
Meridian 1

X11 Software Input/Output Guide

Document Number: 553-3001-400
Document Release: Standard 16.00
Date: June 1999

© 1995, 1999
All rights reserved

Printed in United States of America

Information is subject to change without notice. Nortel Networks Corporation reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules, and the radio interference regulations of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

SL-1 and Meridian 1 are trademarks of Nortel Networks Corporation.

Revision history

June 1999

Standard 16.00. This document is up-issued to include updates and changes required for X11 Release 24.2x.

October 1997

Standard 15.00. This document has been up-issued to reflect updates and changes required for Release X11 23.0x.

August 1996

Standard 14.00. This document has been up-issued to reflect updates and changes required for Release X11 22.0x.

December 1995

Standard 13.00. This document has been up-issued to reflect updates and changes required for Release 21.1x.

July 1995

Standard 12.00. This document is issued to include updates and changes required for X11 Release 21.0x.

Contents

General	1
Format of X11 input/output NTP	2
Notational conventions	6
Related documentation	8
 Communicating with the Meridian 1	 9
Accessing the Meridian 1	10
System memory and disk space	15
Preview of overlay content	17
System Look up Messages	18
Multi-User Login	18
Maintenance display codes	20
Time and date of fault	20
 Alphabetical List of Packages	 21
 Numerical List of Packages	 31
 Overlay Loader and Multi-User Login	 41
 LD 01: Template audit	 45
 LD 02: Traffic	 49
Basic commands	50
How to use traffic commands	52

Print alarm and exception filter summary	66
LD 10: Analog (500/2500) Telephone Administration	67
Prompts and responses	69
Prompts and responses by task	72
Alphabetical list of prompts	76
LD 11: Meridian Digital Telephone Administration	105
Prompts and responses	107
Prompts and responses by task	111
Alphabetical list of prompts	120
LD 12: Attendant Consoles.	171
Prompts and responses	172
Alphabetical list of prompts	173
LD 13: Digitone Receivers, Tone Detectors, Multifrequency Senders and Receivers	181
Prompts and responses	182
Alphabetical list of prompts	183
LD 14: Trunk Data Block.	185
Prompts and responses	186
Alphabetical list of prompts	188
LD 15: Customer Data Block	205
Prompts and responses	206
Prompts and responses (Release 21 & later)	207
Customer data block	207
Default Customer Data Block	208
Data Block: AML (Application Module Link)	208
Data Block: ANI (Automatic Number Identification)	209

Data Block: ATT (Attendant Consoles)	209
Data Block: AWU (Automatic Wake Up Data)	211
Data Block: CAS (Centralized Attendant Service Data)	212
Data Block: CCS (Controlled Class of Service)	212
Data Block: CDR (Call Detail Recording)	213
Data Block: FCR (Flexible Code Restriction)	214
Data Block: FFC (Flexible Feature Codes)	214
Data Block: FTR (Features and options)	215
Data Block: HSP (Hospitality Management)	217
Data Block: IMS (Integrated Message Service)	217
Data Block: INT (Intercept Treatments)	218
Data Block: LDN (Listed Directory Numbers)	219
Data Block: MPO (Multi-Party Operations)	220
Data Block: NET (Networking)	221
Data Block: NIT (Night Service)	223
Data Block: OAS (Off Hook Alarm Security)	224
Data Block: PWD (Password)	224
Data Block: RDR (Call Redirection)	225
Data Block: ROA (Recorded Overflow Announcement)	227
Data Block: TIM (Timers)	228
Data Block: TST (Test lines)	229
Alphabetical list of prompts	231

LD 16: Route Data Block, Automatic Trunk Maintenance 289

Prompts and responses	290
Alphabetical list of prompts	302

LD 17: Configuration Record 1 355

Prompts and responses by Gate Opener	361
Gate Opener: ADAN (Action Device and Number)	362

Gate Opener: PWD (Password)	366
Gate Opener: PARM (System Parameters)	368
Gate Opener: CEQU (Common Equipment)	371
Gate Opener: OVLY (Overlay)	372
Gate Opener: VAS (Value Added Server)	373
Gate Opener: ATRN (Aries Transmission)	374
Gate Opener: ALARM (Alarm filters)	375
ROLR / TOLR/ AOLR Offsets and Values	376
HRLR / HTLR Offsets and Values	377
Alphabetical list of prompts	379
LD 18: Speed/Group Call, Pretranslation, and Hotline	437
Prompts and responses	438
Alphabetical list of prompts	442
LD 19: Code Restriction	447
Prompts and responses	448
Alphabetical list of prompts	451
LD 20-22: Print Reports Guide	457
LD 20: Print Routine 1	461
Prompts and responses	463
Alphabetical list of print reports	464
Alphabetical list of prompts	483
LD 21: Print Routine 2	495
Changes for Release 21	495
Prompts and responses	496
Alphabetical list of print reports	497
Alphabetical list of prompts	507

LD 22: Print Routine 3	511
Prompts and responses	514
Alphabetical list of print reports	515
Alphabetical list of prompts	522
 LD 23: Automatic Call Distribution, Management Reports, Message Center	 531
Prompts and responses	532
Prompts and responses	532
Prompts and responses by data block	536
Alphabetical list of prompts	540
 LD 24: Direct Inward System Access	 563
Prompts and responses by gate opener	564
Prompts and responses	565
Alphabetical list of prompts	566
 LD 25: Move Data Blocks.	 571
Prompts and responses	572
Move and Swap Rules	573
Alphabetical list of prompts	574
 LD 26: Group Do Not Disturb	 577
Prompts and responses	577
Alphabetical list of prompts	578
 LD 27: ISDN Basic Rate Interface (BRI) Administration	 579
Prompts and responses	580
Alphabetical list of prompts	590

LD 28: Route Selection for Automatic Number Identification	607
Prompts and responses	607
Alphabetical list of prompts	608
LD 29: Memory Management	609
Prompts and responses	610
Alphabetical list of prompts	611
LD 30: Network and Signaling Diagnostic	617
Basic commands	619
Superloop commands	620
Basic Rate Interface (BRI) commands	621
Alphabetical list of commands	622
LD 31: Telephone and Attendant Console Diagnostic	627
SL-1 and M1109 Telephone test	629
M2009, M2018 and M2112 Telephone test	633
M2006 and M2008 Telephone test	636
M2216, M2016S and M2616 Telephone test	641
M2317 Telephone test	645
QCW-type Attendant Console test	650
M1250 Console test	656
M1250 Console test	658
M1250 Console test in QMT2 mode	664
M2250 Console	670
LD 32: Network and Peripheral Equipment Diagnostic	675
Basic commands	678
Superloop commands	680

ISDN BRI MISP commands	681
ISDN BRI SILC/UILC commands	682
ISDN BRI BRSC commands	683
Alphabetical list of commands	684

LD 33: Peripheral Equipment Diagnostic for 1.5 Mb/s RPE and Fibre Remote IPE 713

1.5 Mb/s RPE diagnostic	713
Fibre Remote IPE diagnostic	715
Basic commands for 1.5 Mb/s RPE	716
Basic commands for Fibre Remote IPE	717
Alphabetical list of commands	718

LD 34: Tone and Digit Switch and Digitone Receiver Diagnostic 727

Basic commands	728
Extended Tone Detector (XTD) commands	729
Alphabetical list of commands	732

LD 35: Common Equipment Diagnostic. 739

Basic commands	741
Alphabetical list of commands	743

LDs 36, 41: Trunk Diagnostic 749

Basic commands (LD 36)	752
Basic commands (LD 41)	753
Alphabetical list of commands	754

LD 37: Input/Output Diagnostic 757

Basic commands	759
Multipurpose Serial Data Link (MSDL) commands	761
Alphabetical list of commands	762

LD 38: Conference Circuit Diagnostic	765
Basic commands	766
Alphabetical list of commands	767
LD 39: Intergroup Switch and System Clock Generator Diagnostic	771
Basic commands	772
Alphabetical list of commands	773
LDs 40, 42: Call Detail Recording Diagnostic. . .	775
Basic commands	780
Alphabetical list of commands	781
LD 43: Equipment Datadump	787
Basic commands	789
Alphabetical list of commands	790
LD 44: Software Audit	793
LD 45: Background Signaling and Switching Diagnostic	795
Using the manual extended continuity (XCON) command	796
Basic commands	800
XCON sub-prompts	801
Alphabetical list of commands	806
Alphabetical list of XCON sub-prompts	808
: LD 46: Multifrequency Sender Diagnostic for Automatic Number Identification	811
Basic commands	812
Alphabetical list of commands	813
LD 48: Link Diagnostic	815
Basic commands	819

Basic commands	820
ACD High speed and low speed link commands	823
ACD High speed and low speed link monitor commands	823
AML commands	824
AML over Ethernet (ELAN) commands	824
AML/CSL monitor commands	825
Auxiliary Processor Link (APL) commands	827
APL monitor commands	827
CSL commands (X11 Release 17 and earlier)	828
ISDN BRI monitor commands	829
Multipurpose Serial Data Link (MSDL) commands	830
Single Terminal Access (STA) commands	830
Voice Mailbox Administration (VMBA) commands	831
Alphabetical list of commands	832

LD 49: New Flexible Code Restriction and Incoming Digit Conversion. 865

Prompts and responses	866
Alphabetical list of prompts	867

LD 50: Call Park and Modular Telephone Relocation. 871

Prompts and responses	872
Call Park data	872
Meridian Modular Telephone ID change during relocation	872
Alphabetical list of prompts	873

LD 51: Intercept Computer Update. 875

Basic commands	875
Alphabetical list of commands	875

LD 52: 2.0 Mb/s Remote Peripheral Equipment .	877
Prompts and responses	878
Alphabetical list of prompts	881
LD 53: 2.0 Mb/s Remote Peripheral Equipment Diagnostic	885
Basic commands	887
Alphabetical list of commands	888
LD 54: Multifrequency Signaling Diagnostic . . .	893
Basic commands	896
Alphabetical list of commands	897
LD 56: Flexible Tones and Cadences	901
What are tones and cadences?	901
Flexible Tone and Cadence (FTC) Tables	901
Master Cadence Table (MCAD)	902
Firmware Cadence Table (FCAD)	903
TDS and NT8D17 Conference/TDS/MFS cards	905
Time interval for Call Forward	905
Installing FTC	906
Prompts and responses	909
Default Master Cadence (MCAD) tables	922
Master Cadence (MCAD) table for Japan	922
Default Firmware Cadence (FCAD) tables	923
Firmware Cadence (FCAD) table for Japan	926
Alphabetical list of prompts	927
LD 57: Flexible Feature Codes	941
Prompts and responses	942
Alphabetical list of prompts	948

LD 58: Radio Paging	955
Prompts and responses	956
Alphabetical List of Prompts	959
 LD 60: Digital Trunk Interface and Primary Rate Interface Diagnostic	 963
Basic Commands	965
DTI/PRI commands	965
Clock controller commands	966
Alphabetical list of commands	967
 LD 61: Message Waiting Lamps Reset	 975
 LD 62: 1.5 Mb/s Remote Peripheral Equipment Local End Diagnostic	 977
Basic commands	978
Alphabetical list of commands	979
 LD 66: Conversion	 981
 LD 73: Digital Trunk Interface	 983
DDB: Digital data block	984
Prompts and responses for setting pad values	985
Alphabetical list of prompts	989
 LD 74: Digital Private Network Signaling System Link	 997
Prompts and responses	998
Alphabetical list of prompts	999
 LD 75: Digital Trunk Maintenance	 1003
Basic commands	1004
Alphabetical list of commands	1005

LD 77: Manual Print. 1007
Basic commands 1010
Basic commands (Release 15 & later) 1011
Alphabetical list of commands 1012

LD 79: Virtual Network Service 1019
Prompts and responses 1019
Alphabetical list of prompts 1020

LD 80: Call Trace 1021
Originating and terminating information 1023
Alphabetical list of Call Trace outputs 1027
Basic commands 1033
Alphabetical list of commands 1034

LD 81: Features and Station Print 1037
Prompts and responses 1038
Alphabetical list of prompts 1039

LD 82: Print Hunt Chain, Multiple Appearance Group 1053
Prompts and responses 1054
Alphabetical list of prompts 1055

LD 83: Terminal Number Sort and Print 1057
Prompts and responses 1057
Alphabetical list of prompts 1058

LD 84, 85: Set Designation Entry (ODAS) 1059
Prompts and responses 1059
Alphabetical list of prompts 1059

LD 86: Electronic Switched Network 1	1061
Prompts and responses	1062
Alphabetical list of prompts	1067
LD 87: Electronic Switched Network 2	1077
Prompts and responses	1078
Alphabetical list of prompts	1081
LD 88: Authorization Code	1087
Prompts and responses	1088
Alphabetical list of prompts	1091
LD 90: Electronic Switched Network 3	1095
Prompts and responses	1096
Alphabetical list of prompts	1101
LD 92: Automatic Trunk Maintenance	1111
Basic commands	1112
Alphabetical list of commands	1113
LD 93: Multi-Tenant Service	1115
Prompts and responses	1116
Alphabetical list of prompts	1118
LD 94: Multifrequency Signaling.	1125
Prompts and responses	1126
Prompts and responses	1127
Alphabetical list of prompts	1146
LD 95: Call Party Name Display	1149
Prompts and responses	1150
Alphabetical list of prompts	1154

LD 96: D-channel Diagnostic 1159

D-channel commands (Release 18 & later) 1170

Multipurpose Serial Data Link (MSDL) commands 1172

Multipurpose Serial Data Link D-channel commands 1172

Alphabetical list of commands 1173

LD 97: Configuration Record 2. 1191

Prompts and responses 1192

Alphabetical list of prompts 1197

LD 117: Ethernet and Alarm Management 1205

New Command Format 1205

New Alarm Management Capability 1206

Ethernet and Point-to-Point Protocol 1210

Command Descriptions 1214

Alphabetical list of Administration commands 1216

Alphabetical list of Maintenance Commands 1223

LD 135: Core Common Equipment Diagnostic. . 1225

Adding a group to an option 51C/61C/81/81C 1227

Removing a group from an option 51C/61C/81/81C 1228

Basic Commands 1229

Alphabetical list of commands 1230

LD 137: Core Input/Output Diagnostic 1237

Basic Commands 1239

Alphabetical list of commands 1240

**LD 143: Customer Configuration Backup
and Restore 1249**

Basic commands 1250

Alphabetical list of commands 1251

General

This Northern Telecom Publication (NTP) contains all Overlay modules applicable to Meridian 1 and Meridian SL-1 switches equipped with Generic X11 (Release 24) software. Overlays are classified as being either Administration Overlays or Maintenance Overlays.

Administration modules document input and output in the Meridian prompt-response system. When the data administrator loads an Administration Overlay into memory on a Terminal, the switch outputs a prompt. The data administrator may then type a response to answer that prompt. If the response is valid, the program outputs the next prompt. If the response is invalid, an SCHxxxx message is output. To configure or change a feature, the data administrator may have to respond specifically to several prompts.

Maintenance modules document input and output in the command entry system. The Meridian command entry system may be used to:

- view and print status of switch information
- perform background tests
- disable, enable and test system hardware (e.g., a particular phone)

When a data administrator loads a Maintenance overlay into memory on a Terminal, the administrator may then type in any command documented in that overlay. (The term “overlay” is synonymous with the terms “load”, “LD” and “overlay program”.)

A listing of Feature Packages appears twice in this NTP. An alphabetical listing (sorted by Package mnemonic) of Feature Packages can be found on 21. A numerical listing (sorted by Package number) of Feature Packages can be found on 31.

Format of X11 input/output NTP

This NTP presents both maintenance overlays and data administration overlays. Overlay programs are identified by LD XX or LD XXX (for Options 51C, 61C, 81 and 81C) where XX or XXX is the overlay number. Maintenance overlays and data administration overlays are intermingled in this NTP, appearing in numerical order as separate modules.

Format of Administration Overlays

Two general table types appear in each administration overlay. The first table type is the *Prompts and responses* table. It appears at the front of each load and often follows introductory text. The second general table concludes each Administration overlay and is titled *Alphabetical list of prompts*.

The *Prompts and responses* table

Many *Prompts and responses* tables present a complete list of an overlays prompts. When this is the case, they are simply titled *Prompts and responses*. Other *Prompts and responses* tables present only a subset of an overlays prompts. When this is the case, they are titled *Prompts and responses by task, data block or feature*.

In some overlays, both the complete prompt list and several prompt subsets are presented. When both types of list appear in an overlay, a *Table of contents* box appears to help you find a particular prompt listing.

All *Prompts and responses* tables list prompts in the order in which they are output in each overlay. Acceptable responses or response variables are listed beside each prompt. A brief explanation of the prompt is provided in a *Comment* column.

Subprompts are indented with a hyphen. To have subprompts appear on the TTY, the data administrator must enter specific responses at the previous non-indented prompt. Shown below is an excerpt from a *Prompts and responses* table:

Prompt	Response	Comment
REQ	aaa	Request
TYPE	aaa	Type of data block
TN	I s c u	Terminal Number
CDEN	SD, DD	Card Density

Note that in a *Prompts and responses* table:

- a** Responses are often left as generic variables.
- b** The comment entry is typically brief and explains the prompt.

The *Alphabetical list of prompts* table

This table provides a more detailed description of a response. Shown below is an excerpt from an *Alphabetical list of prompts* table:

Prompt	Response	Comment	Pack/Rel
REQ		Request	basic-1
	CHG	Change existing data	
	END	Exit overlay program	

Note that in an *Alphabetical list of prompts* table:

- a** Responses are actual alternatives and not generic variables.
- b** The comment entry is often expansive and may explain the prompt, the response, or both.
- c** The package and release column provides the mnemonic of the package that must be equipped on the switch in order to receive this prompt. (In this example, the “basic” package must be equipped to view REQ.) The number following the hyphen (“1” in this example) denotes the Release of software in which the package was made available.

Format of Maintenance Overlays

Two general tables appear in each maintenance overlay. The first general table is titled “*Basic commands*”. It appears at the front of each load and often follows introductory text. The second general table concludes each Maintenance overlay and is titled “*Alphabetical list of commands*”.

The *Basic commands* Table

This table presents an abbreviated listing of that overlays’s entire command selection. A brief description of the command is presented beside each command.

Shown below is an excerpt from a “*Basic commands*” table:

CDSP	Clears the maintenance display on active CPU to
CMIN ALL	Resets minor alarm indication on attendant consoles ...
CMIN c	Resets minor alarm indication on attendant consoles ...

Note that in a *Basic commands* table:

- a There are no column headings.
- b The list is always arranged in alphabetical order.
- c The corresponding comment is typically brief.

“*Basic commands*” tables present in less detail all entries in the “*Alphabetical list of commands*” table.

The *Alphabetical list of commands* Table

This table provides a more detailed description of a given command. Shown below is an excerpt from an *Alphabetical list of prompts* table:

Command	Description	Pack/Rel
DISI loop c	Disable carrier c on RPE loop when idle. The number of channels still busy on the carrier may be checked using the STAT command. The message ...	rpe-1

Note that in an *Alphabetical list of commands* table:

- a** The description is often expansive.
- b** The package and release column provides the mnemonic of the package that must be equipped on the switch in order to receive this prompt. (In this example, the “rpe” package must be equipped to enter the DISI loop c command.) The number following the hyphen (“1” in this example) denotes the Release of software in which the package was made available.

Notational conventions

- 1 The TTY used for data administration should be set to UPPERCASE input since the Meridian 1 does not normally accept lowercase. However, the exceptions to this rule are:
 - Both upper and lower case input is permitted with Options 51C, 61C, 81 and 81C.
 - In LD 95, “NAME” may be entered in LD 95 in lowercase.
- 2 Lowercase variables are used in this book to represent many possible responses. The following table lists a few key variables which appear throughout this NTP:

Variable	Meaning
aa	Text string
aaa bbb	Alphabetic or alphanumeric characters
c	Customer Number (0-99)
c (u)	Option 11 Terminal Number (TN) Card, Unit; where unit is optional
c u	Option 11 Terminal Number (TN) Card and Unit
c 0 0 u	Terminal Number (TN) for Option 11. A TN consists of a card, two filler digits, and a unit.
dn	Directory Number (DN)
hh mm	Hours (0 - 23) and Minutes (00 - 59)
loop	Network Loop Number (0-159)
l s c (u)	Terminal Number (TN), Loop, Shelf, Card, Unit; where unit is optional
l s c u	Terminal Number (TN) (loop, shelf, card, and unit number)
mmm	Month (JAN - DEC) when used in a date.
nnn xxx	Numeric characters
xxx	Numeric value (such as a DN)
yy mm dd	Year (00 - 99), Month (1 - 12) and Day (1 - 31)

- 3 **<cr>** denotes that the carriage return key is to be depressed without inputting any data. The carriage return leaves the existing value unchanged, or enters the default value if there is no existing value.
 - 4 **<space>** denotes that the space bar is to be depressed instead of **<cr>**.
 - 5 **<value>** denotes a variable value, generally for a prompt response.
For example, **<NIPN>** is the value responded to the NIPN prompt and **<min>** is a minimum value.
 - 6 Default values are shown in parentheses
 - 7 A range of numbers is denoted by giving the lower and upper limits of the range. For example, given the range **0 - (2) - 3**, the user may manually enter 0, 1, 2, or 3, or carriage return (press **<cr>**) to enter the default of 2.
 - 8 Default values are shown in brackets in the response column where applicable. Pressing **<cr>** enters the default.
 - 9 Where applicable, precede an entry with an **X** to delete that entry or set your entry to default value.
-

Related documentation

Feature description

Feature information is provided in the *X11 Features and Services* NTP.

Operational testing

Information and instruction regarding the testing of features and services for telephone sets and attendant (ATT) consoles is contained in the *X11 Features and Services* NTP.

Error Messages

Information is provided to interpret and respond to system error messages in NTP 553-3001-411.

Communicating with the Meridian 1

To communicate with the system, the following input/output devices at either on-site (local) or remote locations are required:

- TTY or VDT terminal as an input/output device
- RS-232-C compatible printer as an output only device
- Meridian SL-1 maintenance telephone set as an input only device

The input/output system can operate with terminals having the following characteristics:

- Interface: RS-232-C
- Code: ASCII
- Speed: 110, 300, 1200, 2400, 4800, and 9600 baud
- Loop Current: 20 mA

Accessing the Meridian 1

Logging in and out

When you access the system through a system terminal, a login procedure is required (refer to Procedure 1). All system passwords are initially set as 0000, but you can change passwords through the Configuration Record (LD 17). See also “Limited Access to Overlays” in the *X11 features and services* NTP.

Level 1 password. This general password is used in the log in sequence to provide general access to the system by service personnel. Once the system is accessed, the service personnel may then perform any necessary administration or maintenance tasks.

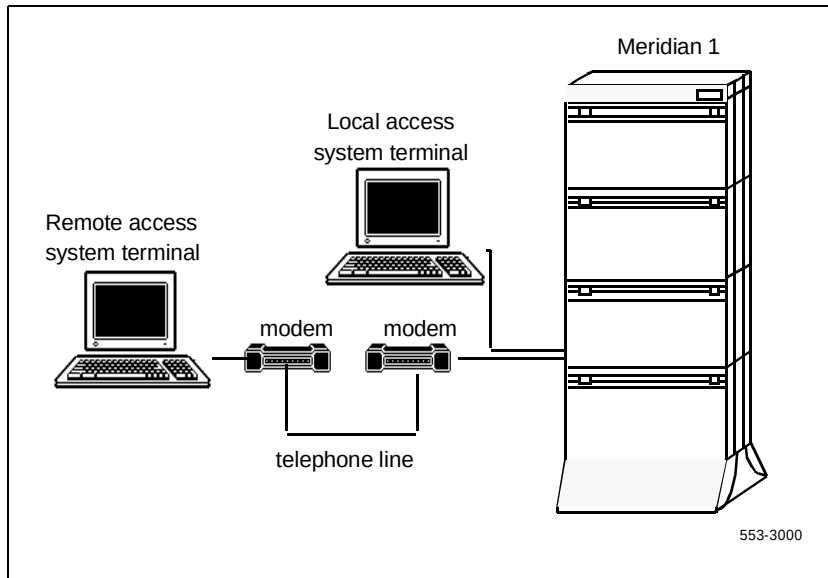
Level 2 password. This administrative password is known and used only by the data administration manager. The password is used to protect the system configuration record and is required when using LD 17 to change either the general or the administrative passwords.

Local and remote access

Input/output terminals may operate either locally or remotely. However, data modems are required for terminals located more than 50 feet (15 meters) from the central control interface. Both local and remote terminals interface with the system through Serial Data Interface (SDI) packs.

Many devices can be installed at local and remote locations. When a system terminal is installed locally, it is connected directly to a SDI Card. When a system terminal is installed at a remote location, modems (or data sets) and a telephone line are required between the terminal and the SDI card. Figure 1 : Local and remote access to a system terminal shows typical system terminal configurations.

With X11 release 19 and later, multiple devices can simultaneously communicate with the Meridian 1 if Multi User Login is enabled. Refer to the *X11 system management applications* NTP for details regarding the Multi User Login Feature. Prior to Release 19, only one device at a time could interact with the Meridian 1.

Figure 1: Local and remote access to a system terminal

HOST mode access

A system terminal is connected through an SDI port. SDI ports are defined in LD 17 and may be configured for different types of outputs. For example, one terminal may be defined for traffic reports, another for maintenance messages. Two ports may be defined for the same output; however, prior to X11 release 17, both ports operate at the speed of the slowest port.

In X11 Release 17, it is possible to log in as a HOST. When in the HOST mode, the outputs defined for the port are only output to that port. Thus the port is no longer limited to the speed of the slowest port sharing the output types. This is useful for applications, such as Meridian Manager, which require high speed ports. Once the HOST port has logged out, the outputs to the other ports are restored.

To configure a system terminal, see the “System and limited access passwords” in the configuration record (LD 17). See also OVL403 and OVL404 messages, which are output to the ports affected by a HOST log in.

Line mode interface log in procedure

X11 release 18 the Overlay Loader introduces Line Mode interface. With Line Mode enabled (LON), the backspace can be used to edit input. The entered information (responses, for example) is not processed until the <CR> is entered. When the Line Mode is disabled (LOF), the system terminal interface operates as it did prior to X11 release 18.

Note: Line Mode interface requires the setting: seven data bits, space parity and one stop bit.

With X11 Release 19 and later, the Serial Data Interface (SDI) application on the Multi-Purpose Serial Data Link (MSDL) card offers the Line Mode Editing (LME) function. With the LME function enabled (FUNC=LME), the backspace can be used to edit input. The LME function is only supported on VT200 type terminals running EM200 emulation mode.

Procedure 1

Logging in and out

1 Press <cr>

— If the response is: **OVL111 nn TTY** or **OVL111 nn SL-1**

That means: Someone else is logged into the system. When they have logged off, press <cr> and go to Step 2.

— If the response is: **OVL111 nn IDLE** or **OVL111 nn BKGD**

That means: You are ready to log into the system. Go to Step 2.

— If the response is: **OVL000 >**

That means: This is the program identifier which indicates that you are have already logged into the system. Go to Step 4.

2 Enter: **LOGI**, then press <cr>

The normal response is: **PASS?**

If there is any other response, refer to the message text in the System Error Messages NTP.

3 Enter: **Level 1 or Level 2 password** and press <cr>.

If the password is correct, the system responds with the prompt: >

- 4 Load a program by entering: **LD XX** (where **XX** represents the overlay program number). For X11 release 18 and later, use LD 135 or LD 137 (LD xxx) to load an overlay program or **LD XX D**.
- 5 Perform tasks
- 6 End the program by entering: **END** or ********
7. Always end the log in session with: **LOGO**

The background routines are then loaded automatically.

Access through the maintenance telephone

A telephone functions as a maintenance telephone when you define the class-of-service as MTA (maintenance telephone allowed) in the Multi-line Telephone Administration program (LD 11). A maintenance telephone allows you to send commands to the system, but you can only use a subset of the commands that can be entered from a system terminal.

You can test tones and outpulsing through the maintenance telephone. Specific commands for those tests are given in the Tone and Digit Switch and Digitone Receiver Diagnostic (LD 34).

To access the system using the maintenance telephone, see Procedure 2. To enter commands, press the keys that correspond to the letters and numbers of the command (for example, to enter LD 42 return, key in 53#42##). Table 2 shows the translation from a keyboard to a dial pad.

The following overlays (LDs) ARE accessible from a maintenance telephone: 30, 32, 33, 34, 35, 36, 37, 38, 41, 42, 43, 45, 46, 60, 61, and 62

The following overlays (LDs) ARE NOT accessible from a maintenance telephone: 31, 40, 48, 77, 80, 92, 96, 135, 137

Note: To use the maintenance telephone, the loop for that telephone must be operating.

Table 2
Translation from keyboard to dial pad

Keyboard				Dial pad
			1	1
A	B	C	2	2
D	E	F	3	3
G	H	I	4	4
J	K	L	5	5
M	N	O	6	6
P	R	S	7	7
T	U	V	8	8
W	X	Y	9	9
			0	0
		Space or #		#
		Return		##
		*		*
Note: There is no equivalent for Q or Z on a dial pad.				

Procedure 2
Access through the maintenance telephone

- 1 Press the prime DN key.
- 2 Place the set in maintenance mode by entering: **xxxx91**
 Where: “xxxx” is the customer Special Prefix (SPRE) number. It is defined in the Customer Data Block and can be printed using LD 21. The SPRE number is typically “1” (which means you would enter 191).
- 3 Check for busy tone by entering “return”: **##**
 — If there is no busy tone, go to Step 4.
 — If there is a busy tone, a program is active. To end an active program and access the system enter: ********
- 4 Load a program by entering: **53#xx##**
 Where: “xx” represents the number of the overlay program
- 5 Perform tasks.
- 6 To exit the program and return the telephone to call processing mode, enter: ********
 Background routines are then loaded automatically.

Accessing Meridian Mail

Option 11 allows access to Meridian Mail Administration & Maintenance through a shared terminal on the Option 11. To access the Meridian Mail system, log in and enter: AX. To exit from Meridian Mail, press the Control key and the closed square bracket (]) simultaneously.

System memory and disk space

The following memory information is output when an administration program is loaded. This information is used to plan the addition of new features, such as speed call lists, which require memory and disk space.

NT, RT, XT, 51, 61, 71, 81 systems

MEM AVAIL: (U/P): pppppp USED: qqqqqq TOT: rrrrr

or (depending on the total amount of memory)

MEM AVAIL: (U-ppppp1 P-ppppp2): USED: qqqqqq TOT: rrrrr

ST, 21, STE, 21E systems

UDATA: ppppp1 PDATA: ppppp2

X11 release 17 (for all systems)

DISK RECS AVAIL: xxxxx

Legend:

Element	Definition
ppppp1	Amount of unprotected memory available for use (in words)
ppppp2	Amount of protected memory available for use (in words)
ppppp	Total memory available for use (ppppp1 + ppppp2) (in words)
qqqqq	Total amount of memory used (in words)
rrrrr	Total amount of memory (in words)
xxxxx	Floppy disk records available for storage of additional data

Low memory and disk warnings

If the amount of memory or disk space is low, the following messages are output on the RT, NT, XT, 51, 61, 71, and 81 systems.

WARNING: LOW MEMORY

WARNING: LOW DISK

WARNING: LOW MEMORY/DISK

When these messages appear, (or when the DISK RECS is less than 5, and/or the available memory is less than 1K words on the ST, STE, 21, or 21E), avoid performing further administration changes which require more memory and disk space. These changes may be lost during the next data dump.

When low memory or disk problems occur, a review of system memory is recommended. Memory may be reclaimed by removing unused features. For example, the system may have speed call lists which are no longer used and can be removed.

The low disk warning only occurs in Release 17 and later. In addition, the Speed Call List program (LD 18) has been enhanced to provide a method of computing the memory and disk requirements of new lists.

A disk record stores approximately 500 words of protected data store. The number of disk records depends on the type of floppy disk used:

- 3.5 inch high density floppy = maximum of 1425 records
- 3.5 super density = maximum of 2850 records
- 5.25 inch floppy = maximum of 1140 records

Note 1: Be sure the correct floppy type is defined. See prompts ADAN and FTYP in LD 17. This does not apply to the Option 81.

Note 2: These messages are not output after sysload until a data dump is done.

Note 3: These messages are not output for 21, 21E, ST, or STE systems. In these systems, avoid performing additional changes when disk records available is below 5, or memory available is below 1K.

Preview of overlay content

System information, call information, features and services are all controlled by overlays (LDs). Data blocks are used to control this information. Listed below are some of the items accessible through the overlays.

Type	Overlay(s)	Item
Terminal Number data block	10, 11, 12, 14	busy lamp field Class of Service (CLS) feature access and requirements key assignments route assignment telephone features (# of key strips, data modules) telephone type trunk access trunk type
Customer data block	15	attendant console information customer number feature access codes incoming call identification intercept options Listed Directory Number (LDN) night service Recorded Announcement (RAN)
Route data block	16	access codes Call Detail Recording (CDR) information code restrictions network trunk features route number trunk route type trunking features (timers, starting arrangements)
Configuration data block	17	input/output devices memory location network loop usage number of memory modules number of network loops system parameters (call register, buffer sizes, traffic)

With multiple overlays operating concurrently, there is the potential for a database conflict if two or more overlays attempt to modify the same data structure. Multi-User Login software prevents such conflicts. When a user requests that an overlay be loaded, the software determines if it could pose a potential conflict with an overlay that is already executing. If no conflict exists, the requested overlay is loaded. If a conflict does exist, the system issues the following message:

OVL429-OVERLAY CONFLICT

The user can try again later, or try to load a different overlay.

Multi-User Login also introduces several user commands. With these commands, the user has the ability to:

- communicate with other users
- determine who is logged into the system
- halt and resume background and midnight routines
- initiate and terminate terminal monitoring
- change printer output assignment

Note: For complete feature information on Multi-User Login, consult the *Management Applications* NTP and *Overlay Loader and Multi-User Login* section in this NTP.

Maintenance display codes

Maintenance displays are located on the faceplate of certain Meridian SL-1 circuit cards. A maintenance display code is a one-, two-, or three-digit alphanumeric code which can indicate the status of the system and identify faulty equipment. For a detailed definition of these codes, see the section titled “HEX” in the System Error Messages NTP.

Time and date of fault

The system identifies the time that faults are detected. When a diagnostic message is output, a timestamp is output within 15 minutes. The format is:

TIMxxx hh:mm dd/mm/yy CPU x

Where: **xxx** is the system ID

The time, date, and system ID are set in LD 2.

Alphabetical List of Packages

Listed below is a comprehensive alphabetical list of packages which may be equipped on your Meridian 1. For a numerical list of available packages, refer to the section titled “Numerical List of Packages” on page 31.

Mnemonic	Feature Name	Number	Release
AA	Attendant Administration	54	1
AAA	Attendant Alternative Answering	174	15
AAB	Automatic Answerback	47	1
ABCD	16-Button Digitone/Multifrequency Telephone	144	14
ACDA	Automatic Call Distribution, Package A	45	1
ACDB	Automatic Call Distribution, Package B	41	1
ACDC	Automatic Call Distribution Package C	42	1
ACDD	Automatic Call Distribution Package D	50	2
ACLI	Analog Calling Line Identification	349	24
ACNT	Automatic Call Distribution, Account Code	155	13
ACRL	AC15 Recall	236	20
ADMINSET	Set Based Administration	256	21
ADSP	ACD Night Call Forward without Disconnect Supervision	289	23
AFNA	Attendant Forward No Answer	134	14
AINS	Automatic Installation (Option 11 only)	200	16
AIOD	Automatic ID of Outward Dialing	3	1
ALRM_FILTER	Alarm Filtering	243	19
AMP	Automated Modem Pooling	78	5
ANI	Automatic Number Identification	12	1
ANIR	ANI Route Selection	13	1
AOP	Attendant Overflow Position	56	1

Mnemonic	Feature Name	Number	Release
APL	Auxiliary Processor Link	109	10
ARDL	Automatic Redial	304	22
ARFW	Attendant Remote Call Forward	253	20
ARIE	Aries Digital Sets	170	14
ATM	Automatic Trunk Maintenance	84	7
ATX	Autodial Tandem Transfer	258	20
AUXS	Automatic Call Distribution Package D, Auxiliary Security	114	12
AWU	Automatic Wake-Up	102	10
BACD	Basic Automatic Call Distribution	40	1
BARS	Basic Alternate Route Selection	57	1
BASIC	Basic Call Processing	0	1
BAUT	Basic Authorization Code	25	1
BGD	Background Terminal	99	10
BKI	Attendant Break-In/Trunk Offer	127	1
BQUE	Basic Queuing	28	1
BRI	Basic Rate Interface	216	18
BRIL	BRI line application	235	18
BRIT	ISDN BRI Trunk Access	233	18
BRTE	Basic Routing	14	1
BTD	Busy Tone Detection Tone	294	21
CAB	Charge Account/Authorization Code	24	1
CALL ID	Call ID (for AML applications)	247	19
CASM	Centralized Attendant Services (Main)	26	1
CASR	Centralized Attendant Services (Remote)	27	1
CBC	Call-by-Call Service	117	13
CCB	Collect Call Blocking	290	21
CCDR	Calling line Identification in Call Detail Recording	118	13
CCOS	Controlled Class Of Service	81	7
CDP	Coordinated Dialing Plan	59	1
CDR	Call Detail Recording	4	1
CDRE	Call Detail Recording Expansion (7 digit)	151	13
CDRQ	ACD CDR Queue Record	83	3
CDRX	Call Detail Recording Enhancement	259	20
CHG	Charge Account for CDR	23	1

Mnemonic	Feature Name	Number	Release
CHINA	China Attendant Monitor Package	285	21
CHTL	China Toll Package	292	21
CISMFS	Commonwealth of Independent States Multifrequency Shuttle Signalling	326	23
CIST	Commonwealth of Independent States - Three Wire Analog Trunk	221	21
CLNK	Call Detail Recording, Data Link	6	1
CMAC	N/W Communications Management Center	30	1
CNAME	Calling Name Delivery	333	23
CNUMB	Calling Number Delivery	332	23
COOP	Console Operations	169	14
CORENET	Core Network Module	299	21
CPCI	Called Party Control on Internal Calls	310	22
CPGS	Console Presentation Group	172	15
CPIO	Call Processor Input/Output (Option 81)	298	21
CPND	Calling Party Name Display	95	10
CPP	Calling Party Privacy	301	21
CPRK	Call Park	33	2
CPRKNET	Call Park Networkwide	306	22
CSL	Command Status Link	77	8
CSLA	CSL with Alpha Signalling	85	8
CTY	Call Detail Recording on Teletype Terminal	5	1
CUST	Multiple-Customer Operation	2	1
CWNT	Call Waiting Notification (Meridian 911)	225	19
DASS2	Digital Access Signaling System 2	124	16
DBA	Data Buffering and Access	351	24
DCON	M2250 Attendant Console	140	15
DCP	Directed Call Pickup	115	12
DDSP	Digit Display	19	1
DHLD	Deluxe Hold	71	4
DI	Dial Intercom	21	1
DISA	Direct Inward System Access	22	1
DKS	Digit Key Signaling	180	1
DLDN	Departmental Listed Directory Number	76	5
DLT2	M2317 Digital Sets	91	9

Mnemonic	Feature Name	Number	Release
DMWI	DPNSSI Message Waiting Indication	325	23
DNDG	Do-Not-Disturb, Group	16	1
DNDI	Do-Not-Disturb, Individual	9	1
DNIS	Dialed Number Identification System	98	10
DNWK	DPNSS Network Services	231	16
DNXP	Directory Number Expansion (7 Digit)	150	13
DPNA	Direct Private Network Access	250	21
DPNSS189I	Enhanced DPNSS1 Gateway	284	20
DPNSS	Digital Private Network Signaling System 1	123	16
DPNSS_ES	DPNSS Enhanced Services	288	21
DRNG	Distinctive Ringing	74	4/9
DSET	M2000 Digital Sets	88	7
DTI2	2 Mbit Digital Trunk Interface	129	10
DTD	Dial Tone Detector	138	10
DTOT	DID to Tie (Japan only)	176	16
EAR	Enhanced ACD Routing	214	17
ECCS	Enhanced Controlled Class of Service	173	15
ECT	Enhanced Call Trace	215	18
EDRG	Executive Distinctive Ringing	185	16
EES	End-To-End Signaling	10	1
EMUS	Enhanced Music	119	12
ENS	Enhanced Night Service	133	20
EOVF	ACD Enhanced Overflow	178	15
ESA	Emergency Services Access	329	23
ESA_CLMP	Emergency Services Access Calling Number Mapping	331	23
ESA_SUPP	Emergency Services Access Supplementary	330	23
ETSI_SS	Euro Supplementary service	323	22
EURO	Euro ISDN	261	20
FAXS	HiMail Fax Server	195	18
FCC68	FCC Compliance for DID Answer Supervision	223	17
FCA	Forced Charge Account	52	1
FCBQ	Flexible Call Back Queuing	61	1
FCDR	New Format CDR	234	18
FDID	Flexible DID	362	24

Mnemonic	Feature Name	Number	Release
FFC	Flexible Feature Codes	139	15
FGD	Feature Group D	158	17
FNPN	Flexible Numbering Plan	160	14
FRTA	French Type Approval	197	15
FTC	Flexible Tones and Cadences	125	16
FFCSF	Boss Secretary Filtering (FFC activation)	198	15
FTDS	Fast Tone and Digit Switch	87	7
GRP	Group Call	48	1
GPRI	International 1.5/2.0 Mb/s Gateway	167	18
GSCM	Global Call Monitoring	344	24
HIST	History File	55	1
HOSP	Hospitality Management	166	16
HOT	Enhanced Hot Line	70	4/10
HSE	Hospitality Screen Enhancement	208	17
HVS	Meridian Hospitality Voice Service	179	16
IAP3P	Integrated Services Digital Network Application Module Link for Third Party Vendors	153	13
ICDR	Internal CDR	108	10
ICP	Intercept Computer Interface	143	10
IDA	Integrated Digital Access	122	16
IDC	Incoming DID Digit Conversion	113	12
IEC	Inter-Exchange Carrier	149	13
IMS	Integrated Message System UST and UMG are part of IMS Package.	35	2
INBD	International nB+D	255	20
INTR	Intercept Treatment	11	1
IPRA	International Primary Rate Access	202	15
ISDN	Integrated Services Digital Network	145	13
ISDN INTL SUP	ISDN Supplementary Features	161	14
ISL	ISDN signaling Link	147	13
ISPC	ISDN Semi-Permanent Connection	313	22
IVR	Hold in Queue for IVR	218	18
JDMI	Japan Digital Multiplex Interface	136	14
JPN	Japan Central Office Trunks	97	9
JTDS	Japan Tone and Digit Switch	171	14

Mnemonic	Feature Name	Number	Release
JTTC	Japan Telecommunication Technology Committee	335	23
KD3	Spanish KD3 DID/DOD interface	252	20
LAPW	Limited Access to Overlays	164	16
L1MF	X08 to X11 Gateway	188	15
LLC	Line Load Control	105	10
LMAN	Automatic Call Distribution Load Management (C2)	43	1
LNK	ACDD, Auxiliary Link Processor	51	2
LNR	Last Number Redial	90	8
LSCM	Local Steering Code Modifications	137	10
LSEL	Automatic Line Selection	72	4
MAID	Maid Identification	210	17
MASTER	Euro ISDN Trunk - Network Side	309	22
MAT	MAT 5.0	296	22
MC32	Meridian Companion Enhanced Capacity	350	24
MCBQ	Network callback Queuing	38	2
MCDR	Mini CDR	31	1
MCMO	Meridian 1 Companion Option	240	19
MCT	Malicious Call Trace	107	10
MEET	MCDN End to End Transparency	348	24
MFC	Multifrequency Compelled Signaling	128	9
MFE	Multifrequency Signaling for Socotel	135	10
MINT	Message Intercept	163	15
MLIO	Multi-Language I/O Package	211	16
MLM	Meridian Link Modular Server	209	16
MLMS_SPL	Latin American Spanish	279	20
MLWU	Multi-Language Wake Up	206	16
MMOPKG	M1 Microcellular Option	303	22
MMSN	M1 Mobility Multi-Site Networking	314	22
MPH	Meridian 1 Packet Handler	248	19
MPO	Multi-Party Operations	141	20
MOSRPKG	Mobility Server	302	22
MQA	Multiple Queue Assignment	297	21
MR	PPM/Message Registration	101	10
MSB	Make Set Busy	17	1

Mnemonic	Feature Name	Number	Release
MSDL	Multipurpose Serial Data Link	222	18
MSDL SDI	MSDL Serial Data Interface	227	19
MSDL STA	MSDL Single Terminal Access	228	19
MULTI_USER	Multi-User Login	242	19
MUS	Music	44	1
MUSBRD	Music Broadcast	328	23
MWC	Message Waiting Center	46	1
MWI	Message Waiting Indication Interworking with DMS	219	19
M911	Meridian 911	224	19
NACD	Network Automatic Call Distribution	207	15
NARS	Network Alternate Route Selection	58	1
NAS	Network Attendant Service	159	20
NAUT	Network Authorization Code	63	1
NCOS	Network Class Of Service	32	1
NFCR	New Flexible Code Restriction	49	2
NGEN	Next Generation Connectivity	324	22
NI2	North America National ISDN Class II Equipment	291	21
NI-2 CBC	NI-2 Call By Call Service Selection	334	23
NMCE	NGenR2/Meridian Communications Exchange Connectivity	364	24
NMS	Network Message Services	175	16
NSC	Network Speed Call	39	2
NSIG	Network Signaling	37	2
NTRF	Network Traffic Measurements	29	1
NTWK	Advanced ISDN Network Services	148	13
NGCC	Nortel Symposium Call Center	311	22
NXFR	Network Call Transfer	67	3
ODAS	Office Data Administration System	20	1
OHOL	On Hold On Loudspeaker	196	20
OHQ	Off-Hook Queuing	62	1
OOD	Optional Outpulsing Delay	79	5
OPAO	Outpulsing, asterisk (*) and octothorpe (#)	104	
OPCB	Operator Call Back (China #1)	126	14
OPEN ALARM	Open Alarms	315	22
OPTF	Optional Features	1	1

Mnemonic	Feature Name	Number	Release
ORC_RVQ	Remote Virtual Queueing	192	18
OVLP	Overlap Signaling (M1 to M1 and M1 to 1TR6 CO)	184	15
PAGNET	Call Page Networkwide	307	22
PAGT	Automatic Call Distribution, Priority Agent	116	12
PBXI	1.5 Mbit Digital Trunk Interface	75	5
PEMD	Pulsed E&M (Indonesia, French Colisée)	232	18
PHTN	Phantom TN	254	20
PLDN	Group Hunt/DN Access to SCL	120	15
PLUGIN	Plug-In	366	24
PMSI	Property Management System Interface	103	10
POVR	Priority Override/Forced Camp-On	186	20
PQUE	Network Priority Queueing	60	1
PRA	International Primary Rate Access (CO)	146	13
PRI2	2.0 Mb/s Primary Rate Interface	154	14
PXLT	Pretranslation	92	8
QSIG	Q reference signaling point Interface	263	20
QSIG GF	QSIG Generic Functional protocol	305	22
QSIG SS	QSIG Supplementary service	316	22
RAN	Recorded Announcement	7	1
RANBRD	Recorded Announcement Broadcast	327	23
RCK	Ringing Change Key	193	15
REMOTE_IPE_PKG	Remote IPE	286	
RMS	Room Status	100	10
ROA	Recorded Overflow Announcement	36	2
RPA	Radio Paging	187	15
RPE1.5	1.5 Mbit Remote Peripheral Equipment	15	1
RPE2	2.0 Mb/s Remote Peripheral Equipment	165	15
RSDB	Resident Debug	82	9
RVQ	Remote Virtual Queueing	192	18
SACP	Semi-Automatic Camp-On	181	15
SAMM	Stand-alone Meridian Mail	262	20
SAR	Scheduled Access Restrictions	162	20
SCC	Tone Detector Special Common Carrier	66	7
SCDR	Station Activity Records	251	20

Mnemonic	Feature Name	Number	Release
SCI	Station Category Indication	80	7
SCMP	Station Camp-On	121	20
SECL	Series Call	191	15
SLP	Station Loop Preemption	106	10
SLST	Meridian SL-1 ST Package	96	9
SMS	Short Message Service	346	24
SNR	Stored Number Redial	64	3
SR	Set Relocation	53	1
SSAU	Station Specific Authorization Codes	229	19
SS5	500 Set Dial Access to Features	73	4
SS25	2500 Set Features	18	1
SSC	System Speed Call	34	2
STA	Single Term Access	228	19
SUPP	International Supplementary Features	131	9
SUPV	Supervisory Attendant Console	93	8
SVCT	Supervisory Console Tones	189	20
SYS_MSG_LKUP	System Errors and Events Lookup	245	19
TAD	Time and Date	8	1
TAT	Trunk AntiTromboning	293	21
TBAR	Trunk Barring	132	20
TDET	Tone Detector	65	7
TENS	Multiple-Tenant Service	86	7
TFM	Trunk Failure Monitor	182	15
THF	Trunk Hook Flash (Centrex)	157	14
TMON	Traffic Monitoring	168	
TOF	Automatic Call Distribution, Timed Overflow Queuing	111	10
TSET	M3000 Digital Sets	89	7
TVS	Trunk Verification from Station	110	9.32
UIGW	Universal ISDN Gateways	283	20
UK	United Kingdom	190	16
UWIN	Universal Wireless Interactive Networking	345	24
VAWU	VIP Auto Wake Up	212	17
VMBA	Voice Mailbox Administration	246	19
VNS	Virtual Network Services	183	16

Mnemonic	Feature Name	Number	Release
XCT0	M1 Enhanced Conference, TDS and MFS	204	15
XCT1	M1 Superloop Administration (LD 97)	205	15
XPE	Meridian 1 XPE	203	15

Numerical List of Packages

Listed below is a comprehensive numerical list of available packages which may be equipped on your Meridian 1. For an alphabetical list of packages, “Alphabetical List of Packages” on page 21.

Number	Mnemonic	Name
0	BASIC	Basic Call Processing
1	OPTF	Optional Features
2	CUST	Multi-Customer Operation
3	AIOD	Automatic ID of Outward Dialing
4	CDR	Call Detail Recording, Teletype Terminal
5	CTY	Call Detail Recording, Teletype Terminal
6	CLNK	Call Detail Recording, Data Link
7	RAN	Recorded Announcement
8	TAD	Time and Date
9	DNDI	Do Not Disturb Individual
10	EES	End-to-End Signaling
11	INTR	Intercept Treatment
12	ANI	Automatic Number Identification
13	ANIR	Automatic Number Identification, Route Selection
14	BRTE	Basic Routing
15	RPE1.5	1.5-Mbit Remote Peripheral Equipment
16	DNDG	Do Not Disturb Group
17	MSB	Make Set Busy
18	SS25	Special Service for 2500 Sets
19	DDSP	Digit Display
20	ODAS	Office Data Administration System
21	DI	Dial Intercom

Number	Mnemonic	Name
22	DISA	Direct Inward System Access
23	CHG	Charge Account for CDR
24	CAB	Charge Account/Authorization code
25	BAUT	Basic Authorization code
26	CASM	Centralized Attendant Service (Main)
27	CASR	Centralized Attendant Service (Remote)
28	BQUE	Basic Queuing
29	NTRF	Network Traffic must have NWK packages.
30	CMAC	N/W Communications Management Center
31	MCDR	Mini CDR
32	NCOS	Network Class of Service
33	CPRK	Call Park
34	SSC	System Speed Call
35	IMS	Integrated Message Services. UST and UMG are part of the IMS package.
36	ROA	Recorded Overflow Announcement
37	NSIG	Network Signaling
38	MCBQ	Network Call Back Queuing
39	NSC	Network Speed Call
40	BACD	Basic Automatic Call Distribution
41	ACDB	Automatic Call Distribution, Package B
42	ACDC	Automatic Call Distribution, Package C
43	LMAN	Automatic Call Distribution, Load Management Reports
44	MUS	Music
45	ACDA	Automatic Call Distribution, Package A
46	MWC	Message Waiting Center
47	AAB	Automatic Answerback
48	GRP	Group call
49	NFCR	New Flexible Code Restriction
50	ACDD	Automatic Call Distribution, Package D
51	LNK	ACDD, Auxiliary Link Processor
52	FCA	Forced Charge Account
53	SR	Set Relocation
54	AA	Attendant Administration
55	HIST	History File

Number	Mnemonic	Name
56	AOP	Attendant Overflow Position
57	BARS	Basic Alternate Route Selection
58	NARS	Network Alternate Route Selection
59	CDP	Coordinated Dialing Plan
60	PQUE	Network Priority Queuing
61	FCBQ	Flexible Call Back Queuing
62	OHQ	Off-Hook Queuing
63	NAUT	Network Authorization code
64	SNR	Stored Number Redial
65	TDET	Tone Detector
66	SCC	Tone Detector Special Common Carrier
67	NXFR	Network Call Transfer
70	HOT	Enhanced Hot Line
71	DHLD	Deluxe Hold
72	LSEL	Automatic Line Selection
73	SS5	500 Set Dial Access to Features
74	DRNG	Distinctive Ringing
75	PBXI	1.5 Mbit Digital Trunk Interface
76	DLDN	Departmental Listed Directory Number
77	CSL	Command Status Link
78	AMP	Automated Modem Pooling
79	OOD	Optional Outpulsing Delay
80	SCI	Station Category Information
81	CCOS	Controlled Class of Service
82	RSDB	Resident Debug
83	CDRQ	ACD CDR Queue Record
84	ATM	Automatic Trunk Maintenance
85	CSLA	CSL with Alpha Signaling
86	TENS	Multi-Tenant Service
87	FTDS	Fast Tone and Digit Switch
88	DSET	M2000 Digital Sets
89	TSET	M3000 Digital Sets
90	LNR	Last Number Redial
91	DLT2	M2317 Digital Sets

Number	Mnemonic	Name
92	PXLT	Pretranslation
93	SUPV	Supervisory Console
95	CPND	Calling Party Name Display
96	SLST	Meridian SL-1 ST Package
97	JPN	Japan Central Office Trunks
98	DNIS	Dialed Number Identification System
99	BGD	Background Terminal
100	RMS	Room Status
101	MR	PPM / Message Registration
102	AWU	Automatic Wake Up
103	PMSI	Property Management System Interface
104	OPAO	Outpulsing, asterisk (*) and octothorpe (#)
105	LLC	Line Load Control
106	SLP	Station Loop Pre-emption
107	MCT	Malicious Call Trace
108	ICDR	Internal CDR
109	APL	Auxiliary Processor Link
110	TVS	Trunk Verification from Station
111	TOF	Automatic Call Distribution, Timed Overflow Queuing
113	IDC	Incoming Digit Conversion
114	AUXS	Automatic Call Distribution Package D, Auxiliary Security
115	DCP	Directed Call Pickup
116	PAGT	Automatic Call Distribution, Priority Agent
117	CBC	Call by Call Service
118	CCDR	Calling Line Identification in Call Detail Recording
119	EMUS	Enhanced Music
120	PLDN	Group Hunt/DN Access to SCL
121	SCMP	Station Camp-On
122	IDA	Integrated Digital Access. COMDT is part of IDA Package
123	DPNSS	Digital Private Network Signaling System 1
124	DASS2	Digital Access Signaling System 2
125	FTC	Flexible Tones and Cadences
126	OPCB	Operator Call Back (China #1)
127	BKI	Attendant Break-In/Trunk Offer

Number	Mnemonic	Name
128	MFC	Multifrequency Compelled Signaling
129	DTI2	2 Mbit Digital Trunk Interface
131	SUPP	International Supplementary Features
132	TBAR	Trunk Barring
133	ENS	Enhanced Night Service
134	AFNA	Attendant Forward No Answer
135	MFE	Multifrequency Signaling for Socotel
136	JDMI	Japan Digital Multiplex Interface
137	LSCM	Local Steering Code Modification
138	DTD	Dial Tone Detection
139	FFC	Flexible Feature Codes
140	DCON	M2250 Attendant Console
141	MPO	Multi-Party Operations
143	ICP	Intercept Computer Interface
144	ABCD	16-Button Digitone/Multifrequency Telephone
145	ISDN	Integrated Services Digital Network
146	PRA	International Primary Rate Access (CO)
147	ISL	ISDN Signaling Link
148	NTWK	Advanced ISDN Network Services
149	IEC	Inter-Exchange Carrier
150	DNXP	DN Expansion (7 digit)
151	CDRE	CDR Expansion (7 digit)
153	IAP3P	ISDN AP for 3rd Party Vendors
154	PRI2	2.0 Mb/s Primary Rate Interface
155	ACNT	Automatic Call Distribution, Account Code
157	THF	Trunk Hook Flash (Centrex)
158	FGD	Feature Group D
159	NAS	Network Attendant Service
160	FNP	Flexible Numbering Plan
161	ISDN INTL SUP	ISDN Supplementary Features
162	SAR	Scheduled Access Restrictions
163	MINT	Message Intercept
164	LAPW	Limited Access to Overlays
165	RPE2	2.0 Mb/s Remote Peripheral Equipment

Number	Mnemonic	Name
166	HOSP	Hospitality Management
167	GPRI	International 1.5/2.0 Mb/s Gateway
168	TMON	Traffic Monitoring
169	COOP	Console Operations
170	ARIE	Aries Digital Sets
171	JTDS	Japan Tone and Digit Switch
172	CPGS	Console Presentation Groups
173	ECCS	Enhanced Controlled Class of Service
174	AAA	Attendant Alternative Answering
175	NMS	Network Message Services
176	DTOT	DID To Tie (Japan only)
178	EOVF	ACD Enhanced Overflow
179	HVS	Meridian Hospitality Voice Service
180	DKS	Digit Key Signaling
181	SACP	Semi-Automatic Camp-On
182	TFM	Trunk Failure Monitor
183	VNS	Virtual Network Services
184	OVLP	Overlap Signaling (M1 to M1 and M1 to 1TR6 CO)
185	EDRG	Executive Distinctive Ringing
186	POVR	Priority Override/Forced Camp-On
187	RPA	Radio Paging
188	L1MF	X08 to X11 Gateway
189	SVCT	Supervisory Console Tones
190	UK	United Kingdom
191	SECL	Series Call
192	ORC_RVQ	Remote Virtual Queuing
193	RCK	Ringin Change Key
195	FAXS	HiMail Fax Server
196	OHOL	On-Hold On-Loudspeaker
197	FRTA	French Type Approval
198	FFCSF	Boss Secretary Filtering (FFC activation)
200	AINS	Automatic Installation (Option 11 only)
202	IPRA	International Primary Rate Access (CO)
203	XPE	Meridian 1 XPE

Number	Mnemonic	Name
204	XCT0	M1 Enhanced Conference, TDS and MFS
205	XCT1	M1 Superloop Administration (LD 97)
206	MLWU	Multi Language Wake Up
207	NACD	Network Automatic Call Distribution
208	HSE	Hospitality Screen Enhancement
209	MLM	Meridian Link Modular Server
210	MAID	Maid Identification
211	MLIO	Multi Language Input/Output
212	VAWU	VIP Automatic Wake Up
214	EAR	Enhanced ACD Routing
215	ECT	Enhanced Call Trace
216	BRI	Basic Rate Interface
218	IVR	Hold in queue for IVR
219	MWI	Message Waiting Indication Interworking with DMS
221	CIST	Commonwealth of Independent States - Three Wire Analog Trunk
222	MSDL	Multi-purpose Serial Data Link
223	FCC68	FCC Compliance for DID Answer Supervision
224	M911	Meridian 911
225	CWNT	Call Waiting Notification (Meridian 911)
227	MSDL SDI	MSDL Serial Data Interface
228	MSDL STA	Single Terminal Access
229	SSAU	Station Specific Authorization Codes
231	DNWK	DPNSS Network Services
232	PEMD	Pulsed E & M (Indonesia, French Colisée)
233	BRIT	ISDN BRI Trunk Access
234	FCDR	New Format CDR
235	BRIL	BRI line application
236	ACRL	AC15 Recall
240	MCMO	Meridian 1 Companion Option
242	MULTI_USER	Multi-User Login
243	ALRM_FILTER	Alarm Filtering
245	SYS_MSG_LKUP	System Errors and Events Lookup (Option 81)
246	VMBA	Voice Mailbox Administration
247	CALL ID	Call ID (for AML applications)

Number	Mnemonic	Name
248	MPH	Meridian1 Packet Handler
250	DPNA	Direct Private Network Access
251	SCDR	Station Activity Records
252	KD3	Spanish KD3 DID/DOD interface
253	ARFW	Attendant Remote Call Forward
254	PHTN	Phantom TN
255	INBD	International nB+D
256	ADMINSET	Set Based Administration
258	ATX	Autodial Tandem Transfer
259	CDRX	Enhanced Call Detail Recording
261	EURO	EuroISDN
262	SAMM	Standalone Meridian Mail
263	QSIG	QSIG Interface
279	MLMS_SPL	Latin American Spanish
283	UIGW	Universal ISDN Gateways
284	DPNSS189I	Enhanced DPNSS1 Gateway
285	CHINA	China Attendant Monitor Package
286	REMOTE_IPE_PKG	Remote IPE
288	DPNSS_ES	DPNSS Enhanced Services
289	ADSP	ACD Night Call Forward without Disconnect Supervision
290	CCB	Collect Call Blocking
291	NI2	North American National ISDN Class II Equipment
292	CHTL	China Toll Package
293	TAT	Trunk Anti-Tromboning
294	BTD	Busy Tone Detection
296	MAT	MAT 5.0
297	MQA	Multiple Queue Assignment
298	CPIO	Call Processor Input/Output (Option 81)
299	CORENET	Core Network Module
301	CPP	Calling Party Privacy
302	MOSRPKG	Mobility Server
303	MMOPKG	M1 Microcellular Option
304	ARDL	Automatic Redial

Number	Mnemonic	Name
305	QSIG GF	QSIG Generic Functional protocol
306	CPRKNET	Call Park Networkwide
307	PAGENET	Call Page Networkwide
309	MASTER	Euro ISDN Trunk - Network Side
310	CPCI	Called Party Control on Internal Calls
311	NGCC	Nortel Symposium Call Center
313	ISPC	ISDN Semi-Permanent Connection
314	MMSN	M1 Mobility Multi-Site Networking
315	OPEN ALARM	Open Alarms
316	QSIG SS	QSIG Supplementary service
323	ETSI_SS	Euro Supplementary service
324	NGEN	Next Generation Connectivity
325	DMWI	DPNSSI Message Waiting Indication
326	CISMFS	Commonwealth of Independent States Multifrequency Shuttle Signalling
327	RANBRD	Recorded Announcement Broadcast
328	MUSBRD	Music Broadcast
329	ESA	Emergency Services Access
330	ESA_SUPP	Emergency Services Access Supplementary
331	ESA_CLMP	Emergency Services Access Calling Number Mapping
332	CNUMB	Calling Number Delivery
333	CNAME	Calling Name Delivery
334	NI-2 CBC	NI-2 Call By Call Service Selection
335	JTTC	Japan Telecommunication Technology Committee
344	GSCM	Global Call Monitoring
345	UWIN	Universal Wireless Interactive Networking
346	SMS	Short Message Service
348	MEET	MCDN End to End Transparency
349	ACLI	Analog Calling Line Identification
350	MC32	Meridian Companion Enhanced Capacity
351	DBA	Data Buffering and Access
362	FDID	Flexible DID
364	NMCE	NGenR2/Meridian Communications Exchange Connectivity
366	PLUGIN	Plug-In

Overlay Loader and Multi-User Login

Overlay loader

The Overlay loader becomes active after the login sequence and password , it will then accept input commands from the Serial Data Interface Terminals (SDI) after the “>” prompt (after login but with no overlay executing).

Overlay loader commands (OVL) C-Type Processors

In the system options 51C, 61C, 81 and 81C, the operation of the Overlay loader commands are as follows:

Command	Description
ERR	Display the last error message given. Only available on systems with System Errors and Events Lookup package 245 equipped.
ERR x..x	Specific system messages are displayed (package 245 required). Where: x..x = specific error type and number (ex. ERR SCH1001)
LD xxx	Load overlay program into the overlay area, then the loaded program assumes control. Where: xxx = number of the desired overlay program.
LOF	Disable Line Mode interface (TTY setup: 7 data bits, space parity, 1 stop bit).
LOGO	Exit overlay loader and Log-off the system.
LON	Enable Line Mode interface (TTY setup: 7 data bits, space parity, 1 stop bit).
****	Aborts the current overlay program, allowing another overlay program to be loaded into the overlay area.

Overlay loader commands (OVL) Omega Processors

A set of instructions or program used to load the nonresident programs, from tape or disk. The overlay loader becomes active after the login sequence and password. It will then accept the following commands from the Serial Data Interface terminal:

Command	Description
DIST	Disable the tape interface or the MSI, FDU, MDU card.
ENLT	Enable the tape interface or the MSI, FDU, MDU card.
LD xx	Load overlay programs from tape, disk or cache memory into the overlay area, then the loaded program assumes control. Where: xx = number of the desired overlay.
LD xx D	Load overlay programs from disk into the overlay area, even if the program resides in cache memory. Where: - xx = number of the desired overlay. - D = entered as part of command to specify the active disk.
LOGO	Exit overlay loader and Log-off the system.
STAT	Print the status of the tape interface or the MSI, FDU, MDU card.
****	Aborts the current overlay program, allowing another overlay program to be loaded into the overlay area.

Multi-User Login commands

Multi-User Login enables up to three users to log in, load, and execute overlay programs simultaneously. These three users are in addition to an attendant console or maintenance terminal. The Multi-User capability also introduces several user commands. With these commands, the user has the ability to:

- determine who is logged into the system
- communicate with other connected users
- halt and resume background and midnight routines
- initiate and terminate terminal monitoring
- change printer output assignment

Changes for X11 release 22 and later

Prior to X11 release 22, the number of Meridian 1 users allowed to login at the same time was three. For X11 release 22, this number is increased to five. A second change has also occurred in X11 release 22. Multiuser capability is now extended to LD 2 and LD 87.

Multi-User commands

A user can issue any of the commands listed in the following table from Overlay loader or from within an overlay. Precede the command with an exclamation point (!) to issue a command from within an overlay.

For example, to issue the WHO command from within an overlay, type:

```
!  
>WHO  
> <CR> takes user back to current overlay
```

Table 3
Multi-User commands

Command	Description
WHO	Displays user name, port ID, and overlay loaded for each logged-in terminal, as well as the user's MON and SPRT commands (see below).
SEND xx	Sends a message to logged-in terminal xx. When the system responds with a " SEND MSG: " prompt, enter the message text yy..yy (up to 80 characters). The text of a message is considered private and therefore is not written to any log file.
SEND ALL	Sends a message to all logged-in terminals. When the system responds with a " SEND MSG: " prompt, enter the message text yy..yy (up to 80 characters). The text of a message is considered private and therefore is not written to any log file.
SEND OFF	Prevents messages sent by other terminals from appearing at the user's terminal.
SEND ON	Enables messages sent by other terminals to appear at the user's terminal.
FORC xx	Forces terminal xx to log off (the requesting user must log in with LAPW or a level 2 password).
HALT	Stops background and midnight routines during a login session.
HALT OFF	Resumes halted background and midnight routines.
MON xx	Initiates monitoring for terminal xx (the requesting user must log in with LAPW or a level 2 password). The monitored terminal receives a message at the beginning and end of the monitored period.
MON OFF	Turns off the monitor function.
SPRT xx	Assigns printer output to port xx.
SPRT OFF	Resets printer output assignment.

Note: For complete feature information on Multi-User Login, consult the *Management Applications NTP*.

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 01: Template audit

Templates are used to store data which is common to many telephones. This includes items such as key functions and Class of Service. The Template Audit program saves protected memory by eliminating unused or duplicate telephone templates.

LD 1 also performs the following consistency checks.

User Count Scan

All telephones in the system are scanned to find the total number of users for a template.

If a template is found to have no users, the entire template is removed with the warning message 'NO USERS FOUND'. If a template is found to have an incorrect user count, the correct user count is written to the template, and the warning message 'USER COUNT LOW' or 'USER COUNT HIGH' is output. If the user count is accurate, the message 'USER COUNT OK' is output.

Duplicate Template Scan

Each template is checked against every other template for possible duplication. A template is considered a duplicate of another if all of the following conditions are met:

- the checksums are the same
- the template lengths and the hunt offsets are the same
- all template entries are the same

If a match is found, the warning message 'DUPLICATE OF xxxx' is output. A scan is then initiated to locate all users of the current template and move them to the matched template.

For each of these users found, the template number in the telephone data block and the user count is updated. After all of the users of the current template are moved to the matched template, the current template is removed.

Template Checksum Audit

A checksum is a binary sum of the template length, hunt offset, and template entries. The checksum is calculated for each template and compared with the existing template checksum. If the existing checksum is correct, the message 'CHECKSUM OK' is output. Otherwise, the checksum is corrected with the warning message 'CHECKSUM WRONG'.

Key Lamp Strip Audit

Two checks are made to correct Key Lamp Strip (KLS) corruption. First, the template length is compared to the number of KLS indicated in the protected line block. The second check verifies that the last word of the template reflects a 'NULL' key.

If these checks detect any discrepancies, they are corrected with the warning message 'CORRUPTED KLS'.

These corrections alter the checksum of the template. This is identified and corrected by the checksum audit.

Operating parameters

Due to the Real Time impact of this program and the large amount of data being scanned, the template audit should be run during low traffic hours.

The template audit should not be aborted unless it is critically necessary. If it does become necessary to interrupt execution of the audit, be aware that the templates may be corrupted.

If a system initialization occurs during the template audit, the program is automatically aborted. It should be restarted as soon as possible after this occurs.

The audit printout only appears on the TTY that requested the template audit program run.

Template Audit cannot be run as a background task.

To confirm that extraneous templates have been removed and that all counts have been corrected to their proper value, re-run the audit program.

A datadump (LD 43) should be run after a template audit is executed.

Sample operation

The audit begins when the program (LD 1) is loaded. All templates are scanned in the following sequence, beginning with template one:

- 1 Single line telephones
- 2 Multi-line telephones

Following is an example of the system information which is generated during a Template Audit:

```
TEMPLATE AUDIT
STARTING PBX TEMPLATE SCAN
TEMPLATE 0001 USER COUNT LOW    CHECKSUM OK
TEMPLATE 0002 USER COUNT HIGH   CHECKSUM OK
TEMPLATE 0003 NO USERS FOUND
      .
      .
      .
STARTING SLI TEMPLATE SCAN
TEMPLATE 0001 USER COUNT OK     CHECKSUM OK
      .
      .
      .
TEMPLATE 0067 USER COUNT OK     CHECKSUM WRONG
TEMPLATE 0068 USER COUNT OK     CHECKSUM OK DUPLICATE
OF 0014
      .
TEMPLATE 0082 USER COUNT OK     CHECKSUM OK
      .
TEMPLATE 0120 USER COUNT OK
TEMPLATE AUDIT COMPLETE
```

Note: The report does not print out that template inconsistencies have been corrected.

LD 02: Traffic

Contents

- Basic commands
- How to use traffic commands
- Set traffic report schedules
- Set report types
- System reports
- Customer reports
- Network report
- Set customer for feature key usage measurement
- Stop printing of title, date and time
- Set traffic measurement on selected terminals
- Set blocking probability for Line Load Control (LLC)
- Set time and date
- Set daily time adjustment
- Set system ID
- Set thresholds
- Perform threshold tests on last reports
- Print last reports

Basic commands

ASUM	Print Alarm/Exception summary
ASUM A	Print all the alarms that have at least one occurrence
ASUM E	Print all the alarms that have escalated
BWTM	Set the date and time for the clock to move backward
CITM	Clear Individual Traffic Measurement from TNs
COPC C R R	Clear one or more customer report types
COPN C R R	Clear one or more network report types
COPS R R	Clear one or more system report types
FWTM	Set the date and time for the clock to move forward
IDLT 0	No title is printed unless further data is also printed
IDLT 1	The title is always printed
INVC C R R ...	Print one or more of the last customer reports
INVN C R R ...	Print one or more of the last network reports
INVS R R ...	Print one or more of last system reports
ITHC C TH	Perform threshold tests on customer reports
ITHS TH	Perform threshold tests on system reports
SCFT C	Set the customer to be measured for feature key usage
SCTL X	Set blocking probability
SDTA X X Y	Set the time of day adjustment
SDST	Enable or disable the automatic daylight savings time adjustment
SITM	Set Individual Traffic Measurement on terminals
SLLC X	Activate Line Load Control at Level X
SOPC C R R	Set one or more customer report types
SOPN C R R	Set one or more network report types
SOPS R R	Set one or more system report types
SSHC C	Set customer report schedule
SSHS	Set system report schedule
SSID SID	Change the system ID number
STAD	Set the time and date
STHC C TH TV	Set the customer thresholds
STHS TH TV	Set the system thresholds
TCFT	Print current customer being measured for feature key usage
TDST	Query the daylight savings time adjustment information
TDTA X	Print the current time of day adjustment
TITM	Print the current TNs with Individual Traffic Measurement set
TLLC	Print current LLC level and blocking probability
TOPC C	Print the current customer report types
TOPN C	Print the current network report types

TOPS	Print the current system report types
TSHC C	Print current customer report schedule
TSHS	Print current system report schedule
TSID	Print the current system ID number
TTAD	Print the current time and date
TTHC C TH	Print the current customer thresholds
TTHS TH	Print the current system thresholds

How to use traffic commands

The Traffic Control program is used to set traffic options, system ID, date and time. The conventions used to describe the traffic commands are:

- data entered by the user is shown in upper case, data output by the system is shown in lower case
- a period (.) prompt indicates that the system is ready to receive a new command
- a double dash (--) indicates that the system is ready to receive data
- a <cr> indicates that the return key should be pressed

Note: The message TFC000 output on your switch indicates that the traffic program is running.

Set traffic report schedules

To print current customer report schedule:

```
TSHC C sd sm ed em  
sh eh so  
d d ...
```

To print current system report schedule:

```
TSHS sd sm ed em  
sh eh so  
d d ...
```

To set customer report schedule:

```
SSHC C sd sm ed em -- SD SM ED EM  
sh eh so -- SH EH SO  
d d ... -- D D ...<cr>
```

To set system report schedule:
SSHS sd sm ed em -- SD SM ED EM
sh eh so -- SH EH SO
d d ... -- D D ...<cr>

Legend

C = customer number

D = day of the week:

- 1 = Sunday
- 2 = Monday
- 3 = Tuesday
- 4 = Wednesday
- 5 = Thursday
- 6 = Friday
- 7 = Saturday

ED = end day (1-31)

EH = end hour (0-23)

EM = end month (1-12)

SD = start day (1-31)

SH = start hour (0-23)

SM = start month (1-12)

SO = schedule options:

- 0 = no traffic scheduled
- 1 = hourly on the hour
- 2 = hourly on the half-hour
- 3 = every half-hour

Example

To change the system reports schedule:

```
SSHS 25 4 16 7 -- 1 10 1 12
12 21 2 -- 0 23 1
2 3 4 5 6 -- 1 7<cr>
```

Old schedule

start time: April 25 at 12 noon

end time: July 16 at 9 P.M.

frequency: hourly on the half-hour (SO = 2)

days of the week: Monday to Friday

New schedule

start time: October 1 at 12 midnight

end time: December 1 at 11 P.M.

frequency: hourly on the hour (SO = 1)

days of the week: Sunday and Saturday

Note 1: In order to obtain traffic reports at the scheduled intervals, the output device must have prompt USER = TRF in (LD 17). If TRF is not defined for any device, reports are still generated to allow the printing of the last reports.

Note 2: Half hour start and end times are not possible.

Set system ID

Each Meridian 1 system has a unique system ID number (SID) selected from 0000 to 9999. The 4-digit ID number can be printed or set by the following commands.

To print the current SID: TSID sid

To change the SID: SSID sid -- SID

System reports

To print the current report types: TOPS r r ...

To set one or more report types: SOPS r r ... -- R R ...<cr>

To clear one or more report types: COPS r r ... -- R R ...<cr>

Legend

R is traffic report type:

- 1 = networks
- 2 = service loops
- 3 = dial tone delay
- 4 = processor load
- 5 = selected terminals
- 7 = junctor group traffic
- 8 = CSL and ISDN/AP links
- 9 = D-channel
- 10 = ISDN GF Transport
- 11 = MISP and EIMC traffic
- 12 = MISP D-channel management
- 13 = MISP messaging
- 14 = ISDN BRI trunk DSL system report
- 15 = MPG traffic

Note 1: To use the print command enter a space (not a carriage return) after the customer number.

Note 2: If no reports are currently set, NIL is output by the system.

Customer reports

To print the current report types: TOPC C r r ...

To set one or more report types: SOPC C r r ... -- R R<cr>

To clear one or more report types: COPC C r r ... -- R R<cr>

Legend

C = customer number

R is traffic report type:

- 1 = networks
- 2 = trunks
- 3 = customer console measurements
- 4 = individual console measurement
- 5 = feature key usage
- 6 = Radio Paging
- 7 = Call Park
- 8 = messaging and auxiliary processor links
- 9 = Network Attendant Service
- 10 = ISPC links establishment
- 11 = usage of broadcasting routes

Note 1: To use the print command enter a space (not a carriage return) after the customer number.

Note 2: If no reports are currently set, NIL is output by the system. For report 5, see “Set customer for feature key usage measurement”.

Network reports

To print the current report types: TOPN C r r ...

To set one or more report types: SOPN C r r ... -- R R<cr>

To clear one or more report types: COPN C r r ... -- R R<cr>

Legend

C = customer number

R is traffic report type:

1 = route list measurements

2 = network class of service measurements

3 = incoming trunk group measurements

Note 1: To use the print command enter a space (not a carriage return) after the customer number.

Note 2: If no reports are currently set, NIL is output by the system.

Set customer for feature key usage measurement

To print current customer being measured: TCFT c

To set the customer to be measured: SCFT c -- C

Note: Where C is the customer number. Only one customer can have feature measurement set at a time.

Stop printing of title, date and time

It is possible to suppress the printing of the title (TFS000), date and time in cases where traffic measurement is scheduled but no other data is printed. The command format is:

IDLT 0,1

0 = no title is printed unless further data is also printed

1 = the title is always printed

Set traffic measurement on selected terminals

These commands are used to print, set and clear the Individual Traffic Measurement (ITM) class of service for given terminal numbers for traffic report TFS005. Telephone sets, trunk and DTI channels can have this class of service. Terminals with ITM set are included in the groups for which Line Traffic Measurements are recorded.

Note: Do not use these commands on superloops or octal density cards (NT8D02, NT8D03, NT8D09, NT8D14, or NT8D16).

To print the current TNs with ITM set: TITM

Example

TITM

shelf 4 0 (all units on loop 4 shelf 0 have ITM set)

loop 5 (all units on loop 5 have ITM set)

tn 11 3 4 1 (unit on TN 11 3 4 1 has ITM set)

card 13 2 1 (all units on card 13 2 1 has ITM set)

chnl 34 18 (loop 34 channel 18 has ITM set)

To set ITM on terminals: SITM

Example

```
SITM          (prints current settings)
shelf 4 1     (current settings)
loop 05       (all units on loop 5 have ITM set)
tn 11 3 4 1   (unit on TN 11 3 4 1 has ITM set)
card 13 2 1   (all units on card 13 2 1 has ITM set)
chnl 34 18    (only loop 34 channel 18 has ITM set)
-- 7          (set ITM on all units on this loop)
-- 6 1        (set ITM on all units this shelf, or on channel 1)
-- 8 1 1      (set ITM on all units on this card)
-- 8 1 1 1    (set ITM on this unit)
-- 30 18      (set ITM on this loop 30 channel 18)
-- <cr>       (stop "--" prompt)
```

To clear line traffic TNs: CITM (the ITM class of service is removed from all units)

Example

```
CITM          (print current settings)
shelf 4 1     (all units on loop 4 shelf 1 have ITM set)
loop 05       (all units on loop 5 have ITM set)
tn 11 3 4 1   (unit on TN 11 3 4 1 has ITM set)
card 19 1 1   (all units on card 13 2 1 has ITM set)
chnl 34 18    (only loop 34 channel 18 has ITM set)
-- 4 1        (clear ITM on all units on this loop 4 shelf 1)
-- 5          (clear ITM on all units on this loop)
-- 11 3 4 1   (clear ITM on this unit)
-- 19 1 1     (clear ITM on all units on this card)
-- 34 18      (clear ITM on this loop 34 channel 18)
-- <cr>       (stop "--" prompt)
```

To clear line traffic TNs: CITM (the ITM class of service is removed from all units)

Set blocking probability for Line Load Control (LLC)

To print current LLC level and blocking probability: TLLC

To set blocking probability: SCTL X aaa

To activate Line Load Control at level X: SLLC X

Legend

x = F, S or T (for LLC level F, S, or T)

aaa = blocking probability in %

Set time and date

To print the current time and date:

TTAD day-of-week day month year hour minute second

Example

STAD WED 24 11 1976 15 41 49

To set the time and date:

STAD DAY MONTH YEAR HOUR MINUTE SECOND

Example

STAD 24 11 1976 15 41 49

Note: Except for the year, the other entries in the time of day output are 2-digit numbers. The year may be any year from 1901 to 2099 inclusive. It may be input as a full 4-digit field or as a 2-digit short form. The 2-digit short form is assumed to be in the range 1976 to 2075 and the appropriate addition is made when calculating the day-of-week and leap years.

Set daily time adjustment

The time of day can be adjusted during the midnight routines to compensate for a fast or slow system clock.

To print the current adjustment: `TDTA X y`

To set the adjustment: `SDTA X y -- X Y`

Legend

x = 0 (negative increment) or 1 (positive increment)

y = 0-60 second adjustment in increments of 100 ms

Set and print Daylight Savings Time

With X11 release 19 and later, the daylight savings time adjustment can be programmed to take place automatically. You can set the date to change to daylight savings, and to return to standard time. This information can be queried at any time.

The following commands are accepted by this program for this capability. The system clock **MUST ALREADY** be set for the daylight savings time to be updated. This information survives sysload.

- FWTM = Set the date and time for the clock to move forward.
- BWTM = Set the date and time for the clock to move backward.
- SDST = Enable or disable the automatic change.
- TDST = Query the change information.

To implement these commands, use the following.

- FWTM <month> <week> <day> <hour>
month = 1-(4)-12 [January-December]
week = (1)-5, L [1st-5th, L is the last week of the month]
day = (1)-7 [Sunday-Saturday]
hour = 1-(2)-22 [Midnight-11:00 pm]
- BWTM <month> <week> <day> <hour>
month = 1-(10)-12 [January-December]
week = (1)-5, L [1st-5th, L is the last week of the month]
day = (1)-7 [Sunday-Saturday]
hour = 1-(2)-22 [Midnight-11:00 pm]
- SDST ON, (OFF)
ON enables the automatic change capability
OFF disables the automatic change capability
- TDST <CR>

The output reflects the input format to indicate the change information.

Set thresholds

To print the current system thresholds: TTHS TH tv

To set the system thresholds: STHS TH tv -- TV

The system thresholds (TH) and range of values (TV) are:

- 1 = dial tone speed (range 0.00% to 99.9%)
- 2 = loop traffic (range 000 to 999 CCS)
- 3 = junctor group traffic (range 0000 to 9999 CCS)
- 4 = superloop traffic (range 0000 to 9999 CCS)

To print the current customer thresholds: TTHC C TH tv

To set the customer thresholds: STHC C TH tv -- TV

Legend

The thresholds (TC) and range of values (TV) for customer C are:

- 1 = incoming matching loss (TV range 00.0% to 99.9%)
- 2 = outgoing matching loss (TV range 00.0% to 99.9%)
- 3 = average Speed of Answer (TV range 00.0 to 99.9 seconds)
- 4 = percent All Trunks Busy (TV range 00.0% to 99.9%)
- 5 = percent OHQ Overflow (TV range 00.0% to 99.9%)

Perform threshold tests on last reports

To perform threshold tests on customer reports: ITHC C TH

Legend

C = customer number

TH is the threshold type:

1 = incoming matching loss

2 = outgoing matching loss

3 = average speed of answer

4 = percent all trunks busy

5 = percent OHQ overflow

To perform threshold tests on system reports: ITHS TH

Legend

TH is the threshold type:

1 = dial tone speed

2 = loop traffic

3 = junctor group traffic

Note: When a threshold test passes, OK is output.

Print last reports

The last traffic reports can be printed or tested against threshold values. Data accumulating for the next reports is not accessible.

To print one or more of the last customer reports: INVC C R R ...

Legend

C = customer number

R is traffic report type:

1 = networks

2 = trunks

3 = customer console measurements

- 4 = individual console measurement
- 5 = feature key usage
- 6 = Radio Paging
- 7 = Call Park
- 8 = messaging and auxiliary processor links
- 9 = Network Attendant Service

To print one or more of the last network reports: INVN C R R ...

Legend

C = customer number

R is traffic report type:

- 1 = route list measurements
- 2 = network class of service measurements
- 3 = incoming trunk group measurements
- 4 = superloop traffic

To print one or more of last system reports: INVS R R ...

Legend

R is traffic report type:

- 1 = networks (per loop)
- 2 = services
- 3 = dial tone delay
- 4 = processor load
- 5 = selected terminals
- 7 = junctor group traffic
- 8 = CSL and ISDN/AP links
- 9 = D-channel
- 10 = ISDN GF Transport
- 11 = MISP traffic
- 12 = MISP D-channel management
- 13 = MISP messaging
- 14 = ISDN BRI trunk DSL system report
- 15 = MPG traffic

Print alarm and exception filter summary

Release 19 and later provide alarms status summaries in this overlay. The alarms printed by this overlay are discussed in the *x11 Software Management* NTP.

Enter any of the following commands at the dot (.) prompt.

Command	Description	Release
ASUM	Print Alarm/Exception summary	alm_filter-19
ASUM A	Print all the alarms that have at least one occurrence	alm_filter-21
ASUM E	Print all the alarms that have escalated	alm_filter-21

LD 10: Analog (500/2500) Telephone Administration

This Overlay program allows data blocks for the 500/2500, DTMF type telephones and Displayphone 1000/220 to be created or modified.

When the Overlay is loaded the available system memory and disk records are output in a header as follows:

```
PBX000
MARF information
MEM AVAIL: (U/P): xxxxxx USED: xxxxxx TOT: xxxxxxxx
DISK RECS AVAIL: xxx
```

Incremental Software Management (ISM) also provides a header to indicate system configuration limits as follows:

```
TNS AVAIL: xxxxxx USED: xxxxxx TOT: xxxxxx
ACD AGENTS AVAIL: xxx USED: xxx TOT: xxx
AST SET AVAIL: xxxxxx USED: xxxxxx TOT: xxxxxx
```

The Group Hunt/DN Access to SCL (PLDN) package 120 allows an asterisk (*) or double asterisk(**) as a valid input to a number of prompts. Usually the asterisk will be part of a dialed number. Without this package, for example, inputting one asterisk will cause the system to reissue the last prompt, and two asterisks will cause a restart of the Overlay at REQ.

Changes for Release 19

With Release 19 and later software, Overlay programs 10, 11, 20 and 32 are linked thus eliminating the need to exit one Overlay and enter another. Once one of the above Overlays has been loaded it is possible to add, print and get the status of a set without having to exit one Overlay and load another.

The input processing has also been enhanced. Prompts ending with a colon (:) allow the user to enter either:

- 1 a question mark (?) followed by a carriage return (<cr>) to get a list of valid responses to that prompt or
- 2 an abbreviated response. The system then responds with the nearest match. If there is more than one possible match the system responds with SCH0099 and the input followed by a question mark and a list of possible responses. The user can then enter the valid response.

Changes for Release 24

With Release 24 and later software, Incremental Software Management (ISM) Header parameters for LD 10 will display as follows:

>ld 10

PBX000

MEM AVAIL: (U/P): xxxxxx USED U P: xxxxxx xxxxxx TOT: xxxxxx

DISK RECS AVAIL: xxx

TNS AVAIL: xxx USED: xxx TOT: xxx

ACD AGENTS AVAIL: xxx USED: xxx TOT: xxx

ANALOGUE TELEPHONES AVAIL: xxx USED: xxx TOT: xxx

AST AVAIL: xxx USED: xxx TOT: xxx

Prompts and responses

Table of Contents

Section	Page
Prompts and responses	70
<i>Prompts and responses by task :</i>	
Add a telephone	72
Copy a set	74
Easy change	75
Remove a telephone	75
Move a telephone	75

Prompts and responses

Prompt	Response	Comment
REQ:	a...a	Request
TYPE:	a...a	Type of data block (TYPE responses begin on page 102)
CFTN	l s c u	Copy From Terminal Number (l s c u ranges are defined on page 101)
SFMT	a...a	Select format for copy command (a...a = TNDN, TN, DN, or AUTO)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 101)
DELETE_VMB	(YES) NO	Delete Voice Mailbox
ECHG	(NO) YES	Easy Change
- ITEM	aaaa yyy	Item (aaaa = Program mnemonic; yyy = its new value)
TOTN	l s c u	To Terminal Number (l s c u ranges are defined on page 101)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
DES	d...d	Office Data Administration System Station Designator
CUST	xx	Customer number associated with this set
WRLS	(NO) YES	TN corresponds to a portable personal telephone
- WTYP	aaaa	Meridian Companion Mobility Option
- MWUN	(16) 32	Maximum number of Wireless Units
DIG	0-2045 0-99	Dial Intercom Group number and Member number
DN	x...x yyy	Directory Number and CLID entry (Range is (0)-value entered for SIZE prompt in LD 15 minus one)
- MARP	(NO) YES	Multiple Appearance Redirection Prime
- CPND	aaa	Calling Party Name Display
- - CPND_LANG	aaa	Calling Party Name Display Language (aa = (ROM) or KAT)
- - NAME	aaaa,bbbb	Calling Party Name Display Name
- - XPLN	xx	Expected name length
- DISPLAY_FMT	aaaa,bbbb	Display Format for Calling Party Name Display
-VMB	aaa	Voice Mailbox (aaa = NEW, CHG, or OUT)
- - VMB_COS	0-127	Voice Mailbox Class Of Service
- - SECOND_DN	x...x	Second DN sharing the Voice Mailbox
- - THIRD_DN	x...x	Third DN sharing the Voice Mailbox
- - KEEP_MSGS	(NO) YES	Preserve Meridian Mail messages and current password
AST	(NO) YES	Associate Set assignment
IAPG	(0)-15	Meridian Link Unsolicited Status Message (USM) group

HUNT	x...x	Hunt DN of the next station in the Hunt chain
TGAR	0-(1)- 31	Trunk Group Access Restriction
LDN	a...a	Departmental Listed DN (a...a = (NO), 0-3, or 0-5)
NCOS	(0)-99	Network Class Of Service group number
RNPG	(0)-4095	Ringing Number Pickup Group
XLST	(0)-254	Pretranslation group with which this station is associated
SCPW	xxxx	Station Control Password
SGRP	(0)-999	Scheduled Access Restriction group number
CLS	a...a	Class of Service options (CLS responses begin on page 77)
MAUT	(NO) YES	Modify assigned authorization codes for this telephone
- SPWD	xxxx	Secure data password
- AUTH	n xxxx	Authorization code
RCO	(0)-2	Ringing cycle option for Call Forward No Answer
DCLP	0-159	Dealer Conference Loop
LNRS	4-(16)-31	Last Number Redial Size
TEN	1-51	Tenant Number
OHID	(0)-9	Off-Hook Alarm Security DN index
HDID	(0) - 9	OHAS Half Disconnect Index to OHAS Half Disconnect security DN
PLEV	0-(2)-7	Priority Level
SCI	(0)-7	Station Category Indication priority level
FCAR	(NO) YES	Forced Charge Account Restriction
LANG	(0)-5	Language choice for Automatic Wake Up service
MLWU_LANG	(0)-5	Language choice for Automatic Wake Up service
PLEV	0-(2)-7	Priority Level
SPID	x...x	Supervisor Position ID
PRI	(1)-48	Priority level for ACD Agent
AACD	(NO) YES	AST ACD telephone
ARTO	(0)-3	Alternate Redirection Time Option for call redirection
ADAY	(0)-3	Alternate Days as defined in LD 15
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15
FTR	a...a x...x	Feature name and related data (FTR responses begin on page 87)
TIMP	xxx	Termination Impedance for XOPS unit (xxx = (600) or 900)
BIMP	a...a	Balance Impedance for XOPS unit (a...a = 600, 900, 3COM, or 3CM2)

Prompts and responses by task

Add a telephone

Prompt	Response	Comment
REQ:	NEW 1-255	Request = NEW 1-255
TYPE:	a...a	Type of data block (TYPE responses begin on page 102)
TN	l s c u	Terminal Number (l s c u ranges are defined for TN on page 101)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
DES	d...d	Office Data Administration System Station Designator
CUST	xx	Customer number associated with this set
WRLS	(NO) YES	TN corresponds to a portable personal telephone
- WTYP	aaaa	Meridian Companion Mobility Option
- MWUN	(16) 32	Maximum number of Wireless Units
DIG	0-2045 0-99	Dial Intercom Group number and Member number
DN	x...x yyy	Directory Number and CLID entry (Range is (0)-value entered for SIZE prompt in LD 15 minus one)
- MARP	(NO) YES	Multiple Appearance Redirection Prime
- CPND	aaa	Calling Party Name Display
- - CPND_LAN	aaa	Calling Party Name Display Language (aaa = (ROM) or KAT)
- - NAME	aaaa,bbbb	Calling Party Name Display Name
- - XPLN	xx	Expected name length
- DISPLAY_FMT	aaaa,bbbb	Display Format for Calling Party Name Display
- VMB	aaa	Voice Mailbox (aaa = NEW, CHG or OUT)
- - VMB_COS	0-127	Voice Mailbox Class Of Service
- - SECOND_DN	x...x	Second DN sharing the Voice Mailbox
- - THIRD_DN	x...x	Third DN sharing the Voice Mailbox
- - KEEP_MSGS	(NO) YES	Preserve Meridian Mail messages and current password
AST	(NO) YES	Associate Set assignment
IAPG	(0)-15	Meridian Link Unsolicited Status Message (USM) group
HUNT	x...x	Hunt DN of the next station in the Hunt chain
TGAR	0-(1)- 31	Trunk Group Access Restriction
LDN	aaa	Departmental Listed DN (aaa = (NO), 0-3, or 0-5)

NCOS	(0)-99	Network Class of Service group number
RNPG	(0)-4095	Ringing Number Pickup Group
XLST	(0)-254	Pretranslation group with which this station is associated
SCPW	xxxx	Station Control Password
SGRP	(0)-999	Scheduled Access Restriction Group number
CLS	a...a	Class of Service options (CLS options begin on page 77)
MAUT	(NO) YES	Modify assigned authorization codes for this telephone
- SPWD	xxxx	Secure Data Password
- AUTH	n xxxx	Authorization code
RCO	(0)-2	Ringing Cycle Option for Call Forward No Answer
DCLP	0-159	Dealer Conference Loop
LNRS	4-(16)-31	Last Number Redial Size
TEN	1-51	Tenant Number
OHID	(0)-9	Off-Hook Alarm Security DN index
HDID	(0) - 9	OHAS Half Disconnect Index to OHAS Half Disconnect security DN
SCI	(0)-7	Station Category Indication priority level
FCAR	(NO) YES	Forced Charge Account Restriction
LANG	(0)-5	Language choice for Automatic Wake Up service
MLWU_LANG	(0)-5	Language choice for Automatic Wake Up service
PLEV	0-(2)-7	Priority Level
SPID	x...x	Supervisor Position ID
PRI	(1)-48	Priority level for ACD Agent
AACD	(NO) YES	AST ACD telephone
ARTO	(0)-3	Alternate Redirection Time Option for call redirection
ADAY	(0)-3	Alternate Days as defined in LD 15
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15
FTR	a...a x...x	Feature name and related data (FTR options begin on page 87)
TIMP	xxx	Termination Impedance for XOPS unit (xxx = (600) or 900)
BIMP	a...a	Balance Impedance for XOPS unit (a...a = 600, 900, 3COM, or 3CM2)

Copy a set

Prompt	Response	Comment
REQ:	CPY 1-32	Request = CPY x
TYPE:	a...a	Type of data block
CFTN	l s c u	Copy from Terminal Number (l s c u ranges are defined on page 101)
SFMT	aaaa	Select Format. You may respond to SFMT with: AUTO, TNDN, TN or DN. Subprompts follow each of these responses as follows:
	AUTO	The system provides the new TNs, DNs and ACD position ID for ACD telephones are provided by the system.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 101)
- DN	x...x	DN of new set
- POS	xxxx	ACD position ID
	TNDN	Manual selection of TNs, DNs and ACD position IDs for ACD telephones. TN, DN and are prompted -n- times as defined by the CPY command.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 101)
- DN	x...x	DN of new set
- POS	xxxx	ACD position ID
	TN	New DNs and ACD position IDs for ACD telephones are provided by the system. TN is prompted -n- times as defined in the CPY command.
- DN	x...x	DN of new set
- POS	xxxx	ACD position ID
- TN	l s c u	TN of new set (l s c u ranges are defined on page 101)
	DN	The new TNs are provided by the system. You are prompted for the starting TN and each DN and ACD position ID for ACD telephones. DN and/or POS are prompted n times as defined in the CPY command.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 101)
- DN	x...x	DN of new set
- POS	xxxx	ACD position ID

Easy change

Prompt	Response	Comment
REQ:	CHG	Request = CHG
TYPE:	a...a	Type of data block
TN	l s c u	Terminal Number (l s c u ranges are defined on page 101)
ECHG	YES	Easy Change
ITEM	aaaa yyy	Item (aaaa = Program mnemonic; yyy = its new value)

Remove a telephone

When removing more than one telephone at a time, you are prompted for the starting TN. The next consecutive assigned TNs are removed.

Prompt	Response	Comment
REQ:	OUT 1-32	Request = OUT x
TYPE:	a...a	Type of data block
TN	l s c u	Terminal Number (l s c u ranges are defined on page 101)
DELETE_VMB	(YES) NO	Delete Voice Mailbox

Move a telephone

Telephones with mixed directory numbers can only be moved to a TN on the same loop unless the prompt MLDN = YES in LD 17.

Prompt	Response	Comment
REQ:	MOV	Request = MOV
TYPE:	a...a	Type of data block
TN	l s c u	Terminal Number (l s c u ranges are defined on page 101)
TOTN	l s c u	To Terminal Number

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AACD	(NO) YES	Associate set (AST) ACD telephone	ism-17
ADAY	(0)-3	Alternate Days as defined in LD 15 Prompted if CLS = RBDA.	basic-24
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15 Prompted if CLS = RBDA.	basic-24
ARTO	(0)-3	Alternate Redirection Time Option for call redirection, defined in the customer data block. Prompted if CLS = RTDA.	basic-22
AST	(NO) YES	Associate Set assignment For sets associated with ISDN Applications Protocol features.	iap3-12
AUTH	n xxxx	Authorization code. Where: - n = number (1-6) of assigned authorization code - xxxx = assigned authorization code (Any customer authorization code assigned in LD 88 is valid.) AUTH is prompted when CLS = AUTR (Class of Service = Authorization code required).	ssau-19
BIMP	600 900 3COM 3CM2	Balance Impedance for Enhanced Off-Premise Station (XOPS) unit 600 ohms. This is the default, except when CLS = OPS. 900 ohms 3 component 3 component 2. This is the default if CLS = OPS.	basic-20
CAC	(0)-10	Category code Category Code range for outgoing CNI of MFC trunks when Multifrequency Compelled Signaling (MFC) package 128 is equipped.	mfc-14

Prompt	Response	Comment	Pack/Rel
CDEN	SD DD 4D 8D	Single Density Card Double Density Card Quadruple Density Card Octal Density Card If REQ=NEW and the loop is a superloop, the default is 4D. If REQ=NEW and the XOPS card is to be configured on the loop, set CDEN to DD. If REQ=CHG, the card density is not changed. Note: If a QPC192 (off-premises extension) card is configured in superloop, then the response for CDEN should be Quadruple Density.	basic-7
CFTN	I s c u	Copy From Terminal Number. Prompted if REQ = CPY. For Meridian: I s c u = loop, shelf, card, unit Use this TN as a template for the new sets. Associate set (AST) assignments are not copied to the new telephones.	basic-12
CLS		Class of Service options The following CLS assignments determine the calling options and features available to an analog telephone. Defaults are shown in parentheses. Enter each non-default option required, separated by a space.	basic-1
	(CTD) CUN FR1 FR2 FRE SRE TLD UNR	Access Restrictions Conditionally Toll Denied Conditionally Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Semi-Restricted Toll Denied Unrestricted	basic-1
	(ABDD) ABDA	Abandoned call record and time to answer denied Abandoned call record and time to answer allowed	fcdr-18
	(AGTD) AGTA	ACD services for 500/2500 type telephone sets denied ACD services for 500/2500 type telephone sets allowed An AGTA entry will not be validated if you do not define FEAT = ACD in the same pass through this overlay.	phtn-20

LD 10

Page 78 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(ARHD) ARHA	Audible Reminder of Held Call Denied Audible Reminder of Held Call Allowed	basic-14
	(ASCD) ASCA	Alarm Security Denied Alarm Security Allowed Mutually exclusive with Three-Party Service Allowed (TSA)	ohas-18
	(AUTU) AUTD AUTR	Unrestricted Authcode Denied Authcode Restricted Authcode When the CLS is changed from AUTR to either AUTU or AUTD, all previous telephone authorization code information is removed. Must have Station Specific Authorization Codes (SSAU) package 229.	ssau-19
	(BNRD) BNRA	Busy Number Redial Denied Busy Number Redial Allowed Must have ADL configured and Flexible Feature Codes (FFC) package 139.	ffc-21
	(C6D) C6A	Six-Party Conference Denied Six-Party Conference Allowed C6A requires Transfer Allowed (XFA) Class of Service.	basic-10
	(CCSD) CCSA	Controlled Class of Service Denied Controlled Class of Service Allowed CCSA is required for the Electronic Lock feature. See the Flexible Feature Codes section in the <i>X11 features and services</i> NTP. Must have Controlled Class of Service (CCOS) package 81.	phtn-20
	(CDMD) CDMA	CDMD denies record generation CDMA allows external station activity records to be generated for the set	emct-20
	(CFHD) CFHA	Call Forward/HUNT Override Denied Call Forward/HUNT Override Allowed	cfho-20

Prompt	Response	Comment	Pack/Rel
(CFTD) CFTA		Call Forward by Call Type Denied Call Forward by Call Type Allowed Call Forward by Call Type enhances Hunt and Call Forward No Answer. CFTA requires Hunting Allowed (HTA) and/or Call Forward Allowed (FNA) Class of Service.	opft-10
(CFXD) CFXA		Call Forward All Calls to external DN Denied Call Forward All Calls to external DN Allowed Examples of external DNs are: • Route Access Code • ESN Access Code • CDP Distant Steering Code When Denied, a call can only be forwarded to the following internal DNs: • Single or multi-line telephone • Attendant DN or CAS local attendant DN • Listed DN as defined in LD 15 • Message center DN where MWC = YES	optf-19
(CLBD) CLBA		Deactivate Calling Party Number and Name per-line blocking Activate Calling Party Number and Name per-line blocking The user may still request CPP by dialing the CPP code.	cpp-21
(CLTD) CLTA		Network Call Trace from this telephone Denied Network Call Trace from this telephone Allowed	pra-17
(CNAD) CNAA		CLASS Calling Name Denied. CLASS Calling Name Multiple Data Format Allowed. Note: CNUD/CNUD/CNUS/CNAD/CNAA are not a valid input for a Dial Intercom Group (DIG) set.	cname-23
(CNDD) CNDA		Call Number Display Denied Call Number Display Allowed Allows user to see calling or called name associated with the number dialed if CPND is set up for the customer associated with the portable personal telephone. Allowed if WRLS = YES.	mcmo-20

LD 10

Prompt	Response	Comment	Pack/Rel
	(CNID) CNIA	Call Number Information Denied Call Number Information Allowed	bgd-10
	(CNUD) CNUA CNUS	CLASS Calling Number Delivery Denied. CLASS Calling Number Multiple Data Format Allowed. CLASS Calling Number Single Data Format Allowed.	cnumb-23
	(CWD) CWA	Call Waiting Denied Call Waiting Allowed The telephone should also have CLS = HTD (Hunting Denied) since hunting takes precedence.	basic-1
	(CWND) CWNA	Call Waiting Notification Denied Call Waiting Notification Allowed Must have Call Waiting Notification (CWNT) package 225.	cwnt-19
	(DDGA) DDGD	DN display on other set Allowed DN display on other set Denied	dpd-21
	(DNDY) DNDN	Diversion Notification with called party's number and name when available. Diversion Notification without called party's number and name.	qsigss- 23
	(DNO3) DNO1 DNO2	Diversion Notification Option with diverted-to party's number and name when available. Diversion Notification Option without notification. Diversion Notification Option without diverted-to party's number and name.	qsigss- 23
	(DTN) DIP MNL	Digitone. DTN is used for 2500, UNITY and digitone telephones. In Release 19 and later, the default is DTN. Dial Pulse. DIP is used for 500, rotary and dial pulse telephones. In Release 18 and earlier, the default is DIP. Manual service. MNL is used for manual service to the attendant and Flexible Hot Line	basic-20
	(DPUD) DPUA	DN Pickup Denied DN Pickup Allowed DN Pickup is not allowed on telephones in group zero (RNPG = 0). Must have Directed Call Pickup (DCP) package 115.	dcp-12

Prompt	Response	Comment	Pack/Rel
	(EHTD) EHTA	Enhanced Hot Line Denied Enhanced Hot Line Allowed Cannot be assigned with LLC1, LLC2, LLC3, LNA, MNL or Permanent Hold feature.	phtn-20
	(FAXD) FAXA	Fax denied Fax allowed. ISDN call is generated with 3.1 KHz Bearer Capability. Set is a modem or a FAX machine.	euroisdn-22
	(FND) FNA	Call Forward No answer Denied Call Forward No answer Allowed	basic-1
	(FTTC) FTTR FTTU	Flexible Trunk to Trunk Connections Conditional Flexible Trunk to Trunk Connections Restricted Flexible Trunk to Trunk Connections Unrestricted (default for sets upon software conversion to X11 Release 23).	
	(GPUD) GPIUA	Group Pickup Denied Group Pickup Allowed Group Pickup is not allowed on telephones in group zero. Must have Directed Call Pickup (DCP) package 115.	dcp-12
	(HTD) HTA	Hunting Denied Hunting Allowed	basic-1
	(LDTD) LDTA	Line Disconnect Tone Denied Line Disconnect Tone Allowed	basic-17
	(LLCN) LLC1 LLC2 LLC3	Line Load Control off Line Load Control Class 1 Line Load Control Class 2 Line Load Control Class 3	llc-13
	(LND) LNA	Last Number Redial Denied Last Number Redial Allowed Must have OPT = LRA in LD 15	lnr-8
	(LPD) LPA	Message Waiting Lamp Denied Message Waiting Lamp Allowed If a modem is connected to a port on the message waiting line card, that port should be defined as LPD. With LPA the modem may be damaged by the message waiting lamp voltage 150 V.	phtn-20

LD 10

Page 82 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(LPR) HPR	Low Priority station High Priority station High Priority will place this set or trunk at the top of the dial tone queue.	povr-1
	(MBXD) MBXA	Multi-Party Operation (MPO) Blind Transfer Denied. When CLS = MBXD, blind transfers occur with mis-operation treatment. Multi-Party Operation (MPO) Blind Transfer Allowed. When CLS = MBXA, blind transfers occur without mis-operation treatment. To configure CLS = MBXA, CLS must first be defined as TSA or XFA. Multi-Party Operations (MPO) package 141 must be equipped to enter MBXD or MBXA.	mpo-21
	(MCRD) MCRA	Multiple Call Arrangement Denied Multiple Call Arrangement Allowed	basic-15
	(MCTD) MCTA	Malicious Call Trace signal Denied Malicious Call Trace signal Allowed MCT is applied on a TN basis.	mct-10
	(MRD) MRA	Message Registration Denied Message Registration Allowed	mr-10
	(MWD) MWA	Message Waiting Denied Message Waiting Allowed	mwc-1
	(NAMA) NAMD	Name display Allowed Name display Denied	dpd-21
	(OCBD) OCBA	Outgoing Call Barring Denied Outgoing Call Barring Allowed Must have FFC and NFCR packages.	ccb-21
	(ONP) OPX	On-Premises extension Off-Premises extension Supported by QPC192 only, Release 19 and earlier.	basic-1
	OPS ONS	Off-Premises Station (default if CDEN is DD) On-Premises Station (default for all others) OPS and ONS replace OPX and ONP in Release 20 and later.	xpe-20

Prompt	Response	Comment	Pack/Rel
	(OVDD) OVDA	Override Denied Override Allowed Must have Flexible Feature Codes (FFC) package 139	ffc-15
	(PDN) LDN	Primary Directory Number Listed Directory Number The number used for the Calling Line Identification (CLID). 500/2500 sets have no display capability but prompt functions to transmit CLID information to sets with digit displays. Note: PDN and LDN do not apply for Release 22.	pra-12
	(PGND) PGNA	Deny PAGENET access Allow PAGENET access PGND/A allowed if PAGENET package 307 is equipped.	pagenet-22
	(PUD) PUA	Call Pickup Denied Call Pickup Allowed Default changes to PUA if Ringing Number Pickup Group (RNPG) is defined. Call Pickup is not allowed on telephones in group zero or RNPG = 0.	grp-1
	(RBDD) RBDA	Redirection By Day Denied Redirection By Day Allowed	basic-24
	(RBHD) RBHA	Redirection By Holiday Denied Redirection By Holiday Allowed	basic-24
	(RMMD) RMMA RMMO	Remote Monitoring of Messages Denied Remote Monitoring of Messages Allowed Allow Remote Monitoring of Messages and to Override, if it is being already monitored.	vmba -24
	(RTDD) RTDA	Call Redirection by Time of day denied Call Redirection by Time of day allowed If CLS = RTDD, AFD/AHNT/AEFD/AEHT will be removed, and ARTO will be reset to zero.	basic-22
	(SFD) SFA	Second Level CFNA Denied Second Level CFNA Allowed Prior to Release 15, SFA must have both FNA and MWD Class of Service. In Release 15 and later, SFA only requires FNA Class of Service.	basic-10

LD 10

Page 84 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(SHL) LOL	Short line Class of Service Long line Class of Service (default if CLS = OPS) Enter ALC Loss Plan Class of Service to be used for determining the Loss Plan Classification for this unit. If neither SHL or LOL is specified for a NEW unit, then SHL will be set as the default.	xops-20
	(SMSD) SMSA	Standalone Mail Server Denied Standalone Mail Server Allowed	samm-20
	(SMWD) SMWA	Extended message waiting indication denied. Extended message waiting indication allowed.	vmbs-24
	(SPKD) SPKA	Speaker Denied Speaker Allowed Must have On-Hold on Loudspeaker (OHOL) package 196.	ohol-15
	(SWD) SWA	Station-to-Station Call Waiting Denied Station-to-Station Call Waiting Allowed Enhances Call Waiting Allowed. Must have CLS = CWA. Must also have CLS = HTD, because hunting takes precedence over Station-to-Station Call Waiting.	basic-8
	(TENA) TEND	Tenant Service Allowed Tenant Service Denied Multi-Tenant must be configured in LD 93 before the default is TENA.	tens-7
	(THFD) THFA	Centrex Trunk Switch Hook Flash on this set denied Centrex Trunk Switch Hook Flash on this set allowed	thf-14
	TSA	Three-Party Service allowed TSA is mutually exclusive with ASCA and XFA. If TSA is requested and XFA is currently set, then XFA will be changed to XFD.	mpo-20
	(TVD) TVA	Trunk Verification from station Denied Trunk Verification from station Allowed	tvb-10
	(ULAD) ULAA	Set Based Administration User Access Denied Set Based Administration User Access Allowed	adminset-21

Prompt	Response	Comment	Pack/Rel
	(USMD) USMA	Meridian 911 position Denied Meridian 911 position Allowed Must have Meridian 911 (M911) package 224	m911-19
	(USRD) USRA	User Selectable Call Redirection Denied User Selectable Call Redirection Allowed	uscr-19
	(WTA) WTD	Warning Tone Allowed Warning Tone Denied	basic-1
	(XFD) XFA XFR	Call Transfer Denied Call Transfer Allowed Call Transfer Restricted TSA is mutually exclusive with XFA. If TSA is requested and XFA is currently set, then XFA will be changed to XFD. The most recently entered CLS overwrites the prior CLS of the same category. Note that one can specify XFR instead of XFD.	basic-1
	(XHD) XHA	Exclusive Hold Denied Exclusive Hold Allowed	dhld-4
	(XRD) XRA	Ring Again Denied Ring Again Allowed Must have CLS= XFA. RANA may be activated if OPT = RNA in LD 15. When OPT = RND in LD 15, all sets with CLS = XRA will be able to activate only Ring Again Busy.	optf-1
CPND	NEW CHG OUT	Calling Party Name Display Add data block Change existing data block Remove existing data block Must have CPND data block defined in LD 95.	cpnd-19
CPND_LANG	(ROM) KAT	Calling Party Name Display Language Roman Katakana CPND_LANG applies when FTR = CPND. CPND_LANG appears only when Multi-Language I/O (MLIO) package 211 is equipped.	cpnd-19
CUST	xx	Customer number associated with this set as defined in LD 15.	cust-1

LD 10

Page 86 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DCLP	0-159	Dealer Conference Loop DCLP input defines the conference loop assigned to the unit. The loop should be in the same group as the unit.	ohol-20
DELETE_VMB	(YES)	Delete Voice Mailbox Remove the Voice Mailbox from the Meridian 1 and Meridian Mail	vmba-19
	NO	Remove the Voice Mailbox from the Meridian 1 Prompted if REQ = OUT and TN has an associated Voice Mailbox. Allowed if the DN is either a single appearance or a multiple appearance DN on a single TN.	
DES	d...d	ODAS Station Designator Enter a 1- 6 alphanumeric character representing an Office Data Administration System (ODAS) Station Designator	odas-1
DIG	0-253 0-99	Dial Intercom Group (DIG) number and Dial Intercom Member (DIM) number prior to Release 14.	di-1
	0-2045 0-99	Dial Intercom Group (DIG) number and Dial Intercom Member (DIM) numbers for Release 14 and later. The value entered for the member number cannot be equal to the SPRE code. In the case of double-digit values, the first digit cannot be the same as the SPRE code. For example, if SPRE = 1, the member number cannot be 10, 11...19. Single line telephones assigned as Dial Intercom sets can only make calls within their own dial intercom groups. No DN can be assigned to them. If any member in the group has a two digit member number, all members have a two digit number. The system enters leading zeros. Must have maximum number of Dial Intercom Groups (DGRP) defined in LD 15.	
DISPLAY_FMT	(FIRST, LAST)	Display Format for CPND name May be input as FIRST To view names as John Doe	

Prompt	Response	Comment	Pack/Rel
		LAST, FIRST May be input as Last To view names as Doe John	
DN	x...x yyy	Directory Number (x...x) and CLID entry (yyy) The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. DN is not prompted if DIG is defined. Range for CLID entry is: [(0) - (value entered for SIZE prompt in LD 15 minus 1)] If the new DN entered already exists, one of the following messages will be output when the TNB is updated: • MIX (DN entered already appears on another set) • PVR (DN is a Private Line number) • HNT (DN exists and is defined as Hunting Allowed) • FNA (DN exists and has Forward No Answer) Before the DN can be modified, the station DN must be removed from all Group Hunt lists in which it is a member. With X11 Release 23, ISDN is not required for Calling Line Identification entry.	basic-1
ECHG	(NO) YES	Easy Change. Prompted when REQ = CHG. This allows change to any prompt in this program without toggling through all the prompts.	basic-12
FCAR	(NO) YES	Forced Charge Account Must use Forced Charge Account Restrict from using Forced Charge Account Prompted if FCAF = YES in LD 15 and CLS = TLD, CUN or CTD. TLD is recommended.	fca-1
FTR		Enter the feature name and related data. Precede feature mnemonic with X to remove it from the allowed features for the telephone. Prompted with Special Service for 2500 sets (SS25) package 18.	ss25-1

LD 10

Prompt	Response	Comment	Pack/Rel
ACD x...x yyyy		The ACD DN and the ACD position (POS ID) The ACD queue must be set in LD 23. ACD can be up to 4 digits; up to 7 digits with Directory Number Expansion (DNXP) package 150. An ACD entry is only allowed if you have already defined CLS = AGTA in the same pass through this overlay.	ism-16
ADL nn x..x	Auto Dial	Auto Dial cannot be configured if Hot Line is defined. nn = number of digits, up to 31 maximum in Auto Dial DN x..x = Auto Dial DN Auto Dial is required for BNRA. Must have Flexible Feature Codes (FFC) package 139.	ffc-15
AEFD y...y		Alternate External Flexible Call Forward DN, up to 13 digits. Remove by setting CLS = RTDD or CFTD. Where yyyy = Alternate Redirection DN.	basic-22
AEHT y...y		Alternate External Hunt DN, up to 13 digits. Remove by setting CLS = RTDD or CFTD. Where yyyy = Alternate Redirection DN.	basic-22
AFD y...y		Alternate Flexible Call Forward DN, up to 13 digits. Remove by setting CLS = RTDD. Where yyyy = Alternate Redirection DN.	basic-22
AHNT y...y		Alternate Hunt DN, up to 13 digits. Remove by setting CLS = RTDD. Where yyyy = Alternate Redirection DN.	basic-22
CFW nn x...x		Call Forward all calls Prior to Release 22, valid entries are: 4, 8, 12, (16), 20, 24. Entries between 5 and 22 are rounded up to the next valid number. For Release 22, valid entries are any integer in the range of (4)-31. Where: nn = maximum number of digits in the CFW DN; it must be large enough to hold the customer Reply DN.	ss25-1

Prompt	Response	Comment	Pack/Rel
		Where: x...x = Call Forward DN	
		If the Enhanced System Access feature is configured, valid entries are 4, 8, 12, (16), 20, 24, 28, 31. Numbers between 4 and 31 are rounded up to the next valid number.	
		If the Enhanced System Access feature is not configured and x11 release 22 software is equipped, you may input any integer in the range of (4)-23.	
CPND	Call Party Name Display, name assignment allowed		cpnd-10
	Response required only if Background Terminal or PMSI is used to configure names. Response is not required if CPND is programmed in LD 95. This feature applies for switches running software Release 18 and earlier.		
DCFW nn x...x			supp-10
	Default Call Forward		
	Where: nn = maximum number of digits in the DCFW DN.		
	Prior to Release 22, valid entries for nn are: 4, 8, 12, 16, 20, 23. Entries between 5 and 22 are rounded up to the next valid number.		
	For Release 22, valid entries for nn are: 4, 8, 12, 16, 20, 24, 28, 31.		
	Where: x...x = Default Call Forward DN.		
EFD x...x	External Flexible call forward DN (a Group Hunt pilot DN can be entered)		basic-10
	This is the DN to which external no answer calls are routed when Class of Service is Call Forward by Call Type allowed (CLS = CFTA). Must also have CLS = FNA.		
	EFD is only used if one of the following customer options are defined in LD 15:		
	• FNAD = FDN • FNAT = FDN • FNAL = FDN		
	Listed DNS, Departmental Listed DNS and prime DNS are accepted as valid input. For Release 16 and later, EFD can be up to 13 digits.		

LD 10

Prompt	Response	Comment	Pack/Rel
EHT x...x	External Hunt DN	This is the DN to which external busy calls Hunt when Class of Service is Call Forward by Call Type allowed (CLS = CFTA). Must also have CLS = HTA. Listed DNs, Departmental Listed DNs and prime DNs are accepted as valid input. A Group Hunt pilot DN can be entered with up to: • 4 digits without DNXP package 150 • 7 digits with DNXP package 150 • 13 digits for Network Call Redirection	basic-10
FAXS x...x	Facsimile server and command sequence	The command sequence includes the following: • Wx = waiting time of 0 to 9 seconds • Cxxx = control command digits • Oxxxx = originating or designated fax DN • D = the called fax DN For HiMail server, if the designated fax DN is 1234: FTR FAXS W6 O1234 C#10* D C## W4, or FTR FAXS W6 O1234 C#20* D C## W4 For Phi-Net server, if the designated fax DN is 1234: FTR FAXS W4 C30 O1234 C*0 D C# The facsimile server TNs must have Digitone (DTN) Class of Service and cannot have FNA, CWA, or FBA Class of Service, or FTR CFW feature. Use the HUNT feature to define the DN of the next port on the facsimile server.	faxs-18

Prompt	Response	Comment	Pack/Rel
FDN x...x	Flexible Call Forward No Answer	The DN cannot be an LDN A Group Hunt pilot DN can be entered of up to: • 4 digits without DNXP package 150 • 7 digits with DNXP package 150 • 13 digits for Network Call Redirection FDN is used for internal calls, if CLS is CFTA and FNA. FDN is used for all calls if CLS is CFTD and FNA. FDN requires that CLS = MWA or FNA. FDN is only used if one or more of the following customer options are defined in LD 15: • FNAD = FDN • FNAT = FDN • FNAL = FDN	basic-1
HOT D nn x...x	Direct entry for one way Enhanced Hot Line. Where: • nn = up to 31 digits maximum in Target DN • x...x = Terminating DN CLS = EHTA and DIP or DTN in Release 10 and later.		hot-10
HOT D nn x...x yyyy	Direct entry for two way Enhanced Hot Line. Where: • nn = up to 31 digits maximum in Target DN • x...x = Terminating DN • yyyy = optional two way Hot Line DN. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. CLS = EHTA and DIP or DTN.		hot-10
HOT nn x..x	Flexible Hot Line. Where: nn = up to 31 digits maximum in Target DN and x..x = Terminating DN. Flexible Hot Line requires that CLS = MNL.		

LD 10

Prompt	Response	Comment	Pack/Rel
	HOT L bbb	One way list entry for Enhanced Hot Line Where: bbb = list entry position from Hot Line list in LD 18. The Hot Line list NCOS overrides the set NCOS. Enhanced Hot Line requires CLS = EHTA, LLCN, PHTD and DIP or DTN. To remove Hot Line DN, change CLS EHTA to EHTD. Hot Line DNs can be programmed with * as operands only if OPAO is enabled.	hot-10
	HOT L bbb x...x	Two way list entry for Enhanced Hot Line. Where: • bbb = list entry position • xxxx = optional two way Hot Line DN. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Enhanced Hot Line requires CLS = EHTA, LLCN, PHTD and DIP or DTN. To remove Hot Line DN, change CLS EHTA to EHTD. Hot Line DNs can be programmed with * as operands only if OPAO is enabled.	hot-10
	ICF x...x	Internal Call Forward and Forward DN length. Prior to Release 22, valid entries for x...x are: 4, 8, 12, (16), 20 and 23. For Release 22, valid entries for x...x are: any integer in the range of (4)-31.	icf-19
	ISP 1-(75)-255	Enable hook flash disconnect supervision with flash timer in 10 milliseconds units. If the numeric parameter is not entered and the saved value is null, it is defaulted to 75 (750 ms). Otherwise, it does not change.	basic-21
	XISP	Disable hook flash disconnect supervision.	

Prompt	Response	Comment	Pack/Rel
	OSP (1)	Enable battery reversal answer and disconnect supervision for outgoing calls with absolute and assumed answer indication.	basic-21
	OSP 2	Enable battery reversal answer and disconnect supervision for outgoing calls with absolute answer indication only. If the numeric parameter is not entered and the saved value is null, it is defaulted to 1. Otherwise, it does not change.	
	XOSP	Disable battery reversal answer and disconnect supervision	
	PHD	Permanent Hold. Allowed with CLS = XFA.	basic-1
	RDL nn	Stored Number Redial Where: nn = DN length 4, 8, 12, (16), 24, 28, 31. Numbers between 5 and 30 are rounded up to the next valid number. Allowed with CLS = XFA.	snr-3
	SCC 0-8190	Speed Call Controller list number Range is 0 - 253 with Release 12 and earlier. The speed call list must be defined in LD 18.	optf-1
	SCU 0-8190	Speed Call User list number Range is 0 - 253 with Release 12 and earlier. The speed call list must be defined in LD 18.	optf-1
	SSU 0-4095	System Speed call User list number Range is 0 - 253 with Release 12 and earlier. The speed call list must be defined in LD 18.	ssc-2
HDID	(0) - 9	OHAS Half Disconnect Index to OHAS Half Disconnect security Directory Number	basic-24

LD 10

Page 94 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
HUNT	x...x	Hunt DN of the next station in the Hunt chain A Group Hunt pilot DN can be entered of up to: • 4 digits without DNXP package 150 • 7 digits with DNXP package 150 • 13 digits with Release 14 and later Precede with X to remove. With Call Forward and Hunt by Call Type, this is the Hunt DN for: • internal calls if CLS = CFTA, or • all busy calls if CLS = CFTD For X11 Release 22, a Control directory number (CDN) can be defined as a Hunt DN for both physical and phantom 500/2500 sets. When a CDN is configured in this way, a call which comes to a busy DN can be Hunting or Call Forward Busy to a CDN.	basic-1
IAPG	(0)-9 (0)-15	Meridian Link Unsolicited Status Message (USM) group prior to Release 17 Meridian Link Unsolicited Status Message (USM) group in Release 17 and later Assign Associate (AST) telephones to an USM group defined in LD 15. These groups determine which status messages are sent to the host computer for an AST telephone. The default Group 0 sends no messages, while Group 1 sends all messages.	aml-16
ITEM	aaaa yyy	Change any prompt Respond with the desired program mnemonic (aaaa) and its new value (yyy). ITEM is reprompted until only a carriage return <cr> is entered.	basic-12
KEEP_MSGS	(NO) YES	Keep Messages Preserve Meridian Mail messages and current password	vmba-19

Prompt	Response	Comment	Pack/Rel
LANG		Language. Prompted with Multi-Language Wake Up (MLWU) package 206 for Release 18 and earlier. This entry defines the language presented for the Automatic Wake Up recorded announcement (RAN) service for language 0 through 5 as follows:	mlwu-16
	(0)	See RAN1/RAN2 in LD 15	
	1	See LA11/LA12 in LD 15	
	2	See LA21/LA22 in LD 15	
	3	See LA31/LA32 in LD 15	
	4	See LA41/LA42 in LD 15	
	5	See LA51/LA52 in LD 15	
	X	Remove entry	
LDN	(NO)	Departmental Listed Directory Number is not activated for this set	dldn-5
	0-3	Departmental Listed Directory Number (LDN) as defined in LD 15 prior to Release 20	
	0-5	Departmental Listed Directory Number (LDN) as defined in LD 15 in Release 20 and later	
LNRS	4-(16)-31	Last Number Redial Size Enter the maximum number of digits that can be stored. Valid entries are 4, 8, 12, (16), 24, 28, 31. Invalid entries are rounded up to the next valid entry. Prompted if CLS = LNA.	lnr-8
MARP	(NO) YES	Multiple Appearance Redirection Prime Use TN as the Multiple Appearance DN Redirection Prime. The MARP prompt, or MARP information, is given only when assigning a DN.	basic-18
MAUT	(NO) YES	Modify assigned authorization codes for this telephone Prompted with Station Specific Authorization Codes (SSAU) package 229 and CLS = AUTR.	ssau-19

LD 10

Prompt	Response	Comment	Pack/Rel
MLWU_LANG		Language choice for Automatic Wake Up service. Prompted with Multi-Language Wake Up (MLWU) package 206 for Release 19 and later. This entry defines the language presented for the Automatic Wake Up recorded announcement (RAN) for language 0 through 5 as follows:	mlwu-19
	(0)	See RAN1/RAN2 in LD 15	
	1	See LA11/LA12 in LD 15	
	2	See LA21/LA22 in LD 15	
	3	See LA31/LA32 in LD 15	
	4	See LA41/LA42 in LD 15	
	5	See LA51/LA52 in LD 15	
	X	Remove entry	
MWUN	(16) 32	Maximum number of Wireless Units Standard line card = 16 Octal line card =32	mc32-24
NAME	aaaa,bbbb	Calling Party Name Display Name First name comma Last name. For example, John Doe is entered as John,Doe. The first single comma is treated as the delimiter. Up to 27 characters (including the comma) may be input. The last occurrence of the first comma group serves as the name delimiter and is translated into a space between the first and last name.	cpnd-21
	aaaa	When the delimiter is omitted, the input is stored as a first name.	
	aaaa,	When the delimiter follows the input, the input is stored as the first name.	
	,bbbb	When the delimiter precedes the input, the input is stored as a last name.	
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service group number CDP BARS or NFCR NARS Network Class of Service group number for Release 13 and later	ncos-2

Prompt	Response	Comment	Pack/Rel
OHID	(0)-9	Off-Hook Alarm Security DN index Enter the index number 0- 9 of the DN defined by LD 15 prompt ODNx. When a dial tone or interdigit timeout occurs on a set with Alarm Security Allowed (ASCA) Class of Service, the set is intercepted to a predefined DN.	basic-18
PLEV	0-(2)-7	Priority Level Where: 2 = set can override sets of level 1 and 2, and can be overridden by sets of level 2 - 7. Prompted with Priority Override/ Forced Camp-On (POVR) package 186.	povr-20
POS	xxxx	ACD position ID. Prompted when SFMT = AUTO, TNDN, TN or DN.	basic-12
PRI	(1)-48 (1)-32	Priority level for ACD Agent. Valid range for machine types NT, RT, STE, XT, and system Options 21E, 51, 51C, 61, 61C, 71 and 81. Valid range for all other system options. The agent with the lowest number assigned has the highest priority and is the first ACD agent to receive calls. (Priority 1 has the highest priority level) PRI is prompted if Automatic Call Distribution, Priority Agent package 116 is equipped and CLS = AGTA.	pagt-16
RCO	(0)-2	Ringin cycle option for Call Forward No Answer Prompted when CLS = FNA or MWA (or both).	uscr-19
REQ:		Request In Release 19, a colon following a prompt indicates enhanced processing. Enhanced processing allows a user to either view a list of possible responses or input an abbreviated response.	basic-1
	?	To get a list of valid responses (Release 19 and later)	
	CHG	Change existing data block	
	CPY n	Copy or create 1 to 32 new station data block or blocks automatically from the specified station data block.	
	END	Exit Overlay program	

LD 10

Page 98 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	MOV	Move data block from one TN to another	
	NEW X	Add new data block or blocks Follow NEW with a value of 1- 255 to create that number of consecutive telephone data block or blocks.	
	OUT X	Remove data block or blocks Follow OUT with a value of 1- 255 to remove that number of consecutive telephones.	
For Release 19, this load is linked with LDs 11, 20 and 32. You may enter one of the responses listed below at the REQ: prompt. Then go to that Load and follow its Prompts and Responses sequence. See "Changes for Release 19" on page 67 for further information. LD 32: CDSP CMIN CONV CPWD DISC DISI DISL DISN DISS DISU DSCT DSPS DSXP ENCT ENLC ENLG ENLL ENLN ENLS ENLU ENPS ENXP IDC IDCS IDU LBSY LDIS LIDL LMNT PBXT SDLC STAT SUPL TRK XNTT XPCT XPEC LD 20: LTN LUC LUDU LUU LUVU PRT LD 11: CHG CPY MOV NEW OUT			
RNPG	(0)-255 (0)-4095	Ringing Number Pickup Group Ringing Number Pickup Group in Release 13 and later with Capacity Expansion To remove a telephone from a group, enter 0 in response to the RNPG prompt.	grp-1
SCI	(0)-7	Station Category Indication priority level The Station Category number 1 to 7 must be defined as attendant console Incoming Call Indicator in LD 15 prompt ICI = CA1 - CA7.	sci-7

Prompt	Response	Comment	Pack/Rel
SCPW	xxxx	Station Control Password The Station Control password is used for the Electronic Lock and Remote Call Forward features. This entry must equal the Station Control Password Length (SCPL) as defined in LD 15. Not prompted if SCPL = 0. See Flexible Feature Codes in the X11 features and services NTP.	ffc-15
SECOND_DN	x...x	Second Directory Number sharing the Voice Mailbox. This number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	vmmba-19
	X	Enter the letter "X" to delete the second directory number	
SFMT		Select Format for the copy command The DN may be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The POS prompt appears if CLS = AGTA.	basic-12
	TNDN	Manual selection of TNs, DNs and ACD position IDs for ACD telephones. TN, DN and POS are prompted -n- times as defined by the CPY command.	
	TN	The new DNs and ACD position IDs for ACD telephones are provided by the system. You are prompted for the starting DN, ACD position ID and each TN. TN is prompted n times as defined in the CPY command.	
	DN	The new TNs are provided by the system. You are prompted for the starting TN and each DN and ACD position ID for ACD telephones. DN and/or POS are prompted n times as defined in the CPY command.	
	AUTO	The new TNs, DNs and ACD position ID for ACD telephones are provided by the system. You are prompted for the starting TN, DN and ACD position ID.	
SGRP	(0)-999	Scheduled Access Restriction Group Number Prompted with Schedule Access Restrictions (SAR) package 162. The group must be defined in LD 88.	sar-15

LD 10

Page 100 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
SPID	x...x	Supervisor Position ID This input assigns an agent to a supervisor when agent lamps are not assigned on the supervisor telephone. This number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. However, ISDN applications can accept up to 13 digits. Prompted for ACD packages B, C and D when CLS = AGTA.	acdb-1
SPWD	xxxx	Secure Data Password Prompted if the password is defined in LD 15. If the password is not entered, the security codes will not print when PRT is requested.	ssau-19
TEN	1-51	Multi-Tenant Number Enter the Multi-Tenant number for this telephone. Prompted with Multiple-Tenant Service (TENS) package 86 and Tenant Service enabled.	tens-7
TGAR	(0)-15 (0)-31 0-(1)-31	Trunk Group Access Restriction: Release 1 to 13 Trunk Group Access Restriction: Release 13 to 21 Trunk Group Access Restriction: Release 22 and later The default of (1) automatically blocks direct access.	basic-1
THIRD_DN	x...x X	Third DN sharing the Voice Mailbox Third Directory Number. This number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Deletes the third directory number	vmba-19

Prompt	Response	Comment	Pack/Rel
TIMP	(600) 900	Termination Impedance for XOPS unit 600 ohms 900 ohms The following combinations of TIMP/BIMP are valid: • 600/600 • 900/900 • 600/3COM • 900/3COM • 600/3CM2 • 900/3CM2 These are equivalent to the TIMP/BIMP prompts in LD 14 for the EXUT card. TIMP is prompted if the specified TN will be configured on an XOPS card (DD card on a superloop). If the response to TIMP uniquely describes the TIMP/BIMP combination, then BIMP is not prompted.	basic-20
TN	I s c u	Terminal Number TN appears when REQ = NEW, CHG, MOV or OUT. The TN defines the location of the telephone set. The ranges for Iscu are: Where I = • 0 - 159: loops, superloops which are multiples of 4, starting with superloop 0 Where s = • 0 - 3: PE shelves of loops defined TERM in LD 17 • 0 - 1: PE shelves of loops defined TERD in LD 17 and superloops • 0: PE shelves of loops defined TERQ in LD 17 Where c = • 1 - 10: PE cards of dual and enhanced loops • 0 - 15: IPE cards of superloops Where u = • 0 - 3: single density units • 0 - 7: double density units • 0 - 15: quad density units	basic-1

LD 10

Page 102 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
TOTN	I s c u	To Terminal Number. Prompted when REQ = MOV. General TN format	basic-1
TYPE:		Type of data block. In Release 19, a colon following a prompt indicates enhanced processing. Enhanced processing allows a user to either view a list of possible responses or input an abbreviated response. Note: For Release 19, LD 10 is linked with LDs 11, 20 and 32. You may enter any of the response options listed for the TYPE prompt in LDs 11 and 20 or any of the commands listed in LD 32. See "Changes for Release 19" on page 67 for further information.	basic-20
	? 500 CARD CARDSL OOSLT	To get a list of valid responses (Release 19 and later) 500/2500 telephone set data block 500/2500 card block for Automatic Set Relocation (ASR) Single- line telephone line card Out-of-Service Single Line Terminal unit	
VMB	NEW CHG OUT	Add Voice Mailbox Change Voice Mailbox Remove Voice Mailbox Prompted with Voice Mailbox Administration (VMBA) package 246.	vmba-19
VMB_COS	0-127	Voice Mailbox Class of Service	vmba-19
WRLS	(NO) YES	TN corresponds to a portable personal telephone. Must have Meridian 1 Companion Option (MCMO) package 240.	mcmo-20
WTYP	(MCMO) DECT	Meridian Companion Mobility Option Digital Enhanced Cordless Telecommunications	mcmo- 23

Prompt	Response	Comment	Pack/Rel
XLST	(0)-7 (0)-254	Pretranslation group associated with this station Pretranslation group: Release 14 and later If the user wants to use a 16-button DTMF ABCD set as a call forward destination station to deactivate the call forward all calls function, then XLST must be set equal to the table number defined in LD 18.	pxlt-10
XPLN	xx	Expected name length (this value should be set to a sufficient length for current and future names for that DN) When REQ=NEW, the XPLN prompt defines the maximum name length for that particular DN or DIG. The XPLN for a DN cannot be changed without deleting that name entry. XPLN must range from the actual length of the name string to MXLN, or defaults to DFLN.	cpnd-19

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 11: Meridian Digital Telephone Administration

This Overlay program allows data blocks for SL-1, Displayphone 1200, M1000 series, M2000 series, and M3000 digital telephones to be created or modified.

When the Overlay is loaded the available system memory and disk records are output in a header as follows:

```
SL1000
MARP information
MEM AVAIL: (U/P): xxxxxx USED: xxxxx TOT: xxxxxxxx
DISK RECS AVAIL: xxx
```

Incremental Software Management (ISM) also provides a header to indicate system configuration limits and appears as follows:

```
TNS AVAIL: xxxxx USED: xxxxx TOT: xxxxx
ACD AGENTS AVAIL: xxx USED: xxx TOT: xxx
AST SET AVAIL: xxxxx USED: xxxxx TOT: xxxxx
```

The Group Hunt/DN Access to SCL (PLDN) package 120 allows an asterisk (*) or double asterisk (**) as a valid input to a number of prompts. Usually the asterisk will be part of a dialed number. Without this package, for example, inputting one asterisk will cause the system to reissue the last prompt, and two asterisks will cause a restart of the Overlay at REQ.

Changes for Release 19

With Release 19 and later software, Overlay programs 10, 11, 20 and 32 are linked, thus eliminating the need to exit one Overlay and enter another. Once one of the above Overlays has been loaded it is possible to add, print and get the status of a set without having to exit one Overlay and load another.

The input processing has also been enhanced so that prompts ending with a colon (:) allow the user to enter either:

- 1 a question mark (?) followed by a carriage return (<cr>) to get a list of valid responses to that prompt, or
- 2 an abbreviated response, the system then responds with the nearest match. If there is more than one possible match the system responds with SCH0099 and the input followed by a question mark and a list of possible responses. The user can then enter the valid response.

Changes for Release 24

With Release 24 and later software, Incremental Software Management (ISM) Header parameters for LD 11 will display as follows:

>ld 11

SL1000

MEM AVAIL: (U/P): xxxxxx USED U P: xxxxxx xxxxxx TOT: xxxxxx

DISK RECS AVAIL: xxx

TNS AVAIL: xxx USED: xxx TOT: xxx

ACD AGENTS AVAIL: xxx USED: xxx TOT: xxx

AST AVAIL: xxx USED: xxx TOT: xxx

DIGITAL TELEPHONES AVAIL: xxx USED: xxx TOT: xxx

Prompts and responses

Table of Contents

Section	Page
Prompts and responses	107
<i>Prompts and responses by task :</i>	
Add a voice telephone	111
Add a data telephone	114
Copy a telephone	118
Easy change	119
Move a telephone	119
Remove a telephone	119

Prompts and responses

Prompt	Response	Comment
REQ:	a...a	Request
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
CFTN	l s c u	Copy From Terminal Number (l s c u ranges are defined on page 166)
SFMT	a...a	Select Format (a...a = TNDN, TN, DN, or AUTO)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 166)
DELETE_VMB	(YES) NO	Delete Voice Mailbox
ECHG	(NO) YES	Easy Change
- ITEM	aaaa yyy	Item (aaaa = Program mnemonic; yyy = its new value)
TOTN	l s c u	To Terminal Number (l s c u ranges are defined on page 166)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
DES	d...d	Office Data Administration System Station Designator
VISI	(NO) YES	Visiting
CUST	xx	Customer number associated with this set

PUTYP	(PRIVATE) IS-41	Portable Subscriber Type
MPHI	(NO) YES	Meridian Communications Unit used as MPH Interface
KLS	1-7	Number of Key/Lamp Strips
AOM	0-2	Number of Add-on Modules
KBA	(0) - 2	Key-based accessory prompt
DSPL	(0)-500	Length (in characters) of portable display
DSPT	(0)-2	Type of portable display
ESN	x..x	Electronic Serial Number (11 Hex digits)
FDN	x...x	Flexible CFNA DN
TGAR	0-(1)-31	Trunk Group Access Restriction
LDN	aaa	Departmental Listed Directory Number (aaa = (NO), 0-3, or 0-5)
MIN	a..a	Mobile Identification Number (10 BCD digits)
NCOS	(0)-99	Network Class of Service group
RNPG	(0)-4095	Ringing Number Pickup Group
SSU	0-4095	System Speed call list number
XLST	(0)-7	Pretranslation group associated with this station
SCPW	xxxx	Station Control Password
SGRP	(0)-999	Scheduled Access Restriction Group number
CLS	a...a	Class of Service (CLS responses begin on page 122)
ARTO	(0)-3	Alternate Redirection Time Option for call redirection
ADAY	(0)-3	Alternate Days as defined in LD 15
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15
AFD	x...x	Alternate Flexible Call Forward DN
AHNT	x...x	Alternate Hunt DN
AEFD	x...x	Alternate External Flexible Call Forward DN
AEHT	x...x	Alternate External Hunt DN
MAUT	(NO) YES	Modify authorization codes for this telephone
- SPWD	xxxx	Secure Data Password
- AUTH	n xxxx	Authorization code
RCO	(0)-2	Ringing Cycle Option for Call Forward No Answer
EFD	x...x	Flexible CFNA DN for External calls
HUNT	x...x	Hunt DN of next station in hunt chain
EHT	x...x	External Hunt DN
LHK	(0)-69	Last Hunt Key number limit

LNRS	4-(16)-31	Last Number Redial Size
TEN	1-511	Tenant number
OHID	(0)-9	Off-Hook Alarm Security DN index for off-hook or interdigit timeout.
FSVC	(0)-9	Forced Out-of-Service Off-Hook Alarm Security DN index
SCI	(0)-7	Station Category Indication priority level
DTP	aaa	Data Station Type
- TOV	(0)-3	Timeout Value for the data port
- DTAO	a...a	Data Option (a...a = (MPDA) or MCA)
- PSEL	a...a	Protocol Selection (a...a = (DMDM) or TLNK)
- OPE	(NO) YES	Change data port Operating Parameters
- PSDS	(NO) YES	Public Switched Data Service option
- TRAN	a...a	Port Transmission type (a...a = (ASYN) or SYN)
- PAR	a...a	Parity (a...a = (SPACE), EVEN, ODD, or MARK)
- DTR	(OFF) ON	Data Terminal Ready settings
- DUP	aaaa	Duplex (aaaa = (FULL) or HALF)
- HOT	(OFF) ON	Hotline
- AUT	(ON) OFF	Auto-answer
- AUTOB	(ON) OFF	Auto Baud rate
- BAUD	0-(7)-10	Data rate in bps for the data port
- DCD	(ON) OFF	Dynamic Carrier Detect
- PRM	(ON) OFF	Prompt for terminal or host mode
- VLL	(OFF) ON	Virtual Leased Line
- MOD	(NO) YES	Mode
- INT	(OFF) ON	Meridian 1/SL-100 Interworking
- CLK	(OFF) ON	Clock
- DEM	aaa	Data Equipment Mode (aaa = (DCE) or DTE)
- DLNG	aaa	Language preference for DAC prompts (aaa = (ENG) or FRN)
- KBD	(ON) OFF	Keyboard Dialing
- V25	(NO) YES	V.25 bis option (synchronous mode only)
- HDLC	(NO) YES	High Level Data Link Control
- RTS	(ON) OFF	Request To Send (applies only to asynchronous mode)
- WIRE	(OFF) ON	Wire test
- PBDO	(OFF) ON	Port Busy when DTR off
- ADCP	(NO) YES	All-Digital Connection Prefix

- MPR	0-511	Modem Pool Route number
LPK	(0)-69	Line Preference Key
PLEV	0-(2)-7	Priority Level
FCAR	(NO) YES	Forced Charge Account Restricted
LTN	1-253 0-15	Logical TN and AUX link number
SPID	x...x	ACD Supervisor Position ID DN
AST	xx yy	Associate Set Assignment for Meridian Link applications
IAPG	(0)-15	Meridian Link Unsolicited Status Message (USM) group
ITNA	(NO) YES	Idle TN for the Third Party Application
DGRP	(1)-5	Device Group
PRI	(1)-32	Priority level for ACD agent
LANG	a	Language choice for Automatic Wakeup (AWU) calls (a = (0)-5 or X)
MLWU_LANG	a	Language choice for Automatic Wakeup (AWU) calls (a = (0)-5 or X)
DTMK	x...x	Data Mode Key number for a dynamic voice/data TN
DNDR	(0)-120	Directory Number Delayed Ringing in seconds
KEY	xx aaa yyyy zz.z	Telephone function key assignments (KEY responses begin on page 140)
- MARP	(NO) YES	Multiple Appearance Redirection Prime
- DNRO	(0)-4	Distinctive Number Ringing index for Outgoing calls
- DNRI	(0)-4	Distinctive Number Ringing index for Incoming calls
- CPND	aaa	Calling Party Name Display
- - CPND_LANG	aaa	Calling Party Name Display Language (aaa = (ROM) or KAT)
- - NAME	aaaa,bbbb	Calling Party Name Display name
- - XPLN	xx	Expected Name Length
- - DISPLAY_FMT	aaaa,bbbb	Display Format for CPND name
- VMB	aaa	Voice Mailbox
- - VMB_COS	0-127	Voice Mailbox Class of Service
- - SECOND_DN	x...x	Second DN sharing the voice mailbox
- - THIRD_DN	x...x	Third DN sharing the voice mailbox
- - KEEP_MSGS	(NO) YES	Preserve Meridian Mail messages and current password

Prompts and responses by task

Add a voice telephone

Prompt	Response	Comment
REQ:	NEW	Request = NEW
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 166)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
DES	d...d	Office Data Administration System Station Designator
VISI	(NO) YES	Visiting
CUST	xx	Customer number associated with this set
PUTYP	(PRIVATE) IS-41	Portable Subscriber Type
MPHI	(NO) YES	Meridian Communications Unit used as MPH interface
KLS	1-7	Number of Key/Lamp Strips
AOM	0-2	Number of Add-on Modules
KBA	(0) - 2	Key-based accessory prompt
DSPL	(0)-500	Length (in characters) of portable display
DSPT	(0)-2	Type of portable display
ESN	x..x	Electronic Serial Number (11 Hex digits)
FDN	x...x	Flexible CFNA DN
TGAR	0-(1)-31	Trunk Group Access Restriction
LDN	aaa	Departmental Listed Directory Number (aaa = (NO), 0-3, or 0-5)
MIN	a..a	Mobile Identification Number (10 BCD digits)
NCOS	(0)-99	Network Class of Service group
RNPG	(0)-4095	Ringing Number Pickup Group
SSU	0-4095	System Speed Call list number
XLST	(0)-7	Pretranslation group associated with this station
SCPW	xxxx	Station Control Password

SGRP	(0)-999	Scheduled Access Restriction Group number
CLS	aaaa	Class of Service (CLS responses begin on page 122)
ARTO	(0)-3	Alternate Redirection Time Option for call redirection
ADAY	(0)-3	Alternate Days as defined in LD 15
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15
AFD	x...x	Alternate Flexible Call Forward DN
AHNT	x...x	Alternate Hunt DN
AEFD	x...x	Alternate External Flexible Call Forward DN
AEHT	x...x	Alternate External Hunt DN
MAUT	(NO) YES	Modify authorization codes for this telephone
- SPWD	xxxx	Secure Data Password
- AUTH	n xxxx	Authorization code
RCO	(0)-2	Ringing Cycle Option for Call Forward No Answer
EFD	x...x	Flexible CFNA DN for External calls
HUNT	x...x	Hunt DN of next station in hunt chain
EHT	x...x	External Hunt DN
LHK	(0)-69	Last Hunt Key number limit
LNRS	4-(16)-31	Last Number Redial Size
TEN	1-511	Tenant number
OHID	(0)-9	Off-Hook Alarm Security DN index for off-hook or interdigit timeout.
FSVC	(0)-9	Forced Out-of-Service Off-Hook Alarm Security DN index
SCI	(0)-7	Station Category Indication priority level
LPK	(0)-69	Line Preference Key
PLEV	0-(2)-7	Priority Level
FCAR	(NO) YES	Forced Charge Account Restricted
LTN	1-253 0-15	Logical TN and AUX link number
SPID	x...x	ACD Supervisor Position ID DN
AST	xx yy	Associate Set Assignment for Meridian Link applications
IAPG	(0)-15	Meridian Link Unsolicited Status Message (USM) group
ITNA	(NO) YES	Idle TN for the Third Party Application
DGRP	(1)-5	Device Group

PRI	(1)-32	Priority level for ACD agent
LANG	(0)-5 X	Language choice for Automatic Wake Up (AWU) calls
MLWU_LANG	a	Language choice for Automatic Wakeup (AWU) calls (a = (0)-5 or X)
DTMK	x...x	Data Mode Key number for a dynamic voice/data TN
DNDR	(0)-120	Directory Number Delayed Ringing (in seconds)
KEY	xx aaa yyyy zz..z	Telephone function key assignments (KEY responses begin on page 140)
- MARP	(NO) YES	Multiple Appearance Redirection Prime
- DNRO	(0)-4	Distinctive Number Ringing index for Outgoing calls
- DNRI	(0)-4	Distinctive Number Ringing index for Incoming calls
- CPND	aaa	Calling Party Name Display (aaa = NEW, CHG or OUT)
- - CPND_LANG	aaa	Calling Party Name Display Language (aaa = (ROM) or KAT)
- - NAME	aaaa,bbbb	Calling Party Name Display name
- - XPLN	xx	Expected Name Length
- - DISPLAY_FMT	aaaa,bbbb	Display Format for CPND name
- VMB	aaa	Voice Mailbox
- - VMB_COS	0-127	Voice Mailbox Class of Service
- - SECOND_DN	x...x	Second DN sharing the Voice Mailbox
- - THIRD_DN	x...x	Third DN sharing the Voice Mailbox
- - KEEP_MSGS	(NO) YES	Preserve Meridian Mail Messages and current password

Add a data telephone

The following prompts apply to M2006, M2008, M2216, M2616 data ports (MPDA), DAC card units and Meridian Communications Adapter (MCA) only:

All operating parameter information is stored in the MPDA. If the hardware does not exist, the parameter information is lost. The hardware must be connected before configuring the operating parameters in this program. In the event that the parameters are lost, it is possible to enter the data through the data adapter. It is not necessary to re-enter the program.

Prompt	Response	Comment
REQ:	NEW	Request = NEW
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 166)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
DES	d...d	Office Data Administration System Station Designator
CUST	xx	Customer number associated with this set
PUTYP	(PRIVATE) IS-41	Portable Subscriber Type
MPHI	(NO) YES	Meridian Communications Unit used as MPH interface
KLS	1-7	Number of Key/Lamp Strips
AOM	0-2	Number of Add-on Modules
KBA	(0) - 2	Key-based accessory prompt
FDN	x...x	Flexible CFNA DN
TGAR	0-(1)-31	Trunk Group Access Restriction
LDN	aaa	Departmental Listed Directory Number (aaa = (NO), 0-3, or 0-5)
NCOS	(0)-99	Network Class of Service group
RNPG	(0)-4095	Ringing Number Pickup Group
SSU	0-4095	System Speed call list number
XLST	(0)-7	Pretranslation group associated with this station
SCPW	xxxx	Station Control Password
SGRP	(0)-999	Scheduled Access Restriction Group number
CLS	aaaa	Class of Service (CLS responses begin on page 122)

ARTO	(0)-3	Alternate Redirection Time Option for call redirection
ADAY	(0)-3	Alternate Days as defined in LD 15
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15
AFD	x...x	Alternate Flexible Call Forward DN
AHNT	x...x	Alternate Hunt DN
AEFD	x...x	Alternate External Flexible Call Forward DN
AEHT	x...x	Alternate External Hunt DN
MAUT	(NO) YES	Modify authorization codes for this telephone
- SPWD	xxxx	Secure Data Password
- AUTH	n xxxx	Authorization code
RCO	(0)-2	Ringing cycle option for Call Forward No Answer
DTYP	aaa	Data station Type
TOV	(0)-3	Timeout Value for the Data port
DTAO	a...a	Data Option (a...a = (MPDA) or MCA)
PSEL	a...a	Protocol Selection (a...a = (DMDM) or TLNK)
OPE	(NO) YES	Change data port Operating Parameters
- PSDS	(NO) YES	Public Switched Data Service option
- TRAN	a...a	Port Transmission type (a...a = (ASYN) or SYN)
- PAR	a...a	Parity (a...a = (SPACE), EVEN, ODD, or MARK)
- DTR	(OFF) ON	Data Terminal Ready settings
- DUP	aaaa	Duplex (aaaa = (FULL) or HALF)
- HOT	(OFF) ON	Hotline
- AUT	(ON) OFF	Auto Answer
- AUTOB	(ON) OFF	Auto Baud rate
- BAUD	0-(7)-10	Enter the data rate in bps for the data port
- DCD	(ON) OFF	Dynamic Carrier Detect
- PRM	(ON) OFF	Prompt for terminal or host mode
- VLL	(OFF) ON	Virtual Leased Line
- MOD	(NO) YES	Mode
- INT	(OFF) ON	Meridian 1/SL-100 Interworking
- CLK	(OFF) ON	Clock
- DEM	aaa	Data Equipment Mode (aaa = (DCE) or DTE)
- DLNG	aaa	Language preference for DAC prompts (aaa = (ENG) or FRN)
- KBD	(ON) OFF	Keyboard Dialing
- V25	(NO) YES	V.25 bis option, synchronous mode only
- HDLC	(NO) YES	High Level Data Link Control

- RTS	(ON) OFF	Request To Send (applies to asynchronous mode only)
EFD	x...x	Flexible CFNA DN for External calls
HUNT	x...x	Hunt DN of next station in hunt chain
EHT	x...x	External Hunt DN
LHK	(0)-69	Last Hunt Key number limit
LNRS	4-(16)-31	Last Number Redial Size
TEN	1-511	Tenant number
OHID	(0)-9	Off-Hook Alarm Security DN index for off-hook or interdigit timeout.
FSVC	(0)-9	Forced Out of Service Off-Hook Alarm Security DN index
SCI	(0)-7	Station Category Indication priority level
WIRE	(OFF) ON	Wire test
PBDO	(OFF) ON	Port Busy when DTR off
ADCP	(NO) YES	All-Digital Connection Prefix
MPR	0-511	Modem Pool Route number
LPK	(0)-69	Line Preference Key
PLEV	0-(2)-7	Priority Level
FCAR	(NO) YES	Forced Charge Account Restricted
LTN	1-253 0-15	Logical TN and AUX link number
SPID	x...x	ACD Supervisor Position ID DN
AST	xx yy	Associate Set Assignment for Meridian Link applications
IAPG	(0)-15	Meridian Link Unsolicited Status Message (USM) group
ITNA	(NO) YES	Idle TN for the Third Party Application
DGRP	(1)-5	Device Group
PRI	(1)-32	Priority level for ACD agent
LANG	(0)-5 X	Language choice for Automatic Wake Up (AWU) calls
MLWU_LANG	aaaa,bbbb	Language choice for Automatic Wake Up (AWU) calls
DTMK	x...x	Data Mode Key number for a dynamic voice/data TN
DNDR	(0)-120	Directory Number Delayed Ringing (in seconds)
KEY	xx aaa yyyy zz..z	Telephone function key assignments (KEY responses begin on page 140)
- MARP	(NO) YES	Multiple Appearance Redirection Prime
- DNRO	(0)-4	Distinctive Number Ringing index for Outgoing calls
- DNRI	(0)-4	Distinctive Number Ringing index for Incoming calls
- CPND	aaa	Calling Party Name Display
- - CPND_LANG	aaa	Calling Party Name Display Language
- - NAME	aaaa,bbbb	Calling Party Name Display name

-- XPLN	xx	Expected Name Length
-- DISPLAY_FMT	aaa	Display Format for CPND name
- VMB	aaa	Voice Mailbox
-- VMB_COS	0-127	Voice Mailbox Class of Service
-- SECOND_DN	x...x	Second DN sharing the Voice Mailbox
-- THIRD_DN	x...x	Third DN sharing the Voice Mailbox
-- KEEP_MSGS	(NO) YES	Preserve Meridian Mail Messages and current password

Copy a telephone

ACD supervisory telephones cannot be copied. Associate set (AST) assignments are not copied to the new telephones.

Prompt	Response	Comment
REQ:	CPY n	Request = CPY n
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
CFTN	l s c u	Copy From Terminal Number (l s c u ranges are defined on page 166)
SFMT	aaaa	Select Format. You may respond to SFMT with: AUTO, TNDN, TN or DN. Subprompts follow each of these responses as follows:
	AUTO	The system provides the new DNs or position IDs (for ACD telephones) and TNs by automatically selecting consecutive unused DNs or ACD position IDs and TNs.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 166)
- DN	xxxx	DN of new set
- POS	xxxx	ACD position ID of new set
	TNDN	Manual selection of DNs or ACD position IDs and TNs. You are prompted for the DN or ACD position ID and TN of each new telephone.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 166)
- DN	xxxx	DN of new set
- POS	xxxx	ACD Position ID of new set
	TN	The new DNs or ACD Position IDs are provided by the system. You are prompted for the starting DN or ACD Position ID and each TN. TN is prompted -n- times as defined in the CPY command.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 166)
- DN	xxxx	DN of new set
- POS	xxxx	ACD Position ID of new set
	DN	The new TNs are provided by the system. You are prompted for the starting TN and each DN or ACD Position ID.
- TN	l s c u	TN of new set (l s c u ranges are defined on page 166)
- DN	xxxx	DN of new set
- POS	xxxx	ACD Position ID of new set

Easy change

Prompt	Response	Comment
REQ:	CHG	Request = CHG
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
TN	I s c u	Terminal Number (I s c u ranges are defined on page 166)
ECHG	YES	Easy Change
ITEM	aaaa bbbb	Item (aaaa = Program mnemonic; yyy = its new value)

Move a telephone

If moving a voice unit with an associated data unit, the data unit must also be moved. On NT8D02 Digital Line Card, both voice and data TNs can be moved by entering MOV PAIR in response to the REQ prompt.

Prompt	Response	Comment
REQ:	a...a	Request = MOVE or MOV PAIR
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
TN	I s c u	Terminal Number (I s c u ranges are defined on page 166)
TOTN	I s c u	To Terminal Number

Remove a telephone

Before removing an ACD agent telephone, first remove the associated AGT key on the supervisor's telephone.

Prompt	Response	Comment
REQ:	OUT	Request = OUT
TYPE:	a...a	Type of data block (TYPE responses begin on page 168)
TN	I s c u	Terminal Number (I s c u ranges are defined on page 166)

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADAY	(0)-3	Alternate Days as defined in LD 15. Prompted if CLS = RBDA	basic-24
ADCP	(NO) YES	All-Digital Connection Prefix. ADCP appears when DTYP = ODS or IOS. Do not enable All-Digital Connection Prefix Enable All-Digital Connection Prefix	adm-5
AEFD	x...x	Alternate External Flexible Call Forward DN. Remove by setting CLS = RTDD or CFTD. Alternate Redirection DN (up to 13 digits)	basic-22
AEHT	x...x	Alternate External Hunt DN. Remove by setting CLS = RTDD or CFTD. Alternate Redirection DN (up to 13 digits)	basic-22
AFD	x...x	Alternate Flexible Call Forward DN. Remove by setting CLS = RTDD. Alternate Redirection DN (up to 13 digits)	basic-22
AHNT	x...x	Alternate Hunt DN. Remove by setting CLS = RTDD. Alternate Redirection DN (up to 13 digits)	basic-22
AHOL	(0)-3	Alternate Redirection Holiday as defined in LD 15. Prompted if CLS = RBDA	basic-24
AOM	0-2	Number of Add-on Modules. AOM appears if TYPE = M2216 and M2616.	arie-14
ARTO	(0)-3	Alternate Redirection Time Option for call redirection, defined in the customer data block. ARTO is prompted if CLS = RTDA.	basic-22
AST	xx yy	Associate Set Assignment for Meridian Link applications A maximum of two DN keys, xx and yy, can be controlled by the host computer. Precede with X to delete.	iap3p-12
AUT	(ON) OFF	Enable Auto-Answer Do not enable Auto-Answer	arie-14
AUTB	(ON) OFF	Auto Baud rate enabled Auto Baud rate disabled	dac-16

Prompt	Response	Comment	Pack/Rel
		AUTB is prompted if TYPE = R232 or R422 and if HOT = OFF.	
AUTH	n xxxx	Authorization code. Where: • n = the number of the assigned authorization code (1-6) • xxxx = assigned authorization code (Any authorization code assigned in LD 88 is valid). AUTH appears when CLS = Authorization Code Required (AUTR).	ssau-19
BAUD	0-(7)-8	Baud rate	mcu/arie-19
	0-(7)-10	Enter data rate in bps for data port on M2006, M2008, M2216 and M2616 telephones and Data Access Card. Enter data rate in bps for M3901, M3902, M3903, M3904, and M3905 telephones. The following values apply to: • MPDA-1 • MCA with DTAO = MPDA and TRAN = ASYN • MCA with DTAO = MCA • TYPE = MCU and TRAN = ASYN Where: 0 = 110, 1 = 150, 2 = 300, 3 = 600, 4 = 1200, 5 = 2400, 6 = 4800, (7) = 9600, 8 = 19,200, 9=28,800, and 10=33,600.	basic-24
	0-(11)-12	The following values apply to: • MCA with DTAO = MPDA, with MCA hardware • TRAN = SYN, MCA with TRAN = SYN • MCA with DTAO = MCA Where: 0 = 1200, 1 = 2400, 2 = 3600, 3 = 4800, 4 = 7200, 5 = 9600, 6 = 14,400, 7 = 19,200, 8 = 38,400, 9 = 40,800, 10 = 48,000, (11) = 56,000, and 12 = 64,000. With DAC in Release 16 and later, BAUD is only prompted if AUTB (Auto Baud Rate) = OFF.	

LD 11

Prompt	Response	Comment	Pack/Rel
CDEN	SD DD 4D 8D	Single Card Density Double Card Density Quadruple Card Density Octal Card Density CDEN defaults to the density of the network loop. CDEN is not prompted for superloops.	basic-7
CFTN	I s c u	Copy From Terminal Number General TN format For Meridian: I s c u = loop, shelf, card, unit Use this TN as a template for new sets. ACD supervisory sets cannot be copied. Associate set (AST) assignments are not copied to the new sets. With X11 release 20 and later and the introduction of Phantom TNs, the system checks to be sure that TNs are not moved or copied from phantom TNs to non-Phantom TNs or visa versa. CFTN appears if REQ = CPY.	basic-12
CLK	(OFF) ON	Clock off Clock on	arie-14
CLS		Class of Service options The following CLS assignments determine the calling options and features available to the telephone. Defaults are shown in parentheses. Enter each non-default option required, separated by a space.	basic-1
	(CTD) CUN FR1 FR2 FRE SRE TLD UNR	Access Restrictions: Conditionally Toll Denied Conditionally Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Semi-Restricted Toll Denied Unrestricted	basic-1

Prompt	Response	Comment	Pack/Rel
	(AAD) AAA	Automatic Answerback Denied Automatic Answerback Allowed Automatic Answerback can be used on M2112, M2317, M2616, M3000 and SL-1 telephones with handsfree capability. A special hardware kit is required for SL-1 sets and Companion 4 speakerphones. Automatic Answerback must have CLS = HFA for M2616 telephones. CLS AAA or AAK keys are not allowed for M2317 TNs.	aab-10
	(ABDD) ABDA	Abandoned call record and time to answer Denied Abandoned call record and time to answer Allowed	fcdr-18
	ADD	Digit Display Automatic Digit Display, default for M2008, M2216, M2317, M2616, M3000 M3902, M3903, M3904, M3905 Release 24 and later.	ddsp-1
	DDS NDD	Delay Display, display activates after call is answered No Digit Display, default for SL-1, M2006, M2009, M2112, M2018	
	TDD	Touchphone Digit Display for Release 22 and earlier. Tandem digit display for Release 23. In the Release 23 Automatic set display feature, TDD Class of Service is applicable to all Meridian 1 proprietary sets except for the M2006 which does not have display capability. Note: Manufacturer discontinued sets, such as the M2317 and the SL1, can be configured with TDD Class of Service; however, they may not have full functionality of the Automatic Set Display feature.	
	(AGN) SPV	ACD Agent ACD Supervisor	
	(AHD) AHA	Automatic Hold Denied Automatic Hold Allowed	basic-24
	(ARHD) ARHA	Audible Reminder of Held Call Denied Audible Reminder of Held Call Allowed	basic-14
	(ASCD) ASCA	Alarm Security Denied Alarm Security Allowed	ohas-18
	(AUTU)	Unrestricted Authorization code Class of Service	ssau-19

LD 11

Prompt	Response	Comment	Pack/Rel
	AUTD AUTR	Denied Authorization code Class of Service Restricted Authorization code Class of Service When the CLS is changed from AUTR to AUTU or AUTD, all previous telephone authorization code information is removed. This Class of Service is valid only when Station Specific Authorization Codes (SSAU) package 229 is equipped.	
(BFED) BFEA		Boss Secretary Feature Enhancement Denied Boss Secretary Feature Enhancement Allowed	bfs-24
(BUZZ) RNGI RNGB		Default Buzz Apply ringing when idle but offhook Apply ringing when idle but offhook or busy on the other line	basic-24
(CCSD) CCSA		Controlled Class of Service Denied Controlled Class of Service Allowed CCSA is required for the Electronic Lock feature. Must have Controlled Class of Service (CCOS) package 81.	ccos-7
(CDCA) CDCD		Conferee Display Count Allowed. Conferee Display Count Denied.	basic- 23
(CDMD)		CDMD denies external station activity records to be generated for the set	emct-20
CDMA		CDMA allows external station activity records to be generated for the set	
(CFHD) CFHA		Call Forward Hunt Override Denied Call Forward Hunt Override Allowed	cfho-20
(CFTD) CFTA		Call Forward by Call Type Denied/Allowed If response is CFTA, you must also designate HTA, FNA or both.	optf-10

Prompt	Response	Comment	Pack/Rel
(CFXD) CFXA		Call Forward All Calls to External DN Denied Call Forward All Calls to External DN Allowed Examples of external DNs are: • Route Access Code • ESN Access Code • CDP Distant Steering Code When denied, a call can only be forwarded to the following internal DNs: • Single or multi-line telephone • Attendant DN or CAS local attendant DN • Listed DN as defined in LD 15 • Message Center DN where MWC = YES	optf-19
(CLBD) CLBA		Deactivate Calling Party Number and Name per-line blocking Activate Calling Party Number and Name per-line blocking The user may still request CPP by dialing the CPP code.	cpp-21
(CLTD) CLTA		Network Call Trace from this telephone Denied Network Call Trace from this telephone Allowed	pra-17
(CMSD) CMSA		Command and Status link Denied Command and Status link Allowed CMSA is not supported by M2009, M2018, M2112, M2317, and M3000.	csl-8
(CNDD) CNDA		Call Party Name Display Denied Call Party Name Display Allowed CNDA allows user names to be displayed on the telephone's digit display.	cpnd-10
(CNID) CNIA		Call Number Information Denied Call Number Information Allowed	bgd-10
(CNTD) CNTA		Network ACD Countdown Denied Network ACD Countdown Allowed Only allowed on ACD agent telephones.	nacd-15
(CPFA) CPFD		Forced Camp-On from another set Allowed Forced Camp-On from another set Denied	scmp-15

LD 11

Page 126 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(CPTA)	Forced Camp-On to another set Allowed. CPTA is the default for VCE TNS.	scmp-15
	CPTD	Forced Camp-On to another set Denied	
	(DAPA)	Display Access Prefix Allowed	isdn-24
	DAPD	Display Access Prefix Denied	
	(DDGA)	DN Display on other set Allowed	dpd-21
	DDGD	DN Display on other set Denied	
	(DDV)	Data Port Verification Denied	amp-5
	ADV	Data Port Verification Allowed	
	(DELD)	Dealer Denied	ohol-20
	DELA	Dealer Allowed Must have On-Hold On Loudspeaker (OHOL) package 196.	
	(DNDD)	Dialed Name Display Denied	cpnd-13
	DNDA	Dialed Name Display Allowed DNDA allows the display of the originally dialed DN's names on redirected calls. Name display applies to M2317, M3000 or Meridian Modular telephones with displays. Must have Calling Party Name Display (CPND) package 95. Must also have CLS = CNDA. CLS is not DTA. For Release 13 and later.	
	(DNDY)	Diversion Notification with called party's number and name when available.	qsig ss- 23
	DNDN	Diversion Notification without called party's number and name notification.	
	(DNO3)	Diversion Notification Option with diverted-to party's number and name when available.	qsig ss- 23
	DNO1	Diversion Notification Option without notification.	
	DNO2	Diversion Notification Option without diverted-to party's number and name.	
	(DOS)	ACD Supervisory Set Denied observation of other supervisory sets	acdb-1
	AOS	ACD Supervisory Set Allowed observation of other supervisory sets Must have CLS = SPV.	

Prompt	Response	Comment	Pack/Rel
	(DPUD)	DN Pickup Denied	dcp-12
	DPUA	DN Pickup Allowed	
	(DRDD)	Distinctive Ringing by Directory Number denied.	edrg-24
	DRDA	Distinctive Ringing by Directory Number denied.	
		Digital telephone distinctive ringing	drng-7
(DRG1)		High fast tone, frequency 667 Hz/500 Hz, warble rate 10.4 Hz	
DRG2		High slow tone, frequency 667 Hz/ 500 Hz, warble rate 2.6 Hz	
DRG3		Low fast tone, frequency 333 Hz/ 250 Hz, warble rate 10.4 Hz	
DRG4		Low slow tone, frequency 333 Hz/ 250 Hz, warble rate 2.6 Hz	
		DRG3 and DRG4 distinctive ringing for M2006 and M2008 telephones are different.	
DRG3		Low fast tone, frequency 1600/ 2000 Hz, warble rate 10.0 Hz	
DRG4		Low slow tone, frequency 1600/ 2000 Hz, warble rate 2.5 Hz	
(DSX)		Data Service access or IS Server TN Denied	cls-8
DSI		Data Service access or IS Server TN Allowed CLS is automatically set to DTA.	
(EXR0)		Executive Distinctive Ringing Off (0)	edrg-16
EXR1		Executive Distinctive Ringing Tone 1	
EXR2		Executive Distinctive Ringing Tone 2	
EXR3		Executive Distinctive Ringing Tone 3	
EXR4		Executive Distinctive Ringing Tone 4	
(FBD)		Call Forward Busy Denied	basic-1
FBA		Call Forward Busy Allowed	
		This feature sends DID calls encountering a busy condition to the attendant. Call Forward Busy should have Hunting and Call Waiting denied, CLS = HTD and CWD, since Hunting and Call Waiting take precedence over FBA.	

LD 11

Prompt	Response	Comment	Pack/Rel
	(FITD) FITA	Flexible Incoming Tones Denied Flexible Incoming Tones Allowed For SL-1 sets OPT must be SBA in LD 15. For Digital sets OPT must be DBA in LD 15.	basic-14
	(FLXD) FLXA	Flexible voice/data Denied Flexible voice/data Allowed FLXA is only allowed for Aries sets. By entering FLXA, you may configure dynamic voice/data TNs by assigning VCE to the upper TN (unit 16-31) and DTA to the lower TN (unit 0-15). You also have the option of designating a SCR key as DTM (data mode). Warning: If connecting the Aries set only to the TCM loop, this option should not be specified. External equipment which can use this capability should be connected. Warning: When changing from CLS DTA to CLS VCE, CLS WTA should also be assigned to avoid conflict with CLS CPTA. CLS CPTA is the default for VCE TNs.	basic-22
	(FND) FNA	Call Forward No Answer Denied Call Forward No Answer Allowed	basic-1
	(FRN) ENG	French language display English language display For M2317 alphanumeric display sets.	dlt2-12
	(FTTC) FTTR FTTU	Flexible Trunk to Trunk Connections Conditional Flexible Trunk to Trunk Connections Restricted Flexible Trunk to Trunk Connections Unrestricted (default for sets upon software conversion to X11 Release 23).	
	(GPUD) GPIA	Group Pickup Denied Group Pickup Allowed Group Pickup is not allowed on telephones in group zero, RNPG = 0.	dcp-12
	(GRLD) GRLA	Group Listening Denied Group Listening Allowed For M3902, M3903, M3904 Taurus sets.	basic-24

Prompt	Response	Comment	Pack/Rel
	(HFD) HFA	Digital Telephone Handsfree Denied Digital Telephone Handsfree Allowed Only available for M2616 telephones. Handsfree capability on all other telephones is a function of the hardware and does not require HFA Class of Service in order to operate.	arie-14
	(HTD) HTA	Hunting Denied Hunting Allowed	basic-1
	(ICDD) ICDA	Internal Call Detail Recording Denied Internal Call Detail Recording Allowed	icdr-10
	(IMD) IMA	Integrated Messaging Service Attendant Denied Integrated Messaging Service Attendant Allowed	ims-2
	(IRD) IRA	Incoming Ringing Line Preference Denied Incoming Ringing Line Preference Allowed	lsl-4
	(LLCN) LLC1 LLC2 LLC3	Line Load Control off Class 1 Class 2 Class 3	llc-10
	(LMPN) LMPX	Red LED on Meridian Modular Telephone reflects the status of the mailbox associated with the PDN Red LED on Meridian Modular Telephone reflects the status of the mailbox associated with the PDN and non-PDNs	vmbs-24
	(LND) LNA	Last Number Redial Denied Last Number Redial Allowed Must have OPT = LRA in LD 15.	lnr-8
	(LPR) HPR	Low Priority Station High Priority Station High Priority will place this set or trunk at the top of the dial tone queue.	povr-16
	(MCTD) MCTA	Malicious Call Trace Denied Malicious Call Trace Allowed The MCT key must be removed before changing MCTA to MCTD. MCT is applied on a TN basis.	mct-10

LD 11

Page 130 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(MMD) MMA	Multimedia Messaging Denied Multimedia Messaging Allowed	
	(MRD) MRA	Message Registration Denied Message Registration Allowed	mr-10
	(MSID) MSIA	Make Set Busy Improvement Denied Make Set Busy Improvement Allowed	msb-24
	(MTD) MTA	Maintenance Telephone Denied Maintenance Telephone Allowed	basic-1
	(MWD) MWA	Message Waiting Denied Message Waiting Allowed If CLS = MWA and there is no Message Waiting Key (MWK) defined, then the red Message Waiting LED lights to indicate Message Waiting notification.	mwc-1
	(NAMA) NAMD	Name Display on other set Allowed Name Display on other set Denied	dpd-21
	(NID) NIA	Non-ringing Incoming Line Preference Denied Non-ringing Incoming Line Preference Allowed	lsl-4
	(OLD) OLA	Outgoing Line Preference Denied Outgoing Line Preference Allowed	lsl-4
	(ONDD) ONDA	One Number Delivery Denied for a portable One Number Delivery Allowed for a portable	basic-22
	(PDN) LDN	Primary Directory Number Listed Directory Number This is the number used for Calling Line Identification or CLID. Note: PDN and LDN do not apply for Release 22.	pra-12
	(PGND) PGNA	Deny PAGENET access Allow PAGENET access PGND/A allowed if PAGENET package 307 is equipped.	pagenet-22
	(POD) POA	Privacy Override Denied Privacy Override Allowed The Privacy Optional feature is used with multiple appearance DNS.	basic-5

Prompt	Response	Comment	Pack/Rel
	(PUD) PUA	Call Pickup Denied Call Pickup Allowed Default changes to PUA if Ringing Number Pickup Group (RNPG) is defined. Call Pickup is not allowed on telephones in group zero or RNPG = 0.	grp-1
	(RBDD) RBDA	Redirection By Day Denied Redirection By Day Allowed	basic-24
	(RBHD) RBHA	Redirection By Holiday Denied Redirection By Holiday Allowed	basic-24
	(RCBD) RCBA	Recall to Boss Denied Recall to Boss Allowed	bfs-24
	(RDLA) RDLD	Automatic Redial Allowed Automatic Redial Denied	ardl-22
	(RMMD) RMMA RMMO	Remote Monitoring of Messages Denied Remote Monitoring of Messages Allowed Allow Remote Monitoring of Messages and to Override, if it is being already monitored	vmba-24
	(RTDD) RTDA	Call Redirection by Time of day denied Call Redirection by Time of day allowed	basic-22
	(SFD) SFA	Second level CFNA Denied Second level CFNA Allowed Prior to Release 15, SFA must have both FNA and MWD Class of Service. In Release 15 and later, SFA only requires the FNA Class of Service.	basic-10
	(SMWD) SMWA	Extended message waiting indication denied. Extended message waiting indication allowed.	mw-24
	(SWD) SWA	Station-to-Station Call Waiting Denied Station-to-Station Call Waiting Allowed A Call Waiting key or CWT must be defined. Must have CLS = HTD since hunting takes precedence.	basic-8
	(TENA) TEND	Tenant Service Allowed Tenant Service Denied Multi-Tenant must be configured in LD 93 before the default is TENA.	tens-7

LD 11

Page 132 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(ULAD) ULAA	Deny access to Set Based Administration Allow access to Set Based Administration Must have Set Based Administration (ADMINSET) package 256.	adminset-21
	(USMD) USMA	Meridian 911 position denied Meridian 911 position allowed Must have Meridian 911 (M911) package 224.	m911-19
	(USRD) USRA	User Selectable Call Redirection Denied User Selectable Call Redirection Allowed	uscr-19
	(VCE) DTA	Voice Terminal Data Terminal VCE is used for voice TNs. DTA is used for data. For digital line cards the Class of Service is VCE for units 0-7 and DTA for units 8-15. For NT8D02 Digital Line Cards, the Class of Service is VCE for units 0-15 and DTA for units 16-31.	basic-5
	(VMD) VMA	Server Voice Messaging Denied Server Voice Messaging Allowed	cls-8
	(WTA) WTD	Warning Tone Allowed Warning Tone Denied	basic-1
	(XHD) XHA	Exclusive Hold Denied Exclusive Hold Allowed	dhld-4
CPND	NEW OUT CHG	Calling Party Name Display New CPND entry Delete CPND entry Change CPND entry Must have Calling Party Name Display (CPND) package 95 and CPND data block defined in LD 95.	cpnd-19
CPND_LANG	(ROM) KAT	Calling Party Name Display Language Roman Katakana	cpnd-19
CUST	xx	Customer number associated with this set Customer number is defined in LD 15.	basic-1

Prompt	Response	Comment	Pack/Rel
DCD	(ON) OFF	Dynamic Carrier Detect Enables Dynamic CD Carrier Detect starts as inactive and follows the state of the call. With DAC in Release 16 and later, DCD is only prompted if TYPE = R232.	arie-14
DELETE_VMB	(YES) NO	Delete Voice Mailbox Remove the Voice Mailbox from the Meridian 1 and Meridian Mail Remove the Voice Mailbox from the Meridian 1 DELETE_VMB is prompted if REQ = OUT and TN has an associated Voice Mailbox. DELETE_VMB is allowed if the DN is a single appearance or multiple appearance DN on a single TN.	vmba-19
DEM	(DCE) DTE	Data Equipment Mode. Prompted if TYPE = R232. Data Carrier Equipment Data Terminal Equipment	dac-16
DES	d...d	Designator The response d...d represents an Office Data Administration System (ODAS) Station Designator of 1-6 alphanumeric characters.	odas-1
DGRP	(1)-5	Device Group DGRP designates an AST BCS set into a specific device group. It is recommended that an AST phantom (BCS) TN should be a non-display BCS set. An AST BCS set of a phantom loop cannot be an ACD set.	basic-20
DISPLAY_FMT	(FIRST, LAST) LAST, FIRST	Display Format for CPND name May be input as FIRST To view names as John Doe May be input as LAST To view names as Doe John	cpnd-19
DLNG	(ENG) FRN	Language preference for the DAC prompts. English French Prompted if TYPE = R232 or R422.	dac-16

LD 11

Prompt	Response	Comment	Pack/Rel
DN	x...x	Directory Number DN is prompted when using the copy command. DN can be up to 4 digits, up to 7 digits if Directory Number Expansion (DNXP) package150 is equipped. ISDN applications can accept up to 13 digits.	basic-12
DNDR	(0)-120	Delay Value in seconds. A DNDR value of 0 disables this feature. If the DNDR value is an odd number, then it increments to the next even number.	basic-21
DNRI	(0)-4	Distinctive Number Ringing index for Incoming calls The index NDR1-4 BCS is defined in LD 56	edrg-24
DNRO	(0)-4	Distinctive Number Ringing index for Outgoing calls The index NDR1-4 BCS is defined in LD 56	edrg-24
DSPL	(0) - 500	Length of portable display (in characters).	basic-22
DSPT	(0) - 2	Type of portable display: 0 = display is numeric 1 = display is alphabetic 2 = display is alphanumeric	basic-22
DTAO	(MPDA) MCA	Data Option, not prompted if TYPE = MCU. Software for Meridian Programmable Data Adapter Software for Meridian Communications Adapter The DTAO prompt determines the downloaded data, system, and operating parameters.	arie-18

Prompt	Response	Comment	Pack/Rel
DTMK	x...x	Data Mode Key number for a dynamic voice/data TN. DTMK is prompted if the TN has both CLS = VCE and CLS = FLXA. There can be only one data mode key per TN. Any response to DTMK will overwrite a previous setting. When changing from CLS = DTA to CLS = VCE, CLS = WTA should also be assigned to avoid conflict with CLS = CPTA. Where x...x = number of the SCR/SCN key to be designated as the data mode key. This cannot be key 00.	basic-22
	<cr>	No data mode key. TN is not a dynamic voice/data TN.	
DTR	(OFF) ON	Data Terminal Ready settings Dynamic DTR Forced DTR, force the data port to always be ready for transmission. With the Data Access Card (DAC). DTR is prompted if TYPE = R232.	arie-14
DTYP	(IOS) IDS ODS	Data Station Type Inbound/Outbound Data Station Inbound Data Station Outbound Data Station	amp-5
DUP	(FULL) HALF	Full Duplex Half Duplex	arie-14
ECHG	(NO) YES	Easy Change This allows change to any prompt in this program without having to <cr> through all unrelated prompts. ECHG is prompted when REQ = CHG.	basic-12

LD 11

Prompt	Response	Comment	Pack/Rel
EFD	x...x	Flexible CFNA DN for External calls EFD is the DN to which external calls are routed when there is no answer, if one of the following customer options is defined in LD 15: • FNAD = FDN • FNAT = FDN • FNAL = FDN The DN can be up to 4 digits without Directory Number Expansion (DNXP) package 150, 7 digits with DNXP package 150, or 13 digits with Release 16. Call Forward by Call Type Allowed and Forward No Answer must be defined as the Class of Service (CLS = CFTA and FNA). LDNs, DLDNs, and Prime DN's will be accepted as valid input.	optf-10
EHT	x...x	External Hunt DN EHT is the DN hunted for by external busy calls when: • Class of Service is Call Forward by Call Type Allowed (CFTA) and Hunting Allowed (HTA) • the LD 15 prompt FNAD, FNAT, or FNAL = HNT This DN can be up to 4 digits without Directory Number Expansion (DNXP) package 150, 7 digits with DNXP package 150, or 13 digits with Release 16. LDNs, DLDNs, and Prime DN's are accepted as valid input. To remove EFD or EHT DN's, change CFTA Class of Service to CFTD. Prompted when CFTA is defined.	basic-10
	000	Short Hunt for external calls	
ESN	x...x	Electronic Serial Number for a portable. Length is 11 Hex digits.	basic-22
FCAR	(NO) YES	Forced Charge Account Restricted Must use Forced Charge Account Restricted from using Forced Charge Account Prompted if FCAF = YES in LD 15 and CLS = TLD, CUN or CTD.	chg-1

Prompt	Response	Comment	Pack/Rel
FDN	x...x	Flexible CFNA DN FDN is used for internal calls, if CLS is CFTA and FNA. FDN is used for all calls if CLS is CFTD and FNA. FDN can be up to 4 digits without Directory Number Expansion (DNXP) package 150, 7 digits with DNXP package 150, or 13 digits with Release 14 A Group Hunt pilot DN can be entered. Precede with X to delete. FDN requires CLS = MWA or FNA. FDN is only used if one or more of the following customer options are defined in LD 15: • FNAD = FDN • FNAT = FDN • FNAL = FDN	optf-1
FSVC	(0)-9	Forced Out-of-Service Off-Hook Alarm Security DN index. When Forced Out-of-Service condition occurs on a digital telephone with Alarm Security Allowed (ASCA) Class of Service, the telephone is intercepted to a predefined DN. Enter the index number (0)-9 of the DN defined by LD 15 prompts ODN 0-9. ODN is the acronym for Change Off-Hook Alarm Security Directory Number options (OHAS DN).	basic-18
HDLC	(NO) YES	High Level Data Link Control Prompted if V25 = YES.	arie-18
HOT	(OFF) ON	Hotline Hotline is inactive for data port. Enables Hotline for data port. If HOT = ON, Auto Baud is forced OFF for the Data Access Card.	arie-14

LD 11

Page 138 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
HUNT	x...x	Hunt DN of next station in hunt chain This Hunt DN can be up to 4 digits without Directory Number Expansion (DNXP) package 150, or 7 digits with Directory Number Expansion (DNXP) package 150, or 13 digits with Release 16. Precede with X to delete.	basic-10
	000	Short Hunting A Group Hunt pilot DN can be entered. For x11 release 22, a Control directory number (CDN) can be defined as a Hunt DN for both physical and phantom 500/2500 sets. When a CDN is configured in this way, a call which comes to a busy DN can be Hunting or Call Forward Busy to a CDN. With Call Forward and Hunt by Call Type, this is the Hunt DN for: • internal calls if CLS = CFTA, or • for all busy calls if CLS = CFTD	
IAPG	0-9 (0)-15	Meridian Link Unsolicited Status Message (USM) group IAPG assigns AST DNs to a status message group defined in LD 15. These groups determine which status messages are sent for an AST set. The default Group 0 sends no messages, while Group 1 sends all messages.	aml-16
INT	ON (OFF)	Meridian 1/SL-100 Interworking Enable Meridian 1 and SL-100 interworking Do not enable Meridian 1 and SL-100 interworking	arie-14

Prompt	Response	Comment	Pack/Rel
ITEM	aaaa yyy	Respond with the desired program mnemonic (aaaa) and its new value (yyy). ITEM is reprompted until only a carriage return <cr> is entered. For example: REQ CHG TYPE SL1 TN Ill ss cc uu ECHG YES ITEM KEY 07 ADL KEY <cr> - KEY is prompted until <cr> is entered ITEM <cr> REQ <cr>	basic-12
ITNA	(NO) YES	Idle TN for the Third Party Application. Do not identify an Associated Set (AST) to be used only by Third Party Application Identify an Associated Set (AST) to be used only by Third Party Application	basic-20
KBA	(0) 1 2	Key-based accessory prompt for M3904 and M3905 which support key-based modules. Configure keys up to and including 31 Configure keys up to and including 53 Configure keys up to and including 75	basic-24
KBD	(ON) OFF	Enable Keyboard Dialing for data port Enables Hayes mode	dac-16
KEEP_MSGS	(NO) YES	Preserve Meridian Mail Messages and current password	vmbs-19

Prompt	Response	Comment	Pack/Rel
KEY	xx aaa yyyy (ccc <i>or</i> D) zz..z	Telephone function key assignments The following key assignments determine calling options and features available to a telephone. Note that KEY is prompted until just a carriage return <cr> is entered. Where: • xx = key number • aaa = key name or function • yyyy = additional information required for the key • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character "D". When the character "D" is entered, the system searches the DN keys from key 0 up to find a DN key a CLID entry. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. With X11 Release 23, ISDN is not required for Calling Line Identification entry. Note: The position of the (ccc or D) field varies depending on the key name or function. You may enter a CLID entry if aaa = ACD key, HOT d, HOT L, MCN, MCR, PVN, PVR, SCN or SCR. Type xx NUL to remove a key function or feature. Some data ports require specific key assignments. Refer to the <i>Meridian Data Services</i> NTPs for information regarding these requirements. Key number limits that can be assigned are as follows: • 0-5 for M2006 • 0-7 for M2008 • 0-59 for M2616, varies with number of add-on modules • 0-69 for SL1, varies with number of key/lamp strips	basic-1

Prompt	Response	Comment	Pack/Rel
		If either the Meridian Programmable Data Adapter (MPDA) or the Display Module is equipped, then key 7 on sets M2008, M2216, and M2616 sets and key 5 on set M2006 will become Program keys which cannot be used as function keys. Any printout of the TN block will not show key 7 because it is a local function key. On the M2616, if CLS = HFA, key 15 on the voice TN defaults to the Handsfree key. No other feature assignment is accepted. Primary and secondary data DNs must be unique. A station SCR, SCN, MCR, or MCN DN must be removed as a member from all Group Hunt lists before the DN can be modified.	
		On the M3903, keys 4-15 are blocked. No feature assignment is accepted for keys 2-15. On the M3903,M3904, M3905, keys 27-31 are reserved. No feature assignment is accepted for keys 17-31 other than NUL. On M3904, no feature assignment is accepted for keys 12-15. On M3905, the craftsperson can assign NUL or a server application on key 5. On key 6, the craftsperson can assign NUL or a local application. On M3905, the craftsperson can assign NUL or the program key on key 7. On M3905, the craftsperson can assign AAG, AMG, ASP,DWC, EMR, MSB, or NRD on keys 8-11. Other features are blocked.	basic-24
xx AAG		ACD Answer Agent key Must have CLS = SPV. On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.	acdb-1 basic-24

LD 11

Prompt	Response	Comment	Pack/Rel
	xx AAK	Automatic Answerback key AAA CLS and AAK key cannot be assigned to the same telephone. Only one type of Automatic Answerback is allowed. M2616 telephone must have CLS = HFA.	aab-1
	xx ACD yyyy (ccc or D) zzz	Automatic Call Distribution key Where: • xx = key number (<i>must be key 0</i>) • yyyy = ACD DN or Message Center DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zzzz = agent's position ID yyyy and zzzz can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	bacd-1
	xx ACNT	Activity Code entry key This key must have an associated lamp and applies to ACD-D and ACD-MAX only. ADS data block must be configured in LD 23. For Release 13 and later.	acdd-13
	xx ADL yy z...z	Autodial key Where: • xx = key number • yy = maximum length of the ADL DN. Prior to Release 22, valid entries are: 4, 8, 12, (16), 20, 23. For Release 22, valid entries are: 4, 8, 12, (16), 20, 24, 28, 31. Note that other values are rounded up to the next valid number. • z...z = actual Autodial DN (this entry is optional)	optf-1

Prompt	Response	Comment	Pack/Rel
xx AGT yyyy		ACD Agent status key Where: yyyy = agent's ID. The agent ID number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Must have CLS = SPV.	bacd-1
xx AMG		ACD Answer Emergency call key Must have CLS = SPV. For x11 release 22, the Answer Emergency Key can be defined as a secondary supervisor's Position ID. The secondary supervisor's Position ID can be NULL by default. The Position ID of the ACD set cannot be changed once the ACD set is acquired as a Human Agent. On the M3905 key numbers 8-11 are reserved for AMG	acdb-1 basic-24
xx AO3		Three-Party Conference key On the M3902 key number 4 is reserved for AO3, AO6, TRN, or NUL On the M3903, M3904, M3905 key number 18 is reserved for AO3, AO6, or NUL.	basic-1 basic-24 basic-24
xx AO6		Six-Party Conference key On the M3902 key number 4 is reserved for AO3, AO6, TRN, NUL On the M3903, M3904, M3905 key number 18 is reserved for AO3, AO6, or NUL.	basic-1 basic-24 basic-24
xx ARC		Attendant Recall key	basic-1
xx ASP		ACD Supervisor call key (must have CLS = AGN) On the M3905 key numbers 8-11 are reserved for NRD, MSB, AAG, AMG, DWC and ASP.	acdb-1 basic-24
xx AWC		ACD Calls Waiting key Must have CLS = AGN and Supervisor Position ID or SPID must be configured.	bacd-1

Page 144 of 1254 Alphabetical list of prompts

553-3001-400 Standard 16.00 June 1999

Prompt	Response	Comment	Pack/Rel
xx CH D yy z...z		Combined No Hold Conference and Direct Hotline key Where: - yy = number of digits in target DN (1-31) - z...z = target DN	basic-14
xx CH L yyy		Combined No Hold Conference and Hotline List key Where: yyy = 0-999 for Hotline list entry as defined in LD 18. Applies to Release 14 and later.	basic-14
xx CHG		Charge account key On the M3903, M3904, M3905 key number 25 is reserved for CHG or NUL.	chg-1 basic-24
xx COS		Controlled Class of Service key	ccos-7
xx CPN		Calling Party Number key On the M3903, M3904, M3905 key number 26 is reserved for CPN or NUL.	chg-1 basic-24
xx CS yyyy		Combined No Hold Conference and Speed Call key Where: yyyy = Speed Call list number from 0-8190. Not available on M3000 telephones.	basic-14
xx CSD		Conferee Selectable Display key.	basic- 23
xx CWT		Call Waiting key Only one CWT Key is allowed. Should have CLS = HTD since Hunting takes precedence.	basic-1
xx DAG		Display ACD Agents key This key displays the status of ACD agents appearing on the supervisor's telephone. Must have CLS = SPV and ADD or DDS.	bacd-1

LD 11

Prompt	Response	Comment	Pack/Rel
	xx DIG yyyy zz R/V	Dial Intercom Group key Where: • yyyy = group number, from 0-253. For Release 13 and later from 0-2045. • zz = member number from 0-99. The zz value cannot be equal to or share the first digit of a 2 digit number with the SPRE code. For example, if SPRE = 1, zz cannot be 1, 10, 11...19. • R = Ring option • V = Voice option Must have maximum number of Dial Intercom Groups DGRP defined in LD 15. If any member in a group has a two-digit member number, then all members have a two-digit number. The system adds leading zeros to other entries. Prompted with Dial Intercom (DI) package 21.	di-1
xx DPU	Directed Call Pickup key	Key is optional, dial access code can be used if CLS = DPUA. Not available on M3000 telephones. This prompt appears with Directed Call Pickup (DCP) package 115.	dcp-12
xx DRC yyy	DID Route Control key	Where: yyy = route number = 0-511	basic-15
xx DSP	Display key	This key must have an associated key/lamp pair.	ddsp-1

Prompt	Response	Comment	Pack/Rel
xx DWC yyyy		ACD Supervisor Display Waiting Calls key Where: yyyy = ACD DN. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. A maximum of eight DWC keys can be assigned per queue on eight supervisors. Agent sets can only have 1 SWC key for their own queue. With X11 release 19 and later, ACD agent telephones can support the display waiting calls key. Must have CLS = SPV and ADD or DDS. With X11 release 19 and later, the key can be used with supervisors and agents. Prior to release 19, this key applied only to supervisor telephones. On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.	bacd-19 basic-24
xx EMR		ACD Emergency key (must have CLS = AGN) On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.	acdb-1 basic-24
xx ENI yyyy		ACD Enable Interflow key Where: yyyy = DN. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Only one is allowed per ACD DN. Must have CLS = SPV.	acdb-1
xx EOVR		Enhanced Override key	povr-20
xx GPU		Group Call Pickup key The key is optional because a dial access code can be used if CLS = GPU. Not available on M3000 telephones. Allowed with Directed Call Pickup (DCP) package 115.	dcp-12
xx GRC yy		Group Call key Where: yy = 0-63 for Group number as defined in LD 18	grp-1

LD 11

Prompt	Response	Comment	Pack/Rel
	nn HOT D dd num DN m (ccc or D)	Two-way Hotline key	hot-21
	Where:	• dd = number of digits dialed • num = target_number (terminating DN is a maximum of 31 digits) • DN = two-way hotline DN • m = one of the following Terminating Modes: H = Hotline (default), N = Non-ringing, R = Ringing, or V = Voice • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used.	
	xx HOT D nn x...x	Direct entry for One-way Enhanced Hotline key	hot-10
	Where:	• nn = number of digits dialed • x...x = Hotline terminating DN up to a 31 digit maximum	
	xx HOT D nn x...x xxxx (ccc or D)	Direct entry for Two-way Enhanced Hotline key	hot-10
	Where:	• nn = number of digits in Target DN • x...x = Terminating DN up to a 31 digit maximum • xxxx = optional two way Hotline DN. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used.	

Prompt	Response	Comment	Pack/Rel
nn HOT I	dd num m	Intercom key Where: • dd = number of digits dialed • num = target_number (terminating DN max 31 digits) • m = one of the following Terminating Modes: V = Voice (default), N = Non-ringing, or R = Ringing	hot-21
xx HOT L	bbb	One-way Hotline key Where: bbb = Hotline list entry = 0-999. The Hotline list entry is defined in LD 18. Note that the Hotline list NCOS overrides the set NCOS.	hot-10
xx HOT L	bbb xxxx (ccc or D)	Two-way list entry for Enhanced Hotline key Where: • bbb = List entry = 0-999 • xxxx = Two-way Hotline DN. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. Hotline list entry is defined in LD 18. Note that the Hotline list NCOS overrides set NCOS.	hot-10

LD 11

Prompt	Response	Comment	Pack/Rel
	xx ICF nn xxxx	Internal Call Forward key Where: nn = Forward DN length. Prior to release 22, valid entries are: 4, 8, 12, (16), 20 and 23. Other ICF DN entries between 4 and 23 are rounded up to the next valid number. For Release 22 and later, valid entries are any integer in the range of (4)-31. Where: xxxx = Forward DN (this entry is optional) An ICF key can be configured if Call Forward is enabled.	icf-19
KY1	aaa	Key 1 located far left, below dial pad. Where: aaa = VUP (Volume Up) by default for KY1. Any function not requiring a lamp may be assigned. CLS must be LVXA.	
KY2	aaa	Key 2 located middle, below dial pad. Where: aaa = VDN (Volume Down) by default for KY2. Any function not requiring a lamp may be assigned. CLS must be LVXA.	
29	LNG	M2317 Language Toggle key (No Language) Where: • xx = key 29 • LNG = Language Toggle enabled • NUL = Remove Language Option This feature allows set operator to set and reset language display, toggling between French and English versions on the alphanumeric display.	dlt2-9
xx	LNK	Last Number Redial key LNRS defines the Last Number Redial Size. Must have OPT = LRA in LD 15 and CLS = LNA.	Inr-8
xx	LSPK yyyy	Loudspeaker key Where: yyyy = associated loudspeaker DN or SPEKABUS channel	ohol-20

Prompt	Response	Comment	Pack/Rel
	xx MCK	Message Cancellation Key This key should only be programmed on Message Center sets.	mwc-1
	xx MCN yyyy (ccc or D) zz..z	Multiple Call Non-Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The DN cannot appear simultaneously on a PBX set DN or as an SCR DN or SCN DN. With Release 18 and later, once the MCN key has been defined, MARP is prompted. On the M3901 and M3902 MCN cannot be configured on keys 1-5. MCN, if it is configured, must be assigned to key 0.	basic-20
			basic-24

LD 11

Prompt	Response	Comment	Pack/Rel
xx MCR	yyyy	ccc,D zz..z Multiple Call Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D and may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The DN cannot appear simultaneously on a PBX set DN or as a SCR Single Call or SCN DN. With Release 18 and later, once the MCR key has been defined MARP is prompted. On the M3901 and M3902 MCR cannot be configured on keys 1-5. MCR, if it is configured, must be assigned to key 0.	basic-20
xx MIK		Message Indication Key This key should only be programmed on Message Center sets.	mwc-1
xx MMM		Voice/Data display key Only key numbers 0-7 can be assigned for the M2008. M2x16 varies with additional add-on modules. Maximum key number is 59. The Data Port requires specific key assignments. An ISDL C line card, vintage C or higher, is required for M2006, M2008, M2216 and M2616 telephones.	amp-5
xx MRK		Message Registration Key Requires PPM/Message Registration (MR) package 101 and CLS = ADD or DDS.	mr-10

Prompt	Response	Comment	Pack/Rel
xx MSB	Make Set Busy key	On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.	msb-1 basic-24
xx MWK yyyy	Message Waiting Key	Where: yyyy = DN. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. With the Network Message Service feature equipped, the NMS-DN can be up to 13 digits. On the M3902, key 5 is reserved for MWK or NUL. On the M3903, M3904, M3905, key 16 is reserved for MWK or NUL.	mwc-1 basic-24
xx NHC	No Hold Conference key		basic-14
xx NRD	Not Ready key	AGN or SPV Class of Service must be assigned. On the M3905 key numbers 8-11 are reserved for AAG, AMG, ASP, DWC, MSB and NRD.	bacd-1 basic-24
xx NSVC yyyy	Night Service key (must have CLS = SPV)	Where: yyyy = ACD DN associated with that Night Service. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	bacd-12
xx NUL	Removes function or feature from key		basic-1
xx OBV	Observe ACD agent key (must have CLS = SPV)		bacd-12
xx OSN	On-Site Notification key.		esa- 23
xx OVB	Overflow Position Busy key		aop-1
xx OVR	Override key		optf-1

LD 11

Page 154 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	xx PRK	Call Park key The Transfer (TRN), or Six-Party Conference (A06) key plus a Dial Access code can be used instead of the Park key. On the M3903, M3904, M3905, key 21 is reserved for PRK or NUL.	cprk-2 basic-24
	xx PRS	Privacy Release key On the M3903, M3904, M3905, key 24 is reserved for PRS or NUL.	basic-1 basic-24
	xx PVN yyyy (ccc or D) zz..z	Private Line Non-Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Must have Private Line Directory Number (PRDN) defined in LD 14. On the M3901, M3902, key 0 is reserved for PVN.	basic-20 basic-24

Prompt	Response	Comment	Pack/Rel
xx PVR yyyy	(ccc or D) zz..z	Private Line Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Must have Private Line Directory Number (PRDN) defined in LD 14. On the M3901, M3902, key 0 is reserved for PRV.	basic-20
xx RAG		ACD Ring Agent key (must have CLS =SPV)	acdb-1
xx RDL yy		Redial stored number key Where: yy = number of digits = 4, 8, 12, (16), 20, 23. Numbers between 5 and 22 are rounded up to the next valid number.	snr-3
xx RGA		Ring Again key RANA may be activated if OPT = RNA in LD 15. When OPT = RND in LD 15, all sets with the RGA key will only be able to activate Ring Again Busy. On the M3903, M3904, M3905, key 20 is reserved for RGA or NUL.	rga/ optf-20 basic-24
xx RLS		Release key Requires CLS = LVXA. Key/lamp pair is not required.	basic-1
xx RMK		Room Status Key	rms-10
xx RMWK xxxx	[yyyy]		mw-24

LD 11

Prompt	Response	Comment	Pack/Rel
		Remote Message Waiting indication key Where: xx= key number xxxx = Message Center DN [yyyy] = DN to be monitored [optional]	
xx RNP yyyy		basic-1	
		Ringling Number Pickup key Where: yyyy = Ringling Number Pickup group number is optional If the group number is not entered, the key will pick up the group number assigned to the station. If the group number is entered, the key will pick up calls in the specified group yyyy. On the M3903, M3904, M3905, key 22 is reserved for RNP or NUL.	basic-24
xx SCC yyyy		optf-1	
		Speed Call Controller key Where: yyyy = SCL list number = 0-253 prior to Release 13, 0-8190 Release 13 and later. SCL must be defined in LD 18.	
xx SCN yyyy (ccc or D)		basic-20	
		Single Call Non-Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. With Releases 18 and later, once the SCN key has been defined, MARP is prompted. On the M3901, M3902, key 0 is reserved for SCN.	basic-24

Prompt	Response	Comment	Pack/Rel
xx SCR yyyy	(ccc or D) zz..z	Single Call Ringing key Where: • yyyy = DN • ccc = CLID entry of (0)-N, where N = the value entered at the SIZE prompt in LD 15 minus 1. • D = the character D may be entered to search a CLID entry from key 0 and up to find a DN key. The CLID associated with the found DN key will then be used. • zz..z = additional information required for the key aaa. For Release 24 and later. The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Use a single appearance DN to terminate VCC Voice Call or SIG Signaling calls. With Release 18 and later, once the SCR key has been defined, MARP is prompted. On the M3901, M3902, key 0 is reserved for SCR.	basic-20
xx SCU yyyy	Speed Call User key	Where: yyyy = SCL list number = 0-253 prior to Release 13, 0-8190 in Release 13 and later. SCL must be defined in LD 18. On the M3903, M3904, M3905, key 23 is reserved for SCC, SCU, SSU, SSC or NUL.	optf-1 basic-24
xx SIG yyyy	Signal key	Where: yyyy = Single appearance DN. The DN can be up to 4 digits, up to 7 digits with DNXP package 150. Key/lamp is not required.	basic-1
xx SSC yyyy	System Speed Call controller key	Where: yyyy = SSC list number = 0-253 prior to Release 13, 0-4095 in Release 13 and later. SSC list must be defined in LD 18. On the M3903, M3904, M3905, key 23 is reserved for SCC, SCU, SSU, SSC or NUL.	optf-1 basic-24

LD 11

Page 158 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
xx SSU yyyy		System Speed Call User key Where: yyyy = SSC list number = 0-253 prior to Release 13, 0-4095 Release 13 and later. SSC list must be defined in LD 18.	optf-1
xx TAD		Time and Date key For SL-1 sets only, must have CLS = ADD or DDS, cannot be key 0. Blocked on the M3901, M3902, M3903, M3904, M3905.	ddsp-1 basic-24
xx THF		Centrex Trunk Switch Hook Flash key	thf-14
xx TRC		Malicious Call Trace key Key/lamp not required. MCT is applied on a TN basis. For Release 19 and later, this key can be configured on ACD telephones. Allowed when CLS = MCTA.	mct-10
xx TRN		Call Transfer key On the M3902, key 4 is reserved for TRN or NUL. On the M3903, M3904, M3905, key 17 is reserved for TRN or NUL.	basic-1 basic-24
xx USR		User Selectable Call Redirection key	uscr-19
xx UST		User Status key (must have UST = YES in LD15 and UST = YES in LD 23)	ims-2
xx VCC yyyy		Voice Call key Where: yyyy = Single appearance DN. Not available on M3000 telephones.	basic-1
xx WUK		Guest entry of automatic Wakeup key (Key/lamp pair is required)	gewu-16

Prompt	Response	Comment	Pack/Rel
	xx XMWK xxxx yyyy	Extended Message Waiting indication key Where: xx= key number xxxx = Message Center DN yyyy = DN to be monitored	mw-24
KLS	1-7	Number of key/lamp strips, including add-on key/lamp modules. Prompted if TYPE = SL-1	basic-1
LANG	(0)-5 X	Language choice for Automatic Wakeup (AWU) calls. Prompted with Multi-Language Wakeup (MLWU) package 206. Applies to Release 18 and earlier. This entry defines the language presented for the Automatic Wakeup Recorded Announcement (RAN), for language 0 through 5 as follows: (0) See RAN1/RAN2 in LD 15 1 See LA11/LA12 in LD 15 2 See LA21/LA22 in LD 15 3 See LA31/LA32 in LD 15 4 See LA41/LA42 in LD 15 5 See LA51/LA52 in LD 15 X Remove entry	mlwu-16
LDN	(NO) 0-3 0-5	Departmental Listed Directory Number (LDN) is not activated for this set Departmental LDN as defined in LD 15 Departmental LDN as defined in LD 15 - Release 20	nldn-20
LHK	(0)-7 (0)-59 (0)-69 (0)	Last Hunt Key number limit For M2008 For M2616, varies with number of add-on modules For SL-1, varies with number of key/lamp strips No Last Hunt Key or remove Last Hunt Key (used for Internal/External Short Hunt)	basic-10
LNRS	4-(16)-31	Last Number Redial Size Enter the maximum number of digits that can be stored. Valid entries are 4, 8, 12, (16), 24, 28, or 31. Invalid entries are rounded up to the next valid entry.	Inr-8

LD 11

Page 160 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
LPK	(0)-5 (0)-7 (0)-59 (0)-69	Line Preference Key limit (last key scanned for Automatic Line Preference) For M2006 For M2008 For M2616, varies with number of add-on modules For SL-1, varies with number of key/lamp strips Prompted when CLS = IRA, NIA or OLA.	Isel-4
LTN	1-253 0-15	Logical TN and AUX link number This prompt appears when CLS = IMA and the valid APL link is defined in LD15.	amp-5
MARP	(NO) YES	Multiple Appearance Redirection Prime Use TN as the Multiple Appearance DN Redirection Prime. The MARP prompt, or MARP information, appears following the DN KEY designation, and is associated with those DN assignments.	basic-18
MAUT	(NO) YES	Modify Authorization Codes for this telephone This prompt appears with Station Specific Authorization Codes (SSAU)package 229 and CLS = AUTR.	ssau-19
MIN	x...x	Mobile Identification Number for a portable. Length is 10 BCD Digits.	basic-22
MLWU_LANG		Language choice for Automatic Wakeup (AWU) calls. Prompted with Release 19 and later. This entry defines the language presented for the Automatic Wakeup Recorded Announcement (RAN), for language 0 through 5 as follows:	mlwu-19
	(0)	See RAN1/RAN2 in LD 15	
	1	See LA11/LA12 in LD 15	
	2	See LA21/LA22 in LD 15	
	3	See LA31/LA32 in LD 15	
	4	See LA41/LA42 in LD 15	
	5	See LA51/LA52 in LD 15	
	X	Remove entry	

Prompt	Response	Comment	Pack/Rel
MOD	(NO) YES	Mode Network is required for Meridian Programmable Data Adapter Modem synchronizes to clock in external device, such as QMT21	arie-14
MPHI	(NO) YES	Meridian Communications Unit used as MPH interface Prompted if TYPE = MCU.	mph-19
MPR	0-511	Modem Pool Route number	amp-5
NAME	aaaa,bbbb aaaa aaaa, ,bbbb	Calling Party Name Display name First name comma Last name. For example, John Doe is entered as John,Doe. The first single comma is treated as the delimiter. Up to 27 characters (including the comma) may be input. The last occurrence of the first comma group serves as the name delimiter and is translated into a space between the first and last name. When the delimiter is omitted, the input is stored as a first name. When the delimiter follows the input, the input is stored as the first name. When the delimiter precedes the input, the input is stored as a last name.	cpnd-21
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service group CDP BARS or NFCR NARS Release 13 and later	ncos-1
OHID	(0)-9	Off-Hook Alarm Security DN index for off-hook or interdigit timeout. When a dial tone or interdigit timeout occurs on a set with Alarm Security Allowed (ASCA) Class of Service, the set is intercepted to a predefined DN. Enter the index number (0)-9 of the DN defined by LD 15 prompts ODNx.	basic-18
OPE	(NO) YES	Change data port Operating Parameters	mcu/arie-19

LD 11

Page 162 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
PAR	(SPAC) EVEN ODD MARK	Space Parity Even Parity Odd Parity Mark Parity	basic-1
PBDO	(OFF) ON	Port Busy when DTR off Disabled Key 7 is automatically assigned as the Make Set Busy (MSB) key Switching to any other mode will force PBDO to OFF. Prompted if TYPE = R232 in operating modes 8 or 12.	dac-16
PLEV	0-(2)-7	Priority Level, prompted with Priority Override/Forced Camp-On (POVR) package 186. 2 = set can override sets of level 1 and 2, and can be overridden by sets of level 2-7.	povr-20
POS	xxxx	ACD position ID. Prompted when SFMT = AUTO, TNDN, TN or DN.	basic-12
PRI	(1)-48 (1)-32	Priority level for Automatic Call Distribution (ACD) agent Valid range for machine types STE, NT, RT, XT, and system Options 21E, 51, 51C, 61, 61C, 71, 81 and 81C. Valid range for all other system options. The agent with the lowest number assigned has the highest priority and is the first ACD agent to receive calls. (Where Priority 1 has the highest priority level). PRI is prompted with Automatic Call Distribution, Priority Agent (PAGT) package 116 and CLS = AGN or SPV.	pagt-12
PRM	(ON) OFF	Prompt for terminal or host mode Terminal or Keyboard dial mode, prompts are output by data unit Host mode prompts are not output by data unit	arie-14
PSDS	(NO) YES	Public Switched Data Service option With PSDS = YES, transmission will be synchronous and the baud will be 56K or 64K. 56K is the default.	arie-18

Prompt	Response	Comment	Pack/Rel
PSEL		Protocol Selection, DM-DM or T-link	arie-18
	(DMDM)	DMDM is used by Meridian 1 data devices such as ASIM, AIM, ADM, SADM, Asynchronous Data Option or ADO, and MPDA. MCA can use both protocols.	
	TLNK	TLNK protocol is used by SL-100 and DMS data devices This prompt appears if DTAO = MCA, or TYPE = MCU	
PUTYP	(PRIVATE) IS-41	Portable Subscriber Type	IS-41-24
RCO	(0)-2	Ringin cycle option for Call Forward No Answer This prompt appears when CLS = FNA or MWA (or both)	uscr-18
REQ:		Request	basic-19
	?	In Release 19, a colon following a prompt indicates enhanced processing. Enhanced Processing allows a user to either view a list of possible responses or input an abbreviated response. To get a list of possible responses (Release 19 and later)	
	CHG	Change existing data block	
	CPY 1-32	Copy or create 1 to 32 new station data block(s) automatically from the specified station data block.	
	END	Exit overlay program	
	MOV	Move data block from one TN to another.	
	MOV PAIR	Move voice TN and data TN data blocks on NT8D02 Digital Line Card	
	NEW	Add new data block to the system	
	OUT	Remove data block	
		Before removing an ACD agent telephone, first remove the associated AGT key on the supervisor's telephone. Select OUT and then NEW when switching resources between virtual and actual ACD DNs, to avoid unwanted information on ACD-D reports.	

LD 11

Prompt	Response	Comment	Pack/Rel
Note: For Release 19, this load is linked with LDs 11, 20 and 32. You may enter one of the responses listed below to the REQ: prompt. Then go to that Load and follow its Prompts and Responses sequence. See "Changes for Release 19" on page 106 for further information.			
LD 32: CDSP CMIN CONV CPWD DISC DISI DISL DISN DISS DISU DSCT DSPS DSXP ENCT ENLC ENLG ENLL ENLN ENLS ENLU ENPS ENXP IDC IDCS IDU LBSY LDIS LIDL LMNT PBXT SDLC STAT SUPL TRK XNTT XPCT XPEC			
LD 20: LTN LUC LUDU LUU LUVU PRT			
LD 10: CHG CPY MOV NEW OUT			
RNPG	(0)-255 (0)-4095	Ringing Number Pickup Group Valid range prior to Release 13 Valid range for Release 13 and later with capacity expansion To remove a telephone from a group, enter 0 in response to the RNPG prompt.	grp-1
RTS	(ON) OFF	Request To Send applies only to asynchronous mode.	mca-18
SCI	(0)-7	Station Category Indication priority level The station category number 1 to 7 must be defined as attendant console Incoming Call Indicator. LD 15 prompt ICI = CA1-CA7.	sci-7
SCPW	xxxx	Station Control Password Must equal Station Control Password Length (SCPL) as defined in LD 15. Not prompted if SCPL = 0. Precede with X to delete.	ffc-15
SECOND_DN	x...x	Second DN sharing the Voice Mailbox Second Directory Number. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	vmba-19
	X	Deletes the second directory number	

Prompt	Response	Comment	Pack/Rel
SFMT		Select one of the following formats for the copy command. The DN may be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	basic-1
	TNDN	Manual selection of TNs and DNs or ACD position IDs for ACD telephones. The TN and DN or POS for ACD set prompts repeat n times as specified under the CPY n command. TN I s c u TN of new set DN xxxx DN of new set POS xxxx ACD position ID of new set	
	TN	The new DNs or ACD position IDs for ACD telephones are provided by the system. You are prompted for the starting TN and DN or ACD position ID for ACD telephones and each TN. The TN prompt repeats n times as specified under the CPY n command. TN I s c u TN of new set DN xxxx DN of new set POS xxxx ACD position ID of new set	
	DN	The new TNs are provided by the system. You are prompted for the starting TN and each DN or ACD position ID for ACD telephones. The DN or POS for ACD sets prompt repeats n times as specified under the CPY n command. TN I s c u TN of new set DN xxxx DN of new set POS xxxx ACD position ID of new set	
	AUTO	The new TNs and DNs or ACD position IDs for ACD telephones are provided by the system. You are prompted for the starting TN and DN or ACD position ID for ACD telephones. TN I s c u TN of new set DN xxxx DN of new set POS xxxx ACD position ID of new set	
SGRP	(0)-999	Scheduled Access Restriction group number This prompt appears with Scheduled Access Restrictions (SAR) package 162. Must have group defined in LD 88.	sar-20

LD 11

Page 166 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
SPID	x...x	Supervisor Position ID DN SPID is prompted for ACD packages B, C, and D when CLS = AGN. SPID can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	bacd-1
SPWD	xxxx	Secure Data Password This prompt appears only if the password is defined in LD 15. If the password is not entered, the security codes will not print when PRT is requested.	ssau-19
SSU	0-253 0-4095	System Speed Call List number Release 13 and later Precede Speed Call list with X to delete.	ssc-2
TEN	1-511	Tenant number This prompt appears if Multi-tenant is configured for the customer.	tens-7
TGAR	(0)-15 (0)-31 0-(1)-31	Trunk Group Access Restriction: Release 1 to 13 Trunk Group Access Restriction: Release 13 to 21 Trunk Group Access Restriction: Release 22 and later The default of (1) automatically blocks direct access.	basic-1
THIRD_DN	x...x	Third DN sharing the Voice Mailbox Third Directory Number. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	vmba-19
TN	X	Deletes the third directory number	basic-1
	I s c u	Terminal Number The TN defines the location of the telephone set. TN appears when REQ = NEW, CHG, MOV, MOV PAIR or OUT.	basic-1

Prompt	Response	Comment	Pack/Rel
		Ranges are provided below: Where l = • 0 - 159: loops, superloops must be multiples of four, starting with superloop 0 Where s = • 0 - 3: PE shelves of loops defined TERM in LD 17 • 0 - 1: PE shelves of loops defined TERD in LD 17 and superloops • 0: PE shelves of loops defined TERQ in LD 17 Where c = • 1 - 10: PE cards of dual and enhanced loops. • 0 - 15: IPE cards of superloops. Where u = • 0 - 3: single density units • 0 - 7: double density units and SL-1 line cards • 0 - 15: integrated services digital line (ISDL) cards • 0 - 31: digital line cards or DLC For a static voice or data TN, u = 0-31. To assign VCE to TNs (where u = 16-31), CLS must be FLXA. To assign DTA to TNs (where u = 0-15), CLS must be FLXA. See text regarding FLXA on page 128.	
TOTN	l s c u	To Terminal Number General TN format	basic-20
TOV	(0) 1 2 3	This prompt appears when REQ = MOV or MOV PAIR. Timeout Value for the Data port, for M2006, M2008, M2216 and M2616 data port only No Timeout 15 minutes 30 minutes 60 minutes	mcu/arie-19

LD 11

Page 168 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
TRAN	(ASYN) SYN	Port transmission type for the data port on M2006, M2008, M2216, M2616 telephones Asynchronous data transmission Synchronous data transmission Asynchronous data modules cannot be set as synchronous. An MMPO with DTAO, MPDA, or MMPO supports SYN.	mcu/arie-19
TYPE:		Type of data block In Release 19, a colon following a prompt indicates Enhanced Processing. Enhanced Processing allows a user to either view a list of possible responses or input an abbreviated response.	basic-1

Note: For Release 19, LD 11 is linked with LDs 10, 20 and 32. You may enter any of the response options listed for the TYPE prompt in LDs 10 and 20 or any of the commands listed in LD 32. See “Changes for Release 19” on page 106 for further information.

?	To get a list of possible responses (Release 19 and later)
2006	M2006 Digital telephone. Rel 15 and later; 1 DN per set.
2008	M2008 Digital telephone. Release 14 and later.
2009	M2009 Digital telephone. Release 7 and later.
2016	M2009 Digital telephone
2018	M2018 Digital telephone. Release 7 and later.
2112	M2112 Digital telephone. Release 7 and later.
2216	M2216 Digital ACD telephone. Release 14 and later.
2317	M2317 Digital telephone. Release 9 and later.
2616	M2616 Digital telephone. Release 14 and later.
3000	M3000 Digital Touchphone. Release 7 and later.
3901	M3901 Digital telephone. Release 24 and later.
3902	M3902 Digital telephone. Release 24 and later.

Prompt	Response	Comment	Pack/Rel
	3903	M3903 Digital telephone. Release 24 and later.	
	3904	M3904 Digital telephone. Release 24 and later.	
	3905	M3905 Digital telephone. Release 24 and later.	
	CARD	Unused line card data block, used for Automatic Telephone Relocation. Release 18 and earlier.	
	CARDMLT	Multi-line Telephone Line Card. Release 19 and later. With Release 24 and later, the MGate card will support 32 units. However, only 24 units are configurable.	
	MCU	Meridian Communications Unit. Release 19 and later.	
	MPORTBL	Mobility Portable	
	OOSMLT	Out of Service Multi-Line Terminal Unit. Entering OOSMLT allows the administrator to mark any unit, regardless of card density or type, "Out of Service".	xpe-20
	R232	NT7D16 Data Access Card (DAC) port in RS-232 Data mode. Release 16 and later.	
	R422	NT7D16 Data Access Card (DAC) port in RS-422 mode Release 16 and later	
	SL1	SL-1 or M1000 series telephone data block The M2006, M2008, M2216, and M2616 require ISDL line card Version C or greater. The data port requires specific key assignments.	
V25	(NO) YES	V.25 bis option, synchronous mode only.	arie-18
VISI	(NO) YES	Visiting TN is not for visiting portables TN is for visiting portables	mmsn-22
VLL	(OFF) ON	Virtual Leased Line	arie-14

LD 11

Page 170 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
VMB	NEW CHG OUT	Voice Mailbox Add Voice Mailbox Change Voice Mailbox Remove Voice Mailbox This prompt appears with Voice Mailbox Administration (VMBA) package 246.	vmba-19
VMB_COS	0-127	Voice Mailbox Class of Service Valid range	vmba-19
WIRE	(OFF) ON	Wire test. Prompted if TYPE = R232 or R422. Wire test disabled System automatically tests wiring/cabling when DAC installed.	dac-16
XLST	(0)-7 (0)-254	Pretranslation group associated with this station. Valid range prior to Release 14. Valid range in Release 14 and later.	pre-8
XPLN	xx	Expected name length	cpnd-19

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 12: Attendant Consoles

This program allows data blocks for attendant consoles to be created or modified.

When the overlay is loaded the available system memory and disk records are output in a header as follows:

ATT000

MEM AVAIL: (U/P): xxxxxx USED: xxxxx TOT: xxxxxxxx

DISK RECS AVAIL: xxx

Incremental Software Management (ISM) also provides a header to indicate system configuration limits. For LD 12, the header appears as follows:

TNS AVAIL: xxxxx USED: xxxxx TOT: xxxxx

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, MOV)
TYPE	a...a	Type of data block (a...a = 1250, 2250, ATT, or PWR)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 179)
CDEN	aa	Card Density (aa = SD or DD)
SETN	l s c u	Second Terminal Number (l s c u ranges are defined on page 179)
CDEN	aa	Card Density of Second Terminal Number (aa = SD or DD)
TOTN	l s c u	To Terminal Number (l s c u ranges are defined on page 179)
CUST	xx	Customer number associated with this set
ANUM	1-63	Attendant Number
IADN	xxxx	Individual Attendant DN for this console.
ALPD	(NO) YES	Alphanumeric Display
DLEN	xx	Display Length (aa = (8) or 16)
SSU	yyyy	System Speed Call User list number
ICDR	(ICDD) ICDA	Internal Call Detail Recording (Denied) Allowed
- ABAN	(ABDD) ABDA	Abandoned call record and time to answer (Denied) Allowed
CPND	(CNDD) CNDA	Call Party Name Display feature (Denied) Allowed
- DNDI	(DNDD) DNDA	Dialed Name Display (Denied) Allowed
LANG	(00)-15	Language to download to M2250 on Sysload
EBLF	(BLFD) BLFA	Enhanced Busy Lamp Field (Denied) Allowed
SGRP	(0)-999	Scheduled Access Restriction Group number
AADN	xxxx	Attendant Alternate Answering DN
DAPC	(DAPA) DAPD	Dial Access Prefix on Console
KEY	xx aaa yyyy	Key (KEY responses begin on page 174)

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AADN	x...x	Attendant Alternate Answering DN This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The DN must be a valid station DN or ACD DN. This prompt appears with Attendant Alternative Answering (AAA) package 174.	aaa-15
ABAN	(ABDD) ABDA	Abandoned call record and time to answer Denied Abandoned call record and time to answer Allowed ABDA generates a B-Record in CDR reports. Refer to the <i>Call Detail Reporting</i> NTP for more information. ABAN appears with New Format Call Detail Recording (FCDR) package 234.	fcdr-18
ALPD	(NO) YES	Alphanumeric Display QCW3 Attendant Console QCW4 Attendant Console This prompt appears when TYPE = ATT.	basic-12
ANUM	1-15 1-63	Attendant Number Release 8 and later	basic-1
CDEN	SD DD	Single Card Density Double Card Density If the loop is a single density loop, the default is single density. If the loop is a double density, the default is double density. If the loop is a quad density, there is no default. This prompt appears when TYPE = ATT or 1250 and the loop is a single or double density.	basic-7
CPND	(CNDD) CNDA	Call Party Name Display feature Denied Call Party Name Display feature Allowed Prompted when TYPE = 1250/2250 and has Calling Party Name Display (CPND) package 95 and OPT = IDP in LD 15.	cpnd-12
CUST	xx	Customer number associated with this set Customer number is defined in LD 15.	basic-1

LD 12

Page 174 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DAPC	(DAPA) DAPD	Dial Access Prefix on Console Display Access Prefix Allowed Display Access Prefix Denied	isdn-24
DLEN	(8) 16	Display Length QCW2 Attendant Console QCW3 or QCW4 Attendant Console Prompted when TYPE = ATT. DLEN applies for only a QCW type console.	basic-1
DNDI	(DNDD) DNDA	Dialed Name Display Denied Dialed Name Display Allowed Prompted if TYPE is 1250/2250 and CPND = CNDA.	cpnd-13
EBLF	(BLFD) BLFA	Enhanced Busy Lamp Field Denied Enhanced Busy Lamp Field Allowed Prompted when TYPE = 1250/2250 and OPT = IBL or ILF in LD 15.	basic-15
IADN	xxxx	Individual Attendant DN for this console. The Individual Attendant DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with 'X' to delete an existing IADN.	basic- 23
ICDR	(ICDD) ICDA	Internal Call Detail Recording Denied Internal Call Detail Recording Allowed ICDA generates an L-Record in CDR reports. Refer to the <i>Call Detail Reporting</i> NTP for more information. ICDR is prompted with Internal Call Detail Recording (ICDR) package 108.	icdr-10
KEY	xx aaa yyyy	Console Key. Where: - xx = key number 0-9 for QCW consoles, 0-19 for M1250 and M2250 consoles - aaa = key name or function - yyyy = additional information required for the key	basic-1
	xx ADL yy z...z		basic-1

Prompt	Response	Comment	Pack/Rel
		Autodia key. Where: - xx = key number - yy = maximum length of the ADL DN. Prior to Release 22, the maximum length is 23 digits. For Release 22, the maximum length is 31 digits. - z...z = actual Autodial DN is optional	
xx AUTO yyy...y		Direct Autoline DN, where: - xx = Key number (0 - 19) - yyy...y = Autoline DN. The Autoline DN can be 1 - 31 digits.	basic- 23
xx AWU		Automatic Wake Up key (cannot be key 0 or 1)	awu-10
01 BIN		Allow Barge-In on key 01.	basic-1
01 BIN		Allow both Barge-In and Attendant Monitor on key 01 if China Attendant Monitor Package (CHINA) package 285 is equipped. Must have OPT = AMA in LD15.	china-21
xx BKI		Break-In key	bki-1
00 BVR		Allow Busy Verify on key 0.	basic-1
00 BVR		Allow both Busy Verify and Attendant Monitor on key 00 if China Attendant Monitor Package (CHINA) package 285 is equipped. Must have OPT = AMA in LD15.	china-21
xx CHG		Charge account key	fca-1
xx COS		Controlled Class of Service key	eccs-15
xx CPN		Calling Party Number key	cab-1
xx DCW		Display Call Waiting key	basic-1
xx DDL		Do Not Disturb Individual key	dndi-1
xx DDT		Display Date key	basic-1
xx DPD		Display Destination key	basic-1

LD 12

Page 176 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
xx DPS		Display Source key	basic-1
xx DRC		DID Route Control key	basic-1
xx DTM		Display Time key	basic-1
xx EES		End-to-End Signaling key (cannot be key 0 or 1)	basic-1
xx GND yy		Group Do Not Disturb key Where: yy = group number = 0-99	dngd-1
xx MCK		Message Cancellation Key. Turns off indication at a telephone.	mwc-1
xx MDT		Maintain Change/Display Date key	tad-1
xx MIK		Message Indication Key Turns on indication at a telephone.	mwc-1
xx MTM		Maintain Change/Display Time key	tad-1
xx NAS		Network Attendant Service key	nas-20
xx NUL		Remove feature or function from key	basic-1
xx PAG yyyy		Paging key Where: yyyy = Route Access Code. This number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The route must be defined in LD 16.	basic-1
xx PRG		Attendant Administration Program key	aa-1
xx PRK		Call Park key	cprk-2
xx RDL		Redial stored number	basic-1
xx RFW		Attendant Remote Call Forward key	arfw-20

Prompt	Response	Comment	Pack/Rel
	xx RTC	Routing Controls key This key will activate the NCOS map defined in LD 86. Must have Network Class of Service (NCOS) package 32.	bars-1
	xx SACP	Semi-Automatic Camp-On key Must have Semi-Automatic Camp-On (SACP) package 181.	sacp-20
	xx SCC yyyy	Speed Call Controller key Where: yyyy = list number = 0-253. For Release 13 & later, this range is 0-8190.	optf-1
	xx SECL	Series Call key Must have Series Call (SECL) package 191	secl-15
	xx SSC yyyy	System Speed Call controller key Where: yyyy = list number = 0-253. For Release 13 and later, this range is 0-4095.	ssc-2
	xxTHF	Trunk Switch Hook Flash key	thf-20
	xx TRC	Malicious Call Trace key Must have Malicious Call Trace (MCT) package 107.	mct-10
LANG	(00)-15	Language to download to M2250 on Sysload Language choices: • (00) - English • 01 - French • 02 - Spanish • 03 - German • 04 - Italian • 05 - Norwegian • 06 - Gaelic • 07 - Turkish • 08 - Katakana	basic-1

LD 12

Page 178 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
		• 09 - People's Republic of China • 10 - Taiwan • 11 - Korean • 12 - Polish • 13 - Czech/Slovak • 14 - Hungarian • 15 - No language assigned	
REQ	CHG END MOV NEW	Request Change existing data Exit overlay program Move from one TN to another. CAUTION: There is a possibility of data corruption when consoles are moved using this response. Add new data to the system	basic-1
SETN	I s c u	Second Terminal Number General TN format SETN must have same loop, shelf and card as the primary TN if TYPE = 2250. This cannot be a phantom loop.	basic-1
SGRP	(0)-999	Scheduled Access Restriction (SAR) Group number Prompted with SAR package 162. Must have group defined in LD 88.	sar-20
SSU	yyyy	System Speed Call User list number Where: yyyy = 0-253 prior to Release 13. For Release 13 and later, the yyyy range is 0-4095.	ssc-2

Prompt	Response	Comment	Pack/Rel
TN	I s c u	Terminal Number. The TN defines the location of the console. The range values are as follows: Where l = • 0 - 159: loops, superloops must be multiples of 4, starting with superloop 0 Where s = • 0 - 3: PE shelves of loops defined as TERM in LD 17 • 0 - 1: PE shelves of loops defined as TERD in LD 17 and superloops • 0: PE shelves of loops defined as TERQ in LD 17 Where c = • 1 - 10: PE cards of dual and enhanced loops • 0 - 15: IPE cards of superloops Where u = • 0 - 3: single density units • 0 - 7: double density units and SL-1 line cards • 0 - 7: integrated services digital line(ISDL) cards • 0 - 15: digital line cards (DLC)	basic-1
TOTN	I s c u	To Terminal Number General TN format For Meridian: I s c u = loop, shelf, card, unit TOTN is prompted when REQ = MOV. TOTN cannot be a phantom loop.	basic-1
TYPE		Type of data block	basic-1
	1250	M1250 Console data block QCW3, QCW4 and M1250 require an SL-1 Line Card.	
	2250	M2250 Console data block M2250 requires an ISDL Card or a Digital Line Card.	

LD 12

Prompt	Response	Comment	Pack/Rel
	ATT	QCW3 or QCW4 Attendant Console data block	
	PWR	Power data block TN used for power or Attendant Supervisory Module (ASM). Third and fourth TNs used for power, or third TN for ASM and fourth and fifth TNs used for power.	

LD 13: Digitone Receivers, Tone Detectors, Multifrequency Senders and Receivers

This program enables the administrator to create or modify data blocks for the following:

- Digitone Receivers (DTR)
- SL-1 Tone Detectors (TDET)
- Multifrequency Receivers (MFR)
- Multifrequency Compelled (MFC) Senders/Receivers
- Extended CLASS Modem Card (XCMC)

These cards are used by 2500-type telephones and trunks that send DTMF tones to the system, and by MF trunks to send MF tones to the system. All 2500 sets and some trunks must have Class of Service (CLS) defined as Digitone (DTN). MF reception is available to QPC916 cards only.

When the overlay is loaded the available system memory and disk records are output in a header as follows:

```
DTR000
MEM AVAIL: (U/P): xxxxxx  USED: xxxxx  TOT: xxxxxxxx
DISK RECS AVAIL: xxx
```

Incremental Software Management (ISM) also provides a header to indicate system configuration limits. For LD 13, the header appears as follows:

```
TNS AVAIL: xxxxx  USED: xxxxx  TOT: xxxxx
```

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, MOV, NEW, or OUT)
TYPE	a...a	Type of data block (a...a = DTD, DTR, MFC, MFE, MFK5, MFK6, MFR, TDET, CMOD or XTD)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 183)
CDEN	aa	Card Density (aa = SD, DD, or 4D)
TOTN	l s c u	To Terminal Number (l s c u ranges are defined on page 183)

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CDEN		Card Density	basic-1
	SD	Enter SD if this unit is on a single density circuit pack. The card density cannot be changed from DD to SD if more than one unit is assigned.	
	DD	Enter DD if this unit is on a double density circuit pack. DD is not allowed if the network loop is not configured for double density	
	4D	Enter 4D if this unit is on a quadruple density circuit pack. 4D is not allowed if the network loop is not configured for quadruple density	
	<cr>	If REQ = NEW and TYPE = DTR then CDEN is set to the default density as specified in the configuration record.	
REQ		Request	basic-1
	CHG	Change existing data	
	END	Exit overlay program	
	MOV	Move from one TN to another	
		CAUTION: There is a possibility of data corruption when Digitone Receivers are moved using this response.	
	NEW	Add new data to the system	
	OUT	Remove information from data block	
TN	I s c u	Terminal Number The TN defines the location of the console. The Iscu range values are as follows: Where I = 0 - 159, for loops, superloops must be multiples of four, starting with superloop 0 Where s = 0 - 3: PE shelves of loops defined as TERM in LD 17 0 - 1: PE shelves of loops defined as TERD in LD 17 and superloops	basic-1

LD 13

Prompt	Response	Comment	Pack/Rel
		• 0: PE shelves of loops defined as TERQ in LD 17 Where c = • 1 - 10: PE cards of dual and enhanced loops • 0 - 15: IPE cards of superloops Where u = • 0: single density or one unit • 0 - 1: double density units and TDET/MFC/MFE • 0 - 3: quad density units and XMFC/XMFE • 0 - 7: octal density units	
TOTN	I s c u	To Terminal Number	basic-1
TYPE		Type of data block	basic-1
	CMOD	CLASS modem unit. A CLASS modem unit is configured on the XCMC card. A maximum of 32 units can be configured on the XCMC card.	cname-23 or cnumb-23
	DTR	Digitone Receiver data block	
	MFC	Multifrequency Compelled sender/receiver data block Multifrequency Compelled Signaling (MFC) package 128 is required.	
	MFR	Multifrequency Receiver data block MFR applies to Feature Group D. Up to 255 MF Receivers can be defined. Only units 0 and 1 can be used. Feature Group D (FGD) package 158 is required.	
	TDET	Tone Detector data block (Not supported on Option 11)	
XTDT	(0)-7	Extended Tone Detector Table number If a table other than 0 is entered, it must exist in LD 97. This prompt appears when TYPE = XTD.	tdet-7

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 14: Trunk Data Block

This program allows data blocks for trunks to be created or modified.

When the Overlay is loaded the available system memory and disk records are output in a header as follows:

```
TRK000
MEM AVAIL: (U/P): xxxxxx  USE D: xxxxx  TOT: xxxxxxxx
DISK RECS AVAIL: xxx
TNS AVAIL: (U/P): xxxxxxx  USE D: xxxxx  TOT: xxxxxxxx
RAN CON AVAIL: (U/P): xxxxxx  USE D: xxxxx  TOT: xxxxxxxx
MUS CON AVAIL: (U/P): xxxxxx  USE D: xxxxx  TOT: xxxxxxxx
AST SET AVAIL: xxxxx  USED: xxxxx  TOT: xxxxx
```

Incremental Software Management (ISM) also provides a header to indicate system configuration limits. For LD 14, the header appears as follows:

```
TNS AVAIL: xxxxx  USED: xxxxx  TOT: xxxxx
```

After making any changes to the trunk data block, IPE trunk cards must be downloaded with **ENLC Is c** command in LD 32.

The Group Hunt/DN Access to SCL package or PLDN package 120 allows an asterisk (*) or double asterisk (**) as a valid input to a number of prompts, usually the asterisk will be part of a dialed number. Without this package, for example, inputting one asterisk will cause the system to reissue the last prompt, and two asterisks will cause a restart of the Overlay at REQ.

With X11 Release 23, the Incremental Software Management header includes Recorded Announcement Broadcast, Music Broadcast connections and Associated trunk ISM information.

Prompts and responses

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, MOV, LCHG, NEW x, or OUT x)
TYPE	a...a	Type of data block (TYPE responses begin on page 201)
T_TN	l ch	Loop number and channel for tandem PRI connection
- IPRI	l ch	Loop number and channel for incoming PRI channel
- OPRI	l ch	Loop number and channel for outgoing PRI channel
TN	l s c u	Terminal Number (l s c u ranges are defined on page 201)
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
XTRK	a...a	Extended Trunk (a...a = EXUT, XCOT, XDID, XEM, XFEM, or XUT)
FWTM	(NO) YES	Firmware Timing for trunk hook flash
SXS	(NO) YES	Step-by-step CO trunk
SICA	(1)-16	Signaling Category table number
PDCA	(1)-16	Pad Category table number for PRI2,DTI2,JDM,PRI,DTI trunks
PCML	aa	Pulse Code Modulation Law (aa = MU or A)
TOTN	l s c u	TO Terminal Number
SIGL	aaa	Level 3 Signaling
CUST	xx	Customer number associated with this trunk
SFEX	(NO) YES	Special digital FEX trunk
AST	(NO) YES	Associated trunk for CTI trunk Monitoring and Control
IAPG	(0) - 15	Event Group for USM message
NCOS	xx	Network Class of Service group
RTMB	0-511 1-510	Route number, Member number
CONN	(4) - 48	Maximum number of broadcast connections allowed for this trunk.
CHID	1-382	Channel ID for this trunk.
MTN	l s c u	Modem Terminal Number (l s c u ranges are defined on page 201)
PRDN	xxxx	Private Line Directory Number
CMF	(NO) YES	Call Modification Features restriction
RLDN	xxxx	Release Link Trunk Directory Number
NGRP	(0)-9	Night Service Group number
NITE	xxxx	Night Service directory number

ATDN	xxxx	Auto Terminate DN
MNDN	xxxx	Manual Directory Number
TGAR	0-(1)-31	Trunk Group Access Restriction
SIGL	aaa	Trunk Signaling (SIGL responses begin on page 196)
XDIC	aaa	Outpulsing for DIC trunks (aaa = (MUT) or NOR)
EMTY	aaa	E & M Type (aaa = (TY2), TY1, or BPO)
CPAD	a...a	Carrier Pad out or Carrier Pad in for 4-wire E & M duplex trunks (a...a = (COUT) or CIN)
LDOP	a...a	Loop Dial Outpulsing (a...a = (LOOP) or BOP)
TIMP	x...x	Termination Impedance
BIMP	a...a	Balance Impedance (a...a = (3COM), 600, 900, or 3CM2)
AUTO_BIMP		Automatic Balance Impedance enabled
	(NO) YES	
STRI	a...a	Start arrangement Incoming (a...a = DDL, IMM, OWK, PTSD, SACK, RT, or WNK)
STRO	a...a	Start arrangement Outgoing (a...a = DDL, IMM, OWK, PTSD, SACK, RT, or WNK)
SUPN	(NO) YES	Answer and disconnect Supervision required
- STYP	a...a	Supervision Type (a...a = ARF, BAT, BST, BTS, JDID, JCO, LBS, PIP, and PSP)
CLS	a...a	Class of Service (CLS responses begin on page 189)
FCAR	(NO) YES	Forced Charge Account
ADID	xxxx	AIOD four-digit Trunk Identifier
CFLP	0-159	Music Conference Loop

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADID	xxxx	AIOD four-digit Trunk Identifier Represents the last 4-digits of the unique telephone number of a trunk that has AIOD service. The calling number received over an AID trunk is associated with the outgoing trunk used to make the call.	aiod-1
AST	(NO) YES	Associated trunk for CTI trunk Monitoring and Control	basic-23
ATDN	x...x	Auto Terminate DN This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. A Group Hunt pilot DN can be entered. If a DNIS route is defined, then the response can only be an ACD DN. If no DN is assigned, the NITE number of the trunk will be used. Must have AUTO = YES in LD 16.	disa-1
AUTO_BIMP	(NO) YES	Enable Automatic Balance Impedance Option. Prompted only for EXUT type trunks. Not supported on Release 23 dual Busy Tone Detection pack (NT5D31).	btd- 23
BIMP	(3COM) 600 900 3CM2	3-component Complex Impedance Not prompted for RAN which exclusively uses 600 Not prompted for XEM trunks For XUT trunks, the Termination Impedance (TIMP) must be compatible with the Balance Impedance (BIMP). See prompt TIMP for allowed combinations of BIMP/TIMP. When using the Enhanced Universal Trunk card Release 19, only 600 or 900 $\frac{3}{4}$ terminating impedance is allowed. However, more Terminating and Balance Impedance (BIMP) combinations are available. These combinations are listed on the next page.	tip/ xpe-19

Prompt	Response	Comment	Pack/Rel
		The Terminating and Balance Impedance options include: <u>TIMPBIMP</u> 600 600 600 3COM 900 3COM 900 900 900 3CM2 600 3CM2	
CDEN	SD DD 4D 8D	Card Density Single Density Double Density Quad Density for XCOT only Octal Density for XCOT only and there is no default. Not prompted for superloops.	basic-7
CFLP	0-159	Music Conference Loop	mus-1
CHID	1-382	Channel ID for this trunk Prompted when the Route specified has ISL enabled in LD 16. The number of ISL trunks allowed for the D-channel is specified in LD 17. A different channel ID is requested for each Phantom TN which is used for ISPC links. The same channel ID must be configured for the same ISPC reference number on both PBXs linked by the connection.	isl-12
CLS		Class of Service options for trunks. Defaults are shown in parentheses. Enter each non-default option required, followed by a space.	basic-1
	(APN) APY	ACD Priority not required ACD Priority required Applies only to COT, WAT, DID and FEX trunks.	bacd-1
	(DIP)	Dial Pulse	basic-21
	DPDT	Dial Pulse Digitone (incoming dial pulse - outgoing digitone)	basic-24
	DTDP	Digitone Dial Pulse (incoming digitone- outgoing dial pulse)	basic-24
	DTN	Digitone	
	MFR	Multifrequency Receiver for Feature Group D	

LD 14

Prompt	Response	Comment	Pack/Rel
	(ECD) ECA	Echo Canceling Denied Echo Canceling Allowed ECA indicates Echo suppression equipment is connected to trunk.	basic-1
	(LNT) JDID JCO	Loop Start Non-supervisory Trunk Japan DID (JDID not valid for XCOT trunks) Japan CO capabilities allowed. JCO should only be accepted with SIGL = LOP. Japan PSTN trunks, (QPC686), not allowed for XUT/XEM. With Release 20 and later, answer NO to prompt SUPN for an unsupervised trunk, instead of using LNT. For supervised trunks answer YES to SUPN then enter the appropriate supervision type at prompt STYP.	xutj-16
	(LPR) HPR	Low Priority High Priority DID and TIE trunks should use HPR and be installed in card slot 1. Superloops do not require any trunks assigned as high priority.	basic-1
	(MID) MIA	Manual Incoming Denied Manual Incoming Allowed	basic-1
	(P10) P12 P20	Make-break ratio for dial pulse dialing 10 pulses per second (see explanation below) 20 pulses per second In Release 14 and earlier: • P10 = 10 pulses per second (pps) • P20 = 20 pulses per second (pps) In Release 15, the P12 option was added where: • P10 = primary 10 pps make-break ratio of 50% • P12 = secondary 10 pps make-break ratio of 50% In Release 16, all three make-break ratios can be set for XUT, XUTJ and XEM trunks. See prompts P10R, P12R and P20R in LD 97. Use P10 for PPS1 and P12 for PPS2 XUT/XEM trunks. P12 applies only to XUT, XUTJ and XEM trunks.	basic-21

Prompt	Response	Comment	Pack/Rel
	(PIP)	Polarity Insensitive Pack. (PIP is used for QPC330 and QPC331 packs)	basic-10
	PSP	Polarity Sensitive Pack (use PSP for QPC218, QPC219 and QPC295 packs). When using PSP in North America, the trunk route should have message registration set to reverse battery; the LD 16 prompt MR should be set to RVB.	
	BST	Battery Supervised pack (SIGL = LOP is required) For loop start trunks with Answer Supervision in U.S., the NT8D14 Universal Trunk does not provide Message Registration, PPM or PIP operation. For Release 18, this can be used for Answer Supervision on Ground Start trunks. Not valid for XCOT trunks.	basic-4
	(SPCD) SPCA MIA	Analog Semi-Permanent Connections Denied Analog Semi-Permanent Connections Allowed Manual Incoming Allowed	basic-24
	(THFD) THFA	Centrex Switchhook Flash Denied Centrex Switchhook Flash Allowed	basic-14
	TRC NTC VNL	Transmission Class of Service Transmission Compensated Non-Transmission Compensated Via Net Loss The default depends on the signaling type (SIGL) • DX2 = VNL • DX4 = VNL • EAM = VNL • EM4 = VNL • GRD = NTC (default changed to TRC in Release 17) • LDR = NTC (default changed to TRC in Release 17) • LOP = NTC (default changed to TRC in Release 17) • OAD = NTC Release 19 and later VNL Class of Service is allowed with Universal Trunk Tie trunks.	tip-19

LD 14

Prompt	Response	Comment	Pack/Rel
		For XDID and XCOT cards in Release 16 and later: • NTC is replaced by SHL • TRC and VNL are replaced by LOL Existing databases will be converted automatically. For EM4 and WR4, AC15 = 2280 Hz. on XFEM trunks: • NTC and VNL are equivalent to TIE designation • TRC is equivalent to LINK designation • TIE = PBX-PBX connections via leased line • LINK = PBX-PBX connections on-premises	
	(CTD)	Conditionally Toll Denied. CTD is the default for trunk types: TIE, CSA, ATVN, FGD, and IDA	
	CUN	Conditionally Unrestricted	
	FR1	Fully Restricted class 1	
	FR2	Fully Restricted class 2	
	FRE	Fully Restricted	
	SRE	Semi-Restricted	
	TLD	Toll Denied	
	UNR	Unrestricted. Only UNR is allowed for CO, FX and WATS trunks. UNR is the default for all trunk types <i>except</i> TIE, CSA, ATVN, FGD, and IDA	
	(WTA)	Warning Tone Allowed	basic-7
	WTD	Warning Tone Denied	
CMF		Call Modification restriction	basic-1
	(NO)	Call Modifications allowed	
	YES	Call Modifications not allowed	
CONN	(4) - 48	Define the maximum number of broadcast connections allowed for this trunk.	ranbrd- 23 ran- 23
CPAD	(COUT)	Carrier Pad Out for 4-wire E & M duplex trunks	xpe-15
	CIN	Carrier Pad In for 4-wire E & M duplex trunks	
		With CPAD = CIN, a 7 dB pad attenuates the trunk input and a 16 dB pad attenuates the trunk output.	
CUST	xx	Customer number (defined in LD 15 and prompted when REQ = NEW)	basic-1
DES	x...x	Designator field for trunk groups of 0-16 alphanumeric characters (DES is an optional entry)	basic-22

Prompt	Response	Comment	Pack/Rel
EMTY	(TY2) TY1 X	E & M Type 4-wire E&M Type 2 4-wire E&M Type 1 Precede with X to delete	xpe-15
FCAR	(NO) YES	Forced Charge Account	chg-1
FWTM	(NO) YES	Firmware Timing for Trunk Hook Flash is not used by the card Firmware timing for Trunk Hook Flash is used by the card This prompt appears if Collect Call Blocking (CCB) package 290, Malicious Call Trace (MCT) package 107 or Trunk Hook Flash (THF) package 157 are enabled.	ccb-21
IAPG	(0) - 15	Event Group for USM message	basic-23
IPRI	I ch	Incoming PRI channel This is the PRI channel through which the Meridian 1 gains access to the PSPDN. Where: • Loop = PRI loop number • Channel = PRI channel that holds the incoming nailed up connection (between 1-23)	mph-19
LDOP	(LOOP) BOP	Loop Dial Outpulsing Loop outpulsing for Loop Dial Repeating signalling Battery Outpulsing for Loop Dial Repeating signalling	xpe-15
MNDN	x...x	Manual Directory Number This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. A Group Hunt pilot DN can be entered. CLS should be MIA.	basic-1
MTN	I s c u	This Modem Terminal Number can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. A Group Hunt pilot DN can be entered. CLS should be MIA.	amp-5
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service group CDP BARS or NFCR NARS Release 13 and later	ncos-1

LD 14

Prompt	Response	Comment	Pack/Rel
NGRP	(0)-9	Night Service Group number NGRP appears when ENS = YES in LD15. This prompt replaces the NITE prompt. If ENS is changed from NO to YES while Night Service is in effect, the system verifies that the NITE number defined is a group number or a DN. If a night DN or 0000 is defined, the existing NITE number is used.	basic-2
NITE	x...x	Night Service directory number This DN can be up to 4 digits, up to seven digits with Directory Number Expansion (DNXP) package 150. A Group Hunt pilot DN can be entered. Night Service applies to trunks terminating at the attendant. This prompt takes precedence over the NITE and NIT1-NIT4 prompts in LD 15. If a DN is defined here, the call goes to this DN. If there is no DN here, the call goes to the defined LD 15 NITE prompts. Precede with X to remove.	basic-1
OPRI	I ch	Outgoing PRI channel (the PRI channel through which the Meridian 1 gains access to the PSPDN) Where: Loop = PRI loop number and Channel = PRI channel that holds the outgoing nailed up connection (between 1-23).	mph-19
PCML	MU A	Pulse Code Modulation Law Mu-law A-law PCML is not prompted for JDMI loops. Prompted if loop is PRI2, DTI2, or if loop is PRI/DTI and is equipped with International 1.5/2.0 Mb/s Gateway (GPRI) package 167.	dti 2-15
PDCA	(1)-16	Pad Category table number The PAD table must be defined in LD 73 first.	dti 2-15
PRDN	x...x	Private Line Directory Number PRDN must be defined in LD 11. This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	basic-1

Prompt	Response	Comment	Pack/Rel
REQ		Request	basic-1
	CHG	Change existing data block	
	END	Exit overlay program	
	LCHG	Print date and time that a trunk data block was last changed. The change can be the result of a NEW, OUT, or CHG command.	
	MOV	Move data block from one TN to another. MOV cannot be used to move a Phantom TN.	
	NEW x	Add new data block to the system. Follow NEW with a value of 1-255 to create that number of consecutive trunks. You are not allowed to create more than one Phantom TN at a time. When a value different than 1 is entered for the creation of a Phantom TN, it is simply ignored and only one TN is created.	
	OUT x	Remove data block. Follow OUT with a value of 1-255 to remove that number of consecutive trunks.	
RLDN	x...x	Release Link trunk Directory Number This DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	cas-1
RTMB	0-127 1-510	Route number and Member number	basic-1
	0-511 1-510	Route number and Member number for Release 24 and later. This range applies for System Options 11C, 51C, 61C, 81, and 81C. B-Channel Signaling is output if CHTY = BCH in LD 16. A/B Bit Signaling is output if CHTY = ABCH in LD 16. To use the ISDN Semi Permanent Connection (ISPC) link, this entry must be an ISL TIE route.	
SFEX	(NO) YES	Special digital FEX trunk This is used on Digital Trunk Interface (DTI).	dti-5
SICA	(1)-16	Signaling Category table number The Digital Signaling Category table must be defined first. See FEAT = ABCD in LD 73. Default is 16 if loop type = JDMI.	dti 2-15

LD 14

Prompt	Response	Comment	Pack/Rel
SIGL		Level 3 signaling	tip-21
	DX2	2-wire duplex	
	DX4	4-wire duplex. The Enhanced Universal Trunk card with Release 19 and later uses DX4 signaling.	
	EAM	E&M 2-wire	
	EM4	E&M 4-wire	
	GRD	Ground start	
	LDR	Loop Dial Repeating	
	LOP	Loop start	
	OAD	Outgoing Automatic, incoming dial	
STRI		Start arrangement Incoming	basic-5
		Your response to STRI determines which type of signaling will be used by the trunk to initiate digit sending or collection. Your STRI response should reflect the type of operation in use at the near end.	
	DDL	Delayed Dial	
		The terminating trunk returns an off-hook to the originating trunk, which is interpreted as an instruction not to send digits immediately. This delay allows the terminating end to find and attach digit collections equipment. When the equipment is attached, the terminating end returns on-hook which is interpreted as a signal to start sending digits.	
		For this application on incoming calls, the Meridian SL-1 sends a non-programmable 256-384 ms pulse. For outgoing calls, the Meridian SL-1 expects a delay-dial pulse from the far end to terminate before sending digits. Some types of delay-dial operation can also be accommodated by the IMM option.	
	IMM	Immediate	
		The terminating trunk is not expected to return a pulse telling the originating end to begin sending digits. In this application for incoming calls, the Meridian SL-1 returns a 256-384 ms off-hook/on-hook wink to the far end. This wink accommodates certain types of delay-dial operation.	
		For outgoing calls, the Meridian SL-1 starts a 300 ms timer when the outgoing trunk is seized. Digits are sent out when an off-hook/on-hook wink returned from the far end ends, or when the 300 ms timer expires (whichever occurs first).	

Prompt	Response	Comment	Pack/Rel
	OWK	Off-Hook Wink for RLR trunks equipped with signaling converter This mode of operation is similar to wink except that the Meridian SL-1 waits one second after seizure before sending a wink start pulse. This arrangement applies only to release link remote trunks.	
	WNK	Wink or Fast Flash The terminating trunk sends an off-hook/on-hook wink as in DDL operation. However, in WNK operation the pulse is interpreted as a signal that digit collection equipment has been attached. The pulse is expected to be of 140-290 ms duration. For this application, the Meridian SL-1 first waits 128-256 ms after seizure and then returns a 256 ms pulse to the far end. After this , the Meridian SL-1 is ready to collect digits. On outgoing calls, the Meridian SL-1 waits until the wink pulse is finished before sending digits.	
STRO		Start arrangement Outgoing Your response to STRO determines which type of signaling will be used by the trunk to initiate digit sending or collection. Your STRO response should reflect the type of operation in use at the far end.	basic-5
	DDL	Delayed Dial	
	IMM	Immediate	
	OWK	Off-Hook Wink for RLR trunks equipped with signaling converter	
	WNK	Wink or Fast Flash	

Prompt	Response	Comment	Pack/Rel
STYP		Supervision Type. STYP is prompted when SUPN = YES. For EPE equipment, only one response of PSP, PIP or BST will be accepted. For IPE equipment or with XUT/EXUT, only one of BST, PIP, JDID, or JCO will be accepted. For XCOT, STYP will accept up to two responses. The responses BAT, ARF and LBS are mutually exclusive. However, BTS can be used with any one of the aforementioned three responses. For Release 22: When BTD and Japan packages are equipped, BTS can be assigned to an XUT card. For Japan, TYPE = COT, SIGL = LOP, SUPN = YES, STYP = JCO BTS or TYPE = DID, SIGL = LOP, SUPN = YES, STYP = JDID BTS.	basic-20
	ARF	ARF supervised trunks. Must have XCOT LOP trunks.	
	BAT	Battery Supervised COT. Must have XCOT LOP trunks.	
	BST	Both Supervised Trunk Incoming and Outgoing supervised LOP CO/FEX/WATS trunk (QPC330/XUT/EXUT). BST and PIP are mutually exclusive.	
	(BTS)	Busy Tone Supervision. BTS is the default when XTRK = XCOT. Must have XCOT LOP trunks. BTD package must be equipped. Prior to x11 release 22, BTS could not be configured with either BST or PIP. In x11 release 22, BTS can be configured with any one of PIP, BST, JCO or JDID.	
	(PSP)	Polarity Sensitive Pack. PSP is the default when SIGL = GRD. Outgoing supervised LOP or GRD start CO/FEX/WATS trunk (QPC218/XUT/EXUT)	

Prompt	Response	Comment	Pack/Rel
	JCO	Japan CO trunk. Must have Japan Central Office Trunks (JPN) package 97 with LOP trunks (XUTJ). For X11 Release 22, JCO and BTS are no longer mutually exclusive.	
	(JDID)	Japan DID trunk. JDID is the default when the trunk is a LOP DID trunk. Must have Japan Central Office Trunks (JPN) package 97. As of Release 22, JDID is no longer automatically displayed.	
	LBS	Loop Break Supervision. Must have XCOT LOP trunks.	
	(PIP)	Polarity Insensitive Pack. PIP is the default when SIGL = LOP. Outgoing supervised Loop start CO/FEX/WATS trunk (QPC330/XUT/EXUT). PIP and BST are mutually exclusive.	
SUPN	(NO) YES	Answer and disconnect supervision required SUPN must = YES for a COT with Virtual Network Service. For ground start trunks disconnect supervision is detected even if SUPN = NO. The operation of answer supervision is affected if Federal Communications Commission Compliance for DID Answer Supervision (FC68) package 223 is equipped. SUPN will automatically be prompted YES for DID LOP.	basic-1
SXS	(NO) YES	Step-by-step CO trunk Only prompted for Universal Trunks XTRK or XUT when TYPE = CO. The central office reverses polarity on outgoing calls.	xpe-15
T_TN	I ch	Tandem PRI connection. Where: • Loop = PRI loop number • Channel = PRI channel that holds the outgoing nailed up connection (between 1-23) If the connection exists, both channels are displayed. Prompted if TYPE = TCON.	mph-19

Prompt	Response	Comment	Pack/Rel																								
TGAR	(0)-15 (0)-31 0-(1)-31	Trunk Group Access Restriction: Release 1 to 13 Trunk Group Access Restriction: Release 13 to 21 Where (0) removes existing restriction. Trunk Group Access Restriction: For Release 22 and later The default of (1) automatically blocks direct access.	basic-1																								
TIMP	 (600) 900 1200	Termination Impedance. Prompted if XTRK = XEM or XUT. 600 ohms 900 ohms 1200 ohms Use 1200 ohms for RAN trunks and (600) or 900 for all others. When using the Enhanced Universal Trunk card with Release 19, only 600 or 900 ¾ terminating impedance is allowed. However, more Terminating and Balance impedance (BIMP) combinations are available. The terminating and balance impedance options are: <table><tr><td><u>TIMP</u></td><td><u>BIMP</u></td></tr><tr><td>600</td><td>600</td></tr><tr><td>600</td><td>3COM</td></tr><tr><td>900</td><td>3COM</td></tr><tr><td>900</td><td>900</td></tr><tr><td>900</td><td>3CM2</td></tr><tr><td>600</td><td>3CM2</td></tr></table> For XUT trunks, the Termination Impedance or TIMP must be compatible with the Balance Impedance or BIMP. The following combination of BIMP/TIMP are allowed: <table><tr><td><u>Timp Impedance</u></td><td><u>Bimp Impedance</u></td></tr><tr><td>600 ohms</td><td>3-component or 3com</td></tr><tr><td>900 ohms</td><td>3-component or 3com</td></tr><tr><td>600 ohms</td><td>600 ohms</td></tr><tr><td>1200 ohms</td><td>600 ohms</td></tr></table> For XEM trunks, TIMP must be set to 600. When CLS = JDID, TIMP must be set to 600.	<u>TIMP</u>	<u>BIMP</u>	600	600	600	3COM	900	3COM	900	900	900	3CM2	600	3CM2	<u>Timp Impedance</u>	<u>Bimp Impedance</u>	600 ohms	3-component or 3com	900 ohms	3-component or 3com	600 ohms	600 ohms	1200 ohms	600 ohms	tip/xpe-19
<u>TIMP</u>	<u>BIMP</u>																										
600	600																										
600	3COM																										
900	3COM																										
900	900																										
900	3CM2																										
600	3CM2																										
<u>Timp Impedance</u>	<u>Bimp Impedance</u>																										
600 ohms	3-component or 3com																										
900 ohms	3-component or 3com																										
600 ohms	600 ohms																										
1200 ohms	600 ohms																										

Prompt	Response	Comment	Pack/Rel
TN	I s c u	Terminal Number	basic-1
	I ch	Loop and channel for digital trunks, where: • I = loop 0-159ch = channel 1-24 for 1.5 Mb/s DTI/PRI Loop and channel when TYPE = RDC or VDC: • I is loop 0-159 • ch = channel 1-15, 17-31.	
TOTN	I s c u	To Terminal Number. TOTN is prompted when REQ = MOV. TOTN cannot be a phantom loop. General TN format	basic-1
	I ch	New loop and channel for digital trunks. For DTI2/JDMI, loop = 0-159 and channel = 1-30. For TYPE = RDC or VDC, I = loop 0-159 and ch = channel 1-15, 17-31.	
TYPE	ADM	Add-on Data Module data block Data port interfacing with a data line card	basic-1
	AID	Automatic Identification of Outward Dial (AIOD) trunk data block. Not supported on Release 20 and later.	
	AWR	Automatic Wake Up RAN/Music trunk data block. Applies to Release 10 and later	
	CAA	Common Control Switching Arrangement (CCSA) Automatic Number Identification (ANI) trunk data block	
	CAM	CAMA trunk data block	
	CBCT	NI-2 CBC trunk	
	COT	Central Office Trunk data block	
	CSA	Common Control Switching Arrangement access line data block	

LD 14

Page 202 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	DIC	Dictation trunk data block	
	DID	Direct Inward Dial trunk data block. Per FCC regulations, DID trunks used in the U.S. must be properly designated for answer supervision. Refer to FCC Compliance for DID Answer Supervision in X11 features and services.	
	FEX	Foreign Exchange trunk data block	
	FGDT	Feature Group D Trunk data block	
	ISA	Integrated Services Access trunk data block. Also called Call-By-Call service trunk type. There is no provision against the use of non-QPC237 trunk types for the analog ISA service route. Only TIE and ISA trunks are applicable for directly connecting SL-1 PBX to SL-1 PBX.	
	MCA	Meridian Communications Adapter. Release 18	
	MCU	Meridian Communications Unit. Release 19 and later	
	MDM	Modem/Data Module data block. Data port interfacing with QPC60 500/2500 type card.	
	MUS	Music trunk data block	
	PAG	Paging trunk data block	
	R232	NT7D16 Data Access Card (DAC) port in RS-232 Data mode data block (Release 18 and later)	
	R422	NT7D16 Data Access Card (DAC) port in RS-422 Data mode data block. (Release 18 and later)	
	RAN	Recorded Announcement trunk data block	
	RCD	Recorder trunk data block	
	RLM	Release Link Main trunk data block	

Prompt	Response	Comment	Pack/Rel
	RLR	Release Link Remote trunk data block	
	TCON	Tandem Connection for MPH and PRI connections Release 19	
	TIE	TIE trunk data block	
	WAT	Wide Area Telephone Service trunk data block	
XDIC	(MUT) NOR	Mute outpulsing for DIC trunks Normal outpulsing for DIC trunks	xpe-15
XTRK		Extended trunk. Prompted for superloops when defining the first unit. Packages 97 and 294 must be equipped.	tip/xpe-19
	EXUT	Enhanced Extended Universal Trunk (Rel 19 & later)	
	XEM	Extended E & M trunk card	
	XUT	Extended Universal Trunk card	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 15: Customer Data Block

This program allows data blocks for customers to be created or modified. When the Overlay is loaded, the available system memory and disk records are output in a header as follows:

CDB000

MEM AVAIL: (U/P): xxxxxx USED: xxxxx TOT: xxxxxxxx

DISK RECS AVAIL: xxx

Changes for Release 21

With Release 21, Overlay program 15 has been restructured to allow changes to be made by entering the desired gate opener mnemonic at the TYPE: prompt. The prompt sequence associated with that gate opener is then prompted in the usual manner. Once the end of the sub prompts has been reached, the Customer Data Block is updated and saved.

Enhanced input processing has also been applied to the REQ: and TYPE: prompts in LD 15. Thus, if the prompt ends with a colon a list of possible responses may be obtained by entering? followed by a carriage return. The REQ: and TYPE: prompts also accept abbreviated responses, thus allowing the user to only enter the first three unique characters of the gateway name.

Prompts and responses

Table of Contents

Section	Page
Prompts and responses (Release 21 & later)	
Customer data block	207
Default Customer Data Block	208
Data Block: AML (Application Module Link)	208
Data Block: ANI (Automatic Number Identification)	209
Data Block: ATT (Attendant Consoles)	209
Data Block: AWU (Automatic Wake Up Data)	211
Data Block: CAS (Centralized Attendant Service Data)	212
Data Block: CCS (Controlled Class of Service)	212
Data Block: CDR (Call Detail Recording)	213
Data Block: FCR (Flexible Code Restriction)	214
Data Block: FFC (Flexible Feature Codes)	214
Data Block: FTR (Features and options)	215
Data Block: HSP (Hospitality Management)	217
Data Block: IMS (Integrated Message Service)	217
Data Block: INT (Intercept Treatments)	218
Data Block: LDN (Listed Directory Numbers)	219
Data Block: MPO (Multi-Party Operations)	220
Data Block: NET (Networking)	221
Data Block: NIT (Night Service)	223
Data Block: OAS (Off Hook Alarm Security)	224
Data Block: PWD (Password)	224
Data Block: RDR (Call Redirection)	225
Data Block: ROA (Recorded Overflow Announcement)	227
Data Block: TIM (Timers)	228
Data Block: TST (Test lines)	229

Prompts and responses (Release 21 & later)

Customer data block

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	CDB	Customer Data Block
CUST	0-99	Customer number
AML_DATA	(NO) YES	Change Application Module Link options (see p. 208)
ANI_DATA	(NO) YES	Change Automatic Number Identification numbers (see p.209)
ATT_DATA	(NO) YES	Change Attendant Console options (see p.209)
AWU_DATA	(NO) YES	Change Automatic Wake Up options (see p.211)
CAS_DATA	(NO) YES	Change Centralized Attendant Service options (see p.212)
CCS_DATA	(NO) YES	Change Controlled Class of Service options (see p. 212)
CDR_DATA	(NO) YES	Change CDR and Charge Account options (see p. 213)
FCR_DATA	(NO) YES	Change New Flexible Code Restriction options (see p. 214)
FFC_DATA	(NO) YES	Change Flexible Feature Code options (see p. 214)
FTR_DATA	(NO) YES	Change Features and options (see p. 215)
HSP_DATA	(NO) YES	Change Hospitality Management options (see p. 217)
IMS_DATA	(NO) YES	Change Integrated Message Service options (see p. 217)
INT_DATA	(NO) YES	Change Intercept treatment options (see p. 218)
LDN_DATA	(NO) YES	Change Departmental Listed Directory Numbers (see p. 219)
MPO_DATA	(NO) YES	Change Multi-Party Options (see p. 220)
NET_DATA	(NO) YES	Change ISDN and ESN Networking options (see p. 221)
NIT_DATA	(NO) YES	Change Night Service options (see p. 223)
OAS_DATA	(NO) YES	Change Off-Hook Alarm Security options (see p.224)
PWD_DATA	(NO) YES	Change Customer related Passwords (see p. 224)
RDR_DATA	(NO) YES	Change Call Redirection (see p.225)
ROA_DATA	(NO) YES	Change Recorded Overflow Announcement options (see p. 227)
TIM_DATA	(NO) YES	Change Timers (see p. 228)
TST_DATA	(NO) YES	Change Test lines (see p. 229)

Note: This *Prompts and responses* table does not list prompts which appear under each gate opener. To find prompts which appear under a given gate opener, refer to the page listed in the *Comment* section of this table.

Default Customer Data Block

Prompt	Response	Comment
REQ:	NEW	Request = NEW
TYPE:	DEFAULT	Type = DEFAULT (Default Customer Data Block)
CUST	0-99	Customer number
ANI_DATA		Automatic Number Identification prompts are automatically output when adding a new customer
ANAT	x...x	ANI billing number for attendants making ANI calls
ANLD	x...x	ANI Listed DN

Data Block: AML (Application Module Link)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	AML_DATA	Application Module Link
CUST	0-99	Customer number
OPT	a..a	Options (OPT responses begin on page 270)
VSID	0-15	Value-Added Server Identifier
GP02	n n n n n n	Group 2 status events 1, 2, 3, 4, 5 or 6 assigned
GP03	n n n n n n	Group 3 status events 1, 2, 3, 4, 5 or 6 assigned
GP04	n n n n n n	Group 4 status events 1, 2, 3, 4, 5 or 6 assigned
GP05	n n n n n n	Group 5 status events 1, 2, 3, 4, 5 or 6 assigned
GP06	n n n n n n	Group 6 status events 1, 2, 3, 4, 5 or 6 assigned
GP07	n n n n n n	Group 7 status events 1, 2, 3, 4, 5 or 6 assigned
GP08	n n n n n n	Group 8 status events 1, 2, 3, 4, 5 or 6 assigned
GP09	n n n n n n	Group 9 status events 1, 2, 3, 4, 5 or 6 assigned
GP10	n n n n n n	Group 10 status events 1, 2, 3, 4, 5 or 6 assigned
GP11	n n n n n n	Group 11 status events 1, 2, 3, 4, 5 or 6 assigned
GP12	n n n n n n	Group 12 status events 1, 2, 3, 4, 5 or 6 assigned
GP13	n n n n n n	Group 13 status events 1, 2, 3, 4, 5 or 6 assigned
GP14	n n n n n n	Group 14 status events 1, 2, 3, 4, 5 or 6 assigned
GP15	n n n n n n	Group 15 status events 1, 2, 3, 4, 5 or 6 assigned

Data Block: ANI (Automatic Number Identification)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	ANI_DATA	Automatic Number Identification
CUST	0-99	Customer number
ANAT	x...x	ANI Attendant Billing number
ANLD	x...x	ANI Listed Directory Number

Data Block: ATT (Attendant Consoles)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	ATT_DATA	Attendant Consoles
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
ATDN	(0)-x...x	Attendant Directory Number
NCOS	(0)-99	Network Class of Service for all attendant consoles for this customer
ATAC	xxxxx	Attendant Administration Access Code
- PWD2	x...x	Second level administration Password
CWUP	(NO) YES	Call Waiting queue Update
CWCL	(0)-255 (0)-255	Call Waiting Call Limit
CWTM	(0)-511 (0)-511	Call Waiting Time
CWBZ	(NO) YES (NO) YES	Call Waiting Buzz
EFLI	(0)-8064	Efficiency Factor Loading Level
MATT	(NO) YES	Consoles used as Message Center
LFTN	l s c u	Lamp Field array Terminal Number
LFTN	l s c u	Second Lamp Field array Terminal Number
LFFD	x00...x00	First Directory Number of lamp field array
ATIM	(0)-126	Attendant Alternative Answering Timer
AQTT	1-(30)-255	Attendant Queue Timing Threshold in seconds
AODN	x...x	Attendant Overflow DN
SPVC	(0)-63	Supervisory Console
- SBLF	(NO) YES	Standard Busy Lamp Field

LD 15

- ITH1	1-255	Visual Indication Threshold 1
- ITH2	1-255	Visual Indication Threshold 2
- ITH3	1-255	Visual Indication Threshold 3
RTSA	aaaa	Recall To Same Attendant (aaaa = (RSAD), RSAA, or RSAX)
SACP	aaaa	Semi-Automatic Camp-On (aaaa = (NO), ALL, or SNGL)
ABDN	(NO) YES	Activation of the Attendant Blocking of DN feature
IRFR	(NO) YES	Internal Attendant Remote Call Forward Password
- IRFP	x...x	Internal Attendant Remote Call Forward Password
XRFR	(NO) YES	External Attendant Remote Call Forward Password
- XRFP	x...x	External Attendant Remote Call Forward Password
AFNT	(0)-126	Attendant Forward No Answer Timer (must be an even number)
AFBT	(0)- <i>AFNT</i>	Attendant Forward Buzz Tone (Entry can be equal to or less than response to AFNT prompt and must be an even number)
IDBZ	(NO) YES	Trunk Buzzing IADN calls in the attendant queue.
PBUZ	xx yy	Flexible Priority Buzz cadence for IADN and Code Blue calls.
ICI	0-19 aaaa	Attendant Incoming Call Indicators
RICI	xx xx...	ICI key numbers that may receive Recorded Overflow Announcement

Data Block: AWU (Automatic Wake Up Data)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	AWU_DATA	Automatic Wake Up Data
CUST	0-99	Customer number
AWU	(NO) YES	Automatic Wake Up
ATRC	(NO) YES	Attendant Recall allowed
RANF	0-511	Music route TYPE must be AWR in LD 16
RAN1	0-511	Primary Ran route TYPE must be AWR in LD 16
RAN2	0-511	Secondary RAN route TYPE must be AWR in LD 16
LA11	0-511	Primary RAN route for Language1
LA12	0-511	Secondary RAN route for Language1
LA21	0-511	Primary RAN route for Language 2
LA22	0-511	Secondary RAN route for Language 2
LA31	0-511	Primary RAN route for Language 3
LA32	0-511	Secondary RAN route for Language 3
LA41	0-511	Primary RAN route for Language 4
LA42	0-511	Secondary RAN route for Language 4
LA51	0-511	Primary RAN route for Language 5
LA52	0-511	Secondary RAN route for Language 5
R2BN	0-23 0-59	RAN2 Begin time; hour, minute
R2ED	0-23 0-59	RAN2 End time; hour, minute
NRWU	2-(5)	Number of Rings for Wake Up before recall to attendant
TAWU	1-(3)	Number of Tries for an unanswered AWU call
- WUD	(NO) YES	Is Wake-up Delimiter required
- - STE	(NO) YES	Is Standard Time Entry allowed?

Data Block: CAS (Centralized Attendant Service Data)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	CAS_DATA	Centralized Attendant Service Data
CUST	0-99	Customer number
CAS	(NO) YES	Centralized Attendant Service main
- MAIN	(NO) YES	CAS Main
- - CHDN	x...x	CAS silent Hold DN
- - HRCL	0-512	Hold Recall timer in units of 2 seconds
- - ICI	0-19 aaaa	Attendant Incoming Call Indicators
- DFLT	(NO) YES	Default
- LDNT	(NO) YES	Listed Directory Number Tone
- LADN	x...x	Local Attendant Directory Number
- RLA	0-511	Release Link route number

Data Block: CCS (Controlled Class of Service)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	CCS_DATA	Controlled Class of Service
CUST	0-99	Customer number
CCRS	aaa	Controlled Class of Service (CCOS) Restricted Service (aaa = (UNR), CTD, FR1, FR2, FRE, SRE, or TLD)
ECC1	aaa	Enhanced Controlled Class of Service level 1 (aaa = (UNR), CTD, FR1, FR2, FRE, SRE, or TLD)
ECC2	aaa	Enhanced Controlled Class of Service level 2 (aaa = (UNR), CTD, FR1, FR2, FRE, SRE, or TLD)
CNCS	0-99	Network Controlled Class of Service for Electronic Lock
PELK	(NO) YES	Electronic Lock on Private Lines

Data Block: CDR (Call Detail Recording)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	CDR_DATA	Call Detail Recording
CUST	0-99	Customer number
CDR	(NO) YES	Change Call Detail Recording data
- IMPH	(NO) YES	CDR for Incoming Packet data call
- OMPH	(NO) YES	CDR for Outgoing Packet data call
- AXID	(NO) YES	Auxiliary Identification output in CDR record
- TRCR	(NO) YES	Carriage Return sent after each CDR message
- CDPR	(NO) YES	Coordinated Dialing Plan Record option
- ECDR	(NO) YES	End-to-End Signaling digits in CDR record
- BDI	(YES) NO	Buffer Data Interface for CDR data
- PORT	0-15	CDR port
- - CNI	a...a	Calling Number Identification (a...a = (DGTS), CLID, or NONE)
- BCAP	(NO) YES	Bearer Capability in CDR.
CHLN	(0)-23	Charge account number Length
FCAF	(NO) YES	Forced Charge Account active
- CHMN	(1)-CHLN	Minimum number of digits for FCA code (Entry can be equal to or less than response to prompt CHLN)
- FCNC	0-99	FCA Network Class of Service

Data Block: FCR (Flexible Code Restriction)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	FCR_DATA	New Flexible Code Restriction
CUST	0 - 99	Customer number
NFCR	(NO) YES	Enable New Flexible Code Restriction
- MAXT	1-255	Maximum number of NFCR translation tables
- OCB1	(0) - (MAXT-1), 255	NFCR tree number to be used for OCB level. Your entry can be either your response to the MAXT prompt minus one or 255. 255 is a special entry which disallows this level.
- OCB2	(0) - (MAXT-1), 255	NFCR tree number to be used for OCB level 2. Your entry can be either your response to the MAXT prompt minus one or 255. 255 is a special entry which disallows this level.
- OCB3	(0) - (MAXT-1), 255	NFCR tree number to be used for OCB level 3. Your entry can be either your response to the MAXT prompt minus one or 255. 255 is a special entry which disallows this level.
IDCA	(NO) YES	Incoming DID Digit Conversion allowed
- DCMX	1- 255	Maximum number of IDC conversion tables

Data Block: FFC (Flexible Feature Codes)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	FFC_DATA	Flexible Feature Code
CUST	0-99	Customer number
CCRS	aaa	Controlled Class of Service (CCOS) Restricted Service
SCPL	0-8	Station Control Password Length
SBUP	(YES) NO	Enable use of station control passwords for set based administration user level access
- PWD2	xxxx	PWD2 password for confirmation
FFCS	(NO) YES	Change Flexible Feature Code end-of-dialing indicator
- STRL	1-3	String Length of end-of-dial indicator
- STRG	xxx	String to indicate end-of-dialing (Enterable characters are digits 0-9, *, and #.)
ADLD	(0)-20	Auto Dial Delay in seconds

Data Block: FTR (Features and options)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	FTR_DATA	Customer Features and options
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
DGRP	(0)-2046	Maximum number of Dial Intercom Groups
IRNG	(NO) YES	Intercom Ring
PKND	(1)-4	Number of digits Dialed for Group Pickup
DNDL	(NO) YES	Do Not Disturb Lamp on 500/2500 telephones
SPRE	xxxx	Special Prefix number (1-4 digits)
LINK	(NO) YES	ACD DNIS Link option
- APL	0-15	Auxiliary Processor Link number
PREO	(0) 1	Pretranslation Option
BPSS	(NO) YES	Block Pretranslation on System Speed Call lists.
SRCD	xxxx	Set Relocation Security Code
EEST	(NO) YES	End-to-End Signaling Tone to originating party
- DTMF	(YES) NO	DTMF feedback tone
EESD	(NO) YES	End-to-End Signalling Digit Display
TTBL	(0)-31	Tone Table number
ADCP	xxxx	All-Digital Connection Prefix
MUS	(NO) YES	Music for sets
- MUSR	0-511	Music Route for sets
ALDN	x...x	Alarm Directory Number
ALRM	(NO) YES	Malicious Call Trace Alarm for internal or external calls
TIME	0-(15)	Time for the alarm in minutes
INT	NO YES	Internal
RECD	(NO) YES	Recorder
- MCRT	0-511	Malicious Call Trace Recording Route number as defined in LD 16
PORT	0-15	Serial Data Interface Port Monitor
STCB	(NO) YES	Station Camp-On Busy allowed
NSCP	(NO) YES	Network Station Camp-On to sets on this node allowed
MCDC	(NO) YES	Malicious Call DN/CLID printing allowed
NAUT	(NO) YES	Network Authorization Code

LD 15

IDEF	(NO) YES	Internal/external definition
MTAR	(NO) YES	Disable (enable) Meridian Mail Trunk Access Restriction
LEND	(NO) YES	List Entry Number Delimiter
MSCD	(NO) YES	Mandatory Speed Call Delimiter
CPCI	(NO) YES	Called Party Control on Internal Call (is not) is allowed for the customer
CONF_DSP	(NO) YES	Change Conference Display configurations
- CNFFIELD	(NO) YES	Enable Conference Count Display Field
- -CNF_NAME	(CONF) aaaa	Change Conferees Count Display Field Name
- INTFIELD	(NO) YES	Enable Internal Conferees Count display field
- -INT_NAME	(I) aaaa	Change Internal Conferees Count display field
- EXTFIELD	(NO) YES	Enable Total External Conferees Count display field
- -EXT_NAME	(E) aaaa	Change Total External Conferees Count field name
DAPC	(NO) YES	Dial Access Prefix on CLID table entry option
- TBL	1-15	Prefix Table Number
- - NPI	aaaa	Numbering Plan Identification
- - TON	aaaa	Type of Number
- - - PREF	0-9999	Additional digits (prefix) required to call back the calling number with the specified NPI and TON value.
BSFE	(NO) YES	Configure Boss/Secretary Filtering Enhancement feature.
- ACT_IDLE	aaaa	Lamp status when boss's set has BSFE active and is idle, where aaaa = (WINK), FLSH, LIT or DARK
- ACT_BUSY	aaaa	Lamp status when boss's set has BSFE active and is idle, where aaaa = (FLSH), WINK, LIT or DARK
- DACT_IDLE	aaaa	Lamp status when boss's set doesn't have BSFE active and is idle, where aaaa = (DARK), WINK, LIT or FLASH
- DACT_BUSY	aaaa	Lamp status when boss's set doesn't have BSFE active and is busy, where aaaa = (LIT), WINK, FLASH or DARK
ARDL_ATTEMPT	1-(30)-60	Automatic Redial number of attempts
ASPCT	(10)-180	Analog Semi-Permanent Connection re-connection timer

Data Block: HSP (Hospitality Management)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	HSP_DATA	Hospitality Management
CUST	0-99	Customer number
FRAN	0-511	First RAN number for first PCR threshold
SRAN	0-511	Second RAN number for second PCR threshold
IDR	0-511	Identification Error RAN number
AUTR	0-511	Authcode Error RAN number
RLCR	0-511	Relocation FFC Error RAN number
FRAN	0-511	First RAN number for first PCR threshold
CLS1	aaa	Class of Service 1 (aaa = (UNR), CTD, CUN, FR1, FR2, FRE, SPE, or TLD)
NCS1	(0)-99	Network Class of Service
TGR1	(0)-31	Trunk Group Access Restriction
CLS2	aaa	Class of Service 2 (aaa = (UNR), CTD, CUN, FR1, FR2, FRE, SPE, or TLD)
NCS2	(0)-99	Network Class of Service
TGR2	(0)-31	Trunk Group Access Restriction

Data Block: IMS (Integrated Message Service)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	IMS_DATA	Change Integrated Messaging System features
CUST	0-99	Customer number
IMS	(NO) YES	Change Integrated Message System
- SAMM	(NO) YES	Standalone Meridian Mail
- IMA	(NO) YES	Integrated Messaging System enabled
- - APL	0-15	Auxiliary Processor Link number for IMS
- UST	(NO) YES	User Status Update enabled
- - APL	0-15	Auxiliary Processor Link number for UST
- UMG	(NO) YES	User-to-User Messaging enabled
- - APL	0-15	Auxiliary Processor Link number for UMG

Data Block: INT (Intercept Treatments)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	INT_DATA	Change Intercept Treatment
CUST	0-99	Customer number
ACCD	(OVF OVF OVF ATN)	Access Denied
- RANR	0-511	Intercept Recorded Announcement Route number
CTVN	(OVF OVF OVF ATN)	Call To Vacant Number
- RANR	0-511	Intercept Recorded Announcement Route number
MBNR	(OVF OVF OVF ATN)	Maintenance Busy Numbers
- RANR	0-511	Intercept Recorded Announcement Route number
CTRC	(OVF NAP OVF NAP)	Restricted Call
- RANR	0-511	Intercept Recorded Announcement Route number
CLDN	(NAP OVF NAP NAP)	Calls to LDN
- RANR	0-511	Intercept Recorded Announcement Route number
NINV	(OVF OVF OVF ATN)	Invalid NARS/BARS call
- RANR	0-511	Intercept Recorded Announcement Route number
NITR	(OVF OVF OVF ATN)	NARS/BARS Invalid Translation
- RANR	0-511	Intercept Recorded Announcement Route number
NRES	(OVF OVF OVF ATN)	NARS/BARS Restricted calls
- RANR	0-511	Intercept Recorded Announcement Route number
NBLK	(OVF OVF OVF ATN)	NARS/BARS Blocked calls
- RANR	0-511	Intercept Recorded Announcement Route number
RCLE	(ATN OVF ATN ATN)	Redirection Count Limit Exceeded as defined by TRCL
- RANR	0-511	Intercept Recorded Announcement Route number
CONG	aaa	Congestion tone for all trunks busy condition (aaa = (OVF) or BSY)
DLT	aaa	Direct Inward System Access Lockout treatment (aaa = (OVF), ATN, or OFA)
LLT	aaa	Flexible Line Lockout treatment (aaa = (OVF), ATN, or OFA)
DNDT	aaa	Do Not Disturb intercept Treatment (aaa = (BST), ATT, or RAN)
- RRT	0-511	Intercept Recorded Announcement Route number

Data Block: LDN (Listed Directory Numbers)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	LDN_DATA	Departmental Listed Directory Numbers
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
DLDN	(NO) YES	Departmental Listed Directory Numbers
LDN0	xxxx	Listed Directory Number 0
LDA0	1-63 ALL	Attendant consoles associated with LDN0
LDN1	x...x	Listed DN 1
LDA1	a...a	Attendant consoles associated with LDN1 (a...a = 1-63 or ALL)
LDN2	x...x	Listed DN 2
LDA2	a...a	Attendant consoles associated with LDN2 (a...a = 1-63 or ALL)
LDN3	x...x	Listed DN 3
LDA3	a...a	Attendant consoles associated with LDN3 (a...a = 1-63 or ALL)
LDN4	x...x	Listed DN 4
LDA4	a...a	Attendant consoles associated with LDN4 (a...a = 1-63 or ALL)
LDN5	x...x	Listed DN 5
LDA5	a...a	Attendant console associated with LDN5 (a...a = 1-63 or ALL)
LDBZ	n n n n n n	Listed Directory Number Buzing assigned groups (n = 0 - 5)
ICI	0-19 aaaa	Attendant Incoming Indicators

Data Block: MPO (Multi-Party Operations)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	MPO_DATA	Multi-Party Operations
CUST	0-99	Customer number
FMOP	(NO) YES	Flexible Misoperation Options
- RGNA	xxx yyy	Ringing No Answer treatment
- AOCS	xxx yyy	All Other Cases
- RCY1	1-(6)-15	Number of Cycles of Re-ringing before forwarding or disconnecting
- RCY2	1-(4)-15	Number of Cycles of Ringing before forwarding to transferring station
- RALL	(NO) YES	Mandatory recall is required prior to dialing control digits
- CDTO	2-(14)	Control digit timeout; in multiples of two seconds
IFLS	(NO) YES	Ignore Switchhook Flash signal from 500/2500 sets
MHLD	(NO) YES	Manual Hold after inquiry enabled
PCDS	(NO) YES	Programming of Control Digits required
- CNFD	0-(1)-9, *, #	Control Digit for Conference
- TGLD	0-(2)-9, *, #	Control Digit for Toggle
- DISD	0-(3)-9, *, #	Control Digit for Disconnect
CCDO	(NO) YES	Consultation Connection Disconnect Option alternative treatment
AFCO	(YES) NO	(Automatic)/Manual Forced Camp-On
- ACNS	aaa	Attendant Clearing during Night Service (aaa = (NO), EXT, or ALL)

Data Block: NET (Networking)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	NET_DATA	Networking
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
AC2	aaaa	Access Code 2 as defined in LD 86 (aaaa = NPA, NXX, INTL, SPN, or LOC)
FNP	(YES) NO	Flexible Numbering Plan feature for the customer
ISDN	(NO) YES	Integrated Services Digital Network
- PNI	(0)- 32700	Private Network Identifier
- CLID	(NO) YES	(Do not allow) Allow Calling Line Identification option
- - SIZE	0-(256)-4000	CLID entry size
- - INTL	0- 9999	Country code (1-4 digits)
- - ENTRY	xx	CLID entry to be configured
- - - HNTN	0- 999999	National code for home national number (1-6 digits)
- - - HLCL	0- 99 ... 99	Local code for home local number or Listed DN (1-12 digits)
- - - DIDN	a...a	Use DN as DID (a...a = YES, NO or SRCH)
- - - HLOC	0- x...x	Home location code (ESN) (1-7 digits)
- - - LSC	0- x...x	Local steering code (1-7 digits)
- ESA_APDN	(YES) NO	Append the originating Directory Number after the Home Local Number for Emergency Services Access calls
- ESA_HLCL	x..x	Home Local Number for Emergency Services Access calls
- ESA_INHN	(NO) YES	Home National Number in front of Home Local Number for Emergency Services Access calls
- CLASS_FMT	aaa	Send information to a CLASS set as the calling number
- PINX_DN	xx....x	Node DN
- MMSN	(NO) YES	(Do not allow) Allow Mobility Multi-Site Networking node
- APPL_DN	x...x	Originating node which communicates with Mobility User Database (MUD) server
- DIAL_PLAN	aaa	Dialing plan used by customer to communicate with MUD server (aaa = (UDP) or CDP)
-- MUD_SRVR	(NO) YES	(Do not allow) Allow MUD Server
--- MUD_DN	x...x	MUD server DN

LD 15

--- SRVR_LOC	x...x	Home location code of MUD Server
--- SRVR_DN	x...x	MUD Server DN
- MBG	(0)-65535	Multi-location Business Group
- BSGC	0-(65535)	Business Sub Group Consult-only
- PFX1	xxxx	Prefix 1 (not applicable for Release 22)
- PFX2	xxxx	Prefix 2 (not applicable for Release 22)
- HNPA	200 - 999	Home Number Plan Area code defined in LD 90 (not applicable for Release 22)
- HNXX	100-9999	Prefix for Central Office defined in LD 90 (not applicable for Release 22)
- CNTP	aaa	Calling Number Type (aaa = (PDN) or LDN) (CNTP is not applicable for Release 22)
- RCNT	0-(5)	Redirection Count for ISDN calls
- PSTN	(NO) YES	Public Service Telephone Networks
- - TNDM	0-(15)-31	Tandem Threshold/Loop Avoidance Limit value permitted in a network connection
- - PCMC	0-(15)-31	Pulse Code Modulation Conversions permitted, μ -Law to A- Law or A- Law to μ -Law, in a network connection
- SATD	0-(1)-5	Satellite Delays
ROPT	aaa	Route Optimization (aaa = (NRO), RAX, ROA, or ROX)
TRNX	(NO) YES	(Prevent) Allow transfer on ringing of supervised external trunks across the network
EXTT	(NO) YES	(Prevent) Allow connection of supervised external trunks via either call transfer or conference
FTOP	aaaa	Flexible Trunk to Trunk Options.
DMWM	(NO) YES	Enable the output of DPNSSI Message Waiting Indication error messages
MWNS	(NO) YES	Message Waiting Indication Non Specified Information string to recognize.
- REQ	aaa	Message Waiting Indication Non Specified Information table
- MFID	a	Manufacturer Identifier
- - NOTI	(NO) YES	Non Specified Information string for Message Waiting Notification
- - MSSC	a	a = any alphanumeric character
- - PRMT	aaa	Subsequent Non Specified Information string for Message Waiting notification
- - CANC	YES NO	Non Specified Information string for Message Waiting Cancellation
VNR	(NO) YES	Vacant Number Routing

- RLI	0-999	Route List Index as defined in LD 86
- FLEN	1-(16)	Flexible length of digits expected
- CDPL	1-(10)	Flexible length of VNR CDP
- LOCL	1-(10)	Flexible length of VNR LOC
NIT	2-(8)	Network Alternate Route Selection (NARS) Interdigit Timer
NAS_ATCL	(YES) NO	Network Attendant Service Attendant Control allowed
NAS_ACTV	(YES) NO	Network Attendant Service routing Activated
FOPT	0-(14)-30	Flexible Orbiting Prevention Timer
ARDL_ACCEPT	0-(20)-60	Automatic Redial Acceptance Timer in seconds
ARDL_RETRY	10-(30)-60	Automatic Redial Retry Timer in seconds
CNDN	0-x...x	Customer Calling Number Identification DN on outgoing MFC calls
- CNIP	(YES) NO	Calling Number Identification Presentation

Data Block: NIT (Night Service)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	NIT_DATA	Night Service
CUST	0-99	Customer number
NIT1	x...x	First Night Service DN by Time of Day
TIM1	hh mm	Hour and Minute for First Night Service DN
NIT2	x...x	Second Night Service DN by Time of Day
TIM2	hh mm	Hour and Minute for Second Night Service DN
NIT3	x...x	Third Night Service DN by Time of Day
TIM3	hh mm	Hour and Minute for Third Night Service DN
NIT4	x...x	Fourth Night Service DN by Time of Day
TIM4	hh mm	Hour and Minute for Fourth Night Service DN
ENS	(NO) YES	Enhanced Night Service enabled
- NWT	(NO) YES	Night Call Waiting Tone enabled
- NNT	0-253	Night Number Table
- NSO	(NO) YES	Enhanced Night Service enabled

LD 15

Data Block: OAS (Off Hook Alarm Security)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	OAS_DATA	Change Off-Hook Alarm Security options
CUST	0-99	Customer number
ODN0	xxxx	OHAS Security DN for zone 0
ODN1	xxxx	OHAS Security DN for zone 1
ODN2	xxxx	OHAS Security DN for zone 2
ODN3	xxxx	OHAS Security DN for zone 3
ODN4	xxxx	OHAS Security DN for zone 4
ODN5	xxxx	OHAS Security DN for zone 5
ODN6	xxxx	OHAS Security DN for zone 6
ODN7	xxxx	OHAS Security DN for zone 7
ODN8	xxxx	OHAS Security DN for zone 8
ODN9	xxxx	OHAS Security DN for zone 9
ASTM	1-(30)-63	OHAS off-hook or interdigit timeout timer in seconds
HDOPT	(0)-10 CONT	OHAS Half Disconnect Treatment Options
HDTM	1 - (30) - 600	OHAS Half Disconnect timer in seconds

Data Block: PWD (Password)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	PWD_DATA	Password
CUST	0-99	Customer number
SPWD	xxxx	Secure data password for LD 88 authcodes and LD 24 DISA
- PWD2	xxxx	Second level administration Password
ATAC	xxxx	Attendant Administration Access code
- PWD2	xxxx	Second level administration Password

Data Block: RDR (Call Redirection)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	RDR_DATA	Call Redirection
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
FNAD	aaa	Call Forward No Answer treatment for DID calls (aaa = (HNT), ATT, NO, or FDN)
FNAT	aaa	Call Forward No Answer treatment for external Trunk non-DID calls (aaa = (HNT), ATT, NO, or FDN)
FNAL	aaa	Call Forward No Answer treatment for All other calls including trunk calls marked as internal (aaa = (HNT), ATT, NO, or FDN)
CFTA	(NO) YES	Call Forward to Trunk Access code allowed
CCFWDN	x...x	Customer Call Forward DN (maximum: 23 digits)
CFNA	1-(4)-15	Number of normal ringing cycles for Call Forward No Answer (CFNA)
CFN0	1-(4)-15	Number of normal ringing cycles for CFNA, Option 0
CFN1	1-(4)-15	Number of normal ringing cycles for CFNA, Option 1
CFN2	1-(4)-15	Number of normal ringing cycles for CFNA, Option 2
CRTOD	(NO) YES	Change Call Redirection by Time Of Day alternate time options
- CRT0	SH SM EH EM	Alternate time option 0, denotes time when Alternate Redirection DN will be used. (SH SM = Start time, EH EM = End time)
- CRT1	SH SM EH EM	Alternate time option 1 (SH SM = Start time; EH EM = End time)
- CRT2	SH SM EH EM	Alternate time option 2 (SH SM = Start time; EH EM = End time)
- CRT3	SH SM EH EM	Alternate time option 3 (SH SM = Start time; EH EM = End time)
CRDAY	(NO) YES	Call Redirection by Day
- DAY0	n n n n n n n	Days for day option 0 for which alternate treatment is given
- DAY1	n n n n n n n	Days for day option 1 for which alternate treatment is given
- DAY2	n n n n n n n	Days for day option 2 for which alternate treatment is given
- DAY3	n n n n n n n	Days for day option 3 for which alternate treatment is given
CRHOL	aaa	Call Redirection by Holiday (aaa = NEW, CHG or OUT.
- DATE	dd mm yyyy	Date of the holiday (dd = day; mm = month; yyyy = year)
- - HOL_OPT	0-3	Holiday redirection option for which the date applies
	0-3	Holiday redirection option for which the date applies.
NMDR	(0)-4	Number of normal ring cycles for DNDR

LD 15

DFN0	1-(4)-15	Number of distinctive ringing cycles for CFNA, Option 0
DFN1	1-(4)-15	Number of distinctive ringing cycles for CFNA, Option 1
DFN2	1-(4)-15	Number of distinctive ringing cycles for CFNA, Option 2
DNDH	(NO) YES	Do Not Disturb Hunting allowed
MDID	(NO) YES	No Answer DID calls routed to Message Center
NDID	(NO) YES	No Answer non-DID calls routed to Message Center
MWFB	(NO) YES	DID calls to busy telephones routed to Message Center
TRCL	(0)-7	Total Redirection Count Limit

Data Block: ROA (Recorded Overflow Announcement)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	ROA_DATA	Recorded Overflow Announcement
CUST	0-99	Customer number
OPT	a...a	Options (OPT responses begin on page 270)
FRRT	0-511	First RAN route
- FRT	0-(20)-2044	Time delay in seconds for the first RAN route
SRRT	0-511	Second RAN route number for ROA
- SRT	0-(40)-2044	Time delay in seconds for the second RAN route
WAIT	aaa	Treatment during Waiting time for ROA (aaa = (RGB), MUS, or SIL)
- MURT	0-511	Music Route
RICI	0-19	ICI key numbers that may receive ROA

Data Block: TIM (Timers)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	TIM_DATA	Timers
CUST	0-99	Customer number
FLSH	20-(45)-768	Switchhook Flash timing
PHDT	1-(30)-63	Permanent Hold Timer
DIND	2-(30)-60	Dial tone and Interdigit timeout for non-DTMF sets
DIDT	2-(15)-60	Dial tone and Interdigit timeout for DTMF sets
LDTT	2-(6)-30	Line disconnect tone timer for 500/2500 telephones in seconds
BOTO	2-(14)-60	Busy tone/Overflow tone Timeout
DBRC	2-(60)-120	Duration Between Reminder Cadences for Audible Reminder of Held Call
RTIM	xxx yyy zzz	Recall Timers for Slow Answer, Camp-On and Call Waiting
ATIM	(0)-126	Attendant Alternative Answering Timer
AQTT	1-(30)-255	Attendant Queue Timing Threshold in seconds
ADLD	(0)-20	Auto Dial Delay in seconds
AFNT	(0)-126	Attendant Forward No Answer Timer (must be an even number)
AFBT	(0)- <i>AFNT</i>	Attendant Forward Buzz Tone (Your entry can be equal to or less than your response to the AFNT prompt and must be an even number)
NFNA	(0)-63	Night Forward No Answer or ring cycles
NFNS	(0)-504	Night Forward No Answer in seconds
HWTT	0-(300)-600	Length of Howler Tone in seconds
NIT	2-(8)	Network Alternate Route Selection Interdigit Timer
FOPT	0-(14)-30	Flexible Orbiting Prevention Timer

Data Block: TST (Test lines)

Prompt	Response	Comment
REQ:	CHG	Change existing data block
TYPE:	TST_DATA	Test lines for transmission testing
CUST	0-99	Customer number
T100	xxxx	DN for Type-100 test line
REF0	xxxx	DN for Reference trunk 0
TST0	xxxx	DN for Test trunk 0
REF1	xxxx	DN for Reference trunk1
TST1	xxxx	DN for Test trunk 1
REF2	xxxx	DN for Reference trunk 2
TST2	xxxx	DN for Test trunk 2
REF3	xxxx	DN for Reference trunk 3
TST3	xxxx	DN for Test trunk 3

LD 15

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AATT	xxxx	Automatic Identification of Outward Dial Attendant Identifier Precede with X to remove. Not supported on Release 20 and later.	aiod-1
ABDN	(NO) YES	Activation of the Attendant Blocking of DN Prompted with Semi-Automatic Camp-On (SACP) package 181.	abdn-20
AC2	NPA NXX INTL SPN LOC	Access Code 2 E.164 National E.164 Subscriber International Special Number Location Code For DPNSS1, only SPN and LOC values apply. Enter call types that use Access Code 2 (AC2) Multiple responses are permitted. If a numbering plan is not entered here, it is automatically defaulted to Access Code1 (AC1). Before Release 16 this prompt appears only when ISDN = YES and the switch is equipped with Network Alternate Route Selection (NARS) package 58 This prompt applies to both ISDN and non-ISDN calls if you have Release 16 and Network Message Services (NMS) package175.	pri-15
ACCD	(OVF OVF OVF ATN)	Access Denied	basic-1
ACNS	(NO) EXT ALL	Attendant Clearing during Night Service No automatic treatment External calls only All calls This prompt appears when the Multi-Party Operations (MPO) package is equipped, MPOP = YES and FMOP = YES.	mpo-20

LD 15

Prompt	Response	Comment	Pack/Rel
ACT_BUSY	(FLSH) WINK LIT DARK	LCD Lamp flashes at a rate of 60 impulses per minute (0.5 seconds on and 0.5 seconds off). LCD Lamp flash rate is 30 impulses per minute. LCD Lamp flash rate is 60 impulses per minute. LCD Lamp is on. LCD Lamp is off.	bfs-24
ACT_IDLE	(WINK) FLSH LIT DARK	LCD Lamp flashes at a rate of 60 impulses per minute (0.875 seconds on and 0.125 seconds off). LCD Lamp flash rate is 60 impulses per minute. LCD Lamp flash rate is 30 impulses per minute. LCD Lamp is on. LCD Lamp is off.	bfs-24
ADCP	x...x	All-Digital Connection Prefix Entry may be 1-4 digits; null input accepted. Prompted with 1.5 Mbit Digital Trunk Interface (PBXI) package 75 and AMP package.	basic-5
ADLD	(0)-120	Auto Dial Delay Time in two-second interval. Prompted with the Flexible Feature Codes (FFC) package 139. 0 = Auto Dial does not take place.	ffc-20
AFBT	(0)-2-AFNT	Attendant Forward Buzz Tone The number of seconds in 2 second intervals that the attendant is buzzed at full volume. Odd entries are rounded down to the next valid entry. If entry is 0, the original volume is in effect.	afna-14
AFCO	(YES) NO	(Automatic)/Manual Forced Camp-On Prompted with Priority Override (POVR) package 186.	povr-20
AFNT	(0)-2-126	Attendant Forward No Answer Timer The number of seconds in 2 second intervals that the call is presented to the attendant before Attendant Forward No Answer (AFNA) is attempted. Odd entries are rounded down to the next valid entry. If entry is 0, the call is not forwarded. Prompted with Attendant Forward No Answer (AFNA) package 134.	afna-14

Prompt	Response	Comment	Pack/Rel
ALDN	x...x	Alarm Directory Number Must be a Single-Appearance 500-set DN. Precede with X to remove.	emct-20
ALRM	(NO) YES	Malicious Call Trace Alarm for internal or external calls ALRM has to set to YES if the alarm is to be rung for any call (external or internal) when MCT is activated.	emct-20
AML_DATA	(NO) YES	Change Application Module Link options	basic-21
ANAT	x...x	ANI Attendant Billing Number Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. In either case, together with ANLD (ANI listed DN), the total number of digits must be seven. Prompted with Automatic Number Identification (ANI) package 12.	ani-1
ANI_DATA	(NO) YES	Change Automatic Number Identification options	basic-21
ANLD	xxxxx	Automatic Number Identification (ANI) Listed Directory Number May be 0-5 digits, depending on the length of ANAT. The combined number of digits for ANAT and ANLD must be 7. Prompted with Automatic Number Identification (ANI) package 12.	ani-1
	X	Enter the letter X to clear the field	

LD 15

Prompt	Response	Comment	Pack/Rel
AOCS	xxx yyy	All Other Cases Where: xxx is for internal calls and yyy or ATN is for external calls Valid entries for xxx and yyy are: • AAR - forward to attendant or Night Service after re-ringing for RCY1 cycles • ATN - forward to attendant or Night Service (ATN is the default for yyy or external calls) • DAR - disconnect after re-ringing for RCY1 cycles • DIS - disconnect default for xxx or internal calls • OVF - provide overflow tone • STD - standard operation.	mpo-20
AODN	x...x	Attendant Overflow DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry. Prompted with Attendant Overflow Position (AOP) package 56.	aop-1
APAD	x y	Alternative Pad. Where: x = trunk pad selection and y = conference pad selection Valid inputs for x are: • (0) = default North America • 1 = Australia • 2 = New Zealand • 3 = Italy • 4 = China EPE or EPE/IPE systems • 5 = China pure IPE system • 6-7 = future usage currently set to default Valid inputs for y are: • (0) = default North America • 1 = Alternative Conference pads selected The default = 0 when REQ = NEW. The default is the existing value when REQ = CHG. Alternative Conference pads are only provided on specific Conference cards.	

Prompt	Response	Comment	Pack/Rel
APL	0 - 15	Auxiliary Processor Link number	apl-10
APPL_DN	x...x	Application DN Originating node that communicates with the Mobility User Database (MUD) server. This DN can be up to 7 digits long.	mmsn-22
APRF	xx	Automatic Identification of Outward Dial Prefix Not supported on Release 20 and later.	aiod-1
AQTT	1-(30)-255	Attendant Queue Timing Threshold in seconds	basic-1
ARDL_ACCEPT	0-(20)-60	Automatic Redial Acceptance Timer in seconds. An odd-numbered entry is rounded up to the next even number, and the following message is printed: "ARDL_ACCEPT ROUNDED TO <u>XX</u> ." (where: xx = the even number). This is the maximum allotted time for the originator response on a successful automatic redial call. Prompted if Automatic Redial (ARDL) package 304 is equipped.	ardl-22
ARDL_ATTEMPT	1-(30)-60	Automatic Redial number of attempts Any single ARDL call is automatically redialed up to the number of retries entered at this prompt. Prompted if Automatic Redial (ARDL) package 304 is equipped.	ardl-22
ARDL_RETRY	10-(30)-60	Automatic Redial Retry Timer in seconds. An odd-numbered entry is rounded up to the next even number, and the following message is printed: "ARDL_RETRY ROUNDED TO <u>XX</u> ." (where: xx = the even number). This timer controls successive automatic redial retry dialing. Prompted if Automatic Redial (ARDL) package 304 is equipped.	ardl-22

LD 15

Prompt	Response	Comment	Pack/Rel
ASPCT		Analog Semi-Permanent Connections re-connection timer	basic-24
	10 180	minimum value = 10 seconds maximum value = 180 seconds	
ASTM	1-(30)-63	OHAS Off-Hook or interdigit timeout timer This timer is applied to telephones with Alarm Security Allowed (ASA) Class of Service. When the timer expires, the telephone is intercepted to the OHAS DN. ASTM applies to all OHAS DNs. If the telephone has Alarm Security Denied (ASD) Class of Service, the normal dial tone and interdigit timers are used. See LD 15 prompts DIND and DIDT.	basic-18
ATAC	xxxx	Attendant Administration Access Code The entered code is not actually accepted until the correct password is entered in the next prompt. Prompted with Attendant Administration (AA) package 54.	aa-1
ATDN	(0)-x...x	Attendant Directory Number Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Calls timed for recall by the DPNSS1 redirection feature are redirected to this number when the timer expires.	basic-1
ATIM	(0)-126	Attendant Alternative Answering Timer This timer is in increments of two seconds, odd numbers are rounded down to the next valid input. Use ATIM = 0 to disable AAA. Prompted with Attendant Alternative Answering (AAA) package 174.	aaa-15
ATRC	(NO) YES	Attendant Recall allowed A YES response enables Attendant Recall for unanswered Automatic Wake Up (AWU) call attempts. The number of Wake Up tries is defined at the TAWU prompt. The number of rings for a Wake Up call is defined at the NRWU prompt.	awu-10
ATT_DATA	(NO) YES	Change Attendant Console options	basic-21

Prompt	Response	Comment	Pack/Rel
AWU	(NO) YES X	Enable Automatic Wake-Up All AWU related data is removed from CDB. Prompted with Automatic Wake-Up (AWU) package 102.	awu-10
AWU_DATA	(NO) YES	Change Automatic Wake Up options	basic-21
AXID	(NO) YES	Auxiliary Identification output in CDR record Auxiliary Identification provides the TN when the call involves a multiple appearance DN.	cdr-1
BCAP	(NO) YES	Bearer Capability in CDR.	cdr-24
BDI	(YES) NO	Assign Buffer Data Interface for CDR data. If CDR options are configured for the first time, the craftsperson must enter a response for BDI.	dba-24
BOTO	2-(14)-60	Busy tone/Overflow tone Timeout Odd entries are rounded down to a valid multiple of two seconds.	basic-10
BPSS	(NO) YES	Block Pretranslation on System Speed Call lists when dial accessed.	pxlt- 23 ssc- 23
BSFE	(NO) YES	Allow (Deny) Boss/Secretary Filtering Enhancement feature.	bfs-24
BSGC	0-(65535)	Business Sub Group Consult-only. Where: • 0 = no indication • 1 - 65535 = Subgroup identifier This value is sent as the Multi-location Business Group Subgroup (MBGS) identifier or tenant number when an existing call has more than two different MBGSs. In this case a consultation connection will be allowed, but completion of a call modification, conference or transfer, will be disallowed. If BSGC = 0 then Call Transfer and Call Modifications may be restricted under certain circumstances. Ensure BSGC ≠ 0 if Call Transfer and Call Modifications to be allowed.	tens-16
CANC	YES NO	Non Specified Information string for Message Waiting Cancellation.	dmwi- 23

LD 15

Prompt	Response	Comment	Pack/Rel
CAS	(NO) YES	Centralized Attendant Service Prompted with Centralized Attendant Services (Main) (CASM) package 26 or Centralized Attendant Services (Remote) (CASR) package 27.	casm-1
CAS_DATA	(NO) YES	Change Centralized Attendant Service options	basic-21
CCDO	(NO)	Consultation Connection Disconnect Option alternative treatment is not required	mpo-20
	YES	Consultation Connection Disconnect Option alternative treatment is required	
CCFWDN	x...x	Customer Call Forward DN.	basic-21
		This number may be a maximum of 16 (0-16) digits prior to Release 22. With Release 22, the maximum is now 23 (0-23) digits. CCFWDN allows subscribers to forward their phones to a central answering service by dialing a FFC. CCFWDN activates the regular Call Forward All Calls function, but without having to specify the DN to which calls will be forwarded. Customer Call Forward is only applicable to 500-type sets.	
CCRS		Controlled Class of Service (CCOS) Restricted Service. This applies when CCRS is active. If CCRS is inactive, the set defaults to the TN class of service access restriction. Allowed access restrictions are:	ccos-7
	(UNR) CTD CUN FR1 FR2 FRE SRE TLD	Unrestricted Conditionally Toll Denied Conditional Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Semi-Restricted Toll Denied Prompted with Controlled Class of Service (CCOS) package 81.	
CCS_DATA	(NO) YES	Change Controlled Class of Service options	basic-21
CDPL	1-(10)	Flexible length of Vacant Number Routing (VNR) Coordinated Dialing Plan (CDP)	cdp-10

Prompt	Response	Comment	Pack/Rel
CDPR	(NO) YES	Coordinated Dialing Plan Record option. CDPR appears with Coordinated Dialing Plan (CDP) package 59. Applies only to trunk routes with OPD = NO. Replace the Distant Steering Code (DSC) or Trunk Steering Code (TSC) with the Access Code (ACOD). The format is: ACOD + concluding digits Insert ACOD ahead of DSC or TSC. The format is: ACOD + DSC or TSC + concluding digits	cdp-10
CDR	(NO) YES	Change Call Detail Recording record Prompted with Call Detail Recording (CDR) package 4.	cdr-1
CDR_DATA	(NO) YES	Change CDR and Charge Account options	basic-21
CDTO	2-(14)	Control digit timeout in multiples of 2 seconds.	mpo-20
CFNA	1-(4)-15	Number of normal ringing cycles for Call Forward No Answer If the Flexible Tones and Cadences (FTC) package 125 is equipped, this interval is tied to the number of cycles of NCAD ringing. Refer to 553-2711-180 Flexible Tone and Digit Switches. Release 18 and earlier.	basic-1
CFN0	1-(4)-15	Number of normal ringing cycles for CFNA, Option 0 Release 19 and later, CFNA has three ringing cycle options. This assigns the normal ringing cycles for Option 0. Refer to X11 features and services for details concerning this feature.	uscr-19
CFN1	1-(4)-15	Number of normal ringing cycles for CFNA	uscr-19
CFN2	1-(4)-15	Number of normal ringing cycles for CFNA	uscr-19
CFTA	(NO) YES	Call Forward to Trunk Access code not allowed Call Forward to Trunk Access code allowed	optf-12
CHDN	x...x	CAS silent Hold DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	casm-1
CHLN	(0)-23	Charge Account Number Length Prompted with Charge Account (CHG) package 23	fca-1

LD 15

Prompt	Response	Comment	Pack/Rel
CHMN	(1)-CHLN	Minimum number of digits for FCA code The range is from 1 to CHLN, where CHLN = Charge account Number Length.	fca-1
CLASS_FMT	(DN) LCL NTN	Send internal Directory Number to a CLASS set as the calling number. Send Local Number to a CLASS set as the calling number. Send National Number to a CLASS set as the calling number.	cnumb- 23
CLDN	(NAP OVF NAP NAP)	Calls to LDN	basic 1
CLID	(NO) YES	Do not allow Calling Line Identification option Allow Calling Line Identification option With X11 Release 23, Calling Line Identification does not require ISDN.	isdn-22
CLS1	(UNR) CTD CUN FR1 FR2 FRE SRE TLD	Class of Service Unrestricted Conditionally Toll Denied Conditional Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Semi-Restricted Toll Denied	basic-1
CNCS	0-99	Controlled NCOS CNCS allows the user to select a controlled NCOS to be used when the set is locked. When a set is locked, the NCOS defined at this prompt is used as the set NCOS when a trunk call is made. Precede entry with X to remove.	ffc -21
CNFD	0-(1)-9, *, #	Control Digit for Conference	mpo-20
CNFFIELD	(NO) YES	Enable Conference Count Display Field.	basic- 23

Prompt	Response	Comment	Pack/Rel
CNF_NAME	(CONF) aaaa	Change Conferees Count Display Field Name. aaaa = 1 to 4 alphanumeric characters.	basic- 23
CNI	(DGTS) CLID NONE	Calling Number Identification (R2MFC) Your CNI response will determine which field of the CDR record will contain the Calling Number Identification for this customer. CNI is recorded in the digits field CNI of R2MFC is recorded in CLID field CNI will not be recorded in CDR CNI is prompted if: • CDR = YES • FCDR, CLID, and MFC packages are equipped • FCDR = NEW in LD 17 • CLID = YES in LD 17	basic-22
CNIP	(YES) NO	Calling Number Identification Presentation Send Customer Calling Number Identification (CNDN) + Trunk ID (TKID) if Calling Line ID (CLID) = NO in LD 17 Respond to Calling Number Identification (CNI) request with End-of-CNI R2MFC level 1 forward signal (ECNI)	basic-22
CNTP	(PDN) LDN	Calling Number Type The Calling Line ID (CLID) feature displays the set's Prime DN The CLID feature displays the customer's Listed Directory Number (LDN) This determines the default Calling Line ID (CLID) Class of Service (CLS) for all sets except those configured differently in LD 10 and LD 11. Attendant consoles only have a Listed Directory Number (LDN). CNTP is not applicable to Release 22.	pri-12
CONF	loop	Conference loop number Release 15 and earlier.	awu-10
CONF_DSP	(NO) YES	Change Conference Display configurations.	basic-23
CONG	(OVFL) BUSY	Congestion tone for all trunks busy condition Overflow tone for all trunks busy condition Busy tone	basic-1

LD 15

Prompt	Response	Comment	Pack/Rel
CPAS	xxxx	Central Precedence answering station listed DN	basic-21
CPCI	(NO)	Called Party Control on Internal Call is not allowed for the customer	cpci-22
	YES	Called Party Control on Internal Call is allowed for the customer CPCI package 310 is required.	
CRDAY	(NO) YES	Call Redirection by Day	basic-24
CRHOL	NEW	Add holiday(s)	basic-24
	CHG	Change holiday(s)	
	OUT	Remove holiday(s)	
	OUT ALL	Deletes all holidays in the list	
CRT0	SH SM EH EM	Alternate time option 0, denoting a time when the Alternate Redirection DN will be used. Where: • SH SM = Start time • EH EM = End time	basic-22
		Both entries are in international time format and are entered as HH MM (hour = 00-23; minute = 00-59). The default value is 00 00 00 00. The default disables CRTOD for that alternate time option.	
CRT1	SH SM EH EM	Alternate time option 1, denoting a time when the Alternate Redirection DN will be used. See the prompt CRT0 for an explanation of the response format.	basic-22
CRT2	SH SM EH EM	Alternate time option 2, denoting a time when the Alternate Redirection DN will be used. See the prompt CRT0 for an explanation of the response format.	basic-22
CRT3	SH SM EH EM	Alternate time option 3, denoting a time when the Alternate Redirection DN will be used. See the prompt CRT0 for an explanation of the response format.	basic-22

Prompt	Response	Comment	Pack/Rel
CRTOD	(NO) YES	Call Redirection by Time Of Day Do not change CRTOD alternate time options Change CRTOD alternate time options	basic-22
CTRC	(OVF NAP OVF NAP)	Restricted Call	basic-1
CTVN	(OVF OVF OVF ATN)	Call to Vacant Number	basic-1
CUST	0-31 0-99	Customer number For machine types NT, RT, STE, XN, XT and system Options 21E, 51, 51C, 61, 61C, 71, 81 and 81C with Release 14 and later.	basic-1
CWBZ	(NO) YES (NO) YES	Call Waiting Buzz First field-Provide two second buzz on exceeding upper CWCL or CWTM threshold. Second field-Buzz on first call entering queue.	basic-1
CWCL	(0)-255 (0)-255 (0)-1000 (0)-1000	Call Waiting Call Limit Lower and upper thresholds. The Call Waiting lamp starts flashing when number of calls in the queue exceeds the upper threshold. The lamp continues to flash until the number of calls in queue is less than the lower threshold. Enter 0 to disable this feature. Lower and upper thresholds defined as a percentage of the active consoles when OPT = FACA. When the FACA/FACD option is changed, a new value for CWCL must be set or the default values are used. The CWCL values for the tenant-level are set equal to the customer-level values. CWCL is also prompted in LD 93.	basic-1

LD 15

Prompt	Response	Comment	Pack/Rel
CWTM	(0)-511 (0)-511	Lower and upper thresholds for Call Waiting Time. The Call Waiting lamp starts flashing when the call in the queue exceeds the upper threshold. The lamp continues to flash until the wait time is less than the lower threshold. Enter 0 to disable this feature.	basic-1
CWUP	(NO) YES	Call Waiting queue Update Prompted with M2250 Attendant Console (DCON) package 140. The M2250 type consoles can be notified every time there is a change to the Call Waiting queue.	dcon-15
DACT_BUSY	(LIT) WINK FLSH DARK	Boss's Lamp status when BSFE is disabled and set is busy. LCD Lamp is on. LCD Lamp flash rate is 60 impulses per minute. LCD Lamp flash rate is 30 impulses per minute. LCD Lamp is off.	bfs-24
DACT_IDLE	(DARK) WINK LIT FLSH	Boss's Lamp status when BSFE is disabled and set is idle. LCD Lamp is off. LCD Lamp flash rate is 60 impulses per minute. LCD Lamp is on. LCD Lamp flash rate is 30 impulses per minute.	bfs-24
DAPC	(NO) YES	Dial Access Prefix on CLID table entry option	isdn-24
DATE	dd mm yyyy	Date of the holiday Where: dd = day mm = month yyyy = year (optional, if no year is entered the holiday is repeated every year.	basic-24

Prompt	Response	Comment	Pack/Rel
DAY0	n n n n n n n	Days for day option 0 for which alternate treatment is given. Where: n = 1 (Sunday) n = 2 (Monday) n = 3 (Tuesday) n = 4 (Wednesday) n = 5 (Thursday) n = 6 (Friday) n = 7 (Saturday)	basic-24
	ALL	Alternate treatment is to be given throughout the week	
	Xn	Precede the day number with X to remove	
	Xn Xn Xn	Multiple days may be removed by preceding each day number with X and separating with a space.	
DAY1	n n n n n n n	Days for day option 1 for which alternate treatment is given Where: n = 1 (Sunday) n = 2 (Monday) n = 3 (Tuesday) n = 4 (Wednesday) n = 5 (Thursday) n = 6 (Friday) n = 7 (Saturday)	basic-24
	ALL	Alternate treatment is to be given throughout the week	
	Xn	Precede the day number with X to remove	
	Xn Xn Xn	Multiple days may be removed by preceding each day number with X and separating with a space.	
DAY2	n n n n n n n	Days for day option 2 for which alternate treatment is given Where: n = 1 (Sunday) n = 2 (Monday) n = 3 (Tuesday) n = 4 (Wednesday) n = 5 (Thursday) n = 6 (Friday) n = 7 (Saturday)	basic-24
	ALL	Alternate treatment is to be given throughout the week	
	Xn	Precede the day number with X to remove	

LD 15

Prompt	Response	Comment	Pack/Rel
	Xn Xn Xn	Multiple days may be removed by preceding each day number with X and separating with a space.	
DAY3	n n n n n n n	Days for day option 3 for which alternate treatment is given Where: n = 1 (Sunday) n = 2 (Monday) n = 3 (Tuesday) n = 4 (Wednesday) n = 5 (Thursday) n = 6 (Friday) n = 7 (Saturday)	basic-24
	ALL	Alternate treatment is to be given throughout the week	
	Xn	Precede the day number with X to remove	
	Xn Xn Xn	Multiple days may be removed by preceding each day number with X and separating with a space.	
DBRC	2-(60)-120	Duration Between Reminder Cadences for audible reminder of held call Odd entries are rounded up to a valid multiple of two seconds.	basic-14
DCMX	1-255	Digit Conversion Maximum number of tables The sum of the values for MAXT and DCMX cannot exceed 255 or MAXT + DCMX = 255.	idc-12
DFLT	(NO) YES	Default CAS will not be activated after a SYSLOAD. CAS will be activated after a SYSLOAD.	casr-1
DFNA	1-(4)-15	Number of Distinctive Ringing Forward No Answer cycles Prompted with Distinctive Ringing (DRNG) package 74. Release 18 and earlier	drng-4
DFNO	1-(4)-15	Number of Distinctive Ringing cycles for CFNA, Option 0 Release 19 and later, CFNA has three ringing cycle options. This assigns the Distinctive Ringing cycles for Option 0. Refer to X11 features and services for details concerning this feature	uscr-19

Prompt	Response	Comment	Pack/Rel
DFN1	1-(4)-15	Number of Distinctive Ringing cycles for CFNA, Option 1	uscr-19
DFN2	1-(4)-15	Number of Distinctive Ringing cycles for CFNA, Option 2	uscr-19
DGRP	(0)-254 (0)-2046	Maximum number of Dial Intercom Groups (DIG) Release 15 and later. Prompted with Dial Intercom (DI) package 21	di-1
DIAL_PLAN	(UDP) CDP	Dialing Plan used by the customer to communicate with the Mobility User Database (MUD) server Uniform Dialing Plan Coordinated Dialing Plan Be sure that the dialing plan is consistent on all Meridian 1 nodes on the network.	mmsn-22
DIDN	(YES) NO SRCH	Precede the DN of the active DN key with the digits in HLCL Use digits in HLCL Find a DN key of the set from key 0 which has DIDN of a CLID entry set to YES	isdn-22
DIDT	0-(14)-60 2-(15)-60	0-(14)-60 0-(14)-60 Dial tone and Interdigit timeout for DTMF sets when International Supplementary Features (SUPP) package 131 is equipped. The 1st parameter is the time before first digit or the dial tone time. The 2nd parameter is the time between the first and second digits. The 3rd parameter is the time between digits after the second digit. Odd entries are rounded down to a valid multiple of two seconds. Dial tone and Interdigit timeout for DTMF sets when International Supplementary Features (SUPP) package 131 is not equipped. Odd entries are rounded down to a valid multiple of two seconds.	supp-9

LD 15

Prompt	Response	Comment	Pack/Rel
DIND	0-(30)-60	0-(30)-60 0-(30)-60 Dial tone and Interdigit timeout for non-DTMF sets when International Supplementary Features (SUPP) package 131 is equipped. The 1st parameter is the time before first digit or the dial tone time. The 2nd parameter is the time between the first and second digits. The 3rd parameter is the time between digits after the second digit. Odd entries are rounded down to a valid multiple of two seconds.	basic-10
	2-(30)-60	Dial tone and Interdigit timeout for non-DTMF sets when International Supplementary Features (SUPP) package 131 is not equipped.	
DISD	0-(1)-9, *, #	Control digit for Disconnect	mpo-20
DLDN	(NO) YES	Departmental Listed Directory Numbers. Prompted with Departmental Listed Directory Number (DLDN) package 76.	dldn-5
DLT	(OVF) ATN OFA	Direct Inward System Access (DISA) Lockout treatment Overflow tone Attendant Overflow then attendant	disa-1
DMWM	(NO) YES	Enable the output of DPNSSI Message Waiting Indication Non Specified Information error messages (ERR0001, ERR0002, ERR0003).	dmwi- 23
DNDH	(NO) YES	Do Not Disturb Hunting allowed Prompted with Meridian Hospitality Voice Services (MHVS) package 179.	hvs-16
DNDL	(NO) YES	Do Not Disturb Lamp on 500/2500 telephones Prompted with Do Not Disturb Individual (DNDI) package 9.	dndi-10

Prompt	Response	Comment	Pack/Rel
DNDT	(BST) ATT RAN	Do Not Disturb intercept Treatment Busy Tone Attendant RAN trunk Prompted with Do Not Disturb Individual (DNDI) package 9	dndi-1
DTMF	(NO) YES	End-to-End Signaling feedback tone Use the improved (Release 19) EES for single tone feedback Use the current EES for DTMF feedback tone	ees-19
ECC1		Enhanced Controlled Class of Service level 1 ECC1 is prompted with Enhanced Control Class of Service (ECCS) package 173. This access restriction applies when CCRS is active. When CCRS is inactive, the set reverts to the Access Restrictions defined in LD 10 or LD 11. Allowed access restrictions are:	eccs-15
	(UNR) CTD CUN FR1 FR2 FRE SRE TLD	Unrestricted Conditionally Toll Denied Conditional Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Semi-Restricted Toll Denied	

LD 15

Prompt	Response	Comment	Pack/Rel
ECC2		Enhanced Controlled Class of Service level 2 ECC2 is prompted with Enhanced Control Class of Service (ECCS) package 173. This access restriction applies when CCRS is active. When CCRS is inactive, the set reverts to the Access Restrictions defined in LD 10 or LD 11. Allowed access restrictions are:	eccs-15
	(UNR)	Unrestricted	
	CTD	Conditionally Toll Denied	
	CUN	Conditional Unrestricted	
	FR1	Fully Restricted class 1	
	FR2	Fully Restricted class 2	
	FRE	Fully Restricted	
	SRE	Semi-Restricted	
	TLD	Toll Denied	
ECDR	(NO) YES	Print End-to-End Signaling digits in CDR record	ees-19
EEED		End-to-End Signalling Digit Display	ees-24
	(NO)	Do not display the End-to-End Signalling digits	
	YES	Display all End-to-End Signalling digits	
EEST		End-to-End Signaling Tone to originating party	ees-19
	(NO)	Do not send feedback tone to the originator	
	YES	Send feedback tone to originator	
		When EEST = NO <i>or</i> when EEST = YES and DTMF = NO, <i>Improved</i> End-to-End Signaling is used. When EEST = YES and DTMF = YES, <i>Enhanced</i> End-to-End Signaling is used.	
		EEST is prompted with End-to-End Signaling (EES) package 10.	
EFLL	(0)-8064	Efficiency Factor Loading Level Prompted with Network Attendant Services (NAS) package 159	nas-14
ELPL	1-15	Electronic Lock Password Length (number of digits)	basic-12
ENS	(NO) YES	Enhanced Night Service enabled Prompted with Enhanced Night Service (ENS) package 133.	ens-20

Prompt	Response	Comment	Pack/Rel
ENTRY	xx	CLID entry to be configured. CLID entries must be between 0 and the value entered at the SIZE prompt - 1. Precede entry or entries with X to delete. ENTRY is repeated until a <cr> is entered.	isdn-22
ESA_APDN	(YES) NO	Append the originating Directory Number after the Home Local Number for Emergency Services Access calls.	esa- 23 esa_clmp -23
ESA_HLCL	x..x	Home Local Number for Emergency Services Access calls. If the system is Flexible Numbering Plan (FNP) packaged, then up to 12 digits are accepted. If the system is not FNP packaged, then up to 7 digits are accepted. 'X' deletes the data.	esa- 23
ESA_INHN	(NO) YES	Insert Home National Number in front of Home Local Number for Emergency Services Access calls.	esa- 23
EXTFIELD	(NO) YES	Enable Total External Conferees Count display field.	basic- 23
EXT_NAME	(E) aaaa	Change Total External Conferees Count field name. aaaa = 1 to 4 alphanumeric characters.	basic- 23
EXTT	(NO) YES	Prevent connection of supervised external trunks via either call transfer or conference Allow connection of supervised external trunks via either call transfer or conference	basic-22
FCAF	(NO) YES	Forced Charge Account active Prompted with Forced Charge Account (FCA) package 52	fca-1
FCNC	0-3 0-7 0-15 0-99	FCA Network Class of Service CDP NFCR or BARS NARS Release 13 and later	fca-1
FCR_DATA	(NO) YES	Change New Flexible Code Restriction options	basic-21
FFC_DATA	(NO) YES	Change Flexible Feature Code options	basic-21

LD 15

Prompt	Response	Comment	Pack/Rel
FFCS	(NO) YES	Change Flexible Feature Code end-of-dialing indicator	ffc-15
FLEN	1-(16)	Flexible length of digits expected	
FLSH	xxx	Switchhook Flash timing. Where: xxx = 20-(45)-768 The timing specified will be used for EPE equipment only. XPE equipment will use the FLSH specified in LD 97.	basic-1
FMOP	(NO) YES	Flexible Misoperation options are not required Flexible Misoperation options are required	mpo-20
FNAD	(HNT) ATT FDN NO	Call Forward No Answer treatment for DID calls Hunt DN, defined in telephone data block CFNA to attendant Flexible CFNA DN, defined in telephone data block CFNA not allowed	basic-2
FNAL		Call Forward No Answer treatment for all other calls including trunk calls marked as internal. An internal trunk call is a trunk call in which LD 16 prompt RCLS = INT. If FNAL = HNT, no answer calls are forwarded to the Hunt DN.	basic-10
	(HNT) ATT FDN NO	Hunt DN (defined in telephone data block) CFNA to attendant Flexible CFNA DN (defined in telephone data block) CFNA not allowed	
FNAN	(HNT) ATT FDN NO	Call Forward No Answer treatment for DID calls. FNAN is prompted only in X11 Release 9 and earlier. Hunt DN, defined in telephone data block CFNA to attendant Flexible CFNA DN, defined in telephone data block CFNA not allowed	basic-2

Prompt	Response	Comment	Pack/Rel
FNAT		Call Forward No Answer treatment for external Trunk non-DID calls. An external call is defined as a trunk call in which LD 16 prompt RCLS = EXT. If FNAT = FDN or HNT, then Call Forward by Call Type (CFCT) handles the call.	basic-10
	(HNT) ATT FDN NO	Hunt DN, defined in telephone data block CFNA to attendant Flexible CFNA DN, defined in telephone data block CFNA not allowed	
FNP	(YES) NO	Flexible Numbering Plan feature is enabled for customer.	fnp-23
FOPT	0-(14)-30	Flexible Orbiting Prevention Timer The number of seconds in two second intervals that CFW should be suspended on a set that has just forwarded a call off-node. Odd entries are rounded up to the next valid entry. A response of 0 disables FOPT.	nas-20
FRRT	0-511	First Recorded Announcement or RAN Route for Recorded Overflow Announcement (ROA). Prompted with Recorded Overflow Announcement (ROA) package 36 and OPT = ROI. Enter X to remove	roa-14
FRT	0-(20)-2044	First RAN Time seconds before first RAN given.	frt-1
FTOP	(FRES) TBFT FTTB FTLY	Flexible Trunk to Trunk Options. FTT feature is inactive. FTT adds new restrictions on connections not barred by TBAR FTT lifts TBAR restrictions for routes barred by TBAR. FTT cannot add any new restrictions for non-barred routes. All set based trunk to trunk connections for Transfer and Conference are controlled by FTT only.	
FTR_DATA	(NO) YES	Change Features and options	basic-21

LD 15

Prompt	Response	Comment	Pack/Rel
GPXX	x	Unsolicited status events 1, 2, 3, 4, 5 or 6 Unsolicited status events are used with Meridian Link applications. Enter the message to be sent to the host computer for telephones in the group, where: • 0 = No status messages monitored • 1 = On-Hook • 2 = Off-Hook • 3 = Ringing • 4 = Active • 5 = Disconnect • 6 = Unringing (Release 19 and later) Precede the value with an X to remove a status from the Group report. The prompts GP02 through GP15 appear when Meridian Link package is equipped. Default values are in Group 0 and Group 1: • Group 0 = sends no messages • Group 1 = sends all messages Groups 0 and 1 cannot be entered or changed here, but can be entered in response to the IAPG prompt in LD 10 and LD 11.	mlm-19
GP02	n n n n n	Group 2 status events The following comment applies to prompts GP03 through GP15: Unsolicited status events are used with Meridian Link applications. Enter the message to be sent to the host computer for telephones in the group, where: • 0 = No status messages monitored • 1 = On-Hook • 2 = Off-Hook • 3 = Ringing • 4 = Active • 5 = Disconnect • 6 = Unringing (Release 19 and later) Precede the value with an X to remove a status from the Group report.	iap3p-13

Prompt	Response	Comment	Pack/Rel
		Default values are in Group 0 and Group 1: • Group 0 sends no messages • Group 1 sends all messages Groups 0 and 1 cannot be entered or changed here, but can be entered in response to the IAPG prompt in LD 10 and LD 11. The prompt GP02 through GP15 are presented only with Integrated Services Digital Network Application Module Link for 3rd Party Vendors (IAP3P) package 153 equipped.	
GP03	n n n n n	Group 3 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP04	n n n n n	Group 4 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP05	n n n n n	Group 5 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP06	n n n n n	Group 6 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP07	n n n n n	Group 7 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP08	n n n n n	Group 8 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP09	n n n n n	Group 9 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP10	n n n n n	Group 10 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP11	n n n n n	Group 11 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP12	n n n n n	Group 12 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP13	n n n n n	Group 13 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP14	n n n n n	Group 14 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13
GP15	n n n n n	Group 15 status events 1, 2, 3, 4, 5 or 6 assigned	iap3p-13

LD 15

Prompt	Response	Comment	Pack/Rel
HDOPT	(0) 1 -10 CONT	Off-Hook Alarm Security Half Disconnect treatment options No Off-Hook Alarm Security Half Disconnect Maximum number of Off-Hook Alarm Security Half Disconnect Continuous OHAS Half Disconnect	basic-24
HDTM	1 - (30) - 600	Off-Hook Alarm Security Half Disconnect timer in seconds	basic-24
HLCL	0-99 ... 99	Local code for home local number or Listed directory number (1-12 digits). Precede with X to remove.	isdn-22
HLOC	100-99999999	Home Location Code (ESN) as defined in LD 90 Up to 7 digits with extended code. Prompted when ISDN=YES, or with Digital Private Network Signaling System 1 (DPNSS) package 123.	pri-12
HMDN	xxxx	Home DN	basic-21
HNPA	200-999	Home Number Plan Area code defined in LD 90 Prompted with Multi Language Wake Up (MLWU) package 206. Not prompted with International Primary Rate Access (IPRA) package 202. HNPA is not applicable for Release 22.	nanp-19
HNTN	0-999999	National code for home national number (1-6 digits). Precede with X to remove.	isdn-22
HNXX	100-999	Prefix for Central Office defined in LD 90. HNXX is not applicable for Release 22. Prompted with Multi Language Wake Up (MLWU) package 206. Not prompted with International Primary Rate Access (IPRA) package 202.	mlwu-12
HOL_OPT	0-3 ALL X0-3	Holiday redirection option for which the date applies Date applies to all holiday options Precede the option number with X to remove the date from that option list	basic-24

Prompt	Response	Comment	Pack/Rel
	100-9999	Release 16 to allow for digit insertion between HNXX and the DN. If HNXX is 4 digits long, only the last 3 digits of the DN are displayed in the Calling Line ID CLID.	
HRCL	0-512	Hold Recall timer	casm-1
HSP_DATA	(NO) YES	Change Hospitality Management options	basic-21
HWTT	0-(300)-600	Length of Howler Tone in seconds. Prompted with Multi Language Wake Up (MLWU) package 206, and Operator Callback (OPCB) package 126. Where: 0 = continuous tone	mlwu-12
ICI	x aaa	Attendant Incoming Call Indicators Where: x = 0-9 if OPT = IC1, or x = 0-19 if OPT = IC2. Where: aaa = ICI function name. Multiple responses can be entered for the same key.	basic-20
	x CAy	ICI number, Station Category Indication priority level, (where y = 1-7)	basic- 23
	x CFB	ICI number, Call Forward Busy	
	x CFN	ICI number, Call Forward No Answer	
	x DF0	ICI number, dial 0 fully restricted	
	x DL0	ICI number, dial 0	
	xx IADN	xx = ICI key number (0 - 19) ICI key for individual attendant DN.	
	x IAT	ICI number, Inter-Attendant call	
	x IEN	ICI number, Idle Extension Notification	
	x INT	ICI number, Intercept	
	x LCT	ICI number, lockout intercept	
	x LD0	ICI number, listed DN0	
	x LD1	ICI number, listed DN1	
	x LD2	ICI number, listed DN2	
	x LD3	ICI number, listed DN3	
	x LD4	ICI number, listed DN4	
	x LD5	ICI number, listed DN5	
	x MTR	ICI number, Meter Recall	
	x MWC	ICI number, Message Waiting Calls	
	x NCO	ICI number, Network CO trunk	
	x NDID	ICI number, Network DID trunk	
	x NFEX	ICI number, Network FEX trunk	

LD 15

Prompt	Response	Comment	Pack/Rel
	x NTIE	ICI number, Network TIE trunk	
	x NUL	ICI number, remove ICI appearances	
	x NWAT	ICI number, Network WAT trunk	
	x RDI	ICI number, RDI intercept	
	x RLL	ICI number, Recall	
	x Ryyy Ryyy	ICI number, one or more Route numbers	
	x TRK	ICI number, Trunk types and local route numbers	
ICP_DATA	(NO) YES	Change Intercept Treatment options	basic-21
IDBZ	(NO) YES	Enable Individual Attendant DN Buzzing.	basic- 23
IDCA	(NO) YES	Incoming DID Digit Conversion Allowed NFCR must = YES before IDCA can = YES. Prompted with Incoming Digit Conversion (IDC) package 113	idc-12
IDEF		Internal/external definition	basic-22
	(NO)	Network wide INY/EXT definition for Call Forward/Hunt by Call Type, Internal Call Forward, and Break In Indication Prevention.	
	YES	A call will not be treated as internal or external according to the network wide definition of internal and external calls. When IDEF = NO, information that could have been entered previously at the IDEF prompt in LD 16 will not influence call treatment.	
	YES	A call will be treated as internal or external according to the network wide definition of internal and external calls. Changing IDEF to NO and then back to YES will not reset the data entered in LD 16.	
IFLS	(NO) YES	Allow switchhook flash signal from 500/2500 sets Ignore switchhook flash signal from 500/2500 sets If YES then sets require ground buttons.	mpo-20
IMA	(NO) YES	Integrated Messaging System enabled Prompted when OPT=MCI	ims-1
IMPH	(NO) YES	CDR for Incoming Packet data call	mph-19

Prompt	Response	Comment	Pack/Rel
IMS	(NO) YES	Change Integrated Messaging System features Prompted with Integrated Message System (IMS) package 35.	ims-1
IMS_DATA	(NO) YES	Change Integrated Message Service options	basic-21
INT	(NO) YES	Internal Malicious Call Trace Alarm If the alarm is to be rung when MCT is activated against internal calls ALRM = YES and INT = YES.	emct-20
INTFIELD	(NO) YES	Enable Internal Conferees Count display field.	basic- 23
INTL	0-9999	Country code (1-4 digits). Precede with X to remove.	isdn-22
INT_DATA	(NO) YES	Change Intercept Treatment options	basic-21
INT_NAME	(I) aaaa	Change Internal Conferees Count display field name. aaaa = 1 to 4 alphanumeric characters.	basic- 23
INTR	(NO) YES	Change Intercept Treatment Intercept treatments determine the action performed when a user makes an invalid call. Each intercept prompt requires four entries representing the type call: • first entry = station/DISA • second entry = attendant extended • third entry = TIE trunk • fourth entry = CCSA/DID trunk One of the following responses is required for each entry: • ATN = Intercept to Attendant • BSY = Busy Tone • NAP = Not Applicable • OVF = Overflow Tone • RAN = Intercept to Recorded Announcement • SRC1-SRC8 = Announcement Source Channel The defaults are shown for each Intercept prompt. If RAN is specified, you are prompted for the RAN route number.	basic-1

LD 15

Prompt	Response	Comment	Pack/Rel
IRFP	x....x	Internal Attendant Remote Call Forward Password The password length is 1-8 digits. The password is numeric only.	arfw-20
IRFR	(NO) YES	Internal Attendant Remote Call Forward Password Required	arfw-20
IRNG	(NO) YES	Intercom Ring Distinctive Ringing for Dial Intercom	drng-4
ISDN	(NO) YES	Integrated Services Digital Network allowed for customer Prompted when ISDN signaling package 145 is equipped and either the Integrated Service Digital Network BRI Trunk Access (BRIT) package 233 is equipped or at least one PRA link is configured.	isdn-12
ITH1	1-255	Visual Indication Threshold 1 TH1 ð calls in queue ð ITH2	bacd-8
ITH2	1-255	Visual Indication Threshold 2 ITH2 ð calls in queue ð ITH3	bacd-8
ITH3	1-255	Visual Indication Threshold 3 calls in queue > ITH3	bacd-8
LA11	0-511	Primary RAN route for Language 1 Prompted with Multi-Language Wake Up (MLWU) package 206.	mlwu-16
LA12	0-511	Secondary RAN route for Language 1	mlwu-16
LA21	0-511	Primary RAN route for Language 2	mlwu-16
LA22	0-511	Secondary RAN route for Language 2	mlwu-16
LA31	0-511	Primary RAN route for Language 3	mlwu-16
LA32	0-511	Secondary RAN route for Language 3	mlwu-16
LA41	0-511	Primary RAN route for Language 4	mlwu-16
LA42	0-511	Secondary RAN route for Language 4	mlwu-16

Prompt	Response	Comment	Pack/Rel
LA51	0-511	Primary RAN route for Language 5	mlwu-16
LA52	0-511	Secondary RAN route for Language 5	mlwu-16
LADN	x...x	Local Attendant Directory Number This must be different from the DN entered for ATDN. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	casr-1
LDA0	1-15 1-63 ALL	Attendant consoles associated with LDN0 Release 8 and later Allow LDN0 on all attendants. Precede X to remove.	basic-5
LDA1	1-15 1-63 ALL	Attendant consoles associated with LDN1 Release 8 and later Allow LDN1 on all attendants. Precede with X to remove.	basic-5
LDA2	1-15 1-63 ALL	Attendant consoles associated with LDN2 Release 8 and later Allow LDN2 on all attendants. Precede X to remove.	basic-5
LDA3	1-15 1-63 ALL	Attendant consoles associated with LDN3 Release 8 and later Allow LDN3 on all attendants. Precede X to remove.	basic-5
LDA4	1-63 ALL	Attendant consoles associated with LDN4 Attendant consoles associated with LDN4	nldn-20
LDA5	1-63 ALL	Attendant console associated with LDN5 Attendant console associated with LDN5	nldn-20
LDBZ	n n n n n n ALL	Listed Directory Number Buzzing groups 0,1,2,3,4,or 5. The Departmental Listed Directory Number groups which should be buzzed when a Listed Directory Number/Code Blue call is in the attendant queue. Precede with 'X' to remove.	basic-23
LDN_DATA	(NO) YES	Change Departmental Listed Directory Numbers	basic-21

LD 15

Prompt	Response	Comment	Pack/Rel
LDN0	x...x	Listed Directory Number 0 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry. LDN0 must be defined for ISDN PRI DID service. The length of LDN0 determines the number of trailing digits translated as the dialed DN on PRI DID routes.	basic-1
LDN1	x...x	Listed DN 1 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry.	basic-1
LDN2	x...x	Listed DN 2 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry.	basic-1
LDN3	x...x	Listed DN 3 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry.	basic-1
LDN4	x...x	Listed DN 4 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry.	nldn-20
LDN5	x...x	Listed DN 5 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove an entry.	nldn-20
LDNT	(NO) YES	Listed Directory Number Tone Special tone to CAS main attendant when presented with LDN calls.	casr-12
LDTT	2-(6)-30	Line disconnect tone timer for 500/2500 telephones in seconds	basic-17

Prompt	Response	Comment	Pack/Rel
LEND	(NO)	List Entry Number Delimiter A delimiter (*) is neither required nor allowed between the list entry number and telephone number	ssc-22
	YES	A delimiter (*) is required between the list entry number and telephone number. LEND is prompted with packages scc-1 or ssc-34	
LFFD	x00..x00	First DN of lamp field array for ILF. The system shows the status of the next 150 consecutive DNs. Last two digits of first DN must be 00. First DN must start on even 100 (e. g., 3400 is acceptable, but 3450 is not). Precede with X to remove. Prompted when OPT = ILF.	basic-1
LFTN	I s c u	Lamp Field array Terminal Number LFTN is prompted again for a second lamp field array. For Supervisory Console, when assigning lamp field array to show Attendant status, enter the secondary TN of the console. To remove the second LFTN, enter "0". To remove both LFTNs, enter XLF in response to prompt OPT. Prompted when OPT = ILF. Not allowed for 2000/3000 series telephones.	basic-1
LINK	(NO) YES	ACD DNIS Link option. Prompted if OPT = DNI.	dnis-10
LLT	(OVF) ATN OFA	Flexible Line Lockout Treatment Overflow tone Attendant Overflow, then Attendant	basic-4
LOCL	1-(10)	Flexible length of Vacant Number Routing (VNR) Location digits (LOC). Enter the maximum number of LOC digits expected by VNR.	fnp-14

LD 15

Prompt	Response	Comment	Pack/Rel
LSC	1-9999999	Local Steering Code. For Release 22, LSC can be one to seven digits. LSCs are required if the CDP DNs are longer than the local PDNs. The CLID sent for a CDP call is composed of the LSC defined in LD 15 plus the PDN of the calling set. Various ISDN network features depend on the CLID as the return address for sending feature control messages. Multiple LSCs may be defined in LD 87 for CDP but only one LSC can be defined here for the CLID. The LSC prompt appears only if the user has a five or six digit dialing plan, or if the DPNSS software package is equipped. LSC is prompted here if ISDN = NO, otherwise LSC is a sub-prompt of ISDN. Precede with X to remove	cdp-12
MAIN	(NO) YES	CAS Main	casm-1
MATT	(NO) YES	Consoles used as Message Center Prompted with Message Waiting Center (MWC) package 46 and OPT = MCI.	mwc-1
MAXT	1-255	Maximum number of NFCR translation tables Once defined a lower value cannot be entered for MAXT. The sum of the values for MAXT and DCMX cannot exceed 255 or MAXT + DCMX ≤ 255 per customer.	nfc-2
MBG	(0)-65535	Multi-location Business Group. Where: • 0 = no indication • 1 = reserved for public network • 2-65535 = Business Group Identifiers This parameter is used to define the Multi-location Business Group. It is not currently used by the MSL-1, but is added for interfacing with systems that require it.	tens-16
MBNR	(OVF OVF OVF ATN)	Maintenance Busy Numbers	basic-1

Prompt	Response	Comment	Pack/Rel
MCDC	(NO) YES	Malicious Call DN/CLID printing allowed	mct-10
MCR	(NO) YES	Mini-CDR equipped	mcd-20
MCRT	xxxx	Malicious Call Trace Recorder route number as defined in LD 16.	emct-20
MDID	(NO) YES	No Answer DID calls routed to Message Center Prompted with Message Waiting Center (MWC) package 46 and OPT = MCI.	mwc-1
MFID	a	Manufacturer Identifier. a = any alpha character 'X' followed by the Manufacturer Identifier of the Message Waiting Indication Non Specified Information table to delete. 'XALL' to remove all the existing Message Waiting Indication Non Specified Information tables.	dmwi- 23
MHLD	(NO) YES	Manual Hold after inquiry is not required Manual Hold after inquiry is required	mpo-20
MMSN	(NO) YES	Mobility Multi-Site Networking Node Do not allow Mobility Multi-Site Networking node Allow Mobility Multi-Site Networking node MMSN is prompted if MMSN package 314 is equipped.	mmsn-22
MPO_DATA	(NO) YES	Change Multi Party Options	basic-21
MPOP	(NO) YES	Multi-Party Operations Do not define certain multi-party options Define certain multi-party options Prompted with Multi-Party Operations (MPO) package 141.	mpo-20
MSCD	(NO) YES	Mandatory Speed Call Delimiter End of dial speed call delimiter is optional A delimiter is required to store the number. A confirmation tone is given if this option is configured. MSCD is prompted with package scc-1.	ssc-22

LD 15

Prompt	Response	Comment	Pack/Rel
MSSC	a	a = any alphanumeric character Manufacturer-specific service character for Message Waiting Notification.	dmwi- 23
MTAR	(NO) YES	Disable Meridian Mail Trunk Access Restriction Enable Meridian Mail Trunk Access Restriction MTAR is prompted if OPT = MCI and Message Center (MWC) package 46 is equipped.	mwc-22
MUD_DN	x...x	Mobility User Database (MUD) Server DN This entry can be up to 7 digits. Er the MUD Server DN if this Meridian 1 node runs the MUD server. MUD_DN is prompted if MUD_SRVR = YES.	mmsn-22
MUD_SRVR	(NO) YES	Mobility User Database (MUD) Server Do not allow MUD Server Allow MUD Server MUD_SRVR is prompted is MMSN = YES.	mmsn-22
MURT	0-511 X	Music Route Prompted if WAIT = MUS. To remove.	mus-1
MUS	(NO) YES	Music for Sets Prompted with Enhanced Music (EMUS) package 119.	emus-12
MUSR	(0)-511	Music Route for Sets The default is route "0" which is not normally a music route. Enter X to remove. Prompted if MUS = YES.	emus-12
MWFB	(NO) YES	DID calls to busy telephones routed to Message Center Prompted with Message Waiting Center (MWC) package 46 and when OPT = MCI.	mwc-1
MWNS	(NO) YES	Message Waiting Indication DPNSSI Non Specified Information string to recognize.	dmwi- 23
NAS_ACTV	(YES) NO	Network Attendant Service routing Activated	nas-20
NAS_ATCL	(YES) NO	Network Attendant Service Attendant Control allowed	nas-20

Prompt	Response	Comment	Pack/Rel
NAUT	YES	Network Authorization Code prompt is given for every leg of a conference.	naut-23.3 7
	(NO)	Network Authorization Code prompt is given for first leg of a conference.	
NBLK	(OVF OVF OVF ATN)	NARS/BARS blocked calls	esn-1
NCOS		Network Class of Service for all Attendant consoles in this customer.	ncos-1
	(0)-3	CDP	
	(0)-7	BARS or NFCR	
	(0)-15	NARS	
	(0)-99	Release 13 and later Prompted with Network Class of Service (NCOS) package 32.	
NDID	(NO) YES	No Answer non-DID calls routed to Message Center Prompted with Message Waiting Center (MWC) package 46 and when OPT = MCI.	mwc-1
NET_DATA	(NO) YES	Change ISDN and ESN networking options	basic-21
NFCR		New Flexible Code Restriction	nfcr-1
	(NO)	Do not enable New Flexible Code Restriction	
	YES	Enable New Flexible Code Restriction To build an IDC table in LD 49, NFCR and IDCA must be set to YES. NFCR is prompted with New Flexible Code Restriction (NFCR) package 49.	
NFNA	(0)-63	Night Forward No Answer ring cycles The number of times a DID/DOD and CO trunk call will ring a set before being disconnected during Night Service. Prompted if OPT = DNCA.	afna-14

LD 15

Page 268 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
NFNS	(0)-504	Night Forward No Answer Seconds If a value is entered for this prompt all outgoing CO/DOD trunk calls in a waiting state, and all incoming CO/DID trunk calls in the answered state will be disconnected after the time in seconds expires as entered in this prompt. The entered value must be a multiple of 8. Prompted if OPT = DNCS.	afna-14
NINV	(OVF OVF OVF ATN)	Invalid NARS/BARS call	esn-1
NIT	2-(8)	Network Alternate Route Selection (NARS) Interdigit Timer	
NIT_DATA	(NO) YES	Change Night Service options	basic-21
NIT1	x...x	First Night Service DN by time of day Up to four night service DNs can be defined. The time of day is specified by the prompts TIM1 to TIM4.	basic-12
NIT2	x...x	Second Night Service DN by time of day	basic-12
NIT3	x...x	Third Night Service DN by time of day	basic-12
NIT4	x...x	Fourth Night Service DN by time of day	basic-12
NIT5	x...x	Network Alternate Route Selection Interdigit Timer	fnp-20
NITE	xxxx	Night Service DN Prompted for Release 10 and earlier. Precede with X to remove. See also prompt NITE in LD 14 which takes precedence for trunk units.	basic-1
NITR	(OVF OVF OVF ATN)	NARS/BARS invalid translation	esn-1
NNT	0-253	Night Number Table Speed Call List number designated to be used as the Night Number Table	ens-20
NOTI	(NO) YES	Non Specified Information string for Message Waiting Notification.	dmwi- 23

Prompt	Response	Comment	Pack/Rel
NPI	E163 E164 NATL PRIV TELX UNKN X121	Numbering Plan based on E163 Numbering Plan based on E164 National Private Telex Unknown Data X121	isdn-24
NRES	(OVF OVF OVF ATN)	NARS/BARS calls which are restricted by Supplemental Digit Restriction (SDRR) intercept treatment. See prompt INTR for details.	esn-1
NRWU	2-(5)	Number of Rings for Wake Up before recall to attendant	awu-10
NSCP	(NO) YES	Network Station Camp-On to sets on this node allowed	sco-20
NSO	0-9	Night Service Option number	ens-20
NWT	(NO) YES	Night Call Waiting Tone enabled	ens-20
OAS_DATA	(NO) YES	Change Off-Hook Alarm Security options	basic-21
OCB1	(0) – [MAXT-1] 255	Outgoing Call Barring level 1 NFCR tree number to be used for OCB level 1. You may enter any digit between zero and your response to the MAXT prompt minus one. The default entry to OCB1 is zero (0). 255 is a special entry which disallows this level.	basic-21
OCB2	(0) – [MAXT-1] 255	Outgoing Call Barring level 2 NFCR tree number to be used for OCB level 2. You may enter any digit between zero and your response to the MAXT prompt minus one. The default entry to OCB2 is zero (0). 255 is a special entry which disallows this level.	basic-21
OCB3	(0) – [MAXT-1] 255	Outgoing Call Barring level 3 NFCR tree number to be used for OCB level 3. You may enter any digit between zero and your response to the MAXT prompt minus one. The default entry to OCB3 is zero (0). 255 is a special entry which disallows this level.	basic-21
ODN0	xxxx	OHAS Security DN for zone 0	basic-18

LD 15

Prompt	Response	Comment	Pack/Rel
ODN1	xxxx	OHAS Security DN for zone 1	basic-18
ODN2	xxxx	OHAS Security DN for zone 2	basic-18
ODN3	xxxx	OHAS Security DN for zone 3	basic-18
ODN4	xxxx	OHAS Security DN for zone 4	basic-18
ODN5	xxxx	OHAS Security DN for zone 5	basic-18
ODN6	xxxx	OHAS Security DN for zone 6	basic-18
ODN7	xxxx	OHAS Security DN for zone 7	basic-18
ODN8	xxxx	OHAS Security DN for zone 8	basic-18
ODN9	xxxx	OHAS Security DN for zone 9	basic-18
OHAS	(NO) YES	Off-Hook Alarm Security Enter X to remove the OHAS DNs for the following zones.	basic-18
OMPH	(NO) YES	CDR for outgoing packet data call This is the Call Detail Records for an outgoing packet data call from the Meridian Packet Handler to the Public Switched Packet Data Network	mph-19
OPT	aaa	Options Multiple options separated by spaces are allowed in response to the OPT prompt. The last option must be followed by a carriage return <cr>. The <cr> inputs the options selected and is followed by either the next prompt or a system message.	basic-1
	(AHD) AHA	Autohold on Loop Key Denied Autohold on Loop Key Allowed Only with International Supplementary Features (SUPP) package 131.	misop-20
	(BIND) BBIN EBIN	Break-In Indication Denied Basic Break-In Indication Extended Break-In Indication	bki-9

Prompt	Response	Comment	Pack/Rel
		Only with Attendant Break-In (BKI) package 127.	
(BIXA) BIXD	Break-In to external call Allowed Break-In to external call Denied	Only with Attendant Break-In (BKI) package 127.	bki-9
(BLA) BLD	Break-In to Line Lockout Set Allowed Break-In to Line Lockout Set Denied	Only with Attendant Break-In (BKI) package 127.	bki-9
(CFO) CFF	Call Forward Originating Call Forward Forwarding	Either the Originating or Forwarding party's Class of Service is used to determine access to services or features on Call Forward.	basic-1
(CFRD) CFRA	Call Forward Reminder tone for 500/2500 telephone Call Forward Reminder tone for 500/2500 telephone		cfrt-19
(COX) COP	Central Office call No Priority for Ringing Central Office call Priority for Ringing	Number Pickup or RNPU and Group Call Pickup GPUA	dcp-12
(CPD) CPA	Call Park Denied Call Park Allowed. Call Park (CPRK) package 33 must be equipped.		cpk-2
CPN	CPN enables the Call Park Network wide (CPRKNET) option. CPRKNET package 306 must be equipped.		
(CTD) CTA	Camp-On Tone Denied Camp-On Tone Allowed		basic-1
(CWRD) CWRA	CFNA treatment for Call Waiting calls on a DN Denied CFNA treatment for Call Waiting calls on a DN Allowed		basic-21
(CXOD) CXOA	No Override of Call Forward External Overrides Call Forward External Denied (CFXD) to allow call forward to a CDP Distant Steering Code (DSC)		basic-24
(DBD) DBA	Flexible Incoming Tones Denied on digital sets Flexible Incoming Tones Allowed on digital sets		basic-14

LD 15

Prompt	Response	Comment	Pack/Rel
	(DNCA)	If DNCA is entered, all DID/CO or DOD calls are disconnected after the number of ring cycles defined by the response to the NFNA prompt while the system is in Night Service.	afna-14
	DNCS	If DNCS is entered, outgoing CO/DOD calls or incoming CO/DID calls in the answered state, and waiting on a set are disconnected after the number of seconds defined in response to the NFNS prompt expires.	
	(DNX)	Only with Attendant Forward No Answer (AFNA) package 134. ACD Dialed Number Identification Service feature excluded	dnis-10
	DNI	ACD Dialed Number Identification Service feature Included Only with Dialed Number Identification Service (DNIS) package 98	
	(DSX) DSI	Data Services or server IS Excluded Data Services or server IS Included Only with Attendant Break-In (BKI) package 127.	bkil-8
	(FKA) FKD	Forward Key Allowed Forward Key Denied	Rel 6
	(HLPD) HLP A	Individual Hold Lamp Option Denied. Individual Hold Lamp Option Allowed.	dhld- 23
	(HRLD) HRL A	Individual Hold Release Option Denied. Individual Hold Release Option Allowed.	dhld- 23
	(HTU) HTR	Hot Line access Unrestricted Hot Line access Restricted If Restricted only Hot Line calls may terminate on Hot Line DNS. Only with Enhanced Hot Line (HOT) package 70.	hot-10
	(HVD) HVA	Handsfree Voice call Denied Handsfree Voice call Allowed	hva-19
	(IC1) IC2	Incoming Call Indicator key/lamp strips One key/lamp strip = 10 ICIs Two key/lamp strips = 20 ICIs	basic-1

Prompt	Response	Comment	Pack/Rel
	(IHD) IHA	Individual Hold Denied Individual Hold Allowed	basic-1
	(LOD) LOA	Lockout Denied Lockout Allowed LOA locks an attendant out of re-entering an established call on the console Hold key. The attendant can override with the Barge-In feature.	basic-1
	(LRD) LRA	Last Number Redial Denied Last Number Redial Allowed Only with Last Number Redial (LNR) package 90.	Inr-8
	(MCTD) MCTA	Malicious Call Trace signal Denied Malicious Call Trace signal Allowed Only with Malicious Call Trace (MCT) package 107	mct-10
	(MCX) MCI	Message Center Excluded Message Center Included	mwc-1
	(MWUD) MWUA	Message Waiting Unconditional Denied Message Waiting Unconditional Allowed	ffc-14
	(PVCA) PVCD	Prevention of reciprocal Call Forward Allowed Prevention of reciprocal Call Forward Denied	arfw-20
	(REA) RED	Release on Exclusion Allowed Release on Exclusion Denied	misop-20
	(RND) RNA	Ring Again No Answer Denied Ring Again No Answer Allowed	misop-20
	(ROX) ROI	Recorded Overflow Announcement Excluded Recorded Overflow Announcement Included This treatment applies exclusively to congested consoles with Recorded Overflow Announcement (ROA) package 36.	roa-2
	(RTD) RTA	Coordinated Dialing Plan routing feature Denied Coordinated Dialing Plan routing feature Allowed RTA allows DID routing with Distant Steering Codes over CO and WATS trunks. Only with Call Detail Recording (CDP) package 59.	cdp-15

LD 15

Prompt	Response	Comment	Pack/Rel
	(RTR)	Terminating side of call determines ringing or buzzing cadence used	ftc-14
	ROR	Originating side of call determines ringing or buzzing cadence used Only with Flexible Tones and Cadences (FTC) package 125.	
	(SBD) SBA	Flexible Incoming Tones Denied for SL-1 telephones Flexible Incoming Tones Allowed for SL-1 telephones Only with Flexible Tones and Cadences (FTC) package 125.	ftc-14
	(SYD) SYA	Secrecy Denied Secrecy Allowed	basic-1
	(TTAD) TTAA	Time To Answer and Abandoned call records Denied Time To Answer and Abandoned call records Allowed Only with New Format CDR (FCDR) package 234.	fcdr-8
	(VOBD) VOBA	Make Set Busy and Voice Call Override Enhancement Denied Make Set Busy and Voice Call Override Enhancement Allowed	Rel-20
	(XBL) IBL	Exclude Enhanced Busy Lamp Field Include Enhanced Busy Lamp Field IBL and ILF cannot be used together. Only with M2250 Attendant Console (DCON) package 140.	dcon-15
	(XDP) IDP	Exclude Digit Display Include Digit Display	ddsp-1
	(XLDN) NLDN	Network-wide LDN denied Network-wide LDN allowed	nldn-20
	(XLF) ILF	Exclude Busy Lamp Field array Include Busy Lamp Field array Busy Lamp Field Array is only used on QCW type consoles. IBL and ILF cannot be used together.	basic-1
	(XTG) ITG	Exclude key/lamp expansion module Include key/lamp expansion module Used as Trunk Group Busy field or supervisory lamp field Release 8 and later.	basic-1

Prompt	Response	Comment	Pack/Rel
PBLK	(ATN) RAN CPAS OVF	Call presented has higher precedence. Attendant Ran trunk Central Precedence answering station Overflow tone	basic-21
PBUZ	xx yy	Priority Buzzing cadence for IADN and Code Blue calls. xx - priority buzz-on phase yy - priority buzz off phase Range is from 2 to 16 seconds. If the value entered is an odd number between 2 and 16, it is truncated to the next lowest even integer.	basic- 23
PCDS	(NO) YES	Programming of Control Digits is not required Programming of Control Digits is required	mpo-20
PCMC	0-(15)-31	Pulse Code Modulation Conversions permitted in a network connection, μ -Law to A- Law or A- Law to μ -Law, in a network connection	esn-14
PELK	(NO) YES	Do not enable Electronic Lock on Private Lines Enable Electronic Lock on Private Lines	ffc-21
PFAN	(ATN) RAN CPAS	Intercept if dialed DN fails to answer (Call waiting) Attendant Ran trunk Central Precedence answering station	basic-21
PFNA	(ATN) RAN CPAS	Intercept if dialed DN fails to answer Attendant Ran trunk Central Precedence answering station	basic-21
PFX1	x...x	Prefix 1. Prefix or area code for International PRA. First element of Calling Party Number. PFX1 + PFX2 + DN cannot exceed 8 numbers for AXE-10. Prompted with International Primary Rate Access (IPRA) package 202. PFX1 is not applicable for Release 22.	pri2-15

LD 15

Prompt	Response	Comment	Pack/Rel
PFX2	x...x	Prefix 2. Central Office Prefix for International PRA. Second element of Calling Part Number. PFX1 + PFX2 + DN cannot exceed 8 numbers for AXE-10. Prompted with International Primary Rate Access (IPRA) package 202. PFX2 is not applicable for Release 22.	pri2-15
PHDT	1-(30)-63	Permanent Hold Timer Number of two second intervals between reminders, for example: 30 = 60 seconds. If Audible Reminder of Held Calls (ARHC) is enabled then DBRC takes precedence over PHDT. Prompted with 2500 Set Features (SS25) package 18.	ss25-4
PHIP	(ATN) RAN CPAS OVF	Precedence dialed is higher than allowed. Attendant Ran trunk Central Precedence answering station Overflow tone	basic-21
PICP	(ATN) RAN CPAS OVF	Intercept treatment if called party cannot be preempted. Attendant Ran trunk Central Precedence answering station Overflow tone	basic-21
PINT	(NO) YES	Change precedence Intercept treatment.	basic-21
PINX_DN	xx...x	Node DN	basic-21
PKND	(1)-3 (1)-4	Number of digits Dialed for Group Pickup Release 14 and later. Prompted with Directed Call Pickup (DCP) package 115. To determine the number of digits, count the number of digits of the highest number RNPG group.	dcp-12

Prompt	Response	Comment	Pack/Rel
PNI	1-32700	Private Network Identifier Each customer data block must have a unique PNI when multi-customer option is equipped. The PNI in the CDB functions as a logical customer number for routing incoming non-call-associated Transaction Capability Application Part (TCAP) facility messages to the appropriate ESN translations. PNI = 1 is typical for customer 0. It must be matched by the PNI in the far end RDB. Default PNI = 0 prevents the operation of features such as NRAG, NACD and NMS. Within one network, use the same value for PNI in both LD 15 and LD 16. When inter-working with different networks, the LD 15 PNI is for the local system and the LD 16 PNI is for the target or remote switch.	
PORT	0-15 <cr>	CDR port Stop PORT prompt To remove a CDR port, change CDR = NO. Exit and re-enter LD 15, select CDR = YES, then add only the desired CDR port numbers. Precede with X to remove.	cdr-1
PORT	(0)-15	Serial Data Interface Port Monitor One Serial Data Interface Port Monitor per customer is recommended.	
PPM_DATA	(NO) YES	Change Periodic Pulse Metering options	basic-21
PREF	0-9999	Up to 4 digit Access Prefix for a unique NPI/TON combination in the table.	isdn-24
	#	Wild character for replacement of any digit. The entry of # for wild card character will be stored as *.	
	X	Reset the access prefix value to nil	
PREO	(0) 1	Pretranslation Option Disabled Enabled To enable the Pretranslation feature, the Pretranslation data block or Calling Group to Speed Call correlation must be configured in LD 18. Prompted with Pretranslation (PXLt) package 92.	pxlt-8

LD 15

Prompt	Response	Comment	Pack/Rel
PRMT	aaa	aaa = sequence of any alphanumeric character. max of 126 characters. Subsequent Non Specified Information parameters for Message Waiting notification. 'PRMT' is re-prompted until <CR> is entered, then the next prompt 'CANC' is prompted.	dmwi- 23
PSTN	(NO) YES	Public Service Telephone Networks Limit the number of PSTNs allowed in a network connection to one PSTN. The default (NO) puts no limit on the number of PSTN connections.	isdn-14
PWD_DATA	(NO) YES	Customer related passwords	basic-21
PWD2	x...x	Second level administration Password Password length is 4-16 characters and is defined in LD 17. The SPWD password is not updated unless the PWD2 password is entered correctly. PWD2 must be entered before new ATAC is accepted.	basic-1
R2BN	0-23 0-59	RAN2 Begin time	awu-10
R2ED	0-23 0-59	RAN2 End time	awu-10
RALL	(NO) YES	Mandatory Recall is not required prior to dialing control digits Mandatory Recall is required prior to dialing control digits	mpo-20
RAN1	0-511	Primary Ran route. Use RAN1 as the Primary route for Language 0 in a Multi Language AWU application. The route must be unique. TYPE must = AWR in LD 16.	mpo-20
RAN2	0-511	Secondary RAN route. Use RAN2 as the Secondary route for Language 0 in a Multi Language AWU application. The route must be unique. TYPE must = AWR in LD 16.	mpo-20
RANF	0-511	Music route. TYPE must = AWR in LD 16.	awu-10
RANR	0-511	RAN Route number	ran-1

Prompt	Response	Comment	Pack/Rel
RCLE	(ATN OVF ATN ATN)	Redirection Count Limit Exceeded as defined by TRCL ATN is not allowed for attendant calls. NAP is not allowed for any field for RCLE.	isdn-15
RCNT	0-(1)-5	Redirection Count for ISDN calls Maximum number of inter-node hops allowed in a network redirection call, only enforced when ISDN = YES. This field must be set to greater than 0 for a network redirection to take place.	esn-14
RCY1	1-(6)-15	Number of Cycles of Re-ringing before forwarding to attendant or disconnecting. Applies only if RGNA = DAR or AAR.	mpo-20
RCY2	1-(4)-15	Number of Cycles of Ringing before forwarding to transferring station Valid only for the RGNA option.	mpo-20
RDR_DATA	(NO) YES	Change Call Redirection	basic-21
RECD	(NO) YES	Malicious Call Trace Recorder is not activated Malicious Call Trace Recorder is activated Not prompted when defining a new customer.	emct-20
REF0	xxxx	DN for Reference trunk 0	basic-1
REF1	xxxx	DN for Reference trunk 1	basic-1
REF2	xxxx	DN for Reference trunk 2	basic-1
REF3	xxxx	DN for Reference trunk 3	basic-1

LD 15

Page 280 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
REQ:		Request In Release 21, a colon following a prompt indicates enhanced processing. Enhanced processing allows a user to either view a list of possible responses or input an abbreviated response.	basic-1
	? CHG END NEW OUT	Get a list of possible responses (Release 21 & later) Change existing data block Exit overlay program Add new data block to the system Remove data block	
	(NEW) CHG OUT	With X11 Release 23, the REQ prompt will appear under the NET: Networking gate opener and the following responses will be valid with respect to the DPNSSI Message Waiting Indication feature. Create a new Message Waiting Indication Non Specified Information table. Change a Message Waiting Indication Non Specified Information table. Delete a Message Waiting Indication Non Specified Information table.	dmwi- 23
RGNA	xxx yyy	Ringing No Answer treatment Where xxx is for internal calls and yyy is for external calls. Valid entries for xxx and yyy are: • AAR - Forward to Attendant or Night Service after re-ringing for RCY1 cycles • ATN - Forward to Attendant or Night Service • DAR - Disconnect After Re-ringing for RCY1 cycles • DIS - Disconnect • OVF - provide Overflow Tone • (STD) - Standard Operation (this is the default)	mpo-20
RICI	xx	ICI key numbers that may receive ROA Where: x = 0-9 if OPT = IC1 or 0-19 if OPT = IC2 Precede with X to remove.	roa-2

Prompt	Response	Comment	Pack/Rel
RLA	0-511	Release Link route number. For Release 14 and later, route 31 is no longer an exclusively private route, unless designated as such in LD 16.	casr-1
RLI	0-999	Route List Index	fnp-20
ROA_DATA	(NO) YES	Change Recorded Overflow Announcement	basic-21
RPA	(NO) YES	Radio Paging Allowed	rpa-20
RR	0-511	RAN route number.	ran-1
RTIM	xxx yyy zzz	Recall. Where: • xxx = 0-(30)-378 (for Slow-Answer) • yyy = 0-(30)-510 (for Camp-On) • zzz = 0-(30)-510 (for Call waiting) These timers indicate in seconds the elapsed time before attendant recall. Slow Answer must be a multiple of six seconds while Camp-On and Call Waiting must be a multiple of two seconds, with odd numbers are rounded down. To change one timer all three fields must be input. For recalls timed at the local node using the redirection feature developed for DPNSS, no distinction can be made between Call Waiting calls and Slow-Answer recalls. The Slow-Answer value is used in both cases.	basic-1
RTSA	(RSAD) RSAA RSAX	Recall To Same Attendant Denied Recall To Same Attendant Allowed Recall to Same Attendant allowed, with queuing on busy attendant	rpa-20
SACP	(NO) SNGL ALL	Semi-Automatic Camp-On not allowed Semi-Automatic Camp-On on a per-call basis Semi-Automatic Camp-On for all occurrences The default was (SNGL) prior to Release 20. Prompted with Semi-Automatic Camp-On (SACP) package 181.	sacp-20
SAMM	(NO) YES	Standalone Meridian Mail. Prompted with Standalone Meridian Mail (SAMM) package 262.	samm-20

LD 15

Prompt	Response	Comment	Pack/Rel
SATD	0-(1)-5	Satellite Delays. Number of satellite delays allowed in a network connection	isdn-14
SBLF	(NO) YES	Standard Busy Lamp Field Prompted when response to SPVC is in the range 1-63.	bacd-8
SBUP	(YES) NO	Enable use of station control passwords for set based administration user level access. If SBUP = YES, a user needs to dial the User FFC followed by the Station Control Password to access User Level changes. If SBUP = NO, a user needs to dial only the User FFC.	adminset-21
SCPL	0-8	Station Control Password Length Must match network wide. SCPL replaces ELPL prompt. Enter "0" to disable the Electronic Lock (ELK) and Remote Call Forward (RCFW) features. A data dump and SYSLOAD are required to implement a change in the password length.	ffc-15
SDFL	384-(1024)-2048	Signal Destination Flash Timing	basic-21
SIZE	0-(256)-400 0	Specify maximum number of CLID entries needed.	isdn-22
SPRE	xxxx	Special Prefix number (1-4 digits) Precede with X to remove. The prefix must not conflict with the numbering plan.	basic-1
SPVC	(0) 1-63	Supervisory console No Supervisor console Attendant number of Supervisory console Prompted with Supervisory Attendant Console (SPVC) package 93.	bacd-8
SPWD	xxxx	Secure Data Password Precede with X to remove. This password is entered when using LD 88 for authorization codes and LD 24 for Direct Inward System Access (DISA) block.	disa-1

Prompt	Response	Comment	Pack/Rel
SRCD	0000-9999	Set Relocation Security Code Precede with X to remove. Release 19 and later has a default code of 0000, there is no default with Release 18 and earlier. Prompted with Set Relocation (SR) package 53.	sr-1
SRRT	0-511 X	Second RAN Route for ROA. Enter X to remove.	roa-2
SRT	2-(40)-2044	Second RAN Time, in seconds before second RAN given	ran-1
SRVR_DN	x...x	Mobility User Database (MUD) Server DN. This entry can be up to 7 digits. SRVR_DN is prompted if MUD_SRVR = NO.	mmsn-22
SRVR_LOC	x...x	Home location code of Mobility User Database (MUD) Server. This entry can be up to 7 digits long. SRVR_LOC is prompted if DIAL_PLAN = UDP.	mmsn-22
STCB	(NO) YES	Station Camp-On Busy allowed	sco-20
STE	(NO) YES	Standard Time Entry not allowed Standard Time Entry allowed. The entry may be 3 or 4 digits long. STE is prompted if WUD = YES.	awu-22
STRG	(#), xxx	String to indicate end-of-dialing Up to three characters are allowed as defined by STRL. Valid entries are: digits 0 through 9, asterisk or *, and octothorpe or #. Default is (#). The default (#) cannot be used with the Outpulsing, Asterisk, and Octothorpe (OPAO) feature package 104.	ffc-15
STRL	1-3	String Length of end-of-dial indicator	ffc-15
T100	xxx...x	DN for Type-100 test line	basic-1
TBL	1-15	Prefix Table Number to be associated with Route Data Block.	isdn-24

LD 15

Prompt	Response	Comment	Pack/Rel
TAWU	1-(3)	Number of Tries for an unanswered AWU call This defines the number of times an unanswered AWU call is presented before recall to the attendant for manual Wake Up calls. Prior to Release 16 the system always tried three times.	awu-16
TGLD	0-(1)-9, *, #	Control digit for Toggle	mpo-20
TIM_DATA	(NO) YES	Change Timers	basic-21
TIM1	hh mm	Hour and Minute for First Night Service DN. Enter the hour and minute for First Night Service DN. Where: hh = 0-23, mm = 0-59 Enter X to remove the time. TIM1 should be set earlier than TIM2, 3 and 4. If no time is entered here, the system assumes a 24-hour clock.	basic-12
TIM2	hh mm	Time for Second Night Service DN	basic-12
TIM3	hh mm	Time for Third Night Service DN	basic-12
TIM4	hh mm	Hour and Minute for Fourth Night Service DN For all of the entries in the Night Service Time of Day (NSTOD) feature, entering X for the DN deletes the existing value for that entry. Entering <cr> allows the user to select an existing entry, or skip to another entry.	basic-12
TIME	0-(15)	Malicious Call Trace Alarm Time	emct-20
TNDM	0-(15)-31	Tandem threshold/loop avoidance limit This is the value permitted in a network connection. If the value entered is greater than 25, then 25 will be used for DPNSS calls. Prompted when Integrated Services Digital Network (ISDN) package 245 and ISDN Supplementary Features (ISDN INTL SUP) package 161, or Digital Private Signaling System Network Services (DNWK) package 231 is equipped.	isdn-14

Prompt	Response	Comment	Pack/Rel
TON	ECDP ELOC ESPN INTL LOCL NATL UNKN	Type of Number. ESN_CDP ESN_LOC ESN_SPN International Local National Unknown	isdn-24
TRCL	(0)-7	Total Redirection Count Limit Number of times that a call can be redirected before being intercepted. (0) means that redirection is not limited by this feature, but is limited by various configurations.	isdn-15
TRCR	(NO) YES	Carriage Return sent after each CDR message	cdr-1
TRNX	(NO) YES	Prevent transfer on ringing of supervised external trunks across a private network Allow transfer on ringing of supervised external trunks across a private network	basic-22
TST_DATA	(NO) YES	Change Test lines	basic-21
TST0	xxxx	DN for Test Trunk 0	basic-1
TST1	xxxx	DN for Test Trunk 1	basic-1
TST2	xxxx	DN for Test Trunk 2	basic-1
TST3	xxxx	DN for Test Trunk 3	basic-1
TSTL	(NO) YES	Test Lines for this customer Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. The following prompts are used for transmission testing. Refer to NTP 553-2001-325 Transmission Capabilities.	basic-1

LD 15

Prompt	Response	Comment	Pack/Rel
TTBL	(0)-31	Tone Table number Table 0, North American default values, is created when the first customer is created. Refer to the <i>Flexible Tone and Digit Switches</i> NTP for other tables. Prompted with Flexible Tones and Cadences (FTC) package 125.	ftc-13
TYPE:	CDB DEFAULT ?	Type of data block Customer Data Block Default Customer Data Block (when REQ = NEW) Get list of possible responses (Release 21 & later) As of release 21, you may directly access a given data block by entering the first three or all the letters of one of the responses listed below. In Release 21, a colon following a prompt indicates enhanced processing. Enhanced processing allows a user to either view a list of possible responses or input an abbreviated response. You may view the revised <i>Prompts and responses</i> sequence for LD 15 on page 207. Release 21 gate openers: AML_DATA Application Module Link options ANI_DATA Automatic Number Identification numbers ATT_DATA Attendant Console options AWU_DATA Automatic Wake Up options CAS_DATA Centralized Attendant Service options CCS_DATA Controlled Class of Service options CDR_DATA CDR and Charge Account options FCR_DATA New Flexible Code Restriction options FFC_DATA Flexible Feature Code options FTR_DATA Features and options HSP_DATA Hospitality Management options IMS_DATA Integrated Message Service options INT_DATA Intercept treatment options LDN_DATA Departmental Listed Directory Numbers MPO_DATA Multi-Party Options NET_DATA ISDN and ESN Networking options NIT_DATA Night Service options OAS_DATA Off-Hook Alarm Security options PWD_DATA Customer related Passwords	basic-1

Prompt	Response	Comment	Pack/Rel
	RDR_DATA	Call Redirection	
	ROA_DATA	Recorded Overflow Announcement options	
	TIM_DATA	Timers	
	TST_DATA	Test lines	
UBRI	(OVF NAP NAP NAP)	Universal BRI	basic-20
UMG	(NO) YES	User to User Messaging enabled	ims-4
UST	(NO) YES	User Status Update enabled	ims-4
VNR	(NO) YES	Vacant Number Routing Prompted with Flexible Tones and Cadences (FTC) package 160.	fnp-20
VSID	0-15	Value added Server Identifier Enter the identifier number of the Value-Added Server or VAS providing the services such as Voice Messaging. Enter X to remove the VSID.	usm-7
WAIT	(RGB) MUS SIL	Treatment during waiting time for ROA Ringback Music Silence	roa-2
WUD	(NO) YES	Wake-up Delimiter is not required Wake-up Delimiter is required A time entered during use of the Automatic Wake Up FFC Delimiter feature is valid only if the user enters “#” at the end of the time digits.	awu-22
XRFP	x...x	External Attendant Remote Call Forward Password The password length is 1-8 digits. The password is numeric only.	arfw-20
XRFR	(NO) YES	External Attendant Remote Call Forward Password Required	arfw-20

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 16: Route Data Block, Automatic Trunk Maintenance

This Overlay program allows data for trunk routes, ATM schedule hours, or ATM routes to be created or modified.

When the Overlay is loaded the available system memory and disk records are output in a header as follows:

```
RDB000
MEM AVAIL: (U/P): xxxxxx USED: xxxxx TOT: xxxxxxxx
DISK RECS AVAIL: xxx
RAN RTE AVAIL: (U/P): xxx USE D: xxx TOT: xxx
```

The range for route numbers are release dependent.

- 0-511 for machine types NT, RT, STE, XN, XT and system Options 21E, 51, 51C, 61, 61C, 71, 81, and 81C with Release 14 and later.
- 0-127 for all other machines and system options.

With X11 Release 14 and later, trunk route 31 is no longer reserved for Private routes. Private routes can be configured individually by the customer on any available CO trunk route.

After making any changes to the route data block, IPE trunk cards must be downloaded with **ENLC I s c** command in LD 32.

With X11 Release 23, the Incremental Software Management header includes Recorded Announcement Broadcast (RAN RTE) information. This information is updated each time a new RAN route is configured.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
RDB: Route data block	290
ATM: Automatic Trunk Maintenance data block	298
SCH: ATM Schedules data block	299
Meridian 911 Route data block	299
NPID: Numbering Plan Digit or Information Digit (NPID) Table	300
<i>Other Information :</i>	
Table 4 Release Mechanism Options	301

RDB: Route data block

Prompt	Response	Comment
REQ	aaaa	Request (aaaa = CHG, END, LCHG, NEW, or OUT)
TYPE	RDB	Type of data block = RDB (Route data block)
CUST	xx	Customer number associated with this route
ROUT	0-511	Route Number
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
TKTP	a...a	Trunk Type (TKTP responses begin on page 349)
- NACC	aaaa	Network access control (aaaa = (PGNR), PGNC, or PGNU)
M911_ANI	(NO) YES	Receive ANI digits for Meridian 911 routes
- M911_TRK_TYPE	aaaa	Meridian 911 ANI trunk types (aaaa = (911T) or 911E)
- M911_ABAN	(NO) YES	Optional call abandon treatment
- M911_TONE	(YES) NO	Optional call abandon tone
- NPID_TBL_NUM	0-7	Meridian 911 route table index

PRIV	(NO) YES	Private Line Route
RPA	(NO) YES	Radio Paging Route
ESN	(NO) YES	Electronic Switched Network or ESN pad control
SIGL	a...a	Layer 3 Signaling (a...a = APNS, BEL, DAS, DPN, NT4, or NTS)
CNVT	(NO) YES	Conventional (applies only to Tie trunks)
- DDMI	(0)-255	Digit Manipulation Index
- ATDN	(0)-x...x	Attendant DN
SAT	(NO) YES	Satellite used for trunk route via earth orbiting satellite
RCLS	aaa	Route Class (aaa = (EXT) or INT)
IDEF	(NET) LOC	Internal/external definition
DTRK	(NO) YES	Digital Trunk Route
- BRIP	(NO) YES	ISDN BRI Packet handler route
- DGTP	a...a	Digital Trunk Type (a...a = BRI, DTI, DTI2, JDMI, PRI, or PRI2)
- IFC	a...a	Interface type for route (IFC responses are listed on page 317)
- - CNTY	a...a	Country (CNTY responses can be found on page 306)
- CLID	OPTx	Calling Line Identification (x = 0, 1, 2, 3, 4, or 5)
- PROG	a...a	Progress signal (a...a = NCHG, MALE, or MCON)
- SBN	(NO) YES	Send Billing Number
- SIDE	aaa	Meridian SL-1 Node Type (aaa = (NET) or USR)
- RCAP	a...a	Remote Capabilities (RCAP responses can be found on page 333)
MQC_FEAT	aaa	MCDN QSIG Feature type
BCOT	(0) - 4000	B-Channel Overload Control timer
INTC	(NO) YES	Speech calls to data sets are (NO = rejected; YES = intercepted) by the an attendant
ISDN	(NO) YES	Integrated Services Digital Network option
- MODE	a...a	Mode of operation (a...a = APN, ISLD, or PRA)
- DCH	0-159	D channel number
- DCHI	1-15	DCHI port number
- IFC	a...a	Interface type for route (IFC responses are listed on page 317)
- SBN	(NO) YES	Send Billing Number
- SRVC	a...a	Service type for AT&T ESS connections (SRVC responses can be found on page 342)
- - SRPM	(0) - 31	Service provisioned for National ISDN PRI (Rel 23 and later)
- - SRPM	0-(15)-255	Service Parameter

LD 16

- - PNI	(0)-32700	Private Network Identifier
- PR_TRIGS	aaa xx	Path Replacement Triggers
- PR_RTN	(NO) YES	Retain option for far end PINX
- NCNA	(YES) NO	Network Calling Name Allowed
- NCRD	(NO) YES	Network Call Redirection
- - TRO	(NO) YES	Trunk Route Optimization
- INAC	(NO) YES	Insert ESN Access Code to incoming private network call
- NSF	(NO) YES	Network Service Facility
- COTR	0-511	DID/CO Trunk Reference route number
- TIER	0-511	Tie Reference route number
- WATR	0-511	Wide Area Telephone Service or WATS Reference route
- CHTY	a...a	Channel Type (a...a = (BCH) or ABCH)
- CTYP	a...a	Call Type for outgoing direct dialed TIE route (a...a = (UNKN), CDP, INTL, LOC, NPA, NXX, or SPN)
- INAC	(NO) YES	Insert ESN Access Code
- ISAR	(NO) YES	Integrated Service Access Route
- - RTN	0-511	Route Number
- - CBCR	(NO) YES	Service route indicator
- - FACY	(NO) YES	Facility indicator
- - SID	0-511	Service Identification
- - MIN	0-510	Minimum number of channels
- - MAX	1-510	Maximum number of channels
- - PTUT	0-510	Preference Trunk Usage Threshold
- - PRIM	(YES) NO	Primary
- - NCOS	(0)-99	Network Class of Service group number
- - CLS	a...a	Class of Service (a...a = (CTD), CUN, FR1, FR2, FRE, SRE, TLD, or UNR)
- - TGAR	0-(1)-31	Trunk Group Access Restrictions
- DAPC	(NO) YES	Display of Access Prefix on CLID
- - TBL	(0)-15	Prefix table number to be associated with this route
- IEC	001-999	Inter-Exchange Carrier ID
CPFXS	(YES) NO	Customer-defined Prefixes
HNTN	0-9999	Home National Number
HLCL	0-9999	Home Local Number
ADDP	(NO) YES	Add Public Prefixes
- DSEL	aaa	Data Selection (aaa = (VOD), DTA, TDN, 3DTA, or 3VCE)

PTYP	a...a	Port Type at far end (PTYP responses begin on page 332)
AUTO	(NO) YES	Auto terminate
- DNIS	(NO) YES	ACD DNIS route
- - NDGT	1-(4)-31	Number of DNIS Digits
- - WDGT	a	First or last 4 DNIS digits to be sent on APL and HSL (a = (L) or F)
- - DCDR	(NO) YES	Include DNIS number in CDR records
IANI	(NO) YES	In-Band Automatic Number Identification route
RTYP	aaa	Recording device for RAN trunks (aaa = AUD, CAP, CK2, CKM, CON, DGT, LVL, or PUL)
- LGTH	4-(60)- 7200	Maximum message length in seconds
- GRD	aaaa	Ground Start Arrangement (aaaa = (IDLE) or PLAY)
REP	1-15	Repetitions of recorded announcements
POST	aaa	RAN Post announcement treatment (aaa = DIS or ATT)
STRT	aaa	Start arrangement (aaa = IMM or DDL)
WAIT	(RGB) MUS	Ringback for calls queueing for RAN trunk
- MRT	0 - 511	Music route for RAN queueing
BDCT	(NO) YES	Broadcast capability for this route
- TITH	(0) - 300	Waiting Time Threshold (seconds)
- NCTH	(0) - 100	Number of Calls Waiting Threshold
ASUP	aaa	Answer Supervision returned by RAN to originator (aaa = (NO), YES, or CO)
SIGL	aaa	Signaling interface for CAMA trunks (aaa = BEL, NT4, or NT5)
FORM	aaa	Format for CAMA trunk signaling (aaa = M1A, M2B, or M3C)
AUDN	xxxx	Auto termination DN for ISA service routes
ICOG	aaa	Incoming and Outgoing trunk (aaa = IAO, ICT, or OGT)
RANX	(NO) YES	RAN for calls diverted to external trunks
- RANR	x...x	0-511 RAN Route number for the desired RAN route 0-127 Option 11C
SRCH	aaa	Search method for outgoing trunk member (aaa = (LIN) or RRB)
TRMB	(YES) NO	Tromboning
STEP	0-511	Alternate trunk route for outgoing trunks
FACN	(0) - 99999	Tie or FX facility number
BAND	(0) - 99	OUTWATS band number
ACOD	x...x	Access Code for the trunk route
CLEN	0 - (1)- 3999	CLID entry number

LD 16

CPP	(NO) YES	Calling Party Privacy Flag
- TCPP	(NO) YES	CPP/CPPO flag treatment for an incoming non-ISDN trunk call tandemed to this trunk route
- DTPI	(*67) nnnn	Privacy indicator for a digitone trunk
- DPPI	(1167) nnnn	Privacy indicator for a dial-pulse trunk
- PII	(NO) YES	Privacy Indicator Ignored
- DTPO	(*82) nnnn	Privacy Override Indicator for a digitone trunk
- DPPO	(1182) nnnn	Privacy Override Indicator for a dial-pulse trunk
TARG	0-(1)-31	Trunk Access Restriction Group
BILN	(NO) YES	Billing Number Required
- BLEN	1-(10)-16	Billing Number Length
- BNUM	0-x...x	Billing number (1 to 16 digits depending on BLEN)
- BDSP	(NO) YES	Billing Number Displayed
ATGT	(0)-60	ADM Trunk Guard Timer
ASTP	1-(2)-15	ADM Step-Forward ring cycles
SGRP	(0)-999	Scheduled Access Restriction Group
OABS	0-9	Actual outgoing toll digits to be ignored for Code Restriction
IABS	(0)-3	Number of incoming digits to be absorbed
CAT	00-99	CAMA trunk route category digits
ID	(0)-9	Identification digit for CAMA trunk routes
STRK	(NO) YES	Super Trunk group feature
SPTO	(NO) YES	Super Trunk Option
ANKP	(NO) YES	KP signal suppressed
INST	(0)-99999999	Insert
JDGT	1-(4)	Japan central office Digits
IDC	(NO) YES	Incoming DID Digit Conversion on this route
- DCNO	(0)-254	Day IDC tree number
- NDNO	0-254	Night IDC tree number
- DEXT	(NO) YES	Display External dialed digits
- - DNAM	(NO) YES	Display IDC Name
AIOD	(NO) YES	Identification of outgoing calls
- ACNO	0-99	AIOD Customer number
- ARNO	0-511	AIOD Route number
- ATTK	xxxx	AIOD identifier number
ANTK	x...x	ANI identifier number

SIGO	a...a	Signaling arrangement (a...a = (STD), ESN2, ESN3, ESN5, ETN, or EN19)
- STYP	aaaa	Standard Signaling Type (aaaa = (SDAT) or STDN)
MFC	(NO) YES	Multifrequency Compelled or MFC Signaling
ICIS	(YES) NO	Incoming Identifier Send
ICDN	x...x a...a	Incoming route DN (x...x = 1-7 digit CLID DN; a...a = (NO) or CLID entry of 0-125 for trunk DN)
ICNP	a...a	Incoming Numbering Plan (a...a = (UKWN), PUB, or PRV)
ICNT	a...a	Incoming Numbering Type (a...a = (UKWN), INTL, NTN, LCL, LOC, CDP or SPN)
ICPS	(YES) NO	Incoming Presentation Status
OGIS	(YES) NO	Outgoing Identifier Send
OGDN	x...x a...a	Outgoing route DN (x...x = 1-7 digit CLID DN; a...a = (NO) or CLID entry of 0-125 for trunk DN)
OGNP	a...a	Outgoing Numbering Plan (a...a = (UKWN), PUB, or PRV)
OGNT	a...a	Outgoing Numbering Type (a...a = (UKWN), INTL, NTN, LCL, LOC, CDP or SPN)
OGPS	(YES) NO	Outgoing Presentation Status
CNTL	(NO) YES	Changes to Controls or timers
- TIMR	aaa xxx	Trunk Timers (TIMR range definitions begin on page 345)
- SST	xx y	Seizure Supervision Timer in seconds
NEDC	aaa	Near End Disconnect Control (aaa = ORG or ETH)
FEDC	aaa	Far End Disconnect Control (aaa = (ORG), ETH, JNT, or FEC)
CPDC	(NO) YES	SL-1 is the only Controlling Party on incoming calls
SPCT	aaa	Speech Path Cut-Through (aaa = (IMM) or DLY)
DLTN	(NO) YES	Dial Tone on originating calls
- TOV	(0)-3	Data Timeout Value
- PSEL	aaaa	Protocol Selection (aaaa = (DMDM) or TLNK)
- OPE	(NO) YES	Change data port Operating parameters
- - PSDS	(NO) YES	Public Switched Data Service option
- - TRAN	a...a	Transmission mode (a...a = (ASYN) or SYN)
- - PAR	a...a	Parity for data port (a...a = (SPAC), EVEN, MARK, or ODD)
- - DTR	(OFF) ON	Data Terminal Ready
- - DUP	aaaa	Duplex for data port (aaaa = (FULL) or HALF)
- - DCD	(ON) OFF	Data Carrier Detect
- - MOD	(NO) YES	Mode for synchronous operation
- - INT	(OFF) ON	Interworking

LD 16

-- CLK	(OFF) ON	Clock source for synchronous operation
-- V25	(NO) YES	V.25 bis option for synchronous operation
-- HDLC	(NO) YES	High Level Data Link Control
-- DEM	aaa	Data Equipment Mode (aaa = (DCE) or DTE)
-- PBDO	(OFF) ON	Port Busy upon DTR Off
ANDT	(NO) YES	Automatic Number Identification Dial Tone
HOLD	ic dc ht	Hold failure threshold
SEIZ	ic dc	Seize failure threshold
RGFL	ic dc	Ring Failure threshold
RVSD	ic dc	Reversed wired CO trunk threshold
ILLR	ic dc	Illegal Ring threshold
SVFL	ic dc	Supervision Failure
DRNG	(NO) YES	North American Distinctive Ringing for incoming calls
BTUA	(NO) YES	Block Transfer of Unanswered Call
CDR	(NO) YES	Call Detail Recording
- INC	(NO) YES	CDR records generated on incoming calls
- LAST	(NO) YES	CDR record printing content option for redirected calls
- TTA	(NO) YES	Time To Answer output in CDR
- ABAN	(NO) YES	Abandoned call records output for this route
- QREC	(NO) YES	CDR ACD Q initial connection records to be generated
- OAL	(NO) YES	CDR on outgoing calls
-- OTL	(NO) YES	CDR on Outgoing Toll calls
-- AIA	(NO) YES	Answered call Identification Allowed
-- OAN	(YES) NO	CDR timing starts On Answer supervision of outgoing calls
-- OPD	(NO) YES	Outpulsed Digits in CDR
- CDRX	(NO) YES	Print CDRX records on multiple call transfer for non-PPM outgoing calls
CDRB	(NO) YES	Abandoned call on busy tone records
NATL	(YES) NO	North American Toll scheme
- TDG	x...x	Toll Digits
MUS	(NO) YES	Music On-Hold
- MRT	0-511	Music Route number
MR	aaa	Message Registration (aaa = (NO), DURC, ENDC, PPM, RVB, STAC, or XLD)
DSPD	(NO) YES	Real Time AOC Display

RACD	(NO) YES	Route traffic information in ACD Reports
RUCS	0-9999	Route Unit Cost
RURC	x y	Route Unit Reference Cost
RUCF	x y	Route Unit Conversion Factor
MULT	(NO) YES	Multiplier for Charge Information
DSPT	0-(10)-60	Charge Display Timer
MANO	(NO) YES	Manual Outgoing trunk route
EQAR	(NO) YES	Enable Equal Access Restrictions
- GCR	(NO) YES	General Carrier Restriction to restrict Equal Access calls
- - NTOL	(DENY) ALLOW	North American Toll calls (i.e., 1+calls)
- - ITOL	(DENY) ALLOW	International Toll calls (i.e., 011+calls)
- SCR	(NO) YES	Selective Carrier Restriction to restrict Equal Access calls
FRL	0-7 0-254	Facility Restriction Level
OHQ	(NO) YES	Off-Hook Queuing
OHQT	(0)-63	Off-Hook Queue Threshold
CBQ	(NO) YES	Call Back Queuing
NDIG	(2)-7	Number of Digits
AUTH	(NO) YES	Authcode
TDET	(NO) YES	Tone Detector required
TTBL	(0)-31	Tone Table number
OHT	0 - (30) -126	Calling Party Control call disconnect in 2 second increments
OHTD	(NO) YES	Off-Hook Timer Delay
PLEV	0-(2)-7	Priority Level
OPR	(NO) YES	Outpulsing Route
OPDL	(0)-8064	Outpulsing Delay in milliseconds
MCTS	(NO) YES	Malicious Call Trace Signal
- MCCD	0-8	Malicious Call Trace request string
- MCDT	(0)-4	Malicious Call Trace Delay Time in seconds
- MCTM	(0)-30	Malicious Call Trace request Timer id
- MTND	(NO) YES	Malicious Call Trace Tandem Disconnect delay
FGNO	(0)-127	Feature Group D block number
ALRM	(NO) YES	Malicious Call Trace Alarm is allowed for external calls
DCTI	(0)-511	Time (in seconds) that an extension is allowed to ring or be On-hold or Call Park before the trunk is disconnected

ATM: Automatic Trunk Maintenance data block

Prompt	Response	Comment
REQ	aaaa	Request (aaaa = CHG, END, LCHG, NEW, or OUT)
TYPE	ATM	Type of data block = ATM (Automatic Trunk Maintenance)
CUST	xx	Customer number associated with this route
ROUT	0-511	Route number
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
T100	n...n	T100 test line DN (2 to 10 digits)
PADT	0-63	Pad factor for T100 test line in dB
STND	(YES) NO	Standard T100 test line
NMNL	27-90	Noise Maintenance Limit
NOUT	27-90	Noise out-of-service limit
NTOF	(YES) NO	Near To Far measurement
- REF	n...n	Reference loop around DN (2 to 10 digits)
- TST	n...n	Test loop around DN
- PADL	0-63	Pad factor for loop around
EML	0-15	Expected Measured Loss
LMNL	0-15	Loss deviation Maintenance Limit
LOUT	0-15	Loss out-of-service deviation limit
DSBL	(0)-100	Percentage of trunks to be Disabled
MXTI	0-(5)-15	Maximum Time

SCH: ATM Schedules data block

Prompt	Response	Comment
REQ	aaaa	Request (aaaa = CHG, END, LCHG, NEW, or OUT)
TYPE	SCH	Type of data block = SCH (ATM Schedules)
CUST	xx	Customer number associated with this route
HOURL	0-23	Hour to start Automatic Trunk Maintenance test
ROUT	0-511	Route number
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
MDMP	(NO) YES	Modem Data Module Pair
- MRAT	5-30	Modem Ring Again Timer
DTYP	aaa	Inbound/Outbound Data Port (aaa = (IOP), IDP, or ODP)
ADCP	(NO) YES	All-Digital Connection Prefix
OAMP	0-127	Outbound Modem Pool route number
IAMP	0-127	Inbound Modem Pool route number

Meridian 911 Route data block

Prompt	Response	Comment
REQ	aaaa	Request (aaaa = CHG, END, LCHG, NEW, or OUT)
TYPE	RDB	Type of data block = RDB (Route data block)
CUST	0-99	Customer number associated with this route
ROUT	0-511	Route number
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
TKTP	DID	DID trunk types must be used for M911 route
M911_ANI	YES	Receive ANI digits for M911 route
M911_TRK_TYPE	aaaa	Meridian 911 ANI trunk type (aaaa = (911T) or 911E)
M911_TBL_NUM	0-7	Meridian 911 route table index

NPID: Numbering Plan Digit or Information Digit (NPID) Table

Prompt	Response	Comment
REQ	aaaa	Request (aaaa = CHG, END, LCHG, NEW, or OUT)
TYPE	NPID	Type of data block = NPID
CUST	xx	Customer number associated with this route
DES	x...x	Designator field for trunk (0-16 character alphanumeric)
IDTB	0-7	ID table index
NPID	0-9	Numbering Plan Digit or Information Digit
TRMT	a...a	NPID Treatment (a...a = (NONE), FAIL, TEST, or NPA)
-NPA	nnn	Numbering Plan Area

Release Mechanism Options

The following table indicates whether a release signal is acknowledged or not. YES indicates the release signal is acknowledged, NO indicates the release signal is not acknowledged.

Table 4
Release Mechanism Options

RLSM Option	Incoming Calls		Outgoing Calls	
	Originator On-Hooks first	Terminator On-Hooks first	Originator On-Hooks first	Terminator On-Hooks first
0	NO	NO	NO	NO
1	NO	NO	NO	YES
2	NO	NO	YES	NO
3	NO	NO	YES	YES
4	NO	YES	NO	NO
5	NO	YES	NO	YES
6	NO	YES	YES	NO
7	NO	YES	YES	YES
8	YES	NO	NO	NO
9	YES	NO	NO	YES
10	YES	NO	YES	NO
11	YES	NO	YES	YES
12	YES	YES	NO	NO
13	YES	YES	NO	YES
14	YES	YES	YES	NO
15	YES	YES	YES	YES

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ABAN	(NO) YES	Abandoned call records output for this route	fcdr-18
ACNO	0-99	AIOD Customer Number The Customer Number range depends on system type and X11 Release. Refer to the CUST prompt in LD 15 for details.	aiod-1
ACOD	x...x	Access Code for the trunk route The ACOD must not conflict with the numbering plan. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	basic-1
ADDP	(NO) YES	Add Public Prefixes The prefixes 0 (National) or 00 (International) <i>are not</i> added to the Calling Party Number if the Type of Number (TON) is Public on the set/attendant displays The prefixes 0 (National) or 00 (International) <i>are</i> added to the Calling Party Number if the Type of Number (TON) is Public on the set/attendant displays	euroisdn-22
ADCP	(NO) YES	All-Digital Connection Prefix assigned to customer	basic-5
AIA	(NO) YES	Answered call Identification Allowed Enter YES to output an "A" in the CDR TerID field to indicate answered calls. Release 13 and later. Prompted when OAL = YES or OTL = YES.	cdr-13
AIOD	(NO) YES	Identification of outgoing calls	aiod-1
ALRM	(NO) YES	Malicious Call Trace Alarm is allowed for external calls	mct-10
ANDT	(NO) YES	Automatic Number Identification Dial Tone	ani-1
ANKP	(NO) YES	KP signal suppressed	cam-1
ANTK	x...x	ANI identifier number Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. In either case, together with ANLD and ANI Listed DN in LD 15, the total number of digits must be no less than 7.	ani-1

Prompt	Response	Comment	Pack/Rel
ARNO	0-511	AIOD route number	aiod-1
ASTP	1-(2)-15	ADM Step-forward ring cycles	adm-12
ASUP	(NO) YES CO	Do not return Answer Supervision by RAN to originator Return Answer Supervision by RAN to originator Return Answer supervision only if the originator is a CO trunk The operation of answer supervision is affected with FCC Compliance for DID Answer Supervision (FC68) package 223. Refer to FCC Compliance for DID Answer Supervision, in X11 features and services.	ran-1
ATDN	(0)-x...x	Attendant DN of conventional main, ESN main, ESN node or ETN node. Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	casm-5
ATGT	(0)-60	Add on Data Module (ADM) Trunk Guard Timer Two-second increments up to one minute, odd entries are rounded down to the next valid number.	adm-12
ATTK	xxxx	AIOD identifier number	aiod-1
AUDN	xxxx	Auto termination DN for ISA service routes Prompted when ISAR = YES and AUTO = YES. This must be an existing DN, and cannot be deleted. When DNIS = YES, it must be an ACD DN.	
AUTH	(NO) YES	Authcode to be prompted for incoming NARS/BARS calls	baut-1
AUTO	YES (NO)	Auto-Terminate The route members terminate on DN defined by response to ATDN prompt in LD 14. The route members terminate normally at the console. Only ACD DNs or DISA DNs support Auto-Terminate trunks. In order to set AUTO = YES for TIE, DID and CCSA trunks, all members of the route must have STRI = IMM in LD 14.	basic-1
BAND	(0) - 99	OUTWATS band number.	cbc_pkg- 23

LD 16

Prompt	Response	Comment	Pack/Rel
BCOT	(0) - 4000	B-Channel Overload Control timer value indicates the delay the M1 PBX will introduce (in milli seconds) before starting the actual disconnect sequence.	isdn- 23
BDCT	(NO) YES	Enable broadcast capability for this route.	ranbrd- 23 ran- 23
BDSP	(NO) YES	Billing Number is not displayed at the CO Billing Number is displayed at the CO	basic-21
BILN	(NO) YES	Billing Number is not required Billing Number is required	basic-21
BLEN	1-(10)-16	Billing Number Length	basic-21
BNUM	0-9999	Billing Number Depending on your response to BLEN, BNUM can be from 1 to 16 digits. If BLEN is changed, a new BNUM must be entered. If the BNUM entered is less than the BLEN specified, the BNUM will be padded with leading zeros.	basic-21
BRIP	(NO) YES	ISDN BRI Packet handler route	bri-18
BTUA	(NO) YES	Block Transfer of Unanswered call	pra-14
CAT	00-99	CAMA Trunk route category digits Prompted if SIGL = NT4 or NT5	cama-1
CBQ	(NO) YES	Call Back Queuing Use only for incoming TIE calls.	bque-1
CBCR	(NO) YES	Service route indicator	cbc_pkg-23
CDR	(NO) YES	Call Detail Recording Set and change CDR options for this route.	cdr-1
CDRB	(NO) YES	Abandoned call on busy tone records.	cdr- 23 fcdr- 23

Prompt	Response	Comment	Pack/Rel
CDRX	(NO) YES	Print CDRX records on multiple call transfer for non-PPM outgoing calls. This prompt appears if CDRX package is equipped and MR is not equal to PPM. Also CDR = YES, TKTP = COT or DID for International DID/DOD and ICOG cannot be ICT.	cdrx-20
CHTY	(BCH) ABCH	Channel Type B-channel A/B bit signaling Prompted when DTRK = YES, ISDN = YES and Mode = PRA.	pra-12
CLEN	0 - (1)- 3999	CLID entry number. This prompt is given only for non-ISDN routes (i.e. ISDN = NO and ISAR = NO).	esa- 23
CLK	(OFF) ON	External Clock source Internal Clock source Prompted if TKTP = MCU and TRAN = SYN	basic-18
CLS	(CTD) CUN FR1 FR2 FRE SRE TLD UNR	Class of Service access restriction. Prompted if TKTP = TIE. Conditionally Toll Denied Conditionally Unrestricted Fully restricted class 1 Fully restricted class 2 Fully restricted Semi-Restricted Toll Denied Unrestricted	isa-12
CLID		Calling Line Identification. CLID is prompted only for UIPE-based protocols.	euroisdn-22
	OPT0	Prefix = 0 for North American dialing plan. OPT0 is the default for ESIG and ISIG interfaces.	
	OPT1	Prefix = 1 for international PFXs in CLID. Any numbering type is supported. OPT1 is the default for all EuroISDN interfaces.	

LD 16

Prompt	Response	Comment	Pack/Rel
	OPT2	Prefix = 2, for international PFXs in CLID. CCITT numbering types supported are: UKWN, INTL, NPA, and NXX. OP2 is the default for CO/DID routes for the Telecom New Zealand interface.	
	OPT3	Prefix = 3 for international PFXs in CLID. Only the NXX number type is supported. OPT3 is the default for TIE routes for the Telecom New Zealand interface.	
	OPT4	For international COs, if the call originates from a CO trunk type, add nothing. Otherwise, add PFX1 and PFX2. OPT4 is the default for the Hong Kong, Singapore, and Thailand interfaces.	
	OPT5	This is the same as OPT4, except it supports a maximum of 10 digits in the CLID. OPT5 is the default for the Austrian interface.	
CNTL	(NO) YES	Changes to controls or timers	basic-1
CNTY	(ESTI) NET	Country ETS 300-102 basic protocol ETSI network side protocol	supp-9
CNVT	(NO) YES	Conventional switch route Prompted with Network Signaling (NSIG) package 37.	nars-5
COTR	0-511	DID/CO Trunk Reference route number Determines how incoming public call types are handled for the associated Integrated Service Access route or ISA. Prompted when TKTP = ISA and = D100 or SL-1 and NSF = NO or YES. Precede with X to delete.	pra-12
CPDC	(NO) YES	SL-1 is the only controlling party on incoming calls. If CPDC = YES, the connection stays up until it is disconnected by SL-1. This is used for 911 emergency services.	basic-1

Prompt	Response	Comment	Pack/Rel
CPFXS	(YES)	Customer-defined Prefixes option. When constructing the Calling or Connected Line Identification, the prefixes are retrieved from the Customer Data Block via the PFX1 and PFX2 prompts in LD 15, as is currently done.	euroisdn-22
	NO	When constructing the Calling or Connected Line Identification, the prefixes are retrieved from the Route Data Block via the HNTN and HLCL prompts in LD 16.	
CPP	(NO) YES	Calling party privacy flag. A response of YES indicates that the CPP feature is recognized in this trunk route. CPP is prompted only if: 1. CPP package 301 is equipped 2. trunk is either OGT or IAO 3. non-ISDN option 4. trunk route type = COT, DID, FEX or WAT	cpp-21
CTYP	(UKWN) CDP INTL LOC NPA NXX SPN	Call Type for outgoing direct dialed TIE route Unknown Call type Coordinated Dialing Plan International number Location code National number Subscriber number Special Number for other than international number format The CTYP is used by the receiving switch so that it can associate a call with a call type and perform ESN access code insertion. This option only applies to direct dialing using trunk access codes. NARS and BARS dialing do not apply here. If you intend to respond YES to prompt ISAR, use the default <cr> for this prompt. If ISAR = YES, then CTYP prints UNWN and does not permit you to enter a response.	pra-15
CUST	xx	Customer number associated with this route as defined in LD 15	basic-1
DAPC	(NO) YES	Display of Access Prefix on CLID	isdn-24

LD 16

Prompt	Response	Comment	Pack/Rel
DCD	(ON) OFF	Data Carrier Detect Data Carrier Detect lead follows state of lead on device to which it is connected. Data Carrier Detect lead forced active. Prompted if TKTP = R232 or MCU.	
DCDR	(NO) YES	Include DNIS number in CDR records For Release 19 and later, this prompt appears for ISDN routes to support Network ACD.	dnis-19
DCH	0-159	D Channel number	isdn-16
DCHI	1-15	DCHI Port Number. Prompted when MODE = ISLD. DCHI Port number must be defined in LD 17	pra-12
DCNO	(0)-254	Day IDC tree number	idc-12
DCTI	(0)-511	Time, in seconds, that an extension is allowed to ring or be On-Hold or Call Park before the trunk is disconnected. Respond with a value equal to the number of seconds a set is to ring after recall, plus the value of the Call Park Recall Timer. The Call Park Recall Timer is defined in LD 50 in response to the CPTM prompt. Default or <cr> means that the condition goes on indefinitely. The value stored - which will be the closest lower multiple of four - is echoed back upon entry.	
DDMI	(0)-127 (0)-255	Digit Manipulation Index Basic Alternate Route Selection Network Alternate Route Selection Prompted with either Basic Alternate Route Selection (BARS) package 57 or Network Alternate Route Selection (NARS) package 58.	nars-5
DEM	(DCE) DTE	Data Equipment Mode. Prompted if TKTP = R232. Data Carrier Equipment Data Terminal Equipment	basic-18
DES	x...x	Designator field for trunk groups of 0-16 alphanumeric characters (this is an optional entry)	basic-22

Prompt	Response	Comment	Pack/Rel
DEXT	(NO) YES	Display External dialed digits Do not display original digits Display original digits pre converted Prompted if AUTO = NO, DNIS = NO and IDC = YES.	icd-12
DGTP	BRI DTI DTI2 JDMI PRI PRI2	Digital Trunk Type for route. ISL routes that use Phantom Trunk TNS must be configured as DTI2 routes. Basic Rate Interface (Allowed if TKTP = TIE, COT or DID and BRIP = NO) 1.5 Mb/s DTI (If BRIP = NO, then default is DTI) 2.0 Mb/s DTI Japan Digital Multiplex Interface. This response is allowed if either 2 Mbit Digital Trunk Interface package 129 or 2 Mbit Primary Rate Interface package 154 is equipped. ISDN 23B + D (If BRIP = YES, then default is PRI) ISDN 30B + D	pra-14
DLTN	(NO) YES	Dial Tone on originating calls Provide dial tone to the far end when the trunk has been accessed from the far end.	basic-1
DNAM	(NO) YES	Display IDC name Prompted with Calling Party Name Display (CPND) package 95. Prompted following NDNO if DNIS = YES.	dnis-17
DNIS	(NO) YES	ACD DNIS route Prompted with Automatic Call Distribution Package D (ACDD) package 50, and the RTYP = TIE or DID.	dnis-10
DPPI	(1167) nnnn	Privacy indicator for a dial-pulse trunk. Any arbitrary digit (0-9) sequence up to 4 digits may be entered. If CPP prompt is changed from NO to YES and <cr> is entered, DPPI defaults to 1167.	cpp-21
DPPO	(1182) nnnn	Privacy Override Indicator for a dial pulse trunk. nnnn = any arbitrary digit (0-9) sequence up to 4 digits in length.	cpp-23

LD 16

Page 310 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DRNG		North American Distinctive Ringing for incoming calls	drng-8
	(NO)	For TIE trunks to provide normal ringing (i.e., make/break/ make/ break, 0.25 sec./ 0.25 sec./ 2.25 sec. to incoming calls terminating on stations)	
	YES	For CO trunks to provide distinctive ringing (i.e., make/break, one second/two seconds to incoming calls terminating on stations).	
		Distinctive Ringing only applies to CAM, COT, DID, FEX, TIE and WAT trunks. These trunks cannot be configured as outgoing only for prompt ICOG.	
DSBL	(0)-100	Percentage of trunks to be disabled if loss or noise reaches the out-of-service limit	atm-7
DSEL		Data Selection	basic-19
	(VOD)	Voice or Data route	
	DTA	Data-only route	
	TDN	Transparent Data Network	
	VCE	Voice-only route	
	3DTA	Data route and 3.1 kHz	
	3VCE	Voice route and 3.1 kHz	
		Prompted if DGTP = DTI, DTI2 or JDML.	
DSPD		Real Time Advice Of Charge Display	isdn-22
	(NO)	Do not display charge information during call	
	YES	Display charge information during call	
		DSPD applies to Aries sets (M2006, M2008, M2016, M2216, and M2616) on a per route basis. To activate this feature, the prompt MR must be set to either DURC or ENDC.	
DSPT	0-(10)-60	Charge Display Timer in seconds	isdn-22
		DSPT determines how long charge information is display at the end of the call.	
DTPI	(*67) nnnn	Digitone Trunk Privacy indicator.	cpp-24
		Any arbitrary digit (0-9) sequence up to 4 digits can be specified. Only the first digit may be an asterisk (*). If CPP prompt is changed from NO to YES and <cr> is entered, DTPI defaults to *67.	

Prompt	Response	Comment	Pack/Rel
DTPO	(*82) nnnn	Digitone Trunk Privacy Override indicator. nnnn = Any arbitrary digit (0-9) sequence up to 4 digits in length. The Asterisk (*) can only be entered as the first digit.	cpp-24
DTR	(OFF) ON	Data Terminal Ready. Prompted if TKTP = R232 or MCU. DTR lead follows state of the lead on the device to which it is connected DTR lead always forced active	basic-18
DTRK	(NO) YES	Digital Trunk Route. Prompted with PBX Interface for: • DTI/CPI (PBXI) pkg 75 • 2 Mbit Digital Trunk Interface (DTI2) pkg 129 • Japan Digital Multiplex Interface (JDMI) pkg 136 • ISDN Primary Rate Access (PRA) pkg 146, or • 2 Mbit Primary Rate Interface (PRI2) pkg 154	dti-5
DTYP	(IOP) IDP ODP	Inbound/Outbound Data Port Inbound Data Port Outbound Data Port	amp-5
DUP	(FULL) HALF	Duplex for data port Full duplex Half duplex Prompted if TKTP = MCU.	basic-18
EML	0-15	Expected Measured Loss (in dB)	atm-7
EQAR	(NO) YES	Enable Equal Access Restrictions Prompted when TKTP = CO, FEX, WAT, or ISA, and ICOG = OGT, or IAO.	eqa-17

LD 16

Prompt	Response	Comment	Pack/Rel
ESN	(NO) YES	Electronic Switched Network pad control for NT8D15 XEM card. This only applies to trunk routes whose members may use 4-wire E&M or DX signaling on an Electronic Switched Network. This prompt is the replacement for the ESN switch setting on the QPC237 circuit card. When YES is selected, a 1 dB improvement in loss levels is provided on trunk to trunk calls using the NT8D15 units. Prompted with Network Alternate Route Selection (NARS) package 58 and Meridian 1 Extended Peripheral Equipment (XPE) package 203.	xpe-15
FACN	(0) - 99999	Tie or FX facility number.	cbc_pkg- 23
FACY	(NO) YES	Facility indicator for Private or TIE connection. Tie connection in the NSF IE Private connection in the NSF IE Prior to Release 17, all tie trunks to a DMS-250 sent a Private facility value, all others sent TIE. In Release 17, trunk routes to a DMS-250 automatically have FACY set to YES. All others default to NO. FACY is prompted when TKTP = TIE, ISAR = YES, and IFC = D100, D250 or S100.	isa-17
FEDC		Far End Disconnect Control This entry should correspond to the type of disconnect control used by the far end apparatus of this trunk route. Loop start trunks may be assigned either ORG or ETH.	basic-1
	(ORG)	Originating end control The apparatus recognizes conditions on the near end only for calls originated by the Meridian SL-1. This does not allow trunk to trunk connections.	
	ETH	Either end control Conditions at the near end are recognized for both incoming and outgoing calls. This allows trunk to trunk connections subject to normal access restrictions. (e.g., TGAR)	

Prompt	Response	Comment	Pack/Rel
	FEC	Far end control FEC allows trunk to trunk connections. FEC involves the following sequences for disconnect at the near end: When the near end goes on-hook first, the DSI (half disconnect) timer starts. If the far end of the trunk goes on-hook before the DSI timer runs out, then the trunk is idled immediately and the DSI timer is cancelled. If the DSI timer expires, the trunk is locked out until an on-hook is received from the far-end, at which time the SL-1 idles the trunk.	
	JNT	Joint control JNT disallows trunk to trunk connections.	
FGNO	(0)-127	Feature Group D block number	fgd-17
FORM	M1A M2B M3C	Format 1 for CAMA trunk signaling Format 2 for CAMA trunk signaling Format 3 for CAMA trunk signaling	cama-1
FRL	0-7 0-254	Facility Restriction Level (FRL) and New Flexible Code Restriction (NFCR) tree number for this route	basic-1
GCR	(NO) YES	General Carrier Restriction to restrict Equal Access calls. Not prompted for Release 20 and later.	eqa-19
GRD	(IDLE)	Ground Start Arrangement RAN machine send ground signal when idle.	ranbrd-23 ran-23
	PLAY	RAN machine send ground signal when playing.	
HDLC	(NO) YES	High level Data Link Control Prompted if TKTP = MCU and V25 = YES.	basic-18

LD 16

Prompt	Response	Comment	Pack/Rel
HLCL	0-9999	Home Location Number This number is similar to PFX2 number prompted in LD 15. It is added to this overlay so that this prefix can be configured on a route basis as required in some countries (e.g., Italy). As is the case with PFX2, the HLCL prefix can be from one-to-four digits long. This prompt is displayed only if CPFXS = NO. If only a <CR> is entered, this prompt keeps its previous configuration. If no value was configured previously, no value will be configured. Enter X to delete the digits.	euroids-22
HNTN	0-9999	Home National Number This number is similar to the PFX1 number prompted in LD 15. It is added to this overlay so that this prefix can be configured on a route basis as required in some countries (e.g., Italy). As is the case with PFX1, the HNTN prefix can be from one-to-four digits long. This prompt is displayed only if CPFXS = NO. If only a <CR> is entered, this prompt keeps its previous configuration. If no value was configured previously, no value will be configured. Enter X to delete the digits.	euroids-22
HOLD	ic dc ht	Hold failure threshold. Where: • ic = increment counter = 1-(2)-31 • dc = decrement count = 1-(2)-31 • ht = minimum hold time = 1-(40)-127 seconds The failure to hold applies to trunks which are not properly seized but disconnected sooner than the minimum hold or ht. See prompt ILLR for a description of increment count (ic) and decrement count (dc) values. The default for AID trunks is 2 1 40.	basic-1

Prompt	Response	Comment	Pack/Rel
HOUR	0-23	Hour to start Automatic Trunk Maintenance test The system outputs xx:15 indicating the test start times are performed 15 minutes after the hour to avoid interactions with traffic reports.	atm-7
IABS	(0)-3	Number of Incoming digits to be Absorbed For CCSA trunks only.	ccsa-1
IAMP	0-127	Inbound Modem Pool route number Prompted if TKTP = ADM and DTYP = IOP or IDP.	amp-5
IANI	(NO) YES	In-band Automatic Number Identification route ISDN must be (NO) for this feature to be enabled. Prompted if AUTO = YES.	ani-15
ICDN	xxxx xxx	CLID DN for incoming route (1-7 digits) and CLID entry (0-125) for trunk DN	mfc/isdn-22
	xxxx (NO)	CLID DN for incoming route (1-7 digits) and CLID is not generated for trunk DN ICDN is prompted if ICIS = NO or if the trunk route is not ISDN.	
ICIS	(YES) NO	Incoming Identifier Send Use CLID/CNI from incoming ISDN/R2MFC trunk Do not use CLID/CNI from incoming ISDN/R2MFC trunk ICIS is prompted for incoming routes when ISDN = YES or if the table type of MFCI = R2MF.	mfc/isdn-22
ICNP	(UKWN) PRV PUB	Incoming Numbering Plan Unknown Private Public ICNP is prompted if table type of MFCI = R2MF and ICIS = YES. ICNP is prompted only if the CLID entry for ICDN = 0-125.	mfc-22
ICNT	(UKWN) INTL NTN LCL LOC CDP	Incoming Numbering Type Unknown International National Local Location Coordinated Dialing Plan	mfc-22

LD 16

Page 316 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	SPN	Special number ICNT is prompted if table type of MFCI = R2MF and ICIS = YES. ICNT is prompted if CLID entry for ICDN = 0-125.	
ICOG	IAO ICT OGT	Incoming and/or Outgoing trunk Incoming and Outgoing Incoming only Trunk Outgoing only Trunk	basic-1
ICPS	(YES) NO	Incoming Presentation Status Provide Trunk DN Do not provide Trunk DN ICPS is prompted if table type of MFCI = R2MF and ICIS = YES. ICPS is prompted if the CLID entry for ICDN = 0-125.	mfc-22
ID	(0)-9	Identification digit for CAMA trunk routes	cama-1
IDC	(NO) YES	Incoming DID Digit Conversion on this route	idc-12
IDEF	(NET) LOC	Internal/external definition Use network information to define a call as internal or external. Calls over the selected route will receive a network treatment as defined by available network information. Use local data to define a call as internal or external. Internal calls will receive an internal treatment if RCLS = INT. External calls will receive an external treatment if RCLS = EXT. IDEF is prompted in LD 16 if IDEF = YES in LD 15.	basic-22
IDTB	0-7	ID table index to be used by this Meridian 911 route	m911-19
IEC	001-999 (0) - xxx (0) - xxxxx	Inter-Exchange Carrier ID Precede with X to remove entry. If no value is entered "???" is printed in the route data block. Prompted when TKTP = COT, FEX or WAT. With Release 23, this value is used for information purposes only. Inter-Exchange carrier providing the service. Prompted if IFC = NI2 and SRVC is 0 - 16, 18, 21 - 31.	pra-12

Prompt	Response	Comment	Pack/Rel
IFC		Interface type for this PRI route. The IFC of an ISA route and its service route must match.	pra-12
	(SL1)	Meridian SL-1	
	AXEA	Ericsson AXE-10 for Australia	
	D70	Interface to Japan D70	
	D100	Meridian DMS-100	
	D250	Interface to Meridian DMS-250	
	EGF4	Q Reference Signalling Point interface	qsig gf-24
	ESIG	ETSI Q reference signalling point (QSIG) Interface ID.	
	ESGF	ESIG interface with GF platform. ESGF can be entered if QSIG and QSIG GF packages are both equipped. If the Digital Route Type is BRI, then the associated DSLs must be removed before changing the interface type to ESGF.	
	ESS4	Interface to AT&T ESS#4	
	ESS5	Interface to AT&T ESS#5	
	ISGF	ISIG interface with GF platform. ISGF can be entered if QSIG and QSIG GF packages are both equipped. If the Digital Route Type is BRI, then the associated DSLs must be removed before changing the interface type to ISGF.	
	ISIG	ISO Q reference signalling point (QSIG) Interface ID	
	NI2	NI-2 TR-1268 interface type	
	S100	Meridian SL-100	
	SS12	SYS-12 for Norway	
ILLR	ic dc	Illegal Ring threshold. Where: - ic = increment count = 0-(2)-15 - dc = decrement count = 0-(2)-15 ILLR specifies illegal ringing on a seized trunk.	basic-1

LD 16

Prompt	Response	Comment	Pack/Rel
		ILLR is only prompted for COT, FEX and WAT trunks. The increment count (ic) and decrement count (dc) control the rate at which detected failures exceed the trunk error threshold. A counter (initially set to zero) records trunk successes and failures. The counter is incremented by the IC value each time a failure is detected, and by the DC value when a valid trunk condition is detected. When the counter value exceeds the trunk threshold value (30), the overflow indicator is set, and a TRKxxx message displays. A high IC value increases the counter more rapidly than a low IC value, thus causing the counter to exceed the threshold with fewer detected failures. The threshold counter only preserves positive values. If the counter contains a negative value, it automatically resets to zero. The next detected failure immediately increases the counter toward the threshold value, enabling quicker trunk failure detection. ic dc = threshold percentage • 41 = 20% • 21 = 33% • 32 = 40% • 22 = 50% • 24 = 67% • 13 = 75% • 14 = 80% • 17 = 88% The RSET command in LD 36 and LD 41 resets the threshold counters to zero.	

Prompt	Response	Comment	Pack/Rel
INAC	(NO) YES	Insert ESN Access Code to incoming private network call INAC permits an ESN access code to be automatically added to an incoming ESN call from a private network. If INAC = YES, then digit insertion (INST) for NARS or BARS calls is bypassed and Access Code 1 (AC1) is used for all call types. However, calls may be specifically defined to use Access Code 2 (AC2) in LD 15 at the AC2 prompt. INAC is prompted when the route type is either a TIE trunk or an IDA trunk with DPNSS1 signaling.	pra-21
INC	(NO) YES	CDR records generated on incoming calls	cdr-1
INST	0-999999 0-99999999 <cr> X	Insert. Not prompted when DNIS = YES. Digits to be inserted before leading digit Release 13 and later No digits are entered To remove entry	basic-1
INT	(OFF) ON	Interworking Far end data unit is not a DMS-100 or SL-100 Data Unit Far end data unit is a DMS-100 or SL-100 Data Unit Prompted if TKTP = MCU.	basic-18
INTC	(NO) YES	Do not intercept voice calls which call data sets to an attendant Intercept voice calls which call data sets to an attendant	euroisdn-22
IPUB	0-511	Incoming Public Network call service route.	cbc_pkg-23
ISAR	(NO) YES	Integrated Service Access Route denied Integrated Service Access Route allowed In Release 16 and later this prompt indicates whether this route is to be used as a service or reference route for the Integrated Service Access or ISA feature. ISAR can only be YES when there are no trunk assignments in LD 14. In Release 15 and earlier, this prompt was used to allow stepping to an ISA route.	pra-12

LD 16

Prompt	Response	Comment	Pack/Rel
ISDN	(NO) YES	Integrated Services Digital Network Defaults to YES when DGTP = PRI or PRI2 and REQ = NEW. Prompted for BRI routes when REQ = CHG. Prompted when ISDN = YES in LD 15 and with ISDN package 145.	pra-12
ITOL	(DENY) ALLOW	Deny International toll calls (i.e., 011+calls) Allow International toll calls	eqa-17
JDGT	1-(4)	Japan central office Digits This indicates the number of address digits sent from the CO to the Meridian 1. If the number of digits is not known, set the parameter to (4).	xutj-16
LAST	(NO) YES	CDR record printing content option for redirected calls. The Terminating ID field in the CDR record will contain the one before the last party. The Terminating ID field in the CDR record will contain the last party.	cdr-1
LGTH	4-(60)- 7200	Maximum message length in seconds. For fault detection purpose. Applicable to MPUL, MLVL & MCON RAN machine types.	ranbrd- 23 ran- 23
LMNL	0-15	Loss deviation Maintenance Limit (in dB)	atm-7
LOUT	0-15	Loss Out-of-Service deviation limit (in dB)	atm-7
MANO	(NO) YES	Manual Outgoing trunk route Define the manual DN in LD 14 at prompt MNDN.	basic-1
MAX	1-510	Maximum number of channels allowed on the ISA route, service dependent. With Release 23, value entered is the maximum number of trunks limited by this service route. This value must match the one assigned at the CO. For example, if MAX = 8 for Tie routes, no more than 8 channels can used simultaneously for Tie calls. Prompted when: 1. ISAR = YES and IFC = ESS4, or 2. NSF = YES and IFC = SL-1 or D100 for the selected ISA route defined by response to RTN prompt.	isa-12

Prompt	Response	Comment	Pack/Rel
MCCD	0- 8	The call trace request string can be 0-8 digits in length. Valid digits are 0-9, *, #.	emct-20
MCDT	(0)-4	Digit string delay time is in seconds. Granularity is 1 second.	emct-20
MCTM	(0)- 30	Malicious Call Trace request timer id (in seconds) This is the disconnection delay which is used when the far end goes on hook. Granularity is 1 second. Prompted if interface type for the D channel is AXE-10 Australia.	mct-10
MCTS	(NO) YES	Malicious Call Trace Signal	emct-20
MDMP	(NO) YES	Modem Data Module Pair ADM only route Modem Data Module Pair route	adm-5
MIN	0-510	Minimum number of channels allowed on the ISA route, service dependent For example, if MIN = 2 for Tie routes, at least two channels will be available for Tie calls. Prompted when: • ISAR = YES and IFC = ESS4 • NSF = YES and IFC = SL1 or D100 for the selected ISA route defined by response to RTN prompt.	isa-12
MOD	(NO) YES	Network Mode for synchronous operation Modem Mode for synchronous operation Prompted if TKTP = MCU and TRAN = SYN.	basic-18

LD 16

Prompt	Response	Comment	Pack/Rel
MODE		Mode of operation	pra-12
	APN	Analog Private Network APN is allowed only with Integrated Services Digital Network Signaling Link (ISL) package 147 and Digital Private Signaling System 1 (DPNSS) package 123.	
	ISLD	Route uses ISDN Signaling Link (ISL) ISLD is allowed only if ISDN = YES, and the Integrated Services Digital Network Signaling Link (ISL) package 147 is equipped. ISLD is allowed only on ISA and TIE trunks.	
	PRA	ISDN/PRA route, DTRK must be YES PRA allowed only if ISDN = YES.	
	<cr>	Default is NULL for service/reference routes If you enter YES to prompt ISAR, then use the default <cr> for this prompt. If ISAR is YES, then MODE prints NULL and does not allow a response.	
MQC_FEAT		MCDN QSIG Feature type	meet-24
	NAS	MCDN NAS functionalities are supported over QSIG.	
	NACD	MCDN NACD functionalities are supported over QSIG.	
	NMS	MCDN NMS - MC functionalities are supported over QSIG.	
		Precede MQC Feature type with X to remove	
MR		Message Registration	mr-10
		If a 1TR6 trunk route is created where TKTP = COT or DID, MR is automatic and is not prompted. However, if TKTP = TIE, then MR is not applicable to the route and is not prompted.	
	(NO)	The route is not metered. If MR is set to NO, the trunk should have a Polarity Insensitive Class of Service in LD 14. (CLS = PIP)	
	DURC	The AOC information is decoded during and at the end of the call. IFC must be set to NUME or SWIS.	

Prompt	Response	Comment	Pack/Rel
	ENDC PPM RVB	The AOC information is decoded at the end of the call Buffered PPM signals to be counted on this route Reverse Battery signal from PSTN for CO interrupted as supervisory signal and used as MR on this route.	
	STAC XLD	Activation of the AOC-S sub-service M & MM Lead non-buffered is used. This is the only metering type allowed for TKTP = IDA and SIGL = DAS. MR is not prompted for Danish and Swedish EuroISDN interfaces as AOC is not supported for those countries.	
MRAT	5-30	Modem Ring Again Timer, in minutes	amp-5
MRT	0-127 0-511	Music Route number Music Route number for machine types NT, RT, STE, XN, XT and system Options 21E, 51, 51C, 61, 61C, 71, 81 and 81C with Release 14 and later. In Release 13 and later, route 31 is no longer an exclusively private route, unless configured as one in LD 16. With X11 Release 23, MRT defines the Music Route number for Recorded Announcement queueing.	mus-1 ranbrd-23 ran-23 mus-23
MTND	(NO) YES	Malicious Call Trace Tandem Disconnect delay for AXE10 interface If set to YES the disconnect operation is delayed at the node closest to the CO for up to MCTM time when the call is a tandem call.	emct-20
MULT	(NO) YES	Multiplier for Charge Information Do not change calculation of charge information. Provide the exact cost of charge information if the RURC exponent is configured to the value of the multiplier. Your response to MULT should be YES when the Central Office sends charge information in one hundredth of currency and the currency multiplier is less than 1. The multiplier exponent should be equal to the RURC exponent. This is only used with functional protocol.	isdn-22
MUS	(NO) YES	Music on Hold	mus-1

LD 16

Page 324 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
MXTI	0-(5)-15	Maximum Time to wait for the far end to connect to test line (in seconds)	atm-7
M911_ABAN	(NO) YES	Meridian 911 Call Abandon Abandoned call treatment is not used on this route Abandoned call treatment is used on this route	m911-21
M911_ANI	(NO) YES	Receive ANI for Meridian 911 routes. The M911_ANI prompt acts as a gate opener for Meridian 911 prompts and should always be YES. Prompted with Meridian 911 (M911) package 224 and TKTP = DID. Applies to Release 19 and later.	m911-19
M911_TONE	(YES) NO	Meridian 911 Tone Tone given on answer Tone not given on answer	m911-21
M911_TRK_TYPE	(T911T) 911E	Meridian 911 ANI trunk types E911 tandem connections End office connection	m911-19
NACC	(PGNR) PGNC PGNU	Network access control Paging route is PAGENET restricted Paging route is PAGENET controlled Paging route is PAGENET uncontrolled NACC is prompted if TKTP = PAG and PAGENET package 307 is equipped.	pagenet-22
NATL	(YES) NO	North American Toll scheme; a toll call has 0 or 1 as first or second digit. If NXX second digit is "1" set NATL to "NO" and answer "0" "1" to TDG. All toll digits for TDG prompt can be removed by a YES response if REQ = CHG. Repeat LD 16 with a NO response to add toll digits.	cdr-13
NCNA	(YES) NO	Network Calling Name Allowed Prompted if ISDN = Yes.	pra-13

Prompt	Response	Comment	Pack/Rel
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service group number. CDP BARS or NFCR NARS Release 13 and later. Prompted if TKTP = TIE.	pra-13
NCRD	(NO)YES	Network Call Redirection allowed YES allows Network Call Redirection messages to be sent or blocked if NCRD = (NO). Network Call Redirection can occur without having NCRD = YES. This prompt only controls the sending of Network Call Redirection messages, not the actual redirection of the call. When NCRD = YES, the message supplied provides information for the CLID display. When NCRD = (NO), the call is redirected without the CLID redirection information if CLID is enabled. It is appropriate to set NCRD = (NO) when your network interfaces with a network that is equipped with an ISDN version earlier than Release 14. Default is Yes in X11 Release 14 and (NO) in X11 Release 15 and later.	pra-14
NCTH	(0) - 100	Number of Calls Waiting Threshold. Prompted only if BDCT = YES and for Start/Stop RAN machine with STRT = DDL. Default value zero means no threshold applies.	ranbrd- 23 ran- 23
NDGT	3, 4 1-(4)-7 1-(4)-31	Number of DNIS Digits expected Number of DNIS Digits expected in Release 20 and later Number of DNIS Digits expected in Release 24 and later. Only available for DID, TID or IDA routes.	dnis-10
NDIG	(2)-7 (2)-10	Number of Digits in numbering plan at conventional main switch Release 13 and later Prompted if SIGO = STD and CBQ = YES.	casm-1

LD 16

Page 326 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
NDNO	0-254	Night IDC tree number for Release 14 and later When REQ = NEW default is the DCNO tree defined. Otherwise, there is no default value.	idc-14
NEDC		Near End Disconnect Control This entry determines the type of control exercised by the Meridian SL - 1 on trunk disconnections.	basic-1
	(ORG)	Originating end control The far-end on-hook condition is recognized only for incoming calls. Far end conditions are ignored for outgoing calls. ORG is default for TIE, DID and CCSA trunks.	
	ETH	Either end control If the far end goes on-hook for either incoming or outgoing calls, the on-hook condition is recognized and the call is disconnected. ETH is the default for all trunks except TIE, DID and CCSA trunks.	
NMNL	27-90	Noise Maintenance Limit (in dBrn)	atm-7
NOUT	27-90	Noise Out-of-Service limit (in dBrn)	atm-7
NPA	nnn	Numbering Plan Area	m911-19
NPID	0-9	Numbering Plan Digit or Information Digit If <CR> is entered, the NPID table is created.	m911-19
NPID_TBL_NUM	0-7	Meridian 911 route table index The ID table must be created before this prompt can be answered.	m911-19
NSF	(NO) YES	Network Service Facility Prompted when TKTP = ISA and IFC = D100 or SL1. When NSF = YES, the ATB traffic counter is incremented when the MAX value is reached in the service route.	pra-12
NTOF	(YES) NO	Near To Far measurement See prompts REF, TST and PADL.	atm-7
NTOL	(DENY) ALOW	Deny North American Toll calls (i.e., 1+ calls) Allow North American Toll calls	eqa-17

Prompt	Response	Comment	Pack/Rel
OABS	0-9	Actual outgoing toll digits to be ignored for Code Restriction OABS is frequently used with 1+calls. Precede with X to remove.	basic-1
OAL	(NO) YES	CDR on outgoing calls If answer supervision is defined for the trunk, CDR records will only be generated on call completion.	cdr-1
OAMP	0-127	Outbound Modem Pool route number Prompted if TKTP = ADM and DTYP = IOP or ODP.	amp-5
OAN	(YES) NO	CDR timing starts On Answer supervision of outgoing calls Prompted if OAL or OTL = YES. This prompt only applies to trunks with answer supervision CLS = PSP, or SUPN = YES. With International Supplementary Features (SUPP) package 131, the default is NO. Without SUPP package 131, the default is YES.	
OGDN	xxxx xxx	CLID DN for outgoing route (1-7 digits) and CLID entry (0-125) for trunk DN	mfc/isdn-22
	xxxx (NO)	CLID DN for outgoing route (1-7 digits) and CLID is not generated for trunk DN OGDN is prompted if ICIS = NO or if the trunk route is not ISDN.	
OGIS	(YES)	Outgoing Identifier Send Use CLID/CNI from incoming ISDN/R2MFC trunk or from the calling set. If OGIS = YES and the incoming trunk is R2MFC, the CNI from the incoming trunk CLID/CNI will be used in the CLID.	mfc/isdn-22
	NO	Do not use CLID/CNI from incoming ISDN/R2MFC trunk or from the calling set. OGIS is prompted for outgoing routes when ISDN = YES or if table of MFCI = R2MF.	
OGNP	(UKWN) PRV PUB	Outgoing Numbering Plan Unknown numbering plan Private Public OGNP is prompted only if the CLID entry for OGDN = 0-125.	mfc/isdn-22

LD 16

Page 328 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
OGNT	(UKWN) CDP INTL LCL LOC NTN SPN	Outgoing Numbering Type Unknown numbering type Coordinated dialing plan International number Local number Location number National number Special Number OGNT is prompted if CLID entry for OGDN = 0-125.	mfc/isdn-22
OGPS	(YES) NO	Outgoing Presentation Status Provide Trunk DN Do not provide Trunk DN OGPS is prompted if the CLID entry for OGDN = 0-125.	mfc/isdn-22
OHQ	(NO) YES	Off-Hook Queuing Used in NARS for incoming TIE callers.	ohq-1
OHQT	(0)-63	Off-Hook Queue Threshold BARS/NARS availability test. Compare with current P3 calls.	ohq-1
OHT	0 - (30) -126	Number of seconds in increments of two after which an outgoing Calling Party Control call will be disconnected after the far end disconnects.	basic-24
OHTD	(NO) YES	Off-Hook Timer Delay Masks the far end Off-Hook for up to 384 ms measured from the end of the interdigit pause of the digit send out. Masks the far end Off-Hook for up to 2 seconds.	basic-1
OPD	(YES) NO	Outpulsed Digits in CDR Dialed digits in CDR System must be initialized for changes to the OPD settings to take effect. Prompted when OTL = YES, OAL = YES or OAN = YES.	cdr-12
OPDL	(0)-8064	Outpulsing Delay, in milliseconds If required for JDML, OPDL = 3000 milliseconds. Prompted when DGTP = DTI2 or JDML.	pra-14
OPE	(NO) YES	Change data port or operating parameters Prompted only if TKTP = R232, R422 or MCU.	basic-18

Prompt	Response	Comment	Pack/Rel
OPR	(NO) YES	Outpulsing Route All trunk members for an OPR must have DTN CLS, unless they are on Route 31 or Private Line Routes. When RPA = YES, the default is YES. Prompted with Outpulsing of Asterisk "*" and Octothorpe "#" (OPAO) package 104, and prompted when TKTP = COT, DID, FEX, TIE, or WATS.	opao-10
OTL	(NO) YES	CDR on Outgoing Toll calls If answer supervision is defined for the trunk, CDR records will only be generated on call completion. Prompted when OAL = NO and Route = CAMA, CO, DID, FX, or WATS.	cdr-1
PADL	0-63	Pad factor for loop around (in dB) This is the far end tone level, plus the total pad loss at both ends on two trunks.	atm-7
PADT	0-63	Pad factor for T100 test line (in dB) This is the near end tone level, plus the total pad loss at both ends.	atm-7
PAR	(SPAC) EVEN MARK ODD	Data port Parity Space Even Mark Odd Prompted if TKTP = R232, R422 or MCU.	basic-18
PBDO	(OFF) ON	Port Busy upon DTR Off Prompted if TKTP = R232, DEM = DCE and DTR = OFF.	basic-18
PII	(NO) YES	Privacy Indicator Ignored Existing functionality is maintained. The CLID Presentation Indicator field in the Calling Party Number IE is changed from restricted to allowed and the CPND Indicator field in the Display IE is changed from denied to allowed.	cpp-23

LD 16

Page 330 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
PLEV	0-(2)-7	Priority Level Priority Level 2 sets can override sets of Level 1 and 2, and can be overridden by sets of Level 2-7. Prompted with Priority Override/Forced Camp-On (POVR) package 186.	povr-20
PNI	(0)-32700	Private Network Identifier Each customer data block must have a unique PNI when equipped with the multi-customer option. PNI = 1 is typical for customer 0. It must match the PNI in the far end CDB in order to support such features as NRAG, NACD and NMS. The PNI in the RDB functions as a logical customer number for routing outgoing non-call-associated Transaction Capability Application Part or TCAP facility messages to the appropriate ESN translations within the far end PBX. Using the default value of PNI = 0 prevents operation of features such as NRAG, NACD and NMS.	pra-12
POST	DIS ATT	RAN Post announcement treatment Disconnect after maximum repetitions Route to attendant after maximum repetitions	ran-1
PRIM	(YES) NO	Primary PRIM represents the ISA route class of use. PRIM determines whether the ISA route is the Primary or secondary choice for calls accessing the service route. PRIM is not prompted in Release 16 and later.	isa-12
PRIV	(NO) YES	Route is not a Private line route Route is a Private line route Up to Release 13, used only on route 31. In Release 14 and later, any COT route can be a private route. Prompted if TKTP = COT and REQ = NEW.	basic-14

Prompt	Response	Comment	Pack/Rel
PROG		Progress	euroisdn-22
	NCHG	Send a PROGRESS signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway. NCHG is the default for all interfaces but the Austrian interface.	
	MALE	Send an ALERT signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway.	
	MCON	Send a CONNECT signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway. MCON the default for the Austrian interface.	
PR_RTN	(NO) YES	Path Replacement Retain Option is supported by the far end Private Integrated Services Network Exchange.	qsig ss- 23
PR_TRIGS		Path Replacement Triggers default values: DIV 2 3 CNG 2 3 XCON 2 3 2 Path Replacement attempts with a delay of 3 minutes for Diversion and Congestion triggers but Connected number is not a trigger. Diversion is used to trigger Path Replacement. Congestion is used to trigger Path Replacement. A Connected number different from a called number is used to trigger Path Replacement. xx = 0 - 15, the number of Path Replacement attempts. y = 1 - 7, the delay between two Path Replacement attempts in minutes. Precede with X to remove.	qsig ss-23
	DIV xx y CNG xx y CON xx y		
PSDS	(NO) YES	Public Switched Data Service Prompted if TKTP = MCU.	basic-18

LD 16

Prompt	Response	Comment	Pack/Rel
PSEL	(DMDM) TLNK	DM-DM Protocol Selection T-link Protocol Selection TLNK protocol is used by SL-100 and DMS data devices, DM-DM is used by Meridian 1 data devices such as ASIM, AIM, ADM, SADM, Asynch Data Option or ADO, and MPDA. MCA uses both protocols. PSEL is prompted if TKTP = R232, R422, or MCU.	basic-18
PTUT	0-510	Preference Trunk Usage Threshold.	mfc,ptu-24
PTYP		Port Type at far end The response to this prompt is used in determining the required transmission level. Refer to the <i>International Loss and Level Plan</i> NTP for more information.	basic-5

Analog TIE trunk routes:

(ATT)	Analog TIE trunks
AOT	Analog TIE trunk, used instead of ATT whenever the PBX has one or more digital satellite trunk routes or DST to any digital satellite PBX which includes OPX telephones.
AST	Satellite PBX TIE or ESN trunks if SAT = YES

Digital TIE trunk routes:

(DTT)	Digital or combination TIE trunk
DCT	Combination satellite PBX TIE trunk
DST	Digital satellite PBX TIE trunk (allowed if SAT = YES or NO)

Analog CO trunk routes:

(ACO)	Analog CO trunk
ATO	Analog toll office trunk

Digital CO, FEX, DID, and WAT trunk routes:

(DCO)	Digital or combination CO port
DTO	Digital or combination Toll Office trunk

Prompt	Response	Comment	Pack/Rel
<i>1.5 Mb/s PRI TIE trunk routes:</i>			
	(PRI)	B-Channel port classification	
	DTT	Digital or combination TIE trunk	
	DCT	Combination satellite PBX TIE trunk	
	DST	Digital Satellite PBX TIE trunk	
<i>1.5 Mb/s PRI CO, FEX, DID, and WAT trunk routes:</i>			
	(PRI)	B-Channel port classification	
	DCO	Analog CO trunk	
	DTO	Analog toll office trunk	
QREC	(NO) YES	CDR ACD Q initial connection records to be generated	cdr-1
RACD	(NO) YES	Route traffic information in ACD Reports Enter YES only if the route is used as the Interflow DN of at least one ACD DN and the Interflow Trunk traffic is desired. Prompted for COT, TIE, DID, WAT, and FEX trunk types only prior to Release 17. Allowed for RAN trunks in Release 17 and later. Actual ACD Report format output examples are included in the <i>ACD Management Reporting</i> NTP.	acd-12
RANR	0-511	RAN Route number for the desired RAN route.	ranx-20
RANX	(NO)	RAN for calls diverted to external trunks RAN not requested when a call is forwarded to this route.	ranx-20
	YES	RAN requested when a call is forwarded to this route. Prompted when: 1. TKTP = COT 2. RPA = NO 3. DSEL = VCE or VOD 4. ICOG = IAO or OGT	
RCAP		Remote Capabilities. Precede with X to remove a configured capability. This prompt will be repeated until <cr> is entered.	supp-10
	BRI	ISDN Line/Trunk interworking	

LD 16

Prompt	Response	Comment	Pack/Rel
	CCBI	Call Completion to busy subscriber using integer value for operation coding	qsig ss-24
	CCBO	CCBO/CCBI are mutually exclusive. XCCB to remove. Call Completion to busy subscriber using object identifier for operation coding CCBO/CCBI are mutually exclusive. XCCB to remove.	
	CCBS	Call Completion to Busy Subscriber for QSIG BRI interfaces. CCBS is allowed if QSIG supplementary services package 316 is equipped.	
	CCNI	Call Completion on no response using integer value for operation coding	qsig ss-24
	CCNO	CCNO/CCNI are mutually exclusive. XCCN to remove. Call Completion on no response using object identifier for operation coding CCNO/CCNI are mutually exclusive. XCCN to remove.	
	CCNR	Call Completion to No Reply for QSIG BRI interfaces. CCNR is allowed if QSIG supplementary services package 316 is equipped.	
	CPK	Network Call Park.CPK is allowed if IFC = SL1 and CPRKNET package 306 is equipped.	
	CTI	Call Transfer Integer	qsig ss-24
	CTO	CTI and CTO are mutually exclusive. XCTI to remove. Call Transfer Object CTI and CTO are mutually exclusive. XCTO to remove.	
		QSIG SS Call Diversion Notification remote capability. Configure sending of QSIG Diversion Notification Information, treatment of Rerouting request and coding of operations. If coded as Object Identifier, the remote capability ends with 'O', whereas for Integer Value, the remote capability ends with 'I'. Only one remote capability is allowed.	qsig ss- 23
	DV1I	Diversion information is sent to remote switch.	
	DV1O	Diversion information is sent to remote switch.	
	DV2I	Rerouting requests from remote switch are processed.	
	DV2O	Rerouting requests from remote switch are processed. Diversion information is sent to remote switch.	
	DV3I	Rerouting requests from remote switch are processed. Diversion information is sent to remote switch.	
	DV3O	Rerouting requests from remote switch are processed. Precede with 'X' to remove capability.	

Prompt	Response	Comment	Pack/Rel
	MQC	MCDN QSIG Conversion as a Remote capability	meet-24
	NAC	Network access data.NAC is allowed if IFC = SL1. Enter XNAC to remove NAC from Remote Capabilities.	
	NCT	Network Call Trace	
	NDI	Name Display - Integer ID Coding	qsig-24
	NDO	Name Display - Object ID Coding	qsig-24
	ND1	Network Name Display 1	
	ND2	Network Name Display 2	
	ND3	Network Name Display 3. This ensures the same level of service between the MCDN and QSIG name display services.	
	NDS	Name Display Services Add Path Replacement as a remote capability. Only one capability can be configured per link.	qsig ss- 23
	PRI	The encoding method uses Integer Values.	
	PRO	The encoding method uses Object Identifier. Precede with 'x' to remove capability.	
	RVQ	Remote Virtual Queuing	
RCLS	(EXT) INT	Route Class marked as external Route Class marked as internal Applies only to CAA, COT, CSA, DID, FEX, TIE, FGDT, or WATS trunks.	basic-10
REF	n...n	Reference loop around DN, range is 2 to 10 digits	basic-1
REP	1-15	Repetitions of recorded announcements	ran-1
REQ		Request	basic-1
	CHG	Change existing data block	
	END	Exit overlay program	
	OUT	Remove data block	
	LCHG	Print date and time that a trunk data block was last changed. The change can be the result of a NEW, OUT, or CHG command.	
	NEW	Add new data block to the system	

LD 16

Prompt	Response	Comment	Pack/Rel
RGFL	ic dc	Ring Failure threshold. Where: - ic = increment count = 1-(2)-31 - dc = decrement count = 1-(2)-31 RGFL specifies the percentage threshold for trunks which fail to produce the expected ringing and ground changes. See prompt ILLR for a description of ic and dc values. RGFL is not prompted for AID, CAM, CSA, RLM, RLR and TIE trunks The default for RAN and MUS trunks is 12 6.	basic-1
ROUT	0-127 0-511	Route number This range applies for all machines. This range applies for machines NT, RT, NT, STE and XT and for Options 21E, 51, 51C, 61, 61C, 71, 81 and 81C. In X11 Release 14 and later, route 31 is no longer reserved as a Private route but can be configured as one.	basic-1
RPA	(NO) YES	Radio Paging Route If this prompt is set to NO, the route is not allowed to be used for Radio Paging. Prompted with Radio Paging (RPA) package 187 and TKTP = TIE or COT.	rpa-20
RTN	0-511	Route Number for any configured ISA route With Release 23, RTN is the Route Number of the associated Call-By-Call master route. Prompted if TKTP = TIE.	pra-12
RTYP		Recording device for RAN trunks	ran-1
	AUD CAP CK2 CKM CON DGT	Audichron or Cook 212, required for XUT trunks Code-a-Phone Cook 201 or QAY1 Cook 201 Multichannel NT7M Digital Recorders (Release 15) 213300 and 213400 Digital Recorders (Release 15)	
	LVL	Level start/stop (X11 Release 19 Enhanced Universal Trunk cards)	
	MCON	Continuous mode, multichannel.	ranbrd- 23

Prompt	Response	Comment	Pack/Rel
	MLSS	Multi-channel Level Start/Stop. (Enhanced Universal Trunk cards) Maximum length of message = 608 seconds.	
	MLVL	Level start/stop, multichannel.	ran- 23
	MPUL	Pulse start/stop, multichannel.	
	PUL	These modes supports independent RAN trunks. Request the RAN broadcast package. Pulse start/stop (X11 Release 19 Enhanced Universal Trunk cards) The Enhanced Universal Trunk cards word with CAP, CK2, or AUD RAN interfaces. The Pulse and Level start/stop options are used in conjunction with the RAN interface selected. The maximum length of the message allowed by software depends on the X11 Release as follows: • AUD = 64 seconds in all Releases • CAP = 320 seconds in Release 14; 608 seconds in Release 15 • CK2 = 64 seconds in all Releases • CON = 608 seconds in Release 15 • DGT = 256 seconds in Release 15	

LD 16

Prompt	Response	Comment	Pack/Rel
RUCF	x y	Route Unit Conversion Factor Formula for Route Unit Conversion Factor is: $X \cdot 10^{(-Y)}$ Where: • x = 0-(1)-9999 • y = (0)-3 This results in a range of .001 to 9999. If the Central Office sends the call charge in AOC units (instead of AOC currency), RUCF is used to convert this charge into PPM format. Call Charge scenarios: 1. When call charge in sent in currency: Displayed charge = (Received charge/RURC) * RUCS 2. When call charge in sent in AOC units: Displayed charge = (Received charge * RUCF) * RUCS units RUCF is not prompted for Danish and Swedish EuroISDN.	isdn-15
RUCS	0-9999	Route Unit Cost RUCS may be used in Motel/Hotel type environments to calculate the margin the Meridian 1 administrator wants to make per unit. Call Charge scenarios: 1. When call charge in sent in currency: Displayed charge = (Received charge/RURC) * RUCS 2. When call charge in sent in AOC units: Displayed charge = (Received charge * RUCF) * RUCS units When REQ = NEW, RUCS defaults to the UCST value in CDB. RUCS is prompted when MR = PPM or XLD.	basic-10

Prompt	Response	Comment	Pack/Rel
RURC	x y	Route Unit Reference Cost Formula for Route Unit reference Cost is: $X * 10^{(-Y)}$ Where: • $x = 0 - 9999$ • $y = (0) - 3$ This gives a range from .001 to 9999. Call Charge scenarios: 1. When call charge is sent in currency: Displayed charge = (Received charge/RURC) * RUCS 2. When call charge is sent in AOC units: Displayed charge = (Received charge * RUCF) * RUCS units The default value for x is identical to the previously entered RUCS value.	basic-20
RVSD	ic dc	Reversed wired CO trunk threshold. Where: • ic = increment count = 1-(8)-31 • dc = decrement count = 1-(31) RVSD specifies the percentage threshold for CO trunks which have tip and ring or other trunk wiring problems. See prompt ILLR for a description of ic and dc values. Prompted for COT, FEX and WATS trunks.	basic-16
SAT	(NO) YES	Satellite used for trunk route via earth orbiting satellite This prompt has no relation to the trunk route function connecting a main PBX to a satellite PBX.	esn-1
SBN	(NO) YES	Do not send Billing Number on this route Send Billing Number on this route	basic-21
SCR	(NO) YES	Selective Carrier Restriction to restrict Equal Access calls New Flexible Code Restriction is enabled. NTOL and ITOL must both be ALLOW. Not prompted for Release 20 and later.	eqa-19

LD 16

Prompt	Response	Comment	Pack/Rel
SEIZ	ic dc	Seize failure threshold. Where: - ic = increment count = 1-(2)-31 - dc = decrement count = 1-(2)-31 SEIZ specifies the percentage threshold of trunks which request seizure but are not seized (either no response from the far end or response is too late). See prompt ILLR for a description of ic and dc values. The default for AID trunks is 2 1. The default for RAN and MUS trunks is 12 6.	basic-1
SGRP	(0)-999	Scheduled access restriction group Prompted with Scheduled Access Restrictions (SAR) package 162. Must have group defined in LD 88.	sar-20
SID	0-511	Service Identification for the route Used to poll switches for traffic, ACD or CDR reports. Allows NSF to be turned on or off. The service route ID must match the far end. In Release 17 there is no default. In Release 16 the range is 0-127 and the default is the route number. Prompted if NSF = YES and TKTP = TIE/WAT/FX/COT.	pra-15
SIDE	(NET) USR	Meridian SL-1 Node Type Network User SIDE defaults to NET if IFC = SL1. SIDE defaults to USR if IFC = 1TR6, NUME or D70. Prompted if IFC = SL-1.	basic-22
SIGL	BEL NT4 NT5	Signaling interface for CAMA trunks Bell method NT400 method NT500 method	cama-1

Prompt	Response	Comment	Pack/Rel
SIGO	(STD) ESN2 ESN3 ESN5 ETN EN19	Signaling arrangement Standard signaling arrangement Supports NCOS, TCOS and CCBQ call types Supports network call transfer, Satellite Link Control and all ESN2 call types. It does not support DTI calls. Either ESN2 or ESN3 is recommended for ISA. Supports DTI data calls plus all other types. Electronic TIE Network signaling arrangement ESN Transparent Data Networking data call. Allowed when TKTP = TIE for PRI and DTI trunks.	esn-19
SPCT	(IMM) DLY	Speech Path Cut-Through Immediate cut-through Delayed cut-through	basic-1
SPTO	(NO) YES	Super Trunk Option 7-10 digit outpulsing on ANI calls 3 digit outpulsing on ANI calls Response must be YES for outpulsing to begin after three digits.	cam-1
SRCH	(LIN) RRB	Linear Hunting Search method for outgoing trunk member. Start with the highest trunk number, used for 2-way trunks. Round Robin Hunting Search for outgoing trunk member. Start with next lower trunk than the one seized, used for outgoing trunks.	basic-1
SRPM	0-(15)-255	Service Parameter. Prompted if SRVC = WATB.	pra-16

LD 16

Prompt	Response	Comment	Pack/Rel
SRVC		Service type provisioned for AT&T ESS connections (where IFC = ESS#4 or ESS#5) Prompted if ISDN = YES and IFC = ESS4 or ESS 5. Prompted with Inter Exchange Carrier (IEC) package 149.	pra-12
	(NNSF)	No Network Specific Facility or NSF IE sent. NSF refers to the services provided on a Call-by-Call basis.	
	ACC	Accunet Data service	
	I800	International 800 service	
	IWAT	In-WATs service for AT&T interface	
	LDS	Long Distance Service	
	M800	MEGACOM 800 service	
	MEG	MEGACOM service	
	Q900	ATT&T Multiquest 900 service	
	SDN	Software Defined Network service	
	WATB	Wide Area Telephone Service Parameter Band for AT&T ESS#5	
	WATM	Wide Area Telephone Maximal service for AT&T ESS#5	
	(0) - 31	Release 23, Service provisioned for National ISDN PRI. Prompted if IFC is NI2. Decimal value of the service is entered here: 0 - No NSF IE (public network call) One service route for incoming public network call and multiple service routes for outgoing public network call. The service route number for incoming public call has to be specified in IPUB prompt in the master route. 17 - INWATS selection 18 - OUTWATS selection 19 - Foreign Exchange Selection 20 - Tie Trunk Selection AT&T defines services other than the one defined in the Bellecore CBC specification. These values (defined in the facility coding field in the NSF IE) can be entered here in order to allow M1 to recognize the AT&T proprietary service.	cbc_pkg- 23

Prompt	Response	Comment	Pack/Rel
SST	xx y	Seizure Supervision Timer Timer for trunks with delay dial or DDL, wink or WNK and ground or GRD start arrangements. Where: xx = minimum value. Therefore: • xx = 1-(3)-15 seconds for GRD start • xx = 5 seconds for DDL and WNK y = increment value of 0-7 seconds	basic-18
STEP	0-511	Alternate trunk route for outgoing trunks STEP cannot be defined for an ISA route. Route 31 is no longer an exclusively private route, unless configured as one in LD 16. Precede with X to delete with X11 Release 14 or later. Enter 31 to delete step entry with X11 Release 13 or earlier. For dataport, it is only possible to step to a similar ADM data route.	basic-1
STND	(YES) NO	Standard T100 test line (STND is 5.5 seconds and is followed by silent termination at the far end)	atm-7
STRK	(NO) YES	Super Trunk group feature	cam-1
STRT	IMM DDL	Start arrangement Immediately connect call to recording Delay call connection until start of recording	ran-1
STYP	(SDAT) STDN	Standard Signaling Type Standard Data signaling for voice and data (DM-DM, non-tandem PSDS). Standard Transparent Data Networking for voice and data and TDN calls. STDN is applicable to calls on DTI trunks only. This prompt appears when SIGO = STD.	tdn-19

LD 16

Prompt	Response	Comment	Pack/Rel
SVFL	ic dc	Supervision Failure. Where: - ic = increment count = 1-(2)-31 - dc = decrement count = 1-(2)-31 SVFL specifies the percentage threshold for trunks which fail to obtain supervision. See prompt ILLR for a description of ic and dc values. Prompted for only AID, CAM, CSA, RLM, RLR and TIE trunks. The default for AID trunks is 2 1.	basic-1
T100	n...n	T100 test line Directory Number, 2 to 10 digits	basic-1
TARG	1-15 1-31 0-(1)-31	Trunk Access Restriction Group range: Releases 1-13 Trunk Access Restriction Group range: Releases 14-21 Trunk Access Restriction Group range: Release 22 and later Enter the list of all TGAR in LD 10, LD 11 and LD 14 which have restricted access to this route. Multiple groups may be defined or deleted. To delete entries, enter Xnn. List all entries to be deleted (Xnn, Xnn, ...). Entries must be separated by a space.	basic-1
TBL	(0)-15	Prefix table number to be associated with this route	isdn-24
TCP		CPP flag for an incoming non-ISDN trunk call tandemed to this trunk route.	cpp-24
	YES	An incoming non-ISDN trunk call tandemed to this outgoing trunk route will carry the Privacy Indicator. I.e. outgoing call will be marked as a CPP call. TCP is prompted only if CPP = YES or if CPP package 301 is equipped and the trunk route has the ISDN option.	
	(NO)	An incoming non-ISDN trunk call tandemed to this trunk route will carry the Privacy Override Indicator. I.e. outgoing call will be marked as a CPPO call.	
TDET	(NO) YES	Tone Detector required	basic-1

Prompt	Response	Comment	Pack/Rel
TDG	x... x	Toll Digits. Where: x = 0-9 Actual digits after the trunk access code which indicate toll calls. Precede with X to remove. If all digits are removed, the digits revert to the North American toll scheme. Prompted when NATL = NO.	cdr-13
TFD	(0) - 3600	Timed forced disconnect for paging trunks (30 second increments). TFD must be defined individually for each route.	basic-15
TGAR	0-15 0-31 0-(1)-31	Trunk Group Access Restrictions: Release 1 to 12 Trunk Group Access Restrictions: Release 13 to 21 Trunk Group Access Restrictions: Release 22 and later Prompted if TKTP = TIE, ISAR = YES, and ISDN = YES.	basic-12
TIER	0-511	Tie Reference route number Determines how incoming TIE or private call types are handled for the associated Integrated Service Access route or ISA. Precede with X to delete. Prompted when TKTP = ISA, IFC = D100 or SL-1 and NSF = YES.	pra-12
TIMR	aaa xxx	Trunk Timers. Where: • aaa = timer mnemonic • xxx = timer value in milliseconds unless stated otherwise	basic-1
	AAD (384)-2048	Address Acknowledge Delay timer AAD is the minimum time for the system to delay before sending the address acknowledge signal to the central office. Inputs are in increments of 128 ms. Allowed only if Japan trunks and Meridian 1 packages are equipped.	jpn-9
	ATO 128-(4992)-6528	ANI Timeout timer in milliseconds.	ani-1

LD 16

Prompt	Response	Comment	Pack/Rel
	CRD 0-(512)-639	CO Release Delay timer.	basic-18
	DDL 0-(70)-511	Dial Delay timer	basic-1
	DSI 128-(34944)-499200	Disconnect Supervision timer	basic-1
	EESD 0-(1024)-4992	End to End Signalling Delay timer. The outpulsing DTMF tone using EES (or IEES) is delayed "EESD" ms after the sending of the first recall signal to the Norstar. If EESD = 0, the timer is not started and the buffered digits will not be outpulsed. The EESD timer is accepted if ACRL package 236 is equipped and if the route is analog TIE.	arcl-22
	EOD 128-(13952)-32640	End-of-Dial timer, non-digitone trunks For DID incoming calls in the U.S., to comply with FCC regulations, the EOD timer expires at 19,968 ms, even if configured otherwise. All other call types utilize the configured timer parameters. Refer to X11 features and services for complete details concerning the FCC Compliance feature.	basic-1

Prompt	Response	Comment	Pack/Rel
FLH 0-(510)-32640		Hook Flash timer (in msec.) The range for Centrex Switchhook flash timer is 256-(512)-1536. For CAS, it is recommended that the timer be set at 768 or greater. This timer must be at least 256 ms shorter than the remote OGF timer and 256 ms shorter than the ICF timer. • 60-89 ms = Digit 1 is sent • 90 ms = Hard coded for XFCOT hook flash • 91-255 ms = Digit 1 is sent • 256-1536 ms = Existing software controlled hook switch flash Range for Centrex Switchhook flash timer is 60-(510)-1536 msec (the value is rounded to the nearest 10 msec). Software controlled Centrex/Trunk Switch Flash timer range of 60- 127 msec is done by sending digit 1. The range of 128-1536 msec is already controlled by Centrex Switchhook Flash feature. Firmware flash user can enter any value from 60 to 1536. FWTM must be YES in LD 14 for the trunk associated with this route, if firmware timing is to be used.	thf-20
GRD 0-(896)-32640		Guard timer (response disallowed)	basic-1
ICF 0-(512)-32640		Incoming Flash timer	basic-1
LEXT 50-(100)-350		Loop Extender timer The minimum amount of time the Meridian 1 waits to determine whether the tip is ground. When the time is expired, the loop is closed to outpulsing. The time is in milliseconds.	tip-19

LD 16

Page 348 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	MAD 0-(500)-1000	Minimum Answer Delay timer The minimum amount of time the Meridian 1 remains On-Hook after the called party is first alerted. Inputs are in steps of 100 ms, numbers are rounded up to next valid entry. Allowed only if Japan trunks and Meridian 1 packages are equipped.	xujt-16
	NBL 128-(4096)-32640	Enblock Long dialing timer Long timeout period set to check if all digits have been entered.	basic-12
	NBS 128-(2048)-32640	Enblock Short dialing timer Short timeout period set to check if all digits have been entered.	basic-12
	NRAG (30)-240	Network Ring Again timer or DPNSS duration for T6 and T7 timers, in minutes. Currently, only 30 minutes is supported.	pra-13
	NRD 128-(10112)-32640	No Ringing Detector change	basic-1
	ODT 256-(4096)-16128	End-of-dial timer for DIGITONE trunks	basic-1
	OGF 0-(512)-32640	Outgoing Flash timer	basic-1
	RGV 128-(640)-1920	Ring Validation timer	basic-1
	RTD 0-(12)-60	Tone Detector Response Timer in seconds. An odd numbered entry is rounded up to the next even number.	ardl-22

Prompt	Response	Comment	Pack/Rel
	SFB 3-(3)-255	Seize Fail Busy timer This timer controls the time that a trunk is held busy following a seize acknowledge failure or call collision. The recommended value for trunks with seizure supervision is 25 seconds. The recommended value for trunks with no seizure supervision is 3 seconds. This value applies to all analog trunks except those which use the ARP timer.	
	TFD (0)-3600	Timed Forced Disconnect, in 30 second increments. TFD applies to CO, DIC, FEX, PAG, TIE and WATS routes.	basic-15
	VGD 0-(6)-31	VNS Guard timer The time allowed for the trunk call to disconnect in seconds. This is the guard timer on the associated VNS DN.	vns-20
	VSS (0)-1-2-1023	VNS Set Speechpath Timer. Where: • 0 = Do not answer the bearer channel until the terminating party answers • 1 = Answer the bearer channel immediately on arrival • 2-1023 = Answer the bearer channel after the specified seconds (rounded down to 2-second multiple) if the terminating party has not already answered.	vns-20
TITH	(0) - 300	Waiting Time Threshold (seconds). Prompted only if BDCT = YES and for Start/Stop RAN machine with STRT = DDL. Default value zero means no threshold applies.	ranbrd- 23 ran- 23
TKTP		Trunk Type You must respond to this prompt when REQ = NEW.	
	ADM	Add-on Data Module associated with a Data Interface Card i.e., DLC, 4PDLC, AILC	basic-5

LD 16

Page 350 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	AID	Automatic Incoming Outgoing Dial trunk.	aiod-5
	AWR	Automatic Wake Up trunk block for RAN/Music Requires Automatic Wake Up (AWU) package 102.	awu-10
	CAA	Common Control Switching Arrangement Automatic Number Identification data block Requires Automatic Number Identification (ANI) package 12.	basic-1
	CAM	Central Automatic Message Accounting trunk data block	basic-1
	CBCT	Call by call master route	cbc_pkg-23
	COT	Central Office Trunk data block Supported for ISDN BRI Trunk Access feature.	basic-1
	CSA	Common Control Switching Arrangement access line data block	basic-1
	DIC	Dictation trunk data block	basic-1
	DID	Direct Inward Dialing trunk data block Supported for ISDN BRI Trunk Access feature.	basic-1
	FEX	Foreign Exchange trunk data block	basic-1
	FGDT	Feature Group D trunk	fgd-17
	ISA	Integrated Service Access route or Call-by-Call route type For ISDN applications, only TIE or ISA Trunks can connect a SL-1 directly to another SL-1. Requires Call-by-Call service (CBC) package 117. Must have ISDN configured in LD 15 and LD 17.	isl-12
	MCU	Meridian Communications Unit port	basic-18
	MDM	Modem trunk data block for data port interfacing with QPC60 500/2500 type card	amp-5

Prompt	Response	Comment	Pack/Rel
	MUS	Music trunk data block Requires Music (MUS) package 44.	mus-1
	PAG	Paging trunk data block	basic-1
	R232	DAC for NT7D16 on RS-232 port	basic-18
	R422	DAC for NT7D16 on RS-422 port	basic-18
	RAN	Recorded Announcement trunk data block Requires Recorded Announcement (RAN) package 7.	ran-1
	RCD	Emergency Recorder trunk data block Requires Basic Automatic Call Distribution (BACD) package 40.	bacd-1
	RLM	Release Link Main trunk data block Requires Centralized Attendant Services (Main) (CASM) package 26.	casm-1
	RLR	Release Link Remote trunk data block Requires Centralized Attendant Services (Remote) (CASR) package 27.	casr-1
	TIE	TIE trunk data block Supported for ISDN BRI Trunk Access feature.	basic-1
	WAT	Wide Area Telephone Service trunk data block	basic-18
TOV		Data Timeout Value	basic-18
	(0)	No timeout	
	1	15 minutes	
	2	30 minutes	
	3	60 minutes	
		Prompted if TKTP = R232, R422 or MCU.	
TRAN	(ASYN) SYN	Asynchronous Transmission mode Synchronous Transmission mode If PSDS = YES, then TRAN must be SYN. Prompted if TKTP = MCU.	basic-18

LD 16

Page 352 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
TRMB	(YES)	Tromboning allowed. Incoming call on route may be routed directly back out on the same route.	tat-21
	NO	Tromboning denied. Incoming trunk call on route may not be routed directly back out on the same route.	
		Only applies to calls routed using NARS/BARS or CDP. Does not apply to calls redirected by HUNT, Forward All Calls, or Forward No Answer.	
TRMT	(NONE), FAIL, TEST, NPA	Numbering Plan Digit or Information Digit treatment FAIL = Interrupts the NPD/ID as an ANI failure TEST = Interrupts the call as a 911 test call (for 922T calls only) This prompt appears when the Meridian 911 (M911) package 224 is equipped.	m911-19
TRO	(NO) YES	Trunk Route Optimization Prompted if NCRD = YES and IFC = SL-1.	tro-16
TST	n...n	Test loop around DN, range is 2 to 10 digits	basic-1
TTA	(NO) YES	Time To Answer output in CDR	fcdr-18
TTBL	(0)-31	Tone Table number Table (0), North American default values, is created when the first customer is created. Refer to LD 56 for other tables.	ftc-13
TYPE	ATM	Route type Automatic Trunk Maintenance data block. Requires Automatic Trunk Maintenance (ATM) package 84.	atm-19
	NPID	Numbering Plan or Information Digit table. Requires Meridian 911 (M911) package 224.	
	RDB	Route Data Block.	
	SCH	ATM Schedule block. Requires Automatic Trunk Maintenance (ATM) package 84.	
V25	(NO) YES	V.25 bis option for synchronous operation Prompted if TKTP = MCU and TRAN = SYN.	basic-18
VRAT	(NO) YES	Answer an attendant extended call over VNS immediately on the incoming bearer trunk	vns-20

Prompt	Response	Comment	Pack/Rel
WAIT	(RGB)	Provide ringback for calls queueing for RAN trunk.	ranbrd- 23
	MUS	Provide music for calls queueing for RAN trunk. Prompted only for RAN route when RAN broadcast package is equipped.	ran- 23 mus- 23
WATR	0-511	Wide Area Telephone Service or WATS Reference route number Determines how incoming WATS call types are handled for the associated Integrated Service Access route or ISA. Precede with X to delete. Prompted when TKTP = ISA, IFC = D250 or SL-1 and NSF = YES. Release 14 and later.	pra-14
WDGT	(L) F	First or last 4 DNIS digits to be sent on APL and HSL link. WDGT has no effect on AML links. All DNIS digits will be sent for AML. Prompted if NDGT is greater than 4. Also used for CDR when the New Format CDR (FCDR) package 234 is disabled.	dnis-20

LD 16

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 17: Configuration Record 1

System configuration defines system hardware and software parameters. Overlay program 17 is used to modify the following parameters:

- passwords
- buffer sizes*
- number of CPU*
- voice or data loops*
- tone and digit loops*
- conference loops*
- memories*
- automatic maintenance routines
- teletypewriters and modem
- server configurations

* When modifying these parameters, the system must be initialized to effect the change. After initialization, load Overlay 17 and check the amount of unprotected memory before the data dump. When adding memory a SYSLOAD is required. See the Conversion Procedures for parallel reload.

When the Overlay is loaded the available system memory and disk records are output in a header as follows:

```
CFN000
MEM AVAIL: (U/P): xxxxxx  USED: xxxxx  TOT: xxxxxxxx
DISK RECS AVAIL: xxx
DCH AVAIL: XX  USED: XX  TOT: 64
AML AVAIL: XX  USED: XX  TOT: 16
```

Summary of changes for Release 18

Release 18 and later have the following changes made to LD 17.

- The new four-port Multi-purpose Serial Data Link or MSDL card can accommodate AML Application Module Links and/or D-channels.
- Application Module Link is a new term used in Release 18. AML is a general name for links using an ESDI port such as CSL and Meridian Link. These links can now use a port on an MSDL card.
- D-channels and AML ports are now addressed by logical port number instead of the physical address.
- The logical number is defined at the ADAN prompt ADAN NEW DCH 0-63 or ADAN NEW AML 0-15. The association to the device number or physical address is defined at the DNUM prompt.
- The MSDL card takes only one of the 16 I/O addresses. The MSDL device number 0-15 cannot conflict with an existing SDI, ESDI or DCHI address.
- With the MSDL, the system now supports up to 64 D-channels, 16 AML ports, or 16 SDI ports.
- The IOTB and ISDN prompt sequences have been replaced by a new ADAN prompt sequence. This is used to configure all I/O devices including D-channels.
- Incremental Software Management or ISM now controls the number of D-channels and AMLs. The system also outputs the available D-channels and AMLs as follows:

> LD 17

DCH AVAIL: 07 USED: 08 TOT: 15

AML AVAIL: 05 USED: 03 TOT: 8

REQ CHG

TYPE CFN

ADAN

- After adding or changing an I/O device via the ADAN prompt sequence, the data is saved before ADAN is reprompted. This allows you to exit LD 17 with ***** after I/O changes without having to carriage return through the remaining prompts. One of the following is output:

ADAN DATA SAVED
ADAN DATA CHGED
ADAN DATA OUTED
ADAN DATA MOVED

Note: The ADAN DCH MOVE command allows primary D-channels to move to a new card type (CTYP), device number (DNUM), and port designation (PORT) when adding MSDL cards. You do not need to remove any D-channels or B-channels when using this command with MSDL cards.

The MOVE capability does not apply to Application Module Links (AMLs). Move AMLs from ESDI cards to MSDL cards by adding a new AML with the VAS ID prompt (VSID), then remove the old AML.

- When adding a D-channel, the parameters defined for the primary D-channel are automatically copied to the backup D-channel. Changes to the D-channel pair should be made to the primary D-channel.
- When changing a D-channel, the existing parameters are printed before prompting you for the changes.
- DROL is updated to include Option 81 maintenance LDs 135 and 137 in the midnight routines.

Conversion notes for Release 18

When converting to Release 18 from an earlier release the existing I/O ports are affected as shown below:

- Existing AML CSL and DCH ports keep their device number and are given an equivalent logical number and a card type or CTYP of ESDI or DCHI. For example: CSL 9 becomes AML 9 with device number of 9 and CTYP of ESDI; DCH 13 becomes DCH 13 with device number of 13 and CTYP of DCHI.
- Asynchronous QPC513 ESDI ports are removed from the database. See SYS4464.
- ESDI ports on DCHI cards are converted to TTY ports with CTYP of DCHI.

- Normal SDI ports are assumed to be on an SDI2 card type. The card type will have to be updated manually for other SDI card types. This can only be done by removing and re-entering the port.
- D-channels on the NT6D11AB with even port numbers are converted with a card type of DCHI.
- Its a good idea to print a hard copy of the Configuration Record before making changes.

Summary of changes for Release 19

Release 19 and later includes following changes in LD 17. For complete discussions concerning system management, refer to *X11 system management applications* (553-3001-301)

- Alarm filtering provides the ability to specify the type of Meridian 1 and auxiliary processor messages output to system terminals. Message output includes the following categories: Critical, Major, Minor, and None. The following mnemonics can be entered at the TRIGGER prompt to specify the messages to be output.

ACD, ADD, AMH, AMLM, ATM, AUD, AUTH, BERR, BIC, BSD, BUG, CCED, CCR, CDM, CED, CIOD, CMON, CNF, CNI, CSA, CSC, DBMT, DCH, DLO, DSET, DTA, DTC, DTI, DTRK, EDD, ERR, ESDA, ESDI, HWI, IOD, ISR, LNK, MFR, MFS, MISP, MSDL, MWL, NPR, NWS, OSM, OVD, OVL, PCH, PMS, PRI, PWR, RPD, RPL, RPT, SCSi, SDL, TDS, TEMU, TFN, TRK, TSM, TTY, VAS, XCT, XMI

- System parameter gateways provide a more direct way to interface with selected system parameters. The following list shows the gateway responses that are accepted at the TYPE prompt with Release 19 and later.

ADAN, ALARM, ATRN, CEQU, CFN, OVLY, PARM, PWD, VAS.

- Option 81 System Message Lookup Utility provides an on-line look up method for any system message appearance. The system will be able to retrieve explanation and definition text for any Meridian 1 system message.

- Prompts are no longer limited to 4 characters. Some prompts appearing in X11 Release 19 and later will have more than 4 characters, and can better define their use. Underscores connect multiple words. For example, the prompt for the log in name is LOGIN_NAME.
- Release 19 introduces the ability to have several active users logged in simultaneously. The feature is enabled and disabled through this program. Refer to *X11 system management applications* (553-3001-301) for complete detail.
- Single Terminal Access (STA) is an application available on the MSDL card with X11 Release 19 and later. The STA application reduces the number of physical devices used to administer and maintain the Meridian 1 and its auxiliary processors. Refer to *X11 system management applications* (553-3001-301) for complete details.
- With Release 19 and later the maximum number of agents is not limited to 999. The number of agents allowed by the system is determined by the IDLB and IDUB prompts in LD 23.

Notes on ISDN Configuration

ISDN configuration may be changed by adding the primary D-channel followed by the optional backup D-channel. Be sure to observe the following:

- Primary and back-up D-channels must be on the same card type (DCHI or MSDL)
- Primary D-channel parameters are automatically copied to the back-up D-channel.
- Disable both ends of a D-channel before making any changes to the D-channel.
- Changes to the D-channel pair should be made to the primary D-channel first (except for BCHL and RCVP).
- The backup D-channel must be removed prior to removing the primary D-channel.

LD 17

- When a backup D-channel is configured for a primary D-channel, the USR of the primary can be changed from SHA to ISLD or PRI, but not from ISLD to PRI or SHA.
 - The ADAN DCH MOVE command allows the primary D-channels to move to a new logical number (NDCH), card type (CTYP), device number (DNUM), and port designation (PORT) when adding MSDL cards. You do not need to remove any D-channels or B-channels when using this command with MSDL cards.
-

Prompts and responses by Gate Opener

Configuration Record 1

Prompt	Response	Comment
REQ	CHG	Request
TYPE	CFN	Configuration Record
ADAN	aaa bbb x	Action Device And Number (aaa = NEW, CHG, MOV or OUT ; bbb = I/O device type ; x = port number) (see page 362)
PWD	(NO) YES	Change Password options (see page 366)
PARM	(NO) YES	Parameters for Interface and transmission mode (see page 368)
CEQU	(NO) YES	Change to Common Equipment (see page 371)
OVLY	(NO) YES	Overlay (see page 372)
VAS	(NO) YES	Value added server configuration (see page 373)
ATRN	(NO) YES	Change Transmission Parameters of MeridianModular / Aries Telephone (see page 374)
ALARM	(NO) YES	Change Alarm Filter (see page 375)

Note: This *Prompts and responses* table does not list prompts which appear under each gate opener. To find prompts which appear under a given gate opener, refer to the page listed in the *Comment* section of this table.

Gate Opener: ADAN (Action Device and Number)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	ADAN	Action Device And Number
- ADAN	aaa bbb x	Action Device And Number (aaa = NEW, CHG, MOV or OUT; bbb = I/O device type; x = port number)
- NUMD	1-(2)	Number of floppy disk drives
- FTYP	aa	Floppy Type (aa = (3), 3S, or 5)
- SIZE	(0)-65534	Size of History File buffer in characters
- PDCH	0-63	Primary D-channel associated with a backup D-channel
- TTY	0-15	Pre-defined MSDL-SDI terminal number
- CTYP	a...a	Card Type (CTYP responses can be found on page 390)
- GRP	0-4	Network group number (Option 81)
- DNUM	0-15	Device number for I/O ports
-	0	Administration Terminal Port number
ADMIN_PORT		
- LANGUAGE	ENGLISH	English Language supported on STA
- ADDITIONAL_PORT		
	aa	Additional Port for the Single Terminal Access (aa = P1, P2, or P3)
- PORT	0-15	Port number (range varies according to system option and card/port type)
- DES	d...d	Designator
- BPS	xxxxx	Bits Per Second
- PARY	aaaa	Parity type (aaaa = (NONE) ODD, or EVEN)
-STOP	(1)-1x5-2	Number of Stop bits (To configure value of 1.5, enter 1x5)
- BITL	x	Data Bit Length (aaa = (5), 6, 7, or 8)
- FLOW	(NO) YES	Flow Control
- -BCST	(NO) YES	Broadcast ports affected by Flow Control
- PARM	aaaa bbb	Parameters for Interface and transmission mode (aaaa = R232 or R422 ; bbb = DCE or DTE)
- FUNC	aaa	MSDL card function (aaa = ABC, FCL, MOD, LME, or SCN)
- USER	a...a	Output message types (USER responses begin on page 430)
- XSM	(NO) YES	Extended System Monitor

- TTYLOG	0-65534	Log buffer size
BANR	(YES) NO	Optional Security Banner option
- CUST	xx	Customer number associated with this function
- SSUP	(NO) YES	Senior Supervisor
- - APRT	(NO) YES	ACD Printer
- STOP	(1)-1x5-2	Number of Stop bits (to configure value of 1.5, enter 1x5)
- USR	aaaa	User (aaaa = ISLD, PRI, SHA, SHA, or VNS)
- IFC	a...a	Interface type for D-channel (IFC responses can be found on page 400)
- - PINX_CUST	0-99	This customer number will be used for the DN address translation associated with call independent connection messages received on this D-channel.
- - ISDN_MCNT	60-(300)-350	Layer 3 call control message count per 5 second time interval.
- - CNTY	aaaa	Country (CNTY responses can be found on page 388)
CLID	OPTx	Calling Line Identification (x= 0, 1, 2, 3, 4, or 5)
PROG	a..a	Progress signal (a..a = NCHG, MALE, or MCON)
CO_TYPE	aaa	Central Office switch type (aaa = (STD) or ATT)
- RCVP	(NO) YES	Recovery to Primary
- - ISLM	1-382	Integrated Services Signaling Link Maximum
- - VNSM	0-300	Virtual Network Services Maximum
- - VNSC	(0)-xx	Virtual Network Services Customer number associated with the D-channel
- - VNSP	0-32700	Virtual Network Services Private Network Identifier
- - VCNA	(NO) YES	Virtual Network Services Network Call Party Name Display available over this D-channel
- - VCRD	(NO) YES	Virtual Network Services Network Call Redirection available over this D-channel
- - VTRO	(NO) YES	Trunk Route Optimization before answer available over this D-channel for VNS
- - DCHL	0-159	D-Channel PRI loop number
- BCHL	0-159	PRI loop number for Backup D-channel
- PRI	loop x	Primary Rate Interface
- PRI2	0-159 2-15	Secondary PRI2 loops for nB + D, plus sequence
- OTBF	1-(32)-127	Output request Buffers
- DRAT	aaa	D-channel transmission Rate (aaa = (56K), 64KC, or 64KI)
- BPS	xxxxx	Bits Per Second

- PARM	aaaa bbb	Parameters for Interface and transmission mode (aaaa = R232 or R422 ; bbb = DCE or DTE)
- CLOK	aaa	Clock (aaa = EXT or INT)
- SIDE	aaa	Meridian 1 node type (aaa = (USR) or NET)
- SEMT	(1)-5	Number of Status Enquiry Messages sent within 128 ms from the network side
- CNEG	x	Channel Negotiation option (x = (1) or 2)
- RLS	xx	Release ID of the switch at the far end of the D-channel
- QCHID	(YES) NO	Map channel number to timeslots on a PRI2 loop
- RCAP	aaa	Remote Capabilities (RCAP options begin on page 418)
- PR_RTN	(NO) YES	Retain option supported by the far end PINX
- PR_TRIGS	aaa xx	Path Replacement Triggers
- MQC_FEAT	aaaa	MCDN QSIG Feature type
- NASA	(NO) YES	Network Attendant Service Allowed
- TIMR	(NO) YES	Change protocol timer value
- - T310	10-60	Timer used to determine how long SL-1 can wait for the response message when the QSIG outgoing call is in the U3 (outgoing call processing) state
- - INC_T306	0-(2)-240	Variable timer for received disconnect message on incoming calls, allowing in-band tone to be heard when sent by the network
- - OUT_T306	0-(30)-240	Variable timer for received disconnect message on outgoing calls, allowing in-band tone to be heard when sent by the network (entered in 2 second increments)
- LAPD	(NO) YES	Link Access Protocol for D-channel Change LAPD parameters
- - T23	1-(20)-31	Interface guard Timer or DCHI only
- - T200	2-(3)-40	Retransmission Timer
- - N200	1-(3)-8	Maximum Number of retransmissions
- - N201	4-(260)	Maximum Number of octets in information element
- - T203	2-(10)-40	Maximum Time allowed without frames being exchanged
- - K	1-(7)-32	Maximum number of outstanding unacknowledged frames
- IADR	0-(3)-255	Individual Address for the data link level HDLC protocol
- RADR	0-(1)-255	Remote Address for the data link level HDLC protocol
- LCTL	(NO) YES	Change Link Control system parameters
- - T1	2-(4)-20	Retransmission Timer. Range in units of 0.5 seconds, (4) = two seconds
- - T2	0-(10)-255	Maximum Time allowed without a frame being exchanged

-- T3	2-(5)-255	Timer for initial link setup in units of 0.5 seconds for ESDI only
-- N1	xxx	Maximum Number of octets per HDLC information frame (xxx = 32, 64, 128, or (512))
-- N2	4-(8)-16	Maximum Number of retransmissions in steps of 1
-- K	1-(7)	Maximum number of outstanding frames
- LTHR	(NO) YES	Link Threshold. Change link performance thresholds for ESDI only
-- RXMT	1-(5)-20	Retransmission Threshold
-- CRC	1-(10)-20	CRC threshold
-- ORUR	1-(5)-255	Overflow/Underruns out-of-service threshold
-- ABOR	1-(5)-255	Number of Aborts before an out-of-service
- DCHI	0-15	D-channel Interface port number
- PORT	0-15	Port number (range varies according to system option and card/port type)

Gate Opener: PWD (Password)

The PWD2 prompt appears immediately following the TYPE = PWD entry in Release 19, unless the LAPW password Multi User Login are enabled. To view LAPW prompts, LAPW package 149 must be equipped. LAPW users can change their passwords by entering the current password at prompt LPWD and entering the new password at the NLPW prompt.

Prompt	Response	Comment
REQ	CHG	Request
TYPE	PWD	Change Password options
- PWD2	x...x	Password 2
- LNAME_OPTION	(NO) YES	Require Log In Name for password access
- NPW1	x...x	New Password 1 (PWD1 Log In password)
- - LOGIN_NAME	aaa	Log In Name for password access
- NPW2	x...x	New Password 2 (PWD2)
- - LOGIN_NAME	aaa	Log In Name for password access
- LAPW	0-99	Limited Access to Overlays Password number
- PWTP	aaaa	Password Access Type (aaaa = (OVLY) or SBA)
- - PWnn	x...x	Password (you may enter new password for SBA)
- LOGIN_NAME	aaa	Log In Name for password access
- LEVL	aaaa	Access Level for Set Based Administration password (aaaa = (INST) or ADMN)
- - OVLA	xx xx ... xx	Overlays Allowed
- - CUST	aaa	Customer to be accessible by way of PWnn
- - TEN	aaa	Tenant to be accessible by way of PWnn
- - HOST	(NO) YES	Enable HOST mode Log In for password PWnn
- - MAT	(NO) YES	Enable MAT 5.0 Log In for password PWnn
- - - MAT_READ_ONLY	(NO) YES	Restrict MAT 5.0 write access for password PWnn
- - OPT	a...a	Options for password PWnn (OPT responses can be found on page 411)
- LPWD	x...x	Limited Access to Overlays log on password to be changed
- - NLPW	x...x	New Limited Access to Overlay Log On Password for the user
- FLTH	0-(3)-7	Failed Log In Threshold

- LOCK	0-(60)-270	Lockout time
- AUDT	(NO) YES	Audit Trail for password usage
- - SIZE	(50)-1500	Word Size of Audit Trail buffer
- INIT	(YES) NO	Initialize to reset locked-out ports

Gate Opener: PARM (System Parameters)

The following values should be set at the factory. However, it is recommended that these values be reviewed during initial system installation.

Prompt	Response	Comment
REQ	CHG	Request
TYPE	PARM	Change system parameters
- LPIB	96-5000	Low-Priority Input Buffers (range depends on system type)
- RCAP	aaa	Remote Capabilities (RCAP options begin on page 418)
- HPIB	16-5000	High-Priority Input Buffers (range depends on system type)
- 500B	16-5000	Output buffers for single line and digital telephones, and trunks (range depends on system type)
- SL1B	16-2048	SL-1 Buffers
- NCR	x...x	Number of Call Registers, range depends on system type
- MGCR	0- <i>NCR</i>	Maximum number of Call Registers used by AUX messaging
- CSQI	(20)-255	Maximum number of Call Registers for CSL input queues
- CSQO	(20)-255	Maximum number of Call Registers for CSL/AML output queues
- AXQI	(20)-255	Size of Auxiliary Input Queue
- AXQO	(20)-255	Size of Auxiliary Output Queue
- TRNS	aaaa	Selects which messages are going to be translated (aaaa = (NONE), HELP, or BOTH)
- NCPU	x	Number of CPUs (aaa = 1 or (2))
- CFWS	(NO) YES	Call Forward Saved on SYSLOAD
- PCML	aa	Pulse Code Modulation Companding Law (aa = (MU) or A)
- ALRM	(NO) YES	Minor Alarm displayed on attendant consoles
- ERRM	aaa	Error Messages (aaa = ERR, BUG, or AUD)
- DTRB	xxx	Digitone Burst time in ms (xxx = 50, 60, 70, or (100))
- TMRK	xxx	Length of cadence increments in ms (xxx = 96 or (128))
- FCDR	aaa	Format for Call Detail Recording (aaa = (OLD) or NEW)
- PCDR	(NO) YES	Priority to CDR
- TPO	(NO) YES	Traffic Period Option
- TSO	(NO) YES	Trunk Period Option
- CLID	(NO) YES	Calling Line ID in the CDR
- DUR5	(NO) YES	Duration 0.5

- MLDN	(NO) YES	Multiple Loop DN
- NDRG	(NO) YES	New Distinctive Ringing
- MARP	(YES) NO	Multiple Appearance Redirection Prime feature allowed
- FRPT	aaaa	(Deny) or allow Access to incoming calls by FRE station (aaaa = (NEFR) or OLFR)
- DCUS	0-5	Maximum number of ACD-ADS customers
- MSCL	0-8190	Maximum Speed Call Lists
- PMSI	(NO) YES	Modify Property Management Systems parameters
- - MANU	aaaa	PMS interface (aaaa = (PMS1), PMS2, or PMS3)
- - PMCR	a	Number of Call Registers used for PMSI (a = (x), y or 5)
- - PORT	0-15	Port number (range varies according to system option and card/port type)
- - XTMR	(0)-6	PMS acknowledgment time
- - XNUM	(1)-4	Number of retransmissions per message for PMSI
- - PMIN	(NO) YES	Minor alarm when the PMSI link is not responding
- - PTMR	(0)-31	Polling timer for PMSI
- NDIS	(20)-255	Number of Display messages for Background Terminal
- OCAC	(NO) YES	Support the Original Carrier Access Code format
- MTRO	aaa	Message Registration or Periodic Pulse Metering (aaa = (MR) or PPM)
- SBA_ADM_INS	0-(2)-63	Maximum Administrator and/or Installer Log Ins allowed at one time
- SBA_USER	0-(100)-500	Maximum User Log Ins allowed at one time
- BCAP	a...a	Bearer Capability (a...a = (SPEECH) or 3.1 KHZ)
- NORTEL_BRAND	(YES) NO	"NORTEL" Electronic Brandlining is displayed
IDLE_SET_DISPLAY	aaaa	Current customized text string "aaaa" is shown. This is for information only
- MODIFY	(NO) YES	Change Electronic Brandlining Terminal Text Broadcast Configuration
- PWD2	x...x	Password 2
- SUPPORTED_TEXT_ONLY	(YES) NO	Change customized text string by text string input
- - IDLE_DISP_STRING	aaaa	Enter customized text string by text string input

IDLE_SET_DISPLAY aaaa	This is infromation only. Displayed for confirmation with the following OK prompt
- OK (YES) NO	Confirm customized text string
- -IDLE_DISP_CHAR xx c/hh	Change customized text string character by character, where: xx = (01 to 24) c = one supported character hh = 2 hexadecimal digits representing a supported character
IDLE_SET_DISPLAY aaaa	IDLE_DISP_CHAR customized text string “aaaa” is shown. This is information only. Displayed for confirmation with the following OK prompt
- OK (YES) NO	Confirm customized text string

Gate Opener: CEQU (Common Equipment)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	CEQU	Change to Common Equipment parameters
- MPED	aa	Maximum Peripheral Equipment Density (aa = (SD), DD, 4D, or 8D)
- TERM	a...a	Single Density Terminal equipment loop or loops
- REMO	a...a	Single Density Remote Peripheral Equipment loop or loops
- TERD	a...a	Double Density Terminal equipment loop or loops
- REMD	a...a	Double Density Remote Peripheral Equipment loop or loops
- TERQ	a...a	Quadruple Density Terminal equipment loop or loops
- REMQ	a...a	Quadruple density Remote Peripheral Equipment loop or loops
- XCT	a...a	Extended Conference/TDS/MFS
- TDS	a...a	Tone and Digit Switch
- CONF	a...a	Conference loop
- MFSD	0, 2, 4...158	Multifrequency Sender loop
- - CODE	x xx xx xx	Code (CODE response is defined on page 388)
- DLOP	loop dd ff ...	Digital Trunk Interface Loop or Loops (l = loop number; dd = number of voice or data calls; ff = frame format)
- MODE	aaaa	Mode of operation (aaaa = LINK, PRI, or TRK)
- - LCMT	aaa	Line Coding Method (aaa = (B8S) or AMI)
- - YALM	aaa	Yellow Alarm Method (aaa = (FDL) or DG2)
- - TRSH	0-15	Threshold
- - DTIC	0, 4, 8,...156	Starting network loop slot for PRI/DTI card
- PRI2	0-159	2.0 Mb/s Primary Rate Interface or PRI loop number
- DTI2	0-159	2.0 Mb/s Digital Trunk Interface or DTI loop number
- JDMI	0-159	Japan Digital Multiplexer Interface loop number
- MCFN	x x x x x x	Number and size of SIMMs in Options 51C/61C/81/81C
- EXT0	x aaa bbb	Extenders for CPU 0 to Network (EXT0 ranges are defined on page 395)
- EXT1	x aaa bbb	Extenders for CPU 1 to Network (EXT1 ranges are defined on page 395)
- - SBE	(NO) YES	Segmented Bus Extender is equipped on SL-1MS, SL-1S
- MTYP	x...x	Memory Type (MTYP responses begin on page 407)

- MEM	0-6	Memory modules
- CNI	s p g	Core to Network Interface card location (s = slot = 8-12 ; p = port = 0-1 ; g = group = 0-4)
- SMEM	(NO) YES	Short Memory test
- PFTR	YES NO	Prioritize Fast Transfer feature enabled or disabled
- BATT	(NO) YES	Battery backup for memory installed on Option 21E and STE only

Gate Opener: OVLY (Overlay)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	OVLY	Change Overlay area options
- SID	xxxx	System ID number
- BKGD	xx xx	Background Overlay task
- PBXH	00-23	Hour to perform Message Waiting lamp maintenance
- TODR	0-23	Time of Daily Routines
- DROL	xx xx	Daily Routine Overlays
- CACH	(0) 2-32	Number of overlay programs in cache buffers
- PRTY	xx xx ... xx	Priority overlay programs to be stored in cache memory
- MULTI_USER	(OFF) ON	Multi-User Log In

Gate Opener: VAS (Value Added Server)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	VAS	Value Added Server configuration
VAS	aaa	Value Added Server data block (aaa = NEW, CHG or OUT)
- VSID	0-15	VAS Identifier
- ELAN	xx	Application Module Link (AML) over Ethernet Associate Value Added Server ID (VSID) with Application Module Link over Ethernet (ELAN) xx. Where xx = 16-31.
- AML	0-15	Application Module Link
-- SECU	(NO) YES	Security for Meridian Link applications
-- INTL	1-12	Interval for checking Meridian Link for overload in five second increments
-- MCNT	5-100000	Threshold for number of Meridian Link messages per time interval
-- CONF	aaa	CSL Configuration (aaa = DIR or IND)
- APPL	aaa VMBA	Application (aaa = NEW, CHG, or OUT; VMBA = Voice Mailbox administration)
-- CUST	xx	Customer number
-- DATA_CORRECT	(OFF) ON	Enable Voice Mailbox Database correction
-- AUTO_AUDIT	(ON) OFF	Enable the Automatic Voice Mailbox database audit
-- SATN	l s c u	SADM/Data Line Card TN
-- IDLP	0-158	DTI loop number used for IND CSL loop
- DLOP	loop dd ff ...	Digital Trunk Interface Loop or Loops (l = loop number ; dd = number of voice or data calls ; ff = frame format)
- CMS	0-15	ESDI port number used for the CSL
-- SECU	(NO) YES	Security for Meridian Link applications
-- INTL	1-12	Interval
-- MCNT	5-100000	Message Count Threshold
-- CONF	aaa	CSL Configuration (aaa = DIR or IND)
-- SATN	l s c u	SADM/Data Line Card TN
-- IDLP	0-158	IND DTI Loop

Gate Opener: ATRN (Aries Transmission)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	ATRN	Aries Transmission
- CODE	(0)-2	CODEC Coding Law
- SOLR	0-(1)-4	Sidetone Objective Loudness Rating
- ROLR	(0)-63	Receive Objective Loudness Rating
- AOLR	(0)-12 32-50	2216 ACD set Objective Loudness Rating
- TOLR	(0)-63	Transmit Objective Loudness Rating
- AGCD	(NO) YES	Automatic Gain Control Disabled
- VOLR	(NO) YES	Volume Reset
- HRLR	(0)-8, 32-40	Handsfree Receive Objective Loudness Rating
- HTLR	(0)-11, 32-54	Handsfree Transmit Objective Loudness Rating

Gate Opener: ALARM (Alarm filters)

Prompt	Response	Comment
REQ	CHG	Request
TYPE	ALARM	Change Alarm Filters
- FMT_OUTPUT	(OFF) ON	Enable/(disable) formatting for the alarm/exception output
- AF_STATUS	(OFF) ON	Alarm and Exception filtering
- A_FILTER	aaa	Alarm Filter entry (aaa = NEW, CHG, or OUT)
- TRIGGER	a...a	Trigger string for alarm tables
- SEVERITY	aaaa	Alarm Severity (aaaa = (NONE), CRITICAL, MAJOR, or MINOR)
- SUPPRESS	0-(5)-127	Alarm occurrence threshold (prior to suppressing)
- ESCALATE	0-(2)-127	Alarm occurrence threshold (prior to escalating)
- A_FILTER	<cr>	Enter carriage return at this prompt to see E_FILTER prompt)
- E_FILTER	aaa	Exception Filter entry (aaa = NEW, CHG, or OUT)
- TRIGGER	a...a	Trigger string for exception tables
- ADAN	aaa bbb x	Action Device And Number (aaa = NEW, CHG, MOV or OUT ; bbb = I/O device type ; x = port number)
- USER	FIL	Alarm filtering message output

ROLR / TOLR/ AOLR Offsets and Values

Offset	ROLR/AOLR	TOLR	Offset	ROLR/AOLR	TOLR
0	+45.00	-45.00	32	+45.00	-45.00
1	+45.85	-44.50	33	+44.15	-45.50
2	+46.70	-44.50	34	+43.30	-46.00
3	+47.55	-44.00	35	+42.45	-46.00
4	+48.40	-43.50	36	+41.60	-46.50
5	+49.25	-43.00	37	+40.75	-47.00
6	+50.10	-43.00	38	+39.90	-47.50
7	+50.95	-42.50	39	+39.05	-47.50
8	+51.80	-42.00	40	+38.20	-48.00
9	+52.65	-41.50	41	+37.35	-48.50
10	+53.50	-41.50	42	+36.50	-49.00
11	+54.35	-41.00	43	+35.65	-49.00
12	+55.20	-40.50	44	+34.80	-49.50
13	N.A.	-40.00	45	+33.95	-50.00
14	N.A.	-40.00	46	+33.10	-50.50
15	N.A.	-39.50	47	+32.25	-50.50
16	N.A.	-39.50	48	+31.40	-51.00
17	N.A.	-38.50	49	+30.55	-51.50
18	N.A.	-38.50	50	+29.70	-52.00
19	N.A.	-38.00	51	N.A.	-52.00
20	N.A.	-38.00	52	N.A.	-52.50
21	N.A.	-37.00	53	N.A.	-53.00
22	N.A.	-37.00	54	N.A.	-53.50
23	N.A.	-36.50	55	N.A.	-54.00
24	N.A.	-36.00	56	N.A.	-54.00
25	N.A.	-35.50	57	N.A.	-54.50
26	N.A.	-35.50	58	N.A.	-55.00
27	N.A.	-35.00	59	N.A.	-55.00
28	N.A.	-34.50	60	N.A.	-55.50
29	N.A.	-34.00	61	N.A.	-56.00
30	N.A.	-34.00	62	N.A.	-56.50
31	N.A.	-33.50	63	N.A.	-56.50

Note: ROLR values are for reset volume.

HRLR / HTLR Offsets and Values

Please refer to note on next page when making changes to HRLR/HTLR offset and values.

Offset	HRLR	HTLR	Offset	HRLR	HTLR
0	+42.00	-44.00	32	+42.00	-44.00
1	+42.85	-43.50	33	+41.15	-44.50
2	+43.70	-43.50	34	+40.30	-45.00
3	+44.55	-43.00	35	+39.45	-45.00
4	+45.40	-42.50	36	+38.60	-45.50
5	+46.25	-42.00	37	+37.75	-46.00
6	+47.10	-42.00	38	+36.90	-46.50
7	+47.95	-41.50	39	+36.05	-46.50
8	+48.80	-41.00	40	+35.20	-47.00
9	N.A.	-40.50	41	N.A.	-47.50
10	N.A.	-40.50	42	N.A.	-48.00
11	N.A.	-40.00	43	N.A.	-48.00
12	N.A.	N.A.	44	N.A.	-48.50
13	N.A.	N.A.	45	N.A.	-49.00
14	N.A.	N.A.	46	N.A.	-49.50
15	N.A.	N.A.	47	N.A.	-49.50
16	N.A.	N.A.	48	N.A.	-50.00
17	N.A.	N.A.	49	N.A.	-50.50
18	N.A.	N.A.	50	N.A.	-51.00
19	N.A.	N.A.	51	N.A.	-51.00
20	N.A.	N.A.	52	N.A.	-51.50
21	N.A.	N.A.	53	N.A.	-52.00
22	N.A.	N.A.	54	N.A.	-52.50
23	N.A.	N.A.	55	N.A.	N.A.
24	N.A.	N.A.	56	N.A.	N.A.
25	N.A.	N.A.	57	N.A.	N.A.
26	N.A.	N.A.	58	N.A.	N.A.
27	N.A.	N.A.	59	N.A.	N.A.
28	N.A.	N.A.	60	N.A.	N.A.
29	N.A.	N.A.	61	N.A.	N.A.
30	N.A.	N.A.	62	N.A.	N.A.
31	N.A.	N.A.	63	N.A.	N.A.

Note: All values are OLR ratings measured without inserted loss/gain for trunk card interfaces and computed per IEEE methods. Receive ratings are at a maximum volume. Transmit ratings are measured in an anechoic environment with less than 25 dBA room noise.

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
500B		Output buffers for single line and digital telephones, and trunks	basic-19
	16-5000	Range for Options 21, 51, 61, 71 and 81 (Release 18 & 19)	
	16-2048	Range for all machines (Release 20 and later)	
		Buffers for single line telephones, trunks and Digital telephones	
		Refer to the <i>Memory Calculations Appendix</i> in the <i>Planning and engineering</i> NTPs.	
ABOR	1-(5)-255	Number of abortions before an out-of-service. Enter in units of 1, the number of abortions in 15 minutes before an out-of-service is enforced.	csi-7
ADAN		Action Device And Number	basic-19
	NEW aaa x	Add I/O device. Where: aaa = type, x = port	
	CHG aaa x	Change I/O device. Where: aaa = type, x = port	
	MOV aaa x	Move I/O device. Where: aaa = type, x = port	
	OUT aaa x	Remove I/O device. Where: aaa = type, x = port	
		Where, aaa and x can be any of the following:	
		1. AML 0-15 = Application Module Link	
		2. BDCH 0-63 = Backup primary D-channel	
		3. DCH 0-63 = primary D-channel (Release 18 and later)	
		4. FDK 0 = Floppy Disk unit, only ADAN CHG HDK allowed (not applicable for Option 81)	
		5. ELAN 16-31= Application Module Link over Ethernet	

LD 17

Prompt	Response	Comment	Pack/Rel
		6. HDK 0 = Hard Disk unit, only ADAN CHG HDK allowed (not applicable for Option 81) 7. HST = History file 8. PRT 0-15 = Printer port number 9. STA 0-15 = Single Terminal Access port number 10. TRF = Traffic Log file (Release 19 and later) 11. TTY 0-15 = Teletype port number	
		Note: You cannot configure more than 16 TTY and HST files. If a HST file is one of 16 TTY files configured and a new TTY is defined, the HST file will be deleted since the TTY has higher priority than HST.	
		The MOV command is not supported for AML, BDCH, HST, PRT, or TTY. MOV is supported for MSDL D-channels only. When using the MOV command, the D-channel must be disabled, as well as all associated PRI and DCH loops. This command is not allowed for a D-channel with a backup D-channel configured, and a backup D-channel cannot be moved to another physical address. MOV supports D-channels in PRI user mode only. It cannot be used if in shared or ISL mode. If the craftsperson attempts to move a configured D channel from the MSDL card to the DCHI card when the D channel interface is based on UIPE, the move will not be allowed.	
		The D channel must be disabled before it can be outed, changed or moved. OUT is not allowed on device 0.	
		Changes to I/O devices are saved before ADAN is reprompted. To indicate the data has been saved, one of the following is output: • ADAN DATA SAVED • ADAN DATA CHGED • ADAN DATA REMOVED • ADAN DATA MOVED	
		Entering 4 asterisks (****) after the ADAN prompt saves the changes and exits the overlay.	

Prompt	Response	Comment	Pack/Rel
ADDITIONAL_PORT	P1 P2 P3	Additional port number for STA terminal This is the port for the Single Terminal Access regular terminal, or the STA system monitor connection. This prompt repeats until <CR> is entered. There can be up to 3 ports for each STA application. Precede with X to delete the port.	sta-19
ADMIN_PORT	0	This is the port used to connect the Single Terminal Access Administration Port. This must be 0 (zero). Prompted if ADAN = STA	sta-19
AF_STATUS	(OFF) ON	This prompt enables (disables) the alarm and exception filtering. <CR> retains the current filtering status	alarm-19
AGCD	(NO) YES	Automatic Gain Control Disabled	
ALARM	(NO) YES	Change Alarm filters Must have Alarm Filtering (ALRM_FILTER) package 243.	alarm-19
ALRM	(NO) YES	Minor Alarm displayed on attendant consoles. (NO) disables the minor alarm on consoles.	alarm-12
AML	0-15	Application Module Link	msdl-18
AOLR	(0)-12 32-50	2216 ACD set Objective Loudness Rating The default value for the AOLR prompt will be the same default value as for ROLR prompt. See "ROLR / TOLR/ AOLR Offsets and Values" on page 376 to determine the decibel level which corresponds to your response to AOLR.	basic-22
APPL	NEW VMBA CHG VMBA OUT VMBA	Application Add Voice Mailbox Change Voice Mailbox Remove Voice Mailbox This prompt allows the user to add, change, or remove an application associated with the VAS ID. The APPL prompt appears when VAS = NEW or CHG.	vmba-19

LD 17

Prompt	Response	Comment	Pack/Rel
APPL	ISAP	User application type: Meridian Link ISDN/AP	iap3p-13
APRT	(NO) YES	ACD printer APRT cannot be YES if prompt SSUP = YES.	acdc-1
ATRN	(NO) YES	Aries Transmission Change Transmission parameters for Meridian Modular or Aries telephones These transmission parameters are downloaded to Meridian Modular telephones: • after sysload (except during parallel reload) • when enabling the loop, shelf or card • when the telephone is plugged in. These values determine the loudness of the receiver and transmitter. Before changing these values, refer to the <i>Summary of Transmission Parameters</i> NTP and the <i>International Loss and Level Plan</i> planning and engineering NTP.	arie-14
AUDT	(NO) YES	Audit Trail for password usage Prompted for PWD1 and PWD2.	lapw-16
AUTO_AUDIT		Automatic Voice Mailbox database correction	vmba-19
	(ON) OFF	When enabled, the Voice Mailbox data is audited every 5 days to ensure consistency between the Meridian Mail and Meridian 1 databases. The audit takes place during the daily routines every 5 days.	
AXQI	(20)-255	Size of Auxiliary Input Queue Maximum lesser of 25% of the maximum number of call registers defined for the system, or 255.	basic-1
AXQO	(20)-255	Size of Auxiliary Output Queue Maximum lesser of 25% of the maximum number of call registers defined for the system, or 255.	basic-1

Prompt	Response	Comment	Pack/Rel
BANR		Optional Security Banner option. BANR is prompted when USER = SCH and/or MTC.	basic-22
	(YES) NO	Enable security banner printing option Disable security banner printing option If BANR = YES, the following Security Banner will be printed at the time a login is attempted, whether or not the login is successful: <i>"Warning: The programs and data stored on this system are licensed to or are the property of NT/BNR and are lawfully available only to authorized users for approved purposes. Unauthorized access to any program or data on this system is not permitted. This system may be monitored at any time for operational reasons. Therefore, if you are not an authorized user, DO NOT ATTEMPT TO LOG IN."</i> The programmer will not modify an existing I/O block by hitting carriage return (<cr>) in response to BANR.	
BCAP		Bearer Capability	euroisdn-2 2
	(SPEECH) 3.1 KHZ	Speech 3.1 KHZ	
BCHI	1-15	Backup D-channel port number. Precede with "X" to remove.	pri-12
BCHL	0-159 0-159 1-126	PRI loop number for Backup D-channel. Prompted when ADAN = BDCH. PRI loop number and interface identifier for DCHI when IFC = D70. Precede with X to remove.	pri-12

LD 17

Prompt	Response	Comment	Pack/Rel
BCST	(NO) YES	Only this broadcast port is affected by flow control All broadcast ports of the same user type are affected by flow control. Use this prompt with caution. For example, if BCST = YES, and a maintenance port receives an X-off command, system output to all maintenance ports will eventually be blocked. This prompt appears only if FLOW = YES. BCST is not prompted for TTY_TYPE = LSL.	basic-18
BITL	(5), 6, 7, 8	Bit length. Prompted for asynchronous ESDI ports.	cls-7
BKGD	30, 33, 34, 35, 36, 37, 38, 40, 41, 43, 44, 45, 46, 53	Background overlay task Enter the diagnostic program number 30, 33 and so on, to run in background when the overlay area is idle. With Release 12, the customer may configure more than one overlay to be run in background. These overlays will run sequentially, one after the other. The data dump routine LD 43 should be reserved for the DROL to preserve data integrity.	basic-1
BPS	1200 2400 4800 9600 19200 48000 56000 64000	Asynchronous baud rates (bits per second): 1200 Bits Per Second 2400 Bits Per Second 4800 Bits Per Second. Default for AML ports. 9600 Bits Per Second. Default for Option 81 CP card. 19200 Bits Per Second 48000 Bits Per Second 56000 Bits Per Second 64000 Bits Per Second. Default for ISL D-channels. If the baud rate is set differently (e.g., 4800) the system will return to the default TEMPORARILY if it is manually initialized. The entered baud rate will return when the initialization is complete.	cls-7

Prompt	Response	Comment	Pack/Rel
CACH	(0) 2-32	Cache CACH = the number of overlay programs in cache buffers. Up to 32 overlays can reside in system memory. This reduces the overlay loading time to about one second. The first time an overlay is requested by the LD xx command it is loaded from disk and placed in the cache memory. If cache area is full, the oldest used non-priority overlay in cache memory is replaced by the new overlay. In the event of data corruption to the overlay or cache memory, the problem can be corrected by a forced reload of the overlay from disk by the command "LD xx D". The DIST/ENLT cannot be used to force a reload of the current overlay. If a SYSLOAD of a new issue of software reduces the available memory, the number of cache buffers is reduced. When this occurs an OVL407 message is output. If this results in too many priority overlays, the highest number priority overlays are removed. Background or daily routine overlays are not stored in cache. If CACH = 0, all overlays are loaded from disk. CACH is not prompted for Options 11C, 51C, 61C, 81 and 81C.	basic-18
CDNO	0-15	Serial Data Interface (SDI) Card number Number the SDI cards logically with the system. Keep a paper record of the number and physical location of each SDI card. Enter 0 if you are not using CDNO to keep track of SDI ports and cards.	xpe-15
CEQU	(NO) YES	Change to Common Equipment parameters	basic-1
CFWS	(NO) YES	Call Forward Saved on SYSLOAD and reactivate on completion. To save information, set CFWS = YES.	basic-20

LD 17

Prompt	Response	Comment	Pack/Rel
CLID	(NO) YES	Calling Line ID in the CDR If CLID = NO, "XXXXXXXXXXXX" will be printed in CLID field of CDR record. Prompted when CDR = YES and the Integrated Services Digital Network (ISDN) package 145 is equipped.	pri-12
	OPT0	Prefix = 0 for North American dialing plan. OPT0 is the default for ESIG and ISIG interfaces.	euroisdn-2
	OPT1	Prefix = 1 for international PFXs in CLID. Any numbering type is supported. OPT1 is the default for all EuroISDN interfaces.	
	OPT2	Prefix = 2, for international PFXs in CLID. CCITT numbering types supported are: UKWN, INTL, NPA, and NXX. OP2 is the default for CO/DID routes for the Telecom New Zealand interface.	
	OPT3	Prefix = 3 for international PFXs in CLID. Only the NXX number type is supported. OPT3 is the default for TIE routes for the Telecom New Zealand interface.	
	OPT4	For international COs, if the call originates from a CO trunk type, add nothing. Otherwise, add PFX1 and PFX2. OPT4 is the default for the Hong Kong, Singapore, and Thailand interfaces.	
	OPT5	This is the same as OPT4, except it supports a maximum of 10 digits in the CLID. OPT5 is the default for the Austrian interface.	
CLOK		Source of primary clock is either internal or external. Prompted for ISL D-channels and ESDI synchronous ports. Other D-channels are automatically set to EXT.	pri-12
	EXT	External Clocking. When USR = ISLD, CLOK should be set to External. Default for ISL D-channels is EXT.	

Prompt	Response	Comment	Pack/Rel
	INT	Internal Clocking. INT is used only during D-channel loopback tests, where one side is set to INT, the other is set to EXT. Default for ESDI AML ports is INT.	
CMS	0-15	ESDI port number used for the CSL Synchronous ESDI port number used for the CSL. This must be the same value as the port number defined at the ADAN prompt. Precede with X to remove. Prompted when SYNC and USER = CMS.	cls-7
CNEG	(1) 2	Channel Negotiation option Channel is indicated and no alternative acceptable, exclusive. Channel is indicated and any alternative acceptable, preferred. CNEG is prompted when IFC = AXEA, AXES, D70, NUME, SS12, ESIG, ISEG or TCNZ.	ipra-15
CNI	s p g	Core to Network Interface card location. To OUT a CNI card, it must be hardware disabled and located in the inactive CPU. For Option 81: s = slot 8-12; p = port 0-1; g = group 0-4 If only one CNI card is equipped, only one network group is supported because one CNI card must be installed in slot 8 in the Core Module and because Port 0 must be configured as "group 5." Only Port 1 can support a network switching group. To support two network groups, two CNI cards are required. To support three network groups, only two CNI cards are required because one port is available in slot 8 and two ports remain available on the second CNI card. For Option 81C: s = slot 12-14; p = port 0-1; g = group 0-4 Both ports (0 and 1) can be used to configure network switching groups for card slot 12. No CNI cables are required for port 0 of card slot 12.	basic-21

LD 17

Prompt	Response	Comment	Pack/Rel
CNTY	(ETSI) NET	Country ETS 300 =102 basic protocol ETSI network side protocol	supp-10
CODE	x xx xx xx	Code, prompted when DTD = TDS. A valid Hex Code for access to a flexible TDS table for a test tone, used to check a Dial Tone Detector or DTD. This code only applies when the tone generator is a TDS. If an XCT is used to generate the test tone the value in CODE will be ignored and the XCT will generate the dialtone specified in the FCT Table number 0 in LD 56.	basic-14
CODE	(0) 1 2	CODEC Coding Law Mu or μ -Law for North America. This parameter is only used by the Meridian digital sets as part of the transmission parameters. A Law, inverted for Sweden only A Law, even-bit interleaved	basic-14
CONF	DIR IND	Direct link CSL Configuration Indirect link CSL Configuration	basic-1
CONF	0-158	Conference loop Use even-numbered loops for Conference. You may configure more than 16 Conference loops; however, enabling more than 16 Conference loops may cause the system to lock-up. Precede with X to remove.	
	D0-D158 S0-S158	Dealer Conference loop Spare dealer Conference loop Should be in the same group as the units planned to use this loop.	ohol-20 ohol-20
CO_TYPE	(STD) ATT	Central Office switch type. Prompted if IFC = NI2. 100% compatible with Bellcore standard AT&T 5ESS	ni2-21

Prompt	Response	Comment	Pack/Rel
CRC	1-(10)-20	CRC threshold. Enter in units of 5 per cent. CRC establishes the % of Cyclic Redundancy Code (CRC) errors detected in 15 minutes before an out-of-service threshold is enforced. $CRC = (\# \text{ of packets retransmitted}) \div (\text{total } \# \text{ packets sent})$.	cls-7
CSQI	(20)-255	Maximum number of call registers for CSL input queues These call registers are used for Command and Status Link applications such as Meridian Link. Set CSQI and CSQO equal to the larger number of either: 1. ACD agents or AST sets to be controlled by the host computer, or 2. 50. Do not set CSQI and CSQO to a number exceeding 25 percent of the total number of call registers.	cls-7
CSQO	(20)-255	Maximum number of call registers for CSL/AML output queues These call registers are used for Command and Status Link applications such as Meridian Link. Set CSQI and CSQO equal to the larger number of either: 1. ACD agents or AST sets to be controlled by the host computer, or 2. 50. Do not set CSQI and CSQO to a number exceeding 25 percent of the total number of call registers.	cls-7

LD 17

Prompt	Response	Comment	Pack/Rel
CTYP		Card Type (Input/output port card type)	msdl-18
	CPSI	Call Processor card (Option 81)	
	DCHI	D-channel Interface card	
	ESDI	Enhanced Serial Data Interface	
	ELAN	AML over Ethernet card	
	MSDL	Multi-purpose Serial Data Link	
	MSPS	Misc./SDI/Peripheral Signaling card	
	PTY	Pseudo TTY (Option 81)	
	SDI	Single port SDI card	
	SDI2	Dual-port SDI card	
	SDI4	Four port SDI card	
	XSDI	SDI paddle board	
		Note: CTYP may printout as being set as QSDI from previous software, but CTYP must be set to SDI4 when configuring data.	
CUST	0-99	Customer number associated with this function (as defined in LD15)	lapw-16
	xxx	Customer to be accessible by way of PWnn. Enter the customer (0-99) and the associated Tenant numbers (entered at the TEN prompt) to have access with PWnn to overlays specified at prompt OVLA.	
	ALL	All customers and associated tenants have access with this password.	
	<cr>	No change to previous definitions. Precede with X to remove.	
DATA_CORRECT (OFF) ON		Voice Mailbox Database Correction In enabled state, the Meridian Mail database is updated to match the Meridian 1 database when the database audit discovers a discrepancy.	vmba-19

Prompt	Response	Comment	Pack/Rel
DCHI	0-15	D-channel Interface port number When adding a D-channel the MEM AVAIL data is output after this prompt indicating the channel has been added. You can therefore abort the program and save the changes without going to the REQ prompt. Precede with X to remove.	pri-12
DCHL	0-159	PRI loop number	pri-12
	0-159 1-126	PRI loop number and interface identifier for the DCH when IFC = D70.	
	0-159 2-15	PRI loop number and interface identifier for all other interfaces One DCH can support up to 16 PRIs, except for D70 (9 PRIs). Precede with X to remove.	
DCUS	0-5	Maximum number of ACD-ADS customers	acdd-1
DDCS	0-159	Loop number for NT DPNSS/DASS hardware Precede with X to remove.	dpnss-16
DENS	SDEN DDEN 4DEN	Single ports on SDI card Double ports on SDI card Quad ports on SDI card	basic-15
DES	d...d	Designator (AML port designation) DES is used to identify the link and can be up to 16 alphanumeric characters: 0-9, and upper case (A-Z). Characters * and # are not allowed. Spaces are removed by the system. For example "MERIDIAN MAIL" becomes "MERIDIANMAIL". Use the underscore character instead, such as MERIDIAN_MAIL DES can be left blank or changed as required. If DES is already defined for a link, the system outputs the current name and reprompts DES. Precede the existing DES with X to remove. Example: "XMERIDIAN_MAIL".	msdl-18

LD 17

Prompt	Response	Comment	Pack/Rel
DLOP	loop dd ff	Digital Trunk Interface Loop or Loops. Where: • l = loop number 0-159 • dd = maximum number of simultaneous voice or data calls 0-(24) • ff = frame format D2, D3, D4, or ESF The default for frame format ff is ESF if prompt MODE is set to PRI; D3 if MODE is set to DTI or LINK. Loop must be removed before a change to ff can be made.	dti-5
DLOP	L1 L2 Ln	Digital Trunk Interface Loop or Loops Loop numbers of the DTI Loops associated with this VAS. Loops must have previously been defined as MODE = LINK. Precede with X to remove.	dti-5
DNUM	0-15	Device number for I/O ports. All ports on the MSDL card share the same DNUM. The MSDL card address settings must match the DNUM value. For all other ports such as SDI, DCHI, etc., the device number should match the port address switch settings. To configure a D-channel on an even number port the card type must be SPDC or MSDL.	msdl-18
DRAT	(56K) 64KC 64KI	D-channel transmission Rate 56 kb/s when LCMT is AMI 64 kb/s clear. Allowed if LCMT = B8S for SL-1 to SL-1 only. Default for PRI2. 64 kb/s inverted HDLC, 64 kb/s restricted DRAT must match the far end. In Release 15 and later, DRAT is not prompted when configuring the ISLD-channel because speed is controlled by the modem baud rate.	pri-12

Prompt	Response	Comment	Pack/Rel
DROL	30, 32, 33, 34, 35, 36, 37, 38, 40, 41, 43, 44, 45, 46, 60, 61	Daily Routine Overlays. Daily or midnight routine programs are run once a day at the time specified by prompt TODR. For SL-1 MS, N and ST and Option 21A, Program 35 is always run in the midnight routines even if it is not specified with this prompt.	basic-1
DTIC	0, 4, 8,...156	Starting network loop slot for PRI/DTI card In Option 21 systems, each network slot has one superloop, made up of four loops. Since the DTI/PRI card takes two slots, eight loops are used per DTI/PRI. On non-Network loops, enter return <cr> and ignore the SCH2035 message. Do not input loop numbers that take the system out of its bounds. Number must be even for all systems.	di-5
DTRB	(100) 50 60 70	Digitone Burst time in ms 100 ms bursts of DTMF with 100 ms interdigit pause 50 ms bursts of DTMF with 50 ms interdigit pause 60 ms bursts of DTMF with 90 ms interdigit pause 70 ms bursts of DTMF with 70 ms interdigit pause This determines the DTMF burst and interdigit pause for the Tone and Digit Switch or TDS. Burst time of 50 ms is used for the Fast TDS; 100 ms is used for the standard TDS. Burst time of 60 ms and 70 ms is used for international requirements.	
DUPX	(FULL) HALF	Full Duplex mode Enter FULL if each end can simultaneously send and receive. Half Duplex mode	csi-7

LD 17

Page 394 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DUR5	(NO) YES	CDR call duration with 0.5 second accuracy. DUR5 does not apply to CDR data link. CDR call record output on TTY with 2.0 second duration accuracy. CDR call record output on TTY with 0.5 second duration accuracy for Japan. 0.5 second duration accuracy is available for outgoing trunks with answer supervision outside Japan.	cdr-8
ELAN	x	Application Module Link (AML) over Ethernet Associate Value Added Server ID (VSID) x with AML over Ethernet (ELAN) x. The configured VSID of the ELAN will be used to distinguish the connection between the Meridian 1 and each application in a multiple application Ethernet environment. If the Nortel Symposium Call Center (NXCC) package 311 is not equipped, a maximum of 16 ELANs can be configured and supported in the range of 16 to 31.	nxcc-22
ERRM	ERR BUG AUD	Error Messages (prompted when USER = MTC) Error monitor-hardware Error monitor-software Software Audit The messages, if enabled here, are output on the maintenance port. Precede with X to remove.	basic-1
ESCALATE	0-(2)-127	Alarm occurrence threshold (prior to escalating) This determines the number of times a major alarm may occur before it becomes critical. Entering 0 disables the alarm escalation. This applies to major alarms only.	alarm-19
ESDI	YES NO	Enhanced Serial Data Interface Default is as previous if ADAN = CHG. The default is NO if ADAN = NEW and no ports on the card are configured, or if the other port is configured and is not ESDI. The default is YES if the other port is configured and is ESDI.	

Prompt	Response	Comment	Pack/Rel
EXT0	x aaa bbb	Extenders for CPU 0 Not prompted for Options 21, ST, 21E, STE. Identifies the types of extenders that connect the Central Processing Unit or CPU to the various Network shelves. Where: • x = Group number • aaa = extender type located on the CPU shelf • bbb = extender type located on the Network shelf Valid inputs: • x = 0-4 • aaa = NIL for ACB cables or passive Bus Extender on CPU shelf 0. • aaa = SBE for Segmented Bus Extender on CPU shelf 0 cabled to Network shelf 3PE or Network shelf backplane connectors ACB. • bbb = NIL if Network shelf not equipped. • bbb = 3PE for 3 Port Extender on a Network shelf cabled to a SBE on CPU shelf 0, or cabled to CPU shelf 0 backplane connectors ACB.	basic-19
EXT1	x aaa bbb	Extenders for CPU 1 Identifies the types of extenders that connect the Central Processing Unit or CPU to the various network shelves. Where: • x = Group number • aaa = extender type located on the CPU shelf • bbb = extender type located on the Network shelf	basic-19

LD 17

Prompt	Response	Comment	Pack/Rel
		Valid inputs: • x = 0-4 • aaa = NIL for ACB cables or passive Bus Extender on CPU shelf 1 • aaa = SBE for Segmented Bus Extender on CPU shelf 1 cabled to Network shelf 3PE or Network shelf backplane connectors ACB. • bbb = NIL if Network shelf not equipped. • bbb = 3PE for 3 Port Extender on a Network shelf cabled to a SBE on CPU shelf 1, or cabled to CPU shelf 1 backplane connectors ACB. EXT1 is not prompted for Options21, ST, 21E, or STE.	
E_FILTER	NEW CHG OUT	Add an Exception Filter entry. Change an Exception Filter entry. Remove an Exception Filter entry. This is reprompted for subsequent exception filters. Up to 50 Exception Filters can be configured. Entering <CR> completes exception filter entries. Precede with X to remove.	alarm-19
FCDR	(OLD) NEW	Format for Call Detail Recording Use OLD for Pre-Release 18 CDR format. Information field location varies according to which features are equipped. Use NEW for Release 18 and later CDR format. Information field locations are fixed. Prompted when New Format CDR (FCDR) package 234 is equipped.	fcdr-20
FLOW	(NO) YES (NONE) XON CTS	Flow control capability (X11 Release 18 and later) This prompt appears for Options: 51C,61C,81C. Flow control (X11 Release 17 and earlier) Prompted for asynchronous ESDI ports.	csi-7
FLTH	0-(3)-7	Failed Log In Threshold Prompted for PWD2 users.	lapw-16

Prompt	Response	Comment	Pack/Rel
FMT_OUTPUT	(OFF)	Alarm Filters Formatted printing	alarm-19
	ON	This prompt disables formatting for the alarm/exception output.	
	<CR>	This prompt enables formatting for the alarm/exception output.	
		Retains the current formatting status.	
FRPT	(NEFR)	Access to incoming calls by FRE station denied	basic-1
	OLFR	Access to incoming calls by FRE station allowed	
		If FRPT = OLFR, then a FRE station can do Ringing Number Pickup, Night Answer and receive modified calls.	
FTYP	(3)	3.5 inch high density floppy type	basic-20
	3S	3.5 inch super density floppy type	
	5	5.25 inch floppy type	
		Prompted if ADAN = FDK or HDK.	
FUNC		MSDL card Function (Release 19 and later). This prompt is used when applying the MSDL card to the SDI application.	msdl-19
	ABD	Autobaud	
	FCL	Flow Control (XON/XOFF handling)	
	MOD	Modem support	
	LME	Line Mode Editing	
	SCN	Character Screening	
		Precede with X to delete.	
GRP	0-4	Network Group number (Option 81)	81-19
		Group numbers cannot be changed until the I/O devices associated with that group are disabled.	
		The option 61C supports 1 network group (0). The option 81 supports up to 5 network groups (0-4).	
		For the option 81:	
		Port 0 of the CNI card in slot 8 in the NT6D60 Core Module must be configured as "group 5." This configuration is not equivalent to a network switching group (groups 0-4). "Group 5" extends the inter-processor section to the interface bus, within the Core Module, through the CNI card in slot 8 and the 3PE card in slot 7.	

LD 17

Prompt	Response	Comment	Pack/Rel
HIST	(0)-65534	History File buffer length The History File stores system messages in Protected Data or Pdata and uses an SDI port address. When full, new incoming messages overwrite the oldest messages. The History File survives initialization, but is lost during SYSLOAD or when the file length is changed. The History File cannot be created if all 16 I/O ports are defined. HIST is not prompted in X11 Release 18 and later. See prompt SIZE.	basic-1
HOST	(NO) YES	Enable HOST mode Log In for password PWnn. When a HOST user logs in, the outputs defined for the port are only output to that port. For example, two ports are defined by prompt USER to output BUG and SCH messages. When a HOST user logs in to one of these ports, the other port does not require BUG and SCH messages until the HOST user logs out. This removes the restriction that ports with the same output must operate at the speed of the slowest port. This feature is primarily used by applications such as Meridian Manager.	lapw-17
HPIB	16-1000 16-5000	High-Priority Input Buffers High-Priority Input Buffers for System Options 51C, 61C, 81 and 81C. Recommended for attendant consoles and DID/TIE trunks. High priority line or trunk cards are placed in slot 1 and assigned have CLS = HPR in LD 10, 11, 12 or 14. Superloops do not require any line or trunk cards assigned as high priority. Refer to Appendix 553-2201-151.	basic-19

Prompt	Response	Comment	Pack/Rel
HRLR	(0)-8, 32-40	Handsfree Receive objective Loudness Rating The HRLR value is downloaded to Meridian Modular telephones after sysload, except when performing a parallel reload. Refer to the Transmission parameter and International loss and level plan NTP's before adjusting this value. The default is 0. The number entered in this field corresponds to an offset value. The offsets and their corresponding values are provided on page 377.	hfdl-20
HTLR	(0)-11, 32-54	Handsfree Transmit Objective Loudness Rating The HTLR value is downloaded to Meridian Modular telephones after sysload, except when performing a parallel reload. Refer to the Transmission parameter and International loss and level plan NTP's before adjusting this value. The default is 0. The number entered in this field corresponds to an offset value. The offsets and their corresponding values are provided on page 377.	hfdl-20
IADR	0-(3)-255	Individual Address for the data-link level HDLC protocol. The IADR and RADR prompts must be coordinated with the far end. If IADR is defined as 3, then RADR must be 1.	cls-7
IDLE_DISP_CHAR xx c/hh		Change customized text string character by character, where xx (01 to 24) is the position of the character in the customized text string. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2). The IDLE_DISP_CHAR prompt is only prompted if SUPPORTED_TEXT_ONLY = NO and is re-prompted until a <CR> is entered or xx = 24th character has been entered, thus allowing additional characters to be entered. Where: c = one supported character. hh = 2 hexadecimal digits (0-9, A-F, a-f) representing a supported character.	basic-23

LD 17

Prompt	Response	Comment	Pack/Rel
IDLE_DISP_STRING	aaaa	Enter customized text string by text string input. A maximum of 24 characters are accepted and validated. Enter <CR> for a blank Electronic Brandlining display. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2).	basic-23
IDLE_SET_DISPLAY	aaaa	IDLE_DISP_STRING entered customized text string “aaaa” is shown. This is information only. This information is shown under three scenarios: 1. to show the current EBLN Terminal Text Broadcast customized text string before the MODIFY prompt to let the user decide if a change is required. 2. To show the customized text string entered in response to the IDLE_DISP_STRING prompt for confirmation with the following OK prompt. 3. To show the customized text string entered in response to the IDLE_DISP_CHAR prompt (s) for confirmation with the following OK prompt. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2).	basic-23
IDLP	0-158	IND DTI Loop DTI loop number used for IND CSL loop. See DLOP prompt.	cs1-7
IFC		Interface type for D-channel. Note that when USR = ISLD or SHA, the interface is automatically entered as SL1.	pri-17
	(D100)	Meridian DMS-100	
	APAC	Asia-Pacific ISDN interface for Australian BRI UIPE PRI, Hong Kong, Singapore and Thailand	
	AXEA	Ericsson AXE-10 for Australia	
	D250	Interface to Meridian DMS-250	
	D70	Interface to Japan D70	
	EGF4	Q Reference Signalling Point interface	qsig gf-24
	ESS4	Interface to AT&T ESS#4	

Prompt	Response	Comment	Pack/Rel
	ESS5	AT&T ESS#5	
	ISGF	ISIG interface with GF platform (allowed if QSIG and QSIGGF packages are both equipped)	
	ISIG	ISO Q reference signalling point (QSIG) Interface ID (Release 20) (allowed only if the new D channel is configured on the MSDL card)	
	NI2	NI-2 TR-1268 interface type	
	S100	Meridian SL-100	
	SL1	Meridian SL-1	
	SS12	SYS-12 for Norway	
INC_T306	0-(2)-240	Variable timer for received disconnect message on incoming calls, allowing in-band tone to be heard when sent by the network. Entered in 2 second increments. The network will stop sending tone after this timer expires.	ddsp-20
INIT	(YES) NO	Manual initialization to reset ports which were locked-out due to failed LOGI attempts. CAUTION: While established calls in progress are unaffected, calls in the signaling state will be aborted.	lapw-16
INTL	1-12	Interval Time interval for checking Meridian Link for overload in five second increments This is the interval for counting the number of messages on a Meridian Link. See prompt MCNT.	iap3p-12
IOTB	(NO) YES	Input/Output Terminal Buffers Change input/output terminals or devices. Prompted in Release 17 and earlier.	basic-1
ISDN	(NO) YES	Integrated Services Digital Network Prompted with 1.5 Mbit Primary Rate Access (PRA) package 146. Prompted in Release 17 and earlier.	pri-12
ISDN_MCNT	60-(300)-350	Layer 3 call control message count per 5 second time interval.	qsig-22

LD 17

Prompt	Response	Comment	Pack/Rel
ISLM	1-382	Integrated Services Signaling Link Maximum. Maximum number of ISL trunks controlled by the D-channel. There is no default value.	isl-12
JDMI	0-159	Japan Digital Multiplexer Interface loop number Precede with X to remove.	jdtm-14
K	1-(7)-32	Maximum number of outstanding frames This value should be the same for the Meridian 1 (near-end) and the host processor (far-end). Where: • 7 = recommended value for AUX applications • 2 = recommended value for CCITT	cls-7
LANGUAGE			sta-19
	ENGLISH	Language supported on STA	
LAPD	(NO) YES	Link Access Protocol for D-channel Change LAPD parameters.	pri-12
LAPW	0-99 <cr>	Enter Limited Access to Overlays Password number to be created, modified or deleted. No more password changes Precede with X to remove. LAPW is reprompted after the OPT prompt, thus allowing multiple Limited Access to Overlays Password users to be created. If the overlay is exited after the OPT prompt the LAPW information is saved. If the overlay is exited before the OPT prompt, the information is not saved.	lapw-16
LCMT	(B8S) AMI	B8ZS Line Coding Method Alternate Mark Inversion, B7 Line Coding Method Release 19 and later, the default is B8ZS when the frame format is ESF. When the frame format is D2, D3, or D4, the default is AMI.	pri-19
LCTL	(NO) YES	Change Link Control system parameters	cls-7
LEVL	(INST) ADMN	Access Level for Set Based Administration password Installer. Access Level for Set Based Administration password Administrator.	adminset-21

Prompt	Response	Comment	Pack/Rel
LNAME_OPTION	(NO) YES	Require Log In name for password access If the option is changed to YES, each password currently in the system is given a default name which is used until new names are assigned. The default names applied to the passwords are: • ADMIN1 is applied to the current PWD1 • ADMIN2 is applied to the current PWD2 • USER0 is applied to the current Password 00 • USER1 is applied to the current Password 01 • (and so on to USER 99) The following message is output before reprompting REQ: DEFAULT LOGIN NAMES SAVED. To login to the system with the LNAME_OPTION enabled, use: LOGIN ADMIN2 <cr> PASS (prompted by the system) Enter the current second level administration password. If the option is changed from YES to NO, random passwords are assigned by the system to ensure no password duplication. The default password for PWD2 is output to the terminal when this option is disabled. The following message is output: WARNING: PASSWORDS WILL BE CHANGED TO DEFAULT VALUES. OK? (Y/N) If Y is entered, the following appears: DEFAULT PASSWORDS SAVED PWD2 = <pwd2 password> Note that entering YES forces the user to define passwords. If NO is entered, Log In name may still be entered, but is not required.	lapw-19

LD 17

Prompt	Response	Comment	Pack/Rel
		To find the other default passwords assigned by the system, Load Overlay 22 and print PWD. With Multi-user Log In enabled, it is possible for more than one user to be logged in with the same name/password combination. However, no two Log In names can have the same password associated with them.	
LOCK	0 -(60)-270	Lockout time, prompted for PWD1 and PWD2 users. The is the time, in minutes, that a port is locked out once the Failed Log In Threshold or FLTH has been exceeded. Messages of the lockout are displayed on maintenance terminals and supervisory stations.	lapw-16
LOGIN_NAME	aaa aaaa	Log In name for password access When LNAME_OPTION is YES, the names must be associated with each Log In password. This can be up to 11 alphanumeric characters (0-9, A-Z, a-z).	lapw-19
LPIB	96-5000 96-1000	Low-Priority Input Buffers for Options 51C/61C/81. Low-Priority Input Buffers all other options. Most stations and trunks are defined as low priority. See prompt HPIB. Refer to the <i>Memory Calculations Appendix</i> in the <i>Planning and Engineering</i> NTPs.	basic-19
LPWD	aaaa <cr>	Enter current LAPW password to change user password. Leave Log In password unchanged This prompt appears only for LAPW users logged in with a LAPW password. This prompt is used by Limited Access to Overlay users to change their password.	lapw-16
LTHR	(NO) YES	Link Threshold Change link performance thresholds for ESDI only.	cls-7
MAGT	0-999 0-1200	Maximum number of ACD agent IDs per customer. Release 13 and later.	acdc-18

Prompt	Response	Comment	Pack/Rel
MANU	(PMS1) PMS2 PMS3	Standard PMS interface Requires <cr> HOD to recognize input message Updated RMS message is followed by the old RMS when a room DN checks IN or OUT.	pmsi-19
MARP	(YES) NO	Multiple Appearance Redirection Prime feature allowed.	marp-18
MAT	(NO) YES	Enable MAT 5.0 Log In for password PWnn Mat 5.0 users can remote log in from a PC to perform Alarm Management and Maintenance operations through a graphical interface. PWD1 and PWD2 users always have MAT 5.0 access.	mat-22
MAT_READ_ONLY	(NO) YES	Do not restrict MAT 5.0 write access for password PWnn Restrict MAT 5.0 write access for password PWnn Read only provides MAT 5.0 users access to Alarm Management and Equipment View windows. However, read only users cannot clear or acknowledge alarms, and can only perform status commands. PWD1 and PWD2 users always have MAT 5.0 write access.	mat-22
MCFN	x x x x x x	Number and size of SIMMs in options: 51C, 61C, 81C, 81. Where x = 0, 4, or 16 (for SIMM size in megabytes). The SIMM size depends on the CP card type. If size is not specified, the system assumes they are unequipped (ie. size = 0). This does not affect system operation.	basic-21
MCNT	5-100000	Message Count Threshold Threshold for number of Meridian Link messages per time interval. The recommended setting is 400. With INTL = 4 and MCNT = 400, the maximum flow is 20 messages per second.	iap3p-12

LD 17

Prompt	Response	Comment	Pack/Rel
MEM	0-6	Memory modules, prompted when MTYP = 0. Add memory modules of 64K words. QPC51 card Precede with X to remove.	basic-1
MFSD	0, 2, 4...158	Multifrequency Sender loop. Use even-numbered loops for Multifrequency Sender. Precede with X to remove.	basic-1
MGCR	0-NCR	Maximum number of call registers used by AUX messaging. MGCR is associated with the NCR prompt. It is the maximum number of call registers that can be queued for use by AUX messaging before extra processing time is allocated to handle them.	basic-1
MLDN	(NO) YES	Multiple Loop DN. MLDN allows multiple appearance DNs to be on different loops.	basic-1
MODE	LINK PRI TRK	Mode of operation Digital Link mode Primary Rate Interface mode Digital Trunk mode	dti-8
MODIFY	(NO) YES	Change Electronic Brandlining Terminal Text Broadcast configuration. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2).	basic-23
MPED	(SD) DD 4D 8D	Single (Maximum Peripheral Equipment Density) Double (Maximum Peripheral Equipment Density) Quadruple (Maximum Peripheral Equipment Density) Octal (Maximum Peripheral Equipment Density) Set to 8D for superloops. See LD 97.	basic-7
MQC_FEA T	NAS NACD NMS	MCDN QSIG Feature type MCDN NAS functionalities are supported over QSIG MCDN NACD functionalities are supported over QSIG MCDN NMS - MC functionalities are supported over QSIG Precede MQC Feature type with X to remove	meet-24

Prompt	Response	Comment	Pack/Rel
MSCL	0-8190	Maximum number of Speed Call Lists that can be defined on the system for Release 13 and later.	optf-13
	0-7999	Maximum number of Speed Call lists and/or Group Hunt lists that can be defined per system. The system will default to 255 if converted from a prior release, and the Speed Call package is equipped. Otherwise, the default is 0.	
MTRO	(MR) PPM	Message Registration Periodic Pulse Metering	mr-20
MTYP		Memory Type, indicated in k-words, except when designated by M for mega-words. Duplicate module for CPU1 is assumed for each entry.	basic-19
	0	See prompt MEM	
	128	Module 0 is 128K card for all machine types except NT, RT, and XT; System Options 51, 61, and 71.	
	128 128	Modules 0 and 1 both 128K cards or one 256K card for all machine types except NT, RT, and XT; System Options 51, 61, and 71.	
	192	Module 0 is 192K card, Module 1 not equipped for all machine types except NT, RT, and XT; System Options 51, 61, and 71.	
	192 128	Module 0 is 192K card, Module 1 is 128K card for N and XN	
	192 192	Modules 0 and 1 are 192K cards for N and XN	
	192 192 192	Modules 0, 1 and 2 are 192K cards for XN	
	192 192 192 192	Modules 0, 1, 2, and 3 are 192K cards for XN	
	512	Module 0 is 512K card for ST or Option 21 only and as a replacement in the LE, VLE and XL	
	768	Modules 0 is 768K card for ST, NT, RT or System Options 21, 51 and 61 CPU/Memory only	

LD 17

Prompt	Response	Comment	Pack/Rel
	768 768	Modules 0 and 1 are 768K cards for XT or System Option 71 CPU/Memory only	
	768 768 768	Modules 0, 1 and 2 are 768K cards for XT or System Option 71 CPU/Memory only	
	2M	Two Megaword memory card required for Release 18 Multiple responses such as 2M, 2M are allowed for XT and 71 systems as long as the total does not exceed four megawords per CPU. The memory types must be the same that is all 2M, or all 768K. A SYSLOAD is required to change the memory type from 786K to 2M, or vice versa.	
MULTI_USER	(OFF) ON	Multi-User Log In	muli-19
N1	32, 64, 128, (512)	Maximum Number of octets per HDLC information frame. An entry of 128 or 512 is recommended for ELAN.	csi-7
N2	4-(8)-16	Maximum Number of retransmissions in steps of 1.	pri-12
N200	1-(3)-8	Maximum Number of retransmissions	pri-12
N201	4-(260)	Maximum Number of octets in information element	pri-12
NASA	(NO) YES	Network Attendant Service not allowed Network Attendant Service allowed Network Attendant Service signaling messages are sent on this D-channel.	nas-20

Prompt	Response	Comment	Pack/Rel
NCPU	1-(2)	Number of CPUs This value is normally programmed at the factory. For System Option 51 set the number of CPU to 1 and define the extenders as EXT0 0 NIL 3PE and EXT1 0 NIL 3PE. With Release 18 and later, this is prompted for NT, RT, 51 and 61 systems only. XT and 71 systems automatically have 2 assigned. Options STE and 21E systems have 1 assigned.	basic-18
NCR	xx	Number of Call Registers, range depends on system type. Where: • xx = 26-2047 for System Option 21 and 51 • xx = 26-5000 for System Option 71 and SL-1 XT • xx = 26-20000 for System Option 81 The maximum number of call registers may be limited by the amount of system memory. In this case the number of call registers is the amount of protected memory available divided by the number of words per call register. Refer to the <i>Memory Calculations Appendix</i> in the <i>Planning and Engineering</i> NTPs.	basic-19
NDCH	0 - 63	Move the primary D-channel to this logical number. With X11 release 18 and later, the ADAN MOV command is supported for D-channels.	pri-18
NDIS	(20)-255	Number of Display messages for the Background Terminal (BGD). The NDIS entry determines the queue length for display messages for the BGD application.	bgd-10
NDRG	(NO) YES	New Distinctive Ringing Prompted if Distinctive Ringing (DRNG) package 74 equipped, and if packages ATVN 68, FTC 125 and JTDS 171 are turned off.	drng-10

LD 17

Prompt	Response	Comment	Pack/Rel
NLPW	x...x <cr>	New Limited Access to Overlay log on password for the user Leave Log In password unchanged Length is 4-16 characters with Limited Access to Overlays (LAPW) package 164. Valid characters are 0-9, A-Z and a-z.	lapw-16
NORTEL_BRAND	(YES) NO	"NORTEL" Electronic Brandlining display option. Prompted if the EBLN ISM parameter value is set to "0" or "1". Show the "NORTEL" Electronic brandline. Show a blank brandline along with the Time and Date on an idle MDT set.	basic-23
NPW1	x...x <cr>	New Password 1(PWD1 Log In password) No change Valid characters are 0-9, A-Z and a-z. Length is 4-16 characters with Limited Access to Overlays (LAPW) package 164. Without the LAPW package, this password requires 4 hexadecimal digits (0-9, A-F).	basic-1
NPW2	x...x <cr>	New Password 2 (PWD2) No change Valid characters are 0-9, A-Z and a-z. Length is 4-16 characters with Limited Access to Overlays (LAPW) package 164. Without the LAPW package, this password requires 4 hexadecimal digits (0-9, A-F).	basic-1
NPWC	aaaa	Enter New Mini-CDR password. This password requires 4 hexadecimal digits (0-9, A-F).	mcdm-1
NUMD	1- (2)	Number of floppy disk drives Prompted if ADAN = FDK or HDK.	basic-15

Prompt	Response	Comment	Pack/Rel
OCAC	(NO) YES	Support the Original Carrier Access Code format The expanded CAC format is automatically supported. OCAC should be set to YES before and during the interim period. If OCAC is not set properly, Equal Access screening will not function.	fcc-20
OK		Confirm validated Terminal Text Broadcast customized text string "aaaa" entered at the IDLE_DISP_STRING or at the IDLE_DISP_CHAR prompts. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2).	basic-23
	(YES) NO	Keep the new text sting. Re-enter a new text string.	
OPT		Options for password PWnn. Multiple entries must be separated by a space.	
	(CFPA) CFPD	Configuration Prompts Allowed Configuration Prompts Denied CFPD allows access to prompts LPWD and NLPW to change one's own password.	lapw-16
	(DTD)	Deny DN-TN correspondence (administrator access only)	adminset-21
	DTA	Allow DN-TN correspondence (administrator access only)	
	(FEAD)	Deny Change Set Features (administrator & installer access)	adminset-21
	FEAA	Allow Change Set Features (administrator & installer access)	
	(FORCD) FORCA	Deny the Force command Allow the Force command	muli-19
	(LLCD) LLCA	Line Load Control Denied Line Load Control Allowed Access to Line Load Control commands in LD 2. Release 12 and later.	lapw-16
	(MOND) MONA	Deny the Monitor command Allow the Monitor command	muli-19

LD 17

Page 412 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	(NAMD)	Deny Change CPND Names (administrator and installer access)	adminset-21
	NAMA	Allow Change CPND Names (administrator and installer access)	
	(PROD) PROA	Print Only Denied Print Only Allowed Restricts overlay access to printing functions only.	lapw-16
	(PSCA) PSCD	Printing of Speed Call lists Allowed Printing of Speed Call lists Denied Printing Speed Call lists can be allowed even though the overlay is restricted for all other functions.	lapw-16
	(TADD)	Deny Set Time and Date (administrator and installer access)	adminset-21
	TADA	Allow Set Time and Date (administrator and installer access)	
	(TOLD)	Deny Change Toll Restrictions (administrator and installer access)	adminset-21
	TOLA	Allow Change Toll Restrictions (administrator and installer access)	
ORUR	1-(5)-255	Overrun/Underruns out-of-service threshold Enter in units of 1, the number of overrun/underrun in 15 minutes before an out-of-service is enforced.	basic-1
OTBF	1-(32)-127	Output request buffers	pri-12
OUT_T306	0-2-(30)-240	Variable timer for received disconnect message on outgoing calls, allowing in-band tone to be heard when sent by the network. Entered in 2 second increments. The network will stop sending tone after this timer expires.	ddsp-20
OVLA		List of Overlay programs from 1 to 99 to be accessible by way of password PWnn	lapw-16
	1-99	Overlay number	
	ALL	To allow access to all overlays	
	XALL	To deny access to all overlays	

Prompt	Response	Comment	Pack/Rel
	<cr>	No change to previous definitions Multiple entries must be separated by a space and the last entry must be followed by a carriage return. Precede with X to remove.	
OVLY	(NO) YES	Overlay	basic-1
PARM	(NO) YES	Gate opener for System Parameters.	
	R232/R422 DCE/DTE	Parameters for Interface and transmission mode, prompted for MSDL ports. The RS-422 parameters are established with switch settings on the MSDL card. This prompt is used to verify those settings prior to enabling the card. RS-232 parameters are set both on the card and at this prompt. Both values must be entered even if only one of them is being changed. For example "R232 DCE." Default for AML is R232 DCE. Default for D-channels is R422 DTE.	msdl-18
PARY	(NONE) ODD EVEN	Parity type. Prompted for asynchronous ESDI ports. No parity bit Odd parity bit Even parity bit	basic-19
PBXH	0-23	Hour to perform Message Waiting lamp maintenance X = no test to be performed.	mwc-15
PCDR	(NO) YES	Priority to CDR YES gives CDR priority over call processing.	cdr-1
PCML	(MU) A	Pulse Code Modulation companding Law for the system μ -Law (use μ -Law for North America) A-Law	basic-1
PDCH	0-63	Primary D-channel associated with a backup D-channel Both D-channels must be on the same card type that is DCHI or MSDL. Prompted if ADAN = BDCH	msdl-18

LD 17

Prompt	Response	Comment	Pack/Rel
PINX_CUST	0-99	This customer number will be used for the DN address translation associated with call independent connection messages received on this D-channel. Prompted when IFC = ISGF.	qsig-22
PMCR	5 (x) y	Number of call registers used for PMSI. Minimum number of call registers to be configured is 5 The lesser of either 60 or 25 percent of the total system call registers The lesser of either 250 or 25 percent of the total system call registers For example, if you enter 65, but 25 percent of the system total is 45, the number entered by the system will be 45.	pms-19
PMIN	(NO) YES	Minor alarm when the PMSI link is not responding. This is not prompted if XTMR = 0. When this prompt is Yes, the attendants minor alarm is activated when the PMSI link does not respond. Note that when the link responds again, the alarm is not cleared.	pms-19
PMSI	(NO) YES	Modify Property Management Systems parameters This is prompted is Property Management Systems Interface (PMSI) is enabled.	pms-19
PORT	0-1 0-3 0-7 0-15	<i>Port number for MSDL cards, Option 81 I/O devices, or PMSI ports:</i> Port number for the CP card Port number for the MSDL card Port number for Pseudo TTYs In Release 19 and later, this prompt appears for Property Management Systems Interface (PMSI) port configuration. Prompted only when CTYP = MSDL (Multi-purpose Serial Data Link), CPSI (Option 81 CP card), or PTY (Option 81 Pseudo TTY).	basic-19

Prompt	Response	Comment	Pack/Rel
PRI		Primary Rate Interface ISDN PRI architecture is composed of three protocol layers providing different services: • layer 1: physical layer • layer 2: link layer • layer 3: network layer These layers provide a standard interface for voice and data communication. Each layer uses the services provided by the layer below, and builds on these services to perform functions for the layer above. Each layer or block can be modified without affecting the protocols in another layer.	pri-12
	loop x	Enter loop number for additional PRI loops using the same D-channel and the interface ID for the additional loop numbers. Where: • loop = 0-159 for PRI loop number • x = 2-15 for Interface ID or 1-126 if IFC= D70 The PRI prompt is used to assign the PRI loops controlled by the D-channel. Each loop is given an Interface ID. The PRI loop carrying primary D-channel (DCHI) and backup D-channel (BCHI) are assigned an Interface ID 0 and 1, respectively. The 14 remaining PRI loops that can be assigned to the D-channel are defined here and given an Interface ID of 2-15.	
PRI2	0-159 2-15	Secondary PRI2 loops for nB + D, plus sequence, when IFC = SL-1 and DCHL is a PRI2 loop.	ipra-14
	0-159 0-3	Secondary PRI2 loops for nB + D, plus sequence, when IFC = TCNZ. The D-channel is not necessarily on IFC ID 0. This is set by service change. Precede with X to remove. This prompt is repeated until <cr> is entered.	
	0-159	2.0 Mb/s Primary Rate Interface or PRI loop number	
PRIM	0-15	Primary PMS port. To remove port, enter X.	pms-19

LD 17

Prompt	Response	Comment	Pack/Rel
PROG		Progress	euroisdn-2 2
	NCHG	Send a PROGRESS signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway. NCHG is the default for all interfaces but the Austrian interface.	
	MALE	Send an ALERT signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway.	
	MCON	Send a CONNECT signal when a CALL PROCEEDING message which contains a progress Indicator Information Element is received at the Meridian 1 EuroISND gateway. MCON the default for the Austrian interface.	
PR_RTN	(NO) YES	The prompt PR_RTN is printed only if the RCAP is set to PRI or PRO. Retain option is (is not) supported by the far end PINX.	qsig ss- 23

Prompt	Response	Comment	Pack/Rel
PR_TRIGS	<CR>	Path Replacement Triggers are set to their default values: DIV 2 3 CNG 2 3 XCON 2 3 2 Path Replacement attempts with a delay of 3 minutes for Diversion and Congestion triggers but Connected number is not a trigger.	qsig ss-23
	DIV xx y CNG xx y CON xx y	Diversion is used to trigger Path Replacement. Congestion is used to trigger Path Replacement. A Connected number different from a called number is used to trigger Path Replacement. Precede with X to remove. xx = 0 - 15, the number of Path Replacement attempts. y = 1 - 7, the delay between two Path Replacement attempts in minutes.	
PRTY	xx xx xx	Priority overlay programs to be stored in cache memory Priority overlays stay in cache memory when a new overlay is loaded. Enter one or more commonly used overlay program numbers. Priority can be set only for the number of overlays specified in the CACH. xx = the overlay number. Precede with X to remove an overlay program number.	basic-18
PTMR	(0)-31	Polling Timer for PMSI This is the polling timer, in minutes. When PTMR = 0, polling does not occur.	pms-19
PWD	(NO) YES	Change Password options	basic -19
PWD2	x...x	Password 2 Enter current second level administration password. This password is required to change existing passwords PWD1, PWD2, LAPW passwords and to change the Electronic Brandlining Terminal Text Broadcast customized text string. Valid characters are 0-9, A-Z and a-z. Length is 4-16 characters with Limited Access to Overlays (LAPW) package 164. Without the LAPW package, this password requires 4 hexadecimal digits (0-9 , A-F).	basic-1

LD 17

Prompt	Response	Comment	Pack/Rel
PWnn	x...x	Password Length is 4-16 characters with Limited Access to Overlays (LAPW) package 164. Valid characters are 0-9, A-Z and a-z. Where: nn = number entered in response to LAPW prompt. Enter the LAPW password to be used for PWnn. Note: If the LAPW password is a Set Based Administration (SBA) password (PWTP=SBA), the PWnn response length is 4-16 numeric characters, where the valid characters are digits 0-9 only.	lapw-16
PWTP	(OVLY) SBA	OVLY Password Access Type SBA Password Access Type	adminset-21
QCHID	(YES) NO	This rule is applicable for both encoding and decoding of Channel Identification IE Timeslot values 17 to 31 of the PR12 loop associated to channel number 17 to 31 of the Channel Identification IE (previous behavior) Timeslot values 17 to 31 of the PR12 loop associated to channel number 16 to 30 of the Channel Identification IE	qsig gf-24
RADR	0-(1)-255	Remote Address for the data-link level HDLC protocol The IADR and RADR prompts must be coordinated with the far-end. If IADR is defined as 3, then RADR must be 1.	cls-7
RCAP		Remote Capabilities. Enter one or more values to define the capabilities of the far-end.	pri-19
	BRI	Basic Rate Interface (when IFC = SL1, D70, ESS4, or ESS5)	
	CCBI	Call Completion to busy subscriber using integer value for operation coding CCBO/CCBI are mutually exclusive.	qsig ss-24

Prompt	Response	Comment	Pack/Rel
	CCBO	Call Completion to busy subscriber using object identifier for operation coding CCBO/CCBI are mutually exclusive. XCCB to remove.	qsig ss-24
	CCBS	Call Completion to Busy Subscriber for QSIG interfaces. CCBS is allowed if QSIG supplementary services package 316 is equipped. XCCB to remove.	
	CCNI	Call Completion on no response using integer value for operation coding CCNO/CCNI are mutually exclusive. XCCN to remove,	qsig ss-24
	CCNO	Call Completion on no response using object identifier for operation coding CCNO/CCNI are mutually exclusive. XCCN to remove.	
	CCNR	Call Completion to No Reply for QSIG interfaces. CCNR is allowed if QSIG supplementary services package 316 is equipped.	
	COLP	Connected Line Identification Presentation	
	CPK	Network Call Park. CPK is allowed if: • IFC = SL1 • RLS = 22 (or later) • CPRKNET package 306 is equipped	
	CTI	Call Transfer Integer CTI and CTO are mutually exclusive. XCTI to remove.	qsig ss-24
	CTO	Call Transfer Object CTI and CTO are mutually exclusive. XCTO to remove.	

Prompt	Response	Comment	Pack/Rel
		QSIG SS Call Diversion Notification remote capability. Configure sending of QSIG Diversion Notification Information, treatment of Rerouting request and coding of operations. If coded as Object Identifier, the remote capability ends with 'O', whereas for Integer Value, the remote capability ends with 'I'. Only one remote capability is allowed.	qsig ss- 23
	DV1I	Diversion information is sent to remote switch.	
	DV1O	Diversion information is sent to remote switch.	
	DV2I	Rerouting requests from remote switch are processed.	
	DV2O	Rerouting requests from remote switch are processed.	
	DV3I	Diversion information is sent to remote switch. Rerouting requests from remote switch are processed.	
	DV3O	Diversion information is sent to remote switch. Rerouting requests from remote switch are processed. Precede with 'X' to remove capability.	
	MQC	MCDN QSIG Conversion as a Remote capability	meet-24
	MSL	Remote D-channel is on a MSDL card	
	MWI	Message Waiting Interworking with DMS-100 (Release 19)	
	NAC	Network Access data. Enter XNAC to remove NAC as a remote capability. NAC is allowed if: - the D-channel is defined on an MSDL card (i.e. CTYP=MSDL) - the D-channel interface type is SL1 (IFC=SL1) - software release of remote end is x11 release 22 or greater (RLS\$22)	
	NCT	Network Call Trace supported	
	NDI	Name Display - Integer ID Coding	qsig-24
	NDO	Name Display - Object ID Coding	qsig-24
	ND1	Network Name Display method 1	
	ND2	Network Name Display method 2	
	ND3	Network Name Display method 3. ND3 ensures the same level of service between the MCDN and QSIG name display services.	
	NDS	Name Display Services	

Prompt	Response	Comment	Pack/Rel
	PRI PRO	Add Path Replacement as a remote capability. Only one capability can be configured per link. The encoding method uses Integer Values. The encoding method uses Object Identifier. Precede with 'x' to remove capability.	qsig ss- 23
	RVQ	Remote Virtual Queuing RCAP is prompted until only <cr> is entered in response. Precede a value with X to remove. ND1 and ND2 are used with Network Call Party Name Display or NCPND. Both ends must have NCPND. ND1 requires Release 13 and later. ND2 requires Release 17 and later; or SL-100, DMS with BCS32 and later. RVQ requires Remote Virtual Queuing (ORC_RVQ) package 192.	
	TAT	Invoke Trunk Anti-Tromboning operation if the far-end switch also supports this feature. TAT may be input if: TAT package is equipped, CTYP = MSDL, IFC = D100, SL1, S100 or D250.	
RCVP	(NO) YES	Auto-recovery to primary D-channel option. RCVP is supported on SL-1 to SL-1 connections only. When RCVP = YES, the primary D-channel is automatically forced to be the active channel after it is brought up from a released state. This option must be coordinated with the far end. Both sides must be either YES or NO. If the two sides do not match, both sides default to NO. When IFC = SL-1, RCVP changes to NO. For Backup DCH only.	pri-13
REMD	0, 1, 2, ...159 G0,G1...G159 T0,T1...T159	Double Density Remote Peripheral Equipment loop(s) Meridian 1 loop or loops GEC loop or loops TVT loop or loops Precede loop number with X to remove. If entry is for an odd-numbered loop, the preceding even numbered loop cannot be TDS, CONF or MFSD.	rpe-1

LD 17

Prompt	Response	Comment	Pack/Rel																											
REMO	0, 1, 2, ...159 G0,G1...G159 T0,T1...T159	Single Density Remote Peripheral Equipment loop(s) Meridian 1 loop or loops GEC loop or loops TVT loop or loops Precede loop number with X to remove. If entry is for an odd-numbered loop, the preceding even numbered loop cannot be TDS, CONF or MFSD	basic-1																											
REMQ	0, 1, 2, ...159 G0, 1...G159 T0,T1...T159	Quadruple density Remote Peripheral Equipment loop(s) Meridian 1 loop or loops GEC loop or loops TVT loop or loops Precede loop number with X to remove.	rpe-7																											
REQ	CHG END	Request: Change existing data block Request: Exit overlay program	basic-1																											
RLS	xx	Release ID of the switch at the far-end of the D-channel. This is the software release at the far-end. If the far-end has an incompatible release, it prevents the sending of application messages. Shown below is the relationship between the ISDN application, equipment and the Release ID X11 or BCS at the far-end. <table><tr><th><u>Application</u></th><th><u>Far-End</u></th><th><u>Minimum RLS</u></th></tr><tr><td rowspan="3">Network Ring Again</td><td>SL-1</td><td>12</td></tr><tr><td>SL-100</td><td>26</td></tr><tr><td>DMS-100/250</td><td>26</td></tr><tr><td rowspan="2">Network ACD</td><td>SL-1</td><td>15</td></tr><tr><td>SL-100</td><td>29</td></tr><tr><td colspan="2">Network Message Service - Message Center</td><td></td></tr><tr><td></td><td>SL-1</td><td>15</td></tr><tr><td colspan="2">Network Message Service - Meridian Mail</td><td></td></tr><tr><td></td><td>SL-1</td><td>16</td></tr></table>	<u>Application</u>	<u>Far-End</u>	<u>Minimum RLS</u>	Network Ring Again	SL-1	12	SL-100	26	DMS-100/250	26	Network ACD	SL-1	15	SL-100	29	Network Message Service - Message Center				SL-1	15	Network Message Service - Meridian Mail				SL-1	16	pri-19
<u>Application</u>	<u>Far-End</u>	<u>Minimum RLS</u>																												
Network Ring Again	SL-1	12																												
	SL-100	26																												
	DMS-100/250	26																												
Network ACD	SL-1	15																												
	SL-100	29																												
Network Message Service - Message Center																														
	SL-1	15																												
Network Message Service - Meridian Mail																														
	SL-1	16																												

Prompt	Response	Comment	Pack/Rel
		Message Waiting Indication Interworking with DMS-100	
		SL-1	19
		DMS-100	36
		The Release ID information is required and supported for connection to Northern Telecom equipment only. For connections to AT&T ESS#4 and ESS#5, set RLS = 1.	
ROLR	(0)-63	Receive Objective Loudness Rating	arie-14
		The default is 0, indicating no change to the default +45 dB. The number entered in this field corresponds to an offset value. The offsets and their corresponding values are provided on page 376.	
		The ROLR value is downloaded to Meridian Modular telephones after sysload except when performing parallel reload. Refer to the Summary of Transmission Parameters NTP and the International Loss and Level Plan planning and engineering NTP before changing these values.	
RXMT	1-(5)-20	Retransmission Threshold	basic-1
		Enter in units of 5 per cent. RXMT is the % of retransmissions allowed in 15 minutes before out of service is enforced, or:	
		$RXMT = (\text{\# of packets retransmitted}) \div (\text{total \# packets sent})$	
SATN	I s c u	TN of SADM/Data Line Card associated with IND CSL. For SL-1 telephone with CLS = CMSA.	cls-7
SBA_ADM_INS		Maximum Administrator and/or Installer Log Ins allowed at one time.	adminset-21
	0-(2)-64	For Options 21-71 and 81	
SBA_USER		Maximum User Log Ins allowed at one time.	adminset-21
	0-(50)-250	For Options 21-71	
	0-(100)-500	For Option 81	
SBE	(NO) YES	Segmented Bus Extender is equipped on SL-1MS, SL-1S	basic-1

LD 17

Prompt	Response	Comment	Pack/Rel
SECU	(NO) YES	Security for Meridian Link applications When set to NO, the host computer must specify both the TN and DN of the associate set in connect, answer and release messages. Prompted when the Integrated Services Digital Network Application Module Link for Third Party Vendors (IAP3P) package 153 is equipped for ISDN/AP Third Party.	iap3p-12
SEMT	(1)-5	Number of Status Enquiry Messages sent within 128 ms from the network side.	msdl-24
SEVERITY	(NONE) CRITICAL MAJOR MINOR <CR>	Alarm Severity of a particular alarm entry No rating (default status) System operation is in jeopardy Serious condition, the system is operational Error condition detected, system operation not affected Retains current value	alarm-19
SID	xxxx	System ID number The SID is used for polling an SL-1 for ACD, CDR and traffic reports. It can also be printed and changed using LD 2.	basic-1
SIDE	(USR) NET	Meridian 1 node type Slave to the controller Network, the controlling switch Prompted only if IFC = SL-1, ESIG or ISIG. Opposite sides of the PBX-to-PBX interface must be set as NET or USR. The call processing software uses these labels to handle call collision.	pri-12
SIZE	(0)- 65534	Size of History File buffer in characters The History File stores system messages in Protected Data or P data and uses an SDI port address. The History File survives initialization, but is lost when SYSLOAD occurs or the length of the file is changed. The History File cannot be created if all 16 I/O ports are defined. Prompted if ADAN = HIST or TRF	hist-18

Prompt	Response	Comment	Pack/Rel
	(50)-1500	Word Size of Audit Trail buffer The Size entered here must be a multiple of 50 for correct memory storage.	lapw-16
SL1B	16-2048	SL-1 Buffers	basic-1
SMEM	(NO) YES	Short Memory test On a manual SYS load the memory is tested on one pass, if (NO), memory is tested with normal six pass test. Not prompted on Options 81 and 81C.	smem-19
SOLR	0-(1)-4	Sidetone Objective Loudness Rating The SOLR value is downloaded to Meridian Modular telephones after sysload except when performing parallel reload. Before changing these values, refer to the <i>Summary of Transmission Parameters</i> NTP and the <i>International Loss and Level Plan</i> planning and engineering NTP.	arie-14
	(1) 0 2 3 4	12 dB 7 dB 17 dB 22 dB sidetone disabled	
		The default is 0, indicating no change to the default +45 dB. The number entered in this field corresponds to an offset value. The default value for Release 14 and 15 is 0 (7 dB). The default value for Release 16 and later is 1 (12 dB). The recommended North American value for all releases is 1 (12 dB). Does not apply to M2216.	
SSUP	(NO) YES	Senior Supervisor Device assigned used by senior supervisor/load manager. Cannot be YES if prompt APRT is YES.	acdc-1
STOP	(1)-1X5-2	Number of stop bits To enter 1.5, use 1X5. (Options 51C, 61C, 81 and 81C do not support 1.5). Prompted for asynchronous ESDI ports.	cls-19

LD 17

Prompt	Response	Comment	Pack/Rel
SUPPORTED_TEXT_ONLY		Change customized text string by text string input. Prompted if the Electronic Brandlining ISM parameter is set to Terminal Text Broadcast (EBLN ISM value of 2).	basic-23
	(YES)	Input by text string and IDLE_DISP_STRING is prompted.	
	NO	Input character by character and IDLE_DISP_CHAR nn is prompted.	
SUPPRESS			alarm-19
	0-(5)-127	Alarm occurrence threshold (prior to suppressing) This determines the number of times an alarm may occur before it is no longer output. Entering 0 indicates that all alarm occurrences are output (no suppression)	
SYNC	(NO) YES	Asynchronous mode of operation for ESDI port Synchronous mode of operation for ESDI port	csi-7
T1	2-(4)-20	Retransmission Timer Range in units of 0.5 seconds, (4) = two seconds	cls-7
T2	0-(10)-255	Maximum Time allowed without a frame being exchanged.	cls-7
T200	2-(3)-40	Retransmission Timer Entry is in units of 0.5 seconds.	pri-12
T203	2-(10)-40	Maximum Time allowed without frames being exchanged Prior to Release 18.30H the default was 5 seconds, (.5 second units). With Release 18.30H and later the default is 10 seconds, (1 second units).	pri-15
T23	1-(20)-31	Interface guard Timer or DCHI only This timer checks how long the interface takes to respond. Entry is in units of 0.5 seconds.	pri-12
T3	2-(5)-255	Timer for initial link setup in units of 0.5 seconds for ESDI only.	cls-7

Prompt	Response	Comment	Pack/Rel
T310	10-(30)-60 110-(120)	Timer used to determine how long SL-1 can wait for the response message when the QSIG outgoing call is in the U3 (outgoing call processing) state. Timer range prior to Release 22. Default = 30 seconds for QSIG. Timer range for Release 22. This range applies to PRI, PRI2, and BRI trunks in Release 22.	qsig-20
TDS	0, 2, 4...158	Tone and Digit Switch (TDS or Fast TDS service loop) Use even-numbered loops for Tone and Digit Switch (TDS). Precede with X to remove. Note: For Option 11C, all XTD/DTR units must be removed from the SSC card (card 0) before TDS 0 can be removed.	basic-1
TEN	xxx ALL <cr>	Tenant to be accessible by way of PWnn All Tenants allowed No change to previous definitions. Precede with X to remove.	lapw-16
TERD	0, 1, 2, ...159 G0,G1...G159 N0,N1,...N159 T0, T1...T159 X0,X1,...X159	Double Density Terminal equipment loop or loops Meridian 1 loop or loops GEC loop or loops Precede loop number with N to create a phantom loop for third party applications TVT loop or loops Precede loop number with X to remove. If entry is for an odd numbered loop, the preceding even numbered loop cannot be TDS, CONF or MFSD.	phntn-20
TERM	0, 1, 2, ...159 G0,G1...G159 N0,N1,...N159 T0, T1...T159 X0,X1,...X159	Single Density Terminal equipment loop or loops Meridian 1 loop or loops GEC loop or loops Precede loop number with N to create a phantom loop for third party applications TVT loop or loops Precede loop number with X to remove. If entry is for an odd-numbered loop, the preceding even numbered loop cannot be TDS, CONF or MFSD	phntn-20

LD 17

Prompt	Response	Comment	Pack/Rel
TERQ	0, 1, 2, ...159 G0,G1...G159 N0,N1,...N159 T0, T1...T159 X0,X1,...X159	Quadruple Density Terminal equipment loop or loops Meridian 1 loop or loops GEC loop or loops Precede loop number with N to create a phantom loop for third party applications TVT loop or loops Precede loop number with X to remove.	phtn-20
TIMR	(NO) YES	Change protocol timer value	basic-1
TMRK	96, (128)	Length of cadence increments in ms Refer to the Flexible Tone and Digit Switch cards NTP. See CLN prompt in LD 56.	basic-13
TODR	0-23	Time Of Daily Routines	basic-1
TOLR	(0)-63	Transmit Objective Loudness Rating The default is 0, indicating no change to the default +45 dB. The number entered in this field corresponds to an offset value. The offsets and their corresponding values are provided on page 376. The TOLR value is downloaded to Meridian Modular telephones after sysload except when performing parallel reload. Refer to the Summary of Transmission Parameters NTP and the International Loss and Level Plan planning and engineering NTP before changing these values.	arie-14
TPO	(NO) YES	Do not enable Traffic Period option Enable Traffic Period option	basic-21
TRIGGER	a...a	Trigger string for alarm tables The trigger string can be up to 10 alphanumeric characters. At least one character must be alphabetic (a-z). Plus sign (+) can be used to indicate the "wild card" entry. For example, BUG++++ includes all BUG system messages. The mnemonics supported for this prompt are lists at the beginning of this overlay. A value must be entered; <CR> is not accepted	alarm-19

Prompt	Response	Comment	Pack/Rel
TRNS	(NONE) HELP BOTH	Selects which messages are going to be translated Help and Option 81 specific system messages are printed in English version Help is printed in translated version and Option 81 specific system messages in English Help and Option 81 specific system messages are printed in translated version	mlms-20
TRSH	0-15	Threshold Digital Trunk Interface Threshold set defined in LD 73.	pri-19
TSO	(NO) YES	Do not enable Trunk Period option Enable Trunk Period option	basic-21
TTY	0-15	Pre-defined MSDL-SDI terminal number Prompted if ADAN = STA	sta-19
TTYLOG	0-65534	Log buffer size When 0 is entered, there is no log file	muli-19
TYPE		Type of data block	
	ADAN	All input/output devices (includes D-channels)	basic-19
	ALARM	Alarm filter configuration data When TYPE = ALARM, the system automatically prints out the current alarm and exception filters Must have Alarm Filtering (ALRM_FILTER) package 243.	alarm-19
	ATRN	Aries Transmission	basic-19
	CEQU	Common Equipment parameters	basic-19
	CFN	Configuration data block	basic-1
	OVLY	Overlay area options	basic-19
	PARM	System Parameters	basic-19
	PWD	System Password and Limited Access to Overlay Password When entering yes, the PWD2 is prompted unless LAPW is used and Multi-User Log In is enabled.	basic-19
	VAS	Value Added Server	basic-19

LD 17

Prompt	Response	Comment	Pack/Rel
USER		Output message types When ADAN = HST, users may be BUG, MCT, MTC, SCH and TRF. Prompted when ADAN is PRT, TTY or, HST.	basic-20
	ACD	Automatic Call Distribution printer for reports	
	ADM	Administrator SBA access level to be stored in the history file. Precede with X to remove.	adminset-21
	APL	Auxiliary Processor Link for IVMS	
	BGD	Background Terminal Mutually exclusive with ACD, APL, CDL, CMC, CMS, HSL, and LSL.	
	BUG	Software error	
	CDL	CDR Data Link	
	CMC	Communications Management Center	
	CMS	Command and Status Link Port must be defined as a synchronous ESDI	
	CSC	Customer Service Changes: Automatic Set Relocation and Attendant Administration	
	CTY	CDR TTY port to output CDR records	
	FIL	This is a special response which applies to Alarm Filtering message output. When a port is assigned this User type, only Alarm Filtered messages will be output. The messages listed at the TRIGGER prompt are the messages that appear for this user type. When AF_STATUS = OFF, no system messages are output to the port with FIL type.	alarm-19

Prompt	Response	Comment	Pack/Rel
		The output appears as shown below. The field definitions follow. <pre> <severity> <report id> <time> <date> <sequence number> <event> <tab> Operator data: <data> <tab> Expert data: <data> </pre> Where: <u>severity</u>: • **** = Critical • *** = Major • ** = Minor • blank = None <u>report id</u>: The system message character string (BUG1234, ERR5683, etc.) <u>time</u>: hh:mm:ss <u>date</u>: dd/mm/yy <u>sequence number</u>: The sequence the message appears. The range is 0-65535, and the numbers are right justified. Meridian 1 and auxiliary processor messages have separate sequence numbers. <u>event</u>: This indicates the type of event that is being output: MSG (message), SET (set alarm), CLR (clear alarm). <u>tab</u>: 6 character indent <u>Operator data</u>: This contains additional information to help clear the fault. This field contains the additional message information (TN, loop number, etc.) that the message contains. Up to 30 characters will appear. <u>Expert data</u>: This field may not always appear. It contains system expert information.	
	HSL	ACD/D High-Speed AUX link	
	INS	Installer SBA access level to be stored in the history file. Precede with X to remove.	adminset-21

LD 17

Prompt	Response	Comment	Pack/Rel
	LSL	ACD/D Low-Speed AUX link. LSL is an invalid response in X11 Release 19 and later.	
	MCT	Malicious Call Trace TTY port along with other users	mct-20
	MTC	Maintenance includes AUD, BUG and ERR if enabled by prompt ERRM in PARM. Use MTC for the system monitor or XSM.	
	NOO	No Overlay allowed	
	PMS	Property Management System interface	
	SCH	Service Change or any data base change	
	TRF	Traffic	
	USR	User SBA access level to be stored in the history file. Precede with X to remove.	adminset-21
USR		User. Precede any of the following with X to remove.	pri-12
	ISLD	Integrated Services Signaling Link Dedicated. D-channel for ISL only, in dedicated mode, without using the PRI channel.	
	PRI	Primary Rate Interface. D-channel for ISDN PRA only.	
	SHA	Shared mode. D-channel used for both ISDN PRA and ISL. D-channel must be using a PRI channel.	
	SHAV	Shared Virtual Network Services. D-channel shared between PRA, VNS and ISLD.	
	VNS	Virtual Network Services. D-channel used for Virtual Network Services or for ISLD.	
VAS	NEW CHG OUT <cr>	New Value Added Server Change Value Added Server Remove Value Added Server End VAS prompting sequence	cls-7

Prompt	Response	Comment	Pack/Rel
VCNA	(NO) YES	Virtual Network Services Network Call Party Name Display available over this D-channel	vns-16
VCRD	(NO) YES	Virtual Network Services Network Call Redirection available over this D-channel	vns-16
VNSC	(0)-xx	Virtual Network Services Customer number associated with the D-channel. Customer number is defined in LD 15. Customer 0 is the default for the D-channel. Ensure customer 0 is not actually a user of the D-channel before changing.	vns-16
VNSM	1-100	Virtual Network Services Maximum Maximum number of VNS channels controlled by the D-channel prior to Release 22	vns-16
	1-300	Maximum number of VNS channels controlled by the D-channel as of Release 22	
VNSP	0-32700	Virtual Network Services Private Network Identifier (PNI) for the far-end customer	vns-16
VOLR	(NO) YES	Handset Volume Reset To have handset volume reset whenever the user hangs up or uses handsfree, set VOLR = YES.	agcr-20
VSID	0-15	VAS Identifier Identifier for the VAS providing the services, this includes IS, Data Services, Voice Messaging, Alpha terminals. The value entered here is associated with the value which may be entered at the ELAN prompt. By responding to VSID, you are preparing to associate a link with a Value Added Server ID to allow message transmission.	cls-7

LD 17

Prompt	Response	Comment	Pack/Rel
VTRO	(NO) YES	Trunk Route Optimization before answer available over this D-channel for VNS. VTRO will be prompted if: 1. Advanced Network Services (NTWK) package 148 <i>is</i> equipped 2. Trunk Anti-Tromboning (TAT) package 293 <i>is not</i> equipped 3. VCRD = YES	vns-21
XCT	0, 2, 4,...158	Extended Conference/TDS/MFS Loop number for NT8D17 Conference/TDS/MFS card. Enter an even network loop number for TDS/MFS functions. The Conference function is automatically assigned the next higher or odd loop number. System prints: TDS n MFS n CNF n+1 This indicates that TDS and MFS functions are configured on the even loop "n" and conference function is configured on the next higher odd loop. Precede with X to remove. Both loops must be disabled first. Since TN 0 0 0 0 cannot be used in non-multigroup systems, it is recommended that Conference/TDS/MFS card be placed in loop 0. You may configure more than 16 conference loops; however, enabling more than 16 conference loops may cause the system to lock-up. In multigroup systems (such as SL-1 XT and Option 71 systems) the NT8D17 should not be configured in loop 0/1.	xct-15
	D0-D158	Dealer conference loop	ohol-20
	S0-S158	Spare dealer conference loop Should be in the same group as the units planned to use this loop.	ohol-20
XNUM	(1)-4	Number of retransmissions per message for PMSI. If XTMR = 0, this prompt does not appear.	pms-19

Prompt	Response	Comment	Pack/Rel
XSM	(NO) YES	Extended System Monitor This is the SDI port for the Extended System Monitor. Prompt USER must be set to MTC (maintenance messages) for the system monitor port. Only one port can be XMS = YES.	xpe-15
XTMR	(0)- 6	PMS acknowledgment time (the time measured in seconds to wait for the acknowledgment message from the PMS) Where: 0 = no retransmission.	pms-19
YALM	(FDL) DG2	Yellow Alarm Method Prompted only if the frame format is ESF. If YALM is not prompted, DG2 was set automatically. If YALM is prompted the response varies between countries. Release 19 and later, the default is FDL when the frame format is ESF. When the frame format is D2, D3, or D4, the default is DG2.	pri-19

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 19: Code Restriction

Overlay program 19 allows data for code restrictions to be created or modified.

Code Restriction is used to control the digits that can be dialed on a COT or FEX trunk route by a Toll Denied (TLD), Conditionally Toll Denied (CTD) or Conditionally Unrestricted (CUN) Class of Service telephone. See also New Flexible Code Restriction in LD 49.

With Release 14, Route 31 is no longer an exclusively private route. It can be configured as a private route in LD 16.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
ANI: Automatic Number Identification data block	448
CRB: Code Restriction data block	449
FGDB: Feature Group D data block	450

ANI: Automatic Number Identification data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	ANI	Type of data block = ANI (Automatic Number Identification)
ANII	0-31	ANI Data Block Index
ANIT	xxx	Invalid ANI treatment
NPA	200- 999	First 3 ANI digits in NPA format
3ANI	xxx	3 Digit ANI (denied) allowed
SLV3	NXX	Number of digits for screening
NXX	xxx yyy	Range of end-office numbers
SLV6	xxx	Number of digits for screening
- SUB	xxxx yyyy	Range of subscriber numbers

CRB: Code Restriction data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	CRB	Type of data block = CRB (Code Restriction)
NCOS	0-99	NCOS value for subscribers
CUST	xx	Customer number associated with this data block
ROUT	0-511	Route number
TORT	0-511	To Route
CLR	aaaa	Codes (aaaa = DENY or ALLOW)
ALLOW	200-999 ... 200-999	NXX, NPA codes allowed
DENY	200-999 ... 200-999	NXX, NPA codes denied

FGDB: Feature Group D data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FGDB	Type of data block = Feature Group D
FGNO	0-127	Feature Group D block number
CIC	0000-9999	Carrier ID
CCLS	a...a	Carrier Class (a...a = IC, INC, or CONS)
PRES	(YES) NO	Presubscription
OVLP	(YES) NO	Overlapped outpulsing by Local Exchange Carrier (LEC)
CCAN	aaa bbb	Call Categories on calls to Carrier, and ANI screening (aaa = NAM, NA0, INT, IN0, OPR, SAM, SAX, SA0, CUT, or (ALL); bbb = (YES) or NO)
SAC	xxx xxx xxx	Service Access Codes
ANII	0-31	ANI Data Block Index
CDAN	(NO) YES	ANI Digits in CDR Records
SHAN	(NO) YES	Show ANI Digits on Terminal Displays
PRTD	(NO) ALL	Printout Control for Invalid II or ANI Digits
LDAC	aaa	Long Distance Access Code (aaa = AC1 or AC2)
LAAC	aaa	Local Area Access Code (aaa = AC1 or AC2)
OPER	DN nnn ... nnn RAN nnn	Treatment for 0+, 0- calls
INTR	(NO) YES	Intercept Treatment
ADFT	(OVF) RAN nnn DN nnn ... nnn	Intercept Treatment for Invalid Address Format
IIT	(OVF) RAN nnn DN nnn ... nnn	Intercept Treatment for Invalid IIs
IITP	xx yyyy zz	Valid II, II Type, and NCOS for ANI screening bypass
CPAR	(NO) YES	Call Processing parameters
INIT	(NO) YES	Length of Initial String of dialed digits on outgoing calls
ENBL	1-(12)-30	Long Enbloc dialing timeout
ENBS	1-(5)-30	Short Enbloc dialing timeout
IFTO	2-(120)-254	Inter-field FGD timeout in increments of 2 seconds
DGTO	128-(640)-5000	Interdigits timeout
MONT	0-(256)-2048	Minimum On-Hook Time

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
3ANI	(DENY) NCOS xx	3 Digit ANI denied Apply invalid ANI treatment 3 Digit ANI allowed Use this NCOS value (0-99)	fdg-17
ADFT	(OVF) RAN nnn DN nnn . . . nnn	Intercept Treatment for Invalid Address format	fgd-17
ALOW	200-999 ... 200-999 <cr>	NXX, NPA codes Allowed Proceed to next prompt Prompted when CLR = DENY or <cr>.	basic-1
ANII	0-31	ANI Data Block Index When ANII = 0, there is no ANI screening; 1-31 is the ANI block index number.	fgd-17
ANIT	(OVF) RAN xxx DN xxxx NCOS xx	Invalid ANI treatment Overflow tone RAN route (0-511) Internal or external DN (1-16 digits) Network Class of Service value (0-99)	fgd-17
CCAN	aaa (YES) aaa NO	Call Categories on calls to Carrier, and ANI screening provided. Call Categories on calls to Carrier, and ANI screening not provided.	fgd-17
		aaa can be any of the following:	
	NAM NA0	1 + (inside World Zone 1) 0 + (inside World Zone 1)* (see note below)	
	INT IN0	1 + (outside World Zone 1) 0 + (outside World Zone 1)* (see note below)	
	OPR	0 - calls	
	SAM SAX SA0	1 + (Embodied SAC) 1 + (External SAC) 0 + (External SAC)* (see note below)	

LD 19

Prompt	Response	Comment	Pack/Rel
	CUT (ALL)	Cut-Through All call types (Default when REQ = NEW) Note: aaa entries marked with the symbol * use zero; not the letter O. If the letter is entered in place of the number zero, no error appears. However, NAM and SAM will be overridden.	
CCLS	IC INC CONS	Inter-Exchange Carrier Class International Carrier Class Consolidated Carrier Class	fgd-17
CDAN	(NO) YES	ANI Digits in CDR Records	fgd-17
CIC	0000-9999	Carrier ID. Response must be three or four digits.	fgd-17
CLR	DENY	Denied codes. If CLR = DENY all NPA/NXX codes are denied except those entered in response to prompt ALLOW (only ALLOW is prompted).	basic-1
	ALLOW	Allowed codes. If CLR = ALLOW all NPA/NXX codes are allowed except those entered in response to prompt DENY (only DENY is prompted).	
	<cr>	Proceed to next prompt when REQ = CHG When changing a CRB, if CLR = <cr> then both ALLOW and DENY are prompted. For a new CRB, CLR must = ALLOW or DENY.	
CPAR	(NO) YES	Call Processing Parameters	fgd-17
CUST	xx	Customer number associated with this data block as defined in LD 15	basic-1
DENY	200-999 ... 200-999 <cr>	NXX, NPA codes Denied Proceed to next prompt Prompted when CLR = ALLOW or <cr>.	basic-1

Prompt	Response	Comment	Pack/Rel
DGTO	128-(640)-5000	Interdigits timeout The maximum time between two digits within the same field, in multiples of 128 milliseconds. 5000 rounds down to 4992.	fgd-17
ENBL	1-(12)-30	Long Enbloc dialing timeout Before initial string is complete on outgoing calls.	fgd-17
ENBS	1-(5)-30	Short Enbloc dialing timeout After initial string is complete on outgoing calls.	fgd-17
FGNO	0-127	Feature Group D block number The system automatically assigns FGNO numbers in sequential order when REQ = NEW.	fgd-17
IFTO	2-(120)-254	Inter-field FGD Timeout in increments of 2 seconds The maximum time between two fields on incoming calls (in seconds).	fgd-17
IIT	(OVF) RAN nnn DN nnn . . . nnn	Intercept Treatment for Invalid IIs. Where: • OVF = Overflow tone • RAN nnn = RAN route • DN nnn . . . nnn = Network or local DN	fgd-17

LD 19

Prompt	Response	Comment	Pack/Rel																											
IITP	xx yyyy zz	Valid II, II Type, and NCOS for ANI screening bypass. Where: xx = II in range 00-99 yyyy = one of the following II types: • REGU = Regular • 4A8P = 4 or 8 party • HOTL = Hotel/Motel • CLES = Coinless • TST3 = Test 3 • AIOD = Automatic Identification of Outward Dialing • COIN = Coin • TST7 = Test 7 zz = optional NCOS number defining ANI screening bypass (00-99) When IITP = <CR> and REQ = NEW, the following shows the default arrangement. International codes (12-19) are left undefined. <table><tr><td><u>xx</u></td><td><u>yyy</u></td><td><u>zz</u></td></tr><tr><td>00</td><td>REGU</td><td>no</td></tr><tr><td>01</td><td>4A8P</td><td>no</td></tr><tr><td>06</td><td>HOTL</td><td>no</td></tr><tr><td>07</td><td>CLES</td><td>no</td></tr><tr><td>10</td><td>TST3</td><td>no</td></tr><tr><td>20</td><td>AIOD</td><td>no</td></tr><tr><td>27</td><td>COIN</td><td>no</td></tr><tr><td>95</td><td>ST7</td><td>no</td></tr></table>	<u>xx</u>	<u>yyy</u>	<u>zz</u>	00	REGU	no	01	4A8P	no	06	HOTL	no	07	CLES	no	10	TST3	no	20	AIOD	no	27	COIN	no	95	ST7	no	fgd-17
<u>xx</u>	<u>yyy</u>	<u>zz</u>																												
00	REGU	no																												
01	4A8P	no																												
06	HOTL	no																												
07	CLES	no																												
10	TST3	no																												
20	AIOD	no																												
27	COIN	no																												
95	ST7	no																												
INIT	(NO) YES	Length of Initial String	fgd-17																											
INTR	(NO) YES	Intercept Treatment	fgd-17																											
LAAC	AC1, AC2	Local Area Access Code Prompted with Network Alternate Route Selection (NARS) package 58.	fgd-17																											
LDAC	AC1, AC2	Long Distance Access Code Prompted with Network Alternate Route Selection (NARS) package 58.	fgd-17																											

Prompt	Response	Comment	Pack/Rel
MONT	0-(256)-2048	Minimum On-hook Time The minimum amount of time between acknowledgment wink and answer off-hook signal, in multiples of 128 milliseconds.	fgd-17
NCOS	0-99	NCOS value for subscribers Reprompts current level NPA, NXX, or SUB.	fgd-17
NPA	100-999 200-999	First 3 ANI digits in NPA format; prior to Release 19 First 3 ANI digits in NPA format; Release 19 and later. Only 3 digits are allowed, even when using 1+ dialing. NPA accepts only 3 digits for NPA even if 1 + dialing is in use.	nanp/ fgd-17
	<cr>	Return to REQ	
NXX	xxx yyy	Range of end office numbers Prompted if SLV3 = NXX. Where: • xxx = starting or only NXX • yyy = ending NXX (optional)	fgd-17
	<cr>	Reprompts NPA	
OPER	DN nnn. . . nnn RAN nnn	Treatment for 0+, 0- calls. Where: • DN nnn . . . nnn = 1-16 digit network or local DN • RAN nnn = RAN route (0-511)	fgd-17
OVLP	(YES) NO	Overlapped outpulsing by Local Exchange Carrier (LEC)	fgd-17
PRES	(YES) NO	Presubscription	fgd-17
PRTD	(NO) ALL REJ	Printout Control for Invalid II or ANI Digits No printout Printout for all invalid ANI and II digits Printout all invalid II digits. Printout invalid ANI when not mapped to NCOS.	fgd-17

LD 19

Page 456 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
REQ		Request	basic-1
	CHG	Change the existing data block	
	END	Exit overlay program	
	MOV	Move data block to a new route	
	NEW	Add new data block to the system	
	OUT	Remove the data block	
	PRT	Print FGD or ANI data block	
ROUT	0-511	Route number	basic-1
SAC	xxx xxx xxx . . . xxx	Service Access Codes. Default codes: 700, 800, 900, 601.	fgd-17
SHAN	(NO) YES	Show ANI Digits on Terminal Displays	fgd-17
SLV3		Number of digits for screening	fgd-17
	NXX	6 or 10 digit screening. NXX prompt follows.	
	NCOS xx	NCOS xx = 3 digit screening (0-99), all NPA map to NCOS value, NPA is reprompted.	
SLV6	SUB	10 digit screening level, SUB prompt appears next. Not allowed if an ending NXX level (yyy) was entered at NXX prompt.	fgd-17
	NCOS xx	6 digit screening level, reprompts NXX. All XXXX numbers under the NPA map to NCOS value (0-99)	
SUB	xxxx yyyy	Range of subscriber numbers. Where: • xxxx = starting or only subscriber number • yyyy = ending subscriber number (optional)	fgd-17
TORT		To Route	basic-1
	0-511	New route number TORT is prompted when REQ = MOV.	
TYPE		Type of data block	basic-1
	ANI	ANI screening data block (for Feature Group D)	
	CRB	Code Restriction data Block	
	FDGB	Feature Group D data Block	

LD 20-22: Print Reports Guide

This module documents only those print reports which can be obtained in LDs 20, 21, and 22. In the Alphabetical list of many other Administration Overlays, you can find print options at the REQ and TYPE prompts.

To obtain a list of telephones which have particular features, refer to LD 81. Consult LD 93 to print data for Attendant Console groups. Consult LD 95 to print information for the Call Party Name Display (CPND) data block.

Print Report	LD	Page
2.0 Mb/s Digital Trunk Interface (DT2) data	20	464
Alarm and Exception Filter (ALARM) data	22	515
Application Module Link (AML) data	21	497
Analog set (500 & PBX) data	20	464
Attendant Console (ATT) data	21	497
Attendant console (ATT, 1250, & 2250) data from LD 12	20	465
Audit trail (AUDT) data	22	515
Automatic Call Distribution Priority Agent (PRI2) data	20	465
Automatic Number Identification (ANI) data	21	497
Automatic Trunk Maintenance (ATM) route data	21	498
Automatic Trunk Maintenance (ATM) schedule data	21	498
Automatic Wake Up (AWU) data	21	498
Business Communicaton Set (BCS) data	20	466
(Part 1 of 4)		

LD 20-22

Print Report	LD	Page
Call Detail Recording (CDR) data	21	499
Call Pickup Network Wide (CPNW) data	20	466
Call Redirection (RDR) data	21	499
Centralized Attendant Service (CASK) Key	21	499
Centralized Attendant Service (CAS) data	21	499
Channel data: Real Analog, Virtual Analog and Virtual Digital	20	467
Code Restriction (CRB) data	21	500
Common Equipment (CEQU) data	22	515
Configuration Record (CFN) data	22	515
Controlled Class of Service (CCS) data	21	500
Core Inventory (CINV) data for Option 51C/61C/81/81C	22	516
Customer data block (CDB)	21	500
Data access card (DAC) data	20	468
Dial Intercom Group (DIG) data	20	469
Dial Tone Detector (DTD & XTD) data	20	469
Digital set (2000 series, 3000, & Aries) data	20	470
Digitone Receiver (DTR) data	20	470
Directory number (DNB) data	20	471
Directory number (DNB) range data	20	471
Flexible Code Restriction (FCR) data	21	501
Flexible Feature Codes (FFC) data	21	501
Generic version and issue of software (Pre Release 19)	22	524
Group Call (GRP) data	20	472
History File (AHST & PHST) data (Pre-Release 19)	22	516
History File (VHST) data (Release 19 & later)	22	517
Hospitality Management (HSP) data	21	501
Hot Line List (HTL) data	20	472
(Part 2 of 4)		

Print Report	LD	Page
Hunting (HNT & EHT) data	20	472
Integrated Message Service (IMS) data	21	502
Input/output device (ADAN) data	22	518
Integrated Message Service (IMA) data	22	518
ISDN Signaling Link (ISLL) data	21	502
Issue and Release (ISS)	22	518
Listed Directory Numbers (LDN) data	21	502
Meridian Modular Telephone (ATRN) data	22	518
Multi-Party Operations (MPO) data	21	503
Multifrequency (MFC, MFE, MFR, & MFVE) data	20	473
Networking (NET) data	21	503
Night Service (NIT) data	21	503
Off Hook Alarm Security (OAS) data	21	503
Out of Service unit (OOSLT & OOSMLT) data	20	473
Overlay area (OVLY) data	22	519
Package (PKG) information	22	519
Password (PWD) data	21	504
Password (PWD) data (Pre-Release 19)	22	519
Password (PWD) data (Release 19 & later)	22	519
Peripheral Software Version (PSWV) data	22	520
Power (PWR) data	20	474
Pretranslation (PRE) data	20	474
Read Only Memory (ROM) data	22	520
Recorded Overflow Announcement (ROA) data	21	504
Route Data Block (RDB)	21	504
Secure Data Password (SDP) (Release 20 and earlier)	21	505
Set Relocation (SRDT) data	21	505
(Part 3 of 4)		

LD 20-22

Print Report	LD	Page
SL1 set data	20	474
Special Service List (SSL) data	20	475
Speed call lists (SCL) data	20	475
System Limits (SLT) data	22	520
System Loop Limits	22	520
System Patch (ISSP) data	22	521
Tandem Connection (TCON) data	20	476
Tape ID (TID) data	22	521
Template (TEM) data	20	476
Terminal Number Block (TNB) data for telephones and trunks	20	477
Terminal Number Block (TNB) range data	20	477
Test lines (TST) data	21	505
Timers (TIM) data	21	506
Tone Detector (TDET) data	20	478
Trunk data: All Trunks	20	478
Trunk Members (LTM) data	21	506
Trunk data: Specific Trunk types	20	479
Unused Card (LUC) data	20	480
Unused Directory Number (LUDN) data	20	471
Unused Units (LUU) data	20	481
Unused Voice or Data unit (LUVU or LUDU) data	20	481
Value Added Server (VAS) data	22	521
Voice Mailbox (VMB) data	20	482
(Part 4 of 4)		

LD 20: Print Routine 1

Overlay program 20 allows data to be printed for the following blocks:

- all hunting
- group calls
- speed calls
- template data blocks
- terminal numbers
- pre-translation

Data Access Card (NT7D16)

By responding R232, R422, or DAC to the TYPE prompt in LD 20, you can print out the configured parameters for each port, or the entire DAC.

If a specific TN is entered, the current settings are uploaded from the unit and printed with the database settings. This is useful if parameters have been altered during keyboard or Hayes dialing modify procedures.

Templates

Templates store telephone information in system memory. Telephones with the same configuration of keys and Class of Service share the same template. This makes efficient use of Protected Data Store. Template Audit (LD 1) is used to remove unused templates.

Changes for Release 18

With Release 18 and later, when printing the TN block, “MARF” is output next to a DN appearance if it is the MARF TN for that DN. When printing the DN block, “MARF” is output prior to the DES if it is the MARF TN. Refer to X11 features and services for an explanation of the MARF feature.

With X11 Release 19 and later, the security password may be required to print telephone and TN information. The password (SPWD) is required if the Station Security Authcode package (229) is equipped and the password is defined.

Changes for Release 19

With Release 19 and later software, LDs 10, 11, 20 and 32 are linked thus eliminating the need to exit one Overlay and enter another. Once one of the above Overlays has been loaded it is possible to add, print and get the status of a set without having to exit one Overlay and load another. The input processing has also been enhanced. Prompts ending with a colon (:) allow the user to enter either:

- 1 a question mark (?) followed by a carriage return (<cr>) to get a list of valid responses to that prompt, or
 - 2 an abbreviated response, the system then responds with the nearest match. If there is more than one possible match the system responds with SCH0099 and the input followed by a question mark and a list of possible responses. The user can then enter the valid response.
-

Prompts and responses

Prompt	Response	Comment
REQ:	a...a	Request (REQ responses begin on page 486)
TYPE:	a...a	Type of data block (Type responses begin on page 489)
TN	l s c u	Terminal Number (l s c u ranges are defined on page 488)
CDEN	aa	Card Density (aa = SD, DD, 4D, or 8D)
CUST	xx xx	Customer number
MPHI	YES NO	Meridian Packet Handler Interface
SPWD	xxxx	Security Password
TEN	x...x	Tenant (0 or 1-511)
DN	x...x	Directory Number
DATE	dd mmm yyyy	Date
PAGE	(NO) YES	Data printed on a per-page basis
- ADJUST PAPER THEN <cr>		Adjust Paper so that printing starts at top of sheet
DES	d...d	Designator
NACT	(NO) YES	Next Activity
AACS	NO YES	Application acquired set
SCNO	0-8190	Speed Call list Number
LSNO	0-8190	Speed Call or System Speed Call List Number
RNGE	xxxx yyyy	Range of list entries to be printed, inclusive from first entry number to last entry number.
HTNO	xxxx	Hunt Number
DGRP	0-2045	Dial Intercom Group
DMEM	0-99	Dial Intercom Group (DIG) Member number
FOR	a...a	For telephone type (a...a = 500, 2xxx, SL1, or 3xxx)
GRNO	0-63	Group Call Group Number
INFO	aaa	Information for templates (aaa = FRM, USE, USS, or DEF)
TEM	x...x	Template
EHNO	x...x	External Hunt DN

Alphabetical list of print reports

2.0 Mb/s Digital Trunk Interface (DT2) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DT2	2.0 Mb/s DTI output
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Analog set (500 & PBX) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	500	500/2500 type analog sets
	PBX	Private branch exchange sets
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis
DES	d...d	Print all units with DES "d...d"
	d+	Print all units starting with "d"
	<cr>	Disregard DES

Automatic Call Distribution Priority Agent (PRI2) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	PRI2	ACD Priority Agents
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Attendant console (ATT, 1250, & 2250) data from LD 12

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	ATT	QCW3 or QCW4 Attendant Console
	1250	M1250 Console (Release 12 and later)
	2250	M2250 Console (Release 15 and later)
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Business Communicaton Set (BCS) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	BCS	Business Communication Sets
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis
DES	d...d	Print all units with DES "d...d"
	d+	Print all units starting with "d"
	<cr>	Disregard DES

Call Pickup Network Wide (CPNW) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	CPNW	Call Pickup Network Wide data
CUST	0-99	Customer number

Channel data: Real Analog, Virtual Analog and Virtual Digital

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	RAC	Real Analog Channels
	VAC	Virtual Analog Channels
	VDC	Virtual Digital Channels
TN	I s c u	Terminal Number (loop, shelf, card, unit)
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Class Modem unit data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	CMOD	CLASS modem unit
TN	I s c u	Terminal Number (loop, shelf, card, unit)

Data access card (DAC) data

By responding R232, R422 or DAC to the type prompt in LD 20, the configured parameters for each port or the entire DAC may be printed.

If a specific TN is entered, the current settings are uploaded from the unit and printed with database settings. This is useful if parameters have been altered during keyboard or Hayes dialing modifying procedures.

Prompt	Response	Comment
REQ:	PRT, LTN, LUU	Print data, TN, or unit for the TN specified
TYPE:	DAC	Print data for whole DAC
	R232	Print data for the RS-232-C ports
	R422	Print data for the RS-422 ports
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from the date specified
	ACT	Print data from the last Activity
PAGE	(NO) YES	Data printed on a per-page basis
DES	d...d	Print all units with DES "d...d"
	d+	Print all units starting with "d"
	<cr>	Disregard DES

Dial Intercom Group (DIG) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DIG	Dial Intercom Group
CUST	0-99	Customer number
DGRP	0-2045	Dial Intercom Group
DMEM	0-99	Dial Intercom Group Member number

Dial Tone Detector (DTD & XTD) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DTD	Dial Tone Detector data
	XTD	Extended Dial Tone Detector
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Digital set (2000 series, 3000, & Aries) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	2xxx	Meridian 1 proprietary sets. You may enter: 2000, 2003, 2006, 2008, 2009, 2016, 2018, 2112, 2216, 2317, or 2616.
	3xxx	For Taurus sets (Release 24 and later): • 3901 = M3901 • 3902 = M3902 • 3903 = M3903 • 3904 = M3904 • 3905 = M3905
	ARIE	Aries (M2006, M2008, M2016S, M2216, or M2616) sets and Meridian Communications Unit (MCU) data blocks
	BCS	Business Communication Set
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Digitone Receiver (DTR) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DTR	Digitone Receiver data
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity

Directory number (DNB) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DNB	Directory number data block
CUST	0-99	Customer number
DN	x...x	Print for Directory Number
DATE	dd mmm yyyy	Print data from the date specified
	ACT	Print data from the last Activity
PAGE	(NO) YES	Data printed on a per-page basis
DES	d...d	Print all units with DES "d...d"
	d+	Print all units starting with "d"
	+	Print units with no DES assignment
	<cr>	Disregard DES
ADJUST PAPER THEN <cr>		
	<cr>	Adjust paper so that printing starts at top of sheet

Directory number (DNB) range data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	DNB	Directory Number block
CUST	0-99	Customer number
DN	xxxx...xxxx	Up to 8 DNs can be entered
DATE	dd mmm yyyy	Print data from the date specified
	ACT	Print data from the last Activity
PAGE	(NO) YES	Data printed on a per-page basis
DES	d...d	Print all units with DES "d...d"
	d+	Print all units starting with "d"
	+	Print units with no DES assignment
	<cr>	Disregard DES
ADJUST PAPER THEN <cr>		
	<cr>	Adjust paper so that printing starts at top of sheet

Group Call (GRP) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	GRP	Group Call
GRNO	0-63	Group Call Group Number

Hot Line List (HTL) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	HTL	Hot Line List
CUST	0-99	Customer number
RNGE	xxxx...xxxx	Range of Hot Line list entries (0-1000) to be printed for this customer
	<cr>	Print all entries in the Hot Line list

Hunting (HNT & EHT) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	HNT	Hunting
	EHT	External Hunting
CUST	0-99	Customer number
HTNO	x...x	Hunt Directory Number
EHNO	x...x	External Hunt Directory Number

Multifrequency (MFC, MFE, MFR, & MFVE) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	MFC	Multifrequency compelled sender/receiver
	MFE	Multifrequency signaling for Socotel sender/receiver
	MFR	Multifrequency receiver (for Feature group D)
	MFVE	Multifrequency versatile units
TN	I s c u	Terminal Number (loop, shelf, card, unit)
	I ch	DTI/PRI loop and channel
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Out of Service unit (OOSLT & OOSMLT) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	OOSLT	Single line TNs that are Out-of-Service
	OOSMLT	Multi-line TNs that are Out-of-Service
TN	I s c u	Terminal Number associated with the unit

Power (PWR) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	PWR	Power data block
TN	I s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Pretranslation (PRE) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	PRE	Pretranslation
CUST	0-99	Customer number

SL1 set data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	SL1	SL1 and M1109 sets, QCW and M1250 console
TN	I s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Special Service List (SSL) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	SSL	Special Service List
SSL	1-15	Special Service List number

Speed call lists (SCL) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	SCL	Regular and System Speed Call Lists
LSNO	0-8190	List Number for Speed Call or System Speed Call
	<cr>	Print for all lists
RNGE	xxxx xxxx	Range of Speed Call entries (0-1000) to be printed
	<cr>	Print all entries

Tandem Connection (TCON) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TCON	Tandem Connection for Meridian Packet Handler and PRI connections

Template (TEM) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TEM	Templates
FOR	aaa	Print template information for telephone type
INFO	FRM	Print key/feature assignment template
	USE	Print number of users of the template
	USS	Print TN using the template
	DEF	Print number of templates defined and the number of templates allowed
TEMP	xxxx	Telephone template number
	<cr>	Print all templates

Terminal Number Block (TNB) data for telephones and trunks

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TNB	Terminal Number Block
TN	l s c u,...	Terminal Number (Up to 6 TNs can be entered)
CDEN	SD, DD, 4D, 8D	Card Density
CUST	xx xx	Customer number
MPHI	YES, NO	Meridian Packet Handler Interface
SPWD	xxxx	Security Password
TEN	0, 1-511	Tenant
DATE	dd mmm yyyy	Print data from date specified
PAGE	(NO) YES	Date printed on a per page basis
DES	d...d, d+, +	Designator
NACT	(NO) YES, END	Next Activity
AACS	a...a	Application acquired set (a...a = (NO), AGTH, or AGT)
ASID	x...x	Application Service ID
SMCB	1-17	Print set message control bitmap
SMOO	(NO) YES	(Do not set) Set message optimize option

Terminal Number Block (TNB) range data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TNB	Terminal Number Block
TN	l s c u-l s c u	Terminal Number Range

Tone Detector (TDET) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TDET	Tone Detector data
TN	l s c u	Terminal Number (loop, shelf, card, unit)
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Trunk data: All Trunks

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	TRK	Trunk data block
TN	l s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Trunk data: Specific Trunk types

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	ADM	Add-on Data Module (Release 5 & later)
	AWR	Automatic Wake-Up RAN/Music trunks (Release 10 & later)
	CAA	Common Control Switching Arrangement
	CAM	CAMA trunks
	CBCT	NI-2 CBC trunk
	COT	Central Office trunks
	CSA	Common control switching arrangement access line
	DIC	Dictation trunks
	DID	Direct inward dial trunks
	FEX	Foreign Exchange trunks
	FGDT	Feature Group D trunks
	IDA	Integrated digital access trunks
	ISA	Integrated services access trunks (ISDN)
	MCU	Meridian Communications Unit (Release 19 & later)
	MDM	Modem/Data Module
	MUS	Music trunks
	CBCT	NI-2 CBC trunk
	PAG	Paging trunks
	R232	RS-232 mode data
	R422	RS-422 mode data
	RAN	Recorded announcement trunks
	RCD	Recorder trunks
	RDC	Real digital channel
	RLM	Release Link Main trunks
	RLR	Release Link Remote trunks
	TIE	TIE trunks
	WAT	Wide Area Telephone service trunks
TN	I s c u	Terminal Number (loop, shelf, card, unit)
CDEN	SD, DD, 4D, 8D	Single, Double, Quad or Octal Density
...		

LD 20

Prompt	Response	Comment
CUST	0-99	Customer number
DATE	dd mmm yyyy	Print data from date specified
	ACT	Print data from last activity
PAGE	(NO) YES	Data printed on a per page basis

Unused Card (LUC) data

Prompt	Response	Comment
REQ:	LUC	List Unused Card slots
TN	l s c	Terminal Number (loop, shelf, card)
	l ch	DTI/PRI loop and channel

Unused Directory Number (LUDN) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	LUDN	List Unused Directory Numbers
CUST	0-99	Customer number
DN	xxxx-xxxx	DN range

Unused Units (LUU) data

Prompt	Response	Comment
REQ:	LUU	List Unused Units
TYPE:		Peripheral equipment requiring TNs:
	500	Single line or analog sets
	SL1	SL-1 sets, QCW and M1250 consoles
	2000	Digital sets and M2250 consoles
	DTR	Digitone Receiver
	DSL	Digital Subscriber Loop
	MCU	Meridian Communications Unit
	TRK	All trunks
	a...a	Any specific trunk type (e.g., COT, DID, FEX, WAT, etc.)
TN	l s c u	Terminal Number

Unused Voice or Data unit (LUVU or LUDU) data

Prompt	Response	Comment
REQ:	LUVU	List Unused Voice Units
	LUDU	List Unused Data Units
TYPE:		Peripheral equipment requiring TNs:
	500	Single line or analog sets
	SL1	SL-1 sets, QCW and M1250 consoles
	2000	Digital sets and M2250 consoles
	DTR	Digitone Receiver
	DSL	Digital Subscriber Loop
	MCU	Meridian Communications Unit
	TRK	All trunks
	a...a	Any specific trunk type (e.g., COT, DID, FEX, WAT, etc.)
TN	xx...xxxx	Terminal Number

Voice Mailbox (VMB) data

Prompt	Response	Comment
REQ:	PRT	Print
TYPE:	VMB	Voice Mailbox information
CUST	<cr>	Customer number automatically appears. No entry is needed.
DN	xxxx	Print for Directory Number
VMB_STATE	nnnn	Print based on Voice Mailbox State

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AACS	NO YES	Application acquired set The TN is not acquired by an application The TN is acquired by an application	nxcc-22
ADJUST PAPER THEN <cr>	<cr>	Adjust paper then <cr> to start printing Start printing	basic-1
ASID	x...x	Application Service ID from which the acquired request originated The ASID is used for sending the monitor/control messages to the application. The ASID value is updated based on the applications's Acquire message for the TN. Since the AML over Ethernet (ELAN) is used to communicate between the Meridian 1 and the application(s), the value of the existing VSID might be used to uniquely identify the application that has acquired this device. ASID is printed if AACS = YES.	nxcc-22
CALB	1 2 ...	Call Filter Bitmap CALB applies to messages such as PCI, DN update, etc. This bitmap is downloaded by the application which is used to control the sending of messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding set message is enabled. CALB is printed if AACS = YES.	nxcc-22
CDEN	SD DD 4D 8D <cr>	Single Card Density Double Card Density Quadruple Card Density Octal Card Density For all card densities	basic-7

LD 20

Prompt	Response	Comment	Pack/Rel
CUST	xx xx	Customer number Print data range from first to last customer. Not prompted when: 1. REQ = LUU or LUC 2. TYPE = SCL, DIG or TEM 3. a complete TN is entered	basic-1
	<cr>	Print data blocks for all customers	
DATE	dd mmm yyyy	Print data from date specified. Where: • dd = 1-31 • mmm = JAN-DEC • yyyy = year (e.g. 1993)	basic-1
	<cr> ACT	DATE is prompted for TN related data. Print data and show last activity date. Print data from last activity date.	
DES	d...d d+ + <cr>	Designator Print all units with ODAS designator d...d Print units starting with ODAS designator d Print units with no ODAS designator assigned Disregard ODAS designator DES is prompted on TN related data The printing of data is subject to restrictions imposed by responses to TN and DATE.	odas-1
DGRP	0-254 0-2045 <cr>	Dial Intercom Group DIG numbers per customer (Release 13 and earlier) Release 14 and later Print all Dial Intercom Groups for customer DGRP is prompted when TYPE = DIG	basic-1
DMEM	0-99 <cr>	Dial Intercom Group (DIG) Member number Print all DIG member numbers	basic-1

Prompt	Response	Comment	Pack/Rel
DN		Directory Number	basic-19
	xxxx	Print data block for DN	
	<cr>	Print data blocks for all DN	
	xxxx <space>	If a space is entered after the Directory Number the system will reprompt for DN. A maximum of six DNs can be stacked and printed at one time.	
		With Release 19 and later the following responses are valid for DN:	
	x<cr>	All DNs starting with first digit x (X000-X999)	
	xx<cr>	All DNs starting with first two digits xx (XX00-XX99)	
	xxx<cr>	All DNs starting with first three digits xxx (XXX0-XXX9)	
	x-<cr>	All DNs between X000-9999	
	x-y<cr>	All DNs between DN X000 through Y999	
	xx-yyy<cr>	All DNs between DN XX00 through YYY9	
	xxxx xxxx	Two specific DNs. Up to a maximum of 8 DNs.	
	xxxx-yyy	All DNs between XXXX and YYYY	
EHNO	xxxx	External HUNT DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. EHNO is prompted when TYPE = EHT	eht-10
FOR		Print template information for telephone type	basic-1
	500	Print data for 500/2500 telephones.	
	2xxx	Print data for 2000 type telephones (specify type).	
	SL1	Print data for SL-1 telephones.	
GRNO	0-63	Group Call Group Number. Prompted when TYPE = GRP.	grp-1
	<cr>	Print all group call groups.	
HTNO	x...x	Hunt Directory Number Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Prompted when TYPE = HNT.	basic-1

LD 20

Page 486 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
INFO	FRM USE USS DEF	Information for Templates Print key/feature assignment template Print number of users of template Print TN using the template Print number of templates defined and number allowed Prompted when TYPE = TEM	basic-1
LSNO	0-253 0-4095 0-8190	Speed Call or System Speed Call List Number prior to Release 14 System Speed Call Lists Release 14 and later Speed Call Lists Release 14 and later When inputting list number for printout, non-DN input exceeding 4 digits may be truncated. Only the 4 right-most digits will be accepted, and printed for Release 14 and later.	basic-1
MPHI	YES NO	Meridian Packet Handler Interface. Prompted when TYPE = MCU. Respond Yes if using the MCU for MPH interfaces.	mph-19
NACT	(NO) YES END	Next Activity Return to REQ prompt Print current system data and end overlay End overlay activity	odas-1
PAGE	(NO) YES	Data printed on a per-page basis Prompted only on TN related data	basic-1
REQ:		Request	basic-1
	END LTN LUC LUDU LUU LUVU PRT	Exit overlay program List TN of TYPE specified Print Unused Card data blocks of TYPE specified List Unused Data Units Print Unused Unit data blocks of TYPE specified List Unused Voice Units Print data block for the TYPE specified.	

Note: As of Release 19, this load is linked with LDs 10, 11 and 32. You may enter one of the responses listed below to the REQ: prompt. Then go to that Load and follow its Prompt and Response sequence. See "Changes for Release 19" on page 462 for further information.

Prompt	Response	Comment	Pack/Rel
		LD 32: CDSP CMIN CONV CPWD DISC DISI DISL DISN DISS DISU DSCT DSPS DSXP ENCT ENLC ENLG ENLL ENLN ENLS ENLU ENPS ENXP IDC IDCS IDU LBSY LDIS LIDL LMNT PBXT SDLC STAT SUPL TRK XNTT XPECT XPEC	
		LD 10 or 11: CHG CPY MOV NEW OUT	
RNGE	xxxx yyyy <cr>	Range of list entries to be printed, inclusive from first entry number to last entry number. Print All members of a specified SCL or SSC list.	optf-1
SCNO	0-253 0-8190 <cr>	Speed Call list Number Speed Call list Number - Release 13 and later Print all lists. Prompted when TYPE = SCL	optf-1
SFNB	1 2 ...	Set Feature Notification Bitmap SFNB is used for messages such as: SFN (login), SFN (logout), ... This bitmap is downloaded by the application which is used to control the sending of SFN messages on behalf of the acquired TN. A numeric value is printed only if the corresponding message is enabled. SFNB is printed if AACS = YES.	nxcc-22
SFRB	1 2 ...	Set Feature Route Bitmap SFRB is used for messages such as: SFR (login), SFR (logout), ... This bitmap is downloaded by the application which is used to control the sending of SFR messages on behalf of the acquired TN. A numeric value is printed only if the corresponding message is enabled. SFRB is printed if AACS = YES.	nxcc-22

LD 20

Page 488 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
SPWD	xxxx	Security Password. This prompt appears when: - the Station Specific Authcode package (229) is equipped - the security password is defined in LDs 10 and 11.	ssau-19
TEM	xxxx xxxxxxx <cr>	Template number Template number - Release 13 and later Print data for all templates. Prompted when TYPE = TEM	basic-1
TEMP	xxxx	Telephone template number. Enter <cr> to print all templates.	basic-1
TEN	0 1-511 <cr>	Tenant Shared customer resource stations Tenant Service stations Print data blocks for all tenants.	tens-7
TN		Terminal Number	basic-1
	loop	Print data of the specified TYPE for this loop.	
	l s	Print data of the specified TYPE for this loop and shelf	
	l s c	Print data of the specified TYPE for this loop, shelf and card	
	l s c u	Print data of the specified TYPE for this loop, shelf, card and unit.	
	l ch	Print data of the specified TYPE for this loop and channel (format for Digital Trunk and Primary Rate Interfaces).	
	<cr>	Print data for all TNs of the specified TYPE. With Release 19 and later the following responses are valid for TN.	
	l s c u, l s c u	List of TNs (up to 6)	
	l s c u, l ch	A TN and a trunk loop/channel can be entered on the same line	

Prompt	Response	Comment	Pack/Rel
	I s c, I s c	All units within the specified starting and ending cards	
	I s, I s c u	All units, including the specified starting shelf and ending TN	
	I s c u	All TNs starting with the specified TN and ending with the last TN	
		Not prompted when TYPE = SCL, HNT, DIG, TEM, or GRP	
TYPE:		Type of data block	basic-1
Note: For Release 19, this load is linked with LDs 10, 11 and 32. LD 20 permits you to enter LD 10 or 11 responses to the TYPE prompt or a command listed in LD 32. See “Changes for Release 19” on page 462 for further information.			
500		500/2500 telephone	
1250		M1250 Console (Release 12 and later)	
2006		M2006 Digital telephone (Release 15 and later)	
2008		M2008 Digital telephone (Release 14 and later)	
2009		M2009 Digital telephone (Release 7 and later)	
2016		M2016 Digital telephone	
2018		M2018 Digital telephone (Release 7 and later)	
2112		M2112 Digital telephone (Release 7 and later)	
2216		M2216 Digital telephone (Release 14 and later) (ACD terminal)	
2250		M2250 Console (Release 15 and later)	
2317		M2317 Digital telephone (Release 9 and later)	
2616		M2616 Digital telephone (Release 14 and later)	

LD 20

Prompt	Response	Comment	Pack/Rel
	3000	M3000 Digital Touchphone (Release 7 and later)	
	4020	M4020 Model	
	ADM	Add-on Data Module (Release 5 and later) Data port interfacing with a data line card	
	ARIE	Aries (M2006, M2008, M2016S, M2216 and M2616) sets and Meridian Communications Unit (MCU) data blocks	
	ATT	QCW3 or QCW4 Attendant Console	
	ATVN	Autovon trunks	
	AWR	Automatic Wake Up RAN/Music trunk (Release 10 and later)	
	CAA	Common Control Switching Arrangement (CCSA) Automatic Number Identification (ANI) trunk data block	
	CAM	CAMA trunk data block	
	CBCT	NI-2 Call by call trunk data block	
	COT	Central Office Trunk (PSTN) data block	
	CPNW	Call Pickup Network Wide data	
	CSA	Common Control Switching Arrangement access line	
	DAC	Data Access Card	
	DIC	Dictation trunk data block	
	DID	Direct Inward Dialing trunk data block	
	DIG	Dial Intercom Group	
	DNB	Directory Number Block	
	DTR	Digitone Receiver	

Prompt	Response	Comment	Pack/Rel
	EHT	External Hunting	
	FEX	Foreign Exchange trunk	
	FGDT	Feature Group D Trunk	
	GRP	Group call	
	HNT	Hunting	
	HTL	Hot Line	
	LUDN	List Unused Directory Numbers.	
	MCA	Meridian Communications Adapter Release 18	
	MCU	Meridian Communications Unit Release 19 and later	
	MDM	Modem/Data Module. Data port interfacing with QPC60 500/2500 type card	
	MFC	Multifrequency Compelled sender/receiver data block	
	MFR	Multifrequency Receiver (for Feature Group D)	
	MFVE	Print Multifrequency Versatile units	
	MUS	Music trunk	
	OOSMLT	Out-of-Service Multi-Line Terminal	xpe-20
	OOSLT	Out-of-Service Single Line Terminal	xpe-20
	PRI2	ACD Priority Agents	
	PWR	Power data block	
	R232	NT7D16 Data Access Card (Release 16 and later) (DAC) port in RS-232 Data mode data block	
	R422	NT7D16 Data Access Card (Release 16 and later) (DAC) port in RS-422 mode data block	
	RAN	Recorded Announcement trunk	

LD 20

Prompt	Response	Comment	Pack/Rel
	RCD	Recorder trunk	
	RLM	Release Link Main trunk	
	RLR	Release Link Remote trunk	
	SCL	Regular and System Speed Call Lists	
	SL1	SL-1 and M1109 sets, QCW and M1250 console (Not supported on Option 11)	
	TCON	Tandem Connection for MPH and PRI connections	
	TDET	Tone Detector	
	TEM	Template	
	TIE	TIE trunk	
	TNB	Terminal Number	
	TRK	Trunk data block	
	VMC	Voice Mailbox information	
	WAT	Wide Area Telephone Service trunk	
	<cr>	Print all	
USFB	1 2 ...	Unsolicited Status Message (USM) Filter Bitmap USFB applies to messages such as: Onhook, Offhook, Ringing, Active, Disconnect, Unringing, Hold, Restore, Ready, Not Ready, Walkaway, Walkaway Return, Reserved, Unreserved, ... This bitmap is downloaded by the application which is used to control the sending of USM messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding message set is enabled. USFB is printed if AACs = YES.	nxcc-22

Prompt	Response	Comment	Pack/Rel
VMB_STATE	nnnn	Print based on Voice Mailbox State	vmba-19

LD 21: Print Routine 2

Overlay program 21 allows data to be printed for the following:

- customer data blocks
- code restriction data blocks
- route data blocks
- trunks within a route
- ATM routes
- ATM schedules
- CAS keys
- associated TN

Set Relocation data

This prints the sets which have “relocated out”, but have not “relocated back in”. With Automatic Set Relocation the set’s serial number, NT code, color code, and release are also printed.

Changes for Release 21

The input processing has also been enhanced, prompts ending with a colon (:) allow the user to enter either

- 1 a question mark (?) followed by a carriage return (<cr>) to get a list of valid responses to that prompt, or
- 2 an abbreviated response, the system then responds with the nearest match. If there is more than one possible match the system responds with SCH0099 and the input followed by a question mark and a list of possible responses. The user can then enter the valid response.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = END, LTM, or PRT)
TYPE	a...a	Type of data block (TYPE responses begin on page 505)
CUST	xx	Customer number associated with this data block
SIZE	0-4000	CLID entry size
RNGE	aa ... aa	CLID entry or entries to be printed
HOURL	0-23	All routes tested by ATM for this hour
OPR	(NO) YES	Outpulsing Route
ROUT	0-511	Route number
ACOD	x...x	Access Code for route
AACR	(NO) YES	The route (is not)/is acquired by the application
ASID	x...x	Application Service ID from which the acquired request originated

Alphabetical list of print reports

Application Module Link (AML) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	AML	Application Module Link
CUST	0-99	Customer number

Attendant Console (ATT) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ATT	Attendant consoles
CUST	0-99	Customer number

Automatic Number Identification (ANI) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ANI	Automatic Number Identification
CUST	0-99	Customer number

Automatic Trunk Maintenance (ATM) route data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ATM	ATM routes
CUST	0-99	Customer number
ROUT	0-511	Route number to be printed

Automatic Trunk Maintenance (ATM) schedule data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	SCH	ATM schedules
CUST	0-99	Customer number
HOUR	0-23	Print all routes tested by ATM for this hour
	<cr>	Print routes tested for all hours

Automatic Wake Up (AWU) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	AWU	Automatic Wake Up
CUST	0-99	Customer number

Call Detail Recording (CDR) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CDR	CDR and Charge Account
CUST	0-99	Customer number

Call Redirection (RDR) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	RDR	Call Redirection options
CUST	0-99	Customer number

Centralized Attendant Service (CAS) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CAS	Centralized Attendant Service
CUST	0-99	Customer number

Centralized Attendant Service (CASK) Key

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CASK	Centralized Attendant Service key
CUST	0-99	Customer number

Code Restriction (CRB) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CRB	Code Restriction data
CUST	0-99	Customer number
ROUT	0-511	Route number to be printed

Controlled Class of Service (CCS) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CCS	Controlled Class of Service
CUST	0-99	Customer number

Customer data block (CDB)

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CDB	Customer data block Note: If you need information regarding System Passwords, print PWD_DATA field by itself. PWD_data will not be provided by printing CDB.
CUST	0-99	Customer number

Features and options (FTR) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	FTR	Features and Options
CUST	0-99	Customer number

Flexible Code Restriction (FCR) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	FCR	New Flexible Code restrictions
CUST	0-99	Customer number

Flexible Feature Codes (FFC) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	FFC	Flexible Feature Code
CUST	0-99	Customer number

Hospitality Management (HSP) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	HSP	Hospitality Management options
CUST	0-99	Customer number

Integrated Message Service (IMS) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	IMS	Integrated Message Service
CUST	0-99	Customer number

Intercept Computer Update (ICP) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ICP	Intercept computer options
CUST	0-99	Customer number

ISDN Signaling Link (ISLL) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ISLL	ISDN Signaling Link trunk TN

Listed Directory Numbers (LDN) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	LDN	Departmental Listed Directory Numbers
CUST	0-99	Customer number

Multi-Party Operations (MPO) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	MPO	Multi-party options
CUST	0-99	Customer number

Networking (NET) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	NET	ISDN and ESN networking options
CUST	0-99	Customer number

Night Service (NIT) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	NIT	Night Service
CUST	0-99	Customer number

Off Hook Alarm Security (OAS) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	OAS	Off-Hook Alarm Security
CUST	0-99	Customer number

Password (PWD) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	PWD	Customer Related Passwords
CUST	0-99	Customer number

Recorded Overflow Announcement (ROA) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ROA	Recorded Overflow Announcement options
CUST	0-99	Customer number

Route Data Block (RDB)

Prompt	Response	Comment
REQ	PRT	Print
TYPE	RDB	Route Data Block
CUST	0-99	Customer number
ROUT	0-511	Route number to be printed
	<cr>	Print data for all routes
ACOD	xxxx	Route access code

Secure Data Password (SDP) (Release 20 and earlier)

With the LAPW package restricted or unrestricted, a craftsperson logged in with an administrator's password (Level 1 or 2) must enter the Level 2 password at the PWD2 prompt.

With the LAPW package unrestricted, printing of the secure data password is suppressed for craftsperson's logged in with a LAPW password.

Prompt	Response	Comment
REQ	PRT	Print
TYPE	SDP	Secure Data Password
CUST	0-99	Customer number
PWD2	xxxx	Level 2 password

Set Relocation (SRDT) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	SRDT	Recent Set Relocation activity

Test lines (TST) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	TST	Test lines
CUST	0-99	Customer number

Timers (TIM) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	TIM	Timer options
CUST	0-99	Customer number

Trunk Members (LTM) data

Prompt	Response	Comment
REQ	LTM	List Trunk members
CUST	0-99	Customer number
ROUT	0-511	Route number to be printed
ACOD	xxxx	Route Access Code

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AACR	(NO) YES	The route is not acquired by the application The route is acquired by the application	nxcc-22
ACOD	x...x <cr>	Access Code for route Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Print data for all route access codes This prompt appears when ROUT = <cr>	basic-1
ASID	x...x	Application Service ID from which the acquired request originated ASID is used for sending route status messages. The ASID value is updated based on the application's Acquire message for the route. Since the AML over Ethernet (ELAN) is used to communicate between the Meridian 1 and other applications, the VSID value might be used to uniquely identify the application which has acquired that device.	nxcc-22
CALB	1 2 ...	Call Filter Bitmap CALB applies to messages such as PCI, DN update, etc. This bitmap is downloaded by the application which is used to control the sending of messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding set message is enabled. CALB is printed if AACR = YES.	nxcc-22
CUST	xx xx <cr>	Customer number Print data range from first to last customer Not prompted when: • REQ = LUU or LUC • TYPE = SCL, DIG or TEM • a complete TN is entered Print data blocks for all customers	basic-1
HOURL	0-23 <cr>	All routes tested by ATM for this hour Print routes tested by ATM for all hours	

LD 21

Prompt	Response	Comment	Pack/Rel
OPR	(NO) YES	Outpulsing Route This prompt appears when OPOA is equipped. Prompted on TN related data	
REQ	END LTM PRT	Request Exit overlay program Print trunk route by TN and member number Print data block for the TYPE specified.	basic-1
RNGE	aa ... aa	CLID entry to be printed You may print one CLID entry or several CLID entries. If you want to print several CLID entries, separate each entry with a comma. Each CLID entry must be between 0 and the number entered for the prompt SIZE in LD 15.	isdn-22
ROUT	0-127 0-511 <cr>	Route number For machine types NT, RT, XN, XT and system Options 51, 61, and 71 (Release 14 and later). Print data for all routes This prompt appears when TYPE = CRB or RDB	basic-1
SFNB	1 2 ...	Set Feature Notification Bitmap SFNB is used for messages such as: SFN (login), SFN (logout), ... This bitmap is downloaded by the application which is used to control the sending of SFN messages on behalf of the acquired TN. A numeric value is printed only if the corresponding message is enabled. SFNB is printed if AACR = YES.	nxcc-22
SIZE	- - -	CLID entry size. The SIZE prompt and the SIZE value print out automatically after the CUST prompt.	isdn-22
TYPE		Type of data block	basic-1
	AML_DATA	Application Module Link	
	ANI_DATA	Automatic Number Identification numbers	

Prompt	Response	Comment	Pack/Rel
ATM		Automatic Trunk Maintenance (ATM) data block	
ATT_DATA		QCW3 or QCW4 Attendant Console	
AWU_DATA		Enable Automatic Wake-up	
CASK		Centralized Attendant Service (CAS) key data block	
CAS_DATA		Centralized Attendant Service	
CCS_DATA		Controlled Class of Service options	
CDB		Customer Data Block Note: If you need information regarding System Passwords, print PWD_DATA field by itself. PWD_data will not be provided by printing CDB.	
CDR_DATA		Call Detail Recording	
CLID		Calling Line Identification entry data	
CRB		Code Restriction data block	
FCR_DATA		New Flexible Feature code options	
FFC_DATA		Flexible Feature Codes	
FTR_DATA		Feature	
HSP_DATA		Hospitality	
IMS_DATA		Integrated Messaging System	
INT_DATA		Alarm ring for Internal calls	
ISLL		IASL ISDN Signaling Link data block. This prompt appears when REQ = PRT.	
LDN_DATA		Listed Directory Number	
MPO_DATA		Multi-party options	
NET_DATA		ISDN and ESN networking options	

LD 21

Prompt	Response	Comment	Pack/Rel
	NIT_DATA	Night Service options	
	NPID	Numbering Plan Digit or Information Digit table	
	OAS_DATA	Off-Hook Alarm Security options	
	PWD_DATA	Print the system Passwords (Release 19 and later)	
	RDB	Route Data Block With Release 14, a printout of a route with the Night Key for DID Digit Manipulation (NKDM) active will show * opposite the value for DCNO or NDNO.	
	RDR_DATA	Call Redirection	
	ROA_DATA	Recorded Overflow Announcement	
	SCH	Schedule data block for ATM	
	SDP	Secure data password (Release 20 & earlier)	
	SRDT	Set Relocation Data block	
	TIM_DATA	System Speed Call	
	TST_DATA	Loop Test trunk data	
USFB	1 2 ...	Unsolicited Status Message (USM) Filter Bitmap USFB applies to messages such as: • Onhook, Offhook, Ringing, Active, Disconnect, Unringing, Hold, Restore, Ready, Not Ready, Walkaway, Walkaway Return, Reserved, Unreserved, ... This bitmap is downloaded by the application which is used to control the sending of USM messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding message set is enabled. USFB is printed if AACR = YES.	nxcc-22

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 22: Print Routine 3

Overlay program 22 allows data to be printed for the following:

- Configuration Record
- DN to TN Matrix
- System Password number
- System Loop Limits
- software version
- tape ID
- issue number
- equipped feature packages
- System Incremental Software Management (ISM) parameters

With Release 18 and later, when printing the DN block, “MARF” is output prior to the DES if it is the MARF TN. Refer to X11 features and services for an explanation of the MARF feature.

Audit trail for Limited Access to Overlays (LAPW)

You must be logged in with the PWD1 or PWD2 password in order to print the Audit Trail. Printing of the Audit Trail deletes the Audit Trail information and resets the buffer.

Packages equipped

This prompt sequence prints the equipped software packages. In Release 18 and later the packages are printed in numerical order by package number, accompanied by the mnemonic. In addition, you can get the status of an individual package.

Issue and release

If the system has a “patch”, then a “+” is printed next to the issue number.

Read Only Memory (ROM)

This print option only applies to SL-1 ST and Option 21 systems.
UNKNOWN is output for all other systems.

System limits for Incremental Software Management (ISM)

This prints the ISM limits for TNs, ACD Positions, ACD DNs, AST sets, Application Module Links (AML), D-channels (DCH), ISDN BRI Digital Subscriber Loops (DSL) and LTID.

The output is as follows:

```
ACDN xxxx LEFT xxxx USED xxxx
AGNT xxxx LEFT xxxx USED xxxx
AML xxxx LEFT xxxx USED xxxx
AST xxxx LEFT xxxx USED xxxx
DCH xxxx LEFT xxxx USED xxxx
DSL xxxx LEFT xxxx USED xxxx
LTID xxxx LEFT xxxx USED xxxx
TNS xxxx LEFT xxxx USED xxxx
```

Changes for Release 24

With Release 24 and later software, Incremental Software Management (ISM) Header parameters for LD 22 will print as follows:

>ld 22

PT2000

REQ slt

TNS	xxx	LEFT	xxx	USED	xxx
ACDN	xxx	LEFT	xxx	USED	xxx
AST	xxx	LEFT	xxx	USED	xxx
LTID	xxx	LEFT	xxx	USED	xxx
DCH	xxx	LEFT	xxx	USED	xxx
AML	xxx	LEFT	xxx	USED	xxx
RAN CON	xxx	LEFT	xxx	USED	xxx
RAN RTE	xxx	LEFT	xxx	USED	xxx
MUS CON	xxx	LEFT	xxx	USED	xxx
ACD AGENTS	xxx	LEFT	xxx	USED	xxx
ANALOGUE TELEPHONES	xxx	LEFT	xxx	USED	xxx
BRI DSL	xxx	LEFT	xxx	USED	xxx
DIGITAL TELEPHONES	xxx	LEFT	xxx	USED	xxx
WIRELESS TELEPHONES	xxx	LEFT	xxx	USED	xxx
TMDI D-CHANNELS	xxx	LEFT	xxx	USED	xxx
MOPT	xxx				
KEY1	00000000				
KEY2	00000000				
KEY3	00000000				

Prompts and responses

Prompt	Response	Comment
REQ	a...a	Request (a..a = END, ISS, ISSP, PRT, PWD, ROM, SLL, SLT, or TLD)
TYPE	a...a	Type of data block (TYPE responses begin on page 525)
PWD2	xxxx	Password 2
CUST	xx	Customer number associated with this data block
DN	xxxx	Print for Directory Number
CUST	xx	Customer number associated with this data block
DN	xxxx	Print for Directory Number
DATE	dd mmm yyy	ACT Date
PAGE	(NO) YES	Data printed on a per-page basis
- ADJUST PAPER THEN <cr>		
	<cr>	Adjust paper so that printing starts at top of sheet.
DES	d...d	Designator
NACT	(NO) YES	Next Activity
- VHST	aaa	View History File (aaa = (%ON) or %OFF)

Alphabetical list of print reports

Alarm and Exception Filter (ALARM) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ALARM	Print Filter and Exception tables. Must have Alarm Filtering (AFTR) package 243.

Audit trail (AUDT) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	AUDT	Audit trail. Must be logged in with the PWD1 or PWD2 password. Printing of the Audit trail deletes the Audit trail information and resets the buffer.

Common Equipment (CEQU) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CEQU	Common Equipment data

Configuration Record (CFN) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CFN	Configuration record

LD 22

Core Inventory (CINV) data for Option 51C/61C/81/81C

Prompt	Response	Comment
REQ	PRT	Print
TYPE	CINV	Core Inventory list

History File (AHST & PHST) data (Pre-Release 19)

Prompt	Response	Comment
REQ	PRT	Print
TYPE	AHST	Print all of the History File
	PHST	Print the previous History File

History File (VHST) data (Release 19 & later)

Prompt	Response	Comment
REQ	PRT	Print
TYPE	VHST	View the History File
VHST	(%ON)	Turn ON display features
	%OFF	Turn OFF display features
	BFIND aaa	Search backward in the History File
	BFIND	Repeats the previous backward search
	DOWN BOT	Moves to the top of the file
	DOWN	Move forward 6 lines in the History File
	FIND aaaa	Search Forward in the history file
	FIND	Repeats the previous forward search
	HELP	List valid responses
	NEXT BOT	Moves to the end of the file
	NEXT x	Move forward x lines in the History File, display all lines in between
	PREV TOP	Moves to the top of the file
	PREV x	Move backward x lines in the History File, display all lines in between
	TRF	View the system traffic log file
	TTYLOG n	View the log file for TTY port n
	UP TOP	Moves to the top of the file
	UP	Move backward 6 lines in the history file

Input/output device (ADAN) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ADAN	All I/O devices
	ADAN AML	Application Modules
	ADAN DCH	D-channel and backup D-channels
	ADAN FDK	Floppy Disk units
	ADAN HST	History Files
	ADAN PRT	System Ports
	ADAN TTY	System Terminals

Integrated Message Service (IMA) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	IMA	IMS Message Attendant
CUST	0-99	Customer number

Issue and Release (ISS)

Prompt	Response	Comment
REQ	ISS	Print Issue and Release

Meridian Modular Telephone (ATRN) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	ATRN	Meridian Modular Telephone transmission parameters

Overlay area (OVLY) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	OVLY	Overlay area information

Package (PKG) information

Prompt	Response	Comment
REQ	PRT	Print
TYPE	PKG	Software Packages
	PKG xxx	Check equipped/restricted status of package number xxx

Password (PWD) data (Pre-Release 19)

Prompt	Response	Comment
REQ	PWD	Action Request
PWD2	xxxx	Level 2 Password
	<cr>	Limited Access to Overlays

Password (PWD) data (Release 19 & later)

Prompt	Response	Comment
REQ	PRT	Print
TYPE	PWD	Print System Passwords

Peripheral Software Version (PSWV) data

Prompt	Response	Comment
REQ TYPE	PRT PSWV	Print Peripheral Software Versions downloaded to: NT8D01 Controller cards, NT8D04 Network cards and NT8D018 Network/Digitone Receiver cards.

Read Only Memory (ROM) data

This is not applicable for C processor systems.

Prompt	Response	Comment
REQ	ROM	Print the QPC code of the ROM card

System Limits (SLT) data

Prompt	Response	Comment
REQ	SLT	Print System Limits

System Loop limit (SLL) data

Prompt	Response	Comment
REQ	SLL	Print System Loop Limits

System Parameters (PARM) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	PARM	System Parameters

System Patch (ISSP) data

Prompt	Response	Comment
REQ	ISSP	Print System and Patch Information

Tape ID (TID) data

Prompt	Response	Comment
REQ	TID	Print Tape ID

Value Added Server (VAS) data

Prompt	Response	Comment
REQ	PRT	Print
TYPE	VAS	Print Value Added Server data

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADJUST PAPER THEN <cr>			basic-1
	<cr>	Adjust paper then <cr> to start printing Start printing	
CUST	xx xx	Customer number Print data range from first to last customer. Not prompted when: 1. REQ = LUU or LUC 2. TYPE = SCL, DIG or TEM 3. a complete TN is entered	basic-1
	<cr>	Print data blocks for all customers	
DATE	dd mmm yyyy	Print data from date specified. Where: • dd = 1-31 • mmm = JAN-DEC • yyyy = year e.g. 1993 DATE is prompted for TN related data	basic-1
	<cr> ACT	Print data and show last activity date Print data from last activity date	
DES		Designator DES is prompted on TN related data The printing of data is subject to restrictions imposed by responses to TN and DATE.	odas-1
	d...d d+ + <cr>	Print all units with ODAS designator ddddd Print units starting with ODAS designator d Print units with no ODAS designator assigned Disregard ODAS designator	

Prompt	Response	Comment	Pack/Rel
DN	xxxx <cr> xxxx <space>	Directory Number Print data block for DN Print data blocks for all DN If a space is entered after the Directory Number the system will reprompt for DN. A maximum of six DNs can be stacked and printed at one time. With Release 19 and later the following responses are valid for DN:	basic-19
	x<cr> xx<cr> xxx<cr>	All DNs starting with first digit x (X000-X999) All DNs starting with first two digits xx (XX00-XX99) All DNs starting with first three digits xxx (XXX0-XXX9)	
	x-<cr> x-y<cr> xx-yyy<cr>	All DNs between X000-9999 All DNs between DN X000 through Y999 All DNs between DN XX00 through YYYY	
	xxxx xxxx xxxx-yyy	Two specific DNs. Up to a maximum of 8 DNs. All DNs between XXXX and YYYY	
NACT	(NO) YES END	Next Activity Return to REQ prompt Print current system data and end overlay End overlay activity	odas-1
PAGE	(NO) YES	Data printed on a per-page basis Prompted only on TN related data	basic-1
PWD2	x...x <cr>	Enter second level administration password (Password 2) to print information relating to all passwords. Valid characters are 0-9, A-Z, a-z. Length is 4-16 characters. To print only the information regarding the Limited Access to Overlay password used to login. PWD2 is prompted when REQ = PWD or TYPE = PWD.	basic-1

LD 22

Prompt	Response	Comment	Pack/Rel
REQ		Request	basic-1
	END	Exit overlay program	
	ISS	Print generic version and Issue (Rel 18 & earlier)	
	ISSP	Print System and Patch Information (Rel 19 & later)	
	PRT	Print data block for TYPE specified	
	PWD	Print the system Passwords	
	ROM	Print ROM daughterboard QPC number (not applicable for C processor systems)	
	SLT	Print System Limits : Incremental Software Management	
	TID	Print the Tape ID.	
TN		Terminal Number	basic-1
		TN is not prompted when TYPE = SCL, HNT, DIG, TEM, or GRP.	
	loop	Print data of the specified TYPE for this loop.	
	l s	Print data of the specified TYPE for this loop and shelf	
	l s c	Print data of the specified TYPE for this loop, shelf and card	
	l s c u	Print data of the specified TYPE for this loop, shelf, card and unit.	
	l s c u, l s c u	List of TNs (up to 6)	
	l s c u, l ch	A TN and a trunk loop/channel can be entered on the same line	
	l s c, l s c	All units within the specified starting and ending cards	
	l s, l s c u	All units, including the specified starting shelf and ending TN	
	l s c u	All TNs starting with the specified TN and ending with the last TN	
	l ch	Print data of the specified TYPE for this loop and channel (format for Digital Trunk and Primary Rate Interfaces).	
	<cr>	Print data for all TNs of the specified TYPE. With Release 19 and later the following responses are valid for TN.	

Prompt	Response	Comment	Pack/Rel
TYPE		Type of data block	basic-1
	ADAN	All I/O devices	
	ADAN AML	Application Modules	
	ADAN DCH	D-channel and backup D-channels	
	ADAN FDK	Floppy Disk units	
	ADAN HST	History Files	
	ADAN PRT	System Ports	
	ADAN TTY	System Terminals	
	ADM	Add-on Data Module (Release 5 and later) Data port interfacing with a data line card	
	AHST	All History File	
	AID	Automatic Identification of Outward Dial (AIOD) trunk. Not supported on Release 20 and later	
	ALARM	Print Filter and exception tables	
	APL	Auxiliary Processor Links	
	ATRN	Print Meridian Modular Telephone Transmission parameters	
	AUDT	Audit Trail buffer Only system Administrators are allowed to print the Audit Trail. They must first respond to PWD2 in LD 17 to define the password.	
	CEQU	Common Equipment	
	CFN	Configuration record data block	
	CHID	Channel ID for ISDN Signaling Link (ISL)	
	CINV	Core Inventory list (Option 81)	
	GHT	Group Hunt	

LD 22

Page 526 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	GRP	Group call	
	IMA	IMS Message Attendant	
	IADN	Individual Attendant Directory Number	
	ISS	Generic version and Issue (Release 18 and earlier)	
	ISSP	System and Patch Information (Release 19 and later)	
	OVLY	Print Overlay area information	
	PARM	System Parameters	
	PHST	Previous History File All History File records since last request	
	PKG	Packages equipped. For a list of packages, refer to pages 21 or 31.	
	PKG xxx	Check equipped/restricted status of package number xxx	
	PSWV	Peripheral Software Version(s) downloaded to: NT8D01 Controller cards NT8D04 Network cards NT8D018 Network/Digitone Receiver cards	
	PWD	Print the system Passwords (Release 19 and later)	
	RLM	Release Link Main trunk	
	RLR	Release Link Remote trunk	
	SLL	System Loop Limits	
	VAS	Value Added Server data	vns-21
	VHST	View History File	

Prompt	Response	Comment	Pack/Rel
VHST		View the History File	hist-19
	(%ON) % OFF	Turn ON display features Turn OFF display features This command is used to enable or disable the following three display features: • brackets to surround the current index ([]) • percent symbol (%) preceding each History File line • relative location within the History File (in percentage) VHST accepts abbreviated responses.	
BFIND aaaa		Search backward in the History File This command can be used to search backward, starting at the current index location, for the string "aaaa." If necessary, the file will wrap until it returns to the same location. The text string can be up to 12 characters. Special characters like space, slash (/), and colon (:) are accepted. Leading or trailing spaces are ignored unless enclosed in double quotes. For example, the spaces denoted here are ignored: <SP><SP>INI<SP>. The spaces in this string, however, are included in the search: "<SP><SP>INI<SP>". When the string is found, the system displays the current index location. Five text lines are shown, with the middle line containing the sought string. The VHST prompt is re-displayed to allow more command use. If the string is not found, VHST is reprompted to allow more command use.	
BFIND		Repeats the previous backward search	
DOWN BOT		Moves to the top of the file	

LD 22

Prompt	Response	Comment	Pack/Rel
	DOWN	Move forward 6 lines in the History File This command can be used to move forward in the History File, toward the end. If x exceeds the end of the file, the end will be shown. When the move is complete, VHST is reprompted to allow more command use.	
	FIND aaaa	Search Forward in the History File This command can be used to search forward, starting at the current index location, for the string "aaaa." If necessary, the file will wrap until it returns to the same location. The text string can be up to 12 characters. Special characters like space, slash (/), and colon (:) are accepted. Leading or trailing spaces are ignored unless enclosed in double quotes. For example, the spaces denoted here are ignored: <SP><SP>INI<SP>. The spaces in this string, however, are included in the search: "<SP><SP>INI<SP>". When the string is found, the system displays the current index location. Five text line are shown, with the middle line containing the sought string. The VHST prompt is re-displayed to allow more command use. If the string is not found, VHST is reprompted to allow more command use.	
	FIND	Repeats the previous forward search	
	HELP	List valid responses	
	NEXT BOT	Moves to the end of the file	

Prompt	Response	Comment	Pack/Rel
	NEXT x	Move forward x lines in the History File, display all lines in between. This command can be used to view lines forward, toward the end of the file. The lines between the current index location, and the new one (x lines down) are displayed. If you enter only NEXT, the default of 20 lines is used for the move. When the move is complete, VHST is reprompted to allow more command use.	
	PREV TOP	Moves to the top of the file	
	PREV x	Move backward x lines in the History File, display all lines in between This command can be used to view lines backward, toward the top of the file. The lines between the current index location, and the new one (x lines up) are displayed. If you enter only PREV, the default of 20 lines is used for the move. When the move is complete, VHST is reprompted to allow more command use.	
	TRF	View the system traffic log file	
	TTYLOG n	View the log file for TTY port n	
	UP TOP	Moves to the top of the file	
	UP	Move backward 6 lines in the History File This command can be used to move backward in the History File, toward the top. If x exceeds the top of the file, the top will be shown. When the move is complete, VHST is reprompted to allow more command use.	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 23: Automatic Call Distribution, Management Reports, Message Center

Overlay program 23 allows Automatic Call Distribution (ACD) data, schedules for management reports and Message Center data to be created, modified, or printed.

ACD groups are also used for Meridian Mail and various server applications. When this overlay is loaded the available system memory and disk records are output in a header. Refer to the introduction of this document for details.

Incremental Software Management (ISM) also provides a header to indicate system configuration limits. For LD 23, the header appears as follows:

ACD DNS AVAIL: xxxxx USED: xxxxx TOT: xxxxx

To prevent Virtual Agent information from appearing on ACD-D reports, do not make changes to Virtual Agents. If a change to a Virtual Agent is required, out the agent and rebuild it with REQ = NEW.

Prompts and responses

Table of Contents

Section	Page
Prompts and responses	532
<i>Prompts and responses by data block :</i>	
ACD or SCB: Automatic Call Distribution (ACD-D) or Schedule data block	536
ADS: Auxillary data system data block (includes Multiple Queue Assignment prompts)	537
CDN: Control DN data block (covers prompts for Customer Controlled Routing)	538
NACD: Network ACD data block	539

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	a...a	Type of data block (a...a = ACD, ADS, CDN, NACD, or SCB)
CUST	xx	Customer number associated with this data block
ACDN	x...x	ACD Directory Number
MWC	(NO) YES	Message Waiting Center
- IMS	(NO) YES	Integrated Messaging Service
- - CMS	(NO) YES	Command and Status link
- - IMA	(NO) YES	Integrated Messaging Allowed
- - IVMS	(NO) YES	Integrated Voice Messaging System
- - DNIS	(NO) YES	Dialed Number Identification Service
- - VSID	0-15	Value Added Server ID
- - EES	(NO) YES	End-to-End Signaling
- - APL	0-15	Auxiliary Processor Link number
- - UST	(NO) YES	User Status update
- - VSID	0-15	VAS ID of VAS providing VMS
- - APL	0-15	Auxiliary Processor Link number

- - UMG	(NO) YES	User-to-User Messaging
- - RAN	0-511	RAN route number
- - UMT	2-(6)-15	Update Message Time
AST	(NO) YES	Associated set
DSAC	(NO) YES	Data Services Access Code
- PRIM	(NO) YES	Primary DSAC
- VSID	0-15	Value Added Server ID
MAXP	xxxx	Maximum Positions
SDNB	(NO) YES	Secondary DN Blocking
BSCW	(NO) YES	Block Secondary DN Calls on Walkaway
ISAP	(NO) YES	Integrated Services Application Protocol
ASID	16-31 or (00)	Application service identity from which the acquired message originated
AACQ	(NO) YES	Application Acquired Queue
- VSID	0-15	Value Added Server ID
ALOG	(NO) YES	Automatic Log In
RGAI	(NO) YES	Ring Again for Internal calls
ACAA	(NO) YES	ACD Agent while IDN on-hold Allowed
FRRT	0-511	First RAN route number for ACD
- FRT	0-2044	First RAN Time
SRRT	0-511	Second RAN route number for ACD
- SRT	0-2044	Second RAN Time
NRRT	0-127	Night RAN Route
FROA	(NO) YES	First RAN On Arrival
NCFW	x...x	Night Call Forward
FNCF	(NO) YES	Force Night Call Forward to busy ACD DN
FORC	(NO) YES	Force
- FCFT	0-(2)-30	Flexible Call Force Timer
RTQT	(0)-50	Return to Queue Timer after no answer in number of ringing cycles
RTQO	(NRD) MSB	Return to Queue Option
SPCP	(NO) YES	Separate Post Call Processing
OBTN	aaa	Observation Tone (aaa = (NO), AGT, or ALL)
RAO	aaa	Restricted Agent Observe (aaa = (NO), YES, or FULL)

HSID	0-15	Host ID
CWTH	0-(1)-2047	Calls Waiting Threshold
NCWL	(NO) YES	New Call Waiting Lamp options
- CWLF	(0)-2047	Call Waiting Lamp Flash threshold
- CWLW	(0)-2047	Call Waiting Lamp Wink (fast flash) threshold
BYTH	(0)-204	Busy Threshold
OVTH	0-(2047)	Overflow Threshold
TOFT	2-1800	Timed Overflow Threshold in seconds
HPQ	(NO) YES	High Priority Queue
- OCN	(NO) YES	Oldest Call in Network
OVDN	x...x x...X x...X	Overflow Directory Number(s)
IFDN	x...x	Interflow Directory Number
- BUSY	aaa bbb ccc ddd	Busy treatment
- AENI	(NO) YES	Automatically Enable Interflow
EMRT	0-511	Emergency Route
MURT	0-511	Music Route
RTPC	(NO) YES	Real Time Processing
STIO	0, 1, 2, ...15	Status Input/Output devices
TSFT	0-(20)-510	Telephone Service Factor Threshold in seconds
HOML	(YES) NO	Headset Or MSB key Log Out
RDNA	(NO) YES	Restricted DN Access
ACNT	xxxx	Account
NRAC	(NO) YES	Enable Not Ready Activity Codes
- NDFL	xxxx	Not Ready Default code Must be equipped with ACD-D or NGCC package
DAL	(NO) YES	Data Agent Log In with the MSB key allowed
RPRT	(YES) NO	Management reporting and status display
RAGT	2-(4)-30	Reserve Agent
DURT	15-(30)-45	Duration Timer in minutes
RSND	(4)-16	Resend timer
FCTH	10-(20)-100	Flow Control Threshold
CRQS	0-(100)-255	Call Request Queue Size
DNRT	(NO) YES	Delay Night RAN Treatment
IVR	(NO) YES	Interactive Voice Response queue

- TRDN	xxxx	Treatment DN for IVR queue
CWNT	I s c u	Call Waiting Notification TN
CWNC	NO YES	Call Waiting Notification TN control

Prompts and responses by data block

ACD or SCB: Automatic Call Distribution (ACD-D) or Schedule data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	aaa	Type of data block = ACD or SCB (Automatic Call Distribution or Schedule data block for ACD management reports)
CUST	xx	Customer number associated with this data block
CPRD	dd mm dd mm	Collection Period
SHR	0-23	Start Hour
EHR	0-23	Hour of day that data reporting ends
DOW	1-7	Days of Week for data collection
RFRQ	0-7	Frequency that Reports are to be generated
SFRQ	x	Status display update Frequency (1 or 2)
ROPT	1-4	Report Options
PRIO	0-15	Printer(s) for Output
PAGE	(NO) YES	Start at the top of a new page for each report
AID	(NO) YES	Agent ID mode
- IDLB	(1)-9999	Agent ID Lower Boundary
- IDUB	/DLB-(9999)	Agent ID Upper Boundary
- LOG	(0)-999	Maximum number of agents that can be logged in at any one time
SRPT	(NO) YES	Short Report option for report 4 (Agent position)
TOT4	(NO) YES	Totals on report 4

ADS: Auxillary data system data block (includes Multiple Queue Assignment prompts)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	ADS	Type of data block = ADS (Auxiliary Data System)
CUST	xx	Customer number associated with this data block
AID	(NO) YES	Agent ID mode
- IDLB	(1)-9999	Agent ID Lower Boundary
- IDUB	<i>IDLB</i> -(9999)	Agent ID Upper Boundary
- MQA	(NO) YES	(Don't allow)/Allow agents to use MQA functionality
- - MQAS	(NO) YES	(Don't allow)/Allow agents to specify a Supervisor ID during login
- - MQAP	(NO) YES	(Don't allow)/Allow agents to specify Priorities during login
- - MQCF	(NO) YES	(Don't allow)/Allow automatic Call Forwarding of Phantom TNs to agent sets at login
- - - MCFD	xxx	The MQA Call Forwarding Digits attached to the Agent IDs

CDN: Control DN data block (covers prompts for Customer Controlled Routing)

Caution: Corruption results if a CDN is not configured in this overlay *before* that CDN is associated with or represented in an association table script in the CCR module.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	CDN	Type of data block = CDN (Control DN)
CUST	xx	Customer number associated with this data block
CDN	xxxx	Control DN
FRRT	0-511	First RAN route number for ACD
- FRT	0-2044	First RAN Time
SRRT	0-511	Second RAN Route number for ACD
- SRT	0-2044	Second RAN Time
FROA	(NO) YES	First RAN On Arrival
MURT	0-511	Music Route number
DFDN	x...x	Local Default ACD DN
CEIL	0-(2047)	CDN Ceiling value
OVFL	(NO) YES	Force Overflow Tone to the call when the ceiling threshold has been exceeded
TDNS	(NO) YES	Is DNIS number an original Called Party
RPRT	(YES) NO	Management reporting and status display
CNTL	(NO) YES	Control DN is in control
VSID	0-15	Value Added Server ID
HSID	0-15	Host ID
CWTH	0-(1)-2047	Calls Waiting Threshold
BYTH	(0)-2047	Busy Threshold
OVTH	0-(2047)	Overflow Threshold
STIO	0, 1, 2, ... 15	Status Input/Output devices
TSFT	0-(20)-510	Telephone Service Factor Threshold in seconds
ACNT	xxxx	Account

NACD: Network ACD data block

Network ACD provides ACD capabilities over an Integrated Service Digital Network (ISDN). An NACD system distributes ACD activities between several sites. Connected by ISDN voice and data services, different sites can be physically or geographically separated within the network.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	NACD	Type of data block = NACD (Network ACD)
CUST	xx	Customer number associated with this data block
ACDN	xxxx	ACD Directory Number
TABL	(a) s	Day, Night or Source Table (a = Day or Night, s = Source Table)
- OUTS	xxxx xxxx	Routing Table entries to be removed
- TRGT	xxxx tttt	Target ACD DN and the timer in seconds

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AACQ	(NO) YES	Application Acquired Queue The ACD DN is not acquired by the application The ACD DN is acquired by the application	nxcc-22
ACAA	(NO) YES	Allow ACD calls to an agent on an Individual DN (IDN) Call On Hold The agent cannot place an IDN Call On Hold, and return to the idle queue. The agent can put an active IDN Call On Hold and press the in-calls to return to the idle agent queue.	bacd-18
ACDN	x...x	ACD Directory Number Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150	acda-1
ACNT	x...x	Account (Default activity code) Maximum 4 digits (0 through 9). The # and * are not allowed. Prompted if the ADS data block is built, and CNTL = YES.	acdc-13
AENI	(NO) YES	Automatically Enable Interflow Prompted when IFDN is defined.	acdb-12
AID	(NO) YES	Customer will operate in Position ID mode. Customer will operate in Agent ID mode.	acdc-2
ALOG	(NO) YES	Provide Automatic Log In for agents on this DN. Set to YES for Meridian Mail applications. ALOG applies only to Command and Status Link (CMS) and Data Service Access Codes (DSAC). Prompted if IMS or ISAP = YES. With Release 24 and later, ALOG is used to provide automatic login for agents of NGen ACD queue.	csi-8
APL	0-15	Auxiliary Processor Link number Prompted if IMA = YES. The APL is defined in LD 17.	lnk-2
ASID	16-31 or (00)	Application service identity from which the acquired message originated	nxcc-22

Prompt	Response	Comment	Pack/Rel
AST	(NO) YES	Associated set Release 16 and earlier. Release 17 and later, the Associate Set assignments is performed in LD 10 and LD 11 for each ACD telephone. In Release 16 and earlier, the AST is assigned automatically to each telephone for an ACD DN with AST = YES.	iap3p-13
BSCW	(NO) YES	Block Calls to the Secondary DN on Walkaway The caller to the source DN hears busy tone. Release 13 and later.	bacd-13
BUSY	aaa bbb ccc ddd	Interflow Busy Treatment for different originators Prompted if IFDN is defined. The possible options are: • BSY = caller hears busy tone • SRC = caller is re-linked to source queue Enter BSY or SRC for each of the four different originators: • aaa = Stations • bbb = Attendants • ccc = CO, FEX and WATS trunks • ddd = all other trunk types Defaults if the IFDN is an ACD DN, internal or external DN are: • BSY BSY SRC BSY (3rd entry cannot be changed) Default if the IFDN is an attendant console: • BSY SRC SRC BSY (only the 4th entry can be changed)	acdb-12
BYTH	(0)-2047	Busy Threshold at which the Calls Waiting lamp flashes and this queue ceases to accept overflowed calls. When BYTH = 0, overflow calls are not accepted by this target queue unless an agent is available. To delete existing entry, precede entry with X.	acdb-1

LD 23

Prompt	Response	Comment	Pack/Rel
CALB	1 2 ...	Call Filter Bitmap CALB applies to messages such as PCI, DN update, etc. This bitmap is downloaded by the application which is used to control the sending of messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding set message is enabled. CALB is printed if AACR = YES.	nxcc-22
CDN	x...x	Control DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	ear-17
CEIL	0-(2047)	CDN Ceiling value CEIL limits the number of unanswered calls a CDN can have at its default ACD DN at a time. New calls receive a busy signal once the ceiling is reached (CO trunks do not receive busy).	ear-17
CMS	(NO) YES	Command and Status link If this ACD DN is to use the CSL, enter YES. Set to YES for Meridian Mail applications.	csi-8
CNTL	(NO) YES	Control DN is in control. When CNTL = NO, CDN calls are sent to the Default ACD DN (DFDN).	ear-17
CPRD	sm sd em ed	Collection Period: Month and day data collection is to start and end. Where: • sm = start month (1-12) • sd = start day of month(1-31) • em = end month (1-12) • ed = end day of month(1-31)	acdc-2

Prompt	Response	Comment	Pack/Rel
CRQS	0-(100)-255	Call Request Queue Size It is recommended that CRQS be approximately 20% higher than the number of trunks available for networking. If the customer selects the OCN option, set this value at 5% over trunking capacity. This avoids reserving agents for calls on the network when trunking facilities are unavailable. Flow Control (FCTH) is typically set at 25% of the call request queue size. The CRQS must be defined for each ACD DN in the network. CRQS must be greater than FCTH. CRQS = 0 closes the queue.	nacd-15
CUST	xx	Customer number associated with this data block as defined in LD 15.	bacd-1
CWLF	(0)-2047	Call Waiting Lamp Flash threshold Prompted if NCWL = YES. CWLF must be greater than or equal to CWTW	acdb-15
CWLW	(0)-2047	Call Waiting Lamp Wink (fast flash) threshold Prompted if NCWL = YES. CWLW must be greater than or equal to CWLF	acdb-15
CWNC	NO YES	Alert rings for all calls Alert rings for only priority calls CWNC appears when a TN has been entered for CWNT. There is no default.	m911-19
CWNT	I s c u	Call Waiting Notification TN	m911-19
CWTH	0-(1)-2047 0 X	Calls Waiting Threshold: The number of Calls Waiting in queue that triggers the "calls waiting" indication. To disable To delete existing entry.	acdb-1
DAL	(NO) YES	Data Agent Log In with the MSB key allowed The data agent must be defined with a DTA Class of Service in LD 11. DAL is not prompted when IVMS or DSAC are set to "YES". Release 14 and later. Prompted if TYPE = SCB or ADS.	acdc-14

Prompt	Response	Comment	Pack/Rel
DFDN	x...x	Local default ACD DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Calls to the CDN are directed to this ACD DN. RAN and Music, if provided, are as defined for the CDN. Any other ACD treatment, such as Night, is applied as if the caller directly dialed the ACD DN.	ear-17
DNIS	(NO) YES	Dialed Number Identification Service Send (do not send) ACD/DNIS information across the link. Not prompted for Virtual Agents.	dnis-12
DNRT	(NO) YES	Delay Night RAN Treatment When DNRT = YES for an ACD DN there is a delay in routing calls to the night RAN. The call is delayed until the call has reached the end of the Night table and there are no outstanding call requests for the call. Prompted if a NACD Night table and a RAN route have been defined.	nacd-15
DOW	1-7	Days of Week for data collection Where: 1 = Sunday and 7 = Saturday	acdc-2
DSAC	(NO) YES	ACD DN is not an IS/Data Service Access Code ACD DN is an IS/Data Service Access Code Prompted when MWC = NO	csi-8
DURT	15-(30)-45	Duration Timer (in minutes) DURT indicates how long a Target node honors a call request from the Source node. If the timer expires, the call is removed from the call request queue. If this timer is too large, the network call request queues may become overcrowded. If the timer is too small, waiting customers may be cut off from receiving services. This timer must be defined only for Target queues.	nacd-15
EES	YES (NO)	IVMS uses End-to-End Signaling to send tone. IVMS (does not use) End-to-End Signaling to send tone. Prompted when IMA = YES.	ims-2

Prompt	Response	Comment	Pack/Rel
EHR	0-23	Hour of day that data reporting ends	acdc-2
EMRT	0-511	Emergency Recorder Trunk Route. The route and at least one trunk must exist before defining EMRT. Enter X to remove.	acdb-1
FCFT	0-(2)-30	Flexible Call Force Timer (the time in seconds before Flexible Call Force is enforced)	acdb-16
FCTH	10-(20)-100	Flow Control Threshold to allow additional calls into the call request queue The Flow Control option opens and closes the ACD DN for network calls. Once the number of Call Requests received over the network meets the call request queue size defined in LD 23, the queue is shut down (INACTIVE) for network calls. For the queue to open for network calls, the pending queue request size must drop to a value equal to the flow calls control. For example, a call request queue size of 50 with a flow control of 10 allows the queue to become inactive after 50 call requests are pending. After 10 calls or 10 Call Requests have been answered or removed, leaving 40 remaining in queue, the queue will reopen.	nacd-15
FNCF	(NO) YES	Force Night Call Forward to busy ACD DN	bacd-15
FORC	(NO) YES	Force Calls are forced to arrive in answered state. When FORC = Yes, the call arrives on Key 0 (in-calls key) in an answered state. Headsets are recommended for this option.	acdb-1
FROA	(NO) YES	First RAN On Arrival (the 1st RAN to be given to incoming calls immediately; FRT time ignored) If FROA = NO, the call is forced to wait FRT time. Recorded Announcement is only given if an idle agent is not found.	acda-1
FRRT	0-511	First RAN Route number for ACD The route and at least one trunk must exist before defining FRRT. Enter X to remove.	acda-1

LD 23

Page 546 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
FRT	0-2044	First RAN Time (the time in seconds allowed before unanswered incoming ACD calls are connected to the first RAN) Prompted if FRRT is defined. If a value is not entered FRT defaults to blank and there is no connection to the RAN.	acda-1
HMSB	(NO) YES	Agent cannot activate Make Set Busy if an ACD call is on-hold Agent can activate Make Set Busy if ACD call is on-hold	basic-9
HOML	 (NO) YES	Handset Removal or Make Set Busy key (MSB key) log out. The HOML option allows an agent to log out by removing the headset or going on hook without using the Make Set Busy (MSB) key. Logout while on Agent Reserve causes a cancellation message. Log out with only the Make Set Busy key Log out with either handset removal or Make Set Busy key activation HOML is prompted if an Auxiliary Data System (ADS) or Schedule Block (SCB) exists.	bacd-1
HPQ	 (NO) YES	High Priority Queue (preference given to High Priority trunk calls) Calls from the source queue's high priority trunks are presented after another queue's Timed Overflow queue (TOFQ) calls. Calls from the source queue's high priority trunks are presented before another queue's Timed Overflow queue (TOFQ) calls. In an NACD environment, HPQ must be denied to receive the OCN prompt. (HPQ = No)	tof-10

Prompt	Response	Comment	Pack/Rel
HSID	0-15	VAS ID for the Host Application Module Link. When the CCR and ML applications are both running, this HSID is the VSID assigned to the AML for Meridian Link in LD 17. The VSID prompt in this CDN configuration will match the VSID for the CCR AML port configured in LD 17.	ccr-17
IDLB	(1)-9999	Agent ID Lower Boundary With Release 19 and later, this prompt is used with the IDUB prompt to determine the maximum number of agents allowed by the system. The number must be within the parameters set by the IDLB and IDUB prompts. Prompted if TYPE = ADS or SCB and AID = YES	acdc-19
IDUB	<i>IDLB</i> -(9999)	Agent ID Upper Boundary With Release 19 and later, this prompt is used with the IDLB prompt to determine the maximum number of agents allowed by the system. The number must be within the parameters set by the IDLB and IDUB prompts. Prompted if TYPE = ADS or SCB and AID = YES	acdc-19
IFDN	x...x	Interflow Directory Number The Interflow Directory Number serves as the DN to which calls interflow. Prior to Release 22, IFDN can be up to 23 digits. For Release 22, IFDN can be up to 31 digits. Calls diverted to the IFDN are not routed by NACD. Network calls diverted to an IFDN lose all the network information, so that information cannot be displayed on the terminating telephone. A group hunt pilot DN can be entered. If the OPAO package is equipped, then # can be used in this DN.	acdb-1
	X	To delete existing entry.	

LD 23

Prompt	Response	Comment	Pack/Rel
		IFDN and NFCR are affected by the Outpulsing feature for Japan. Refer to the Feature Description in X11 Features and Services for details. Typing four asterisks (****) at the IFDN prompt will not let the user exit Overlay 23.	
IMA	(NO) YES	Integrated Messaging Allowed (ACD DN assigned to IMS) Set to YES for Meridian Mail applications.	ims-2
IMS	(NO) YES	Integrated Messaging Service Set to YES for Meridian Mail applications. IMA must be set to Yes in LD 15.	ims-2
ISAP	(NO) YES	Integrated Services Application Protocol (ACD messages sent across the ISDN/AP link) Set to YES for Meridian Mail applications.	ani-15
IVMS	(NO) YES	Integrated Voice Messaging System Set to YES for Meridian Mail applications.	ivms-2
IVR	(NO) YES	Interactive Voice Response queue An ACD queue must be defined as an IVR queue before the Treatment Request for IVR command can be used in Customer Controlled Routing (CCR) applications.	ivr-18
	(0)-999	Login maximum (the maximum number of agents that can be logged in at any one time) LOG cannot exceed MAGT value defined in LD 17.	acdc-18
LOG	(0)-999	Login maximum (the maximum number of agents that can be logged in at any one time) LOG cannot exceed the MAGT value defined in LD 17	acdc-18

Prompt	Response	Comment	Pack/Rel
MAXP		Maximum Number of Agent Positions. The value of the MAXP can be increased to the allowed maximum or decreased to the current number agents.	acda-1
	1-70	For M, S and MS	
	1-120	For LE, N and ST	
	1-240	For XN, RT, VLE, XL and Option 21	
	1-500	For NT and Options 51 and 61	
	1-1000	For XT	
	1-1200	For Option 71 and 81	
MCFD		Multiple Queue Assignment (MQA) Call Forwarding Digits attached to Agent IDs. The digits are used to determine which Phantom TNs are Call Forwarded.	mqa-21
	(0)	MCFD is prompted if MQCF = YES.	
	xxx	No digits attached to Agent IDs	
	X	Maximum of 3 digits attached to Agent IDs	
		Remove all digits	
MQA		Multiple Queue Assignment	mqa-21
	(NO)	No Multiple Queue Assignment functionality	
	YES	Multiple Queue Assignment functionality	
		MQA is prompted if AID = YES and MQA package 297 is equipped. Warning: The HSL link must be disabled before you configure or change MQA.	
MQAP		MQA Priority option	mqa-21
	(NO)	No Priorities selected during login	
	YES	Select Priorities during login	
		Prompted if MQA = YES and Priority Agent package 116 is equipped.	
MQAS		Multiple Queue Assignment Supervisor ID option	mqa-21
	(NO)	No Supervisor ID during login	
	YES	Select a Supervisor ID during login	
		Prompted if MQA = YES.	

LD 23

Page 550 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
MQCF	(NO)	Multiple Queue Assignment Call Forward option No automatic Call Forwarding of Phantom TNs to agent sets at login	mqa-21
	YES	Automatic Call Forwarding of Phantom TNs to agent sets at login Prompted if MQA = YES and Phantom TN package 254 is equipped.	
MURT	0-511	Music Route number The route and at least one trunk must exist before defining MURT. Enter X to remove.	acda-1
MWC	(NO) YES	Message Waiting Center (ACD DN is a message center DN) MWC is set to YES for Meridian Mail applications. Prompted if Message Waiting Center (MWC) package 46 is equipped.	mwc-1
NCFW	x...x	Night Call Forward DN for ACD calls (up to 23 digits) and Operator Revert DN for Meridian Mail (IMS, IVMS). NCFW is tracked on reports as interflow. Prior to Release 22, NCFW can be up to 23 digits. For Release 22, NCFW can be up to 31 digits. Precede NCFW entry with X to delete. Typing four asterisks (****) at the NCFW prompt will not let the user exit Overlay 23.	acda-1
NCWL	(NO) YES	New Call Waiting Lamp options When NCWL = YES, the Busy Threshold and Overflow Threshold apply only to Overflow by Number and Interflow conditions, but do not change the lamp states. Calls in the Call Request and Local Flow-in queues are included when adding up the calls in queue for lamp state updates.	acdb-15
NDFL	xxxx	Not Ready Default code Must be equipped with ACD-D or NGCC package	acdd-24
NRAC	(NO) YES	Enable Not Ready Activity Codes.	acdd-24

Prompt	Response	Comment	Pack/Rel
NRRT	0-511	Night RAN Route number assigned as night announcement for ACD calls. If NRRT and NCFW are both defined, then NRRT course first. The route and at least one trunk must exist before defining NRRT. Enter X to remove.	acda-1
OBTN	(NO) AGT ALL	No Observation Tone given Audible Observe Tone to Agent only (post Release 14) Audible Observe Tone to all parties (post Release 14) Prior to Release 14, options are YES (NO); YES is equivalent to the AGT option in Release 14 and later	acdb-1
OCN	(NO) YES	Accept Oldest Call in Network This feature determines if the oldest call in the network is answered ahead of calls to the Source location. Use caution with this feature. Because agents are reserved for network calls, agents may remain idle while calls wait in the local queue. To avoid reserving all the agents for network calls, split the ACD group into two areas: one area for all calls and the second area for a group of agents equal to the number of tie lines between the network locations. This solution allows local calls to overflow by time into the area for all calls. The OCN option must be defined only for Target queues.	nacd-15

Prompt	Response	Comment	Pack/Rel
		When OCN = YES and HPQ = NO, the system compares calls from queues for that target ACD DN. The highest priority call that has waited the longest is the call presented to the next available agent. When OCN = NO and HPQ = NO, the system selects the oldest call from the ACD DN's own Timed Overflow (TOF) queue. If there are no calls in the Source Timed Overflow queue, the system looks at calls in the Call Request queue and Source Timed Local Flow-in queue. When OCN = NO and HPQ = YES, the system presents calls from the agent's own TOF queue and High-Priority queues before presenting calls from Source TOF queues and Call Request queues. OCN is prompted if Network Automatic Call Distribution (NACD) package 207 equipped.	
OUTS	xxxx xxxx	Routing Table entries to be removed Up to 20 entries at a time can be removed from the Enhanced Overflow (EOVF) or Network ACD (NACD) routing tables. Only 5 entries can be entered at OUTS at a time. OUTS is prompted until just <cr> is entered. Prompted if REQ = CHG. Remove routing tables by list entry number, not by ACD DN. Print the NACD data to see the ACD DN associated with each entry number.	nacd-15
OVBU	aaa bbb ccc ddd	Overflow Busy treatment for specific call originator types when IFDN not defined. Enter the required treatment for Overflow calls: • LNK = caller is re-linked to source queue (the default value) • BSY = caller hears busy tone Enter all four entries at the same appearance. Enter LNK or BSY for each of the four different originators: • aaa = Internal calls • bbb = Attendant calls • ccc = CO, FEX and WATS trunks (only LNK allowed in Release 17 and later) • ddd = DID and TIE trunks	acdb-16

Prompt	Response	Comment	Pack/Rel
		If busy tone is configured for CO trunk calls, the calling or called party will be billed for the duration of the call, which is from the time the PBX returns answer supervision until the time the calling party disconnects. In Release 17 and later, BSY is not allowed for CO trunks. Prompted if there is no entry for IFDN.	
OVDN	x...x x...x x...x X Xxxxx	Overflow ACD Directory Number(s) (maximum of three responses) Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. To remove ALL OVDNs for the ACD DN To delete a specific DN. Any new entry replaces the old data. The Overflow DN cannot be a CDN.	acdb-1
OVFL	(NO) YES	Overflow Tone Busy tone will be given to call Force overflow tone will be given to call by Mobility switch OVFL is prompted when a call arrives at a Controlled DN in default mode and when that call has exceeded the CDN-to-a-default-ACD-DN ceiling threshold.	basic-20
OVTH	0-(2047)	Overflow Threshold OVTH represents the value at which the Calls Waiting lamp winks (Fast flashes), causing calls which are entering the queue to overflow. When OVTH = 0 overflow is attempted when all agents are busy. Enter X to delete existing entry.	acdb-1
PAGE	(NO) YES	Start at the top of a new page for each report	acdc-2
PRIM	(NO) YES	Primary DSAC	csi-8
PRI0	0-15	Printer(s) for Output (establish the number(s) of devices used for output of reports) These output devices must have been defined in LD 17 as ACD printers. Precede with X to remove a device number.	acdc-2

LD 23

Prompt	Response	Comment	Pack/Rel
RAGT	2-(4)-30	Number of seconds an agent in a remote target is reserved for an overflow call. The Reserve Agent Timer keeps the agent reserved until call presentation or timeout. The timer also prevents a situation where an agent may be reserved indefinitely. When an agent is reserved with Countdown Allowed (CNTA) CLS as defined in LD 11, the RAGT countdown is shown on the agent's Digit Display. The agent being reserved has a Reserve Agent Timer with countdown display. The countdown display starts when the Reserve Agent Timer (RAGT) starts, and counts down by increments of 2 seconds, to zero. If the call is not presented to the Target agent before the Reserve Agent Timer (RAGT) expires, that call remains at the originating Source queue. The Target agent is returned to the idle agent queue. If the Reserve Agent Timer is set too high, the agent is reserved waiting for calls. If the Reserve Agent Timer is set too low, the agent may be freed before the network facility can set up the call. Different timer settings can be tried through Load Management. Subsequent calls are presented to agents only after the Reserve Agent Timer has expired. The RAGT must be defined only for Target queues.	nacd-15
RAN	0-511	Recorded Announcement Trunk Route Number for calls entering message queue (default NO RAN)	acda-1
RAO	(NO) YES FULL	Restricted Agent Observe Restricted Agent Observe on logout disabled Restricted Agent Observe on logout enabled Restrict the supervisor from observing any of agents IDN calls even when logged in	
RDNA	(NO) YES	Restricted DN Access Enter NO if use of DN keys is to be allowed without logging in. Enter YES to restrict agents from making outgoing calls when not logged in. Prompted if an Auxiliary Data System (ADS) or Schedule Block (SCB) exists.	acdc-1

Prompt	Response	Comment	Pack/Rel
REQ		Request	bacd-18
	CHG	Change existing data Select OUT followed by NEW, instead of CHG when switching resources between virtual and actual ACD DNs to avoid unwanted information on ACD-D reports.	
	END	Exit Overlay program	
	LST	List ACD DNs (This includes ACD DNs, CDNs and NACD DNs)	
	NEW	Add new data to the system	
	OUT	Remove data block When removing an ACD DN from the Meridian 1 which is monitored by ACD-MAX, the DN is not automatically deleted from the ACD-MAX configuration.	
	PRT	Print the specified data	
RFRQ		Report Frequency. See also ROPT prompt for Report Options.	acdc-2
	0	No reports	
	1	All reports hourly on the hour	
	2	All reports hourly on the half-hour	
	3	All reports half-hourly	
	4	Report 3 every quarter-hour, no other reports.	
	5	Report 3 every quarter-hour, other reports hourly on the hour.	
	6	Report 3 every quarter-hour, other reports hourly on the half-hour.	
	7	Report 3 every quarter-hour, other reports every half-hour	
RGAI	(NO) YES	Ring Again for Internal calls When internal caller dials a queue with no available agents, fast ringback is provided. If RGA = YES, the caller can activate Ring Again to be presented to the next available agent. Enter YES for Data Service Access Code. (DSAC). RGA must = YES for DSAC.	acda-8

LD 23

Prompt	Response	Comment	Pack/Rel
ROPT	1 2 3 4	Report Options Agent group Queue Trunk routes Agent position Precede with X to disable a report. More than one option allowed. Any new entry replaces the old data.	acdc-2
RPRT	(YES) NO	Information about this ACD-DN (or CDN) will be included in management reports and status displays Information about this ACD-DN (or CDN) will be excluded in management reports and status displays. RPRT is prompted only if a SCB or an ADS block exists for this customer.	acdc-17
RSND	(4)-16	Message Resend timer (in seconds) This is the length of time the Source node waits for a response from the Target node after sending a Call Request message. When the Resend Timer expires, another message is sent. If the second Call Request message expires without a response, the Call Request is removed from the network queue. The Resend Timer should be changed only if the network uses multiple hops and ISL with lower baud rates. A single hop typically requires 100 ms of real time to set up the call. When the Resend Timer is too large, the control function of the timer to limit traffic to busy nodes is lost. If the Resend Timer is too small, the access of calls to nodes may be limited unnecessarily. The Resend Timer must be defined for the Source node and the Target nodes.	nacd-15
RTPC	(NO) YES	Real Time Processing The SAGP Load Management command does not take effect in real time. The SAGP Load Management command takes effect in real time.	supp-9
RTQO	(NRD)	Return to Queue Option Not Ready	acd-23

Prompt	Response	Comment	Pack/Rel
	MSB	Make Set Busy	
RTQT	(0)-50	Return to Queue Timer after no answer in number of ringing cycles	acdb-23
SDNB	(NO) YES	Secondary DN Blocking Block calls to the Secondary DN while busy on ACD call.	acdb-12
SFNB	1 2 ...	Set Feature Notification Bitmap SFNB is used for messages such as: SFN (login), SFN (logout), ... This bitmap is downloaded by the application which is used to control the sending of SFN messages on behalf of the acquired TN. A numeric value is printed only if the corresponding message is enabled. SFNB is printed if AACR = YES.	nxc-22
SFRQ	1 2	Frequency of Status Display updates 30 seconds 60 seconds	acdc-2
SHR	0-23	Start Hour Hour of day that data reporting starts	acdc-2
SPCP	(NO) YES	Separate Post Call Processing (to enable separate DCP/PCP indication) When SPCP = YES, agents in Post Call Processing (PCP) are separated from agents in Direct Call Processing (DCP). Changing the SPCP option for an ACD DN changes all ACD DNs in the same customer group. Agent (AGT) key lamp states and display (DAG) field on supervisor telephones are affected by SPCP as follows: AGT key lamp steady: • SPCP = YES; agent is on an ACD call • SPCP = NO; agent is on an ACD call or not ready (NRD)	acdb-1

LD 23

Prompt	Response	Comment	Pack/Rel
		AGT key lamp fast flash: • SPCP = YES; agent is on non-ACD call or NRD • SPCP = NO; agent is on non-ACD call	
		DAG Display ACD DN: • SPCP = YES; displays # of agents on ACD calls • SPCP = NO; displays # of agents on ACD calls or NRD	
		DAG Display non-ACD DN: • SPCP = YES; displays # of agents on non-ACD calls or NRD • SPCP = NO; displays # of agents on non-ACD calls	
		The SPCP option is a customer-wide option. A change to SPCP for any ACD queues affects all ACD queues for that customer.	
SRPT	(NO) YES	Short Report option for report 4 (Agent position) Use the short report when more than one agent, each with a unique agent ID, logs into the same position ID during a report period.	acdc-2
SRRT	0-511	Second RAN Route number for ACD The route and at least one trunk must exist before defining SRRT. Enter X to remove.	acda-1
SRT	0-2044	Second RAN Time Time in seconds before second RAN is connected to ACD calls. Prompted if SRRT is defined. There is no default for SRT.	acda-1
STIO	0, 1, 2,...15	Status Input/Output devices Enter all Input/Output devices assigned for status displays. The device must be first defined in LD 17. Prompted if a Schedule Block (SCB) exists. Enter X to remove.	acdc-2

Prompt	Response	Comment	Pack/Rel
TABL	x	Table. Where: x = • D = Day Table • N = Night Table • S = Source Table (Release 24 and later) The Day Table is mutually exclusive with TOFT. The Night Table is mutually exclusive with NCFW.	nacd-15
TDNS	(NO) YES	DNIS number is not an original Called Party of a defined CDN queue. DNIS number is an original Called Party of a defined CDN queue. TDNS = YES is recommended if a CDN is defined for the Mobility Control Point (MCP) application to control a Personal Communication Service (PCS) call.	basic-20
TOFT	2-1800	Timed Overflow Threshold (in seconds) In Release 14 and earlier, the TOFT range is 10 - 1800. Before defining the TOFT value, first delete that OVDN from its Source ACD DN. Then, enter the time, in seconds, that you want a call to wait in queue before it overflows to an OVDN. When REQ = CHG, and the OVDNs are answering TOF calls, an error message is output indicating the affected Target ACD DNs. Enter X to disable the feature. If no value is entered, NONE is printed.	tof-10
TOT4	(NO) YES	Totals on report 4 Averages are output on report 4 (Agent position) Totals are output on report 4 (Agent position) Prompted if ROPT = 4. If TOT4 = YES, HDCP column is output on report 1 and 4. Must have ACD-C enabled.	acdc-10
TRDN	xxxx	Treatment DN for IVR queue A treatment DN does not have to be a valid DN in the switch. If Meridian Mail is to be used for both Voice Messaging and IVR, a Treatment DN should not be the same as any Meridian Mail voice box. Enter X to remove.	ivr-18

LD 23

Page 560 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
TRGT	xxxx tttt	Target. Where: • xxxx = Target ACD DN • tttt = time (0-1800) in seconds Up to 20 target ACD DN's can be defined. For each target, tttt is the total time from the call entering the ACD queue until a call request is sent to the target. TRGT rounds up to an even number.	nacd-15
TSFT	0-(20)-510	Telephone Service Factor Threshold (in seconds) Prompted if a Schedule Block (SCB) exits.	acdc-1
TYPE		Type of data block	
	ACD	Automatic Call Distribution data block Requires Basic Automatic Call Distribution (BACD) package 40.	bacd-1
	ADS	Auxiliary Data System data block Requires Automatic Call Distribution Package C (ACDC) package 50. Not valid when REQ = PRT.	acdd-2
	CDN	Control Directory Number data block This is a special DN created to specify a destination ACD DN to which incoming calls are directed. Multiple CDNs can direct calls to the same ACD DN providing different treatments based on the CDN parameters. Requires Enhanced ACD Routing (EAR) package 214.	ear-17
	NACD	Network ACD data block Requires Network Automatic Call Distribution (NACD) package 207.	nacd-15
	SCB	Schedule data Block for ACD Management Reports Requires Automatic Call Distribution, Package C (ACDC) package 42.	acdc-2
UMG	(NO) YES	User to User Messaging	ims-2
UMT	2-(6)-15	Update Message Time Silence interval in seconds after message queue alert tone.	ims-2

Prompt	Response	Comment	Pack/Rel
USFB	1 2 ...	Unsolicited Status Message (USM) Filter Bitmap USFB applies to messages such as: Onhook, Offhook, Ringing, Active, Disconnect, Unringing, Hold, Restore, Ready, Not Ready, Walkaway, Walkaway Return, Reserved, Unreserved, ... This bitmap is downloaded by the application which is used to control the sending of USM messages on behalf of the acquired TN. A numeric value would only be printed if the corresponding message set is enabled. USFB is printed if AACR = YES.	nxcc-22
UST	(NO) YES	User Status update	ims-2
VSID	0-15	Value Added Server ID of VAS providing VMS VASs are external server equipment facilities such as Meridian Mail. Prompted if IMS or ISAP = YES. Must be defined in LD 17.	csi-8

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 24: Direct Inward System Access

Overlay program 24 allows data for the Direct Inward System Access (DISA) to be created, modified, and printed.

For X11 Release 23 and later, Overlay 24 allows data for the Emergency Services Access feature to be created, modified, and printed.

Prompts and responses by gate opener

DIS: Direct Inward System Access (DISA)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DIS	Type of data block = DIS (Direct Inward System)
CUST	xx	Customer number associated with this data block
SPWD	xxxx	Secure data Password
DN	x...x	DISA Directory Number (x...x = 1-7 digits)
SCOD	x...x	Security Code
AUTR	(NO) YES	Authorization Code required
TGAR	0-(1)-15	Trunk Group Access Restriction
NCOS	(0)-31	Network Class of Service
COS	aaa	Class of Service (aaa = (CTD), FR1, FR2, FRE, CUN, SRE, TLD, or UNR)
RANR	0-511, (X)	Route number for DISA RAN (Entering "X" removes the existing route and deactivates DISA RAN)
- RTMR	(0)-10-300	Route timer
DGTS	x...x	Digits for DISA Digit Insertion
- DLNT	(YES) NO	Dial tone needed after digit insertion
CRCS	x	Code Restriction Class of Service

Prompts and responses

ESA: Emergency Services Access Data Block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	ESA	Type of data block = ESA (Emergency Services Access)
CUST	xx	Customer number associated with this data block
ESDN	xxxx	Emergency services Directory Number
ESRT	0-511	Emergency Services Access route number
DDGT	x..x	Directing digits
DFCL	x..x	Default ESA Calling Number
OSDN	x..x	On-Site Notification station DN

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AUTR	(NO) YES	Authorization Code required If YES, the user enters the authorization code but not the special prefix access code.	disa-7
COS	(CTD) CUN FR1 FR2 FRE SRE TLD UNR	Conditionally Toll Denied Class of Service Conditionally Unrestricted Class of Service Fully Restricted class 1 Fully Restricted class 2 Fully Restricted Class of Service Semi-Restricted Class of Service Toll Denied Class of Service Unrestricted Class of Service	disa-1
CRCS	x	Code Restriction Class of Service New Flexible Code Restriction (NFCR) must be activated at least once.	
CUST	xx	Customer number associated with this data block as defined in LD 15.	disa-1
DDGT	x..x	Directing digits (e.g. 1, 11, 911, etc.). Up to 4 digits are accepted. The configured digits are outpulsed as the called number if the outgoing trunk for the ESA call is a CAMA trunk.	esa- 23
DFCL	x..x	Default ESA Calling Number. The input must be the following lengths: * On a system that is not FNP packaged, 8 or 11 digits are accepted if the first digit of the input is '1'; otherwise the input must be 7 or 10 digit. * On a system that is FNP packaged, up to 16 digits are allowed to be entered. 'X' deletes the data. Note that the prompt does not expect a CLID entry number.	esa- 23
DGTS	x...x X	Digits for DISA Digit Insertion. A maximum of 31 digits can be defined. Removes existing digits and deactivates DISA Digits Insertion.	dpna-21

Prompt	Response	Comment	Pack/Rel
		Direct Private Network Access (DPNA) package 250 is required.	
DLNT	(YES) NO	Dial tone needed after digit insertion Dial tone not needed after digit insertion	dpna-21
DN	x...x	DISA Directory Number x...x = DISA DN	disa-1
		DN (represented in response by "x...x") can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	
		All trunk routes terminating in DISA must auto-terminate (LD 16 prompt AUTO = YES) and trunks must have ground start signaling (LD 14 prompt SIGL = GRD). The DN must be the same as prompt ATDN in LD 14.	
ESDN	xxxx	Emergency services DN. Up to 4 digits are accepted.	esa- 23
ESRT	0-511	Emergency Services Access route number. Precede with "X" to delete the data.	esa- 23
		Route number of the following routes types are accepted as valid input: CAM COT DID FEX TIE WAT	
		The route number of an ISA service route (LD16, ISAR = YES) can be entered for ESRT as long as the route type of the ISA service route is one of the above.	
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	CDP Network Class of Service NFCR or BARS Network Class of Service NARS Network Class of Service Network Class of Service for Release 13 and later.	ncos-1

LD 24

Page 568 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
OSDN	x..x	On-Site Notification station DN. The input must be a valid single appearance internal DN. 'X' deletes the data. The On Site Notification function is dependent on the OSDN to locate and alert the OSN set in the event of an ESA call.	esa- 23
RANR	0 - 511 (X)	Route number for DISA RAN Removes existing route and deactivates DISA RAN. This prompt appears with Direct Private Network Access (DPNA) package 250 and Recorded Announcement (RAN) package 7.	dpna-21
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Create a new DISA data block Remove a DISA data block Print DISA data block	disa-1
RTMR	(0)-10-300	Route Timer RTMR = the maximum time (in seconds) that a caller can wait for an available RAN trunk before being removed from the RAN queue. A caller that has failed to capture a RAN trunk during the RTMR time limit will proceed with the call as if DISA RAN has completed. Entering "0" clears the timer and deactivates the DISA RAN timer.	dpna-21
SCOD	x...x	Security Code (1-8 digit DISA security access code) The security code can be changed using REQ = CHG, but is only removed by removing the entire DISA data block. Enter X to remove. Entering <cr> = no code or code not changed.	disa-1
SPWD	xxxx	Secure Data Password Prompted only if the password is defined in LD 15. If the password is not entered, the security code will not print when PRT is requested.	disa-1
TGAR	(0)-15 (0)-31 0-(1)-15	Trunk Group Access Restriction: Release 1 to 12 Trunk Group Access Restriction: Release 13 to 21 Trunk Group Access Restriction: Release 22 and later	disa-1

Prompt	Response	Comment	Pack/Rel
TYPE		Type of data block	disa-1
	DIS	Direct Inward System data block	
	ESA	Emergency Services Access data block	esa-23

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 25: Move Data Blocks

Overlay program 25 allows data associated with loops, shelves, or cards to be moved to or interchanged with different loops, shelves, or cards.

The program also allows the data associated with different customers to be moved at the same time as long as all source and destination loops, shelves, and cards are identical for all customers specified.

Move and swap rules

- 1 Before using MOV or SWP the following hardware should be removed from the database and reconstructed after the MOV is completed:
 - Consoles
 - Digitone Receivers
 - Dial Tone Detectors
 - Multifrequency Compelled Signaling (MFC/MFE)
 - PRA loops
 - ACD telephones
 - All lines
- 2 Loops must be configured in LD 17.
- 3 NT8D17 Conference/TDS loop cannot be moved or swapped with LD 25.
- 4 An individual unit must be moved to a card of the same type.

Prompts and responses

Prompt	Response	Comment
REQ:	aaa	Request (aaa = END, SWP, or MOV)
CUST	xx xx ... xx	Customer number
SRCL	0-159	Source Loop
DSTL	0-159	Destination Loop
SHCD	a...a	Shelf Card (a...a format = ss TO ds <i>or</i> ss c TO ds c)
STUN	xx	Starting destination Unit Number
MVSG	(NO) YES	Move Segment
- SHSG	a...a	Shelf Segment (a...a format = ss sseg TO ds dseg)
STSG	0-3	Starting destination Segment

Move and Swap Rules

Scenario: Move or swap a shelf or card from source loop to destination loop		DESTINATION		
		Single density loop (SD)	Double density loop (DD)	Quadruple density loop (4D)
SOURCE	Single density loop (SD)	all cards are SD	all cards are SD	all cards are SD
	Double density loop (DD)	all cards must be SD	cards can be DD or SD	cards can be DD or SD
	Quadruple density loop (4D)	all cards must be SD	cards can be DD or SD	cards can be 4D, DD or SD

Scenario: Move or swap a whole loop from source loop to destination loop		DESTINATION		
		Single density loop (SD)	Double density loop (DD)	Quadruple density loop (4D)
SOURCE	Single density loop (SD)	shelf 0-3	if only shelf 0 and/or 1 is configured on loop	if only shelf 0 is configured on loop
	Double density loop (DD)	all cards on shelf must be SD	shelf 0-1	if only shelf 0 is configured on loop
	Quadruple density loop (4D)	all cards on loop must be SD	cards can be DD or SD	shelf 0

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CUST	xx xx ... xx	Customer number Enter the customers affected by the move or swap operation. Customer 0 must be specified to move digitone receivers on the source loop.	basic-1
	<cr>	All customers affected The move/swap superloop data on a customer basis is not supported. Enter a return, (<cr>) when moving or swapping superloop data.	
DSTL	0-159	Loop number Destination to which data is to be moved If the loop has D-channel as a backup, REQ = MOV is not supported.	basic-20
MVSG	(NO) YES	Move or swap Superloop Segments	basic-15
REQ		Request	
	END	Exit Overlay program.	basic-1
	MOV	Move data associated with an existing loop to a vacant loop (see Table). CAUTION: Before using MOV, consoles and digitone receivers should be removed from the database and reconstructed after the move is completed.	
	SWP	Swap (interchange) data associated with existing loops (See "Move and Swap Rules" on page 573.)	

Prompt	Response	Comment	Pack/Rel
SHCD	ss TO ds ss c TO ds c	Shelf Card Move or interchange data to or between shelves. Move or interchange data to or between cards. Where: • c = card number (0-15) • ss = source shelf • ds = destination shelf Shelf range: • SD = 0-3 • DD = 0-1 • 4D = 0 • 8D = 0-1 (superloops only)	basic-1
SHSG	ss sseg TO ds dseg	Move/Swap source Shelf Segment to destination Shelf Segment, where: • ss = source shelf • ds = destination shelf • sseg = source segment • dseg = destination segment. The SHSG command is used to move or swap superloop segments.	basic-15
SRCL	0-159	Source Loop number from which data is to be moved If the loop has D-channel as a backup, REQ = MOV is not supported.	basic-20
STSG	0-3	Starting destination Segment For superloops only, if REQ = MOV, enter the starting destination segment to which the shelf is to be moved.	basic-15
STUN	xx	Starting destination Unit Number Enter the starting destination unit number to which the first source unit is to be moved. The source card must not be on a superloop; the destination card must be on a superloop. The value of xx depends on source loop density.	basic-15

Prompt	Response	Comment	Pack/Rel

For 500/2500 and digital line cards:

- SD, xx = 0, 4, 8, 12
- DD, xx = 0, 8
- QD, xx = 0, 8 (8 for digital line cards only)

For a Digitone Receiver card the destination density is 8D and the source density is:

- SD, xx = 0, 1, 2, 3, 4, 5, 6, 7
- DD, xx = 0, 2, 4, 6
- QD, xx = 0, 4

SD, DD trunk cards cannot be moved to Universal or E&M/Dictation Trunk cards.

Different source cards cannot be mixed into Superloop cards with one destination. Only ALC, DLC and DTR can be moved to superloops.

LD 26: Group Do Not Disturb

Overlay program 26 allows Do Not Disturb groups to be created, modified, and printed.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DND	Type of data block = DND (Do Not Disturb Group)
CUST	xx	Customer number associated with this data block
GPNO	0-99	Group Number or new Group Number to be formed
TOGP	0-99	Move to Group number
GRPx	0-99	Number of next Group to be moved
STOR	x...x	DN to be Stored
RMOV	x...x	Remove DN

LD 26

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CUST	xx	Customer number associated with this data block as defined in LD 15.	dndg-1
GPNO	0-99 <cr>	Group Number or new Group Number to be formed Print all Group Numbers. Prompted when REQ = PRT.	dndg-1
GRPx	0-99 <cr>	Number of next Group to be moved Proceed to next prompt.	dndg-1
REQ	CHG END MOV MRG NEW OUT PRT REM	Action Request Change existing data block. Exit Overlay program. Move a DN from one DND Group data block to another Group data block. Merge existing Group data blocks into a new Group (the old groups will still exist) data block. Create a New data block. Remove data block. Print DND Group data block. Remove an entry from a Group data block.	dndg-1
RMOV	x...x G0-G99	Remove DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Remove Group number	dndg-1
STOR	x...x G0-G99	DN to be stored Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Group number to be stored. Numbers may be added when REQ is CHG.	dndg-1
TOGP	0-99	Move To Group number	dndg-1
TYPE	DND	DND Group data block type	dndg-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 27: ISDN Basic Rate Interface (BRI) Administration

Overlay program 27 was introduced in Release 18 and is used to configure ISDN Basic Rate Interface hardware.

If ISDN BRI is being configured for the first time the following sequence must be used:

- 1** Configure Protocol group (PROT) data block (Release 18), Link Access Protocol on D-channel (LAPD) data block (Release 19 and later).
- 2** Configure PRI loop, route, and channel data blocks for packet data transmission (Release 18).
- 3** Configure Multi-purpose ISDN Signaling Processor (MISP) data block.
- 4** Configure Basic Rate Signaling Concentrator (Release 19 and later).
- 5** Configure S/T Interface Line Card (SILC) or U Interface Line Card (UILC) data block.
- 6** Configure Digital Subscriber Loop (DSL) data block.
- 7** Configure Terminal Service Profile on DSL (TSP) data block.

If changing the existing ISDN BRI service this sequence does not have to be followed, but the relationship of one data block to another must be observed. Due to interactions the changing of one data block may require the changing of other data blocks.

Refer to the *ISDN BRI Administration* NTP for complete details.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
BRSC : Basic Rate Signaling Concentrator data block	580
DNAT: Data Network Address Tables data block	581
DSL: Digital Subscriber Loop data block (APPL = BRI)	581
DSL: Digital Subscriber Loop data block (APPL = BRIT or BRIE)	583
LAPB: Link Access Procedure - Balanced data block (Release 19 and later)	584
MISP: Multipurpose ISDN Signaling Processor data block	585
PVC: Permanent virtual circuit connections data block	586
PROT or LAPD: Protocol or Link Access Protocol data block	587
TSP: Terminal Service Profile data block	588
X25P: X25P packet protocol parameters data block (Release 19 and later)	589

BRSC : Basic Rate Signaling Concentrator data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	BRSC	Type of data block = BRSC (Basic Rate Signaling Concentrator)
BRSC	l s c	Basic Rate Signaling Concentrator card
MISP	x...x	MISP loop number for large systems; SISP card slot for small systems (Option 11)
DPSD	(NO) YES	D-channel Packet Switched Data
- MPHc	(YES) NO	Switch Route D-channel packet data to (Meridian Packet Handler) or public switched packet data network
- MPH	l	Meridian Packet Handler loop
- PRI_CH	l ch	PRI for Packet Handler and BRSC connections

DNAT: Data Network Address Tables data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DNAT	Type of data block = DNAT (Data Network Address Table)
DNAT	1-32	DNA Table to print
DNIC	xxxx	Data Network Identification Code
NTN	x...x	Network Terminal Number

DSL: Digital Subscriber Loop data block (APPL = BRI)

The Digital Subscriber Loop (DSL) configuration determines the characteristics for each DSL connected to an SILC or UILC. Up to eight DSLs can be assigned to each SILC or UILC. When REQ = PRT, entering <CR> at the DSL prompt prints out all DSLs in the system.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DSL	Type of data block = DSL (Digital Subscriber Loop)
DSL	l s c dsl	Digital Subscriber Loop address
DES	d...d	DSL Designator
CUST	0-99	Customer number associated with this function
CTYP	aaaa	Card Type (aaaa = SILC or UILC)
OPT	(BRIL)	BRI Line application (Release 18)
APPL	BRI	Basic Rate Interface (Release 19 and later)
MISP	x...x	MISP loop number for large systems; SISP card slot for small systems (Option 11)
MODE	aaaa	Network Terminal line sampling mode for SILC only (aaaa = NTAS or NTFS)
B1CT	aaa	B-channel 1 Call Type (aaa = (VCE DTA), PMD, or IPD)
- TN	l ch	PRI loop number and B-channel number when B1CT = PMD
- MPH	l	Meridian Packet Handler loop number when B1CT = IPD
- PRI	0-158	Primary Rate Interface loop

LD 27

- CH	xx	Channel number
B2CT	aaa	B-channel 2 Call Type (aaa = (VCE DTA), PMD, or IPD)
- TN	l s c	PRI loop number and B-channel number when B2CT = PMD
LDN	aa	Listed Directory Number (aa = (NO) or 0-5)
XLST	(0)-254	Pretranslation group
MTEI	1-(8)-20	Maximum Terminal Endpoint Identifiers
LTEI	n1 n2, m	Logical Terminal and Terminal Endpoint Identifiers
MCAL	2-(16)-32	Maximum number of Calls on a DSL at one time
MTSP	1-(8)-16	Maximum Terminal Service Profiles
PGPN	0-15	Protocol Group Number
PRID	1-4	Protocol ID
FDN	x...x	Flexible Call Forward No Answer Directory Number
EFD	x...x	External Flexible Call Forward No Answer Directory Number
HUNT	x...x	Hunt directory number
EHT	x...x	External Hunt directory number
TGAR	0-(1)-31	Trunk Group Access Restriction number
NCOS	(0)-99	Network Class of Service
CLS	a...a	Class of Service (CLS responses begin on page 592)

DSL: Digital Subscriber Loop data block (APPL = BRIT or BRIE)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DSL	Type of data block = DSL (Digital Subscriber Loop)
DSL	l s c dsl	Digital Subscriber Loop address
DES	d...d	DSL Designator (1 to 6 alphanumeric characters)
APPL	aaaa	Basic Rate Interface (aaa = BRIT or BRIE)
- ISDN_MCNT		
	60-(300)-350	Layer 3 call control message count per 5 second time interval.
CUST	0-99	Customer number associated with this function
CTYP	aaaa	Card Type (aaaa = SILC or UILC)
MISP	x...x	MISP loop number for large systems; SISP card slot for small systems (Option 11)
MODE	aa	Mode for DSL (aa = (TE) or NT)
- MTFM	(NO) YES	Multi-Frame Mode
TKTP	aaa	Trunk Type (aaa = TIE, COT, and DID)
CLOK	(NO) YES	Clock source
- TSET	0-15	Threshold Set for clock errors
PDCA	1-16	Pad Category table (defined in LD 73)
ROUT	0-511	Route number for the Trunk DSL
TIMR	(NO) YES	Change Timer values
- T310	10-(30)-60	T310 Timer value in seconds
B1	(NO) YES	Change B-channel 1 configuration
- MEMB	1-510	Member number of BRI route
- TGAR	0-(1)-31	Trunk Group Access Restriction number
- NCOS	(0)-99	Network Class of Service
- CLS	aaa	Class of Service (CLS responses begin on page 592)
B2	(NO) YES	B-channel 2
- MEMB	1-510	Member number of BRI route
- TGAR	0-(1)-31	Trunk Group Access Restriction number
- NCOS	(0)-99	Network Class of Service
- CLS	aaa	Class of Service (CLS responses begin on page 592)

**LAPB: Link Access Procedure - Balanced data block
(Release 19 and later)**

The Link Access Protocol for B-channels defines the B-channel packet data configuration. Meridian 1 Packet Handler (MPH) package 248 must be equipped.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	LAPB	Type of data block = LAPB (Link Access Procedure - Balance)
PGPN	0-15	Protocol Group Number
LAPB	(NO) YES	Change Link Access Protocol for B-channels
- T1	2-(6)-130	Response Timer in units of 0.5 seconds
- T2	1-(4)-129	Maximum frame delay in units of 0.5 seconds
- T3	xxx	Idle Timer in units of 0.5 seconds (xxx = 0 or 3-(12)-131)
- N1	23-(135)- 263	Maximum I-frame size in octets
- N2	1-(10)-15	Maximum number of retries
- K	(1)-7	Window size

MISP: Multipurpose ISDN Signaling Processor data block

The Multi-purpose ISDN Signaling Processor (MISP) configuration procedures identify each MISP in the system and its packet handling capabilities. After the MISP is configured it can be enabled using LD 32. An MISP can support any combination of SILCs and UILCs up to a total of four, which are assigned to the MISP using the SILC/UILC configuration procedure.

When REQ = PRT, entering <CR> at the LOOP prompt prints out all MISPs in the system. When REQ = CHG, the following applies:

- MISP must be disabled when adding/removing D-channel packet capability
- remove Packet Mode Data call type B-channels before removing the B-channel packet capability
- remove Logical Terminal Identifiers (LTIDs) before removing the D-channel packet capability

Prompt	Response	Comment
REQ	aaa	Request
TYPE	MISP	Type of data block = MISP
LOOP	0, 2, 4...158	MISP/SISP loop number
APPL	a...a	Application (a...a = BRI, BRIE, BRIL, or MPH)
PH	a...a	Packet Handler (a...a = DCH, BCH, or BDCH)
- PRI	0, 2, 4...158	Primary Rate Interface
- CH	xx	Channel number
DPSD	(NO) YES	D-channel Packet Switched Data
- MPH	(YES) NO	Route D-channel packet switched data to the Meridian Packet Handler.
- TN	l s c u	Terminal Number
PRFX	0-9	DNA table Prefix
NTNO	(YES) NO	Public Switched Packet Data Network presentation
DNIC	xxxx	Data Network Identification Code
NWIF	1-3	MPH Network Interface identifier
- TN	l s c u	Terminal Number

- RATE	(64) 56	PSDN communication Rate
- LAPB	(NO) YES	Change LAPB parameters
- X25P	(YES) NO	Change X.25 parameters
- PVC	n1 n2	Permanent Virtual Circuit Logical Channel number range
- IC	n1 n2	Incoming Logical Channel number range
- TC	n1 n2	Two-way Logical Channel number range
- OC	n1 n2	Outgoing Logical Channel number range
- DNAT	1-32	DNA Table to print

PVC: Permanent virtual circuit connections data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	PVC	Type of data block = PVC (Permanent virtual circuit connections)
MPH	loop	Meridian Packet Handler loop
PVCN	1-4	Permanent Virtual Circuit Number
XPVC	(YES) NO	External or internal PVC connection
- NWIF	1-3	MPH Network Interface identifier
NTN1	x...x	First Permanent Virtual Circuit connection to the NTN
LCN1	1-4095	Permanent Virtual Circuit Logical Channel number for NT1
NTN2	xx . . . xx	Second Permanent Virtual Circuit connection to the NTN
LCN2	1-4095	Permanent Virtual Circuit Logical Channel number for NT2

PROT or LAPD: Protocol or Link Access Protocol data block

The protocol configuration procedures define the protocols used by ISDN BRI DSLs to communicate over ISDN. These protocol groups support various ISDN communication standards used in North America, Europe, and other continents and countries.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	PROT	Type of data block = PROT or LAPD (Protocol group for Release 18 or Link Access Protocol on D-channel for Release 19 and later)
PGPN	0-15	Protocol Group Number
LAPD	(NO) YES	Change Link Access Protocol for D-channels
USER	(NO) YES	Print groups selected at PGPN prompt
- T200	(2)-40	Retransmission Timer in increments of 0.5 seconds
- T203	4-(20)-80	Maximum Time between transmission frames
- N200	1-(3)-8	Maximum Number of retransmissions
- N201	4-(260)	Maximum Number of contiguous octets or bytes in information element
- K	(1)-32	Maximum number of outstanding Negative Acknowledgment (NAKs)
PGPN	<cr>	This prompt is repeated until <CR> is entered.

TSP: Terminal Service Profile data block

The Terminal Service Profile (TSP) configuration procedures define the service profiles for ISDN BRI terminals connected to a DSL. A service profile specifies the type of transmission, the call restrictions, and the features the terminal can use.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	TSP	Type of data block = TSP (Terminal Service Profile)
DSL	l s c dsl	Digital Subscriber Loop address
OPT	a...a	Options (a...a = DN, DNS, SPID, SUID, or USID)
USID	(0)-15	User Service Identifier
MPHC	(YES) NO	Route D-channel packet switched data to the Meridian Packet Handler
- SPID	a...a	Service Profile Identifier
FEATID	aaa mmm nnn	Feature ID association
DN	x...x y...y	Directory Number (x...x) and CLID entry (y...y)
- CT	aaa	Call Types for the DN (aaa = VCE or DTA)
- MCAL	1-(4)-8	Maximum Calls allowed per DN
- CLIP	(YES) NO	Calling Line Identification Presentation for incoming calls
- PRES	(YES) NO	Presentation of CLID to far-end on outgoing calls
COLP	(NO) YES	Connected Line Identification Presentation
TRANS	(NO) YES	Transparent presentation of COLP, CLID coming from S0 terminal without presentation option
FEAT	a...a	Features (FEAT responses begin on page 595)
DFDN	x...x	Default Directory Number

X25P: X25P packet protocol parameters data block (Release 19 and later)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	X25P	Type of data block = X25P (X.25 packet protocol parameters)
PGPN	0-15	LAPB Protocol Group Number
X25P	(YES) NO	Change X.25 Parameters
- T10/T20	15-(180)-930	Request restart Timer in 1 second units
- T11/T21	15-(180)-930	Call request Timer in 1 second units
- T12/T22	15-(180)-930	Reset request Timer in 1 second units
- T13/T23	0-15-(180)-930	Clear request Timer in 1 second units
- PSIZ	xxx	Default Packet Transmission Size in octets (xxx = 16, 32, 64, (128), or 256)
- WSIZ	1-(2)-7	Default Transmit Window Size in octets

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
APPL		Application	bri-19
	(BRI)	Basic Rate Interface if Integrated Service Digital Network BRI Trunk Access (BRIT) package 233 and Basic Rate Interface Line Application (BRIL) package 235 not equipped.	
	BRIE	Basic Rate Interface protocol engine BRIE supports the QSIG and EURO ISDN interfaces and requires BRIT package 233. Any changes in the DSL route has to match the BRIE loadware application. To configure the appropriate application for the DSL, the required application must be entered here. To add or delete an application, the MISP must be in a disabled state. To delete an application, all associated DSLs must be removed first. Precede with an X to remove.	brit-20
	BRIL	Basic Rate Interface Line APPL will default to BRIL if BRIL package 235 is equipped. Otherwise, BRIT will be the default.	
	BRIT	Basic Rate Interface Trunk BRIT supports SL-1, Numeris and 1TR6 interface. APPL will default to BRIL if BRIL package 235 is equipped. Otherwise BRIT will be the default. BRIT package 233 is required.	
	MOB	Mobility Routing Application	
	MPH	Meridian Packet Handler BRIL and MPH cannot operate on the same MISP. MPH can only be deleted if there are none of the following: • no D-channel packet data separators • no B-channel or D-channel terminals • no network interface • no PVC connections	

Prompt	Response	Comment	Pack/Rel
B1CT		B-channel 1 Call Type	bri-19
	(VCE) (DTA) PMD IPD	Circuit switched Voice Circuit switched Data Packet Mode Data B-channel Packet Data with MPH For PMD the B-channel packet data must have been specified at the PH prompt during the MISP configuration procedure. PMD cannot be selected simultaneously with VCE and/or DTA. Precede with X to remove.	
B2CT		B-channel 2 Call Type	bri-19
	(VCE) (DTA) PMD	Circuit switched Voice Circuit switched Data Packet Mode Data For PMD, the B-channel packet data must have been specified at the PH prompt during the MISP configuration procedure. PMD cannot be selected simultaneously with VCE and/or DTA.	
	IPD	B-channel Packet Data with MPH Precede with X to remove.	
BCH	1 2	TSP associated with the B1 DSL Channel TSP associated with the B2 DSL Channel	bri-19
BRSC	I s c	Basic Rate Signaling Concentrator Only 1 BRSC card can be enabled on a single IPE shelf.	bri-19
CAC	(0) - 10	Multifrequency Compelled Signaling (MFC) CNI Category Code Allowed with Multifrequency Compelled Signaling (MFC) package 128.	mfc-9
CARD	1-9	Card slot for Small system ISDN Signalling Processor (SISP). CARD applies exclusively to Option 11.	qsig-22

LD 27

Page 592 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CDR	(NO) YES	Turn off Internal Call Detail Recording Turn on Internal Call Detail Recording	bri-19
CH	1-23	Channel number (Release 18) for PRI This channel carries D-channel packet data between the MISP and the packet handler. The PRI route and channel must have already been defined in LD 16 and LD 14. Prompted if PH = DCH or BDCH.	bri-18
CLIP	(YES) NO	Calling Line Identification Presentation for incoming calls.	bri-18
CLS		Class of Service You can enter more than one Class of Service by separating each entry with a space.	
	(ABDD) ABDA	Abandoned call record and time to answer Denied Abandoned call record and time to answer Allowed	fcdr-18
	(CDMD) CDMA	CDMD denies external station activity records to be generated for the set CDMA allows external station activity records to be generated for the set	mct-20
	(ICDD) ICDA	Internal Call Detail Recording Denied Internal Call Detail Recording Allowed	bri-20
	(PGND) PGNA	Deny PAGENET access Allow PAGENET access	pagenet-22
	(CTD) CUN FR1 FR2 FRE SRE TLD UNR	Conditionally Toll Denied (valid for TIE trunks only) Conditionally Unrestricted (valid for TIE trunks only) Fully Restricted Class 1 (valid for TIE trunks only) Fully Restricted Class 2 (valid for TIE trunks only) Fully Restricted (valid for TIE trunks only) Semi-Restricted (valid for TIE trunks only) Toll Denied (valid for TIE trunks only) Unrestricted	

Prompt	Response	Comment	Pack/Rel
COLP	(NO) YES	Connected Line Identification Presentation Optional CONNECTED NUMBER IE and optional connected subaddress IE are not passed from M1 to S0 Optional CONNECTED NUMBER IE and optional CONNECTED SUB-ADDRESS IE are passed from M1 to S0	bril-22
CT	VCE DTA	Circuit switched Voice Call Type for the DN Circuit switched Data Call Type for the DN One or more call types can be entered by separating each entry with a space. The call types entered must have been specified for the B1CT and B2CT prompts during the DSL configuration procedures. Precede with X to remove.	bri-18
CTYP	SILC UILC	S/T Interface Line Card Type U Interface Line Card Type This prompt is displayed only if the S/T (SILC) or U(UILC) Interface Line Card has not been previously configured or when configuring another DSL on the same SILC/UILC.	bri-18
CUST	xx	Customer number associated with this function as defined in LD 15.	bri-18
DES	d...d	DSL Designator (1 to 6 alphanumeric characters)	bri-18
DFDN	x...x	Default Directory Number Enter a 1 to 7-digit directory number. This directory number must have been previously defined at the DN prompt. A directory number can be associated with multiple TSPs. Only one default DN can be defined for a TSP. This DN is sent in the outgoing setup if the terminal does not send a calling line identification number with the outgoing call.	bri-18

LD 27

Prompt	Response	Comment	Pack/Rel
DMPH	(YES) NO	Meridian Packet Handler supports 8 SAPI 16 separators and 19 B-channels. Meridian Packet Handler supports 3 SAPI 16 separators and 1 B-channels.	bri-19
DN	x..x yyy	Directory Number (x..x = 1 to 7 digits) and CLID entry (yyy) The Directory Number cannot be shared by a non-BRI terminal. 1-8 DNs may be assigned to a DSL. The DN can be assigned to multiple TSPs on a DSL but cannot be assigned to any other DSL. Range for CLID entry (yyy) is: [(0) - (value entered for SIZE prompt in LD 15 minus 1)] Precede with X to remove.	bri-18
DNIC	xxxx	Data Network Identification Code Enter a 4-digit DNIC for this item	bri-19
DPSD	(NO) YES	Route D-channel Packet Switched Data calls to an external packet handler, or Public Switched Packet Data Network (PSPDN). Do not route D-channel Packet Switched Data calls to an external packet handler, or Public Switched Packet Data Network (PSPDN).	mph-19
DSL	l s c dsl	Digital Subscriber Loop address for large system, where: • l (superloop) = 0-156 (must be 0 or a multiple of 4) • s (shelf) = 0-1 • c (card) = 0-15 • dsl (Digital Subscriber Loop) = 0-7 You can assign 31 DSLs for each MISP if you specified DCH or BDCH at the PH prompt during MISP configuration procedures. When REQ = PRT, entering <cr> at this prompt prints out all DSLs in the system.	bri-20
EFD	x...x	External Flexible Call Forward No Answer Directory Number (1-13 digits allowed)	bri-18

Prompt	Response	Comment	Pack/Rel
EHT	x...x	External Hunt directory number (1-13 digits allowed)	bri-18
FDN	x...x	Flexible Call Forward No Answer Directory Number (1-13 digits allowed)	bri-18
FEAT		Features	bri-18
	(CFTD) CFTA	Call Forward by call Type Denied Call Forward by call Type Allowed	
	(CFXD) CFXA	Call Forward to External DN Denied Call Forward to External DN Allowed. CFXA is valid if PRID = 2 or 6 in DSL.	isdn-20
	(DNDY)	Diversion Notification with called party's number and name when available.	qsig ss- 23
	DNDN	Diversion Notification without called party's number and name.	
	(DNO3)	Diversion Notification Option with diverted-to party's number and name when available.	qsig ss- 23
	DNO1	Diversion Notification Option without notification.	
	DNO2	Diversion Notification Option without diverted-to party's number and name.	
	(FBD) FBA	Call Forward Busy Denied Call Forward Busy Allowed	
	(FND) FNA	Call Forward No Answer Denied Call Forward No Answer Allowed	
	(HTD) HTA	Hunting Denied Hunting Allowed Always assign HTA if the terminal does have CWT capability.	
	(MWD) MWA	Message Waiting Denied Message Waiting Allowed	
	(SFD) SFA	Second level Call Forward No Answer Denied Second level Call Forward No Answer Allowed	

LD 27

Prompt	Response	Comment	Pack/Rel
FEATID	aaa mmm nnn	Feature ID association This is prompted when PRID = 6, to implement the ISDN BRI Conferencing capability. Where: • aaa = Feature: AO3 = 3-party conference, AO6 = 6 party conference • mmm = Feature activation ID (1-127) • nnn = Feature indication ID (1-127) This is optional. If nothing is entered, the same value as mmm is used. Feature activation and Feature indication ID are the feature key assignments on the terminal. The key numbers must also be configured at the terminal level. Recommended assignments are: M5317TDX: AO6 15 and M5209TDcp: AO6 9.	bri-19
HUNT	x...x	Hunt directory number (1-13 digits allowed)	bri-18
IC	n1	Lowest incoming Logical Channel Number range (1-4095)	bri-19
	n2	Highest incoming Logical Channel Number range (1-4095)	
	<cr>	no incoming LCNs	
ISDN_MCNT	60-(300)-350	Layer 3 call control message count per 5 second time interval.	qsig gf-22
K	(1)-7 (1)-32	Window size Maximum number of outstanding negative acknowledgment (NAKs) frames.	bri-19
LAPB	(NO) YES	Change Link Access Protocol for B-channels	mph-19
LAPD	(NO) YES	Change Link Access Protocol for D-channels	bri-18
LAPD	0-15	LAPD protocol group number for DSL assignment Prompted for Release 19 and later.	bri-19

Prompt	Response	Comment	Pack/Rel
LCN1	1-4095	Permanent Virtual Circuit Logical Channel Number for NT1	bri-19
LCN2	1-4095	Permanent Virtual Circuit Logical Channel Number for NT2	bri-19
LDN	(NO) 0-3 0-5	No LDN assigned to the DSL Departmental Listed Directory Number defined in LD 15 Departmental Listed Directory Number for X11 Release 20	bri-20
LOOP	0, 2, 4,...158	MISP loop (must be an even number and the next odd loop number must be unequipped) When REQ = PRT, enter <cr> to print all MISPs in the system.	bri-18
LTEI		Logical Terminal and Terminal Endpoint Identifiers. The Logical Terminal Identifier (LTID) consists of: • Logical Terminal Group (LTG) • Logical Terminal Number (LTN) • Static Terminal Endpoint Identifier (TEI) pair for D-channel packet data transmission The maximum number of LTID and TEI pairs is defined by MTEI. LTG = 15 and LTN = 1023 is an invalid combination.	bri-18
	n1 n2 m Xm <cr>	Logical Terminal Group (LTG) 1-15 Logical Terminal Number (LTN) 1-1023 TEI (0-63) Deletes LTID and TEI as a pair for the specified TEI Go to the next prompt. LTEI is prompted if D-channel packet data was specified for the associated MISP.	

LD 27

Page 598 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
MCAL	2-(16)-32	Maximum number of calls on a DSL at one time when TYPE = TSP. The maximum number of calls includes Active, Waiting, and On-Hold calls. Warning is received if less than 8 is specified.	bri-18
	1-(4)-8	Maximum Calls allowed per DN when TYPE = DSL. The maximum number of calls allowed for a directory number includes sum total of Active calls, Call Waiting, and calls On-Hold.	bri-18
MEMB	1-510	Member Number of the Basic Rate Interface route.	bri,brit-24
MISP	0, 2, 4...158	MISP loop number for large systems	bri-19
		ISDN BRI applications on the MISP must be disabled when changing the MISP loop or card. The SILC or UILC must be disabled before changing the MISP loop number.	
		Prompted if the MISP has not been assigned to the specified SILC or UILC. With Release 19 and later, 8 BRSC cards can be configured per MISP	
MODE		Mode. Prompted when CTYP = SILC.	bri-18
		NTAS and NTFS may be input when APPL = BRI, BRIL, or MPH.	
	NTAS	Network Termination Adaptive line Sampling (extended passive bus, branched passive bus Point-to-Point bus, U interface DSL)	
	NTFS	Network Termination Fixed line Sampling (short passive bus)	
MPH	loop	Meridian Packet Handler loop This is the loop with the dedicated connection from the MISP card. Prompted when B2CT = IPD.	mph-19
MPHC	(YES)	Route D-channel packet switched data to the Meridian Packet Handler	mph-19
	NO	Route D-channel packet data calls to an external packet handler, or Public Switched Packet Data Network (PSPDN)	

Prompt	Response	Comment	Pack/Rel
MTEI	1-(8)-20	Maximum Terminal Endpoint Identifiers MTEI represents the maximum number of both static and dynamic combined assigned to the logical terminals on a DSL.	bri-18
MTSP	1-(8)-16	Maximum Terminal Service Profiles	bri-18
N1	23-(135)- 263	Maximum I-frame size (in octets)	mph-19
N2	1-(10)-15	Maximum Number of retries	mph-19
N200	1-(3)-8	Maximum Number of retransmissions	bri-18
N201	4-(260)	Maximum Number of contiguous octets or bytes in information element	bri-18
NCOS	(0)-99	Network Class of Service	bri-18
NTN	x...x	Network Terminal Number Add the NTN to the DNA table. The NTN can be up to 10 digits; up to 32 NTN entries are supported for each table. Enter a range of NTNs by separating the numbers with a space. Delete entry by preceding the number with X.	bri-19
NTN1	x...x	First Permanent Virtual Circuit connection to the NTN Up to 10 digits can be entered.	bri-19
NTN2	x...x	Second Permanent Virtual Circuit connection to the NTN Up to 10 digits can be entered.	bri-19
NTNO	(YES) NO	Public Switched Packet Data Network presents only the NTN in the Incoming Call packet's called address field. Public Switched Packet Data Network presents NTN and DNIC in the Incoming Call packet's called address field	bri-19
NWIF	1-3 <CR>	MPH Network Interface Identifier Indicates there is no identifier Delete an identifier by preceding the entry with an X.	bri-19

Prompt	Response	Comment	Pack/Rel
OC	n1	Outgoing Logical Channel number range	bri-19
		Lowest Incoming Logical Channel Number range (1-4095)	
	n2	Highest Incoming Logical Channel Number range (1-4095)	
	<cr>	no incoming LCNs	
OPT	(BRIL)	BRI Line application This information is NOT downloaded to the DSL.	bri-19
		Terminal Service Profile (TSP) print options (when REQ = PRT):	bri-18
	DN	Print TSPs with the requested Directory Number.	
	DNS	Print Directory Number for specified dsl.	
	SPID	Print TSPs with the specified Service Profile Identifier.	
	SUID	Print Service Profile ID and User Service Identifier map.	
	USID	Print TSPs with the specified User Service ID.	
	<cr>	Print all TSPs defined for the specified dsl.	
PGPN	0-15	Protocol Group Number	mph/bri-19
	ALL	To remove all protocol groups. You cannot remove a protocol group if it is assigned to a DSL.	
	<cr>	To print all protocol groups and the number of DSLs in each group Prompted for Release 18	
PH		Packet Handler (Release 18)	bri-18
	(X)	No packet data transmission	
	DCH	BRI terminal communicates with the packet handler using multiplexed D-channels over a dedicated BD-channel	
	BCH	BRI terminal communicates with the packet handler using a dedicated B-channel	
	BDCH	Both D-channel and B-channel communicate with packet handler	
		If you select DCH or BDCH, the MISP can support only 31 DSLs because one serial port is dedicated to the packet handler.	
PRES	(YES) NO	Presentation of CLID to far-end on outgoing calls.	bri-18

Prompt	Response	Comment	Pack/Rel
PRFX	0-9	DNA table Prefix.	bri-19
PRI	0, 2, 4,.....158	Primary Rate Interface Loop numbers. This Primary Rate Interface is connected to the packet handler. The Primary Rate Interface must have already been added in LD 17. Prompted if B1CT or B2CT = PMD.	bri-18
PRI_CH	loop channel	PRI for packet handler and BRSC connections. Where: loop (1-159) = the PRI loop number that is connected to the external packet handler channel (1-23) = the PRI channel number where the dedicated BRSC connection terminates This PRI loop must have been previously assigned in LD 17, and must be dedicated to packet handler connection. The PRI channel must be configured for BRI packet data in LD 14 and LD 16.	bri-19
PRID	1 2 3 4 5 6	Protocol ID. Prompted if REQ = NEW. ANSI ETSI DMS NET64 Numeris (Release 18 and later) NI-1 (Release 19 and later) PRID = 6 allows the ISDN BRI conference feature to be configured in the TSPs of the DSL	bri-19
PSIZ	16 32 64 (128) 256	Default packet transmission Size (in octets)	bri-19
PVC	n1 n2	Lowest Permanent Virtual Circuit logical channel number range Highest Permanent Virtual Circuit logical channel number range	bri-19
PVCN	1-4	Permanent Virtual Circuit Number	bri-19

LD 27

Prompt	Response	Comment	Pack/Rel
RATE	(64) 56	PSDN communication Rate This establishes the rate at which the PSDN communicates across the PRI channel network interface.	bri-19
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Create a new data block Remove data block Print data block	bri-18
SCPW	xxxxx	Station Control Password The SCPW entry must equal the Station Control Password Length (SCPL) defined in LD 15. SCPW is not prompted if SCPL = 0. Precede entry with "X" to delete.	isdn-20
SPID	a ... a	Service Profile Identifier Where: aaa...a = 9-character alphanumeric service profile ID. A maximum of 8 valid SPIDs per TSP are allowed. Precede with X to remove. With X11 Release 23, any combination of 20 characters or less is valid. Prompted only if the user service identifier is 1-15. It will be repeated until <cr> is entered but only up to 8 SPIDs should be entered. This SPID must be entered in the initializing terminal to associate the terminal with a USID.	bri-18 bri-23
SSRV_ETSI	VCFW DCFW	Supplementary Service Voice Call Forward. VCFW is valid if CT = VCE or if CT = VCE and DTA. Data Call Forward. DCFW is valid if CT =DTA or VCE and DTA. Prompted if PRID = 2 (ETSI) in the DSL. Precede with X to remove, the service must not be active.	isdn-20

Prompt	Response	Comment	Pack/Rel
SSRV_N1	aaa mmm nnn	NI-1 Supplementary Service. Where: • aaa = VCFA (Voice Call Forward Activation) if CT = VCE • aaa = VCFD (Voice Call Forward Deactivation) if CT = VCE • aaa = DCFA (Data Call Forward Activation) if CT = DTA • aaa = DCFD (Data Call Forward Deactivation) if CT = DTA • mmm = Feature Activation ID, 1-127 • nnn = Feature Indication ID, 1-127 (If not defined, mmm is used). The same mmm value may be assigned to VCFA and VCFD, or to DCFA and DCFD. Precede with X to remove, not allowed if feature is activated. Prompted if PRID = 6.	isdn-20
SUPL_SVC	AO3 AO6	Supplementary Services Three-Party Conference Six-Party Conference Precede with X to remove.	isdn-20
T1	2-(6)-130	Response Timer (in units of 0.5 seconds) Default is 3 seconds.	mph-19
T10/T20	15-(180)-930	Request Restart Timer (in 1 second units)	mph-19
T11/T21	15-(180)-930	Call Request Timer (in 1 second units)	bri-19
T12/T22	15-(180)-930	Reset Request Timer (in 1 second units)	bri-19
T13/T23	0-15-(180)-930	Clear request timer (in 1 second units)	bri-19
T2	1-(4)-129	Maximum frame delay (in units of 0.5 seconds) Default is 2 seconds. T2 must be less than T1.	mph-19

LD 27

Page 604 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
T3	0, 3-(12)- 131	Idle Timer (in units of 0.5 seconds) Default is 6 seconds. Setting it a 0 (zero) turns off the timer. If this is not 0, it must be greater than T1.	mph-19
T200	(2)-40	Retransmission Timer Registered in increments of 0.5 seconds to specify the time delay which occurs before the system retransmits the information.	bri-18
T203	4-(20)-80	Maximum Time between transmission frames (in increments of 0.5 seconds)	bri-18
TC	n1 n2 <cr>	Lowest two-way Logical Channel Number range Highest two-way Logical Channel Number range No two-way LCNs	mph-19
TEI	0-63	Static TEI for addressing terminal This is given in units of 1 second.	mph-19
TGAR	(0)-31 0-(1)-31	Trunk Group Access Restriction number: range prior to Release 22 Trunk Group Access Restriction number: range for Release 22 and later	bri-18
TN	I s c I s c u loop ch	Terminal Number of SILC or UILC. Prompted when B1CT= PMD. Where: • I (loop) = 0-156 (must be 0 or a multiple of 4) • s (shelf) = 0-1 • c (card) = 1-15 If REQ = PRT, entering: • I: prints out information for all cards on this loop • I s: prints out information for all cards on that loop and shelf • <cr>: prints out information for all system cards Terminal Number PRI loop and B-channel number	bri-20

Prompt	Response	Comment	Pack/Rel
TRANS	(NO)	Restrict presentation of COLP, CLID coming from S0 terminal without presentation option If TRANS = NO and if the presentation indicator is set to restricted, the number digits are erased from the information element before it is sent to the S0 terminal.	bril-22
	YES	CONNECTED NUMBER IE received from the Meridian 1 is sent transparently to S0 terminal, even if restricted	
TRMT		Terminating Type	bri-20
	D	D-channel terminal type configuration used	
	B	B-channel terminal configuration type used	
TYPE		Type of data block	bri-19
	BRSC	BRI Signaling Concentrator (Rel 19 and later)	
	CARD	S/T (SILC) or U (UILC) Interface Line Card data block	
	DNAT	Data Network Address Tables (Rel 19 and later)	
	DSL	Digital Subscriber Loop data block	
	LAPB	Link Access Protocol on B-channels (Rel 19 and later)	
	LAPD	Link Access Protocol on D-channel (Rel 19 and later)	
	MISP	Multi-purpose ISDN Signaling Processor data block	
	PROT	Protocol group data block (Rel 18 only)	
	PVC	Permanent Virtual Circuit connections (Rel 19 and later)	
	TSP	Terminal Service Profile data block	
	X25P	X.25 Packet Protocol Parameters (Rel 19 and later)	

LD 27

Prompt	Response	Comment	Pack/Rel
USER		Print groups selected at PGPB prompt. USER is prompted when REQ = PRT.	mph-19
	(NO) YES	Do not print LAPB or LAPD group user information Print LAPB or LAPD group user information (LAPB or LAPD groups selected at the PGPB prompt as well as the TSPs or MPH network interfaces which use them)	
USID	(0)-15	User Service Identifier The total number of TSPs defined for a DSL cannot exceed the maximum number of TSPs allowed for a DSL as specified by the MTSP prompt during the DSL configuration procedures.	bri-18
	ALL	Removes all TSPs defined for the DSL. Use only when REQ = OUT. A default TSP should be configured for non-initializing terminals. This is done by assigning USID = 0 to the TSP.	
WSIZ	1-(2)-7	Default Transmit Window Size (in octets)	bri-19
X25P	(YES) NO	Change X.25 Parameters If these parameters are changed, all active calls associated with the TSPs and network interfaces for the group will be dropped.	bri-19
XLST	(0)-254	Pretranslation group Prompted if PREO = 1 in LD 15	bri-18
XPVC	(YES) NO	External PVC connection Internal PVC connection	bri-19

LD 18

Issued:	June 1999
Status:	Standard
X11 Release:	24

Page 437 of 1254

LD 18: Speed/Group Call, Pretranslation, and Hotline

This overlay allows data for Speed Call, System Speed Call, Group Call, Pretranslation, and Enhanced Hotline to be created or modified. The data may be printed using Overlay 20.

The Pretranslation List configuration now takes place in this program. To enable the Pretranslation feature in LD 15, the list must be configured here using the XLAT prompt.

Release 19 and later provides the ability to add and copy multiple Speed Call lists and System Speed Call lists. The memory requirements for Speed Call do not change. The number of lists allowed by each system is subject to the system type and memory available. Refer to *X11 features and services* for details concerning speed call requirements.

LD 18

Page 438 of 1254 Prompts and responses

Prompts and responses Table of Contents

Section	Page
<i>Prompts and responses by task :</i>	
Compute Speed Call list memory size and disk records	438
Configure Group Call lists	439
Configure Speed Call lists	439
Assign a Pretranslation group to Speed Call list	440
Configure Enhanced Hot Line lists	440
Move from one group or list to another	441

Compute Speed Call list memory size and disk records

Use this prompt sequence to determine if there are enough memory and disk records for new Speed Call and Hot Line lists. Compare the output with the “MEM AVAIL” and “DISK RECS AVAIL” values output before the REQ prompt. See also “System memory and disk space” at the beginning of this document.

Prompt	Response	Comment
REQ	COMP	Request = COMP (Compute disk and memory required for new lists)
TYPE	aaa	Type of data block, where: aaa = SCL, SSC or HTL (Speed Call, System Speed Call or Hot Line estimation)
NOLS	1-8191	Number of lists to be added
DNSZ	4-(16)-31	Maximum length of DNs allowed for new lists
SIZE	1-1000	Maximum number of DNs allowed in new lists

Configure Group Call lists

Prompt	Response	Comment
REQ	aaa	Request (REQ responses begin on page 443)
TYPE	GRP	Type of data block = GRP (Group Call list)
CUST	0-99	Customer number associated with this data block
GRNO	0-63	Group number for group call
GRPC	(YES) NO	Allow or deny group call control to the originator
STOR	xxx yy...y	Entry number (0-19) and the digits stored with it

Configure Speed Call lists

Prompt	Response	Comment
REQ	aaa	Request (REQ responses begin on page 443)
TYPE	aaa	Type of data block, where aaa = SCL or SSC (Speed Call list or System Speed Call list)
LSNO	0-8190	List Number for Speed Call (SCL)
	0-4095	List Number for System Speed Call (SSC)
TOLS	0-8190	To List (New speed call list number)
NCOS	(0)-99	Network Class of Service for SSC
DNSZ	4-(16)-31	Maximum number of DNs allowed for Speed Call lists
SIZE	1-1000	Maximum number of DNs in Speed Call list
WRT	(YES) NO	Data is correct and can be updated in the data store
STOR	xxx yy...y	Entry number (0-999) and the digits stored with it
WRT	(YES) NO	Data is correct and can be updated in the data store

LD 18

Page 440 of 1254 Prompts and responses

Assign a Pretranslation group to Speed Call list

Prompt	Response	Comment
REQ	aaa	Request (REQ responses begin on page 443)
TYPE	PRE	Type of data block = Pretranslation calling group assignment
CUST	0-99	Customer number
XLAT	0-254 0-8191	Pretranslation list (Calling group to Speed Call list correlation)
	0-254 8191	If list number 8191 is assigned to a group then pretranslation is removed for that group

Configure Enhanced Hot Line lists

Prompt	Response	Comment
REQ	aaa	Request (REQ responses begin on page 443)
TYPE	HTL	Type of data block = Hot Line list
CUST	0-99	Customer number
LSNO	0-8190	List Number for Hotline (one for customer)
NCOS	0-4095	Network Class of Service for HTL
DNSZ	4-(16)-31	Maximum number of DNs allowed for Hot Line list
SIZE	1-1000	Maximum number of DNs in Hot Line list
WRT	(YES) NO	Data is correct and can be updated in the data store
STOR	xxx yyy...y	Entry number (0-999) and the digits stored with it
WRT	(YES) NO	Data is correct and can be updated in the data store

Move from one group or list to another

Prompt	Response	Comment
REQ	MOV	Request = MOV
TYPE	aaa	Group or List Type (aaa = GHT, GRP, SCL, SSC, or SSL)
CUST	0-99	Customer number
LSNO	xxxx	List Number
TOLS	0-254	To List
GRNO	xx	Group Number
TOGR	0-63	To Group

LD 18

Page 442 of 1254 Alphabetical list of prompts

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CUST	xx	Customer number associated with this function as defined in LD 15 Prompted when REQ = NEW or CHG and LSNO = <cr>	basic-1
DNSZ	4-(16)-31	Directory Number Size Maximum length of DN allowed for Speed Call list or Group Hunt list. Range is 4, 8, 12, 16, 20, 24, 28, 31. For Speed Calling the default = 16. Numbers between 1 and 30 are rounded up to the next valid number. Once defined DNSZ should not be changed. Instead, print out the list, remove it with REQ = OUT and rebuild the list with the new DNSZ.	optf-1
GRNO	0-63	Group Number for group call	grp-20
GRP	0 - 4095 <CR> X	Ringing Number Pickup Group (RNPG) using this speed call list. Repeat for all groups sharing the same list. To reprompt "LSNO" To remove	grp-1
GRPC	(YES) NO	Group Call originator does have control Group Call originator does not have control If GRPC = YES in the Group Call List, the originator has control: when the originator goes on hook, the call is terminated. If GRPC = NO and the originator goes on hook, the Group Call acts like a conference call: the call remains active until all members go on hook.	grp-20
LSNO	 0-254 0-4095 0-8190 <cr>	List Number for Speed Call, System Speed Call, Group Hunting and Hotline Range for Release 13 and earlier System Speed Call and Hot Line lists for Release 14 and later A Speed Call list associated with Call Pickup network wide groups. to end Use only when REQ = CHG and TYPE = GHT.	optf-1

LD 18

Alphabetical list of prompts Page 443 of 1254

Prompt	Response	Comment	Pack/Rel
		List numbers exceeding four digits will have the left most digits truncated, and only the right most digits will be accepted. A Hot Line list uses a System Speed Call list entry, only one Hot Line list is allowed per customer. MSCL must be defined in LD 17.	
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service CDP NFCR or BARS NARS Release 13 and later Prompted when TYPE = SSC or HTL.	basic-17
NOLS	1-8191	Number of lists to be added. Prompted if REQ = COMP	
REQ		Request	basic-19
	CHG	Change existing data block	
	COMP	Compute memory and disk requirements for new Speed Call, System Speed Call or Hot Line lists for Release 17.	
	CPY xxx	Copy speed call data. Where: xxx = 1-100. For Release 19 and later, the ability to copy multiple Speed Call and System Speed Call lists is supported.	
	END	Exit overlay program	
	MOV	Move data block from one group or list to another.	
	NEW xxx	Add new data block. Where: xxx = 1-100. Release 19 and later support the ability to create multiple speed Call and System Speed Call lists.	
	OUT	Remove data block.	
SIZE	1-1000 1-96	Maximum number of DNs in Speed Call or Hot Line lists Maximum number of DNs in Group Hunt list Once defined, SIZE should not be changed. Instead, print out the list in LD 20, remove it with REQ = OUT and rebuild the list with the new SIZE. SIZE is not prompted for TYPE = GRP or PRE.	optf-1

LD 18

Page 444 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
STOR	xxx yyy ... y	Store For TYPE = SCL, SSC, or HTL the input format is entry number and digits stored against it. Where: • xxx = list entry number from 000 to 999 • yyy ... y = digits stored with each list entry number xxx	optf-1
	xx yyyy	For TYPE = GRP the input format is member number and member DN. Where: • xx = member number (00-19) • yyyy = member DN If the Directory Number Expansion (DNXP) package is equipped, up to seven digits are allowed; otherwise, only four digits can be entered.	
	xx yy	For TYPE = GHT the input format is Group Hunt entry and digits stored against it. Where: • xx = GHT entry number from 00 to 95 • yyyy = digits stored	
	<cr>	Stop STOR prompt For Speed Call, System Speed Call or Hot Line the member number must conform with SIZE and the number of digits must conform to prompt DNSZ. Digits may include "*" and "#" if the Outpulsing, asterisk and octothorpe (OPAO) package 104 is equipped.	
	xxx <space> <cr>	Remove entry	
TOGR	0-63	To Group New group call group number.	grp-1
TOLS	0-254	To List New speed call list number.	optf-1
	0-8190	Release 13 and later	

Prompt	Response	Comment	Pack/Rel
TYPE		Type of data block	basic-1
	CPNW	Call Pickup Network Wide data	
	GRP	Group call data block	
	HTL	Hot Line data block	
	PRE	Pretranslation data block	
	SCL	Speed Call List or pretranslation data block	
	SSC	System Speed Call data block	
WRT	(YES) NO	Write Data is correct and can be updated in data store. The Prompt WRT follows prompts SIZE and STOR asking you to confirm the correctness of the data just entered. If data is correct, enter "YES" or <cr>. A response of "NO" causes the data just entered to be ignored and SCH3213 is output. A response of "*****" aborts the program. Only the last STOR value is lost. All previous values to which WRT was "YES" or <cr> are saved. Release 17 and later, the following information is output with the WRT prompt: ADDS: MEM: xxxxx DISK: yy.y Where: • xxxxx = the amount of protected memory • yy.y = the number of disks records required for the new Speed Call list Check the "MEM AVAIL" and "DISK RECS AVAIL" output values before the REQ prompt. See also "System memory and disk space" at the beginning of this document.	optf-1

LD 18

Page 446 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
XLAT	xxx yyyy	• Calling group number to translation Speed Call list number correlation, where: xxx = Pretranslation group number, 0-254 • xxx = Group 0 is used for trunks. • xxx = Group 1 is used for attendant consoles. • xxx = Groups 2-254 can be used for other calling groups. • yyyy = List number to be used for Pretranslation, 0-8191. 8191 is used to remove the group from pretranslation.	pxlt-8
	<cr>	End the prompt group.	

LD 28: Route Selection for Automatic Number Identification

Overlay program 28 allows data for Route Selection for Automatic Number Identification (RS-ANI) to be created, modified, and printed.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	RSA	Type of data block = RSA (Route Selection ANI)
CUST	xx	Customer number associated with this function
RSAC	xxxx	RS-ANI Access Code digits
0-RT	x...x	0- calls, Route access code (calls to Public Network Operator)
0+RT	x...x	0+ calls, Route access code
1RT	x...x	1+ or IDDD (International Direct Distance Dial) calls Route access code
CORT	x...x	Central Office (local calls) Route access code

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
0+RT	x...x	0+ calls Route access code (for toll calls that require Public Network Operator assistance) Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150	ani-1
0-RT	x...x	0- calls, Route access code (calls to Public Network Operator) Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150	ani-1
1RT	x...x	1+ or IDDD (International Direct Distance Dial) calls, Route access code Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150	ani-1
CORT	x...x	Central Office (local calls) Route access code Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150	ani-1
CUST	xx	Customer number associated with this function as defined in LD 15	ani-1
REQ	CHG END NEW OUT PRT	Request Change an existing data block Exit Overlay program Create a New data block Remove data block Print RSA data	ani-1
RSAC	xxxx	RS-ANI Access Code digits	ani-20
TYPE	RSA	Route Selection ANI data block	ani-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 29: Memory Management

Overlay program 29 is used to determine the following:

- determine the amount of unused memory
- determine if sufficient memory is available to accommodate substantial amounts of new data to be added
- respond to messages SCH601 and SCH603 on SL-1 XN & XL

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
MSG	x...x	SCH Message (x...x = 601 or 603 xx)
NEW DATA PLANNED?	(NO) YES	New data to be added in this program?
TYNM	aaa xx	Type and Number (TYNM responses begin on page 610)
OPT	aaaa	Option (aaaa = FULL or FREE)
MAP	a...a	Active Map or Data Dump (a...a = ACT or DUMP)
DISPLAY NEW MAP?	(NO) YES	Display new map
SAVE NEW MAP?	(NO) YES	Save new map
PWD2	xxxx	Password 2
CHANGE MAP?	(NO) YES	Change Map
CMD	a...a	Command (a...a = ASGN or CHK)
PGMM	xxx yy	Page/Memory Module
PGBY	xxx yyyy	Page/Bytes

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CHANGE MAP?	(NO) YES	Change map Prompted when SAVE NEW MAP? = NO or automatic map generator fails (message MEM150)	basic-1
CMD	ASGN CHK	Command Assign logical page and memory number Check memory map	basic-1
DISPLAY NEW MAP?	(NO) YES	Display new map Prompted when a new map has been created	basic-1
MAP	ACT DUMP	Map Active map Data dump Prompted when REQ = PRT	basic-1
MSG	601 603 xx	SCH Message. Prompted when REQ = SCH. Enter 601 when SCH message is 601 Enter 603 followed by the parameters printed with the SCH603 message during an attempt to add data.	basic-1
NEW DATA PLANNED?	(NO) YES	New data to be added in this program? Prompted when REQ = SCH	basic-1
OPT	FULL FREE	Option Full map Free space only	basic-1
PGBY	xxx yyyy	Page/Bytes (used to define logical page size). Where: • xxx = Logical Page number (0-254, 256-510) • yyyy = size (1-65535) Prompted only if CMD = ASGN.	basic-1

LD 29

Page 612 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
PGMM	xxx yy	Page/Memory Module (used to determine the Memory Module on which Logical Pages will reside or to which they will be moved). Where: • xxx = Logical Page number (0-254, 256-510) • yy = Memory Module number (00, 01, 02) Prompted only if CMD = ASGN.	basic-1
PWD2	xxxx	Password 2 (Second level administration password as defined in LD 17)	basic-1
REQ		Request	basic-1
	ADD	Create a new data block	
	CHG	Change existing map (SL-1XN & XL systems only)	
	CLR	Clear map	
	PRT	Print the specified map	
	END	Exit Overlay program	
	GEN	Generate a new map. Do not use this response unless ROMs with memory extensions are in place.	
	SCH	Change map in response to error messages SCH601 and SCH603	
SAVE NEW MAP?			basic-1
	(NO) YES	Save new map Prompted when a new map has been created	
TYNM		Type and Number	basic-1
	500 1-12800	Number of new 500/2500 telephones	basic-1
	ACD 0-99 1-240 1-240	Customer number, number of ACD DN, maximum number of positions per ACD DN	bacd-1
	AGNT 1-12800	Number of Agent positions	bacd-1
	ANI xxx yyyy zzzz	Feature Group D ANI data blocks. Where: • xxx = number of NPAs (1-160) • yyyy = number of ranges of NXXs (0-9999) • zzzzz = number of ranges of XXXXs (0-30,000)	fgd-17

Prompt	Response	Comment	Pack/Rel
	APRT 1-16	Number of ACD Printers	bacd-1
	ATM 1-4096	Number of ATM routes for the system	atm-7
	ATT 1-480	Number of consoles	basic-1
	AUB 1-99 1-5000 1-14	Customer number, number of authcodes, authcode digit length	baut-1
	BGD 1-15 1-99	Number of Background Terminals in the system, and the number of customers in the system	bgd-10
	CDB 1-99	Number of new customers	basic-1
	CDL 1-16	Number of CDR links	clnk-1
	CONF xxx	Number of Conference loops	basic-1
	CPG 1-100 1-63	CPG Level services, customers and average size	
	CPND xx yy zz	Calling Party Name Display data xx = number of customers with CPND, 1-99 yy = number of CPND names per customer, 1-1000 zz = average size of name string, 5-27 characters	cpnd-10
	CRB 1-1024	Number of Code Restriction Blocks	basic-1
	DGT 1-99 xx xx	Customer number, number of digit manipulation tables, maximum average number of inserted digits	basic-1
	DIS 0-99 1-240	Customer number, number of DISA DN	disa-1
	DND 1-99 1-100 1-127	Customer number, number of DND groups, average number of numbers per group	dndg-1
	DTR 1-126	Number of Digitone Receivers	basic-1

LD 29

Prompt	Response	Comment	Pack/Rel
	EBLF xx yy zz	Enhanced Busy Lamp Field (Release 14 and later).Where: • xx = the number of customers (1-99) to receive the feature • yy = average number of hundreds groups per customer • zz = average DN length (4, 5, 6 or 7 digits)	basic-14
	ESN xx	Number of customers with ESN (1-99)	basic-1
	FCAS 1-99 xx yy zz	Customer number, number of Free Calling Area tables, maximum average number of FCAS blocks, maximum average number of different first digit of NXX codes	fca-1
	FGD xxx yyy	FGD data blocks. Where: • xxx = number of FGD blocks (1-128) • yyy = average number of II entries	fgd-17
	MFR 1-99 0-126 0-126	Automatic Call Distribution routes Number of customers, average number of ACD routes per customer, average largest member number per ACD route	bacd-1
	MFRR 1-255	Number of Multifrequency Receivers	fgd-17
	MFSD xx	Number of MF Sender loops	basic-1
	NACD xx yy zz	Network Automatic Call Distribution. Where: • xx = the number of NACD customers • yy = average number of source DNS • zz = average number of target ACD DNS	
	NCTL 1-99	Number of customers with NTCL	basic-1

Prompt	Response	Comment	Pack/Rel
	NET 1-99 xx yy	Customer number, number of Network Translation codes, number of LOC codes	esn-1
	RDB 1-4064 1-126	Number of Routes, average largest member number	basic-1
	REMO xx	Number of RPE loops	rpe-1
	RLB 1-99 1-256 1-32	Customer number, number of Route Lists, maximum average number of entries	basic-1
	RSA 1-99	Number of customers to get RS-ANI	ani-1
	SCL 4-31 1-1000 1-8191	DN size as defined in LD 18, list size as defined in LD 18, number of new lists	optf-1
	SDR 1-99 xx yy	Customer number, number of Supplemental Digit Restriction blocks, maximum average number of entries	basic-1
	SL1 1-12800	Number of new SL-1 telephones	basic-1
	SUP 1-16	Number of ACD Supervisor TTY	bacd-1
	TAP 1-3	Number of new Tape units	basic-1
	TDS 1-80	Number of new TDS loops	basic-1
	TENC 1-99	Number of customers that will have Tenant Service	ten-7
	TENR 0-127	Number of routes that will be shared by Tenants	ten-7
	TENT 0-512	Number of Tenants that will have access to each other	ten-7
	TERM 1-159	Number of new Terminal loops	basic-1
	TRK 1-6400	Number of new Trunks	basic-1
	TTY 1-16	Number of new TTY	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 30: Network and Signaling Diagnostic

This program is used to maintain Network loops. It may be run in background, loaded during the daily routines or loaded manually to enter commands.

Program operation

When invoked automatically by the system, the program performs the following tests:

- network memory of each enabled network card
- continuity of the speech path to each PE shelf (for enabled loops only)
- signaling channel to each line or trunk card (on enabled loops only)
- signaling channel through each Integrated Services digital line card to each Digital telephone or data TN
- clock controllers are switched (if either DTI2 or PRI2 are used when LD 30 is run in midnight mode, clock controllers will not be switched)

For the Integrated Voice Messaging System (IVMS), the program does not test Automatic Call Distribution (ACD) positions when the positions belong to IVMS-DN groups.

Digital telephones that pass the signaling test have their date and time updated to match the system clock.

Any SL-1 telephone or card that fails the signaling test may be disabled by this program. Use LD 32 to re-enable them.

If two or more PE cards are disabled on a loop, an NWS101 message is printed without the associated NWS301 messages to indicate card failures. However, the shelves that failed are known from the NWS201 messages. Therefore, the state of the individual cards can be determined by manually retesting using the SHLF command.

If NWS301 indicates a failure of the Peripheral Buffer or Controller card, the message may not be correct. Therefore the card should be retested using the SHLF command.

This program does not test attendant consoles or Automatically Identified Outward Dialing (AIOD) trunks. Equipment which has been disabled due either to overload or manual request is not tested.

How to use LD 30

When invoked manually, the Overlay may be used to:

- conduct a complete test, as when the program is invoked automatically, except for switching the clocks
- conduct a test on a specific PE shelf
- get the enable/disable status of network loops
- enable or disable network loops
- clear alarm indications and the maintenance display
- download peripheral software on superloops
- clear contents of the Controller maintenance display
- read contents of the Controller maintenance display

Basic commands

The following table outlines the basic maintenance commands.

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMAJ	Clear major alarm and reset power fail transfer
CMIN c	Clear minor alarm indication on attendant consoles for customer c
CMIN ALL	Clear minor alarm indication on all attendant consoles
DISL loop	Disable loop
DISL sl	Disable specified superloop.
END	Abort current test
ENLL loop	Enable network loop
ENLL sl	Enable specified superloop.
LDIS	List disabled loops
LENL	List enabled loops
LOOP loop, ALL	Test network memory on one or all loops
SHLF l s	Test loop l, shelf s
STAT	Get status of all network loops
STAT (loop)	Get status of specified loops
TTSM loop x y z	Test Time Switch Memory (TSM) of a loop
TTWI loop x y z	Test TSM when the timeslot junctor is idle

Superloop commands

The following commands are used with Controllers (NT8D01) and Network Cards (NT8D04 or NT8D18).

CPED I s	Clear contents of Controller maintenance display on loop I shelf s
DISL loop	Disable loop
END	Abort current test
ENLL loop (v)	Enable superloop, download peripheral software version v
LDIS	List disabled loops
LENL	List enabled loops
LOOP loop, ALL	Test network memory on one or all loops
RPED I s	Read contents of the Controller maintenance display
SHLF I s	Test loop I, shelf s
STAT	Get status of all network loops
STAT (loop)	Get status of specified loop
UNTT I s c (u)	Do a signaling test on specified card or unit

Basic Rate Interface (BRI) commands

The following commands are used with Multi-purpose ISDN Signal Processor (MISP), S/T-Interface Line (SILC), and U-Interface Line (UILC) cards.

SLFT l s c	Invoke self-test on ISDN BRI line card
SLFT l s c type	Selftest ISDN BRI line card. The card must be disabled. Response is: NWS637 selftest passed or NWS632 selftest failed. Where: l = loop, s = shelf, c = card, and type = self-test type (Long or Short)
STEI l s c d	Query the Terminal Endpoint Identifiers, and their corresponding USIDs This command queries the TEIs, and their corresponding USIDs on the specified DSL with an established D-channel data link layer with the MISP. Output looks like: MISP 111 TEI USID --- ---- nnn nnnn
SLFT loop type	Invoke self-test on MISP loop. Where: type = 1 (comprehensive test) or type = 2 (power on reset)
TEIT l s c d	Perform TEI check on Digital Subscriber Loop d (0-7)

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
CPED I s	Clear contents of Controller maintenance display on loop I shelf s. This also clears the buffer printed with the command RPED.	xpe-15
DISL loop	Disable loop. All calls in progress on this loop are disconnected. Peripheral cards remain software enabled and no LEDs are lit.	basic-1
DISL sl	Disable specified superloop. Active calls on the superloop specified will be disconnected and line transfer will occur at the remote end.	basic-21
END	Abort current test. If no test is in progress, message NWS002 is output.	basic-1
ENLL loop	Enable network loop. This enables the network, performs a network memory test and tests continuity and signaling to all shelves on the loop. If it passes the test, OK is output. This does not re-enable any disabled cards on the loop. Use LD 32 ENLS or ENXP commands or enable each card individually. When enabling a network loop serving ISDL C cards, the ISDL C cards must be individually disabled, then re-enabled to ensure that service is restored to digital telephones. Service may also be restored to digital telephones by disconnecting and then reconnecting the telephone's line cord.	basic-1

ENLL loop (v)	Enable superloop, download peripheral software version v. If version v is not specified, the software downloaded is current (c) or latest (l) version as defined in LD 97.	xpe-15
ENLL sl	Enable specified superloop. OK is output if superloop has been enabled. Establishing service of individual voice-and-data-capable carriers is dependant on the F/W state of that carrier.	basic-21
LDIS	List disabled loops. Response is: • l1, l2, ln: loop is a disabled loop, or • NONE: if no cards are disabled.	basic-1
LENL	List enabled loops. Response is: • l1, l2, ln: l is an enabled loop, or • NONE: if no cards are enabled.	basic-1
LOOP loop, ALL	Test network memory on one or all loops. Performs a network memory test, continuity test and signaling test on the specified loop, which can be either a value from 0 to 159 or ALL. If ALL is specified, every loop currently enabled is tested. All shelves on each loop are tested (except for attendant consoles). If no errors are detected, OK is output. With X11 Release 20 and later, this command is used for XOPS cards. Out-of-Service units are not tested when this command is used. The range for units is 0-31, but only 0-7 are allowed on the XOPS card.	basic- 20
RPED l s	Read contents of the Controller maintenance display. This command lists the current and last 15 clock tracking states of the NT8D01 Controller. The tracking is indicated on the Controller maintenance display. The possible tracking modes are: C0 = Controller is tracking to the network connected to port 0. C1 = Controller is tracking to the network connected to port 1. C2 = Controller is tracking to the network connected to port 2. C3 = Controller is tracking to the network connected to port 3. CF = Controller is not tracking any network. See HEX messages for the interpretation of Controller maintenance display codes.	xpe-15

SHLF l s	Test loop l, shelf s. Performs a network memory test, continuity test and signaling test only on loop l shelf s. All line cards, idle trunk cards (except AIOD trunks) and idle SL-1 telephones are tested. If no errors are detected, OK is output. With X11 Release 20 and later, this command is used for XOPS cards. Out-of-service units are not tested when this command is used.	basic- 20
SLFT l s c	Invoke self-test for ISDN BRI line card. The card must be disabled.	bri-18
SLFT l s c type	Self-test ISDN BRI line card. The card must be disabled. Response is: NWS637 selftest passed, or NWS632 selftest failed, where: • l = loop • s = shelf • c = card • type = self-test type (Long or Short)	rsc/bri-19
SLFT loop type	Invoke self-test for MISP card. The comprehensive test is run automatically when the MISP is enabled. The card must be disabled. Response is: NWS632 self-test failed or NWS637 self-test passed • type = 1 (comprehensive), or • type = 2 (power-on-reset)	bri-18
STAT	Gives status of network loops (circuits), indicating how many are enabled and how many are disabled. Response is: x ENBL, y DSBL	basic-1

STAT loop	Get status of a network loop. Response is one of the following: 1. UNEQ = loop is unequipped. 2. DSBL: RESPONDING = loop is disabled and the Network card is responding. The loop may have been disabled because of: - a DISL command - b associated Peripheral Signaling (PS) card is disabled - c overload condition on associated loop. In this case an OVD message is output. An attempt to enable the loop may result in a recurrence of the overload. 3. DSBL: NOT RESPONDING = loop is disabled and the Network card is not responding. The card is missing, disabled by the faceplate switch or is faulty. 4. x BUSY, y DSBL = loop is enabled with x channels busy, y channels disabled. 5. CTYF l1, l2... = loop specified in the STAT command cannot receive speech from one or more loops (l1, l2). This usually indicates the LD 30 continuity test failed. Probable fault is the network card.	basic-1
STEI l s c d	Query the Terminal Endpoint Identifiers, and their corresponding USIDs This command queries the TEIs, and their corresponding USIDs on the specified DSL with an established D-channel data link layer with the MISP. Output looks like: <pre> MISP 111 TEI USID --- ---- nnn nnnn </pre>	brsc-19
TEIT l s c d	Perform TEI check on Digital Subscriber Loop d (0-7). This test is carried out on a single specified DSL interface. It checks the existence of the defined TEIs and any possible duplication of TEIs. Duplicate TEIs are removed by the layer 2 task on the MISP.	bri-18

TTSM loop x y z basic-1

Test Time Switch Memory (TSM) of a loop.
Tests the Time Switch Memory (TSM) of the network card.

Where:

loop = the network loop that may have a faulty TSM.

x = the network loop of the transmitting party.

y = the junctor used on the transmitting side of the call. Its value has a range of 0 to 7, unless the two loops are in the same group, in which case the junctor value to be entered is 15.

z = the timeslot used on the transmitting side of the call. Its value has a range of 2 to 31.

The values normally used in this command are the same values that appeared in the ERR3036 or ERR3037 message during call processing.

TTWI loop x y z basic-1

Test TSM when the timeslot junctors are idle. The command is usually used if error message NWS800 is output in response to TTSM.

Where:

loop = the network loop that may have a faulty TSM.

x = the loop ID (range 0 to 159) of the transmitting party.

y = the junctor used on the transmitting side of the call. Its value has a range of 0 to 7, unless the two loops are in the same group, in which case the junctor value to be entered is 15.

z = the timeslot (2-31) used on the transmitting side of the call.

This command waits for the timeslot z and junctor y to become available and will then execute the command.

UNTT I s c (u) xpe- 20
Do a signaling test on specified card or unit. This command applies only to superloops.

With X11 Release 20 and later, this command is used for XOPS cards. Out-of-service units are not tested when this command is used. The range for units is 0-31, but only 0-7 are allowed on the XOPS card.

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 31: Telephone and Attendant Console Diagnostic

This program tests the keys and lamps of telephone sets and attendant consoles. The tests consist of pressing keys on a telephone and checking for the correct response. This diagnostic cannot be used for testing the DISPLAYPHONE 1200, or M3000.

After loading the program, any telephone in the system may invoke the test by dialing SPRE 92, (SPRE is the Special Service Prefix Code for the customer). No further inputs from the TTY are needed. If commands are input, the system responds with TRM001 indicating an invalid command.

To start the test:

- 1 Load program 31.
- 2 Dial SPRE 92 from the telephone to be tested.
- 3 Perform the steps given in the appropriate Table. The expected responses for LCD lamps, displays and tones are given. Each key need only be operated momentarily.

The volume keys (VOL UP and VOL DOWN) have eight levels. The level is adjusted by operating a key once for a change in one level. These keys control the audible level for ring volume, buzz volume and speech/tone volume.

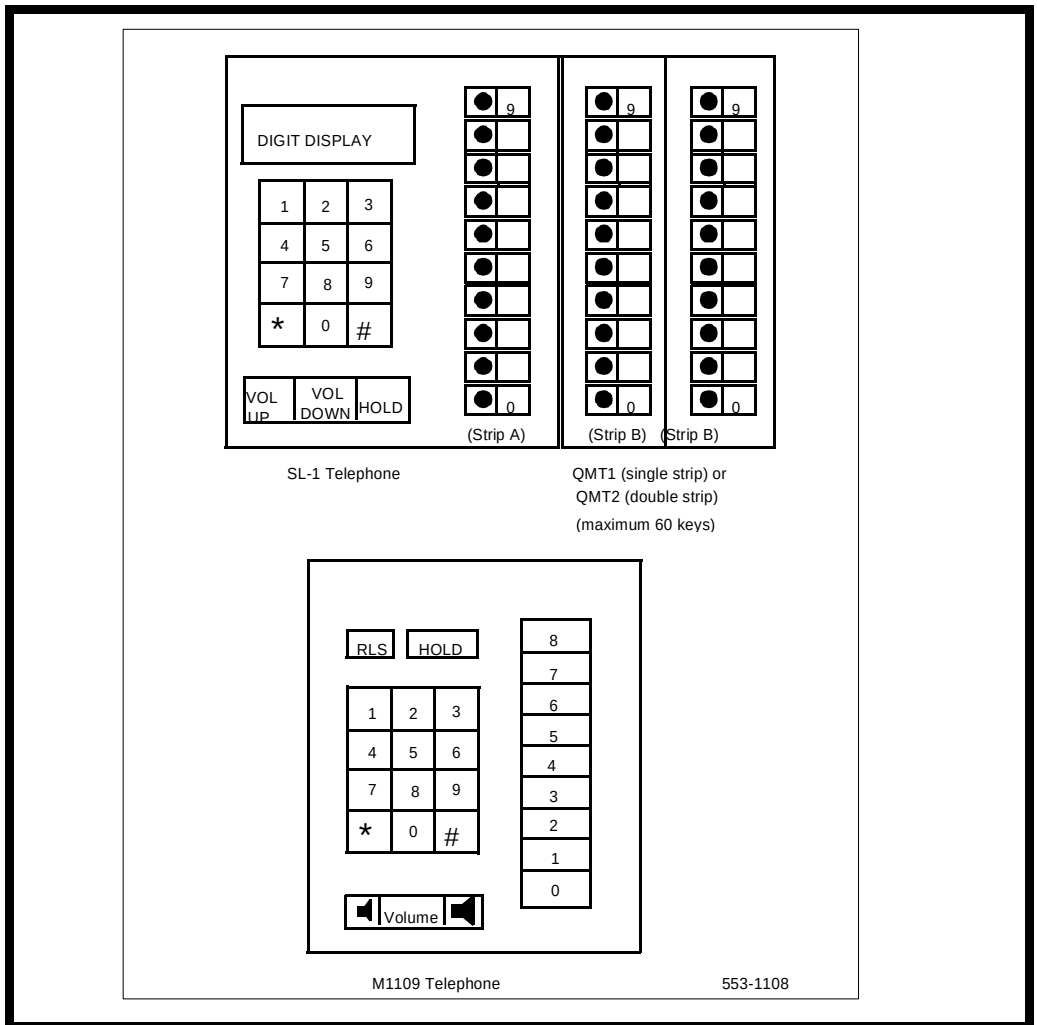
Note 1: When enabling a network loop with ISDL packs, the ISDL packs must be individually disabled and then re-enabled to restore service to digital telephones. Service may also be restored to digital telephones by disconnecting then reconnecting the telephone's line cord.

Note 2: Terminal diagnostics are provided by the M3000 itself. Refer to Meridian M3000 Description, Installation, Operation & Maintenance (553-2201-115).

SL-1 and M1109 Telephone test

The SL-1 and M1109 key and lamp layout is shown in Figure 2. The test is provided in Table 5.

Figure 2
SL-1 and M1109 Key and Lamp Layout



SL-1 and M1109 Telephone test

After dialing the SPRE code 92 the SL-1 telephone shows all LEDs lit and the display shows all 8's. For the M1109 press the “*” key first.

Note 1: If a lamp field array module exists on an SL-1 telephone, the following responses are included: * Key — All lamps on, # Key— All lamps off, Strip A Key 0 — Diagonal test pattern. (650).

Note 2: Response shown is for a 16-digit display. For an 8-digit display, only the last eight characters of each response are shown.

Table 5
SL-1 and M1109 Telephone test

Step	Key operated	LCD location and response	Display and Tones
1	Handset off-hook	All LEDs flash	blank display
2	Handset on-hook	All LEDs fast flash	blank display
3	Handset off-hook	All LEDs lit	8888888888888888
4	Handset on-hook	All LEDs off	blank display
5	Handset on-hook	All LEDs off	
6	Dial Pad key 1	LED A0 lit	1
7	Dial Pad key 2	LED A1 lit	12
8	Dial Pad key 3	LED A2 lit	123
9	Dial Pad key 4	LED A3 lit	1234
10	Dial Pad key 5	LED A4 lit	12345
11	Dial Pad key 6	LED A5 lit	123456
12	Dial Pad key 7	LED A6 lit	1234567
13	Dial Pad key 8	LED A7 lit	12345678
14	Dial Pad key 9	LEDs A0 & A7 lit	123456789
15	Dial Pad key 0	LEDs A1 & A7 lit	1234567890
16	Dial Pad key *	All LEDs lit	8888888888888888
17	Dial Pad key #	All LEDs off	blank display
18	Strip A key 0	LED A0 lit	

Table 5
SL-1 and M1109 Telephone test

Step	Key operated	LCD location and response	Display and Tones
19	Strip A key 1	LED A1 lit	
20	Strip A key 2	LED A2 lit	
21	Strip A key 3	LED A3 lit	
22	Strip A key 4	LED A4 lit	
23	Strip A key 5	LED A5 lit	
24	Strip A key 6	LED A6 lit	
25	Strip A key 7	LED A7 lit	
26	Strip A key 8	LEDs A0 & A7 lit	
27	Strip A key 9 (SL-1)	LEDs A1 & A7 lit	
28	RLS key (M1109)	LEDs A1 & A7 lit	
29	Strip B key 0	LED B0 lit	
30	Strip B key 1	LED B1 lit	
31	Strip B key 2	LED B2 lit	
32	Strip B key 3	LED B3 lit	
33	Strip B key 4	LED B4 lit	
34	Strip B key 5	LED B5 lit	
35	Strip B key 6	LED B6 lit	
36	Strip B key 7	LED B7 lit	
37	Strip B key 8	LEDs B0 & B7 lit	
38	Strip B key 9	LEDs B1 & B7 lit	
Note: If 10-key or 20-key add-on modules are equipped, repeat steps 29 to 38 for each key/lamp strip on each module before proceeding.			
39	HLD key	LEDs, A0 to A4 lit	Dial tone
40	Handset off-hook	All LEDs flash	Dial tone from handset only
41	Handset on-hook	All LEDs fast flash	Dial tone from speaker
42	Vol Up key	LEDs A5 to A7 lit	Volume up
43	Vol Down key	LEDs A5 to A7 off	Volume down

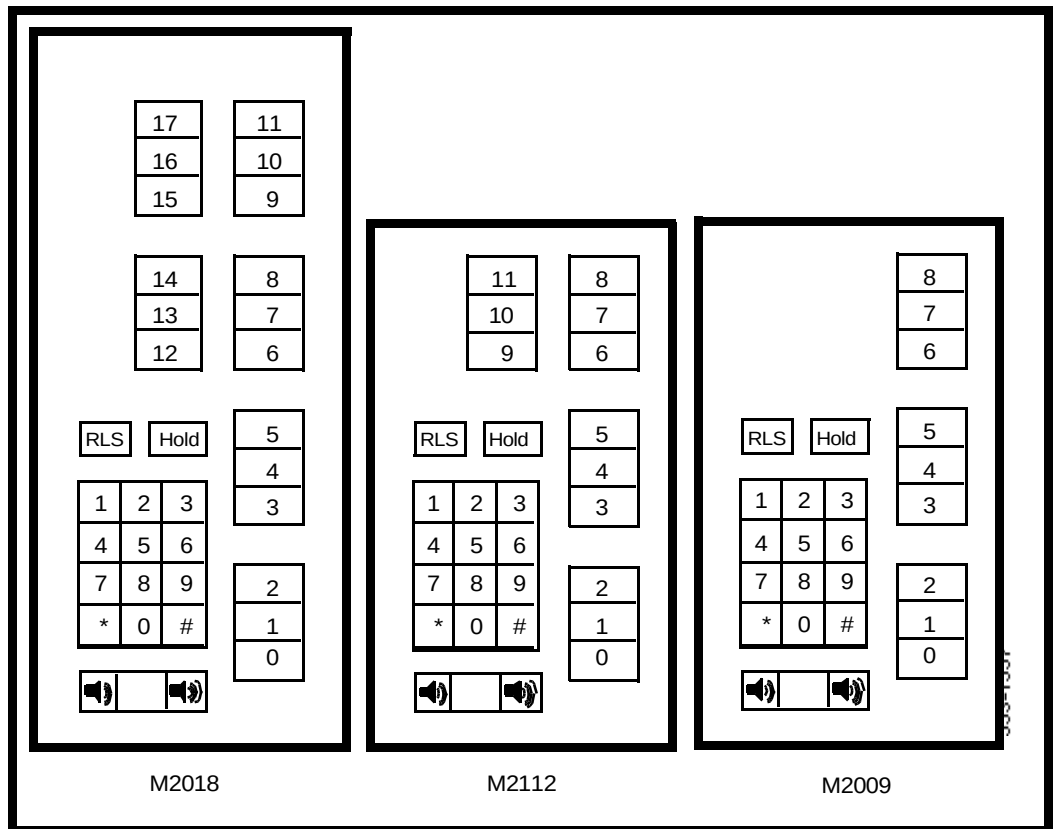
Table 5
SL-1 and M1109 Telephone test

Step	Key operated	LCD location and response	Display and Tones
44	HLD key	LEDs A0 to A4 lit	Buzzer
45	HLD key	End of test	

M2009, M2018 and M2112 Telephone test

The M2000 key and lamp layout is shown in Figure 3. The test is provided in Table 6.

Figure 3
M2000 Series Digital Telephone Key and LCD Layout



M2009, M2018, and M2112 Telephone test

After dialing the SPRE code 92, the M2009 telephone shows all LEDs lit and the display shows all 8's. For the M2018 and M2112, press the "*" key first.

Table 6
M2009, M2018, and M2112 Telephone test

Step	Key operated	LCD location and response	Display and Tones
1	Handset off-hook	All LCDs flash	blank display
2	Handset on-hook	All LCDs fast flash	blank display
3	Handset off-hook	All LCDs lit	blank display
4	Handset on-hook	All LCDs off	blank display
5	Dial Pad key 1	LCD 0 lit	1
6	Dial Pad key 2	LCD 1 lit	12
7	Dial Pad key 3	LCD 2 lit	123
8	Dial Pad key 4	LCD 3 lit	1234
9	Dial Pad key 5	LCD 4 lit	12345
10	Dial Pad key 6	LCD 5 lit	123456
11	Dial Pad key 7	LCD 6 lit	1234567
12	Dial Pad key 8	LCD 7 lit	12345678
13	Dial Pad key 9	LCDs 0 & 7 lit	123456789
14	Dial Pad key 0	LCDs 1 & 7 lit	1234567890
15	Dial Pad key *	All LCDs lit (except M2112) LCD 6 lit (M2112)	8888888888888888
16	Dial Pad key # Dial Pad key *	All LCDs off (except M2112) LCD 7 lit (M2112)?	blank display
17	Fixed key 0	LCD 0 lit	
18	Fixed key 1	LCD 1 lit	
19	Fixed key 2	LCD 2 lit	
20	Fixed key 3	LCD 3 lit	
21	Fixed key 4	LCD 4 lit	

Table 6
M2009, M2018, and M2112 Telephone test

Step	Key operated	LCD location and response	Display and Tones
22	Fixed key 5	LCD 5 lit	
23	Fixed key 6	LCD 6 lit	
24	Fixed key 7	LCD 7 lit	
25	Fixed key 8	LCD 8 lit	
26	Fixed key 9	LCD 9 lit	
27	Fixed key 10	LCD 10 lit	
28	Fixed key 11	LCD 11 lit	
29	Fixed key 12	LCD 12 lit	
30	Fixed key 13	LCD 13 lit	
31	Fixed key 14	LCD 14 lit	
32	Fixed key 15	LCD 15 lit	
33	Fixed key 16	LCD 16 lit	
34	Fixed key 17	LCD 17 lit	
35	HLD key	LCDs 0 to 4 lit	Dial tone
36	Handset off-hook	all LCDs flash	Dial tone from handset only
37	Handset on-hook	all LCDs fast flash	Dial tone from speaker
38	Handsfree key	LCD 0 to 2 lit	

M2006 and M2008 Telephone test

The M2006 and M2008 faceplate is shown in Figure 4. The M2006 test is provided in Table 7. The M2008 test is provided in Table 8.

Figure 4
Meridian M2006 and M2008 set

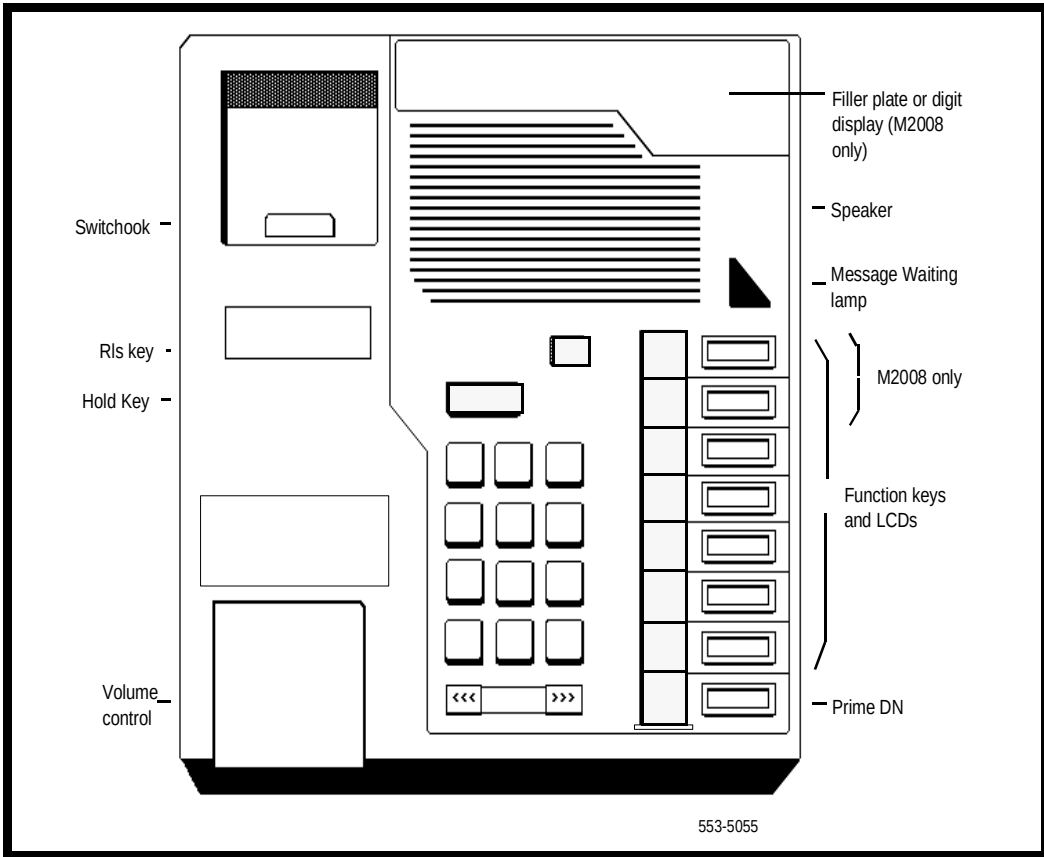


Table 7
Meridian M2006 Telephone test

Step	Key operated	LCD location and response	Display and Tones
Feature keys:			
1	Key 0	LCD 0 lit	
2	Key 1	LCD 1 lit	
3	Key 2	LCD 2 lit	
4	Key 3	LCD 3 lit	turn on Message Waiting LED
5	Key 4	LCD 4 lit	turn off Message Waiting LED
6	Key 5	LCD 5 lit, (if key 5 is not a Program key for data option)	
Keypad keys:			
7	Key 1	LCD 0 lit	
8	Key 2	LCD 1 lit	
9	Key 3	LCD 2 lit	
10	Key 4	LCD 3 lit	
11	Key 5	LCD 4 lit	
12	Key 6	LCD 0 and 4 lit	
13	Key 7	LCD 1 and 4 lit	
14	Key 8	LCD 2 and 4 lit	
15	Key 9	LCD 3 and 4 lit	
16	Key 0	LCD 1 and 4 lit	
17	Key *	all LCDs lit	
18	Key #	all LCDs off	
Fixed keys:			
19	HLD	LCD 0 to 4 lit	dial tone
20	Release	all LCDs off	
21	Off-hook	all LCDs flash	dial tone from handset only
22	On-hook	all LCDs fast flash	dial tone form speaker

Table 7
Meridian M2006 Telephone test

Step	Key operated	LCD location and response	Display and Tones
23	Off-hook	all LCDs lit	
24	On-hook	all LCDs off	
25	HLD	LCD 0 to 4 lit	buzzer
26	HLD	end of test	

Table 8
Meridian M2008 Telephone test

Step	Key operated	LCD location and response	Display and Tones
Feature keys:			
1	Key 0	LCD 0 lit	display upper case letters
2	Key 1	LCD 1 lit	display lower case letters
3	Key 2	LCD 2 lit	display clear
4	Key 3	LCD 3 lit	display darkens
5	Key 4	LCD 4 lit	top line of display darkens
6	Key 5	LCD 5 lit	turn Message Waiting LED on
7	Key 6	LCD 6 lit	turn Message Waiting LED off
8	Key 7	LCD 7 lit	
Keypad keys:			
9	Key 1	LCD 0 lit	1 on display
10	Key 2	LCD 1 lit	2 on display
11	Key 3	LCD 2 lit	3 on display
12	Key 4	LCD 3 lit	4 on display
13	Key 5	LCD 4 lit	5 on display
14	Key 6	LCD 5 lit	6 on display
15	Key 7	LCD 6 lit	7 on display
16	Key 8	LCD 0 and 6 lit	8 on display
17	Key 9	LCD 1 and 6 lit	9 on display
18	Key 0	LCD 2 and 6 lit	0 on display
19	Key *	all LCDs lit	bottom line of display darkens
20	Key #	all LCDs off	display clear

Table 8
Meridian M2008 Telephone test

Step	Key operated	LCD location and response	Display and Tones
Fixed keys:			
21	HLD	LCD 0 to 4 lit	
22	Release	all LCDs off	display clear
23	Off-hook	all LCDs flash	dial tone from handset only
24	On-hook	all LCDs fast flash	dial tone form speaker
25	Off-hook	all LCDs lit	display darkens
26	On-hook	all LCDs off	display clear
27	HLD	LCD 0 to 4 lit	buzzer
28	HLD	end of test	

M2216, M2016S and M2616 Telephone test

The set faceplate is shown in Figure 5. The M2216 test is provided in Table 9.
The M2016S and M2616 set test is provided in Table 10.

Figure 5
M2216, M2016S and M2616 set

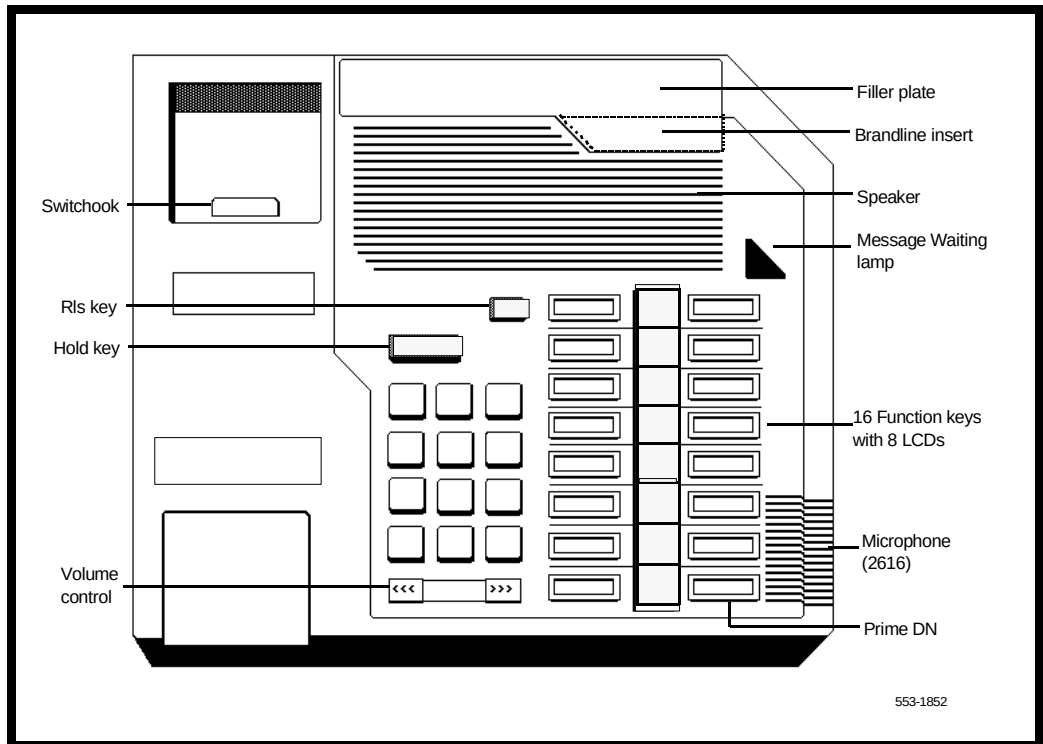


Table 9
M2216 Telephone test

Step	Key operated	LCD location and response	Display and Tones
<i>Note:</i> Do not test key 7			
Feature keys:			
1	Key 0	LCD 0 lit	display upper case letters
2	Key 1	LCD 1 lit	display lower case letters
3	Key 2	LCD 2 lit	display clear
4	Key 3	LCD 3 lit	display darkens
5	Key 4	LCD 4 lit	top line of display darkens
6	Key 5	LCD 5 lit	turn Message Waiting LED on
7	Key 6	LCD 6 lit	turn Message Waiting LED off
8	Key n>7	LCD n lit	
Keypad keys:			
9	Key 1	LCD 0 lit	1 on display
10	Key 2	LCD 1 lit	2 on display
11	Key 3	LCD 2 lit	3 on display
12	Key 4	LCD 3 lit	4 on display
13	Key 5	LCD 4 lit	5 on display
14	Key 6	LCD 5 lit	6 on display
15	Key 7	LCD 6 lit	7 on display
16	Key 8	LCD 0 and 6 lit	78 on display
17	Key 9	LCD 1 and 6 lit	9 on display
18	Key 0	LCD 2 and 6 lit	0 on display
19	Key *	all LCDs lit	bottom line of display darkens
20	Key #	all LCDs off	display clear
Fixed keys:			
21	HLD	LCD 0 to 4 lit	dial tone
22	HLD	LCD 0 to 4 lit	buzzer
23	HLD	end of test	

Table 10
M2016S and M2616 Telephone test

Step	Key operated	LCD location and response	Display and Tones
<i>Note:</i> Do not test key 7			
Feature keys:			
1	Key 0	LCD 0 lit	display upper case letters
2	Key 1	LCD 1 lit	display lower case letters
3	Key 2	LCD 2 lit	display clear
4	Key 3	LCD 3 lit	display darkens
5	Key 4	LCD 4 lit	top line of display darkens
6	Key 5	LCD 5 lit	turn Message Waiting LED on
7	Key 6	LCD 6 lit	turn Message Waiting LED off
8	Key n>7	LCD n lit	
Keypad keys:			
9	Key 1	LCD 0 lit	1 on display
10	Key 2	LCD 1 lit	2 on display
11	Key 3	LCD 2 lit	3 on display
12	Key 4	LCD 3 lit	4 on display
13	Key 5	LCD 4 lit	5 on display
14	Key 6	LCD 5 lit	6 on display
15	Key 7	LCD 6 lit	7 on display
16	Key 8	LCD 0 and 6 lit	8 on display
17	Key 9	LCD 1 and 6 lit	9 on display
18	Key 0	LCD 2 and 6 lit	0 on display
19	Key *	all LCDs lit	top line of display darkens
20	Key #	all LCDs off	display clear
Fixed keys:			
21	Handsfree	LCD 15 lit (with no display) LCD 0-2 lit (with display)	
22	Release	all LCDs off	

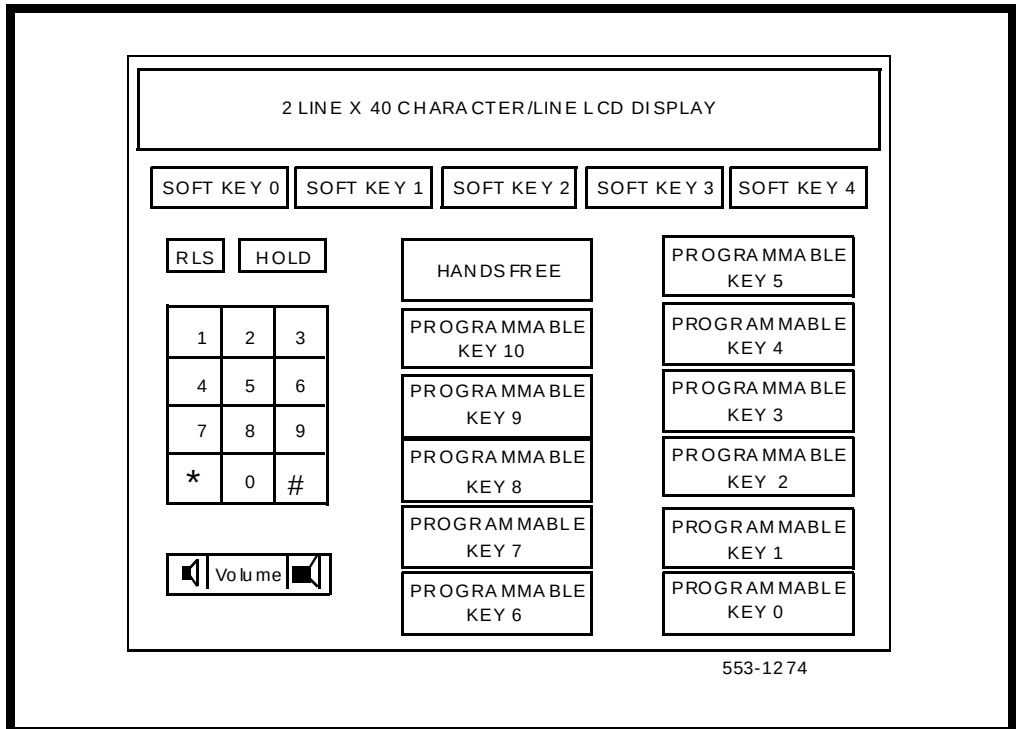
Table 10
M2016S and M2616 Telephone test

Step	Key operated	LCD location and response	Display and Tones
23	HLD	LCD 0 to 4 lit	dial tone from speaker
24	Off-hook	all LCDs flash	dial tone from handset
25	On-hook	all LCDs fast flash	dial tone from speaker
26	Off-hook	all LCDs lit	display darkens
27	On-hook	all LCDs off	display clear
28	HLD	LCD 0 to 4 lit	buzzer
29	HLD	end of test	

M2317 Telephone test

The key and LCD layout is shown in Figure 6. The test is provided in Table 11.

Figure 6
M2317 Series Telephone Key and LCD Layout



LD 31

Table 11
M2317 Telephone test

Step	Key operated	LCD location & response	Display and Tones
1	Press *	All LCD are lit	Blank
2	Off-hook	All LCDs flash (except Key 11)	192
3	On-hook	All LCDs fast flash (except Key 11)	192
4	Off-hook	All LCDs lit	All 80 character elements (40 characters x 2 lines) are fully lit. Each character element is made up of 35 dots in a 5 x 7 dot array.
5	On-hook	All LCDs off	All 80 character elements are off
Dial Pad Keys:			
6	Key 1	LCD 0 lit	1
7	Key 2	LCD 1 lit	12
8	Key 3	LCD 2 lit	123
9	Key 4	LCD 3 lit	1234
10	Key 5	LCD 4 lit	12345
11	Key 6	LCD 5 lit	123456
12	Key 7	LCD 6 lit	1234567
13	Key 8	LCD 7 lit	12345678
14	Key 9	LCDs 0 & 7 lit	123456789
15	Key 0	LCDs 1 & 7 lit	1234567890
16	Key 1	LCD 0 lit	12345678901
17	Key 2	LCD 1 lit	123456789012
18	Key 3	LCD 2 lit	1234567890123
19	Key 4	LCD 3 lit	12345678901234
20	Key 5	LCD 4 lit	123456789012345
21	Key 6	LCD 5 lit	1234567890123456
22	Key 7	LCD 6 lit	12345678901234567

Table 11
M2317 Telephone test

Step	Key operated	LCD location & response	Display and Tones
23	Key 8	LCD 7 lit	123456789012345678
24	Key 9	LCDs 0 & 7 lit	1234567890123456789
25	Key 0	LCDs 1 & 7 lit	12345678901234567890
26	Key 1	LCD 0 lit	12345678901234567890 1
27	Key 2	LCD 1 lit	12345678901234567890 12
28	Key 3	LCD 2 lit	12345678901234567890 123
29	Key 4	LCD 3 lit	12345678901234567890 1234
30	Key 5	LCD 4 lit	12345678901234567890 12345
31	Key 6	LCD 5 lit	12345678901234567890 123456
32	Key 7	LCD 6 lit	12345678901234567890 1234567
33	Key 8	LCD 7 lit	12345678901234567890 12345678
34	Key 9	LCDs 0 & 7 lit	12345678901234567890 123456789
35	Key 0	LCDs 1 & 7 lit	12345678901234567890 1234567890
36	Key 1	LCD 0 lit	12345678901234567890 12345678901234567890 1
37	Key 2	LCD 1 lit	12345678901234567890 12345678901234567890 12
38	Key 3	LCD 2 lit	12345678901234567890 12345678901234567890 123
39	Key 4	LCD 3 lit	12345678901234567890 12345678901234567890 1234

LD 31

Table 11
M2317 Telephone test

Step	Key operated	LCD location & response	Display and Tones
40	Key 5	LCD 4 lit	12345678901234567890 12345678901234567890 12345
41	Key 6	LCD 5 lit	12345678901234567890 12345678901234567890 123456
42	Key 7	LCD 6 lit	12345678901234567890 12345678901234567890 1234567
43	Key 8	LCD 7 lit	12345678901234567890 12345678901234567890 12345678
44	Key 9	LCDs 0 & 7 lit	12345678901234567890 12345678901234567890 123456789
45	Key 0	LCDs 1 & 7 lit	12345678901234567890 12345678901234567890 1234567890
46	Key *	All LCD lit (except Key 11)	88888888888888888888 88888888888888888888
47	Key #	All LCD go off	Display clears
Programmable Keys:			
48	Key 0	LCD 0 lit	Blank
49	Key 1	LCD 1 lit	Blank
50	Key 2	LCD 2 lit	Blank
51	Key 3	LCD 3 lit	Blank
52	Key 4	LCD 4 lit	Blank
53	Key 5	LCD 5 lit	Blank
54	Key 6	LCD 6 lit	Blank
55	Key 7	LCD 7 lit	Blank
56	Key 8	LCD 8 lit	Blank

Table 11
M2317 Telephone test

Step	Key operated	LCD location & response	Display and Tones
57	Key 9	LCD 9 lit	Blank
58	Key 10	LCD 10 lit	Blank
Soft Keys:			
59	Key 0	LCD 0 flashes 60 ipm	ABCDEFGHIJKLMNO PQRSTUVWXYZ
60	Key 1	LCD 1 flashes 60 ipm	Display clears
61	Key 2	LCD 2 flashes 60 ipm	abcdefghijklmnop qrstuvwxyz
62	Key 3	LCD 3 flashes 60 ipm	Display clears
63	Key 4	LCD 4 flashes 60 ipm	Display clears
64	Press HOLD key	LCD 0 to 4 light steadily (Key 11 lit)	Dial tone heard through speaker
65	Handset off-hook	All LCD flash at 60 ipm (Key 11 off)	Dial tone heard through handset
66	Handset on-hook	All LCD fast flash at 120 ipm (Key 11 on)	Dial tone heard through speaker
67	Press HANDSFREE key	LCD 0 to 2 light steadily	
68	Press RELEASE key	All LCD go off	
69	Press HOLD key	LCD 0 to 4 light steadily	Buzz heard through speaker
70	Press HOLD key	End of test	

QCW-type Attendant Console test

This is the procedure for testing the basic Attendant Console used with most Meridian systems. Start these tests with the headset/handset plugged in. Tones, except for Buzz, are heard from the headset/handset.

Figure 7 show the optional lamp field array. Table 12, “QCW-type Attendant Console test,” on page 652. Figure 7 shows the layout of the keys and LEDs on a console.

Figure 7
Lamp Field Array Response

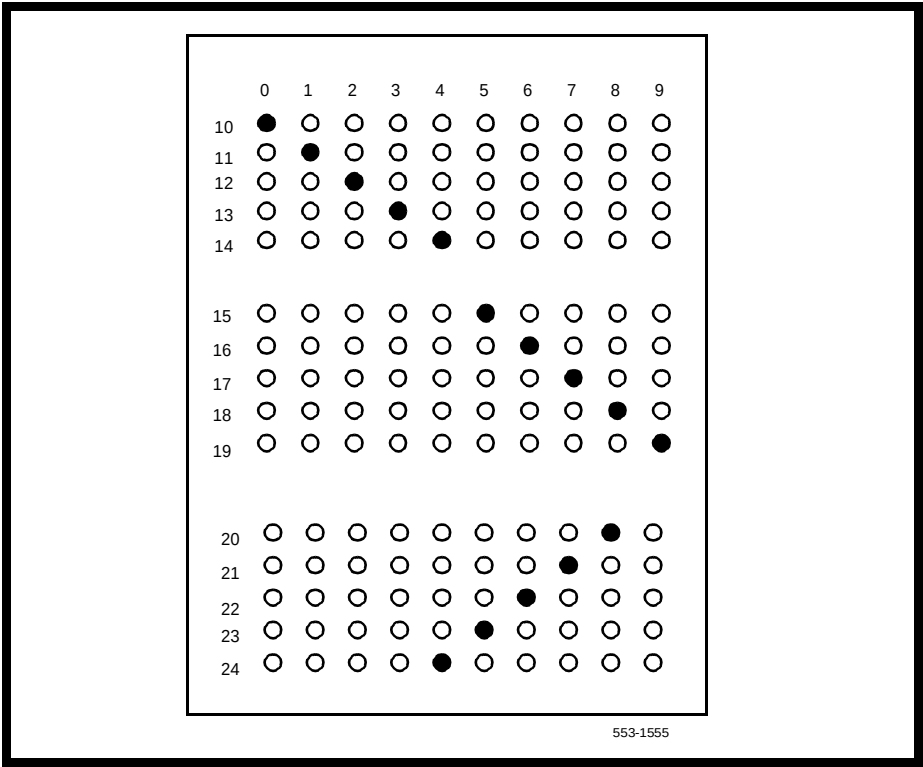
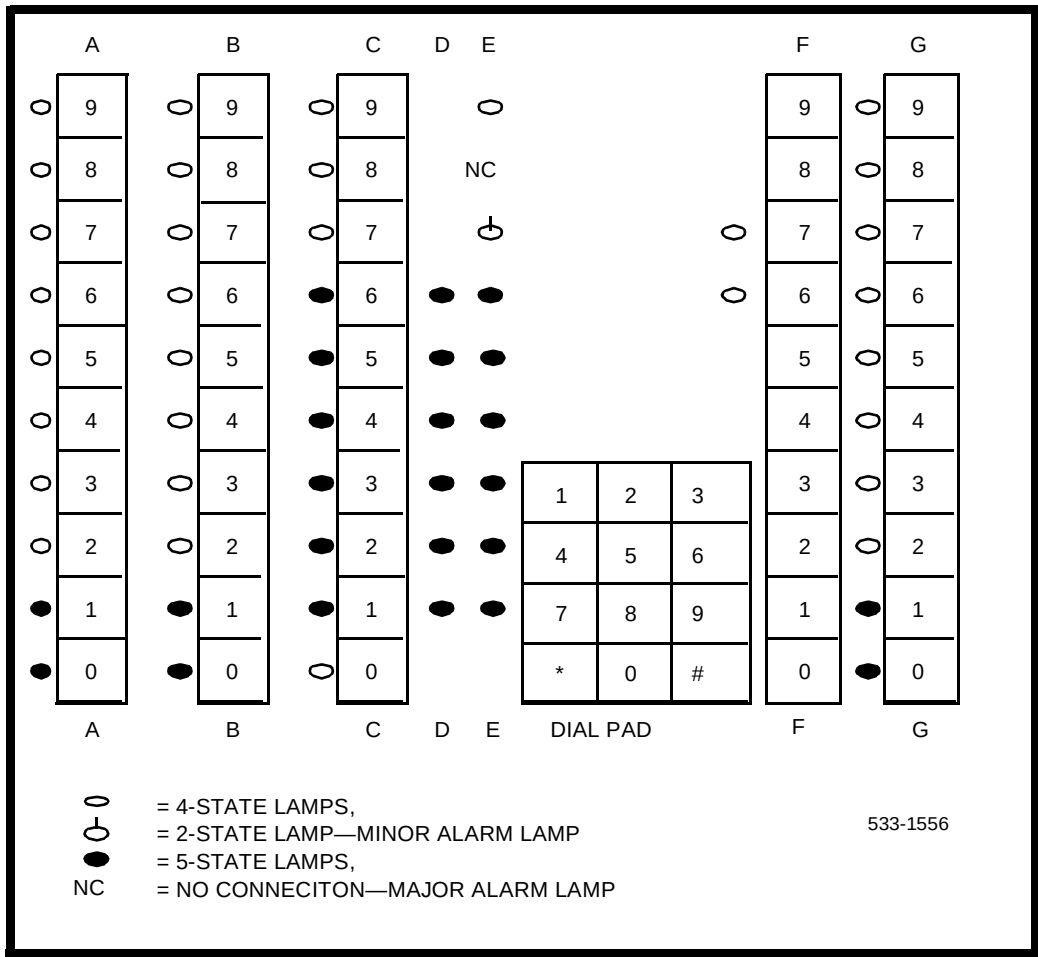


Figure 8
SL-1 Console Key and LED Layout



QCW-type Attendant Console test

Note 1: If the console has a 16-digit display, test all digits by repeating the dial pad sequence. On 8-digit display consoles, only the last 8 digits are shown.

Note 2: This is the test of the conference circuit. EXCL DEST controls the DESTINATION port, EXCL SRC controls the SOURCE ports and RLS the ATTENDANT port. Each key activation reverses the enable/disable status of the port.

Table 12
QCW-type Attendant Console test

Step	Key operated	LCD location & response	Display and Tones
1	Select an idle loop key on the Console to be tested.		
2	Enter SPRE 92	All lit (except F0-5, 8-9, D0, 7-9 and E0)	All field array LEDs are lit
3	Dial Pad Key #	All unlit	Display is blank, all lamp field array LEDs are off
4	Dial Pad Key 1	D1 lit	1
5	Dial Pad Key 2	E1 lit	12
6	Dial Pad Key 3	D2 lit	123
7	Dial Pad Key 4	E2 lit	1234
8	Dial Pad Key 5	D3 lit	12345
9	Dial Pad Key 6	E3 lit	123456
10	Dial Pad Key 7	D4 lit	1234567
11	Dial Pad Key 8	E4 lit	12345678
12	Dial Pad Key 9	D5 lit	123456789
13	Dial Pad Key 0	E5 lit	1234567890 (<i>See Note 1</i>)
14	Dial Pad Key *	All lit (except F0-5, 8-9, D0, 7-9 and E0)	8888888888888888
15	Dial Pad Key #	all unlit	All field array LEDs are lit Blank, all lamp field array LEDs are off
16	Strip A key 0	A0 lit	
17	Strip A key 1	A1 lit	

Table 12
QCW-type Attendant Console test

Step	Key operated	LCD location & response	Display and Tones
18	Strip A key 2	A2 lit	
19	Strip A key 3	A3 lit	
20	Strip A key 4	A4 lit	
21	Strip A key 5	A5 lit	
22	Strip A key 6	A6 lit	
23	Strip A key 7	A7 lit	
24	Strip A key 8	A8 lit	
25	Strip A key 9	A9 lit	
26	Strip B key 0	B0 lit	
27	Strip B key 1	B1 lit	
28	Strip B key 2	B2 lit	
29	Strip B key 3	B3 lit	
30	Strip B key 4	B4 lit	
31	Strip B key 5	B5 lit	
32	Strip B key 6	B6 lit	
33	Strip B key 7	B7 lit	
34	Strip B key 8	B8 lit	
35	Strip B key 9	B9 lit	
36	Strip C key 0	C0 lit	
37	Strip C key 1	C1 lit	
38	Strip C key 2	C2 lit	
39	Strip C key 3	C3 lit	
40	Strip C key 4	C4 lit	
41	Strip C key 5	C5 lit	
42	Strip C key 6	C6 lit	
43	Strip C key 7	C7 lit	
44	Strip C key 8	C8 lit	

LD 31

Table 12
QCW-type Attendant Console test

Step	Key operated	LCD location & response	Display and Tones
45	Strip C key 9	C9 lit	Lamp field array displays a diagonal pattern as shown in Figure 7 All field array LEDs are off
46	Strip G key 0	G0 lit	
47	Strip G key 1	G1 lit	
48	Strip G key 2	G2 lit	
49	Strip G key 3	G3 lit	
50	Strip G key 4	G4 lit	
51	Strip G key 5	G5 lit	
52	Strip G key 6	G6 lit	
53	Strip G key 7	G7 lit	
54	Strip G key 8	G8 lit	
55	Strip G key 9	G9 lit	

Note: If console is equipped with 10- or 20-button modules, proceed to Step 56. If not, go to Step 66.

56	Strip H key 0	H0 lit
57	Strip H key 1	H1 lit
58	Strip H key 2	H2 lit
59	Strip H key 3	H3 lit
60	Strip H key 4	H4 lit
61	Strip H key 5	H5 lit
62	Strip H key 6	H6 lit
63	Strip H key 7	H7 lit
64	Strip H key 8	H0 and H7 lit
65	Strip H key 9	H1 and H7 lit

Note: Test all remaining key strips in a similar manner to H before testing strip F. H7 remains lit for strip I test.

66	Strip F key 0	B0 to B4 lit. H7 and I7 lit.	Busy tone

Table 12
QCW-type Attendant Console test

Step	Key operated	LCD location & response	Display and Tones
67	Strip F key 1	All lit (except D0, 7-9, E8, F0-5, F8-9)	8888888888888888
68	Strip F key 1	All Fast Flash at 120 ipm (except D0, 7-9, E8, F0-5, F8-9)	Blank
69	Strip F key 1	All Flash at 60 ipm (except D0, 7-9, E8, F0-5, F8-9)	Blank
70	Strip F key 1	C1-6, D1-6, E1-6, and G0-1 Slow Flash at 30 ipm.	
71	Strip F key 2	All strip A lit	Blank
72	Strip F key 3	All strip B lit	
73	Strip F key 4	All off	
74	Strip F key 5 (See Note 2)	B0 to B4 lit	Busy tone and dial tone
75	Strip F key 6 (See Note 2)	B0 to B4 off	Dial tone only
76	Strip F key 5 (See Note 2)	B0 to B4 lit	No tone
77	Strip F key 6 (See Note 2)	B0 to B4 off	Busy tone only
78	Strip F key 7 (See Note 2)	B0 to B4 lit	No tone
79	Strip F key 7 (See Note 2)	B0 to B4 off	Busy tone
80	Handset out	B0 to B4 off	Speaker on (all keys disabled on QCW4E only)
81	Handset in	B0 to B4 lit	Speaker off, tone in handset receiver
82	Strip F key 0	B0 to B4 lit	Buzz in speaker
83	Strip F key 9	F7 lit	Volume up
84	Strip F key 8	F6 lit	Volume down
85	Strip F key 0	End of test	
86	Repeat test for all remaining consoles		

M1250 Console test

The M1250 and M2250 faceplate is shown in Figure 9. The tests are provided in the following tables:

Table 13 — M1250 console test

Table 14 — M1250 console test in QMT2 mode

Table 15 — M2250 console test

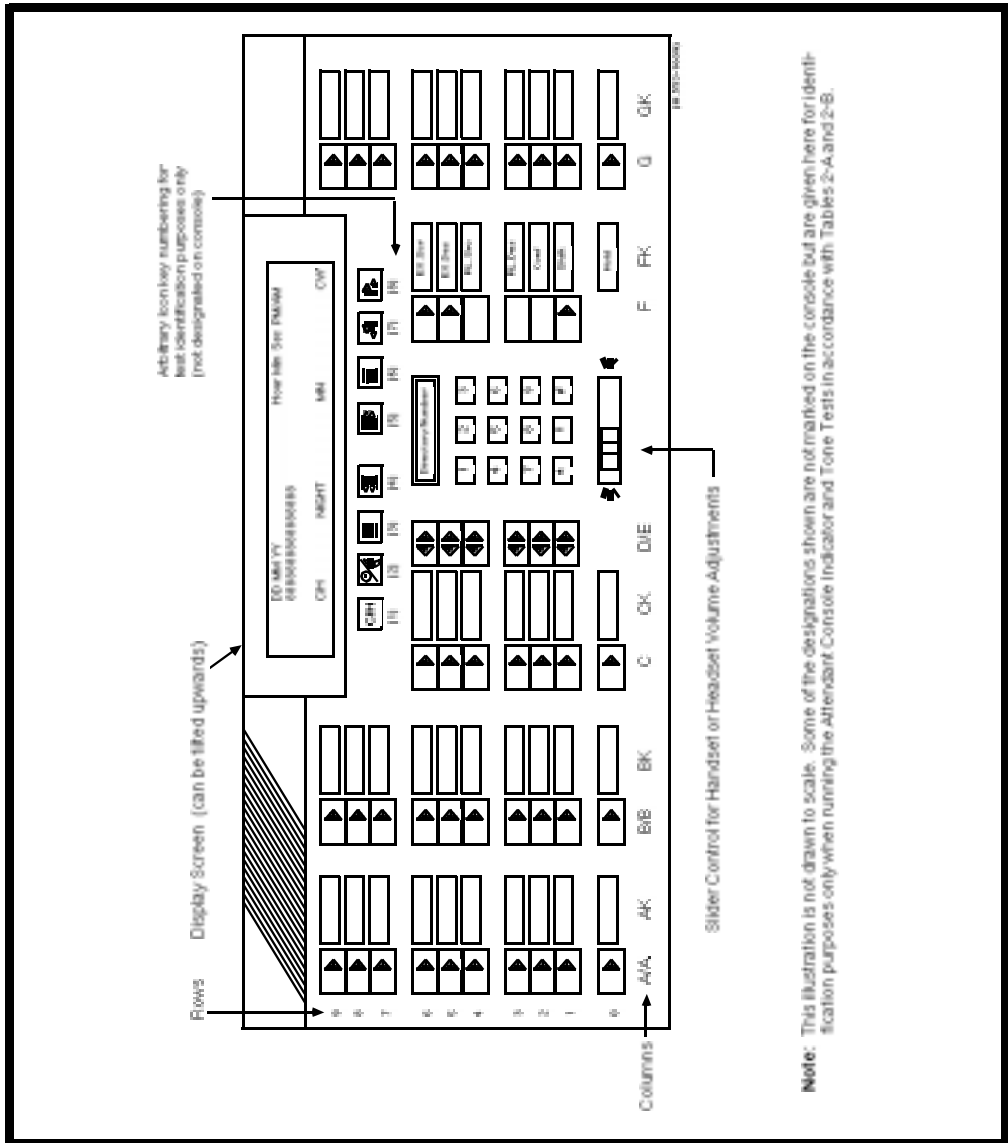
QMT2 mode for M1250 Console

When console is configured for the QMT2 mode, the two left most keystrips imitate add-on keystrips QMT2 of QCW-type consoles when in shift mode. For the M1250 console to operate in the QMT2 mode, Option IC2 must be assigned in the Customer Data Block (LD 15).

To place the M1250 into QMT2 mode:

- 1 Unplug the console from the wall jack.
- 2 Open the console faceplate and the set dip-switch on the top circuit board to ON. Refer to the NTP titled *Installation Procedures for Telephone Sets and Attendant Consoles*.
- 3 Replace the console faceplate.
- 4 Plug the console into the wall jack.
- 5 Put the M1250 console in an idle state, with handset or headset plugged in.
- 6 Press SHIFT to put the console into shift mode.
- 7 Enter diagnostics mode by pressing F6 function key.
- 8 From the diagnostics menu on the Liquid Crystal Display (LCD) screen, select the QMT2 option by keying in the number (3) from the dial pad, then check for ON confirmation on line 2 of the LCD screen.
- 9 Exit the diagnostics menu by pressing the octothorpe (#) key.
- 10 Return to the operating mode by pressing the # key again.

Figure 9
SL-1 M1250 and M2250 Console — Key and LCD Layout



M1250 Console test

- Note 1:** Refer to Table 14 for M1250 test in the QMT2 mode.
- Note 2:** An “Active” LCD display shows the date and time on line 1, digits on line 2, and the word ACTIVE on line 4.
- Note 3:** Where “headset” is written, the word “handset” may be substituted.
- Note 4:** The volume keys for adjusting the speaker volume (alerting tones) have eight levels. Volume levels are adjusted by pressing the Volume Up key (Icon key 2 in Shift mode) or the Volume Down key (Icon key 3 in Shift mode) once for each change in level.

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
1	Select an idle loop key on the M1250 Attendant Console to be tested.		
2	Enter SPRE 92	All LCD indicators are lit as illustrated in Figure 9.	Display screen appears as shown in Figure 9.
3	Press Key #	All LCD key indicators are blank	Active
Note: When lines 1 and 4 are Active, line 2 displays digits.			
4	Press Key 1	D1 lit	1
5	Press Key 2	E1 lit	12
6	Press Key 3	D2 lit	123
7	Press Key 4	E2 lit	1234
8	Press Key 5	D3 lit	12345
9	Press Key 6	E3 lit	123456
10	Press Key 7	D4 lit	1234567
11	Press Key 8	E4 lit	12345678
12	Press Key 9	D5 lit	123456789

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
13	Press Key 0	E5 lit	1234567890
Note: Only 16 integers (maximum) are displayed, even though the display line has a total capacity of 40 characters. If steps 4 to 13 are repeated, line 2 displays the numbers 1 to 0 as shown here. The display appears where the field is filled with eights (8's) in Figure 9. After key 7 is pressed, one number is truncated off the right of the display for each number added on the left. Avoid this scrolling condition as it may disrupt the rest of the test.			
14	Press Key *	All LCD indicators are lit as illustrated in Figure 9, except FK0-4.	Display screen appears as shown in Figure 9.
15	Press Key #	All LCD key indicators are blank	Active
16	Press AK key 0	A0 blank	Active
17	Press AK key 1	A1 blank	Active
18	Press AK key 2	A2 blank	Active
19	Press AK key 3	A3 blank	Active
20	Press AK key 4	A4 blank	Active
21	Press AK key 5	A5 blank	Active
22	Press AK key 6	A6 blank	Active
23	Press AK key 7	A7 blank	Active
24	Press AK key 8	A8 blank	Active
25	Press AK key 9	A9 blank	Active
26	Press BK key 0	B0 lit	Active
27	Press BK key 1	B1 lit	Active
28	Press BK key 2	B2 lit	Active
29	Press BK key 3	B3 lit	Active
30	Press BK key 4	B4 lit	Active
31	Press BK key 5	B5 lit	Active
32	Press BK key 6	B6 lit	Active
33	Press BK key 7	B7 lit	Active

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
34	Press BK key 8	B8 lit	Active
35	Press BK key 9	B9 lit	Active
36	Press CK key 0	C0 lit	Idle
37	Press CK key 1	C1 lit	Active
38	Press CK key 2	C2 lit	Active
39	Press CK key 3	C3 lit	Active
40	Press CK key 4	C4 lit	Active
41	Press CK key 5	C5 lit	Active
42	Press CK key 6	C6 lit	Active
43	Press Icon key (1)		C/H and Active
44	Press Icon key (2)		BUSY/NIGHT
Note: BUSY or NIGHT display is dependent on how many consoles are configured in the system, and the state of those consoles at the time of the test. 1. BUSY = Standard consoles are POS BUSY — M1250 is IDLE 2. NIGHT = all consoles are POS BUSY			
45	Press FK key 1	F1 lit	BUSY/NIGHT
46	Press Icon key (2)	F1 lit	BUSY/NIGHT
47	Press FK key 1	F1 off	BUSY/NIGHT
48	Press GK key 0	G0 lit	Active
49	Press GK key 1	G1 lit	Active
50	Press GK key 2	G2 lit	Active
51	Press GK key 3	G3 lit	Active
52	Press GK key 4	G4 lit	Active
53	Press GK key 5	G5 lit	Active
54	Press GK key 6	G6 lit	Active
55	Press GK key 7	G7 lit	Active
56	Press GK key 8	G8 lit	Active

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
57	Press GK key 9	G9 lit	Active
58	Press FK key 1	G9 and F1 lit	Active
59	Press AK key 0	A0 and F1 lit	Active
60	Press AK key 1	A1 and F1 lit	Active
61	Press AK key 2	A2 and F1 lit	Active
62	Press AK key 3	A3 and F1 lit	Active
63	Press AK key 4	A4 and F1 lit	Active
64	Press AK key 5	A5 and F1 lit	Active
65	Press AK key 6	A6 and F1 lit	Active
66	Press AK key 7	A7 and F1 lit	Active
67	Press AK key 8	A8 and F1 lit	Active
68	Press AK key 9	A9 and F1 lit	Active
69	Press BK key 0	B0 and F1 lit	Active
70	Press BK key 1	B1 and F1 lit	Active
71	Press BK key 2	B2 and F1 lit	Active
72	Press BK key 3	B3 and F1 lit	Active
73	Press BK key 4	B4 and F1 lit	Active
74	Press BK key 5	B5 and F1 lit	Active
75	Press BK key 6	B6 and F1 lit	Active
76	Press BK key 7	B7 and F1 lit	Active
77	Press BK key 8	B8 and F1 lit	Active
78	Press BK key 9	B9 and F1 lit	Active
79	Press FK key 0	B0-4, and F1 lit	Active
80	Press FK key 0		Active tone
81	Press FK key 0	C0 and F1 lit	BUSY/NIGHT

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
Note: BUSY or NIGHT display is dependent on how many consoles are configured in the system, and the state of those consoles at the time of the test. - BUSY = Standard consoles are POS BUSY — M1250 is IDLE - NIGHT = all consoles are POS BUSY			
82	Press CK key 1	C1 and F1 lit	BUSY/NIGHT
83	Dial SPRE 92	As shown in Figure 9.	As shown in Figure 9.
84	Press key #	F1 lit while all other LCDs are blank.	Active
85	Press FK key 0	B0-4 and F1 lit	Active
86	Press FK key 1	F1 goes blank (B0-4 still lit)	Active
87	Press FK key 2	All LCDs are lit as in Figure 8, except F1.	Night
88	Press FK key 2	All LCDs Fast Flash at 120 ipm.	Fast Flash Active/Night
89	Press FK key 2	All LCDs Flash at 60 ipm.	Flash Active/Night
90	Press FK key 2	These LCDs are lit: C1-6, D/E1-6, G0-1 Slow Flash at 30 ipm.	
91	Press FK key 3	All of Key Strip A is lit	Active
92	Press FK key 4	All LCDs in strip B are lit	Active
93	Press Icon key (8)	All LCDs are blank	Active
94	Press Icon key (7)	B0-4 lit	Active
95	Press Strip FK key 5	B0-4 lit	Active
96	Press Icon key (7)	All LCDs are blank	Active
97	Press FK key 5	B0-4 are lit	Active
98	Press FK key 6	B0-4 lit	Active
99	Press FK key 6	B0-4 are blank	Active

Table 13
M1250 Console test

Step	Key operated	LCD location and response	Display and Tones
100	Remove the headset jack (unplug the headset)	All LCDs are blank	Active
101	Replace the headset jack (plug-in the headset)	B0-4 lit	Active
102	Press FK key 0	B0-4 lit	Buzz tone to the Attendant display is active
103	Press FK key 0	C0 lit	BUSY/NIGHT
104	Press FK key 0	End of test	NIGHT

M1250 Console test in QMT2 mode

Note 1: An “Active” LCD display shows the date and time on line 1, digits on line 2, and the word ACTIVE on line 4.

Note 2: Where “headset” is written, the word “handset” may be substituted.

Note 3: The volume keys for adjusting the speaker volume (alerting tones) have eight levels. Volume levels are adjusted by pressing the Volume Up key (Icon key 2 in Shift mode) or the Volume Down key (Icon key 3 in Shift mode) once for each change in level.

Note 4: Ensure console is not in shift mode when beginning test.

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
Step	Key operated	LCD location and response	Display and Tones
1	Select an idle loop key on the M1250 console to be tested.		
2	Enter SPRE 92	All LCD indicators are lit as illustrated in Figure 9. AA and BB lit on both sides.	The display screen is activated and shows all alphanumerics as indicated in Figure 9.
3	Dial Pad Key #	All LCD indicators are blank.	Active
4	Dial Pad Key 1	D1 lit	1
5	Dial Pad Key 2	E1 lit	12
6	Dial Pad Key 3	D2 lit	123
7	Dial Pad Key 4	E2 lit	1234
8	Dial Pad Key 5	D3 lit	12345
9	Dial Pad Key 6	E3 lit	123456
10	Dial Pad Key 7	D4 lit	1234567
11	Dial Pad Key 8	E4 lit	12345678
12	Dial Pad Key 9	D5 lit	123456789

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
13	Dial Pad Key 0	E5 lit	1234567890
Note: Only 16 integers (maximum) are displayed, even though the display line has a total capacity of 40 characters. If steps 4 to 13 are repeated line 2 displays the numbers 1 to 0 as shown here. The display appears where the field is filled with eights in Figure 9. After key 7 is pressed, one number is truncated off the right of the display for each number added on the left. Avoid this scrolling condition as it may disrupt the rest of the test.			
14	Dial Pad Key *	All LCD indicators are lit as illustrated in Figure 9.	Display screen is activated and displays alphanumerics as indicated in Figure 9.
15	Dial Pad Key #	All LCD indicators are blank	Active
16	Strip AK key 0	A0 lit	Active
17	Strip AK key 1	A1 lit	Active
18	Strip AK key 2	A2 lit	Active
19	Strip AK key 3	A3 lit	Active
20	Strip AK key 4	A4 lit	Active
21	Strip AK key 5	A5 lit	Active
22	Strip AK key 6	A6 lit	Active
23	Strip AK key 7	A7 lit	Active
24	Strip AK key 8	A8 lit	Active
25	Strip AK key 9	A9 lit	Active
26	Strip BK key 0	B0 lit	Active
27	Strip BK key 1	B1 lit	Active
28	Strip BK key 2	B2 lit	Active
29	Strip BK key 3	B3 lit	Active
30	Strip BK key 4	B4 lit	Active
31	Strip BK key 5	B5 lit	Active
32	Strip BK key 6	B6 lit	Active
33	Strip BK key 7	B7 lit	Active
34	Strip BK key 8	B8 lit	Active

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
35	Strip BK key 9	B9 lit	Active
36	Strip CK key 0	C0 lit	Active
37	Strip CK key 1	C1 lit	Active
38	Strip CK key 2	C2 lit	Active
39	Strip CK key 3	C3 lit	Active
40	Strip CK key 4	C4 lit	Active
41	Strip CK key 5	C5 lit	Active
42	Strip CK key 6	C6 lit	Active
43	Icon key (1)	—	C/H and Active
44	Icon key (2)	—	BUSY
45	Strip FK key 1	F1 lit	BUSY
46	Icon key (2)	F1 lit	NIGHT
47	Strip FK key 1	—	NIGHT
48	Strip GK key 0	G0 lit	Active
49	Strip GK key 1	G1 lit	Active
50	Strip GK key 2	G2 lit	Active
51	Strip GK key 3	G3 lit	Active
52	Strip GK key 4	G4 lit	Active
53	Strip GK key 5	G5 lit	Active
54	Strip GK key 6	G6 lit	Active
55	Strip GK key 7	G7 lit	Active
56	Strip GK key 8	G8 lit	Active
57	Strip GK key 9	G9 lit	Active
58	Strip FK key 1	G9 and F1 lit	Active
59	Strip AK key 0	A0 and F1 lit	Active
60	Strip AK key 1	A1 and F1 lit	Active

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
61	Strip AK key 2	A2 and F1 lit	Active
62	Strip AK key 3	A3 and F1 lit	Active
63	Strip AK key 4	A4 and F1 lit	Active
64	Strip AK key 5	A5 and F1 lit	Active
65	Strip AK key 6	A6 and F1 lit	Active
66	Strip AK key 7	A7 and F1 lit	Active
67	Strip AK key 8	A7, A0 and F1 lit	Active
68	Strip AK key 9	A7, A1 and F1 lit	Active
69	Strip BK key 0	A7, B0 and F1 lit	Active
70	Strip BK key 1	A7, B1 and F1 lit	Active
71	Strip BK key 2	A7, B2 and F1 lit	Active
72	Strip BK key 3	A7, B3 and F1 lit	Active
73	Strip BK key 4	A7, B4 and F1 lit	Active
74	Strip BK key 5	A7, B5 and F1 lit	Active
75	Strip BK key 6	A7, B6 and F1 lit	Active
76	Strip BK key 7	A7, B7 and F1 lit	Active
77	Strip BK key 8	A7, B7, B0 and F1 lit	Active
78	Strip BK key 9	A7, B0, B1 and F1 lit	Active
79	Strip FK key 0	A7, B7, B0 to B4 and F1 lit	Active and busy tone
80	Strip FK key 0	A7, B7, B0 to B4 and F1 lit	Active and tone from speaker
81	Strip FK key 0	C0 and F1 lit	NIGHT
82	Strip FK key 1	C0 lit	NIGHT
83	Strip CK key 1	All LCD key indicators are blank	Display screen is activated and shows all alphanumerics as indicated in Figure 9.
84	Dial Pad Key #	All LCD key indicators remain blank	Active

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
85	Strip FK key 0	B0 to B4 lit	Active and busy tone
86	Strip FK key 2	All LCD indicators are lit as illustrated in Figure 9.	Display is activated and displays all alphanumerics as indicated in Figure 9.
87	Strip FK key 2	As in Step 86, but LCD indicators Fast Flash at 120 ipm.	As in Step 86, but LCD display Fast Flashes at 120 ipm.
88	Strip FK key 2	As in Step 86, but LCD indicators Flash at 60 ipm.	As in Step 86, but LCD display Flashes at 60 ipm.
89	Strip FK key 2	All 5-state LCD indicators (strips C and D/E) Slow Flash at 30 ipm.	Active
90	Strip FK key 3	All LCD indicators in strip A/A are lit	Active
91	Strip FK key 4	All LCD indicators in strip B/B lit	Active
92	Icon key (8)	All LCD indicators go off	Active
93	Icon key (7)	LCD indicators B0 to B4 lit	Active and dial tone, then busy tone
94	Strip FK key 5	LCD indicators B0 to B4 go off	Active and dial tone
95	Icon key (7)	LCD indicators B0 to B4 lit	Active
96	Strip FK key 5	LCD indicators B0 to B4 go off	Active and busy tone
97	Strip FK key 6	LCD indicators B0 to B4 lit	Active
98	Strip FK key 6	LCD indicators B0 to B4 go off	Active and busy tone
99	Handset unjacked	All LCD indicators go off	Active
100	Handset jacked in	B0 to B4 lit	Active and busy tone
101	Handset unjacked	All LCD indicators go off	Active
102	Handset jacked in at other side of console	B0 to B4 lit	Active and busy tone

Table 14
M1250 Console test in QMT2 mode

Step	Key operated	LCD location and response	Display and Tones
103	Strip FK key 0	B0 to B4 lit	Active and tone from speaker
104	Strip FK key 0	C0 lit	NIGHT
End of test. Repeat for all additional consoles in QMT2 mode.			

M2250 Console

Table 15

M2250 Console

Step	Key operated	LCD location and response	Display and Tones
1	Select idle loop key		
2	Enter SPRE code 92	All LCDs lit except F1	888888888888888888. . . 888888888888888888. . .
3	Press dial pad #	All off	Active
4	Press dial key 1	D1 lit	1
5	Press dial key 2	E1 lit	12
6	Press dial key 3	D2 lit	123
7	Press dial key 4	E2 lit	1234
8	Press dial key 5	D3 lit	12345
9	Press dial key 6	E3 lit	123456
10	Press dial key 7	D4 lit	1234567
11	Press dial key 8	E4 lit	12345678
12	Press dial key 9	D5 lit	123456789
13	Press dial key 0	E5 lit	1234567890
14	Repeat step 4 until both lines of the display are full		12345678901234567. . . 12345678901234567. . .
15	Press dial pad *	All LCDs lit except F1	888888888888888888. . . 888888888888888888. . .
16	Press dial pad #	All LCD blank	ACTIVE
17	Press AK key 0	A0 lit	ABCDEFGH IJKLMN OP. . . NOPQRSTU VWXYZA B. . .
18	Press AK key 1	A1 lit	abcdefghijklmnopqrstuv wnopqrstuvwxyza bcd efg
19	Press AK key 2	A2 lit	Display shows series of dark squares
20	Press AK key 3	A3 lit	ACTIVE
21	Press AK key 4	A4 lit	ACTIVE

Table 15
M2250 Console

Step	Key operated	LCD location and response	Display and Tones
22	Press AK key 5	A5 lit	ACTIVE
23	Press AK key 6	A6 lit	ACTIVE
24	Press AK key 7	A7 lit	ACTIVE
25	Press AK key 8	A8 lit	ACTIVE
26	Press AK key 9	A9 lit	ACTIVE
27	Press BK key 0	B0 lit	ACTIVE
28	Press BK key 1	B1 lit	ACTIVE
29	Press BK key 2	B2 lit	ACTIVE
30	Press BK key 3	B3 lit	ACTIVE
31	Press BK key 4	B4 lit	ACTIVE
32	Press BK key 5	B5 lit	ACTIVE
33	Press BK key 6	B6 lit	ACTIVE
34	Press BK key 7	B7 lit	ACTIVE
35	Press BK key 8	B8 lit	ACTIVE
36	Press BK key 9	B9 lit	ACTIVE
37	Press CK key 0	C0 lit	IDLE
38	Press CK key 1	C1 lit	ACTIVE
39	Press CK key 2	C2 lit	ACTIVE
40	Press CK key 3	C3 lit	ACTIVE
41	Press CK key 4	C4 lit	ACTIVE
42	Press CK key 5	C5 lit	ACTIVE
43	Press CK key 6	C6 lit	ACTIVE
44	Press Icon key 1		C/H and ACTIVE
45	Press Icon key 2		BUSY
46	Press CK key 0	C1 lit	IDLE
47	Press GK key 0	GO lit	ACTIVE

Table 15
M2250 Console

Step	Key operated	LCD location and response	Display and Tones
48	Press GK key 1	G1 lit	ACTIVE
49	Press GK key 2	G2 lit	ACTIVE
50	Press GK key 3	G3 lit	ACTIVE
51	Press GK key 4	G4 lit	ACTIVE
52	Press GK key 5	G5 lit	ACTIVE
53	Press GK key 6	G6 lit	ACTIVE
54	Press GK key 7	G7 lit	ACTIVE
55	Press GK key 8	G8 lit	ACTIVE
56	Press GK key 9	G9 lit	ACTIVE
57	Press FK key 1	G9 and F1 lit	[S] ACTIVE
58	Press AK key 0	A0 and F1 lit	[S] ACTIVE
59	Press AK key 1	A1 and F1 lit	[S] ACTIVE
60	Press AK key 2	A2 and F1 lit	[S] ACTIVE
61	Press AK key 3	A3 and F1 lit	[S] ACTIVE
62	Press AK key 4	A4 and F1 lit	[S] ACTIVE
63	Press AK key 5	A5 and F1 lit	[S] ACTIVE
64	Press AK key 6	A6 and F1 lit	[S] ACTIVE
65	Press AK key 7	A7 and F1 lit	[S] ACTIVE
66	Press AK key 8	A8 and F1 lit	[S] ACTIVE
67	Press AK key 9	A9 and F1 lit	[S] ACTIVE
68	Press GK key 0	G1 and F1 lit	[S] ACTIVE
69	Press GK key 1	G2 and F1 lit	[S] ACTIVE
70	Press GK key 2	G3 and F1 lit	[S] ACTIVE
71	Press GK key 3	G4 and F1 lit	[S] ACTIVE
72	Press GK key 4	G4 and F1 lit	[S] ACTIVE
73	Press GK key 5	G5 and F1 lit	[S] ACTIVE

Table 15
M2250 Console

Step	Key operated	LCD location and response	Display and Tones
74	Press GK key 6	G6 and F1 lit	[S] ACTIVE
75	Press GK key 7	G7 and F1 lit	[S] ACTIVE
76	Press GK key 8	G8 and F1 lit	[S] ACTIVE
77	Press GK key 9	G9 and F1 lit	[S] ACTIVE
78	Press Hold key	F1 and B0-4 lit	[S] Busy tone in handset
79	Press Hold key	F1 and B0-4 lit	[S] Buzz in speaker
80	Press Hold key	F1 and C0 lit	[S] NIGHT or BUSY
81	Press CK key 1	F1 and C1 lit	[S] NIGHT or BUSY
82	Dial SPRE 92	All LCDs lit	88888888888888888888. . . 88888888888888888888. . .
83	Press dialpad #	F1 lit	[S] ACTIVE
84	Press FK key 1		ACTIVE
85	Press FK key 2	All LCDs lit except F1	88888888888888888888. . . 88888888888888888888. . .
86	Press FK key 2	LCDs Flash at 120 ipm	Flash ACTIVE/NIGHT
87	Press FK key 2	LCDs Flash at 60 ipm	Flash ACTIVE/NIGHT
88	Press FK key 2	LCDs Flash at 30 ipm	Flash ACTIVE/NIGHT
89	Press Icon key 8	All LCDs off	ACTIVE
90	Press Icon key 7	B0-4 lit	ACTIVE, dial tone
91	Press FK key 5	All LCDs off	ACTIVE, dial tone
92	Press Icon key 7	B0-4 lit	ACTIVE
93	Press FK key 5	All LCDs off	ACTIVE
94	Press FK key 6	B0-4 lit	ACTIVE
95	Press FK key 6	All LCDs off	ACTIVE
96	Handset out	All LCDs off	ACTIVE
97	Handset in	B0-4 lit	ACTIVE
98	Handset out	All LCDs off	ACTIVE

Table 15
M2250 Console

Step	Key operated	LCD location and response	Display and Tones
99	Handset in other side of console	B0-4 lit	ACTIVE
100	Press Hold key	B0-4 lit	ACTIVE, busy tone
101	Press Hold key	B0-4 lit	ACTIVE, Buzz in speaker
102	Press Hold key	C0 lit	NIGHT
103	End of test		

LD 32: Network and Peripheral Equipment Diagnostic

LD 32 performs checks and maintenance functions on network and Peripheral Signaling equipment. LD 32 will allow commands to be used for XTD cards. The STAT command will produce an output which has XTD, LDC or LGD appended where required.

this program is used to:

- get the status of Peripheral Signaling (PS), Controller and network cards
- get the status of PE shelves cards and units
- disable and enable PS, Controller and network cards
- disable and enable PE shelves, cards and units
- test message waiting lamps on 500/2500 sets
- list TNs of 500/2500 sets with faulty message waiting lamps on specified shelf (not applicable from X11 Release 5.24 and later).
- test Message Waiting Lamps (MWL) on 2500 sets during midnight routines (Release 8 and later)
- print set and card IDs on superloops
- convert packed TNs in hex to the loop, shelf, card, unit format

Note 1: Disabled DID trunks are placed in the answer state while disabled.

Note 2: If Recorded Telephone Dictation (RTDT) cards are to be software enabled or disabled, the Out-of-Service (OS) lead should be connected to ground. On completion of the task, ground can be removed.

Note 3: Card ID information is presented as follows:

CCCCCCCC-RRSSSS

Where:

Note 4: CCCCCCCC = is the order code

RR = is the release number

SSSS = is the serial number After making any changes to the route data block, IPE TRUNK CARDS MUST BE DOWNLOADED by issuing the ENLC l s c command.

Note 5: When getting the status of a card relating to a trunk error (STAT), the term RVSD may appear with the trunk information. RVSD indicates that the software detected a reversed wired trunk for that unit.

Overlay 32 Linkage

With Release 19 and later software, Overlay programs 10, 11, 20 and 32 are linked, thus eliminating the need to exit one Overlay and enter another. Once one of the aforementioned Overlays has been loaded, it is possible to add, print and obtain the status of a set without having to exit one Overlay and load another.

Input processing has also been enhanced. Prompts ending with a colon (:) allow the user to enter either:

- 1 a question mark (?) followed by a carriage return (<cr>)
This entry will present you with a list of valid responses to that prompt.
- 2 An abbreviated response
The system responds to this entry with the nearest match. If there is more than one possible match, the system responds with SCH0099, the input followed by a question mark, and a list of possible responses. The user can then enter a valid response.

Using Enable/Disable commands

All units on a loop go into maintenance busy mode when disabled using the DISL command. The shelves on a loop must be individually re-enabled via the ENLS command. Any telephones that were in lockout mode show as idle, then go into lockout mode again 30 seconds after any unit on the shelf requests dial tone.

When enabling a network loop serving ISDL C cards, the ISDL C cards must be individually disabled then re-enabled to ensure that service is restored to digital telephones. Service may also be restored to digital telephones by disconnecting, and then reconnecting the telephone's line cord.

Note 1: When the Trunk Failure Monitor (TFM) package is enabled, a failed trunk is displayed as BUSY. The enable/disable command does not enable or disable the failed trunk unit (it stays in the BUSY state).

Note 2: When the French Type Approval package (FRTA 197) is enabled then CO trunk units are not busied when they are disabled.

Basic commands

Table of contents

Section	Page
Basic commands	678
Superloop commands	680
ISDN BRI MISP commands	681
ISDN BRI SILC/UILC commands	682
ISDN BRI BRSC commands	683

Basic commands

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
CONV tn	Convert packed TN (in hex) to loop, shelf, card and unit format
CONV l s c u	Convert loop, shelf, card and unit format to packed TN (in hex)
CPWD l s c u	Clear directory password for M3000 set
CWD l s c u	Clear directory password for M3000, M3903, M3904, M3905
DISC l s c	Disable specified DTR/MFR card
DISI l s c	Disable specified card when it is idle
DISL loop	Disable network loop
DISR l s c u	Disable specified DTR/MFR card or unit
DISN loop	Disable network card containing specified loop
DISS l s	Disable specified shelf
DISU l s c u	Disable specified unit
DSCT I	Disable automatic background continuity tests for superloop
DSNW loop	Disable network card containing specified loop
DSPS x	Disable Peripheral Signaling card x
DSXP x	Disable controller x and all connected cards
END	Abort current test
ENLC l s c	Enable and reset specified DTR/MFR card

ENLG x	Enable group x
ENLL loop	Enable network loop
ENLN loop	Enable network card with specified loop
ENLR l s c u	Enable specified DTR/MFR card or unit.
ENLS l s	Enable specified shelf
ENLU l s c u	Enable specified unit
ENNW loop	Enable network card with specified loop
ENPS x	Enable PS card x and associated loops
LBSY l s	List TNs of all busy units on specified shelf
LDIS l s	List TNs of all disabled units on specified shelf
LIDL l s	List TNs of all idle units on specified shelf
LLBD l s	List TNs of 500/2500 sets with defective MWLs
LMNT l s	List TNs of all maintenance busy units on specified shelf
MFR l s c u	Test specified MFR card or unit.
MFR l	Test all MFR units on loop l.
MFR <cr>	Test all MFR units
PBXH	Message Waiting lamp maintenance
PBXT ALL	Test all Message Waiting lamps
PBXT l (s c u)	Test Message Waiting lamps on loop (or shelf or card or unit)
SDLC l s c	Get status of specified ISDLC card
SDTR l s c u	List status of specified DTR/MFR card or unit.
SDTR <cr>	List the TN of all disabled DTR/MFR units
STAT	Get status of all configured loops in system
STAT (loop)	Give status of one or all loops
STAT l s	Get idle, busy or disabled status of units on specified shelf
STAT l s c	Get status of specified card
STAT l s c u	Get status of specified unit
STAT NWK loop	Check status of network card with specified loop
STAT PER x	Get status of PS card x
TRK l s c u	Seize specified trunk for outpulsing

Superloop commands

DISL sl	Disable specified superloop
DSCT sl	Disable automatic background continuity tests for a superloop
DSXP x	Disable Controller x and all associated PE cards
ENCT sl	Enable automatic background continuity tests for a superloop
ENLL sl (v)	Enable superloop, download peripheral software version v
ENLL sl	Enable specified Superloop
ENXP x (v)	Enable Controller x and associated PE cards, download software version v
ENXP XPC x (v)	Enable Controller x, do not enable the associated PE cards, download software version v
IDC sl	Print Card ID for superloop and associated Controller(s)
IDC l s c	Print card ID for PE card
IDC sl	Get card id of LCI sl and its associated RCI
IDCS x	Print card ID for all cards on shelf controlled by Controller x
IDU l s c u	Print set ID
LBSY l s	List TNs of all busy units on specified shelf
LDIS l s	List TNs of all disabled units on specified shelf
LIDL l s	List TNs of all idle units on specified shelf
STAT sl	Get status of superloop and separate carriers on that superloop
SUPL (sl)	Print data for one or all superloops
XNTT sl	Do self-test of Network card for specified superloop
XPCT x	Do self-test on Controller x
XPEC (x)	Print data for one or all Controllers

Note: If a trunk unit is controlled by APNSS, the STAT commands will indicate this is an APNSS trunk and will also display the status of the D-channel. The display format remains the same.

ISDN BRI MISP commands

The following commands are available for ISDN Basic Rate Interface Multi-purpose ISDN Signaling Processor (MISP) cards.

DISL loop	Disable MISP loop
DISL (appl) loop	Disable specified application on MISP loop
DLIF loop x	Download an UIPE BRI trunk interface data file to an MISP loop
ENLL loop	Enable MISP loop
ENLL loop FDL	Enable specified MISP loop and force download (FDL) basecode
ENLL (appl) loop	Enable specified application on MISP loop
ENLL (appl) loop 1	Enable specified application on MISP loop and force download the application loadware onto the MISP
ENLL (appl) loop FDL	Enable specified application on MISP loop and force download the application loadware onto the MISP
IDC loop	Print MISP card ID
PERR loop	Upload error log for specified MISP
STAT I s	Get idle, busy or disabled status of units on specified shelf
STAT (appl) loop	Get status of MISP loop (and application)

ISDN BRI SILC/UILC commands

The following commands are available for ISDN Basic Rate Interface S/T-Interface line (SILC) or U-Interface line (UILC) cards and the associated Digital Subscriber Loops (DSL).

DIS AUTO I s c u	Disable automatic link recovery option of a DSL
DISC I s c	Disable S/T-Interface line (SILC) or U-Interface line (UILC) card
DISI I s c	Disable specified card when it is idle
DISU I s c d	Disable specified Digital Subscriber Loop (DSL) (0-7)
DSRB I s c d	Disable Remote Loop Back for specified BRI Trunk DSL
DSTS I s c d	Disable Remote Loop Back test mode for specified BRI Trunk DSL
ENL AUTO I s c u	Enable automatic link recovery option of a DSL
ENLC I s c	Enable S/T-Interface line (SILC) or U-Interface line (UILC) card
ENLU I s c d	Enable specified unit Digital Subscriber Loop (DSL) (0-7)
ENRB I s c d	Enable Remote Loop Back for specified BRI Trunk DSL
ENTS I s c d	Enable Remote Loop Back test mode for the specified BRI Trunk DSL
ESTU I s c d	Establish D-channel link for specified DSL
FDIS NCAL <I s c DSL#> <conn_ID>	Force disconnect the specified call-independent connection
IDC I s c	Print SILC/UILC card ID
PCON I s c d	Print configuration and LAPD parameters for specified BRI Trunk DSL
PERR I s c	Print protocol log for specified BRI line card
PLOG I s c d	Print protocol log for specified BRI Trunk DSL
PMES I s c d	Print Layer 3 message log for specified BRI Trunk DSL
PTAB I s c d	Upload and print Layer 3 Message configuration IE table for specified BRI Trunk DSL
PTAB I s c d <tbl #>	Upload and print specified Layer 3 Message configuration IE table for specified BRI Trunk DSL
PTRF I s c d	Print traffic data for specified BRI Trunk DSL
RLBT I s c d	Perform Remote Loop Back test on specified BRI Trunk DSL
RLSU I s c d	Release D-channel link for specified DSL
STAT I s c	Get status of specified SILC or UILC
STAT I s c d	Get status of specified Digital Subscriber Loop 0-7
STAT NCAL <I s c DSL#>	List all current call-independent connections on a given BRIT DSL
STAT NCAL <I s c DSL#> <conn_ID>	List information pertaining to a specific call-independent connection

ISDN BRI BRSC commands

The following commands are available for the ISDN Basic Rate Signaling Concentrator (BRSC) card, available with X11 Release 19 or later.

DISC BRI l s c	Disable the BRSC ISDN BRI application.
DISC (BASE) l s c	Disable specified card.
ENLC (BASE) l s c (FDL/NST)	Enable specified card.
ENLC BRI l s c (FDL)	Enable the BRSC ISDN BRI application.
IDC l s c	Print BRSC card and loadware version.
STAT l s c	Get status of specified card.

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-1
CONV tn, CONV l s c u	Convert packed TN (in hex) to l s c u, or vice versa. The command format is: • CONV tn - convert packed TN • CONV l s c u - convert unpacked TN	xpe-15
CPWD l s c u	Clear directory password for M3000 set. Allows the M3000 Directory password of the specified M3000 set to be cleared. This allows a user to access the M3000 Directory if the password has been forgotten or if the user wants to change the current password.	basic-1
CWD l s c u	Clear directory password for M3000, M3903, M3904, M3905	basic-24
DIS AUTO l s c u	Disable automatic link recovery option of a DSL.	bri-18
DISC (BASE) l s c	Disable specified BRSC card. With X11 Release 19 and later, this command is also used to disable the ISDN Basic Rate Interface Signaling Concentrator (BRSC) card. Where: • BASE = Disable only the basecode. If not specified, both the basecode and application are disabled. The application is disabled first unless BASE is entered. • l = loop • s = shelf • c = card	bri-18

	The card faceplate LED is turned on to indicate the card is disabled, and the IPC channel is eliminated. The “.” prompt is given when the process is complete.	
DISC BRI l s c	Disable the BRSC ISDN BRI application. This command is available with X11 Release 19 and later. Where: • BRI = the BRSC ISDN BRI application • l = loop • s = shelf • c = card All active and transient ISDN BRI calls are dropped, and all signaling and packet channels are torn down. The DSL software state remains the same, but the ISDN BRI line cards receive a disable message.	bri-18
DISC l s c	Disable specified DTR/MFR card. If BRI reference clock source is configured on this SILC the user will be prompted with: CLOCK SOURCE ON DSL #, PROCEED?, where # = unit 0-7	basic-1
DISI l s c	Disable specified card when it is idle. If BRI reference clock source is configured on this SILC the user will be prompted with: CLOCK SOURCE ON DSL #, PROCEED?, where # = unit 0-7	basic-1
DISL (appl) loop	Disable application on MISP loop. Where appl = • BRIL (Basic Rate Interface Line), or • BRIT (Basic Rate Interface Trunk) •	bri-18
DISL (appl) loop 1	Disable MISP loop. Where: appl =BRIL (Basic Rate Interface Line), BRIT (Basic Rate Interface Trunk), or BRIE (UIPE Basic Rate Interface Trunk).	bri-18

DISL (appl) loop (FDL)	Disable MISP application and loop. Where: • appl = optional application name (BRIL) • loop = loop number • FDL = force download the application With X11 Release 18, entering 1 rather than FDL force downloads the application.	bri-18
DISL loop	Disable network loop. See “Using the Enable/Disable commands” in the introduction. This command is also used for superloops and MISPs.	basic-1
DISL sl	Disable specified superloop. Active calls on the superloop will be disconnected and line transfer will occur at the remote end.	basic-21
DISN loop	Disable network card containing specified loop, where “loop” is the number of the even or odd loop. Not applicable to superloops.	
DISR l s c u	Disable specified DTR/MFR card or unit. The LED should be lit on the XMFR card in response to this command.	basic-21
DISS l s	Disables specified shelf. See “Using the Enable/Disable commands” in the introduction.	basic-1
DISU BRI l s c	Disable ISDN BRI BRSC card.	brit-19
DISU l s c d	Disable specified Digital Subscriber Loop 0-7. If BRI reference clock source is configured on the DSL the user will be prompted with: CLOCK SOURCE ON THIS DSL, PROCEED?	bri-18
DISU l s c u	Disable specified unit. See “Using the Enable/Disable commands” in the introduction.	basic-1

DLIF loop x	Download an UIPE BRI trunk interface data file to a MISP loop. The MISP specified must have the BRIT UIPE loadware application. Where x may be: • (0) = UIPE SL1 • 1 = ETSI QSIG • 2 = ISO QSIG • . • . • 28 = ETSI QSIG GF • 29 = ISO QSIG GF To achieve a successful download: 1. the MISP basecode must be enabled 2. the specified MISP must have the UIPE BRI trunk loadware configured 3. the interface must be inactive (interpret this to mean that either the UIPE BRI trunk application must be disabled or no DSL of this interface type can be enabled)	bri-18
DSCT loop	Disable automatic background continuity tests for a superloop.	xpe-15
DSIF L PDL2 I s c	Disables the SAPI 16 interface number for BRSC on I s c for the MPH on loop L.	bri-19
DSIF L PDL2 L1	Disables SAPI 16 interface number for BRIL on Loop L1 for MPH on loop L.	bri-19
DSIF I s c DSL BCH x	Disables the link interface for B-channel x for DSL I s c bch. Where: x = 1–2	bri-19
DSIF I s c DSL DCH x	Disables the link interface number for USID x for the DSL on I s c dch.	bri-19
DSIF loop PDNI Y	Disable the link interface number Y for PDNI on Loop Y (1-3)	bri-19
DSNW loop	Disable network card containing specified loop, where “loop” is the number of the even or odd loop. Not applicable to superloops.	basic-1

DSPS x Disables Peripheral Signaling (PS) card x and loops serviced by the card. Disabling PS card 0 interrupts service on loops 0 to 15. To re-enable the card, use the ENPS x command. basic-1

If this fails, a system initialization may be required. Use the disable command with discretion. Disabling a PS card disables up to 16 loops.

The following lists the group/PS/loop relationship:

<u>Group</u>	<u>PS</u>	<u>Loops</u>
0	0	0 to 15
0	1	16 to 31
1	2	32 to 47
1	3	48 to 63
2	4	64 to 79
2	5	80 to 95
3	6	96 to 111
3	7	112 to 127
4	8	128 to 143
4	9	144 to 159

DSRB l s c d Disable Remote Loop Back for specified BRI Trunk DSL bri-18

DSTS l s c d Disable Remote Loop Back test mode for specified BRI Trunk DSL bri-18

DSXP x Disable Controller x and all connected cards. xpe-15

ENCT loop Enable automatic background continuity tests for loop. xpe-15

END Abort current test. Stops outputting. Stops current test. basic-1

ENIF L PDL2 l s c Enables the SAPI 16 interface number for BRSC on l s c for MPH on loop L. bri-19

ENIF l s c DSL BCH x Enables the link interface for B-channel x for DSL l s c bch. bri-19
Where: x = 1–2

ENIF l s c DSL DCH x Enables the link interface number for USID x for the DSL on l s c dch. bri-19

ENIF loop PDNI Y Enables the link interface number Y for PDNI on Loop Y (1-3). bri-19

ENL AUTO I s c u Enable automatic link recovery option of a DSL. bri-18

ENLC (BASE) I s c (FDL/NST) brit-19

Enable specified card.

If the card resides on a disabled shelf, the status is output and enable is not performed. If card has been disabled by overload, the overload status entry is cleared.

Used to enable the ISDN Basic Rate Interface Signaling Concentrator (BRSC) card. The command format is shown here. ENLC (BASE) I s c u (FDL/NST)

Where:

- BASE = enable only the BRSC basecode. If not specified, both the basecode and the application will be enabled.
- I = loop
- s = shelf
- c = card
- FDL = force download the basecode
- NST = No self-test

The card faceplate is turned off to indicate the card is enabled, and the IPC channel is built.

ENLC BRI I s c (FDL) brit-19

Enable the BRSC ISDN BRI application. Where:

- BRI = the BRSC ISDN BRI application
- I = loop
- s = shelf
- c = card
- FDL = force download the application

The application is force downloaded if:

- FDL is entered, or
- No application currently exists on the BRSC card, or
- There is a version number mismatch between the applications in the software and on the card.

ENLC l s c	Enable and reset specified DTR/MFR card. If the card resides on a disabled shelf, the status is output and enable is not performed. If card has been disabled by overload, the overload status entry is cleared. For Release 21, this command causes the pack to perform a self test. If the pack self test passes, the LED will blink 3 times. If it fails, the LED will be lit solidly. A XMI message will be issued to indicate that the XMFR pack has powered up. This command can be used to enable a XMFR card. This command is also used for the S/T-Interface (SILC) and U-Interface (UILC) line cards.	basic-1
ENLG x	Enable group x. Equivalent to two ENPS commands. Refer to DSPS command for the relationships of groups, PS cards and loops.	basic-1
ENLL (appl) loop (FDL)	Enable MISP application, and loop. Where: • appl = optional application name (BRIL) • loop = loop number • FDL = force download the application For Release 18, entering 1 rather than FDL force downloads the application.	bri-18
ENLL (appl) loop 1	Enable MISP loop. Where: • appl = optional application name (BRIL) • 1 = force downloads the application	bri-18
ENLL loop	Enable network loop. See "Using the Enable/Disable commands" in the introduction. This command is also used for Multi-purpose ISDN Signaling Processors (MISP).	basic-1
ENLL loop (v)	Enable superloop, download peripheral software version v. If version v is not specified, the software downloaded is current (c) or latest (l) version as defined in LD 97.	xpe-15
ENLL sl	Enable specified Superloop. OK is output if the operation is successful.	basic-21

ENLN loop	Enable network card with specified loop, where loop is the even or odd numbered loop on the network card. Not applicable to superloops.	
ENLR l s c u	Enable the specified DTR/MFR card. Meridian 1 software will issue a message to request XMFR to perform an echo test only when ENLR is issued to enable the XMFR card.	basic-21
ENLS l s	Enable specified shelf. Where: l = loop and s = shelf. If the shelf is disabled by overload, the overload status entry is cleared.	basic-1
ENLU l s c d	Enable Digital Subscriber Loop (0-7).	bri-18
ENLU l s c u	Enable specified unit. If the unit resides on a disabled shelf or card, the status is output and enable is not performed. If the unit to be enabled is a 500/2500 message waiting telephone, test the unit prior to enabling.	basic-1
ENNW loop	Enable network card with specified loop, where loop is the even or odd numbered loop on the network card. Not applicable to superloops.	basic-1
ENPS x	Enables PS card x and all loops that were enabled at time of last DSPS command. Refer to DSPS command to find the relationships of groups, PS cards and loops.	basic-1
ENRB l s c d	Enable Remote Loop Back for specified BRI Trunk DSL.	bri-18
ENTS l s c d	Enable Remote Loop Back test mode for specified BRI Trunk DSL.	bri-18
ENXP x (v)	Enable Controller x and associated PE cards, download software version v. Enable all PE cards connected to Controller x and the Controller itself. If version v is not specified, the software downloaded to the Controller is current (c) or latest (l) version as defined in LD 97.	xpe-15

ENXP XPC x (v)	Enable Controller x, do not enable the associated PE cards, download software version v. The cards connected to the Controller are not enabled by this command. If version v is not specified, the software downloaded to the Controller is current (c) or latest (l) version as defined in LD 97.	xpe-15
ESTU l s c d	Establish D-channel link for the specified Digital Subscriber Loop (0-7).	bri-18
FDIS NCAL <c DSL#> <conn_id>	Force disconnect the specified call-independent connection (as defined by its connection ID number) Note that the command format for an Option 11C is: STAT NCAL <c 0 0 DSL#><conn_id#>	qsig gf-22
FDIS NCAL <l s c DSL#> <conn_id>	Force disconnect the specified call-independent connection (as defined by its connection ID number)	qsig gf-22
IDC l s c	Print BRSC card and loadware version. This command, with X11 Release 19 and later, queries the BRSC card ID, the basecode, and the application version number. Where: l = loop, s = shelf, and c = card. Output example: • BOOTCODE VERSION xx . . . x • BASECODE VERSION xx . . . x • BRI APPL VERSION xx . . . x	brit-19

IDC I s c Print MISP or XPE card ID. bri-18

The MISP card ID output format is:

- CARDID: xxx. . . x
- BASECODE VERSION: xxx. . . x
- BRI LINE/TRUNK VERSION: xxx. . . x
- BOOTCODE VERSION: xxx. . . x

The XPE card ID output format is:

=> XXXX CCCCCCCC-RRSSSS

Where:

- XXXX = card type (i.e., XDTR, XUT, etc.)
- CCCCCCCC = order code
- RR = release number
- SSSS = is the serial number

IDC I s c d Print ID of Digital Subscriber Loop 0-7. bri-18

IDC sl *For Copper Connections in Release 21:* xpe-15

Print Network ID and Controller for a superloop.

Output format for superloop card ID:

XNET VERS => xxx
 RUNNING FROM yyy
 FW IS SANE
 CCCCCCCC-RRSSSS

XPEC0 VERS => xxx
 RUNNING FROM yyy
 FW IS SANE
 XPECz CCCCCCCC-RRSSSS

XPEC1 VERS => xxx
 RUNNING FROM yyy
 FW IS SANE
 XPECz CCCCCCCC-RRSSSS

Where:

- xxx = loadware version
- yyy = RAM or ROM
- z = 2 or 4
- CCCCCCCC = order code
- RR = release number
- SSSS = is the serial number

IDC sl *For Carrier Connections in Release 21:* rem_ipe-21

Get card id of Local Carrier Interface (LCI) superloop and its associated Remote Carrier Interface (RCI).

Output format for LCI superloop card ID:

```
LCI VERS => xxx
FW IS SANE
aaaaaaaaaaaa
```

Output format for RCI superloop card ID:

```
XPEC VERS=>xxx
FW IS SANE
aaaaaaaaaaaa
```

Where:

- xxx = loadware version
- aaaaaaaaaaaaa = contents of ID EEPROM (LCI or RCI)

IDC sl *For Fibre Connections in Release 22:* rem_ipe-22

Print card ID of optical packets and main boards for Fibre superloop and associated Controller(s)

The output format for the superloop card ID including optical packets is:

```
FNET VERS => xxx
FW IS SANE
aaaaaaaaaaaa
PRIM: pppppppp
SEC: ssssssss
```

```
XPEC VERS => xxx
FW IS SANE
aaaaaaaaaaaa
PRIM: pppppppp
SEC: ssssssss
```

Where:

1. xxx = loadware version
2. aaaaaaaaaaaaa = contents of ID EEPROM (FNET or FPEC)
3. PRIM: pppppppp = contents of ID EEPROM primary packet (if present)
4. SEC: ssssssss = contents of ID EEPROM secondary packet (if present)

IDC l s c	Print card ID for PE card. The format is: xpe-15 IDC l s c — print ID of specified line card The format of the card ID is CCCCCCCC-RRSSSS, where: • CCCCCCCC = order code • RR = release number • SSSS = serial number For example, a Network Card (NT8D04AA) with a release of 01 and serial number of 00001 will have a card ID with: NT8D04AA-010001 For BRI MISP cards, the output is: • CARDID: xxx...x • BASECODE VERSION: xxx...x • BRI LINE/TRUNK VERSION: xxx...x • BOOTCODE VERSION: xxx...x
IDCS x	Print card ID for all cards on shelf controlled by Controller x. xpe-15 The card ID for all cards in shelf controlled by Controller x is output. The XPE card ID output format is: => XXXX CCCCCCCC-RRSSSS Where: • XXXX = card type (i.e., XDTR, XUT, etc.) • CCCCCCCC = order code • RR = release number • SSSS = is the serial number
IDU l s c d	Print set ID for Digital Subscriber Loop d (0-7) bri-18

IDU l s c u	Print set ID. Print ID applies to the following set types: M2006, M2008, M2016, M2216 and M2616. xpe-15 The output format of the set ID (M2008 for example) is: • ARIES TN: l s c u • TN ID CODE: M2008 • NT CODE: NT2K08WC • COLOR CODE: xx • RLS CODE: xx • SER NUM xxxxxx (X11 Release 18 and later) The color codes are: • 03 is black • 35 is chameleon ash • 93 is dolphin grey
LBSY l s	List TNs of all busy units on specified shelf. basic-1
LDIS l s	List TNs of all disabled units on specified shelf. basic-1
LIDL l s	List TNs of all idle units on specified shelf. basic-1
LLBD l s	Lists TNs of all 500/2500-type units for specified loop and shelf with message waiting lamps seen by the system as defective (not available after Release 5. 24). basic-1
LMNT l s	List TNs of all maintenance busy units on specified shelf. basic-1
MFR l s c u	Test specified MFR card or unit. basic-21 During the MFR test, faulty MFR/XMFR packs are disabled and MFRxxx error messages are output.
MFR l	Test all MFR units on loop l basic-21 During the MFR test, faulty MFR/XMFR packs are disabled and MFRxxx error messages are output.
MFR <cr>	Test all MFR units basic-21 During the MFR test, faulty MFR/XMFR packs are disabled and MFRxxx error messages are output.
PBXH	Message Waiting lamp maintenance. basic-1

PBXT ALL	Test all Message Waiting lamps.	basic-5
PBXT I (s c u)	Tests 500/2500 Message Waiting lamp on specified loop, shelf, card or unit. This is required after failed lamp is fixed.	basic-5
PCON I s c d	Upload and print configuration and LAPD parameters for specified DSL. This command requires the specified DSL to be configured for the BRI Trunk Application. See example below: <pre>PCON 6 0 0 6 .DSL: 6 0 0 6 LINL PARAM CONFIRM TIME: 0:02:10 INTERFACE: SL -1 OPER MODE: USR T200: 2 T203: 20 N200: 3 N201: 260 K: 1 PROT #: 1</pre>	bri-18
PERR loop	Upload and print Layer 2 error log for specified MISP.	bri-18
PERR I s c	Upload and print Layer 2 error log for specified SILC or UILC. This command requires the specified MISP or line card to be configured for the BRIT Application. If error log is requested for a line card the error log for each DSL is printed. If error log is requested for a MISP the application global log is also printed. Interpretation of error logs: 1st byte is DSL number or "80" for Application log. 2nd byte is number of non-zero logs. If errors were logged the subsequent information is printed for each error type: • 3rd byte is counter type code • 4th byte is "HIGH" byte of count • 5th byte is "LOW" byte of count	bri-18

Examples follow :

PERR 6

.DSL: 6 0 0 6 ERR LOG CONFIRM TIME: 0:02:10

00 00 01 00 06 00 07 00

^ ^ ^ ^

DSL 0 DSL 1 DSL 6 DSL 7 (no errors
for all DSLs)

PERR 3

.DSL: 5 0 0 2 ERR LOG CONFIRM TIME: 0:02:10

80 01 4D 00 09

Where:

- 1st byte - 80 - indicates Application global log
- 2nd byte - 01 - is number of error logs
- 3rd byte - 4D - is counter type code
- 4th byte - 00 - is "HIGH" byte count
- 5th byte - 09 - is "LOW" byte counts for all DSLs

PLOG l s c d

Upload and print protocol log for specified BRI Trunk DSL.
The protocol log keeps record of up to 32 protocol types. Only
non-zero counters are uploaded and printed.

bri-18

This command requires the specified MISP or line card to be
configured for the BRIT Application. See example below:

PLOG 6 0 0 6

.DSL: 6 0 0 6 PROTOCOL CONFIRM TIME: 0:02:10

17 117 <--Counter 17 shows 117 SABME frames
received with incorrect C/R bit

18 141 <--Counter 18 shows 141 supervisory
frames received with F=1

19 84 <--Counter 19 shows 84 unsolicited DM
responses with F=1

PMES l s c d	Upload and print Layer 3 message log for specified DSL. This command requires the specified DSL to be configured for the BRI Trunk Application. Each time a valid Layer 3 message is received by the MISP, a counter for that particular message is incremented. The log keeps track of up to 20 message types. Only non-zero items are uploaded and printed. Making trunk calls will create a printable log. In the following example, 2 calls were made: <pre>PMES 6 0 0 6 .DSL: 6 0 0 6 MSG LOG CONFIRM TIME: 0:02:10 ALERT: 2 PROC: 2 CONNECT: 2 DISCONN: 2 REL COP: 2</pre>	bri-18
PTAB l s c d	Upload and print Layer 3 Message configuration IE table for specified BRI trunk DSL. PTAB uploads what was downloaded when the Application was enabled.	bri-18
PTAB l s c d <tbl #>	Upload and print specified Layer 3 Message configuration IE table for specified BRI trunk DSL. PTAB uploads what was downloaded when the Application was enabled. Where: <tbl #> = table number.	bri-18

PTRF l s c d	Upload and print traffic report for specified BRI Trunk DSL. This command requires the specified DSL to be configured for the BRI Trunk Application. See example below: <pre> PTRF 6 0 0 6 .DSL: 6 0 0 6 TRAFFIC CONFIRM TIME: 0:02:10 PEAK_I_US: 0 <-- Peak link usage (over a 5 second period) for incoming traffic since the last time the traffic data was uploaded. An integer 0 - 100 which represents the percentage of the link capacity used. AVRG_I_US: 0 <-- Average link usage for incoming traffic since the traffic was last uploaded. PEAK_O_US: 0 <-- Peak link usage (over a 5 second period) for outgoing traffic since the last time the traffic data was uploaded. An integer 0 - 100 which represents the percentage of the link capacity used. AVRG_O_US: 0 <-- Average link usage for outgoing traffic since the traffic was last uploaded. TIME: 0 <-- time since last traffic upload query CONNECTED CALL: 2 <-- number of successfully connected trunk calls </pre>	bri-18
RLBT l s c d	Perform Remote Loop Back Test on specified BRI Trunk DSL.	bri-18
RLSU l s c d	Release D-channel link for specified Digital Subscriber Loop (0-7).	bri-18
RMIF L PDL2 l s c	Disables and removes the SAPI 16 interface number for BRSC on l s c for MPH on loop L.	bri-19
RMIF L PDL2 L1	Disables and removes the SAPI 16 interface number for BRIL on Loop L1 for MPH on loop L.	bri-19
RMIF l s c DSL BCH x	Disables and removes the link interface for B-channel x for DSL l s c bch; where: x = 1-2	bri-19
RMIF loop PDNI Y	Disables and removes the link interface number Y for PDNI on Loop Y (1-3)	bri-19
SDLC l s c	Get status of specified ISDLc card.	basic-7

SDTR l s c u	List status of specified DTR/MFR card or unit.	basic-21
SDTR <cr>	List status of all disabled DTR/MFR units	basic-21
STAT	Get status of all configured loops in system	basic-1
STAT (appl) loop	Get status of MISP loop and application. If appl = BRIL, the status of the BRI Line application is output. If appl = BRIT, the status of the BRI Trunk application is output. Typical response is: <pre> Loop = MISP loop mm DSBL nn BUSY MISP lll : ENBL ACTIVATED timestamp BRIL : ENBL BRIT : ENBL </pre> If the card has been manually disabled, the response is: <pre> Loop = MISP loop DISABLED RESPONDING MAN DSBL </pre> If the card has been disabled by the system, the response is: <pre> Loop = MISP loop DISABLED RESPONDING SYS DSBL - aaa...a </pre> Where aaa...a is the reason as follows: a BOOTLOADING = basecode is being downloaded to the MISP b FATAL ERROR = MISP has a serious problem c OVERLOAD = MISP overload (card inoperable) d RESET THRESHOLD = too many resets (card inoperable) e SELF TESTING = card is performing self-test f SELFTEST FAILED = self-test failed g SELFTEST PASSED = successfully completed self-test h SHARED RAM TEST FAILED = MISP memory problem (card inoperable) i STUCK INTERRUPT = MISP hardware failure (replace card)	bri-18

With the STAT BRIL or STAT BRIT option, the response is one of the following:

1. APPLICATION ENBL
2. APPLICATION NOT CONFIGURED
3. APPLICATION NOT RESPONDING
4. APPLICATION MAN DSBL (manually disabled)
5. APPLICATION SYS DSBL - aaa . . a (system disabled)

Where: aaa . . a is the reason as follows:

- a** CLOSED = application is closed by basecode on the card
- b** CLOSED ERR = error in closing the application
- c** CORRUPTED = application is corrupted on the card
- d** DOWNLOADING = application is being downloaded
- e** ENABLED = application is in active state
- f** INACTIVE = application is in inactive state
- g** MNT BUSY = application is in maintenance busy state
- h** WAIT DSBL = application is in process of being disabled
- i** WAIT ENABLE = application is in process of being enabled
- j** WAIT ERASE = application is being erased from the card
- k** WAIT REMOVE = application is being removed from the card

STAT (loop)	Give status of one or all loops. Response is one of the following:	basic-1
	1. x BUSY, y DSBL = loop enabled with x channels busy and y channels disabled. 2. UNEQ = loop unequipped. 3. CTYF: l1 l2 = loop specified in STAT command is unable to receive data from loops l1, l2, etc. (i.e., continuity test failed in most recent LD 45 loop test). Probable fault in network card. 4. DSBL: NOT RESPONDING = loop disabled. Network card not responding. Card missing, disabled by switch or faulty.	

5. DSBL : RESPONDING = loop disabled but the network card responds. loop may have been disabled due to:
 - a manual request (DISL)
 - b associated Peripheral Signaling card being disabled
 - c overload condition on associated loop

Note 1: Overload conditions are indicated by OVD messages. An attempt to enable a loop which was disabled due to overload may result in a recurrence of the overload condition: the system's service may be impaired for about 2 minutes.

Note 2: For MISP loops see STAT (appl) loop command.

STAT I s	Get idle, busy or disabled status of units on specified shelf. Displays number of units idle, busy, disabled and maintenance busy for the specified shelf.	basic-1
STAT I s c	Get status of any specified PE/IPE card. (e.g., digital line, analog, DTR, etc.) When getting the status of a card relating to a trunk error (STAT), the term RVSD may appear with the trunk information. RVSD indicates that the software has detected a reversed wired trunk for that unit. When getting the status of a card where ACD sets are defined, the printout will include MSB LOG OUT, MSB LOG IN, LOG IN, OR LOG OUT, according to the ACD set state. The output format for either a <i>S/T-Interface line card (SILC)</i> or an <i>U-Interface line card (UILC)</i> is: For BRI trunks: ll = UNIT ll = DSL/UNIT number on the card = swstate type L2_state L1_state dch_state clk (mode) For BRI lines: ll = UNIT ll = DSL/UNIT number on the card = swstate type L2_state L1_state If you are analyzing a <i>SILC</i> or an <i>UILC</i> card, Table 16 on page 705 lists and defines output fields and field responses. An output example can be found page 704.	bri-18

The output format for an *ISDN BRI card* is:

brsc/basic-19

loop = UNIT sw_state DSL misp_state LC_state

With ISDN BRI BRSC cards, the basecode and application status are output.

APPLICATION TIME	MAIN STATE	SUB STATE/ACTIVATION
-----+-----+-----		
BASECODE	ENABLED	xx/xx/xx x:xx
BRI	ENABLED	xx/xx/xx x:xx
-----+-----+-----		
IDLE 0	BUSY 0	DISABLED 8
MSBY 0		
TOTAL DSLS CONFIGURED 8		

If you are analyzing an *ISDN BRI card*, see “STAT I s c d” command for a list of possible states.

Output Example:

00 = UNIT 00 = IDLE LINE ESTA UP

01 = UNIT 01 = IDLE TRNK ESTA UP ESTA SREF (TE)

02 = UNIT 02 = IDLE LINE ESTA DOWN

03 = UNIT 03 = UNEQ

04 = UNIT 04 = UNEQ

05 = UNIT 05 = UNEQ

06 = UNIT 06 = DSBL TRNK DSBL UNEQ RLS (NT)

7 = UNIT 07 = DSBL TRNK DSBL UNEQ RLS (TE)

Table 16: STAT I s c Field and Response Definitions

Field	Field Definition	Response	Response Definition
swstate	state of DSL/UNIT in software	IDLE BUSY UNEQ MBSY	no active call active with a call unequipped maintenance busy
type	DSL type	LINE TRNK	BRI line BRI trunk
L2_state	Layer 2 state of DSL/UNIT in MISP loadware	UNEQ IDLE BUSY MBSY DSBL ESTA RLSU TEST RLBT APDB MPDB MPNR UTSM	unequipped no active call active with a call maintenance busy disabled D-channel link is established D-channel link is released test mode remote loop back application disabled associated MISP disabled associated MISP not responding unable to send message to MISP
L1_state	Layer 1 state of line card	UNEQ DOWN LCNR UP UNDN XPDB UTSM	unequipped Layer 1 is down line card not responding Layer 1 is up undefined DSL state Associated XPEC is disabled unable to send message to MISP
dch_state	State of D-channel link in software	ESTA RLSU TEST-IDLE TEST-RLBT	D-channel link is established D-channel link is released test mode idle test mode remote loop back
clk	Clock mode	DSBL PREF SREF	disabled primary reference secondary reference
mode	Layer 1 mode of DSL	NT TE	Network Termination Terminal Equipment

STAT I s c d

Get status of specified Digital Subscriber Loop (0-7).

When getting the status of an unit where ACD sets are defined, the printout will *not* include MSB LOG OUT, MSB LOG IN, LOG IN, OR LOG OUT, according to the ACD set state.

The output format is:

DSL sw_state misp_state lc_state B1 status
B2 status

bri-18

Table 17 defines output fields. Table 18 on page 707 lists and defines possible responses.

Table 17
STAT I s c d Field Definitions

Field	Definition
sw_state	DSL software state
misp_state	DSL state on the MISP card
lc_state	DSL state on the BRI line card
swstate	State of DSL/UNIT in software
L2_state	Layer 2 state of DSL/UNIT in MISP loadware
L1_state	Layer 1 state of line card
dch_state*	State of D-channel link in software
clk*	Clock mode
b1_state	State of first B-channel
b2_state	State of second B-channel
* these fields are output only for BRI trunks	

Table 18
STAT I s c d Response Definitions

Response	Definition
APDB	MISP call application is disabled
BUSY	Call is active
DOWN	Link layer is not established
DSBL	DSL is disabled
ESTA	Link layer is established
IDLE	No active calls
LCNR	Line card is not responding
MBSY	DSL is in maintenance busy mode
MPDB	MISP is disabled
MPNR	MISP not responding or message is lost
NTAN	DSL is not assigned to a MISP
RLS	Link layer is not established
UNDN	DSL is in an undefined state
UNEQ	Unequipped
UP	Link layer is established
UTSM	CPU is unable to send message to MISP or line card
XTDB	Superloop is disabled
XPDB	Controller is disabled

STAT I s c u Get status of specified unit. basic-1

Table 19 lists and defines possible responses to STAT I s c u. The response may be normal, abnormal, or caused by an invalid equipment choice.

Table 19
STAT I s c u Responses

Type	Response	Definition
Normal	IDLE	Idle
	MBSY	Maintenance busy
	DSBL	Disabled
	DSBL	Virtual terminal on Meridian 1 / Meridian SL-1 disabled by Server
	BUSY	In use by call processing
	BUSY BARRED	Barring is applied to trunk with BARA Class of Service
	UNEQ	Terminal not defined in software
	L500	Line is 500/2500 type
	MBCS	Maintenance set
	BCS	Normal SL-1 telephone
	TRK	Trunk
	ATTN	Attendant console
	DTR	Digitone Receiver
	PWR	Console power unit
Abnormal	CARD x DSBL (OVD)	Card x disabled due to overload
	DND xxx xxx	Do Not Disturb feature is active
	SHELF DSBL (OVD)	Shelf disabled due to overload
	SIG FAULT	Outgoing signal circuitry fault detected on PS card under examination.
	WARNING: CRPTR NOT IN RANGE	TN's data is corrupted. Check BUG messages relating to the TN.
Responses caused by invalid equipment choice:		
	EXT DSBL	Extender disabled
	LOOP NOT TERM	Loop is not a terminal loop
	LOOP UNEQ	Loop is unequipped
	SHELF UNEQ	Shelf is unequipped
	SHELF UNEQ	No 500 cards on shelf
	W/PBX CARDS	
	CARD UNEQ	Card is unequipped
	CARD NOT PBX	Card is not a PBX card
	UNIT UNEQ FOR MW	Unequipped for Message Waiting
	PER UNEQ	PS card is unequipped
	UNIT UNEQ	Unit is unequipped

STAT NCAL <c DSL#>

qsig gf-22

List all current call-independent connections on a given BRIT DSL. (Option 11)

The response format is as follows:

- NCALL CONN ID: a number in the range of 1-9999 that identifies the call independent connection on a given DSL
- CREF: call reference number in HEX identifying independent connection
- STATE: current state of all call-independent connections (IDLE, CONN_REQ, CONN_EST)
- TIME: year month day hour:minute:second (the time when call independent connection request is made)
- APPL: applications using the call-independent connection (e.g., NACD, NMS,...)
- ORIG: originator
- DEST: destination

Note that the command format for an Option 11C is:

STAT NCAL <c 0 0 DSL#>

STAT NCAL <l s c DSL#>

qsig gf-22

List all current call-independent connections on a given BRIT DSL.

The response format is as follows:

- NCALL CONN ID: a number in the range of 1-9999 that identifies the call independent connection on a given DSL
- CREF: call reference number in HEX identifying independent connection
- STATE: current state of all call-independent connections (IDLE, CONN_REQ, CONN_EST)
- TIME: year month day hour:minute:second (the time when call independent connection request is made)
- APPL: applications using the call-independent connection (e.g., NACD, NMS,...)
- ORIG: originator
- DEST: destination

To enter this command, QsigGF package 305 is required.

STAT NCAL <l s c DSL#> <conn_ID> qsig gf-22

List information pertaining to a specific call-independent connection (as defined by its connection ID)

The response format is as follows:

- NCALL CONN ID: a number in the range of 1-9999 that identifies the call independent connection on a given DSL
- CREF: call reference number in HEX identifying independent connection
- STATE: current state of all call-independent connections (IDLE, CONN_REQ, CONN_EST)
- TIME: year month day hour:minute:second (the time when call independent connection request is made)
- APPL: applications using the call-independent connection (e.g., NACD, NMS,...)
- ORIG: originator
- DEST: destination

To enter this command, QsigGF package 305 is required.

STAT NWK loop basic-1

Check status of network card with specified loop, where loop is the even or odd numbered loop on the network card.

STAT PER x basic-1

Get status of PS card x.

If the PS card is disabled, the response is changed from DSBL to either:

1. DSBL : NOT RESPONDING = PS card x is either missing, faulty or disabled via the faceplate switch.
 - If there is a fault in the extender pair for the network shelf, the status of the PS card will also be: DSBL : NOT RESPONDING.
2. DSBL : RESPONDING = The PS card is disabled and responding to the CPU. The PS may have been disabled by manual request (DSPS) or the associated extender pair may have been manually disabled.

If neither of these conditions exists, the card may have been disabled because of an overload condition on the associated shelf. Check for OVD messages appearing in previous TTY output.

	An attempt to enable a PS card which was disabled because of an overload may result in a recurrence of the overload condition: the system's service may be impaired for approximately 2 minutes.	
STAT sl	Get current status of superloop and separate carriers on that superloop, based on data previously sent by the Carrier Interface F/W (LCIM). For each carrier, the following fields will be displayed: S/W State, SPARE Status, NND Status, TSA (Time Slot Availability) and CALS. TTSA = Number of Traffic Timeslots currently available for voice and data calls out of a possible: 21 for T-1 and 27 for T-E. SPARE Status indicates whether the carrier is spared and which carrier it is spared in. NND Status indicates whether new data calls are disallowed on the timeslots being transmitted by the carrier.	rem_ipe-21
STIF L PDL2 l s c	Displays link status for SAPI 16 interface of BRSC l s c for MPH on loop L.	bri-19
STIF L PDL2 L1	Displays the link status for SAPI 16 interface of BRIL L1 for MPH on loop L.	bri-19
STIF l PDNI y	Displays the link status for interface Y for PDNI. Where: Loop Y = 1-3	bri-19
STIF l s c DSL DCH x	Displays the link status for B-channel X for the DSL l s c D. Where: BCH stands for B-channel and X = 1-2.	bri-19
SUPL (loop)	Print data for all or specified superloop(s).	xpe-15
TRK l s c u	Seize specified trunk for outpulsing. Command is valid at a maintenance telephone only. The specified trunk is connected to the maintenance telephone and a test call may be performed on the trunk. When the test call is completed, access sequence SPRE 91 must be redialed to use the maintenance telephone to input more commands.	basic-1

LD 32

XNTT loop	Do self-test of Network card for specified superloop. The Network card must be disabled before the self-test.	xpe-15
XPCT x	Do self-test on Controller x. The NT8D01 Controller must be disabled before the self-test.	xpe-15
XPEC (x)	Print data for all or specified Controller(s).	xpe-15

LD 33: Peripheral Equipment Diagnostic for 1.5 Mb/s RPE and Fibre Remote IPE

This module contains commands to perform diagnostic tests of 1.5 Mb/s remote peripheral equipment and fibre remote intelligent peripheral equipment.

1.5 Mb/s RPE diagnostic

The 1.5 Mb/s Remote Peripheral Equipment Diagnostic (RPD) is loaded manually or as one of the daily routines. It should be included in the daily routines for any system having Remote Peripheral Equipment (RPE).

Program operation during daily routines

When loaded as part of the daily routines, the program will, for each RPE loop in the system:

- reset internal counts of carrier failures which are used to determine whether carriers should be automatically re-enabled if a temporary carrier fault occurs
- test the connection memory on the local network pack
- test the signaling channel to the Local Carrier Buffer (LCB) pack
- test the connection memory of the Remote Peripheral Switch (RPS) pack
- test the continuity of the speech path to the remote site using all idle channels
- switch the primary carrier function from the current primary carrier to the other one, then repeat the above tests

If faults are detected during the above tests, the primary carrier is selected to give the greatest number of working speech timeslots, provided that the signaling channel works on this carrier.

Purpose of 1.5 Mb/s RPE commands

When loaded manually, the program may be used to:

- conduct a test of a specific RPE loop, similar to the automatic tests
- enable or disable a RPE loop, or either carrier associated with a RPE loop
- enable or disable the automatic carrier status monitoring function on a RPE loop
- give timeslot numbers of speech channels which could not be successfully transmitted by a specified carrier
- switch the primary carrier function from one carrier to the other
- obtain the status of RPE loops and/or carriers
- obtain a list of equipped RPE loops
- clear minor alarms and the maintenance display on the active CPU

Speech timeslots used by each carrier

If primary carrier = 0

- Speech channels carried by primary carrier = 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31
- Speech channels carried by secondary carrier = 2, 3, 8, 9, 16-19, 24, 25

If primary carrier = 1

- Speech channels carried by primary carrier = 2, 3, 4, 5, 8, 9, 10, 11, 16, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29
- Speech channels carried by secondary carrier = 6, 7, 12, 13, 14, 15, 22, 23, 30, 31

Fibre Remote IPE diagnostic

The craftsperson may complete any of the following Fibre Remote IPE maintenance operations:

- 1 Enable or disable optical packets.
- 2 Manually invoke protection switching, at the local or remote side.
- 3 Query status of cards and optical packets.
- 4 Conduct the loop-back test on the optical receiver-transmitter (EOI) to determine the source of the fault as being the optical fibre span or Fibre remote equipment.
- 5 Run loopback test and continuity tests on optical interface.

Midnight routine operation

Overlay 33 can be scheduled to run at midnight if included in midnight routines. The following actions take place during midnight operation:

- 1 Send Time of Day message to loadware (L/W).
 - 2 Print performance monitoring report.
 - 3 Run non-service-impacting test on the standby link.
 - 4 Run MNSN and MNSP commands to cause protection switching. When these commands are run, continuity tests check both links alternately.
-

Basic commands for 1.5 Mb/s RPE

CDSP	Clears the maintenance display on active CPU to 00 or blank
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Resets minor alarm indication on attendant consoles for all customers
CMIN c	Resets minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DISC loop c	Disable carrier c on RPE loop
DISI loop c	Disable carrier c on RPE loop when idle
DISL loop	Disable specified RPE loop
DISM loop	Disable carrier status monitoring on RPE loop
END	Abort current command
ENLC loop c	Enable carrier c on RPE loop
ENLL loop	Enable RPE loop
ENLM loop	Enable carrier status monitoring on RPE loop
LDIS loop c	List all speech channels that failed continuity test on RPE loop carrier c
LOOP loop	Perform various tests on RPE loop
LRPE	List all equipped RPE loops
NCAR loop	Get number of "carrier status change" messages for RPE loop
SCAR loop	Switch primary carrier on RPE loop
STAT	Get number of busy channels on specified carrier in the active DISI request
STAT loop	Get status of RPE loop
STAT loop ALL	Get status of the RPE loop, carriers and RPS card
STAT loop c	Give status of carrier c on RPE loop
STAT loop RPS x	Get status of RPS card x on specified RPE loop

Basic commands for Fibre Remote IPE

AHIN sl	Print all history file (log file) of Fibre superloop sl
AHIP pc	Print all history file of Fibre Peripheral Controller pc
CDSP	Clears the maintenance display on active CPU to 00 or blank
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Resets minor alarm indication on attendant consoles for all customers
CLPM sl	Clears all performance monitoring counters of Fibre superloop sl (FNET) and its associated FPEC
DSOP sl PRI	Disable optical link of Fibre superloop sl, link Primary
DSOP sl SEC	Disable optical link of Fibre superloop sl, link Secondary
ENOP sl PRI	Enable optical link of Fibre superloop sl, link Primary
ENOP sl SEC	Enable optical link of Fibre superloop sl, link Secondary
FDEF sl	Query default MMI mode on FNET and FPEC of Fibre superloop sl
FNET ALL	Print current status of all Fibre superloops
FNET sl	Print status of Fibre superloop sl (FNET) and its optical packets
FNTT sl	Test specified Fibre superloop sl (FNET)
FPCT pc	Test specified Fibre peripheral controller pc (FPEC)
FPEC pc	Print status of Fibre peripheral controller pc (FPEC) and its optical packets
FSTA sl	Print the transmission test status of Fibre superloop sl
FSTP sl	Stop the transmission test. Print test status of Fibre superloop sl.
FTST sl test (h/m/s)	Perform a transmission test of Fibre superloop sl for time h/m/s
MNSN sl	Manual switch on Fibre superloop sl (FNET)
MNSP sl	Manual switch on Fibre peripheral controller pc (FPEC)
NHIN sl	Print new history file of Fibre superloop sl (FNET)
NHIP pc	Print new history file of Fibre peripheral controller pc (FPEC)
PRPM sl	Print performance monitoring report for Fibre superloop sl (FNET) and its associated FPEC
SDEF sl LOC	Set default MMI mode on FNET and FPEC of Fibre superloop sl: MMI mode (Local)
SDEF sl REM	Set default MMI mode on FNET and FPEC of Fibre superloop sl: SL-1 mode (Remote)

Alphabetical list of commands

Command	Description	Pack/Rel
AHIN sl	Print all history file (log file) of Fibre superloop sl.	rem_ipe-22
AHIP pc	Print all history file of Fibre Peripheral Controller pc.	rem_ipe-22
CDSP	Clears the maintenance display on active CPU to 00 or blank.	rpe-1
CLPM sl	Clears all performance monitoring counters of Fibre superloop sl (FNET) and its associated FPEC.	rem_ipe-22
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Resets minor alarm indication on attendant consoles for all customers.	rpe-1
CMIN c	Reset minor alarm indication on attendant consoles for customer c (not applicable for Release 22).	rpe-1
DISC loop c	Disable carrier c on RPE loop. Any active calls using this carrier will be disconnected.	rpe-1
DISI loop c	Disable carrier c on RPE loop when idle. Disables the carrier as soon as it has become idle. The number of channels still busy on the carrier may be checked using the STAT command. The message RPD018 indicates that the disable operation is complete.	rpe-1
DISL loop	Disable specified RPE loop. Any active calls on the loop are disconnected and line transfer occurs at the remote end.	rpe-1
DISM loop	Disable carrier status monitoring on RPE loop. Carrier failures are not detected while this command is in effect. The command is canceled by the ENLM or ENLL commands.	rpe-1
DSOP sl PRI	Disable optical link of Fibre superloop sl, link Primary. If that link is active, protection switching occurs. If protection switching is not available, and the FNET is enabled, the command is refused.	rem_ipe-22

DSOP sl SEC	Disable optical link of Fibre superloop sl, link Secondary. If that link is active, protection switching occurs. If protection switching is not available, and the FNET is enabled, the command is refused.	rem_ipe-22
END	Abort current command. If no command is in progress, the active DISI command (if any) is canceled.	rpe-1
ENLC loop c	Enable carrier c on RPE loop. If the operation is successful, OK is output.	rpe-1
ENLL loop	Enable RPE loop. Implies ENLM also. If the operation is successful, OK is output. If the loop is already enabled, RPD007 is output.	rpe-1
ENLM loop	Enable carrier status monitoring on RPE loop.	rpe-1
ENOP sl PRI	Enable optical link of Fibre superloop sl, link Primary. The command fails if the packet is not physically there.	rem_ipe-22
ENOP sl SEC	Enable optical link of Fibre superloop sl, link Secondary. The command fails if the packet is not physically there.	rem_ipe-22
FDEF sl	Query default MMI mode on FNET and FPEC of Fibre superloop sl. The system response is: FNET: L/R FPEC: L/R Where: L = local and R = remote	rem_ipe-22
FNET ALL	Print current status of all Fibre superloops. The same as FNET sl but repeated for all Fibre superloops in the system.	rem_ipe-22

FNET sl

Print status of Fibre superloop sl (FNET) and its optical packets. The first line prints the general status of the card and includes:

rem_ipe-22

1.

enable/disable status (known by Software)
2.

PLL status
3.

NNDC (indicates that new data calls are disallowed on this superloop)

The next two lines print the status of the packets:

1.

enable/disable status (known by Firmware)
2.

activity (if selected as active for incoming voice/data)
3.

ALM_LVL - alarm level
4.

ALM_EOI - alarm Electro-Optical Interface (EOI)

Presented below is an example of this general Output format, showing possible values. Bold characters indicate fixed titles.

FNET: n	enabled/disabled	locked/unlocked	NNDC/ <blank>	
PACKLETS:	F/W State	Activity	ALM_LVL	ALM_EOI
Primary:	enabled	RCV	unequipped	Rx
	disabled	idle	S.F.	Tx
	transmission tested		S.D.	Rx Tx
			No alarm	No alarm
Secondary:	enabled	RCV	unequipped	Rx
	disabled	idle	S.F.	Tx
	transmission tested		S.D.	Rx Tx
			No alarm	No alarm

Where:

1.

unequipped = the optical packet is physically absent. Firmware treats this as Signal Fail.
2.

S.F. = Signal Fail = Out of service. Loadware either switches to the other link or declares “No active link” if Protection Switching (PS) was not possible.
3.

S.D. = Signal Degradation = Deteriorated performance. Firmware either switches to the other link, or else the data calls are disallowed if Protection Switching (PS) was not possible. Software handles this state as NNDC.
4.

Rx = Receiver alarm
5.

Tx = Transmitter alarm

FNTT sl	Test specified Fibre superloop sl (FNET). The Firmware performs a self-test of hardware components and reports results to software. Optical packlets, if present, are also tested. If the FNET is enabled, only the non-active packlet is tested without affecting service. The response may be: TEST PASSED or TEST FAILED REASON <reason#>	rem_ipe-22
FPCT pc	Test specified Fibre peripheral controller pc (FPEC). The Firmware performs a self-test of hardware components and reports results to software. Optical packlets, if present, are also tested. If the FPEC is enabled, only the non-active packlet is tested without affecting service. The response may be: TEST PASSED or TEST FAILED REASON <reason#>	rem_ipe-22
FPEC pc	Print status of Fibre peripheral controller pc (FPEC) and its optical packlets. The first line prints the general status of the card. The next two lines print the status of the packlets. See FNET description for more detail.	rem_ipe-22
FSTA sl	Print the transmission test status of Fibre superloop sl.	rem_ipe-22
FSTP sl	Stop the transmission test. Print test status of Fibre superloop sl.	rem_ipe-22

FTST sl test (h/m/s)	Perform specified transmission test of Fibre superloop sl for time tm. Where: - test = 1 for FNET primary packetlet ; 2 for FPEC primary packetlet ; 3 for FNET secondary packetlet ; 4 for FPEC secondary packetlet - tm = H/M/S = test duration. This field is optional. The duration can be either: - H for hours (1-24) - M for minutes (1-255) - S for seconds (1-255) If a duration is not entered, then Firmware performs a quick test and reports the results to software. The system response will then be TEST SUCCESS or TEST FAILED. If duration is entered, then firmware starts testing and sends an acknowledge message to software. The system response will be TEST STARTED. These transmission tests can only be executed on the standby or disabled link.	rem_ipe-22
LDIS loop c	List all speech channels that failed continuity test on RPE loop, carrier c. If no channels failed, response is NONE. The response is based on the results of the most recent tests (via the LOOP command) of the carrier.	rpe-1

LOOP loop	Perform various tests on RPE loop. Performs the following tests: 1. tests idle timeslots of network connection memory 2. tests signaling channel to the LCB pack 3. tests idle timeslots of the RPS connection memory 4. tests speech continuity to remote site, using idle channels If all tests pass, system response is OK. Any connection memory or channel faults detected results in the affected channel being disabled. To completely check the loop, this command may be run twice, once with each carrier being primary, by using the SCAR command between tests. This command does not test signaling to PE packs on the loop. To test signaling, use LD 30 or LD 45.	rpe-1
LRPE	List all equipped RPE loops. If no RPE loops exist, the response is NONE.	rpe-1
MNSN sl	Manual switch on Fibre superloop sl (FNET). The FNET loadware switches between the active link and the standby link.	rem_ipe-22
MNSP pc	Manual switch on Fibre peripheral controller pc (FPEC). The FPEC loadware switches between the active link and the standby link.	rem_ipe-22
NCAR loop	Get number of "carrier status change" messages for RPE loop. This outputs the number of messages received from the RPE loop since the most recent running of the midnight routines, initialize or loop enable. Response is: • LCB: XX • CAR 0: YY, CAR 1: ZZ The Local Carrier Buffer (LCB) pack gives the total number of messages received. CAR 0 and CAR 1 indicate the number of those messages which indicated a change of state of the corresponding carrier. The count for each carrier is reset when the carrier is manually enabled or at midnight.	rpe-1

LD 33

A large number of messages received (particularly on one carrier only), may indicate a transient fault on the affected carrier.

NHIN sl	Print new history file of Fibre superloop sl (FNET)	rem_ipe-22
NHIP pc	Print new history file of Fibre peripheral controller pc (FPEC)	rem_ipe-22
PRPM sl	Print performance monitoring report for Fibre superloop sl (FNET) and its associated FPEC.	rem_ipe-22
SCAR loop	Switch primary carrier on RPE loop. This command is allowed only if the current non-primary carrier is enabled, and no faults exist on the current non-primary carrier (which would reduce the number of working speech channels if it becomes the primary carrier).	rpe-1
SDEF sl LOC	Set default MMI mode on FNET and FPEC of Fibre superloop sl : MMI mode (Local)	rem_ipe-22
SDEF sl REM	Set default MMI mode on FNET and FPEC of Fibre superloop sl : SL-1 mode (Remote)	rem_ipe-22
STAT	Get number of busy channels on specified carrier in the active DISI request. If no DISI request is active, error code RPD022 is output.	rpe-1
STAT loop	Get status of RPE loop. Response will be one or more of the following: 1. x BUSY, x DSBL = number of busy/disabled speech channels on the loop. 2. x NWK MEM FLTS = number of speech channels disabled due to fault in connection memory of network. 3. LCB DSBL = carrier monitoring function of LCB pack disabled 4. CTYF : l1 l2 = cannot receive speech from loops l1, l2, etc., based on most recent test run by the background diagnostic (LD 45).	rpe-1

5. DSBL : RESPONDING = loop is disabled but can still communicate with the CPU. The loop may have been disabled manually, as the result of the disabling of some other pack (e.g., associated Peripheral Signaling pack) or by an overload condition. If the loop was disabled because of overload, the overload condition may recur if the loop is re-enabled.
6. DSBL : NOT RESPONDING = loop is disabled and cannot communicate with the CPU. The Network pack may be missing or faulty, or not responding because of the removal or failure of other packs, e.g., CE extenders.

STAT loop ALL Get status of the RPE loop, carriers and RPS card. rpe-1

Response is:

x BUSY, y DSBL
 CAR 0: x BUSY, y DSBL PRIME
 CAR 1: x BUSY, y DSBL
 RPS: x MEM FLTS

Where:

x BUSY, y DSBL = number of busy and disabled channels for the RPE loop and each carrier (CAR0 and CAR1).

PRIME = indicates which carrier is currently the primary one.

RPS: x MEM FLTS = number of faults in the memory connection of the RPS card.

STAT loop c Give status of carrier c on RPE loop. rpe-1

Response is one or more of:

1. x BUSY, y DSBL = number of busy channels and number of channels having continuity failure on this carrier
2. PRIME = indicated carrier is currently the primary one.
3. DSBL = carrier is disabled.
4. LOOP DSBL = loop is disabled.

STAT loop RPS x rpe-1

Get status of RPS card x on specified RPE loop.

LD 33

Results are based on the most recent tests. Response is one of:

1. x MEM FLTS = number of faults in the connection memory of the RPS card
 2. NOT RESPONDING = card failed to respond (this message does not necessarily indicate a RPS fault)
 3. LOOP DSBL = loop is disabled.
-

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 34: Tone and Digit Switch and Digitone Receiver Diagnostic

This program tests circuit cards used in generating and detecting tones in the Meridian 1/Meridian SL-1 system. If loaded automatically in background or as part of the daily routines, it tests the hardware and performs fault detection and isolation. If invoked manually, commands can be issued to conduct the entire test or only certain parts of the test and to change card status.

The program tests the following circuit cards:

- Tone and Digit Switch (TDS)
- Flexible Tone and Digit Switch
- Digitone Receiver (DTR)
- Tone Detector
- Dial Tone Detector
- Extended Tone Detector (XTD)

TDS circuit card outpulsers and channels are checked for timing errors, memory faults and Digitone frequency accuracy. Digitone receivers are checked for response to all Digitone frequencies. Tones and outpulses are tested from a maintenance set.

Basic commands

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMAJ	Clear major alarm and reset power fail transfer
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DISD l s c	Disable the specified Meridian 1/Meridian SL-1 Tone Detector card
DISD l s c u	Disable specified Dial Tone Detector
DISL loop	Disable tone and digit loop
DISR l s c (u)	Disable specified DTR/MFR card or unit. Applies to DTR or XTD packs.
DISX l	Disable Conf/TDS/MFS card on loop l and l + 1
DTD l s c u	Test specified Dial Tone Detector unit. Applies to DTD and XTD packs.
DTR l s c (u)	Test specified Digitone receiver card or unit. Applies to DTR and XTD packs.
END	Stop execution of current command
ENLD l s c (u)	Enable Tone Detector on specified card or unit
ENLL loop	Enable tone and digit loop
ENLR l s c (u)	Enable the DTR/MFR card or unit. Applies to DTR and XTD packs.
ENLX l	Enable Conf/TDS/MFS card on loop l and l + 1
MFR	Test all Automatic Number Identification Feature Group D Multifrequency receiver units
MFR loop	Test all Automatic Number Identification Feature Group D Multifrequency receiver units on specified loop
MFR l s c (u)	Test Automatic Number Identification Feature Group D Multifrequency card or unit
SDTR l s c (u)	Get status of specified DTR/MFR or XTD card or unit.
STAD	List all disabled Tone Detector units
STAD l s c (u)	Get status of Tone Detector card or unit
STAT	List TNs of all disabled DTRs and MFRs
STAT loop	Get status TDS loop
TDET l s c (u)	Perform self-test and tone detection on specified card or unit
TDS loop	Test outpulsers and channels on specified loop

Extended Tone Detector (XTD) commands

The following commands are applicable to the NT5K20 and NT5K48 XTD cards:

DISR l s c (u)	Disable the specified XTD card (or unit)
DTR l s c u	Test the specified XTD unit as a Digitone receiver unit
ENLR l s c (u)	Enable the specified XTD card (or unit)
SDTR	List Terminal Numbers (TN) of all disabled DTR units
SDTR l s c (u)	List the status of the specified XTD card (or unit)

Maintenance telephone commands

The following commands are used from a Maintenance telephone to test and hear the various tones. Both the command and the dial pad equivalents (in parentheses) are shown.

ANNx#loop## (266x#loop##)	basic-6
Provides signals coming through source number x of KAPSCH Digital Announcer or Music Interface. Where loop = Tone and Digit Switch loop number)	
BSY#loop## (279#loop##)	basic-1
Provide busy tone from tone and digit loop.	
C## (2##)	basic-1
Remove any active tone.	
CMP#loop## (267#loop##)	basic-1
Provide Camp-On tone from loop.	
CUST#xx## (2878#xx##)	basic-1
Test outpulsing for customer XX.	
CWG#loop## (294#loop##)	basic-1
Give call waiting tone from loop.	
DIA#loop## (342#loop##)	basic-1
Provide dial tone from tone and digit loop.	
DRNG#loop## (3764#loop##)	basic-1
Provide distinctive ringing from loop.	
ITN#loop## (486#loop##)	basic-1
Provide intrusion tone from loop.	
JDRG#loop## (5374#loop##)	basic-8
Provide distinctive ringing from loop.	
JIDT#loop## (5438#loop##)	basic-8
Provide interrupted dial tone from loop.	
OPS#loop#x## (677#loop#x##)	basic-1
Test outpulsing from Meridian 1/Meridian SL-1 to idle trunk.	

ORD#loop## (673#loop##)	basic-1
Provide override tone from loop.	
OVF#loop## (683#loop##)	basic-1
Provide overflow tone from loop.	
PCRT#loop## (7278#loop##)	pcr-7
Test the Paid Call Restriction (PCR) tone after the TABL command.	
RBK#loop## (725#loop##)	basic-1
Provide ringback tone from loop.	
RNG#loop## (764#loop##)	basic-1
Provide ring tone from loop.	
SDL#loop## (735#loop##)	basic-1
Give special dial tone from loop.	
TABL#xx## (8225#xx##)	basic-1
Select table number xx. If this command is not issued before any tone request command, then table 0 is assumed (Generic X11 with supplementary features).	
TLP#loop## (857#loop##)	basic-4
Provide tone to last party from the tone and digit loop.	
TST#loop## (878#loop##)	basic-1
Provide test tone from loop.	
XCTT#loop##t#c## (9288#loop##t#c##)	xct-15
Test tone and cadence number on Conference/TDS/MFS card.	

Alphabetical list of commands

Command	Description	Pack/Rel
ANNx#loop## (266x#loop##)	Provides signals coming through source number x of KAPSCH Digital Announcer or Music Interface. Where: loop = Tone and Digit Switch loop number.	basic-6
BSY#L## (279#L##)	Provide busy tone from tone and digit loop L.	basic-1
C## (2##)	Remove any active tone.	basic-1
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
CMP#loop## (267#loop##)	Provide Camp-On tone from loop.	basic-1
CUST#xx## (2878#xx##)	Test outpulsing for customer XX.	basic-1
CWG#loop## (294#loop##)	Give call waiting tone from loop.	basic-1
DIA#L## (342#L##)	Provide dial tone from tone and digit loop L.	basic-1
DISD I s c	Disable the specified Meridian 1/Meridian SL-1 Tone Detector card. Disables both units and lights the LED.	basic-1
DISD I s c u	Disable specified Dial Tone Detector. If both units on the card are disabled, the LED lights.	basic-1

DISL loop	Disable tone and digit loop. For Conference/TDS/MFS cards see note with ENLL command.	basic-1
DISR l s c (u)	Disable specified DTR/MFR or XTD card or unit.	xtd-8
DISX l	Disable Conf/TDS/MFS card on loop l and l + 1. Disables the entire combined Conference, Tone and Digit Switch, and MF Sender (NT8D17) card. Both the even numbered TDS/MFS loop and adjacent conference loop are disabled. loop = 0, 2, 4, . . . 158 The DISL and ENLL commands can be used on the even number loop for the TDS/MFS functions. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The DISX and ENLX commands are recommended. The ENLX command must be used if the DISX command was used to disable the card. This command can be used in LD 34, LD 38 and LD 46.	xct-15
DRNG#loop## (3764#loop##)	Provide distinctive ringing from loop.	basic-1
DTD l s c u	Test specified Dial Tone Detector unit. Applies to DTD and XTD packs. The Dial Tone Detector Test (DTDT) parameters must be configured in the configuration record (LD 17). Faulty DTD packs are disabled. Only 50% of all Dial Tone Detectors in the system may be disabled.	xtd-8
DTR l s c (u)	Test specified unit on Digitone receiver card or unit. This test may be performed while the card is enabled or disabled. If a disabled card passes the test, it is enabled automatically. This command also applies to the XTD.	xtd-8
END	Stop execution of current command.	basic-1
ENLD l s c (u)	Enable Tone Detector on specified card or unit.	basic-1

ENLL I	Enable tone and digit switch loop I. For Conference/TDS/MFS cards the DISX and ENLX commands must be used whenever the faceplate switch of the card has been toggled. ENLL will software enable the card but the card will not be properly reset.	basic-1
ENLR I s c (u)	Enable the DTR/MFR or XTD card or specified unit.	xtd-8
ENLX I	Enable Conf/TDS/MFS card on loop I and I + 1. This command can be used in LD 34, LD 38 and LD 46. Enables the entire combined Conference, Tone and Digit Switch, and MF Sender (NT8D17) card. Both the even numbered TDS/MFS loop and adjacent conference loop are enabled. (loop = 0, 2, 4, . . . 158) The Conf/TDS card is not enabled automatically when it is inserted. Both loops must have been previously disabled. This command initiates card tests and the download of software. The DISL and ENLL commands can be used on the even number loop for the TDS/MFS functions. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The DISX and ENLX commands are recommended. The ENLX command must be used if the DISX command was used to disable the card. Enabling more than 16 conference loops may cause the system to lock-up.	xct-15
ITN#loop## (486#loop##)	Provide intrusion tone from loop.	basic-1
JDRG#loop## (5374#loop##)	Provide distinctive ringing from loop.	basic-8
JIDT#loop## (5438#loop##)	Provide interrupted dial tone from loop.	basic-8
MFR	Test all Automatic Number Identification (ANI) Multifrequency receiver units.	fgd-17
MFR loop	Test all Automatic Number Identification (ANI) Multifrequency receivers on this loop.	fgd-17

MFR l s c (u)	Test Automatic Number Identification (ANI) Multifrequency receiver card or unit.	fgd-17
OPS#L#xx## (677 #L #xx##)	Test outpulsing from Meridian 1/Meridian SL-1 to idle trunk. Outpulses from tone and digit loop l using the 10 or 20 pps outpulser to any idle trunk. This command connects the Meridian 1/Meridian SL-1 maintenance telephone to the trunk, permitting a test call on the trunk to be made using the outpulsers selected. Where: xx = 10 or 20 representing the trunk class of service (LD 14 CLS = P10 or P20). When the test call is completed, LD 34 must be reloaded by dialing SPRE + 91 before entering another command.	basic-1
ORD#loop## (673#loop##)	Provide override tone from loop.	basic-1
OVF#L## (683#L##)	Provide overflow tone from loop L.	basic-1
PCRT#loop## (7278#loop##)	Test the Paid Call Restriction (PCR) tone after the TABL command.	pcr-7
RBK#L## (725#L##)	Provide ringback tone from loop L.	basic-1
RNG#L## (764#L##)	Provide ring tone from loop L.	basic-1
SDL#loop## (735#loop##)	Give special dial tone from loop.	basic-1
SDTR	List the TNs of all disabled DTR/MFR or XTD units	xtd-8
SDTR	List all disabled DTR units	basic-1

LD 34

SDTR l s c (u)	Get status of specified DTR/MFR or XTD card or unit. If no parameters are entered, a list of all DTR/MFR TNs is output. If l s c is input, the status of the DTR/MFR units on the specified card are output. If l s c u is input, the status of the specified unit is output. Applies to DTR and XTD packs.	basic-1
STAD	List all disabled Tone Detector units.	basic-1
STAD l s c (u)	Get status of Tone Detector card or unit. The status is either idle, busy, maintenance busy or not equipped.	basic-1
STAT	List TNs of all disabled Digitone Receivers. NONE is output if there are no disabled Digitone Receivers.	basic-1
STAT loop	Get status TDS loop. The response may include OPS DSBL, indicating that the outpulsing function of the TDS card has been disabled.	basic-1
TABL#xx## (8225#xx##)	Select table number xx. If this command is not issued before any tone request command, then table 0 is assumed (Generic X11 with supplementary features).	basic-1
TDET l s c (u)	Perform self-test and tone detection on specified card or unit. Performs the self-test and basic tone detection functions of the Meridian 1/Meridian SL-1 Tone Detector card or unit. This test may be performed while the card is enabled or disabled. If a disabled card passes the test, it is enabled automatically.	basic-1
TDS loop	Test outpulsers and channels on specified loop. Tests the outpulsers and channels of the tone and digit switch at loop. Outpulsers and tones are tested with a maintenance telephone (see commands from maintenance telephone).	basic-1
TLP#loop## (857#loop##)	Provide tone to last party from the tone and digit loop.	basic-4
TST#loop## (878#loop##)	Provide test tone from loop.	basic-1

XCTT# L#t#c## (9288# L#t#c##)

xct-15

Test tone and cadence number on Conference/TDS/MFS card.

Where:

- L = loop number of Conference/TDS/MFS (NT8D17) card
- t = tone number
- c = cadence number

Refer to Flexible Tone and Digit Switch cards (553-2711-180) for the Conference/TDS tone and cadence numbers.

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 35: Common Equipment Diagnostic

This program is used to maintain the Central Processing Unit (CPU) and related cards. It can be run in background, during the daily routines, or loaded manually to enter commands. Problems are reported by CED messages.

The CED program is used to:

- clear the maintenance display to 00 or blank
- switch CPUs in dual-CPU systems
- test the idle CPU in dual-CPU systems
- display the status of CPU and buses
- enable, disable, test, and display status of memory and CMA cards
- enable, disable and display the status of CE extenders

When loaded during daily routines, memories cards are tested. If there are two CPUs, a CPU switchover is made.

This Overlay applies to all systems EXCEPT Options 51C, 61C, 81 and 81C. Refer to LD 135 for Core Common Equipment Diagnostics.

Extender designations

Extender Codes for LD 35 (CED)

0M0—from CPU 0 to Memory Shelf 0

0M1—from CPU 0 to Memory Shelf 1

1M0—from CPU 1 to Memory Shelf 0

1M1—from CPU 1 to Memory Shelf 1

0G0—from CPU 0 Network Group 0

0G1—from CPU 0 Network Group 1

0G2—from CPU 0 Network Group 2

0G3—from CPU 0 Network Group 3

0G4—from CPU 0 Network Group 4

1G0—from CPU 1 Network Group 0

1G1—from CPU 1 Network Group 1

1G2—from CPU 1 Network Group 2

1G3—from CPU 1 Network Group 3

1G4—from CPU 1 Network Group 4

Basic commands

BATT	Check status of memory battery backup (STE and Option 21E only)
CDSP	Clear the maintenance display on active CPU to 00 or blank
CMAJ	Clear major alarm and reset power fail transfer
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DIS xx	Disable memory card xx
DIS CMA x	Disable Changeover and Memory Arbitrator (CMA) x
DIS EXT xxx	Disable the specified extender pair
DIS SBE	Disable the Segmented Bus Extender (SL-1 MS only)
DSPL	Get contents of maintenance display on the active CPU
END	Terminate test in progress
ENL xx	Enable and perform a memory test on card x
ENL CMA x	Enable Changeover and Memory Arbitrator (CMA) x
ENL EXT xxx	Enable specified extender pair
ENL SBE	Enable Segmented Bus Extender (SL-1 MS only)
FCNT	Print soft failure counts of all memory modules
IDC ICM	Print card ID for Integrated CPU with 4Meg Memory (ICM). (STE and Option 21E only)
IDC MSPS	Print card ID for Misc/SDI and PS (MSPS). (STE and Option 21E only)
LDIS	List disabled memories
LENL	List enabled memories
MEM xx	Perform memory test on module xx
MIDN	Run midnight (daily) routines once CED is aborted and the user logs off
REPL xx	Enable new memory card xx
SCPU	Make inactive CPU the active CPU
SHLF X	Perform memory decode fault test on CPU x
STAT CMA x	Get status of CMA x
STAT CPU	Output status of both CPUs
STAT EXT	Output extender pair designations
STAT EXT xxx	Output status of specified extender
STAT MEM	Output status of all memory cards
STAT MEM xx	Output status of memory card xx

LD 35

STAT SBE	Print status of Segmented Bus Extender (SL-1 MS)
TCPU	Test inactive CPU in a dual CPU system

Alphabetical list of commands

Command	Description	Pack/Rel
BATT	Check status of memory battery backup. (STE and Option 21E only). The response is OK or CED503.	basic-18
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
DIS xx	Disable memory card xx. (xx is a 2-digit number) The first digit specifies which CPU the card is associated with and the second specifies the memory card number. All memory cards associated with that CPU must be disabled before removing the card.	basic-1
DIS CMA x	Disable Change over and Memory Arbitrator (CMA) x. Disables the specified Change over and Memory (CMA) card. The CMA must be on the idle CPU and all memories served by the CMA must be disabled.	basic-1
DIS EXT xxx	Disables the extender pair specified by xxx. Only extenders on the non active CPU may be disabled. The extender is marked as unusable by the system and it will not attempt to use it, i.e., a CPU change over will not be permitted. LEDs on the card faceplates do not reflect this command. See introduction for extender designations.	basic-1
DIS SBE	Disable the Segmented Bus Extender (SL-1 MS only).	basic-1
DSPL	Get contents of maintenance display. If the maintenance display is blank, 000 will be output.	basic-1
END	Terminate test in progress.	basic-1

ENL xx	Perform memory test on Memory card xx. (xx is a 2-digit number) The first digit specifies which CPU the card is associated with and the second specifies the card number. The card must not be in use by the system. Dual CPU systems only. System response of OK is output and card is enabled if the test is passed.	basic-1
ENL CMA x	Enable Change over and Memory Arbitrator (CMA) x. The CMA must be on the idle CPU.	basic-1
ENL EXT xxx	Enable specified extender pair. Only extenders on the nonactive CPU may be enabled. See introduction for extender designations. The state of the LED on the circuit card faceplate does not reflect this command.	basic-1
ENL SBE	Enable Segmented Bus Extender (SL-1 MS only).	basic-1
FCNT	Print soft failure counts of all memory modules. Response is either (sample):	basic-1

1. For system Options NT, RT, XT, 51, 61 and 71:

<u>CD</u>	<u>MTR</u>	<u>FCNT</u>
0	0	0
0	1	0
0	2	0

Where: CD = memory card number, MTR = Memory Trouble Register on 768K memory board, and FCNT = fault counts on that MTR.

2. For all other system options:

<u>CD</u>	<u>PAGE</u>	<u>LFC</u>	<u>HFC</u>
0	0	3	1
0	1	0	2
0	2	3	2
1	5	2	0
1	6	0	1

Where: CD = memory card number, PAGE = page number, LFC = fault count of low card module, and HFC = fault count of high card module.

Not applicable to SL-1 MS, S, ST or system Option 21.

IDC ICM IDC MSPS	Print card ID for ICM and Print card ID for MSPS. The Integrated CPU with 4Meg Memory (ICM) or Misc/SDI and PS (MSPS) card ID is output in the following format: <pre>PPPPPPPPAA RRSSSS cccccccc@DDDDD</pre> Where: • P P P P P P P P = PEC code • AA = Attribute code • RR = Release number • S S S S = Serial number • c c c c c c c c = Comments (optional) • @ = HEX 01 ASCII SOH character (non printing) • D D D D D = Design code	basic-18
LDIS	List disabled memories. Not applicable to SL-1 MS, S, ST or system Option 21.	basic-1
LENL	List enabled memories. Not applicable to SL-1 MS, S, ST or system Option 21.	basic-1
MEM xx	Perform memory test on module xx. Performs a memory test on module xx, which is a 1- or 2-digit number specifying the card to be tested. If only one digit is entered the memory in CPU 0 is tested. The card does not have to be in the configuration record (CFN) to pass the test. System outputs K if test is passed. The module must be disabled first with the DIS xx command.	basic-1
MIDN	Run midnight (daily) routines once CED is aborted. MIDN causes midnight routines to be run after CED is aborted or logged out.	basic-1
REPL xx	Enable new memory card xx. (xx is a 2-digit number) The first digit specifies which CPU the module is associated with and the second specifies the memory module number. This command is used to enable a new memory module after inserting it into the shelf. It sets the soft memory failure count zero and tests the module. If the tests are successful the module is enabled.	basic-1

SCPU	Make inactive CPU the active CPU. In a dual CPU system, this command causes the inactive CPU to become the active CPU. If the changeover is successful, OK is output. This command cannot be used when the active CPU is in maintenance mode. Caution: Indiscriminate use of this command should be avoided as system reload may occur.	basic-1
SHLF x	SHLF x performs a memory decode fault test on the disabled memories corresponding to the specified CPU x (0 or 1). To use this test, disable the memory cards that are to be included in the test and issue the command to the appropriate shelf. If individual tests of memory cards using the MEM command pass but the SHLF test fails on the same modules, then the CMA or controller is probably faulty.	basic-1
STAT CMA x	Get status of CMA x. Response is: CMA x ACTIVE y MEM = CMA is being used CMA x DSBL y MEM = CMA is disabled CMA x ENBL y MEM = CMA is enabled but in a standby state Ignore the value y for memory. Use STAT MEM to check memory status.	basic-1
STAT CPU	Outputs the status of both CPUs. Responses are: • ENBL = CPU is running • IDLE = CPU is in standby • DSBL = CPU is disabled Not applicable to Meridian SL-1 MS or S.	basic-1
STAT EXT	Output extender pair designations. This command outputs the extender pair designation and if disabled indicates the number of devices on the network shelf connected to the extender that would become inaccessible if a CPU changeover occurs. If the extender has been disabled by using the DIS EXT command, then the number output will be equal to the number of devices on the shelf. See introduction for extender designations.	basic-1

STAT EXT xxx	Output status of specified extender. For extenders to network shelves, the response is: • x <status> <y NET> Where: 1. x <status> = status of extender x and can be one of: a ENBL = the extender is enabled. b DSBL = the extender is disabled. c LEFT DSBL = only the left half of the group served by the extender is disabled; i.e., shelf 0. d RIGHT DSBL = only the right half of the group served by the extender is disabled; i.e., shelf 1 2. y NET = the number of network and PS cards that do not respond when accessed using the specified extender but do respond when the extender from the other CPU is used.	basic-1
STAT MEM	Outputs the status of all Memory cards, i.e., how many cards enabled and how many disabled. Use STAT MEM xx for status of a specific card.	basic-1
STAT MEM xx	Output status of memory card xx. (xx is a 2-digit number) The first digit specifies which CPU the module is associated with and the second specifies the memory module number. Responses are: • ENBL = module is enabled • ENBL BUT FAULTY = module is enabled but faulty • REPL = module is replaced • DSBL = module is disabled • UNEQ = module is missing or not configured	basic-1
STAT SBE	Print status of Segmented Bus Extender (SL-1 MS only).	basic-1
TCPU	Test inactive CPU in a dual CPU system. This command tests the inactive CPU. If the CPU passes, OK is output. This command cannot be used when the active CPU is in maintenance mode. Caution: Indiscriminate use of this command should be avoided as system reload may occur.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LDs 36, 41: Trunk Diagnostic

Insufficient space in the Overlay area requires the trunk diagnostic to be split into two programs. Overlay 41 is an extension of Overlay 36. Overlay 41 is not applicable with X11 Release 20 and later software.

The programs allow trunks to be tested from either the Meridian 1/Meridian SL-1 site or a remote test center.

When testing from a Meridian 1/Meridian SL-1 site, individual trunks can be seized and a test call can be performed on the trunk in the normal manner.

When testing from a remote test center, a speech path must be set up to monitor the testing. This is accomplished by having the Meridian 1/Meridian SL-1 system call a directory number (DN) at the test center. This allows for dial tone, outpulsing and test tones to be monitored as tests are performed on other trunks by inputting commands at the TTY.

When a trunk is seized, the system prompts DN? for a DN. When the DN is input, the system calls that number automatically. When the call is answered a pure tone indicates the validity of the speech path. New trunks can be tested in the same manner with the maintenance telephone.

Note 1: When the French (FRTA) package 197 is enabled the units on CO trunks are not busied when they are disabled.

Note 2: When the Trunk Failure Monitor (TFM) package 182 is enabled, a failed trunk is displayed as BUSY. The enable/disable command does not enable or disable the failed trunk unit (it stays in the BUSY state).

When to use LD 36 and LD 41

Use either LD 36 or LD 41 to:

- clear minor alarms and the maintenance display
- query threshold overflows for specific customers and routes
- reset thresholds for specific trunks

Use LD 36 to:

- query number of days since an incoming call was received for a specific customer and route or trunk
- query the trunk with the most number of idle days for a specific customer and route
- query trunks for which no disconnect supervision was received
- test Automatic Number Identification (ANI) trunks.

Note: When defined as a midnight routine, this program searches for trunks not used during the day and updates the total number of days the trunks have been idle.

Use LD 41 to:

- test AIOD (Automatically Identified Outward Dialing) trunks in the system
- enable, disable and request the status of Trunk circuit cards. (Disabled DID trunks are placed in the answer state)

Note: LD 36 and LD 41 can only be used for analog trunks, LD 60 must be used for diagnostics on digital trunks.

Trunk Error Thresholds

Resident programs monitor all calls and note apparent errors. The errors are accumulated and, if they occur consistently (exceed a threshold) on any trunk, a diagnostic message which identifies the trunk is output to the TTY or printer. The trunk should be suspected of trouble and a manual test should be performed on the trunk.

A record is kept in memory for each threshold violation error message. At any time, all trunks which have been identified by such a message may be listed by entering the command LOVF for any trunk route. Once an identifying message has been printed, it will not be repeated for that trunk until the RSET command is entered for that trunk or an initialization has occurred.

Potentially, a trunk may fail by not detecting incoming calls. The Meridian 1/Meridian SL-1 threshold mechanism cannot be used to detect such failures so the Meridian 1/Meridian SL-1 maintains for each trunk a count of the number of days since an incoming call was received on each trunk.

Thus, customer reports that indicate incoming calls are not being processed can initiate a check for the trunk which has been without an incoming call for the longest interval via the LMAX command. This trunk should be tested first.

It is possible to determine for each trunk the number of days since an incoming call was processed via the LDIC command. Subsequent trunk tests should be performed on those trunks showing the highest counts until the trouble is located.

LDs 36, 41

Basic commands (LD 36)

CALL	Set up monitor link with test center
CALL I s c u	Set monitor link with test center on this trunk
CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DISC I s c	Disable specified card for replacement
DISU I s c u	Disable specified unit
END	Terminate test in progress
ENLC I s c	Enable specified card
ENLU I s c u	Enable specified unit
LDIC c r	List number of days since last incoming call for specified customer and route
LDIC I s c u	List number of days since last incoming call on specified trunk
LMAX c r	List trunk with maximum idle days for specified customer and route
LNDS c r	List trunks with no disconnect supervision for specified customer and route
LOVF c r	List threshold overflows for specified customer and route
RAN c r	Test recorded announcement device for specified customer and route
RLS	Release trunk being tested
RSET I s c u	Reset thresholds for specified trunk
STAT I s c	Check card's software status
TRK I s c u	Seize trunk for testing
TPPM I s c u	Test the specified PPM trunk

Note: If a trunk unit is controlled by APNSS, the STAT command will display the status of the D-channel.

Basic commands (LD 41)

Overlay 41 is not available with X81 Phase 6 and later software or X11 Release 20 and later software.

AIOD I s c	Test AIOD card
AIOD MSG I s c	Output codes transmitted to Public Telephone Rated Service (PTRS)
CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DISC I s c	Disable specified card for replacement
END	Terminate test in progress
ENLC I s c	Enable specified card
LOVF c r	List threshold overflows for specified customer and route
RSET I s c u	Reset thresholds for specified trunk
STAT I s c	Check card's software status

Alphabetical list of commands

Command	Description	Pack/Rel
AIOD I s c	Test AIOD card. Not available in Release 9 and later.	basic-1
AIOD MSG I s c	Output codes transmitted to PTRS. Output on TTY all 8-digit codes bring transmitted to PTRS by AIOD card. Response is OK if monitor is set. Not available in Release 9 and later.	basic-1
CALL	Set up monitor link with test center. Same as the CALL I s c command except any PTRS trunk in the system can be selected. The CALL command must be terminated using the * command.	basic-1
CALL I s c u	This command sets up a monitor link (call) between the Meridian 1/ Meridian SL-1 and the test center on the trunk specified. The system prompts "DN?" for the directory number. When the PTRS directory number is entered, the system calls up that number automatically. When the call is answered, a pure tone indicates the validity of the link. This sequence can take up to 14 seconds on a trunk without answer supervision. The END command disconnects the call. The CALL I s c u command is not allowed when the diagnostic program is being run from a maintenance telephone. During the CALL command, On-Hook and Off-Hook signals from the maintenance telephone may initiate BUG105. When the monitor is enabled, a failed trunk is displayed as BUSY. The enable/disable command does not enable or disable the failed trunk unit (it stays in the BUSY state).	basic-1
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1

CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-1
DISC I s c	Disable specified card for replacement.	basic-1
DISU I s c u	Disable specified unit.	basic-1
END	Terminate test in progress	basic-1
ENLC I s c	Enable specified card. If the card resides on a disabled shelf, its status is output and the enable is not performed. If the card has been disabled by an overload, the overload status is cleared.	basic-1
ENLU I s c u	Enable specified unit. If unit resides on a disabled shelf or card, then status is output and enable is not performed.	basic-1
LDIC c r	List number of days since last incoming call for specified customer (c) and route (r).	basic-1
LDIC I s c u	List number of days since last incoming call on specified trunk.	basic-1
LMAX c r	List trunk with maximum idle days for specified customer and route	basic-1
LNDS c r	List trunks with no disconnect supervision for specified customer and route. (trunks for which no disconnect supervision was received, i.e., terminating party not going On-Hook after a call)	basic-1
LOVF c r	List threshold overflows for specified customer and route. The overflows are set when the resident trunk monitor outputs a diagnostic	basic-1
RAN c r	Test recorded announcement device for specified customer and route.	basic-1
RSET I s c u	Reset thresholds for specified trunk.	basic-1
STAT I s c	Check card's software status.	basic-1
TPPM I s c u	Test the specified PPM trunk. This command is not applicable when the Meridian 1/Meridian SL-1 is connected to 1 TR 6 international ISDN PRA.	basic-1

TRK I s c u	Seize trunk for testing. Seizes the specified trunk for outpulsing and testing. If the command is issued from a maintenance telephone, dial tone is heard followed by outpulsing when the directory number is entered. If a trunk is to be seized for outpulsing and testing from a remote test center (not a maintenance telephone), a monitor link must first be set up using the CALL I s c u command. This must not be over the trunk to be tested. With the monitor link set up, the TRK I s c u command is input to select the trunk to be tested. The system then prompts with "DN?" and the directory number is input via the TTY. Normal speech path connections are made between the monitor link and the trunk being tested. Disconnect by entering END, by going On-Hook if an SL-1 telephone is used or by entering *. END also disconnects the monitor link. This command cannot be used to seize an ISL trunk.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 37: Input/Output Diagnostic

This program is used to diagnose faults with disk units, tape units, Teletypewriter (TTY) or Serial Data Interface (SDI) cards. It provides enable, disable, status and test functions on these devices. Problems are indicated in IOD messages.

When LD 37 is defined as a daily routine, the program runs only once every 5 days and the primary storage device (disk or tape) is thoroughly tested (equivalent to command MSI 0 or TAPE 0).

Only some of the commands in this Overlay are supported by Options 51C, 61C, 81 and 81C. Refer to LD 137 for core commands.

Refer to LD 48 for I/O ports used with the following applications.

- Command and Status Links (CSL)
- Meridian Link
- Automatic Call Distribution (ACD)
- Integrated System Messaging Link
- Enhanced Serial Data Interface (ESDI) ports

Intelligent links (APL, HSL, LSL, and CMAC)

A warning message is generated each time an intelligent link is accessed (enable, disable, test). The message is generated for the following types of links:

- APL
- ACD-D (HSL/LSL)
- CMAC (CMC)

The message allows the access to be aborted prior to performing the enable, test, etc. The warning appears in the following format:

DIS TTY N (link type) LINK (status) (y/n)

A response of y disables the hardware of the TTY regardless of the software status of the link. The status field provides the software status of the link. Valid status entries are:

- BAD = software status is invalid
- DOWN = link is down
- MAINT = link is up and in maintenance mode
- FULL = link is full
- EMPTY = link is empty
- NOT EMPTY= link still contains data

Disk commands versus tape commands

Various MSI (Mass Storage Interface) commands are not supported on Generic X37 and Generic X08 (prior to Release 12) and if equipped with disk drives, the corresponding TAPE command should be used when testing the MSI as follows:

Disk command	Tape command
DIS MSI x	DIS TAPE x
ENL MSI x	ENL TAPE x
MSI DATA	TAPE DATA
MSI x	TAPE x
MSI RW x	TAPE RW x
MSI SELF x	TAPE CTRL x
STAT MSI	STAT TAPE
STAT MSI x	STAT TAPE x

Use of the TAPE x or TAPE MOTN x commands on a system equipped with disk drives will result in an IOD075 message. This message should be disregarded.

If LD 37 is run as part of the daily routines, an IOD075 message will be output on systems equipped with disk drives. This message should be disregarded.

Basic commands

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DIS MSG	Disable incoming message monitoring for the primary PMSI port.
DIS MSGO	Disable outgoing message monitoring for the primary PMSI port.
DIS MSI x	Disable Mass Storage Interface card x
DIS PRT x	Disable printer x
DIS TAPE x	Disable tape unit x
DIS TTY x	Disable TTY x.
END	Clear all test activity
ENL MSGI	Enable incoming message monitoring for the primary PMSI port.
ENL MSGO	Enable outgoing message monitoring for the primary PMSI port.
ENL MSI x	Enable Mass Storage Interface x
ENL PRT x	Enable printer x
ENL TAPE x	Enable tape unit x
ENL TTY x	Enable TTY x
MSI x	Test Mass Storage unit x
MSI DATA	Test data validity in primary and backup device.
MSI RW x	Test READ/WRITE ability of Mass Storage unit x.
MSI SELF x	Perform self-test on MSI card x and report result.
PRT x	Test printer x
SET MON 0	Set the monitoring display to be in alphanumeric format. This applies to the primary PMSI port.
SET MON 1	Set the monitoring display to be in hexadecimal format. This applies to the primary PMSI port.
STAT	Provide status of all input/output devices in system
STAT LINK	Provide status of all CDR links
STAT LINK x	Provide status of CDR data link x

STAT MON	Get the monitoring status for the primary PMSI port. This command displays the status of the message monitoring for the primary port. For example, if MSGI, MSGO, and SET MON 0 are enabled, the display would be as follows. MSGI:ON MSGO: ON ALPH
STAT MSI	Provide status of all MSI cards
STAT MSI x	Provide status of MSI card x
STAT PRT	Provide status of all printers in system
STAT PRT x	Provide status of printer x
STAT TAPE	Provide status of all magnetic tape devices.
STAT TTY	Provide status of all TTY devices in system Release 19 and later, this command enables you to get the status of the primary PMSI I/O port, and the Single Terminal Access (STA) administration terminal.
STAT TTY x	Provide status of TTY x Release 19 and later, this command also provides the status of the primary PMSI port.
STAT XSM	Provide status of the system monitor
TAPE CTRL x	Test control electronics on tape device x
TAPE DATA	Test data on all 4 tracks
TAPE MOTN x	Test motion and timing on tape device x
TAPE x	Test magnetic tape device x
TAPE RW x	Test READ/WRITE ability of tape device x
TTY x	Test TTY x

Multipurpose Serial Data Link (MSDL) commands

The MSDL provides 4 ports for ISDN Primary Rate D-channel (DCH) and Application Module Link (AML).

The MSDL commands are listed below, **x** is the MSDL device number (defined by prompt DNUM in LD 17). These commands are provided in Link Diagnostic (LD 48) and D-channel Diagnostic (LD 96).

DIS MSDL x (ALL)	Disable MSDL device x (card)
ENL MSDL x (ALL, FDL)	Enable MSDL device x (card, Forced Download)
RST MSDL x	Reset MSDL device x
SLFT MSDL x	Invoke self-test for MSDL device x
STAT MSDL (x) (FULL)	Get status of MSDL card (x) (additional information)

Note: See “Alphabetical List of commands” in LD 48 for a complete description of these commands.

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-1
DIS MSG	Disable incoming message monitoring for the primary PMSI port.	pms-19
DIS MSGO	Disable outgoing message monitoring for the primary PMSI port.	pms-19
DIS MSI x	Disable Mass Storage Interface card x.	basic-1
DIS PRT x	Disable printer x.	basic-1
DIS TAPE x	Disable tape unit x.	basic-1
DIS TTY x	Disable TTY x.	basic-1
END	Clear all test activity.	basic-1
ENL MSGI	Enable incoming message monitoring for the primary PMSI port.	pms-19
ENL MSGO	Enable outgoing message monitoring for the primary PMSI port.	pms-19
ENL MSI x	Enable Mass Storage Interface card x.	basic-1
ENL PRT x	Enable printer x.	basic-1
ENL TAPE x	Enable tape unit x.	basic-1
ENL TTY x	Enable TTY x.	basic-1

MSI x	Test Mass Storage unit x. This command runs the MSI DATA, MSI RW x and MSI SELF x tests.	basic-1
MSI DATA	Test data validity in primary and backup device.	basic-1
MSI RW x	Test READ/WRITE ability of Mass Storage unit x.	basic-1
MSI SELF x	Perform self-test on MSI card and report result.	basic-1
PRT x	Test printer x. Same as TTY test except that no keyboard input is expected and END command is not required. Where: * denotes that the printer is not yet available	basic-1
SET MON 0	Set the monitoring display to be in alphanumeric format. This applies to the primary PMSI port.	pms-19
SET MON 1	Set the monitoring display to be in hexadecimal format. This applies to the primary PMSI port.	pms-19
STAT	Provide status of all input/output devices in system.	basic-1
STAT LINK	Provide status of all CDR links.	basic-1
STAT LINK x	Provide status of CDR data link x.	basic-1
STAT MON	Get the monitoring status for the primary PMSI port. This command displays the status of the message monitoring for the primary port. For example, if MSGI, MSGO, and SET MON 0 are enabled, the display would be as follows. MSGI : ON MSGO : ON ALPH	pms-19
STAT MSI	Provide status of all MSI cards.	basic-1
STAT MSI x	Provide status of MSI card x associated with the active CPU.	basic-1
STAT PRT	Provide status of all printers in system.	basic-1
STAT PRT x	Provide status of printer x.	basic-1
STAT TAPE	Provide status of all magnetic tape devices.	basic-1

STAT TTY	Provide status of all TTY devices in system. Release 19 and later, this command enables you to get the status of the primary PMSI I/O port, and the Single Terminal Access (STA) administration terminal.	basic-1
STAT TTY x	Provide status of TTY x. Release 19 and later, this command also provides the status of the primary PMSI port.	basic-1
STAT XSM	Provide status of the system monitor. If there are no error conditions, PWR000 is output. Otherwise, the appropriate PWR messages are output.	xpe-15
TAPE x	Test magnetic tape device x. This command combines the TAPE CTRL x, TAPE MOTN x, TAPE RW x and TAPE DATA tests.	basic-1
TAPE CTRL x	Test control electronics on tape device x.	basic-1
TAPE DATA	Test data on all 4 tracks.	basic-1
TAPE MOTN x	Test motion and timing on tape device x.	basic-1
TAPE RW x	Test READ/WRITE ability of tape device x.	basic-1
TTY x	Test TTY x. Response is: ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789"#\$%*!&()<>-. : , . ? READY FOR INPUT Anything entered on the keyboard will be echoed until END is input.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 38: Conference Circuit Diagnostic

This program is used to detect and isolate circuit faults on the conference equipment in the system.

LD 38 can detect problems on the conference circuit such as:

- channel faults on the network card which interfaces a conference card to the system
- channel faults on the conference card
- conference faults associated with conferee group numbers
- switching faults controlling the attenuation feature.

The program is used to

- enable a specific conference card
- disable a specific conference card
- check status of channels and conferee groups
- clear alarms and displays

The program allows complete manual control in establishing a test conference, thus allowing the user to listen for noise and distortion. This includes:

- selection of a specific conference card
- selection of a specific conferee group
- stepping through all free channels and groups with special test conference.

Basic commands

CDSP	Clears the maintenance display on active CPU to 00 or blank
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
CNFC loop	Test conference loop
CNFC MAN loop g	Set up for manual conference on conference group g
CNFC STEP	Ready TTY for testing conferee groups
DISL loop	Disable conference loop
DISX loop	Disable Conf/TDS/MFS card on loop and loop - 1
END	Abort all current test activity
ENLL loop	Enable conference loop
ENLX loop	Enable Conf/TDS/MFS card on loop and loop - 1
LCNF loop	List busy and disabled conferee groups on specified loop
STAT loop	Provide status of conference card loop
STAT l s c u	List conference card and group used by specified TN.

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clears the maintenance display on active CPU to 00 or blank.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
CNFC loop	Test conference loop. Tests conference loop for channel, group and switching faults. Note: Both the conference loop and the adjacent TDS/MFS loop must be enabled to run the conference test.	basic-1
CNFC MAN loop g	Set up for manual conference on conference group g. Only one manual conference is be allowed at a time. The conference group range is 1-15. After this command, any telephone dialing SPRE 93 enters the conference, where SPRE is the special service prefix for the system. Going on-hook from that telephone takes it out of the conference. If going On-Hook causes the conference to go from a three-party to a two-party call processing may remove all conference equipment and establish the remaining two parties as a normal call. The END command, which normally removes all telephones in the manual conference, will no longer affect these two telephones, as they are no longer using the conference card. If the CNFC MAN command is entered from a maintenance set, the telephone automatically becomes part of the manual conference.	basic-1
CNFC STEP	Ready TTY for testing conferee groups. Readies the TTY into a special command mode for testing various channels and conferee groups audibly, using two telephones: one to monitor and one to act as a signal source. The CNFC MAN command should have been used previously to set up the two-party conference. Entering C on the command input device will step the conference on to the next available channel.	basic-1

LD 38

Entering G will step to the next available conferee group.
Entering an asterisk (*) will revert back to the normal command mode.

Entering "END" or aborting LD 38 releases the manual conference.

DISL loop	Disable conference loop. For NT8D17 Conference/TDS/MFS cards, see ENLL command.	basic-1

DISX loop	Disable NT8D17 Conf/TDS/MFS card.	xct-15

Disables the entire combined Conference, Tone and Digit Switch, and MF Sender (XCT) card. Both the even numbered and adjacent loop are disabled.

Where: loop = 1, 3, 5,... 159

The DISL and ENLL commands can be used on the even number loop for the conference function. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The DISX and ENLX commands are recommended. The ENLX command must be used if the DISX command was used to disable the card.

This command can be used in LD 34, LD 38 and LD 46.

END	Abort all current test activity. There will be a 30 second time-out dial tone for phones still off-hook.	basic-1

ENLL loop	Enable conference loop.	basic-1

For NT8D17 Conference/TDS/MFS cards the DISX and ENLX commands must be used whenever the faceplate switch of the card has been toggled. ENLL will software enable the card but the card will not be properly reset.

Enabling more than 16 conference loops may cause system to lock-up.

ENLX loop	Enable NT8D17 Conf/TDS/MFS card on loop and loop - 1.	xct-15

Enables all functions on the NT8D17 Conference/TDS card. Both the even numbered TDS/MFS loop and adjacent conference loop are enabled.

Where: loop = 1, 3, 5... 159

If one of the loops is already enabled, it is disabled and then both loops are enabled. The Conf/TDS card is not enabled automatically when it is inserted.

This command initiates card tests, downloads software and can be used in LD 34, LD 38 and LD 46.

The DISL and ENLL commands can be used on the even number loop for the conference function. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The DISX and ENLX commands are recommended.

Enabling more than 16 conference loops may cause the system to lock-up.

LCNF loop	List busy and disabled conferee groups on specified loop.	basic-1
STAT loop	Provide status of conference card loop. Output format is: 1. CNFC N DSBL N BUSY = number of conferee groups disabled and busy 2. CHAN N DSBL N BUSY = number of channels disabled and busy 3. UNEQ = card is not equipped in the system 4. DSBL = card is disabled in software	basic-1
STAT I s c u	Lists which conference card and conferee group is being used by the specified terminal number.	basic-1

LD 39: Intergroup Switch and System Clock Generator Diagnostic

The Intergroup Switch (IGS) and System Clock Generator (SCG) or Clock Controller (CC) diagnostic applies to multi-group systems. It is used to:

- determine the status of any Peripheral Signaling, Intergroup Switch (IGS), System Clock Generator (SCG) or Clock Controller (CC) card
- disable and enable any PS, IGS, SCG or CC card
- switch the system clock from one SCG or CC to another
- clear minor alarm indications and the maintenance display on the active CPU
- All SCG commands can be used for Clock Controllers, although LD 60 is normally used when DTI, CPI or PRI features are installed

Group, loop, and Peripheral Signaling card relationship

<u>Group</u>	<u>Shelf</u>	<u>PS</u>	<u>Loops</u>
0	0	0	0-15
0	1	1	16-31
1	0	2	32-47
1	1	3	48-63
2	0	4	64-79
2	1	5	80-95
3	0	6	96-111
3	1	7	112-127
4	0	8	128-143
4	1	9	144-159

Basic commands

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DIS IGS x	Disables IGS card x (0 to 19)
DIS SCG x	Disable SCG card x (0 or 1)
DISI IGS x	Disables IGS card x (0 to 19) when idle
DSPS x	Disable PS card x (0 to 9)
END	Stop current operation or test
ENL IGS x	Enables IGS card x (0 to 19)
ENL SCG x	Enable SCG x (0 or 1)
ENPS x	Disable PS card x (0 to 9)
SCLK	Switch clock to other SCG
STAT IGS x	Get status of IGS card x (0 to 19)
STAT PER x	Print status of PS card x (0 to 9)
STAT SCG x	Print status of SCG x (0 or 1)

Alphabetical list of commands

Command	Description	Pack/ Rel
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
DIS IGS x	Disables IGS card x (0 to 19).	basic-1
DIS SCG x	Disable SCG card x (0 or 1).	basic-1
DISI IGS x	Disables IGS card x (0 to 19) when idle. Use of this command is recommended instead of DIS IGS, which interrupts calls in progress. The command's progress can be monitored by using the appropriate STAT command. The command's completion is indicated by an output of ISR043 on the maintenance terminal.	basic-1
DSPS x	Disable PS card x (0 to 9).	basic-1
END	Stop current operation or test.	basic-1
ENL IGS x	Enables IGS card x (0 to 19).	basic-1
ENL SCG x	Enable SCG x (0 or 1).	basic-1
ENPS x	Disable PS card x (0 to 9).	basic-1
SCLK	Switch clock to other SCG.	basic-1
STAT IGS x	Get status of IGS card x (0 to 19). The response of "x DSBL y BUSY" indicates the number of junctor timeslots disabled or busy associated with the specified IGS card.	basic-1

LD 39

STAT PER x Print status of PS card x (0 to 9). basic-1

Possible responses:

1. DSBL : NOT RESPONDING = PS card x is either missing, faulty or disabled via the faceplate switch. If there is a fault in the extender pair for the network shelf, the status of the PS card will also be DSBL: NOT RESPONDING.
2. DSBL : RESPONDING = The PS card is disabled and responding to the CPU. The PS may have been disabled by manual request (DSPS) or the associated extender pair may have been manually disabled.

If neither of these conditions exist, the card may have been disabled because of an overload condition on the associated shelf.

Check for OVD messages appearing in previous TTY output. An attempt to enable a PS card which was disabled because of an overload may result in a recurrence of the overload condition: the system's service may be impaired for approximately 2 minutes.

STAT SCG x Print status of SCG x (0 or 1). basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LDs 40, 42: Call Detail Recording Diagnostic

The Call Detail Recording (CDR) feature outputs call records to a single or multi-port tape drive storage system. The tapes are processed to produce billing reports.

The Option 51C/61C/81/81C Pseudo TTY (PTY) and Call Processor (CP) cards do not support the CDR link maintenance commands (CDL, CTY) used in this Overlay. When using the STAT command in this LD, the output includes all the ports: CP and PTY.

Automatic diagnostic routines

LD 40 is run in background, during the daily routines, or automatically in response to CDR faults. It performs the following:

- CDR Link test.
- CDR Controller status report.
- CDR data transmission/loss summary.

Fault indications reported by LD 40 are cleared after their corresponding CDM message is output. Faults in a multi-port CDR Tape Controller are reported to all Meridian 1/Meridian SL-1 systems connected to the controller. The fault records kept for each Meridian 1/Meridian SL-1 are maintained and cleared independently of each other by the controller.

Loading LD 40 manually runs the automatic fault-clearing routines. Also, similarly to LD 42, the “CDMA loaded today” flag which prevents LD 40 from being automatically loaded more than once a day are cleared. Thus, manually loading LD 40 or 42 allows faults detected in the afternoon to be reported, even though previous faults may have been detected and cleared in the morning.

To run CDMA in background, you must reload LD 40 after a trouble has been cleared using LD 42. CDM117 X 3 is printed after LD 40 has been reloaded, where X is the Meridian 1/Meridian SL-1 link or port number. This reload is required so that the Meridian 1/Meridian SL-1 can react again as soon as another error is detected.

CDR maintenance mode and commands

Use LD 42 to:

- enable/disable/give status of CDR links and TTY
- perform diagnostic tests on CDR machines
- perform manual tape functions on CDR machines
- clear alarms and the maintenance display
- clear the maintenance display of CDR machines
- clear “CDMA loaded today” flags

The CDR storage system is put into maintenance mode to test the tape drive. While in maintenance mode, call records are saved in tape buffers. When all the buffer space is used up, incoming call records are lost. An 8K CDR machine can buffer about 600 call records; a 32K CDR can retain about 2500. Use the BUFF command to write the buffer contents to tape or output it to the I/O device.

Enter maintenance mode

- 1 Load CDM (LD 42).
- 2 Issue the PORT command to specify the CDR port.
- 3 Issue the GET command to put the CDR into maintenance mode.

GET sends the “Request Maintmode” message to CDR and waits for CDR to grant MAINTMODE, which CDR will not do until it is finished its current activity on the drive.

When CDR grants Maintenance Mode, it also makes available a tape buffer for the use of the read/write and RBC functions. This buffer may be loaded with data by using the LOAD command and the contents can be output onto the TTY by using the BUFF command without indicating which buffer to output (it defaults to the active maintenance buffer).

Exit maintenance mode

To ensure that CDR does not stay in maintenance mode forever, CDR starts a 30 second timer whenever it receives a request for maintenance mode. If this timer expires, CDR resets maintenance mode. To prevent this, CDM sends a message every 5 seconds to keep the CDR in maintenance mode.

If CDM does not send the message in time, CDR will reset maintenance mode and a CDM017 message will appear to indicate that maintenance mode has been lost. Pressing the UNLOAD button on CDR will also cancel maintenance mode.

The CDR may also be released from maintenance mode using the FREE command. When CDR leaves maintenance mode it returns to the state it was in before it entered maintenance mode. That is, if it was in a state in which it would not attempt to write on the drive, it will still not try to use the drive.

However, if it was using the drive before it entered the maintenance mode, it will use one of two methods to return to using the drive:

- If it left maintenance mode because of a time-out, it will rewind to LP and search for the first tape mark to locate the place where it should begin writing.
- If the FREE command was used to release it from maintenance mode, it will begin writing on the tape wherever the tape is. Thus, the tape should be left at the same point it was before maintenance mode was entered.

Ensure tape integrity

The following procedure is recommended to ensure tape integrity if manual tasks are to be performed on the drive using CDM:

- 1 UNLOAD the call recording tape from the drive.
- 2 Mount a scratch tape and put the drive on line but do not use any of the CDR pushbuttons. Call records are now being stored in tape buffers so this should only be done at low traffic periods.
- 3 Use CDM to issue the PORT and GET commands.
- 4 Perform tests using manual functions.
- 5 Issue the FREE command.
- 6 UNLOAD the scratch tape.
- 7 Remount the call-recording tape and press RESTORE to get the tape to the proper position for writing. If the tape is nearly full, a new call recording tape might be loaded instead to save time.

Verify proper recording

To verify that call records are being properly recorded on tape, the following procedure may be used:

- 1 Issue the PORT and GET commands to go into maintenance mode.
- 2 Issue the FUNC BKSP 1 command to position the tape just before the most recently written block.
- 3 Issue the FUNC READ command to read the most recently written block.
- 4 Issue the BUFF command to output the contents of the maintenance buffer on your I/O device.
- 5 Issue FREE to release the drive from maintenance mode.

This procedure may be modified easily to allow the checking of tape blocks older than the most recent. Extreme caution is advised, however, as it is easy to lose track of where the tape is positioned.

If it is suspected that the tape may not be positioned just after the last data block on tape when the FREE command is about to be issued, simply abort the program (****). This will cause the CDR machine to time out from maintenance mode after 30s, after which CDR will automatically restore tape position so that data recording can continue normally.

Basic commands

BLOC	Output hexadecimal contents of CDR tape block
BUFF	Output contents of CDR maintenance mode buffer
BUFF x	Output contents of tape buffer x
CCDS x	Clear maintenance display of CDR on link x
CDSP	Clear the maintenance display on active CPU to 00 or blank
CMIN AL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DIS LINK x	Disable device on link x
DIS SL1 x	Disable CDR device x
DIS TTY x	Disable device x
DISP pg addr cnt	Display CDR storage
ECHO x y	Perform echo test on link x, y times
END	Terminate command in progress
ENL LINK x	Enable link x
ENL SL1 x	Enable SL-1 machine connected to CDR link x
ENL TTY x	Enable TTY x
FREE	Release CDR from maintenance mode
FUNC function	Initiate specified tape drive function
GET	Put CDR tape unit into maintenance mode
LOAD xxxx	Set buffer for a WRITE
PORT	Reset port
PORT x	Set up links for commands to follow
STAT x	Get status of SDI x
STAT SL1 ALL, x	Get status of one or all CDR ports
STOR pg addr	Alter CDR storage information
TEST x	Write x sets of test records to tape

Alphabetical list of commands

Command	Description	Pack/Rel
BLOC	Output hexadecimal contents of CDR tape block.	clnk-1
BUFF	Output contents of CDR maintenance mode buffer.	clnk-1
BUFF x	Output contents of tape buffer x. For a single port CDR machine, $0 < x < 6$. For a 32K machine, $0 < x < 29$. The contents of the buffer may change while it is being output.	clnk-1
CCDS x	Clear maintenance display of CDR on link x.	clnk-1
CDSP	Clear the maintenance display on active CPU to 00 or blank.	clnk-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	clnk-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	clnk-1
DIS LINK x	Disable device on link x.	clnk-1
DIS SL1 x	Disable CDR device x. This command should be issued before disconnecting another SL-1 machine from a multi-port CDR machine. DIS SL-1 x is the inverse of ENL SL-1 x. The commands may NOT be used to disable the SDI port currently being used by the CDM program; i.e., "you can't disable yourself." The enabled/disabled status of a SL-1 port in a multi-port CDR machine is maintained by the CDR machine only. If the CDR machine initializes for any reason - such as a power failure - then the enabled/disabled status of each SL-1 port is set according to whether the physical SDI device responds. For this reason, the enabled/disabled status of a SL-1 port in a multi-port CDR machine should not be considered trustworthy over extended periods of time.	clnk-1

LDs 40, 42

Note also that disabling a SDI port in the CDR using the DIS SL-1 x command causes the report "SL1 x DSBL <type> SOFT" to be given by STAT SL1 x. This status indication remains even after the SDI pack has been physically pulled out, until the next CDR initialization.

DIS TTY x	Disable device x. You may not disable the TTY you are logged into.	clnk-1

DISP pg addr cnt	Display CDR storage. Where: pg = memory page 0, 2 or 3. cnt = the number of words to output. If cnt is not entered, one word will be output. No checking is performed on the validity of the address. If an invalid address is provided, the CDR machine will trap with a response time-out. This command can be used to continue printing buffer contents, if time-out or transmission error occurs using the BUFF x command, rather than reissuing BUFF x and starting from the beginning again. In this case, the command is: DISP O addr 100 addr = given by the last 4-digit hexadecimal code preceding the colon in the last printed line.	clnk-1

ECHO x y	Perform echo test on link x, y times. A test pattern is sent to the CDR machine and the machine echoes it back. OK is output if a successful response indicates a fault-free link. If y is not provided, the test is performed once only.	clnk-1

END	Terminate command in progress. This command may be output at any time.	clnk-1

ENL LINK x	Enable link x. The specified link is checked for response and stuck interrupt. OK is output and the link enabled if the tests are passed.	clnk-1

ENL SL1 x	Enable SL-1 machine connected to CDR link x. This command is only valid for multi-port CDR machines. It enables new SL-1 machines connected to the CDR machine to communicate with the CDR, without interruption of service to existing SL-1 machines.	clnk-1

ENL TTY x	Enable TTY x. The specified TTY is checked for response and stuck interrupt. OK is output and the TTY is enabled once the tests are passed.	clnk-1
FREE	Release CDR from maintenance mode. If the CDR tape drive is enabled, then the next tape block that CDR has to write will be written wherever the tape was left. Thus, if the FUNC command was used on a tape which is to contain valid CDR data, it is imperative that the user reposition the tape to the same position that CDR had it before the FUNC command was used.	clnk-1
FUNC function	Initiate specified tape drive function. Initiates the specified function on the tape drive. “Function” may be one of: 1. STAT = status function 2. WID = write ID burst function 3. WTM = write tape mark 4. WFB = write contents of the maintenance tape buffer 5. READ = read block into maintenance buffer 6. RBC = perform read back check into maintenance buffer 7. SKIP x = skip x blocks in hexadecimal number 8. ERG = erase gap 9. ERAS = erase to end of tape 10. BKSP x = backspace x blocks in hexadecimal number 11. REW = rewind 12. UNL = unload 13. TERM = terminate These commands correspond to the primitive tape functions supported by the CDR tape handler firmware. The FUNC STAT command causes the tape status to be printed at the TTY. The tape status is the first word printed in response to the BLOC command and is the “status” field of a CDM122 error message. If the “unexpected interrupt” bit in the tape status is ON, a word corresponding to the “unexpected” field in a CDM122 message is printed.	clnk-1

LDs 40, 42

GET	Put CDR tape unit into maintenance mode. When CDR is in this mode, it will not initiate any tape functions of its own. A tape buffer will be allocated for CDM to use for tape functions. Only one SL-1 system may put the CDR into maintenance mode at one time. See the description of maintenance mode.	clnk-1
LOAD xxxx	Set buffer for a WRITE. The hexadecimal digits xxxx are propagated through the tape buffer allocated for maintenance mode. The command is used to set the buffer for a WRITE.	clnk-1
PORT	Reset port. Resets the port so that no port is active. Enter the following commands only after a PORT command, and only from a TTY: DISP STOR BLOC TEST x BUFF (continued on next page) BUFF x GET LOAD xxxx FUNC FREE ENL SL-1 x DIS SL-1 x STAT SL-1 x	clnk-1

PORT x	Sets the links to which the following commands will apply. This command may only be entered from a TTY. Take care when using the following commands with PORT or PORT x, as the CDR may trap data or write erroneous data to tape. DISP STOR BLOC TEST x BUFF BUFF x GET LOAD xxx FUNC FREE ENL SL-1 x DIS SL-1 x STAT SL-1 x	clnk-1
STAT	Lists all SDI packs and specifies whether they are dedicated to data links or TTY; enabled or disabled. Output is: SDI x <tty/link> <enbl/dsbl><messages> <naks> <time-outs> <lost> If the device is an enabled link, then the number of messages sent, the number of transmission errors and the number of lost call records are also output. See error code CDM121 for a description of the <> fields.	clnk-1
STAT SL1 ALL, x	Get status of one or all CDR ports. This command is used to output the status of ports in multiport CDR machines. The format of the output is: status type mode Where: status = UNEQ (unequipped), DSBL (Disabled) or ENBL (enabled) type = SNGL (single-port SDI) or DUAL (dual-port SDI) mode = May be IDLE (normal idle), BUSY (normal busy), SOF (software-disabled), NOIS (disabled for too many interrupts), STUC (disabled for stuck interrupt condition) or EIA (disabled for having EIA device not ready)	clnk-1

LDs 40, 42

STAT x	Get status of SDI x. Output is: <tty/link> <enbl/dsbl/uneq> <messages> <naks> <time-outs> <lost> See error code CDM121 for a description of the <> fields.	clnk-1
STOR pg addr	Alter CDR storage information. The old contents of the location is output and the user is prompted for the new contents. After entering the new contents, enter a space or carriage return. If a carriage return is entered, the command ends. If a space is entered, the contents of the next location are output and the user is prompted for input. If only the carriage return or space is entered (i.e., the new contents are not input), then the current word is not modified. If an invalid address is provided, CDR will response time-out.	clnk-1
TEST x	Write x sets of test records to tape. Before using this command, refer to the description of the maintenance mode prior to this table. If x is not given, the default is 1. As this command writes to tape, a scratch tape should be mounted before the command is executed. PORT and GET commands must be issued before this command can be used. Twenty blocks of data are written to the tape, then the tape is rewound and read to check the data. The number of errors found is output using a CDM035 message.	clnk-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 43: Equipment Datadump

This program is used to keep data on the system storage device up to date. When the datadump program is invoked, data in the read/write memory (including any that has been changed or added) is written to the storage device at the location reserved for it.

The program can be invoked daily as part of the daily routines or loaded manually. An incremental datadump occurs during the daily routines if database changes have been made.

Options 51C, 61C, 81 and 81C utilize two CMDUs and disk redundancy, LD 43 commands apply to both sides of the system. Refer to the specific commands for the differences between Options 51C, 61C, 81 or 81C and other systems. Refer to System installation (553-3001-210) for general information.

Following a successful EDD on Options 51C, 61C, 81 and 81C, the “HI” (Hardware Infrastructure) string is output.

When the datadump fails

In the event of an unsuccessful initial dump, the office data on the tape or disk is suspect. Another datadump with spool option should be done on the same tape or disk; if successful, a transient error is indicated and normal procedures can be resumed. If this second attempt also fails, DO NOT attempt another datadump until the fault is isolated and corrected.

If the storage medium is not proved faulty and the storage device appears serviceable, datadumping to an OLD tape or disk, if available, may help to pinpoint the problem.

Except during the troubleshooting phase, storage medium which has failed to datadump successfully must not be left in the storage device. Should a SYSLOAD occur with such a storage medium, the load may terminate abnormally with unpredictable results.

Low memory warning

Unprotected data store equal in size to the length of the records being written (i.e., 512 words) must be available to the datadump program.

A low memory warning message (SCH603) is issued when spare unprotected data store falls below a given threshold. Once this warning message has been issued, it is not possible to perform a datadump as the system requires spare unprotected data store equivalent to the size of a record on the storage medium (i.e., 512 words).

Users should ensure that these amounts of spare unprotected data store are available before attempting to perform a datadump.

Basic commands

BKO	Copy data from primary to backup device
DAT	Print the data issue and creation date of the primary and backup database
EDD	Invoke datadump program
EDD CLR	Clear datadump inhibit flag
EDD CN	Save CND names (use prior to datadump)
EDD DP xx xx ..xx	Dump patch
EDD GP	Get patch
EDD HM	Save AWU, RMS and MR data (prior to dump)
EDD IWC	Inhibits write check: caution
EDD NBK	Inhibit database backup
EDD NS	Inhibit tape far-end spool
EDD NX	Write tape data records
EDD SA	Complete data dump and bypass software audit
EDD SP	Spool tape to far-end
PBX CF6 (ALLOWED)	Bit dumped with PBX data block
RES	Copy entire contents of backup to primary device
SWP	Swap (exchange) main and ".bak" data files on the primary flash drive

Alphabetical list of commands

Command	Description	Pack/Rel
BKO	Copy data base from primary device (Winchester disk) to backup device (floppy disk). BKO is applicable to systems with hard disk storage.	basic-19
DAT	Print the creation date of the main, secondary, or backup database.	basic-18
EDD	Invoke datadump program For system Option 81, EDD creates backups to floppy disks for both CMDUs if redundancy is in effect and both CDMUs contain floppy disks. For system Option 61C, EDD creates backups to floppy disks for the active CDMU.	basic-1
EDD CLR	Clear datadump inhibit flag This flag is set because SYSLOAD or the conversion programs detect incomplete or inconsistent equipment data. Exercise caution since the use of this option may result in incorrect data being written.	basic-1
EDD CN	Save CND names. EDD CN saves the names associated with DNs for Caller's Name Display. Use Prior to datadump.	basic-1
EDD DP xx xx xx...	Dump patch Customer data and the specified patches (xx xx...xx) are dumped onto disk. If no patch numbers are specified, then only customer data is dumped.	basic-18
EDD GP	Get patches The non-patch customer data from the core memory is placed on the new disk without overwriting the preloaded patches on the disk. Any patches in the system are also ignored.	ph-6
EDD HM	Saves Automatic Wake Up (AWU), Room Status (RMS) and Message Registration (MR) data. Use prior to datadump, then system load. This should be performed prior to a SYSLOAD or software conversion.	basic-1

EDD IWC	Inhibits write check. Caution: for Emergency Use Only. Inhibits write check. This command is useful when the standard commands for datadump fail and end-of-file cannot be found. It writes an end-of-file on tape and allows other commands to be invoked.	basic-1
EDD NBK	Inhibit database backup. Indicates that a database backup should not be done after a datadump. (Applicable to hard disk storage with floppy disk backup). For Option 11C systems, this command invokes a data dump and writes entered data to primary and internal backup drives.	basic-1
EDD NS	Inhibit tape far-end spool. Tape will not spool to the far-end and will not perform write test. Default option is SP. Overlay program cannot be aborted until writing has either been completed or has failed. This command applies to systems equipped with tape units.	basic-1
EDD NX	Writes tape data records consistent in size with predefined system values. Default option is NX.	basic-1
EDD SA	This command is used to complete the data dump and bypass the software audit of Peripheral Controller and superloop data.	basic-18
EDD SP	Spool tape to far-end. This command applies to systems equipped with tape units. Spools tape to the far-end in order to even the tension on the tape. Also writes a test record after the end of existing data to check for any write problems. If errors occur during test, data should remain intact.	basic-1
PBX CF6 (ALLOWED)	Bit dumped with PBX data block.	basic-1

RES	Copy entire contents of backup device (floppy diskettes) to primary device (Winchester disk). Applicable to Meridian 1/Meridian SL-1 with hard disk storage. For Options 51C, 61C, 81 and 81C, this command copies the contents of the floppy disks on the active CMDU to both hard disks providing redundancy is in effect. If redundancy is not in effect, this command copies the floppy disk contents to the active CMDU. For Options 11 and 11C in X11 Release 22, the RES command may be entered to restore files to the primary device from the external backup device.	basic-19
SWP	Exchange (swap) main and secondary database files. A sysload is required for the swap to take effect.	basic-19

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 44: Software Audit

The audit program (LD 44) monitors system operation and provides an indication of the general state of system operation. The program is concerned mostly with the system software. When a software problem is encountered, the program outputs an AUD message and attempts to clear the problem automatically.

With X11 Release 23 the audit program is changed to recognize and handle various new scenarios added by Music or Recorded Announcement Broadcast features. The following new checks are performed by audit for broadcasting trunks:

- Check the list of call registers connected to the broadcasting trunk and verify that the size of this list matches the number of callers connected according to the counter in the unprotected trunk block
- ensure that a trunk marked as broadcasting does indeed have more than one caller connected to it
- go through the list of call registers connected to the broadcasting trunk and ensure that the list is linked correctly from beginning to end
- all call registers in the broadcasting trunk call register list should point back to the broadcasting trunk
- various checks are done on the connections for a broadcasting call
- check through the list of call registers queued for and ensure the list is linked correctly from beginning to end

Running software audit

The Audit program is enabled as a Background Program or Daily Routine in the configuration record. See prompts BKGD and DROL in LD 17. To load the Audit program manually, enter:

LD 44

R **x**

Where, **x** is the number of audit passes required.

Enter 0 for continuous auditing. R and **x** must be separated by a space or the system responds with:

```
AUD REQ ERR.  
AUDIT
```

The Meridian Mail MP data base audit (co-administration) is run during Audit if a data base mismatch is known by the system, or if it is being run manually.

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 45: Background Signaling and Switching Diagnostic

This program performs network continuity tests and outputs detected problems via BSD messages.

The Manual Continuity Test (MCT) allows you to isolate intermittent faulty points reported by the Background Continuity Test (BCT). For example, BCT reports faults between A, B, and C. Run the MCT between A and B, then between B and C to determine how often it fails.

When run in background, LD 45 tests the following on all enabled network loops:

- the continuity of the speech path between each network card and its associated PE shelves is tested
- the continuity of the speech path between all network card is tested
- non functioning paths between network cards are identified

Note: When running in background, only new faults detected are output.

For systems running Release 15 and later, memory and signaling tests are only performed in LD 30. If LD 45 is included in background or midnight routines it is recommended that LD 30 also be included. By including LD 30, bad memory areas will be flagged before the continuity tests of LD 45 which will improve fault isolation.

Using the manual extended continuity (XCON) command

The XCON command is used to test various communication paths on or between NT8D04 Network, NT8D01 Controller, Multipurpose ISDN Signaling Processor (MISP), S/T-Interface Line (SILC) and U-Interface Line (UILC) cards. There are 10 paths XCON may test. Table 10 and Table 11 show 8 of these paths. Only 1 XCON test at a time can be run on a superloop.

To begin a manual extended continuity test, enter one of the following:

- XCON 0 = perform test once and output results
- XCON H hhh = repeat test for hhh hours (hhh = 1-255)
- XCON M mmm = repeat test for mmm minutes (mmm = 1-255)
- XCON S sss = repeat test for sss seconds (sss = 1-255)

After you enter a XCON command, you are prompted for a combination of the values listed below. The responses to these prompts determine the test performed.

Prompt — Response — Comment

DSLT — xx — Timeslot (2-31, 34-63, 66-95, 98-127) for Network Card associated with detector Controller.

GSLT — xx — Timeslot (2-31, 34-63, 66-95, 98-127) for Network Card associated with generator Controller.

JUNC — x — Junctor number (0-7).

LBTN — l s c u — Terminal Number (loop, shelf, card, unit) to be loopback point.

LBTY — N/P — Loopback address: N = Network Card, P = Controller or terminal.

Note: When using XCON Test 9 for ISDN BRI, the possible responses for LBTY are 3 or 4. 3 indicated the test will take place with the DSL enabled; 4 performs the test with the DSL disabled.

PATT — x — Test pattern number (0-7). Signal sent by the generator to the detector. You should run a test several times with varying patterns.

SLOT — xx — Timeslot (2-31, 34-63, 66-95, 98-127). Enter return (<cr>) to select a random timeslot.

SUPL — l — Superloop number (0-156, in multiples of 4).

TAG — x — Tag number (1-15) returned by the system. Tag number 0 is used for one-shot tests (XCON 0).

TEST — x — Test case number (1-8).

TN — l s c u — Controller or terminal (loop, shelf, card, unit) to be the detector. For Controller, enter any valid TN on Controller's shelf. For special loopback channel enter: l s 99 0.

TYPD — N/P — Pattern detector: N = Network Card, P = Controller.

TYPG — N/P — Pattern generator: N = Network Card, P = Controller.

Figure 10
XCON test paths

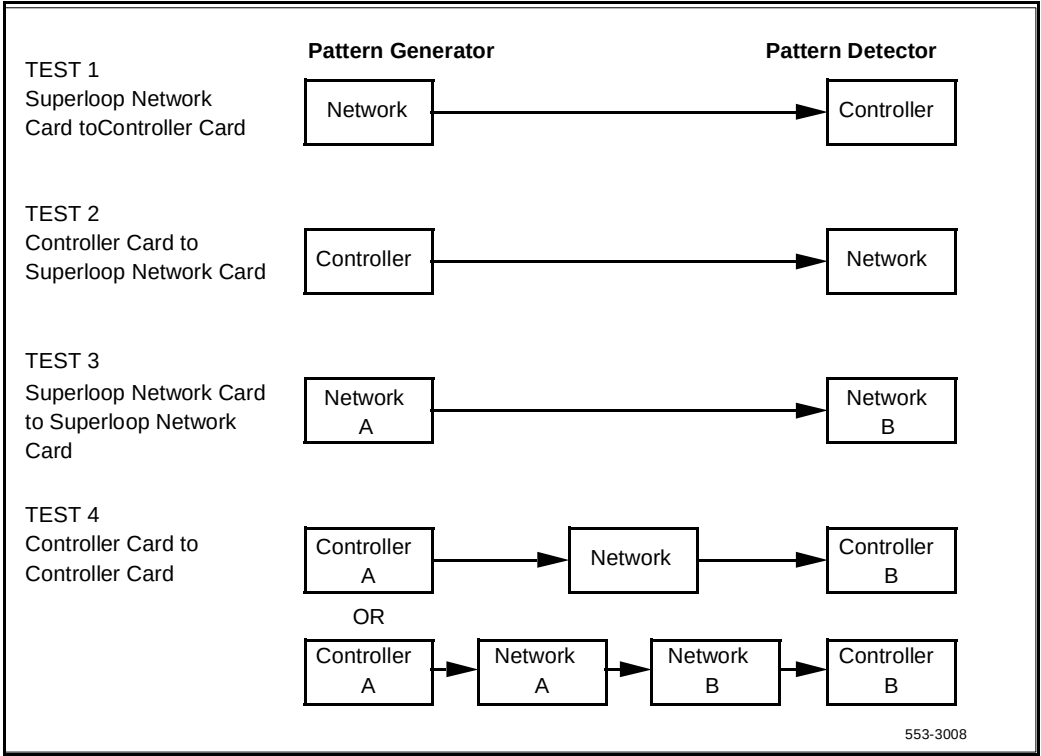
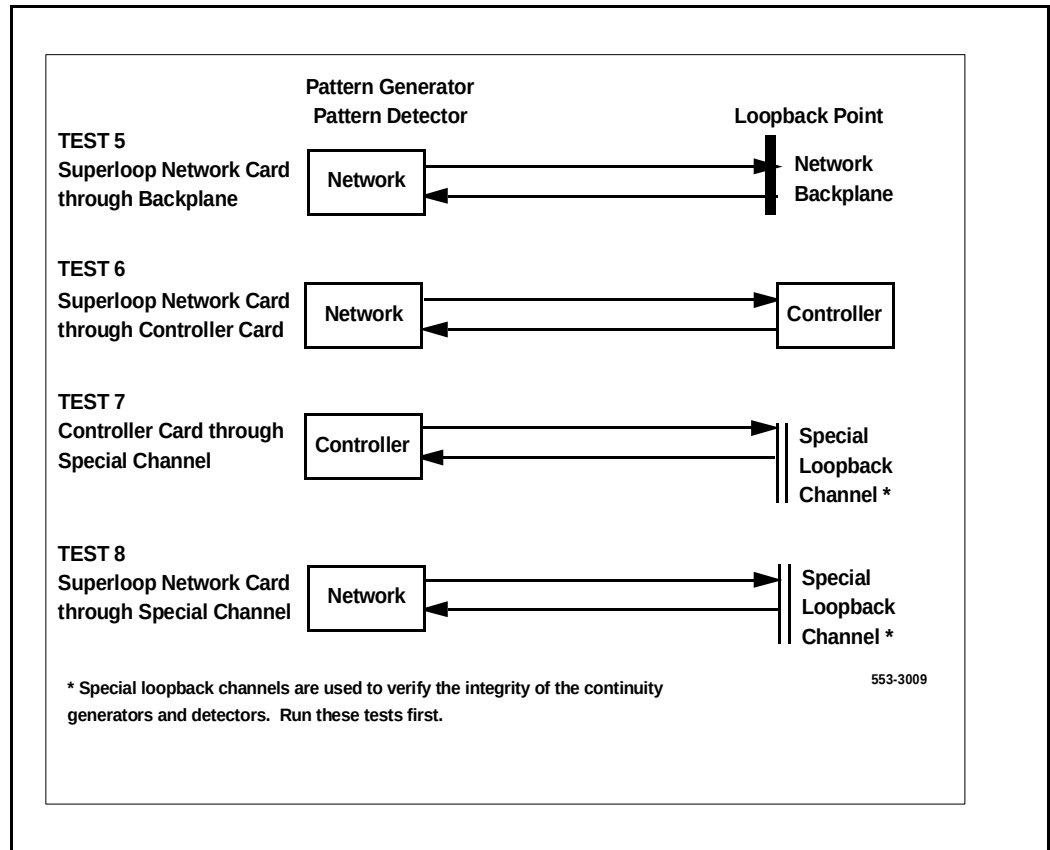


Figure 11
XCON test paths (continued)



Basic commands

NSIG	Perform the network memory and continuity tests (Release 14 and earlier)
TEST (loop)	Perform a complete continuity test for one or all loops. Unplugged cards are not tested for continuity.
XCON 0	Perform Extended Continuity test once and output results. User will be prompted for TEST number. See "XCON sub-prompts" on page 801.
XCON H hhh	Repeat Extended Continuity test for hhh hours (hhh = 1-255). User will be prompted for TEST number. See "XCON sub-prompts" on page 801.
XCON M mmm	Repeat Extended Continuity test for mm minutes (mm = 1-255). User will be prompted for TEST number. See "XCON sub-prompts" on page 801.
XCON S sss	Repeat Extended Continuity test for ss seconds (ss = 1-255). User will be prompted for TEST number. See "XCON sub-prompts" on page 801.
XINF	Display the tag numbers of all running and completed continuity tests
XSTA x	Get the status of manual continuity test with TAG = x
XSTP x	Stop manual continuity test with TAG = x

XCON sub-prompts

TEST = 1		
Test Path	Network Card to Controller. This test uses the Network Card (NT8D04) as a pattern generator and the Controller (NT8D01) as the detector.	Pack/Rel xpe-15
Prompt	Response	Description
TEST	1	Network Card to Controller
TYPE	SL	Test superloop (SL)
PATT	x	Pattern (0-7)
TYPG	N	Network Card is generator
SUPL	loop	0-156 in multiples of 4
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127. SLOT appears if Remote IPE package 286 is not equipped.
TYPD	P	Controller is detector E1 Carrier = Timesot : 0 = 5-31 ; 1 = 37-63 ; 2 = 69-95 T-1 Carrier = Timesot : 0 = 5-25 ; 1 = 37-57 ; 2 = 69-89
TN	I s c u	Valid TN on the Controller
TAG	xx	Tag number (1-15) assigned by the system

TEST = 2		
Test Path	Controller to Network Card. This test uses the Controller (NT8D01) as a pattern generator and the Network Card (NT8D04) as the detector.	Pack/Rel xpe-15
Prompt	Response	Description
TEST	2	Controller to Network Card
PATT	x	Pattern (0-7)
TYPG	P	Controller is generator
TN	I s c u	Valid TN on the Controller
TYPD	N	Network Card is detector
SUPL	loop	0-156 in multiples of 4
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127
TAG	xx	Tag number (1-15) assigned by the system

TEST = 3

Test Path	Network Card to different Network Card. This test uses the Network Card (NT8D04) as a pattern generator and another Network Card as the detector.		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	3	Network Card to different Network Card	
PATT	x	Pattern (0-7)	
TYPG	N	Network Card is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127	
TYPD	N	Network Card is detector	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127	
JUNC	x	Junctor if Network cards in different groups	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 4

Test Path	Controller to different Controller. This test uses a Controller (NT8D01) as a pattern generator and another Controller as a detector. The pattern is sent through one or two Network Cards (NT8D04).		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	4	Controller to different Controller	
PATT	x	Pattern (0-7)	
TYPG	P	Controller is generator	
TN	I s c u	Valid TN on the Controller	
TYPD	P	Controller is detector	
TN	I s c u	Valid TN on the Controller	
GSLT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127 on generator Network Card	
DSL T	xxx	Timeslot 2-31, 34-63, 66-95, 98-127 on detector Network Card	
JUNC	x	Junctor if Network cards in different groups	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 5

Test Path	Network Card to Network Card (loop back at backplane). This test uses the Network Card (NT8D04) as a pattern generator and detector. The pattern is sent to the network backplane and back.		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	5	Network Card to Network Card (loop back at backplane)	
PATT	x	pattern (0-7)	
TYPG	N	Network Card is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	timeslot 2-31, 34-63, 66-95, 98-127	
TYPD	N	Network Card is detector	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	timeslot 2-31, 34-63, 66-95, 98-127	
LBTY	N	through network backplane	
TAG	xx	tag number (1-15) assigned by the system	

TEST = 6

Test Path	Network Card to Network Card (loop back through Controller). This test uses the Network Card (NT8D04) as a pattern generator and detector. The pattern is looped back through a Controller (NT8D01).		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	6	Network Card to Network Card (loop back through Controller)	
PATT	x	Pattern (0-7)	
TYPG	N	Network Card is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127	
TYPD	N	Network Card is detector	
SUPL	loop	0-156 in multiples of 4	
SLOT	xxx	Timeslot 2-31, 34-63, 66-95, 98-127	
LBTY	P	Through Controller	
LBTN	I s 99 0	Special Controller loop back channel	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 7

Test Path	Controller to Controller (special loop back channel). This test uses the Controller (NT8D01) as a pattern generator and detector. The pattern is looped back through a special loop back channel.		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	7	Controller to Controller (special loop back channel)	
PATT	x	Pattern (0-7)	
TYPG	P	Controller is generator	
TN	l s 99 0	Special Controller loop back channel	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 8

Test Path	Network Card to Network Card (special loop back channel). This test uses the Network Card (NT8D04) as a pattern generator and detector. The pattern is looped back through a special channel which is specified by timeslot 128.		Pack/Rel xpe-15
Prompt	Response	Description	
TEST	8	Network Card to Network Card (special loop back channel)	
PATT	x	Pattern (0-7)	
TYPG	N	Network Card is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	128	Special Network loop back channel	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 9

Test Path	Loop back test on Digital Subscriber Loop. This test uses the MISP as a pattern generator and detector. The pattern goes through the Network and Controller Card and is looped back at a single DSL. Both B- and D-channels are looped back.		Pack/Rel bri-18
Prompt	Response	Description	
TEST	9	Loop back test on Digital Subscriber Loop	
PATT	x	Pattern (0-7)	
TYPG	N	Network Card is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	128	Special Network loop back channel	
LBTY	3	DSL is requested for loop back	
LBTN	l s c d	Address of DSL	
TAG	xx	Tag number (1-15) assigned by the system	

TEST = 10

Test Path	Loop back test on BRI line card. This test uses the MISP as a pattern generator and detector. The pattern goes through the Network and Controller Card and is looped back at the line card level (i.e., bus loop back). Both B- and D-channels are looped back.		Pack/Rel bri-18
Prompt	Response	Description	
TEST	10	Loop back test on BRI line card	
PATT	x	Pattern (0-7)	
TYPG	5	MISP is generator	
SUPL	loop	0-156 in multiples of 4	
SLOT	128	Special Network loop back channel	
LBTY	4	loop back at line card	
LBTN	l s c d	Address of DSL	
TAG	xx	Tag number (1-15) assigned by the system	

Alphabetical list of commands

Command	Description	Pack/Rel
NSIG	Perform the network memory and continuity tests (Release 14 and earlier). No signaling test is done. All faults detected are reported. If no faults are detected, "OK" is output. This command is not available in Release 15 and later.	basic-1
TEST (loop)	Perform a complete continuity test for one or all loops. Performs a complete test and reports all faults detected (even if they have been previously reported).	basic-1
XCON 0	Perform Extended Continuity test once, then output results. After entering this command, you will then be able to select and conduct 1 of 10 possible XCON tests. These XCON tests begin on page 801.	xpe-15
XCON H hhh	Perform Extended Continuity test for hhh (1-255) hours, then output results. After entering this command, you will then be able to select and conduct 1 of 10 possible XCON tests. These XCON tests begin on page 801.	xpe-15
XCON M mmm	Perform Extended Continuity test for mmm (1-255) minutes, then output results. After entering this command, you will then be able to select and conduct 1 of 10 possible XCON tests. These XCON tests begin on page 801.	xpe-15
XCON S sss	Perform Extended Continuity test for sss (1-255) seconds, then output results. After entering this command, you will then be able to select and conduct 1 of 10 possible XCON tests. These XCON tests begin on page 801.	xpe-15
XINF	Display the tag numbers of all running and completed tests. The output format (where T# = Tag Number) is: RUNNING: T# T# T# T# DONE: T# T# T# T# SUSPENDED: T# T# T# T# FREE: x x (number of free tags available [0-15])	xpe-15

XSTA x	Get the status of manual continuity test with TAG = x. Individual tests are identified by the tag number the system generates when you complete a sequence of test prompts. See also the XINF and XSTP commands. The test status provides the following format information: PATT x Pattern number GENERATE: Generator information follows: TYPG N/P Network or Controller as pattern generator SUPL x Superloop number or TN on Controller SLOT x Timeslot DETECT: Detector information follows: TYPD N/P Network or Controller as pattern detector SUPL x Superloop number or TN on Controller SLOT x Timeslot RESULTS: Results follow: TESTS COMPLETED: xxxxxxxx TESTS FAILED: xxxxxxxx	xpe-15
XSTP x	Stop manual continuity test with TAG = x. Individual tests are identified by the tag numbers. The XSTP command outputs the test status. See also XINF and XSTA commands.	xpe-15

Alphabetical list of XCON sub-prompts

Prompt	Response	Description
DSLT	xxx	Timeslot (2-31, 34-63, 66-95, 98-127) for Network Card associated with detector Controller
GSLT	xxx	Timeslot (2-31, 34-63, 66-95, 98-127) for Network Card associated with generator Controller
JUNC	x	Junctor number (0-7)
LBTN	l s c u or l s c d	Loop back Controller or Terminal Number. Where: l = loop, s = shelf, c = card, u = unit, and d = Digital Subscriber Loop (DSL).
LBTY	y	Loop back Type (3, 4, N, or P). Where: • 3 = Digital Subscriber Loop • 4 = Line Card • N = Network Card • P = Controller or Terminal
PATT	x	Test pattern (0-7) sent by the generator to the detector
SLOT	xxx	Timeslot (2-31, 34-63, 66-95, 98-127). Enter return (<cr>) to select a random timeslot. For special loop back slot enter: 128.
SUPL	loop	Superloop number (0-156, in multiples of 4)
TAG	xx	Tag number (0-15) returned by the system. Tag number 0 is used for one-shot tests (XCON 0).
TEST	xx	XCON test path (1-10). Where: • 1 = Network Card to Controller • 2 = Controller to Network Card • 3 = Network Card to different Network Card • 4 = Controller to different Controller • 5 = Network Card to Network Card (loop back at backplane)

- 6 = Network Card to Network Card (loop back through Controller)
- 7 = Controller to Controller (special loop back channel)
- 8 = Network Card to Network Card (special loop back channel)
- 9 = Loop back test on Digital Subscriber loop
- 10 = Loop back test on BRI line card

TN	I s c u	Controller or terminal (loop, shelf, card, unit) to be the detector. For Controller, enter any valid TN on Controller's shelf. For special loop back channel enter: I s 99 0.
TYPD	y	Type of Pattern Detector (N or P). Where: N = Network Card and P = Controller.
TPYG	y	Type of Pattern Generator (5, N, or P). Where: • 5 = Multipurpose ISDN Signaling Processor • N = Network Card • P = Controller

: LD 46: Multifrequency Sender Diagnostic for Automatic Number Identification

This program is used to maintain the Multifrequency Sender card. The Multifrequency Sender pack provides multifrequency signals of Automatic Number Identification (ANI) digits over Centralized Automatic Message Accounting (CAMA) trunks to a toll switching CAMA, Traffic Operator Position System (TOPS) or Traffic Service Position System (TSPS).

The MFS diagnostic program can be run in background, during the daily routines, or manually to enter commands. It performs the following tests:

- checks that the MF Sender pack responds to system I/O functions
- tests the 30-channel memory locations, the 480 (30 x 16) digit buffer memory locations and the 64 First-in, First-out locations
- exercises all 15-digit codes with digit strings from 2 to 16 digits long and verifies both the 68 ms pulse width and whether each string outputpulses to completion

No check is possible on MFS frequencies used in each tone burst due to the lack of receivers in the system. Also, no check can be made as to whether the correct digits are being outputpulsed.

Basic commands

CDSP	Clear the maintenance display on active CPU to 00 or blank
CMAJ	Clear major alarm and reset power fail transfer
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DISL loop	Disable MFS loop
DISX loop	Disable Conf/TDS/MFS card on loop and loop + 1
END	Stop all current testing
ENLL loop	Enable loop
ENLX loop	Enable Conf/TDS/MFS card on loop and loop + 1
MFS loop	Test and enable MFS loop
STAT loop	Get status of MFS loop
TONE loop	Enter input mode to provide MF tone bursts
TONE loop ALL	Provide MF tone bursts for all digits on specified loop

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear the maintenance display on active CPU to 00 or blank.	basic-1
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	basic-1
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-1
DISL loop	Disable MFS loop. For NT8D17 Conference/TDS/MFS cards, see ENLL command.	basic-1
DISX loop	Disable NT8D17 Conference/TDS/MFS card on loop and loop + 1. Disables the entire combined Conference, Tone and Digit Switch, and MF Sender (XCT) card. Both the even numbered TDS/MFS loop and adjacent conference loop are disabled. Where: loop = 0, 2, 4,.. . 158 The DISL and ENLL commands can be used on the even number loop for the TDS/MFS functions. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The ENLX and DISX commands are recommended. The ENLX command must be used if the DISX command was used to disable the card. This command can be used in LD 34, LD 38 and LD 46.	xct-15
END	Stop all current testing.	basic-1
ENLL loop	Enable loop. For NT8D17 Conference/TDS/MFS cards the DISX and ENLX commands must be used whenever the faceplate switch of the card has been toggled. ENLL will software enable the card but the card will not be properly reset.	basic-1

LD 46

ENLX loop	Enable NT8D17 Conference/TDS/MFS card on loop and loop + 1. Enables all functions on the NT8D17 Conference/TDS card. Both the even numbered TDS/MFS loop and adjacent conference loop are enabled. Where: loop = 0, 2, 4. . . 158 If one of the loops is already enabled, it is disabled and then both loops are enabled. Enabling more than 16 conference loops may cause system to lock-up. This command initiates card tests, downloads software and can be used in LD 34, LD 38 and LD 46. The DISL and ENLL commands can be used on the even number loop for the TDS/MFS functions. However, this only prevents the loop from being used by software and does not affect the hardware status of the card. The ENLX and DISX commands are recommended. The Conf/TDS card is not enabled automatically when it is inserted.	xct-15
MFS loop	Test and enable MFS loop.	basic-1
STAT loop	Get status of MFS loop. Response is: • LOOP UNEQ—loop is unequipped • LOOP DSBL—loop is disabled • CHAN yy—number of channels busy • xx DSBL yy BUSY—number of channels disabled & busy • NOT MFS—loop is not an MFS loop	basic-1
TONE loop	Enter input mode to provide MF tone bursts.	basic-1
TONE loop ALL	Provide MF tone bursts for all digits on specified loop (1 to 9, 0, 11 to 15, in that order).	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 48: Link Diagnostic

The Link Diagnostic program is used to maintain data links used with various special features and auxiliary data links. A maintenance telephone cannot use LD 48.

Automatic Call Distribution Links

When equipped with the Automatic Call Distribution (ACD) feature, the Meridian 1/Meridian SL-1 is supplemented with an Auxiliary Data Store (ADS) minicomputer system. The auxiliary data processor is located external to the Meridian 1/Meridian SL-1 and is connected via a high-speed link and a low-speed link.

The high-speed link is used for transmission of ACD-related messages between the Meridian 1/Meridian SL-1 and the auxiliary processor; the low-speed link is used for transmission of maintenance/error messages between the maintenance TTY (connected to the Meridian 1/Meridian SL-1) and the auxiliary processor.

Note: When enabling a high-speed link (using the command “ENL HSL” or “ENL SDI HIGH” in LD 48), the craftsperson must log out of the TTY to receive a message from the switch which confirms that the high-speed link (HSL) has been enabled.

Each Auxiliary Processor Link (APL) consists of a single Serial Data Interface (SDI) port connected via an interface cable to an interface port on the auxiliary processor.

ACD High speed and low speed link monitor

The ACD monitor diagnoses messages which flow across the link. This tool is useful to someone experienced with message formats and protocols.

APL monitor

The APL monitor is a tool used to diagnose the messages flowing across the link. This is only useful for someone experienced with the message formats and protocols.

Integrated Messaging System Links

The link maintenance capabilities provided for Integrated Messaging System (IMS) and Integrated Voice Messaging System (IVMS) links allow the link to be disabled/enabled and put into the maintenance mode.

The link software/hardware status can also be displayed. The program allows the craftsman to request that the printouts of all packed and/or unpacked messages be sent over a specified APL link.

Using print options (packed/unpacked messages) and observing the patterns of messages sent over the link, the most probable fault location (AUX, Meridian 1/Meridian SL-1 or SDI cable) can be determined.

Command and Status Links (CSL)

The Command and Status Link is an application protocol used for communication between the Meridian 1/Meridian SL-1 CPU and an external Value Added Server such as the Meridian Mail MP. The CSL runs on an Enhanced Serial Data Interface (ESDI) card.

In addition to the tests in LD 48, resident firmware diagnostics for the CSLs and ESDIs can output CSA, ESDA, ESDI error messages.

Multi-purpose Serial Data Link (MSDL)

MSDL provides 4 ports for applications such as ISDN Primary Rate D-channels (DCH) and Application Module Links (AML). With X11 Release 19 and later, the MSDL card supports SDI functions.

The MSDL commands are listed below, where x is the MSDL device number (defined by prompt DNUM in LD 17). These are provided in Link Diagnostic (LD 48) and D-channel Maintenance (LD 96), and I/O Diagnostic (LD 37).

DIS MSDL x (ALL) — Disable MSDL card
 ENL MSDL x (FDL, ALL) — Enable MSDL card
 RST MSDL x — Reset MSDL card
 STAT MSDL (x (FULL)) — Get MSDL status
 SLFT MSDL x — Execute a self-test on MSDL card x

These are provided in Link Diagnostic (LD 48) and D-channel Maintenance (LD 96), and I/O Diagnostic (LD 37) Overlays.

Application Module Link (AML)

An Application Module Link (AML) provides a connection to applications such as Meridian Link. The AML is configured on an Enhanced Serial Data Interface (ESDI) or Multipurpose Serial Data Link (MSDL) card.

In X11 Release 18 and later, CMS and ESDI commands are replaced by the following AML commands:

Old command	New command
ENL ESDI x	ENL AML x LYR2
DIS ESDI x	DIS AML x LYR2
ENL CMS x	ENL AML x LYR7
DIS CMS x	DIS AML x LYR7
CON ESDI x	EST AML x
DSC ESDI x	RLS AML x
ACMS x	AML x ACMS
SLFT ESDI x	SLFT AML x
STAT CMS (x)	STAT AML x
STAT ESDI (x)	STAT AML x
SWCH CMS x	SWCH AML x y

AML/CSL monitor

The AML monitor is a tool used to diagnose the messages flowing across the link. This is only useful for someone experienced with the message formats and protocols.

ISDN BRI monitor

This capability is used to monitor input/output messages to the MISP and SILC/UILC. This is only useful for someone experienced with the message formats and protocols. A password is required for DGB and MON options. The SETM TNx, RSET TNx and RSET ALL commands are also available for digital telephones.

Caution: Use of the SETM MISP loop MON commands may use all system printing registers and cause an initialization.

Single Terminal Access (STA)

Single Terminal Access (STA) is an application available on the MSDL card with X11 Release 19 and later. The STA application reduces the number of physical devices used to administer and maintain the Meridian 1 and its auxiliary processors.

Voice Mailbox Administration (VMBA)

Voice Mailbox Administration (VMBA) is available with X11 Release 19 and Meridian Mail 9. It allows for Integrated Voice Mailbox Administration.

Basic commands

Table of contents

Section	Page
Basic commands	820
ACD High speed and low speed link commands	823
ACD High speed and low speed link monitor commands	823
AML commands	824
AML over Ethernet (ELAN) commands	824
AML/CSL monitor commands	825
Auxiliary Processor Link (APL) commands	827
APL monitor commands	827
CSL commands (X11 Release 17 and earlier)	828
ISDN BRI monitor commands	829
Multipurpose Serial Data Link (MSDL) commands	830
Single Terminal Access (STA) commands	830
Voice Mailbox Administration (VMBA) commands	831

Basic commands

ACMS x	Automatic set-up for Command and Status link x
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
CON ESDI x	Set up link layer of HDLC protocol
DIS AML x	Disable AML x
DIS AML x AUTO	Disable AUTO recovery on AML x (MSDL only)
DIS AML x LYR2	Disable layer two on AML x
DIS AML x LYR7	Disable layer seven on AML x
DIS AML x MDL	Disable MDL error reporting on AML x (MSDL only)
DIS AML x MON	Disable monitor on AML x (MSDL only)
DIS APL x	Put software AUX link x in maintenance mode
DIS CMS x	Disable Command and Status link x
DIS ESDI x	Disable ESDI x
DIS HSL	Disable the high-speed link
DIS ISDI x	Disable hardware AUX link SDI x
DIS MON	Disable the monitor-bit of high-speed link data
DIS MSDL x (ALL)	Disable MSDL device x
DIS MSGI x	Disable the MSGI option
DIS MSGO x	Disable the MSGO option
DIS PACI x	Disable the PACI option
DIS PACO x	Disable the PACO option
DIS PPRT x	Disable packet message print option on link x
DIS PRNT	Disable the print-bit of high-speed link data
DIS SDI HIGH	Disable the SDI port for high-speed link
DIS SDI LOW	Disable the SDI port for low-speed link
DIS STA x	Disable the STA application.
DIS UPRT x	Disable unpack message print on AUX link x
DSC ESDI x	Disconnect the link
ENL AML x	Enable AML x
ENL AML x ACMS	Enable automatic set-up on AML x (ESDI only)
ENL AML x AUTO	Enable AUTO recovery on AML x (MSDL only)
ENL AML x FDL	Force download loadware to the MSDL card and enable AML x
ENL AML x LYR2	Enable layer two on AML x
ENL AML x LYR7	Enable layer seven on AML x
ENL AML x MDL	Enable MDL error reporting on AML x (MSDL only)

ENL AML x MON	Enable monitor on AML x (MSDL only)
EST AML x	Establish layer two on AML x
ENL APL x	Put software AUX link x in non-maintenance mode
ENL CMS x	Enable CSL x
ENL ESDI x	Enable ESDI x
ENL HSL	Enable the high-speed link
ENL ISDI x	Enable AUX link SDI x
ENL MON	Print software information at maintenance TTY
ENL MSDL x (ALL, FDL)	Enable MSDL device x
ENL MSGI x	Print incoming messages from link x
ENL MSGO x	Print outgoing messages from link x
ENL PACI x	Print incoming messages from link x
ENL PACO x	Print outgoing messages from link x
ENL PPRT x	Enable packet message print option on link x
ENL PRNT	Connect high-speed link to TTY
ENL SDI HIGH	Enable SDI port for high-speed link
ENL SDI LOW	Enable SDI port for low-speed link
ENL UPRT x	Enable unpacked message print on link x
ENLX MSGI x p	Output incoming priority p messages from link x
ENLX MSGO x p	Output outgoing priority p messages from link x
ENL STA x (FDL)	Enable STA application. The MSDL card must be enabled to implement this command.
MAP AML (x)	Get physical address and card name of one or all AMLs
MAP STA x	Get information relating to the STA application.
RLS AML x	Release layer two on AML x
RSET ALL	Stop printing all messages on a line card
RSET BRIM	Stop printing of messages on SILC/UILC, MISP or digital line card
RSET IFx 1 PDL2 1	Stop printing SAPI 16 interface messages.
RSET IFx 1 PDNI n	Stop printing network interface messages.
RSET IFx l s c u BCH x	Stop printing B-channel terminal interface messages.
RSET IFx l s c u DCHx	Stop printing D-channel terminal interface messages.
RESET IMSG l s c dsl	Disable monitoring on incoming
RSET MISP loop AMO	Stop MISP printing of audit messages on MISP card
RSET MISP loop DGB	Exit MISP debug
RSET MISP loop MNT	Stop MISP printing of status messages on MISP card
RSET MISP loop MON	Stop printing of input/output messages on MISP card
RSET MPHm	Stop all Meridian Packet Handler message monitoring.
RSET OMSG l s c dsl	Disable monitoring on outgoing
RSET TNx	Stop printing messages on an ISDN BRI line card

RST MSDL x	Reset MSDL device x
SET IMSG l s c dsl MON x	Set monitor on incoming msg
SET OMSG l s c dsl MON x	Set monitor on outgoing msg
SETM BRIM xxxx	Set printing of messages on SILC/UILC, MISP or digital line card
SETM IFx 1 PDL2 1	Set printing of SAPI 16 interface messages
SETM IFx 1 PDNI n	Set printing of network interface messages.
SETM IFx l s c u BCHx	Set printing of B-channel terminal interface messages.
SETM IFx l s c u DCHx	Set printing of D-channel terminal interface messages.
SETM MISP loop AMO	Set printing of audit messages on MISP card
SETM MISP loop DBG	Set debug option on MISP card
SETM MISP loop MNT	Set printing of status messages on MISP card
SETM MISP loop MON	Set printing of input/output messages on MISP card
SETM MPMH xxxx	Set printing of Meridian Packet Handler messages.
SETM TNx l s c u, 31	Set printing messages on a digital line card unit (u) or ISDN BRI line card (31)
SETM TNx l s c u, dsl	Set printing messages on a unit
SLFT AML x	Invoke self-test for AML x
SLFT ESDI x	Invoke ESDI and run self-test
SLFT MSDL x	Invoke self-test for MSDL device x
STAT AML (x)	Get AML status
STAT APL x	Display status of AUX link x
STAT CMS x	Get status of Command and Status link x
STAT CNFG	Get status of link monitor/simulator configuration
STAT CSDI x	Get status of SDI port x
STAT DSP LNK x	Get status of all Displays on link x
STAT ESDI x	Get status of ESDI x
STAT HSL	Get high-speed link status
STAT ISDI x	Get status of hardware AUX link SDI x
STAT LSL	Get low-speed link status
STAT MON (x)	Get status of one or all message monitors
STAT MSDL (x [FULL])	Get MSDL status
STAT SDI HIGH	Get status of high-speed link port
STAT SDI LOW	Get status of low-speed link port
STAT STA x	Get status of STA application.
SWCH AML x y	Switch active (x) and standby (y) AML
SWCH CMS x y	Switch active (x) and standby (y) CSL
UPLD AML x TBL x	Upload parameter Table 1 to 4 from AML x (MSDL only)

ACD High speed and low speed link commands

The following commands are used to enable, disable, test and check the status of an APL link.

Note: When enabling a high-speed link (using the command “ENL HSL” or “ENL SDI HIGH” in LD 48), the craftsperson must log out of the TTY to receive a message from the switch which confirms that the high-speed link (HSL) has been enabled.

DIS HSL	Disable the high-speed link
DIS SDI HIGH	Disable the SDI port for high-speed link
DIS SDI LOW	Disable the SDI port for low-speed link
ENL HSL	Enable the high-speed link
ENL SDI HIGH	Enable SDI port for high-speed link
ENL SDI LOW	Enable SDI port for low-speed link
STAT HSL	Get high-speed link status
STAT LSL	Get low-speed link status
STAT SDI HIGH	Get status of high-speed link port
STAT SDI LOW	Get status of low-speed link port

ACD High speed and low speed link monitor commands

The monitor is a tool used to diagnose the messages flowing across the link. This is only useful for someone experienced with the message formats and protocols.

DIS MON	Disable the monitor-bit of high-speed link data
DIS PRNT	Disable the print-bit of high-speed link data
ENL MON	Print software information at maintenance TTY
ENL PRNT	Connect high-speed link to TTY
STAT MON (x)	Get status of one or all message monitors

AML commands

The AML commands are listed below, where **x** is the AML logical device number (defined by prompt ADAN in LD 17). Some of these commands only apply to AMLs on an MSDL card.

DIS AML x	Disable AML x
DIS AML x AUTO	Disable AUTO recovery on AML x (MSDL only)
DIS AML x LYR2	Disable layer two on AML x
DIS AML x LYR7	Disable layer seven on AML x
DIS AML x MDL	Disable MDL error reporting on AML x (MSDL only)
DIS AML x MON	Disable monitor on AML x (MSDL only)
ENL AML x	Enable AML x
ENL AML x ACMS	Enable automatic set-up on AML x (ESDI only)
ENL AML x AUTO	Enable AUTO recovery on AML x (MSDL only)
ENL AML x FDL	Force download loadware to the MSDL card and enable AML x
ENL AML x LYR2	Enable layer two on AML x
ENL AML x LYR7	Enable layer seven on AML x
ENL AML x MDL	Enable MDL error reporting on AML x (MSDL only)
ENL AML x MON	Enable monitor on AML x (MSDL only)
EST AML x	Establish layer two on AML x
MAP AML (x)	Get physical address and card name of one or all AMLs
RLS AML x	Release layer two on AML x
SLFT AML x	Invoke self-test for AML x
STAT AML (x)	Get AML status
SWCH AML x y	Switch active (x) and standby (y) AML
UPLD AML x TBL x	Upload parameter table 1 to 4 from AML x (MSDL only)

AML over Ethernet (ELAN) commands

DIS ELAN	Disable ELAN (server task)
DIS ELAN x	Disable ELAN link number x (client task)
ENL ELAN	Enable ELAN (server task)
STAT ELAN	Check status of all configured ELANs
STAT ELAN	Check status of ELAN x

AML/CSL monitor commands

The AML monitor is a tool used to diagnose the messages flowing across the link. This is only useful for someone experienced with the message formats and protocols. These commands apply to CSLs or AMLs on ESDI cards and AMLs on MSDL cards.

DIS MSGI x	Disable output of incoming layer seven messages on AML x
DIS MSGO x	Disable output of outgoing layer seven messages on AML x
DIS PACI x	Disable output of incoming layer two messages on AML x
DIS PACO x	Disable output of outgoing layer two messages on AML x
DISM MSGI <link#><msg1><msg2>...	Disable message input/output monitoring excluding those specified incoming messages
DISM MSGO <link#><msg1><msg2>...	Disable message input/output monitoring excluding those specified outgoing messages
DSIM MSGI <link#>	Disable inclusive incoming message monitoring
DSIM MSGO <link#>	Disable inclusive outgoing message monitoring
DSIP MSGI <link#><pri><pri>...	Disable monitoring of inclusive priorities on incoming messages
DSIP MSGO <link#><pri><pri>...	Disable monitoring of inclusive priorities on outgoing messages
DSIT MSGI <link#><l><s><c><u>	Disable inclusive TN incoming message monitoring
DSIT MSGO <link#><l><s><c><u>	Disable inclusive TN outgoing message monitoring
DSXP MSGI <link#><pri><pri>...	Disable monitoring of exclusive priorities on incoming messages
DSXP MSGO <link#><pri><pri>...	Disable monitoring of exclusive priorities on outgoing messages
DSXT MSGI <link#><l><s><c><u>	Disable exclusive TN incoming message monitoring
DSXT MSGO <link#><l><s><c><u>	Disable exclusive TN outgoing message monitoring
ENIM MSGI <link#><msg1><msg2>...	Enable inclusive input/output message monitoring of only those specified incoming messages
ENIM MSGO <link#><msg1><msg2>...	Enable inclusive input/output message monitoring of only those specified outgoing messages
ENIP MSGI <link#><pri><pri>...	Enable inclusive input/output monitoring of incoming messages with specified priorities

ENIP MSGO <link#><pri><pri>...	Enable inclusive input/output monitoring of outgoing messages with specified priorities
ENIT MSGI <link#><l><s><c><u>	Enable inclusive input/output monitoring of incoming messages with specified TN
ENIT MSGO <link#><l><s><c><u>	Enable inclusive input/output monitoring of outgoing messages with specified TN
ENL MSGI x	Enable output of incoming layer seven messages on AML x
ENL MSGO x	Enable output of outgoing layer seven messages on AML x
ENL PACI x	Enable output of incoming layer two messages on AML x
ENL PACO x	Enable output of incoming layer two messages on AML x
ENXM MSGI <link#><msg1><msg2>...	Enable message input/output monitoring excluding those specified incoming messages
ENXM MSGO <link#><msg1><msg2>...	Enable message input/output monitoring excluding those specified outgoing messages
ENXP MSGI <link#><pri><pri>...	Enable input/output incoming message monitoring excluding messages with specified priorities
ENXP MSGO <link#><pri><pri>...	Enable input/output outgoing message monitoring excluding messages with specified priorities
ENXT MSGI <link#><l><s><c><u>	Enable input/output message monitoring excluding incoming messages with specified TN
ENXT MSGO <link#><l><s><c><u>	Enable input/output message monitoring excluding outgoing messages with specified TN
FLSH	Disable monitor and flash buffers
STAT MON (x)	Get status of one or all message monitors

Auxiliary Processor Link (APL) commands

The following commands are used to enable, disable, test and check the status of an APL link.

DIS APL x	Put software AUX link x in maintenance mode
DIS ISDI x	Disable hardware AUX link SDI x
ENL APL x	Put software AUX link x in non-maintenance mode
ENL ISDI x	Enable AUX link SDI x
STAT APL x	Display status of AUX link x
STAT DSP LNK x	Get status of all Displays on link x
STAT ISDI x	Get status of hardware AUX link SDI x

APL monitor commands

The APL monitor is a tool used to diagnose the messages flowing across the link. This is only useful for someone experienced with the message formats and protocols.

DIS PPRT x	Disable packet message print option on link x
DIS UPRT x	Disable unpacket message print on AUX link x
ENL PPRT x	Enable packet message print option on link x
ENL UPRT x	Enable unpacked message print on link x
ENLX MSGI x p	Output incoming priority p messages from link x
ENLX MSGO x p	Output outgoing priority p messages from link x
STAT CNFG	Get status of link monitor/simulator configuration
STAT CSDI x	Get status of SDI port x
STAT DSP LNK x	Get status of all Displays on link x

CSL commands (X11 Release 17 and earlier)

The following commands are used to enable, disable, test and check the status of Command and Status links. Note: Use AML commands in X11 Release 18 and later.

ACMS x	Automatic set-up for Command and Status link x
CON ESDI x	Set up link layer of HDLC protocol
DIS CMS x	Disable Command and Status link x
DIS ESDI x	Disable ESDI x
DSC ESDI x	Disconnect the link
ENL CMS x	Enable CSL x
ENL ESDI x	Enable ESDI x
SLFT ESDI x	Invoke ESDI and run self-test
STAT CMS x	Get status of Command and Status link
STAT ESDI x	Get status of ESDI x
SWCH CMS x y	Switch active (x) and standby (y) CSL

ISDN BRI monitor commands

These commands are used to monitor input/output messages to the MISP, and SILC/UILC. This is only useful for someone experienced with the message formats and protocols. A password is required for DGB and MON options. The SETM TNx, RSET TNx and RSET ALL commands are also available for digital telephones.

Caution: Use of the SETM MISP loop MON commands may use all system printing registers and cause an initialization.

RSET ALL	Reset (turn off) printing of messages for all terminal numbers associated with TN0-TN6.
RSET BRIM	Stop printing of messages on SILC/UILC, MISP or digital line card.
RSET MISP x AMO	Stop printing of audit messages on MISP specified.
RSET MISP x DGB	Exit MISP debug.
RSET MISP x MNT	Stop printing status messages on MISP specified.
RSET MISP x MON	Stop printing input/output messages on MISP specified.
RSET TNx	Stop printing of messages for terminal number associated with TNx. TNx is associated with the terminal number by the SETM TNx command.
SETM BRIM xxxx	Set printing of selected message types for MISP, SILC/UILC or digital line cards.
SETM MISP x AMO	Set printing of audit messages on MISP specified. The SETM TNx command must have been issued before issuing this command.
SETM MISP x DBG	Set debug option for the MISP specified. DISABLE MISP prior to issuing this command, re-enable MISP after command issued.
SETM MISP x MNT	Set printing of maintenance messages for the MISP specified.
SETM MISP x MON	Set printing of input/output messages for the MISP specified.
SETM TNx l s c u, dsl	Set printing messages on a unit
SETM TNx l s c u, 31	Set printing messages on a digital line card unit (u) or ISDN BRI line card (31)
SETM TNx y	Set printing of messages for specified digital line card unit or ISDN BRI line card.

Multipurpose Serial Data Link (MSDL) commands

The MSDL commands are listed below, **x** is the MSDL device number (defined by prompt DNUM in LD 17). These commands are also provided in Input/Output Diagnostic (LD 37) and D-channel Diagnostic (LD 96).

DIS MSDL x (ALL)	Disable MSDL device x
ENL MSDL x (ALL, FDL)	Enable MSDL device x
RST MSDL x	Reset MSDL device x
SLFT MSDL x	Invoke self-test for MSDL device x
STAT MSDL (x [FULL])	Get MSDL status

Single Terminal Access (STA) commands

Single Terminal Access (STA) is an application available on the MSDL card with X11 Release 19 and later. The STA application reduces the number of physical devices used to administer and maintain the Meridian 1 and its auxiliary processors. Refer to the X11 *system management applications* NTP for complete details.

DIS STA x	Disable the STA application
ENL STA x (FDL)	Enable STA application
MAP STA x	Get information relating to the STA application
STAT STA x	Get status of STA application

Voice Mailbox Administration (VMBA) commands

Voice Mailbox Administration (VMBA) is available with X11 Release 19 and Meridian Mail 9. It allows for Integrated Voice Mailbox Administration. Refer to the *X11 features and services* NTP for complete details.

DIS VMBA <vsid>	Disable the Voice Mailbox Administration application
DIS VMBA <vsid> AUDT	Disable the mailbox database audit
DIS VMBA <vsid> UPLD	Disable the mailbox database upload
ENL VMBA <vsid>	Enable the Voice Mailbox Administration application
ENL VMBA <vsid> AUDT	Enable the mailbox database audit
ENL VMBA <vsid> UPLD	Enable the mailbox database upload
STAT VMBA <vsid>	Get the status for the Voice Mailbox Administration application
STAT VMBA <vsid> AUDT	Get the status for the Voice Mailbox database audit
STAT VMBA <vsid> UPLD	Get the status for the Voice Mailbox database upload

Alphabetical list of commands

Command	Description	Pack/Rel
ACMS x	Automatic set-up for Command and Status link x. ACMS is a background process. The given CSL must have been previously disabled. This command is equivalent to using the ENL ESDI x, CON ESDI x and ENL CMS x sequence of commands to set up a Command and Status link or Meridian link. If the first attempt to bring up the CSL fails, ACMS will automatically try again to set up the link. If set-up failure continues, an appropriate error code is generated periodically. Use ENL AML x ACMS command in X11 Release 18 and later.	cs1-8
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	basic-1
CON ESDI x	Set up link layer of HDLC protocol. This command is only applicable for a synchronous port. This command is valid only if the ESDI is enabled. If successful, the corresponding ESDI port will be in the CONNECTED state. If the port is used for a CSL application, the command ENL CMS x must be entered before the CSL is operational. Use EST AML x command in X11 Release 18 and later.	cs1-8
DIS AML x	Disable AML x. Whenever the third parameter (LYR2, LYR7, etc.) is not typed, the overlay defaults the third parameter of the DIS command to LYR2. Therefore, this command is equivalent to DIS AML x LYR2. Refer to DIS AML x LYR2 command definition, for more information.	msdl-18
DIS AML x AUTO	Disable AUTO recovery on AML x (MSDL only). This command is not available for an ESDI AML.	msdl-18

DIS AML x LYR2	Disable layer two on AML x. MSDL Requirement: The MSDL card must be enabled. The AML link state can be any state other than the disabled state, and should not be in the process of self-test. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The AML link state is changed to the disable state. The MSDL port on which the AML is configured is disabled. ESDI: The ESDI port is disabled. The port must be idle.	msdl-18
DIS AML x LYR7	Disable layer seven on AML x. The MSDL or ESDI card must be enabled. The AML layer two must be enabled and established, and AML layer seven must also be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 followed by EST AML x followed by ENL AML x LYR7 must have been executed at an earlier time. Action: A request to disable the AML layer seven is issued. SL-1 will stop sending polling messages to the far-end.	msdl-18
DIS AML x MDL	Disable MDL error reporting on AML x (MSDL only). MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The MSDL AML loadware command to disable the debug monitor is sent to the MSDL card. This command is not available for ESDI AML.	msdl-18
DIS AML x MON	Disable monitor on AML x (MSDL only). MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The MSDL AML loadware command to disable the debug monitor is sent to the MSDL card. This command is not available for ESDI AML.	msdl-18
DIS APL x	Put software AUX link x in maintenance mode.	apl-1

DIS CMS x	Disable Command and Status link x. This command does not disable the physical or link layer (HDLC protocol) of the CSL. i.e., the corresponding ESDI is not disabled or disconnected. Warning messages will appear if an attempt is made to disable the active CSL but the link can be disabled if desired. Use DIS AML x LYR7 command in X11 Release 18 and later.	csl-8
DIS ELAN	Disable the ELAN (server task)	nxcc-22
DIS ELAN x	Disable ELAN link number x (client task) If the application ELAN client task cannot be established from the Meridian 1, the Meridian 1 can disable the client task with this command.	nxcc-22
DIS ESDI x	Disable ESDI x. If the port is used for CSL purposes, the link layer is disconnected and the ESDI will NOT respond to far end SABM (HDLC protocol). Also, ESDI can no longer interrupt the SL-1. A warning message will appear if an attempt is made to disable the active CSL, though it can be disabled, if desired. You cannot disable the active TTY port with this command. Use DIS AML x LYR2 command in X11 Release 18 and later.	csl-8
DIS HSL	Disable the high-speed link.	lnk-2
DIS ISDI x	Disable hardware AUX link SDI x.	apl-1
DIS MON	Disable the monitor-bit of high-speed link data.	apl-1

DIS MSDL x (ALL)	Disable MSDL device. When entered without the optional parameter, the disable MSDL command attempts to disable the MSDL card. Disabling the card via this command is permitted from either the Enabled (ENBL) state or the System Disabled (SYS DSBL) state. When attempted on an MSDL that does not have any ports enabled, this command will succeed. The only exception to this is when the disable card message needs to be sent to the card, and there is no buffer currently available for building the message (MSDL015 is output to the TTY). In this unusual situation, attempting the command again will most likely result in success. Application Overlays are not erased when the MSDL is disabled. If there are any ports that are still running in the MSDL card, the 'ALL' option must be used to force disable the active ports. As an alternative to this command, the craftsman can use the commands provided by the applications to disable the ports (D-channels or AML) individually, and then use the 'DIS MSDL x' command. The command 'DIS MSDL x ALL' is not allowed if the active TTY (the terminal from which the command was entered) is supported on the MSDL card in question. Software disable the logical channel prior to disabling the physical DNUM port.	msdl-18
DIS MSGI x	Disable printing of messages on link x at input queue level. Disable output of incoming layer seven messages on AML x.	csi-8
DIS MSGO x	Disable printing of messages on link x at output queue level. Disable output of outgoing layer seven messages on AML x.	csi-8
DIS PACI x	Disable printing of input messages on link x at input buffer level. (disable output of incoming layer two messages on AML x)	csi-8
DIS PACO x	Disable printing of output messages on link x at output buffer level. (disable output of outgoing layer two messages on AML x)	csi-8

DIS PPRT x	Disable packet message print option on link x.	apl-1
DIS PRNT	Disable the print-bit of high-speed link data.	apl-1
DIS SDI HIGH	Disable the SDI port for high-speed link.	lnk-2
DIS SDI LOW	Disable the SDI port for low-speed link.	lnk-2
DIS STA x	Disable the STA application. This command disables the application, the administration port, and any other additional ports. The associated ports must be disabled before using this command. x = the logical ID number identifying the STA application.	sta-19
DIS UPRT x	Disable unpacket message print on AUX link x.	apl-1
DIS VMBA <vsid>	Disable the Voice Mailbox Administration application. This command is used to disable the Voice Mailbox Application. Enter the command in the following format: - DIS VMBA <vsid> <NNNN> Where: - vsid = The VAS ID number associated with VMBA. - NNNN = AUDT or UPLD for the database audit or upload. AUDT and UPLD are optional entries. The VAS ID must be entered. The Voice Mailbox audit and upload functions are aborted when the application is disabled. Be sure to get the status of those functions before disabling the application.	vmba-19
DIS VMBA <vsid> AUDT	Disable the mailbox database audit. This command aborts the audit function whether it was invoked manually or automatically.	vmba-19
DIS VMBA <vsid> UPLD	Disable the mailbox database upload. This command aborts the audit function whether it was invoked manually or automatically.	vmba-19

DISM MSGI <link#><msg1><msg2>...	nxcc-22
Disable message input/output monitoring excluding those specified incoming messages	
DISM MSGO <link#><msg1><msg2>...	nxcc-22
Disable message input/output monitoring excluding those specified outgoing messages	
DSC ESDI x	csi-8
Disconnect the link.	
This command is only applicable when the ESDI port is in CONNECTED state. If the command is entered successfully, ESDI x is in enabled state.	
If this command is entered while the CSL is active, a warning message is generated. Disabling while in this state disables the CMS and ESDI.	
Use RLS AML x command in X11 Release 18 and later.	
DSIM MSGI <link#>	nxcc-22
Disable inclusive incoming message monitoring	
DSIM MSGO <link#>	nxcc-22
Disable inclusive outgoing message monitoring	
DSIP MSGI <link#><pri><pri>...	nxcc-22
Disable monitoring of inclusive priorities on incoming messages	
DSIP MSGO <link#><pri><pri>...	nxcc-22
Disable monitoring of inclusive priorities on outgoing messages	
DSIT MSGI <link#><l><s><c><u>	nxcc-22
Disable inclusive TN incoming message monitoring	
DSIT MSGO <link#><l><s><c><u>	nxcc-22
Disable inclusive TN outgoing message monitoring	
DSXP MSGI <link#><pri><pri>...	nxcc-22
Disable monitoring of exclusive priorities on incoming messages	

DSXP MSGO <link#><pri><pri>...	nxcc-22
Disable monitoring of exclusive priorities on outgoing messages	
DSXT MSGI <link#><l><s><c><u>	nxcc-22
Disable exclusive TN incoming message monitoring	
DSXT MSGO <link#><l><s><c><u>	nxcc-22
Disable exclusive TN outgoing message monitoring	
ENIM MSGI <link#><msg1><msg2>...	nxcc-22
Enable inclusive input/output message monitoring of only those specified incoming messages	
ENIM MSGO <link#><msg1><msg2>...	nxcc-22
Enable inclusive input/output message monitoring of only those specified outgoing messages	
ENIP MSGI <link#><pri><pri>...	nxcc-22
Enable inclusive input/output monitoring of incoming messages with specified priorities	
ENIP MSGO <link#><pri><pri>...	nxcc-22
Enable inclusive input/output monitoring of outgoing messages with specified priorities	
ENIT MSGI <link#><l><s><c><u>	nxcc-22
Enable inclusive input/output monitoring of incoming messages with specified TN	
ENIT MSGO <link#><l><s><c><u>	nxcc-22
Enable inclusive input/output monitoring of outgoing messages with specified TN	
ENL AML x	esdi/ msdl-18
Enable AML x.	
For MSDI: If AUTO recovery is off, then this command is the same as the ENL AML x LYR2 command. If AUTO recovery is on, an attempt is made to establish the link (layer two) and the application (layer seven).	
For ESDI: This is the same as the ENL AML x LYR2 command.	

ENL AML x ACMS	Enable automatic set-up on AML x (ESDI only). This command is valid only for ESDI AML and is not available on the MSDL AML. It is equivalent to ACMS x command.	esdi-18
ENL AML x AUTO	Enable AUTO recovery on AML x (MSDL only). This command is not available for ESDI AML links.	msdl-18
ENL AML x FDL	Force download loadware to the MSDL card and enable AML x. MSDL Requirement: The MSDL card must be enabled. The AML link state must be in the disable state. All other MSDL AML links configured on the same MSDL card must be in the disable state. Example: ENL MSDL x must have been executed at an earlier time. MSDL Action: The MSDL AML loadware is downloaded to the MSDL card. While download is in progress a series of dots are output. Once the command is executed successfully the ENL AML x LYR2 command is executed automatically.	msdl-18
ENL AML x LYR2	Enable layer two on AML x. MSDL Requirement: The MSDL card must be enabled. The AML link state must be in the disable state. Example: ENL MSDL x must have been executed at an earlier time. MSDL Action: The AML link state is changed to the release state. The MSDL port on which the AML is configured is enabled. If the ENL AML x command is executed successfully, and MSDL AML auto recovery is in the enable state, then the EST AML x is issued automatically. ESDI: The ESDI port is enabled. The ESDI card must first be disabled.	msdl-18
ENL AML x LYR7	Enable layer seven on AML x. MSDL Requirement: The MSDL card must be enabled. The AML link should not be in the simulation mode. The AML layer two must be enabled and established, and AML layer seven must be disabled.	msdl-18

Example: ENL MSDL x followed by ENL AML x LYR2 followed by EST AML x must have been executed at an earlier time.

MSDL Action: A request to enable the AML layer seven is issued. Polling messages are sent to the far end.

ESDI: Layer seven is enabled for the ESDI AML. The ENL AML x (LYR2) command must be completed successfully first.

ENL AML x MDL	Enable MDL error reporting on AML x (MSDL only). MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The MSDL AML loadware command to enable the MDL error reporting is sent to the MSDL card. This command is not available for ESDI AML links.	msdl-18
ENL AML x MON	Enable monitor on AML x (MSDL only). MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The MSDL AML loadware command to enable the debug monitor is sent to the MSDL card This command is not available for ESDI AML links.	msdl-18
ENL APL x	Put software AUX link x in non-maintenance mode.	apl-1

ENL CMS x	Enable CSL x. This does not automatically enable the physical layer (HDLC protocol) of the CSL, i.e., the corresponding components (ESDI, Digital Link Interface, ASIM/Data Line Card) have to be enabled before this command can be entered. The command is valid only when the corresponding ESDI is in the CONNECTED state (i.e., the HDLC link layer is up). This command will trigger a polling message to be sent and if the correct response is returned, a confirmation message will be printed and a polling message sent automatically every 5 seconds. If there is no response within 5 seconds, an error message will be printed and no more polling messages will be sent. (48 messages are sent at initial set-up) Use ENL AML x LYR7 command in X11 Release 18 and later.	csl-8
ENL ELAN	Enable ELAN server task When the application establishes connection to a Meridian 1 via this ELAN, a client process will be spawned for this application. The APP_IP_ID (Port ID and IP address) of each connection will be passed into the Meridian 1.	nxcc-22
ENL ESDI x	Enable ESDI x. ESDI hardware tests will be performed and parameters will be downloaded to the ESDI port. If the command is successful, the ESDI port will be in the ENABLED state. If the ESDI is used for a CSL application, the commands CON ESDI x and ENL CSL x have to be entered before CSL is operational. Use ENL AML x LYR2 command in X11 Release 18 and later.	csl - 8
ENL HSL	Enable the high-speed link. When enabling a high-speed link, the craftsperson must log out of the TTY to receive a message from the switch which confirms that the high-speed link (HSL) has been enabled.	lnk-2
ENL IALM <vsid>	Enable the integrated alarms application on the specified VAS. A VAS011 message is printed if the application is successfully enabled and a VAS012 if it is not.	ialm-21
ENL ISDI x	Enable AUX link SDI x.	apl-1

ENL MON	Print software information at maintenance TTY. This command causes software information being sent to the auxiliary processor to be printed at the TTY. This information would include counts of Cumulative Negative Acknowledgments (NAKs), time-outs and many other control characteristics of the link. Use this command only when the ACD is handling light traffic. Otherwise, the TTY will be overloaded from the high volume of messages.	apl-1
ENL MSDL x (FDL, ALL)	Enable MSDL card. When entered without any of the optional parameters, the enable MSDL command attempts to enable the MSDL card. Enabling the card via this command is only permitted if the card is currently in the Manually Disabled (MAN DSBL) state. The enable card succeeds if: 1. the card is resident in the shelf 2. it has passed all the self-tests 3. the MSDL base software has been downloaded and is responding If the MSDL base software and any configured application software has not been downloaded, or if the version of the software on the card is different from the version on the system disk, software download occurs. While download is in progress, a series of dots (".") are output. If the FDL (forced download) option is entered, the MSDL base software and all the configured applications will be downloaded regardless if the application already exists on the card. Following the download, the card will be enabled. If the ALL option is entered, the card will be enabled (provided the three conditions mentioned above are met), all the applications will be downloaded if necessary and then an attempt will be made to enable all the links/ports configured on the card. Additionally, the enable command with the ALL option can be entered when the card is already in the enabled state. This allows you to enable any disabled links/ports through one command. It is not possible to use both the ALL and the FDL options in the same command.	msdl-18

ENL MSGI x	Print incoming messages from link x. Enable output of incoming layer seven messages on AML x. This command allows printing of all incoming message received over link x on the maintenance output device. The SSD signaling messages and the program input are not printed. This is typically used to check the validity of incoming messages for the different queues.	csl-8
ENL MSGO x	Print outgoing messages from link x. Enable output of outgoing layer seven messages on AML x. This command allows printing for all outgoing messages over link x on the maintenance output device. This is typically used to check the validity of outgoing messages sent from the application layer to the output queue.	csl-8
ENL PACI x	Print incoming ESDI messages from link x. Enable output of incoming layer two messages on AML x. When enabled, all incoming messages received on link x to the ESDI are printed on the maintenance TTY, including SSD signaling messages. Typically this is used to check the correctness of the incoming messages as received from the ESDI in the data block format.	csl-8
ENL PACO x	Print outgoing ESDI messages from link x. Enable output of incoming layer two messages on AML x. When enabled, all outgoing messages are sent through link x to the ESDI and are printed on the maintenance TTY. The message will be printed in the data block format required by the ESDI.	csl-8
ENL PPRT x	Enable packet message print option on link x. Printouts can be up to 7 lines in length and are of the form: • APL0 xxx y xxx. . . x • APLI xxx y xxx. . . x Where: • APL0 = the message is output from the Meridian 1 • APLI = the message is input to Meridian 1 from AUX • xxx = number of the APL link. • y = number from 0 to 6 indicating the printout line number of the message. This field is not used for ACK and NAK messages.	apl-1

ENL PRNT	Connect high-speed link to TTY. Disconnects the high-speed link from the AUX and connects it instead to an RS-232-C compatible TTY device. This disrupts communication between the Meridian 1 and the auxiliary processor. It enables ACD related messages (which would normally be sent to the auxiliary processor) to be printed at the TTY connected to the high-speed link. Normal communications between the Meridian 1 and the auxiliary processor will not continue if the ENL PRNT command is inputted while the Meridian 1 and auxiliary processor are still connected. A different message format is used between the Meridian 1 and the auxiliary processor. This condition will cause the HSL to go down because the auxiliary processor cannot interpret this other message format.	apl-1
ENL SDI HIGH	Enable SDI port for high-speed link. When enabling a high-speed link, the craftsperson must log out of the TTY to receive a message from the switch which confirms that the high-speed link (HSL) has been enabled.	lnk-2
ENL SDI LOW	Enable SDI port for low-speed link.	lnk-2
ENL STA x (FDL)	Enable STA application. The MSDL card must be enabled to implement this command, where: • x = the logical ID number identifying the STA application. • FDL = force download the application. If not invoked, the application is downloaded only when needed	sta-19
ENL UPRT x	Enable unpacked message print on link x. Printouts are of the form: APLMxxx aa b c zzzz. . . z Where: • APLMxxx = indicates unpacked message over link xxx • aa = indicates the message length • b = indicates the application type • c = indicates the message type • zzz = these fields are the message body, depending on the application and message type	apl-1

ENL VMBA <vsid>

vmba-19

Enable the Voice Mailbox Administration application. Enter the command in the following format:

ENL VMBA <vsid> <NNNN> ALL/xxxx

Where:

- vsid = The VAS ID number associated with VMBA.
- NNNN = AUDT or UPLD for the mailbox database audit or upload functions.
- ALL/xxxx = Enable NNNN for ALLDNs with Voice Mailboxes, or a specific DN (xxxx).

NNNN and ALL/xxxx are optional entries. The VAS ID must be entered to initiate this command.

ENL VMBA <vsid> AUDT

vmba-19

Enable the mailbox database audit. Enter the command in the following format:

ENL VMBA <vsid> AUDT ALL/xxxx

The audit can be implemented for a specific Directory. Number by entering the DN following the audit command:

- ENL VMBA <vsid> AUDT xxxx

The upload can also be enabled for all DN's eligible for a Voice Mailbox by entering ALL following the audit command:

- ENL VMBA <vsid> AUDT ALL

ENL VMBA <vsid> UPLD

vmba-19

Enable the mailbox database upload. Enter the command in the following format:

- ENL VMBA <vsid> UPLD ALL/xxxx

The upload can be implemented for a specific Directory. Number by entering the DN following the upload command:

- ENL VMBA <vsid> UPLD xxxx

The audit can also be enabled for all DN's configured with Voice Mailboxes by entering ALL following the upload command:

- ENL VMBA <vsid> UPLD ALL

ENLX MSGI x p	Output incoming priority p messages from link x. When enabled by the user, all incoming messages received on link x are output, excluding the messages with specified priorities, where “p” is the message priority, and where: • 1 = the system priority • 2 = signaling priority • 3 = call processing priority • 4 = administration priority	apl-1
ENLX MSGO x p	Output outgoing priority p messages from link x. When enabled by the user, all outgoing messages sent through link x are output, excluding the messages with specified priorities, where “p” is the message priority, and where: • 1 = the system priority • 2 = signaling priority • 3 = call processing priority • 4 = administration priority.	apl-1
EST AML x	Establish layer two on AML x. The layer two is established for the AML configured on the given MSDL port. The layer two is connected for the AML configured on the ESDI card. MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled and released. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. MSDL Action: The MSDL AML link state is changed into the established state. If EST AML x executes successfully, and provided that the MSDL AML AUTO recovery is enabled, next the ENL AML x LYR7 is executed automatically. ESDI: Layer two is connected for the ESDI AML. The port must be enabled first.	msdl-18
ENXM MSGI <link#><msg1><msg2>...	Enable message input/output monitoring excluding those specified incoming messages	nxcc-22
ENXM MSGO <link#><msg1><msg2>...	Enable message input/output monitoring excluding those specified outgoing messages	nxcc-22

ENXP MSGI <link#><pri><pri>...	Enable input/output incoming message monitoring excluding messages with specified priorities	nxcc-22
ENXP MSGO <link#><pri><pri>...	Enable input/output outgoing message monitoring excluding messages with specified priorities	nxcc-22
ENXT MSGI <link#><l><s><c><u>	Enable input/output message monitoring excluding incoming messages with specified TN	nxcc-22
ENXT MSGO <link#><l><s><c><u>	Enable input/output message monitoring excluding outgoing messages with specified TN	nxcc-22
FLSH	Disable monitor and flash buffers	nxcc-22
MAP AML (x)	Get physical address and card name of one or all AMLs. This command outputs the card name and physical card address and ports for one or all AMLs. This information is also output with the STAT AML command. For example: • MAP AML • AML : 05 ESDI : 04 • AML : 12 MSDL : 07 PORT : 1	msdl-18
MAP STA x	Get information relating to the STA application. This command displays the logical, physical, and port allocation information related to the STA application. If the ID number (x) is not specified, the information for all existing STAs is given.	sta-19

RLS AML x	Release layer two on AML x. The layer two is released for the AML link configured on the given MSDL port. The layer two is disconnected for the AML configured on the ESDI card. MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled and established. Example: ENL MSDL x followed by ENL AML x LYR2 followed by EST AML x must have been executed at an earlier time. MSDL Action: Prior to the execution of the RLS AML x, if the MSDL AML layer seven is enabled, the DIS AML x LYR7 is automatically executed. The MSDL AML state is changed to the release state. ESDI: The layer two is disconnected for the ESDI AML port. The port must be in the connected and idle state first.	msdl-18
RSET ALL	Stop printing all messages on a line card.	arie/ bri-14
RSET BRIM	Stop printing of messages on SILC/UILC, MISP or digital line card.	bri/ arie-18
RSET IFx 1 PDL2 1	Stop printing SAPI 16 interface messages.	mph-19
RSET IFx 1 PDNI n	Stop printing network interface messages.	mph-19
RSET IFx I s c u BCH x	Stop printing B-channel terminal interface messages.	mph-19
RSET IFx I s c u DCHx	Stop printing D-channel terminal interface messages.	mph-19
RSET IMMSG I s c dsl	Disable monitoring on incoming	
RSET MISP x AMO	Stop printing of audit messages on MISP specified. Where: x = loop.	bri-18
RSET MISP x DGB	Exit MISP debug. Where: x = loop.	bri-18

RSET MISP loop MNT	Stop printing of status messages on MISP specified. Where: x = loop.	bri-18
RSET MISP x MON	Stop printing of input/output messages on MISP specified. Where: x = loop.	bri-18
RSET MPH M	Stop all Meridian Packet Handler message monitoring.	mph-19
RSET OMSG I s c dsl	Disable monitoring on outgoing	
RSET TNx	Stop printing messages on an ISDN BRI line card. Where: x = 0-6 (TN0-TN6).	bri-18
RST MSDL x	Reset MSDL card. This command causes a power-on reset on the MSDL, followed by a series of short self-tests. Resetting the card via this command is only permitted if the card is in the Manually Disabled (MAN DSBL) state.	msdl-18
SET IMSG I s c dsl MON x	Set monitor on incoming msg	
SET OMSG I s c dsl MON x	Set monitor on outgoing msg	

SETM BRIM xxxx

bri-18

Set printing of messages on SILC/UILC, MISP, or digital line card.

This command is used to select various message types for printing on a given TN (defined by SETM TNx commands). The value of xxxx is a HEX word which determines the message types.

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
				X						X	X	X	X	X	X

Bit 0 = Input SSD message from BRI line cards.

Bit 1 = Output SSD message to BRI line cards.

Bit 2 = Input expedited (high priority) message from BRIL application on MISP.

Bit 3 = Output expedited (high priority) message from BRIL application on MISP.

Bit 4 = Input ring message from BRIL application on MISP.

Bit 5 = Output ring message from BRIL application on MISP

Bit 11 = Call processing error message.

All other Bits are for future use. Note that the SETM TNx command must have been issued before issuing this command.

Examples:

To print input SSD and expedited messages:

- SETM BRIM 0005 (i.e., 0000000000000101)

To print input and output expedited messages:

- SETM BRIM 000C (i.e., 0000000000001100)

SETM IFx 1 PDL2 1

mph-19

Set printing of SAPI 16 interface messages.

SETM IFx 1 PDNI n

mph-19

Set printing of network interface messages.

SETM IFx l s c u BCHx

mph-19

Set printing of B-channel terminal interface messages.

SETM IFx l s c u DCHx

mph-19

Set printing of D-channel terminal interface messages.

SETM MISP x AMO bri-18

Set printing of audit messages on MISP specified.

Where: x = loop.

These messages are sent from the MISP handler to the MISP basecode. This command is used to turn these messages back on once they have been turned off because:

- debug or monitor (MON) mode is enabled
- RSET x AMO command has been issued

SETM MISP x DBG bri-18

Set debug option on MISP specified. Where: x = loop.

The card must be disabled first. The debug option has the following effect when the MISP is enabled:

- turns off the sanity timer
- stops interface handler audit messages
- no timestamp messages are sent to the MISP card

This command requires a password. The “dot” prompt indicates debug mode is turned on.

SETM MISP x MNT bri-18

Set printing of status messages on MISP specified.

Where: x = loop.

These messages indicate:

- error indication messages from the MISP
- state of L1 on SILC/UILC and L2/L3 on MISP

This option setting is lost during an initialization.

SETM MISP x MON	Set printing of input/output messages on MISP card. Where: x = loop. Both the expedited and ring input/output messages are printed. This command also sets the debug option and requires a password. This command turns on all input/output messages. This may use up all system print registers and may cause system initialization. Therefore use this command with caution. The debug option is turned off by a system initialization. Restarting debug will also restart the input/output monitoring. DISABLE MISP prior to issuing this command, re-enable MISP after command issued.	bri-18
SETM MPHx xxxx	Set printing of Meridian Packet Handler messages. Where: xxxx = the MPHs to be monitored	mph-19
SETM TNx l s c u, 31	Set printing messages on a digital line card unit (u) or ISDN BRI line card (31). This command is used in conjunction with the SETM BRIM command. The value x is a tag number (0-6). For ISDN BRI line cards, you must enter "l s c 31" for the address.	arie/ bri-14
SETM TNx l s c u, dsl	Set printing messages on a unit. This command is used in conjunction with the SETM BRIM command. The value x is a tag number (0-6).	arie/ bri-14
SETM TNx y	Set printing messages on a digital line card unit or ISDN BRI line card. Where: x = tag number 0-6 (TN0-TN6) y = l s c u (loop, shelf, card, and unit) or l s c dsl (loop, shelf, card, and digital subscriber loop). If u = 31 when a S/T (SILC) or U (UILC) Interface Line Card is specified for the y parameter, then messages for that line card are printed. This command must be issued before the SET BRIM command.	bri-18

SLFT AML x	Self-test on AML x. This command runs the local loop back test for MSDL AML, and the ESDI self-test for the ESDI AML. MSDL Requirement: The MSDL card must be enabled. The AML layer two must be disabled. Example: ENL MSDL x must have been executed at an earlier time. MSDL Action: The MSDL AML local loop back test is executed and upon completion of the test the MSDL AML port is set to the disable state.	msdl-18
SLFT ESDI x	Invoke ESDI and run self-test. The command is only valid for the port which is in an enabled state and when the other port on the ESDI pack is in the disabled state (tests the whole card). If the self-test passes, OK is output; otherwise, an error message is output. Use SLFT AML x command in X11 Release 18 and later.	csl-8
SLFT MSDL x	Execute a self-test on MSDL card x. This command causes a power-on reset on the MSDL, which will be followed by a complete set of self-tests. This command only executes self-tests if the card is in the Manually Disabled (MAN DSBL) state. If the self-tests pass, a message indicating this and card id is output. If the self-tests fail, a message is output describing which self-test failed. It is useful to note that the first test that fails will abort the self-test sequence, so this command only indicates one test failure, even if multiple tests might fail.	msdl-18

STAT AML (x)	Get AML status.	msdl-18

This command outputs the status of layer two and layer seven of one or all configured AMLs. The designation (DES) of the AML is output if it has been defined for the port in LD 17.

Examples:

```
AML: 01 MSDL: 08 PORT: 00
LYR2: DSBL AUTO: OFF LYR7: DOWN
DES: MERIDIAN_MAIL
AML: 04 ESDI: 10
LYR2: EST AUTO: ON LYR7: ACTIVE
```

STAT APL x	Display status of AUX link x.	apl-1

STAT CMS x	Get status of Command and Status link.	csl-8

Status may be:

1. DOWN = CSL is not available. Link layer may not be up (Enhanced Serial Data Interface state is not CONNECTED) or there may be no polling message response after two tries.
2. DOWN AUTOSETUP = Meridian 1 software is attempting Auto Set-Up of a CSL, but the CSL is not available. Link layer (HDLC protocol) may not be up (ESDI state is not connected) or there may be no polling message response after two tries.
3. ACTIVE EMPTY = CSL is in ACTIVE state and there are no messages waiting to be sent.
4. ACTIVE NOT EMPTY = CSL is in ACTIVE state and there are some messages in the queue waiting to be sent.
5. ACTIVE FULL = CSL is in ACTIVE state and the call register queue is full of messages to be sent. It may be an indication of a problem.
6. STANDBY = CSL is in standby mode. The Enhanced Serial Data Interface (ESDI) has established the link layer and can become ACTIVE (switchover).
7. ACTIVE EMPTY CCR DISABLE = Customer Controlled Routing feature is not implemented or not enabled.

Use STAT AML x command in X11 Release 18 and later.

STAT CNFG	Get status of link monitor/simulator configuration. csl-8 Display link monitor/simulator configuration status. The system will respond according to the current configuration as follows: — *NOT CNFG - if system is not configured — *CNFG INT/SIM - CSLAPL x - CSLSIM x - if the system is in internal maintenance mode; shows link numbers of CSLSIM and CSL application program — *CNFG FLD - CSL x - if the system is in field maintenance mode; shows CSL link number	
STAT CSDI x	Get status of SDI port x.	basic-1
STAT DSP LNK x	Get status of all Displays on link x.	apl-1
STAT ELAN	Check status of all configured AML over Ethernet (ELAN) links	nxcc-22
STAT ELAN x	Check status of specific AML over Ethernet (ELAN) link x	nxcc-22
STAT ESDI x	Get status of ESDI x. csl-8 Status may be: 1. DISABLED = ESDI cannot communicate with the Meridian. Interrupt is disabled. 2. ENABLED = Meridian 1 has already down-loaded parameters to ESDI. ESDI is in internal WAIT state. Self-test can only be performed while in this state. CON ESDI command can also be issued to bring up the link layer. 3. CONNECTED = ESDI has already brought up the link layer and is ready to send and receive messages (result of entering CON ESDI x command). 4. AUTO SETUP = ESDI is trying to automatically bring up the link layer for the High-Level Data Link Control (HDLC) for CSL application. This state will occur during automatic recovery of the CSL, or after the ACMS x command has been issued. Use STAT AML x command in X11 Release 18 and later.	

STAT HSL	Get high-speed link status. Response can be either: 1. UP 2. DOWN, or 3. NOT READY	Ink-2
STAT ISDI x	Get status of hardware AUX link SDI x.	apl-1
STAT LSL	Get low-speed link status. Response can be either UP, DOWN or NOT READY. This command is invalid in X11 release 19 and later.	Ink-2
STAT MON (x)	Get status of one or all message monitors. The system will respond with the status. If all monitors are disabled, the response is: MSG0 DIS MSGI DIS PAC0 DIS PACI DIS X25I DIS X250 DIS If the monitor function is enabled, for outgoing messages on two links, the response is: MSG0 ENL CSL x	csl-8
STAT MSDL (x (FULL))	Get MSDL status. This command outputs the status of MSDL cards. Without any optional parameters (no card number, etc.), the status of all MSDL cards in the system is output. When a card number alone is provided with the command, the status of the card is output along with additional information regarding the applications configured on the card. Specifically, for each D-channel or AML configured on the card, the application name, logical number and port status is output. With Release 24 and later, the status output will include the overloaded state of the individual ports. The benefit, individual ports with a high incoming message rate will be locked-out, operation of the other ports will be unaffected. Prior to Release 24, one overloaded port would disable the MSDL card.	msdl-18

For example:

```
MSDL x: ENL
SDI 7 OVLD PORT 0
AML 11 DIS      PORT 1
DCH 25 OPER PORT 2
AML 03 OPER PORT 3
```

If the FULL option is entered along with the MSDL number, the Meridian 1 outputs all the information output for the 'STAT MSDL x' command along with the following additional information:

- card ID
- bootload firmware version
- basecode version
- basecode state
- when the basecode was activated (if it is active)
- each application version
- each application state
- when each the application was activated (if it is active)

The card status is output on the first line and can be any one of the following:

MSDL x: ENBL - card is enabled

MSDL x: MAN DSBL - card disabled by the DIS MSDL command

MSDL x: SYS DSBL reason - card has been disabled by the system

The system disabled state may be due to any of the following:

1. SYS DSBL - NOT RESPONDING
 - If the MSDL is in this state, the implication is that the Meridian 1 has attempted to communicate with the MSDL and was not successful. It is possible that the card is not present in the shelf. If it is present, then it is possible that the software on the card is unable to respond to messages from the Meridian 1.

- **Action:** Check to see if the card is properly inserted in its slot. If it is (and has been for more than a few minutes), then check the console output for MSDL or ERR messages and take the appropriate action for the error message.
 -
 - It may be that the rotary switch setting on the MSDL card is not set properly. To keep the Meridian 1 from continuously attempting recovery of the MSDL, use the 'DIS MSDL x' command to put the card in the Manually Disabled (MAN DSBL) state.
2. SYS DSBL- SELF-TESTING
- If the MSDL is in this state, self-tests are in progress.
 - **Action:** Wait for self-tests to complete and for the Meridian 1 to examine the results. Under normal circumstances, self-tests take less than one minute to complete. However, when an erasable EPROM on the card has been cleared, self-tests may take between five and six minutes to complete. Therefore, it is prudent not to take any action at this time.
3. SYS DSBL- SELF-TESTS PASSED
- This is a transient state. A card in a transient state has successfully completed self-tests and the Meridian 1 either is about to begin downloading the MSDL base software, or has just completed downloading the MSDL base software and is about to attempt to enable the card.
 - **Action:** Wait for the Meridian 1 to begin the next step of recovery. If a more immediate recovery is desired, use the 'DIS MSDL x' command followed by the 'ENL MSDL x' command. This causes essentially the same recovery action to be taken. However, it may be faster (since it is being done as a result of input from the craftsperson).
 -
4. SYS DSBL- SELF-TESTS FAILED
- If the MSDL is in this state, self-tests have executed and failed on this card.

- **Action:** Use the 'STAT MSDL x' command to determine reason for self-test failure. Disable the MSDL card using the 'DIS MSDL x' command, then use the 'SLFT MSDL x' command to execute the self-tests again.
- If the self-tests pass, attempt to enable the card using the 'ENL MSDL x' command. If the card fails the self-tests again, record the results and replace the card.

5. SYS DSBL- SRAM TESTS FAILED

- If the MSDL is in this state, self-tests have executed and passed, however when the Meridian 1 attempted to perform read/write tests to the shared RAM on the MSDL, it detected a failure.
- **Action:** Same as for self-test failure. If the attempt to enable the card fails, record the results and replace the card.

6. SYS DSBL- OVERLOAD

- The Meridian 1 has received too many messages from the MSDL. This is considered to be unacceptable, in that this much of a demand may interfere with other system functions.
- **Action:** If the MSDL is left in this state, the Meridian 1 will attempt to bring the card back into service within a few minutes. If this is not desired, disable the card using the 'DIS MSDL x' command.
-
- It is also advisable to identify a specific port or application that may be responsible for the overload. The identification can be made by disabling individual links/ports on the MSDL and letting the remaining links/ports operate normally.

7. SYS DSBL- RESET THRESHOLD

- If the MSDL is in this state, the Meridian 1 has detected more than four resets within ten minutes. This is considered to be unacceptable, as a normally operating card should not reset so often.
-

- It is possible that the card may be in this state due to a Fatal Error or Self-test failure from which no recovery was successful. (As the recovery from Fatal Errors and Self-test failures begins with resetting the card, repeated attempts at recovery may cause the reset threshold to be reached.)
 -
 - **Action:** Disable the card using the 'DIS MSDL x' command and execute the 'SLFT MSDL x' command. If self-tests pass, attempt to enable the card using the 'ENL MSDL x' command. If the problem recurs, try force downloading the software to the MSDL using the 'ENL MSDL x FDL' command.
 -
 - If the problem continues to recur and resets continue because of a repeated fatal error, attempt to isolate the problem by disabling all links/ports controlled by one application (e.g., all D-channels or all AMLs). If no manual intervention is taken by the craftsperson, the Meridian 1 will attempt to bring the card back into service beginning at midnight.
8. SYS DSBL- FATAL ERROR
- If the MSDL is in this state, the card encountered a fatal condition from which it could not recover. In response to the 'STAT' command, the cause of the fatal error will be displayed.
 -
 - If the 'STAT' command is not entered while the card is in this state, the MSDL302 message printed at the time of the state transition will indicate the cause of the fatal error.
 - **Action:** The Meridian 1 will attempt to bring the card back into service automatically. While the card is in this state, it is recommended that the craftsperson do nothing. If the Meridian 1 is unable to recover the card, the system disabled substate will be changed to indicate the reason recovery was not possible. The craftsperson should then take the recommended action for that new substate.
 -

	9. SYS DSBL- NO RECOVERY ATTEMPTED UNTIL MIDNIGHT - When this is output after the SYS DSBL message, the Meridian 1 has attempted to recover the card but has repeatedly failed. One example of this condition is when the background recovery mechanism has failed to download the MSDL Base Code five times in a row. Action: Disable the card using the 'DIS MSDL x' command, test the card using the 'SLFT MSDL x' command, and if self-tests pass, enable the card using the 'ENL MSDL x' command. - If downloading of the MSDL Base Code is necessary, it will be attempted in response to the enable command. If no manual intervention is taken, the Meridian 1 will again attempt recovery beginning at midnight.	
STAT SDI HIGH	Get status of high-speed link port. The response can be either ENL (enabled) or DIS (disabled).	Ink-2
STAT SDI LOW	Get status of low-speed link port. The response can be either ENL (enabled) or DIS (disabled).	Ink-2
STAT STA x	Get status of STA application. When x (STA ID number) is specified, the STA state, port number, port type, port state, and system description are displayed. If x is not specified, and the application is enabled, the state and port information is given. If x is not specified, and the application is in any state other than enabled, only the STA status is given. No port or system information is displayed. .	sta-19

Possible output follows:

1. Application state and Target state:
ENABLED, MANUAL DISABLE, SYSTEM DISABLE,
AWAIT DISABLE, AWAIT APPL ENABLE, AWT
CONF DOWNLOAD
2. Port type: ADM, SYS, TTY
3. Port state:
NO SDI/STA, DISABLED, ENABLED, TESTING,
KEYBOARD TST, AWAIT VT-200, DTR DOWN,
AUTOBAUDING, AWT AUTOBAUD, ABD SCANNING,
DEFAULT ABD, NO MODEM, IN SESSION, AWAIT
ENABLE

System description is entered as part of the port configuration. For the additional port used to shadow the STA application, the system description is SHADOW TTY.

STAT VMBA <vsid>

vmba-19

Get the status for the Voice Mailbox Administration application. Enter the command in the following format:

STAT VMBA <vsid> <NNNN>

Where:

- vsid = the VAS ID where the VMBA is configured
- NNNN = VMBA audit or upload function. You may enter either AUDT or UPLD, where:
 - AUDT = mailbox database audit, or
 - UPLD = mailbox database upload

AUDT and UPLD are optional entries. The VAS ID must be entered. The status output is shown below:

STAT VMBA <vsid>

- VMBA <ACTIVE or INACTIVE>
- AUDIT <ACTIVE or INACTIVE>
- UPLOAD <ACTIVE or INACTIVE>

STAT VMBA <vsid> AUDT

- AUDIT INACTIVE, or AUDIT ACTIVE

Where:

- n AUDITED
- n MISMATCHES FOUND/CORRECTED
- n ERRORS

STAT VMBA <vsid> UPLD

- UPLOAD INACTIVE, or UPLOAD ACTIVE

Where:

- n UPLOADED
- n DELETED
- n ERRORS

STAT VMBA <vsid> AUDT

vmba-19

Get the status for the Voice Mailbox Database audit. Enter the command in the following format.

STAT VMBA <vsid> AUDT

The status output is shown below:

STAT VMBA <vsid> AUDT

- AUDIT INACTIVE, or AUDIT ACTIVE

Where:

- n AUDITED
- n MISMATCHES FOUND/CORRECTED
- n ERRORS

STAT VMBA <vsid> UPLD

vmba-19

Get the status for the Voice Mailbox Database upload. Enter the command in the following format.

STAT VMBA <vsid> UPLD

The status output is shown below:

STAT VMBA <vsid> UPLD

UPLOAD INACTIVE, or UPLOAD ACTIVE

Where:

- n UPLOADED
- n DELETED
- n ERRORS

SWCH AML x y

Switch active (x) and standby (y) AML. This is AML switchover, where x is the active AML switching to standby and y is the standby AML to become active.

msdl-18

SWCH CMS x y	Switch active (x) and standby (y) CSL. This is CSL switchover, where x is the active CSL switching to standby and y is the standby CSL to become active. Use SWCH AML x y in X11 Release 18 and later.	csl-8
UPLD AML x TBL y	Upload parameter table 1 to 4 from AML x (MSDL only). The MSDL AML maintenance error log table, is uploaded from the MSDL card and is displayed on the TTY screen. The parameter tables are: • TBL1 = AML maintenance error log table • TBL2 = AML downloaded parameter table • TBL3 = AML protocol error log table • TBL4 = AML traffic table MSDL Requirement: The MSDL card must be enabled. The AML layer two must be enabled. Example: ENL MSDL x followed by ENL AML x LYR2 must have been executed at an earlier time. Action: MSDL AML table is uploaded and is displayed on the TTY screen. This command is not available for the ESDI card.	msdl-18

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 49: New Flexible Code Restriction and Incoming Digit Conversion

Overlay program 49 allows the building, changing, deleting, moving, and printing of code restriction trees and the cancellation of all New Flexible Code Restriction (NFCR) data.

Overlay program 49 also allows the building, changing, deleting, moving, and printing of Incoming DID Digit Conversion (IDC) data.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	aaa	Type of data block (aaa = FCR or IDC)
FROM	0-99 0-254	Source customer and tree number
TO	0-99 0-254	Destination customer and tree number
CUST	xx	Customer number
DCNO	0-254	Digit Conversion tree Number
FDID	(NO) YES	Flexible DID IDC tree
IDGT	0-9999 0-9999	Incoming Digits
CRNO	(0)-254	Code Restriction tree Number
INIT	aaaa	Initial (aaaa = ALLOW or DENY)
- ALLOW	xxxx	Allow
- - UPDT	(YES) NO	Update Tree
- DENY	xxxx	Deny
- - UPDT	(YES) NO	Update Tree
FRCE	(NO) YES	Force
BYPS	xxxx	Bypass
- UPDT	(YES) NO	Update Tree

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ALLOW	xxxx xxxx y...y	Allow (Digit sequence to be allowed unconditionally) Prompted when INIT = DENY. Digit sequence to be conditionally allowed and maximum number of digits that can follow A maximum of 50 digits may be analyzed. Enter <cr> to end ALLOW prompt.	nfc-2
BYPS	xxxx	Bypass (Digit sequence to be bypassed) A maximum of 50 digits may be analyzed. Enter <cr> to end EYPS prompt.	nfc-2
CRNO	(0)-254	Code Restriction tree Number (NFCR tree number) The maximum number of trees allowed for a customer is defined by prompt MAXT in LD 15.	nfc-2
CUST	xx <cr>	Customer number For all customers Prompted when REQ = PRT.	nfc-2
DCNO	0-254	Digit Conversion tree Number (IDC tree number)	idc-12
DENY	xxxx	Deny (Digit sequence to be denied) A maximum of 50 digits may be analyzed. Prompted when INIT = ALLOW.	nfc-2
FDID	(NO) YES	Flexible DID IDC tree	fdid-24
FRCE	(NO) YES	Force the storage or release of data. If an entry for ALLOW, DENY or BYPS conflicts with existing data, FRCE is prompted. For example, ALLOW = 7 and the existing ALLOW = 7000. In this case enter "NO" to ignore the data, or "YES" to accept the change. A modification of this type may result in the loss of portions of the tree. If REQ = RLS and FRCE = YES, then all the customer's NFCR data is deleted. Prompt NFCR in LD 15 must be set to NO first.	nfc-2
FROM	0-99 0-254	Source customer and tree number	nfc-2

LD 49

Prompt	Response	Comment	Pack/Rel
IDGT	0-9999 0-9999	Incoming Digits (DN or range of DNs to be converted) The external DNs to be converted is output and the users enter the internal DN. For example, to convert the external DN 3440 to 510, enter: Prompt: Response IDGT: 3440 3440: 510 To convert the external DNs in the range 3440 to 3465, enter: Prompt: Response IDGT: 3440 3465 3440: 444 3441: 445 . . 3465: 469 This is not a prompt. This is the DID directory number which delineates the following prompt.	idc-12
INIT	ALLOW DENY	Initial To specify digit strings to be denied To specify digit strings to be allowed Entering DNs may be affected by the Outpulsing feature for Japan.	nfc-2
REQ	CHG END MOV NEW OUT PRT RLS RPL	Request Change an existing data block Exit Overlay program Move existing data block to a new customer and/or NFCR tree data block Create a new data block Remove a specified NFCR tree data block Print NFCR tree data block Release all NFCR data blocks for a specified customer Replace data in the specified NFCR tree data block with new data	nfc-2

Prompt	Response	Comment	Pack/Rel
TO	0-99 0-254	Destination customer and tree number	nfc-r-2
TYPE	FCR IDC	Type of data block NFCR data block Incoming Digit Conversion data block	nfc-r-2
UPDT	(YES) NO	Update Tree Data is correct and can update the NFCR tree.	nfc-r-2

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 50: Call Park and Modular Telephone Relocation

Overlay program 50 allows the implementation and administration of the Call Park and Meridian Modular Telephone Relocation features. Meridian Modular Telephone Relocation is supported with Release 18 and later.

Prompts and responses

Call Park data

Prompt	Response	Comment
REQ	aaa	Request
TYPE	CPK	Type of data block = CPK (Call Park)
CUST	xx	Customer number associated with this function
BLOC	1-5	Call Park block number
CPTM	30-(45)-240	Call Park Timer (in seconds)
RECA	(NO) YES	Recall parked call to attendant
SPDN	(0)-50 xxxx	Number of contiguous system park DN's and first DN
MURT	0-511	Music Route

Meridian Modular Telephone ID change during relocation

The serial number, NT code, color code or release information stored in a Meridian Modular Telephone may be changed during the relocation sequence. This can only be done after the set has “relocated out” and before it is “relocated in” to the new location. An application of this occurs when the terminal is being replaced with one of the same type and requires the same key configuration.

See Set Relocation Data in LD 21, and IDU: Print set ID command in LD 32.

Prompt	Response	Comment
REQ	aaa	Request = CHG or OUT
TYPE	MTRT	Type of data block = MTRT (Meridian Modular Telephone Relocation Table)
TN	I s c u	Terminal Number
SER	xxxxxx	Serial number
NTCD	xxxxxxxx	NT (product) Code
COLR	xx	Color
RLS	xx	Release

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
BLOC	1-5	Call Park block number Where:1-5 allows the system administrator to define the subsequent prompts. After subsequent prompts have been defined, the administrator is returned to the BLOC prompt until a carriage return (<cr>) is entered. The Primary Call Data Block (block 1) must be defined before any Secondary Call Park Blocks (2-5) can be added.	cprknet-22
	ALL	Enter ALL when REQ = OUT to remove all Call Park Blocks	
	<cr>	Enter <cr> to return to the REQ prompt. BLOC is prompted if CPRKNET package 306 is equipped.	
COLR	xx	Color of Meridian Modular Telephone. The color codes are: • 03 is black • 35 is chameleon ash • 93 is dolphin	arie-18
CPTM	30-(45)-240 30-(45)-480	Call Park Timer (in seconds) Call Park recall time (in seconds) if CPRK package 33 is equipped The amount of time a call is held in the parked state before recalling the parking set or the attendant.	cprk-20
CUST	xx	Customer number associated with this function as defined in LD 15	cprk-2
MURT	0-511 X	Music Route number for parked calls Remove existing music route.	mus-1
NTCD	xxxxxxxx	New NT (product) Code of Meridian Modular Telephone	arie-18
RECA	(NO) YES	Recall Attendant Unanswered parked calls recall the parking set Unanswered parked calls recall the attendant	cpk-20

LD 50

Page 874 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program. Create a new Call Park data block (not applicable if TYPE = MTRT) Remove data block Print call park data block (not applicable if TYPE = MTRT)	cprk-2
RLS	xx	New Release of Meridian Modular Telephone	asr-18
SER	xxxxxx	New Serial Number of Meridian Modular Telephone	arie-18
SPDN	xx yyyy	System Park DNs Number of contiguous System Park DNs, and first DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Where: xx = # of contiguous System Park DNs. The range is: • (0)-50 prior to Release 22 • (0)-100 for Release 22 when CPRK package 33 is equipped yyyy = First Call Park DN	cprk-2
TN	I s c u	Terminal Number Old Terminal Number of set in relocation table	arie-18
TYPE	CPK MTRT	Type of data block Call Park data block Meridian Modular Telephone Relocation Table	cprk-2

LD 51: Intercept Computer Update

This program updates the Meridian 1 with the intercept service interface information that is stored. The program can be run manually or run in the midnight routine for all customers.

Basic commands

CUST ALL	Update all customers.
CUST c ...c	Update 1 to 5 customers (0-99).
END	Terminate the program.
UPD	Update the transfer information.

Alphabetical list of commands

Command	Description	Pack/Rel
CUST ALL	Update all customers.	icp-5
CUST c ...c	Update 1 to 5 customers (0-99). Repeat the command if more than 5 customers are to be updated.	icp-5
END	Terminate the program.	icp-5
UPD	Update the transfer information.	icp-5

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 52: 2.0 Mb/s Remote Peripheral Equipment

Overlay program 52 defines the 2.0 Mb/s Remote Peripheral Equipment (RPE) group data and system thresholds.

Overlay program 52 is not supported on Option 11 systems.

Prompts and responses

Table of Contents

Section	Page
2.0 Mb/s RPE data block (TASK = Counter Threshold)	878
2.0 Mb/s RPE data block (TASK = Group Member)	879
2.0 Mb/s RPE data block (TASK = Timer Threshold)	879
2.0 Mb/s RPE data block (TASK = No New Data call timer)	880
Prompts and responses to remove 2.0 Mb/s RPE data block	880

2.0 Mb/s RPE data block (TASK = Counter Threshold)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	RPE2	Type of data block = RPE2 (2.0 Mb/s Remote Peripheral Equipment)
GRP	1-31	RPE group number
TASK	CTHS	Counter Threshold
LFAL	0-(5)-255	Loss of Frame Alignment at Local site
FAEL	0-(5)-255	Frame Alignment Error rate at Local site
PCML	0-(5)-255	Pulse Code Modulation (PCM) error rate at Local site
LFAR	0-(5)-255	Loss of Frame Alignment at Remote site
FAER	0-(5)-255	Frame Alignment Error rate at Remote site
PCMR	0-(5)-255	Pulse Code Modulation (PCM) error rate at Remote site
RPF	0-(3)-255	Remote Processor Failure
LINT	0-(2)-255	Local site Initialization of Remote Peripheral Controller
BGTH	0-(3)-7	Background Threshold

2.0 Mb/s RPE data block (TASK = Group Member)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	RPE2	Type of data block = RPE2 (2.0 Mb/s Remote Peripheral Equipment)
GRP	1-31	RPE Group number
TASK	GMBR	Group Member
ID	x...x	Identifier
LM0	xxx	Loop number for Member 0 in the group (first primary loop)
LM1	xxx	Loop number for Member 1 in the group (second primary loop)
LM2	xxx	Loop number for Member 2 in the group (third primary loop)
LM3	xxx	Loop number for Member 3 in the group (fourth primary loop or spare loop if SPAR = YES)
- SPAR	(NO) YES	Spare loop option

2.0 Mb/s RPE data block (TASK = Timer Threshold)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	RPE2	Type of data block = RPE2 (2.0 Mb/s Remote Peripheral Equipment)
GRP	1-31	RPE group number
TASK	TTHS	Timer Threshold
LFAL	2-(10)-999	Loss of Frame Alignment at Local site in seconds
FAEL	2-(600)-999	Frame Alignment Error rate at Local site in seconds
PCML	2-(600)-999	Pulse Code Modulation (PCM) error rate at Local site in seconds
LFAR	2-(10)-999	Loss of Frame Alignment at Remote site in seconds
FAER	2-(10)-999	Frame Alignment Error rate at Remote site in seconds
PCMR	2-(600)-999	Pulse Code Modulation (PCM) error rate at Remote site in seconds
RPF	128-(1024)-9999	Remote Processor Failure in milliseconds

2.0 Mb/s RPE data block (TASK = No New Data call timer)

Prompt	Response	Comment
REQ	aaa	Request
TYPE	RPE2	Type of data block = RPE2 (2.0 Mb/s Remote Peripheral Equipment)
GRP	1-31	RPE group number
TASK	NND	No New Data call timer
ERR	10-(14)-30	Error threshold in seconds
NND	0-(56)-1800	No New Data call time in seconds

Prompts and responses to remove 2.0 Mb/s RPE data block

Prompt	Response	Comment
REQ	OUT	Remove
TYPE	RPE2	Type of data block = RPE2 (2.0 Mb/s Remote Peripheral Equipment)
GRP	1-31	RPE Group number
LOOP	x xx x	Loop numbers for loops to be removed.

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
BGTH	0-(3)-7	Background Threshold (Unsparing attempts allowed by background) A response of 0 will deactivate the background processing of LD 53 for this RPE group.	rpe2-15
ERR	10-(14)-30	Error threshold in seconds Time after which the NND state is entered.	rpe2-15
FAEL	2-(600)-999 0-(5)-255	Frame Alignment Error rate at Local site in seconds Prompted when TYPE = TTHS Frame Alignment Error rate at Local site Prompted when TYPE = CTHS	rpe2-15
FAER	2-(10)-999 0-(5)-255	Frame Alignment Error rate at Remote site in seconds Prompted when TYPE = TTHS Frame Alignment Error rate at Remote site Prompted when TYPE = CTHS	rpe2-15
GRP	1-31 <cr>	RPE group number All RPE group numbers, when REQ = PRT	rpe2-15
ID	x...x	Identifier (1-16 character alphanumeric group identification)	rpe2-15
LFAL	2-(10)-999 0-(5)-255	Loss of Frame Alignment at Local site in seconds Prompted when TYPE = TTHS Loss of Frame Alignment at Local site Prompted when TYPE = CHTS	rpe2-15
LFAR	2-(10)-999 0-(5)-255	Loss of Frame Alignment at Remote site in seconds Prompted when TYPE = TTHS Loss of Frame Alignment at Remote site Prompted when TYPE = CHTS	rpe2-15
LINT	0-(2)-255	Local site Initialization of Remote Peripheral Controller (RPC)	rpe2-15
LM0	0-159	Loop number for group member 0 (1st primary loop) Precede with X to delete a loop number	rpe2-15
LM1	0-159	Loop number for group member 1 (2nd primary loop) Precede with X to delete a loop number	rpe2-15

LD 52

Prompt	Response	Comment	Pack/Rel
LM2	0-159	Loop number for group member 2 (3rd primary loop) Precede with X to delete a loop number	rpe2-15
LM3	0-159	Loop number for group member 3 (4th primary loop or spare loop if SPAR = YES) Precede with X to delete a loop number.	rpe2-15
LOOP	x xx x ALL	Loop numbers for loops to be removed. All loops in the group are removed If accepted, then the whole group is removed.	rpe2-15
NND	0-(56)-1800	No New Data call time in seconds The time to stay in the NND state. Time is stored as nearest lower multiple of 8. A response of 0 will deactivate the NND error handling system on this RPE group.	rpe2-15
PCML	2-(600)-999	Pulse Code Modulation (PCM) error rate at Local site in seconds. Prompted when TYPE = TTSH.	rpe2-15
	0-(5)-255	Pulse Code Modulation (PCM) error rate at Local site Prompted when TYPE = CHTS	rpe2-15
PCMR	2-(600)-999	Pulse Code Modulation (PCM) error rate at Remote site in seconds. Prompted when TYPE = TTSH.	rpe2-15
	0-(5)-255	Pulse Code Modulation (PCM) error rate at Remote site Prompted when TYPE = CHTS	
REQ		Request	rpe2-15
	CHG	Change a data block	
	END	Exit Overlay program	
	NEW	Create a new data block When an RPE group is created using REQ = NEW, counter and timer thresholds are initialized to their default values.	
	OUT	Remove 2.0 Mb/s RPE data block	
	PRT	Print 2.0 Mb/s RPE data block	
RPF	128-(1024)-9999	Remote Processor Failure (milliseconds)	rpe2-15

Prompt	Response	Comment	Pack/Rel
RPF	0-(3)-255	Remote Processor Failure	rpe2-15
SPAR	(NO) YES	Spare loop option	rpe2-15
TASK	CTHS GMBR NND THRS TTHS	Counter Threshold Group Member No New Data call timer Threshold data (timer/counter) Timer Threshold When REQ = PRT, TASK can only be GMBR or THRS	rpe2-15
TYPE	RPE2	Type of data block 2.0 Mb/s RPE group data	rpe2-15

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 53: 2.0 Mb/s Remote Peripheral Equipment Diagnostic

Load 53 is used to maintain 2.0 Mb/s Remote Peripheral Equipment.

LD 53 Daily Routines

This program functions according to the type of loading. When loaded as part of the daily routines, the program:

- tests the connection memory of network circuits on idle loops
- tests the continuity of speech paths to the remote site
- unspares a loop if it passes the tests, is autospared, and the BGTH threshold is not zero
- resets alarm counters to zero
- performs loop around tests on local and remote ends of spare remote peripheral equipment (RPE) loops
- tests idle timeslots in network circuits
- tests continuity of the signaling paths

How to use LD 53

The 2.0 Mb/s Remote Peripheral Equipment Diagnostic (RPM) is loaded manually to:

- enable, disable, and check the status of network loops
- perform loop around tests on local and remote ends of an RPE loop
- clear minor alarms and the maintenance display
- print the counter values (alarm occurrences) for RPE loops

LD 53

- test the idle timeslots in network circuits
 - test the continuity of the speech path to the remote site
 - reset the counter values to 0
 - test local and remote RPE Controller (RPC) card
 - switch spare loops into and out-of-service
 - prints the status of RPE groups/loops and their path switch
 - test continuity of signaling paths
-

Basic commands

CDSP	Clear maintenance display on active CPU to 00 or blank
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indicator for customer c
DISI loop	Disable loop once it becomes idle
DISL loop	Disable loop
END	Terminate the active command
ENLL loop	Enable loop
LBKL loop	Close local loop back relay
LBKR loop	Force remote loop back relay
LCNT ALL	List the alarm occurrence counter values for all loops
LCNT loop	Print alarm occurrence counter values on loop
LDIS	List disabled RPE loops in the system
LFLT loop	List speech timeslots that failed loop test
LOCL loop	Perform local loop around test on loop
LOOP loop	Test idle timeslots and speech path continuity on loop
LRPE	List the remote loops in the system
OLBL loop	Remove local loop back on loop
OLBR loop	Remove remote loop back on loop
RCNT ALL	Reset the alarm occurrence counter values for all loops
RCNT loop	Reset the alarm counters for loop
REML loop	Perform remote loop around test on loop
STAT	Get number of busy channels with DISI active
STAT loop	Get status of loop
STAT PSW g	Get status of path switch of RPE group g
STAT RPG g	Get status of RPE group g
SWSP loop	Spare loop
TRPL loop	Test both local and remote end of the RPE loop
TSTL loop	Test local RPE controller of loop
TSTR loop	Test remote RPE controller of loop
UNSP loop	Unspare loop

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear maintenance display on active CPU to 00 or blank.	basic-1
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indicator for customer c.	basic-1
DISI loop	Disable loop once it becomes idle. The number of channels still busy on the loop may be checked using the STAT command.	basic-1
DISL loop	Disable loop. Any calls on loop are disconnected.	basic-1
END	Terminate the active command. If no command is in progress, the active DISI command is cancelled.	basic-1
ENLL loop	Enable loop. If the operation is successful, OK is output. This command performs test only on the local equipment. A loop test should be performed to ensure the remote end is enabled.	basic-1
LBKL loop	Close local loop back relay. The loop must be disabled before the command is given. The relay remains closed until OLBL command is entered. This command requires approximately 30 seconds to complete.	basic-1
LBKR loop	Force remote loop-relay. The loop must be disabled before the command is given. Similar to LBKL. The relay remains closed until the OLBR command is entered. This command requires approximately 30 seconds to complete.	basic-1
LCNT ALL	List the alarm occurrence counter values for all loops.	basic-6

LCNT loop	Print alarm occurrence counter values on specified loop. Alarm types are: 1. ALM1 = Customer defined alarm 1 2. ALM2 = Customer defined alarm 2 3. ALM3 = Customer defined alarm 3 4. BGTH = Unsparing attempts by background 5. CCLK = Loss of carrier clock at local site 6. FAEL = Frame alignment error rate exceeded at local site 7. FAER = Frame alignment error rate exceeded at remote site 8. LFAL = Loss of frame alignment at local site 9. LFAR = Loss of frame alignment at remote site 10. LIMG = Local incoming message buffer overflow (RPC) 11. LINT = Local RPC initialization problem 12. LOMG = Local outgoing message buffer overflow (RPC) 13. PCML = PCM error rate exceeded at the local site 14. PCMR = PCM error rate exceeded at remote site 15. PSWD = Path switch missing or disabled 16. PSWF = Path switch status failure 17. RPF = Remote RPC failure 18. SSDF = SSD failed on a line card	basic-1
LDIS	List disabled RPE loops in the system.	basic-1
LFLT loop	List speech timeslots that failed loop test. If no channels failed or no test has been performed, response is NONE.	basic-1
LOCL loop	Perform local loop around test on loop. The command tests the local equipment and continuity of loop. If all tests pass, response is OK. This command requires approximately 2.5 min to complete. If test fails, local loop back relay remains closed; enter OLBL to open the relay.	basic-1
LOOP loop	Test idle timeslots and speech path continuity. This command tests idle timeslots of connection memory or network loop and the continuity of speech path to remote site. Faulty units will be disabled. If all pass test, response is "OK". This command does not test signaling to PE cards.	basic-1

LRPE	List the remote loops in the system.	basic-1
OLBL loop	Remove local loop back on loop.	basic-1
OLBR loop	Remove remote loop back on loop.	basic-1
RCNT ALL	Reset the alarm occurrence counter values for all loops.	basic-6
RCNT loop	Reset the alarm counters for loop.	basic-1
REML loop	Perform remote loop around test on loop. The command tests the local equipment and continuity of loop. If the test passes, response is OK. This command requires approximately 2.5 min to complete. If test fails, the remote Carrier Interface (CI) card remains in loop back mode. Use the OLBR command to disable loop back.	basic-1
STAT	Get number of busy channels with DISI active. If a DISI request is not active, an error message is output.	basic-1
STAT loop	Get status of loop. Responses are: 1. x BUSY y DSBL = number of busy/disabled speech channels on loop. 2. x NWK MEM FLTS = number of speech channels disabled due to fault in connection memory of card. 3. CTYF: l1 l2 ln = loop could not receive speech from specified loops during background diagnostic. 4. DSBL: = loop is disabled, responding or not responding (REM/LOC LPBK). LOC/REM LPBK indicates that local or remote loop back relay is closed.	basic-1
STAT PSW g	Get status of path switch of RPE group g. Responses are: 1. x SPARED = PSW for group g is in use, x is the spared loop 2. IDLE = no loop spared 3. UNEQ/DSBL = path switch is unequipped or disabled	basic-1

STAT RPG g	Get status of RPE group g. Responses are:	basic-1
	1. x: DSBL THRS OVFL = loop x has been disabled and a threshold level for the loop has been exceeded. 2. x: DSBL, REM/LOC LPBK = loop x is disabled and has been set up for REMote/LOCal loop back. 3. x: ENBL/DSBL = loop x is enabled/disabled 4. x: SPRD-ENBL/DSBL = loop x has been replaced with a spare and is enabled/disabled 5. x: SPR IN USE, ENBL/DSBL = loop x is the spare loop in use and is enabled/disabled 6. x: AUTO SPARED AT: date hour-ENBL/DSBL = loop x is auto spared at date and hour and is enabled/disabled 7. PSW: IDLE/ENBL/DSBL = state of the patch switch for the RPE group. 8. PSW: SPRD-x = patch switch for the RPE group is spared from loop x	
SWSP loop	Spare loop.	basic-1
TRPL loop	Test both local and remote end of the RPE loop. Loop must be disabled first. This command may require minutes to complete. Messages appear as the various tests progress.	basic-6
TSTL loop	Test local RPE controller of loop. Loop must be disabled prior to entering this command. Use DISI/DISL command to disable loop.	basic-1
TSTR loop	Test remote RPE controller of loop. Loop must be disabled prior to entering the command. Use DISI/DISL command to disable loop.	basic-1
UNSP loop	Unspare loop. The spare loop must be disabled before entering this command. Use DISI/DISL command to disable loop.	basic-6

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 54: Multifrequency Signaling Diagnostic

Multifrequency Compelled Signaling (MFC) or Multifrequency Signaling (MFE) provides a handshaking facility between the Meridian 1/Meridian SL-1 and the Central Office or Public Exchange (CO/PE) or between other PBXs over network/Tie trunks.

The XMFC card (for superloop only) can be used on MFC or MFE. XMFC card has four units.

The MFD overlay program is used to diagnose, display or change the status of the MFC or MFE send/receive (S/R) cards.

The program resets all available MFC or MFE cards (for channels on AXMFC card) and performs loop back tests during the midnight routines. After every SYSLOAD or power-up, all available MFC or MFE cards are initialized.

The program can be loaded by the system after every power-up (or SYSLOAD), as part of the daily routines, or loaded manually to enter commands.

Hardware Initialization after SYSLOAD

After system power-up, every idle MFC or MFE card is initialized (self-tested). During this test the card is disabled (LED on faceplate ON) and the S/R card microprocessor executes sequential loop back tests on both channels.

On power-up SYSLOAD on XMFC, pack performs self-test, LED blinks 3 times to indicate self-test pass

- Cardlan polling message indicates that XMFC pack has powered up.
- MSL-1 down loads the configuration (E0XXH)
- MSL-1 enables the card (C000H)
- Pack performs self-test again. If self-test passes (8000H), then LED is OFF and pack is enabled. If self-test fails (80XXH), LED is ON and pack is disabled.

These tests entail looping the sender output of each card to the Receiver input. The sender transmits all thirty tone pairs (1 to 15 digits for both DOD/DID modes) with a default signal level of zero. Each time the receiver detects a tone pair, the microprocessor verifies the digit received. At the end of the test the microprocessor tries to send two test results (one for each channel) to the CPU.

The CPU cannot receive the results of the test because the card is disabled. A command to enable the card is issued and the microprocessor sends the test results to the CPU.

Loop around test during daily routines

This loop around test is conducted by the system during the midnight routines. The midnight test is identical to the test conducted after power-up except for the following points:

- the midnight test is conducted on one channel at a time for all available MFC or MFE cards
- the MFC or MFE S/R card remains enabled (LED on faceplate OFF)
- the midnight self-test can also be loaded manually by issuing a command on the specified channel

Loop around test by command

The loop around tests are performed by maintenance personnel on a specified channel of the MFC or MFE S/R card. There are two types of tests:

- one is identical to the midnight test which is conducted on the specific channel
- the second is conducted on a specific channel for a specified digit and signal level

LD 54 also performs the following functions:

- resets all idle MFC or MFE cards once a day during the midnight routines
- disables MFC or MFE card or channel. It enables MFC or MFE card or channel
- determines the status of MFC card or channel
- lists all disabled MFC or MFE channels
- handles other common overlay operations (such as clear alarms)

Note 1: Use the DISL command to force-disable the MFC or MFE channel or card.

Note 2: Use the DISI command in LD 32 to disable the card when idle.

Note 3: No more than 50% of MFC channels can be disabled at one time as a result of system or manually initiated tests. However, this constraint does not apply using disable commands.

MFC/MFE error handler and counter

The MFC/MFE error handlers are resident programs that monitor the number of MFC or MFE signaling errors. A one-word error field in the MFC or MFE block is initialized to zero. The Error Handler program allows a maximum of 10 errors. After every successful use of the MFC or MFE channel, the error field will decrement by one, if it is not already at zero. After every failure of the MFC or MFE channel the error field will increment by one.

In Generic X11, the Error Handler program generates only the ERR700 L S C U message. When an Error Handler code is output, the MFD Overlay must be loaded manually and the MFC or MFE channels tested.

Basic commands

ATST l s c u	Invoke automatic loop around test for specified unit
CDSP	Clear maintenance display to 00 or blank
CMAJ	Clear major alarm and reset power fail transfer
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DISC l s c	Disable specified MFC or MFE card
DISU l s c u	Disable specified MFC or MFE channel
END	Stop further testing or cancel active command
ENLC l s c	Enable specified MFC or MFE card
ENLU l s c u	Enable specified MFC or MFE channel
MIDN 0	Reset all idle MFC or MFE cards
MIDN 1	Initialize all idle MFC or MFE cards
MTST l s c u d l	Invoke manual loop around test on unit with specified digit and level
STAT	List all disabled MFC channels in the system
STAT l s c (u)	Get status of specified MFC or MFE card or unit

Alphabetical list of commands

Command	Description	Pack/Rel
ATST I s c u	Invoke automatic loop around test for specified unit. Performs automatic loop around test on specified unit with default signal level of zero. All 30 tone pairs are tested and verified by the card microprocessor. Digits 1 to 15 signify Forward Signals 1 to 15 (DOD mode) and digits 16 to 30 signify Backward Signals 1 to 15 (DID mode). The response is OK when the unit passes test and is enabled. If the receiver sends no message within a predefined time period, an error message indicating time-out is printed. If the receiver indicates it has received a different signal than that sent, the failed signal, an error message and the TN are printed.	basic-1
CDSP	Clear maintenance display to 00 or blank.	basic-1
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	basic-1
CMIN	Clear the minor lamp on a system basis.	alarm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-1
CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-1
DISC I s c	Disable specified MFC or MFE card. LED on card is ON when disabled.	basic-1
DISU I s c u	Disable specified MFC or MFE channel. When the other unit on the card is also in a disabled state in the software, a message is sent to disable the MFC or MFE card. LED on card is ON when disabled.	basic-1
END	Stop further testing or cancel active command.	basic-1
ENLC I s c	Enable specified MFC or MFE card. Response is OK. A message is sent to the MFC or MFE card to turn off the LED.	basic-1

ENLU l s c u	Enable specified MFC or MFE channel. Response is OK. A message is sent to the MFC or MFE card to turn off the LED.	basic-1
MIDN 0	Reset all idle MFC or MFE cards. Resets all idle MFC or MFE cards and performs loop around tests on all idle channels.	basic-1
MIDN 1	Initialize all idle MFC or MFE cards. Recommended after installation.	basic-1
MTST l s c u d l	Invoke manual loop around test on unit with specified digit and level. This command performs the manual loop around test on specified unit with specified digit and signal level. MFC-30 tone pairs are tested and verified by the Meridian 1 CPU. Digits 1 to 15 indicate forward signals 1 to 15 (DOD mode) and digits 16 to 30 indicate backward signals 1 to 15 (DID mode). MFE-15 tone pairs are tested and verified. Digits 1-15 represent Forward Signals 1-15 (DID mode). Digit 0 represents the control frequency. Table 20 on 898 presents MFC sender (transmit) levels. These levels are output by the MFC pack and do not include any pads that may be put in by the trunk pack.	basic-1

Table 20
MFC sender/transmit levels

Digit level	Level at S/R card	Digit level	Level at S/R card
0	8 dBm	8	4 dBm
1	11 dBm	9	5 dBm
2	12 dBm	10	6 dBm
3	13 dBm	11	7 dBm
4	14 dBm	12	9 dBm
5	15 dBm	13	10 dBm
6	16 dBm	14	spare (8) dBm
7	31 dBm	15	spare (8) dBm

The MFE signal level 0 = -10.5 dBm level with skew -7.0 dBm control frequency level. Signal levels 1-7 are used for internal test purposes.

The response is OK when the unit passes the test and is enabled. If the unit fails the test, the appropriate error message and the TN are printed.

STAT	List all disabled MFC channels in the system.	basic-1
STAT I s c (u)	Get status of specified MFC or MFE card or unit. Status is one of: IDLE, BUSY, MBSY, DSBL or UNEQ for both channels.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 56: Flexible Tones and Cadences

Flexible Tones and Cadences (FTC) is an optional feature which is used to customize the tones provided to telephone users. FTC is primarily intended for international markets where tones which are different from the North American defaults are required.

Overlay program 56 allows the implementation and administration of tone and ringing parameters for one or more customers. If the FTC feature (package 125) is not equipped, North American tones and cadences are used.

An FTC table number can be entered for each trunk route at prompt TTBL in LD 16. Table 0 is the default for all trunk routes and contains the defaults for North America.

What are tones and cadences?

Tones are used to provide call status to telephone users. A tone is defined by both the frequency and volume of the sound.

Tones are provided in on and off phases. One or more cycles of on/off cycles make up a tone's cadence. For example, the default cadence for normal North American ringing is 2 seconds on, 4 seconds off, 2 seconds on, 4 seconds off, and so on.

Flexible Tone and Cadence (FTC) Tables

FTC tables define the tones and cadences used for various calling features. Up to 31 FTC tables can be created. Each table can be associated with one or more trunk routes by entering the table number in response to prompt TTBL in LD 16.

Master Cadence Table (MCAD)

The Master Cadence Table (MCAD) defines cadences that are controlled by software. These are used for single line sets (500/2500) and digital sets.

The MCAD can have 256 entries (0-255). Each entry can have up to 10 on/off phases each. Entry 0 is reserved for continuous tone and cannot be changed. Entries 1-15 are reserved for ringing cadences.

Most of the software cadences are continuously repetitive unless it is specified that the tone should end after the last phase. There are four exceptions to this rule: prompts ACBT, AOBT, INTU and OVRD cadences repeat the last 8 phases. This allows a special initial tone burst to be defined. To have the first cycle repeat, it must be defined as both the first and last cycle.

A cadence is defined at the CDNC prompt by entering the time for each on and off phase. The time depends on the settings for the TMRK prompt in LD17 which defines the software cadence increments as 96 or 128 ms. For each phase, enter the closest multiple of 5 ms equal to the multiple of 96 or 128 ms which gives the a time Š the time required.

The range for the first phase is 1-9999. The range for the second phase is 0-9999. Once an MCAD entry has been created, it can be changed but not removed.

For example, given LD 17 TMRK is set to 128 ms, and a repeating 2 seconds on, 4 seconds off cadence is required.

- 1 Determine the ON phase (2 seconds = 2000 ms)
 $2000/128 = 15.625 = 16$ (always round up)
 $128 \times 16 = 2048$ ms
multiple of 5 closet to 2048 ms = 2050
Entry for prompt CDNC = $2050/5 = 0410$
- 2 Determine the OFF phase (4 seconds = 4000 ms). By using the same calculation, the entry for prompt CDNC = 0820.
- 3 To define the cadence, respond to the prompts as follows:

REQ NEW, CHG
 TYPE MCAD
 WCAD 1-255
 CDNC 0410 0820

To define the cadence: 2 s on, 4 s off, 4 s on, 2 s off, repeat cycle 1 and 2, enter:

CDNC 0410 0820 0820 0410

To define the cadence: 2 s on, then steady off, enter:

CDNC 0410, or
 CDNC 0410 0000

If an odd number of non-zero phases are entered, software ends the tone after the last ON phase. Once a zero phase has been entered, it cannot be followed by non-zero phases. A carriage return at any phase results in zero for the remaining phases.

Once the cadence is defined, it can be entered in response to the CDNC prompt for a given feature. For example, CDNC is output after the Call Waiting tone prompt.

Firmware Cadence Table (FCAD)

The Firmware Cadence Table (FCAD) defines cadences that are controlled by an NT8D17 Conference/TDS/MFS card.

The FCAD can have 256 entries (0-255). Each entry can have up to 10 on/off phases. Entry 0 is reserved for continuous tone and cannot be changed. Entries 1-15 are reserved for ringing cadences. Each phase is in multiples of 5 ms.

FCAD cadences have the following capabilities:

- Each cadence may be defined to end at the “on” phase, the “off” phase, or repeat after a single pass through the defined on/off cycles. Any or all of the five cycles can be repeated.
- Unique tones can be defined for each “on” phase. These tones are permanently held in the Conference/TDS/MFS firmware.

In order to have the same cadences on 500/2500/digital telephones and SL-1 telephones, the MCAD and FCAD entries 0-15 are identical. Changes to MCAD entries 1-15 automatically change FCAD entries 1-15. The FCAD entries 1-15 can only be changed by changing the MCAD entries 1-15.

The Conference/TDS/MFS card must be disabled and then re-enabled to download changed firmware cadences.

Examples of creating firmware cadences:

1 For a cadence of 2 s on, 4 s off, repeat:

```
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0410 0820
```

```
END REPT
CYCS 1 (on/off cycles to be repeated)
WTON NO (use default tone for this cadence)
```

2 For a cadence of 2 s on, 4 s off, 3 s on, 5 s off, repeat:

```
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0410 0820 0614 0998
```

```
END REPT
CYCS 1 2 (on/off cycles to be repeated)
WTON NO (use default tone for this cadence)
```

3 For a cadence of:

```
0.1 s on at 950 Hz, 19 dB below overload A-law, 0.1 off
0.1 s on at 1400 Hz, 20 dB below overload A-law, 0.1 off
0.1 s on at 1800 Hz, 20 dB below overload A-law, steady off
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0020 0020 0020 0020 0020
```


END OFF

WTON YES (define tones for this cadence)

TONES 134 135 136 (See NT8D17 Conference/TDS tone table)

TDS and NT8D17 Conference/TDS/MFS cards

There are two types of cards providing tones and cadences:

- Tone and Digit Switch (TDS) cards
- NT8D17 Conference, TDS and Multi-Frequency (MF) Sender card

There are a variety of TDS cards. Each card provides a different set of tones and cadences. When a TDS card is used for SL-1 sets, each tone and cadence is identified by a hexadecimal code. The decimal equivalents for these hex codes are entered at the TDSH prompt for each calling feature.

Refer to the the *Flexible Tones and Cadences* NTP for the appropriate codes.

When the NT8D17 Conference/TDS/MFS cards are used, the tones and cadences are defined by the following prompts:

- XCAD = 0-255 - entry in the Firmware Cadence Table (FCAD)
- XTON = 0-255 - tone stored in the card firmware
- CDNC = 0-255 - entry in Master Cadence Table (MCAD)

The ringing cadences for all telephones use the Master Cadence Table (MCAD). MCAD entries 1-15 are downloaded to the Peripheral Controller to provide ringing.

Time interval for Call Forward

For Call Forward No Answer (CFNA), the time interval before a call is forwarded is measured by the time interval for one ring cycle (defined at NCAD prompt) times the number of ring cycles (defined at CFNA prompt in LD 15).

All other types of ringing forward a call after this same time interval regardless of cadence. For example, those with a faster cadence will forward after more rings, those with a slower cadence after fewer rings.

Installing FTC

These steps outline the process to install the FTC feature and change the default tones and cadences for one or more calling features.

To assist in fault clearing, it is recommended that you keep a record of all changes.

- 1 Load Overlay 56
- 2 Define new MCAD cadences
- 3 Define new FCAD tones and cadences
- 4 Create one or more FTC tables (one for each trunk route requiring different tones and cadences)
- 5 Define the non-default tones and cadences for each FTC table
- 6 Enter the FTC table number for each trunk route (LD 16 prompt TTBL)
- 7 If a Conference/TDS/MFS card is equipped, then follow these steps:
 - a set options in LD 97
 - b initialize the system (INIT)
 - c disable and enable each Conf/TDS/MFS card (LD 34)
 - d disable and enable each Controller (LD 32)

Note 1: The Master Cadence Table (MCAD) defines cadences that are controlled by software. These are used for single line sets (500/2500) and digital sets.

MCAD can have up to 256 entries (0-255). Each entry can have up to 10 on/off phases. Entry 0 is reserved for continuous tone and cannot be changed. Entries are reserved for ringing cadences.

To define an MCAD cadence, enter the time for each on and off phase. Phases are in 5 ms increments. For example, enter 200 to have a phase last 1 second ($200 \times 5 \text{ ms} = 1000 \text{ ms} = 1 \text{ second}$).

The range for the first phase is 1-9999. The range for the second phase is 0-9999. Once an MCAD entry has been created, it can be changed but not removed.

Note 2: Prompts with the response i bb c tt are only prompted for systems equipped with Tone and Digit cards.

- i = internal (0) or external (1) source
- bb = burst
- cc = cadence
- tt = frequency/level

Prompts with the response i bb c tt define the Internal/External source, burst, cadence and frequency/level respectively. Enter the decimal equivalent (0-15) of the TDS Hex code (refer to 553-2711-180).

The first field is usually 0. If an external source is used the entry is 1 and the fourth field is 0-7 for the specified channel.

Note 3: The Firmware Cadence Table (FCAD) defines cadences that are controlled by the NT8D17 Conference /TDS/MFS card. These are used for SL-1 sets.

The FCAD can have up to 256 entries (0-255). Each entry can have up to 10 on-off phases. Entry 0 is reserved for continuous tone and cannot be changed.

FCAD cadences have the following capabilities:

- each cadence may be defined to end on the ON phase, OFF phase or repeat after a single pass through all defined on-off cycles. Any or all of the five on-off cycles can be repeated.
- a unique tone can be defined for each on phase. These tones are permanently held in the Conference/TDS/MFS firmware.

In order to have the same cadences for 500/2500 Digital and SL-1 sets, the MCAD and FCAD entries 0 through 15 are identical. Changes to MCAD entries 1 through 15 automatically change MCAD entries 1 through 15. FCAD entries 1 through 15 cannot be changed without changing the MCAD entries.

Note 4: The cadences for Software Controlled Cadence Tones AOBT (Agent Observe Tone), INTU (Intrusion tone) and OVRD (Override tone) do not repeat in the same manner as the other tones. All other tones repeat all on-off cycles from the first up to the fifth if all ten on and off times are programmed. However, these tones reserve cycle 1 for special use, providing a tone burst of a different length if desired, to emphasize the initial iteration of the tone cycle.

Note 5: A cycle of 200 3200 50 3200 will have a 200 millisecond tone followed by 3.2 seconds of silence. After this initial burst, the tone will repeat in a 50 millisecond on, 3.2 seconds off pattern as long as the time remains valid. However, if the pattern is intended to not have an initial burst, the first two entries must be repeated as the last two entries to obtain the correct sequence.

As an example, if the desired tone is repeating sequence of 50 ms on, 100 ms off, 100 ms on, 50 ms off, 50 ms on, 3500 ms off, the entry must be as follows:

50 100 100 50 50 3500 50 100

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
FCAD: Firmware Cadence data block	910
FTC: Flexible Tones and Cadences data block	911
MCAD: Master cadence data block	920
RART: Route Access Restriction table data block	920
RCDT: Route Category Default Table data block	920
TBAR: Trunk Barring data block	921
Print a customer defined route's ART course	921
<i>Other Information :</i>	
Default Firmware Cadence (FCAD) tables	923

FCAD: Firmware Cadence data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FCAD	Type of data block = FCAD (Firmware Cadence)
WCAD	0-225	Cadence Number (0 is reserved for continuous tone and cannot be changed)
CDNC	xxxx xxxx ... xxxx	Cadence
END	a...a	End treatment for cadence (a...a = REPT, ON, or OFF)
- CYCS	x x x x	Cycles
- WTON	(NO) YES	Define Tones associated with the cadence
- - TONES	ttt ttt ...	NT8D17 tones (0-255) to be used with each phase of the cadence

FTC: Flexible Tones and Cadences data block

An FTC table number can be entered for each trunk route at prompt TTBL in LD16. Table 0 is the default for all trunk routes and contains the defaults for North America.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FTC	Type of data block = FTC (Flexible Tones and Cadences)
TABL	0-31	FTC Table number
USER	(NO) YES	Print users of this table and tone table values (tone table value only)
DFLT	0-31	Default to existing FTC tone table
RING	(NO) YES	Change the ringing feature definitions
- NCAD	(1)-255	Normal Cadence
- NBCS		Normal BCS (SL-1 set) ringing
- - TDSH	i bb c tt	TDS Hex (Default is 0032)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- DCAD	0-(2)-255	Distinctive Cadence
- DBCS		Distinctive BCS (SL-1 set) ringing
- - TDSH	i bb c tt	TDS Hex (Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- ICAD	0-(5)-255	Intercom Cadence
- IBCS		Intercom ringing for BCS (SL-1)sets
- - TDSH	i bb c tt	TDS Hex (Default is 0012)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- NDR1 PBX	0-255	Network Distinctive Ring 1 cadence for PBX sets
- NDR1 BCS		Network Distinctive Ring 1 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Confernece/TDS) Cadence code

LD 56

- NDR2 PBX	0-255	Network Distinctive Ring 2 cadence for PBX sets
- NDR2 BCS		Network Distinctive Ring 2 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Confernece/TDS) Cadence code
- NDR3 PBX	0-255	Network Distinctive Ring 3 cadence for PBX sets
- NDR3 BCS		Network Distinctive Ring 3 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Confernece/TDS) Cadence code
- NDR4 PBX	0-255	Network Distinctive Ring 4 cadence for PBX sets
- NDR4 BCS		Network Distinctive Ring 4 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Confernece/TDS) Cadence code
- RCAD	0-(1)-255	Recall Cadence
- RBCS		Recall for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Default is 0032)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- GCAD	0-(1)-255	Group Call Cadence
- GBCS		Group Call for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- HCAD	0-(1)-255	Held call reminder Cadence
- HBCS		Held call reminder ringing for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex(Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- PCAD	0-255	Recall or Misoperation Cadence
- PBCS		Recall or Misoperation ringing for BCS
- - TDSH	i bb c tt	TDS Hex (Default is 0032)

-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
HCCT	(NO) YES	Hardware Controlled Cadences and Tones
- DIAL		Dial tone
- EEST		End-to-End Signaling Feedback Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code For EEST, with X11 Release 19 and later, this value is set to 0 no matter what is entered.
-- XCAD	(0)-55	XCT (NT8D17 Conference/TDS) Cadence number (FCAD cadence number)
- SPCL		Special dial tone
-- TDSH	0 00 0 tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number (FCAD Cadence number)
- CDT		Control Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- CFDT		Call Forward Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS)
- MWDT		Message Waiting Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0024)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number
- CFMW		Call Forward Message Waiting tone
-- TDSH	i bb c tt	TDS Hex (Default is 0024)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code

LD 56

-- XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number
- BUSY		Busy tone
-- TDSH	i bb c tt	TDS Hex (Default is 0017)
-- XTON	0-(7)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(16)-255	XCT (NT8D17 Conference/TDS) Cadence number
- RGBK		Ringback tone
-- TDSH	i bb c tt	TDS Hex (Default is 0035)
-- XTON	0-(5)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(1)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PREM		Preemption tone
-- TDSH	i bb c tt	TDS Hex (Default is 0006)
-- XTON	0-(6)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PRBK		Precedence Ringback tone
-- TDSH	i bb c tt	TDS Hex (Default is 0008D)
-- XTON	0-(11)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(2)-255	XCT (NT8D17 Conference/TDS) Cadence number
- ARBK		ACD RGA (Ring Again) Ringback tone
-- TDSH	i bb c tt	TDS Hex (Default is 0008D)
-- XTON	0-(11)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(2)-255	XCT (NT8D17 Conference/TDS) Cadence number
- FFCT		Flexible Feature Code Confirmation Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- LIMIT		Log In Mode Tone for 500/2500 ACD sets
-- TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
-- XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-255	XCT (NT8D17 Conference/TDS) Cadence number

- NRMT		Not Ready (NRDY) Mode Tone for ACD sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-255	XCT (NT8D17 Conference/TDS) Cadence number
- AWUT		Automatic Wake Up special error Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0027)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- OVFL		Overflow tone
- - TDSH	i bb c tt	TDS Hex (Default is 0027)
- - XTON	0-(7)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number
- TEST		Test tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0008)
- - XTON	0-(8)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- ERWT		Expensive Route Warning Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PCWT		Precedence Call Waiting Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number (FCAD Cadence number)
- ACFT		ACD Call Force Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number

- TLP		Tone to Last Party
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- TLPT	(0)-30	Tone to Last Party Timer in seconds. No tone = 0
- PATI		Patience tone Multi-Party Operations
- - TDSH	i bb c tt	TDS Hex (Default is 0000)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
CAB	(NO) YES	M911 Call Abandon on Answer tone
- TDSH	i bb cc tt	TDS external, burst, cadence and tone
- XTON	0-255	NT8D17 TDS Tone code
- XCAD	0-255	NT8D17 Cadence code for FCAD
CAST	(NO) YES	Centralized Attendant Service Tones
- LDN		Listed Directory Number tone
- - TDSH	i bb c tt	TDS Hex (Default is 0346)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(24)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(16)-255	MCAD software Cadence number
- DIO		Dial 0 Recall tone
- - TDSH	i bb c tt	TDS Hex (Default is 0283)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(22)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(16)-255	MCAD software Cadence number
- HLDC		Hold Confirmation tone
- - TDSH	i bb c tt	TDS Hex (Default is 0346)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(24)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(16)-255	MCAD software Cadence number

- CPNC		Camp-On Confirmation tone
- - TDSH	i bb c tt	TDS Hex (Default is 0243)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(21)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(17)-255	MCAD software Cadence number
SCCT	(NO) YES	Software Controlled Cadences and Tones
ILIN		NSSC pending agent Login tone
ILOU		NSSC pending agent Logout tone
- CAMP		Camp-On tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(17)-255	MCAD software cadence number
- AOBT		Agent Observe Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(18)-255	MCAD software cadence number
- INTU		Intrusion tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(19)-255	MCAD software cadence number
- CWT		Call Waiting Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(20)-255	MCAD software cadence number
- OBKT		Observe Blocking Tone

- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(17)-255	MCAD software cadence number
- OVRD		Override tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(18)-255	MCAD software cadence number
- OHQ		Off-Hook Queuing tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(3)-255	MCAD software cadence number
- SRT		Set Relocation Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(22)-255	MCAD software cadence number
- TMAT		Telephone Messaging Alert Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(22)-255	MCAD software cadence number
- TMOT		Telephone Messaging OK Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(23)-255	MCAD software cadence number
- TSUT		Telephone Status Update Tone

- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(23)-255	MCAD software cadence number
- ABST		Authorization Code Conditionally Last Enhancement cadence
- - XTON	0-(4)-255	NT8D17 TDS Tone code
- - XCAD	(0)-255	NT8D17 TDS Cadence code
- - CDNC	0-(2)-255	MCAD table entry for this cadence
SRC	(NO) YES	Source
- SRC1		Source tone 1
- - TDSH	i bb c tt	TDS Hex (Default is 0000)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- SRC2		Source tone 2
- SRC3		Source tone 3
- SRC4		Source tone 4
- SRC5		Source tone 5
- SRC6		Source tone 6
- SRC7		Source tone 7
- SRC8		Source tone 8
PULS	(NO) YES	Pulse timers are to be changed
- P10	4 (8)	Codes for make/break ratio for 10 pps
- ID1	256-(768)-1024	Inter-Digit 1
- ID2	256-(512)-1024	Inter-Digit 2
- IDD	256-1024	Inter-Digit DTMF
- IDE	256-(384)	EOS interdigital pause in milliseconds

MCAD: Master cadence data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	MCAD	Type of data block = MCAD (Master cadence)
WACD	0-225	Cadence Number (0 is reserved for continuous tone and cannot be changed)
CDNC	xxxx xxxx ... xxxx	Cadence

RART: Route Access Restriction table data block

Prompt	Response	Comment
REQ	CHG	Request. REQ = NEW or OUT is not accepted for RART.
TYPE	RART	Type of data block = RART (Route Access Restriction table)
CUST	(0)-xx	Customer number
ROUT	(0)-127	Route
ART	1-63	Access Restriction Table

RCDT: Route Category Default Table data block

Prompt	Response	Comment
REQ	CHG	Request. When TYPE = RCDT, you cannot enter NEW or OUT at the REQ prompt.
TYPE	RCDT	Type of data block = RCDT (Route Category Default table)
COT	(0)-63	COT, FEX, WAT. These route types will be assigned the entered ART when the route is created in LD16.
DID	(0)-63	These route types will be assigned the entered ART when the route is created in LD16
TIE	(0)-63	CAA, CAM, CSA, TIE
OTH	(0)-63	Other

TBAR: Trunk Barring data block

Prompt	Response	Comment
REQ	NEW CHG	Request
TYPE	TBAR	Type of data block = TBAR (Trunk Barring)
ART	1-63	Access Restriction Table
DENY	yyy yyy ...	Enter ART number denied to Originating Trunk Connection (OTC)

Print a customer defined route's ART course

Prompt	Response	Comment
REQ	PRT	Request
TYPE	aaa	Type of data block
CUST	(0)-xx	Customer number
ROUT	(0)-127	Route

Default Master Cadence (MCAD) tables

WCAD =	DEFAULT MCAD TABLE (Master Cadence Table)
000	CDNC = 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
001	CDNC = 0410 0800 0000 0000 0000 0000 0000 0000 0000 0000
002	CDNC = 0308 0076 0308 0076 0000 0000 0000 0000 0000 0000
003	CDNC = 0205 0000 0000 0000 0000 0000 0000 0000 0000 0000
004	CDNC = 0102 0102 0205 0819 0000 0000 0000 0000 0000 0000
005	CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000
016	CDNC = 0128 0000 0000 0000 0000 0000 0000 0000 0000 0000
017	CDNC = 0051 0000 0000 0000 0000 0000 0000 0000 0000 0000
018	CDNC = 0205 3072 0051 3072 0000 0000 0000 0000 0000 0000
019	CDNC = 0205 1229 0051 1229 0000 0000 0000 0000 0000 0000
020	CDNC = 0051 0026 0051 2048 0000 0000 0000 0000 0000 0000
021	CDNC = 0410 0000 0000 0000 0000 0000 0000 0000 0000 0000
022	CDNC = 0102 0000 0000 0000 0000 0000 0000 0000 0000 0000
023	CDNC = 0512 0000 0000 0000 0000 0000 0000 0000 0000 0000

Master Cadence (MCAD) table for Japan

001	CDNC = 0050 0050 0050 0450 0000 0000 0000 0000 0000 0000
002	CDNC = 0200 0400 0000 0000 0000 0000 0000 0000 0000 0000

Default Firmware Cadence (FCAD) tables

WCAD =	DEFAULT FCAD TABLE (Firmware Cadence Table)
000	Cadence number in the Master Cadence table (MCAD) CDNC = 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
001	Cadence number in the Master Cadence table (MCAD) CDNC = 0410 0800 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
002	Cadence number in the Master Cadence table (MCAD) CDNC = 0308 0076 0308 0076 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
003	Cadence number in the Master Cadence table (MCAD) CDNC = 0205 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
004	Cadence number in the Master Cadence table (MCAD) CDNC = 0102 0102 0205 0819 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
005	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
(Part 1 of 3)	

WCAD = DEFAULT FCAD TABLE (Firmware Cadence Table)	
016	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
017	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0050 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
018	Cadence number in the Master Cadence table (MCAD) CDNC = 0010 0010 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
019	Cadence number in the Master Cadence table (MCAD) CDNC = 0040 0060 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
020	Cadence number in the Master Cadence table (MCAD) CDNC = 0015 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
021	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
022	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0020 0020 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
(Part 2 of 3)	

WCAD = DEFAULT FCAD TABLE (Firmware Cadence Table)	
023	Cadence number in the Master Cadence table (MCAD) CDNC = 0060 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
024	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0000 0020 0000 0020 0000 0000 0000 0000 0000 END = OFF SPCL = YES
025	Cadence number in the Master Cadence table (MCAD) CDNC = 0200 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
026	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
027	Cadence number in the Master Cadence table (MCAD) CDNC = 0400 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
028	Cadence number in the Master Cadence table (MCAD) CDNC = 0125 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
029	Cadence number in the Master Cadence table (MCAD) CDNC = 0030 0070 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
(Part 3 of 3)	

Firmware Cadence (FCAD) table for Japan

WCAD =	DEFAULT FCAD TABLE (Cadence Table for JAPAN TDS)
001	Cadence number in the Master Cadence table (MCAD) CDNC = 0200 0400 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
002	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0050 0050 0450 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
017	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0050 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ABST		Authorization Code Conditionally Last Enhancement cadence.	nars-24
ACFT		ACD Call Force Tone When defining the hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13
AOBT		Agent Observe Tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
ARBK		ACD RGA (Ring Again) Ringback tone	ftc-13
ART	1-63 <cr>	Access Restriction Table Return to REQ prompt ART remains unchanged Printing of the route category default table occurs	ftc-10
AWUT		Automatic Wake Up special error Tone	mlwu-16
BUSY		Busy tone	ftc-13
CAB	(NO) YES	M911 Call Abandon on Answer tone	M911-19
CAMP		Camp-On tone	ftc-13

Prompt	Response	Comment	Pack/Rel
CAST	(NO)YES	Centralized Attendant Service Tones Modification to the CAS (Centralized Attendant Service) tone definition. For systems with XCT (NT8D17 Conference/TDS) cards, each feature requires a firmware cadence (XCAD), a software cadence (CNDN) and tone (XTON). Due to the finer resolution of the firmware cadence (5 ms) compared to the software (96/128 ms), you should allow the software cadence to be long enough to cover the full duration of the XCAD. For example, to define a cadence of 0.1 s on, 0.1 s off, 0.1 s on, steady off • CDNC0020 0020 0020 0000 • END OFF • SPCL The software cadence is then 0.3 s (600 ms). If the software precision is 128 ms, the software cadence is calculated as follows: • $600 \text{ ms}/128 = 4.6 = 5$ (rounded up) • $128 \times 5 = 640$ Entry to on phase = $640/5 = 0128$, and to define the cadence enter 0128 to prompt CDNC.	ftc-13
CDNC	xxxx xxxx ... xxxx	On-off phases for Cadence (ten on-off cycles) Entries 1 through 15 are reserved for ringing cadences. When defining the cadences in MCAD each phase entry is in 5 millisecond increments. The range for the first phase is 1-9999 increments. The range for the second phase is 0-9999 increments. The default is 0 0 0 0 0 0 0 0 0 0. Table shows the default MCAD Tables.	ftc-14
	0-(16)-255	MCAD software cadence number	ftc-14
	0-(17)-255	MCAD software cadence number	
	0-(19)-255	MCAD software cadence number (see <i>Note 5</i>)	

Prompt	Response	Comment	Pack/Rel
	0-(18)-255	MCAD software cadence number (see <i>Note 5</i>)	
	0-(20)-255	MCAD software cadence number	
	0-(3)-255	MCAD software cadence number	
	0-(22)-255	MCAD software cadence number	
	0-(23)-255	MCAD software cadence number	
CDT		Control Dial Tone	ftc-13
CFDT		Call Forward Dial Tone	ftc-13
CFMW		Call Forward Message Waiting tone	ftc-13
COT	(0)-63	COT, FEX, WAT. These route types will be assigned the entered ART when the route is created in LD 16.	
CPNC		Camp-On Confirmation tone	ftc-13
CUST	(0)-xx	Customer number	cust-15
CWT		Call Waiting Tone	ftc-13
CYCS	x x x x	On-off Cycles (1 to 5) to be repeated. Default is no repeats. Prompted when END = REPT	ftc-14
DBCS		Distinctive BCS (SL-1 set) ringing	ftc-13
DCAD	0-(2)-255	Distinctive Cadence 500/2500 and Digital set ringing MCAD cadence number. (See <i>Notes 1 and 3</i>) It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt DBCS). DCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13

LD 56

Page 930 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DENY	yyy yyy ...	Enter ART number denied to Originating Trunk Connection (OTC)	ftc-10
	ALL xALL	Deny all ARTs to OTC All ART numbers are allowed to OTC	
	Xyyy Xyyy .. <cr>	Enter ART numbers allowed to OTC Return to REQ prompt with no table being stored The ART is removed unless it is used as a default when REQ = OUT. REQ = NEW or OUT is disallowed for RART.	
DFLT	0-31 <cr>	Default to existing FTC tone table Create tone table without defaulting Prompted when REQ = NEW	ftc-13
DIAL		Dial tone	ftc-13
DID	(0)-63	These route types will be assigned the entered ART when the route is created in LD 16	
EEST		End-to-End Signaling feedback Tone This prompt appears with X11 Release 19 and later, to indicate that the improved EES tone is used. There is actually no cadence. When using the Enhanced Conference/TDS card, the XCAD prompt is not printed, and the cadence is set to 0 no matter what is entered.	ees-19
END	REPT ON OFF	End treatment for cadence Repeating cycles (defined by the CYCS prompt) End cadence on the "on" phase End cadence on the "off" phase	ftc-14
ERWT		Expensive Route Warning Tone When defining the hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13

Prompt	Response	Comment	Pack/Rel
FFCT		Flexible Feature Code Confirmation Tone This tone allows users of 500/2500 or multi-line telephone sets to receive a confirmation tone after activating/deactivating the following features: • Call Forward activate/deactivate • Ring Again deactivate • Store/erase Stored Number Redial • all Automatic Wake Up codes • Speed Call store • any verification code	ffc-15
GBCS		Group Call ringing for BCS (SL-1) sets	grp-13
GCAD	0-(1)-255	Group Call Cadence 500/2500 and Digital set Group Call Ringing Cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt GBCS). GCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	grp-14
HBCS		Held call ringing for BCS (SL-1) sets	ftc-13
HCAD	0-(1)-255	Held call reminder Cadence 500/2500 and Digital set held call reminder ringing cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt HBCS). HCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
HCCT	(NO) YES	Hardware Controlled Cadences and Tones Modification of the hardware (TDS card) controlled cadence tone definitions allowed. For systems with XCT (NT8D17 Conference/TDS) cards, each feature requires a firmware cadence (XCAD) and tone (XTON). For other TDS cards, the tone and cadence is defined by prompt TDSH.	ftc-13
HLDC		Hold Confirmation tone	ftc-13

LD 56

Prompt	Response	Comment	Pack/Rel
IBCS		Intercom ringing for BCS (SL-1)sets Distinctive Dial Intercom ringing for BCS (SL-1) sets	ftc-13
ICAD	0-(5)-255	Intercom Cadence 500/2500 and Digital set Dial Intercom Distinctive ringing MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt IBCS). ICAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
ID1	256-(768)-1024	Inter-Digit 1(P10 interdigit pause in milliseconds)	ftc-13
ID2	256-(512)-1024	Interdigit 2 (P20 interdigit pause in milliseconds)	ftc-13
IDD	256-1024	Interdigit DTMF pause in milliseconds Default is 512 if 100 is the response to prompt DTRB in LD 17. Otherwise, the default is 384.	ftc-13
IDE	256 - (384)	EOS interdigital pause in ms. Prompted if DDD package is equipped and PULS = YES.	ftc-13
ILIN		Nortel Symposium Call Center (NSCC) pending agent Login tone	nxcc-22
ILOU		Nortel Symposium Call Center (NSCC) pending agent Logout tone	nxcc-22

Prompt	Response	Comment	Pack/Rel
INTU		Intrusion tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
LDN		Listed Directory Number tone	ftc-13
LIMT		Log In Mode Tone for 500/2500 ACD sets This is the tone setting for ACD services to 500/2500 agent sets. You must have Flexible Tones and Cadences (FTC) supported for this feature to function properly.	bacd-16
MWDT		Message Waiting Dial Tone	ftc-13
NBCS		Normal BCS (SL-1 set) ringing	ftc-13
NCAD	(1)-255	Normal Cadence 500/2500 and Digital set ringing MCAD cadence number. (<i>Notes 1 and 3</i>) It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NBCS). NCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
NDR1 BCS		Network Distinctive Ring 1 for BCS (SL-1) sets	ftc-16
NDR1 PBX		Network Distinctive Ring 1 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 1 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR1 BCS). NDR1 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	

LD 56

Prompt	Response	Comment	Pack/Rel
NDR2 BCS		Network Distinctive Ring 2 for BCS (SL-1) sets	ftc-16
NDR2 PBX		Network Distinctive Ring 2 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 2 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR2 BCS). NDR2 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NDR3 BCS		Network Distinctive Ring 3 for BCS (SL-1) sets	ftc-16
NDR3 PBX		Network Distinctive Ring 3 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 3 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR3 BCS). NDR3 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NDR4 BCS		Network Distinctive Ring 4 for BCS (SL-1) sets	ftc-16
NDR4 PBX		Network Distinctive Ring 4 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 4 MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR4 BCS). NDR4 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NRMT		Not Ready (NRDY) Mode Tone for ACD sets This is the tone setting for the NRDY function within ACD services to 500/2500 agent sets. You must have Flexible Tones and Cadences supported for this feature to function properly.	bacd-16
OBKT		Observe Blocking Tone	ftc-13

Prompt	Response	Comment	Pack/Rel
OHQ		Off-Hook Queuing tone	ftc-13
OTH	(0)-63 <cr>	Other (ADM, DIC, MDM, PAG, RCD) These route types will be assigned the entered ART when the route is created in LD 16. Return to REQ prompt.	ftc-10
OVFL		Overflow tone	ftc-13
OVRD		Override tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
P10	4 (8)	Codes for make/break ratio for 10 pps. Other make/break ratio (Prompt S10P in LD97) North American make/break ratio (Prompt S10P in LD97) (See also CLS P10 in LD 14)	ftc-13
PATI		Patience tone multi-party operations	frta-21
PBCS		Recall or Misoperation ringing for BCS (SL-1) sets (default is SL-1 ringing tone TDS code)	ftc-12
PCAD	0-255	Recall or Misoperation Cadence 500/2500 and Digital set Recall or Misoperation ringing cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt PBCS). PCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-12

LD 56

Prompt	Response	Comment	Pack/Rel
PCWT		Precedence Call Waiting Tone When defining the TDS hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., 0 0 0 xx).	ftc-13
PRBK		Precedence Ringback tone	ftc-13
PREM		Preemption tone	ftc-13
PULS	(NO) YES	Pulse timers are to be changed	ftc-13
RBCS		Call Park Recall ringing for BCS (SL-1) sets	ftc-14
RCAD	0-(1)-255	Recall Cadence 500/2500 and digital set Call Park recall ringing cadence MCAD cadence number. RCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-14
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Add new data block to the system Remove data block Print data block	ftc-13
RGBK		Ringback tone	ftc-13
RING	(NO) YES	Change the Ringing feature definitions For systems with NT8D17 Conference/TDS cards, all telephones share the same ringing cadence. SL-1 telephones require an NT8D17 tone (XTON).	ftc-13
SCCT	(NO) YES	Software Controlled Cadences and Tones Modification of the Software Controlled Cadence Tone definitions allowed	ftc-13
SPCL		Special dial tone Only the code for the frequency/level is required as the cadence is provided by software. Enter 0 for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13

Prompt	Response	Comment	Pack/Rel
SRC	(NO) YES	Source tones (SRC1 through SRC8) are required. Eight intercept Source tones can be defined. These tones are entered in LD 15 in response to the various intercept treatment prompts.	ftc-13
SRC1		Source tone 1 Prompts and default values for TDSH, XTON and XCAD are the same for all SRC1 through SRC8 prompts.	ftc-13
SRC2		Source tone 2	ftc-13
SRC3		Source tone 3	ftc-13
SRC4		Source tone 4	ftc-13
SRC5		Source tone 5	ftc-13
SRC6		Source tone 6	ftc-13
SRC7		Source tone 7	ftc-13
SRC8		Source tone 8	ftc-13
SRT		Set Relocation Tone	ftc-13
TABL	0-31 <cr>	FTC Table number To associate a FTC table with a trunk route, enter the table number in response to prompt TTBL in LD 16. Prints all tables	ftc-13
TDSH	i bb c tt	Hexadecimal code for TDS. Internal/External, burst, cadence and tone (See <i>Note 2</i>) The default value of a TDSH prompt changes according to the tone-type prompt (e.g. NBCS, IBCS, HOWL, etc.) which precedes it.	ftc-14
TEST		Test tone	ftc-13
TIE	(0)-63	CAA, CAM, CSA, TIE These route types will be assigned the entered ART when the route is created in LD16.	

LD 56

Page 938 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
TLP		Tone to Last Party	
TLPT	(0)-30	Tone to Last Party Timer in seconds. No tone = 0.	
TMAT		Telephone Messaging Alert Tone	ftc-13
TMOT		Telephone Messaging OK Tone	ftc-13
TONES	ttt ttt ...	NT8D17 tones (0-255) to be used with each phase of the cadence. Default is no tones (0 0 0 0 0). See "Default Firmware Cadence (FCAD) tables" on page 923.	ftc-14
TSUT		Telephone Status Update Tone	ftc-13
TYPE		Type of data block	ftc-13
	FCAD	Firmware Cadence data block	ftc-15
	FTC	Flexible Tones and Cadences data block	ftc-13
	MCAD	Master Cadence data block (Release 14 and later)	ftc-14
	RART	Route Access Restriction Table data block REQ = NEW or OUT is disallowed for RART.	
	RCDT	Route Category Default Table data block REQ = NEW or OUT is disallowed for RCDT.	
	TBAR	Trunk Barring data block	
USER	(NO) YES	Print Users of this table and tone table values (tone table value only) Prompted when REQ = PRT	ftc-13
WCAD	0-225	Cadence number in the Firmware Cadence table (FCAD) Cadence number 0 is reserved for continuous tone and is not changeable.	ftc-14
WTON	(NO) YES	Define tones associated with the cadence. Prompted for systems equipped with Conference /TDS / MF Sender cards.	ftc-14

Prompt	Response	Comment	Pack/Rel
XCAD	0-(2)-255	XCT (NT8D17 Conference/TDS) Cadence number (FCAD cadence number) The default range of a XCAD prompt changes according to the tone-type prompt (e.g. DBCS, HOWL, etc.) which precedes it.	ftc-19
XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code	ftc-19

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 57: Flexible Feature Codes

Overlay program 57 allows the implementation and administration of the Flexible Feature Codes (FFC) software and hardware.

Up to 100 user access codes may be entered at a time for one or more different codes. After entering 100 user access codes, SCH8891 is output.

If the Directory Number Expansion (DNXP) package 150 is equipped, up to 7 digits are allowed for Flexible Feature Codes. Otherwise, a maximum of 4 digits can be entered.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FFC	Type of data block
CUST	xx	Customer number associated with this function
FFCT	(NO) YES	Flexible Feature Confirmation Tone
CEPT	(NO) YES	Conference European Des Postes Tel defaults
- REP*	0-9	Replacement for the * in the CEPT default codes
ALL	(NO) YES	Remove all Flexible Feature Codes
CODE	aaaa	Specific Flexible Feature Code type
- ADMN	ADMN xxxx	Set-based Administration sequence code Enter Flexible Feature Code
- ASRC	ASRC xxxx	Automatic Set Relocation code Enter Flexible Feature Code
- ATDA	ATDA xxxx	Autodial Activated Enter Flexible Feature Code
- ATDD	ATDD xxxx	Autodial Deactivated code Enter Flexible Feature Code
- AUTH	AUTH xxxx	Authorization code Enter Flexible Feature Code
- AWUA	AWUA xxxx	Automatic Wake Up Activate code Enter Flexible Feature Code
- AWUD	AWUD xxxx	Automatic Wake Up Deactivate code Enter Flexible Feature Code
- AWUV	AWUV xxxx	Automatic Wake Up Verify code Enter Flexible Feature Code
- BNRA	BNRA xxxx	Busy Number Redial code Enter Flexible Feature Code
- BNRD	BNRD xxxx	Busy Number Redial Deactivate code Enter Flexible Feature Code

- CCFA	CCFA xxxx	Customer Call Forward code Enter Flexible Feature Code
- CCFD	CCFD xxxx	Customer Call Forward Deactivate code Enter Flexible Feature Code
- CDRC	CDRC xxxx	CDR Charge Account code Enter Flexible Feature Code
- CFDD	CFDD xxxx	Call forward destination deactivation Enter Flexible Feature Code
- CFWA	CFWA xxxx	Call Forward All Calls Activate code Enter Flexible Feature Code
- CFWD	CFWD xxxx	Call Forward All Calls Deactivate code Enter Flexible Feature Code
- CFWV	CFWV xxxx	Call Forward All Calls Verify code Enter Flexible Feature Code
- COND	COND xxxx	Conference Diagnostics code Enter Flexible Feature Code
- CPAC	CPAC xxxx	Call Park Access Code Enter Flexible Feature Code
- CPP	CPP xxxx	Calling Party Privacy code Enter Flexible Feature Code
- CPPO	CPPO xxxx	Calling Party Privacy Override code Enter Flexible Feature Code
- CPRK	CPRK xxxx	Call Park code Enter Flexible Feature Code
- CSHF	CSHF xxxx	Centrex Switchhook Flash code Enter Flexible Feature Code
- CWGA	CWGA xxxx	Call Waiting Activated code Enter Flexible Feature Code

LD 57

- CWGD	CWGD xxxx	Call Waiting Deactivated code Enter Flexible Feature Code
- C6DS	C6DS xxxx	Six-Party Conference code Enter Flexible Feature Code
- DEAF	DEAF xxxx	Deactivate Feature code Enter Flexible Feature Code
- DPVS	DPVS xxxx	Data Port Verification code Enter Flexible Feature Code
- ELKA	ELKA xxxx	Electronic Lock Activate code Enter Flexible Feature Code
- ELKD	ELKD xxxx	Electronic Lock Deactivate code Enter Flexible Feature Code
- GRPF	GRPF xxxx	Group Call code Enter Flexible Feature Code
- GRCL	GRCL xxxx	Group Call List number code Enter Flexible Feature Code
- HOLD	HOLD xxxx	Permanent Hold code Enter Flexible Feature Code
- ICFA	ICFA xxxx	Internal Call Forward Activate code Enter Flexible Feature Code
- ICFD	ICFD xxxx	Internal Call Forward Deactivate code Enter Flexible Feature Code
- ICFV	ICFV xxxx	Internal Call Forward Verify code Enter Flexible Feature Code
- INST	INST xxxx	Set based administration Installer code Enter Flexible Feature Code
- IMS	IMS xxxx	Integrated Message System access code Enter Flexible Feature Code
	LILO	Log In-Log Out for 500/2500 ACD sets code

- LILO	xxxx	Enter Flexible Feature Code
- MNTC	MNTC xxxx	Maintenance Access code Enter Flexible Feature Code
- MSBA	MSBA xxxx	Make Set Busy Activated code Enter Flexible Feature Code
- MSBD	MSBD xxxx	Make Set Busy Deactivated code Enter Flexible Feature Code
- MTRC	MTRC xxxx	Malicious Call Trace code Enter Flexible Feature Code
- MWRA	MWRA xxxx	Repeat Multiple Wake Up Activated code Enter Flexible Feature Code
- MWUA	MWUA xxxx	Multiple Wake Up Activated code Enter Flexible Feature Code
- MWUD	MWUD xxxx	Multiple Wake Up Deactivated code Enter Flexible Feature Code
- NRDY	NRDY xxxx	Not Ready Activation/Deactivation for 500/2500 ACD sets code Enter Flexible Feature Code
- OVRD	OVRD xxxx	Override and Priority Override code Enter Flexible Feature Code
- OCBA	OCBA xxxx	Outgoing Call Barring feature code Outgoing Call Barring feature
- OCBD	OCBD xxxx	Outgoing Call Barring Deactivate code Enter Flexible Feature Code
- OCBV	OCBV xxxx	Verify the Outgoing Call Barring feature code Enter Flexible Feature Code
- PUDN	PUDN xxxx	Pick Up DN code Enter Flexible Feature Code
	PUGR	Pick Up Group code

- PUGR	xxxx	Enter Flexible Feature Code
- PURN	PURN xxxx	Pick Up Ringing Number code Enter Flexible Feature Code
- RCFA	RCFA xxxx	Remote Call Forward Activate code Enter Flexible Feature Code
- RCFD	RCFD xxxx	Remote Call Forward Deactivate code Enter Flexible Feature Code
- RCFV	RCFV xxxx	Remote Call Forward Verify code Enter Flexible Feature Code
- RDLN	RDLN xxxx	Redial Last Number code Enter Flexible Feature Code
- RDNE	RDNE xxxx	Redial Number Erase code Enter Flexible Feature Code
- RDSN	RDSN xxxx	Redial Saved Number code Enter Flexible Feature Code
- RDST	RDST xxxx	Redial Store code Enter Flexible Feature Code
- RGAA	RGAA xxxx	Ring Again Activate code Enter Flexible Feature Code
- RGAD	RGAD xxxx	Ring Again Deactivate code Enter Flexible Feature Code
- RGAV	RGAV xxxx	Ring Again Verify code Enter Flexible Feature Code
- RMST	RMST xxxx	Room Status code Enter Flexible Feature Code
- RPAN	RPAN xxxx	Radio Paging Answer call code Enter Flexible Feature Code
- RPAX	RPAX xxxx	Radio Paging Access code Enter Flexible Feature Code

- SADS	SADS xxxx	SAR Disable code Enter Flexible Feature Code
- SAEN	SAEN xxxx	SAR Enable code Enter Flexible Feature Code
- SALK	SALK xxxx	SAR Lock code Enter Flexible Feature Code
- SAUN	SAUN xxxx	SAR Unlock code Enter Flexible Feature Code
- SCPC	SCPC xxxx	Station Control Password Change code Enter Flexible Feature Code
- SPCC	SPCC xxxx	Speed Call Controller code Enter Flexible Feature Code
- SPCU	SPCU xxxx	Speed Call User code Enter Flexible Feature Code
- SSPU	SSPU xxxx	System Speed Call User code Enter Flexible Feature Code
- TFAS	TFAS xxxx	Trunk Answer From Any Station code Enter Flexible Feature Code
- TRMD	TRMD xxxx	Terminal Diagnostics code Enter Flexible Feature Code
- TRVS	TRVS xxxx	Trunk Verification code Enter Flexible Feature Code
- USER	USER xxxx	Set based administration User code Enter Flexible Feature Code
- USCR	USCR xxxx	User Selectable Call Redirection code Enter Flexible Feature Code
- USTA	USTA xxxx	User Status code Enter Flexible Feature Code

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ALL	(NO) YES	Remove all Flexible Feature Codes Prompted when REQ = OUT	ffc-15
ASRC	xxxx	Automatic Set Relocation Code	sr-15
ATDA	xxxx	Autodial Activated	ffc-20
ATDD	xxxx	Autodial Deactivated	ffc-20
AUTH	xxxx	Authorization code	baut-15
AWUA	xxxx	Auto Wake Up Activate code	awu-15
AWUD	xxxx	Auto Wake Up Deactivate code	awu-15
AWUV	xxxx	Auto Wake Up Verify	awu-15
BNRA	xxxx	Activate the Busy Number Redial feature	ffc-21
BNRD	xxxx	Deactivate the Busy Number Redial feature	ffc-21
C6DS	xxxx	Six-Party Conference code	awu-15
CCFA	xxxx	Activate the Customer Call Forward feature	ffc-21
CCFD	xxxx	Deactivate the Customer Call Forward feature	ffc-21
CDRC	xxxx	CDR Charge Account code	chg-15
CEPT	(NO) YES	Conference European Des Postes Tel defaults are to be used. CEPT is prompted when REQ = NEW. If CEPT = YES, then all CEPT defaults will be set up. The default value for CPP is *67 and default for CPPO is *82 if Calling Party Privacy (CPP) package 301 is equipped.	basic-15
CFDD		Call forward destination deactivation code	chffc/ffc-22

Prompt	Response	Comment	Pack/Rel								
CFHO	xxxx	Call Forward/HUNT Override via FFC	optf-15								
CFWA	xxxx	Call Forward All Calls Activate code	optf-15								
CFWD	xxxx	Call Forward All Calls Deactivate code	optf-15								
CFWV	xxxx	Call Forward All Calls Verify code	optf-15								
CODE	aaaa	Specific Flexible Feature Code (FFC) type. Where: aaa = FFC type to be changed. (e.g., AUTH, CPP, etc.) Two entries are required to change a specific FFC. First enter the mnemonic of the FFC to be changed and then carriage return <cr>. The switch will then prompt the mnemonic just entered. Respond to this second prompt by entering the numeric value desired for that Flexible Feature Code. See example below. The Flexible Feature Code may be up to 4 digits, or up to 7 digits with Directory Number Expansion (DNXP) package (150). CODE is prompted when ALL = NO. Example: to change the Flexible Feature Code for Call Park to 88, respond to CODE as follows: <table><tr><td><u>Prompt</u></td><td><u>Response</u></td></tr><tr><td>CODE</td><td>CPRK <cr></td></tr><tr><td>CPRK</td><td>88 <cr></td></tr><tr><td>CODE</td><td><cr> (No further prompts, return to REQ)</td></tr></table>	<u>Prompt</u>	<u>Response</u>	CODE	CPRK <cr>	CPRK	88 <cr>	CODE	<cr> (No further prompts, return to REQ)	ffc-15
<u>Prompt</u>	<u>Response</u>										
CODE	CPRK <cr>										
CPRK	88 <cr>										
CODE	<cr> (No further prompts, return to REQ)										
	ALL	All feature mnemonics that may have a Flexible Feature Code will be prompted.									
	<cr>	No further prompts, return to REQ.									
COND	xxxx	Conference Diagnostics code	basic-15								
CPAC	xxxx	Call Park Access Code	cpk-15								
CPP	xxxx	Calling Party Privacy	cpp-21								

LD 57

Prompt	Response	Comment	Pack/Rel
CPPO	xxxx	Calling Party Privacy Override code	cpp-23
CPRK	xxxx	Call Park code	cpk-15
CSHF	xxxx	Centrex Switchhook Flash code	thf-15
CUST	xx	Customer number associated with this function as defined in LD 15	cust-15
CWGA	xxxx	Call Waiting Activated	ffc-20
CWGD	xxxx	Call Waiting Deactivated	ffc-20
DEAF	xxxx	Deactivate Feature (deactivates RDLN, RGA, CFW, GHD and SNA codes. Same operation as ATDD, CFWD, MSBD, CWGD and RGAD	optf-15
DPVS	xxxx	Data port verifications code	basic-15
ELKA	xxxx	Electronic Lock Activate code	basic-15
ELKD	xxxx	Electronic Lock Deactivate code	basic-15
EOVR	xxxx	Enhanced Override (manual Forced Camp-On followed by Priority Override)	povr-20
FFCT	(NO) YES	Flexible Feature Confirmation Tone This tone allows users of 500/2500 or multi-line telephone sets to receive a confirmation tone after activating/deactivating the following features: • Call Forward activate, deactivate • Ring Again deactivate • Store/erase Stored Number Redial • all Automatic Wake Up codes • Speed Call store • any verification code	ffc-15
GRCL	xxxx	Group Call List number	ffc-20

Prompt	Response	Comment	Pack/Rel
GRPF	xxxx	Group Call	ffc-20
HOLD	xxxx	Permanent Hold code	basic-15
ICFA	xxxx	Internal Call Forward Activate code	icf-19
ICFD	xxxx	Internal Call Forward Deactivate code	icf-19
ICFV	xxxx	Internal Call Forward Verify code	icf-19
IMS	xxxx	Integrated Message System Access code	ims-15
INST	xxxx	Set based administration Installer	adminset-21
LILO	xxxx	Login-Logout for 500/2500 ACD sets Dialing the number programmed here allows an ACD Agent on a 500/2500 telephone set to toggle between Login and Logout. There is no confirmation tone.	bacd-16
MNTC	xxxx	Maintenance Access code	basic-15
MSBA	xxxx	Make Set Busy Activated.	ffc-20
MSBD	xxxx	Make Set Busy Deactivated.	ffc-20
MTRC	xxxx	Malicious Call Trace code	mct-15
MWRA	xxxx	Multiple Wake Up Activated Automatic Wake Up (AWU) package 102 must be equipped for the MWU FFC codes to be available.	ffc-20
MWUA	xxxx	Repeat Multiple Wake Up Activated.	ffc-20
MWUD	xxxx	Multiple Wake Up Deactivated	ffc-20

LD 57

Prompt	Response	Comment	Pack/Rel
NRDY	xxxx	Not Ready activation/deactivation for 500/2500 ACD sets Dialing the number programmed here allows an ACD Agent on a 500/2500 telephone set to toggle in and out of the Not Ready state like other ACD Agents. There is no confirmation tone returned.	bacd-16
OCBA	xxxx	Activate the Outgoing Call Barring feature	ffc-21
OCBD	xxxx	Deactivate the Outgoing Call Barring feature	ffc-21
OCBV	xxxx	Verify the Outgoing Call Barring feature	ffc-21
OVRD	xxxx	Override and Priority Override	povr-20
PUDN	xxxx	Pick Up DN code.	grp-15
PUGR	xxxx	Pick Up Group code.	grp-15
PURN	xxxx	Pick Up Ringing Number code.	grp-15
RCFA	xxxx	Remote Call Forward Activate code.	optf-15
RCFD	xxxx	Remote Call Forward Deactivate code.	optf-15
RCFV	xxxx	Remote Call Forward Verify code.	optf-15
RDLN	xxxx	Redial Last Number code.	lnr-15
RDNE	xxxx	Redial Number Erase code.	snr-15
RDSN	xxxx	Redial Saved Number code.	snr-15
RDST	xxxx	Redial Store code.	snr-15

Prompt	Response	Comment	Pack/Rel
REP*	0-9	One digit replacement for the * in the CEPT default codes. The CEPT defaults will be defined again with this digit used in place of the “*”. In addition, the trailing # will be omitted. REP* is prompted only when REQ = NEW and CEPT = YES. Use <cr> to create only CEPT defaults. Note that digit replacement is blocked for CPP and CPPO defaults.	ffc-15
	<cr>	No change to defaults	
REQ	CHG END NEW OUT PRT	Request Change existing data. Exit Overlay program. Create a new data block. Remove Data Block. Print Data Block.	ffc-15
RGAA	xxxx	Ring Again Activate code.	optf-15
RGAD	xxxx	Ring Again Deactivate code.	optf-15
RGAV	xxxx	Ring Again Verify code.	optf-15
RMST	xxxx	Room Status code	rms-15
RPAN	xxxx	Radio Paging Answer call code	rpa-20
RPAX	xxxx	Radio Paging Access code	rpa-20
SADS	xxxx	SAR Enable code	sar-20
SAEN	xxxx	SAR Lock code	sar-20
SALK	xxxx	Ring Again Activate code	sar-20
SAUN	xxxx	SAR Unlock code	sar-20
SCPC	xxxx	Station Control Password Change code	basic-15

LD 57

Prompt	Response	Comment	Pack/Rel
SPCC	xxxx	Speed Call Controller code	optf-15
SPCU	xxxx	Speed Call User code	optf-15
SSPU	xxxx	System Speed Call User code	optf-15
TFAS	xxxx	Trunk Answer From Any Station code	basic-15
TRMD	xxxx	Terminal Diagnostics code	basic-15
TRVS	xxxx	Trunk Verification code	tvS-15
TYPE	FFC	Flexible Feature Codes data block	ffc-15
USCR	xxxx	User Selectable Call Redirection	uscr-19
USER	xxxx	Set based administration User	adminset-21
USTA	xxxx	User Status code	basic-15

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 58: Radio Paging

Overlay program 58 allows the definition of options on a Radio Paging Access Code (RPAX) basis per customer.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
RPAX: Radio Paging Access Code data block	956
RPCD: Radio Paging Customer Data block	957
RPS: Radio Paging System data block	957
TBL: Translation Table access data block	958

RPAX: Radio Paging Access Code data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	RPAX	Radio Paging Access Code data block
CUST	xx	Customer number associated with this function
SNUM	0-15	System Number
RPAX	nnnn	Radio Paging Access code
- ROUT	0-511	Route number
- PANN	(NO) YES	Recorded Paging Announcement
- - RPAR	0-511	Route number that provides the recorded announcement
- BYPS	(NO) YES	Bypass the DN-PSA translation
- OPER	aaaa	Operation (aaaa = (AUTO) or MANU)
- - INTM	(0)-1-9	Internal Mode digit for this RPAX
- - TRDN	(0)-7	Transmit this number of digits of caller's DN to paging equipment
- PATH	aaaa	Type of path to be provided (aaaa = (NONE), SPCH, or RNGB)
- - TWSP	aaaa	Two-way Speech Path with a mobile pager allowed (aaaa = (BOTH) or INT)
- - ACPS	(YES) NO	Radio Paging System to provide call-in-progress signals
- - - ACPT	(YES) NO	Call Accepted is to be detected
- DCHR	xxxx	Display Characters

RPCD: Radio Paging Customer Data block

Prompt	Response	Comment
REQ	aaa	Request (CHG, END, NEW, OUT, or PRT)
TYPE	RPCD	Radio Paging Customer Data block
CUST	xx	Customer number associated with this function
RPTO	a...a	Radio Paging Tone (a...a = (SPCL), DIAL, or NONE)
MRPS	(NO) YES	Multiple Radio Paging Systems
TRAN	aaa	Translation type (aaa = (TAB), TWO, THR, FOR, or NO)
DNLN	1-(4)-7	DN Length
RCRG	0-(6)-20	Number of Ring Cycles when recall to transferring set, before reroute to attendant
RCTI	0-(30)-120	Time to wait for a "BUSY" transferring set to become idle
RCAL	(NO) YES	Recall if busy from RPA
TBTR	4-(10)-30	Time between two recall attempts (to an SL-1 set)

RPS: Radio Paging System data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	RPS	Radio Paging System data block
CUST	xx	Customer number associated with this function
SNUM	0-15	System Number
PSAL	1-7	Paging System Access code Length
RTIM	0-(60)-630	Length of the Recall Timer
STO	10-(30)-630	Length of time required for Speech Path to be maintained in seconds
NSTO	10-(30)-630	Length of time required for paging when No Speech Path is required
MTO	0-(150)-630	Length of the Meet-Me Timeout timer in seconds.

TBL: Translation Table access data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	TBL	Translation Table access
CUST	xx	Customer number associated with this function
SNUM	0-15	System Number
DNPS	xxxx yyyy	The DN to be translated and the number of the paging equipment to which the DN is assigned.
TABT	aaa	Table Type (aaa = DNP, NPS, or UPS)
RANG	xxxx...xxxx	Print DN Range from the first DN to the second DN

Alphabetical List of Prompts

Prompt	Response	Comment	Pack/Rel
ACPS	(YES) NO	Radio Paging System to provide the call-in-progress signals	rpa-15
ACPT	(YES) NO	Call Accepted is to be detected. Prompted when PATH = RNGB or SPCH. If PATH = RNGB or SPCH and ACPT = YES, then ringback is provided only when the call accepted signal is received. Speech path opens when Start-talk signal is received. If PATH = RNGB and ACPT = NO, then ringback is provided when all the paging information has been entered. If PATH = SPCH and ACPT = NO, then speech path is provided when all paging information has been sent (number processed).	
BYPS	(NO) YES	By-pass the DN-PSA translation YES means that meet-me is not available and that the trunk is accessed directly; the next prompt is RPAX. Prompted when MRPS = NO.	rpa-15
CUST	xx	Customer number associated with this function as defined in LD 15.	rpa-15
DCHR	xxxx	Display Characters. Enter X to remove all characters	rpa-15
	(PAGE)	Characters to be displayed on sets with Call Party Name Display (CPND) activated (replaces the FFC) (one per page).	
DNLN	1-(4)-7	DN Length Prompted if TRAN = NO, TWO, THR, or FOR	rpa-15
DNPS	xxxx yyyy	The DN to be translated and the number of the paging equipment to which the DN is assigned. This prompt is repeated to allow multiple entries.	rpa-15
	Xxxxx <cr>	The DN to be deleted from the entry Stops the DNPS prompt	
INTM	1-9-(0)	Internal Mode digit for this RPAX	rpa-15

LD 58

Prompt	Response	Comment	Pack/Rel
	<cr>	Default is the mode digit defined in EXTM	
MRPS	(NO) YES	Multiple Radio Paging Systems	rpa-15
MTO	0-(150)-630	Length of the Meet-Me Timeout timer in seconds, after the STO or NSTO timer has expired Where: 0 = no meet-me after STO or NSTO has expired. 10 second resolution.	rpa-15
NSTO	10-(30)-630	Length of time required for paging when No Speech Path is required. 10 second resolution.	rpa-15
OPER	(AUTO) MANU	Automatic Operation Manual Operation	rpa-15
PANN	(NO) YES	Recorded Paging Announcement allowed (denied) for this route	rpa-15
PATH	(NONE) SPCH RNGB	No speech path or ringback provided Speech path provided Ringback to the calling party provided	rpa-15
PSAL	1-7	Paging System Access code length Number of digits that are to be used to identify individual paging devices	rpa-15
RANG	xxxx xxxx xxxx <cr>	Print DN Range from the first DN to the second DN. Print this DN. Print all DNs. DNs are those listed in the Radio Paging (RPA) translation table. Prompted when TABT = DNP	rpa-15
RCAL	(NO) YES	Recall if busy from RPA.	rpa-15
RCRG	0-(6)-20	Number of ring cycles when recall to transferring set, before reroute to attendant. Where: 0 = use value entered in response to CFNA prompt in LD 15	rpa-15
	X	Reroute to attendant (that is, no recall attempts to transferring set).	

Prompt	Response	Comment	Pack/Rel
RCTI	0-(30)-120	Time to wait for a "BUSY" transferring set to become idle. After this time the call is routed to the attendant.	rpa-15
REQ	CHG END NEW OUT PRT	Request Change existing data block. Exit Overlay program. Create a new data block. Remove data block. Print data block.	rpa-15
ROUT	0-511	Route number of the trunk route connected to this paging system. Route must be defined as PRA in LD 14 and 16.	rpa-15
RPAR	0-511	The route number where the recorded announcement is provided from. Route must be defined as RAN in LD 16.	rpa-15
RPAX	nnnn <cr>	Radio Paging Access Code This prompt is repeated to allow multiple entries. Stop RPAX prompt. Access Codes must previously be defined in LD 57.	rpa-15
RPTO	(SPCL) DIAL NONE	Radio Paging Tone, which is to be provided after the RPAX/RPAN Special dial tone Normal Dial tone No tone	rpa-15
RTIM	0-(60)-630	Length of the Recall Timer (in seconds) after the STO or NSTO timer has expired Where: 0 = no timeout limit. 10 second resolution	rpa-15
SNUM	0-15	System Number Prompted when MPRS = YES	rpa-15
STO	10-(30)-630	Length of time required for Speech Path to be maintained in seconds. 10 second resolution.	rpa-15
TABT	DNP NPS UPS	Table Type Print the DN-Paging System Access (PSA) entries Print the unused PSA codes Print the used PSA codes Prompted when TYPE = TBL	rpa-15

LD 58

Prompt	Response	Comment	Pack/Rel
TBTR	4-(10)-30	Time between two recall attempts (to an SL-1 set)	rpa-15
TRAN	(TAB) TWO THR FOR NO	Translation type Translation lookup table Last two digits of DN Last three digits of DN Last four digits of DN No translation (DN sent as PSA code) Prompt is not given if MRPS = YES. TRAN is then forced to TAB.	rpa-15
TRDN	(0)-7	Transmit this number of digits of the caller's DN to the paging equipment	rpa-15
TWSP	(BOTH) INT	Two-way speech path with a mobile pager allowed Both internal and external calls Internal calls Prompted when PATH = SPCH	rpa-15
TYPE	RPAX RPCD RPS TBL	Type of data block Radio Paging Access Code data block Radio Paging Customer Data block Radio Paging System data block Translation Table access data block	rpa-15

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 60: Digital Trunk Interface and Primary Rate Interface Diagnostic

The LD 60 diagnostic program can be run in midnight routines or loaded manually to enter commands.

This program is used to maintain the following on other systems:

- QPC471/775 Clock Controller
- QPC472 1.5 Mb/s Digital Trunk Interface (DTI)
- QPC536 2.0 Mb/s Digital Trunk Interface (DTI2)
- QPC720 Primary Rate Interface (PRI)

Channel Timeslot Mapping

If a system loop is configured with a SYS-12, AXE-10 SWE, NUMERIS, SwissNet D-channel (SWISS), TCNZ, or EuroISDN, then the following message to explain the difference in timeslot to channel mapping between the Meridian 1/Meridian SL-1 and the public network will be printed on loading the Overlay. The heading will differ according to the interface supported by the phase.

Example Message:

M 1/SL-1 — SYS-12
 AXE-10 SWE
 NUMERIS
 SWISS
 TCNZ
 EuroISDN

Table 21: Channel Timeslot Mapping

Channel	M 1/SL-1	Network	Timeslot
B	1-15	1-15	1-15
B	16-30	17-31	17-31
D	31	16	16

Basic Commands

DTI/PRI commands

ATLP (0), 1	Disable (default) or enable midnight auto loop test
CDSP	Clear maintenance display to 00 or blank
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c
DISI loop	Disable loop when all channels are idle
DISL loop	Disable network and DTI/PRI cards of loop
DLBK loop	Disable remote loop back test per RLBK command
DLBK l ch	Disable remote loop back test per RLBK l ch command
DSCH l ch	Disable channel ch of loop
ENCH loop	Enable all channels on 2.0 Mb/s DTI/PRI
ENCH l ch	Enable channel ch of DTI/PRI loop
ENLL loop	Enable network and DTI/PRI cards of loop
LCNT (loop)	List contents of alarm counters on one or all DTI/PRI loops
LOVF c r	List threshold overflows for customer c (0-99) and route r (0-511)
RCNT	Reset alarm counters of all DTI/PRI loops
RCNT loop	Reset alarm counter of DTI/PRI loop
RMST loop	Perform self-test on loop
RMST l ch	Perform self-test on specified channel (2.0 Mb/s DTI/PRI only)
RLBK loop	Close loop at carrier interface point for testing
RLBK l ch	Close channel ch at carrier interface point
RSET l ch	Reset thresholds for channel ch
SLFT loop	Invoke hardware self-test on loop
SLFT l ch	Invoke partial hardware self-test on channel ch
STAT	Get status of all loops
STAT loop	Get status of DTI/PRI loop
STAT l ch	Get status of channel ch

Clock controller commands

DIS CC x (0,1)	Disable system clock controller x (0 or 1)
DSCK loop	Disables the clock for loop
DSYL loop	Disable yellow alarm processing for loop
ENCK loop	Enable the clock for loop
ENL CC x (0,1)	Enable system clock controller x (0,1)
ENYL loop	Enable yellow alarm processing for loop
EREF	Enable automatic switchover of system clocks
MREF	Disable switchover of system clocks
SSCK x (0,1)	Get status of system clock x (0,1)
SWCK	Switch system clock from active to standby
TRCK aaa	Set clock controller tracking to primary, secondary or free run

Alphabetical list of commands

Command	Description	Pack/Rel
ATLP (0), 1	Disable (0) or enable (1) daily routine auto loop test. Where: • 1 = loop test enable; causes far-end to raise and clear yellow alarm • 0 =run the partial loop test; there is no interaction for far-end loop (default value) LD 60 is included in the daily (midnight) routines if defined by LD 17 prompt DROL. ATLP is only run if LD 60 is included in the daily routines. If ATLP = 1, and all 24 channels on the loop are idle, then the DTI/PRI card is disabled and a self-test is performed on each channel. All DTI/PRI cards are tested, one at a time. If a D-channel is on the loop, it is temporarily released and reestablished. If one or more channels are busy, the test is not performed on the loop. If ATLP = 0, then an "AUTO TEST DSBL" message is output and only one channel is tested. The channel is randomly selected by software, it cannot be specified.	dti/pa-5
CDSP	Clear maintenance display to 00 or blank.	dti/pa-5
CMIN ALL	Clear minor alarm indication on all attendant consoles.	dti/pa-5
CMIN c	Clear minor alarm indication on attendant consoles for customer c.	dti/pa-5
DIS CC x (0,1)	Disable system clock controller 0 or 1. CPU 0 must be idle to disable CC 0. CPU 1 must be idle to disable CC 1. To switch CPUs, use the SPCU command in LD 35.	dti/pa-5
DISI loop	Disable DTI/PRI loop when all channels are idle. The network and DTI/PRI cards are then disabled and status LEDs are lit. Channel status is set to BSY. Enter END to abort. When the PRI is physically connected to a DCHI card, the D-channels must be disabled first using LD 96.	dti/pa-5

LD 60

DISL loop	Disable network and DTI/PRI/DTI2/PRI2 cards of loop. (PRI & PRI2 loops cannot be disabled unless associated D-channel is disabled first using LD 96). Active calls are force disconnected by on-hook simulation. All channels are disabled and status LEDs are lit.	dti/pra-5
DLBK loop	Disable remote loop back test per RLBK command. Loop remains disabled.	dti/pra-5
DLBK I ch	Disable remote loop back test per RLBK loop ch command. The channel remains disabled.	dti/pra-5
DSCH I ch	Disable channel ch of loop I.	dti/pra-5
DSCK loop	Disables the clock for loop, which does not have to be previously defined as the primary or secondary clock source.	dti/pra-5
DSYL loop	Disable yellow alarm processing for loop.	dti/pra-5
ENCH loop	Enable all channels on DTI2 loop.	dti/pra-5
ENCH I ch	Enable channel ch of loop. For TIE trunks with A+B signaling, the channel is set to the same state as the far-end. The far-end refers to the status of the channels as presented by DTI T1 port. With B-channel signaling, channels are placed into the IDLE state and made available for calls.	dti 2 - 5
ENCK loop	Enables the clock for loop, which must be previously defined as a primary or secondary clock source via service change.	dti/pra-5
END	Aborts the program.	dti/pra-5
ENL CC x	Enable system clock controller 0 or 1.	dti/pra-5
ENLL loop	Enable network and DTI/PRI/DTI2/PRI2 cards of loop. For TIE trunks with A+B signaling, the channels are set to the same status as the far-end; otherwise, the channels are set to idle status. The far-end refers to the status of the channels as presented by DTI T1 port. Status LEDs are deactivated. With B-channel signaling, channels are placed into the IDLE state and made available for calls.	dti/pra-5

ENYL loop	Enable yellow alarm processing for loop.	dti/pra-5
EREF	Enables automatic switchover of primary and secondary reference clocks. Also enables recovery to primary or secondary clocks when loops associated with these clocks are automatically enabled.	dti/pra-5
LCNT (loop)	List contents of alarm counters on one or all of the following cases: Case 1 1.5 Mb/s DTI/PRI The counters are: • BPV = bipolar violation counter • SLIPD = frame slip deletion counter • SLIPR = frame slip repetition count • LOSFA = loss of frame alignment counter • OS_BPV = 24-hr bipolar violation counter a For PRI with D2, D3, or D4 framing format, 24-hr bipolar violation counter b For PRI with Extended Superframe Format, 24-hr Cyclic Redundancy Check (CRC) counter • OS_LOSFA = 24-hr loss of frame alignment counter • OS_YEL = 24-hr yellow alarm counter Case 2 2.0 Mb/S DTI The counters are: • G1 alarms • BPV = bipolar violation counter • FAP = frame alignment threshold counter • SLP = maintenance threshold slip counter • CRC = cyclic redundancy threshold counter • AIS = alarm indication signal • AIS64 = 64 Kb/s alarm indication signal • FAL = loss of frame alignment • MFAL = loss of multiframe alignment • BIT3 = bit 3 error • BIT6 = bit 6 error • CFAS = loss of crc-4 multiframe alignment	dti/pra-5

Case 3 2.0 Mb/s PRI

The counters are:

- BPV = bipolar violation counter
- CRC = cyclic redundancy threshold counter
- FAP = frame alignment threshold counter
- SLP = maintenance threshold slip counter
- AIS = alarm indication signal
- LFAS = loss of frame alignment signal
- LMAS = loss of multiframe alignment signal
- RAI = remote alarm indication
- LOS = loss of signal

LOVF c r	List threshold overflows for customer c (0-99) and route r (0-511). The overflows are set when the resident trunk monitor outputs a diagnostic message. Defined thresholds are HOLD, ILLR, REPT, SEIZ and SVFL (see LD 16).	dti/pra-5
MREF	Disable switchover of system clocks. Also disables recovery to primary or secondary reference clocks when loops associated with these clocks are automatically enabled.	dti/pra-5
RCNT (loop)	Reset alarm counters for all or specified loop only. If the DTI loop was disabled due to an error threshold overflow and the DTI may be enabled automatically when the counter is cleared, then before performing any command, such as test, that requires the DTI to be disabled you should: 1. disable the DTI 2. list the counters with the LCNT command 3. reset the counters with the RCNT command 4. do the test commands	dti/pra-5
RLBK loop	Close loop at carrier interface point for testing. Allows the far-end to perform an external loop back test on the carrier span using the RMST command. This command closes the loop at the carrier interface point of the DTI/PRI. The DTI/PRI loop must be disabled first using the DISI or DISL loop commands.	dti/pra-5

RLBK I ch	Close channel ch at carrier interface point. Allows the far-end to perform an external loop back test on the carrier span. The loop remains enabled, but closes the specified channel at the carrier interface point of the DTI/PRI. The DTI/PRI channel must be disabled first using the DSCH loop ch command.	dti/pri-5
RMST loop	Perform remote loop back test on loop. The far-end must be in the remote loop back mode. (RLBK command has been issued at the far-end)	dti/pri-5
RMST I ch	The far-end channel must be in the remote loop back mode. (RLBK command has been issued at the far-end)	dti 2 - 14
RSET I ch	Reset thresholds for channel ch on loop l.	dti/pri-5
SLFT loop	Invoke DTI/PRI hardware self-test on loop. This command tests speech path continuity, zero code suppression, remote alarm detection, and A&B bit signaling. The loop must be disabled first using the DISI or DISL loop command.	dti/pri-5
SLFT I ch	Invoke partial hardware self-test on channel ch. The DTI/PRI channel must be disabled first using the DSCH command.	basic-1
SSCK x	Get status of system clock 0 or 1. The SSCK command indicates the active controller as well as active primary or secondary reference clock source or free run. Response may be: 1. AUTO SWREF CLK - ENBL = automatic switchover of system clocks enabled 2. AUTO SWREF CLK - DSBL = automatic switchover of system clocks disabled 3. CLOCK ACTIVE = the active controller 4. DSBL = clock disabled 5. ENBL = clock enabled 6. REF CLK ERR = possible faulty cable from CC to DTI/PRI, or faulty Clock Controller 7. SYSTEM CLOCK - FREE RUN, PREF or SREF = clock is in free run mode or tracking to the primary (PREF) or secondary (SREF) reference loop 8. VCXO AGING ERROR = the timing crystal is faulty, replace the clock	dti/pri-5

STAT	Get status of all digital loops. The types of loops are:	dti/pa-5
	1. PRI = Primary Rate Interface 2. PRI2 =2.0 Mb/s Primary Rate Interface 3. DTI = Digital Trunk Interface 4. DTI2 =2.0 Mb/s Digital Trunk Interface 5. DLI = Digital Link Interface 6. JDMI = Japan Digital Multiplex Interface	
STAT loop	Get status of digital loop. Sample output:	dti/pa-5
	AAA TRK LOOP x - BBBB SERVICE RESTORE: YES/NO YEL ALM PROCESS: YES/NO ALARM STATUS: NO ALARM/RED(local) ALARM <i>Where: AAA may be :</i> 1. DTI 2. DTI2 3. PRI 4. PRI2 5. TIE 6. DID 7. DTI LINK (DTI link loop = DLI) <i>Where: BBBB may be:</i> 1. DSBL = Hardware of specified digital loop is disabled 2. ENBL = Hardware of specified digital loop is enabled 3. RLBK = Hardware of specified digital loop is in remote loop back mode 4. DISI PENDING = DSI command is in progress 5. TRACKING = system clock is tracked to this loop 6. IDLE = Hardware of specified digital loop is idle 7. SERVER RCVY = server has not recovered status of DTI LINK loop. Channels will not be allocated for call processing until this status is removed by the server 8. BUSY = Hardware of specified digital loop is busy 9. MSBY = Hardware of specified digital loop is in make busy mode	

Where: **SERVICE RESTORE** may be:

1. YES = restore service automatically if alarm is removed
2. NO = loop can only be manually enabled

Where: **YEL ALARM PROCESS** may be:

1. YES = yellow alarm processing is enabled
2. NO = yellow alarm processing is disabled

Where: **ALARM STATUS** may be:

1. NO ALARM = no alarm active
2. RED = red (local) alarm active

Action 1:

1. list alarm counters (LCNT command)
2. check for DTA messages
3. go to the fault clearing section

Where:

- YELLOW = yellow (remote) alarm active
- WAITING = DTI/PRI card is not responding. The card either did not respond to a status check or did not respond when a red alarm was cleared. Go to Action 2.

Action 2:

1. check DTI/PRI status again
2. disable, then enable the DTI/PRIPRI

STATE OF SERVICE:

- OOS = out-of-service
- NNC = no new call
- NNDC = no new data call
- MNT = maintenance

When an alarm is present (group 2 error), it is a
REMOTE ALARM

REMOTE ALARM:

- NS = alarm indication signal
- RAI = remote alarm indication

LOCAL ALARM:

- LOS = loss of signal
- LFAS = loss of frame alignment signal
- LMAS = loss of multiframe alignment signal
-

STAT I ch Get status of channel ch. Status may be: dti/prs-5

1. IDLE = channel is enabled and is idle
2. BUSY = channel is enabled and is call processing busy or channel is in a lockout state (far-end is disabled)
3. MBSY = channel is being used for maintenance busy, the D-channel is down, or far-end channel is disabled
4. DSBL = channel is disabled
5. DSBL (SERVER) = channel is being used for server maintenance and is disabled for the duration (1.5 Mb/s DTI digital link interface only)
6. FE MBSY = near end is idle, far-end is maintenance busy
7. FE DSBL = near end is idle, far-end is disabled
8. FE DSBL = far-end B-channel is disabled
9. FE MBSY = far-end B-channel is in maintenance mode
10. UNEQ = channel is not equipped

When the loop is a Phantom loop, it is possible to receive the status messages: TIE IDLE ISPC, TIE BUSY ISPC, or TIE MBSY ISPC. Interpret these system responses as they are interpreted for the command STAT loop. See the section which outlines BBBB alternatives for the STAT loop command on page 972.

SWCK Switch system clock from active to standby. dti/prs-5
The reference clock source remains unchanged.

TRCK aaa Set clock controller tracking to primary, secondary or free run. dti/prs-5
Where aaa is:

- PCK = track primary clock
- SCLK = track secondary clock
- FRUN = free run mode

Track primary clock (PCK) or secondary clock (SCLK) as the reference clock or go to free run (FRUN) mode.

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 61: Message Waiting Lamps Reset

The Message Waiting Lamps Reset (MWL) program can be invoked automatically by the system as part of the daily routines or manually from an input device. It is used to deactivate all active Message Waiting lamps on user stations and reset the associated status in the system.

This program cannot be applied to digital sets.

When LD 61 is loaded manually, 'G' must be entered to initiate the task.

G command

Starts resetting the trouble status on all Message Waiting lamps. The program does not reset lamp status unless all message center sets are out-of-service (i.e., message center is closed and attendants are in Night Service).

Before running this program, all Message Center (MC) telephones must be taken out-of-service by “make telephone busy” and if attendants are set up to handle message calls, they must be in night mode.

LD 61

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 62: 1.5 Mb/s Remote Peripheral Equipment Local End Diagnostic

This program is loaded manually to test the local equipment associated with a particular carrier going to a remote site.

When to use LD 62

It is assumed that either:

- a manually requested or automatic test using LD 33 has indicated a fault which may be due to a failure of either local or remote equipment by one of the following messages: RPD202, RPD230, RPD232, RPD240, RPD250.
- a carrier has been disabled automatically and RPD211, RPD214 or RPD215 was printed.

This program is used to determine whether the fault is at the local Meridian 1/Meridian SL-1 site. It is necessary to disable the carrier to be tested before performing the local loop around test.

If a local end fault is detected and cleared, a complete test using LD 33 should then be done.

The program operates on one loop, which must be defined via the DFLP command. If a command is issued when no loop number has been specified, the response LOOP? will be output.

Basic commands

DFLP loop	Define RPE loop
DISC c l	Disable carrier c on loop l
DISI c	Disable carrier c once it is idle
END	Terminate active command
ENLC c	Enable carrier c
LFLT	List speech timeslots that failed LOCL test
LOCL c	Perform loop around test on carrier c
LOCL c ALL	Loop around test for all speech timeslots on carrier c
LPBK c	Close loop back relay on carrier c
SCAR	Switch primary carriers
STAT	Get status of carrier specified by DISI
STAT CAR loop	Get status of all carriers on loop
UNLP c	Open loop back relay on carrier c

Alphabetical list of commands

Command	Description	Pack/Rel
DFLP loop	Define RPE loop. Defines the loop for the following commands. The specified loop must be an enabled RPE loop.	basic-1
DISC c l	Disable carrier c on loop l. Must be the current secondary carrier. Any calls using this carrier will be disconnected.	basic-1
DISI c	Disable carrier c once it is idle. The number of channels still busy on the carrier may be checked using the STAT command.	basic-1
END	Terminate active command. If no command is in progress, the active DISI command is canceled.	basic-1
ENLC c	Enable carrier c. If the operation is successful, OK is output.	basic-1
LFLT	List speech timeslots that failed LOCL test. If no channels failed or if no test has been performed, the response is NONE.	basic-1
LOCL c	Perform loop around test on carrier c. Carrier c must be disabled when the command is given. The command tests the local equipment associated with the carrier, plus the continuity of the 10 speech timeslots which are always carried by this carrier (see below). If all tests pass, response is OK. The carrier is left in the "manually disabled" state.	basic-1

Speech timeslots carried by each carrier:

Carrier	Timeslots
primary	4, 5, 10, 11, 20, 21, 26, 27, 28, 29
0	6, 7, 12, 13, 14, 15, 22, 23, 30, 31
1	2, 3, 8, 9, 16, 17, 18, 19, 24, 25

LD 62

LOCL c ALL	Loop around test for all speech timeslots on carrier c. Similar to LOCL command, except that all 20 speech timeslots plus the signaling channel will be tested, provided the channels are not being used by active calls. Execution of this command will cause temporary disruption of all active calls on the loop. The command should be used only when LOCL command tests OK without the ALL option and a fault is still indicated by a complete test using LD 33. Response will include: x SLOTS TESTED, giving the number of speech channels actually tested (maximum 20)	basic-1
LPBK c	Close loop back relay on carrier c. Carrier c must be disabled. The relay remains closed until an ENLC or UNLP command is given.	basic-1
SCAR	Switch primary carriers. This command is allowed only if both the current secondary carrier is enabled, and no faults exist on the current secondary carrier which would reduce the number of working speech channels if it were to become the primary carrier.	basic-1
STAT	Get status of carrier specified by DISI. If no DISI request is active, error message RPL022 is output.	basic-1
STAT CAR loop	Get status of all carriers on specified loop. Response will be one or more of: 1. PRIME = carrier is currently the primary one 2. DSBL = carrier is disabled 3. LPBK = loop back relay is closed 4. x BUSY 5. y DSBL The values x and y indicate the number of busy channels and number of channels having continuity failure from the most recent tests in LD 33. The LOCL command does not change the number of disabled channels.	basic-1
UNLP c	Open loop back relay on carrier c.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 66: Conversion

Conversion programs are used to convert to a new version of software. The procedure used for this process depends on the versions of software involved.

Refer to the *Software Conversion* NTP and Controlled Release Bulletins (provided with new software).

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 73: Digital Trunk Interface

Overlay program 73 allows the implementation and administration of the Digital Trunk Interface (DTI) and Primary Rate Interface (PRI) software and hardware.

Table of Contents

Section	Page
DDB: Digital data block	984
Prompts and responses for DTI / PRI data blocks (with GPRI package 167)	986
Table 22 Pad codes & corresponding dB values for DTI/PRI	987
Table 23 Default Pad Category 1 values (PDCA 1) (DTI/PRI with GPRI pkg 167)	988

DDB: Digital data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	DDB	Type of data block = DDB (Digital data block)
CEQP	(NO) YES	Clock Controller Equipped
- PREF	0-159	Primary Reference
- - SREF	0-159	Secondary Reference
TRSH	0-15	Threshold set
RALM	1-(3)-128	Remote (yellow) Alarm clear threshold
BIPC	0-(2)-128	Bipolar violation Count threshold
LFAC	0-(3)-128	Loss of Frame Alignment Counter
BIPV	1-(3)-4 1-(2)-4	Bipolar Violation maintenance and out-of-service threshold
SRTK	1-(5)-24 1-(30)-3600	Slip Rate Tracking mode maintenance
SRNT	1-(15)-1024 1-(3)-1024	Slip Rate Non-Tracking
LFAL	1-(17)-10240	Loss of Frame Alignment maintenance and out-of-service thresholds
AUTO	(NO) YES	Automatic recovery for frame slippage
SRGT	1-(15)-127	Slip Rate Guard Time in minutes
SRIM	(1)-127	Slip Rate Improvement Monitoring time in minutes
SRMM	1-(2)-127	Slip Rate Maintenance Maximum
ICS	0-159	Multi Purpose Serial Data Link Idle Code Selection

Prompts and responses for setting pad values

Prompts and responses for DTI / PRI data blocks (with GPRI package 167)

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	aaa	Type of data block = DTI or PRI
FEAT	PAD	Pad Category
PDCA	1-16	Pad Category table. PDCA 1 and PDCA 16 are preconfigured. See the Note below for further details.
TNLS	(NO) YES	Terminal Number List
DFLT	1-16	Use default codes from this pad category table for the following prompts if <cr> is entered at the prompt

Note: For the following prompts, **x = Rx code (receive)** and **y = Tx code (transmit)**. You may assign receive and transmit dB values to the following prompts by entering a code which corresponds to a dB value. Code options and their corresponding dB values are listed in Table 22 on page 987. The codes listed in Table 22 apply for both Rx codes and Tx codes.

To find the default values for Pad Category 1 when TYPE = DTI or PRI, refer to Table 23 on page 988.

ONP	x y	On-Premises Extension
DSET	x y	Meridian Digital Set
OPX	x y	Off-Premises Extension
DTT	x y	Digital TIE Trunks
SDTT	x y	Satellite Digital TIE Trunks
DCO	x y	Digital COT, FEX, WAT, and DID trunks
DTO	x y	1.5 Mb/s DTI/PRI Digital TOLL Office trunks
VNL	x y	Via Net Loss (Analog TIE)
SATT	x y	Satellite Analog TIE Trunks
ACO	x y	Analog COT and WATS trunks
ATO	x y	Analog TOLL Office trunks
PRI	x y	1.5 Mb/s PRI/DTI trunk
XUT	x y	Extended Peripheral Equipment Universal Trunk

XEM x y Extended Peripheral Equipment E&M Trunk

Table 22
Pad codes & corresponding dB values for DTI/PRI

Code	Value (dB)	Code	Value (dB)	Code	Value (dB)
0	0.0	9	+9.0	18	-4.0
1	+1.0	10	+10.0	19	-5.0
2	+2.0	11	+11.0	20	-6.0
3	+3.0	12	+12.0	21	-7.0
4	+4.0	13	+13.0	22	-8.0
5	+5.0	14	+14.0	23	-9.0
6	+6.0	15	-1.0	24	-10.0
7	+7.0	16	-2.0	25	Idle
8	+8.0	17	-3.0	26	+0.6

Note 1: PRI/DTI pad category prompts require GPRI package 167.

Note 2: Positive dB represents loss and negative dB represents gain.

Note 3: “Idle” means that PCM signals are converted to silence.

Table 23
Default Pad Category 1 values (PDCA 1) (DTI/PRI with GPRI pkg 167)

Connection type	Rx code	Rx PAD (dB)	Tx code	Rx PAD (dB)
ONP	6	+6.0	0	0.0
DSET	6	+6.0	0	0.0
OPX	6	+6.0	0	0.0
DTT	0	0.0	0	0.0
SDTT	3	+3.0	0	0.0
DCO	3	+3.0	0	0.0
DTO	0	0.0	0	0.0
VNL	6	+6.0	0	0.0
SATT	6	+6.0	0	0.0
ACO	6	+6.0	0	0.0
ATO	6	+6.0	0	0.0
PRI	0	0.0	0	0.0
XUT	6	+6.0	0	0.0
XEM	3	+3.0	0	0.0

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ACO	x y <cr>	Analog COT and WATS trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	dti/pa-14
ACRC	(NO) YES	No reporting of CRC-4 error Automatic reporting of CRC-4 error during transmission ACRC is only printed for PRI2 loops and if MFF = CRC.	euro-20
ATO	x y <cr>	Analog Toll Office trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
AUTO	(NO) YES	Automatic Recovery for Frame Slippage (Release 14 and earlier only)	dti/pa-14
BIPV	1-(3)-4 1-(2)-4	Bipolar Violation maintenance and Out-of-Service threshold The BIPV values determine the sensitivity of the loop to errors, where BIPV = 1 is the least tolerant to errors, and BIPV = 4 is the most tolerant. The maintenance threshold must be greater than the out-of-service threshold. The method of bit rate monitoring depends on the loop configuration: 1. For DTI mode: bipolar violation thresholds 2. For PRI mode with D2, D3, or D4 framing format: bipolar violation thresholds 3. For PRI mode with Extended Superframe Format (ESF): Cyclic Redundancy Check (CRC) thresholds	dti/pa-14

LD 73

Prompt	Response	Comment	Pack/Rel
CEQP	(NO) YES	Clock Controller Equipped Prompted only for SL-1 M, MS or S.	dti/pra-14
CLEA	0-(100)-256	Clearance timer for Group II problems in 2 millisecond increments. CLEA is only printed for PRI2 loops.	euro-20
DCO	x y <cr>	Digital COT, FEX, WAT, and DID trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	dti/pra-14
DFLT	(1)-16 <cr>	Default signaling category to be used for default values. DTI/PRI - default pad codes from Table 23 on page 988. (PDCA 1). Must be equipped with GPRI package 167.	dti/pra-14
DSET	x y <cr>	Meridian Digital Set. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
DTO	x y <cr>	1.5 Mb/s DTI/PRI Digital TOLL Office trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
DTT	x y <cr>	Digital TIE Trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
ICS	0-159	Multi Purpose Serial Data Link Idle Code Selection Loop number for which IDLE PCM code has to be sent Precede loop number with X to remove	pra-24

Prompt	Response	Comment	Pack/Rel
LFAC	0-(3)-128	Loss-of-Frame-Alignment Counter This is the maximum number of times a DTI/PRI loop can be taken out-of-service in 24 hours. If this threshold is reached the DTI/PRI must be restored to service manually. If "0" is entered, there is no limit on number of times that trunks can be taken out and automatically restored to service.	dti/pa-14
LFAL	1-(17)-10240	1-(511)-10240 Loss-of-Frame-Alignment maintenance and out-of-service thresholds for a 24 hour period The maintenance threshold must be greater than the out-of-service threshold.	dti/pa-14
ONP	x y <cr>	On-Premises extension. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	dti/pa-14
OPX	x y <cr>	Off-Premises Extension. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	dti/pa-14
PDCA	1-16 <cr>	Pad Category table (Pad Category Table1 cannot be changed or deleted) Print all the pad category tables	dti/pa-14
PREF	0-159 <cr>	Primary Reference Source loop for clock controller If REQ = NEW and carriage return is entered, then Primary Reference is free-run mode. If REQ = CHG, then Primary Reference is not changed.	dti/pa-14

LD 73

Prompt	Response	Comment	Pack/Rel
		The loop or card must already be defined in LD 17 (prompt DLOP). Use <cr> for free-running mode. If <cr> is used, you are not prompted for the Secondary Reference (SREF). Precede with X to remove	
PRI	x y <cr>	1.5 Mb/s PRI/DTI trunk. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
RAIE	(NO) YES	Disable reporting of RAIE Group II alarm state with continuous CRC error information reporting Enable reporting of RAIE Group II alarm state with continuous CRC error information reporting	euro-20
RALM	1-(3)-128	Remote (yellow) Alarm clear threshold This is the number of "remote alarm clear" signals received in 24 hours. If the threshold is reached the DTI/PRI must be restored to service manually.	dti/pra-14
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Create a new data block Remove data block Print the specified data block	dti/pra-14
SATT	x y <cr>	Satellite Analog TIE Trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18
SDTT	x y <cr>	Satellite Digital TIE Trunks. Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes. Initial values	gpri-18

Prompt	Response	Comment	Pack/Rel
SRAR	(NO) YES	Slip Rate Automatic Recovery This prompt appears in Release 14 and earlier only.	dti/pr-14
SREF		Secondary Reference. Prompted when PREF is not free-run.	dti/pr-14
	0-159	Source loop for clock controller The loop must already be defined in LD 17 at the DLOP prompt. Precede with X to remove.	
	<cr>	Free-running mode	
SRGT	1-(15)-127	Slip Rate Guard Time in minutes (Release 14 and earlier) Before monitoring begins for a noticeable improvement in the slip rate, the SRGT prompt measures the number of minutes that trunks stay out-of-service.	dti/pr-14
SRIM	(1)-127	Slip Rate Improvement Monitoring time (the amount of time in minutes before returning trunks either to service or to the SRGT state) After the tracking or non-tracking mode frame slippage out-of-service threshold is exceeded, the slip rate is monitored for improvement. If the non-tracking maintenance threshold exceeds SRMM or fewer times in the duration of this timer, then the trunks are returned to service. Otherwise, this timer is reset and monitoring continues.	dti/pr-15
SRMM	1-(2)-127	Slip Rate Maintenance Maximum Number of times the Slip Rate exceeds the maintenance limit while waiting for Slip Rate improvement during the time window specified at the SRIM prompt.	dti/pr-14

LD 73

Prompt	Response	Comment	Pack/Rel
SRNT	1-(15)-1024	1-(3)-1024 Slip Rate Non-Tracking mode maintenance and out-of-service thresholds These are frame slip rate thresholds for the non-tracking mode. The first value is the maintenance threshold in seconds. The second value is the out-of-service threshold in seconds, the amount of time in which 10 slips occur.	dti/pr-14
SRTK	1-(5)-24	1-(30)-3600 Slip Rate Tracking mode maintenance (in hours) and out-of-service thresholds (per hour) These are frame slip rate thresholds for the tracking mode. The first value is the maintenance threshold or the elapsed time (in hours) between frame slips. The default is 1 slip in 5 hours. The second value is the out-of-service threshold or the number of slips per hour. The default is 30 slips in 1 hour.	dti/pr-14
TIME	10-(100)-630	Time of Register Recall signal timer {RRC (S)} in milliseconds. This defines the flash duration for 2.0 Mbit DTI trunks.	emct-20
TNLS		Terminal Number List (for the PRT command)	dti/pr-14
	(NO)	Will not print the list of trunk TNs using the requested table (pad category or SICA) following the table number.	
	YES	Will print the list of trunk TNs using the requested table (pad category or SICA) following the table number.	
TRSH	0-15	Threshold set Enter this number in LD 17 when defining a DTI/PRI loop. Use X0-15 to remove TRSH. Note: The LD 17 DLOP/TRSH associated with this LD 73 TRSH must be removed first. Precede with X to remove.	dti/pr-19

Prompt	Response	Comment	Pack/Rel
TYPE		Type of data block	dti/pri-14
	DDB	1.5 Mb/s DTI data block	
	DTI	1.5 Mb/s DTI with International 1.5/ 2.0 Mb/S Gateway (GPRI) package 167 data block	gpri-18
	PRI	1.5 Mb/s PRI data block with International 1.5/ 2.0 Mb/s Gateway (GPRI) package 167	gpri-18
VNL	x y	Via Net Loss (Analog TIE). Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes.	dti/pri-14
	<cr>	Initial values	
XEM	x y	Extended Peripheral Equipment E&M Trunk (Analog TIE trunk). Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes.	gpri-18
	<cr>	Initial values	
XUT	x y	Extended Peripheral Equipment Universal Trunk (Analog CO trunk). Where x = Rx code (receive) and y = Tx code (transmit). Response range for x and y is: 0-26. See "Prompts and responses for setting pad values" on page 985 for more information about x and y codes.	gpri-18
	<cr>	Initial values	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 74: Digital Private Network Signaling System Link

Overlay program 74 allows data blocks for Digital Private Network Signaling System Number 1 (DPNSS1) and Digital Access Signaling System Number 2 (DASS2) protocols to be created or modified.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	aaaa	Type of data block (aaaa = DDSL, DTSL, LSSL, LSRC, or LSVC)
LSSL	xx	Low Speed Signaling Link
RATE	a...a	Baud rate for Low Speed Signaling Link (aaaa = (EXT), 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19K, 56K, or 64K)
S2	(0)-1	Switch 2 mode
HTYP	aaaa	Hardware Type (aaaa = DCHI, DCHX, or MSDL)
DDSL	0-n	DPNSS link number
DTSL	0-159	Digital Trunk Signaling Link number
SIGL	DA	Level 2 Signaling (DASS2)
DDCS	0-159	Loop for DPNSS Channel Switch
DTCS	0-159	Digital Trunk Channel Switch loop number
PRIV	(YES) NO	Private link
- SIDE	aaa	Side for Termination (aaa = (AET) or BNT)
- MWIF	a...a	Message Waiting Interface (a...a = (STD) or ISDM]
L2_RST	(YES) NO	Indicates if Layer 2 could be reset during a system initialize.
FLOW CNTL	(NO) YES	Flow Control
- BRST PARM	xx	Burst Parameter set on public network (xx = (0) 4, 8, 16, or 32)
- - REPL PARM	x	Replenishment Parameter set on public network (x = 1, 2, 4, or 8)
CNTL	(NO) YES	Change Control timers and counters
- ALRM	aaa pp mm cc	Alarm timers (aaa = AIS, DAI, FAE, HER, LOI, TBF, or TSF; pp = persistence time; mm = monitor time; cc = repeat threshold time)
- CNTR	aaa x	Counter threshold (aaa = CRT, TMT, or SCT; x = threshold value)

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ALRM		Alarm timers. For the following response alternatives, pp = Persistence time, mm = Monitor time and cc = Repeat count threshold.	dpnss1/dass2-16
	AIS pp mm cc	Alarm Indication Signal Where: pp = 0-(1)-15 minutes, mm = 0-(1)-24 hours and cc = 0-(4)-15.	
	DAI pp mm cc	Distant Alarm Indication Where: pp = 0-(1)-15 minutes, mm = 0-(1)-24 hours and cc = 0-(5)-15.	
	FAE pp mm cc	Frame Alignment Error Where: pp = 0-(2)-15 seconds, mm = 0-(1)-24 hours and cc = 0-(4)-15.	
	HER pp mm cc	High Error Where: pp = 0-(1)-15 minutes, mm = 0-(1)-24 hours and cc = 0-(10)-15.	
	LOI pp mm cc	Loss Of Input Where: pp = (0)-15 seconds, mm = (0)-24 hours and cc = (0)-15.	
	TBF pp mm cc	Transmit Buffer Full Where: pp = 0-(5)-15 seconds, mm = (0)-24 hours and cc = 0-(1)-15.	
	TSF pp mm cc	Transmit Signaling Failure Where: pp = (0)-15 seconds, mm = (0)-24 hours and cc = (0)-15.	
BRST PARM xx		Burst Parameter set on public network. You may respond with: (0), 4, 8, 16, or 32.	dpnss1/dass2-16
CNTL	(NO) YES	Do not change Control timers and counters Change Control timers and counters	dpnss1/dass2-16
CNTR		Counter threshold	dpnss1/dass2-16
	CRT 0-(120)-255	Channel Reset Threshold	
	TMT 0-(50)-255	Test Message Threshold	
	SCT 0-(20)-255	Stop Count Threshold	

LD 74

Prompt	Response	Comment	Pack/Rel
		If 255 is entered, the threshold is set to infinity.	
DDCS	0-159 1-9	Loop for DPNSS Channel Switch Card number for Option 11 DDCS is prompted when TYPE = DDSL.	dpnss1/dass2-16
DDSL	0-n	DPNSS link number. Where: • n = 15 for NT5K35AA or NT5K75AA in standard mode (S2 = 0) • n = 159 for NT5K75AA in expanded mode (S2 = 1) DDSL: is prompted when TYPE = DDSL.	dpnss1/dass2-16
DTCS	0-159	Digital Trunk Channel Switch loop number Prompted when TYPE = DTSL.	dass2-16
DTSL	0-159	Digital Trunk Signaling Link number. Prompted when TYPE = DTSL.	dass2-16
FLOW CNTL (NO) YES		Flow Control FLOW CNTL is prompted if PRIV = NO.	dpnss1/dass2-16
HTYP		Hardware Type	dpnss_es-21
	DCHI	DPNSS1, DASS2 or APNSS link configured with the NT5K35 DCHI card or on the NT5K75 DCHI card in standard mode.	
	DCHX	DPNSS1 or DASS2 link configured with the NT5K75 DCHI card in the expanded mode.	
	MSDL	DPNSS1, DASS2 or APNSS link configured with the MSDL card.	

Prompt	Response	Comment	Pack/Rel
L2_RST	(YES) NO	Indicates if Layer 2 could be reset during a system initialize. On certain systems, for example System Y and SX2000, established calls would be released if the Layer 2 is reset during an initialize. This prompt should only be set to NO when using NTAG54AA type Dual DCH Daughter board on a NTCK43AB DCH PRI pack. Note: If this Option is set to NO on an NT6D11 type pack, the pack would be left disabled after the initialize.	ida- 23
LSSL	xx	Low Speed Signaling Link Link number identifying the D-channel to be used for APNSS.	dpnss1-18
MWIF	(STD) ISDM	Message Waiting Interface Standard message waiting interface Plessy ISDX switch with remote message notification	samm-20
PRIV	(YES) NO	For a Private link to another PBX For a link to the public exchange Not prompted for APNSS.	dpnss1/dass2-16
RATE	(EXT) 110 150 300 600 1200 2400 4800 9600 19K 56K 64K	Baud Rate for Low Speed Signaling Link 110 bits per second 150 bits per second 300 bits per second 600 bits per second 1200 bits per second 2400 bits per second 4800 bits per second 9600 bits per second 19 kilobits per second 56 kilobits per second 64 kilobits per second	dpnss1/dass2-18
REPL PARM	x	Replenishment Parameter set on public network. You may enter: 1, 2, 4, or 8.	dpnss1/dass2-16

LD 74

Prompt	Response	Comment	Pack/Rel
REQ	CHG END NEW OUT PRT	Request Change existing data block. Exit Overlay program Create a new data block Remove data block Print data block	basic-1
S2	(0) 1	Switch 2 mode (the mode selected with the switch S2 located on the NT5K75AA DCHI pack) NT5K35AA DCHI pack or NT5K75AA DCHI pack operating in standard mode NT5K75AA DCHI pack operating in expanded mode	dpnss1/dass2-16
SIDE	(AET) BNT	A Side (Exchange Termination) B Side - PBX Termination	dpnss1/dass2-16
SIGL	DA	Level 2 Signaling (DASS2)	dpnss1/dass2-16
TYPE	DDSL DTSL LSSL LSRC LSVC	Type of data block DPNSS Link (NT hardware) data block Digital Trunk Signaling Link (GPT hardware) data block. Not supported on Option 11. Low Speed Signaling Link data block. Required for APNSS. Low Speed Channel data block. Accepted when REQ=PRT. Low Speed Virtual Channel data block. Accepted when REQ=PRT.	dpnss1/dass2-16

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 75: Digital Trunk Maintenance

This program lets you test digital channels, bring a digital (IDA) link into service or take a link out-of-service.

Basic commands

CDSP	Clears the maintenance display
CMIN ALL	Clears minor alarm for all customers
CMIN c	Clears a minor alarm for customer c
DIS DDCS loop	Disables DDCS loop
DIS DDSL n	Disables DDSL n
DIS DTCS loop	Disables DTCS loop
DIS DTRC l c	Disables real channel c on loop l
DIS DTSL n	Disables DTSL n
DIS DTVC l c	Disables virtual channel c on loop l
DIS LSSL n	Disables Low Speed Signaling Link n for APNSS
DIS PRI2 loop	Disables PRI2 loop
DISI DDCS loop	Disables all channels on loop as they become idle
DISI DTCS loop	Disables all channels on loop as they become idle
ENL DDCS loop	Enables DDCS loop
ENL DDSL n	Enables DDSL n
ENL DTCS loop	Enables DTCS loop
ENL DTRC l c	Enables real channel c on loop l
ENL DTSL n	Enables DTSL n
ENL DTVC l c	Enables virtual channel c on loop l
ENL LSSL n	Enables Low Speed Signaling Link n for APNSS
STAT DDCS (loop)	Gives status of all DDCS loops if loop omitted. Gives status of DDCS loop and all channels on loop if loop specified.
STAT DDSL (n)	Gives status of all DDSLs if n omitted. Gives status of DDSL n if n specified.
STAT DTCS (loop)	Gives status of all DTCS loops if loop omitted. Gives status of DTCS loop and all channels on loop if loop specified.
STAT DTRC l c	Gives status of real digital channel c on loop l
STAT DTSL (n)	Gives status of all DTSLs if n omitted. Gives status of DTSL n if n specified.
STAT DTVC l c	Gives status of virtual digital channel c on loop l
STAT LSRC n (x)	Gives status of Real Channel x on Signaling Link n
STAT LSSL n	Gives status of Low Speed Signaling Link n for APNSS
STAT LSVC n (x)	Gives status of Virtual Channel x on Signaling Link n
STAT PRI2 loop	Gives status of PRI2 loop
STRT n	Starts DDSL n

Note: If GEC Plessey Telecommunications (GPT) hardware is used, the mnemonic DTSL is used instead of DDSL and the mnemonic DTCS is used instead of DDCS.

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clears the maintenance display.	dpnss-16
CMIN ALL	Clears minor alarm for all customers.	dpnss-16
CMIN c	Clears a minor alarm for customer c.	dpnss-16
DIS DDCS loop	Disables DDCS loop.	dpnss-16
DIS DDSL n	Disables DDSL n.	dpnss-16
DIS DTCS loop	Disables DTCS loop	dpnss-16
DIS DTRC l c	Disables real channel c on loop l.	dpnss-16
DIS DTSL n	Disables DTSL n.	dpnss-16
DIS DTVC l c	Disables virtual channel c on loop l.	dpnss-16
DIS LSSL n	Disables LSSL n.	dpnss-16
DIS PRI2 loop	Disables PRI2 loop	
DISI DDCS loop	Disables all channels on loop as they become idle. The message "OK DISABLING" is issued and further commands can be entered. DTM055 is issued when all of the channels are disabled.	dpnss-16
DISI DTCS loop	Disables all channels on loop as they become idle.	dpnss-16
ENL DDCS loop	Enables DDCS loop.	dpnss-16
ENL DDSL n	Enables DDSL n.	dpnss-16
ENL DTCS loop	Enables DTCS loop.	dpnss-16
ENL DTRC l c	Enables real channel c on loop l.	dpnss-16
ENL DTSL n	Enables DTSL n.	dpnss-16

LD 75

ENL DTVC l c	Enables virtual channel c on loop l.	dpnss-16
ENL LSSL n	Enables Low Speed Signaling Link n for APNSS.	dpnss-16
STAT DDCS (loop)	Gives status of all DDCS loops if loop omitted. Gives status of DDCS loop and all channels on loop if loop specified.	dpnss-16
STAT DDSL (n)	Gives status of all DDSLs if n omitted or specified.	dpnss-16
STAT DTCS (loop)	Gives status of all DTCS loops if loop omitted. Gives status of DTCS loop and all channels on loop if loop specified.	dpnss-16
STAT DTRC l c	Gives status of real digital channel c on loop l	dpnss-16
STAT DTSL (n)	Gives status of all DTSLs if n omitted. Gives status of DTSL n if n specified.	dpnss-16
STAT DTVC l c	Gives status of virtual digital channel c on loop l	dpnss-16
STAT LSRC n (x)	Gives status of Real Channel x on Signaling Link n	dpnss-16
STAT LSSL n	Gives status of Low Speed Signaling Link n for APNSS	dpnss-16
STAT LSVC n (x)	Gives status of Virtual Channel x on Signaling Link n	dpnss-16
STAT PRI2 loop	Gives status of PRI2 loop	
STRT n	Starts DDSL n The message "OK, STARTING" is issued and further commands can be entered. DTM301 is issued when the link is successfully started.	dpnss-16

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 77: Manual Print

LD 77 is used to print the signals that come from the peripheral packs to the common equipment.

Note: This Overlay is intended for people experienced with the message formats and protocols.

When to use LD 77

LD 77 can be useful in determining which peripheral pack (line or trunk) is causing a system overload in situations in which the CPU cannot narrow the problem to a specific Terminal Number (TN). Once the program is loaded from a tape, the user may request the system to print all the input messages from a specific area of peripheral equipment.

Manual Print can also be used to continuously send frequency combinations by defining the loop and terminal number of the MFE card, busying the channel, setting the read/write bit to write, defining the message and repeatedly sending it. This channel will not be available for regular signaling until the message sending is stopped and the channel is idled.

When a machine is carrying traffic, there will be a large number of valid messages generated from the peripheral equipment. Thus, the program will be most effective for trouble-shooting when:

- there is little system traffic
- message address range is restricted (i.e., looks only at one shelf or loop)

This program has capabilities which are used by the software designers during development activities. The user is protected from accidental access to these commands (and resulting potential service degradation) as a password is required. This password is not available to customers.

LD 77 Output Format

All numerical input/output is in hexadecimal format. The output is in the following format:

<loop> <shelf> <card> <terminal> <message> <time-stamp>

The loop, shelf and card fields identify the circuit pack generating the message.

Abbreviations for LD 77

The fields are defined as follows:

b = bypass bit value

cb = continuity bit

ch = chip on a given SSD Peripheral Signaling pack

g = group

l s c u = TN: loop, shelf, card, unit

ln = link

loop = network loop

m = module

p = page

ps = Peripheral Signaling pack

sh = Multigroup shelf

ts = time slot

v = desired lamp state; 0 = lit, 1 = dark

x = Multigroup bit

Some four-letter commands can be abbreviated to a one-letter command when entered from a TTY (but not an SL-1 telephone). The one-letter command is shown in parentheses after the four-letter mnemonic (e. g., ARPS (F) l s 32 can be entered as F l s 32).

LD 77 Input Format

All input is in decimal form, except message data which is in hexadecimal form. Space and carriage return are automatically done by the overlay when the expected number of digits are input. Therefore the number of input digits must be strictly entered for each input parameter. The number of letters specified in each parameter field dictate the number of hex or decimal digits that must be entered.

For example:

Enter for TN 1 0 2 0:

001 0 02 00

Enter for TN 156 1 15 30:

156 1 15 30

Basic commands

Only “P” commands can be used on superloops.

ANWK (B) loop ts	Read/write network card memory
ANWS (C) loop ts	Read/write network card memory (short)
ARPM loop 20	Print contents of timeslots in RPC
ARPM loop ts b s c u	Get contents of timeslot ts, loop
ARPS (F) loop ts	Read Remote Peripheral Switch memory
DENL loop	Get the density of loop
DFTM (T) s c u	Define unit to receive signaling messages
DRTM (N) l s c u	Stop printing messages
N	Stop print
P	Print all messages
P lll	Print all messages from specified loop lll
P lll s	Print all messages from specified shelf lll s
P lll s cc	Print all messages from specified card lll s cc
PRTM (P) lll s cc uu	Print messages, as specified lll s cc uu
WCTS loop	Print the current unit scan of loop
WMBY l s c u	Write the maintenance bit for the given unit to BUSY
WMUB l s c u	Write the maintenance bit for the given unit to NOT BUSY
XRCL loop	Read contents of RPC control register for loop
XRSH loop	Read and print contents of SHEN register for loop
XRST loop	Read and print contents of STATUS register for loop
XTRP loop	Test remote RPC processor for loop
XTLP loop	Test local RPC processor for loop
XWCS loop xxxx	Writes RPC control/SHEN register for loop

Basic commands (Release 15 & later)

DISC	Call disconnect
DLMP 0/1	Turn on/off lamp audit
DMTN	Monitor input and output SSD messages for 1 to 6 TNs
IMSG	Send input SSD messages from PE to Meridian 1 CPU
KALL	Call set up without specifying timeslots
KALS	Call set up with specifying timeslots
KILLx	Reset one or all TN being monitored
XMSG	Send output SSD messages from Meridian 1 CPU to PE
XMII, XMIO	Send input/output XMI messages between the CPU and superloops

Alphabetical list of commands

Command	Description	Pack/Rel
ANWK (B) loop ts	Read/write network card memory. Access the specified network card memory to read and print one word. The word format is: <cb s c u x ln --> Where: cb = continuity bit, s = shelf, c = card, u = unit, x = multigroup bit and ln = link You can write in new data. To change the values, rekey the word after the dashes, substituting new values where appropriate.	basic-1
ANWS (C) loop ts	Read/write network card memory (short). Access the specified network card memory (short form) to read and print one word. The multigroup bit and continuity field are not used. The word format is: <s c u ln --> Where: s = shelf, c = card, u = unit and ln = link. You can write in new data. To change the values, rekey the word after the dashes, substituting new values where appropriate.	basic-1
ARPM loop 20	Prints contents of 32 timeslots in RPC associated with loop (20 hexadecimal = 32 decimal).	basic-1
ARPM loop ts b s c u	Get contents of timeslot ts, loop. The system prints data in the form "bscu", where b is the current value of the bypass bit in the Remote Peripheral Equipment Controller (RPC) memory (0 or 1) for that shelf, card and unit. The user can enter a new bypass bit for the RPC memory after the dash.	basic-1

ARPS (F) loop ts	Read Remote Peripheral Switch memory. Access the specified Remote Peripheral Switch (RPS) memory to read and print one word. The word format is: <cb s c u --> Where: cb = continuity bit, s = shelf, c = card and u = unit. You can write in new data. To change the values, rekey the word after the dashes, substituting new values where appropriate.	basic-1
DENL loop	Get the density of loop.	basic-1
DFTM (T) s c u	Define unit to receive signaling messages.	basic-1
DISC	Call disconnect. Format is: DISC TN1 lll s cc uu TN2 lll s cc uu This command disconnects the call specified by the TNs. A scan of the connection memory is done prior to disconnecting the call, if no timeslot can be found for the specified TN, nothing is done. TN1 and TN2 are prompted by the program.	xpe-15
DLMP 0/1	Turn on/off lamp audit. Format is: - DLMP 0 = turn on lamp audit - DLMP 1 = turn off lamp audit	xpe-15

DMTN	Monitor input and output SSD messages for 1 to 6 TNs. This command is used to monitor all SSD messages for the specified TN. TN is automatically prompted by the program. Up to 6 TNs can be monitored at the same time. Enter the DLPM and DMTN commands as follows: <pre>DLMP 2 DMTN TNx lll s cc uu</pre> Where: x = (1-6), TN index The output format is: O SSD111 TN MSG TIME Where: • O SSD111 = header • TN = packed TN • MSG = SSD message content • TIME = real time clock before output when work scheduler gets the input message	xpe-15
DRTM (N) l s c u	Stop printing messages from the loop, shelf, card and unit. Only loop and shelf numbers are required.	basic-1
IMSG	Send input SSD messages from PE to Meridian 1 CPU. This command is used to simulate incoming SSD message from the peripheral equipment. The specified TN must be equipped. Format is: <pre>IMSG TN lll s cc uu NUMBER MESSAGES mm # TIMES TO SEND hhh MSG DATA xxxx xxxx xxxx xxxx. . .</pre> Where: • mm = number of SSD messages (1-10) to be sent • hhh = number of times (1-999) to simulate the SSD input message • xxxx = SSD message content. Number of message contents depends on input of mm TN, NUMBER MESSAGES, # TIMES TO SEND, and MSG DATA are prompted by the program.	xpe-15

KALL Call set up without specifying timeslots. xpe-15

This command is used to set up a simple call (intra or inter-group). The system finds an available timeslot for the specified TNs. The specified TN must be equipped, enabled and idle.

Format is:

KALL

TN1 lll s cc uu,

Loop 0 00 CH for Digital Trunk Cards.

TN2 lll s cc uu,

Loop 0 00 CH for Digital Trunk Cards.

TN1 and TN2 are automatically prompted by the program.

If AUDIT is running, call(s) are disconnected, and AUD17, AUD18, AUD19, and/or AUD31, AUD32 is printed.

Call setup command simply finds the available timeslots and sets up the connection memory and/or junctor memory. BUG105, BUG330 may be printed if illegal sequences are carried out.

These commands are designed for lab use only, and should be used cautiously in a live switch.

KALS Call set up with specifying timeslots. xpe-15

This command will set up a call specified by the input TNs and the timeslots if both TNs are equipped, enable and idle. The specified timeslots will be used if they are idle, if the specified timeslot are occupied, then the call will not be set up. See Notes with the KALL command.

Format:

KALS

TN1 lll s cc uu,

Loop 0 00 CH for Digital Trunk Cards.

TN2 lll s cc uu,

Loop 0 00 CH for Digital Trunk Cards.

TIMESLOTS ts1 ts2

Where:

- ts1 = specified timeslot of the TN1
- ts2 = specified timeslot of the TN2
- TN1, TN2, and TIMESLOTS are prompted by the program.

LD 77

KILLx	Reset one or all TN being monitored. Where: x = the TN index number (1-6) entered with the DMTN command. Enter 7 to reset all the output monitored TNs.	xpe-15
N	Stop print.	basic-1
P	Print all messages.	basic-1
P III	Print all messages from specified loop. Enter the exact number of digits. Example: for loop 4, enter 004	basic-1
P III s	Print all messages from specified shelf. Enter the exact number of digits. Example: for loop 4, enter 004.	basic-1
P III s cc	Print all messages from specified card. Enter the exact number of digits. Example: for loop 4, enter 004.	basic-1
PRTM (P) III s cc uu	Print messages, as specified. Only loop and shelf numbers are required. Enter the exact number of digits. (Example: for loop 4, enter 004.)	basic-1
WCTS loop	Print the current unit scan of specified loop. Outputs shelf, card and unit.	basic-1
WMBY I s c u	Write the maintenance bit for the given unit to BUSY.	basic-1
WMUB I s c u	Write the maintenance bit for the given unit to NOT BUSY.	basic-1
XMII, XMIO	Send input/output XMI messages between the CPU and superloops. Send input/output XMI messages to the Peripheral Controller (NT8D01) or Network card (NT8D04). Use XMII for input messages from the Network card (NT8D04) to the CPU. Use XMIO for messages from the CPU to the Network. This command is used to simulate input/output XMI message. It may not be useful in LD 77, a similar command is available in resident debugger.	xpe-15

Format:

```
XMII or XMIO
LOOP lll
NUMBER MESSAGES m
# TIMES TO SEND hhh
MSG DATA
CCCC xxxx xxxxxxxx
CCCC xxxx xxxxxxxx
CCCC xxxx xxxxxxxx
```

Where:

- lll = Loop number
- m = Number of multiple XMI messages (1-6)
- hhh = Number of times to send XMI messages (1-999)
- cccc = Control word; cccc is defined as follows:

```
r  ss  applic  type
-  |  --  |  -----  |  -----  |
```

Where:

- r = one bit msg ready flag, always sets to
- ss = two bit sequence status field. ss may be:
 - a** B.00 : short message
 - b** B.01 : starting a long message (message has 6 or more words of data)
 - c** B.10 : continue a long msg
 - d** B.11 : end of a long msg
- applic = six bit value for msg's intended application. appl may be:
 - a** B.000001 : for LD 30
 - b** B.000010 : for LD 32
 - c** B.000011 : for LD 45
 - d** B.000100 : for LD 77
 - e** B.000101 : for XPE parameter download
 - f** B.000110 : for XNET action request
- type = seven bit value of message type
- xxxx = message data
-

XMSG	Send output SSD messages from Meridian 1 CPU to PE.	xpe-15

This command is used to send output SSD message to the peripheral equipment TN. The specified loop of the TN must be enabled and responding.

Format:

```
XMSG
TN lll s cc uu,
TN l s c u, for Option 11 only
Loop 0 00 CH for Digital Trunk Cards.
NUMBER MESSAGES mm
# TIMES TO SEND hhh
MSG DATA xxxx xxxx xxxx. . . .
```

Where:

- mm = number of SSD messages to be sent (1-10)
- hhh = number of times to output SSD message (1-999)
- xxxx = SSD message content. Number of message contents depends on the value of mm
- TN, NUMBER MESSAGES, # TIMES TO SEND, and MSG DATA are prompted by the program.
-

XRCL loop	Read contents of RPC control register.	basic-1

XRSH loop	Read and print contents of SHEN register.	basic-1

XRST loop	Read and print contents of STATUS register.	basic-1

XTLP loop	Test local RPC processor for loop.	basic-1

XTRP loop	Test remote RPC processor for loop.	basic-1

XWCS loop xxxx	Writes RPC control/SHEN register for loop with data xxxx in hexadecimal format.	basic-1

LD 79: Virtual Network Service

Overlay program 79 allows the implementation of Virtual Network Services feature.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request
TYPE	aaa	Type of data block
CUST	xx	Customer number associated with this function
VNDN	1-4000 n...n	Number of contiguous VNS Directory Numbers
When REQ = OUT and VNDN = XALLVNDNS., the switch outputs the following: REMOVE ALL VDN BLOCKS? The following prompt then appears:		
CONF	(NO) YES	(Deny) Confirm intent to remove all VDN blocks

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
CONF	(NO) YES	Confirm Deny intent to remove all VDN blocks Confirm intent to remove all VDN blocks CONF is prompted if REQ = OUT and VNDN = XALLVNDNS.	vns-22
CUST	0-99	Customer number associated with this function as defined in LD 15	basic-1
REQ	CHG DIS END ENL NEW OUT PRT	Request Change existing data block Disable a block of contiguous VDN to prevent the use of a VDN in this block Exit Overlay program Enable a block of contiguous VDN Create Virtual Network Service data block Remove Virtual Network Service data block Print Virtual Network Service data block	basic-1
TYPE	VNS	Type of data block Virtual Network Service data block	basic-1
VNDN	1-100 n...n x...x 1-4000 xxxxxxxx XALLVDNS	Number of contiguous VNS Directory Numbers, and first VNS DN Individual VDN. This entry is accepted if REQ = NEW, OUT, DIS or ENL. Number of contiguous VDNs and first VDN. This entry is accepted if REQ = NEW. Remove all VNS data blocks. This entry is accepted if REQ = OUT. VNDN is reprompted until a carriage return is entered.	vns-16

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 80: Call Trace

LD 80 provides a means of tracing a call by looking at a snap shot of the transient data (such as call register contents) associated with the call. The trace commands operate only when this Overlay is active. If LD 80 is aborted (****), the trace functions stop. Note that when using the enhanced trace commands, the Overlay will not automatically abort (according to the defined time-out period) if calls are being traced.

When a system initialization occurs, all trace commands are removed, and the trace operation is stopped.

For Network Call Trace see NCT messages.

X11 Release 19 and later include Enhanced Trace Commands. The enhanced trace function requires Multi-User Login functionality (package 242) to be enabled in LD 17. The enhanced commands are: DALL, DIST, ENTC, ENTD, GOTR, FITR, and STPT. These commands interact with each other only. They do not affect pre-Release 19 commands.

The enhanced trace commands can be disabled through a maintenance telephone by dialing the following: nn + 9913 + x + yy

Where:

- nn = customer SPRE access code
- 9913 = feature code to display for message display control
- x = action code (0 to deactivate)
- yy = message monitor code (02 for enhanced trace messages)

A second dial tone indicate that the command was successful. Overflow tone is heard if the command is entered incorrectly. Once this command has been entered, a user entering FITR from the TTY will receive the period (.) prompt.

When to use LD 80

There are three basic commands:

- TRAT for tracing attendant consoles
- TRAC for tracing sets and trunks
- TRAD for tracing calls through Computer PBX Interface (CPI), Digital Trunk Interface (DTI), Primary Rate Interface, or Digital Link Interface (DLI) loops.

The TRAC command can be used to print the tone detector TN if a tone detector is used at the time of the call trace.

Generic X11 enables the printing of auxiliary data related to a call. The auxiliary data consists of information associated with the NARS/BARS/CDP features, if equipped, and the Ring Again (RGA) feature. This additional data can be retrieved by appending DEV to any of the TRAC commands.

Example: TRAC L S C U DEV

Note: BRI DNs can be traced with the TRAC C DN command. For TRAC L S C U, enter U = DSL0 to DSL7 for Digital Subscriber Loops.

With X11 Release 23, when Music and Recorded Announcement Broadcast trunks are traced, the following information is printed out:

- indication that the trunk is broadcasting
- the number of callers connected to the trunk

When a caller connected to a broadcasting trunk is traced, the existing trace information is printed out as well as an indication that the trunk is broadcasting.

Originating and terminating information

The Call Trace originating and terminating party information depends on the types of telephone, console or trunk as shown below.

Single line telephones:

```
ORIG l s c u  cust dn 500
TERM l s c u  cust dn 500
```

Multi-line telephones:

```
ORIG l s c u  key# keytype cust dn settype
TERM l s c u  key# keytype cust dn settype
```

Attendant consoles

```
ORIG l s c u  cust att# lpk#  ATTN consoletype
TERM l s c u  cust att# lpk#  ATTN consoletype
```

Trunks:

```
ORIG l s c u  rtyp RMBR rrr mmm
TERM l s c u  rtyp RMBR rrr mmm
```

Where:

l s c u = TN

consoletype = console type (ATT, 1250, 2250)

cust = customer number

dn = directory number

key# = multi-line telephone key number

keytype = multi-line telephone key type (SCR, MCR, HOT, etc.)

lpk# = console loop key number

rrr mm = trunk route and member number

rtyp = trunk route type (TIE, CO, FX, etc.)

settype = multi-line telephone type (SL1, 2008, 2317, etc.)

Example 1

Trace a call placed to a 500-type set

Configuration: active call from key 0 on an M2008, to 500-type telephone
Customer number: 06

Originator:

telephone type: M2008
TN: 004 0 05 00
DN: 5100 on SCR key 0

Terminator:

telephone type: 500
TN: 008 0 03 06
DN: 2121

Trace command:

TRAC 4 0 5 0 (l s c u), or
TRAC 6 5100 (customer and DN)

Output:

ACTIVE TN 004 0 05 00
ORIG 04 0 0 05 00 6 SCR 0 5100 2008
TERM 008 0 03 06 6 2121 500
DIAL DN 2121
MAIN PM ESTD
TALKSLOT ORIG 22 TERM 22
QUEUE NONE

Example 2**Trace an outgoing ISDN call**

Configuration: outgoing call from key 0 on an M2317, to 500-type telephone
Customer number: 05

Originator:

telephone type: M2317
TN: 016 0 02 00
DN: 6050 on SCR key 0

Terminator:

Dialed DN: 7873107
Outgoing PRI TIE trunk: loop 018 channel 16; route 24 member 12

Trace command:

TRAC 5 6050 (customer, DN), or
TRAC 16 0 2 0 (l s c u)

Output:

```
ACTIVE  TN    016  0  02  00
ORIG     016  0  02  00      5  SCR 0    6050    2317
TERM      018  16      TIE  RMBR  24  12
DIAL DN   7873107
MAIN PM   ESTD
TALKSLOT  ORIG  13      TERM  13
QUEUE    NONE
---- ISDN PRA CALL (TERM) ----
CAL REF # = 16
BEARER CAP = VOICE
CALL STATE = 10      ACTIVE
CALLING NO = 4376050
CALLED NO  = 7873107
```

Example 3

Enhanced Trace command output

The enhanced call trace output includes a time stamp that appears on the first line of the output.

The TN or digital trunk prints out only when there has been a change to the call register. The TN or trunk is printed only once.

Sample output:

```
.14:00:02 12/25/1992

KEY 0 MCR MARP ACTIVE TN 001 0 02 01

ORIG 001 02 01 0 SCR MARP 1 5011 SL1

TERM 001 0 02 00 0 MCR MARP 1 5006 SL1

DIAL DN 5006

MAIN_PM ESTD

TALKSLOT ORIG 19 TERM 21

QUEU NONE

KEY 1 TRN IDLE

KEY 2 A03 IDLE

.
.
.

KEY 8 RND

KEY 9 RLS

.14:00:04 12/25/1992

IDLE TN 015 04
```

Alphabetical list of Call Trace outputs

This section provides definitions of the data output by the various call trace commands.

With X11 Release 19 and later, a time stamp is added to Call Trace output. The following information is added below the time stamp as necessary.

- A digital telephone with no active call register shows:
IDLE TN l s c u
 - A locked out telephone or digital trunk shows:
LOCKOUT TN l s c u (or l ch)
 - A disabled telephone or digital trunk shows:
DSBL TN l s c u (or l ch)
 - A telephone or digital trunk that is in maintenance busy state shows:
MSBY TN l s c u (or l ch)
MSBY TN l s c u (or l ch) MARP shows if the TN is a MARP TN
- 1 ACTIVE — the call/key is active
 - 2 AUX_NARS — Network Automatic Route Selection (NARS) data to follow
 - 3 AUX_PM — auxiliary progress mark may be any of the following depending on the MAIN_PM:
 - a ABSORBING = performing digit manipulation on the call
 - b AWAIT ANI = waiting for Automatic Number Identification information
 - c AWAITREPLY = CPU is waiting for a response during a dial sequence
 - d BSYG = busy tone to originator
 - e CDR-CALLRECORD = CPU is outputting a CDR record
 - f CDR-TIMING = CPU is computing a CDR record
 - g COMPLETE = dialing is complete
 - h DNTRANS = DN translation to TN in progress
 - i FAREND-OFF = ?

- j** NARS = call is a network call
- k** NOOUTPULS = outpulsing complete, originator receiving ringback
- l** OUTPUTSING = outpulsing digits related to the call
- m** OVLF = resources not available, returning overflow to originator
- n** PAUSING = timed pause in a trunk call dialing sequence
- o** SPEEDCALL = performing speed call
- p** TEMPPATH = software timing, occurs when outpulsing digits on trunks
- q** TOLLCHECK = checking access restrictions for the call
- r** USCR = User Selectable Call Redirection programming, receiving dial tone
- s** USCR_DIAL = USCR programming
- 4** AUX_RGAT_PM — Ring Again over trunk information
- 5** BEARER CAP — bearer capability, such as voice, 64K clear, 64K restricted and 56K
- 6** BUSY — unit or DN is busy
- 7** CALL REF # — PRI call reference number assigned by the system
- 8** CALL STATE — specifies the PRI call as active or inactive
- 9** CALLED NO — PRI dialed number
- 10** CALLING NO — PRI home location code and DN of originating party
- 11** CONF — conference call

- 12 COS_ORIG, COS_TERM — class of service restrictions for originating and terminating party. Possible values are:
 - a UNR = Unrestricted
 - b TLD = Toll Denied
 - c SRE = Semi-restricted
 - d FRE = Fully Restricted
 - e FR1 = Fully Restricted class 1
 - f FR2 = Fully Restricted class 2
 - g CUN = Conditionally Unrestricted
 - h CTD = Conditionally Toll Denied
- 13 CSD — Confree Selectable Display Key
- 14 DARK_CONSOLE — the call is being temporarily released by a console. Also outputs three types of recall:
 - a RLSED = console released the call is getting recall
 - b FLASH = Flash recall
 - c CAMP = Camp-On recall
- 15 DIAL DN— the dialed number
- 16 DIAL xxx yy TTR zz — TDS on loop xxx and timeslot yy connected to Digitone Receiver timeslot zz
- 17 DG_MAN xxx FCA_INDEX xxx TOD x — Digit Manipulation Index, Free Area Screening and Time Of Day value
- 18 DIRECT MW_CALL — Message Waiting indication is being given
- 19 DSBL — the unit has been disabled
- 20 DST — console destination information to follow
- 21 EMR100 — ACD emergency conference
- 22 EXP_ROUTE — identifies if an expensive route is being used for an ESN call
- 23 IDLE — TN or key is idle

- 24 HLD — number of calls On-Hold at the console
- 25 HOLD — call is On-Hold
- 26 LOCKOUT — the unit is in lockout state
- 27 LOOP — attendant console LPK key
- 28 MAIN_PM — this is the main progress mark which identifies the state of the call, possible values are listed below: (See also AUX_PM)
 - a BUSY = originator is receiving busy tone
 - b CDR = CPU is processing Call Detail Recording records
 - c DELAY DIAL = CPU is in a timing sequence while establishing a delay dial start trunk call
 - d DIAL = one or more digits have been dialed, system requires more digits
 - e ESTD = call is established between the originating and terminating party
 - f HALFDISC = Trunk with answer supervision has not received a disconnect signal from the far-end during trunk idling
 - g READY = CPU is ready to process a function for the originating TN
 - h REOR = originator is receiving intercept treatment
 - i RING = originator is receiving ringback tone
 - j WAIT = dial tone waiting queue
 - k WINKON = CPU is in a timing sequence while establishing a wink start trunk call
- 29 MARP — indicates the TN is Multiple Appearance Redirection Prime
- 30 MBSY — unit is in maintenance busy state
- 31 NARS_PM — NARS call progress mark
- 32 NEW_RLIST_INDEX NWQ_RLIST_ENTRY — network queue route list index and route list entry
- 33 NCOS_ORIG, NCOS_TERM — Network Class of Service for originating and terminating party

- 34 OHQ/CBQ — call is in the Off-Hook queue or Callback queue
- 35 OSN — On-Site Notification key
- 36 PRIORITY NWQ_EXT_ROUTE — the priority in the queue and extended route queuing
- 37 PTY SLOT — TDS priority timeslot; reserved by the CPU while a user is receiving tones (this timeslot may be required by the CPU to further process the call). Normally PTY SLOT is the same timeslot as SLOT.
- 38 QUEU — a call may be in one of the following CPU timing queues:
 - 128 = 128 ms timing queue
 - 2S = 2 second timing queue
 - CAD = cadence
 - CDR = Call Detail Recording processing queue
 - DIAL = dialing queue
 - IDLE = idle queue
 - NONE = call is not in a timing queue
 - RING = ringing queue
- 39 RCVR xx SET yy — timeslot to the Digitone Receiver (xx) and the telephone (yy)
- 40 RGAT_PM — Ring Again progress mark
- 41 RL_IND xx RL_ENT xx — NARS/BARS route list index and entry number
- 42 SRC — console source information to follow
- 43 SBSY — unit is software busy
- 44 SLOT — the timeslot used by the originator and terminator
- 45 TALKSLOT — identifies the timeslot and junctor (if applicable) used by the originator and terminator
- 46 TDTN — Tone Digit Switch loop and timeslot
- 47 TERM — originating party information, identifies the TN or DN where the call terminates, output depends on type of telephone or console

LD 80

- 48 TGAR_ORIG, TGAR_TERM — Trunk Group Access Restriction for
originating and terminating party
- 49 TTR = Digitone Receiver TN

Basic commands

DALL	Disable all enhanced trace commands.
DIST n	Disable the enhanced trace operation.
ENTC l s c u t	Enable the enhanced trace command for a TN.
ENTD l ch t	Enable the enhanced trace command for a digital trunk.
FITR	Get information about the enhanced trace function.
GOTR	Begin enhanced trace commands. This command starts the trace operation specified with the ENTC and ENTD commands.
STPT	Stop the enhanced trace command.
TRAC c acod	List route number, type and status of each trunk for customer c
TRAC c dn	Trace calls for customer c Directory Number or Local Steering Code dn
TRAC c r m	Trace calls, customer c, route r, member m
TRAC l s c DSLx	Trace calls on Digital Subscriber Loop x (0-7)
TRAC l s c u	Trace calls associated with this unit
TRAC l s c u k	Trace calls associated with key k on specified unit
TRAC x yyyy	Trace using customer number as DN
TRAC xx...xx DEV	Print auxiliary data
TRAC zzzz	Trace using TN of the set to be traced
TRAD loop ch	Trace DTI or DLI calls, channel ch of loop
TRAT c a	Trace calls, attendant a of customer c
TRAT c a k	Trace calls associated with key k of attendant console a for customer c
TRAT l s c u	Trace attendant calls, this unit
TRAT l s c u k	Trace attendant calls on key k
TRAT xx...xx DEV	Print auxiliary data

Alphabetical list of commands

Command	Description	Pack/Rel
DALL	Disable all enhanced trace commands. This command disables all trace commands enabled with ENTC or ENT D command. You must stop the trace with the STPT command before disabling all the commands with DALL.	basic-19
DIST n	Disable the enhanced trace operation. This command disables the trace command enabled with ENTC or ENT D command. This command is used once a trace command is started then stopped. Where: n = the entry number (as seen with the FITR command)	basic-19
ENTC l s c u t	Enable the enhanced trace command for a TN. This command enables the trace capability for the TN specified. Note that this command does not start the trace immediately. Use the GOTR command to begin the trace operation. Where: l = loop, s = shelf, c = card, u = unit and t = the length of time the trace command operates. The format for the trace command duration (t) is HHMM, where HH = hours (0-23) and MM = minutes (0-59). For example, for a duration of 5 minutes, t = 0005; for 1 hour, t = 0100 The time duration must be at least 1 minute, and no more than 23 hours.	basic-19
ENTD l ch t	Enable the enhanced trace command for a digital trunk. This command enables the trace capability for the TN specified. Note that this command does not start the trace immediately. Use the GOTR command to begin the trace operation. Where: l = loop, s = shelf, c = card, u = unit and t = the length of time the trace command operates. The format for the trace command duration (t) is HHMM, where HH = hours (0-23) and MM = minutes (0-59). For example, for a duration of 5 minutes, t = 0005; for 1 hour, t = 0100. The time duration must be at least 1 minute, and no more than 23 hours.	basic-19

FITR	Get information about the enhanced trace function. This command queries the TNs or Digital trunks being traced with the ENTC and ENTD commands. The output is shown as follows: <table> <tr> <th>ENTRY</th> <th>TN or TRUNK</th> <th>TIME</th> <th>STATUS</th> </tr> </table> For example: <table> <tr> <td>1</td> <td>01 0 01 01</td> <td>0030</td> <td>OFF</td> </tr> <tr> <td>2</td> <td>015 04</td> <td>1200</td> <td>OFF</td> </tr> </table>	ENTRY	TN or TRUNK	TIME	STATUS	1	01 0 01 01	0030	OFF	2	015 04	1200	OFF	basic-19
ENTRY	TN or TRUNK	TIME	STATUS											
1	01 0 01 01	0030	OFF											
2	015 04	1200	OFF											
GOTR	Begin enhanced trace commands. This command starts the trace operation specified with the ENTC and ENTD commands.	basic-19												
STPT	Stop the enhanced trace command. This command stops the enhanced trace operation specified with the ENTC and ENTD commands. This can be used at any time during the trace operation. This does not disable the commands; they can be restarted with the GOTR command. When they are restarted, the duration timer is reset. For example: the timer is set at 30 minutes, but the trace is stopped after 2 minutes. When the trace is restarted (GOTR) the timer is set to 30 minutes.	basic-19												
TRAC c acod	List route number, type and status of each trunk for customer c.	basic-1												
TRAC c dn	Trace calls for customer c Directory Number or Local Steering Code dn.	basic-1												
TRAC c dn	Trace calls, this dn of customer c.	basic-1												
TRAC c r m	Trace calls, customer c, route r, member m. With Release 24 and later, member range is 1-510.	basic-1												
TRAC l s c DSLx	Trace calls on Digital Subscriber Loop x (0-7).	bri-18												
TRAC l s c u	Trace calls associated with this unit. If a trace is performed on a DTR, an error message is output.	basic-1												
TRAC l s c u k	Trace call associated with key k on specified unit.	basic-1												

LD 80

TRAC x yyyy	Trace using customer number as DN. Where : x = customer number of the set to be traced and yyyy = DN of the key to be traced.	nxcc-22
TRAC xx...xx DEV	Print the auxiliary data related to the call for Network Alternate Route Selection (NARS), Basic Alternate Route Selection (BARS), Coordinated Dialing Plan (CDP) or Ring Again (RGA), where equipped, as well as the normal data for command xx...xx. Command xx...xx can be any of the TRAC commands. When TYP E is output, E = extended route (not expensive).	nxcc-22
TRAC zzzz	Trace using TN of the set to be traced. Where: zzzz = TN of the set to be traced.	nxcc-22
TRAD loop ch	Trace DTI or DLI calls, channel ch of specified loop.	basic-1
TRAT c a	Trace calls for customer c, attendant a.	basic-1
TRAT c a k	Trace calls associated with key k of attendant console a for customer c.	basic-1
TRAT l s c u	Trace attendant calls, this unit.	basic-1
TRAT l s c u k	Trace attendant calls on key k.	basic-1
TRAT xx...xx DEV	Print auxiliary data. Print the auxiliary data related to the call for Network Alternate Route Selection (NARS), Basic Alternate Route Selection (BARS), Coordinated Dialing Plan (CDP) or Ring Again (RGA), where equipped, as well as the normal data for command xx...xx. Command xx...xx can be one of the TRAT commands.	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 81: Features and Station Print

Overlay program 81 is used to print a list or count of telephones with selected features. It also allows last service change date information to be printed.

In Release 18, a TN which is the Multiple Appearance Redirection Prime (MARF) is indicated by an “M” following FEAT (when TYPE = MCN, SCN, MCR, or SCR).

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = LST, CNT, or END)
CUST	xx xx	One Customer or a range of Customer numbers
DATE	a...a	Print data from activity date specified (You may enter : dd mmm yyyy or ACT)
PAGE	(NO) YES	Data printed on a per page basis
DES	d...d	1-6 alphanumeric character Office Data Administration System
FEAT	aaaa	Features requested (FEAT responses begin on page 1039)
RNPG	xx yy	Ringing Number Pick Up Group
LSNO	xx yy	List Number
NCOS	xx yy	Network Class of Service
- ADJUST PAPER THEN <cr>	<cr>	Starts printing
NACT	(NO) YES	Next Activity

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADJUST PAPER THEN	<cr>	Starts printing Prompted when PAGE = YES	basic-1
CUST	xx xx <cr>	One Customer or a range of Customer numbers All Customers	basic-1
DATE	dd mmm yyyy	Print data from activity date specified. Where: • dd = day (0-31) • mmm = month (JAN-DEC) • yyyy = year	basic-1
	ACT <cr>	Print data from last Activity date. Disregard date restrictions.	
DES	d...d dddd d+ + <cr>	1-6 alphanumeric character Office Data Administration System (ODAS) Station Designator Print data for stations with specific DES. Print data for stations with a DES starting with d. Print data for all stations with no DES. Print data for all stations.	odas-1
FEAT		Features requested Enter a specific feature mnemonic or one the following for groups of features: ALL, COS, DNK, SETS, SCL, RNP or 500. FEAT is repeated until <cr> is entered.	basic-1
	2000 3000 4020 500 3900	All M2000 telephones M3000 Touchphone M4020 telephone (no longer supported) 500/2500 type telephone M3901, M3902, M3903, M3904, M3905 Print both MNL and DIP telephones. 2500 type telephones are requested by DTN entry.	dset-7 tset-7 basic-8 basic-1 basic-24
	AAA AAD	Automatic Answerback Allowed Automatic Answerback Denied	aab-1

LD 81

Page 1040 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	AAK	Automatic Answerback Key	aab-1
	ACD	ACD in calls key	bacd-1
	ACNT	Assignment of activity codes allowed	bacd-13
	ADD	Automatic Digit Display equipped	ddsp-1
	ADL	Autodial key	optf-1
	ADV	Data port Verification allowed	bacd-5
	AGN	ACD Agent	bacd-1
	AGT	ACD Agent's key	
	AGTA	ACD services for 500/2500 telephone Allowed	bacd-16
	AGTD	ACD services for 500/2500 telephone Denied	
	AHD	Automatic Hold Denied	basic-24
	AHA	Automatic Hold Allowed	
	ALL	All features	basic-1
		When REQ = LST, only the features actually programmed on telephones are listed along with the associated TN. Features not listed are RNPK, DIP and MNL.	
		When REQ = CNT, features available in the system software are listed even if they are not programmed on any telephone. Not listed are RNPK, 500, 2500, SL-1, 2000, and 3000.	
	AO3	Three-party conference key	basic-1
	AO6	Six-party conference key	
	ARC	Attendant Recall key	basic-1
	ARHA	Audible Reminder of Held Call Allowed	basic-14
	ARHD	Audible Reminder of Held Call Denied	
	ASCA	Alarm Security Allowed	ohas-18
	ASCD	Alarm Security Denied	
	AUTD	Authorization Code Denied	ssau-19

Prompt	Response	Comment	Pack/Rel
	AUTR AUTU	Authorization Code Restricted Authorization Code Unrestricted	
	BFED BFEA	Boss Secretary Feature Enhancement Denied. Boss Secretary Feature Enhancement Allowed.	bfs-24
	BFS	Busy Forward Status key	bfs-20
	BRCD BRCA	Recall to Boss Denied. Recall to Boss Allowed.	bfs-24
	C6A C6D	Six-Party Conference Allowed Six-Party Conference Denied	basic-10
	CA	Combined No Hold Conference and Autodial	basic-14
	CAS	Centralized Attendant Service	casm-1
	CCOS CCSA CCSD	Controlled Class of Service key Controlled Class of Service Allowed Controlled Class of Service Denied	ccos-7
	CDCA CDCD	Conferee Display Count Allowed Conferee Display Count Denied	basic-23
	CDMA CDMD	Station Activity Records Allowed Station Activity Records Denied	mct-20
	CFHA CFHD	List/count sets with CFHA CLS List/count sets with CFHD CLS	cfho-20
	CFTA CFTD	Call Forward by Call Type Allowed Call Forward by Call Type Denied	basic-10
	CFW	Call Forward key	basic-1
	CFXA CFXD	Call Forward number to External DN Allowed Call Forward number to External DN Denied	basic-10
	CHD	Combined No Hold Conference and Direct Hot Line	basic-14
	CHG	Charge Account key	fca-1
	CHL	Combined No Hold Conference and Hot Line list	basic-14

LD 81

Page 1042 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	CLTA CLTD	Network Call Trace Allowed Network Call Trace Denied	basic-17
	CMSA	Command and Status link Allowed	csl-8
	CNA CNAD	CLASS Calling Name Multiple Data Format Allowed. CLASS Calling Name Denied.	cname- 23 cname- 23
	CNDA CNDD	Call Party Name Display Allowed Call Party Name Display Denied	cpnd-10
	CNIA CNID	Call Number Identification Allowed Call Number Identification Denied	pra-12
	CNTA CNTD	Network ACD Countdown Allowed Network ACD Countdown Denied	nacd-15
	CNUA CNUD CNUS	CLASS Calling Number Multiple Data Format Allowed. CLASS Calling Number Denied. CLASS Calling Number Single Data Format Allowed.	cnumb- 23 cnumb- 23 cnumb- 23
	COS	Print stations with Class of Service restrictions. These are telephones with equipped with C6A, C6D, CMSA, CNDA, CNDD, CTD, CUN, DSI, FRE, FR1, FR2, NCOS, SFA, SFD, SRE, TLD, TTA, TTD, UNR and VMA.	basic-1
	CPN	Display Calling Party Number key	cpnd-10
	CS	Combined No Hold Conference and Speed Call	
	CSD	Conferee Selectable Display key	basic- 23
	CTD CUN	Conditionally Toll Denied Conditionally Unrestricted	basic-1
	CWA CWD CWT	Call Waiting Allowed Call Waiting Denied Call Waiting key	basic-1
	DAG	ACD Display Agents key	bacd-1
	DAPA DAPD	Display of Access Prefix allowed Display of Access Prefix Denied	isdn-24

Prompt	Response	Comment	Pack/Rel
	DCFW	Default call forward for Phantom TNs	phtn-20
	DDGA	DN Display on other set Allowed	sdd-21
	DDGD	DN Display on other set Denied	
	DDS	Digit Display allowed	ddsp-1
	DDV	Data port Verification denied	amp-5
	DELA	Dealer Allowed	ohol-20
	DELD	Dealer Denied	
	DIG	Dial Intercom Group	di-1
	DIP	Dial Pulse telephone (500 type)	bssic-1
	DNDA	Dialed Name Display Allowed	cpnd-13
	DNDD	Dialed Name Display Denied	
	DNK	Telephones with MCN, MCR, SCN, and SCR keys	basic-1
	DPU	DN Pickup key	grp-1
	DPUA	DN Pickup Allowed	dcp-12
	DPUD	DN Pickup Denied	
	DRC	DID Route Control	basic-14
	DRDD	Distinctive Ringing by Directory Number denied.	edrg-24
	DRDA	Distinctive Ringing by Directory Number denied.	
	DRG1	Digital telephone Distinctive Ringing (high/fast)	drng-7
	DRG2	Digital telephone Distinctive Ringing (high/slow)	
	DRG3	Digital telephone Distinctive Ringing (low/fast)	
	DRG4	Digital telephone Distinctive Ringing (low/slow)	
	DSP	Digit Display key	ddsp-1
	DTA	Data set	basic-5
	DTN	Digitone dial telephone (2500 type)	basic-1
	DWC	ACD Display Waiting Calls key	bacd-1

LD 81

Prompt	Response	Comment	Pack/Rel
	ENG	English language display for M2317	dlt2-12
	FAXS	Facsimile servers	faxs-18
	FBA FBD	Call Forward Busy Allowed Call Forward Busy Denied	optf-1
	FITA FITD	Flexible Incoming Tones Allowed Flexible Incoming Tones Denied	basic-14
	FLXA	Flexible voice/data TN allowed	digital_set-22
	FLXD	Flexible voice/data TN denied	
	FNA FND	Call Forward No Answer Allowed Call Forward No Answer Denied	basic-1
	FR1 FR2 FRE	Fully Restricted class 1 Fully Restricted class 2 Fully Restricted	basic-1
	FRN	French language display for M2317	dlt2-12
	FTTC FTTR FTTU	Flexible Trunk to Trunk Connections Conditional Flexible Trunk to Trunk Connections Restricted Flexible Trunk to Trunk Connections Unrestricted	
	GPU	Group Call Pickup key	dcp-12
	GPUA GPUD	Group call Pickup Allowed Group call Pickup Denied	dcp-12
	GRC	Group Recall key	grp-1
	HFA HFD	Handsfree Allowed M2616 Handsfree Denied M2616	arie-14
	HOTD HOTL	Enhanced Hot Line, Direct entry method Enhanced Hot Line, List entry method	hot-10
	HPR	High Priority station	basic-1
	HTA HTD	Hunting Allowed Hunting Denied	basic-1

Prompt	Response	Comment	Pack/Rel
	HTL	Hot Line	hot-10
	ICDA	Internal CDR Allowed	icdr-10
	ICDD	Internal CDR Denied	
	ICF	Internal Call Forward key	icf-19
	IMA	IMS or IVMS Allowed	ims-2
	IRA	Incoming Ringing line preference Allowed	1sel-4
	IRD	Incoming Ringing line preference Denied	
	KLS	Key/lamp Strip	basic-1
	LDN	Listed Directory Number (DN)	dldn-12
		Note: LDN does not apply for Release 22.	
	LDTA	Line Disconnect Tone allowed	basic-17
	LDTD	Line Disconnect Tone denied	
	LLC1	Line Load Control level 1	11c-10
	LLC2	Line Load Control level 2	
	LLC3	Line Load Control level 3	
	LLCA	Line Load Control Allowed	
	LLCN	Line Load Control off	
	LMPN	Red LED on Meridian Modular Telephone reflects the status of the mailbox associated with the PDN	vmbs-24
	LMPX	Red LED on Meridian Modular Telephone reflects the status of the mailbox associated with the PDN and non-PDNs	
	LNA	Last Number Redial Allowed	1nr-8
	LND	Last Number Redial Denied	
	LNK	Last Number Redial Key	
	LOL	Long Line Class of Service	xops-20
	LPA	Message Waiting lamp Allowed	mwc-1
	LPD	Message Waiting lamp Denied	mwc-1
	LPR	Low Priority station	basic-1

LD 81

Page 1046 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	LSPK	Loudspeaker key	ohol-20
	MBXD MBXA	Multi-Party Operation (MPO) Blind Transfer Denied. Multi-Party Operation (MPO) Blind Transfer Allowed. Multi-Party Operations (MPO) package 141 must be equipped to enter MBXD or MBXA.	mpo-21
	MCD MCK MCN	Message Center DN Message Cancellation Key Multiple Call Non-Ringing DN	mwc-1 basic-1
		In Release 18, a TN which is the Multiple Appearance Redirection Prime (MARF) for the DN is indicated by an "M" in the output (MCN M).	
	MCR	Multiple Call Ringing DN In X11 Release 18, a TN which is the Multiple Appearance Redirection Prime (MARF) for the DN is indicated by an "M" in the output (MCN M).	basic-1
	MCTA MCTD	Malicious Call Trace Allowed Malicious Call Trace Denied	mct-10 mct-19
	MIK	Message Indication Key	mwc-1
	MNL	Manual service	basic-1
	MON	TN(s) Monitored by at least one BFS key	bfs-20
	MMA MMD	Multimedia Messaging Allowed Multimedia Messaging Denied	
	MRA MRD	Message Registration Allowed Message Registration Denied	mr-10
	MSB	Make Set Busy key	msb-1
	MSID MSIA	Make Set Busy Improvement Denied Make Set Busy Improvement Allowed	msb-24
	MTA	Maintenance set Allowed	basic-1
	MWA MWD	Message Waiting Allowed Message Waiting Denied	mwc-1

Prompt	Response	Comment	Pack/Rel
	MWK	Message Waiting key	
	NAMA	Name display on other set Allowed	sdd-21
	NAMD	Name display on other set Denied	
	NCOS	Network Class of Service (COS)	ncos-1
	NDD	No Digit Display	ddsp-1
	NHC	No Hold Conference	basic-14
	NIA	Incoming non-ringing line preference Allowed	1se1-4
	NID	Incoming non-ringing line preference Denied	1se1-4
	NKL	Notification Key Lamps	drng-7
	NRD	ACD Not Ready key	bacd-1
	NSVC	ACD Night Service key for Supervisor Control	bacd-12
	OLA	Outgoing Line preference Allowed	1se1-4
	OLD	Outgoing Line preference Denied	
	ONP	On Premise extension (X11 Release 19 & earlier)	basic-1
	ONS	On Premise Station (X11 Release 20 & later)	xops-20
	OPS	Off Premise Station (X11 Release 20 & later)	xops-20
	OPX	Off Premise extension (X11 Release 19 & earlier)	basic-1
	OSN	On Site Notification key. OSN is accepted as valid input only if the system is ESA and ESA_SUPP package equipped.	esa- 23
	OVB	Attendant Overflow position	aop-1
	OVDA	Override Allowed (500/2500 telephone)	ffc-15
	OVDD	Override Denied (500/2500 telephone)	
	OVR	Override key	basic-1
	PDN	Prime Directory Number Note: LDN does not apply for Release 22.	pra-12
	(PGND)	Deny PAGENET access	pagenet-22
	PGNA	Allow PAGENET access	

LD 81

Page 1048 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	PHD	Permanent Hold	basic-4
	POA POD	Optional Privacy Allowed Optional Privacy Denied	basic-1
	PRK	Park key	cprk-2
	PRS	Privacy Release key	basic-1
	PUA PUD	Call Pickup Allowed Call Pickup Denied	grp-1
	PVN PVR	Private Line Non-ringing phantom DN Private Line Ringing phantom DN	basic-1
	RBDA RBDD	Redirection By Day Allowed Redirection By Day Denied	basic-24
	RBHA RBHD	Redirection By Holiday Allowed Redirection By Holiday Denied	basic-24
	RDL	Stored Number Redial	basic-14
	RDLA RDLD	Automatic Redial call Allowed Automatic Redial call Denied	ardl-22
	RGA	Ring Again key	optf-1
	RLS	Release key	basic-1
	RMMD RMMA RMMO	Remote Monitoring of Messages Denied Remote Monitoring of Messages Allowed Allow Remote Monitoring of Messages and to Override, if it is being already monitored	vmba-24
	RMWK	Remote Message Waiting indication	vmba-24
	RNP	Ringin Number Pickup (includes PUA, PUD and RNPK)	grp-1
	RNPK	Ringin Number Pickup key	grp-1
	RTDA RTDD	Call Redirection by Time of day allowed Call Redirection by Time of day denied	basic-22

Prompt	Response	Comment	Pack/Rel
	SAR	Scheduled Access Restriction	sar-20
	SCC	Speed Call Controller	optf-1
	SCI	Station Category Indication Priority Level	sci-7
	SCL	Speed Call (includes SCU and SCC)	optf-1
	SCN	Single Call Non-ringing DN In Release 18, a TN which is the Multiple Appearance Redirection Prime (MARF) for the DN is indicated by an "M" in the output (MCN M).	basic-1
	SCR	Single Call Ringing DN In Release 18, a TN which is the Multiple Appearance Redirection Prime (MARF) for the DN is indicated by an "M" in the output (MCN M).	basic-1
	SCU	Speed Call User	optf-1
	SETS	All telephones	basic-1
	SFA SFD	Second level Forwarding Allowed Second level Forwarding Denied	optf-10
	SHL	Short Line Class of Service	xops-20
	SIG	Buzz key to phantom DN	basic-1
	SL1	SL-1 stations	basic-1
	SMSA SMSD	Standalone Mail Server Allowed Standalone Mail Server Denied	samm-20
	SMWD SMWA	Extended message waiting indication denied. Extended message waiting indication allowed.	mw-24
	SPKA SPKD	Speaker Class of Service Allowed Speaker Class of Service Denied	ohol-20
	SPV	ACD Supervisor	acdb-1
	SRE	Semi-Restricted	basic-1

LD 81

Page 1050 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	SSC SSU	System Speed Call Controller System Speed Call User	optf-1
	SWA SWD	Station-to-Station Call Waiting Allowed Station-to-Station Call Waiting Denied	basic-8
	TAD	Time And Date key	ddsp-1
	TDD	Touchphone Display	tset-7
	THF THFA	Centrex Trunk Switchhook Flash Centrex Trunk Switchhook Flash Allowed (500/2500 telephones)	thf-14
	THFD	Centrex Trunk Switchhook Flash Denied (500/2500 telephones)	
	TLD	Toll Denied	basic-1
	TRC	Malicious Call Trace key	mct-10
	TRN	Call Transfer key	basic-1
	TSA	Three-Party Service Allowed	mpo-21
	TVA TVD	Trunk Verification Allowed Trunk Verification Denied	basic-1 basic-1
	ULAA ULAD	User Level Access Allowed for set based administration User Level Access Denied for set based administration	adminset-21
	UNR	Unrestricted	basic-1
	USR USRA USRD	User Selectable Call Redirection key User Selectable Call Redirection allowed User Selectable Call Redirection denied	uscr-19
	UST	Telephone Status feature	iap3p-13
	VCC	Voice Call to phantom DN	basic-1
	VCE	Voice set	basic-5
	VMA	Server Voice Messaging Allowed	cs1-8

Prompt	Response	Comment	Pack/Rel
	WTA WTD	Warning Tone Allowed Warning Tone Denied	basic-1
	WUK	Guest entry of Automatic Wake Up key	gewu-16
	XFA XFD	Call Transfer Allowed Call Transfer Denied	basic-1
	XHA XHD	Exclusive Hold Allowed Exclusive Hold Denied	dhld-4
	XRA XRD	Ring Again Allowed Ring Again Denied	optf-1
	XMWK	Extended Message Waiting indication	vmba-24
LSNO		List Number.	basic-1
	0-253 0-253	One Speed Call List Number or a range of list numbers	
	0-8190 0-8190		
	<cr>	List Number: Release 13 and later Print all lists.	
		LSNO is prompted when FEAT is SCL, SCU, SCC, SSC, SSU or CS.	
NACT	(NO) YES END	Next Activity Return to REQ prompt. Print current system data and exit overlay. Exit Overlay program.	odas-1
NCOS		Network Class of Service. NCOS is prompted when FEAT = COS or NCOS.	basic-1
	0-3 0-3	One NCOS group number or a range of group numbers when CDP equipped	
	0-7 0-7	One NCOS group number or a range of group numbers when BARS or NFCR equipped	
	0-15 0-15	One NCOS group number or a range of group numbers when NARS equipped	

LD 81

Page 1052 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	0-99 0-99	One NCOS group number, or a range of group numbers for all features (Release 13 and later)	
PAGE	(NO) YES	Data printed on a per page basis	basic-1
REQ		Request	basic-1
	CNT	Print a count of telephones equipped with the features specified in response to the FEAT prompt.	
	END	Exit Overlay program.	
	LST	List telephones equipped with the features specified in response to the FEAT prompt.	
RNPG		Ringing Number Pickup Group.	basic-1
	0-255 0-255	One Ringing Number Pickup Group number or a range of group numbers	
	0-4095 0-4095		
	<cr>	Ringing Number Pickup Group: Release 13 and later Print all groups.	
		RPNG is prompted when FEAT = RNP, RNPK, PUA, PUD, DPU, DPUA, DPUD, GPU, GPUA or GPUD.	
SGRP		Station Group	sar-20
	0-999 0-999	One station group number or a range of station group numbers	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 82: Print Hunt Chain, Multiple Appearance Group

Overlay program 82 allows the printing of hunting patterns and Multiple Appearance groups for system stations.

Refer to the Office Data Administration System NTP (553-2721-100) for detailed information regarding printouts for multiple appearance DN's, single appearance DN's appearing on telephones with multiple appearance DN, and hunting patterns.

In Release 18, a TN which is the Multiple Appearance Redirection Prime (MARP) is indicated by an "M" preceding the TN in the output.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = EHT, END, HNT, MAG, MAP)
CUST	xx xx	Customer number or range of customer numbers
DATE	a...a	Print data from activity date specified or last activity date (You may enter: dd mmm yyyy or ACT)
PAGE	(NO) YES	Data printed on a per-page basis
DES	a...a	Print all telephones with DES "dddddd"
DN	xxxx	Print specific DN
- ADJUST PAPER THEN <cr>		
	<cr>	Starts printing
NACT	(NO) YES	Next Activity

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADJUST PAPER THEN	<cr>	Starts printing. Prompted when PAGE = YES	basic-1
CUST	xx xx <cr>	Customer number or range of customer numbers Print data for all customers.	basic-1
DATE	dd mmm yyyy	Print data from activity date specified. Where: • dd = day (0-31) • mmm = month (JAN-DEC) • yyyy = year	basic-1
	ACT <cr>	Print data from last activity date. Disregard date restrictions.	
DES	dddddd d+ + <cr>	Print all telephones with DES "dddddd" Print all telephones with DES "d" Print all telephones with no DES assignment Disregard DES	odas-1
DN	xxxx xxxx xxxx ALL <cr>	Print specific DN Print range of DNs Print data when REQ = MAG or MAP Print data for all DNs DN may be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150.	basic-1
NACT	(NO) YES END	Next Activity Return to REQ prompt Print current system data and exit Overlay Exit Overlay program	odas-1
PAGE	(NO) YES	Data printed on a per-page basis	basic-1
REQ	EHT END HNT	Request External Hunting pattern (except regular and short hunting) Exit Overlay program Hunting pattern (except short hunting and EHT)	basic-1

LD 82

Prompt	Response	Comment	Pack/Rel
	MAG	Multiple Appearance Groups Print Multiple Appearance Groups including all Single Appearance DNs assigned on telephones having Multiple Call Assignments.	
	MAP	Multiple Appearance Print Multiple Appearance DN and associated TNs. The hunt pattern displayed shows only the first TN in a MADN hunt group.	

LD 83: Terminal Number Sort and Print

Overlay program 83 allows the printing of a list of TNs and of TN blocks in Designation (DES) order.

In Release 18, “MARP” is output after the DN when printing the TN block (NOT when using the LST command) if the TN is the Multiple Appearance Redirection Prime.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = END, LST, TNB)
CUST	xx xx	Customer number or range of customer numbers
DATE	a...a	Print data from activity date specified or last activity date (You may enter: dd mmm yyyy or ACT)
PAGE	(NO) YES	Data printed on a per-page basis
- ADJUST PAPER THEN <cr>	<cr>	Starts printing
NACT	(NO) YES	Next Activity

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ADJUST PAPER THEN	<cr>	Starts printing	odas-1
CUST	xx xx <cr>	Customer number or range of customer numbers Print data date for all customers	odas-1
DATE	dd mmm yyyy	Print data from activity date specified. Where: • dd = day (0-31) • mmm = month (JAN-DEC) • yyyy = year	odas-1
	ACT <cr>	Print data from last activity date Disregard date restrictions	
NACT	(NO) YES END	Next Activity Return to REQ prompt Print current system data and exit overlay Exit Overlay program	odas-1
PAGE	(NO) YES	Data printed on a per-page basis	odas-1
REQ	END LST TNB	Request Exit Overlay program Print List of TNs in designator order Print list of TN blocks in designator order	odas-1

LD 84, 85: Set Designation Entry (ODAS)

Overlay program 84 allows the addition of line designators to existing single line (500/2500) sets.

Overlay program 85 allows the addition of line designators to existing multi-line (SL-1, M2000, etc.) sets.

If currently active on a call, the station will be disconnected after the last <cr>.

Prompts and responses

Prompt	Response	Comment
TN	I s c u	Terminal Number
DES	d...d	1-6 character alphanumeric designator

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DES	d...d	1-6 character alphanumeric Office Data Administration System (ODAS) Station Designator	odas-1
TN	I s c u END	Terminal Number Exit Overlay program	basic-1

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 86: Electronic Switched Network 1

Overlay program 86 allows data defining the NARS/BARS/CDP features to be created, modified, and printed.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by feature :</i>	
FEAT = DGT (Digit Manipulation)	1062
FEAT = ESN (Electronic Switched Network)	1063
FEAT = ITGE (Incoming Trunk Exclusion)	1064
FEAT = NAS (Network Attendant Service)	1064
FEAT = RLB (Route List)	1065
FEAT = SCC (Special Common Carrier)	1066

FEAT = DGT (Digit Manipulation)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	DGT	Feature = DGT (Digit manipulation)
DMI	(0)-999	Digit Manipulation Index numbers
DEL	(0)-19	Number of leading digits to be Deleted
INST	x...x	Insert
SCCI	(0)-7	Special Common Carrier Index into the SCC data table
CTYP	a...a	Call Type to be used by the manipulated digits (a...a = (NCHG), INTL, NPA, NXX, LOC, CDP, SPN, or UKWN)

FEAT = ESN (Electronic Switched Network)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	ESN	Feature = ESN (Electronic switched network)
MXLC	0-1000	Maximum number of LOC codes (NARS only)
MXSD	xxx	Maximum number of Supplemental Digit restriction blocks
MXIX	xxx	Maximum number of Incoming Trunk Group exclusion tables
MXDM	0-256	Maximum number of Digit Manipulation tables
MXRL	xxx	Maximum number of Route Lists
MXFC	0-256	Maximum number of Free Calling area screening tables
MXFS	0-255	Maximum number of Free Special number screening tables
CDP	(YES) NO	Coordinated Dialing Plan feature for this customer
- MXSC	0-5000	Maximum number of Steering Codes
- NCDP	3-7	Number of digits in CDP DN (DSC + DN or LSC + DN)
MSCC	0-7	Maximum number of Special Common Carrier entries
AC1	xx	One or two digit NARS/BARS Access Code 1
AC2	xx	One or two digit NARS Access Code 2
DLTN	(YES) NO	NARS/BARS Dial Tone after dialing AC1 or AC2 access codes
ERWT	(YES) NO	Expensive Route Warning Tone
- ERDT	0-(6)-10	Expensive Route Delay Time
TODS	aa-aa	Time of Day Schedules
RTCL	(DIS) YES	Routing Controls
NMAP	xx yy	NCOS Map
ETOD	1-7	Extended Time of Day schedule
TGAR	(NO) YES	Check for Trunk Group Access Restrictions

FEAT = ITGE (Incoming Trunk Exclusion)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	ITGE	Feature = ITGE (Incoming Trunk Exclusion)
ITEI	1-127	Incoming Trunk group Exclusion Index number
RTNO	0-127	Route Number associated with index

FEAT = NAS (Network Attendant Service)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NAS	Feature = NAS (Network Attendant Service)
TBL	(0)-63	NAS routing Table 0 is the customer routing table
ALT	1-7	Attendant Alternative number
ID	x...x	Digits (up to 16) dialed to reach a remote attendant
TODS	1-31	Schedule period to be changed
- PER	hh mm hh mm	The start and stop times for the schedule period
- DAYS	1-7	Days assigned to the currently defined schedule period.
ALST	1-7	Alternatives List
DBK	(N) Y	Drop Back busy option
QUE	(N) Y	Queuing to a route

FEAT = RLB (Route List)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	RLB	Feature = RLB (Route list)
RLI	xxx	Route List Index to be accessed
ENTR	xxx	Entry number for NARS/BARS Route list
LTER	(NO) YES	Local Termination entry
ROUT	0-511	Route number
TDET	(NO) YES	Tone Detector used
- TYPE	aaa	Type of tone detector application (aaa = TIE, CC1, or CC2)
- TONE	a...a	Tone type expected from SCC (a...a = DIAL or SCC)
TOD	0-7	Time of Day schedule
VNS	(NO) YES	Entry is a VNS route
- VDCH	1-15	VNS D-channel number
- VDMI	xxx	VNS Digit Manipulation Index
- VTRK	1-(20)-254	VNS Trunks
CNV	(NO) YES	Conversion to LDN
EXP	(NO) YES	Expensive route
FRL	(0)-7	Facility Restriction Level
DMI	(0)-999	Digit Manipulation Index
ISDM	(0)-255	ISL D-channel Down Digit Manipulation index
FCI	(0)-255	Free Calling Area Screening Index number
FSNI	(0)-1-255	Free Special Number Screening Index
SBOC	aaa	Step Back on Congestion (aaa = (NRR), RRO, or ROA)
- COPT	(1)-2	QSIG Alternate Routing Support Options
IDBB	aaa	ISDN Drop Back Busy (aaa = (DBD), DBA, or DBI)
IOHQ	(NO) YES	ISDN Off-Hook Queuing option
OHQ	(NO) YES	Off-Hook Queuing allowed
CBQ	(NO) YES	Call Back Queuing
ISET	(0)-8	Initial Set
MFRL	aaa	Set Minimum Facility Restriction Level (aaa = (MIN) or 0-7)
OVLL	(0)-24	Overlap Length

FEAT = SCC (Special Common Carrier)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	SCC	Feature = SCC (Special Common Carrier)
MXLC	0-1000	Maximum number of LOC codes (NARS only)
SCCI	(0)-7	Special Common Carrier Index
LDN2	(0)-10	Number of digits in SCC type 2 LDN
RBTD	(0)-30	Ringback Tone Delay time

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AC1	xx xxxx	One or two digit NARS/BARS Access Code 1 One to four digit Flexible Numbering Plan Access Code 1 The access code cannot conflict with the numbering plan.	b/nars-1
AC2	xx xxxx	One or two digit NARS Access Code 2 One to four digit Flexible Numbering Plan Access Code 2 The access code cannot conflict with the numbering plan.	nars-1
ALST	1-7	Attendant Alternatives List (up to 4 for each schedule period) If no attendants are placed on the list, local attendant service is given. Precede with X to remove an alternative attendant. The order of the input determines which entry in the alternative list is being changed. For example, to change the third alternative, both the first and second alternatives must be entered.	nas-15
ALT	1-7 X1-X7 <cr>	Attendant Alternative number Clear the alternative number (zero ID store); allowed only if there is no schedule period associated with it. Stop ALT prompt, go to TODS prompt.	nas-15
CBQ	(NO) YES	Call-Back Queuing not allowed Call-Back Queuing allowed This prompt should not be used with NARS DPNSS1. CBQ is not prompted if LTER = YES.	fcby-1
CDP	(YES) NO	Coordinated Dialing Plan feature for this customer	cdp-1
CNV	(NO) YES	Conversion to LDN required (NARS). Not prompted if route is TKTP = ADM or LTER = YES	nars-1
COPT	(1)	QSIG Alternate Routing is supported for the following causes: — cause 34 "No channel / circuit available" — cause 38 "Network out of order" — cause 42 "Congestion"	

LD 86

Prompt	Response	Comment	Pack/Rel
	2	QSIG Alternate Routing is supported for the following causes: — cause 27 "Destination is out of service" — cause 34 "No channel / circuit available" — cause 38 "Network out of order" — cause 42 "Congestion"	
CTYP	(NCHG) INTL NPA NXX LOC CDP SPN UKWN	Call Type to be used by the manipulated digits. This call type must be recognized by the far-end switch. Call type will not be changed Special number in International format NPA NXX Location Code Coordinated Dialing Plan Special Number other than International Unknown call type	pra-15
CUST	xx	Customer number associated with this function as defined in LD 15	basic-1
DAYS	1-7	Days assigned to the currently defined schedule period To remove days from the schedule period precede the number representing the day with X. Up to 7 entries, separated with a space, may be input (Where: 1 = Monday, 7 = Sunday).	nas-15
DBK	(NO) YES	Drop Back busy option disabled Drop Back busy option enabled Up to four entries one for each of the attendant alternatives in this schedule period. If both sides of the ISDN trunk are set to N the remote node accepts the call and reroutes it, thus one side of the trunk must be set to Y. If a node has all the NAS routes with DBK = Y it will be considered by the network as "Centralized Night DN Node". This permits all other nodes in night to reject all attempts of this specific node, even in night, thus the call can only be inserted in this local night DN que.	nas-15

Prompt	Response	Comment	Pack/Rel
		The order of the response to this prompt must correspond to the order of response to the ALST prompt.	
DEL	(0)-15 (0)-19	Number of leading digits to be Deleted prior to Release 22 Number of leading digits to be Deleted for Release 22	b/nars-1
DLTN	(YES) NO	NARS/BARS Dial Tone after dialing AC1 or AC2 access codes	b/nars-1
DMI	(0) (0)-31 (0)-255 (0)-999	Digit Manipulation Index numbers No digit manipulation required CDP NARS/BARS NARS/BARS with Flexible Numbering Plan (FNP) package 160 The maximum number of Digit Manipulation tables is defined by prompt MXDM. DMI is not prompted if route TKTP = ADM.	b/nars-20
ENTR	0-7 0-31 0-63 0-2 0-6 X0-X63	Entry number for NARS/BARS Route List Prior to Release 13 Release 13 and later Release 15 and later Route list entry number for CDP Release 13 and later To remove an entry	esn-1
ERDT	0-(6)-10	Expensive Route Delay Time (in 2 second intervals)	b/nars-1
ERWT	(YES) NO	Expensive Route Warning Tone Note: ERWT is not supported on TIE trunks. ERWT defaults to of three bursts of tone, but may be modified in LD 56 if Flexible Tones and Cadences (FTC) package 125 is equipped, to indicate that the call will be placed over an expensive route. The user has 3 choices: 1. go On-Hook and abort the call 2. remain On-Hook and accept the call 3. activate Ring Again	b/nars-1

LD 86

Prompt	Response	Comment	Pack/Rel
ETOD	1-7 X1-X7	Extended Time of Day schedule (day(s) of the week for special TOD schedule) Where:1 = Sunday and 7 = Saturday. To remove a day	b/nars-1
EXP	(NO) YES	Expensive route Not prompted if route TKTP = ADM or LTER = YES	b/nars-1
FCI	(0)-127 (0)-255	Free Calling area screening Index number BARS NARS Use 0 if no FCAS is required. Not prompted if route TKTP = ADM.	b/nars-1
FEAT	DGT ESN ITGE NAS RLB SCC	Feature Digit manipulation data block ESN data block Incoming Trunk Group Exclusion data block Network Attendant Service data block Route List data Block Special Common Carrier data block	esn-1
FRL	(0)-7	Facility Restriction Level	b/nars-1
FSNI	(0)-1-255	Free Special Number screening Index	fnp-20
ID	x...x <cr>	Digits (up to 16) dialed to reach a remote attendant Leave ID unchanged, go to ALT prompt.	nas-15
IDBB	(DBD) DBA DBI	ISDN Drop Back Busy Drop Back Disabled (Default for Release 20 and later) Drop Back if All routes busy (Default prior to Release 20) Drop Back if Initial set busy. IDBB appears if ISDN=YES in LD 15	orc/orq-16
INST	x...x x...x y...y	Insert. Where x...x is: • up to 24 leading digits may be Inserted prior to Release 22 • up to 31 leading digits may be inserted for Release 22 and later For Specialized Common Carriers (SCC), up to 23 leading digits may be inserted including: access number, delimiter*, and authorization code.	b/nars-1

Prompt	Response	Comment	Pack/Rel
IOHQ	(NO) YES	ISDN Off-Hook Queuing option Prompted if ISDN = YES in LD 15.	ohq-16
ISDM	(0)-255 (0) (0)-31 (0)-127 (0)-999	ISL D-channel Down Digit Manipulation Index number. Not prompted if route TKTP = ADM or LTER = YES No digit manipulation required CDP NARS/BARS (in Release 17) NARS/BARS with Flexible Numbering Plan (FNP) package 160. When the ISL D-channel goes down, this Digit Manipulation Index is used to perform the Digit Manipulation which includes the ESN access code insertion capability. This is only used when the ISL reverts back to conventional signaling. When the D-channel is up the existing DMI is used to perform digit manipulation. This DMI is only used when the ISL D-channel is down. Any valid DMI can be entered. The ISDM is intended to be a DMI which inserts an ESN access code.	is1-17
ISSET	(0)-8 (0)-64	Initial Set. Number of entries in Initial Set for route list block. Initial Set. Release 13 and later	b/nars-1
ITEI	1-127 1-255	Incoming Trunk group Exclusion Index BARS NARS	b/nars-5
LDN2	(0)-10	Number of digits in SCC type 2 LDN	b/nars-1
LTER	(NO) YES	Local Termination entry	fgd-17
MFRL	(MIN) 0-7	Set Minimum Facility Restriction Level used to determine autocode prompting. Use default of MIN to set to the minimum FRL value.	b/nars-1
MSCC	0-7	Maximum number of Special Common Carrier (SCC) entries	nars-1

LD 86

Page 1072 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
MXDM		Maximum number of Digit Manipulation tables (you must count Table 0 for the system)	esn-1
	0-32	CDP	
	0-256	NARS/BARS	
	0-1000	NARS/BARS with Flexible Numbering Plan (FNP) package 160 equipped	
MXFC		Maximum Free Calling area screening tables	b/nars-1
	0-127	BARS	
	0-255	NARS	
		Prompted when NARS/BARS equipped	
MXFS	0-255	Maximum number of Free Special Number Screening tables	b/nars-1
MXIX		Maximum number of Incoming Trunk Group Exclusion tables (use "0" if not required)	b/nars-5
	0-127	BARS	
	0-255	NARS	
MXLC	0-999	Maximum number of LOC codes (NARS only)	nars-1
MXRL		Maximum number of Route Lists	esn-1
		If MXRL = 0, the system will not allow the creation of any route lists.	
	0-32	CDP	
	0-128	CDP (Release 13 and later)	
	0-128	BARS	
	0-256	NARS	
	0-1000	NARS with Flexible Numbering Plan (FNP) package 160 equipped	
MXSC	0-5000	Maximum number of Steering Codes prior to Release 13	cdp-1
	0-10000	Maximum number of Steering Codes for Release 13 and later in North America	
MXSD		Maximum Supplemental Digit restriction blocks	b/nars-1
	0-32	BARS	
	0-128	BARS Release 4	
	0-256	BARS Release 5 and later	
	0-256	NARS	
	0-512	NARS Release 5 and later	
	(0)-1500	Range for both BARS and NARS in Release 22 and later	

Prompt	Response	Comment	Pack/Rel
NCDP		Define DN length for CDP A Coordinated Dialing Plan (CDP) consists of the CDP code and the Directory Number (DN). This dialing plan does not need an access code because the CDP code is part of the internal dialing plan. The CDP code is one of the following: the Distant Steering Code (DSC) or the Local Steering Code (LSC)	cdp-1
	3-7 3-10	Number of digits in CDP DN (DSC + DN or LSC + DN) Number of digits in CDP DN with Directory Number Expansion (DNXP) package 150	
NMAP	xx yy	NCOS Map (NCOS numbers to be applied for routing controls). Where: - xx = current NCOS number - yy = NCOS number to be applied for BARS/CDP or NARS when routing control is in effect. NCOS ranges: 0-3 with CDP 0-7 with BARS/NFCR 0-15 with NARS 0-99 with Release 13 and later	ncos-1
OHQ	(NO) YES	Off-Hook Queuing not allowed Off-Hook Queuing allowed This prompt should not be used with NARS DPNSS1. OHQ is not prompted if LTER = YES.	bars-1
OVLL	(0)-16 (0)-24	Overlap Length (prior to Release 22) Overlap Length (Release 22 and later) Number of digits dialed (after the ESN access code) before SETUP message is sent or outpulsing begins. If OVLL = 0, Overlap Sending is controlled by the number of digits in the ESN or CDP steering codes (e.g. FLEN).	ovlp-16
PER	hh mm hh mm	The start and stop times for the schedule period (the start time must be less than the stop time)	

LD 86

Prompt	Response	Comment	Pack/Rel
QUE	(NO) YES	Queuing to a route disabled Queuing to a route enabled Up to four entries one for each of the attendant alternatives in this schedule period. The order of the response to this prompt must correspond to the order of response to the ALST prompt.	
RBTD	(0)-30	Ringback Tone Delay time in seconds for SCC (only even numbers will be accepted)	nars-1
REQ	CHG END LCHG NEW OUT PRT	Request Change existing data block. Exit Overlay program. Print date and time that each data group was last changed (data groups include: ESN, DGT, NAS, RLB, SCC, and ITGE) Create new data block. Remove data block. Print data block.	esn-1
RLI	0-31 0-127 0-255 0-999	Route List Index to be accessed CDP CDP (Release 13 and later) and BARS NARS FNP	esn-20
ROUT	0-511	Route number Not prompted if LTER = YES.	esn-1
RTCL	(DIS) YES	Disable Routing Controls. Enable or modify Routing Controls.	esn-1
RTNO	0-511	Route Number associated with index Precede with X to delete an existing route.	b/nars-5
SBOC	(NRR) RRO RRA	Step Back on Congestion No Reroute Reroute if originating node, step back if transit node. Reroute all.	dpnss1-16
SCCI	(0)-7	Special Common Carrier Index into the SCC data table Use "0" if not required.	nars-1

Prompt	Response	Comment	Pack/Rel
TBL	(0)-63	NAS routing table. 0 is the customer routing table. It is also associated with Attendant Console Group 0.	nars-16
TDET	(NO) YES	Tone Detector used Not prompted if route TKTP = ADM or LTER = YES.	nars-1
TGAR	(NO) YES	Check for Trunk Group Access Restrictions Ignore TGAR/TARG when call is placed through BARS. Examine TGAR/TARG when call is placed through BARS.	esn-1
TOD	0-1 0-7	Time of Day schedule CDP NARS/BARS Precede with X to turn off schedule.	esn-1
TODS	1-31 0 0-1 0-7 0-7 hh mm hh mm 0-1 hh mm hh mm X1-X31 X0 <cr>	Time of Day schedule Schedule period to be changed. Catch-all period. Start and stop times are not relevant for this period. The next prompt is ALST. CDP NARS/BARS Schedule number, start hour, start minute, end hour, end minute for NARS/BARS. Schedule number, start hour, start minute, end hour, end minute for CDP. Remove the schedule period Remove/clear all alternatives associated with period 0. This leaves the catch-all treatment as local attendant treatment. End NAS feature data setup and return to REQ prompt.	esn-1
TONE	SCC DIAL	SCC dial tone type expected Normal dial tone type expected	nars-1
TYPE	CC1 CC2 TIE	SCC Type 1 tone detector application SCC type 2 tone detector application On-network call tone detector application	
VDCH	1-15	VNS D-channel number	vn-16
VDMI	(0)	VNS Digit Manipulation Index number for the D-channel (ESN routing) No digit manipulation required	vn-16

LD 86

Prompt	Response	Comment	Pack/Rel
	1-31	CDP	
	1-255	NARS/BARS	
	0-999	With Flexible Numbering Plan (FNP) package 160	
VNS	(NO) YES	Entry is a VNS route Prompted for DID,TIE and CO.	vns-16
VTRK	1-(20)-100	VNS Trunks (maximum number of VNS Trunks to be used by this route list entry)	vns-16
	1-(20)-254	VTRK range for Release 22	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 87: Electronic Switched Network 2

Overlay program 87 allows data which define the NARS/BARS/CDP features to be created, modified and printed.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by feature :</i>	
FEAT = CDP (Coordinated Dialing Plan)	1078
FEAT = FCAS (Free Calling Area Screening)	1079
FEAT = FSNS (Free Special Number Screening)	1079
FEAT = NCTL (Network Control)	1080

FEAT = CDP (Coordinated Dialing Plan)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	CDP	Feature = CDP (Coordinated Dialing Plan)
TYPE	aaa	Type of steering code (aaa = LSC, DSC, or TSC)
LSC	x...x	Local Steering Code
- DMI	0-31	Digit Manipulation Index for LSC
- DEL	0-4	Number of digits to be deleted
DSC	x...x	Distant Steering Code
- FLEN	(0)-24	Flexible Length number of digits
- DSP	aaa	Display (aaa = LSC, LOC, or DN)
- RRPA	(NO) YES	Remote Radio Paging Access
- RLI	xxx	Route List to be accessed for Distant Steering Code
TSC	x...x	Trunk Steering Code
- FLEN	(0)-24	Flexible Length number of digits
- ITOH	(NO) YES	Inhibit Time-out option
- RLI	0-999	Route List to be accessed for trunk steering code

FEAT = FCAS (Free Calling Area Screening)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	FCAS	Feature = FCAS (Free Calling Area Screening)
FCI	xxx	Free Calling Area Screening Index number
NPA	xxx	Three-digit NPA code to be screened
NXX	aaaa	NXX codes for NPA (aaaa = DENY or ALLOW)
- DENY	xxx xxx	NXX code or range of codes to be Denied
- ALLOW	xxx xxx	NXX code or range of codes to be Allowed

FEAT = FSNS (Free Special Number Screening)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	FSNS	Feature = FSNS (Free Special Number Screening)
FSNI	1-255	Free Special Number screening Index
SPN	x...x	Special Number code to be screened
XXX	aaaa	Routing codes (aaaa = DENY or ALLOW)
- DENY	xxx xxx	Routing code or range of codes to be Denied
- ALLOW	xxx xxx	Routing code or range of codes to be Allowed

FEAT = NCTL (Network Control)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NCTL	Feature = NCTL (Network Control)
SOHQ	(NO) YES	Off-Hook Queuing option
- OHTL	2-(10)-60	Off-Hook Queue Time Limit
SCBQ	(NO) YES	Call-Back Queuing option
- CBTL	10-(20)-30	Call-Back Queue Time Limit
- RANE	0-511	RAN route number for CBQ offer to ESN stations
- RANC	0-511	RAN route number for CBQ offer to Conventional main
NRNG	0-99 1-99	NCOS Range
NCOS	(0)-99	Network Class of Service group number
ARDL	a	ARDL network route selection is allowed from both initial and extended route sets or only the initial route set (a = (A) or I)
- EQA	(NO) YES	Equal Access associated with this NCOS group
- FRL	(0)-7	Facility Restriction Level
- RWTA	(NO) YES	Expensive Route Warning Tone
- NSC	(NO) YES	Network Speed Call access allowed
- - LIST	0-253	List numbers to which System Speed Call has access
- OHQ	(YES) NO	Off-Hook Queuing eligibility
- CBQ	(NO) YES	Call Back Queuing eligibility
- RETT	2-(10)-30	Remote Virtual Queuing Retry Timer
- RETC	4-(5)-16	Remote Virtual Queuing Retry Counter
- - ROUT	a	Call Back Queuing on Initial or All Routes (a = (I) or A)
- - RADT	(0)-30	Route Advance Timer
- SPRI	(0)-3	Starting Priority in CBQ
- MPRI	(0)-3	Maximum Priority attainable in CBQ
- PROM	(0)-30	Priority Promotion timer
TOHQ	0-7	TCOS OHQ eligibility

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ALOW	xxx xxx <cr>	Routing code (NXX) code or range of codes to be allowed Stop ALOW prompt	b/nars-20
ARDL	(A) I	ARDL network route selection is allowed from ALL (both initial and extended) route sets ARDL network route selection is only allowed from initial route set	ardl-22
CBQ	(NO) YES	Call Back Queuing eligibility	bque-1
CBTL	10-(20)-30	Call Back Queue Time Limit (in 2 second increments) This is the time in which the user must respond to Ring Again feature to accept the CBQ call. Applies to multi-line sets only.	b/nars-1
CUST	0-99	Customer number associated with this function as defined in LD 15	esn-1
DEL	0-4 0-7	Number of digits to be Deleted Up to 7 digits with Directory Number Expansion (DNXP) package 150	cdp-1
DENY	xxx xxx <cr>	Routing (NXX) code or range of codes to be denied Stop DENY prompt.	b/nars-20
DMI	0-31 0-999	Digit Manipulation Index for LSC With Flexible Numbering Plan (FNP) package 160	b/nars-20
DSC	xxxx	Distant Steering Code Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Release 19 and later this is reprompted until <CR> is entered.	cdp-19
DSP	(LSC) HLOC DN	Display Local Steering Code Home Location code Directory Number to be used for CLID Prompted with Flexible Numbering Plan (FNP) package 160 and ISDN are equipped.	fnp-20
EQA	(NO) YES	Equal Access associated with this NCOS group	eqa-18

LD 87

Prompt	Response	Comment	Pack/Rel
FCI	1-127 1-255	Free Calling area screening Index number BARS NARS Table 0 is network reserved to indicate that no FCAS is applied.	b/nars-1
FEAT	CDP FCAS FSNS NCTL	Feature Coordinated Dialing Plan Free Calling Area Screening Free Special Number Screening (allowed with Flexible Numbering Plan (FNP) package 160) Network Control	esn-1
FLEN	(0)-24	Flexible Length number of digits Prompted with Flexible Numbering Plan (FNP) package 160. Prior to Release 22, FLEN can be up to 16 digits. For Release 22, FLEN can be up to 24 digits.	fnp-20
FRL	(0)-7	Facility Restriction Level FRL is assigned to each NCOS. It determines the entries in a Route List (RLI) to which it has access. 0 is the most restrictive, 7 is the least restrictive and can access more entries.	b/nars-1
FSNI	1-255	Free Special Number screening Index	fnp-20
ITOH	(NO) YES	Inhibit Time-out option	fnp-20
LIST	0-253 0-4095 <cr>	List numbers to which System Speed Call has access Release 13 and later All lists Precede with X to remove SSC list.	ssc-2
LSC	xxxx	Local Steering Code Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. With X11 Release 19 and later this is reprompted until <CR> is entered.	cdp-19
MPRI	(0)-3	Maximum Priority attainable in CBQ	bque-1

Prompt	Response	Comment	Pack/Rel
NCOS	(0)-3 (0)-7 (0)-15 (0)-99	Network Class of Service group number CDP BARS/CDP and NFCR NARS and NFCR Release 13 and later	ncos-1
NPA	xxx	Three-digit NPA code to be screened (the first digit must be 2-9; the second and third digits can be 0-9). Omit the "1" in 1 + NPA format. With X11 release 18 and earlier, the allowed response is 100-999. With X11 release 19 and later, the allowed responses are 200-999. Only 3 digits are allowed, even when using 1 + dialing. BARS allows up to 7 NPA codes per table with a maximum of 800 NXX codes each. With Release 19 and later, allow up to 15 NPA codes per table with BARS. NARS allows up to 15 NPA codes per table with a maximum of 800 NXX codes each.	nanp-19
	xxx yyy	Area code or extended NPA code translation (Release 20). Where xxx & yyy = 200 - 999. FCAS accepts only three digits for the NPA, even if 1 + dialing in use.	
NRNG	0-99 1-99 <cr>	NCOS Range (starting and ending number for NCOS printing) Pressed without defining the ending number, then only the NCOS with the starting number defined is printed. For Release 14 and later. Prompted when REQ = PRT.	ncos-14
NSC	(NO) YES	Network Speed Call access allowed	nsc-2
NXX	DENY ALLOW	NXX codes to be denied for NPA NXX codes to be allowed for NPA	b/nars-1
OHQ	(YES) NO	Off-Hook Queuing eligibility	ohq-1

Prompt	Response	Comment	Pack/Rel
OHTL	2-(10)-60	Off-Hook Queue Time Limit (in 2 second increments) This is the maximum amount of time a user will remain off-hook for OHQ before it times out. After timeout the system searches once before going to Network Blocking Intercept treatment. If an odd number is entered, it is rounded up to the next even number.	b/nars-1
PROM	(0)-30	Priority Promotion timer (in 30 second increments, where: 1 = 30 seconds and 30 = 15 minutes)	pque-1
RADT	(0)-30	Route Advance Timer (in 30 second increments, where: 1 = 30 seconds and 30 = 15 minutes)	bque-1
RANC	0-511	RAN route number for CBQ offer to Conventional main Enter X to remove RAN route.	nars-1
RANE	0-511	RAN route number for CBQ offer to ESN stations Enter X to remove RAN route.	nars-1
REQ	CHG END LCHG NEW OUT PRT	Request Change existing data block Exit Overlay program Print date and time that each data group level was last changed (data groups include: NCTL, FCAS, FSNS, LSC, DSC, and TSC) Create new data block Delete existing data block Print data block	esn-1
RETC	4-(5)-16	Remote Virtual Queuing Retry Counter. This is the number of times the initial set should be searched before the scanning includes the extended set. Once the retry counter threshold is met, each node in the network searches its extended set.	rvq-18
RETT	2-(10)-30	Remote Virtual Queuing Retry Timer in seconds. This is the number of seconds between forward scanning attempts.	rvq-18

Prompt	Response	Comment	Pack/Rel
RLI	0-31 0-127 0-255 0-999	Route List accessed for trunk or distant steering code CDP BARS NARS Flexible Numbering Plan (FNP) (X11 Rel 20 & later)	cdp-20
ROUT	(I) A	Call Back Queuing on Initial routes The system offers queuing only after examining ISET (Initial Set) entries. Call Back Queuing on All routes The system examines all entries in the route list, both ISET (Initial Set) and ESET (Extended Set) before offering queuing.	bque-2
RRPA	(NO) YES	Remote Radio Paging Access (Remote Radio Paging FFC is being used). Prompted if a CDP, TSC or DSC is being added or changed.	rpa-20
RWTA	(NO) YES	Expensive Route Warning Tone	b/nars-1
SCBQ	(NO) YES	Call Back Queuing option	b/nars-1
SOHQ	(NO) YES	Off-Hook Queuing option	b/nars-1
SPN	x...x	Special Number code to be screened. SPN can be 1 to 11 digits prior to Release 22. SPN can be 1 to 19 digits for Release 22 and later.	fnp-20
SPRI	(0)-3	Starting Priority in CBQ	pque-2
TOHQ	0-7 <cr>	TCOS OHQ eligibility Which TCOS (i.e., FRL) are OHQ eligible (Up to 8 entries). No TCOS are OHQ eligible Precede with X to remove OHQ eligibility from a TCOS.	b/nars-1
TSC	xxxx	Trunk Steering Code Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. With X11 Release 19 and later this is reprompted until <CR> is entered.	cdp-19

LD 87

Prompt	Response	Comment	Pack/Rel
TYPE	LSC	Local Steering Code	fnp/ cdp-20
	DSC	Distant Steering Code	
	TSC	Trunk Steering Code	
	FSNS	Free Special Number Screening Index (x11 release 20 & later)	
	ALL	All steering codes	
XXX	DENY	Routing codes to be denied	fnp-20
	ALLOW	Routing codes to be allowed	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 88: Authorization Code

Overlay program 88 allows data for Basic Authorization Code (BAUT) and Network Authorization Code (NAUT) to be created, modified and printed.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
AUB or RAUB: Authcode or Room Authcode data block	1088
AUT : Authcode entries data block	1089
SAR: Scheduled Access Restriction data block	1089

AUB or RAUB: Authcode or Room Authcode data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	aaaa	Type = AUB (Authcode) or RAUB (Room Authcode)
CUST	0-99	Customer number associated with this function
SPWD	xxxx	Secure Data Password
ALEN	1-14	Authcode Length
ACDR	NO YES	Activate CDR for authcodes
AUTHCOD_ALARM	(OFF) ON	Authcode Alarm
RANR	0-511	RAN Route number
ACLE	(NO) YES	Authorization Code Conditionally Last Enhancement
BRST	0-(10)	Number of initial bursts of tone to be given
RTRY	(NO) YES	(Disable) Enable Authcode - last Retry
- RAN2	0-511	Route number for Authcode - last Retry RAN
CLAS	(0)-115	Class code value assigned to authcode (NAUT)
- COS	a...a	Class of Service (a...a = (CTD), CUN, FR1, FR2, FRE, SRE, TLD, UNR, IPNA, or IRGA)
- TGAR	0-(1)-31	Trunk Group Access Restriction
- NCOS	(0)-99	Network Class of Service
AUTO	YES NO	Automatically generate authcodes
- SECR	0000-9999	Security password (NAUT)
- NMBR	1-20000	Number of authcodes to be generated automatically

- CLAS (0)-115 Class code to be automatically assigned

AUT : Authcode entries data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	AUT	Type = AUT (Authcode entries)
CUST	0-99	Customer number associated with this function
SPWD	xxxx	Secure Data Password
CODE	xxxx	Authcode
SARC	NO YES	Scheduled Access Restriction (SAR) Code
- SERV	nnn...nnn	SAR Service functions for SARC
- SGRP	0-999	SGRP number
CLAS	(0)-115	Class code
SECR	0000-9999	Security password

SAR: Scheduled Access Restriction data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	SAR	Type = SAR (Scheduled Access Restriction)
CUST	0-99	Customer number associated with this function
SPWD	xxxx	Secure Data Password
SGRP	0-999	SAR Group number
SCDR	(NO) YES	Activate CDR for the SAR code feature
OFFP	1-8	Off-hour Period number
- STAR	hh mm	Start time
- STOP	hh mm	Stop time
- DAYS	d ... d	Respond with a new set of days to be used
- COS	a...a	Class of Service (a...a = (CTD), CUN, FR1, FR2, FRE, SRE, TLD, UNR, IPNA, or IRGA)

LD 88

- TGAR	0-(1)-31	Trunk Group Access Restriction
- NCOS	(0)-99	Network Class of Service
ICR	(NO) YES	Incoming Calls are Restricted.
LOCK	(1)-8	Lock period

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ACDR	(NO) YES	Activate CDR for authcodes. There is no default.	cdr-1
ACLE	(NO) YES	Authorization Code Conditionally Last Enhancement	nars-24
ALEN	1-4 1-7 1-14	Authcode Length (all authcodes are the same length). Room Authcode NAUT BAUT and Release 13 and later	baut-1
AUTHCOD	ALRM (OFF) ON	Disable Authcode Alarm Enable Authcode Alarm	basic-21
AUTO	YES NO	Automatically generate authcodes. Prompted when Network Authorization Code (NAUT) package 63 is equipped and REQ = "NEW". ALEN must be a minimum of four digits.	naut-1
BRST	0-(10)	Number of initial bursts of tone to be given	nars-24
CLAS	(0)-115 X <cr>	Class code value assigned to authcode. Cycle continues with CODE. Prompted when SARC = NO. When TYPE = "AUT", enter X to have authcode be an exempt code. When this data is printed, the month in which authcode was deactivated is output. Default is "0" when adding authcode entries. Exempt authcode End of input	baut-1
CODE	xxxx ALL	Authcode (number of digits must equal the ALEN response). May be used to delete Authcodes if Network Authorization Code (NAUT) package 63 is equipped and codes were automatically generated.	baut-1
COS	(CTD) CUN FR1 FR2 FRE	Class of Service Conditionally Toll Denied Conditionally Unrestricted Fully Restricted class 1 Fully Restricted class 2 Fully Restricted	baut-1

LD 88

Page 1092 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	SRE TLD UNR	Semi-Restricted Toll Denied Unrestricted	
CUST	xx	Customer number associated with this function as defined in LD 15	esn-1
DAYS	d...d	Respond with a new set of days to be used (a maximum of seven entries in range 1-7)	sar-20
ICR	(NO) YES	Incoming Calls are Restricted.	sar-20
LOCK	(1)-8	Lock period	sar-20
NCOS		Network Class of Service (enter the new NCOS that will replace the NCOS of the station).	baut-1
	0-3 0-7 0-15 0-99	CDP BARS/CDP and NFCR NARS and NFCR Release 13 and later	
NMBR	1-20000 1-50000	Number of authcodes to be generated automatically Release 14 and later To generate up to 50,000 authcodes, the maximum entry at NMBR is 5000 each time it is prompted.	baut-1
OFFP	1-8 <cr>	Off-hour Period number Go to ICR prompt.	sar-20
RANR	0-511 X	RAN route number for "Authcode Last" prompt (NAUT) No RAN route	naut-1
RAN2	0 - 511 X	Route number for Authcode - last Retry RAN Removes and deactivates Authcode-last Retry RAN	dpna-21
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Create new data block Delete existing data block Print data block	baut-1
RTRY	(NO) YES	Disable authcode - last Retry. Enable authcode - last Retry.	dpna-21

Prompt	Response	Comment	Pack/Rel
		Prompted with Direct Private Network Access (DPNA) package 250.	
SARC	NO YES	Scheduled Access Restriction (SAR) Code is to be a Scheduled Access Restriction (SAR) authorization code.	sar-20
SCDR	(NO) YES	Activate CDR for the SAR code feature.	sar-20
SECR	0000-9999	Security password as entered during AUTO sequence Prompted when CODE = ALL. Cycle continues with CODE.	baut-1
SERV		SAR Service functions for SARC	sar-20
	(END) ENA	Enable Denied Enable Allowed	
	(LKD) LKA	Lock Denied Lock Allowed	
	(DSD) DSA	Disable Denied Disable Allowed	
	(UND) UNA	Unlock Denied Unlock Allowed	
		Up to four entries can be made at once.	
SGRP	0-999 ALL <cr>	Scheduled Access Restriction group (SGRP) number Authorization code is to be a customer SARC. End of SAR changes, return to REQ.	sar-20
SPWD	xxxx	Secure Data Password (same password as defined for DISA on a per customer basis in LD 15). Prompt will not appear to user with a LAO password.	baut-1
STAR	hh mm	Start time	sar-20
		The current start time (hours and minutes) is printed individually after the prompt. Respond with the new start time.	
	X	Remove value and return to OFFP.	

LD 88

Prompt	Response	Comment	Pack/Rel
STOP	hh mm	Stop time The current stop time (hours and minutes) is printed individually after the prompt. Respond with the new stop time.	sar-20
	X	Remove value and return to OFFP.	
TGAR	(0)-15	Trunk Group Access Restriction range: prior to Release 13	baut-1
	(0)-31	TGAR range: Release 13 to 21	
	0-(1)-31	TGAR range: Release 22 and later	
TYPE		Type of data block	baut-1
	AUB	Authcode data block	
	AUT	Authcode entries data block	
	RAUB	Room Authcode data block (Hospitality Management)	
	SAR	Scheduled Access Restriction data block	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 90: Electronic Switched Network 3

Overlay program 90 allows data for network translation tables to be generated and administered.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
HLOC: Home Location data block (NARS only)	1096
HNPA: Home Number Plan area code data block	1097
LOC: Location code data block (NARS only)	1097
NPA: Number Plan area code data block	1098
NSCL: Network Speed Call List data block	1099
NXX : Central Office Code Translation data block	1099
SPN: Special Number Translation data block	1100

HLOC: Home Location data block (NARS only)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	HLOC	Type = HLOC (Home Location code)
HLOC	xxx y..y	Home Location code, where xxx = home location code and y...y = extended code of 1-4 digits. The extended code is optional.
- DMI	1-255	Digit Manipulation Index

HNPA: Home Number Plan area code data block

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	HNPA	Type = HNPA (Home Number plan area code transmission)
HNPA	xxx	Home Numbering Plan Area code where xxx = 200 - 999
	1xxx	Home Numbering Plan Area code using 1+ dialing, where xxx = 200 - 999.

LOC: Location code data block (NARS only)

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	LOC	Type = LOC (Location code)
LOC	xxx y..y	Location code, where xxx = home location code and y..y = extended code of 1-4 digits. The extended code is optional.
- FLEN	(0)-24	Flexible Length
- RLI	xxx	Route List Index
- ITOH	(NO) YES	Inhibit Time Out Handler
- ITEI	xxx	Incoming Trunk group Exclusion Index
- LDN	xx...xx	Listed Directory Number
- DID	(NO) YES	Direct Inward Dial (DID)
- - MNXX	(NO) YES	Multiple NXX
- - SAVE	1-4	Saved digits
- - - OFFC	xxx	Office

-- RNGE 0-9999 0-9999 Range

NPA: Number Plan area code data block

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	NPA	Type = NPA (Number plan area code transmission)
NPA	xxx y..y z..z	Numbering Plan Area code translation, where xxx = 3 digits, y..y = 1-3 digits, and z..z = 1-4 digits. the y..y and z..z entries are optional. Precede the xxx entry with the character "1" when using 1+ dialing.
- RLI	xxx	Route List Index
- SDRR	a...a	Supplemental Digit Restriction or Recognition (a...a = ALLOW, DDD, DENY, DID, ITED, LDDD, LDID, or STRK)
- - DENY	x...x	Number to be denied within the NPA
- - DMI	1-255	Digit Manipulation Index
- - - LDID	x...x	Local DID number to be recognized
- - LDDD	x...x	Local DDD number to be recognized
- - DID	x...x	Remote DID number to be recognized
- - DDD	x...x	Remote DDD number to be recognized
- - ITED	x...x	Incoming Trunk group Exclusion Digits
- - ALLOW	x...x	Allowed codes
- ITEI	xxx	Incoming Trunk group Exclusion Index

NSCL: Network Speed Call List data block

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	NSCL	Type = NSCL (Network Speed Call List)
- ITEI	xxx	Incoming Trunk group Exclusion Index
NSSC	xxx	Network Speed Call access Code
- SSCL	0-253	System Speed Call List number

NXX : Central Office Code Translation data block

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	NXX	Type = NXX (Central Office Code Translation)
NXX	xxx y..y	Numbering Plan Exchange (Central Office)
- RLI	xxx	Route List Index
- SDRR	a...a	Supplemental Digit Restriction or Recognition (a...a = ALLOW, DDD, DENY, DID, ITED, LDDD, LDID, or STRK)
- - DENY	x...x	Number to be denied within the NXX
- - DMI	1-255	Digit Manipulation Index
- - - LDID	x...x	Local DID number to be recognized
- LDDD	x...x	Local DDD number to be recognized
- - DID	x...x	Remote DID number to be recognized
- - DDD	x...x	Remote DDD number to be recognized
- - ITED	x...x	Incoming Trunk group Exclusion Digits
- - ALLOW	x...x	Allowed codes
- ITEI	xxx	Incoming Trunk group Exclusion index

SPN: Special Number Translation data block

Prompt	Response	Comment
REQ	a...a	Request (a...a = CHG, END, LCHG, NEW, OUT, or PRT)
CUST	xx	Customer number associated with this function
FEAT	NET	Feature = NET
TRAN	aaa	Translator (aaa = AC1, AC2, or SUM)
TYPE	SPN	Type = SPN (Special Number Translation)
SPN	x..x	Special Number translation
- FLEN	(0)-24	Flexible Length
- - INPL	(NO) YES	International Dialing Plan
- ITOH	(NO) YES	Inhibit Time-out Handler
- RLI	xxx	Route List Index
- CLTP	a...a	Type of call that is defined by the special number (a...a = (NONE), LOCL, NATL, INTL, SSER, or SERH)
- SDRR	a...a	Supplemental Digit Restriction or Recognition (a...a = ALLOW, ARRN, DDD, DENY, DID, ITED, LDDD, LDID, or STRK)
- - DENY	x...x	Number to be Denied
- - DMI	1-255	Digit Manipulation Index
- - - LDID	x...x	Local DID number to be recognized
- - LDDD	x...x	Local DDD number to be recognized
- - DID	x...x	Remote DID number to be recognized
- - DDD	x...x	Remote DDD number to be recognized
- - ITED	x...x	Incoming Trunk group Exclusion Digits
- - ARRN	x...x	Alternate Routing Remote Number
- - STRK	x...x	Allowed codes for ADM/MDM
- - ALLOW	x...x	Allowed codes
- - - ARLI	0-255 0-999	Alternative Route List Index

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ALLOW	x...x	Allowed codes for ADM/MDM to be recognized within the NXX, NPA or SPN The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	basic-22
ARLI	0-255 0-999	Alternative Route List Index Alternative Route List Index with Flexible Numbering Plan (FNP) package 160. The ARRN prompt is repeated after the ARLI prompt until <cr> is entered (in response to ARRN).	fnp-16
ARRN	x...x	Alternate Routing Remote Number to be recognized within SPN. The maximum number of digits to be entered must be the lesser of 10 or 19-m for SPN. Where: m = number of digits entered for SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	fnp-16

LD 90

Prompt	Response	Comment	Pack/Rel
CLTP	(NONE) LOCL NATL INTL SSER SERH	Type of call that is defined by the special number. No call type Local National International Special Service Special Service Hold	kd3-20
CUST	xx	Customer number associated with this function as defined in LD 15.	b/nars-1
DDD	x...x	Remote DDD number to be recognized within the NPA, NXX or SPN. The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked. <cr>Return to SDRR prompt.	b/nars-5

Prompt	Response	Comment	Pack/Rel
DENY	x...x	Number to be denied within the NPA,NXX,SPN, or SDR. The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	b/nars-1
	<cr>	Return to SDRR prompt.	
DID	(NO) YES	Direct Inward Dial (DID) This location arranged for DID.	
DID	x...x	Remote DID number to be recognized within the NPA,NXX or SPN. The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked. Precede with X to remove.	bnars-1
	<cr>	Return to SDRR prompt.	

LD 90

Prompt	Response	Comment	Pack/Rel
DMI	1-255 1-999	Digit Manipulation Index (Release 13 and later) Digit Manipulation Index with Flexible Numbering Plan (FNP) package 160 DMI is only prompted when the Directory Number Expansion (DNXP) package 150 is equipped and SDRR = LDID.	dnxp-13
FEAT	NET	Feature Network translation tables	nars-1
FLEN	(0)-16 (0)-24	Flexible Length (the number of digits the system expects to receive before accessing a trunk and outputting these digits) Flexible Length range prior to Release 22 Flexible Length range for Release 22	fnp-20
HLOC	xxx xxx y..y	Home Location code xxx = 3 digits Extended Home Location code, where xxx = 3 digits and y..y = 1-4 digits. Separate the xxx and y..y with a space.	nars-1
HNPA	xxx 1xxx	Home Numbering Plan Area code (a leading zero is not allowed) Response for Home Numbering Plan Area code, where xxx = 200-999. A leading zero is not allowed. Response for Home Numbering Plan Area code using 1+ dialing, where xxx = 200-999. Note that the xxx entry must be preceded with the character "1".	nanp-19
INPL	(NO) YES	International Dialing Plan for special number Default to North American operation when FLEN = 0. Prompted with Flexible Numbering Plan (FNP) package 160, FLEN = 0 and SPN = 0, 00, 01, 011, 411, 611, 911, 800, 1800.	

Prompt	Response	Comment	Pack/Rel
ITED	x...x	Incoming Trunk group Exclusion Digits (number to be restricted within the NPA for the excluded trunk group) The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	b/nars-1
	<cr>	Return to SDRR prompt	
ITEI	(0)-127 (0)-255	BARS Incoming Trunk group Exclusion Index NARS Incoming Trunk group Exclusion Index	b/nars-5
ITOH	(NO) YES	Inhibit Time-Out Handler	fnp-16
LDDD	x...x	Local DDD number to be recognized within the NPA, NXX, or SPN The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	b/nars-5
	<cr>	Return to SDRR prompt	

LD 90

Prompt	Response	Comment	Pack/Rel
LDID	x...x	Local DID number to be recognized within the NXX, NPA or SPN. The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	b/nars-5
	<cr>	Return to SDRR prompt	
LDN	xx...xx	Listed Directory Number Up to 10 digit listed directory number, including NPA.	
LOC	x...x xxx y..y	Location code , where xxx = 3 digits Extended Location code, where xxx = 3 digits and y..y = 1-4 digits. Separate xxx and y..y entries with a space.	nars-1
MNXX	(NO) YES	Multiple NXX codes and ranges This prompt should not be used with NARS DPNSS1.	b/nars-5
NPA	xxx xxx y..y z..z 1xxx 1xxx y..y z..z	Numbering Plan Area code translation Area code translation, where xxx = 3 digits. A leading zero is not allowed. Extended NPA code translation. An extended NPA code can be from 4 to 10 digits, where xxx = 3 digits, y..y = 1-3 digits and z..z = 1-4 digits. Separate xxx, y..y and z..z entries with a space. Area code translation using 1+ dialing, where xxx = 3 digits. Note that the xxx entry must be preceded with the character "1". Extended NPA code translation 1+ dialing. An extended NPA code using 1+ dialing can be from 5 to 11 digits, where xxx = 3 digits, y..y = 1-3 digits and z..z = 1-4 digits. Separate xxx, y..y and z..z entries with a space. Note that the xxx entry must be preceded with the character "1".	nanp-19

Prompt	Response	Comment	Pack/Rel
NSCC	xxx	One to three-digit Network Speed Call access Code	nars-1
NXX		Numbering Plan Exchange	b/nars-1
	xxx	Office code translation, where xxx = 3 digits. A leading zero is not allowed.	
	1xxx	Office code translation using 1+ dialing, where: xxx = 3 digits. The xxx entry must be preceded with the digit "1".	
	xxx y..y	Extended NXX code, where xxx = 3 digits and y..y = 1-4 digits. Separate the NXX code (xxx) and the extended	
	1xxx y..y	Extended NXX code using 1+ dialing, where xxx = 3 digits and y..y = 1-4 digits. Separate the NXX code (xxx) and the extended code (y..y) with a space. The xxx entry must be preceded with the digit "1".	
	<cr>	Return to REQ.	
OFFC	xxx	Office (NXX of the DID number) Prompted if MNXX = YES.	b/nars-5
REQ		Request.	esn-1
	CHG	Change existing data block.	
	END	Exit Overlay program.	
	LCHG	Print date and time that each data group was last changed (data groups include: LOC, HLOC, NPA, HNPA, NXX, SPN and NSCL)	
	NEW	Create new data block.	
	OUT	Delete existing data block.	
	PRT	Print data block.	
RLI	0-127 0-255 0-999	BARS Route List Index NARS Route List Index Flexible Numbering Plan (FNP) Route List Index Must be in the range specified by prompt MXRL in LD 86, (i.e., 0 ≤ RLI < MXRL).	esn-20
RNGE	0-9999 0-9999	Range (upper and lower limit for DID number range) Inputs must be the same number of digits as the number of trailing digits to be saved.	b/nars-1
SAVE	1-4	Saved digits (number of trailing digits to be saved in dialed extension number - DID only) Must be 4 if MNXX = YES.	b/nars-1

Page 1108 of 1254 Alphabetical list of prompts

553-3001-400 Standard 16.00 June 1999

Prompt	Response	Comment	Pack/Rel
STRK	x...x	Allowed codes for ADM/MDM to be recognized within the NXX, NPA or SPN The maximum number of digits to be entered must be the lesser of 10 or: • 7-m (8-m for 1 + dialing) for NXX • 10-m (11-m for 1 + dialing) for NPA • 19-m for SPN Where: m = number of digits entered for NPA, NXX, or SPN. For Release 22 and later, these numbers do not have to be leftwise unique. For non leftwise unique numbers, the longer number takes precedence over the shorter number. However, the exact same numbers (not leftwise unique and the same length) are still blocked.	
TRAN	AC1 AC2 SUM	Translator Access Code 1 (NARS/BARS) Access Code 2 (NARS) Summary of Network Translations (allowed when REQ = PRT)	b/nars-1
TYPE		Type of data block	esn-1
	ALL	If REQ = PRT, all of the following types will be printed	
	HLOC	ESN Home Location Code translation data block (NARS only)	
	HNPA	Home NPA translation code	
	LOC	ESN Location Code translation data block (NARS only)	
	NPA	Numbering Plan Area code translation data block	
	NSCL	Network Speed Call List data block	
	NXX	Central Office Code Translation data block	
	SPN	Special code translation data block	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 92: Automatic Trunk Maintenance

The Automatic Trunk Maintenance (ATM) program tests TIE, CSA, WATS, FEX, DID, and COT trunk routes automatically each day at times scheduled in the ATM schedule block. This program also allows the manual testing of trunks.

Basic commands

ATMC l ch	Test DTI channel ch on loop
ATMC l ch l ch	Test specified DTI channel, with reference trunk
ATMR c r	Test customer c route r
ATMR c r m	Test customer c route r with reference trunk member m
ATMU l s c u	Test specified unit
ATMU l s c u l s c u	Test specified unit, with reference trunk
CLRR c r	Clear “ring no answer” count on route r for customer c
CLRU l s c u	Clear “ring no answer” count on specified trunk unit
CMAJ	Clear major alarm and reset power fail transfer
END	Terminate test in progress
PRTR c r	Get “ring no answer” count for all members on route r for customer c.
PRTU l s c u	Get “ring no answer” count on specified unit.

Alphabetical list of commands

Command	Description	Pack/Rel
ATMC l ch	Test DTI channel ch on loop.	atm-7
ATMC l ch l ch	Test the specified DTI channel (loop and channel of the first field) with the reference trunk (loop and channel of the second field).	atm-7
ATMR c r	Test route r of customer c. Accepts ADM Route numbers in release 12 and later. When an ADM Route is entered, member numbers cannot be entered.	atm-7
ATMR c r m	Test route r of customer c with reference trunk member m. With Release 24 and later, member m range is 1-510.	atm-7
ATMU l s c u	Test specified unit. If the unit specified is an ADM trunk unit, no reference information can be entered.	atm-7
ATMU l s c u l s c u	Test the specified unit (l s c u of the first field) using the reference trunk (l s c u of the second field). If the unit specified is an ADM trunk unit, no reference information (l s c u) can be entered.	atm-7
CLRR c r	Clear "ring no answer" count on route r for customer c. Clears the "ring no answer" count for every trunk member in the ADM Route specified.	atm-7
CLRU l s c u	Clear "ring no answer" count on specified trunk unit.	atm-7
CMAJ	Clear major alarm, reset power fail transfer and clear power fault alarm.	atm-7
END	Terminate test in progress. This command can be entered at any time.	atm-7
PRTR c r	Get "ring no answer" count for all members on route r for customer c.	atm-7
PRTU l s c u	Get "ring no answer" count on specified unit.	atm-7

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 93: Multi-Tenant Service

Overlay program 93 is used to enable and administer the Multi-Tenant Service feature. It is used to configure or change assignments and print data for Attendant Console groups, Tenant-to-Tenant groups, Tenant-to-Route groups, Tenant-to-Attendant Console groups, and Route-to-Attendant Console groups.

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	a...a	Type of data block (a...a = ACG, CPG, CPGP, RACC, RACG, RCPG, TACC, TACG, TCPG, TENS, or TGEN)
CUST	xx	Customer number associated with this function
CPG	1-63	Console Presentation Group number
CPGS	(NO) YES	Customer Presentation Group Services
ROUT	0-511	Route number
TEN	1-511	Tenant number
SGRP	(0)-999	Scheduled Access Restriction Group number
ACC	aaaa	Access (aaaa = ALLOW or DENY)
DENY	1-511 1-511	Access denied tenant numbers
ALLOW	1-511 1-511	Access allowed tenant numbers
AGNO	0-63	Attendant Console Group Number
ANUM	1-63 1-63	Add Attendant Console Numbers
LDN0	x...x	Listed DN 0
LDN1	x...x	Listed DN 1
LDN2	x...x	Listed DN 2
LDN3	x...x	Listed DN 3
LDN4	x...x	Listed DN 4
LDN5	x...x	Listed DN 5
NIT1	x...x	First Night Service by Time of Day (NTOD) DN
TIM1	hh mm	Time for first NTOD DN
NIT2	x...x	Second NTOD DN
TIM2	hh mm	Time for second NTOD DN
NIT3	x...x	Third NTOD DN
TIM3	hh mm	Time for third NTOD DN
NIT4	x...x	Fourth NTOD DN
TIM4	hh mm	Time for fourth NTOD DN

ICI	xx aaa	Incoming Call Indicators (ICI)
AQTT	1-(30)-255	Attendant Queuing Threshold
AODN	xxxx	Attendant Overflow DN
CWCL	(0)-255 (0)-255	Call Waiting Call Limit
CWTM	(0)-511 (0)-511	Call Waiting Time
CWBZ	(NO) YES	Call Waiting Buzz
FRRT	0-511	First RAN Route number
- FRT	0-(20)-2044	First RAN Time threshold
SRRT	0-511	Second RAN Route number
- SRT	0-(20)-2044	Second RAN Time threshold
WAIT	aaa	Wait time treatment (aaa = (RGB), MUS, or SIL)
- MURT	0-511	Music Route number if WAIT = MUS
RICI	(NO) xx	Recorded overflow announcement on ICI keys

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ACC		Access	tens-7
	DENY	Denied tenants are to be entered. Sets with TEND Class of Service can access all routes. Sets with TENA can only access routes if tenant to route access is allowed for that set's tenant. When REQ = PRT, print access denied tenants.	
	ALLOW	Allowed tenants are to be entered. Sets with TEND Class of Service can access all routes. Sets with TENA can only access routes if tenant to route access is allowed for that set's tenant. When REQ = PRT, print access allowed tenants.	
AGNO	0-63	Attendant Console Group Number AGNO 0 always exists and contains all Attendant Consoles that are configured for the customer. AGNO is initially specified for all tenants. When TYPE = CPG, AGNO cannot be zero.	tens-7
ALLOW	1-511 1-511	Access allowed tenant numbers Prompted when ACC = ALLOW.	tens-7
	ALL <cr>	Access allowed all tenants Stop ALLOW prompt.	
ANUM	1-15 1-15 1-63 1-63 <cr>	Add Attendant Console Numbers. Release 8 and later Stop prompt. Precede with X to remove.	tens-7
AODN	xxxx	Attendant Overflow DN Precede with X to remove.	aop/ cpg-15
AQTT	1-(30)-255	Attendant Queuing Threshold	aop/ cpg-15
CPG	1-63	Console Presentation Group number Use <cr> to print all configured CPG data blocks for the customer.	cpg-15
CPGS	(NO)	Disable Customer Presentation Group level Services	cpg-15

Prompt	Response	Comment	Pack/Rel
	YES	Enable Customer Presentation Group level Services Prompted with Console Presentation Group (CPG) package 172.	
CUST	0-99	Customer number associated with this function as defined in LD 15	tens-7
	<cr>	Print specified data for all customers when REQ = PRT	
CWBZ	(NO) YES (NO) YES	Call Waiting Buzz	cpg-15
		First field: Provide 2 second buzz on exceeding upper CWCL or CWTM threshold.	
		Second field: Buzz on first call entering queue.	
CWCL	(0)-255 (0)-255	Lower and upper thresholds for Call Waiting Call Limit	cpg-15
		The call waiting lamp starts flashing when number of calls in the queue meets or exceeds the upper threshold. The lamp continues to flash until the number of calls in queue is less than the lower threshold.	
		Enter 0 0 to disable this feature.	
CWTM	(0)-511 (0)-511	Lower and upper thresholds (in seconds) for Call Waiting Time	cpg-15
		The Call Waiting lamp starts flashing when the call in the queue meets or exceeds the upper threshold. The lamp continues to flash until the wait time is less than the lower threshold.	
		Enter 0 0 to disable this feature.	
DENY	1-511 1-511	Access denied tenant numbers	tens-7
	ALL	Prompted when ACC = DENY.	
	<cr>	Access denied all other tenants	
		Stop DENY prompt.	
FRRT	0-511	First RAN Route number	roa/cpg-15
		Precede with X to remove.	
FRT	0-(20)-2044	First RAN Time threshold	roa/cpg-15

LD 93

Prompt	Response	Comment	Pack/Rel
ICDN	xxxx	Internal Call DN DN used for intercept transfer when the FDN and multi-tenant is not on intercept position. The DN is used for intercept treatment for internal calls. Up to four digit DN prior to Release 18; up to 13 digits in Release 18 and later.	
ICI	xx aaa	Incoming Call Indicators (ICI). Where: • xx = key number (0-19) • aaa = Call type aaa may be any of the following: • CAx = Station Category (x = 1-7) • CFB = Call Forward Busy • CFN = Call Forward No Answer • DF0 = Dial 0 Fully Restricted • DL0 = Dial 0 • IAT = Inter-Attendant call • INT = Intercept • LCT = Lockout intercept • LD0 = Listed DN 0 • LD1 = Listed DN 1 • LD2 = Listed DN 2 • LD3 = Listed DN 3 • LD4 = Listed DN 4 • LD5 = Listed DN 5 • MWC = Message Waiting Calls • NUL = remove ICI appearances • RLL = Recall • Rxxx Rxxx = Routes (0-511). Enter one or more routes.	cpg-20
LDN0	xxxx	Listed DN 0 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15

Prompt	Response	Comment	Pack/Rel
LDN1	xxxx	Listed DN 1 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
LDN2	xxxx	Listed DN 2 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
LDN3	xxxx	Listed DN 3 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
LDN4	xxxx	Listed DN 4 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	nldn-20
LDN5	xxxx	Listed DN 5 Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	nldn-20
MURT	0-511	Music Route number if WAIT = MUS Precede with X to remove.	roa/ cpg-15
NIT1	xxxx	First Night Service by Time of Day (NTOD) DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
NIT2	xxxx	Second NTOD DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
NIT3	xxxx	Third NTOD DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15

LD 93

Page 1122 of 1254 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
NIT4	xxxx	Fourth NTOD DN Up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Precede with X to remove.	cpg-15
REQ	CHG END NEW	Request Change existing data block Exit Overlay program Create the Multi-Tenant Service data block. If REQ = NEW and <cr> is entered for all prompts, then all parameters default to the customer data block (LD 15) values except LDN0-3, ICI, RICI and AQT. T.	tens-7
	OUT PRT	Remove the Multi-Tenant Service data block. Print the data block specified by TYPE.	
RICI	(NO) xx ... xx	Recorded overflow announcement on ICI keys 0-19 Precede with X to remove.	roa/ cpg-15
ROUT	0-511 <cr>	Route number Print all routes for the specified type when REQ = PRT.	tens-7
SGRP	(0)-999	Scheduled Access Restriction Group number. Prompted when TYPE = TGEN	sar-20
SRRT	0-511	Second RAN Route number Precede with X to remove.	roa/ cpg-15
SRT	0-(20)-2044	Second RAN Time threshold	roa/ cpg-15
TEN	1-511 <cr>	Tenant number Print specified data for all tenants of CUST when REQ = PRT.	tens-7
TIM1	hh mm	Time for first NTOD DN. Where: • hh = 0-23 • mm = 0-59	cpg-15
TIM2	hh mm	Time for second NTOD DN	cpg-15
TIM3	hh mm	Time for third NTOD DN	cpg-15

Prompt	Response	Comment	Pack/Rel
TIM4	hh mm	Time for fourth NTOD DN	cpg-15
TYPE		Type of data block	tens-7
	ACG	Attendant Console Group data block (Release 7 to 14)	
	CPG	Console Presentation Group data block (Release 15 and later) If REQ = NEW and <cr> is entered for all prompts, then all parameters default to the customer data block (LD 15) values except LDN0-LDN3, ICI, and RIC1 which are cleared. Use <cr> to print all configured CPG data blocks for the customer.	
	CPGP	Console Presentation Group level parameters (Release 15)	
	RACC	Tenant-to-Route Access data block (Release 7)	
	RACG	Route-to-Attendant Console data block (Releases 7-14)	
	RCPG	Route-to-Attendant Presentation Group data block (Release 15 and later)	
	TACC	Tenant-to-Tenant Access data block (Release 7)	
	TACG	Tenant-to-Attendant Console Group data block (Releases 7-14)	
	TCPG	Tenant-to-Attendant Console Group data block (Release 15 and later)	
	TENS	Multi-Tenant Service data block (Release 7)	
	TGEN	Tenant SAR data block	
WAIT	(RGB) MUS SIL	Wait time treatment Ring Back Music Silence	roa/ cpg -15

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 94: Multifrequency Signaling

Overlay program 94 allows the implementation and administration of R2 and L1 Multifrequency Compelled Signaling (MFC) and Multifrequency Signaling for Socotel (MFE) tables.

Prompts and responses

Table of Contents

Section	Page
Prompts and responses	1127
<i>MFC Information :</i>	
MFC DID/TIE signal functions; Incoming and outgoing route tables	1127
MFC DID/TIE default (standard) incoming table	1129
MFC DID/TIE default (standard) outgoing table	1130
<i>MFE Information :</i>	
MFE signal functions; Incoming and outgoing route tables	1131
MFE DID default incoming table	1132
MFE DOD default outgoing table	1133
<i>2 of 5 and 2 Of 6 Information :</i>	
2 of 5 MFK signal functions ; Incoming and outgoing route tables	1134
2 of 6 MFK signal functions; Incoming and outgoing route tables	1134
<i>L1 Signaling information :</i>	
Programmable signals for all 6 L1 signaling levels	1135
MFC default (standard) incoming tables for L1 signaling	1138
MFC default (standard) outgoing tables for L1 signaling	1142

Prompts and responses

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, NEW, OUT, or PRT)
TYPE	aaaa	Type of data block (aaaa = L1MF, MFET, MFK5, MFK6, or R2MF)
ICOG	aaa	Incoming/Outgoing (aaa = ICT or OGT)
MAXT	(1)-127	Maximum Number of Tables
TBNO	1-127 <cr>	Table Number
CACD	(NO) YES	Category Code Default
- SET	(1)-10	Set category code
- ATT	(1)-10	Attendant category code
- TIE	1-(6)-10	TIE category code
- NTT	1-(6)-10	Non-TIE category code
EECD	1-127 <cr>	End-to-End Signaling Code
SMFC	(NO) YES	Send MFC
SCNT	(NO) YES	Switch CNI on Next
LVNO	1-6	Level Number
DFLT	0-127	Default Table number
RECV	1-15 mmmm	Receive signal number and mnemonic (MFC or MFE)
	1-15 NUL	Remove signal number and mnemonic (MFC or MFE)
XMIT	mmmm 1-15	Transmit signal mnemonic and number (MFC, MFE or MFK)
	mmmm 0	Remove signal mnemonic and number (MFC, MFE or MFK)
	IDCT n	Idle Call Trace Signal number

Table 24
MFC DID/TIE signal functions; Incoming and outgoing route tables

Group	Function mnemonic	Description of mnemonic
Forward Level 1 Group I	DGT1 -	Digit 1 -
(Part 1 of 3)		

LD 94

Group	Function mnemonic	Description of mnemonic
Backward Level 1 Group A	DGT9	Digit 9
	DGT0	Digit 0
	HTDM	H tandem signal. Sent before the called party DN if DN is in the Special Service List (SSL). The International Supplementary Features (SUPP) package 131 must be equipped.
	ECNI	CNI (Calling Number Identification) not available
	EODL	End of Dialing End of CPN (Calling Party Number) Request not accepted.
	CCNI	Send category. Send first CNI digit. Send next CNI digit.
	COMP	Address Complete, next group
	CONG	Congestion
	FAIL	Call Failure
	NEXT	Send Next digit (fixed value)
	SCAT	Send Category
	SCNI	Send first CNI digit; send next CNI digit
	TERM	Terminated
	TFST *	Tandem, send first digit
	TNM1 *	Send last but one digit
Forward Level 2 Group II	TNM2 *	Send last but two digits
	TNM3 *	Send last but three digits
	TNXT *	Tandem, send next digit
	VACO *	Vacant Office
	OPER	Operator/attendant
	NOPR	Subscriber No Priority
	PRIO *	Subscriber with Priority
(Part 2 of 3)		

Group	Function mnemonic	Description of mnemonic
Backward Level 2 Group B	REST	Restricted Station
	RICA *	Route Incoming Call to Attendant
	TOBI *	Toll Operator Break-In
	TOLL	Toll call
	BUBA **	Busy (break in allowed after TOBI)
	BUBN **	Busy (break in not allowed after TOBI)
	BUSY	Station Busy
	CONG	Congestion
	FAIL	Failure
	IDCT	Idle Call Trace
	IDLE	Station Idle
	OUTT	Station Out-of-Order
	VACC	Vacant number
(Part 3 of 3)		

* Function will not be transmitted (Receive only)

** Function will not be received (Transmit only)

Note: Signal numbers not listed in Table 24 default to NUL (no assigned function).

Table 25
MFC DID/TIE default (standard) incoming table

Group	Signal number	Function mnemonic
Receive Level 1 Group I	1 -	DGT1 -
	9	DGT9
	10	DGT0
	12	ECNI
	15	EODL
Transmit Level 1 Group A	1	NEXT
	3	COMP

Group	Signal number	Function mnemonic
Receive Level 2 Group II	4	CONG
	5	SCAT
	6	TERM
	9	SCNI
	15	FAIL
	1	NOPR
	2	PRIO
	3	NOPR
	5	OPER
	6	NOPR
	7	REST
	8	NOPR
	9	PRIO
	10	OPER
	11	NOPR
	12	NOPR
	13	NOPR
Transmit Level 2 Group B	2	IDLE
	3	BUSY
	4	CONG
	5	VACC
	8	OUTT
	9	FAIL

Note: Signal numbers not listed in Table 25 default to NUL (no assigned function.)

Table 26
MFC DID/TIE default (standard) outgoing table

Group	Signal number	Function mnemonic
Transmit Level 1 Group I	1 -	DGT1 -
	9	DGT9
	10	DGT0
	12	ECNI
	15	EODL

Group	Signal number	Function mnemonic
Receive Level 1 Group A	1	NEXT
	2	TNM1
	3	COMP
	4	CONG
	5	SCAT
	6	TERM
	7	TMN2
	8	TNM3
	9	SCNI
	10	TFST
	11	TNXT
	15	FAIL
Transmit Level 2 Group II; Receive Level 2 Group B		
	1	NOPR
	5	OPER
	7	REST
	2	IDLE
	3	BUSY
	4	CONG
	5	VACC
	8	OUTT
	9	FAIL

Note 1: In Table 27, for incoming tables the signals which are received are forwarded signals, MFE tables have no Level 2 forward signals. Level 1 values for function xxxx range from DGT0 to DGT9 (Digits 0 - 9).

Note 2: Multiple function assignment allowed (same function to different signals).

Note 3: Signals transmitted in the case of incoming tables, are backward signals.

Table 27
MFE signal functions; Incoming and outgoing route tables

Group I	Function mnemonic	Description of mnemonic

Forward Level 1	DGT1-9	Digits 1-9
	DGT0	Digit 0
	ACOC	Access code for a call to other installation
	ACSS	Access code for a call to special services
Backward Level 1	SACD	Send Access Code and Digits
	SEND	Send remaining digits (plus last digits if preceded by TRAN)
	COMP	Address Complete, change to Level 2 congestion
	TRAN	Transit connection
	FAIL	Failure, new attempt
	CONG	Congestion
Backward: Level 2	IDLE	Station Idle, charge call
	BUSY	Station Busy
	CONG	Congestion
	OUTT	Out-of-Order
	VACC	Vacant number

Table 28
MFE DID default incoming table

Group I	Signal number	Function mnemonic
Receive Level 1	1-9	DGT1-DGT9
	10	DGT0
Transmit Level 1	2	SEND
	3	COMP
	-	CONG
Transmit Level 2	1	IDLE
	3	BUSY
	3	CONG
	3	OUTT

3	VACC

Table 29
MFE DOD default outgoing table

Group I	Signal number	Function mnemonic
Transmit Level 1	1-9	DGT1-DGT9
	10	DGT0
	1	ACOC
	5	ACSS
Receive Level 1	1	SACD
	2	SEND
	3	COMP
	6	TRAN
	8	FAIL
	9	CONG
Receive Level 2	1	IDLE
	2	IDLE
	3	BUSY
	4	IDLE
	5	IDLE
	6	IDLE
	7	BUSY
	8	BUSY
	9	BUSY
	10	BUSY

Table 30

2 of 5 MFK signal functions ; Incoming and outgoing route tables

Group	Function mnemonic	Description of mnemonic
Forward Group I	DGT0-9	Digits 0-9
Forward Group II	LOCB	Regular subscriber
	SERB	Special Services inside the province
	NATB	National
	INTB	International
Backward Code A	GRPA	Send Group a digits
	CCAL	Send Class of Call
	GRBC	Send Group bc digits
	SALL	Send All the digits
	GRPC	Send Group c digits
	COMP	Change to code “b”
	CONG	Congestion
Backward Code B	FMTR	Subscriber free with Metering
	CONG	Congestion
	BUSY	Subscriber Busy
	OUTT	Line dead
	EOSL	End of Selection without line state reached

Table 31

2 of 6 MFK signal functions; Incoming and outgoing route tables

Group	Function mnemonic	Description of mnemonic
Forward Group I	DGT0-15	Digits 0-15
Forward Group II	LOCB	Provincial-regular subscriber (charging by block)

	LOCL	Provincial-regular subscriber (charging by line)
	NATB	National-regular subscriber (charging by block)
	NATL	National-regular subscriber (charging by line)
	INTB	International-regular subscriber (charging by block)
	INTL	International-regular subscriber (charging by line)
	SERB	Special services (charging by block)
	SERL	Special services (charging by line)
Backward Code A	GRBC	Send Group BC digits
	SALL	Send All the digits
	SORG	Send Origination subscribers number - All Digits
	CCAL	Send Class of Call
	CONG	Congestion
	COMP	Change to code "B"
Backward Code B	FMTR	Subscriber free with Metering
	CONG	Congestion
	BUSY	Subscriber Busy
	OUTT	Line dead
	EOSL	End of Selection without line state reached

Table 32
Programmable signals for all 6 L1 signaling levels

Group	Function mnemonic	Description of mnemonic
Forward Level 1	DGT1 -	Digit 1 -
	DGT9	Digit 9
	DGT0	Digit 0
	UREJ	Level 1 signal rejected (Abort call)
(Part 1 of 4)		

LD 94

Group	Function mnemonic	Description of mnemonic
Backward Level 1	GOEN	Change to a Supplementary Service (SS) level. New level is Level 6 when terminator has a Backward Supplementary Service (BSS). Otherwise, the new level is Level 5.
	EODL	End of Dialing. No more digits to send. Aborts call when no digits have been received.
	NEXT	Send Next digit in destination address
	TNFS	Tandem encountered. Send digits again starting from the first digit.
	COMP	Address Complete (Terminate signaling)
	FAIL	Call Failure (Abort call)
	SCAT	Send calling party category (always rejected)
	TERM	Address complete (Terminate signaling)
	CONG	Congestion (Abort call)
	EINF	Request change from Level 1 to Level 6 for BSS activity. Enhanced signal set is implied.
Forward Level 2	ELV2	Address complete. Change to Level 2. Signaling will also use Level 3 or higher.
	ENO1	Request next digit in destination address. Implies using at least Level 3 signaling.
	TNTX	Tandem encountered (Send next digit)
	OLNE	Originator is a subscriber without priority
	OPER	Originator is an attendant
Backward Level 2	NETW	Network call for Ring Again (RGA). Call is not intended for termination at a station.
	LSIG*	Restricted circuit
	BUSY	Destination is busy
	FAIL	Call has failed. Abort.
	VCOT	Call has terminated on a vacant DN
(Part 2 of 4)		

Group	Function mnemonic	Description of mnemonic
	IDLE	Destination is idle
	CONG	Congestion (Abort call)
	SOTI	State of Termination undetermined
Forward Level 3	SIIN	Simple call (No restrictions)
	SUPL	Request a Forward Supplementary Service (FSS)
	NOSS	No further SS activity
Backward Level 3	TERM	Call complete (Terminate signaling)
	FAIL	Call has failed (Abort)
	SUPL	Request BSS activity
	SCNI**	Request Call Number Indicator (CNI)
	NEXT	Send FSS digit
Forward Level 4	DGT1 -	CNI digit 1 -
	DGT9	CNI digit 9
	DGT0	CNI digit 0
	LFSS	Change to Level 1 when CNI is complete.
	EODG	No more CNI digits.
Backward Level 4	DGT1 -	CNI digit 1 -
	DGT9	CNI digit 9
	DGT0	CNI digit 0
	KEND	Changing to Level 6. Preceded by a LFSS signal.
	NEXT	Send next CNI digit
Forward Level 5 and Backward Level 6		
	DGT1	FSS digit 1
	DGT2	FSS digit 2
	DGT3*	FSS digit 3
(Part 3 of 4)		

Group	Function mnemonic	Description of mnemonic
	DGT4**	FSS Digit 4
	DGT5**	FSS Digit 5
	DGT6*	FSS Digit 6
	DGT7*	FSS Digit 7
	DGT8*	FSS Digit 8
	DGT9*	FSS Digit 9
	DGT10*	FSS Digit 10
	DGT11**	FSS Digit 11
	DGT12**	FSS Digit 12
	DGT13*	FSS Digit 13
	DGT14*	FSS Digit 14
	DGT15*	FSS Digit 15
Backward Level 5 and Forward Level 6		
	KEND	SS successful (Terminate signaling)
	FEND	SS failed (Terminate signaling)
	KMFC	SS successful (Signaling continues at a slower rate)
	FMFC	SS failed (Signaling continues at a slower rate)
	NEXT	Request next SS digit
(Part 4 of 4)		

* Function will not be transmitted (Receive only)

** Used for Ring Again (RGA)

Table 33
MFC default (standard) incoming tables for L1 signaling

This table indicates the default signal tables for L1 signaling. The transmit sets indicate only those signals that can be sent. The receive sets must have duplicate signals in order to be able to accept signals that must be mapped to another signal for processing.

Group	Signal number	Function mnemonic
Receive Level 1 Group I	1 -	DGT1 -
	9	DGT9
	10	DGT0
	12	UREJ
	13	GOEN
	15	EODL
Transmit Level 1 Group A	1	NEXT
	2	TNFS
	3	COMP
	4	FAIL
	5	SCAT
	6	TERM
	9	CONG
	10	EINF
	11	ELV2
	12	ENOI
	14	TNXT
Receive Level 2 Group II	1	OLNE
	2	LSIG
	4	OLNE
	5	OPER
	7	OPER
	8	OPER
	9	OPER
(Part 1 of 4)		

LD 94

Group	Signal number	Function mnemonic
Transmit Level 2 Group B	10	NETW*
	11	OLNE
	12	UREJ
	13	OLNE
	3	BUSY
	4	FAIL
	5	VCOT
	6	IDLE
	9	CONG
	14	SOTI
Receive Level 3 Group III	1	SIIN
	2	SIIN
	3	SIIN
	4	SIIN
	5	SUPL
	6	SUPL
	7	SUPL
	8	SUPL
	9	SIIN
	10	SIIN
	11	SUPL
	12	SUPL
	15	NOSS
Transmit Level 3 Group C	1	TERM
	4	FAIL
	8	SUPL
	9	SCNI*
(Part 2 of 4)		

Group	Signal number	Function mnemonic
	15	NEXT
Receive Level 4 Group IV	1 -	DGT1 -
	9	DGT9
	10	DGT0
	11	LFSS
	15	EODG
Transmit Level 4 Group D	1 -	DGT1 -
	9	DGT9
	10	DGT0
	11	KEND
	15	NEXT
Receive Level 5 Group V	1 -	DGT1 -
	9	DGT9
	10 -	DG10 -
	15	DG15
Transmit Level 5 Group E	11	KEND
	12	FEND
	13	KMFC
	14	FMFC
	15	NEXT
Receive Level 6 Group VI	11	KEND
	12	FEND
	13	KMFC
	14	FMFC
	15	NEXT
Transmit Level 6 Group F	1	DGT1
(Part 3 of 4)		

Group	Signal number	Function mnemonic
	2	DGT2
	4	DGT4
	13	DG13
(Part 4 of 4)		

* Not included unless Ring Again (RGA) is included for L1 signaling.

Table 34
MFC default (standard) outgoing tables for L1 signaling

This table indicates the default signal tables for L1 signaling. The transmit sets indicate only those signals that can be sent. The receive sets must have duplicate signals in order to be able to accept signals that must be mapped to another signal for processing.

Group	Signal number	Function mnemonic
Transmit Level 1 Group I	1 -	DGT1 -
	9	DGT9
	10	DGT0
	12	UREJ
	13	GOEN
	15	EODL
Receive Level 1 Group A	1	NEXT
	2	TNFS
	3	COMP
	4	FAIL
	5	SCAT
	6	TERM
	7	RUID
(Part 1 of 4)		

Group	Signal number	Function mnemonic
	8	ALFS
	9	CONG
	10	EINF
	11	ELV2
	12	ENOI
	13	PSNX
	14	TNXT
Transmit Level 2 Group II	1	OLNE
	2	LSIG
	5	OPER
	10	NETW*
Receive Level 2 Group B	3	BUSY
	4	FAIL
	5	VCOT
	6	IDLE
	9	CONG
	10	BUSY
	11	IDLE
	12	BUSY
	13	IDLE
	14	SOTI
Transmit Level 3 Group III; Receive Level 3 Group C		
	1	SIIN
	5	SUPL
	15	NOSS
	1	TERM
(Part 2 of 4)		

LD 94

Group	Signal number	Function mnemonic
	2	TERM
	3	TERM
	4	FAIL
	5	TERM
	7	SUPL
	8	SUPL
	9	SCNI*
	10	SUPL
	11	SCNI*
	12	SCNI*
	13	SUPL
	14	SCNI*
	15	NEXT
Transmit Level 4 Group IV	1 -	DGT 1 -
	9	DGT9
	10	DGT0
	11	LFSS
	15	EODG
Receive Level 4 Group D	1 -	DGT 1 -
	9	DGT9
	10	DGT0
	11	KEND
	15	NEXT
Transmit Level 5 Group V	1 -	DGT1 -
	3	DGT3
	4	DGT4*
(Part 3 of 4)		

Group	Signal number	Function mnemonic
	5	DGT5*
	6 -	DGT6 -
	9	DGT9
	10	DGT0
	11	DG11*
	12	DG12*
Receive Level 5 Group E	11	KEND
	12	FEND
	13	KMFC
	14	FMFC
	15	NEXT
Transmit Level 6 Group VI	11	KEND
	12	FEND
	13	KMFC
	14	FMFC
	15	NEXT
Receive Level 6 Group F	1 -	DGT 1 -
	9	DGT9
	10	DGT0
	11 -	DG11 -
	15	DG15
(Part 4 of 4)		

* Not included unless Ring Again (RGA) is included for L1 signaling.

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ATT	(1)-10	Attendant category code Category code for attendants	mfc-10
CACD	(NO) YES	Category Code Default Change category code default. Prompted when TYPE = R2MF	opcb-14
DFLT	0-127	Default table number	mfc-10
EECD	1-127 <cr>	End-to-End Signaling code Default to TBNO response when REQ = NEW otherwise leave TBNO as assigned.	mfc-18
ICOG	ICT OGT	Incoming/Outgoing Incoming table Outgoing table	mfc-10
LVNO	1-6	Level Number • 1-2 for TYPE = R2MF • 1-6 for TYPE = L1MF Precede with X to remove.	mfc-10
MAXT	(1)-127	Maximum number of Tables Prompted when REQ = NEW	mfc-10
NTT	1-(6)-10	Non-TIE category code Category code for non-TIE trunks	mfc-14
RECV	1-15 mmmm	Receive signal number and mnemonic (MFC or MFE) Signal number range is: • 1 - 15 if TYPE = MFK6	mfc-10
	1-15 NUL	Remove signal number and associated function mnemonic.	
	<cr>	Stop RECV prompts Refer to Tables 24 through 34 for function mnemonics.	

Prompt	Response	Comment	Pack/Rel
REQ	CHG END NEW OUT PRT	Request Change existing data. Exit Overlay program. Add new data to the system. Remove data block. Print data.	mfc-10
SCNT	(NO) YES	Switch CNI on Next. When the NEXT signal is received during CNI transmission on Level 1, the system will continue with sending the calling number. When the NEXT signal is received during CNI transmission on Level 1, the system will switch to called number and then send the next called number digit.	mfc-18
SET	(1)-10	Set category code. Category code for SL-1 and 500/2500 sets.	mfc-10
SMFC	(NO) YES	Send MFC Backward signals are stopped when the forward signal is recognized as having stopped. Backward signals are sent (incoming calls) pulsed for 150 ms or received (outgoing calls) pulsed 150 ms +/- 20%.	mfc-18
TBNO	1-127 <cr>	Table Number MFC or MFE table number Print all MFC, MFE, MFK5 or MFK6 tables.	mfc-10
TIE	1-(6)-10	TIE category code Category code for TIE trunks	mfc-10
TYPE	L1MF MFET R2MF	Type of data block. L1 MFC data block Must have X08 to X11 Gateway (L1MF) package 188. MFE data block R2 MFC data block	mfc-10

Prompt	Response	Comment	Pack/Rel
XMIT	mmmm 1-15	• Transmit signal mnemonic and number (MFC, MFE or MFK)	mfe-10
	mmmm 0	Remove function mnemonic mmmm and associated signal number Any undesired function in the default transmit tables should not be removed, but instead assigned a different signal number. LNVO is prompted following a null entry for XMIT. If nothing is entered in response to LVNO then, provided that there is a level one, the table is stored.	
	IDCT n	Idle Call Trace signal number (Default is the same as the IDLE signal) Where: n = signal number and 0 = close	
	<cr>	Stop XMIT prompts. Refer to Tables 17 through 26 for the function mnemonics.	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 95: Call Party Name Display

Overlay program 95 is used to define, change, remove or print information for the Call Party Name Display (CPND) data block and name assignment, on a per customer basis.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by task :</i>	
Create or Change Calling Party Name Display (CPND)	1150
Add Calling Party Name Display name	1151
Change Calling Party Name Display name	1151
Remove Calling Party Name Display name	1152
Print Calling Party Name Display data and names	1152

Create or Change Calling Party Name Display (CPND)

Prompt	Response	Comment
REQ	aaa	Req = NEW or CHG
TYPE	CPND	Type = CPND (Calling Party Name Display)
CUST	xx	Customer number associated with this function
CNFG	aaaa	Configuration (aaaa = (ALON), REMO, or LOCL)
MXLN	5-(17)-27	Maximum Length
STAL	(NO) YES	Static Allocation of name storage
- DFLN	5-(13)-27	Default Length
DES	(NO) YES	Designator for Multiple Appearance DNs allowed
RESN	(NO) YES	Display of Reason for redirecting calls allowed
- CFWD	(F) aaaa	Mnemonic for Call Forward All Calls display
- CFNA	(N) aaaa	Mnemonic for Call Forward No Answer display
- HUNT	(B) aaaa	Mnemonic for Busy display
- NITC	(NI) aaaa	Mnemonic for Call Forward Non Intercom Call
- PKUP	(P) aaaa	Mnemonic for Call Pickup display
- XFER	(T) aaaa	Mnemonic for Call Transfer display
- AAA	(A) aaaa	Mnemonic for Attendant Alternative Answering display

Add Calling Party Name Display name

Prompt	Response	Comment
REQ	NEW	Req = NEW
TYPE	NAME	Type = NAME (CPND Name)
CUST	xx	Customer number associated with this function
CPND_LANG	aaa	CPND Language (aaa = (ROM) or KAT)
DIG	0-253 0-99	Dial Intercom Group
- LANG	aaa	Language (aaa = (ROM), KAT, or ALL)
- NAME	a...a	CPND Name in ASCII characters
- XPLN	xx	Expected Length
DISPLAY_FMT	aaaa	Display Format (aaaa = (LAST) or FIRST)
DN	x...x	Directory Number
- LANG	aaa	Language (aaa = (ROM), KAT, or ALL)
- NAME	a...a	CPND Name in ASCII characters
- XPLN	xx	Expected Length
DCNO	0-254	Digit Conversion table Number
- IDC	0-254	Incoming DID Digit Conversion number
- NAME	a...a	CPND Name in ASCII characters

Change Calling Party Name Display name

Prompt	Response	Comment
REQ	CHG	Req = CHG
TYPE	NAME	Type = NAME (CPND Name)
CUST	xx	Customer number associated with this function
CPND_LANG	aaa	CPND Language (aaa = (ROM) or KAT)
DIG	0-253 0-99	Dial Intercom Group
- NAME	a...a	CPND Name using ASCII characters
- DN	x...x	Directory Number
- NAME	a...a	CPND Name in ASCII characters
DCNO	0-254	Digit Conversion table Number
- IDC	0-254	Incoming DID Digit Conversion number

- NAME a...a CPND Name in ASCII characters

Remove Calling Party Name Display name

Prompt	Response	Comment
REQ	OUT	Req = OUT
TYPE	NAME	Type = NAME (CPND Name)
CUST	xx	Customer number associated with this function
CPND_LANG	aaa	CPND Language (aaa = (ROM) or KAT)
DIG	0-253 0-99	Dial Intercom Group
DN	x...x	Remove Directory Number x...x
	x...x y...y	Remove range of DN-defined names
	ALL	Remove all DN-defined names
DCNO	0-254	Digit Conversion table Number
- IDC	0-254	Incoming DID Digit Conversion number
ARE YOU SURE?	(YES) NO	(Confirm) or remove operation

Print Calling Party Name Display data and names

Prompt	Response	Comment
REQ	PRT	Req = PRT
TYPE	NAME	Type = NAME (CPND Name)
CUST	xx	Customer number associated with this function
CPND_LANG	aaa	CPND Language (aaa = (ROM) or KAT)
LANG	aaa	Language choice for name display (aaa = ROM or KAT)
PAGE	(NO) YES	Page headers and numbers printed (or not) if the Multiple DN/DIG is specified.
DIG	0-2045 0-99	Dial Intercom Group
SHRT	(NO) YES	Short form
- DN	x...x	Print single Directory Number x...x
	x...x y...y	Print range of Directory Numbers
	x/xx/xxx	Print all DNs starting with x, xx, or xxx
	ALL	Print all DNs
SHRT	(NO) YES	Short form

DCNO	0-254	Digit Conversion table Number
- IDC	nnn	Incoming DID Digit Conversion number
	ALL	All names defined are printed
SHRT	(NO) YES	Short form

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
AAA	aaa	Attendant Alternative Answering display mnemonic Default = A	cpnd-10
ARE YOU SURE?	(YES) NO	(Confirm) or remove operation. The default response is YES.	cpnd-1
CFNA	xxxx	Call Forward No Answer display mnemonic Default = N	cpnd-10
CFWD	xxxx	Call Forward All Calls display mnemonic Default = F	cpnd-10
CNFG	(ALON)	Configuration Standalone CPND configuration	cpnd-10
CPND_LANG	(ROM) KAT	CPND language. Prompted when FTR = CPND. Roman CPND language Katakana CPND language	cpnd-19
CUST	xx	Customer number associated with this function as defined in LD 15	cpnd-10
DCNO	0-254	Digit Conversion table Number	dnis-17
DES	(NO) YES	Designator for Multiple Appearance DN's allowed Prompted when ODAS is equipped.	odas-10
DFLN	5-(13)-27	Default character string Length Default to 13 or MXLN, whichever is less. Prompted when STAL = YES	cpnd-10
DIG	0-253 0-99 0-2045 0-99 <cr>	Existing Dial Intercom Group number followed by member number Release 14 and later To prompt DN If CPND Name already exists, an error message is returned. Prompted when DIG is equipped.	di-10

Prompt	Response	Comment	Pack/Rel
DISPLAY_FMT	(LAST) FIRST	Display format for CPND name (Release 19 and later). Last name, First name (Doe, John) First name, Last name (John Doe)	cpnd-19
DN	xxxx	Directory Number (Existing eligible DN or Partial DN). The DN can be up to 4 digits, up to 7 digits with Directory Number Expansion (DNXP) package 150. Valid DN types are Single or Multiple line prime DN, trunk DN, attendant DN or ACD DN. If Partial DN, all possible DNs are printed.	cpnd-10
	x...x y...y	Range of DN-defined names are deleted/printed. This entry is valid when REQ = OUT/PRT.	
	ALL	All names defined are deleted/printed. ALL is a valid entry when REQ = OUT/PRT.	
	x/xx/xxx	DNs starting with x, xx, or xxx are printed. This entry is valid when REQ = PRT.	
	<cr>	To re-prompt DCNO If the CPND name is already defined, an error message is returned.	
HUNT	xxxx	Busy display mnemonic Default = B	cpnd-10
IDC	0-254 ALL	Incoming DID Digit Conversion number Existing complete or partial IDC number All Names defined	dnis-17
LANG	(ROM) KAT ALL <cr>	Language choice for name for CPND screen and set display. Allowed only if REQ = OUT. English display (Roman characters) Non-English display (Katakana characters) Remove ALL names from CPND data block for the DN or DIG selected. Roman (English) display	cpnd-16
MXLN	5-(17)-27	Maximum allowable CPND character string Length Once an MXLN is entered, it cannot be changed to a lower value via the CHG prompt.	cpnd-10

LD 95

Prompt	Response	Comment	Pack/Rel
NAME	a...a <cr>	CPND Name using ASCII characters If STAL = YES, then Name size < XPLN If STAL = NO, then Name size = number of characters entered. DIG is reprompted. to DN prompt	cpnd-19
NITC	(NI) aaaa	Non intercom call NITC indicates that an intercom call terminated as a normal call.	
PAGE	(NO) YES	Page headers and numbers not printed if the Multiple DN/DIG is specified. Page headers and numbers printed if the Multiple DN/DIG is specified. Page headers (date and page number) are not printed if a single DN/DIG is specified.	cpnd-10
PKUP	xxxx	Call Pickup display mnemonic. Default = P.	cpnd-10
REQ	CHG END NEW OUT PRT	Request. Change existing data block Exit Overlay program Create CPND data blocks and/or name strings Remove existing name or data block Print an existing Name or data block from the data base	cpnd-10
RESN	(NO) YES	Display of Reason for redirecting calls allowed	cpnd-19
SHRT	(NO) YES	Prints one DN or IDC per single line. (long form) Prints several DNs or IDCs on a single line. (one-line form) Prompted when DN = ALL, Range or Partial DN to be specified.	cpnd-10
STAL	(NO) YES	Static Allocation of Name storage In a Hotel/Motel environment with Background Terminal facilities, STAL must be YES. STAL = YES is recommended whenever CPND Names change frequently, for efficient use of available memory (i.e., when a guest checks in).	cpnd-10

Prompt	Response	Comment	Pack/Rel
TYPE	CPND NAME	Type of data block CPND data block CPND Name data block Allowed only if CPND data block is already defined.	cpnd-10
XFER	xxxx	Call Transfer display mnemonic Mnemonic for call transfer display in Network Call Redirection (NCRD). One to four characters are accepted. Default = T. Prompted if ISDN = YES in LD 15	nocrd-16
XPLN	xx	Expected Length Range must be between the Input Name length and the MXLN, or it default to DFLN. This value should be set to a sufficient length to allow for current and future names to be entered. When REQ = NEW, the XPLN prompt defines the maximum name length for that particular entry. The XPLN for a DN cannot be changed without deleting that name entry.	cpnd-10
	<cr>	This sets the XPLN to the input length, or DFLN whichever is greater. Re-prompts DIG. Prompted when STAL = YES	

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 96: D-channel Diagnostic

LD 96 is used to test and maintain D-channel links and the QPC757 or NT6D11AB D-channel Interface (DCHI) card.

In Release 18, D-channels can also reside on Multi-purpose Serial Data Link (MSDL) cards. A new set of LD 96 commands are provided to support MSDL cards. The MSDL commands listed in LD 48 can also be used in LD 96.

Note: In Release 18, all commands accept “DCH” instead of “DCHI.” For example, use ENL DCH x rather than ENL DCHI x.

Monitoring

D-channel message monitoring is used to analyze the Layer 3 protocol messages traveling between the near and far-end D-channels.

Up to and including Release 16, message monitoring can be performed only on a per D-channel basis using LD 96. That is, once the message monitor is turned on, all messages are output for that D-channel. The messages output might be excessive.

Release 17 provides additional commands in LD 96 that allows selective message monitoring based on

- the D-channel
- the B- or ISL channel
- the message types for a specific feature
- any specific message

The following sections describe the various command formats.

Note 1: During high traffic some of the monitored messages may be lost.

Note 2: For the D-channel monitor messages to be displayed, the system terminal must have USER defined as MTC in LD 17 (Release 17 and later).

D-channels

All message types, features and channels associated with a particular D-channel can be monitored. Up to and including Release 16, only one D-channel can be monitored for outgoing messages and one for incoming messages. Release 17 and later allows the monitoring of multiple D-channels for both incoming and outgoing messages.

The LD 96 commands to enable or disable monitoring of all incoming or outgoing messages on a D-channel are:

- ENL MSGI x—enable monitoring of incoming messages
- ENL MSGO x—enable monitoring of outgoing messages
- DIS MSGI x—disable monitoring of incoming messages
- DIS MSGO x—disable monitoring of outgoing messages

Where x is the DCHI or MSDL port address (I/O address). For example, to enable monitoring of incoming messages on D-channel 5, enter:

ENL MSGI 5

The output includes all messages, features and channels for D-channel 5.

B-channels and ISL channels

You can monitor up to 5 ISL or B-channels, for each direction. If there is no specific channel selected, all channels are monitored. The commands follow:

For B-channels on all systems:

```
ENL MSGI x CH loop channel
ENL MSGO x CH loop channel
DIS MSGI x CH loop channel
DIS MSGO x CH loop channel
```

For ISL channels on all systems:

```
ENL MSGI x CH l s c u
ENL MSGO x CH l s c u
DIS MSGI x CH l s c u
DIS MSGO x CH l s c u
```

Where:

```
ENL = enable monitoring
DIS = disable monitoring
MSGI = incoming messages
MSGO = outgoing messages
```

ISDN features

You can select specific ISDN applications, such as Network Ring Again, for message monitoring. Only one or all ISDN applications can be monitored per D-channel at one time. The LD 96 commands are listed below, where x is the D-channel (DCHI or MSDL) port number.

ENL MSGI x FEAT feature
ENL MSGO x FEAT feature
DIS MSGI x FEAT feature
DIS MSGO x FEAT feature

Where “feature” can be:

NCT = Network Call Trace
NRAG = Network Ring Again
NACD = Network Automatic Call Distribution
TRO = Trunk Optimization
NMS = Network Message Services
OHQ = Offhook Queuing
RCFW = Network Remote Call Forward
NRPA = Network Radio Paging
NITC = Network Intercom
TAT = Trunk Anti-Tromboning

Message types

You can select specific types of messages to be monitored on a D-channel. The LD 96 commands are listed below, where **x** is the D-channel (DCHI or MSDL) port number.

```
ENL MSGI x MSG msg1 msg2 msg3
ENL MSGO x MSG msg1 msg2 msg3
DIS MSGI x MSG msg1 msg2 msg3
DIS MSGO x MSG msg1 msg2 msg3
```

Up to three message types (msg1, msg2, msg3) can be entered per command. The default is “ALL”, which is all message types except SVC and SVCA. The message types are:

- 1** ALER = alerting
- 2** ALL = all primitives and all messages except SVC and SVCA
- 3** CAPR = call proceeding
- 4** CON = connect
- 5** CONA = connect ack
- 6** DISC = disconnect
- 7** FAC = facility
- 8** FACA = facility ack
- 9** FACR = facility reject
- 10** INFO = information
- 11** NOTF = notify
- 12** PRIM = all primitives (such as release indication)
- 13** PROC = call proceeding
- 14** PROG = progress
- 15** RLS = release
- 16** RLSC = release complete
- 17** RST = restart
- 18** RSTA = restart ack

- 19 STAT = status
- 20 STEN = status enquiry
- 21 STP = setup
- 22 STPA = setup ack
- 23 SVC = service
- 24 SVCA = service ack
- 25 UI = user information

Setting output format levels

There are three levels (0-2) of message decoding. The level determines the format of the data output to the system terminal. To set the output level enter the following.

```
SET MSGI x MON (0)-2
SET MSGO x MON (0)-2
```

Level 0 outputs the message as shown below.

DCH x y MSG msgtype REF xxxxxxxx CH zzzz TOD hh:mm:ss <more data>

Where:

x = D-channel number
y = "I" for incoming messages, "O" for outgoing messages
xxxxxxx = the call reference number
zzzz = the loop and channel number (or TN for ISL channels)

<more data> = additional lines of information, such as:

- 1 CALLED # = called number
- 2 CALLING # = calling number of originator
- 3 CAUSE = reason for action taken (e.g, unassigned number)
- 4 CONNECT # = connected number
- 5 FEAT = feature (such as Network Ring Again)
- 6 NUM PLAN = Numbering plan used (such as private)

- 7** PROGRESS = call progress description
- 8** REDIR REASON = reason the call was re-directed
- 9** REDN # = call redirection number
- 10** STATE = call state
- 11** STATUS = channel status
- 12** TYPE = type of channel

Level 1 outputs the raw data (as was done in X11 Release 16).

The format is:

DCH x y MSG msgtype REF xxxxxxxx TN zzzzzz CH# x CK x
<more data in hexadecimal>

Level 2 output identifies the individual Information Elements (IE) in the messages and their hexadecimal values. The possible IEs are:

- 1 BCAP = bearer capability
- 2 CAST = call state
- 3 CHGA = charge advice
- 4 CHID = channel ID
- 5 CHST = change status
- 6 CLED = called number
- 7 CLES = called party subaddress
- 8 CLNG = calling number
- 9 CLNS = calling party subaddress
- 10 CNS5 = codeset 5 connected number subaddress
- 11 CON# = connect number
- 12 CON5 = codeset 5 connected number
- 13 CSE = cause
- 14 DES6 = codeset 6 Destination IE
- 15 DISP = display
- 16 FAC = facility IE for codeset 0
- 17 FAC6 = codeset 6 facility IE
- 18 FIND = feature Indication
- 19 HLYR = higher layer compatibility
- 20 INFO = information request

- 21** KYPD = keypad
- 22** LLYR = low layer compatibility
- 23** LS5 = locking Shift to codeset 5
- 24** LS6 = locking shift to codeset 6
- 25** LS7 = locking Shift to codeset 7
- 26** NLS5 = codeset 5 non-locking shift
- 27** NLS6 = codeset 6 non-locking shift
- 28** NLSO = non-locking shift to codeset 0
- 29** NOTI = notify indicator
- 30** NSF = network specific facility
- 31** ORG# = originating called number
- 32** ORG6 = codeset 6 Originating IE
- 33** PROG = progress indicator
- 34** RDG6 = codeset 6 redirecting number
- 35** REDG = redirecting number
- 36** REDN = redirection number
- 37** RETR = codeset 6 reason for return
- 38** RSTI = restart indicator
- 39** SHFT = shift
- 40** SIGN = signal
- 41** TACG = codeset 6 TTC advice charge
- 42** TNS = transit network selection
- 43** UNKN = unknown
- 44** UUI = user-user information

Deactivate monitor from a maintenance telephone

Once the system has been tied up or flooded with the monitored messages, it is very difficult, if not impossible, to use LD 96 to disable the monitors. In this case, a maintenance telephone with MTA Class of Service can be used to deactivate the monitor.

To activate or deactivate the monitor from a maintenance telephone, simply dial: SPRE 9913 x 01

Where:

SPRE = special function access code (defined in LD 15)

9913 = feature code to activate or deactivate the monitor

x = 0 to deactivate, 1 to activate

01 = DCH monitor ID

Note 1: Dial tone is provided if successful.

Note 2: Use “RST MON” to reactivate the monitor from LD 96.

Note 3: Deactivating the monitor by the maintenance telephone does not disable the monitor, but simply halts the output. If the monitor is deactivated and not disabled using the DIS MSGI and DIS MSGO commands, then the monitor becomes re-activated after a datadump and sysload.

Get monitor status

To determine the current status of the D-channel monitor, enter the following command, where x is the D-channel (DCHI or MSDL) port number.

STAT MON x

Output format:

***DCH MSGI x LEVEL y ACTV (where, y = format level)

MSG - msg1 msg2. . .

FEAT - feat

CH - loop channel (or l s c u for ISL)

***DCH MSGO x LEVEL y ACTV

MSG - msg1 msg2. . .

FEAT - feat

CH - loop channel (or l s c u for ISL)

If the monitor had been deactivated by the maintenance telephone, INACTV is output instead of ACTV.

Multi-purpose Serial Data Link (MSDL)

The MSDL provides 4 ports for ISDN Primary Rate D-channel (DCH) and Application Module Link (AML).

The MSDL commands are listed below, x is the MSDL device number (defined by prompt DNUM in LD 17).

DIS MSDL x (ALL)—Disable MSDL device

ENL MSDL x (FDL, ALL)—Enable MSDL device

RST MSDL x—Reset MSDL device

STAT MSDL (x) (FULL)—Get MSDL status

SLFT MSDL x—Execute a self-test on MSDL device x

These commands are also provided in Input/Output Diagnostic (LD 37) and Link Diagnostic (LD 48).

D-channel commands (Release 18 & later)

The following commands are used to enable, disable, test and get the status of a D-channel. Refer to the LD 96 introduction for details on the use of these commands.

Note: In X11 Release 18 and later, all commands now accept “DCH” instead of “DCHI.” For example: use “ENL DCH x” instead of “ENL DCHI x.” The STAT DCH and STAT DCHI commands have been combined to STAT DCH.

DIS AUTO x	Disable automatic recovery for DCH x
DIS DCH x	Disable DCH x
DIS MSGI x (options)	Disable the monitoring of incoming messages on D-channel x
DIS MSGI x FEAT CPNW	Disable incoming monitoring for the Network CPNW ISDN messages on D Channel x.
DIS MSGO x (options)	Disable the monitoring of outgoing messages on D-channel x
DIS MSGO x FEAT CPNW	Disable outgoing monitoring for the Network CPNW ISDN messages on D Channel x.
DIS SERV x	Disable service messages on D-channel x
DLIF DCH x	Force download of D channel x (For PRI UIPE application)
ENL AUTO x	Enable automatic recovery for DCH x
ENL DCH x (FDL)	Enable DCH x and attempt to establish the link, and force download to MSDL
ENL MSGI x (options)	Enable the monitoring of incoming messages on D-channel x
ENL MSGI x FEAT CPNW	Enable incoming monitoring for the Network CPNW ISDN messages on D Channel x.
ENL MSGO x (options)	Enable the monitoring of outgoing messages on D-channel x
ENL MSGO x FEAT CPNW	Enable outgoing monitoring for the Network CPNW ISDN messages on D Channel x.
ENL SERV x	Enable service messages on D-channel x
EST DCH x	Establish multiple frame operation on D-channel x
EST ISPC I ch (N)	Start the data interface establishment process at the ISPC slave side an ISPC link (where “N” = the “number of tries” counter)
FDIS NCAL <DCH#> <conn_ID>	Force disconnect the specified call-independent connection
PLOG DCH x	Print protocol error log on DCH x
RLS DCH x	Release D-channel x
RLS ISPC I ch	Stop the data interface establishment process
RST DCH x	Reset D-channel x, inhibit signaling

RST MON	Reset or reactivate monitoring on D-channels with enabled monitors
SDCH DCH x	Switch to the standby D-channel x
SET MSGI x MON (0)-2	Set monitor output format level for incoming messages on D-channel x
SET MSGO x MON (0)-2	Set monitor output format level for outgoing messages on D-channel x
STAT DCH (x)	Get status of one or all D-channels
STAT ISPC l ch	Get status of data interface establishment process at ISPC slave side ISPC link which has been configured to convey D-channel signaling
STAT NCAL <DCH#>	List all current call-independent connections on a given PRI D-channel.
STAT NCAL <DCH#> <conn_ID>	List information pertaining to a specific call-independent connection
STAT MON (x)	Display the incoming and outgoing monitoring status of one or all D-channels.
STAT SERV (x)	Get the enable/disable status of services messages for one or all D-channels
TEST 100 x	Perform interrupt generation test on DCH x
TEST 101 x	Perform loop back mode test on DCH x
TEST 200 x	Perform interrupt handler test on DCH x
TEST 201 x	Test interrupt handler-to-link interface path

Multipurpose Serial Data Link (MSDL) commands

The MSDL commands are listed below, **x** is the MSDL device number (defined by prompt DNUM in LD 17). These commands are also provided in Input/Output Diagnostic (LD 37) and Link Diagnostic (LD 48).

DIS MSDL x (ALL)	Disable MSDL device x
ENL MSDL x (ALL, FDL)	Enable MSDL device x
RST MSDL x	Reset MSDL device x
SLFT MSDL x	Invoke self-test for MSDL device x
STAT MSDL (x [FULL])	Get MSDL status

Note: See “Alphabetical List of commands” in LD 48 for a complete description of these commands.

Multipurpose Serial Data Link D-channel commands

The following commands are only available for D-channels on an MSDL port.

DIS LLB x	Disable local loop back mode on MSDL DCH x
DIS RLB x	Disable remote loop back mode on MSDL DCH x
DIS TEST x	Disable TEST mode on MSDL DCH x
DLIF DCH xx FDL	Force download a PRI interface table.
ENL LLB x	Enable local loop back mode on MSDL DCH x
ENL RLB x	Enable remote loop back mode on MSDL DCH x
ENL TEST x	Enable TEST mode on MSDL DCH x
MAP DCH x	Get physical address and switch settings for D-channels
PCON DCH x	Print configuration parameters on MSDL DCH x
PMES DCH x	Print incoming layer 3 messages on MSDL DCH x
PTRF DCH x	Print traffic report on MSDL DCH x
PTRF DCH x	Print traffic report on MSDL DCH x
TEST LLB x	Start local loop back test on MSDL DCH x
TEST RLB x	Start remote loop back test on MSDL DCH x

Alphabetical list of commands

Command	Description	Pack/Rel
DIS AUTO x	Disable automatic recovery for DCH x	pra-13
DIS DCH x	Disable DCH x. This changes the status of the DCH to DSBL and the status of the D-channel to DCH RST (reset). In X11 Release 17 and earlier, the command format is: DIS DCHI x.	pra-18
DIS DCHI x	Disable DCHI x. This changes the status of the DCHI card to DSBL and the status of the D-channel to DCH RST (reset).	pra-13
DIS LLB x	Disable local loop back mode on MSDL DCH x. See “ENL TEST” command for details.	msdl-18
DIS MSGI x	Disable the monitoring of all incoming messages from D-channel x.	pra-13
DIS MSGI x (options)	Disable the monitoring of all incoming messages from D-channel x. The available options are: 1. CH loop channel: disable incoming messages on B-channel loop channel 2. CH l s c u: disable incoming messages on ISL-channel loop shelf card unit 3. FEAT feature: disable incoming messages for a PRI feature 4. MSG msg1 msg2 msg3: disable incoming message types Refer to the LD 96 introduction for details.	pra-17
DIS MSGI x FEAT CPNW	Disable incoming monitoring for the Network CPNW ISDN messages on D Channel x.	basic-21
DIS MSGO x	Disable the monitoring of outgoing messages from D-channel x.	pra-13
DIS MSGO x (options)	Disable the monitoring of outgoing messages from D-channel x. Refer to DIS MSGI x (options) for the list of options.	pra-17

DIS MSGO x FEAT CPNW	Disable outgoing monitoring for the Network CPNW ISDN messages on D Channel x.	basic-21
DIS RLB x	Disable remote loop back mode on MSDL DCH x. See "ENL TEST" command for details.	msdl-18
DIS SERV x	Disable service messages on D-channel x. See "ENL SERV" for details. The D-channel must be disabled before disabling service messages.	pra-15
DIS SSM x y	Disable Supplementary Service Monitor for feature y on D-channel x. Only the NAS supplementary service is included (service identifier = 3)	
DIS TEST x	Disable TEST mode on MSDL DCH x. See "ENL TEST" command for details. When the test mode state is disabled, the DCH link will go back to release state and the DCH background audit will then try to establish the link.	msdl-18
DLIF DCH x	Force download of D channel x (For PRI UIPE application). Note that: 1. D channel specified must use the UIPE application 2. D channel must be disabled 3. D channels configured on the same MSDL card using the same interface must be disabled	uipe-20
DLIF DCH xx FDL	Force download a PRI interface table. To download the ISDN interface cable: 1. the D channel must be disabled 2. the UIPE application must be active 3. other D channels on the same MSDL card must be disabled	qsig-22
DWNL DCHI x (t)	Down load layer 3 message configuration table t and LAPD parameters from DCHI x. If table t is not specified, all table information is shown. This command is intended as a debugging tool for system designers.	pra-13

ENL AUTO x	Enable automatic recovery for DCH x. Automatic recovery is initially enabled.	pra-13
ENL DCH x (FDL)	Enable DCH x and attempt to establish the link, and force download to MSDL. A self-test on the DCH runs automatically. If successful, then: • DCHI status: OPER • DCH status: EST If this is not successful, then: • DCHI status: OPER • DCH status: RLS FDL forces D-channel loadware to the MSDL card. This is optional. In X11 Release 17 and earlier, the command format is: ENL DCHI x.	msdl-18
ENL DCHI x	Enable DCHI port x. A self-test on the DCHI card runs automatically. If successful, then: • DCHI status : OPER • DCH status: EST If test is not successful, then: • DCHI status: OPER • DCH status: RLS	pra-13
ENL LLB x	Enable local loop back mode on MSDL DCH x. See “ENL TEST” command for details.	msdl-18
ENL MSGI x	Enable the monitoring of all incoming messages from D-channel x.	pra-13
ENL MSGI x (options)	Enable the monitoring of all incoming messages from D-channel x. Refer to DIS MSGI x (options) for the list of options.	pra-17
ENL MSGI x FEAT CPNW	Enable incoming monitoring for the Network CPNW ISDN messages on D Channel x.	basic-21

ENL MSGO x	Enable the monitoring of all outgoing messages for D-channel x.	pra-13
ENL MSGO x (options)	Enable the monitoring of all outgoing messages for D-channel x. Refer to DIS MSGI x (options) for the list of options.	pra-17
ENL MSGO x FEAT CPNW	Enable outgoing monitoring for the Network CPNW ISDN messages on D Channel x.	basic-21
ENL RLB x	Enable remote loop back mode on MSDL DCH x. See "ENL TEST" command for details.	msdl-18
ENL SERV x	Enable service messages on D-channel x. "Service" and "Service Acknowledge" messages are supported on individual PRA B channels, ISL channels and D-channels. They are used to coordinate channel status between the near and far end. A channel status can be in service, maintenance or out-of-service. The primary and backup D-channel must be disabled before enabling service messages. Make sure both ends support service messages before using this command. For Meridian 1/Meridian SL-1 to Meridian 1 / Meridian SL-1, both systems must have X11 Release 15 or higher. By default, SERV is disabled when the interface type is Meridian 1/Meridian SL-1 (LD 17 IFC = SL1). When enabled, service messages are supported on individual PRA B-channels, ISL channels and D-channels. When disabled, service messages are provided automatically on D-channels with Backup D-channel configured. For Meridian 1/Meridian SL-1 to DMS, or Meridian 1/Meridian SL-1 to AT&T only service messages on individual PRA B-channels and ISL channels are supported. By default, SERV is disabled when the interface type is DMS (LD 17), and enabled when the interface type is AT&T (LD 17 IFC = ESS4/ESS5).	pra-15

ENL SSM x y	Enable Supplementary Service Monitor for feature y on D-channel x, where: y = 3 for Network Attendant Service. All other entries are reserved for future use	nas-18

Output format is as follows:

Standard ISDN message monitor output format appended with four fields.

Where:

- Field 1 = Customer number
- Field 2 = Indicator of whether the message is one that was decoded at a “tandem” node
- Field 3 = Descriptive string about a specified item
- Field 4 = Numeric information about specified item

Examples of the four fields follow:

```
--> 002 T-ACCESS TRKINFO
--> 002 T-PRIVATE TRUNK
--> 002 T-TIE TRUNK
--> 002 T-TANDEM COUNT (000001)
```

ENL TEST x	Enable TEST mode on MSDL DCH x.	msdl-18

The DCH is put into TEST mode to perform the local loop back (LLB) or remote loop back (RLB) test. The DCH link can only be put in test mode if it is in the release or established state. If the link is in establish state, the DCH link is first released, and then put in test mode.

The local loop back test first tests the expedited interface, then the ring interface. The test consists of sending a data packet through each interface, which in turn is sent back by Layer 2. This data packet is then validated to ensure that the contents of the data packet are the same that were originally sent.

Example:

- ENL TEST x enter TEST mode
- ENL LLB x enter local loop back mode
- TEST LLB x perform test (results are PASS or FAIL)
- DIS LLB x exit local loop back mode
- DIS TEST x exit TEST mode and restore link

The remote loopback test is used to verify the integrity of the physical link. This following test is only supported if both the D channels are on the MSDL card and both switches are running Release 18 or above. To run the test the far-end must be in the remote loopback mode (ENL RLB x). The DCH running the test (near-end) must be in TEST mode.

Example:

Far-end:

ENL TEST x — enter TEST mode
 ENL RLB x — enter remote loopback mode
 DIS RLB x — exit remote loopback mode (after test)
 DIS TEST x — exit TEST mode and restore link

Near-end:

ENL TEST x — enter TEST mode
 TEST RLB x — perform test (results are PASS or FAIL)
 DIS TEST x — exit TEST mode and restore link

If the far end is not an MSDL D-channel, use the RLBK command in LD60 to set up the remote loopback test.

EST DCH x	Establish multiple frame operation on D-channel x.	pra-13
	With the absence of the back-up D-channel, issuing the EST DCH x command clears all the B-channels on loop x. If backup D-channel is available, the system switches to the backup D-channel and the B-channels of loop x are not cleared.	

EST ISPC I ch (N)	Establish data interface process at the ISPC SLAVE side of an ISPC link at loop (I) and channel (ch), where "N" = the "number of tries" counter. The range for N = 0-(1)-255. When N = 0, the mode is set to AUTOMATIC. This mode requires one TDS slot and one DTR unit. This mode is not recommended for use on small systems or systems loaded with heavy traffic. When N > 0, the process is activated for a period of up to N * 30 minutes. The available range goes from 30 minutes (N = 1) to 128.5 hours or 5 days (N = 255). If no value is entered for N, it defaults to a value of 1. When N = 1, one attempt will be made to establish the data interface process before the ISPC slave D-channel is released.	ispc-22

FDIS NCAL <DCH#> <conn_id>	Force disconnect the specified call-independent connection as defined by its connection ID number. The connection ID number is a number in the range of 1-9999 that identifies the call independent connection on a given DCH.	qsig gf-22
MAP DCH x	Get physical address and switch settings for D-channels. This command outputs the card name and switch settings for D-channels. For example: MAP DCH DCH 15 DCHI 07 DCH 23 MSDL 09 PORT 2	msdl-18
PCON DCH x	Print configuration parameters on MSDL DCH x. This command outputs the parameters originally downloaded when the D-channel was enabled. The output format is: DCH : x LINK PARAM CONFIRM TIME: hh:mm:ss • MSDL x = 0-15 • PORT x = 0-3 • INTERFACE aaa = SL1, D100, D250, ESS4, S100, etc. • OPER MODE aaa bbb ccc ddd eee Where: aaa = RS422, RS232 ; bbb = DTE, DCE ; ccc = USR, NET ; ddd = baud rate ; eee = clock (EXT or INT CLK) T200 xx (LAPD parameter) T203 xx (LAPD parameter) T200 xx (LAPD parameter) N201 xx (LAPD parameter) K xx (LAPD parameter) N2X4 xx (LAPD parameter if INTERFACE is ITR6)	msdl-18
PLOG DCH x	Print protocol error log-on DCH x. Protocol errors can be the result of PRI transmission problems and re-start procedures, or a protocol mismatch with the far end. The PLOG counters are cleared after the PLOG is printed or the DCH card is enabled. In X11 Release 17 and earlier, the command format is: • PLOG DCHI x	pra-18

When a protocol counter overflows, the PLOG is printed automatically and the counters are cleared. The counter is also cleared when the D-channel is disabled.

Response in X11 *Release 17* and earlier is:

```
DCH xx I xxxx  
yy zz 01 02 03...16
```

Response for MSDL DCH in X11 *Release 18* and later is:

```
DCH : xx MAINT CONFIRM    TIME: hh:mm:ss  
01   cc  
11   cc  
23   cc
```

Where:

- x = DCH number
- xxxx = system real time (in hexadecimal)
- yy = maintenance indication primitive
- zz = maintenance indication task ID
- 01 02 03 . . . 16 = protocol error counters as listed below
- cc = protocol error counts

In X11 *Release 18* and later, only the non-zero counters are output. Protocol error counters:

- 01 = Count of missing PRI handshakes
- 02 = Count of peer initiated re-establishment link
- 03 = Count of unsuccessful retransmit N200 of SABME
- 04 = Count of unsuccessful retransmit N200 of DISC
- 05 = Count of N(R) errors
- 06 = Count of I fields with length greater than N201
- 07 = Count of undefined frames
- 08 = Count of I fields but not allowed
- 09 = Count of FRMR frames
- 10 = Count of CRC error frames
- 11 = Count of REJ frames
- 12 = Count of messages with less than 4 octets
- 13 = Count of undefined protocol discriminators
- 14 = Count of undefined message types
- 15 = Count of messages missing mandatory information elements
- 16 = Count of messages with undefined information elements

-
- 17 = Count of layer 1 reports of no external clock being received
- 18 = Count of aborted frames
- 19 = Count of SABME frames received with incorrect C/R bit
-
- 20 = Count of supervisory frames received with F = 1
- 21 = Count of unsolicited DM responses with F = 1
- 22 = Count of unsolicited UA responses with F = 1
- 23 = Count of unsolicited UA responses with F = 0
- 24 = Count of DM responses with F = 0
- 25 = Number of times that no response was received from the far end after N200 retransmissions of RR or RNR
- 26 = Count of frames received with incorrect header length
- 27 = Number of times owner receiver busy condition was entered
- 28 = Number of times peer receiver busy condition was entered
- 29 = Count of messages with call reference length greater than 2
-
- 30 = Count of optional IEs received with invalid contents
- 31 = Count of mandatory IEs received with invalid contents
- 32 = Count of messages received with IE's not ordered correctly
- 33 = Count of IEs which were repeated in received messages, but are only allowed to appear once per message
- 34 = Count of IEs received with length exceeding the specified maximum length for the IE
- 35 = Count of layer 3 messages from far-end with invalid call reference flag value of 0.
- 36 = Count of layer 3 messages from far-end with invalid call reference flag value of 1.
- 37 = Count of layer 3 messages from far-end with invalid global call reference.
- 38 = Count of layer 3 messages from SL-1 that are too short.
- 39 = Count of layer 3 messages from SL-1 containing an undefined message type.
-

- 40 = Count of layer 3 messages from SL-1 missing mandatory IE(s).
- 41 = Count of layer 3 messages from SL-1 containing unsupported IE(s).
- 42 = Count of layer 3 messages from SL-1 containing invalid operational IE(s).
- 43 = Count of layer 3 messages from SL-1 containing invalid mandatory IE(s).
- 44 = Count of layer 3 messages from SL-1 with IE(s) out of order.
- 45 = Count of layer 3 messages from SL-1 containing repeated IE(s).
- 46 = Count of layer 3 messages from far-end with an invalid call reference length.
- 47 = Count of layer 3 messages from SL-1 with an invalid call reference flag value of 0.
- 48 = Count of layer 3 messages from SL-1 with an invalid call reference flag value of 1.
- 49 = Count of layer 3 messages from SL-1 with an invalid global call reference.
-
- 50 = Count of unexpected layer 3 messages received from the far-end.
- 51 = Count of unexpected layer 3 messages received from the SL-1.
- 52 = Count of unexpected layer 3 timer expirations.
- 53 = Count of protocol messages received when D-channel is not in service or waiting for a Service Acknowledge message.
-

PLOG DCHI x Get D-channel protocol statistics log for DCHI x. pra-13

Protocol errors can be the result of PRI transmission problems and restart procedures, or a protocol mismatch with the far-end.

The PLOG counters are cleared after the PLOG is printed or the DCHI card is enabled. When a protocol counter overflows, the PLOG is printed automatically and the counters are cleared.

Response is:

• DCH x I xxxx yy zz 01 02 03. . . 16

Where:

- x = DCHI port
- xxxx = system real time (in hexadecimal)
- yy = maintenance indication primitive
- zz = maintenance indication task ID
- 01 02 03. . . 16 = protocol error counters as listed below:
 - 01 = count of missing PRI handshakes
 - 02 = count of peer initiated re-establishment link
 - 03 = count of unsuccessful retransmit N200 of SABME
 - 04 = count of unsuccessful retransmit N201 of DISC
 - 05 = count of N(R) errors
 - 06 = count of I fields with length greater than N201
 - 07 = count of undefined frames
 - 08 = count of I fields but not allowed
 - 09 = count of FRMR frames
 -
 - 10 = count of CRC error frames
 - 11 = count of REJ frames
 - 12 = count of messages with less than 4 octets
 - 13 = count of undefined protocol discriminators
 - 14 = count of undefined message types
 - 15 = count of messages missing mandatory info. elements
 - 16 = count of messages with undefined information elements
 -

PMES DCH x	Print incoming layer 3 messages on MSDL DCH x. The following data is kept by the MSDL DCH loadware and output when requested by this command or when one of the counters overflows: DCH : xx MSG LOG CONFIRM TIME: hh:mm:ss SETUP: yy CONNECT: yy ALERT: yy (Only non-zero counters are reported) (Where yy is the number of times a message was received) When a counter overflows, the log is printed automatically and the counters are cleared. The counter is also cleared when the D-channel is disabled.	msdl-18
PTAB DCHI x (t)	Display layer 3 message configuration table t and LAPD parameters from DCHI x. This command is intended as a debugging tool for system designers.	pra-13
PTRF DCH x	Print traffic report on MSDL DCH x. The following traffic information is output: 1. PEAK_I_US xx % = peak incoming usage on the DCH link 2. AVRG_I_US xx % = average incoming usage on the DCH link 3. PEAK_O_US xx % = peak outgoing usage on the DCH link 4. AVRG_O_US xx % = average outgoing usage on the DCH link 5. TIME xx = time in seconds 6. CONNECTED CALLS xx: = total number of established call-independent connections	msdl-18

RLS DCH x	Release D-channel x. The link is in a waiting state, ready to come back up at any time. If you release the D-channel with active B-channels, then calls in progress are not affected. However, these calls are disconnected when you re-establish the D-channel. When the automatic recovery feature is active, the B-channels are automatically re-established	pra-13
RLS ISPC I ch	Stop the data interface establishment process. When this command is entered, the mode becomes MANUAL and the number of attempts to be performed = 0.	ispc-22
RST DCH x	Reset D-channel x, inhibit signaling. Forces the link to reset (RST) state, but does not disable PRI or DCH	pra-13
RST MON	Reset or reactivate monitoring on D-channels with enabled monitors.	pra-17
SDCH DCH x	Switch to the standby D-channel x. This is only valid in a backup D-channel configuration. Releases a D-channel and switches over to the other D-channel as long as the other D-channel is in EST STBY, established standby mode. Where x is the standby D-channel number. This command changes the status of the active D-channel to standby, and changes the status of standby D-channel to active. This command is not applicable if the recovery to primary D-channel option (prompt RCVP = YES in LD 17) is used. This command is only applicable to Meridian 1/Meridian SL-1 to Meridian 1/Meridian SL-1 Backup D-channel interface (IFC = SL-1 in LD 17).	pra-13
SET MSGI x MON (0)-2	Set monitor output format level for all incoming messages on D-channel x. Refer to Setting output format levels earlier in the section.	pra-17
SET MSGO x MON (0) -2	Set monitor output format level for all outgoing messages on D-channel x. Refer to Setting output format levels earlier in the section.	pra-17

STAT DCH x Get the present status of D-channel x, where x is the I/O port number (entering x to specify just one link is optional). pra-13

DCH status may be:

- EST = DCH link is established
- EST STBY = DCH link is established and is the standby
- FAIL = DCH link has failed
- RLS = DCH link is released
- RST = DCH link is in reset state
- AEST, ARLS, REST = these codes indicate intermediate background functions are being performed. Enter the STAT command again to determine final status.

STAT DCH (x) Get status of one or all D-channels. pra-18

If a DCH number is not entered, the status of all D-channels is output. The output format is:

DCH x : aaaa bbbb cccc dddd x

Where:

- x = DCH number
- aaaa = application status
- bbbb = link status
- cccc = AUTO if autorecovery is enable
- dddd = BKUP x or PRIM x (associated primary or backup DCH)

Application status (aaaa):

- APRI = Awaiting PRI response
- CPRI = Checking PRI
- DIAG = application has failed
- DSBL = application is disabled
- OPER = link is operational
- RST = application is in reset state
- SDCH = Setting D-channel

Link status (bbbb):

- AEST = Awaiting establishment
- ARLS = Awaiting release
- EST ACTV = DCH link is established and active
- EST STBY = DCH link is established and is the standby
- FAIL = DCH link has failed
- REST = request establishment
- RLS = DCH link is released
- RST = DCH link is in reset state
- TST = Test mode

In X11 Release 17 and earlier, the STAT DCHI command is required to get the application status.

STAT DCHI (x) Get the present status of DCHI x (entering x to specify just one card, is optional). DCHI status may be: pra-13

1. DSBL = DCHI hardware is disabled.
2. DIAG = DCHI hardware has failed.
3. OPER = DCHI hardware is operational.
4. RST = DCHI is in reset state.
5. PRI, CPRI, SDCH = these codes indicate intermediate background functions are being performed. Enter the STAT DCHI command again to determine final status.

STAT ISPC l ch Get status of data interface establishment process at an ISPC SLAVE side of an ISPC link (where l = loop and ch = channel) which is configured to convey D-channel signaling. ispc-22

The status may be:

1. DISABLED = ISPC link is disabled
2. AWAITING ESTABLISHMENT = the data interface establishment process is waiting to receive DTMF digits. While waiting, dial tone is provided to the ISPC link at the SLAVE side.
3. RELEASED = the data interface establishment process is stopped because either an "RLS ISPC" command has been entered or because the maximum number of tries has been reached.
4. ESTABLISHED = data interfaces at both ends of the ISPC link are established.
5. AWAITING RELEASE = the ISPC link is being disconnected. Once disconnected, the link will transition to the "RELEASED" state.

The mode may be:

1. MODE MANUAL N = the data interface establishment process is running with up to "N" number of tries
2. MODE AUTOMATIC = the Meridian 1 provides dial tone to the ISPC slave D-channel.

STAT MON (x) Display the incoming and outgoing monitoring status of one or all D-channels. pra-13

STAT NCAL <DCH#> List all current call-independent connections on a given PRI D-channel. qsig gf-22

The response format is as follows:

- NCAL CONN_ID: The connection ID number is a number in the range of 1-9999 that identifies the call independent connection on a given DCH.
- CREF: call reference number in HEX identifying independent connection
- STATE: current state of all call-independent connections (IDLE, CONN_REQ, CONN_EST)
- TIME: year month day hour:minute:second (the time when call independent connection request is made)
- APPL: applications using the call-independent connection (eg. NACD, NMS, ...)
- ORIG: originator
- DEST: destination

STAT NCAL <DCH#> <conn_ID>	List information pertaining to a specific call-independent connection as defined by its connection ID number. The response format is as follows:	qsig gf-22
	• NCAL CONN_ID: The connection ID number is a number in the range of 1-9999 that identifies the call independent connection on a given DCH. • CREF: call reference number in HEX identifying independent connection • STATE: current state of all call-independent connections (IDLE, CONN_REQ, CONN_EST) • TIME: year month day hour:minute:second (the time when call independent connection request is made) • APPL: applications using the call-independent connection (eg. NACD, NMS, ...) • ORIG: originator • DEST: destination	
STAT SERV (x)	Get the enable/disable status of services messages for one or all D-channels. See "ENL SERV" for details.	pra-15
TEST 100 x	Perform interrupt generation test on DCHI x. This is an isolated hardware test. If this test fails, either a faulty DCHI card or a contention problem is indicated. Tests 100, 101, 200, and 201 must be run in sequential order. Established calls will stay up, but new calls cannot be placed. The DCH link must be in the reset (RST) state when these tests are run. Reset (RST) can be established when the status of the D-channel is established (EST) or released (RLS).	pra-13
TEST 101 x	Perform loop back mode test on DCHI x. This is an isolated hardware test. If this test fails, either a faulty DCHI card or a contention problem is indicated.	pra-13
TEST 200 x	Perform interrupt handler test on DCHI x. This is a software test which, when failed, indicates software problems.	pra-13
TEST 201 x	Test interrupt handler-to-link interface path. This is a software test which, when failed, indicates software problems.	pra-13
TEST LLB x	Start local loop back test on MSDL DCH x. See "ENL TEST" command for details.	msdl-18

LD 96

TEST RLB x	Start remote loop back test on MSDL DCH x. See "ENL TEST" command for details.	msdl-18

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 97: Configuration Record 2

Overlay program 97 is used to specify several system parameters for XPE and other related equipment. These parameters include the minimum flash timing to download to the XPE packs when required.

Loss and Level Plan information may also be specified as of Release 18. Refer to the *International Loss and Level Plan planning and engineering* NTP for information regarding Loss and Level Plans prior to making any changes to the parameters defined in this Overlay.

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
FIRP: Fibre Remote Parameters Data Block	1192
SUPL: Superloop parameters data block	1193
SYSM: System Parameters for MSDL/MISP card	1193
SYSP: System parameters for Peripheral Equipment	1194
XCTP: Conference/TDS/MF Sender card parameters data block	1194
XNPD: Extended Network/Digitone Receiver card data block	1195
XPE: Extended Peripheral Equipment shelf data block	1196
<i>Other Information:</i>	
Print information on Superloop or Extended PE shelves	1196

FIRP: Fibre Remote Parameters Data Block

Prompt	Response	Comment
REQ	CHG PRT	Change or Print
TYPE	FIRP	Fibre Remote Parameters
SUPL	0-156	Superloop number associated with the Remote IPE shelf
NNDC	5-(7)-8	No-New-Data -Calls condition Threshold
XSMN	(0)-63	XSM address on the remote shelf

SUPL: Superloop parameters data block

Prompt	Response	Comment
REQ	aaa	Request (CHG, END, PRT)
TYPE	SUPL	Type = SUPL (Superloop)
SUPL	0-156	Superloop number in multiples of 4
ST21	(NO) YES	System Type 21
SLOT	a	Network Card is in Left or Right Slot (x = (L) or R)
SUPT	aaaa	Superloop type (aaaa = (STD), CARR, or FIBR)
XPE0	x y z	Extended Peripheral Equipment controller 0 (STD)
XPE1	x y z	Extended Peripheral Equipment controller 1 (STD)
XPEC	1-95	Extended Peripheral Equipment Controller (CARR or FIBR)

SYSM: System Parameters for MSDL/MISP card

Prompt	Response	Comment
REQ	aaa	Req = CHG or PRT
TYPE	SYSM	Type = SYSM (System parameters for MSDL/MISP cards)
FDLC	p1 p2 p3 p4	Fast Download Control parameters

SYSP: System parameters for Peripheral Equipment

Prompt	Response	Comment
REQ	aaa	Req = CHG or PRT
TYPE	SYSP	Type = SYSP (System parameters for Peripheral equipment)
INTN	(NO) YES	International companding law
CODE	(0)-3	Quite Code is used by Network Card firmware
CONT	1-(4)-32767	Continuity
CRCF	1-(4)-32767	Cyclic Redundancy Check (CRC) Failures
FLSH	(120)-168	Flash timing
P10R	(50)-70	Pulse 10 Ratio
P12R	(50)-70	Pulse 12 Ratio
P20R	(50)-70	Pulse 20 Ratio
FDLC	p1 p2 p3 p4	Fast Download Control parameters

XCTP: Conference/TDS/MF Sender card parameters data block

Prompt	Response	Comment
REQ	aaa	Request (CHG, END, PRT)
TYPE	XCTP	Type = XCTP (Conference/TDS/MF Sender card parameters)
CPAD	x	Conference PAD (x = (0) or 1)
DTMF	0-(14)-255	Dual Tone Multifrequency
P10P	0-(30)-255	Primary 10 Pulses per second
S10P	0-(31)-255	Secondary 10 Pulses per second
20PP	0-(32)-255	20 Pulses Per second

XNPD: Extended Network/Digitone Receiver card data block

Note: The XNPD data block does not apply for Release 22.

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, PRT)
TYPE	XNPD	Type = XNPD (Extended Network / Digitone Receiver)
XNPD	28	Extended Network/Peripheral equipment controller/Digitone receiver
XPEC	(0)-95	Extended Peripheral Equipment Controller

XPE: Extended Peripheral Equipment shelf data block

Prompt	Response	Comment
REQ	aaa	Request (aaa = CHG, END, PRT)
TYPE	XPE	Type = XPE (Extended Peripheral Equipment shelves)
XPEC	(0)-95	Extended Peripheral Equipment Controller
LOC	xxxxxx	Location code for Peripheral Controller
MED	(COP)	Connection Media to Peripheral Controller
RGTP	x	Ringin Generator Type (x = (8) or 16)

Print information on Superloop or Extended PE shelves

Prompt	Response	Comment
REQ	PRT	Req = PRT
TYPE	aaaa	Type = SUPL or XPE
SUPL	0-156	Superloop number in multiples of 4
XPE	1-95	Extended Peripheral Equipment controller

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
20PP	0-(32)-255	20 Pulses Per second Tone table index for primary 20 pulses per second (pps) digit set. Use 32 for North American tones. Tone tables are defined in LD 56.	xct-15
CODE	(0)	Quite Code is used by Network Card firmware 0 is the only valid entry. Entries 1-3 are for future use.	xpe-15
CONT	1-(4)-32767	Continuity. Maintenance threshold for number of continuity faults per timeslot.	xpe-15
CPAD	(0) 1	Conference PAD Use software PAD values Use PAD values defined by switch settings on pack (NT8D17). The CNFC command in LD 38 will not do the attenuation testing when CPAD = 1.	xct-15
CRCF	1-(4)-32767	Cyclic Redundancy Check (CRC) Failures	xpe-15
DTMF	0-(14)-255	Dual Tone Multifrequency (Tone table index of the first DTMF digit to be used). Use 14 for North American tones.	xct-15

Prompt	Response	Comment	Pack/Rel
FDLC	p1 p2 p3 p4		xpe/msdl-15

Fast Download Control parameters. Where **p1** can be:

1. (ALL) = All cards listed below
2. AML = Applications Module Link (Rel 18 & later)
3. BRIE = BRI Trunk Universal ISDN Protocol Engine
4. BRIL = BRI Line cards (Rel 18 & later)
5. BRIT = Basic Rate Interface Trunk (Rel 18 & later)
6. DCH = D-Channel cards (Rel 18 & later)
7. FNET = Fibre Network Card (NT1P61)
8. FPEC = Fibre Peripheral Equipment Controller card (NT1P62)
9. LCRI = Carrier Remote IPE (Rel 21 & later)
10. MISP = Multipurpose ISDN Signaling Link cards (Rel 18 & later)
11. MSDL = Multipurpose Serial Data Link cards (Rel 18 & later)
12. PRIE = Primary Rate Interface Universal ISDN Protocol Engine
13. SDI = Serial Data Interface cards (Rel 18 & later)
14. XNET = Network cards
15. XPEC = Controller cards (this includes Carrier Remote IPE RCI in Release 21 and later)
16. XNPD = Network/Digitone receiver cards (XNPD is not applicable in Release 22 and later)

Where **p2** can be:

1. (C) = Conditional download (only if there is a major fault in the firmware or after a power failure). "C" is the recommended setting.
2. F = Force download after initialization. Entering "F" only applies to the first INIT following the entry. After the INIT, the system reverts to C (conditional).

Where **p3** can be:

1. (C) = Current version
2. L = Latest version
3. S = Specified version

Prompt	Response	Comment	Pack/Rel
		Where p4 is : • xx (version number, if p3 = S). See LD 20-22 to print versions.	
FLSH		Flash timing	xpe-15
	(120)-768	Switchhook Flash timing Establishes Switchhook Flash time in milliseconds for 500/2500 sets (NT8D PE only)	
INTN	(NO) YES	μ- International companding Law A- International companding Law	xpe-15
LOC	xxxxxx	Location code for Peripheral Controller (0-6 characters) Should be equal to the column number assigned to the System Monitor and the Universal Equipment Module (UEM) that contains the Controller. For example: CxxMy Where: • xx = column number • y = UEM number	xpe-15
MED	(COC)	Connection Media to Peripheral Controller (copper cabling)	xpe-17
NNDC	5-(7)-8	No-New-Data-Calls condition Threshold NNDC defines the bit error rate (BER) for Signal Degrade, calculated by the loadware. The actual range is 10^{-5} to 10^{-8} . The value entered here is the absolute value to the power of 10 (logarithmic scale).	rem_ipe-22
P10P	0-(30)-255	Primary 10 Pulses per second Tone table index for primary 10 pulses per second (pps) digit set. Use 30 for North American tones.	xct-15

LD 97

Prompt	Response	Comment	Pack/Rel
P10R	(50)-70	Pulse 10 Ratio (make-break ratio for 10 PPS dial pulse dialing) Range is 50% to 70%, in steps of 1. For example, at 70% the signal is on for 30 ms and off for 70 ms producing the 100 ms cycle for one pulse. To use on individual XUT, XUTJ and XEM trunks, set CLS to P10 in LD 14. For either XUT, XUTJ and XEM trunks specified or Option 11 DTI2 trunks.	xpe-16
P12R	(50)-70	Pulse 12 Ratio (make-break ratio for 12 PPS dial pulse dialing) Range is 50% to 70%, in steps of 1. For example, at 70% the signal is on for 30 ms and off for 70 ms producing the 100 ms cycle for one pulse. To use on individual XUT, XUTJ and XEM trunks, set CLS to P12 in LD 14. For either XUT, XUTJ and XEM trunks specified or Option 11 DTI2 trunks.	xpe-16
P20R	(50)-70	Pulse 20 Ratio (make-break ratio for 20 PPS dial pulse dialing) Range is 50% to 70%, in steps of 1. For example, at 70% the signal is on for 15 ms and off for 35 ms producing the 50 ms cycle for one pulse. To use on individual XUT, XUTJ and XEM trunks, set CLS to P20 in LD 14. For either XUT, XUTJ and XEM trunks specified or Option 11 DTI2 trunks.	xpe-16
REQ	CHG END PRT	Request Modify existing data Exit overlay Print data block	xpe-15

Prompt	Response	Comment	Pack/Rel
RGTP	(8) 16	Ringling Generator Type (8 or 16 concurrent ringers; 16 requires NT6D42CA Ringling Generator). This prompt determines the maximum number of 500/2500 telephones which can be in the active ringing state at the same time. CAUTION: Do not set RGTP = 16 if you do not have the NT6D42 ringing generator. Exceeding the ringer capacity may cause intermittent overload alarms on the ringing generator. The value is not passed to the Peripheral Controller card immediately after service change. That information is downloaded when the card is enabled.	xpe-18
S10P	0-(31)-255	Secondary 10 Pulses per second Tone table index for secondary 10 pulses per second (pps) digit set. Use 31 for North American tones. Tone tables are defined in LD 56.	xct-15
SLOT	(L) R	Network Card is in Left or Right slot Enter L (left) if the Network Card is located in the lower numbered network pair. For example, in superloop 0, enter L if the Network Card sits in the slot for network loops 0/1, enter R (right) for 2/3.	xpe-15
ST21	(NO) YES	System Type 21. Enter "YES" for Option 21 systems. Enter "NO" for all other systems.	xpe-15
SUPL	0-156 N0-N156	Superloop number in multiples of 4 Precede loop number with N to create a phantom loop	xpe-20
SUPT	(STD)	Standard Superloop type (normal copper cable connecting an XNET to XPEC)	rem_ipe-21
	CARR	Carrier Link Superloop type: this connects an Local Carrier Interface (LCI) to a Remote Carrier Interface (RCI)	
	FIBR	Fibre Link [connects a Fibre Network NT1P61 Card (FNET) to a Fibre PE Controller Card NT1P62 (FPEC)]	

LD 97

Prompt	Response	Comment	Pack/Rel
TYPE		Type of data block When modifying PE system parameters, the system must initialize for the changes to come into effect. The loop number for the NT8D17 Conference/TDS/MFS card is defined by prompt XCT in LD 17.	xpe/ msdl-18
	FIRP	Fibre Remote Parameters (Release 22 and later)	
	SYSM	System parameters for MSDL/MISP cards. (Rel 18 & later)	
	SYSP	System parameters. When modifying the PE system parameters, the system must initialize for the changes to come into effect.	
	SUPL	Superloop parameters	
	XCTP	Conference/TDS/MF Sender card parameters. The loop number for the NT8D17 Conference/TDS/MFS card is defined by prompt XCT in LD 17.	
	XNPD	Extended Network/Digitone Receiver (Release 21 and earlier)	
	XPE	Extended Peripheral Equipment shelves	
XNPD	28	Network loop number for Extended Network/ Peripheral equipment controller/ Digitone receiver (XNPD) card The NT8D18 card contains a superloop and 8 Digitone Receivers. It is located in network slot 10 of an Option 21/21A and must be defined as superloop 28. The Digitone Receivers are defined in LD 13.	xpe-15
XPE0	x y z	Extended Peripheral Equipment controller 0 Peripheral Controller number, starting segment and ending segment Define the superloop configuration, where: • x = Controller number (1-95) for superloop's shelf 0 • y = starting shelf segment number (0-3) • z = ending shelf segment number (0-3) Enter: X to remove XPE0 or <cr> Return to REQ prompt.	xpe-15

Prompt	Response	Comment	Pack/Rel
XPE1	x y z	Extended Peripheral Equipment controller 1 Peripheral Controller number, starting segment and ending segment Define the superloop configuration, where: • x = Controller number (1-95) for superloop's shelf 1 • y = starting shelf segment number (0-3) • z = ending shelf segment number (0-3) Enter: • X to remove XPE1 • <cr> Return to REQ prompt.	xpe-15
XPEC	(0)-95	Extended Peripheral Equipment Controller (assign Peripheral Controller numbers; 0 for automatic) Block is built with segments of the peripheral shelf (RCI or FXPEC) which are associated with this SUPL (LCI or FXNET) Where: 0 = Automatically assign Controller numbers. The system assigns the next available Controller number. 0 cannot be assigned for XPND. 1-95 = Manually assign Controller numbers Precede with X to remove. Remove all cards/TNs in the Controller shelf first. XPEC is prompted if SUPT=CARR or FIBR. <i>Range for Release 21 and later :</i>	xpe-15
	1-95	Extended Peripheral Equipment Controller if SUPT = CARR or FIBR. If SUPT = CARR, the superloop block is built with all segments (0-3) of the peripheral shelf (RCI) and associated with this SUPL (LCI). This ensures that one LCI is configured to only one RCI, and that all segments on the RCI are associated with the LCI. If SUPT = FIBR, the superloop block is built with default Fibre remote parameters and all segments (0-3) of the peripheral shelf (FPEC) are associated with this SUPL (FNET).	rem_ipe-21

LD 97

Prompt	Response	Comment	Pack/Rel
XSMN	(0)-63	XSM address on the remote shelf. (0) means not configured. XSMN applies only to Wall-Mounted remotes.	rem_ipe-22

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 117: Ethernet and Alarm Management

This overlay has a new command format which allows the administrator to:

1. configure the Release 22 Alarm Management feature
2. identify all Meridian 1 alarms
3. configure IP network interface addresses
4. perform all IP network related maintenance and diagnostic functions

Both Administration and Maintenance commands appear in this overlay.

New Command Format

LD 117 uses a new command line input interface (input parser) which has the following general structure (where “=>” is the command prompt):

=> COMMAND OBJECT [(FIELD1 value) (FIELD 2 value)... (FIELDx value)]

LD 117 offers the administrator the following configuration features:

1. **Context Sensitive Help** - Help is offered when “?” is entered. The Help context is determined by the position of the “?” entry in the command line. If you enter “?” in the COMMAND position, Help text will appear which presents all applicable command options. If you enter “?” in the OBJECT position, HELP text will appear which presents all applicable OBJECT options.
2. **Abbreviated Inputs** - The new input parser will recognize abbreviated inputs for commands, objects and object fields. For example, “N” can be entered for the command “NEW” or “R” can be entered for the object “Route”.
3. **Optional Fields** - Object fields with default values can be bypassed by the user on the command line. For example, to configure an object which consists of fields with default values, enter the command, enter the object name, press <return>, and the object will be configured with default values. All object fields do not have to be specified.
4. **Selective Change** - Instead of searching for a prompt within a lengthy

prompt-response sequence, “Selective Change” empowers the administrator to directly access the object field to be changed.

5. **Service Change Error Message Consistency** - The parser simplifies usage of service change error messages. LD 117 displays only SCH0099 and SCH0105.

New Alarm Management Capability

With the Release 22 Alarm Management feature, all *processor-based system events* are processed and logged into a new disk-based System Event List (SEL). Events which are generated as a result of administration activities, such as SCH or ESN error messages, *are not* logged into the SEL. Events which are generated as a result of maintenance or system activities, like BUG and ERR error messages, *are* logged into the SEL. Unlike the previous System History File, this new System Event List survives Sysload, Initialization and power failures.

The Event Collector

The Event Collector captures and maintains a list of all processor-based system events. The Event Collector also routes critical events to FIL TTY ports and lights the attendant console minor alarm lamp as appropriate. The System Event List (SEL) can be printed or browsed.

The Event Server

The *Event Server* consists of two components:

- 1 **Event Default Table (EDT):** This table associates events with a default severity. By using the CHG EDT command in LD 117, the EDT can be overridden so that all events default to a severity of either INFO or MINOR. The EDT can be viewed in LD 117.

Sample Event Default Table (EDT)

Error Code	Severity
ERR220	Critical
IOD6	Critical
BUG4001	Minor

Note: Error codes which do not appear in the EDT will be assigned a default severity of MINOR.

- 2 Event Preference Table (EPT): This table contains site-specific preferences for event severities as well as criteria for severity escalation and alarm suppression. The administrator can configure the EPT to:
 - a override the default event severity assigned by the default table
 - b escalate event severity of frequently occurring minor or major alarms

Sample Event Preference Table (EPT)

Error Code	Severity	Escalate Threshold (events/60 sec.) (see Note 2)
ERR??? (see Note 1)	Critical	5
INI???	Default	7
BUG1??	Minor	0
HWI363	Major	3
Note 3: The "?" is a wildcard. See section below for explanation of wildcard entries. Note 4: The window timer length defaults to 60 seconds. However, this value can be changed by the Administrator. Read "Global Window Timer Length" on page 1208 for more information.		

Wildcards

The special wildcard character "?" can be entered for the numeric segment of an error code entry in the EPT to represent a range of events. All events in the range indicated by the wildcard entry can then be assigned a particular severity or escalation threshold.

For example, if "ERR???" is entered and assigned a MAJOR severity in the EPT, all events from ERR0000 to ERR9999 are assigned MAJOR severity. If "BUG3?" is entered and assigned an escalation threshold of 5, the severity of all events from BUG0030 to BUG0039 will be escalated to the next higher severity if their occurrence rate exceeds 5 per time window.

Escalation and Suppression Thresholds

The escalation threshold specifies a number of events per window timer length that when exceeded, will cause the event severity to be escalated up one level. The window timer length is set to 1 minute by default. Escalation occurs only for minor or major alarms. Escalation threshold values must be less than the universal suppression threshold value.

A suppression threshold suppresses events that flood the system and applies to all events. It is set to 15 events per minute by default.

Global Window Timer Length

Both the escalation and suppression thresholds are measured within a global window timer length. The window timer length is set to 1 minute by default. However, the window timer length can be changed by using the CHG TIMER command in LD 117.

TTY Output Format of Events

TTY event output can be formatted or unformatted. Formatted output is also called fancy format. Output format is configurable in LD 117 using the CHG FMT _OUTPUT command.

Fancy Format Output

Formatted output appears in the following template:

<severity> <report id> <date> <time> <prim_seq_no> <cp_id> <cp_ad>
DESCTXT: <descriptive text>
OPRDATA: <operator data>
EXPDATA: <expert data>

Field	Description
<severity>	"""" (critical); """" (major); "" (minor); " " (blank for info)
<report id>	The report id consists of an event category (e.g. BUG, ERR, etc.) and an event number (1200, 230, etc.). It is padded with blanks at the end to ensure it is 9 characters long (4 characters max. for category and 5 digits max. for number). Examples of report ids are: ERR230, ACD3560, and BUG30.
<date>	DD/MM/YY
<time>	HH:MM:SS
<prim_seq_no>	Primary sequence number of the event (length of 5 digits)
<cp_id>	The Component ID is a 15 character string which indicates the id of the subsystem generating the alarm
<cp_ad>	The Component address is a 15 character string which indicates the address of the subsystem generating the event
<descriptive text>	This is an optional string which describes an event
<operator data>	This is an optional field which holds a 160 character string containing extra text or data to assist the operator in clearing a fault. This field contains any data output with a filtered SL-1 alarm (e.g. loop number, TN, etc.)
<expert data>	This is an optional variable length character string which contains extra text or data for a system expert or designer.

The following are samples of fancy format output:

```

***  BUG015 15/12/95 12:05:45 00345
EXPDATA: 04BEF0FC 05500FBA 05500EE2 05500EC6 05500EAA
BUG015 + 05500E72 + 05500E56 + 0550D96 + 055053A + 04D84E02 +
04D83CFC
BUG015 + 04D835CA 04D81BAE 04D7EABE 04F7EABE 04F7EDF2 04F7EFC
04F7E1B0

*      ERR00220 15/12/92 12:05:27 00346
OPRDATA: 51

VAS0010 15/12/92 12:06:11 00347 VMBA      VAS 5

```

Unformatted Output

Unformatted data consists of only the report ID and perhaps additional text. The following is a sample of unformatted output:

```
BUG015
BUG015 + 04BEF0FC 05500FBA 05500EE2 05500EAA 0550E8E
BUG015 + 05500E72 05500E56 05500D96 0550053A 04D84E02
BUG015 + 04D835CA 04D81BAE 04D7EABE 04F7EDF2 04F7E2FC 04&E1B0
BUG015 + 04F7E148

ERR00220 51
VAS0010
```

Ethernet and Point-to-Point Protocol

LD 117 may be used to configure and manage an IP network interface. The Meridian 1 51C, 61C, 81 and 81C Options are hardware-equipped for this advance with an Ethernet controller on the I/O processor (IOP) card. Each IOP card is equipped with a Local Area Network Controller for Ethernet (LANCE) which is preconfigured with an unique Ethernet address. The Option 11C will support Ethernet and Point-to-Point Protocol.

An Ethernet address is a unique 48-bit long physical address assigned to the Ethernet controller on the IOP. On a single CPU M1 system, there is only one IOP which contains one Ethernet interface and an IP address which must be configured. Single CPU systems use only a Primary IP address.

On a redundant or dual CPU M1 system, two IP addresses must be specified: Primary and Secondary. A dual CPU M1 system operating normally will use the Primary IP address. A dual CPU M1 system operating in split mode (the mode used only when upgrading software or hardware) will use the Secondary IP address.

Remote access to Meridian 1 switches is made possible with Point-to-Point Protocol (PPP). LD 117 may be used to configure IP addresses for Point-to-Point Protocol.

The Meridian 1 Ethernet interface is provided by the IOP pack with AUI cable on the back panel on Options 51C, 61C, 81 and 81C. The Option 11C provides Ethernet interface through an ethernet connection on the main cabinet. The Point-to-Point Protocol (PPP) can be established via asynchronous connection to any Meridian 1 SDI port. The IP addresses for Ethernet and PPP interface can be configured in overlay 117, and defaults will be used for all new installation and upgrades.

How to Configure Ethernet and Point-to-Point Protocol

The following tables explain how to configure IP addresses for Ethernet and Point-to-Point Protocol. These two tables are followed by examples.

Configure IP address for the Ethernet Interface	
Step	Action
1	Load Overlay 117
2	Create host entries
3	Assign host to primary and/or secondary IP address(es)
4	Set up Ethernet subnet mask
5	Set up routing entry

Step	Action
1	Load Overlay 117
2	Create host entries
3	Assign host to primary and/or secondary IP address(es)
4	Set up Ethernet subnet mask
5	Set up routing entry

Configure IP address for the Point-to-Point Protocol Interface	
Step	Action
1	Load Overlay 117
2	Create host entries
3	Assign host to primary and/or secondary IP address(es)

Step	Action
1	Load Overlay 117
2	Create host entries
3	Assign host to primary and/or secondary IP address(es)

Example 1
Configure IP address for the Ethernet Interface

Given: Primary IP address: 47.1.1.10 ; Secondary IP address: 47.1.1.11; Subnet mask: 255.255.255.0; Default Gateway IP: 47.1.1.1

Step	Action
1	Load Overlay 117
2	Create host entries. Enter one of the following commands: NEW HOST PRIMARY_IP 47.1.1.10 NEW HOST SECONDARY_IP 47.1.1.11 (for Dual CPU only) NEW HOST GATEWAY_IP 47.1.1.1 (if connected to customer LAN)
3	Assign host to primary and/or secondary IP address(es). Enter one of the following commands: CHG ELNK ACTIVE PRIMARY_IP CHG ELNK INACTIVE SECONDARY_IP (for Dual CPU only) Verify your IP address for Ethernet by entering the PRT ENLK command.
4	Set up Ethernet subnet mask. Enter the command: CHG MASK 255.255.255.0 Verify subnet mask setting by entering the command: PRT MASK
5	Set up routing entry. Enter the command: NEW ROUTE 0.0.0.0 47.1.1.1 (if connected to customer LAN) *Note that 0.0.0.0 = network IP; 47.1.1.1 = gateway IP Verify default routing by entering the command: PRT ROUTE

- Note 1:** For a single CPU machine, the secondary IP is not used.
- Note 2:** The secondary IP is only accessible when a system is in split mode.
- Note 3:** The subnet mask must be the same value used for the M1 Ethernet network.
- Note 4:** The M1 private Ethernet is used by all M1 devices for system access and control. An internet gateway must be used to isolate the M1 private Ethernet from the customer LAN.
- Note 5:** Routing information is required if an internet gateway or router connects an M1 private network to the customer's LAN.

Example 2
Configure IP address for the Point-to-Point Protocol Interface

Given: Local IP address: 172.1.1.1; Remote IP address 100.1.1.1

Step	Action
1	Load Overlay 117
2	Create host entries. Enter one of the following commands: NEW HOST LOCAL_PPP 172.1.1.1 NEW HOST REMOTE_PPP 100.1.1.1 (this entry is optional)
3	Assign host to primary and/or secondary IP address(es). Enter one of the following commands: CHG PPP LOCAL LOCAL_PPP 0 (always use interface #0) CHG PPP REMOTE REMOTE_PPP 0 (this entry is optional) Verify your IP address(es) for PPP by entering the PRT PPP command.

Command Descriptions

Command	Definition	Description
****	Abort	Abort overlay
BROWSE	Browse	Browse an existing System Event List
CHG	Change	Change/modify object configuration
DIS	Disable	Disable Point-to-Point Protocol
ENL	Enable	Enable Point-to-Point Protocol
INV GENERATE CARDS	Enable	Begin generating card inventory
INV GENERATE SETS	Enable	Begin generating sets inventory
INV GENERATE ALL	Enable	Begin generating both card and sets inventory
INV PRT STATUS	Status	Print out the status of the Inventory feature
INV PRT CARDS	Print	Print out the Card Inventory file
INV PRT SETS	Print	Print out the Sets Inventory file
INV PRT ALL	Print	Print out both Card and Sets Inventory file
****	Abort	Abort overlay or Printing if it is printing an Inventory file
INV GENERATE ABORT	Abort	Abort any/all inventory generations
INV MIDNIGHT CARDS	Enable	Set Midnight to run card inventory file generations
INV MIDNIGHT SETS	Enable	Set Midnight to run sets inventory file generations
INV MIDNIGHT ALL	Enable	Set Midnight to run both card and sets inventory generations
INV MIDNIGHT OFF	Disable	Set Midnight to be turned off for both card and sets inventory generations
INV MIDNIGHT STATUS	Status	Get the state of the Midnight for Inventory.
NEW	New	Add and configure new object
OUT	Out	Delete existing object
PRT	Print	Print configuration of existing object
RST	Reset	Reset Object
SET	Set	Set ELNK subnet mask to configured value
STAT	Status	Display object statistics
UPDATE	Update	Update INET database

Object Descriptions

Object	Description
DBS	Database
EDT	Event Default Table: Table of default event entries and associated severities
ELNK	Ethernet interface
ELNK ACTIVE	Active Ethernet Link: Change the Primary IP address and host name
ELNK INACTIVE	Inactive Ethernet Link: Change the Secondary IP address and host name
EPT	Event Preference Table: Table of customer's event entries with associated severities
FMT_OUTPUT	Formatted Output: Determine if system events uses formatted (also called fancy) or unformatted output. See "TTY Output Format of Events" on page 1208 for more information.
HOST	Host name
MASK	Subnet mask
OPEN_ALARM	Open Simple Network Management Protocol (SNMP) traps setting
PPP	Point-to-Point Protocol interface
PPP LOCAL	Local Point-to-Point Protocol interface address
PPP REMOTE	Remote Point-to-Point Protocol interface address
PTM	Point-to-Point Protocol idle Timer
ROUTE	Configure new routing entry
SELSIZE	System Event List Size: Number of events in System Event Log
SEL	System Event List
SUPPRESS	Suppress count: Number of times the same event is processed before it is suppressed
TIMER	Global window timer length. See "Global Window Timer Length" on page 1208 for more information.

Alphabetical list of Administration commands

The commands listed below use the following general structure
(where “=>” is the command prompt):

=> **COMMAND** **OBJECT** [(FIELD1 value) (FIELD 2 value)... (FIELDx value)]

In the table below, **COMMANDS** and **OBJECTS** are in bold typeface and fields are in regular typeface. Fields enclosed in brackets () are default values.

=> Command	Description
BROWSE SEL UP n	Browse up n # of lines in System Event List (SEL)
BROWSE SEL DOWN n	Browse down n # of lines in SEL
BROWSE SEL TOP	Browse to top of SEL
BROWSE SEL BOT	Browse to bottom of SEL
BROWSE SEL FIND xxx	Browse forward to find string xxx in SEL
BROWSE SEL BFIND xxx	Browse backward to find string xxx in SEL
CHG EDT NORMAL	Use Event Default Table (EDT) default severities
CHG EDT INFO	Override EDT; use INFO as default severity for all events except those specified in Event Preference Table (EPT)
CHG EDT MINOR	Override EDT; use MINOR as default severity for all events except those specified in Event Preference Table (EPT)
CHG ELNK ACTIVE hostname	Set Meridian 1 active Ethernet interface IP address
CHG ELNK INACTIVE hostname	Set Meridian 1 inactive Ethernet interface IP address
CHG EPT aa... a INFO x	Change an Event Preference Table (EPT) entry to Information severity, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.

=> Command	Description
CHG EPT aa... a EDT x	Change EPT to NT-defined severity from EDT, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
CHG EPT aa... a MAJOR x	Change an EPT entry to Major severity, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
CHG EPT aa... a MINOR x	Change an EPT entry to Minor severity, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
CHG EPT aa... a CRITICAL x	Change an EPT entry to Critical severity, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
CHG FMT_OUTPUT OFF	Turn off formatted output
CHG FMT_OUTPUT ON	Turn on formatted output
CHG MASK nnn.nnn.nnn.nnn	Change subnet mask
CHG PPP LOCAL hostname	Set Meridian 1 local Point-to-point Protocol interface IP address
CHG PPP REMOTE hostname	Set Meridian 1 remote Point-to-point Protocol interface IP address
CHG PTM 0-60	Change Point-to-point Protocol idle timer to specified value (in minutes)
CHG SELSIZE 5-(500)-2000	Change System Event List Size (number of events in SEL)

=> Command	Description
CHG SUPPRESS 5-(15)-127	Change global suppress for events (number of occurrences before event is suppressed)
CHG TIMER (1)-60	Change global timer window length in minutes. See "Global Window Timer Length" on page 1208 for more information.
INV GENERATE CARDS	Requests for the Inventory feature to begin generating the Inventory file for all of the cards in the system. The generation produces an inventory file with all of the cards configured on the system. Those cards that are present in the system and have card ID are noted in the inventory file with their card type, TN, and card ID. Those cards that do not have card ID or are not present in the system, will be noted to be "Unavailable" in place of their card ID.
INV GENERATE SETS	Requests for the Inventory feature to begin generating the Inventory file for the digital telsets with their telsets' IDs that have been configured in the system. Those telsets that are present in the system and have sets ID are noted in the inventory file with their sets type, TN, sets ID, DES, Primary DN. Those telsets that do not have sets ID or are not present in the system will be noted to be "Unavailable" in place of their sets ID.
INV GENERATE ALL	Requests for the Inventory feature to begin generating both the card and telsets Inventory file.
INV PRT STATUS	Requests for the status of the Inventory feature. Result may look somewhat: Inventory status: Card file status is Ok 43 records; 18/03/1999 17:10:21 Sets file status is Ok 19 records; 18/03/1999 16:44:09
INV PRT CARDS	Requests for the Card Inventory file to be printed out to the output destination (i.e. TTY).
INV PRT SETS	Requests for the Sets Inventory file to be printed out to the output destination (i.e. TTY)
INV PRT ALL	Requests for both the Card Inventory file and the Sets Inventory file to be printed out to the output destination (i.e. TTY).

=> Command	Description
****	Abort overlay. This command can also be used to abort any Inventory file printing.
INV GENERATE ABORT	Abort any currently running Inventory generations.
INV MIDNIGHT CARDS	Scheduling for the Midnight to run Card Inventory generation.
INV MIDNIGHT SETS	Scheduling for the Midnight to run Sets Inventory generation.
INV MIDNIGHT ALL	Scheduling for the Midnight to run both Card and Sets Inventory generations.
INV MIDNIGHT OFF	Turns off Midnight run off Card and Sets Inventory generations.
INV MIDNIGHT STATUS	Print out the state of the Midnight schedule of Inventory.
NEW EPT aa... a INFO x	Assign Information severity to new EPT entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
NEW EPT aa... a EDT x	Assign NT-defined severity from EDT to new EPT entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
NEW EPT aa... a MAJOR x	Assign Major severity to new EPT entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.

=> Command	Description
NEW EPT aa... a MINOR x	Assign Minor severity to new EPT entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
NEW EPT aa... a CRITICAL x	Assign Critical severity to new EPT entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025) • x = optional entry to escalate value of EPT entry from (0)-Suppress value, as defined by default or your CHG SUPPRESS entry.
NEW HOST hostname IPaddress	Configure a new host entry. The host name must exist in the host table. The default setting for the Primary IP address is: 137.135.128.253. The default setting for Primary Host Name is: PRIMARY_ENET. The default setting for the Secondary IP address is: 137.135.128.254. The default setting for the Secondary Host Name is: SECONDARY_ENET. Host Name Syntax: A host name can be up to 16 characters in length. The first character of a host name must be a letter of the alphabet. A character may be a letter, number, or underscore(_). A period is used as a delimiter between domain names. Spaces and tabs are not permitted. No distinction is made between upper and lower case.
NEW ROUTE networkIP gateway IP	Configure a new routing entry
OUT EPT aa... a	Delete a single Event Preference Table (EPT) events, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025)
OUT EPT ALL	Delete all entries in Event Default Table (EDT)
OUT HOST nnn	Delete configured host entry

=> Command	Description
OUT ROUTE nn	Delete configured routing entry
PRT EDT aa... a	Print a single Event Default Table (EDT) event, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025)
PRT EDT aa... a bb...b	Print a range of Event Default Table (EDT) events, where: • aa... a = first entry in EDT event range (e.g. BUG1000, ERR0025) • bb...b = last entry in EDT event range (e.g. BUG1000, ERR0025)
PRT ELNK	Print active and inactive Ethernet interface IP addresses
PRT EPT aa... a	Print a single Event Preference Table (EPT) entry, where: • aa... a = an event class with an event number (e.g. BUG1000, ERR0025)
PRT EPT aa... a bb...b	Print specific Event Preference Table (EPT) entry, where: • aa... a = first entry in EPT event range (e.g. BUG1000, ERR0025) • bb...b = last entry in EPT event range (e.g. BUG1000, ERR0025)
PRT EPT ALL	Print all entries in Event Preference Table (EPT)
PRT FMT_OUTPUT	Print formatted output string
PRT HOST	Print network host table entry(ies) information stored in database
PRT MASK	Print subnet mask stored in database
PRT OPEN_ALARM	Print open Simple Network Management Protocol (SNMP) traps setting
PRT PPP	Print Point-to-point Protocol interface address(es)
PRT PTM	Print current Point-to-point Protocol idle timer settings
PRT ROUTE	Print routing table entry(ies) information stored in database
PRT SEL nn	Print most recent record(s) in system event list, where: nn = 0-(20)-SELSIZE. For example, if nn = 50, the 50 most recent events in the system event list will be printed.
PRT SELSIZE	Print System Event List size

=> Command	Description
PRT SUPPRESS	Print global suppress value
PRT TIMER	Print global timer window length (in minutes). See “Global Window Timer Length” on page 1208 for more information.
OUT EPT ALL	Delete all entries in Event Preference Table (EPT)
OUT EPT aa...a	Delete a single EPT entry, where: • aa... a = first entry in EPT event range (e.g. BUG1000, ERR0025)
RST ELNK ACTIVE	Reset Meridian 1 active Ethernet interface IP address to default value
RST ELNK INACTIVE	Reset Meridian 1 inactive Ethernet interface IP address to default value
RST MASK	Reset subnet mask to default
RST PPP LOCAL	Reset local Point-to-point Protocol interface IP address to default value
RST PPP REMOTE	Reset remote Point-to-point Protocol interface IP address to default value
RST PTM	Reset Point-to-point Protocol idle timer to default
UPDATE DBS	Rebuild INET database and renumber host and route entry ID

Alphabetical list of Maintenance Commands

Maintenance commands share the same entry format as Administration commands.

=> Command	Description
DIS BUF ALL	Disable buffering for all data types
DIS BUF CDR	Disable buffering for CDR data
DIS BUF TRF	Disable buffering for TRF data
DIS DBK	Display database disaster recovery's backup & restore
DIS HOST n	Remove a host from the run time host table, where: n = host entry number
DIS PPP	Disable Point-to-point Protocol access (this enables PPPD)
DIS ROUTE n	Remove a route from the run time routing table, where: n = route entry number
ENL BUF ALL	Enable buffering for all data types
ENL BUF CDR	Enable buffering for CDR data
ENL BUF TRF	Enable buffering for TRF data
ENL DBK	Enable database disaster recovery's backup & restore
ENL HOST n	Add a host to run time host table, where: n = host entry number
ENL PPP	Enable Point-to-point Protocol access (Enables PPPD command)
ENL ROUTE n	Add a route to run time routing table, where: n = route entry number
PING	Ping an IP address to test the network settings
SET MASK	Set ELNK subnet mask to configured value
SET OPEN_ALARM slot address	Add an SNMP (Simple Network Management Protocol) trap destination slot address from 0 to 7. The address format is: x.x.x.x. (TCP/IP) To clear slot, set address to 0.0.0.0.

=> Command	Description
STAT BUF	Display buffer info (data type,% full, not ready)
STAT DBK	Display status of disaster recovery (enabled, disabled)
STAT HOST	Display current runtime host table status
STAT PPP	Show Point-to-point Protocol connection status
STAT ROUTE	Display host and network routing table

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 135: Core Common Equipment Diagnostic

LD 135 provides diagnostic and maintenance information for Option 11C/51C/61C/81/81C machines with X11 Release 18 and later. It provides a means of performing the following functions:

- clearing minor and major alarms
- clearing and printing maintenance display contents for the primary Core
- testing the idle Core
- displaying CP card status and ID
- enabling and disabling CNI cards
- displaying CNI card ID and status
- testing SIMMs, inactive CNIs, and standby Core during daily routines
- switch Cores when in redundant mode
- during midnight routines checks primary CNIs, checks for Core redundancy, and attempts to switch Cores

When a status appears disabled, one or more Out-of-Service (OOS) messages may appear. Listed below are the possible OOS messages. (What actually appears are the numbers associated with the OOS text).

Possible OOS Messages

- 0 = CP local bus parity threshold exceeded
- 1 = CP card HPM timeout threshold exceeded
- 8 = Unconfigured CNI card.
- 9 = Port has been disabled by craftsperson.
- 10 = Device is not accessible.
- 16 = CNI to 3PE cable 1 on specified card and port lost.
- 17 = CNI to 3PE cable 2 on specified card and port lost.
- 18 = 3PE power lost.
- 19 = 3PE has been manually disabled.
- 20 = CNI card has been manually disabled.
- 21 = Card test failed.
- 22 = Port test failed.
- 23 = Extender disabled by Meridian 1 initialization.
- 24 = Port interrupt line 0 disabled.
- 25 = Port interrupt line 1 disabled.
- 26 = Port interrupt line 2 disabled.
- 27 = Port interrupt line 3 disabled.

Adding a group to an option 51C/61C/81/81C

It may be necessary to add a group, or groups, to your system after original installation. Refer to the *System installation* NTP for cabling and general installation information. Follow these steps to configure the new groups in the software.

- 1 Be sure to connect the cables from the network shelf to the active and standby IPB CNI card slots. Each CNI card has 2 ports and can support 2 groups.
- 2 Load Overlay 135 and disable the standby port connect to the new group. Switch Cores, then disable the standby port again (was the active one).

LD 135

```
DIS CNI c s p  Disable the standby core CNI port
SCPU          Switch Cores If asked for FORCE, enter Yes.
DIS CNI c s p  Disable the standby core CNI port
```

- 3 Load Overlay 17 and configure the active and standby EXT for each new group.
- 4 Load Overlay 135 and enable the standby CNI port. Switch Cores and enable the standby again (was the active). Switch Cores again.

LD 135

```
ENL CNI c s p  Enable the standby core CNI port
SCPU          Switch Cores If asked for FORCE, enter Yes.
ENL CNI c s p  Enable the standby CNI port
SCPU          Switch Cores If asked for FORCE, enter Yes.
```

- 5 Load Overlay 43 and datadump to save the new configuration.
- 6 Load Overlay 135 and perform some system integrity checks. Switch the Cores, and test the CNI ports.

LD 135

```
ENL CNI c s p  Enable the standby CNI port
SCPU          Switch Cores If asked for FORCE, enter Yes.
ENL CNI c s p  Enable the standby CNI port
SCPU          Switch Cores If asked for FORCE, enter Yes.
```

Removing a group from an option 51C/61C/81/81C

It may be necessary to remove a group, or groups, from your system after original installation. Refer to the *System installation* NTP for cabling and general installation information. Follow these steps to remove the groups from the software.

- 1 Disable any peripheral or network devices connected to the groups being removed.
- 2 Load Overlay 135 and disable the standby port connect to the new group. Switch Cores, then disable the standby port again (was the active one).

LD 135

DIS CNI c s p Disable the standby CNI port

SCPU Switch Cores If asked for FORCE, enter Yes.

DIS CNI c s p Disable the standby CNI port

- 3 Load Overlay 17 and remove (OUT) the active and standby EXT for removed group.
 - 4 Load Overlay 43 and datadump to save the new configuration.
-

Basic Commands

CDSP	Clear maintenance displays.
CMAJ	Clear major alarm, and reset power fail transfer.
CMIN	Clear the minor lamp on a system basis
CMIN ALL	Clear minor alarm indication on all attendant consoles
CMIN c	Clear minor alarm indication on attendant consoles for customer c (not applicable for Release 22)
DIS CNI c s p	Disable the CNI port.
DSPL	Get contents of maintenance display for the active Core.
DSPL ALL	Get contents of maintenance display for the active Core as well as previous 63 displays.
ENL CNI c s p	Enable CNI port.
IDC CNI s	Print the card ID for the CNI on the active side.
IDC CPU	Print card ID for the active Core.
MIDN	Run midnight routines after LD 135 is aborted and TTY is logged out.
SCPU	Switch Cores.
SHDW	Restore redundancy to a system put in single mode by the SPLIT command.
SPLIT	Put a redundant (shadowed) system into single (non-shadowed) mode.
STAT CNI c s p	Get the status of all configured CNIs. (Also prints the Network Group number of both ports on each CNI.)
STAT CPU	Get the status and core numbers for both CPs.
STAT MEM c m	Get status of SIMMs on both CPs.
TEST CNI c s p	Test the CNI port.
TEST CPU	Test the inactive (standby) Core. This command performs NO tests upon the active (primary) Core.
TEST IPB	Test the backplane protocol on the secondary (inactive) Interprocessor Bus. This command does NOT test the primary (active) IPB.
TEST LCD	Test the LCD display on the active CP card.

Alphabetical list of commands

Command	Description	Pack/Rel
CDSP	Clear maintenance displays. This command sets the maintenance display for the primary CP to blank.	basic-18
CMAJ	Clear major alarm, and reset power fail transfer.	basic-18
CMIN	Clear the minor lamp on a system basis.	alm_filter-22
CMIN ALL	Clear minor alarm indication on all attendant consoles.	basic-18
CMIN c	Clear minor alarm indication on attendant consoles for customer c. (not applicable for Release 22)	basic-18
DIS CNI c s p	Disable the CNI port. Where: • c = Core number (0 or 1) This must be the standby side. Disable the active side if the CNI is not in service. • s = Slot number (8-12) • p = Port number (0 or 1) If the P is not entered, both ports, and the card itself are disabled.	basic-18
DSPL	Get contents of maintenance display for the active Core. If the maintenance display is blank, BLANK is output.	basic-18
DSPL ALL	Get contents of maintenance display for the active Core, and previous 63 displays.	basic-18
ENL CNI c s p	Enable CNI port. Where: c = Core number (0 or 1); s = Slot number (8-12); p = Port number (0 or 1) If the P is not entered, both ports, and the card itself are enabled. A port cannot be enabled if the card is disabled. Enabling the CNI card will also enable the 3 Port Extender.	basic-18

IDC CNI s	Print the card ID for the CNI on the active side. Where: s = Slot number (8-12). The printout appears in the following format: <pre>x y pppppppppaa rrssss cccccc</pre> Where: • x = Core number (0 or 1) • y = Slot number (8-12) • ppppppppp = PEC code • aa = Attribute code • rr = Release number • ssss = Serial number • cccccc = Comments (optional)	basic-18
IDC CPU	Print card ID for the active Core. The printout appears in the following format: <pre>x y ppppppppppp rrssss cccccc</pre> Where: • x = Core number (0 or 1) • y = Slot number (8-12) • ppppppppppp = PEC code • rr = Release number • ssss = Serial number • cccccc = Comments (optional)	basic-18
MIDN	Run midnight routines after LD 135 is aborted and TTY is logged out.	basic-18
SCPU	Switch Cores. This command causes the inactive CP to become active. If the switchover is successful, OK is printed. If it is not successful, an error message is printed. If, when attempting to switch CPs, the system determines the currently active side is better than the standby side, a message appears on the TTY: "FORCE Enter <YES> to force SCPU to standby Core x. Press <Return> to abort SCPU." Entering Yes continues the switch. Entering a Carriage Return <CR> defaults to No and retains the currently active side.	basic-18

LD 135

SHDW	Restore redundancy to a system put in single mode by the SPLIT command. This command cannot be used unless the system is already SPLIT. This command MUST be entered by the CPIO port on the secondary CP. SHDW puts the secondary CP to "sleep." Once the secondary CP is asleep, the primary CP begins the process of updating the secondary CP's memories so they match the primary CPs. SHDW does NOT synchronize the contents of the CMDUs. Use LD 137 to synchronize the CMDUs. When implementing this command, the following is output: WARNING: CP x will be put to SLEEP. Enter <YES> to continue, or press <return> to abort.	basic-18
SPLIT	Put a redundant (shadowed) system into single (non-shadowed) mode. The active Core remains active. Use this command for parallel reload, and for diagnostics requiring split mode operation. Additionally, the standby (inactive) Core "wakes up" and does a system level INIT. When the command is successful, OK is printed. If it is not successful, an error message is printed. This command has the same effect as putting both Cores into MAINT. If a terminal is connected to the secondary Core's CPIO port, OS level startup messages appear as well as INI messages. This is not an error, and is operating according to design. If the disks are not synchronized, the command aborts, and an error message appears.	basic-18

STAT CNI c s p Get the status of all configured CNIs. (This command also prints the Network Group number of both ports on each CNI.) basic-18

To get the status of a specific CNI port, enter the following information. Entering only STAT CNI gets the status for all CNI ports.

Where: c = Core number (0 or 1); s = Slot number (8-12);
p = Port number (0 or 1).

If the P is not entered, the status of both ports is printed.

If the status is DSBL (Disabled), one or more of the OOS reasons may appear. What actually appears are the numbers associated with the OOS text.

- 0 = CP local bus parity threshold exceeded
- 1 = CP card HPM timeout threshold exceeded
- 8 = Unconfigured CNI card
- 9 = Port has been disabled by craftsperson
- 10 = Device is not accessible
- 16 = CNI to 3PE cable 1 on specified card and port lost
- 17 = CNI to 3PE cable 2 on specified card and port lost
- 18 = 3PE power lost
- 19 = 3PE has been manually disabled
- 20 = CNI card has been manually disabled
- 21 = Card test failed
- 22 = Port test failed
- 23 = Extender disabled by Meridian 1 initialization
- 24 = Port interrupt line 0 disabled
- 25 = Port interrupt line 1 disabled
- 26 = Port interrupt line 2 disabled

STAT CPU	Get the status and core numbers for both CPs. Possible responses are: • ENBL = CP is running • IDLE = CP is in standby • DSBL = CP is disabled If the status is DSBL, one of the following OOS reasons is printed: • 0 = CP card local bus parity threshold exceeded • 1 = CP card sanity timeout threshold exceeded • 10 = Secondary CP is not accessible • 16 = Secondary CP has a major fault This command also prints out the results of the latest self-test, and the position of the MAINT/NORM switch.	basic-18
STAT MEM c m	Get status of SIMMs on both CPs. To get the status of a single SIMM, or a specific side, enter the following information. Where: • c = Core (0 or 1) • m = SIMM number (0-5) If m is not entered, status for all SIMMs is printed. If the status is Disabled (DSBL), the device is not accessible	basic-18
TEST CNI c s p	Test the CNI port. Where: • c = Core number (0 or 1) • s = Slot number (8-12) • p = Port number (0 or 1) If the P is not entered, both ports are tested. This command can test Standby CNIs as well as active CNIs that are out of service. This may take a few minutes because of the time required to reestablish memory shadowing and contents. When the command is successful, OK is printed. If it is not successful, an error message is printed.	basic-18

TEST CPU	Test the inactive (standby) Core. This command performs NO tests upon the active (primary) Core. The CMB (on the CP card), CP to CP cable, and memory are sure that Split mode can be entered safely. Then the CP is tested. The system enters split mode, runs the test, and returns to redundancy (memory shadowing). This may take a few minutes because of the time required to reestablish memory shadowing and contents. It is possible, during the test, that service may be interrupted if an error occurs on the single active Core. Output from this test is "OK," or a CCED message. Refer to the specific message for more information. Testing the secondary (inactive) Core is done by performing a "reset" on the secondary Core. If a terminal is connected to the secondary Core's CPIO, cold start diagnostics are displayed on the terminal. This is not an error, and is operating according to design.	basic-18
TEST IPB	Test the backplane protocol on the secondary (inactive) Interprocessor Bus. This command does NOT test the primary (active) IPB. The system enters split mode, runs the test, and returns to redundancy (memory shadowing). When the command is successful, OK is printed. If it is not successful, an error message is printed. This may take a few minutes because of the time required to reestablish memory shadowing and contents. It is possible, during the test, that service may be interrupted if an error occurs on the single active Core.	basic-18
TEST LCD	Test the LCD display on the active CP card. The following test pattern is displayed on the active CP card's display: • 8888888888888888 • 8888888888888888 • ABCDEFGHIJKLMNOP • QRSTUVWXYZ123456 • abcdefghijklmnop • qrstuvwxyz012345 The first two tests go by very quickly, so you may actually see only the third one.	basic-18

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 137: Core Input/Output Diagnostic

LD 137 provides IOP and CMDU related diagnostic and maintenance information for Option 11C, 51C, 61C, 81 and 81C machines with X11 Release 18 and later. Some commands in LD 37 can also be used. Refer to that program.

LD 137 provides a means of performing the following functions.

- enabling and disabling the CMDU and IOP cards
- displaying status and card ID for CMDU and IOP cards
- testing the IOP and CMDU (the hard and floppy disk drives are tested)
- testing individual disk drives
- enabling and disabling disk redundancy
- testing SCSI cable connections between IOPs and CMDUs
- testing disk synchronization on file or sector levels
- during midnight routines performs DATA CMDU, DATA RDUN commands
- displaying the Security Device Identification of the Security Dongle

The DATA CMDU AND DATA RDUN midnight routines are run every 5 days.

When a status appears disabled, one or more Out of Service (OOS) messages may appear. Listed below are the possible OOS messages:

- IOP out-of-service
- Unexpected interrupt fault monitor threshold exceeded
- Fault interrupt fault monitor threshold exceeded
- Processor exception fault monitor threshold exceeded
- ASIC interrupt fault monitor threshold exceeded
- Unrecognized error fault monitor threshold exceeded
- General event interrupt fault monitor threshold exceeded
- IOP not responding
- IOP disabled by craftsperson
- IOP responding but cannot be enabled
- CMDU out-of-service
- Hard disk read error
- Hard disk write error
- Hard disk drive error
- CMDU does not respond, the disk drive may be missing
- CMDU has been disabled by the craftsperson
- CMDU is disabled because the IOP is out-of-service
- Hard disk is inaccessible
- CMDUs are not synchronized
- CMDU status is mismatched because of a software error
- CMDU is in split mode
- CMDU is out of split mode
- No access to hard disk (HDK)

Basic Commands

DATA CMDU n	Perform read tests on the specified CMDU.
DATA CMDU n HDK, FDK	Perform read test on either the Hard Disk or Floppy Disk
DATA RDUN	Perform sector level checking on both hard disk
DIS CMDU n	Disable CMDU.
DIS ELNK	Disable the ethernet link on the active IOP pack
DIS IOP	Disable the active IOP and Ethernet
ENL CMDU n	Enable the CMDU.
ENL ELNK	Enable the ethernet link on the active IOP pack
ENL IOP	Enable IOP on the active Core and Ethernet
ENL HOST n	Add a host to run time host table
IDC	Print the IDs of both CMDUs and the active IOP
IDC CMDU n	Print the ID for the CMDU
IDC IOP	Print out the ID of the active IOP
SDID	Display Security Device Identification of Security Dongle(s)
STAT	Get status of IOPs, CMDUs and Ethernet.
STAT CMDU n	Get status of the CMDU.
STAT ELNK	Display status of the ethernet link on the active IOP pack whether enabled or disabled
STAT HOST	Display current run time host table status
STAT IOP	Display status of the active IOP and Ethernet
SWAP	Swap the CMDUs
SYNC	Synchronize the hard disks on both CMDUs
TEST CMDU n	Perform test for the CMDU.
TEST CMDU n HDK, FDK	Perform test on the Hard or Floppy Disk
TEST ELNK INT	Test internal loop-back on Ethernet link
TEST ELNK EXT	Test external loop-back on Ethernet link
TEST ELNK TDR	Test the Time Domain Reflectometry
TEST IOP	Perform the self test on the active IOP
TEST RDUN	Perform file level checking on both hard disks
TEST SCSI	Test the SCSI cables
TTY x	Test TTY x

Alphabetical list of commands

Command	Description	Pack/Rel
DATA CMDU n	Perform read tests on the specified CMDU. This data validity check is performed on both hard and floppy disks. While the test is in progress, the CMDU is inaccessible. Progress messages are output. n = core number (0 or 1) If n is not entered, this command checks both CMDUs. This is more extensive than the TEST command, and may take longer.	basic-18
DATA CMDU n HDK, FDK	Perform read test on either the Hard Disk or Floppy Disk. This is a data validity check. While the test is in progress, the Disk is inaccessible. Where: n = Core number (0 or 1). You must enter the Core number. This is more extensive than the TEST command, and may take longer.	basic-18
DATA RDUN	Perform sector level checking on both hard disks. This test ensures that disk synchronization (disk redundancy) exists. It can only be performed when disk redundancy is enabled. All data is checked, on both disks, sector by sector. If the test fails, a CIOD message appears, and disk redundancy is disabled. This is more extensive than the TEST command, and may take longer. While this test is in progress, the disks are inaccessible.	basic-18
DIS CMDU n	Disable CMDU. Where: n = Core number (0 or 1). You must enter the Core number. If disk redundancy is currently enabled (both CMDUs are enabled and enabled), disabling the CMDU also disables disk redundancy. The confirmation is displayed: "CURRENTLY CMDU N IS ACTIVE. DISK RDUN WILL BE DISABLED. ENTER Y(ES) TO CONFIRM, N(O) TO ABORT." If the specified CMDU is in standby, its state is changed to disabled. If it is the active CMDU, it is disabled, and the standby CMDU becomes active.	basic-18

DIS ELNK	Disable the ethernet link on the active IOP pack. An attempt is made to disable the Ethernet link. When the link is disabled, all activities will be terminated. The system displays OK to indicate that the link is disabled or FAIL to indicate that the link could not be disabled.	basic-22
DIS IOP	Disable the active IOP and Ethernet. The LED is lit on the IOP faceplate and both CMDUs are inaccessible.	basic-18
ENL CMDU n	Enable the CMDU. Where: n = Core number (0 or 1). You must enter the Core number. When the first CMDU is enabled, that CMDU's state is ACTIVE. If a second ENL CMDU is attempted, a file level synchronization on both hard disks is performed first. If the synchronization (disk redundancy) does not exist, a CIOD error message is printed, and the second CMDU remains disabled. If the synchronization exists, the confirmation is displayed: "DISK RDUN WILL BE ENABLED, ENTER Y(ES) to CONFIRM, N(0) TO ABORT." When disk redundancy is successful, both CMDU states are Enabled. The CMDU enabled first is active, and the second is standby.	basic-18
ENL ELNK	Enable the ethernet link on the active IOP pack. If the Ethernet link is down, entering this command will cause an attempt to restore the Ethernet link to normal operation state. However, if the system cannot successfully restore the link, the Ethernet link will remain disabled. If the link was already up, this command does not affect the current operation of it. The system displays OK to indicate that the link is now enabled or FAIL to indicate that the link could not be enabled.	basic-22
ENL HOST n	Add a host to run time host table.	basic-22

LD 137

ENL IOP	Enable IOP and Ethernet on the active Core. The LED is turned off on the IOP faceplate. The CMDUs are restored to the state they were in prior to the IOP being changed. However, if the cable between the IOPs is not connected, the CMDUs remain inaccessible until the cable is reattached. If both CMDUs were enabled, a file level synchronization check is performed prior to restoring states. If the synchronization (disk redundancy) does not exist, only the previously active CMDU is enabled.	basic-18
IDC	Print the IDs of both CMDUs and the active IOP. The printout appears in the following format: <pre>pppppppppp rrssss cccccccc</pre> Where: • pppppppppp = PEC code • rr = Release number • ssss = Serial number • cccccccc = Comments (not always be present)	basic-18
IDC CMDU n	Print the ID for the CMDU. Where: n = Core number (0 or 1). If n is not entered, card ID information is printed for both CMDUs.	basic-18
IDC IOP	Print out the ID of the active IOP.	basic-18
SDID	Display Security Device Identification of Security Dongle(s)	basic-23
STAT	Get status of IOPs, CMDUs and Ethernet. For the IOP, the Enabled or Disabled, and Active or Standby state is printed. Status is given for active and standby IOPs. For the CMDU, Disk redundancy, enabled/disabled, and active/standby status are printed. If Ethernet is disabled, the status (enabled or disabled) is displayed along with an OOS message. The status given for the standby IOP is a software status as it was last seen when that IOP was active. No hardware status is given because the standby IOP cannot be accessed.	basic-18

If the status of the IOP or CMDU is disabled, one of the following OOS messages may appear:

- IOP out-of-service
- Unexpected interrupt fault monitor threshold exceeded
- Fault interrupt fault monitor threshold exceeded
- Processor exception fault monitor threshold exceeded
- ASIC interrupt fault monitor threshold exceeded
- Unrecognized error fault monitor threshold exceeded
- General event interrupt fault monitor threshold exceeded
- IOP not responding
- IOP disabled by craftsperson
- IOP responding but cannot be enabled
- CMDU out-of-service
- Hard disk read error
- Hard disk write error
- Hard disk drive error
- CMDU does not respond, the disk drive may be missing
- CMDU has been disabled by the craftsperson
- CMDU is disabled because the IOP is out-of-service
- Hard disk is inaccessible: CMDUs are not synchronized
- CMDU status is mismatched because of a software error
- CMDU is in split mode
- CMDU is out of split mode
- No access to hard disk (HDK)

STAT CMDU n Get status of the CMDU. Where: n = Core number (0 or 1). basic-18
If n is not entered, the status for both CMDUs is printed.

If the CMDU is disabled, one of the following CMDU OOS reason may appear:

- Hard disk read error
- Hard disk write error
- Hard disk drive error

- CMDU does not respond, the disk drive may be missing
- CMDU has been disabled by the craftsperson
- CMDU is disabled because the IOP is out-of-service
- Hard disk is inaccessible
- CMDUs are not synchronized
- CMDU status is mismatched because of a software error
- CMDU is in split mode
- CMDU is out of split mode
- No access to hard disk (HDK)

STAT ELNK Display status of the ethernet link on the active IOP pack basic-22
 whether enabled or disabled. The Ethernet address of this
 active Input Output Processor (IOP) is also displayed.

Since the Local Area Network Controller for Ethernet (LANCE)
 is equipped on the IOP, LANCE will be disabled when the IOP is
 disabled.

If the ethernet link is disabled, an OOS reason will be displayed
 containing the following information:

```
ELNK            ENABLED
Ethernet (In unit number 0):
Host: aaaxxx
Internet address: xx.xxx.xx.xxx
Netmask: xxxxxxxxxx ; Subnetmask: xxxxxxxxxx
xxx packets received ; xxx packets sent
x input errors ; x output errors
x collisions
```

STAT HOST Display current run time host table status. basic-22

STAT IOP Display status of the active IOP and Ethernet. basic-18

This command prints out the status whether the IOP is enabled
 or disabled. If it is disabled, the OOS reasons are printed. The
 following IOP OOS messages may appear:

- IOP out-of-service
- Unexpected interrupt fault monitor threshold exceeded
- Fault interrupt fault monitor threshold exceeded
- Processor exception fault monitor threshold exceeded

- ASIC interrupt fault monitor threshold exceeded
- Unrecognized error fault monitor threshold exceeded
- General event interrupt fault monitor threshold exceeded
- IOP not responding
- IOP disabled by craftsperson
- IOP responding but cannot be enabled

SWAP Swap the CMDUs. basic-18

After this command is issued, the active CMDU becomes standby, and the standby CMDU becomes active. This command is performed only when disk redundancy is enabled.

SYNC Synchronize the hard disks on both CMDUs. basic-18

This is a sector level synchronization. It is performed by copying the data from the active CMDU to the disabled CMDU, sector by sector. This can only be done when one CMDU is active and one is disabled.

The confirmation prompt appears when the system is ready to do the copying:

“CMDU n ACTIVE HDK WILL BE COPIED AND DISK RDUN WILL BE ENABLED. ENTER Y TO CONFIRM.”

Synchronization may take as long as 40 minutes. Progress reports appear on the TTY periodically.

TEST CMDU n Perform test for the CMDU. basic-18

This test includes a self-test, read/write capability test, and disk access test on both hard and floppy disks for this CMDU. While the test is in progress, the CMDU is inaccessible.

Where: n = Core number (0 or 1). You must enter the Core number.

A disk must be in the floppy drive when this test is run. If the floppy disk is not present, the floppy disk test will fail. The hard disk test will not be affected.

TEST CMDU n HDK, FDK	basic-18
Perform test on the Hard or Floppy Disk.	
This test includes a self-test, read/write capability test, and disk access test on either the hard or floppy disk drive for this CMDU. While the test is in progress, the CMDU is inaccessible.	
Where: n = Core number (0 or 1). You must enter the Core number.	
A disk must be in the floppy drive to test it. If a floppy disk is not present, the floppy disk test will fail. The hard disk test will not be affected.	
TEST ELNK EXT	basic-22
Test the external-loop back on Ethernet link.	
The result displayed can be either: PASS or FAIL. A pass indicates that the system can transmit its own transmitted packet and a fail means the opposite.	
TEST ELNK INT	basic-22
Test the internal-loop back on Ethernet link.	
The result displayed can be either: PASS or FAIL. A pass indicates that the system can receive its own transmitted packet and a fail means the opposite.	
TEST ELNK TDR	basic-22
Test the Time Domain Reflectory	
The displayed result is used to determine the location of suspected cable faults. A confirm message is displayed to ask the user to enter YES or NO. The entry YES tells the system to stop the Ethernet communication and perform a DTR. The entry NO tells the system to ignore the command.	
The Ethernet link remains disabled after this test. The user must enable it by command ENL ELNK.	
TEST IOP	basic-18
Perform the self test on the active IOP and internal loop-back test on Ethernet. The IOP must be disabled to perform this test.	
TEST RDUN	basic-18
Perform file level checking on both hard disks.	
This test ensures that disk synchronization exists. It can only be performed when disk redundancy is enabled. If the test fails, a CIOD message appears, and disk redundancy is disabled.	
While this test is in progress, the disk is inaccessible.	

TEST SCSI	Test the SCSI cables. This test ensures the cable connections between the IOPs are present. Access to the CMDUs is tested as well. If the test is successful, OK is printed. If the test is unsuccessful, CIOD messages are printed to indicate the problem.	basic-18
TTY x	Test TTY x. Response is: ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789"#\$%*!&(<>-.: , .? READY FOR INPUT Anything entered on the keyboard will be echoed until END is input.	basic-18

Issued:	June 1999
Status:	Standard
X11 Release:	24

LD 143: Customer Configuration Backup and Restore

X11 Release 23 introduces the Keycode Management feature for customers with the Input/Output Disk Unit with CD-Rom (IODU/C). Previously, a Keycode was stored on two devices: a Security Cartridge and a Direct.rec file.

With X11 Release 23, however, a Keycode is a “soft” entity that resides on a customer’s hard disk. A Keycode can be delivered, replaced, upgraded, and downgraded.

All Keycode Management commands are executed in Overlay 143.

Basic commands

ABKO	Attended Backup
ARES	Attended Restore
HELP	View overlay commands on terminal
KDIF k1 k2	Print the differences between two specified keycodes
KMAN	Manually introduce the keycode the same way as form the Installation Tools
KNEW d r	Check and accept new keycode file
KOUT	Delete "keycode.new" file
KRVR d r	Revert the current keycode.rec and keycode.old files
KSHO k	Show content of the currently used keycode file and the differences with the rest of keycode files
KSTT	Print the status of a new (trial) keycode (if any).
KUPL	Upload keycode command.
UPGRADE	Perform Option 11C upgrade
XBK	Remote backup database
XRT	Remote restore database
XSL	Remote sysload the system
XVR	Remote verify database

Alphabetical list of commands

Command	Description	Pack/Rel
ABKO	Attended Backup. EDD and BKO commands are enhanced to indicate lack of space or other obstacles to perform required backup. In case of failure, an Attended Backup is suggested.	basic-23
ARES	Attended Restore. Attended Database Restore is an interactive process very similar to the existing Install procedure. Installer is prompted to install Database floppies in appropriate order. Note that the identical procedure is used during upgrade of large customer IODU/C machine assuming that Amber will generate multiple 2MB floppies with customer's Database.	basic-23
HELP	View overlay commands on terminal	basic-23
KDIF k1 k2	Print the differences between two specified keycodes. Where k1 and k2 may have one of the following values: • PEND: pending keycode which is searched for in "/f0", if not found, in "/f1" and finally in "/u" • CURR: current keycode which can be either keycode.rec or keycode.new, both residing in "/p/install" on user's hard disk • REC: keycode.rec file residing in "/p/install" on user's hard disk • OLD: keycode.file residing in "/p/install" on user's hard disk • NEW: keycode.new file residing in "/p/install" on users hard disk	basic-23
KMAN	Manually introduce the keycode the same way as form the Installation Tools. The user must input 20 lines, each line containing 16 characters to create a keycode. The "end" string notifies the end of keycode creation. On the 21st line it marks keycode completion; on any other line, it the keycode creation is abandoned.	

KNEW d r	Check and accept new keycode file. The new keycode will be activated by the first restart and will become permanent keycode on the d-the midnight unless r restarts occur before. With Release 24 and later, the KNEW command allows changes to ISM parameters and feature packaging to be instantly activated without Sysload. The following message is output: CCBR020 New Keycode accepted and activated successfully. Sysload is NOT needed!	basic-23
KOUT	Delete "keycode.new" file.	basic-23
KRVR d r	The old keycode is reverted to current keycode. Where, the old keycode will be activated by the first restart and will become permanent keycode on the D-th midnight unless r restarts occur before. Note: Using the KRVR command without parameters implies that the old keycode will be activated and become the permanent keycode after the first restart. With Release 24 and later, the KRVR command will instantly activate the Old keycode if the only difference between the Old Keycode (Keycode.old) and the new Keycode (Keycode.rec) is that some or all of the ISM parameters in the Old Keycode are higher. After the KRVR command has been entered, the following new message is printed if the system has instantly activated the Old Keycode: CCBR020 New Keycode accepted and activated successfully. Sysload is NOT needed!	basic-23
KSHO k	Print the content of the currently used keycode file and the differences with the rest of keycode files. Where k may have one of the following values: • PEND: pending keycode which is searched for in "fo", if not found, in "f1" and finally in "u" • CURR: current keycode which can be either keycode.rec or keycode.new, both residing in "/p/install" on user's hard disk • REC: keycode.rec file residing in "/p/install" on user's hard disk • OLD: keycode.old file residing in "/p/install" on user's hard disk • NEW: keycode.new file residing in "/p/install" on user's hard disk	basic-23

KSTT	Print the status of a new (trial) keycode (if any).	
KUPL	Upload keycode command. In the Meridian 1 system window, paste the new keycode after the Upload keycode prompt. Pressing enter will upload the keycode and initiate validation.	
UPGRADE	Perform Option 11C upgrade. This command invokes the Install Setup Program. To perform an installation, the installer inserts a Software Delivery Card in the PCMCIA slot on the System Core Card. Then, on TTY 0, the installer may invoke the Setup Program by using the UPGRADE command in LD 143. If the installation was invoked in LD 143, the system reboots and automatically runs the Loader Program. With Release 24 and later, the UPGRADE command allows changes to ISM parameters and feature packaging to be instantly activated without Sysload upon keycode acceptance. The following message is output: Upgrade was completed and activated successfully. Sysload is NOT needed!	opt11c-22
XBK	Remote backup database Backup the configuration files from the primary flash drive of the Option 11C system onto a computer.	opt11c-22
XRT	Remote restore database Restore the files from a computer into the primary flash drive of the Option 11C system.	opt11c-22
XSL	Remote sysload the system Sysload the Option 11C system from the primary flash drive.	opt11c-22
XVR	Remote verify database Verify the files on a computer with the files in the primary flash drive of the Option 11C system.	opt11c-22

Meridian 1

X11 Software Input/Output Guide

© 1995,1999 Nortel Networks Corporation

All rights reserved

Information is subject to change without notice. Nortel Networks Corporation reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules, and the radio interference regulations of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

SL-1 and Meridian 1 are trademarks of Nortel Networks Corporation.

Publication number: 553-3001-400

Document release: Standard 16.00

Date: June 1999

Printed in United States of America