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DEFINITY Communications System Generic 2.2

Administration Procedures

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CONTENTS

ABOUT THIS DOCUMENT 1-1
Purpose of This Document 1-1
Prerequisite Skills and Knowledge 1-1
Organization and Use of This Document 1-1
Trademarks and Service Marks 1-4

USING MANAGER II 2-1

PROCEDURE MODE — SYSTEM MANAGEMENT ACCESS PORT STATUS 3-1

PROCEDURE TPE WORD 1 — RUN TAPE 4-1

PROCEDURE 000 WORD 1 — SINGLE TERMINAL TRANSLATION 5-1

PROCEDURE 000 WORD 2 — SINGLE TERMINAL - FEATURE AND RESTRICTION GROUPS 6-1

PROCEDURE 000 WORD 3 — SINGLE TERMINAL - MISCELLANEOUS FEATURES 7-1

PROCEDURE 000 WORD 4 — EXTENSION NPA-NXX/PARTITION ASSIGNMENT 8-1

PROCEDURE 001 WORD 1 — TERMINAL TRANSLATION - MULTIPLE EXTENSIONS 9-1

PROCEDURE 003 WORD 1 — RECENTLY DISCONNECTED EXTENSIONS 10-1

PROCEDURE 010 WORD 1 — EXTENSION CLASS OF SERVICE - FEATURES 11-1

PROCEDURE 010 WORD 2 — EXTENSION CLASS OF SERVICE - FEATURES 12-1

PROCEDURE 010 WORD 3 — EXTENSION CLASS OF SERVICE - RESTRICTIONS 13-1

PROCEDURE 010 WORD 4 — EXTENSION CLASS OF SERVICE - RESTRICTIONS 14-1

PROCEDURE 011 WORD 1 — CALL COVERAGE CRITERIA - D/A INTERVAL - PATH 15-1

PROCEDURE 012 WORD 1 — NAME DATABASE - NAME TO BE DISPLAYED 16-1

PROCEDURE 012 WORD 2 — NAME DATABASE - ENTRY 17-1

PROCEDURE 012 WORD 3 — NAME DATABASE COMPACTION 18-1

PROCEDURE 013 WORD 1 — MNEMONIC DIALING - ALPHANUMERIC CHARACTERS 19-1

PROCEDURE 013 WORD 2 — MNEMONIC DIALING - PHONE NUMBER 20-1

PROCEDURE 013 WORD 3 — NUMBER OF MNEMONICS 21-1

PROCEDURE 014 WORD 1 — BEARER CAPABILITY CLASS OF SERVICE - CALL OPTIONS 22-1

PROCEDURE 014 WORD 2 — BEARER CAPABILITY CLASS OF SERVICE - DATA OPTIONS 23-1

PROCEDURE 026 WORD 1 — ACD - SPLIT CHARACTERISTICS 24-1

PROCEDURE 026 WORD 2 — ACD - SPLIT SUPERVISOR AND SPLIT CHARACTERISTICS 25-1

PROCEDURE 026 WORD 3 — ACD - SPLIT MEMBERS 26-1

PROCEDURE 026 WORD 4 — ACD - SYSTEM SUPERVISOR AND WARNING TONE 27-1

PROCEDURE 026 WORD 5 — ACD - DISPLAY SPLIT MEMBER ALLOCATION 28-1

PROCEDURE 027 WORD 1 — ACD - FIRST RECORDED ANNOUNCEMENT 29-1

PROCEDURE 027 WORD 2 — ACD - SECOND RECORDED ANNOUNCEMENT 30-1

PROCEDURE 027 WORD 3 — ACD - QUEUE-OF-ORIGIN/CITY-OF-ORIGIN ANNOUNCEMENT 31-1

PROCEDURE 028 WORD 1 — CMS BUSY OUT 32-1

PROCEDURE 030 WORD 1 — CALL VECTORING - ABBREVIATED DIALING LIST 33-1

PROCEDURE 030 WORD 2 — CALL VECTORING - ADMINISTER VECTORS 34-1

PROCEDURE 030 WORD 3 — CALL VECTORING - PROGRAMMING VECTOR STEPS 35-1

PROCEDURE 031 WORD 1 — CALL VECTORING - VDN TERMINATION AND ATTRIBUTES 36-1

PROCEDURE 031 WORD 2 — CALL VECTORING - VDN ATTRIBUTES 37-1

PROCEDURE 031 WORD 3 — CALL VECTORING - TRUNK GROUP TERMINATION 38-1

PROCEDURE 032 WORD 1 — CALL VECTORING - DISPLAY SPLIT USAGE 39-1

PROCEDURE 033 WORD 1 — CALL VECTORING - ORIGIN ANNOUNCEMENT 40-1

PROCEDURE 050 WORD 1 — MULTIAPPEARANCE TERMINAL DEFINITIONS 41-1

PROCEDURE 050 WORD 2 — BUTTON TEMPLATE 42-1

PROCEDURE 051 WORD 1 — MULTIAPPEARANCE TERMINAL AND DATA MODULE TRANSLATION 43-1

PROCEDURE 051 WORD 2 — BRI TERMINAL SPID TRANSLATION 44-1

PROCEDURE 051 WORD 3 — DATA LINE CIRCUIT - LINE PORTS 45-1

PROCEDURE 052 WORD 1 — MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE 46-1

PROCEDURE 052 WORD 2 — MULTIAPPEARANCE TERMINAL/DATA MODULE - ABBREVIATED AND DELAYED RINGING 47-1

PROCEDURE 053 WORD 1 — MULTIAPPEARANCE TERMINAL - MANUAL SIGNALING 48-1

PROCEDURE 053 WORD 2 — MULTIAPPEARANCE TERMINAL - MESSAGE WAITING 49-1

PROCEDURE 054 WORD 1 — MULTIAPPEARANCE TERMINAL - MISCELLANEOUS FEATURES 50-1

PROCEDURE 054 WORD 2 — MULTIAPPEARANCE TERMINAL - CUSTOM CALLING FEATURES 51-1

PROCEDURE 054 WORD 3 — MULTIAPPEARANCE TERMINAL - HOLD BUTTON 52-1

PROCEDURE 054 WORD 4 — MULTIAPPEARANCE TERMINAL - DISPLAY BUTTONS 53-1

PROCEDURE 055 WORD 1 — MULTIAPPEARANCE TERMINAL - TERMINAL BUSY 54-1

PROCEDURE 055 WORD 2 — MULTIAPPEARANCE TERMINAL - ONE BUTTON TRANSFER/RETURN TO VOICE 55-1

PROCEDURE 056 WORD 1 — MULTIAPPEARANCE TERMINAL - INTERCOMS 56-1

PROCEDURE 057 WORD 1 — MULTIAPPEARANCE TERMINAL - PERSONAL CO LINE APPEARANCE 57-1

PROCEDURE 057 WORD 2 — MULTIAPPEARANCE TERMINAL - DISPLAY PERSONAL CO LINE 58-1

PROCEDURE 057 WORD 3 — MULTIAPPEARANCE TERMINAL - DISPLAY CO LINE TRUNKS 59-1

PROCEDURE 058 WORD 1 — MULTIAPPEARANCE TERMINAL SWAP 60-1

PROCEDURE 059 WORD 1 — ABBREVIATED DIALING - MANAGE LISTS 61-1

PROCEDURE 059 WORD 2 — ABBREVIATED DIALING - ADMINISTER LIST ITEMS 62-1

PROCEDURE 059 WORD 3 — ABBREVIATED DIALING - LIST ACCESS AND SPECIAL FUNCTION BUTTONS 63-1

PROCEDURE 059 WORD 4 — ABBREVIATED DIALING - AUTOMATIC DIALING/DEFAULT DIALING BUTTONS 64-1

PROCEDURE 059 WORD 5 — ABBREVIATED DIALING - DISPLAY CAPACITIES 65-1

PROCEDURE 060 WORD 1 — ACD DISPLAY - AGENT ASSIGNMENTS 66-1

PROCEDURE 060 WORD 2 — ACD DISPLAY - PAIR ASSIGNMENTS 67-1

PROCEDURE 061 WORD 1 — MULTIAPPEARANCE TERMINAL - INTERCOM RING RATES AND A/D RINGING 68-1

PROCEDURE 063 WORD 1 — AUTOMATIC MESSAGE WAITING 69-1

PROCEDURE 063 WORD 2 — AUTOMATIC MESSAGE WAITING 70-1

PROCEDURE 070 WORD 1 — MULTIAPPEARANCE TERMINAL ID/PERIPHERALS 71-1

PROCEDURE 070 WORD 2 — DATA MODULE TRANSMISSION SETTINGS 72-1

PROCEDURE 070 WORD 3 — DATA MODULE EMULATION SETTINGS 73-1

PROCEDURE 070 WORD 4 — DATA MODULE EIA LEAD STATUS 74-1

PROCEDURE 070 WORD 5 — BRI TERMINAL VENDOR AND SPID REQUEST 75-1

PROCEDURE 075 WORD 1 — EXTENSION-RELATED SEARCHES 76-1

PROCEDURE 075 WORD 2 — TRUNK GROUP-RELATED SEARCHES 77-1

PROCEDURE 075 WORD 3 — NETWORK DIAL PLAN RELATED SEARCHES 78-1

PROCEDURE 076 WORD 1 — SEARCH FOR HUNTING ASSIGNMENTS 79-1

PROCEDURE 100 WORD 1 — TRUNK GROUP TRANSLATION 80-1

PROCEDURE 100 WORD 2 — TRUNK GROUPS - MODEM POOLING AND BCCOS 81-1

PROCEDURE 100 WORD 3 — TRUNK GROUPS - SIGNALING AND OTHER PARAMETERS 82-1

PROCEDURE 100 WORD 4 — TRUNK GROUPS - ROUTE ADVANCE 83-1

PROCEDURE 100 WORD 5 — DATA LINE CIRCUIT - TRUNK GROUP PORTS 84-1

PROCEDURE 100 WORD 7 — ASAI GATEWAY TRUNK GROUP ASSOCIATION 85-1

PROCEDURE 101 WORD 1 — TRUNK GROUP CHARACTERISTICS 86-1

PROCEDURE 101 WORD 2 — TRUNK GROUP CHARACTERISTICS 87-1

PROCEDURE 101 WORD 3 — TRUNK GROUP CHARACTERISTICS - PREFIXING 88-1

PROCEDURE 102 WORD 1 — MISCELLANEOUS TRUNK RESTRICTION GROUPS 89-1

PROCEDURE 103 WORD 1 — NETWORK TRUNK GROUP TRANSLATION 90-1

PROCEDURE 104 WORD 1 — MAIN/SATELLITE - SYSTEM TRANSLATION 91-1

PROCEDURE 104 WORD 2 — MAIN/SATELLITE - TRUNK GROUPS 92-1

PROCEDURE 106 WORD 1 — TRUNK MAINTENANCE-BUSY LIST 93-1

PROCEDURE 107 WORD 1 — ATMS - TERMINATING TEST LINE ASSIGNMENT 94-1

PROCEDURE 107 WORD 2 — ATMS - MARGINAL THRESHOLDS FOR TESTS 95-1
PROCEDURE 107 WORD 3 — ATMS - TEST SCHEDULE 96-1
PROCEDURE 107 WORD 4 — ATMS - TRUNK ASSIGNMENT TO SCHEDULE 97-1
PROCEDURE 107 WORD 5 — ATMS - DISPLAY OF TRUNK ASSIGNMENTS BY SCHEDULE 98-1
PROCEDURE 107 WORD 6 — ATMS - BUSY OUT THRESHOLDS 99-1
PROCEDURE 107 WORD 7 — ATMS - ALARM THRESHOLDS 100-1
PROCEDURE 108 WORD 1 — ISDN TERMINATING TEST LINE ASSIGNMENT 101-1
PROCEDURE 110 WORD 1 — TRUNK DAC FOR TANDEM TIE/TRUNK-TO-TRUNK RESTRICTIONS 102-1
PROCEDURE 111 WORD 1 — TANDEM TIE/TRUNK-TO-TRUNK RESTRICTIONS 103-1
PROCEDURE 115 WORD 1 — TRUNK GROUP TERMINATION 104-1
PROCEDURE 116 WORD 1 — DS1 AND ISDN TRUNK ASSIGNMENTS 105-1
PROCEDURE 120 WORD 1 — AUTOMATIC CIRCUIT ASSURANCE 106-1
PROCEDURE 150 WORD 1 — TRUNK - FEATURES 107-1
PROCEDURE 155 WORD 1 — CONTACT INTERFACE 108-1
PROCEDURE 175 WORD 1 — DISPLAY MISCELLANEOUS TRUNK RESTRICTION GROUPS 109-1
PROCEDURE 178 WORD 1 — SEARCH FOR TRUNK CHARACTERISTICS 110-1
PROCEDURE 180 WORD 1 — MODEM POOL 111-1
PROCEDURE 200 WORD 1 — CONSOLE FEATURES 112-1
PROCEDURE 201 WORD 1 — CONSOLE DXS/BLF GROUP SELECT BUTTONS 113-1
PROCEDURE 201 WORD 2 — CONSOLE EXTENDED DXS 114-1
PROCEDURE 202 WORD 1 — CONSOLE DIRECT TRUNK GROUP SELECT BUTTONS 115-1
PROCEDURE 203 WORD 1 — CONSOLE CONTROL BUTTONS 116-1
PROCEDURE 204 WORD 1 — CONSOLE MESSAGES AND LISTED DIRECTORY NUMBERS 117-1
PROCEDURE 210 WORD 1 — CONSOLE ASSIGNMENTS - HARDWARE 118-1
PROCEDURE 210 WORD 2 — CONSOLE ASSIGNMENTS - ATTENDANT PARTITIONS 119-1
PROCEDURE 211 WORD 1 — CAS - BRANCH CHARACTERISTICS 120-1

PROCEDURE 211 WORD 2 — CAS - BRANCH OUTGOING RELEASE LINK TRUNKS 121-1
PROCEDURE 212 WORD 1 — CAS - MAIN BRANCH NUMBER ASSIGNMENT 122-1
PROCEDURE 212 WORD 2 — CAS - MAIN RELEASE LINK TRUNK LAMP ASSIGNMENT 123-1
PROCEDURE 250 WORD 1 — CARRIERS 124-1
PROCEDURE 252 WORD 1 — STANDARD TONE PLANTS 125-1
PROCEDURE 252 WORD 2 — AUXILIARY TONE PLANTS 126-1
PROCEDURE 253 WORD 1 — DATA CHANNELS 127-1
PROCEDURE 254 WORD 1 — DIAL PULSE ORIGINATING REGISTER AND INTERCOM RECORDS 128-1
PROCEDURE 255 WORD 1 — PCC - LINK ATTRIBUTES 129-1
PROCEDURE 255 WORD 2 — PCC - APPLICATION ATTRIBUTES 130-1
PROCEDURE 256 WORD 1 — DCIU - LINK ASSIGNMENT 131-1
PROCEDURE 256 WORD 2 — DCIU - LEVEL 2 LINK CHARACTERISTICS 132-1
PROCEDURE 256 WORD 3 — DCIU - LEVEL 3 LINK CHARACTERISTICS 133-1
PROCEDURE 257 WORD 1 — DCIU - NETWORK CHANNELS 134-1
PROCEDURE 257 WORD 2 — DCIU - PORT CHARACTERISTICS 135-1
PROCEDURE 257 WORD 3 — DCIU - TRUNK GROUP AND DCS NODE ASSIGNMENT 136-1
PROCEDURE 257 WORD 4 — DCIU - ALTERNATE ROUTING 137-1
PROCEDURE 257 WORD 5 — DCIU - PORT RESERVATION 138-1
PROCEDURE 257 WORD 6 — DCIU - ENHANCED SERVICES PORTS 139-1
PROCEDURE 258 WORD 1 — REBOOT DCIU 140-1
PROCEDURE 258 WORD 2 — REFRESH DCIU SCRATCH-PAD TABLES 141-1
PROCEDURE 260 WORD 1 — DS1/ISDN AND RCG CIRCUIT PACK ASSIGNMENTS 142-1
PROCEDURE 261 WORD 1 — LOCAL ADJUNCT CHARACTERISTICS 143-1
PROCEDURE 261 WORD 2 — NETWORK ADJUNCT CHARACTERISTICS 144-1
PROCEDURE 262 WORD 1 — ISDN BOARD PARAMETERS 145-1
PROCEDURE 262 WORD 2 — ISDN NFAS/D-CHANNEL BACKUP 146-1
PROCEDURE 262 WORD 3 — ISDN LINK PARAMETERS 147-1
PROCEDURE 263 WORD 1 — SPEECH PROCESSING ADJUNCT ALARM SPECIFICATION 148-1
PROCEDURE 270 WORD 1 — TENANT SERVICES - EXTENSION PARTITIONS 149-1

PROCEDURE 270 WORD 2 — TENANT SERVICES - PARTITION OVERFLOW/RESTRICTIONS 150-1

PROCEDURE 270 WORD 3 — TENANT SERVICES - UNATTENDED CONSOLE SERVICE 151-1

PROCEDURE 270 WORD 4 — TENANT SERVICES - LISTED DIRECTORY NUMBERS 152-1

PROCEDURE 270 WORD 5 — TENANT SERVICES - TRUNK GROUPS 153-1

PROCEDURE 275 WORD 1 — SYSTEM COS - AIOD AND OTHER FEATURES 154-1

PROCEDURE 275 WORD 2 — SYSTEM COS - UNATTENDED CONSOLE/REMOTE ACCESS 155-1

PROCEDURE 275 WORD 3 — SYSTEM COS - MISCELLANEOUS 156-1

PROCEDURE 275 WORD 4 — SYSTEM COS - MISCELLANEOUS 157-1

PROCEDURE 276 WORD 1 — FEATURE GROUP CLASS OF SERVICE 158-1

PROCEDURE 277 WORD 1 — ASSIGN AGENTS TO A SET 159-1

PROCEDURE 277 WORD 2 — ASSIGN APPLICATIONS TO A SET 160-1

PROCEDURE 277 WORD 3 — HISTORY OF RECENT CHANGES 161-1

PROCEDURE 277 WORD 4 — SWITCH ACCESS AUTHORIZATION 162-1

PROCEDURE 279 WORD 1 — NETWORK-SPECIFIC FACILITY 163-1

PROCEDURE 280 WORD 1 — ISDN CODESET MAPPING 164-1

PROCEDURE 281 WORD 1 — AUTHORIZATION CODE ALGORITHM 165-1

PROCEDURE 282 WORD 1 — AUTHORIZATION CODE PARAMETERS 166-1

PROCEDURE 282 WORD 2 — NUMBER OF AUTHORIZATION CODES 167-1

PROCEDURE 283 WORD 1 — FACILITY RESTRICTION LEVEL RELATED SEARCHES 168-1

PROCEDURE 284 WORD 1 — SYSTEM CLOCK 169-1

PROCEDURE 285 WORD 1 — SYSTEM COS - NETWORK 170-1

PROCEDURE 286 WORD 1 — CUSTOMER CHANGE SYSTEM COS - NETWORK 171-1

PROCEDURE 287 WORD 1 — TIME OF DAY PLAN - CLOCKED MANUAL OVERRIDE 172-1

PROCEDURE 288 WORD 1 — CALL DETAIL RECORDING - FORMAT OPTIONS 173-1

PROCEDURE 288 WORD 2 — CALL DETAIL RECORDING - VARIABLE FORMAT RECORD 174-1

PROCEDURE 289 WORD 1 — PROGRAMMABLE INTERCEPT TREATMENT 175-1

PROCEDURE 290 WORD 1 — DISPLAY CIRCUIT STATUS OF ASSIGNED PORT BOARDS 176-1

PROCEDURE 290 WORD 2 — INSTALLED CIRCUIT PACK IDENTIFICATION 177-1
PROCEDURE 300 WORD 1 — 0/1 TOLL NONRESTRICTED CODES 178-1
PROCEDURE 301 WORD 1 — CODE RESTRICTION - TRUNK GROUP AND TYPE 179-1
PROCEDURE 301 WORD 2 — CODE RESTRICTION - DIGIT ABSORPTION 180-1
PROCEDURE 301 WORD 3 — ALLOWED CODES - PRIMARY RESTRICTION GROUP 181-1
PROCEDURE 301 WORD 4 — CODE RESTRICTION - TOLL OFFICE CODES 182-1
PROCEDURE 302 WORD 1 — CODE RESTRICTION - ALLOWED NPA AND OFFICE CODES 183-1
PROCEDURE 305 WORD 1 — AUTOVON - TRUNK GROUP ROUTING PATTERNS 184-1
PROCEDURE 305 WORD 2 — AUTOVON - NNXD ROUTING PATTERNS 185-1
PROCEDURE 312 WORD 1 — WCR - ORIGINAL NETWORK INFORMATION 186-1
PROCEDURE 314 WORD 1 — NETWORK DIGIT ANALYSIS - DIAL PLAN DEFINITION 187-1
PROCEDURE 314 WORD 2 — NETWORK DIGIT ANALYSIS - STRING ATTRIBUTE SPECIFICATION 188-1
PROCEDURE 314 WORD 3 — NETWORK DIGIT ANALYSIS - UNALLOCATED NODE COUNTS 189-1
PROCEDURE 315 WORD 1 — NETWORK DIGIT ANALYSIS - PARSE STRING IDENTIFIER 190-1
PROCEDURE 315 WORD 2 — NETWORK DIGIT ANALYSIS - STRING DATA 191-1
PROCEDURE 315 WORD 3 192-1
PROCEDURE 316 WORD 1 — WCR - 7 DAY CLOCK 193-1
PROCEDURE 317 WORD 1 — GRS - NETWORK CALL CATEGORY DEFINITION 194-1
PROCEDURE 317 WORD 2 — GRS - NETWORK ROUTING 195-1
PROCEDURE 318 WORD 1 — WCR - NETWORK ROUTE TRANSLATION 196-1
PROCEDURE 318 WORD 2 — NETWORK ROUTE TRANSLATION 197-1
PROCEDURE 319 WORD 1 — NETWORK TOLL-FREE INDEX 198-1
PROCEDURE 320 WORD 1 — WCR - NETWORK DIGIT MODIFICATION 199-1
PROCEDURE 321 WORD 1 — WCR - DIGIT SENDING TRANSLATION 200-1
PROCEDURE 321 WORD 2 — WCR - DIGIT GROUPING FOR SENDING 201-1
PROCEDURE 322 WORD 1 — WCR - OUTGOING ISDN FEATURE PARAMETERS 202-1

PROCEDURE 330 WORD 1 — QUEUING - SYSTEM TRANSLATION 203-1
PROCEDURE 330 WORD 2 — QUEUING - TRUNK GROUP TRANSLATION 204-1
PROCEDURE 350 WORD 1 — DIALING PLAN - FIRST DIGIT 205-1
PROCEDURE 350 WORD 2 — DIALING PLAN - FEATURE DIAL ACCESS CODES 206-1
PROCEDURE 350 WORD 3 — BURNED-IN CODE FEATURE ASSIGNMENT 207-1
PROCEDURE 354 WORD 1 — EXTENSION GROUPS 208-1
PROCEDURE 354 WORD 2 — EXTENSION DESTINATION 209-1
PROCEDURE 354 WORD 3 — NPA-NXX ASSIGNMENT 210-1
PROCEDURE 354 WORD 4 — NODE NUMBER TO VNI MAPPING 211-1
PROCEDURE 356 WORD 1 — PRECEDENCE CALLING - DIALED DIGIT ASSIGNMENT 212-1
PROCEDURE 360 WORD 1 — DEDICATED SWITCH CONNECTION 213-1
PROCEDURE 410 WORD 1 — TRAFFIC STUDIES - SYSTEM TRANSLATION AND CLOCK 214-1
PROCEDURE 411 WORD 1 — TRAFFIC STUDIES - LOAD BALANCE 215-1
PROCEDURE 411 WORD 2 — TRAFFIC STUDIES - CARRIER USAGE 216-1
PROCEDURE 413 WORD 1 — TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS 217-1
PROCEDURE 413 WORD 2 — TRAFFIC STUDIES - SPECIAL MEASUREMENT GROUPS 218-1
PROCEDURE 413 WORD 3 — TRAFFIC STUDIES - ISDN ASSIGNMENTS 219-1
PROCEDURE 413 WORD 4 — TRAFFIC STUDIES - ISDN D-CHANNEL ENCODE DISPLAY 220-1
PROCEDURE 414 WORD 1 — TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS 221-1
PROCEDURE 414 WORD 2 — TRAFFIC STUDIES - TIME-COINCIDENT REGISTER ASSIGNMENTS 222-1
PROCEDURE 415 WORD 1 — TRAFFIC STUDIES - MAIN/SATELLITE TRANSLATION 223-1
PROCEDURE 420 WORD 1 — PROCESSOR DATA 224-1
PROCEDURE 421 WORD 1 — TRAFFIC - DATA DISPLAY AND RESET 225-1
PROCEDURE 421 WORD 2 — TRAFFIC - EQUIPMENT LOCATION INDEX DISPLAY 226-1
PROCEDURE 421 WORD 3 — TRAFFIC - NETWORK CHANNEL INDEX DISPLAY 227-1
PROCEDURE 426 WORD 1 — FORCE ADMINISTRATION DATA SYSTEM 228-1

PROCEDURE 450 WORD 1 — CUSTOMER TRAFFIC STUDIES - SYSTEM TRANSLATION AND CLOCK 229-1

PROCEDURE 451 WORD 1 — CUSTOMER TRAFFIC STUDIES - LOAD BALANCE 230-1

PROCEDURE 451 WORD 2 — CUSTOMER TRAFFIC STUDIES - CARRIER USAGE 231-1

PROCEDURE 453 WORD 1 — CUSTOMER TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS 232-1

PROCEDURE 453 WORD 2 — CUSTOMER TRAFFIC STUDIES - SPECIAL MEASUREMENT GROUPS 233-1

PROCEDURE 453 WORD 3 — CUSTOMER TRAFFIC STUDIES - ISDN ASSIGNMENTS 234-1

PROCEDURE 453 WORD 4 — CUSTOMER TRAFFIC STUDIES - ISDN D-CHANNEL ENCODE DISPLAY 235-1

PROCEDURE 454 WORD 1 — CUSTOMER TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS 236-1

PROCEDURE 454 WORD 2 — CUSTOMER TRAFFIC STUDIES - TIME COINCIDENT REGISTER ASSIGNMENTS 237-1

PROCEDURE 455 WORD 1 — CUSTOMER TRAFFIC STUDIES - MAIN/SATELLITE TRANSLATION 238-1

PROCEDURE 461 WORD 1 — CUSTOMER TRAFFIC - DATA DISPLAY AND RESET 239-1

PROCEDURE 461 WORD 2 — CUSTOMER TRAFFIC - EQUIPMENT LOCATION INDEX DISPLAY 240-1

PROCEDURE 461 WORD 3 — CUSTOMER TRAFFIC - NETWORK CHANNEL INDEX DISPLAY 241-1

PROCEDURE 490 WORD 1 — PATCH BLOCK IDENTIFICATION 242-1

PROCEDURE 490 WORD 2 — PATCH DATA 243-1

PROCEDURE 497 WORD 1 — CUSTOMER SERIAL NUMBER AND SOFTWARE VERSION 244-1

PROCEDURE 497 WORD 2 — CUSTOMER IDENTIFICATION 245-1

PROCEDURE 497 WORD 3 — CUSTOMER ALARM PHONE NUMBER 246-1

A. STANDARD ERROR CODES A-1

B. TMS MEASUREMENT—MODULE PAIRS B-1

INDEX IN-1

ABOUT THIS DOCUMENT

Purpose of This Document

This is a reference document covering AT&T DEFINITY™ Communications System Generic 2.2 administration procedures.

Prerequisite Skills and Knowledge

This document was written primarily for system administrators and AT&T services personnel. Readers should have a working knowledge of the DEFINITY Generic 2 system features and capabilities and be familiar with the DEFINITY Manager II administration tool.

Organization and Use of This Document

This manual is organized numerically by procedure number. You can easily locate the procedures you are looking for by using the table of contents or the page footers.

All procedures described in this manual use the following heading format making it quick and easy to locate desired information:

Purpose
Explains what attributes a procedure administers. This section is in all procedures.

Prerequisite Procedures
Explains administration that must be completed in other procedures before a given procedure can be used. This section is only in procedures where it applies.

Related Procedures
Explains administration in other procedures that may be of concern when a given procedure is used. This section is only in procedures where it applies.

Cautions
Explains administration in a given procedure that must be completed using an extra measure of care. Cautions are used to flag changes to a procedure that could hinder system operation. This section is only in procedures where it applies.

Screen Display

Illustrates a given Procedure's screen layout for Enhanced Mode of Manager II.

Fields Used or Required for Command Routines

Lists the five most common commands used by Manager II and explains how the command is used in a given procedure.

The five most common command sequences performed on Manager II are referred to in this manual as ''routines''. The following is a list of these routines and the key presses required to do them.

- **Display Routine**
  A display routine is executed by pressing **dx** Return.
- **Add Routine**
  An add routine is executed by pressing **ax** Return **dx** Return.
- **Change Routine**
  A change routine is executed by pressing **cx** Return **dx** Return.
- **Remove Routine**
  A remove routine must always be done after you have done a display routine and the item you want to remove is currently displayed on the screen. A remove routine is executed by pressing **rx** Return **dx** Return.
- **Next Data Routine**
  A next data routine is typically executed by pressing **nd** Return repeatedly. The next data routine operates differently for different procedures.

Field Ranges and Encodes

Lists the permissable ranges and defines encodes for all fields in the procedure. The Field Ranges and Encodes section is organized by the following headings:

- *Group Headers*
  Group headers are used to group fields together that have something in common. The group header is followed by a range of fields (in parenthesis) that make up the group. Help information is often included for the group and follows the group header. This help information typically applies to all the fields in a given group and is referred to as ''Group Help''.

  Even if help information isn't provided, a set of encodes and their definitions or a range value follow the group header. These encodes or the range value apply to all the fields in the group.
- *Subgroup Headers*
  Occasionally subgroup headers are used to group fields within a larger group. Subgroup sections are structured the same as groups.

- *Fields*

  Fields occur either individually or under a group or subgroup header. Fields each have a field number in a given procedure. If ‘‘Field Help’’ is available for that field, it follows the field name. If no field help is provided, a list of encodes and their definitions follow the field name. If field help or encodes are not provided, the valid range of numbers is shown to the right of the field name.

  One level of help may be provided for any particular field or group of fields. The levels of help are set up as a hierarchy. The highest level of help is group help, followed by subgroup help, and finally field help.

  1. Group Help — help that applies to a group of fields
  2. Subgroup Help — help that applies to a group of fields which is part of a larger group of fields
  3. Field Help — help that applies to a single field.

Notes

Provides extra information about a given procedure. This section is in procedures where extra information is necessary.

Special Error Codes

Lists the special error codes that the system uses to inform the administrator of an administration error. These error codes are listed in numerical order. These error codes should not be confused with the Standard Error Codes or Manager II error codes.

When using Manager II, error codes longer than 80 characters cannot be displayed in their entirety. Use this section to read the complete error message.

Trademarks and Service Marks

5ESS® electronic switch

ACCUNET® digital service

AUDIX™ voice messaging system

CALLMASTER® digital voice terminal

DEFINITY™ communications system

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ESS™ electronic switch

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* MS is a trademark of Microsoft Corp.

USING MANAGER II

Manager II is the administration tool provided with DEFINITY Generic 2. Manager II is an MS-DOS package that runs on several AT&T personal computers and other IBM-compatible personal computers. At the time this document was published, the following AT&T models could run Manager II:

- PC 6300
- 6312 WGS
- 6286 WGS
- 6286/EL WGS
- 6386SX/EL
- 6386 WGS
- 6386E WGS
- 6386E/33 WGS
- 6386E/33 WGS Model S

In addition to the MS-DOS requirement, the personal computer must be equipped with:

- An RS232C serial communication port.
- A 25-by-80 character display. However, to take full advantage of Manager II's display capabilities, a color monitor is recommended. If the optional color display is selected, Color Graphic Adapter (CGA) compatibility is required.
- At least 640K RAM.
- At least one floppy disk drive.
- At least one hard disk drive having at least 10 Megabytes of available space. More disk space may be needed if multiple versions of SSB software will be on the disk.

An optional second RS232C serial communication port may be ordered to support two simultaneous switch connections; although, only one connection can be active at any time.

Manager II, in its simplest form, emulates the operations of the Maintenance and Administration Panel (MAAP) and System Management Terminal (SMT) used in System 85 R2V4 and earlier. It also emulates Visual MAAP (VMAAP) operation.

Manager II operates in three modes: Basic, Enhanced, and Task. Basic mode is similar to VMAAP. Enhanced mode provides a full-screen layout of the administration and maintenance procedures and includes extensive on-line help. Task mode packages several procedures into a single task.

This chapter contains instructions for installing Manager II, a brief description of screen layout used by enhanced mode, and a synopsis of Manager II commands. For more detailed information on Manager II operations, see *DEFINITY™ Manager II Operation MS-DOS® Version* (555-104-505).

The Manager II Software and Support Files

The software for Manager II is delivered on diskettes. There are two main parts of software:

- The Manager II executable files
- The switch support base (SSB)

The Manager II executable files contain the software that runs Manager II. This includes the required support files and help files.

The SSB (only available in Generic 2.1 and 2.2) contains the electronic flipcharts (EFCs) and EFC help files, both of which are used in Manager II enhanced mode. The SSB received on diskettes is also loaded as part of the software on the switch (also called the SSB). This is done so that you can download new EFCs from the switch as the switch software is updated. You will not always receive new SSB diskettes when changes are made. Updating the SSB on the PC is discussed later in this chapter.

Installing Manager II and the SSB

There are two install programs: one for Manager II and one for the SSB. This allows Manager II to be installed without having to install the SSB. (It does no good to install only the SSB without also installing Manager II.) If you are using a PC that doesn't have enough hard disk storage to hold the entire SSB, the SSB can be accessed while on diskette.

The install programs for ManagerII and the SSB are straight-forward and easy to use. Unless your installation is different than others, use the default entries of the Manager II install program. Select these entries by simply pressing Return.

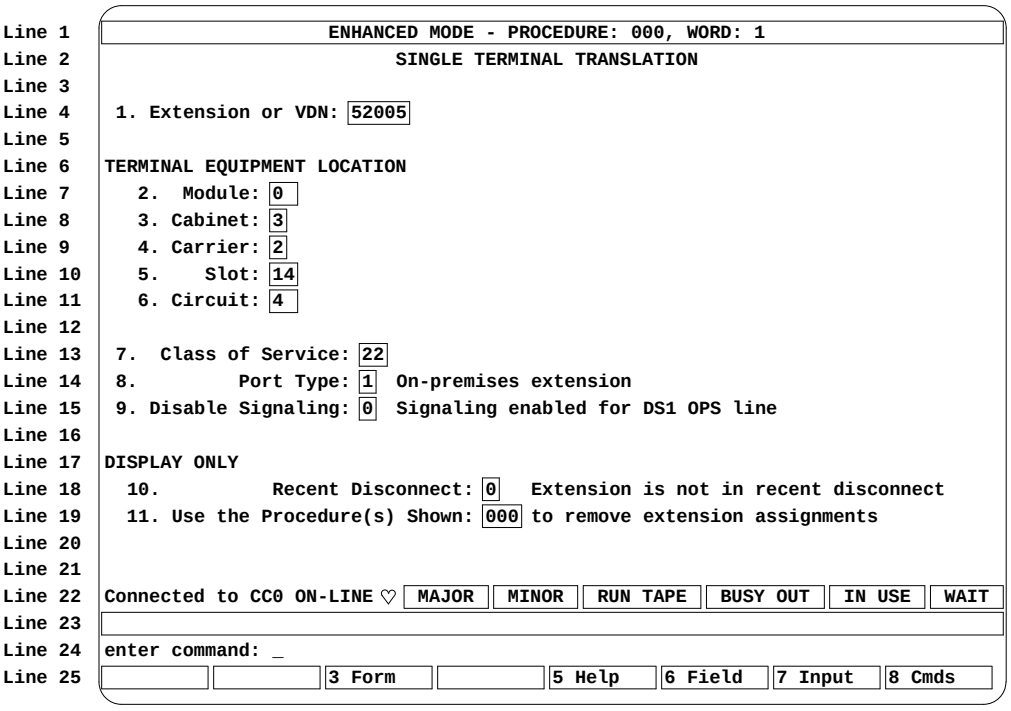
While the computer is accessing the diskette drive, the light on the diskette drive will illuminate. DO NOT remove any diskette while this light is on!

1. Put the Manager II diskette in the PC's diskette drive.
2. At the keyboard, type **a:install** Return.

   The install software begins working. The first screen begins the Manager II install program. Note that you can quit from the install at this time by typing **ctrl-break**.
3. Continue through the install program until it is complete. Remove the diskettes.
4. Insert the first SSB diskette into the drive. Type **a:ssbmgr** Return.

   The SSB software begins working. Follow the instructions given to install a complete set of SSB or just a partial (delta) set of SSB.
5. After the install is completed, reset the PC by typing **ctrl-alt-del**.
6. When the PC finishes resetting, Manager II is ready to use.

The Manager II Screen Layout



Each screen contains 25 lines of data. They are used as follows:

Line 1 **Activity Line** — Shows whether you are in Manager II basic or enhanced mode and what procedure you are currently using; shows if you are looking at the on-line help for enhanced mode; shows in task mode what operation you are doing (display, add, change, or remove).

Line 2 **Title Line** — Shows the title of the current procedure or task, if appropriate.

Lines 3-21 **Text Lines** — Contain the procedure or task data fields. On-line help is also shown in this area.

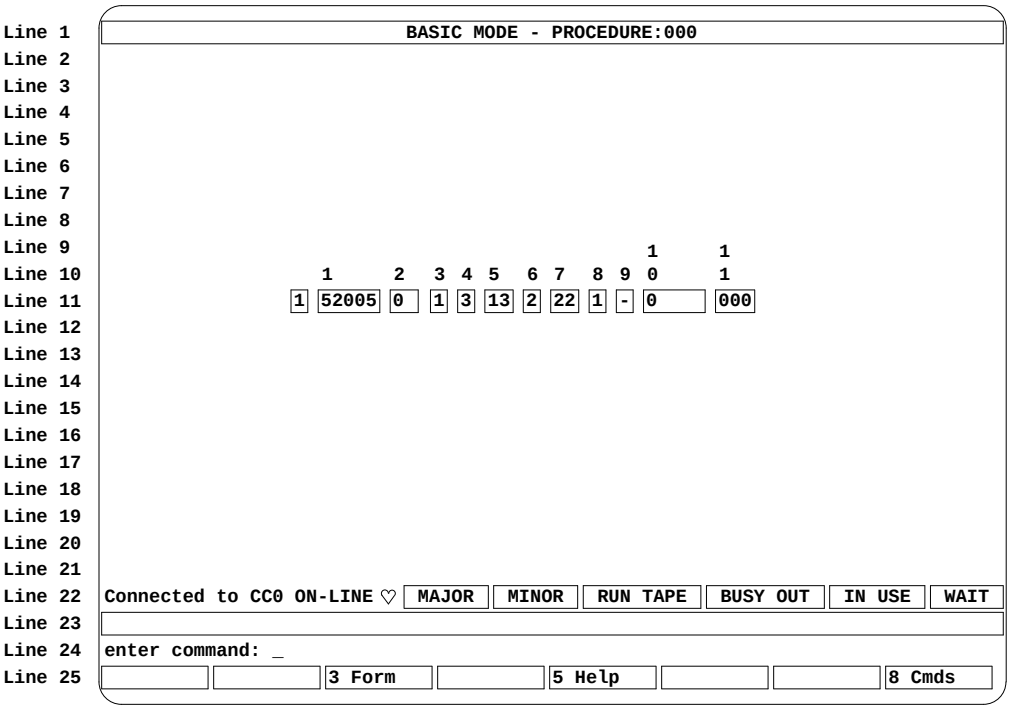
Line 22 **Status Line** — Shows if connected to a switch. When connected to a switch, it also shows the Major Alarm, Minor Alarm, Run Tape, Busy Out, In Use, and Wait status. These status are the same as were previously given on the MAAP and SMT. This is not used in task mode.

Line 23 **Message Line** — Displays the switch standard error codes and special error codes, Manager II software information and error messages, and range values for input fields.

Line 24 **Command Line** — Accepts system commands.

Line 25 **Function Key Line** — Displays the functions keys. The labels on the function keys change depending on the current operation.

Basic Mode

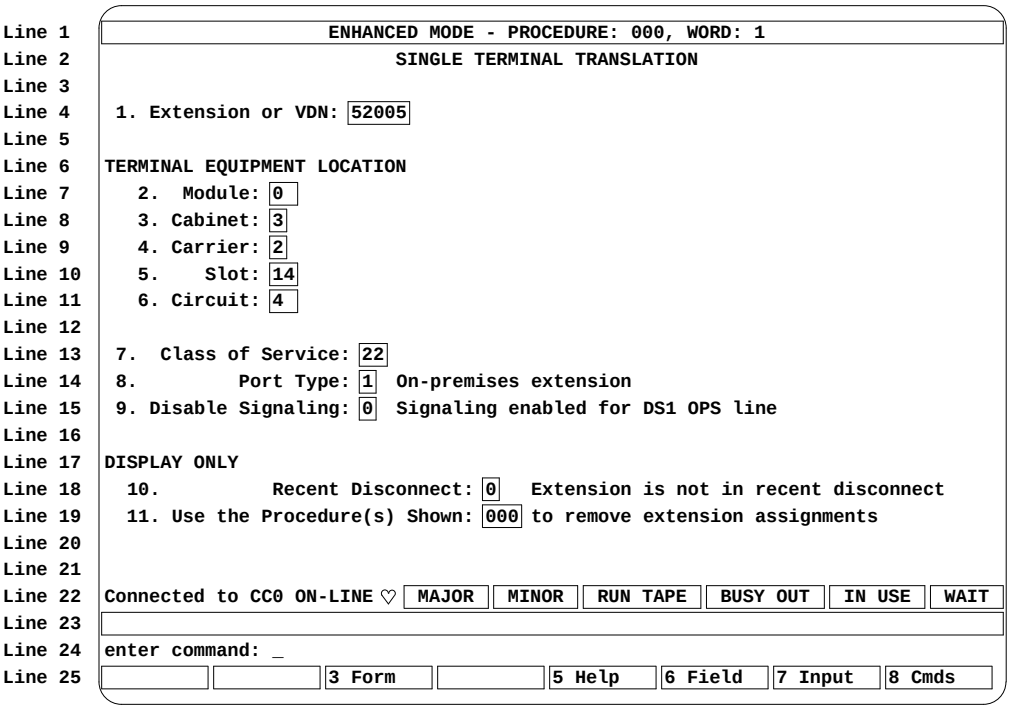


Basic mode provides access to System 85s and DIMENSION PBXs by displaying ‘‘raw’’ procedure data in a horizontal format on the screen much like the LED display on the MAAP or the screen display of VMAAP. Manager II provides field numbering for each procedure and a clear cursor indicator, making data entry and interpretation easier than with VMAAP, MAAP, or SMT.

Basic mode requires switch specific documentation (administration manuals) to identify field values, error information, procedure specific help, etc. General help for Manager II commands, connections, and logs are available in basic mode.

Basic mode may be used for Generic 2 switches. In fact, basic mode is the default mode if Manager II can’t find the correct SSB files for enhanced mode. Using basic mode for Generic 2 has one main drawback: there is no automatic mapping of universal or XE module physical locations to traditional module locations. Equipment mapping redefines a physical location on a universal or XE module to a logical location on a traditional module as if it were located on a traditional module. A special command can be invoked to convert the equipment locations. Character mapping is also not available in basic mode. Character mapping allows users to enter alphabetic characters (such as carrier position ‘‘C’’ in a universal module) in procedure data fields procedures that previously accepted only numeric encodes.

Enhanced Mode



Enhanced mode provides a full-screen interface to the administration and maintenance procedures for Generic 2. Fields are displayed on the screen in a ‘‘fill in the blank’’ format with easy to understand labels. The basic layout of the screen closely resembles that of Manager I. Reference material, such as this manual, may not be needed with enhanced mode because extensive on-line help is provided with the support files. Enhanced mode is primarily used in this document.

Electronic Flipcharts and the Switch Support Base

Manager II provides a switch support base (SSB) that contains the screen interfaces and on-line help that makes enhanced mode easier to use. Enhanced mode also does equipment mapping automatically. Equipment mapping redefines a physical location on a universal or XE module to a logical location on a traditional module as if it were located on a traditional module. Another mapping called character mapping is also available in enhanced mode. Character mapping allows you to enter alphabetic characters in data fields of procedures where previously you could only enter numeric encodes. Character mapping makes data entry easier. Electronic flipcharts (EFCs) are the files that are stored with the switch software and on the PC used with Manager II. Part of the EFCs are encode definitions that are displayed on screens. The encode definition for **1** in Field 8 is **On-premises extension**. This allows quicker interpretation of data on the screens. As changes are made to the switch software, new versions of EFCs can be downloaded to the PC for Manager II. The EFCs for Manager II are available in both 5¼-inch and 3½-inch diskettes.

Task Mode

```
Line 1  display station 52005                                    Page  1 of  2
Line 2                                  STATION_
Line 3
Line 4   Extension: 52005
Line 5        Type: analog                                        Hot Line? n
Line 6   Equip Loc: 0 /0/2/0 /1         COS: 22                  Port Type: 1
Line 7        Name:
Line 8
Line 9  FEATURE OPTIONS
Line 10
Line 11             LWC Destination: 0                  Call Coverage Group: 0
Line 12                   AP Number: 0                Coverage Msg Retrieval? n
Line 13         AUDIX Machine Number: 0                     Call Pickup Group: 0
Line 14                Auxiliary ANI? n                     Hunt-To Extension:
Line 15
Line 16        Automatic Msg Waiting? n                  Bearer Capability COS: 0
Line 17     Audible Auto Msg Waiting? n               Dedicated Switch Connection? n
Line 18         Attd Cont Rest Group: 0
Line 19
Line 20
Line 21
Line 22
Line 23
Line 24
Line 25 1 Cancel | 2 Refrsh |  |  | 5 Help |  | 7 NextPg | 8 PrevPg
```

Task mode provides a ‘‘task oriented’’ presentation of administration transactions for Generic 2. This interface allows the user to complete an entire task (such as adding a station) in a screen (or screens) that are accessed using only one command instead of many procedures. It is intended to simplify administration by providing a friendly user interface, eliminating the complexity of working with multiple procedures, and it takes the first step in moving toward a consistent system administration interface across the DEFINITY Communications System product line. Administering voice terminals with task mode is documented in *DEFINITY™ Communications System Generic 2 Administration of Features and Hardware* (555-105-507).

Manager II Commands

Manager II commands are done with basic keystrokes and the use of function keys. In this chapter, keystrokes are represented in **`constant-width bold`**, keyboard control keys in (keycaps), and functions keys in [boxes].

Using the Keyboard

In Manager II, the following keys are used regularly.

(Return) or **blank space** — enter data

The (Return) key is used to mark the end of each command line. A (Return) indicates to Manager II that it should begin processing the entered commands. This key may also be identified as the "Carriage Return", "Return", or a down-left arrow. A (Return) is used to separate data entered in each field of a procedure.

Multiple commands may be entered on one command line by separating the commands with a blank space. When typing a long string of commands, you still have to end the string with a (Return).

To skip a data field when entering data on the command line, use the **`;`** to skip over that field. Using a blank space will not work. For example, **`p011 1 dx`** (Return) calls in Procedure 011 Word 1, puts the number 1 in Field 1, and does a display execute. You could also do this string of commands as follows:

`p011` (Return)

`1` (Return)

`dx` (Return)

Each of these commands produce the same results.

To skip over Field 1 and put data in Field 2, type **`p011 ; 1`** (Return).

(Backspace) — back up spaces on a command line

When entering a command string, use (Backspace) to back-up on the command line to correct an error or change some information. After completing the command line, press (Return).

`" "` — double quotes

To enter a block of text as procedure field data, surround the text with double quotes ("). For example, to get names to display on voice terminals, administer names to go along with extensions and trunk groups. This is administered in Procedure 012 Words 1 and 2. To enter a name for an extension after setting up some preliminary information in Procedure 012 Word 1, type **`w2 1 "John Jones" cx`** (Return).

This tells the switch that the letters **J o h n J o n e s** are to be placed in translation. If you don't enter the characters of a name this way, you must enter them one character at a time (a much longer process).

Executing the Manager II Software

To execute the Manager II software, type **mgrii** (Return). You are prompted for a login and password. (Get these from the account team.) The software begins operating. The first thing seen is the copyright screen displayed momentarily on the PC. This will be followed by the Manager II ''signature'' screen. Two function keys are now active: [5 Help] and [8 Cmds].

Command Help

The [5 Help] key gives access to help on how to use Manager II, the administration and maintenance procedures, and feature and task administration. You will be instructed later how to use this help. Exit from this help by using the [1 Exit] key.

The [8 Cmds] key gives a list of commands available in Manager II. All these commands will be explained in this chapter. Exit from this help by pressing (Return) or using the [1 Exit] key.

Connecting to a Switch

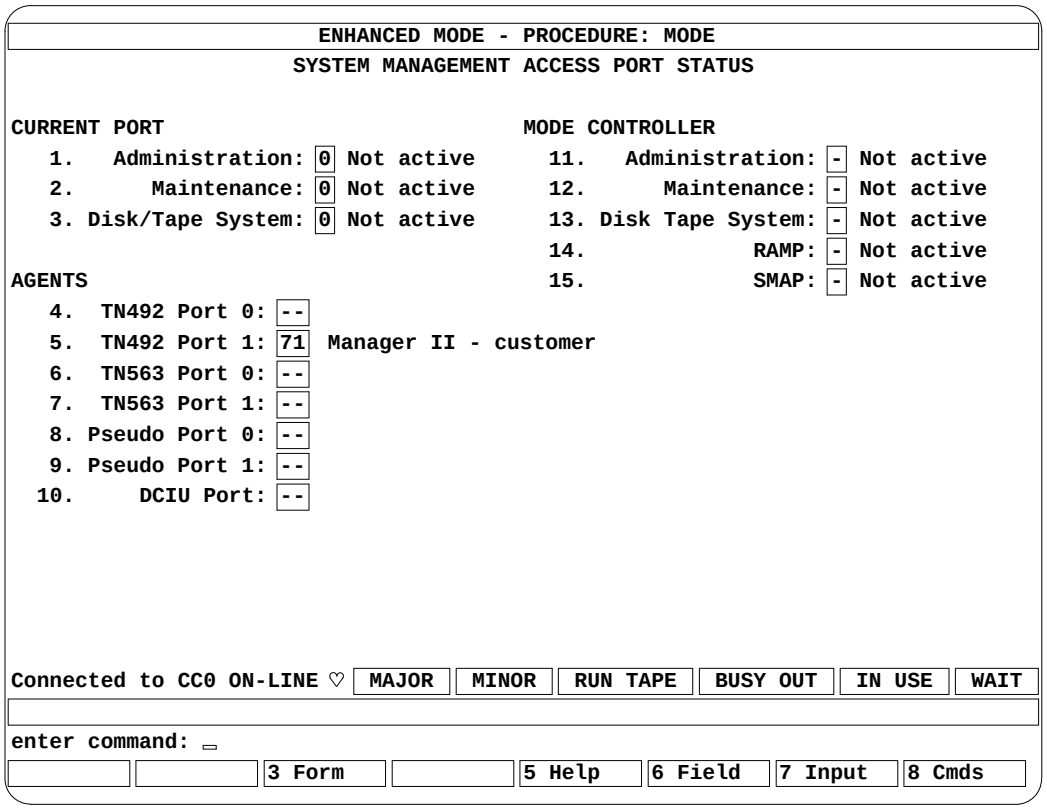
The **con** command is used to connect to a switch whose name is a valid entry in the switch database. Type **con** *switch name* (Return). You can type just **con** and the connection screen is displayed. On this screen, you can enter the switch name and change other connection parameters that are defaulted in the switch database.

When the connection is being established, call progress messages are displayed on the message line. These messages will differ depending on the type of modem or data module used.

If you don't have a hardwired connection, you can use different types of hardware for the connection. You can use a DTDM or a PDM for a digital connection or an AT&T 4112 modem or a Hayes 1200 modem for an analog connection.

Reduced port contention in Generic 2 supports four simultaneous port connections. This allows an administration task to be done by the system administrator (through a local Manager II) while a maintenance task is also being done (through a remote Manager II).

Using Procedure Mode



Once connected to a switch, several changes occur on the Manager II screen. The status line now denotes that you are connected to the switch at a particular common control. Also, any alarms currently active on the switch are displayed on the status line. (These status indicators are explained in detail later.) The cursor is active on the command line and the Mode Procedure is automatically paged in. If Manager II can find the switch support base (SSB), enhanced mode is automatically used.

The Mode Procedure allows access to certain portions of the switch software (if another user doesn't already have control). Those portions are the administration procedures, the maintenance procedures, and the disk/tape subsystem. The reason for accessing these is to make changes or run programs that use these things. For example, before changing anything in an administration procedure, enable the Procedure Mode's administration field.

The Mode Procedure works differently from any other procedure. Instead of entering data into fields, type a number that represents one of the three modes. The numbers for the modes are 1 for administration, 2 for maintenance, and 3 for the disk/tape system.

For example, to gain control over the administration and the disk/tape subsystem while connected to a switch, type **13** Return. To release control of these two areas, type **13** Return. These commands toggle between having and not having control of administration and the disk/tape subsystem.

Setting Procedure Mode

To begin the administration, gain access to the administration and disk/tape subsystem by typing **13** Return. Since we were already in Procedure Mode, type **13** Return. If we had been in some other procedure, you would have to type **m13** Return. **Remember this for future reference.**

There are four ports available for connections to the switch. There are two ports on the TN492 and two ports on the TN563. The TN492 provides an analog interface to the switch while the TN563 provides an EIA interface to the switch using an Asynchronous Data Unit (ADU).

In the example, the user has connected to the switch through TN492 port 0 and has gained access to the administration and disk/tape modes. Your screen may have different data depending on the connection.

Status Indicators

The information on the status line (line 22) represents the current state of the switch.

Connected to CCX ON/OFF LINE — processor status

This identifies which common control Manager II is connected to (CC0 or CC1) and whether it is connected to the on-line or off-line processor.

DISCONNECTED — disconnected from switch

This is displayed before making a switch connection and when disconnected from the switch.

♥ — processor heartbeat

The ♥ flashes to indicate that communications with the switch processor are operating normally.

MAJOR — major alarm

This indicator is on when there is a major alarm registered on the switch.

MINOR — minor alarm

This indicator is on when there is a minor alarm registered on the switch.

RUN TAPE — do a run tape

This indicator is on after making a translation change, and it goes off after doing a run tape (save translation changes on tape).

BUSY OUT — a facility is busied out

This is displayed when a switch facility has been busied out.

IN USE — facility is in use

This is displayed when trying to remove something and it is currently in use. Facilities in use cannot be removed.

WAIT — wait for the system to complete its task

This is displayed when changes are being sent to the switch after doing an add, change, remove, etc.

Moving Between Modes

The following commands are used to move between the different modes of Manager II. They will be used later in this chapter.

bas — go to basic mode

Use this command from either the enhanced or the task mode. To use this command, type **bas** Return.

enh — go to enhanced mode

Use this command from either the basic or the task mode. To use this command, type **enh** Return.

task — go to task mode

Use this command from either the basic or the enhanced mode. To use this command, type **task** Return.

Using Basic or Enhanced Mode

The following sections discuss using administration procedures while in basic or enhanced modes. A similar section with task mode is given in *DEFINITY™ Communications System Generic 2 Administration of Features and Hardware* (555-105-507). The figures in this section illustrate only enhanced mode screens. However, most of these commands can be used in basic mode. These exceptions are noted in the section.

Displaying a Procedure

The command used to call in a procedure is **p###** where **###** represents a three-digit procedure number. For example, type **p000** Return to call in Procedure 000 Word 1. For another example, type **p011** Return to call in Procedure 011 Word 1.

Don't specify a word unless it is something other than Word 1. Word 1 is brought in as the default. For example, type **p000w3** Return to call in Procedure 000 Word 3.

Another command used to call in a particular word of a procedure is the **w#** command where # represents a single-digit word number. This only works when a multiword procedure is currently displayed. For example, if you are already in Procedure 000 Word 3 and you want to go to

Procedure 000 Word 1, type **w1** Return.

Procedure commands may be shortened if the procedure number contains leading zeros. For example, it is possible to enter **p0** or **p00** or **p000** to access Procedure 000 Word 1.

```
                ENHANCED MODE - PROCEDURE: 000, WORD: 1
                      SINGLE TERMINAL TRANSLATION

 1. Extension or VDN: 52005

TERMINAL EQUIPMENT LOCATION
   2.  Module: 0
   3. Cabinet: 3
   4. Carrier: 2
   5.    Slot: 14
   6. Circuit: 4

 7.  Class of Service: 22
 8.         Port Type: 1   On-premises extension
 9. Disable Signaling: 0   Signaling enabled for DS1 OPS line

DISPLAY ONLY
  10.          Recent Disconnect: 0    Extension is not in recent disconnect
  11. Use the Procedure(s) Shown: 000  to remove extension assignments


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Entering Data From the Command Line

Call in Procedure 000. Field 1 is highlighted. As a default, the cursor resides on the command line (line 24) next to the *enter command:* prompt. From here you can enter data into the data fields. If you type an extension followed by Return, the extension will display in the Field 1 data field and the highlight will move to Field 2. The cursor remains on the command line waiting for the next command. Use the Backspace key to correct an entry, but this only works before pressing Return.

If you then type a module number followed by Return, the module number will display in the Field 2 data field and the highlight will move to Field 3. Again, the cursor remains on the command line waiting for the next command.

To skip a data field, type **;** Return. This will move the field highlight to the next field and only dashes are shown in the field skipped.

Continue to enter data or skip fields for all remaining data fields until no data field is highlighted. When no data field is highlighted, this means either that data is entered or all available entry fields

have been skipped. Notice that Fields 10 and 11 only display information. Several procedures have fields that only display information.

Normally, you would now add this data to the switch as a translation. For now, let's reset the procedure by typing **rs** Return. The **rs** command resets the procedure and clears out all data fields as if the procedure was called in again.

You can also string commands together on the command line. For example, enter the extension and the equipment location in Fields 1-6 by typing **52005 0 3 2 14 4** Return. As soon as you type Return, the data starts displaying up in the data fields one field at a time. The field highlight moves through each field where data is entered. Reset the procedure by typing **rs** Return.

Entering Data in the Data Fields

Find the function key 3 Form. Press that key. Immediately, the label on the function key changes to 3 Line and the cursor is now up in the Field 1 data field. The 4 Clear key is also displayed.

Now type an extension to be entered in the field. As you type in the extension, the numbers are entered into the field character-by-character. When the extension was entered on the command line, the number didn't appear in the field until after pressing Return.

With this feature, the data entered into the field is seen as it is typed. Use the Backspace key to back up and correct any errors. After typing the extension in the field, press Return to move to the next field. If you want to skip a data field, press Return. This leaves dashes in the field(s) skipped. To back up to a previous field, use the Shift Tab or ↑ keys. Use the Tab or ↓

keys to move forward to the next data fields.

Continue to enter data or skip data fields until all data fields have been filled.

After filling the last data field, press Return, and the function keys 3 Line and 4 Clear immediately blank out and the cursor returns to the command line waiting for the next command (usually an add or a change or a correction to some field data).

So, in other words, the 3 Form and 3 Line keys toggle the cursor between the command line and the data fields. Experiment with each way of entering data to find the one that best suits your needs.

Commands Used to Process Data Entered in a Procedure

After entering data into fields of a procedure, you must send this information to the switch as a translation. Here are some commands that do this.

dx — display execute

Use this command after paging in a procedure to display information stored in translations. For example, to see what has been administered for extension 52005, type **p000 52005 dx** Return.

This will display any translations already there for extension 52005. If no translations are there, dashes are displayed in all other data fields (in some procedures, zeros are displayed when nothing is translated).

nd — next data

Use next data while in procedures to search through a series of translation items. For example, to display all assigned coverage groups, type **p011 1 dx** Return to display coverage group 1 and then **nd** Return repeatedly to search through the other coverage groups.

When all coverage groups have been displayed, dashes are displayed in all fields signifying that the search is complete. A subsequent **nd** Return will start the search over again.

ax — add execute

Use **ax** to add translations to the switch. After entering data into the fields, type **ax** Return. After a successful add, the first input field is highlighted. There is no other positive indication that the operation was successful.

After every **ax**, also do a **dx** to verify that the data was added correctly. If the data fields all have dashes after doing the display, something has gone wrong and the translation was not sent to the switch.

cx — change execute

Use **cx** to change translations that already exist on the switch. After changing data in a field, type **cx** Return. After a successful change, the first input field is highlighted. There is no other positive indication that the operation was successful.

After every **cx**, also do a **dx** to verify that the data was changed correctly. If the changed data fields have something different after doing the display, something has gone wrong and the translation was not sent to the switch.

rx — remove execute

Use **rx** to remove translations from the switch. After displaying translations from a procedure, type **rx** Return.

After every remove execute, also do a display execute to verify that the data was removed. If the data fields have data in them even after doing a remove, something may have gone wrong and the translation was not sent to the switch.

Other Commands Used Regularly

The following is a list of other commands used regularly when sending translations to the switch.

v — verify

This can be used to redraw the screen in case a data transmission error has invalidated the screen display. To use this command, type **v** Return. Any data in the fields remains intact.

ce or 4 Clear — clear entry

This command is used to clear out a data field (put dashes in the field). When on the command line, type **ce** Return. When entering data when the cursor is in the data fields, press 4 Clear.

cf## — change field

The **cf##** command, where ## represents a one- or two-digit field number, allows you to go directly to a specified field to enter some data. For example, to enter a 10 in Field 13, type **cf 13 10** Return. After entering this data, you would typically do a display, add, or change.

hist — history

The **hist** command displays the last 9 commands sent to the switch and responses received from the switch. This is handy when multiple error messages get displayed on the message line and they go by too quickly to read. To use this command, type **hist** Return. Exit from this screen by typing Return or 1 Exit.

In the hist command, each line is preceded by either a < or > or **!**. The < identifies a command sent to the switch, the > identifies a response from the switch, and the **!** identifies a status message from the switch.

Enhanced Mode Help

The enhanced mode help is available whether or not you are connected to the switch but only if the switch support base electronic flipcharts are loaded on the PC. While using Procedure 000 Word 1, take time to look at the help available.

The help information may be contained in several help windows. Use the Page Up , Page Down , ↑ , and ↓

keys to display multipage help windows.

h or **help** or 5 Help — general help

Use this command to display a menu of help available for the current procedure plus other help information. To access this help, press 5 Help or type **h** Return or **help** Return. The available items are also selected by using the highlight bar with the ↑

and ↓

keys and then either Return or 3 Select. After reading the help, press either Return or 2 Return to get back to the previous help menu. After selecting this help, two new keys are displayed. The first is named 5 Errors. Use this key to get a complete listing of the special error codes available for that procedure. This is helpful if a special error code is longer than the one line that is displayed. Use this help to see the entire special error code. The second new key is 6 Field. Use this key to get field help on a procedure even when you aren't connected to a switch. Step through the fields in the procedure using the Return key.

To leave the help menu all together, press 1 Exit.

hf or 6 Field — field help

This gives specific information about data fields within a procedure. At a minimum, a range of input numbers is displayed on the message line. In addition, text explanations for that field, if appropriate, are displayed. If encodes are used as input for that field, they are also displayed and may be selected.

To access field help when the cursor is in a field, press 6 Field. To access field help when the cursor is on the command line and a field is highlighted, either press 6 Field or type **hf** Return.

If encodes are displayed, they appear after any help text in a format like this:

```
0=Not assigned
1=Assigned
```

In this example, a highlight bar will rest on the first selection. You can move up and down through all possible selections by using [↑]

and [↓]. To make a selection using the highlight bar, type either (Return) or [3 Select]. You may also manually enter the encode by leaving the help screen (press [1 Exit]) and then typing in the desired encode on the command line or in the data field.

hi or [7 Input] — input help

This help shows which procedure fields must have data to execute the standard display, add, change, and remove commands. To access this help, press [7 Input] or type **hi** (Return). To leave the command help, press either (Return) or [1 Exit].

hc or **?** or [8 Cmds] — command help

This help gives a one-page summary of all the commands discussed in this chapter. This help is also available in basic mode. To access this help, press [8 Cmds] or type **?** (Return) or type **hc** (Return). To leave the command help, press either (Return) or [1 Exit].

Advanced Commands

The following commands will rarely be used during normal operations but are given here for information.

sw — switch processors

The **sw** command is used by maintenance personnel to switch between the on-line and the off-line processors. This permits them to run tests on the off-line processor. Type **sw** (Return) to switch to the off-line processor. When the switch is completed, the status line is updated.

get — get electronic flipcharts from the switch support base (SSB)

The **get** command allows you to download electronic flipchart information from the SSB in switch memory to the PC. The electronic flipcharts are only used in enhanced mode. This is usually done only after updates have been made to the switch software and new versions of electronic flipcharts are required.

rld — reload the common control

The **rld** command reloads the Generic 2 switch common control from the system disk (not from tape). When a reload is done, the common control is taken out of service for just a few minutes. Any translation changes done since the last run tape will be lost during a reload. To start a reload, type **rld** (Return) **disc** (Return). Reconnect to the switch after the reload is finished.

ptx — park tape execute

Use this command to return a tape to the beginning of tape (BOT) mark. To use this command, type **ptx** Return. A park tape is done automatically after every run tape. Any procedure used before doing a park tape will have to be accessed again after the park tape is completed.

el *module cabinet carrier slot circuit* — equipment location mapping

Use **el** to convert universal or XE module equipment locations to their traditional module equivalent. For example, if you typed **el 1 0 e 15 20** Return, the message line will

display the equivalent equipment location as if it were on a traditional module. This command will usually be used only in basic mode.

Using Task Mode

The task mode of Manager II is an extension of the basic and enhanced modes. It takes administration information about voice terminals and executes the appropriate procedures to complete the request. You still enter information into data fields but they are arranged differently from how basic and enhanced mode fields are presented. With task mode you can display, add, change, and remove a voice terminal or data module. See *DEFINITY™ Communications System Generic 2 Administration of Features and Hardware* (555-105-507) for information about using task mode.

Ending the Session

After doing all the translations for a session, end your session by saving your changes, disconnecting from the switch, and exiting from the Manager II program.

`rtx` — run tape execute

After making any translation changes, the RUN TAPE indicator will light on the status line. This means you need to do a run tape. If a run tape is not done, translation changes will be lost if the switch should reload. To start a run tape, type **`rtx`** Return. Status messages will be sent to the screen showing the progress of the run tape. This operation takes about 15-30 minutes depending on the translations and longer if you have duplicated common control. Normal switch operation is not affected when doing a run tape except that the switch cannot be accessed by any system management agent (Manager II, Manager IV, etc).

In case you forget to do a run tape after your session, there is an automatic run tape done at 29-hour intervals. This automatic update should not be relied upon for normal updating because a reload will cause translations to be lost if a run tape was not done after making translation changes.

`disc` — disconnect from the switch

After saving the translations using run tape, disconnect from the switch. The **`disc`** command simply disconnects Manager II from the current switch connection. This leaves you within the Manager II operating system so that you can do other operations, such as, connect to another switch. To disconnect, type **`disc`** Return.

`quit` — quit out of the Manager II

PROCEDURE MODE — SYSTEM MANAGEMENT ACCESS PORT STATUS

Purpose

Use Procedure Mode to gain control of the administration and maintenance procedures or the disk/tape subsystem. Agents are blocked from doing administration, maintenance, or disk/tape operations unless the current port is activated for each of these three operations. Procedure Mode also displays the current port status, the mode controllers, and the agents controlling the modes.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: MODE
                  SYSTEM MANAGEMENT ACCESS PORT STATUS

CURRENT PORT                          MODE CONTROLLER
   1.      Administration: -            11.      Administration: -
   2.         Maintenance: -            12.         Maintenance: -
   3. Disk/Tape Subsystem: -            13. Disk/Tape Subsystem: -
                                        14.                RAMP: -
AGENTS                                  15.                SMAP: -
   4.  TN492 Port 0: --
   5.  TN492 Port 1: --
   6.  TN563 Port 0: --
   7.  TN563 Port 1: --
   8. Pseudo Port 0: --
   9. Pseudo Port 1: --
  10.     DCIU Port: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

None.

Field Ranges and Encodes

CURRENT PORT (Fields 1-3)

0	Not active
1	Active

1. Administration 0, 1
2. Maintenance 0, 1
3. Disk/Tape Subsystem 0, 1

AGENTS (Fields 4-10)

3	RMATS II
4	INADS - green
5	INADS - red
6	Remote Carrier Group maintenance
7	TRACS
8	Manager II - installation and maintenance
9	SHOPS
10	Run tape
11	Delayed termination
12	EMAP
14	Park tape
15	Trouble Tracker
40	Monitor I - services
41	Monitor I - customer
50	Manager III - services
51-59	Manager III - customer
60	Manager IV - services
61-69	Manager IV - customer
70	Manager II - services
71-79	Manager II - customer
80	LMAAP
99	Translation audit

4. TN492 Port 0 -, 3-12, 14, 15, 40, 41, 50-80, 99
5. TN492 Port 1 -, 3-12, 14, 15, 40, 41, 50-80, 99
6. TN563 Port 0 -, 3-12, 14, 15, 40, 41, 50-80, 99
7. TN563 Port 1 -, 3-12, 14, 15, 40, 41, 50-80, 99
8. Pseudo Port 0 -, 3-12, 14, 15, 40, 41, 50-80, 99
9. Pseudo Port 1 -, 3-12, 14, 15, 40, 41, 50-80, 99
10. DCIU Port -, 3-12, 14, 15, 40, 41, 50-80, 99

MODE CONTROLLER (Fields 11-15)

-	Not active
0	TN492 pt 0
1	TN492 pt 1
2	TN563 pt 0
3	TN563 pt 1
4	Pseudo pt 0
5	Pseudo pt 1
6	DCIU

11. Administration	-, 0-6
12. Maintenance	-, 0-6
13. Disk/Tape Subsystem	-, 0-6
14. RAMP	-, 0-6
15. SMAP	-, 0-6

Notes

1. To gain control of the administration procedures, type 1 then <CR>. To release control of the administration procedures, type 1 then <CR>.
2. To gain control of the maintenance procedures, type 2 then <CR>. To release control of the maintenance procedures, type 2 then <CR>.
3. To gain control of the tape subsystem, type 3 then <CR>. To release control of the tape subsystem, type 3 then <CR>.
4. If Standard Error Code 76 is displayed, Procedure Mode has already been used by another agent to gain control of one of the modes. Fields 11-15 display encodes that tell which port has control of the given mode. Fields 4-10 display a code that tells which agent has control of the given mode.

Special Error Codes

None.

PROCEDURE TPE WORD 1 — RUN TAPE

Purpose

Use Procedure TPE (run tape) to copy translations from memory to tape for the system. Do this after completing all customer translation changes made during one administrative session.

Prerequisite Procedures

Activate the tape and administration mode from Procedure Mode in order to run tape.

Cautions

Do a run tape after all customer translation changes. If this is not done, the translation changes will be lost if the system were to initialize and reload from a tape that doesn't have the latest administration changes. As a safety measure, the system does an automatic Run Tape every 29 hours after a previous run tape. This is done whether the previous Run Tape was manual or automatic.

Do not disconnect from the switch after starting a run tape. The update will continue, but any status messages that may indicate an error cannot be viewed.

Screen Display

```
                ENHANCED MODE - PROCEDURE: TPE, WORD: 1
                              RUN TAPE

 1.    Update Status: --
 2. Update Operation: -
 3.  DTS Restarts During On-Line Updates: -
 4. DTS Restarts During Off-Line Updates: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

None.

Field Ranges and Encodes

1. Update Status	-	Update(s) completed or error detected
	1	On-line update in progress
	2	Off-line update in progress
	3	Subsequent on-line update in progress
2. Update Operation	-	When field 1 = 2, off-line update is starting
	1	Translation memories being compared
	2	Updating tape
	3	Comparing disk to memory
	4	Parking tape

If a 1 is displayed and the memories do not agree, Standard Error Code 75 is displayed.

3. DTS Restarts During On-Line Updates
   - `-` The update completed successfully
   - `0-9` Number of operations failed and restarted

   This field shows the number of times a tape operation failed and was restarted during the on-line translation update. If no error code is displayed, the update completed successfully. If this field is not dashed or zero, report trouble.

4. DTS Restarts During Off-Line Updates
   - `-` The update completed successfully
   - `0-9` Number of operations failed and restarted

   This field shows the number of times a tape operation failed and was restarted during the off-line translation update (duplicated systems only). If no error code is displayed, the update completed successfully. If this field is not dashed or zero, report trouble.

Notes

1. The Run Tape operates differently between duplicated and unduplicated systems. On duplicated systems, the Run Tape must update both the on-line and off-line disk/tape systems (DTS). On the unduplicated system, you only have one DTS. The DTS also keeps two versions of the software in what is called section A and section B. The version on section A is a copy of the last loaded tape and the version on section B is a copy of the tape that is currently in the tape drive.

   a. On the tape cartridge you will find a set-screw that controls the writability of the tape. For run tape, set the set-screw opposite from the ‘‘SAFE’’ position. This allows you to write changes on this tape.

   b. Insert the cartridge tape into the DTS drive. The tape will ‘‘click’’ into position when successfully inserted. Under most conditions, this tape should remain in the tape drive at all times.

   c. Connect to the system if not already connected.

   d. To start the Run Tape, type `rtx` <CR>.

      When the process begins, Procedure TPE displays status of the run tape in Fields 1 and 2. There are also two status lamps (green and red) on the front of the DTS unit.

      If on a duplicated system, the translations between both processors are compared (field 2 = 1). If they are not the same, Standard Error Code 75 (memories mismatch) is displayed. You can continue by typing `rtx` <CR>. By continuing with mismatched memories, only the on-line DTS is updated.

      If the translations between processors match, the installed tape is copied onto section B of the disk. The green lamp is lit and the red lamp is flashing on the DTS and Procedure TPE has field 1 = 1 and field 2 = 2.

      When complete, the processor translations are copied to section B on the disk. The red lamp is lit almost steadily during this operation.

      The entire section B is now copied back onto the tape. The red lamp is now flashing and the green lamp is lit steadily.

      The entire processor memory is now copied onto section A of the disk.

      The contents of section A of the tape are compared with the processor memory. The red lamp is lit steadily on the DTS and Procedure TPE has field 1 = 1 and field 2 = 3.

If everything compares correctly, the tape is parked and the disk heads are parked. Field 1 = 1 and field 2 = 4 (very briefly).

This process is now repeated for the off-line tape in a duplicated system. Field 1 = 2 during the off-line update.

Special Error Codes

40 - The on-line tape cartridge is defective, translation memory was not stored on the tape. Install a different cartridge and try again.

50 - The off-line tape cartridge is defective, translation memory was not stored on the tape. Install a different cartridge and try again.

80 - Cannot access the on-line tape subsystem. Follow the normal error reporting procedures.

81 - The on-line side is on holdover power.

82 - Manual diagnostics preclude doing an on-line run tape.

83 - The on-line tape failed to complete the update.

84 - The on-line tape cartridge is not in the tape drive.

85 - Cannot access the off-line processor.

86 - The on-line tape cartridge is write protected.

87 - The on-line compare operation failed to complete.

88 - The on-line translation and tape do not agree.

89 - Cannot initiate an off-line run tape, follow the normal error reporting procedures.

90 - Cannot access the off-line tape subsystem, follow the normal error reporting procedures.

91 - The off-line side is on holdover power.

92 - Manual diagnostics preclude doing an off-line run tape.

93 - The off-line tape failed to complete the update.

94 - The off-line tape cartridge is not in the tape drive.

96 - The off-line tape cartridge is write protected.

97 - The off-line compare operation failed to complete.

98 - The off-line translation and tape do not agree.

PROCEDURE 000 WORD 1 — SINGLE TERMINAL TRANSLATION

Purpose

Use Procedure 000 Word 1 to:

— Administer an extension to an equipment location and class of service (COS). See the ‘‘Related Procedures’’ section when displaying multiappearance terminals.

— Administer a transmission test line to a carrier for testing.

— Administer a vector directory number (VDN).

Prerequisite Procedures

Use Procedure 010 Word 1 to enable the ACD member flag when administering extensions in an ACD class of service.

Before you can administer an extension in field 1, use Procedure 350 Word 1 and Procedure 354 Word 1 to assign the extension in the dialing plan.

Before you can remove an extension, all appearances of that extension must be removed from all procedures displayed in field 11. Use the next data routine to display all the procedures associated with an extension.

Use Procedure 276 Word 1 field 5 to enable Call Vectoring before administering a VDN here.

Related Procedures

Use Procedure 010 Words 1-4 to define features and restrictions assigned to an extension COS (field 7).

Use Procedure 075 Word 1 to display extensions that are assigned to the same extension COS.

Use Procedure 052 Word 2 to display extension assignments on multiappearance terminals.

Use Procedure 290 Word 1 to find an unassigned equipment location (fields 2-6). To display this location, go directly to Procedure 000 Word 1 and do a display routine.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 000, WORD: 1
                          SINGLE TERMINAL TRANSLATION

 1. Extension or VDN: -----

TERMINAL EQUIPMENT LOCATION
   2.  Module: --
   3. Cabinet: -
   4. Carrier: -
   5.    Slot: --
   6. Circuit: --

 7.  Class of Service: --
 8.         Port Type: -
 9. Disable Signaling: -

DISPLAY ONLY
  10.          Recent Disconnect: -
  11. Use the Procedure(s) Shown: ---


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-6.
Add:	Fields 1-9.
Change:	Fields 1-9 (field 1 or fields 2-6 can be changed, but not both). Fields 7 and 8 cannot be changed when field 8 is set to 4 (VDN).
Remove:	Fields 1-9.
Next Data:	Displays the procedures in field 11 that contain translations that must be removed before a given extension in this procedure can be removed.

Field Ranges and Encodes

1. Extension or VDN -, 000-99999

   The first digit of an extension cannot be a * or #.

   The port type (field 8) must be compatible with the number entered in this field. For example, if a VDN is entered in this field, field 8 must contain a 4 (VDN).

   Extensions assigned here are automatically assigned Bearer Capability COS 0. This predefined COS is set in Procedure 014 Words 1 and 2.

TERMINAL EQUIPMENT LOCATION (Fields 2-6)

The equipment entered in fields 2-6 must be compatible with the port type in field 8. Typically, every port type shown in field 8 requires an equipment location in fields 2-6. The main exception occurs when you are assigning an extension that will be used on a multiappearance terminal administered in the 050-series of procedures. For these extensions, the port type in field 8 is dashed.

2. Module — 0-30

3. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules

4. Carrier — 0-3 for traditional modules, c-e for universal and XE modules

5. Slot — 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE

6. Circuit — 0-23

   Circuits 0-7 applies to all traditional module circuit packs.

   Circuits 0-16 applies to the TN746 circuit pack on universal and XE modules administered as on-premises lines.

   Circuits 0-23 applies to the TN767 (without the use of a TN555) circuit pack on universal and XE modules administered as DS1 off-premises lines (OPS). This configuration must be specified in Procedure 260 Word 1 field 7.

7. Class of Service — -, 1-63

   Do not administer class of service 31; it is reserved for callers using remote access and for test lines.

8. Port Type

   - Extension administered in Procedure 052 Word 1
   1 On-premises extension
   2 Off-premises extension (OPS)
   3 Test line
   4 Vector Directory Number (VDN)
   5 Reserved for OSS
   6 OPS with terminal balance
   9 DS1 OPS line

   All module processors must be equipped with a TN380D (for a traditional module) or a TN580 or a TN590 (for a universal and XE module) to administer an off-premises extension (encode 2) in this field.

   Use Procedure 276 Word 1 field 5 to enable Call Vectoring before administering a VDN here.

   Line lengths greater than 3500 feet should be administered as off-premises. Line lengths less than 3500 feet should be administered as on-premises.

9. Disable Signaling	-	Non-DS1 lines
	0	Signaling enabled for DS1 OPS line
	1	Signaling disabled for DS1 OPS line

DISPLAY ONLY (Fields 10-11)

10. Recent Disconnect	0	Extension is not in recent disconnect
	1	Extension is in recent disconnect

A remove routine on an assigned extension places it in recent disconnect. A remove routine on an extension in recent disconnect completely removes the extension. See Procedure 003 Word 1.

11. Use the Procedure(s) Shown — 000-999 to remove extension assignments

This field displays all procedures associated with an extension. You must use these procedures to disassociate an extension from the applicable features before it can be removed or changed.

Notes

1. When a multiappearance terminal extension is displayed, the extension COS field (field 7) and display-only fields (fields 10 and 11) contain data. The equipment-location fields (fields 2-6) contain dashes.
2. If after displaying an extension number with an equipment location, you attempt to change either the extension or the equipment location, you may get Special Error Code 82. This happens when the extension or the equipment location is already assigned. To resolve this problem, do a display on the new extension or equipment location to see if it is already assigned. If it is already assigned, you must make another selection.
3. When a multiappearance terminal extension is displayed, the following change routines produce the results indicated:
   - — When changing an unassigned extension to an unassigned equipment location, Special Error Code 82 is displayed.
   - — When changing an assigned extension (multiappearance) to a valid unassigned equipment location (analog), the change is made.
   - — When changing an assigned multibutton terminal extension (that is not assigned to a button) to an unassigned equipment location, the change is made.
   - — When changing an assigned multibutton terminal extension (that is assigned to a button) to an unassigned equipment location, Special Error Code 85 is displayed (field 11 = 052).
   - — When changing an unassigned extension (analog) to an assigned analog equipment location, the change is made.
   - — When changing the extension COS on an assigned terminal, the change is made.
   - — When changing an assigned extension (that is not assigned to a multibutton terminal button) to an assigned equipment location, Special Error Code 82 is displayed.
   - — When changing an unassigned extension to a multibutton terminal, Special Error Code 85 is displayed (field 11 = 051).

— When changing an assigned extension to a multibutton terminal extension, the change is made.

— When changing the extension COS on an assigned multibutton terminal extension that is not assigned to a button, the change is made.

— When changing the extension COS on an assigned multibutton terminal extension that is assigned to a button, the change is made.

— Unless Special Error Code 85 is displayed after a change routine, all features associated remain assigned to the extension (no changes occur in any other procedures).

4. To add a VDN, enter data in fields 1, 7, and 8 only.
5. A touch-tone hot-line terminal that uses manual digit entry must be assigned with a touch-tone COS and, similarly, a rotary terminal to a rotary COS.
6. The following chart shows equipment location-to-channel number conversion for a DS1 line-only configuration on a traditional module.

	Slot		
	0 5 13 18	1 6 14 19	2 7 15 20
CKT	Channel		
0	1	2	3
1	4	5	6
2	7	8	9
3	10	11	12
4	13	14	15
5	16	17	18
6	19	20	21
7	22	23	24

7. The following chart shows equipment location-to-channel number conversion for a line on a DS1 trunk board on a traditional module.

	SLOT					
CIRCUIT	0 or 13	1 or 14	2 or 15	5 or 18	6 or 19	7 or 20
0	13	14	15	1	2	3
1	16	17	18	4	5	6
2	19	20	21	7	8	9
3	22	23	24	10	11	12

Special Error Codes

81 - The equipment in fields 2-6 is incompatible with the port type in field 8.

82 - You can change either the extension or the equipment location, but not both. The extension or equipment location must be assigned before a change can be made. To isolate the conflict, display the extension, then clear the display, and do a display on the equipment location.

83 - A test line is already assigned for the module in field 2.

84 - Only circuits 0 and 1 can be used for facility test.

85 - Remove all occurrences of this extension from the procedures shown in field 11 before removing the extension in Procedure 000 Word 1.

86 - Class of Service 31 is reserved, and cannot be changed.

87 - This extension cannot be removed because it has stored messages associated with it.

88 - You cannot assign the 24th time slot in a remote carrier group.

89 - The port type must be on-premises or off-premises for ports assigned to a remote carrier group.

90 - The DS1 board does not use robbed bit signaling; you cannot assign the port as a line.

91 - The number of circuits per slot on a DS1 board has been exceeded.

92 - The slot already has a trunk assigned; you cannot add a line.

93 - DCP data and BRI data lines are the only multiappearance terminals that can be assigned as a hot line. See Procedure 000 Word 3.

94 - A change is not allowed when a vector directory number (VDN) is indicated in fields 1 or 8.

95 - The extension cannot be changed or removed because it has a personal list or default dialing assigned. Use Procedure 059 Word 1 for personal lists and Procedure 059 Word 4 for default dialing.

96 - The ACD member flag must be set in Procedure 010 Word 1 for this Class of Service.

PROCEDURE 000 WORD 2 — SINGLE TERMINAL - FEATURE AND RESTRICTION GROUPS

Purpose

Use Procedure 000 Word 2 to administer the following:

— Call Pickup groups

— Hunt-to extensions

— Auxiliary Automatic Number Identification (ANI) number

— Call Coverage groups

— Controlled restriction groups associated with an extension.

Prerequisite Procedures

Use Procedure 000 Word 1 to administer an extension to an equipment location and class of service.

If field 3 is to be set to 1, use Procedure 275 Word 1 to assign an auxiliary ANI number for toll call billing.

Before removing an extension with this procedure, make sure that the associated extension is unassigned with Procedure 001 Word 1.

If removing an extension that is also an ACD member, remove it first in Procedure 026 Word 3 before removing it in this procedure.

Related Procedures

Extensions that hunt to the extension in field 1 can be found using Procedure 076 Word 1.

The number of extensions in a Call Pickup group are limited only by the number available in the system. To find other extensions in the same group, use Procedure 075 Word 1. Also use Procedure 075 Word 1 to find other members of the same controlled restriction group.

If an ACD split in the coverage group is associated with a different AP or AUDIX than the one assigned in field 8 or 10, use Procedure 026 Word 1 to find the other AP or AUDIX.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 000, WORD: 2
                SINGLE TERMINAL - FEATURE AND RESTRICTION GROUPS

 1.            Extension: [-----]
 2.              Hunt to: [-----]
 3. Auxiliary ANI Number: [-]
 4.    Call Pickup Group: [---]
 5. Attendant Control of Voice Terminal Group: [--]

CALL COVERAGE
   6.    Coverage Group: [----]
   7. Message Retrieval: [-]

 8.              AP: [-]
 9. LWC Destination: [-]
10.           AUDIX: [-]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-10.
Change:	Fields 2-10. To discontinue services, enter a dash in field 2 or enter a single zero in each of fields 3-10 and use the change routine.
Remove:	Not allowed.
Next Data:	Displays all assigned extensions.

Field Ranges and Encodes

1.	Extension	000-99999 The first digit of an extension cannot be # or *. A VDN cannot be entered in this field.
2.	Hunt to	-, 000-99999 The extension in this field is hunted-to by the extension in field 1. A VDN cannot be entered in this field.

If the extension in field 1 is to hunt to an extension with a one- or two-digit access code, the regular extension must be entered in field 2.

When an extension is removed, all terminals change their hunting sequence as follows:

Original sequence: A hunts to B; B hunts to C; C does not hunt.
— If B is removed; A hunts to C.
— If C is removed; A hunts to B.
— If A is removed; B hunts to C.

3. Auxiliary ANI Number
   0 Disabled
   1 Enabled

   Setting this field assigns an extension to an auxiliary ANI number that is set up in Procedure 275 Word 1 field 4. The auxiliary ANI number is used for billing a group of extensions under the same number. If this field is not enabled, billing is made to the extension in field 1.

4. Call Pickup Group
   0 Not assigned
   1-999 Assigned

5. Attendant Control of Voice Terminal Group
   0 Not assigned
   1-63 Assigned

CALL COVERAGE (Fields 6-7)

6. Coverage Group
   - No coverage
   0 Not assigned
   1-1999 Single path
   2000-4095 Dual path

   When assigning dual path coverage to an extension, the allowed values are even numbers from 2000-4094.

7. Message Retrieval
   - No coverage in system
   0 Disabled
   1 Enabled

   Enabling this field allows any coverage point for this principal to retrieve the principal's messages.

8. AP
   0 Not assigned
   1-7 Assigned to Message Center

9. LWC Destination
   0 Not assigned
   1 Switch
   2 AP
   3 AUDIX

10. AUDIX
    0 Not assigned
    1-8 Assigned

Notes

1. ADFTC/MTCPs hunt to each other in the order that they are assigned in Procedure 051 Word 1 and 052 Word 1. Procedure 000 Word 2 displays the hunting of ADFTC/MTCPs, but does not allow the assignment of hunting to ADFTC/MTCPs. If an extension is only given a class of service in Procedure 000 Word 1, it can be assigned as a hunt extension. If later it is assigned as an ADFTC/MTCP, it is removed from the extension hunting and assigned as ADFTC/MTCP hunting.

Special Error Codes

81 - Assignment of message retrieval requires a call coverage group to be assigned.

82 - An AP or AUDIX number is required.

83 - An extension cannot hunt to itself or an associated extension.

84 - The ACD split in the coverage group is associated with a different AP or AUDIX than the one assigned in field 8 or 10. Use Procedure 026 Word 1 to find the other AP or AUDIX.

85 - Use the display routine in Word 1 to identify the procedure that must be used to administer this extension.

86 - Assign even-numbered coverage groups in the dual path section (2000-4094).

87 - Remove the extension in Procedure 026 Word 3 before removing it in this procedure.

88 - The current LWC destination has unaccessed messages for this extension. The messages must be delivered before changing the destination.

89 - The VDN in the coverage group references an ACD split which is associated with a different AP/AUDIX than the one assigned in field 8 or field 10.

90 - The Call Pickup group translations for this extension are incorrect. This could lead to serious switch problems including switch reload. Follow the standard escalation procedure.

PROCEDURE 000 WORD 3 — SINGLE TERMINAL - MISCELLANEOUS FEATURES

Purpose

Use Procedure 000 Word 3 to administer the following:

— Hot Line

— Dedicated Switch Connection messages

— Audible Message Waiting - Automatic

— Bearer Capability class of service

— Universal Code Calling Identifier (UCCID).

Prerequisite Procedures

Use Procedure 000 Word 1 to administer an extension to an equipment location and a class of service.

Related Procedures

Use Procedure 014 Words 1 and 2 to administer attributes to a bearer capability class of service.

Use Procedure 063 Word 1 to administer Message Waiting - Automatic to a voice terminal.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 000, WORD: 3
                    SINGLE TERMINAL - MISCELLANEOUS FEATURES

 1.                           Extension: -----
 2.                            Hot Line: -
 3. Dedicated Switch Connection Messages: -
 4.  Audible Message Waiting - Automatic: -
 5.   Bearer Capability Class of Service: ---
 6.             Universal Code Calling ID: ---
 7.             Call Forward Off-net Toll: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or field 6.
Add:	Fields 1-7.
Change:	Fields 2-7.
Remove:	Not allowed.
Next Data:	On field 1, it displays all assigned extensions. On field 6, it displays the next extension assigned to the UCCID.

Field Ranges and Encodes

1. Extension -, 000-99999

2. Hot Line
   - 0 Not a hot line
   - 1 Is a hot line

   A multiappearance terminal cannot be a hot line.

   A data module hot line will dial the default dial telephone number for the data module. An analog hot line or basic rate interface (BRI) data hot line will dial the telephone number stored in the Abbreviated Dialing personal list A, item 1.

3.	Dedicated Switch Connection Messages	0 1	Not supported (TDM, PDM, DTDM) Supported (7400 or 3270 DM)
4.	Audible Message Waiting - Automatic	0 1	Disabled Enabled
5.	Bearer Capability Class of Service	0-255	
6.	Universal Code Calling ID	111-555 (each digit must be in the range 1 to 5 inclusive) A UCCID is a three digit code, each digit must be within the range 1 through 5. This is the code that is chimed when the extension number associated with it is used with the Universal Code Calling/Chime Paging feature. It is not applicable to the Traditional Code Calling feature.	
7.	Call Forward Off-net Toll	0 1	Disabled Enabled

Special Error Codes

81 - This extension is not on-premises, off-premises, on a BRI terminal, or the extension of a data module.

82 - This extension is not the extension of a data module.

83 - For BRI data hot line, the extension must have one and only one line appearance, and the line appearance cannot have shared appearances.

85 - Use the display routine in Procedure 000 Word 1 to identify the procedure that must be used to administer this extension.

86 - Must set call forward off-net in extension's class of service (Procedure 010 Word 2) and WCR Toll Call's must be allowed (Procedure 010 Word 3) before enabling Call Forward Off-net Toll.

PROCEDURE 000 WORD 4 — EXTENSION NPA-NXX/PARTITION ASSIGNMENT

Purpose

Use Procedure 000 Word 4 to administer the extension partition number to an extension or group of extensions and the NPA-NXX Designator to an extension or a group of extensions.

Prerequisite Procedures

Use Procedure 276 Word 1 field 6 to enable the Tenant Services feature.

An extension must be assigned first in Procedure 000 Word 1 and it cannot be an associated extension or VDN.

NPA-NXX numbers must be assigned to the entered NPA-NXX designator in Procedure 354 Word 3 before changing translations in this procedure.

Related Procedures

When an extension is assigned in Procedure 000 Word 1, the extension is defaulted to extension partition 0.

Use Procedure 354 Word 2 to determine the type of invalid extension that is displayed in field 5.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 000, WORD: 4
                     EXTENSION NPA-NXX/PARTITION ASSIGNMENT

 1.     First Extension: -----
 2.      Last Extension: -----
 3. Extension Partition: ---
 4.  NPA-NXX Designator: --

DISPLAY ONLY
   5. Invalid Extension: -----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1, 3, or 4. If both the extension (field 1) and partition (field 3) is given, the display routine will key on the extension.
Add:	Not allowed.
Change:	Fields 1, 3, and 4 or fields 1-4.
Remove:	Not allowed. To remove an extension from an extension partition, reassign the extension to extension partition 0 by using the change routine.
Next Data:	Displays all extensions in a partition. The next data routine can step on field 4 only if the Tenant Services feature is not administered.

Field Ranges and Encodes

1.	First Extension	000-99999
2.	Last Extension	-, 001-99999

3. Extension Partition -, 0-999

   A voice terminal in extension partition 0 is allowed to place calls to or receive calls from any extension in the switch.

   If Tenant Services is enacted in Procedure 276 Word 1, field 3 must be 0-999. If Tenant Services is not activated, enter a dash in field 3.

4. NPA-NXX Designator -, 1-99

   If the extension in field 1 is not assigned an NPA-NXX designator, and the extension originates an ISDN/PRI call, the setup message will not contain a calling party number information element.

   An NPA-NXX designator can be assigned to a range of extensions as long as all extensions in the range are assigned.

DISPLAY ONLY (Field 5)

5. Invalid Extension -, 000-99999

Special Error Codes

81 - An extension must be assigned first in Procedure 000 Word 1 and it cannot be an associated extension.

82 - The first extension cannot be greater than the last extension.

83 - NPA-NXX numbers must be assigned to the entered NPA-NXX designator in Procedure 354 Word 3 before changing the designator in this procedure.

PROCEDURE 001 WORD 1 — TERMINAL TRANSLATION - MULTIPLE EXTENSIONS

Purpose

Use Procedure 001 Word 1 to administer extensions associated with existing extensions. These associated extensions are often used as Listed Directory Numbers (LDNs) that provide access to Automatic Call Distribution (ACD) splits. An associated extension cannot be an extension that has already been assigned in Procedure 000 Word 1.

Prerequisite Procedures

Use Procedure 000 Word 1 to assign the primary extension.

Use Procedure 354 Word 1 to assign the associated extension to the numbering plan.

Use Procedure 012 Word 1 to remove an assigned name display used by an associated extension before removing that associated extension in this procedure.

Related Procedures

Use Procedure 026 Word 2 to change the associated extension of an ACD split.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 001, WORD: 1
                  TERMINAL TRANSLATION - MULTIPLE EXTENSIONS

 1.    Primary Extension: -----
 2. Associated Extension: -----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 2.
Add:	Fields 1 and 2.
Change:	Not allowed.
Remove:	Fields 1 and 2.
Next Data:	Displays all associated extensions.

Field Ranges and Encodes

1.	Primary Extension	000-99999 Use Procedure 000 Word 1 to assign the primary extension.
2.	Associated Extension	-, 000-99999 Use Procedure 354 Word 1 to assign the associated extension to the numbering plan.

Notes

1. When an associated extension that is not assigned to an ACD split is dialed, the system treats the call as if the primary extension were dialed.

2. If the associated extension is assigned to a primary extension that is the controlling extension of an ACD split, the call enters the group queue and is answered by the first idle group member.
3. To find the associated extension of an ACD split, enter the split supervisor's extension (as assigned in Procedure 026 Word 2) into field 1 and do a display routine.

Special Error Codes

81 - The associated extension is not related to the primary extension.

82 - An associated extension cannot also be a primary extension.

83 - An associated extension cannot have been previously assigned using Procedure 000 Word 1.

84 - Primary and associated extensions must have at least three digits.

85 - The number of digits in the associated extension must equal the number of digits in the primary extension.

86 - An associated extension cannot have been previously assigned as an LDN.

87 - Use Procedure 026 Word 2 to change the associated extension of an ACD split.

88 - You cannot remove an associated extension that is assigned to a name display in Procedure 012 Word 1.

PROCEDURE 003 WORD 1 — RECENTLY DISCONNECTED EXTENSIONS

Purpose

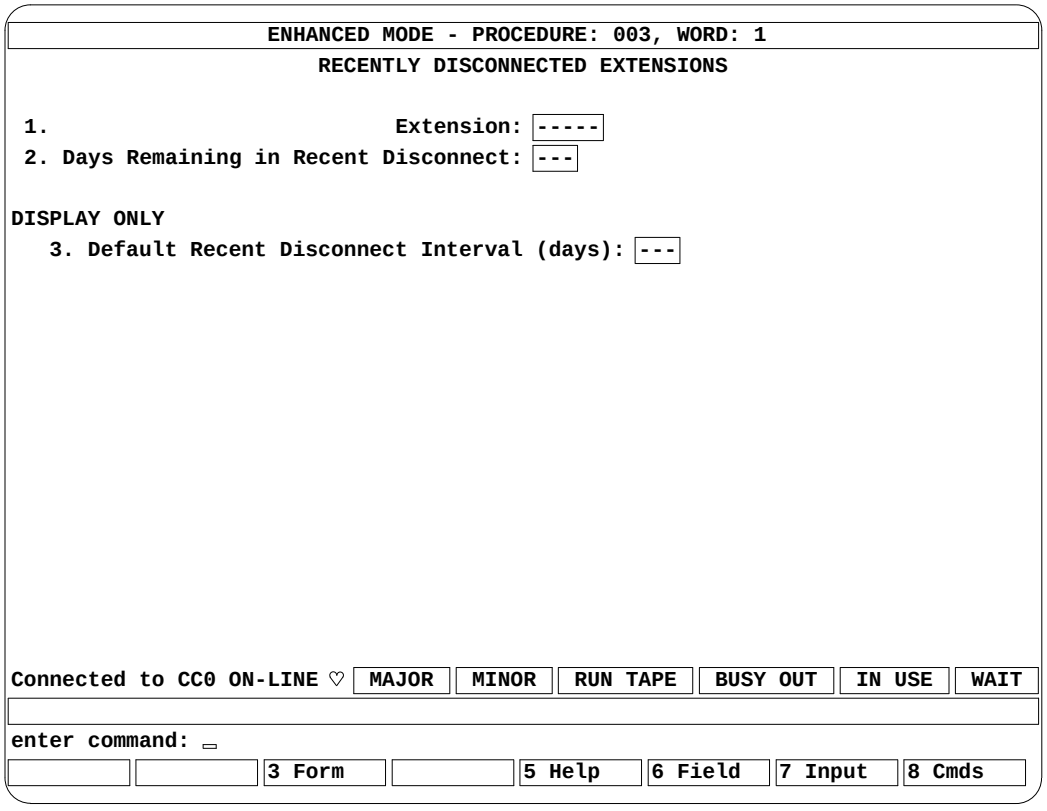
Use Procedure 003 Word 1 to display recently disconnected extensions and to administer the number of days (0-511) that the extension will remain in the recent disconnect state.

Related Procedures

Use Procedure 000 Word 1 to remove an extension. This places the assigned extension into the recently disconnected state.

The default value for the days remaining in recent disconnect is administered in Procedure 275 Word 4 (field 6).

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 or 2.
Add:	Not allowed.
Change:	Field 2.
Remove:	Not allowed.
Next Data:	Displays all extensions in the recent disconnect state.

Field Ranges and Encodes

1. Extension	-, 000-99999	
2. Days Remaining in Recent Disconnect	-	Extension not in recent disconnect
	0	Extension unassigned
	1-511	Days

Changing the recent disconnect state interval to 0 takes the extension out of the recently disconnected state, leaving the extension allocated but unassigned. On an unassigned extension, changing the recent disconnect state interval to greater than 0 puts the extension back into recent disconnect.

DISPLAY ONLY (Field 3)

3. Default Recent Disconnect Interval (days)	1-511

Special Error Codes

81 - Use Procedure 000 Word 1 to remove the extension. This places the assigned extension into the recent disconnect state.

PROCEDURE 010 WORD 1 — EXTENSION CLASS OF SERVICE - FEATURES

Purpose

Use Procedure 010 Word 1 to administer features associated with an extension class of service (COS).

Related Procedures

Use Procedure 010 Word 2 to administer other COS features and Procedure 010 Words 3 and 4 to administer COS restrictions.

Use Procedure 075 Word 1 to find extensions with the same COS and to find unused classes of service.

Cautions

Changes made in this procedure affect all extensions assigned to a given COS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 010, WORD: 1
                      EXTENSION CLASS OF SERVICE - FEATURES

 1.   Class of Service: --              20.         ACD Member: -
 3. Automatic Callback: -               21.          Stop Hunt: -
                                        22. ACD Agent Override: -
CALL FORWARDING                         23.     Send All Calls: -
   4. Busy and Don't Answer: -
   5.             Follow Me: -
 6.                   Call Hold: -
 7.      Calling Number Display: -
 8.            Priority Calling: -
 9.                Call Waiting: -
10.                    Override: -
13.             Priority Paging: -
14. Conference 3 Party/Transfer: -
15.          Touch-tone Dialing: -
16.         Timed Recall Exempt: -
17.         Ring Ping Immediate: -
19.           ACD Queue Display: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 3-10, 13-17, and 19-23.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Class of Service 1-63

   A COS cannot be removed, it can only be displayed and changed. A COS with zeros in all fields is legitimate, but none of the features in this procedure are enabled. A COS with all zeros has rotary dialing (field 15), timed recall inactive (field 16), ring ping immediate (field 17), and hunting (field 21).

   COS 31 is reserved for test circuits and is the COS applied to callers using the Remote Access feature once they have gained access into the switch.

3. Automatic Callback	0	Disabled
	1	Enabled

CALL FORWARDING (Fields 4-5)

4. Busy and Don't Answer	0	Disabled
	1	Enabled
	2	Enabled (don't answer only)
5. Follow Me	0	Disabled
	1	Enabled
6. Call Hold	0	Disabled
	1	Enabled
7. Calling Number Display	0	Disabled
	1	Enabled with calling number display unit
8. Priority Calling	0	Disabled
	1	Enabled
9. Call Waiting	0	Disabled
	1	Enabled
10. Override	0	Disabled
	1	Enabled
13. Priority Paging	0	Disabled
	1	Enabled
14. Conference 3 Party/Transfer	0	Disabled
	1	Enabled
15. Touch-tone Dialing	0	Disabled (rotary dialing only)
	1	Enabled (touch-tone and rotary dialing)

This field is set to 1 for COS 31 and cannot be changed.

Extensions equipped with a rotary dial:
— Can originate calls within the system
— Cannot originate calls using features with a * or # in their Dial Access Codes (DAC)
— Cannot place outside calls using through-dialing (via the attendant).

16. Timed Recall Exempt	0	Disabled
	1	Enabled

Enabling this field for an extension class of service makes the users exempt from getting timed recall from the attendant. Enable this field for outgoing trunk callers that are not to be interrupted.

17. Ring Ping Immediate	0	Disabled
	1	Enabled
19. ACD Queue Display	0	Disabled
	1	Enabled

20. ACD Member	0	Disabled
	1	Enabled
21. Stop Hunt	0	Hunting
	1	No hunting
22. ACD Agent Override	0	Disabled
	1	Enabled
23. Send All Calls	0	Disabled
	1	Enabled

Special Error Codes

83 - Field 15 cannot be changed in class of service 31.

PROCEDURE 010 WORD 2 — EXTENSION CLASS OF SERVICE - FEATURES

Purpose

Use Procedure 010 Word 2 to administer the following features and capabilities to an extension class of service (COS):

— Leave Word Calling

— Call Forwarding Off-Net

— Call Detail Recording (CDR) Forced Entry of Account Codes (FEAC)

— Malicious Call Trace.

Related Procedures

Use Procedure 010 Word 1 to administer other COS features and Procedure 010 Words 3 and 4 to administer COS restrictions.

Use Procedure 075 Word 1 to find extension numbers that share the same COS and to find unused classes of service.

Cautions

Changes made in this procedure affect all extensions that are assigned to a given COS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 010, WORD: 2
                     EXTENSION CLASS OF SERVICE - FEATURES

 1. Class of Service: --

LEAVE WORD CALLING
   2. Originating: -
   3. Terminating: -

 4.      Call Forwarding Off-Net: -
 5.             CDR Account Code: -
 6. Malicious Call Trace Control: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 2-6.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Class of Service 1-63

   A COS cannot be removed, it can only be displayed and changed. A COS with zeros in all fields is legitimate, but none of the features in this procedure are enabled.

   COS 31 is reserved for test circuits and is the COS applied to callers using the Remote Access feature once they have gained access into the switch.

LEAVE WORD CALLING (Fields 2-3)

2.	Originating	0	Disabled
		1	Enabled
3.	Terminating	0	Disabled
		1	Enabled
4.	Call Forwarding Off-Net	0	Disabled
		1	Enabled

When enabling this field, the desired local office codes should be specified in the WCR Toll-free table (Procedure 319 Word 1 and Procedure 318 Word 1). Otherwise, when activating this field, an office code that is not specifically assigned as Toll-free is presumed by the software to be a toll office code.

Specific extensions can be allowed to Call Forward Off-Net to Toll locations in Procedure 000 Word 3.

5.	CDR Account Code	0	Not required
		1	Required

If account codes are administered as part of the format, all CDR configurations (SMDR, VFCDR, CMDR) will record the account codes.

6.	Malicious Call Trace Control	0	Disabled
		1	Enabled

Special Error Codes

None.

PROCEDURE 010 WORD 3 — EXTENSION CLASS OF SERVICE - RESTRICTIONS

Purpose

Use Procedure 010 Word 3 to administer restrictions that are applicable to an extension class of service (COS).

Related Procedures

Use Procedure 010 Words 1 and 2 to administer extension COS features and Procedure 010 Word 4 to administer other COS restrictions.

Use Procedure 075 Word 1 to find extensions with the same COS and to find unused classes of service.

Use Procedure 102 Word 1 to assign trunk groups to miscellaneous trunk restriction groups.

Use Procedure 175 Word 1 to display miscellaneous trunk restriction groups.

Use Procedure 300 Word 1 to define 0/1 toll nonrestricted codes.

Use Procedures 301 Words 1-4 and 302 Word 1 to define code restrictions.

Cautions

Changes made in this procedure affect all extensions that are assigned a COS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 010, WORD: 3
                  EXTENSION CLASS OF SERVICE - RESTRICTIONS

 1. Class of Service: --                 15. Term-to-Term Only: -
                                         16.            Inward: -
MISCELLANEOUS TRUNK RESTRICTION GROUPS   17.  Manual Line Term: -
   2.    Group 1: -                      18.       Origination: -
   3.    Group 2: -                      19.           Outward: -
   4.    Group 3: -                      20.       Termination: -
   5.    Group 4: -                      21.              Toll: -
   6.    Group 5: -                      22.          WCR Toll: -
   7.    Group 6: -                      23.              FRL: -
   8.    Group 7: -
   9.    Group 8: -
  10. All Groups: -

11.               APLT Off-Net: -
12.      Code Restriction Level: -
13. Data Protection (permanent): -
14.                        DID: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 2-23.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Class of Service 1-63

   A COS cannot be removed, it can only be displayed and changed. A COS with zeros in all fields is legitimate, which means there will be no restrictions except for an FRL of 0 (most restrictive).

   COS 31 is reserved for test circuits and is the COS applied to callers using the Remote Access feature once they have gained access into the switch.

MISCELLANEOUS TRUNK RESTRICTION GROUPS (Fields 2-10)

0 Not restricted
1 Restricted

2. Group 1 0-1
3. Group 2 0-1
4. Group 3 0-1
5. Group 4 0-1
6. Group 5 0-1
7. Group 6 0-1
8. Group 7 0-1
9. Group 8 0-1
10. All Groups 0-1
11. APLT Off-Net
    0 Not restricted
    1 Restricted

    This restricts users from making off-network, direct distance dialing calls over APLT/CCSA facilities.
12. Code Restriction Level
    0 Least restrictive
    1 Most restrictive
    2 More restrictive
    3 Restrictive

    The code restriction level assigned determines whether extensions are allowed to dial designated office codes, home numbering plan area (NPA) codes, etc.
13. Data Protection (permanent)
    0 Not restricted
    1 Restricted

    This protects data transmission from intrusion by denying requests of bridge-on features (Call Waiting, Priority Calling, Override, attendant call waiting, verification by attendant or voice terminal user).
14. DID
    0 Not restricted
    1 Restricted

    This restricts users from receiving DID and APLT/CCSA calls.
15. Term-to-Term Only
    0 Not restricted
    1 Restricted

    This restricts users from placing or receiving anything but terminal-to-terminal calls.

16. Inward	0 1	Not restricted Restricted
	This restricts users from receiving incoming CO/DID calls that are either direct dial or attendant completing.	
17. Manual Line Term	0 1	Not restricted Restricted
	This restricts users from receiving any calls except those from the attendant.	
18. Origination	0 1	Not restricted Restricted
	This restricts users from originating any calls. The user can still receive calls.	
19. Outward	0 1	Not restricted Restricted
	This restricts users from accessing the exchange network without attendant assistance.	
20. Termination	0 1	Not restricted Restricted
	This restricts users from receiving any calls. The user may still originate calls.	
21. Toll	0 1	Not restricted Restricted
	This restricts users from completing toll calls to the toll operator without attendant assistance.	
22. WCR Toll	0 1	Not restricted Restricted
	This restricts users from completing WCR toll calls to toll facilities.	
23. FRL	0-7 (0 being most restrictive, 7 being least restrictive)	
	Extensions can only access trunk groups that have an FRL that is lower than or equal to the FRL assigned in this field.	

Special Error Codes

None.

PROCEDURE 010 WORD 4 — EXTENSION CLASS OF SERVICE - RESTRICTIONS

Purpose

Use Procedure 010 Word 4 to administer the precedence level and Integrated Services Digital Network (ISDN) routing associated with a specific extension class of service (COS).

Related Procedures

Use Procedure 010 Words 1 and 2 to assign COS features and Procedure 010 Word 3 to assign other COS restrictions.

Use Procedure 075 Word 1 to find extensions that share the same COS and to find unused classes of service.

Cautions

Changes made in this procedure affect all extensions that are assigned a COS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 010, WORD: 4
                  EXTENSION CLASS OF SERVICE - RESTRICTIONS

 1.         Class of Service: --
 2. Maximum Precedence Level: -
 3.             ISDN Routing: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 2 and 3.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Class of Service 1-63

   A COS cannot be removed, it can only be displayed and changed. A COS with zeros in all fields is legitimate.

   COS 31 is reserved for test circuits and is the COS applied to callers using the Remote Access feature once they have gained access into the switch.

2. Maximum Precedence Level	-	Precedence calling not allowed
	0	Flash override
	1	Flash
	2	Immediate
	3	Priority
	4	Routine
3. ISDN Routing	-	ISDN is not supported
	0	Use any facility
	1	Use ISDN exclusively
	2	ISDN if available; another facility type if not

This field affects both ISDN/PRI and ISDN/BRI.

This field affects DMI-MOS the same as it does ISDN/PRI.

Special Error Codes

None.

PROCEDURE 011 WORD 1 — CALL COVERAGE CRITERIA - D/A INTERVAL - PATH

Purpose

Use Procedure 011 Word 1 to administer a Call Coverage group by assigning the group's criteria, principal don't answer interval, and coverage points.

Related Procedures

Remove extensions from all Call Coverage paths before removing them from service in Procedure 000 Word 1.

Remove Automatic Call Distribution (ACD) splits from all call coverage paths before removing them from the system in Procedure 026 Word 1.

Use Procedure 075 Word 1 to find Call Coverage groups associated with an ACD split.

Use Procedure 026 Word 1 to find ACD splits associated with an AP or AUDIX.

Use Procedure 031 Word 1 to terminate a vector directory number (VDN) to a vector before adding it to a coverage path.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 011, WORD: 1
                  CALL COVERAGE CRITERIA - D/A INTERVAL - PATH

 1. Call Coverage Group: ----

CALL COVERAGE GROUP CRITERIA
   2. Extension Active: -
   3.   Extension Busy: -
   4.        All Calls: -
   5.     Don't Answer: -

 6.        Principal Don't Answer Interval: -
 7.               Coverage Point Indicator: -
 8.                        Coverage Point: -
 9. Coverage Point Extension/ACD Split/VDN: -----




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 1 and 8.
Add:	Fields 1-9.
Change:	Fields 2-6 can only be changed when the coverage point (field 8) is set to 1. Fields 7-9 can be changed when field 8 is set to 1, 2, or 3.
Remove:	Fields 1-9 (this removes all coverage points for the Call Coverage group and removes the coverage group assignment in Procedure 000 Word 2 field 6).
Next Data:	Displays all assigned coverage groups.

Field Ranges and Encodes

1. Call Coverage Group — 1-1999 Single path; 2000-4095 Dual path

   Group numbers 1-1999 are reserved for single-path coverage groups and numbers 2000-4095 are reserved for dual coverage paths. Dual coverage paths are administered in even-odd pairs; the even number specifies path 1, the odd number specifies path 2.

   For example, group path numbers 2112 and 2113 represent a dual path coverage arrangement. Path 2112 specifies the coverage criteria and the coverage path for path 1. Path 2113 specifies the coverage criteria and the coverage path for path 2. When assigning dual path coverage to an extension (Procedure 000 Word 2 field 6), use the even group number of the even-odd pair.

   To use groups 2000-4095 as single path groups, assign the same criteria and coverage points to both even and odd groups of a pair.

CALL COVERAGE GROUP CRITERIA (Fields 2-5)

- 0 No coverage
- 1 Extension coverage
- 2 Attendant or trunk coverage
- 3 Extension and attendant or trunk coverage

2. Extension Active — 0-3
3. Extension Busy — 0-3
4. All Calls — 0-3
5. Don’t Answer — 0-3
6. Principal Don’t Answer Interval — 0 None; 2-6 Ring cycles

   This field defines how long a call rings at a principal’s voice terminal before going to coverage when the don’t answer criteria is active (field 5).

7. Coverage Point Indicator — 0 Extension; 1 ACD split; 2 VDN
8. Coverage Point — 1-3

   There can be one, two, or three points in the coverage path.

9.	Coverage Point Extension/ACD Split/VDN	000-99999 for extension and VDN, 1-60 for ACD split VDNs and extensions that are members of the same coverage group should be assigned the same machine number. An ACD split cannot be the final point in a coverage path when Call Vectoring is enabled. An extension belonging to a group of extensions that are in a simple hunting pattern (Procedure 000 Word 2) can be assigned as the final coverage point in a coverage path. You must limit this hunting group to 9 members because the system will not search past the tenth member of the hunting pattern.

Special Error Codes

81 - If field 5 is not zero, field 6 must be 2, 3, 4, 5, or 6.

82 - Assign the coverage points (field 8) consecutively (i.e., 1, 2, 3) without leaving gaps.

83 - Associated extensions are not allowed when an ACD split is entered as a point in a Call Coverage path. The split number should be entered.

85 - The ACD split or split supervisor is not assigned.

86 - No coverage point may appear more than once in the path.

87 - One or more extensions that go to this Call Coverage path are associated with an AP that conflicts with the ACD split AP. Use Procedure 075 Word 1 to find these.

88 - The ACD split is associated with a conflicting AP or AUDIX. Use Procedure 026 Word 1 to find these.

89 - One or more extensions that go to this call coverage path are associated with an AUDIX that conflicts with the ACD split AUDIX. Use Procedure 075 Word 1 to find these.

90 - If an ACD split or a VDN is in the path, it must be the last point (see field 7 limits).

91 - Fields 2-6 can only be changed when the coverage point is set to 1 (field 8); fields 7-9 can be changed when field 8 is set to 1, 2, or 3.

92 - Use Procedure 031 Word 1 for terminating a VDN to a vector before adding it to a coverage path.

93 - The VDN in this coverage group terminates at a vector which references a Message Center split. The Message Center split has a different AP number (Procedure 026 Word 1) than at least one of the extensions using this coverage path (Procedure 000 Word 2).

94 - The VDN in this coverage group terminates at a vector which references an AUDIX split. The AUDIX split that has a different AUDIX number (Procedure 026 Word 1) than at least one of the extensions using this coverage path (Procedure 000 Word 2).

95 - Field 7 indicates a VDN, but an extension is entered in field 9; or field 7 indicates an extension, but a VDN is entered in field 9.

PROCEDURE 012 WORD 1 — NAME DATABASE - NAME TO BE DISPLAYED

Purpose

Use Procedure 012 Word 1 to administer an extension, vector directory number (VDN), or trunk group for ‘‘name display’’ related features. Specifically, use this procedure to:

— Display ‘‘name display’’ characteristics for a given extension, VDN, or trunk group

— See if a name is administered to display upon use of an outgoing trunk group

— Assign a given extension, VDN, or trunk group to a set of extensions or trunk groups sharing the same name

— Copy a name already assigned to another extension, VDN, or trunk group to this extension or trunk group (administration time-saver)

— View all extensions, VDNs, or trunk groups that share the same name.

Related Procedures

Procedure 012 Word 1 and Word 2 are linked together. For example, if two extensions are administered in Word 1 to share a name, the actual name that is displayed for the two extensions is administered in Word 2.

Use Procedure 012 Word 3 to:

— View the number of names that can still be added

— View the amount of space remaining in the names database

— Compact the names database table to increase usable space.

Cautions

Removal of an entry for one associated extension of a primary extension removes that entry for all associated extensions of that primary extension.

Words 1 and 2 of this procedure are linked together. When moving from Word 1 to Word 2, use the ‘‘**w**’’ command to select Word 2. If Word 2 is selected by typing in the procedure and word number (i.e., **p012w2**), the link between Word 1 and 2 is lost and you must display the information in Word 1 again.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 012, WORD: 1
                      NAME DATABASE - NAME TO BE DISPLAYED

 1. Extension, VDN, or Trunk Group: -----
 2.                    Type: -
 3.           Display Start: --
 4. Outgoing Trunk Display: -
 5.               Copy Mode: -
 6. Extension, VDN, or Trunk Group to Copy or Share: -----

DISPLAY ONLY
   7.                        Characters In Name: --
   8. Shared Primary Extensions or Trunk Groups: --
   9.        Associated Extension Name Assigned: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-6.
Change:	Fields 3 and 4.
Remove:	Fields 1-6.
Next Data:	The next data routine only operates on primary extensions, VDNs, or trunk groups that share names. Field 8 displays the number of extensions sharing a name.

Field Ranges and Encodes

1.	Extension, VDN, or Trunk Group	-, 000-99999 for extensions and VDNs, 18-999 for trunk groups Adding a name to a primary extension will add the name for all associated extensions. Removing a name from an associated extension, will remove the name for all associated extensions.
2.	Type	0 Trunk group 1 Extension or VDN

3. Display Start — 1-30

   This field specifies the character position on the display set that the name display is to start on when the name is to be truncated.

   Any characters entered in Procedure 012 Word 2 that precede the display start position are overwritten with blanks.

4. Outgoing Trunk Display
   - \- Not an outgoing trunk in field 1
   - 0 Name not displayed for outgoing trunk
   - 1 Name displayed for outgoing trunk

5. Copy Mode
   - 0 Use Word 2 to enter, add, or change a name
   - 1 Share key to existing name
   - 2 Create name by copy

   Use copy mode to quickly copy the name associated with the extension (VDN or trunk group) in field 6 to the extension (VDN or trunk group) in field 1. For example, if one extension has the name ‘‘BUILDING MAINTENANCE 1’’ as its name display, and another extension needs the name ‘‘BUILDING MAINTENANCE 2’’, copy mode 2 could be used to copy the name ‘‘BUILDING MAINTENANCE 1’’ over to the other extension. This saves time spent typing the word ‘‘BUILDING MAINTENANCE’’ again in Word 2. After the copy is made, use Word 2 to change the ‘‘1’’ to a ‘‘2’’.

   If field 5 is 1 or 2, then field 6 must be filled.

6. Extension, VDN, or Trunk Group to Copy or Share — -, 000-99999 for extensions and VDNs, 18-999 for trunk groups

   For this field, the type is determined from field 2 (field 5 does not equal 0).

   Extensions and VDNs can share the same name. Extensions and VDNs cannot share the same name with trunk groups.

   Sharing a primary extension with an associated extension name is not allowed.

   Procedure 012 Word 1 and Word 2 are linked together. If two extensions are administered in Word 1 to share a name, the actual name that is displayed for the two extensions is administered in Word 2.

DISPLAY ONLY (Fields 7-9)

7. Characters In Name — 1-30

8. Shared Primary Extensions or Trunk Groups
   - \- Associated extension
   - 1-63 Shared extension or trunk group

9. Associated Extension Name Assigned
   - \- Trunk group in field 1
   - 0 Name is not assigned
   - 1 Name is assigned

Notes

1. A maximum of 63 primary extensions, VDNs, or trunk groups can be assigned to a single name.
2. The data administered in Procedure 012 Words 1 and 2 are used in building the display information element (IE) of ISDN. The display IE is used in the SETUP and CONNECT messages. If data is not assigned for a calling party using an ISDN/PRI trunk, a display information element is not created.

Special Error Codes

81 - Use Procedure 012 Word 3 to compact the names database table.

82 - You cannot assign an associated extension if its primary extension belongs to a shared set of primary extensions.

83 - You cannot use the share operation for an associated extension. Set the copy mode in field 5 equal to 0 or 2.

84 - Two primary extensions may not share a name if the associated extension of either has a name assigned.

85 - You cannot remove the name of a primary extension if the associated extension has a name assigned.

86 - Assign the primary extension name before the associated extension name.

87 - The next data routine operates only on a set of primary extensions (or trunk groups) that share the same name.

88 - The Display Start number (field 3) cannot exceed the number of characters in the name currently stored on a share or copy operation (field 5 = 1 or 2). Lower the number in field 3.

89 - You cannot share more than 63 primary extensions (or trunk groups) with a single name.

90 - You cannot share or copy from an extension (or VDN or trunk group) with no name assigned.

91 - A primary extension and an associated extension cannot share a name.

92 - You cannot set the outgoing trunk display flag (field 4) to 0 or 1 for incoming-only trunk groups.

93 - The name is not assigned.

94 - A name is already assigned. Choose a different name.

PROCEDURE 012 WORD 2 — NAME DATABASE - ENTRY

Purpose

Use Procedure 012 Word 2 to administer a name in the name database.

Prerequisite Procedures

Do a valid display in Word 1 before using Word 2.

Related Procedures

Use Procedure 012 Word 1 to administer an extension, vector directory number (VDN), or trunk group to be used by ‘‘name display’’ related features. Word 1 and Word 2 are linked together. For example, if two extensions are administered in Word 1 to share a name, the actual name displayed for the two extensions is administered in Word 2.

The number of characters in the display start field (field 3) of Word 1 cannot be greater than the number of characters in a given name.

Use Procedure 012 Word 3 to compact the name database table.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 012, WORD: 2
                              NAME DATABASE - ENTRY

 1. Segment: -

CHARACTER ENCODES
   2.  Character 1: --
   3.  Character 2: --
   4.  Character 3: --
   5.  Character 4: --
   6.  Character 5: --
   7.  Character 6: --
   8.  Character 7: --
   9.  Character 8: --
  10.  Character 9: --
  11. Character 10: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-11.
Change:	Fields 2-11.
Remove:	Not allowed.
Next Data:	Displays the characters assigned to each segment.

Field Ranges and Encodes

1. Segment	1	Assign characters 1-10
	2	Assign characters 11-20
	3	Assign characters 21-30.

CHARACTER ENCODES (Fields 2-11)

CHARACTER ENCODES					
21 = A	11 = Q	44 = g	94 = w	18 = ?	58 = -

22 = B	72 = R	45 = h	95 = x	19 = ;	59 = +
23 = C	73 = S	46 = i	96 = y	20 = :	60 = *
31 = D	81 = T	54 = j	15 = z	27 = "	67 = {
32 = E	82 = U	55 = k	00 = 0	28 = ’	68 = }
33 = F	83 = V	56 = l	01 = 1	29 = ‘	69 = |
41 = G	91 = W	64 = m	02 = 2	30 = ,	70 = \
42 = H	92 = X	65 = n	03 = 3	37 = (	77 = <
43 = I	93 = Y	66 = o	04 = 4	38 =)	78 = >
51 = J	12 = Z	74 = p	05 = 5	39 = _	79 = =
52 = K	24 = a	14 = q	06 = 6	40 = ~	80 = %
53 = L	25 = b	75 = r	07 = 7	47 = [	87 = #
61 = M	26 = c	76 = s	08 = 8	48 =]	88 = &
62 = N	34 = d	84 = t	09 = 9	49 = ^	89 = @
63 = 0	35 = e	85 = u	10 = . (period)	50 = blank	90 = $
71 = P	36 = f	86 = v	17 = !	57 = /	

2. Character 1 00-12, 14, 15, 17-96
3. Character 2 00-12, 14, 15, 17-96
4. Character 3 00-12, 14, 15, 17-96
5. Character 4 00-12, 14, 15, 17-96
6. Character 5 00-12, 14, 15, 17-96
7. Character 6 00-12, 14, 15, 17-96
8. Character 7 00-12, 14, 15, 17-96
9. Character 8 00-12, 14, 15, 17-96
10. Character 9 00-12, 14, 15, 17-96
11. Character 10 00-12, 14, 15, 17-96

Notes

1. To create a name, each letter (capital or lower case) is entered into fields 2 through 11. Each segment cannot exceed 10 characters.
2. The number entered in the ‘‘Display Start’’ field of Procedure 012 Word 1 cannot be greater than the number of characters in the name.

Special Error Codes

81 - Use Procedure 012 Word 3 to compact the table.

82 - You must do a display routine using Procedure 012 Word 1 prior to using this procedure.

83 - The number in the display start field (field 3) of Procedure 012 Word 1 cannot be greater than the number of characters in a given name. Either the name must be lengthened in this procedure or the display start (field 3) changed in Procedure 012 Word 1.

84 - Attempts to add a name or change a name to a zero-character length are not allowed. The remove routine in Procedure 012 Word 1 must be used.

PROCEDURE 012 WORD 3 — NAME DATABASE COMPACTION

Purpose

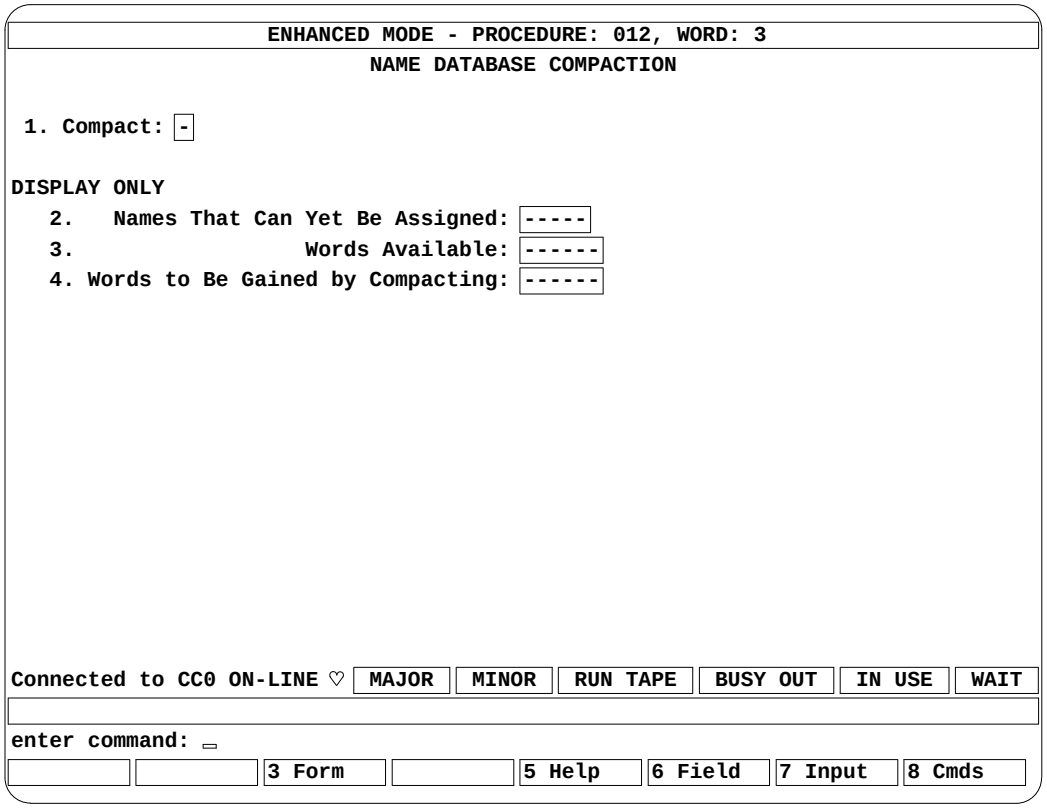
Use Procedure 012 Word 3 to:

— Display the number of names that can still be added

— Display the amount of space remaining in the names database

— Compact the names database table to increase usable space.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Field 1.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Compact	-	No compaction
	1	Compact name database

DISPLAY ONLY (Fields 2-4)

2. Names That Can Yet Be Assigned	Depends on memory space
3. Words Available	Depends on memory space
4. Words to Be Gained by Compacting	Depends on memory space

Notes

1. Before compacting the database, do a display routine to see if the database needs to be compacted. If field 4 equals 0, the database is already compact.

   To compact the database enter a 1 in field 1 and do a change routine.

2. To estimate the number of names that can be gained by compacting, add fields 3 and 4 and divide the sum by the number of words required to store a typical-size name. One word is equal to two characters.

Special Error Codes

None.

PROCEDURE 013 WORD 1 — MNEMONIC DIALING - ALPHANUMERIC CHARACTERS

Purpose

Use Procedure 013 Word 1 to administer alphanumeric mnemonics for mnemonic dialing. The mnemonic assigned in this procedure is used to dial a phone number assigned in Procedure 013 Word 2. Mnemonic dialing is administered on a system-wide basis and is available to all users.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 013, WORD: 1
                  MNEMONIC DIALING - ALPHANUMERIC CHARACTERS

 1. Segment: -

CHARACTER ENCODES

 2.  Character 1: --
 3.  Character 2: --
 4.  Character 3: --
 5.  Character 4: --
 6.  Character 5: --
 7.  Character 6: --
 8.  Character 7: --
 9.  Character 8: --
10.  Character 9: --
11. Character 10: --




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 2-11.
Add:	Fields 1-11.
Change:	Not allowed.
Remove:	Fields 1-11.
Next Data:	Displays mnemonics in alphabetical order.

Field Ranges and Encodes

1. Segment -, 1

CHARACTER ENCODES (Fields 2-11)

Character Encodes					
21 = A	53 = L	91 = W	44 = g	14 = q	00 = 0
22 = B	61 = M	92 = X	45 = h	75 = r	01 = 1
23 = C	62 = N	93 = Y	46 = i	76 = s	02 = 2
31 = D	63 = O	12 = Z	54 = j	84 = t	03 = 3
32 = E	71 = P	24 = a	55 = k	85 = u	04 = 4
33 = F	11 = Q	25 = b	56 = l	86 = v	05 = 5
41 = G	72 = R	26 = c	64 = m	94 = w	06 = 6
42 = H	73 = S	34 = d	65 = n	95 = x	07 = 7
43 = I	81 = T	35 = e	66 = o	96 = y	08 = 8
51 = J	82 = U	36 = f	74 = p	15 = z	09 = 9
52 = K	83 = V				

The first character of the mnemonic must be alphabetic, and characters 2-10 can be alphanumeric.

2. Character 1 — 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
3. Character 2 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
4. Character 3 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
5. Character 4 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
6. Character 5 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
7. Character 6 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
8. Character 7 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
9. Character 8 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
10. Character 9 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96
11. Character 10 — 00-09, 11, 12, 14, 15, 21-26, 31-36, 41-46, 51-56, 61-66, 71-76, 81-86, 91-96

Notes

1. When using the enhanced mode, you can enter characters or numbers into the data fields without using the encodes. In basic mode, you must use the alphanumeric character encodes.
2. The mnemonics assigned in this procedure are case-sensitive. For example, ‘‘sam’’ is different from ‘‘SAM’’.
3. The maximum number of mnemonics that can be stored in the switch is 1000.

Special Error Codes

81 - Character 1 must be alphabetic and characters 2-10 can be alphanumeric.

82 - This mnemonic is not in the list.

83 - This mnemonic is already in the list.

84 - The maximum number of mnemonics is already stored (1000).

PROCEDURE 013 WORD 2 — MNEMONIC DIALING - PHONE NUMBER

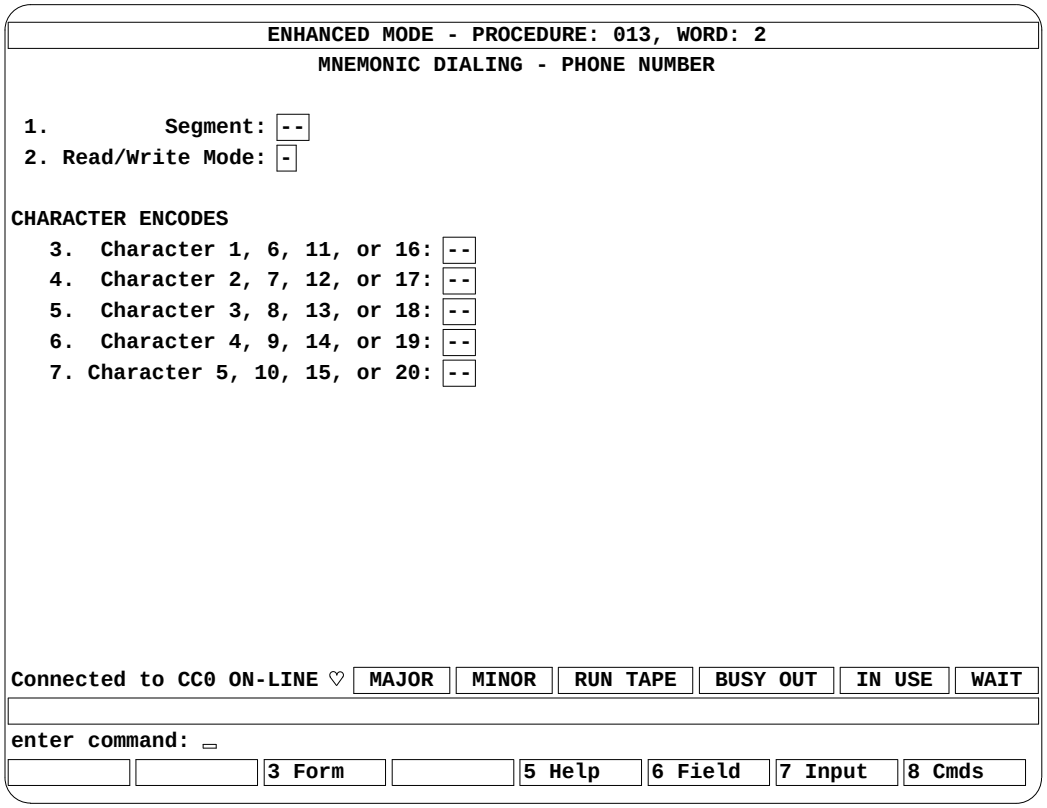
Purpose

Use Procedure 013 Word 2 to administer the telephone numbers associated with alphanumeric mnemonics assigned in Procedure 013 Word 1.

Prerequisite Procedures

Do a display in Procedure 013 Word 1 before using Word 2. This display relates the alphanumeric mnemonic in Word 1 to the telephone number in Word 2.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-7.
Remove:	Not allowed.
Next Data:	Displays each telephone number segment.

Field Ranges and Encodes

1. Segment	1	Characters 1-5
	2	Characters 6-10
	3	Characters 11-15
	4	Characters 16-20
2. Read/Write Mode	-	Read or write machine-used table
	0	Read or write scratch-pad table
	1	Read or write machine-used table

CHARACTER ENCODES (Fields 3-7)

0-9	Decimal digits
11	*
12	#
13	Function entry
14	Pause
15	Wait
16	Mark
17	Await dial tone
18	Manual digit entry
19	Suppress display
20	End of dialing

The function entry encode (13) must be followed by a special function encode (14-20). A special function encode must be preceded by the function entry encode. The function entry encode cannot be the last character in a list item.

The manual digit entry encode (18) must be followed by the number of digits that will be entered manually (1-15).

3. Character 1, 6, 11, or 16	-, 0-9, 11-20
4. Character 2, 7, 12, or 17	-, 0-9, 11-20
5. Character 3, 8, 13, or 18	-, 0-9, 11-20
6. Character 4, 9, 14, or 19	-, 0-9, 11-20

7. Character 5, 10, 15, or 20 -, 0-9, 11-20

Notes

1. The telephone number can be a maximum of 20 digits long.
2. Enter the telephone number segments in the same sequence as the telephone number that is dialed. For example, a ten-digit telephone number ''3035382180'' would be entered as follows: segment number 1 (field 1) would be associated with digits ''30353'' entered in fields 3-7 (characters 1-5); segment number 2 (field 1) would be associated with digits ''82180'' entered in fields 3-7 (characters 6-10).
3. The following defines the use of special functions:
   - — Function entry (13) - This encode is required before any of the following special functions.
   - — Pause (14) - This suspends dialing for 1.5 seconds. This is typically used after dialing a trunk dial access code (e.g., 9-13-14-2552323).
   - — Wait (15) - This suspends dialing for up to 10 seconds. This is used when a return dial tone from a distant switch may take this long.
   - — Mark (16) - This is required before the * or # characters (e.g., 13-16-*11).
   - — Await dial tone (17) - This will suspend dialing until the switch actually receives dial tone from the other location.
   - — Manual digit entry (18) - This allows the user to manually enter digits at any point in the dialing sequence. It must always be followed by the number of digits expected (1-15). For example, a user might make many calls to people at one location. They can set up the initial digits ''91303538'' with a manual digit entry for a four-digit extension number. This translates into ''9-13-14-1303538-13-18-4''.
   - — Suppress display (19) - This is used when a security code, such as a password or authorization code, is used in an Abbreviated Dialing list entry and the user also has a display voice terminal. By enclosing the code digits within the suppress display function, the digits of the code are converted to ''s'' on the display, thus hiding the code from unauthorized persons. For example, the code ''5555'' can be suppressed by entering ''13-19-5555-13-19'' as part of the list item.
   - — End of dialing (20) - This is used to signify that Abbreviated Dialing will send no more digits and the originating register (OR) used for the call can be released. This signifies the same end of dialing as the pound (#) sign. The end of dialing function is recommended for all list items that access trunk facilities on the switch. By using this function, you can save on the holding time of ORs which will allow the switch to operate more efficiently.
4. If equipment in the call path requires special function encodes (encodes 14-20), then administer the telephone number to account for this. For example, some older electro-mechanical equipment cannot handle high-speed digit transmission, so you must put delays in the telephone number segments.

Special Error Codes

81 - A display or change in Word 2 cannot follow a remove in Word 1.

85 - Illegal character entered. Function entry (13) must be followed by a special function (14-20). A special function (14-20) must be preceded by function entry (13).

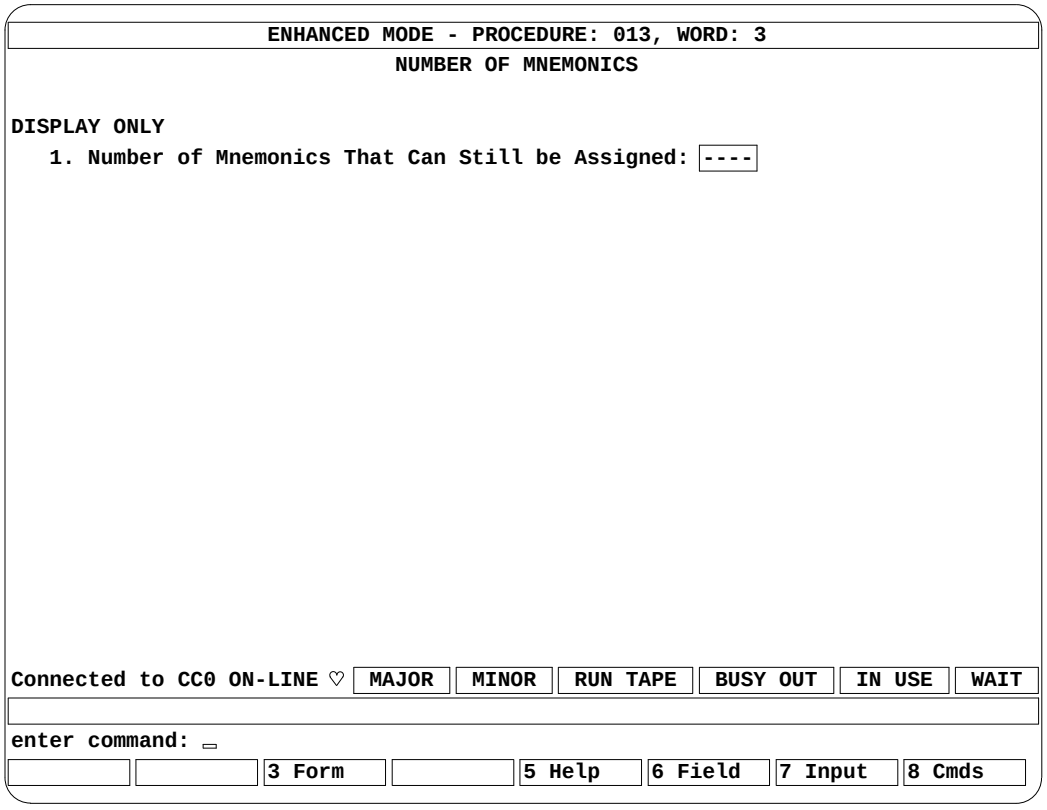
87 - The character following special function 18 must be a number from 1-15.

PROCEDURE 013 WORD 3 — NUMBER OF MNEMONICS

Purpose

Use Procedure 013 Word 3 to display how many mnemonics can still be added to the system.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

DISPLAY ONLY (Field 1)

1.	Number of Mnemonics That Can Still be Assigned	0-1000

Special Error Codes

None.

PROCEDURE 014 WORD 1 — BEARER CAPABILITY CLASS OF SERVICE - CALL OPTIONS

Purpose

Use Procedure 014 Word 1 to administer bearer capability translations such as the default bearer capability and action when a real or virtual device uses a bearer capability. There are nine different default bearer capability classes of service (0-8). See the Notes section for the predefined values associated with each class of service.

Related Procedures

Use Procedure 014 Word 2 to administer the data rates and other translations for bearer capability classes of service.

Use Procedure 000 Word 3 to assign an extension to a bearer capability class of service.

Use Procedure 100 Word 2 to assign a trunk group to a bearer capability class of service.

Use Procedure 318 Word 2 to assign a WCR preference to a bearer capability class of service.

Cautions

It is highly recommended that the nine default bearer capability classes of service are not modified, and that new bearer capability classes of service are created for any special applications.

Extreme care should be taken when administering the Bearer Capability Classes of Service. Administration errors may restrict facility operation (i.e. trunk access, terminal usage, network routing, etc).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 014, WORD: 1
              BEARER CAPABILITY CLASS OF SERVICE - CALL OPTIONS

 1.  Bearer Capability COS: [---]        DEFAULT CAPABILITIES
 2.         Transport Mode: [-]            14.    Transport Mode: [-]
 3. Incoming Endpoint Type: [-]            15.  Information Type: [-]
                                           16. Bearer Capability: [--]
CALL TYPES AND ACTION TAKEN
   4.            Voice: [-]
   5. Voice Grade Data: [-]
   6.           Mode 0: [-]
   7.           Mode 1: [-]
   8.           Mode 2: [-]
   9.           Mode 3: [-]
  10.  Unknown Digital: [-]
  11.   Unknown Analog: [-]
  12.         Mode 3/2: [-]
  13.             X.25: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-16.
Remove:	Not allowed.
Next Data:	Displays assignments for each bearer capability class of service.

Field Ranges and Encodes

1. Bearer Capability COS — -, 0-255

   In the Notes section there is a list of bearer capability classes of service (BCCOS) and the facilities that each class of service supports. BCCOS 0 through 8 are each predefined with a different set of active parameters. Each BCCOS supports a specific facility. It is recommended that these nine classes of service not be modified, and that a new class of service is created to support any other unique configuration. Some of the BCCOS default to a specific facility when the facility is administered in a particular procedure. See the Notes section for details.

2.	Transport Mode	0	Circuit switched
		1	Packet switched
		2	Both circuit and packet
3.	Incoming Endpoint Type	0	Restricted
		1	Clear

Restricted is presented in an encoded format (ZCS).

Clear is unrestricted and presented as raw data (B8ZS).

This field assigns the incoming endpoint type, while field 15 administers the outgoing side information type for a BCCOS.

A clear channel call cannot terminate to a restricted channel facility.

A restricted channel call can terminate to a clear channel facility.

CALL TYPES AND ACTION TAKEN (Fields 4-13)

These bearer capabilities are administered to extensions, WCR preferences, and trunk groups so that a caller of these facilities is given appropriate treatment. The treatments that can be given to a caller are defined by the encodes.

Convert-to-speech is used to convert 3.1 kHz audio to speech for BRI endpoints. Convert-to-3.1 kHz is used to convert speech to 3.1 kHz audio.

4.	Voice	0	Circuit switch the call
		1	Insert a mode 2-to-analog modem pool facility
		2	Block the call
		3	Convert to 3.1 kHz
5.	Voice Grade Data	0	Circuit switch the call
		1	Insert a mode 2-to-analog modem pool facility
		2	Block the call
		3	Convert to speech
6.	Mode 0	0	Circuit switch the call
		1	Insert a mode 2-to-analog modem pool facility
		2	Block the call
		3	Undefined
7.	Mode 1	0	Circuit switch the call
		1	Insert a mode 2-to-analog modem pool facility
		2	Block the call
		3	Undefined
8.	Mode 2	0	Circuit switch the call
		1	Insert a mode 2-to-analog modem pool facility
		2	Block the call
		3	Undefined

9. Mode 3	0	Circuit switch the call
	1	Insert a mode 2-to-analog modem pool facility
	2	Block the call
	3	Undefined
10. Unknown Digital	0	Circuit switch the call
	1	Insert a mode 2-to-analog modem pool facility
	2	Block the call
	3	Convert to 3.1 kHz
11. Unknown Analog	0	Circuit switch the call
	1	Insert a mode 2-to-analog modem pool facility
	2	Block the call
	3	Convert to 3.1 kHz
12. Mode 3/2	0	Circuit switch the call
	1	Insert a mode 2-to-analog modem pool facility
	2	Block the call
	3	Undefined
13. X.25	0	Circuit switch the call
	1	Insert a mode 2-to-analog modem pool facility
	2	Block the call
	3	Undefined

DEFAULT CAPABILITIES (Fields 14-16)

Fields 14-16 are the default capabilities assumed by the switch for an originating facility (on this switch) that doesn't have a bearer capability class of service (BCCOS) information element (non-ISDN).

The switch assumes these default capabilities are acceptable to the originating facility when it tries to connect the originating facility to the terminating facility.

Do not confuse the default capabilities mentioned here with the predefined bearer capability classes of service that default through administration. See the Notes section for information on the predefined bearer capability classes of service (0-8).

14. Transport Mode	0	Circuit switched
	1	Packet switched
15. Information Type	0	Restricted
	1	Clear

Restricted is presented in an encoded format (ZCS).

Clear is unrestricted and presented as raw data (B8ZS).

This field is used to code the bearer capability information element for outgoing calls and the low layer compatibility information element (DCP or non-ISDN calls tandeming to ISDN trunks). The information type specified applies to data modes 0, 1, 2, and 3.

If an ISDN facility originates the call, the information type is obtained from the setup message.

16. Bearer Capability

0 Voice
1 Mode 1
2 Mode 2
3 Mode 3
4 Mode 0
5 Voice grade data
6 Unknown digital
7 Unknown analog
8 Mode 3/2
9 X.25

For non-ISDN facilities, this is the BCCOS that is assumed. For ISDN facilities, the BCCOS is obtained from the call setup message.

This field is used to code the bearer capability information element and the low layer compatibility information element (DCP or non-ISDN calls tandeming to ISDN trunks).

Notes

1. The attendant is automatically assigned bearer capability class of service 0.
2. The term ‘‘unknown digital’’ in field 10 and encode 6 of field 16 stands for DS1 connections. The term ‘‘unknown analog’’ in field 11 and encode 7 of field 16 stands for voice or voice grade data. Unknown analog also includes anything that comes across an analog trunk that cannot be further identified.
3. A new BCCOS can be quickly defined by using one of the predefined BCCOS as a template. Select a predefined BCCOS that is close to what you are trying to create, and display it. After displaying the defined BCCOS, change field 1 to the new class of service number and do a change routine. Now change the appropriate field(s) as desired.
4. The following table is the list of default values for each of the pre-defined bearer capability classes of service.

Field	**Predefined Classes of Service 0-8**								
Bearer Capability Class of Service (1)	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Transport Mode (2)	0	0	0	0	0	0	0	0	0
Channel Type (3)	0	0	0	0	0	0	0	0	0
Voice (4)	0	0	0	0	0	0	0	0	0
Voice Grade Data (5)	0	1	1	0	0	0	1	1	1
Mode 0 (6)	0	0	0	0	1	1	0	0	0
Mode 1 (7)	0	0	0	0	1	1	0	0	0

Mode 2 (8)	0	0	0	0	1	1	0	0	0
Mode 3 (9)	0	0	0	0	1	1	0	0	0
Unknown Digital (10)	0	0	0	0	0	0	0	0	0
Unknown Analog (11)	0	1	0	0	0	0	1	1	1
Mode 3/2 (12)	0	0	0	0	1	1	0	0	0
X.25 (13)	0	0	0	0	0	0	0	0	0
Transport Mode (14)	0	0	0	0	0	0	0	0	0
Information Type (15)	0	0	0	0	0	0	0	0	0
Bearer (16) Capability	0	2	0	6	7	5	4	1	3

Some of the eight predefined bearer capability classes of service (BCCOS) are automatically assigned (default) to a facility when the facility is administered in a particular procedure. Other BCCOS are not automatically assigned to a facility. The following list explains which classes of service default and under what conditions they default.

BCCOS 0 defaults to extensions (analog lines) administered in Procedure 000 Word 1.

BCCOS 1 defaults to extensions administered as DCP data modules in Procedure 052 Word 1.

BCCOS 2 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering BRI terminals.

BCCOS 3 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering AVD trunk groups.

BCCOS 4 defaults to trunk groups (except host access) administered in Procedure 100 Word 1. This BCCOS is also recommended for WCR preferences (Procedure 318 Word 2).

BCCOS 5 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering modems.

BCCOS 6 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 0 data modules - 64000 bps.

BCCOS 7 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 1 data modules - 56000 bps.

BCCOS 8 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 3 data modules - packet mode.

Special Error Codes

None.

PROCEDURE 014 WORD 2 — BEARER CAPABILITY CLASS OF SERVICE - DATA OPTIONS

Purpose

Use Procedure 014 Word 2 to administer the data characteristics for bearer capability classes of service.

Only use this procedure for administering Bearer Capability Class of Service to trunk types 102 through 109.

Related Procedures

Use Procedure 014 Word 1 to administer bearer capability translations such as the transport mode, channel type, and action when a real or virtual device uses a bearer capability.

Use Procedure 000 Word 3 to assign an extension to a bearer capability class of service.

Use Procedure 100 Word 2 to assign a trunk group to a bearer capability class of service.

Use Procedure 318 Word 2 to assign a WCR preference to a bearer capability class of service.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 014, WORD: 2
              BEARER CAPABILITY CLASS OF SERVICE - DATA OPTIONS

 1. Bearer Capability COS: [---]

DATA RATE
   2. 64000 bps: [-]
   3. 56000 bps: [-]
   4. 19200 bps: [-]
   5.  9600 bps: [-]
   6.  4800 bps: [-]
   7.  2400 bps: [-]
   8.  1200 bps: [-]
   9.   300 bps: [-]
  10. Low Speed: [-]

11.       Synchronous: [-]
12.            Duplex: [-]
13.             Clock: [-]
14. Default Data Rate: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-14.
Remove:	Not allowed.
Next Data:	Displays assignments for each bearer capability class of service.

Field Ranges and Encodes

1. Bearer Capability COS -, 0-255

DATA RATE (Fields 2-10)

0 Not supported
1 Supported

Fields 2-10 are used to administer the data characteristics for modem pool and host access trunk groups. The digital half of the modem pool (trunk type 102) determines the data characteristics. The analog half (trunk type 101) is automatically administered to BCCOS 5 and should be left in a BCCOS with a default bearer capability of voice grade data.

Administer data rates to facilities where calls terminate to host access trunk groups (trunk types 103-109).

Messaging is used to determine called facilities data characteristics, when the call terminates to a line side data module or an ISDN/BRI set.

2. 64000 bps	0-1	
3. 56000 bps	0-1	
4. 19200 bps	0-1	
5. 9600 bps	0-1	
6. 4800 bps	0-1	
7. 2400 bps	0-1	
8. 1200 bps	0-1	
9. 300 bps	0-1	
10. Low Speed	0-1	
11. Synchronous	0	Asynchronous
	1	Synchronous
12. Duplex	0	Full duplex
	1	Half duplex
13. Clock	0	Internal
	1	External/slaved
14. Default Data Rate	0	None
	1	Low speed
	2	300 bps
	3	1200 bps
	4	2400 bps
	5	4800 bps
	6	9600 bps
	7	19200 bps
	8	56000 bps
	9	64000 bps

If a BRI set originates or terminates a call requiring a modem pool member, and the BRI set does not support management information messaging (MIM) (Procedure 050 Word 1 field 6 = 0 or 1), this field is used as the baud when selecting a modem pool member.

DCP terminals always support the data characteristic messaging. In other words, the switch can request the data rate information, and the DCP terminals will respond with its data rate setting.

Notes

1. The following table lists data attributes for some AT&T analog data sets:

Modem	Duplex	Sync/ Async	Speed (bps)	Answer Mode	Originate Mode
103JR	full	async	low	yes	yes
212AR	full	async	low, 1200	yes	yes
212AR	full	sync	1200	yes	yes
201CR	half	sync	2400	yes	yes
208BR	half	sync	4800	yes	yes
2224A	full	async	low, 1200, 2400	yes	yes
2224A	full	sync	1200, 2400	yes	yes

2. The attendant always has bearer capability class of service 0.

3. The following table is the list of default values for each of the predefined bearer capability classes of service.

Field	Predefined Classes of Service 0-8								
Bearer Capability Class of Service (1)	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
64000 bps (2)	0	1	1	1	0	0	1	1	1
56000 bps (3)	0	1	1	1	0	0	1	1	1
19200 bps (4)	0	1	1	1	0	0	1	1	1
9600 bps (5)	0	1	1	1	0	0	1	1	1
4800 bps (6)	0	1	1	1	0	0	1	1	1
2400 bps (7)	0	1	1	1	0	1	1	1	1
1200 bps (8)	0	1	1	1	0	1	1	1	1
300 bps (9)	0	1	1	1	0	1	1	1	1
Low Speed (10)	0	1	1	1	0	0	0	1	1
Synchronous (11)	-	0	0	0	0	0	1	1	0
Duplex (12)	-	0	0	0	0	0	0	0	0
Clock (13)	-	-	-	-	-	-	-	-	-
Default Data Rate (14)	-	3	3	3	0	3	9	8	3

4. Some of the eight predefined bearer capability classes of service (BCCOS) are automatically assigned (default) to a facility when the facility is administered in a particular procedure. Other BCCOS are not automatically assigned to a facility. The following list explains which classes of service default, and under what conditions they default.

   BCCOS 0 defaults to extensions administered in Procedure 000 Word 1.

   BCCOS 1 defaults to extensions administered as DCP data modules in Procedure 052 Word 1.

   BCCOS 2 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering BRI terminals.

   BCCOS 3 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering AVD trunk groups.

BCCOS 4 defaults to trunk groups (except host access) administered in Procedure 100 Word 1. This BCCOS is also recommended for WCR preferences (Procedure 318 Word 2).

BCCOS 5 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering modems.

BCCOS 6 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 0 data modules - 64000 bps.

BCCOS 7 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 1 data modules - 56000 bps.

BCCOS 8 parameters in this procedure are predefined but the BCCOS does not default to a facility. This BCCOS is used when administering mode 3 data modules - packet mode.

Special Error Codes

None.

PROCEDURE 026 WORD 1 — ACD - SPLIT CHARACTERISTICS

Purpose

Use Procedure 026 Word 1 to administer split characteristics for the Automatic Call Distribution (ACD) feature.

Prerequisite Procedures

Use Procedure 026 Words 2 and 3 to remove the split supervisor and members before removing the split in this procedure.

Use Procedure 027 Words 1 and 2 (Procedure 033 Word 1 for Call Vectoring) to remove recorded announcements before removing the split in this procedure.

Use Procedure 028 Word 1 to busy out CMS before making changes in this procedure.

Use Procedure 100 Word 1 to administer the queuing trunk group.

Use Procedure 115 Word 1 to remove trunk group termination to this split before removing the split in this procedure.

Use Procedure 155 Word 1 to administer the contact interface board if you are setting an outflow level and assigning a warning lamp control circuit.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 026, WORD: 1
                            ACD - SPLIT CHARACTERISTICS

 1.           ACD Split: [--]
 2.  ICI Message Number: [--]
 3. Queuing Trunk Group: [---]
 4. Outflow/Queue Level: [--]

LAMP CONTROL CIRCUIT
   5.   Board Index: [-]
   6. Circuit Index: [-]

 7.   Inflow Level: [--]
 8.      Hunt Type: [-]
 9.     Split Type: [-]
10. Machine Number: [-]

DISPLAY ONLY
  11. Number of Members Assigned to This Split: [----]
  12.     Total Members Assigned to All Splits: [----]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-10.
Change:	Fields 2-8.
Remove:	Fields 1-10.
Next Data:	Displays all assigned splits.

Field Ranges and Encodes

1. ACD Split — 1-60
2. ICI Message Number — -,0 No ICI message; 4-63 ICI message number

   The ICI message used here is administered in Procedure 204 Word 1. For Call Vectoring, put a dash in this field.
3. Queuing Trunk Group — 18-999

4. Outflow/Queue Level — -, 1-99

   When Call Vectoring is enabled, field 4 is used as a queue warning lamp level only.

LAMP CONTROL CIRCUIT (Fields 5-6)

5. Board Index — -, 0-7

6. Circuit Index — -, 0-7

7. Inflow Level — -, 0-98

   A dash in this field is required for Call Vectoring.

8. Hunt Type

   0 Circular hunt (UCD)
   1 Terminal hunt (DDC)
   2 Most-idle agent hunting (same relative queue position)
   3 Most-idle agent hunting (moves to last queue position)

   When encode 2 is assigned, an agent making an outgoing call retains their queue position but is marked as unavailable. When encode 3 is assigned, an agent making an outgoing call loses their queue position; once the agent becomes available again, she or he is placed at the bottom of the queue.

9. Split Type

   0 Regular
   1 Message Center
   2 AUDIX
   3 ISDN Gateway (number only)
   4 ISDN Gateway (name and number)

10. Machine Number — -, 0-8

    The data in this field depends on the split type in field 9. For regular, enter a dash or 0. For Message Center, enter 1-7. For AUDIX, enter 1-8. For ISDN Gateway, enter 1-7.

DISPLAY ONLY (Fields 11-12)

11. Number of Members Assigned to This Split — 1-1024 (1-1023 if measured split)

12. Total Members Assigned to All Splits — 0-2048

Special Error Codes

81 - Assign the contact interface board in Procedure 155 Word 1.

82 - Board 0, circuit 0 is dedicated to the reload warning lamp.

83 - Remove trunk group termination using Procedure 115 Word 1 before using this procedure.

84 - This queuing trunk group has already been assigned to an ACD split.

85 - Assign the outflow level in order to specify a lamp control circuit.

86 - Remove the split members in Procedure 026 Word 3 and then the split supervisor in Procedure 026 Word 2 before removing the split.

87 - The split type and machine number may not be changed.

88 - Remove recorded announcements using Procedure 027 Words 1 and 2 (Procedure 033 Word 1 when Call Vectoring is enabled) before removing the split.

90 - Busy out CMS using Procedure 028 Word 1 before changing translations.

91 - When Call Vectoring is enabled, this field must be dashed.

92 - This machine number is in use by a different split type.

93 - Use PRC031w2 to remove this split from VDN preferences before removing the split.

PROCEDURE 026 WORD 2 — ACD - SPLIT SUPERVISOR AND SPLIT CHARACTERISTICS

Purpose

Use Procedure 026 Word 2 to administer the Automatic Call Distribution (ACD) split supervisor, queue directory number (QDN), priority extension, multiple call handling, auto available, forced entry, and CMS measurement.

Prerequisite Procedures

Use Procedure 028 Word 1 to busy out CMS before making changes in this procedure.

Use Procedure 000 Word 1 to assign an extension to be used as a priority extension.

Use Procedure 001 Word 1 to assign the QDN as an associated extension.

Use Procedure 010 Word 1 to assign ACD to the member's extension class of service (COS).

Use Procedure 011 Word 1 to remove the split supervisor's extension from a Call Coverage path before removing the extension in this procedure.

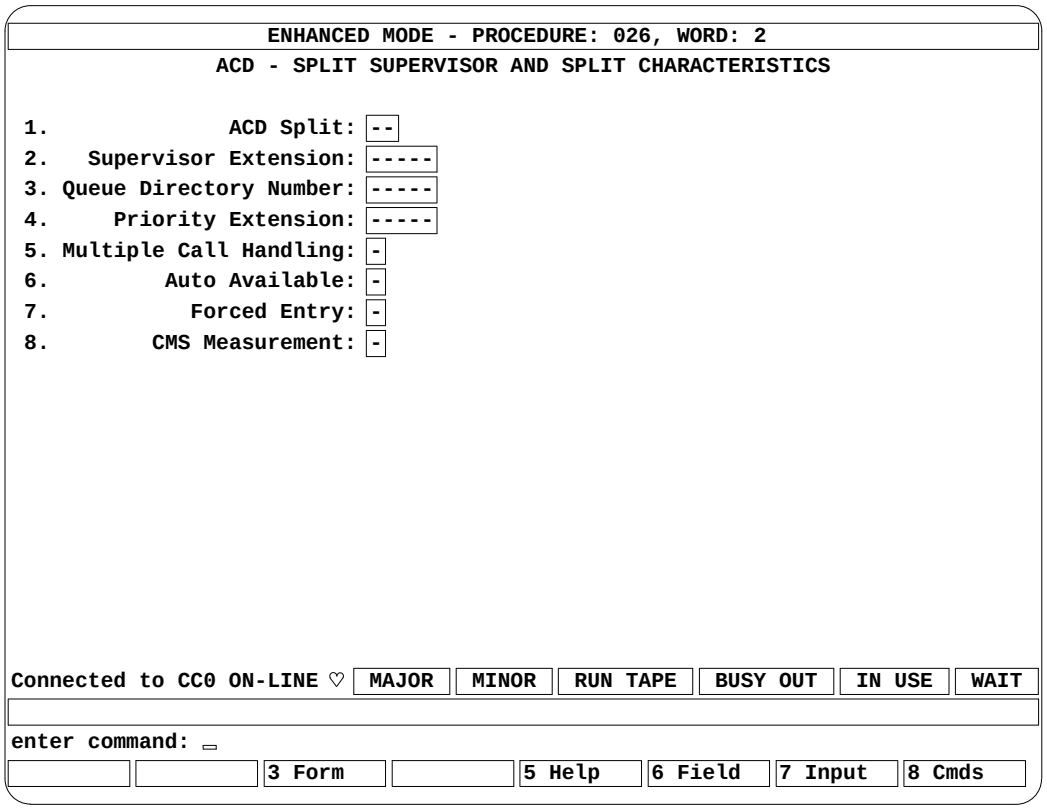
Use Procedure 026 Word 3 to remove all members of a split before removing the split supervisor in this procedure.

Use Procedure 032 Word 1 to display the vector using this split and Procedure 030 Word 3 to remove this split from a vector step before removing the split supervisor in this procedure.

Related Procedures

Use Procedure 000 Word 1 to coordinate the AUDIX and AP machine number assignments as related to the split supervisor's extension.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 or 2.
Add:	Fields 1-8.
Change:	Fields 3-8.
Remove:	Fields 1-8.
Next Data:	Displays all splits with supervisor extensions assigned.

Field Ranges and Encodes

1.	ACD Split	1-60
2.	Supervisor Extension	000-99999 This is known as the controlling extension of an ACD split.
3.	Queue Directory Number	-, 000-99999 A dash is required when Call Vectoring is enabled.

4. Priority Extension -, 000-99999

   The priority extension allows users calling into a queue to be placed at the head of the queue.

5. Multiple Call Handling
   - \- Disabled
   - 0 Disabled
   - 1 Enabled

   This allows ACD agents in this split to handle multiple calls.

6. Auto Available
   - \- Disabled
   - 0 Disabled
   - 1 Enabled

   This sets all agents in the split to the ‘‘available’’ status. This is usually only used when a split is connected to an auxiliary processor where there are no agents to set the agent status. Do not enable this for AUDIX. AUDIX sets the agent availability through DCIU messages.

7. Forced Entry
   - \- Disabled
   - 0 Disabled
   - 1 Enabled

   Agents in forced-entry splits use the Manual-In mode to receive ACD calls and must satisfy the forced-entry requirement before receiving another ACD call. For more information about forced entry see the Call Work Codes feature in *DEFINITY(TM) Communications System Generic 2 and System 85 Feature Descriptions* (555-105-301).

8. CMS Measurement
   - \- Unmeasured by CMS
   - 0 Unmeasured by CMS
   - 1 Measured by CMS

   This sets all agents in the split as measured or unmeasured by CMS.

Special Error Codes

50 - Forced Entry and Auto Available may not be simultaneously enabled for a split.

51 - Forced Entry and Multiple Call Handling may not be simultaneously enabled for a split.

52 - Forced Entry cannot be enabled for an unmeasured split.

53 - The auto-available attribute of a split cannot be changed if any agent in the split is still staffed.

54 - All ACD agents must be unstaffed before changing the split to be measured.

81 - This member’s extension does not have an ACD COS (Procedure 010 Word 1).

82 - Assign only primary extensions to a split.

83 - The QDN or priority extension is not an associated extension.

84 - The split supervisor must be member 0.

85 - Member 0 must have a QDN extension.

86 - This split is still assigned as a coverage point in Procedure 011 Word 1.

87 - Busy out CMS using Procedure 028 Word 1 before changing translations here.

88 - You cannot remove a supervisor who is service-observing a split member.

89 - The machine number assigned to this extension in Procedure 000 Word 1 disagrees with machine number in Procedure 026 Word 1.

90 - You cannot remove the supervisor while other members are still administered (Procedure 026 Word 3).

91 - Call Vectoring is enabled; the QDN and priority extension must be dashed.

92 - You cannot remove the split supervisor if the split is used in a vector. See Procedure 032 Word 1 to identify the vector and use Procedure 030 Word 3 to remove the split from the vector.

94 - There are already 2048 ACD agents in the system.

95 - There are already 1023 measured extensions assigned.

96 - This split can not be made a CMS measured split. Making it measured would require more than 1023 measured extensions.

97 - Supervisor is still assigned to 106B in Procedure 060 Word 1.

98 - This split cannot be made measured if CMS is not active in the system.

PROCEDURE 026 WORD 3 — ACD - SPLIT MEMBERS

Purpose

Use Procedure 026 Word 3 to administer Automatic Call Distribution (ACD) split member characteristics. Only primary extensions assigned in Procedure 000 Word 1 can be split members.

Prerequisite Procedures

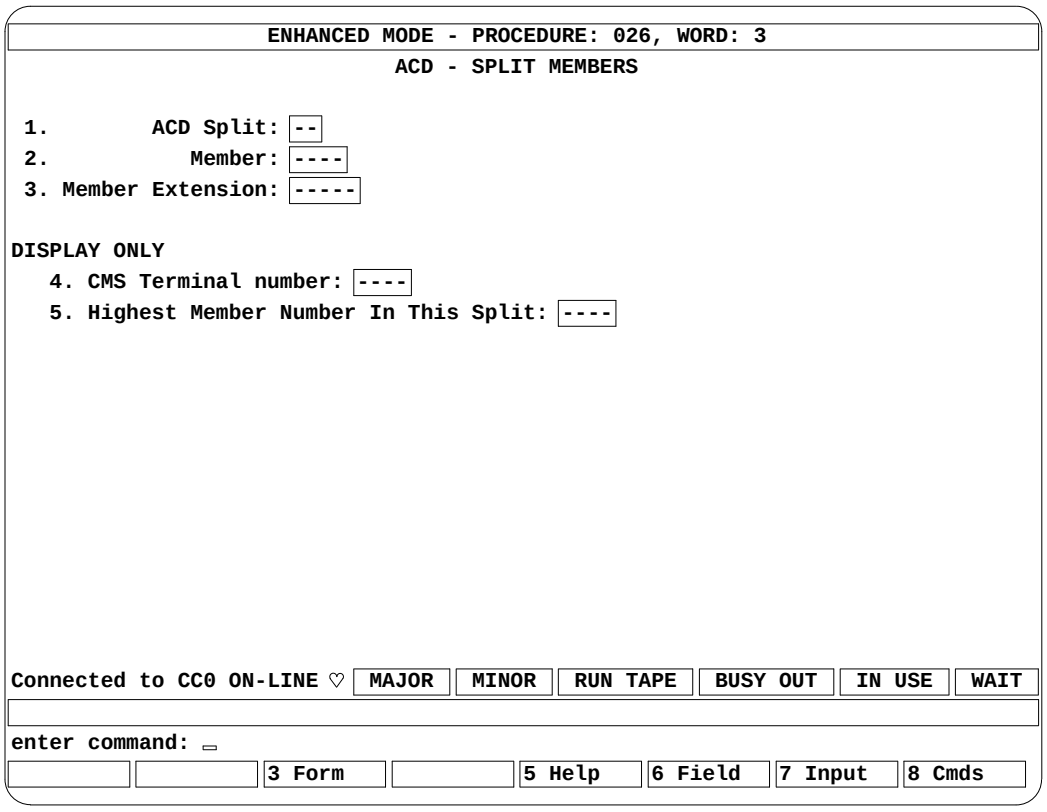
Use Procedure 028 Word 1 to busy out CMS before making changes in this procedure.

Use Procedure 010 Word 1 to assign ACD to the member's extension class of service (COS).

Use Procedure 026 Word 2 to administer a split supervisor before adding split members.

The machine number assigned to a member's extension must match in Procedure 000 Word 1 and Procedure 026 Word 1.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2 or 3.
Add:	Fields 1-3.
Change:	Not allowed.
Remove:	Fields 1-3.
Next Data:	Displays all members assigned to a given split.

Field Ranges and Encodes

1. ACD Split — 0, 1-60

   When split 0 is entered, the extension is being made a CMS measured extension, but is not being added as a member of a split.

2. Member — -, 0-1023 (-, 0-1023 for display), (-, 1-1023 for add)

   You can't add member 0 with this field. Member 0 (the split supervisor) is automatically assigned. However, when ''0'' is entered in this field, field 3 displays the split supervisor's extension number.

   For splits assigned circular or terminal hunting (Procedure 026, Word 1), member numbers determine hunting order. Splits using most-idle agent hunting are not affected by member numbers.

3. Member Extension — 000-99999

DISPLAY ONLY (Fields 4-5)

4. CMS Terminal number — 1-1024
5. Highest Member Number In This Split — 0-1023

Special Error Codes

81 - This member's extension does not have an ACD COS (Procedure 010 Word 1).

82 - Only primary extensions can be assigned to a split.

84 - Member 0 represents the split supervisor. To assign or remove split supervisor characteristics, use Procedure 026 Word 2.

85 - Busy out CMS using Procedure 028 Word 1 before changing translations.

86 - You cannot remove a member being service-observed by the split supervisor.

87 - Assign the split supervisor with Procedure 026 Word 2 before assigning other members.

88 - The machine number assigned to this extension in Procedure 000 Word 1 disagrees with machine number in Procedure 026 Word 1.

89 - There are already 2048 ACD agents assigned in the system

90 - There are already 1023 measured extension in the system.

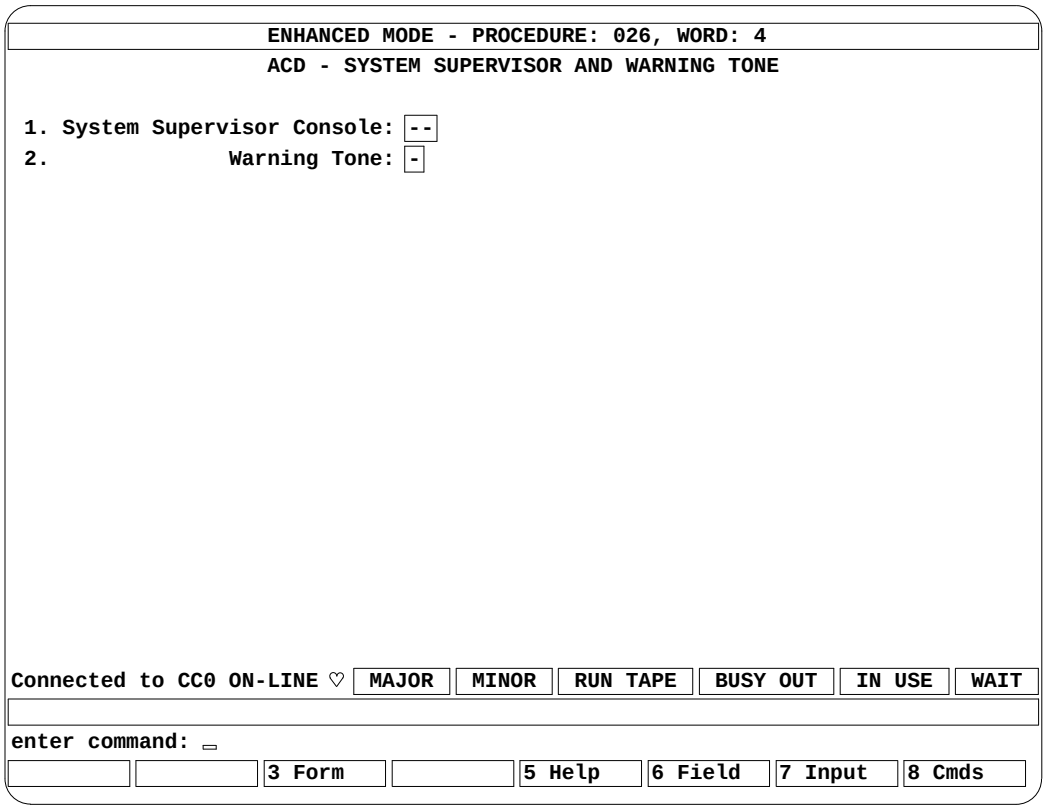
91 - Member is still assigned to 106B in Procedure 060 Word 1.

PROCEDURE 026 WORD 4 — ACD - SYSTEM SUPERVISOR AND WARNING TONE

Purpose

Use Procedure 026 Word 4 to administer one of the switch consoles as an ACD system supervisor console. Use this procedure to also administer whether warning tone will be given while observing a split member.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	System Supervisor Console	1-40 Only one console can be assigned as the system supervisor console.
2.	Warning Tone	0 No warning tone while observing 1 Warning tone while observing, (microphone on) The warning tone, if enabled, is applied to a connection between an agent and a caller. This alerts the agent that a supervisor has joined the call to observe the agent's work by listening to the call. If the warning tone is disabled, the observer's microphone is muted, but it can later be turned on if the observer wishes to participate in the call. If the warning tone is enabled, the observer's microphone is always on and it cannot be muted.

Special Error Codes

None.

PROCEDURE 026 WORD 5 — ACD - DISPLAY SPLIT MEMBER ALLOCATION

Purpose

Use Procedure 026 Word 5 to display ACD split member allocation for each ACD split.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 026, WORD: 5
                      ACD - DISPLAY SPLIT MEMBER ALLOCATION

 1.    Split Number: --
 2. CMS Measurement: -

SPLIT MEMBERS
   3.          Number of Members Assigned to This Split: ----
   4. Number of Members That Can Be Added to This Split: ----
   5.      Highest Member Number Assigned in This Split: ----
   6.    Total Number of Members Assigned to All Splits: ----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the next assigned split.

Field Ranges and Encodes

1. Split Number	0-60	
2. CMS Measurement	0	Unmeasured by CMS
	1	Measured by CMS

SPLIT MEMBERS (Fields 3-6)

3.	Number of Members Assigned to This Split	0-1024 (0-1023 if Measured)
4.	Number of Members That Can Be Added to This Split	0-1024 (0-1023 if Measured)
5.	Highest Member Number Assigned in This Split	0-1024 (0-1023 if Measured)
6.	Total Number of Members Assigned to All Splits	0-2048

Special Error Codes

None.

PROCEDURE 027 WORD 1 — ACD - FIRST RECORDED ANNOUNCEMENT

Purpose

Use Procedure 027 Word 1 to administer an auxiliary trunk equipment location for a recorded announcement and the recorded announcement wait times for an ACD split.

This procedure is not used when Call Vectoring is enabled. Use Procedure 033 Word 1.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign the first and second ACD recorded announcement trunk groups.

Use Procedure 150 Word 1 to assign the trunk equipment location.

Use Procedure 026 Word 1 to assign the ACD split before assigning a recorded announcement to the split.

Use Procedure 027 Word 2 to assign the second recorded announcement trunk before assigning the second wait time (field 8).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 027, WORD: 1
                       ACD - FIRST RECORDED ANNOUNCEMENT

 1. ACD Split: --

AUXILIARY TRUNK LOCATION
   2.  Module: --
   3. Cabinet: -
   4. Carrier: -
   5.    Slot: --
   6. Circuit: --

 7.  First Wait Time: --
 8. Second Wait Time: --

DISPLAY ONLY
   9. First Recorded Announcement Trunk Group: ---




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-8.
Change:	Fields 1-8.
Remove:	Fields 1-8.
Next Data:	Displays recorded announcement assignments for all assigned splits.

Field Ranges and Encodes

1. ACD Split 1-60

AUXILIARY TRUNK LOCATION (Fields 2-6)

Use the SN231 for traditional modules and the TN763 for universal and XE modules.

2. Module 0-30
3. Cabinet 0-7 for traditional modules, 0 for universal and XE modules
4. Carrier 0-3 for traditional modules, c-e for universal and XE modules

5.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
6.	Circuit	0-3
7.	First Wait Time	0-15 in two-second intervals (30 second maximum wait time) The wait time for the first recorded announcement begins after the call enters the split queue.
8.	Second Wait Time	0-15 in two-second intervals (30 second maximum wait time) The wait time for the second recorded announcement begins at the end of the first announcement. To assign the second wait time, follow this sequence: — Enter zero (0) in field 8. — Add the second auxiliary trunk location using Procedure 027 Word 2. — Return to this procedure, enter the second wait time in field 8 and do a change routine.

DISPLAY ONLY (Field 9)

9.	First Recorded Announcement Trunk Group	18-999

Special Error Codes

81 - Assign the trunk group using Procedure 100 Word 1 and the trunk equipment location in Procedure 150 Word 1 first.

82 - This split has already been assigned to a recorded announcement.

83 - This procedure is not used when Call Vectoring is enabled.

84 - You cannot assign a second wait time without having the first wait time.

85 - Assign the second recorded announcement trunk in Procedure 027 Word 2 before assigning the second wait time.

PROCEDURE 027 WORD 2 — ACD - SECOND RECORDED ANNOUNCEMENT

Purpose

Use Procedure 027 Word 2 to administer the auxiliary trunk equipment location for the Automatic Call Distribution (ACD) second recorded announcement. This assignment is on a per-system basis.

After assigning the second recorded announcement equipment location in this procedure, add the second recorded announcement wait-time in Procedure 027 Word 1 (field 8) for every split that has a first recorded announcement. This is on a per-split basis.

This procedure is not used when Call Vectoring is enabled. Use Procedure 033 Word 1.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign the ACD second recorded announcement trunk group.

Use Procedure 150 Word 1 to assign the trunk equipment location.

Related Procedures

Use Procedure 026 Words 1-4 to assign ACD splits.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 027, WORD: 2
                       ACD - SECOND RECORDED ANNOUNCEMENT

AUXILIARY TRUNK LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

DISPLAY ONLY
   6. Second Recorded Announcement Trunk Group: ---




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-5.
Change:	Fields 1-5.
Remove:	Fields 1-5.
Next Data:	Not allowed.

Field Ranges and Encodes

AUXILIARY TRUNK LOCATION (Fields 1-5)

Use the SN231 for traditional modules and the TN763 for universal and XE modules.

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-3

DISPLAY ONLY (Field 6)

6. Second Recorded Announcement Trunk Group — 18-999

Special Error Codes

81 - Assign the trunk group using Procedure 100 Word 1 and a trunk location in Procedure 150 Word 1 first.

83 - Do not use this procedure word when Call Vectoring is enabled (use Procedure 033 Word 1).

PROCEDURE 027 WORD 3 — ACD - QUEUE-OF-ORIGIN/CITY-OF-ORIGIN ANNOUNCEMENT

Purpose

Use Procedure 027 Word 3 to administer the auxiliary trunk that provides the queue-of-origin announcement for an Automatic Call Distribution (ACD) split or the city-of-origin announcement of an incoming trunk group.

This procedure is not used when Call Vectoring is enabled. If Call Vectoring is enabled, use Procedure 033 Word 1.

Prerequisite Procedures

Use Procedure 026 Word 1 to assign ACD splits.

Use Procedure 100 Word 1 to assign the ACD city-of-origin announcement incoming trunk group.

Use Procedure 150 Word 1 to assign a trunk equipment location.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 027, WORD: 3
              ACD - QUEUE-OF-ORIGIN/CITY-OF-ORIGIN ANNOUNCEMENT

 1. ACD Split/Trunk Group Number: [---]
 2.     ACD Split or Trunk Group: [-]

AUXILIARY EQUIPMENT LOCATION
   3.  Module: [--]
   4. Cabinet: [-]
   5. Carrier: [-]
   6.    Slot: [--]
   7. Circuit: [--]

DISPLAY ONLY
   8. Origin Announcement Trunk Group: [---]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-7.
Change:	Fields 1-7.
Remove:	Fields 1-7.
Next Data:	Not allowed.

Field Ranges and Encodes

1. ACD Split/Trunk Group Number — 1-60 for ACD splits, 18-999 for trunk groups
2. ACD Split or Trunk Group
   - 0 — ACD split (queue-of-origin announcement)
   - 1 — Incoming trunk group (city-of-origin announcement)

AUXILIARY EQUIPMENT LOCATION (Fields 3-7)

Use the SN231 for traditional modules and the TN763 for universal and XE modules.

If Standard Error Code 11 comes up when administering this equipment location, the trunk location is probably unassigned in Procedure 150 Word 1.

3.	Module	0-30
4.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
5.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
6.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
7.	Circuit	0-3

DISPLAY ONLY (Field 8)

8.	Origin Announcement Trunk Group	18-999

Special Error Codes

81 - Assign the trunk group using Procedure 100 Word 1 and a trunk location in Procedure 150 Word 1 first.

82 - This ACD split or trunk group is already assigned as a recorded announcement.

83 - This procedure is not used when Call Vectoring is enabled (use Procedure 033 Word 1).

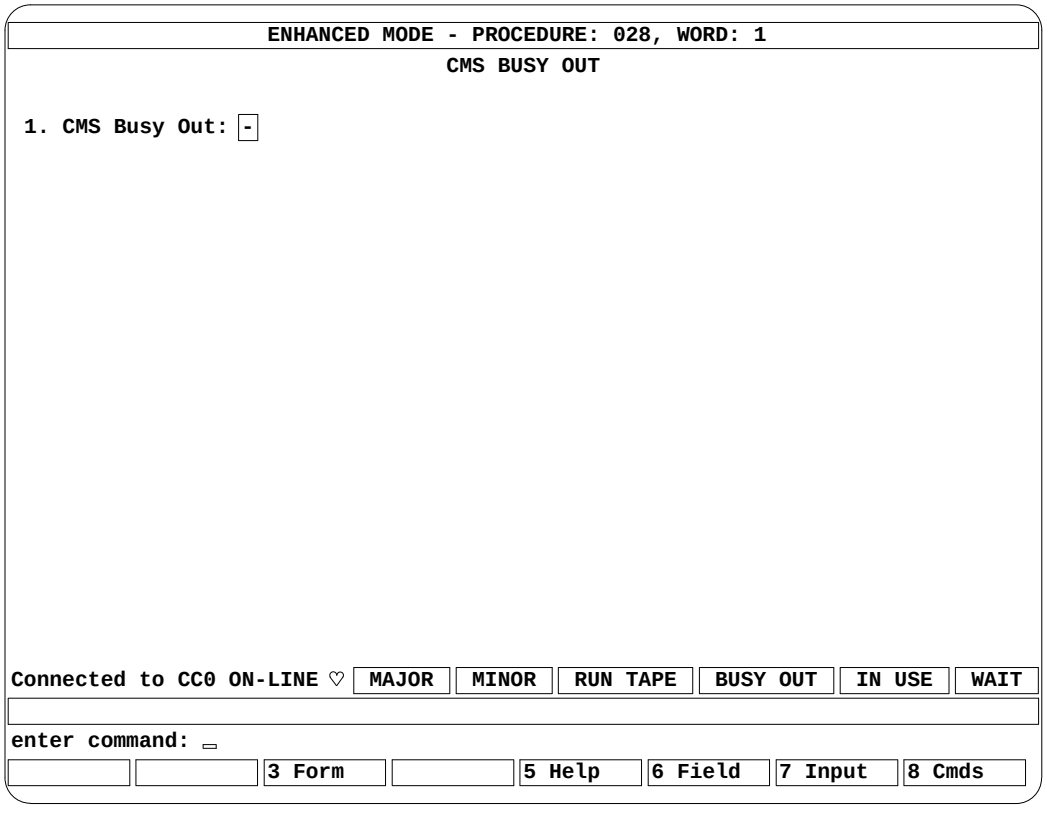
PROCEDURE 028 WORD 1 — CMS BUSY OUT

Purpose

Use Procedure 028 Word 1 to busy out the Call Management System (CMS). CMS must be busied out in this procedure to make changes in the following: Procedure 026 Words 1-3, Procedure 031 Word 1, Procedure 115 Word 1, Procedure 116 Word 1, Procedure 150 Word 1, Procedure 275 Word 4, and Procedure 276 Word 1.

After busying out CMS to make a change to the CMS data, don't forget to release CMS (put a 0 in field 1 and do a change routine).

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Field 1.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. CMS Busy Out	0	CMS not busied out
	1	CMS busied out

Special Error Codes

None.

PROCEDURE 030 WORD 1 — CALL VECTORING - ABBREVIATED DIALING LIST

Purpose

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list used for the route-to steps within vectors. The vector steps are then assigned in Procedure 030 Word 3. Only one group list is used for Call Vectoring. Items within this group list can be assigned to extensions, the attendant queue, host-computer access trunks, vector directory numbers (VDNs), Centralized Attendant Service (CAS), and remote locations. Up to 95 items can be assigned to this group list.

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and the class of service.

Use Procedure 010 Word 3 to administer an FRL to a VDN's class of service.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Words 1 and 2 to administer a name to a VDN.

Use Procedure 030 Word 2 to display which messaging machines are associated with a vector.

Use Procedure 030 Word 3 to administer vector steps.

Use Procedure 031 Word 1 to administer VDN termination to a vector, plus other attributes.

Use Procedure 031 Word 2 to administer termination of a trunk group to a VDN.

Use Procedure 032 Word 1 to display vectors assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

Use Procedure 100 Word 1 to administer the ''Vectoring Announcement'' trunk group (type 90).

Use Procedure 115 Word 1 to administer trunk group termination used for Call Vectoring.

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 354 Words 1 and 2 to administer blocks of extension numbers to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 030, WORD: 1
                  CALL VECTORING - ABBREVIATED DIALING LIST

ABBREVIATED DIALING GROUP
   1. List 0: [----]
   2. List 1: [----]
   3. List 2: [----]
   4. List 3: [----]
   5. List 4: [----]

DISPLAY ONLY
   6. Vector Number: [---]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None
Add:	Not allowed.
Change:	Field 1-5.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

ABBREVIATED DIALING GROUP (Fields 1-5)

1.	List 0	1-9999
2.	List 1	1-9999
3.	List 2	1-9999
4.	List 3	1-9999
5.	List 4	1-9999

DISPLAY ONLY (Field 6)

6.	Vector Number	1-511

Special Error Codes

81 - An Abbreviated Dialing group list cannot be changed or removed while an item in the list is being used by any permanent vector.

82 - An Abbreviated Dialing group list cannot be changed or removed while an item in the list is being used by any scratch vector.

83 - A specific Abbreviated Dialing group list can be assigned only once.

PROCEDURE 030 WORD 2 — CALL VECTORING - ADMINISTER VECTORS

Purpose

Use Procedure 030 Word 2 to administer vectors. The administration of the individual vector steps is done in Procedure 030 Word 3. The Procedure 030 Word 2 display operation copies an entire vector from translation to the procedure scratch vector. Individual steps of the vector can then be added, changed or removed using Procedure 030 Word 3. If the Word 2 display operation is performed prior to a Word 2 add or change operation, changes made to the procedure scratch vector are overwritten and will be lost. The Word 2 display operation additionally displays the AUDIX machine number and the Message Center machine number associated with an assigned vector. The administration that ties a vector and a machine together is a multiple procedure process. The display operation provides a quick way of displaying the vector and machine association.

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and the class of service.

Use Procedure 010 Word 3 to administer an FRL to a VDN's class of service.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Word 1 to administer a name to a VDN.

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list.

Use Procedure 030 Word 3 to administer vector steps.

Use Procedure 031 Word 1 to administer VDN termination, plus other attributes.

Use Procedure 031 Word 2 to administer termination of a trunk group to VDN.

Use Procedure 032 Word 1 to display vectors assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

Use Procedure 100 Word 1 to administer ''Vectoring Announcement'' trunk group (type 90).

Use Procedure 115 Word 1 to administer trunk group termination used for Call Vectoring.

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 354 Words 1 and 2 to administer blocks of extension numbers to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 030, WORD: 2
                      CALL VECTORING - ADMINISTER VECTORS

 1. Vector Number: [---]

DISPLAY ONLY
   2.   See Vector Directory Number: [-----]
   3.             See Vector Number: [---]
   4.               See Step Number: [--]
   5.          AUDIX Machine Number: [-]
   6. Message Center Machine Number: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
enter command:
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Field 1.
Change:	Field 1.
Remove:	Field 1.
Next Data:	Displays machine number information for assigned vectors.

Field Ranges and Encodes

1. Vector Number 1-511

DISPLAY ONLY (Fields 2-6)

2. See Vector Directory Number -, 000-99999

   This field is used when a vector cannot be removed due to a Vector Directory Number (VDN) in the system still terminating to that vector. The VDN found is displayed in this field.

3. See Vector Number -, 1-511

   This field is used when a vector cannot be removed due to a Goto-Vector step in the system still terminating to that vector. The vector with the Goto-Vector step is displayed in this field.

4. See Step Number -, 1-15

   This field is used when the add or change operation fails due to an error in a vector step. The step number where the error was found is displayed in this field.

5. AUDIX Machine Number -, 1-8

6. Message Center Machine Number -, 1-7

Special Error Codes

50 - The vector being changed contained a step which had an AUDIX/Message Center split that was either removed or was changed to a regular split. This change may have very adverse affects on Message Center or AUDIX coverage. If this change is really desired, do another change routine.

80 - Vector has no assigned steps.

81 - You cannot mix AUDIX/AP machine numbers in the same vector.

82 - You cannot add an AUDIX/Message Center split to an existing vector.

83 - You cannot change the AUDIX/AP machine number in a vector.

84 - The step used in the ‘‘go-to-step’’ does not exist.

85 - Both the scratch and permanent vector are in use. Any changes are blocked.

86 - Need time-of-day start time.

87 - Need time-of-day end time.

88 - If the start time is every day, then the end time must also be every day, and vice versa.

89 - Remove all VDNs terminating at this vector (Procedure 031 Word 1) before removing this vector.

90 - The go-to destination step number/vector number is the same as the current step number/vector number.

91 - This vector is the target vector for a Goto-Vector step in another permanent vector.

92 - This vector is the target vector for a Goto-Vector step in another scratch vector.

PROCEDURE 030 WORD 3 — CALL VECTORING - PROGRAMMING VECTOR STEPS

Purpose

Use Procedure 030 Word 3 to define a vector. Each vector may have as many as 15 individual steps. A vector with all its steps is first defined in a scratch-pad memory, then transferred to translation memory as a complete vector using Procedure 030 Word 2.

Prerequisite Procedures

Assign ACD splits with member number 0 in Procedure 026 Word 3 before assigning splits here as part of a vector.

Use Procedure 031 Word 1 to remove all vector directory numbers (VDNs) terminating to a given vector before removing the vector.

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and the class of service.

Use Procedure 010 Word 3 to administer an FRL to a VDN's class of service.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Word 1 to administer a name to a VDN.

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list (used for ''route to'' commands).

Use Procedure 030 Word 2 to administer vectors.

Use Procedure 031 Word 1 to administer VDN termination, plus other attributes.

Use Procedure 031 Word 2 to administer VDN skills for a VDN.

Use Procedure 031 Word 3 to administer termination of a trunk group to a VDN.

Use Procedure 032 Word 1 to display vectors assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring (''route to'' commands).

Use Procedure 100 Word 1 to administer ''Vectoring Announcement'' trunk group (type 90).

Use Procedure 115 Word 1 to administer trunk group termination used for Call Vectoring.

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 276 Word 1 to activate the EAS feature.

Use Procedure 354 Words 1 and 2 to administer blocks of extension numbers to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 030, WORD: 3
                  CALL VECTORING - PROGRAMMING VECTOR STEPS

 1. Step Number: --

ACTION
    2.   Step Type: --
    3. Destination: ---
 4. Priority Level: -

CRITERIA
   5. Condition: --
   6. Threshold: ----
 7. Split/Skill: ---

START/END TIME OF DAY
   8.    Day: -
   9.   Hour: --
  10. Minute: --


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-10.
Change:	Fields 1-10.
Remove:	Fields 1-10.
Next Data:	Displays each step in the scratch pad.

Field Ranges and Encodes

1. Step Number 1-15

ACTION (Fields 2-3)

2. Step Type

-	Not assigned
1	Queue-to-main-split/skill
2	Check-backup-split/skill
3	Route-to
4	Announcement

5 Wait
6 Go-to-step
7 Forced-disconnect
8 Forced-busy
9 Stop
10 Go-to-Vector

For a complete description of each step type, see the *DEFINITY(TM) Communications System Generic 2 and System 85 Feature Descriptions* (555–105–301).

3. Destination -, 0-609

For step types 1 and 2 when the EAS feature is **not** active:
destination is a split number (1-60).
For step types 1 and 2 when the EAS feature is active:
destination is a VDN skill preference (1-3) or a skill (10-609).
For step type 3:
destination is an abbreviated dial list/member number (1-95, 101-195, 201-295, 301-395, 401-495).
For step type 4:
destination is an announcement number (1-255).
For step types 5, 8, and 9:
destination is set to a dash (not applicable).
For step type 6:
destination is a step number (1-15).
For step type 7:
destination is an announcement number (1-225) or a dash.
For step type 10:
destination is a vector number (1-511).

4. Priority Level -, 0-3

This field is not applicable for step types 3, 4, 5, 7, 8, and 9. The following encodes apply for step types 1, 2, 6, and 10.

-=Not applicable
0=Low priority
1=Medium priority
2=High priority
3=Top priority

CRITERIA (Fields 5-6)

5. Condition -, 0-9

The following encodes apply for step type 5 (field 2 equals 5).
0=Silence
1=Ring back
2=Music

The following encodes apply for step type 2 (field 2 equals 2):

0=Queue the call if number of available agents in the destination split/skill (field 3) is greater than the threshold (field 6)

2=Queue the call if number of staffed agents in the destination split/skill (field 3) is greater than the threshold (field 6)

5=Queue the call if number of calls queued in the destination split/skill (field 3) is less than the threshold (field 6)

7=Queue the call if oldest call waiting in the destination split/skill (field 3) is less than the threshold (field 6). With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken:

- For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10
- For a specific skill, error code 86 is returned.

The following encodes apply for step types 6 and 10 (field 2 equals 6 or 10):

-=Unconditional branch (null test)

0=Go to this step/vector (field 3) if number of available agents in the split/skill (field 7) is greater than the threshold (field 6).

1=Go to this step/vector (field 3) if number of available agents in the split/skill (field 7) is less than the threshold (field 6).

2=Go to this step/vector (field 3) if number of staffed agents in the split/skill (field 7) is greater than the threshold (field 6).

3=Go to this step/vector (field 3) if number of staffed agents in the split/skill (field 7) is less than the threshold (field 6).

4=Go to this step/vector (field 3) if number of calls queued in the split/skill (field 7) is greater than the threshold (field 6).

5=Go to this step/vector (field 3) if number of calls queued in the split/skill (field 7) is less than the threshold (field 6).

6=Go to this step/vector (field 3) if oldest call waiting in the split/skill (field 7) is greater than the threshold (field 6). With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken:

- For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10
- For a specific skill, error code 86 is returned.

7=Go to this step/vector (field 3) if oldest call waiting in the split/skill (field 7) is less than the threshold (field 6). With the EAS feature, if the destination skill is not a multiple of 10, one of the following actions is taken:

- For a VDN skill preference (1-3), the skill is rounded down to the nearest multiple of 10
- For a specific skill, error code 86 is returned.

8=Go to this step/vector (field 3) if time-of-day is equal to or after starting time.

9=Go to this step/vector (field 3) if time-of-day is equal to or before starting time.

NOTE: If a split/skill (field 7) is not specified where one is expected, the split/skill the caller is currently queued to will be used. If the caller is not currently queued, the condition will always fail.

6. Threshold -, 0-1023

The following encode applies for step types 1, 3, 4, 7, 8, and 9 (step type is specified in field 2):

-=Unconditional branch (null test)

The following ranges apply to the remaining step types:

Step type 2, 6, or 10 and condition 0 or 2: 0-1023.
Step type 2, 6, or 10 and condition 5: 1-99.
Step type 2, 6, or 10 and condition 7: 1-999.
Step type 6 or 10 and condition 1 or 3: 1-1023.
Step type 6 or 10 and condition 4: 0-99.
Step type 6 or 10 and condition 6: 0-999.
Step type 5 and conditions 0-2: 0-998.

Note 5 summarizes allowed range combinations for fields 2 through 10.

7. Split/Skill -, 1-609

Step type 6 or 10, conditions 0-7:

When the EAS feature is **not** active, enter a split (1-60).

When the EAS feature is active, enter a VDN skill preference (1-3) or a skill (10-609).

START/END TIME OF DAY (Fields 8-10)

8. Day

-	Not applicable
0	Every day
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday

This field is used when step type 6 or 10 specifies condition 8 or 9.

9. Hour	-, 0-23 This field is used when step type 6 or 10 specifies condition 8 or 9.
10. Minute	-, 0-59 This field is used when step type 6 or 10 specifies condition 8 or 9.

Notes

1. Vector specification additions and changes are made in scratch-pad memory. After all the steps of the vector have been added or changed as required, the entire vector is transferred from the scratch pad to permanent translation using procedure 030 word 2.
2. The procedure scratch-pad area will be cleared after a vector has been successfully added or changed in translation through procedure 030 word 2.
3. Use procedure 030 word 2 to clear out the scratch-pad area:
   a. Put a 0 in procedure 030 word 2, field 1.
   b. Do a remove routine.
4. If you add or remove a step, the steps that follow are renumbered automatically.
5. Field limits for fields 3-10 may vary depending on what is entered in fields 2 and 5. Use the following chart to determine the field limits when the EAS feature is not active.

2 Step Type	3 Desti-nation	4 Prior-ity	5 Condi-tion	6 Thresh-old	7 Split Number	8 Day	9 Hour	10 Minute
1	1-60	0-3	-	-	-	-	-	-
2	1-60	0-3	0 or 2	0-1023	-	-	-	-
	1-60	0-3	5	1-99	-	-	-	-
	1-60	0-3	7	1-999	-	-	-	-
3	1-495	-	-	-	-	-	-	-
4	1-255	-	-	-	-	-	-	-
5	-	-	0-2	0-998	-	-	-	-
6	1-15	-	-	-	-	-	-	-
	1-15	-	0 or 2	0-1023	-,1-60	-	-	-
	1-15	-	1 or 3	1-1023	-,1-60	-	-	-
	1-15	0-3	4	0-99	-,1-60	-	-	-
	1-15	0-3	5	1-99	-,1-60	-	-	-
	1-15	0-3	6	0-999	-,1-60	-	-	-
	1-15	0-3	7	1-999	-,1-60	-	-	-
	1-15	-	8 or 9	-	-	0-7	0-23	0-59
7	-,1-255	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
10	1-511	-	-	-	-	-	-	
	1-511	-	0 or 2	0-1023	-,1-60	-	-	-
	1-511	-	1 or 3	1-1023	-,1-60	-	-	-
	1-511	0-3	4	0-99	-,1-60	-	-	-
	1-511	0-3	5	1-99	-,1-60	-	-	-
	1-511	0-3	6	0-999	-,1-60	-	-	-
	1-511	0-3	7	1-999	-,1-60	-	-	-
	1-511	-	8 or 9	-	-	0-7	0-23	0-59

Use the following chart to determine the field limits when the EAS feature is active.

2 Step Type	3 Destination	4 Priority	5 Condition	6 Threshold	7 Skill Number	8 Day	9 Hour	10 Minute
1	1-3	0-3	-	-	-	-	-	-
	10-609	0-3	-	-	-	-	-	-
	1-3	0-3	0 or 2	0-1023	-	-	-	-
	10-609	0-3	0 or 2	0-1023	-	-	-	-
2	1-3	0-3	5	1-99	-	-	-	-
	10-609	0-3	5	1-99	-	-	-	-
	1-3+	0-3	7	1-999	-	-	-	-
	10-609+	0-3	7	1-999	-	-	-	-
3	1-495	-	-	-	-	-	-	-
4	1-255	-	-	-	-	-	-	-
5	-	-	0-2	0-998	-	-	-	-
	1-15	-	-	-	-	-	-	-
	1-15	-	0 or 2	0-1023	1-3	-	-	-
	1-15	-	0 or 2	0-1023	-,10-609	-	-	-
	1-15	-	1 or 3	1-1023	1-3	-	-	-
	1-15	-	1 or 3	1-1023	-,10-609	-	-	-
6	1-15	0-3	4	0-99	1-3	-	-	-
	1-15	0-3	4	0-99	-,10-609	-	-	-
	1-15	0-3	5	1-99	1-3	-	-	-
	1-15	0-3	5	1-99	-,10-609	-	-	-
	1-15	0-3	6	0-999	1-3+	-	-	-
	1-15	0-3	6	0-999	-,10-609+	-	-	-
	1-15	0-3	7	1-999	1-3+	-	-	-
	1-15	0-3	7	1-999	-,10-609+	-	-	-
	1-15	-	8 or 9	-	-	0-7	0-23	0-59
7	-,1-255	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-
	1-511	-	-	-	-	-	-	
	1-511	-	0 or 2	0-1023	1-3	-	-	-
	1-511	-	0 or 2	0-1023	-,10-609	-	-	-
	1-511	-	1 or 3	1-1023	1-3	-	-	-
	1-511	-	1 or 3	1-1023	-,10-609	-	-	-
10	1-511	0-3	4	0-99	1-3	-	-	-
	1-511	0-3	4	0-99	-,10-609	-	-	-
	1-511	0-3	5	1-99	1-3	-	-	-
	1-511	0-3	5	1-99	-,10-609	-	-	-
	1-511	0-3	6	0-999	1-3+	-	-	-
	1-511	0-3	6	0-999	-,10-609+	-	-	-
	1-511	0-3	7	1-999	1-3+	-	-	-
	1-511	0-3	7	1-999	-,10-609+	-	-	-
	1-511	-	8 or 9	-	-	0-7	0-23	0-59

6. For ‘‘route to’’ commands (field 2 = 3), the member-number range for the destination (field 3) depends on the group-list number; see the following table for details:

Abbreviated Dialing Group-List (030 Word 1)	Abbreviated Dialing Group-List Member-Number (030 Word 3 field 3)
List 0	1-95
List 1	101-195
List 2	201-295
List 3	301-395
List 4	401-495

7. Steps that test a split/skill’s queue for the number of calls or for the oldest call (field 5 = 4, 5, 6, or 7) can be assigned a priority level other than 0. When this happens, the test only considers those calls in the queue at the specified priority level or above; calls with lower priority levels are not considered. To test all calls in the queue, the priority level must be set to 0.

Special Error Codes

80 - This vector already contains 15 steps.

81 - A recorded announcement that is continuous cannot be used in a vector (see Procedure 150 Word 1).

82 - Step numbers in a vector cannot be skipped.

83 - Member 0 of the Automatic Call Distribution (ACD) split must be assigned.

84 - The Automatic Call Distribution (ACD) split is not assigned.

85 - The wait time must be in two-second increments.

86 - Only skill numbers in multiples of 10 can be used for this condition.

PROCEDURE 031 WORD 1 — CALL VECTORING - VDN TERMINATION AND ATTRIBUTES

Purpose

Use Procedure 031 Word 1 to administer:

— The termination of a vector directory number (VDN) to a vector

— The Call Management System (CMS) measurement of calls to VDNs

— VDN incoming call identification (ICI) display on the console

— VDN return-call assignments

— VDN display override.

Prerequisite Procedures

Use Procedure 000 Word 1 to administer extensions as VDNs.

Use Procedure 028 Word 1 to busy out CMS before changing translations in this procedure.

Before removing a given VDN-to-vector termination in this procedure:

1. Use Procedure 031 Word 2 to remove the trunk group terminating to that VDN (if applicable).
2. Use Procedure 011 Word 1 to remove the VDN from a coverage group(s) (if applicable).
3. Use Procedure 033 Word 1 to remove the VDN-of-origin announcement (if applicable).
4. Use Procedure 276 Word 1 to enable Call Vectoring for the feature group class of service (COS).
5. Use Procedure 030 Word 3 to administer vector specifications (vector steps).

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and COS.

Use Procedure 010 Word 3 to administer an FRL to a VDN's COS.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Words 1 and 2 to administer a name to a VDN.

Use Procedure 030 Word 1 to administer the Call Vectoring Abbreviated Dialing group list.

Use Procedure 030 Word 2 to display the adjunct number associated with a vector.

Use Procedure 031 Word 2 to administer VDN attributes.

Use Procedure 031 Word 3 to administer trunk group termination to a VDN.

Use Procedure 032 Word 1 to display vector numbers assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

Use Procedure 075 Word 1 to display coverage groups assigned to a VDN.

Use Procedure 100 Word 1 to administer ‘‘Vectoring Announcement’’ trunk groups (trunk type 90).

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 354 Words 1 and 2 to administer blocks of extensions to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 031, WORD: 1
                CALL VECTORING - VDN TERMINATION AND ATTRIBUTES

 1.      VDN: [-----]
 2.   Vector: [---]
 3. Measured: [-]

CONSOLE MESSAGE CHARACTER
   4. Character 1: [--]
   5. Character 2: [--]
   6. Character 3: [--]
   7. Character 4: [--]

 8. Return-Call Indicator: [-]
 9.     VDN Override Flag: [-]

DISPLAY ONLY
  10. Message Center or AUDIX Machine Number: [-]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 2, or 1 and 2 (Displays the data associated with the VDN, or the data associated with a vector).
Add:	Not allowed.
Change:	Fields 1-9.
Remove:	Not allowed.
Next Data:	Displays the next VDN that terminates at a vector (field 2).

Field Ranges and Encodes

1. VDN -, 000-99999

   Up to 127 VDNs may have console messages assigned.

2. Vector -, 1-511

3. Measured
   - 0 VDN is not measured by CMS
   - 1 VDN is measured by CMS

CONSOLE MESSAGE CHARACTER (Fields 4-7)

0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	- = 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

Fields 4-7 must all contain encoded characters or they all must remain dashed.

4. Character 1 -, 0-37
5. Character 2 -, 0-37
6. Character 3 -, 0-37
7. Character 4 -, 0-37
8. Return-Call Indicator
   - - Not a return-call VDN
   - 0 Not a return-call VDN
   - 1 Message Center return-call VDN
   - 2 AUDIX return-call VDN

   A VDN cannot be specified as a return-call VDN if the vector at which the VDN terminates has both AUDIX and Message Center splits associated with it (see Procedure 030 Word 2).

9. VDN Override Flag
   - - Disabled
   - 0 Disabled
   - 1 Enabled

   When a call is routed to another VDN using vector processing, setting the VDN override flag to 1 allows the ‘‘routed-to’’ VDN name to be displayed instead of the ‘‘called’’ VDN name. This does not apply when the call is routed to another VDN by Call Coverage or Call Forwarding.

DISPLAY ONLY (Field 10)

10.	Message Center or AUDIX Machine Number	-, 1-8

Special Error Codes

81 - Administer the extension as a VDN in Procedure 000 Word 1.

82 - Busy out CMS using Procedure 028 Word 1 before changing translation.

83 - Remove all trunk groups terminating to this VDN using Procedure 031 Word 3 before removing this termination.

84 - When changing VDN termination, Message Center machine numbers of the old and new vectors must be the same.

85 - When changing VDN termination, AUDIX machine numbers of the old and new vectors must be the same.

86 - This VDN is a member of a coverage group. Remove it in Procedure 011 Word 1 before removing termination to a vector.

87 - 127 VDNs may have console messages assigned. This capacity has been reached.

88 - Remove VDN-of-origin announcement in Procedure 033 Word 1 before removing termination.

89 - The vector in field 2 is not associated with an ACD split of this type. See Procedure 030 Word 2 for vector-split usage. See Procedure 026 Word 1 for ACD split characteristics.

90 - A VDN cannot be specified as a return-call VDN if the vector to which it terminates has both AUDIX and Message Center splits associated with it.

91 - The return-call indicator field must be 0 or dashed when field 2 is dashed.

PROCEDURE 031 WORD 2 — CALL VECTORING - VDN ATTRIBUTES

Purpose

Use Procedure 031 Word 2 to administer:

— The primary, secondary, and tertiary skill of a vector directory number (VDN)

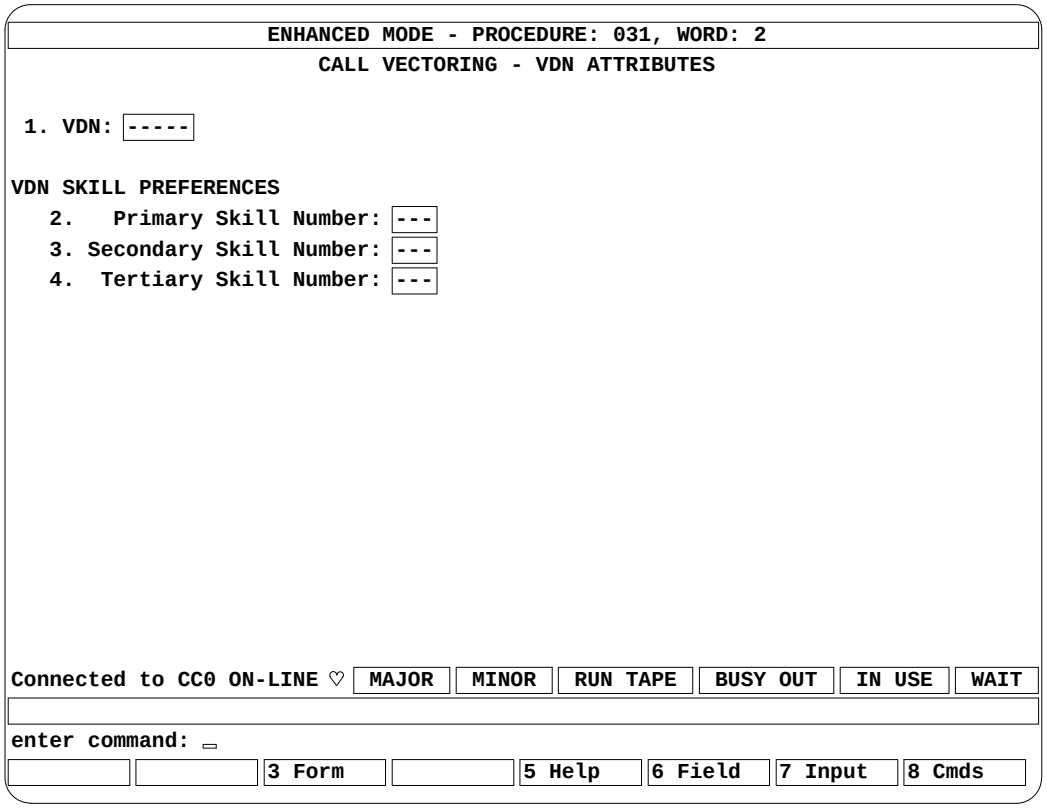
Prerequisite Procedures

Use Procedure 000 Word 1 to administer extensions as VDNs.

Related Procedures

Use Procedure 031 Word 1 to administer VDN termination and other VDN attributes.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-4.
Remove:	Not allowed.
Next Data:	Displays the next VDN.

Field Ranges and Encodes

1. VDN -, 000-99999

VDN SKILL PREFERENCES (Fields 2-4)

2. Primary Skill Number -, 10-609
3. Secondary Skill Number -, 10-609
4. Tertiary Skill Number -, 10-609

Special Error Codes

81 - Administer this extension as a VDN in Procedure 000 Word 1.

82 - VDN Skill Preferences cannot be administered if the EAS feature is not enabled.

83 - The ACD split referenced by the skill is not assigned.

PROCEDURE 031 WORD 3 — CALL VECTORING - TRUNK GROUP TERMINATION

Purpose

Use Procedure 031 Word 3 to administer the termination of a trunk group to a vector directory number (VDN).

Prerequisite Procedures

Use Procedure 000 Word 1 to assign extensions as VDNs.

Use Procedure 028 Word 1 to busy out CMS (if the trunk group being changed is being measured by CMS) before changing translations in this procedure.

Use Procedure 030 Word 3 to administer vector specifications (vector steps).

Use Procedure 031 Word 1 to administer VDN termination and console displays.

Use Procedure 276 Word 1 to enable Call Vectoring for the feature group class of service (COS).

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and COS.

Use Procedure 010 Word 3 to administer an FRL to a VDN's COS.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Words 1 and 2 to administer a name to a VDN or trunk group.

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list.

Use Procedure 030 Word 2 to display the adjunct number associated with a vector.

Use Procedure 032 Word 1 to display vector numbers assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

Use Procedure 100 Word 1 to administer the ''Vectoring Announcement'' trunk group (trunk type 90).

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 354 Words 1 and 2 to administer blocks of extensions to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 031, WORD: 3
                    CALL VECTORING - TRUNK GROUP TERMINATION

 1. Trunk Group: [---]
 2.         VDN: [-----]

DISPLAY ONLY
   3. Vector: [---]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 2, or 1 and 2.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed. To remove trunk group termination at a VDN, do a display routine on the VDN, do a clear entry on the trunk group field, and then do a change routine.
Next Data:	Displays the next trunk group that terminates at the VDN.

Field Ranges and Encodes

1. Trunk Group -, 18-999

   The following are the valid trunk types for trunk group termination:

   16 = CO 1-way in attendant completing
   19 = CO 2-way attendant completing in/DOD out
   20 = CO 2-way with party test attendant completing in/DOD out
   21 = FX 1-way in attendant completing
   24 = FX 2-way attendant completing in/DOD out
   25 = FX 2-way with party test attendant completing in/DOD out
   26 = WATS 1-way in attendant completing
   35 = TIE 1-way in automatic
   38 = TIE 2-way automatic in/dial repeating out
   39 = TIE 2-way automatic in and out
   66 = CAS release link trunk 1-way incoming at main

   Type 50 (Remote Access 2-way) is available when speaker verification is enabled in Procedure 285 Word 1.

2. VDN -, 000-99999

DISPLAY ONLY (Field 3)

3. Vector -, 1-511

Special Error Codes

81 - Administer this extension as a VDN in Procedure 000 Word 1.

82 - Busy out CMS using Procedure 028 Word 1 before changing translation.

83 - The trunk type of this trunk group is inappropriate for termination at a VDN.

85 - This trunk group cannot be terminated at a VDN unless the VDN is first terminated at a vector.

PROCEDURE 032 WORD 1 — CALL VECTORING - DISPLAY SPLIT USAGE

Purpose

Use Procedure 032 Word 1 to display the splits being used by vectors.

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and the class of service.

Use Procedure 010 Word 3 to administer an FRL to a VDN's class of service.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Word 1 to administer a name to a VDN.

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list.

Use Procedure 030 Word 2 to display which messaging machines are associated with a vector and to add or remove a complete vector to or from translation memory.

Use Procedure 030 Word 3 to administer vector steps.

Use Procedure 031 Word 1 to administer VDN termination, plus other attributes.

Use Procedure 031 Word 2 to administer termination of a trunk group to a VDN.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

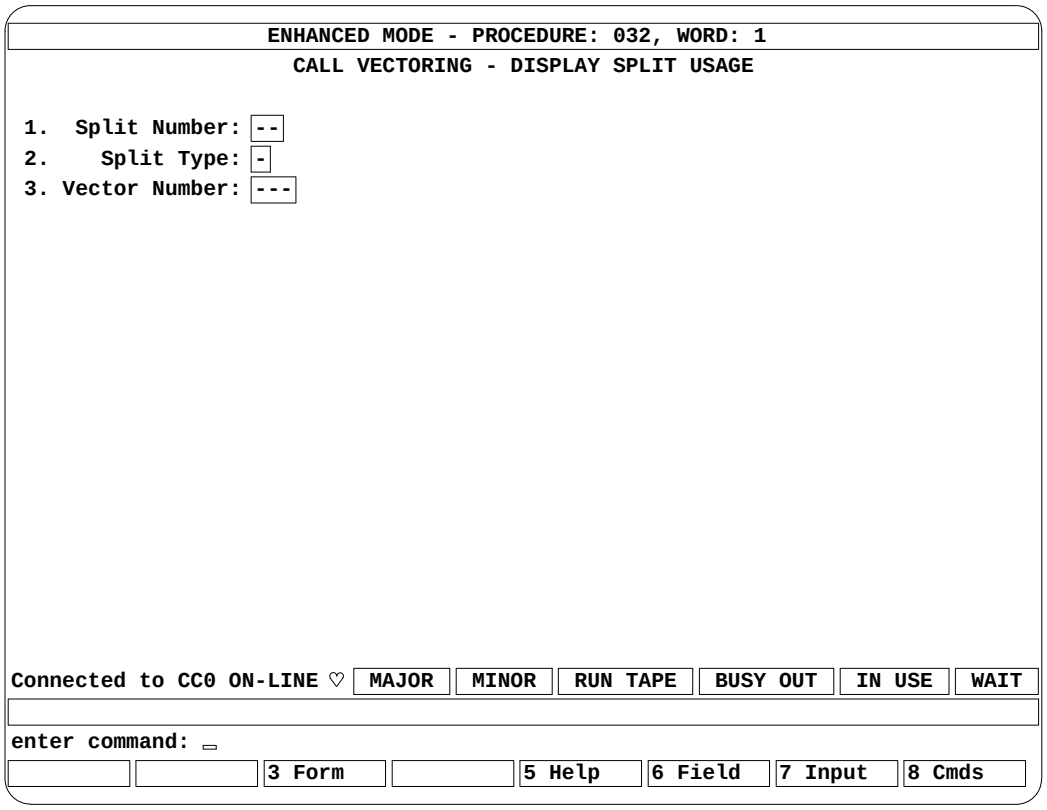
Use Procedure 100 Word 1 to administer ''Vectoring Announcement'' trunk groups (type 90).

Use Procedure 115 Word 1 to administer trunk group termination used for Call Vectoring.

Use Procedure 150 Word 1 to administer recorded announcement parameters for vectors.

Use Procedure 354 Words 1 and 2 to administer blocks of extension numbers to be used as VDNs.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the next vector that references a main or backup split.

Field Ranges and Encodes

1. Split Number	1-60	
2. Split Type	1	Main split
	2	Backup split
3. Vector Number	-, 1-511	

Special Error Codes

None.

PROCEDURE 033 WORD 1 — CALL VECTORING - ORIGIN ANNOUNCEMENT

Purpose

Use Procedure 033 Word 1 to administer queue-of-origin announcements for Automatic Call Distribution (ACD) splits, city-of-origin announcements for trunk groups and Vector Directory Number (VDN)-of-origin announcements for VDNs.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer basic trunk group translations.

Use Procedure 150 Word 1 to administer trunks to trunk groups.

Use Procedure 030 Word 3 to administer vector specifications (vector steps).

Use Procedure 031 Word 1 to administer VDN termination and console displays.

Use Procedure 276 Word 1 to enable Call Vectoring for the feature group class of service (COS).

Related Procedures

Use Procedure 000 Word 1 to administer the VDN port type and COS.

Use Procedure 010 Word 3 to administer an FRL to a VDN's COS.

Use Procedure 011 Word 1 to administer a VDN as the final point in a coverage path.

Use Procedure 012 Words 1 and 2 to administer a name to a VDN or trunk group.

Use Procedure 026 Word 1 to administer ACD characteristics.

Use Procedure 030 Word 1 to administer the Abbreviated Dialing group list.

Use Procedure 030 Word 2 to display the adjunct number associated with a vector.

Use Procedure 032 Word 1 to display vector numbers assigned to splits.

Use Procedure 033 Word 1 to administer a VDN-of-origin announcement to a VDN.

Use Procedure 059 Words 1, 2, and 3 to administer the group list used for Call Vectoring.

Use Procedure 100 Word 1 to administer the ''Vectoring Announcement'' trunk group (trunk type 90).

Use Procedure 354 Words 1 and 2 to administer blocks of extensions to be used as VDNs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 033, WORD: 1
                      CALL VECTORING - ORIGIN ANNOUNCEMENT

 1. VDN/Trunk Group/ACD Split: -----
 2.   Type of Data in Field 1: -
 3.     Recorded Announcement: ---

DISPLAY ONLY
   4. Recorded Announcement Trunk Group: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-3.
Change:	Fields 1-3.
Remove:	Fields 1-3.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	VDN/Trunk Group/ACD Split	000-99999 for VDN, 18-999 for trunk group, 1-60 for ACD split	
2.	Type of Data in Field 1	0	ACD split
		1	Trunk group
		2	VDN
3.	Recorded Announcement	1-255	

DISPLAY ONLY (Field 4)

4. Recorded Announcement Trunk Group — 18-999

Special Error Codes

81 - Field 1 must contain a VDN if field 2 equals 2.

82 - This announcement is not administered as a continuously playing announcement (see Procedure 150 Word 1 field 11).

83 - VDN must terminate at a vector in Procedure 031 Word 1 before assigning a VDN-of-origin announcement.

PROCEDURE 050 WORD 1 — MULTIAPPEARANCE TERMINAL DEFINITIONS

Purpose

Use Procedure 050 Word 1 to administer a multiappearance voice terminal or data module definition. Terminal types 1-99 are predefined AT&T multiappearance voice terminals and data modules. Their definitions can only be displayed. Terminal types 100-200 can be used to define AT&T multiappearance voice terminals and data modules that are not already defined in this procedure (terminal types 1-99). Terminal types 100-200 can also be used to define terminals and data modules made by other vendors.

Prerequisite Procedures

For terminal types 100-200, before a definition can be removed or changed in this procedure, all terminals of the same type or type and option must be removed in Procedure 051 Word 1.

Related Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Use Procedure 051 Word 2 to assign a Service Profile Identifier (SPID) to a newly defined BRI terminal.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 050, WORD: 1
                      MULTIAPPEARANCE TERMINAL DEFINITIONS

TERMINAL OR DATA MODULE
   1. Terminal Type: [---]
   2.        Option: [--]
 3. Equipment Type: [--]
TERMINAL CHARACTERISTICS
   4.    Data Type: [-]
   5. Display Type: [-]
   6.     ISDN MIM: [-]
NUMBER OF BUTTONS
   7. Terminal: [--]
   8.  Display: [--]
   9.  Feature: [--]
  10. Coverage: [--]
DISPLAY ONLY
  11. Terminals Assigned: [-----]



Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 1 and 2.
Add:	Fields 1-10 (terminal types 100-200 only).
Change:	Fields 3-10 (terminal types 100-200 only).
Remove:	Terminal types 100-200 only.
Next Data:	Displays the next defined terminal type or option depending on the information entered. If the terminal type and option fields are dashed or only the terminal type is entered, next data displays only terminal types, skipping all options. If the terminal type and option are entered, next data displays the valid options. After the last defined option is displayed, next data displays the total definition for the terminal type; then, next data displays dashes.

Field Ranges and Encodes

TERMINAL OR DATA MODULE (Fields 1-2)

1. Terminal Type	1	PDM
	2	TDM
	3	Dual Port Data

5 ADFTC
7 EIA
8 MTCP ATMS
9 MTCP DCP
10 SLS
15 10-button MET
16 20-button MET
17 30-button MET
21 7401 PLUS (Model 02A)
22 7410 PLUS (Model 02A)
23 7203H
24 7407 PLUS (Model 03A)
25 7205H
26 7406 BIS (Model 05A) -- Integrated Display
27 7406 BIS (Model 06A)
28 7406 PLUS (Model 07A) -- Integrated Display
29 7406 PLUS (Model 08A)
33 7303S
35 7305S
40 7434D
41 7401D (Model 01A)
42 7410D (Model 01A)
43 7403D
44 7404D
45 7405D
46 7406D (Models 01A, 03A) -- Integrated Display
47 7407D (Models 01A, 01B, 02C)
48 7444D (Model 01A)
50 7500 BRI
55 7505 BRI
56 7506 BRI
57 7507 BRI
62 CallMaster(TM)
64 7406D (Models 02A, 04A)
91 510 BCT
95 515 BCT
99 PC/PBX
100-200 Undefined terminal type

Use terminal types 100-200 to administer AT&T multiappearance voice terminals and data modules that are not already defined in this procedure and BRI terminals and data modules made by other vendors. Predefined AT&T terminal types (1-99) cannot be added, removed, or changed.

See the section called ‘‘Field Options Based on Terminal Type’’ for valid entries for each terminal type.

2. Option

- All options
0 Data only
1 Voice only
2 Terminal, feature
3 Terminal, coverage
4 Terminal, feature, coverage
5 Terminal, display
6 Terminal, data
7 Terminal, feature, display
8 Terminal, feature, data
9 Terminal, coverage, data
10 Terminal, display, data
11 Terminal, feature, coverage, data
12 Terminal, feature, display, data

Use a dash (-) in this field when first defining a new terminal type. Once the terminal options are defined, based on information you enter in fields 4, 5, and 7-10, you can display each of those options using Next Data.

The ‘‘feature’’ option means the terminal has a feature key module.

The ‘‘coverage’’ option means the terminal has a Call Coverage module.

The ‘‘display’’ option means the terminal has built-in display capabilities or an adjunct display module.

The ‘‘data’’ option means the terminal has built-in data capabilities, a data stand, or digit terminal data module (DTDM).

3. Equipment Type

0 Unequipped
1 Analog boards (SN228, SN229, TN742, TN746)
2 MFET/MET boards (SN224, TN735)
3 MFAT boards (ANN17, TN762)
4 MFDT boards (SN270, TN754)
5 BRI board (TN556)
6 MFDT boards (SN270, TN754)
7 ADFTC board (SN261)
8 EIA boards (SN238, TN726)
9 MET-only board (TN735)
10 MTCP ATMS board (TN771)
11 MTCP DCP board (TN771)

Use encode 4 to assign digital (DCP) voice terminals. Use encode 6 to assign DCP data modules (PDM, TDM, MDM).

TERMINAL CHARACTERISTICS (Fields 4-6)

4. Data Type

- Not applicable
0 No data
1 Optional data
2 Integrated data
3 Data module
4 Dual port data
5 BRI data
6 ADFTC data
7 MTCP data

5. Display Type

- Not applicable
0 No display
1 Display type 1
2 Display type 2
3 Display type 3
4 Display type 4
5 Display type 5 (BRI only)
6 Display type 6 (BRI only)

Display type 1 - one display for both call appearance and feature information.

Display type 2 - one call appearance display and one feature display.

Display type 3 - four call appearance displays and one feature display.

Display type 4 - ten call appearance displays and one feature display.

Display type 5 - one display for both call appearance and feature information (BRI only).

Display type 6 - four call appearance displays and one feature display (BRI only).

6. ISDN MIM

- Not a BRI Terminal
0 None
1 MIMs are not supported, terminal requires initialization
2 Synchronous MIMs, terminal does not require initialization
3 Synchronous MIMs, terminal requires initialization
4 Asynchronous MIMs, terminal does not require initialization
5 Asynchronous MIMs, terminal requires initialization

The ISDN Management Information Message (MIM) assignment is used only for BRI voice terminals. The MIM is part of the AT&T ISDN Management and Maintenance specification. The value assigned in this field depends on the characteristics of the individual BRI voice terminals. Check with the terminal vendor to see if the terminal can recognize AT&T ISDN MIMs.

Encode 0 means that no MIMs are supported (this limits BRI usage to point-to-point connections and maintenance audits from the switch are not possible) and a Service Profile Identifier (SPID) is not required. Encode 0 is usually used for non-AT&T BRI voice terminals.

Encode 1 is not used at this time.

If this field = 3 or 5, a SPID must be assigned to the voice terminal using Procedure 051 Word 2.

Use encode 3 for AT&T 7500-series BRI voice terminals.

NUMBER OF BUTTONS (Fields 7-10)

7. Terminal 0-62
8. Display -, 0-7
9. Feature -, 1-24
10. Coverage -, 1-20

DISPLAY ONLY (Field 11)

11. Terminals Assigned 0-10000

Field Options Based on Terminal Type

The following tables show the possible values for defined AT&T voice terminals. These values cannot be changed for these terminal types, but are shown here since they may help you when defining a new terminal type. Though not shown in the tables, dashes (-) mean that the option is not assigned.

FIELD									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1=PDM	0	6	3	0	0	0	0	0	0
2=TDM	0	6	3	0	0	0	0	0	0
3=Dual Port Data	0	6	4	0	0	0	0	0	0
5=ADFTC	0	7	6	0	0	0	0	0	0
7=EIA (or DLC)	0	8	3	0	0	0	0	0	0
8=MTCP ATMS	0	10	7	0	0	0	0	0	0
9=MTCP DCP	0	11	7	0	0	0	0	0	0
10=SLS	1	1	0	0	0	0	0	0	0
15=MET10	1	9	0	0	0	7	0	0	0
16=MET20	1	9	0	0	0	17	0	0	0
17=MET30	1	9	0	0	0	27	0	0	0
21=7401 PLUS 02A	1,6,10	4	1	1	0	11	0,7	0	0
22=7410 PLUS 02A	1,6	4	1	0	0	12	0	0	0
23=7203H	1	2	0	0	0	12	0	0	0
24=7407 PLUS 03A	5,10	4	0,1	2	0	36	7	0	0
25=7205H	1-4	2	0	0	0	36	0	0,24	0,20
26=7406 BIS 05A	5,10	4	0,1	1	0	30	0	0	0
27=7406 BIS 06A	1,6,10	4	0,1	0,1	0	30	0,7	0	0
28=7406 PLUS 07A	5,10	4	0,1	1	0	30	0	0	0
29=7406 PLUS 08A	1,6,10	4	0,1	0,1	0	30	0,7	0	0
33=7303S	1	3	0	0	0	12	0	0	0
35=7305S	1	3	0	0	0	36	0	0	0
40=7434D	1,3,5, 6,9,10	4	1	1	0	36	0,7	0	0,20
41=7401D 01A	1,6,10	4	1	1	0	11	0,7	0	0

FIELD									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
42=7410D 01A	1,6	4	1	0	0	12	0	0	0
43=7403D	1,6	4	1	0	0	12	0	0	0
44=7404D	6,8-12	4	2	1	0	8	0,7	0,24	0,20
45=7405D	1-12	4	1	1	0	36	0,7	0,24	0,20
46=7406D 01A 03A	1,5,10	4	0,1	1	0	30	0	0	0
47=7407D 01A 01B 02C	5,10	4	0,1	2	0	36	7	0	0
48=7444D 01A	5,10	4	0,1	2	0	36	7	0	0
50=7500	6	5	5	0	3	4	0	0	0
55=7505	1,6	5	0,5	0	3	19	0	0	0
56=7506	5,10	5	0,5	5	3	19	0	0	0
57=7507	5,10	5	0,5	5	3	42	0	0	0
62=Call- Master	5,10	4	0,1	2	0	30	0	0	0
64=7406D 02A 04A	1,6,10	4	0,1	0,1	0	30	0,7	0	0
91=510BCT	10	4	2	3	0	21	7	0	0
95=515BCT	10	4	2	1	0	12	7	0	0
99=PC/PBX	10,12	4	2	4	0	36	7	0,24	0

Special Error Codes

81 - The value in this field is incompatible with the equipment type (field 3).

82 - Incorrect option specifications.

83 - The terminal type (field 1) is inconsistent with existing option definitions.

84 - The change routine is only allowed for entire type definitions.

85 - Remove all terminals of this type or type and option in Procedure 051 Word 1 before removing or changing the definition.

86 - Predefined AT&T terminal type definitions (1-99) may not be added, removed, or changed.

87 - Terminal attributes may not be added or removed with the change routine.

PROCEDURE 050 WORD 2 — BUTTON TEMPLATE

Purpose

Use Procedure 050 Word 2 to administer a button template for terminal types 100-200 (other vendor and undefined AT&T multiappearance voice terminals and data modules). A button template defines the number of lamps associated with each button and button usage.

Prerequisite Procedures

For terminal types 100-200, use Procedure 050 Word 1 to administer a multiappearance voice terminal or data module definition.

Related Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Use Procedure 051 Word 2 to assign a Service Profile Identifier (SPID) to a newly defined BRI terminal.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 050, WORD: 2
                                BUTTON TEMPLATE

TERMINAL OR DATA MODULE
   1.   Terminal Type: [---]
   2.     Device Type: [-]
   3. Member (button): [--]

BUTTON CHARACTERISTICS
   4. Number of Lamps: [-]
   5.    Button Usage: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 1-3.
Add:	Fields 4 and 5 (terminal types 100-200 only).
Remove:	Fields 4 and 5 (terminal types 100-200 only).
Change:	Fields 4 and 5 (terminal types 100-200 only).
Next Data:	Displays button assignments.

Field Ranges and Encodes

TERMINAL OR DATA MODULE (Fields 1-3)

1. Terminal Type	1	PDM
	2	TDM
	3	Dual Port Data
	5	ADFTC
	7	EIA
	8	MTCP ATMS
	9	MTCP DCP
	10	SLS

15 10-button MET
16 20-button MET
17 30-button MET
21 7401 PLUS (Model 02A)
22 7410 PLUS (Model 02A)
23 7203H
24 7407 PLUS (Model 03A)
25 7205H
26 7406 BIS (Model 05A) -- Integrated Display
27 7406 BIS (Model 06A)
28 7406 PLUS (Model 07A) -- Integrated Display
29 7406 PLUS (Model 08A)
33 7303S
35 7305S
40 7434D
41 7401D (Model 01A)
42 7410D (Model 01A)
43 7403D
44 7404D
45 7405D
46 7406D (Models 01A, 03A) -- Integrated Display
47 7407D (Models 01A, 01B, 02C)
48 7444D (Model 01A)
50 7500 BRI
55 7505 BRI
56 7506 BRI
57 7507 BRI
62 CallMaster(TM)
64 7406D (Models 02A, 04A)
91 510 BCT
95 515 BCT
99 PC/PBX
100-200 Undefined terminal types

Use terminal types 100-200 to administer AT&T multiappearance voice terminals and data modules that are not already defined in this procedure and BRI terminals and data modules made by other vendors. Predefined AT&T terminal types (1-99) cannot be added, removed, or changed.

2. Device Type

0 Basic set
1 Feature module
2 Coverage module
3 Display module

3. Member (button) 1-62

If field 2 = 0, the range for field 3 is 1-62.

If field 2 = 1, the range for field 3 is 1-24.

If field 2 = 2, the range for field 3 is 1-20.

If field 2 = 3, the range for field 3 is 1-7.

Device type 0, member (button) 1 is reserved for the Hold button for all voice terminals.

BUTTON CHARACTERISTICS (Fields 4-5)

4. Number of Lamps
   - 0 No lamps
   - 1 One lamp
   - 2 Two lamps

5. Button Usage
   - 0 Unusable
   - 1 No pad
   - 2 Pad

Unusable - Assign this encode to buttons that do not exist or cannot be administered. For example, if a terminal has 10 buttons, buttons 11 through 62 should be assigned as unusable.

No pad - Assign this encode to buttons that do not have a pad (membrane). For example, the message waiting lamp is considered a button without a pad.

Pad - Assign this encode to buttons that have a pad. The user presses the button pad to activate or cancel a feature assigned to the button.

Special Error Codes

81 - Predefined AT&T terminal type definitions (terminal types 1-99) may not be added, removed, or changed.

82 - This button is reserved for special use and cannot be administered.

83 - Invalid terminal type. A button template can only be administered for terminal types 100-200.

84 - Button cannot be assigned; terminal is assigned as a no-button set.

85 - Can not change template values while terminals of this type are assigned in Procedure 051 Word 1.

PROCEDURE 051 WORD 1 — MULTIAPPEARANCE TERMINAL AND DATA MODULE TRANSLA

Purpose

Use Procedure 051 Word 1 to administer multiappearance voice terminal and data module translations. This procedure is used to administer:

— The association between a multiappearance voice terminal or data module and an equipment location

— Terminal type

— Terminal options

— Data capability

— Display capability

— Origination preference

— Termination preference

— Lock/unlock available (for terminals with display capability)

— Keyboard dialing

— Leave Word Calling global retrieval

— Terminal alarming

— Basic rate interface (BRI) terminal endpoint identifier (TEI).

Prerequisite Procedures

For terminal types 100-200 (other vendor and undefined AT&T multiappearance voice terminals and data modules), use Procedure 050 Word 1 to administer the terminal or data module definition.

For terminal types 100-200, use Procedure 050 Word 2 to administer a button template.

Use Procedure 275 Word 4 (field 15 = 2) to administer terminal alarming to the system class of service.

Use Procedure 275 Word 4 field 14 to enable ISDN before administering any ISDN/BRI voice terminals.

Before removing a terminal in this procedure, do the following:

— Retrieve all Leave Word Calling messages associated with the terminal.

— Use Procedure 011 Word 1 to remove the terminal's extension(s) from all Call Coverage paths.

— Use Procedure 052 Word 1 to set the home terminal (field 12) to 0 for the last appearance assigned to the terminal.

— Use Procedure 055 Word 2 to remove all one-button-transfer buttons assigned to the terminal.

— Use Procedure 059 Word 1 to remove all Abbreviated Dialing lists assigned to the terminal.

— Use Procedure 063 Word 1 to remove the Automatic Message Waiting (AMW) lamp assignment(s).

— Use Procedure 360 Word 1 to remove the terminal from a Dedicated Switch Connection (DSC).

Related Procedures

Use Procedure 290 Word 1 to find an unassigned equipment location. Then, go to Procedure 051 Word 1 and do a display routine. The same unassigned equipment location will be displayed in fields 1-5.

Use Procedure 051 Word 2 to assign a Service Profile Identifier (SPID) to a BRI terminal.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 051, WORD: 1
            MULTIAPPEARANCE TERMINAL AND DATA MODULE TRANSLATION

TERMINAL EQUIPMENT LOCATION              12. Lock/Unlock Available: -
   1.  Module: --                        13.      Keyboard Dialing: -
   2. Cabinet: -                         14.  LWC Global Retrieval: -
   3. Carrier: -                         15.     Terminal Alarming: -
   4.    Slot: --                        16.               BRI TEI: ---
   5. Circuit: --                        17.        ISDN Advantage: -
TERMINAL OR DATA MODULE TYPE
   6. Terminal Type: ---
   7.        Option: --

PHYSICAL TYPE
   8.    Data: -
   9. Display: -

PREFERENCE
  10. Origination: -
  11. Termination: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Fields 1-17.
Change:	Fields 6-17.
Remove:	Fields 6-17.
Next Data:	Displays next assigned multiappearance voice terminal or data module.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
5.	Circuit	0-23 (0, 2, 4, ... 22 for BRI circuits)

TERMINAL OR DATA MODULE TYPE (Fields 6-7)

6.	Terminal Type	1	PDM
		2	TDM
		3	Dual Port Data
		5	ADFTC
		7	EIA
		8	MTCP ATMS
		9	MTCP DCP
		10	SLS
		15	10-button MET
		16	20-button MET
		17	30-button MET
		21	7401 PLUS (Model 02A)
		22	7410 PLUS (Model 02A)
		23	7203H
		24	7407 PLUS (Model 03A)
		25	7205H
		26	7406 BIS (Model 05A) [see Help]
		27	7406 BIS (Model 06A) [see Help]
		28	7406 PLUS (Model 07A) [see Help]
		29	7406 PLUS (Model 08A) [see Help]
		33	7303S
		35	7305S
		40	7434D
		41	7401D (Model 01A)
		42	7410D (Model 01A)
		43	7403D
		44	7404D
		45	7405D
		46	7406D (Models 01A, 03A) [see Help]
		47	7407D (Models 01A, 01B, 02C)
		48	7444D (Model 01A)
		50	7500 BRI
		55	7505 BRI
		56	7506 BRI

57 7507 BRI
62 CallMaster(TM)
64 7406D (Models 02A, 04A) [see Help]
91 510 BCT
95 515 BCT
99 PC/PBX
100-200 Other, see Help

Use terminal type 26, 28, or 46 to administer a 7406 BIS, 7406 PLUS, or 7406D respectively that have an integrated display. For these terminal types, Procedure 054 Word 4 can be used to administer display feature buttons to the voice terminal (device type 0). Display feature buttons cannot, however, be assigned to a display module (device type 3).

Use terminal type 27, 29, or 64 to administer a 7406 BIS, 7406 PLUS, or 7406D respectively that have a data stand but do not have an integrated display. For these terminal types, Procedure 054 Word 4 can be used to administer display feature buttons to the voice terminal (device type 0), display module (device type 3), or both. The associated data terminal provides the display capabilities and the display feature buttons (administered to device type 3).

Use terminal types 100-200 to administer AT&T multiappearance voice terminals and data modules that are not already defined in this procedure and BRI terminals and data modules made by other vendors. Predefined AT&T terminal types (1-99) cannot be added, removed, or changed.

7. Option

0 Data only
1 Voice only
2 Terminal, feature
3 Terminal, coverage
4 Terminal, feature, coverage
5 Terminal, display
6 Terminal, data
7 Terminal, feature, display
8 Terminal, feature, data
9 Terminal, coverage, data
10 Terminal, display, data
11 Terminal, feature, coverage, data
12 Terminal, feature, display, data

The ‘‘feature’’ option means the terminal has a feature key module.

The ‘‘coverage’’ option means the terminal has a call coverage module.

The ‘‘display’’ option means the terminal has built-in display

capabilities or an adjunct display module.

The ‘‘data’’ option means the terminal has built-in data capabilities, a data stand, a digital terminal data module (DTDM), or an ADM-T for BRI terminals.

PHYSICAL TYPE (Fields 8-9)

8. Data
   - \- Not assigned
   - 1 DTDM, data stand, or ADM-T
   - 2 7400 data module

9. Display
   - \- Not assigned
   - 0 Integrated display
   - 1 Display module

PREFERENCE (Fields 10-11)

Fields 10 and 11 are not administrable to SLS terminals and data modules (DTDM, TDM, PDM). No matter what is entered in these fields, the preferences for each will default to a preset number.

10. Origination
    - 0 No line
    - 1 Idle line
    - 2 Prime line
    - 3 Last line

    This field specifies the line type that is automatically selected when the user of this terminal originates a call.

11. Termination
    - 0 None
    - 1 Calling line
    - 2 Ringing line

    This field specifies the line type that is automatically selected when the user of this terminal answers a call.

12. Lock/Unlock Available
    - \- N/A
    - 0 No
    - 1 Yes

    This field can only be assigned to a multiappearance voice terminal with display capability.

13. Keyboard Dialing
    - \- N/A
    - 0 No
    - 1 Yes

14. LWC Global Retrieval
    - \- N/A
    - 0 No
    - 1 Yes

    This field specifies that this terminal is allowed to retrieve LWC messages for anyone on the switch.

    This field can only be assigned to a multiappearance voice terminal with display capability.

15. Terminal Alarming
- \- N/A
- 0 Disabled
- 1 Enabled

To enable terminal alarming, administrable alarms must be set in Procedure 275 Word 4.

16. BRI TEI
- 0-63 Fixed
- 128 Automatic

The terminal endpoint identifier (TEI) is used to identify multiple terminals connected to one BRI endpoint. If a BRI TEI is not specified, a default value is assigned.

17. ISDN Advantage
- \- N/A
- 0 Disabled
- 1 Enabled

ISDN Advantage can only be administered on DCP sets having data and display capabilities.

Notes

1. A 7300 series voice terminal cannot be assigned to slots 5 or 18 in a traditional port carrier.

Field Options Based on Terminal Type

FIELD										
6 Terminal Type	**7 Optn**	**8 Data**	**9 Disp**	**10 Orig Pref**	**11 Term Pref**	**12 Lock Unlck**	**13 Kybd Dial**	**14 LWC Retr**	**15 Term Alrm**	**16 BRI TEI**
1=PDM or 7400A/B*	0	1,2	-	2	0	-	-,0,1	-	-,0,1	-
2=TDM or 7400A*	0	1,2	-	2	0	-	-,0,1	-	-,0,1	-
3=Dual Port Data	0	1,2	-	2	0	-	-,0,1	-	-,0,1	-
5=ADFTC	0	1	-	2	0	-	-,0,1	-	-	-
7=EIA	0	1	-	2	0	-	-,0,1	-	-	-
8=MTCP ATMS	0	1	-	2	0	-	-,0,1	-	-	-
9=MTCP DCP	0	1	-	2	0	-	-,0,1	-	-	-
10=SLS	1	-	-	2	0	-	-	-	-	-
15=10-Button MET	1	-	-	0-3	0-2	-	-	-	-	-
16=20-Button MET	1	-	-	0-3	0-2	-	-	-	-	-
17=30-Button MET	1	-	-	0-3	0-2	-	-	-	-	-

* Depending on the desired configuration, a hardware change is required for the 7400 data modules. See the users manual.

FIELD										
6 Terminal Type	**7 Optn**	**8 Data**	**9 Disp**	**10 Orig Pref**	**11 Term Pref**	**12 Lock Unlck**	**13 Kybd Dial**	**14 LWC Retr**	**15 Term Alrm**	**16 BRI TEI**
21= 7401 PLUS 02A	1,6,10	-,2	-	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
22= 7410 PLUS 02A	1,6	-,2	-	0-3	0-2	-	-,0,1	-	-,0,1	-
23= 7203H	1	-	-	0-3	0-2	-	-	-	-	-
24= 7407 PLUS 03A	5,10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
25= 7205H	1-4	-	-	0-3	0-2	-	-	-	-	-
26= 7406 BIS 05A	1,5, 10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
27= 7406 BIS 06A	1,6,10	-,1,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
28= 7406D 07A	1,5, 10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
29= 7406D 08A	1,6,10	-,1,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
33= 7303S	1	-	-	0-3	0-2	-	-	-	-	-
35= 7305S	1	-	-	0-3	0-2	-	-	-	-	-
40= 7434D	1,3,5, 6,9,10	-,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
41= 7401D 01A	1,6,10	-,2	-	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
42= 7410D 01A	1,6	-,2	-	0-3	0-2	-	-,0,1	-	-,0,1	-
43= 7403D	1,6	-,1,2	-	0-3	0-2	-	-,0,1	-	-,0,1	-

FIELD										
6 Terminal Type	**7 Optn**	**8 Data**	**9 Disp**	**10 Orig Pref**	**11 Term Pref**	**12 Lock Unlck**	**13 Kybd Dial**	**14 LWC Retr**	**15 Term Alrm**	**16 BRI TEI**
44= 7404D	6,8-12	1	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
45= 7405D	1-12	-,1,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
46= 7406D 01A 03A	1,5, 10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
47= 7407D 01A 01B 02C	5,10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
48= 7444D 01A	5,10	-,1,2	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
50= 7500BRI	6	1	-	2	0	-	-,0,1	-	-,0,1	0-63, 128
55= 7505BRI	1,6	-,1	-	0-3	0-2	-	-,0,1	-	-,0,1	0-63, 128
56= 7506BRI	5,10	-,1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	0-63, 128
57= 7507BRI	5,10	-,1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	0-63, 128

FIELD										
6 Terminal Type	**7 Optn**	**8 Data**	**9 Disp**	**10 Orig Pref**	**11 Term Pref**	**12 Lock Unlck**	**13 Kybd Dial**	**14 LWC Retr**	**15 Term Alrm**	**16 BRI TEI**
62=Call-Master	5	-,2	0	0	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
64= 7406D 02A 04A	1,6,10	-,1,2	-,1	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
91= 510BCT	10	1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
95= 515BCT	10	1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-
99= PC/PBX	10,12	1	0	0-3	0-2	-,0,1	-,0,1	-,0,1	-,0,1	-

Special Error Codes

50 - A Service Profile Identifier (SPID) must be assigned to the first BRI terminal assigned to this equipment location before a second terminal can be assigned.

51 - The scroll button and normal button must be removed from this terminal via Procedure 054 Word 4 before the display module can be removed.

53 - ISDN Advantage must be administered on a DCP voice set.

54 - ISDN Advantage must have data and display modules.

55 - This terminal's type cannot be changed.

56 - Use Procedure 052 Word 1 to set the Send All Calls group to 0 for all extensions assigned to this terminal.

81 - Remove Terminal Busy with Procedure 055 Word 1 and one-button-transfer with Procedure 055 Word 2.

82 - All button assignments in the area being removed must be removed first.

83 - Define terminal type and option in Procedure 050 Word 1.

84 - Terminal option (field 7) does not have display capabilities.

85 - This terminal type is incompatible with the equipment type or equipment location.

86 - Remove Abbreviated Dialing lists from this terminal with Procedure 059 Word 1 before removing this terminal. Remove default dialing with Procedure 059 Word 4 before removing this terminal.

87 - An extension assigned to this terminal must be removed from a Call Coverage path with Procedure 011 Word 1.

88 - Retrieve Leave Word Calling (LWC) messages before removing this terminal.

89 - You cannot change the preference allowed on terminals with automatic line appearances.

90 - A 7300-series voice terminal cannot be assigned to slots 5 or 18 in a traditional port carrier.

91 - Use Procedure 052 Word 1 to set home terminal to 0 for the last appearance assigned to this terminal.

92 - Cannot assign the 24th time slot in a remote carrier group.

93 - Terminal type cannot be an Analog/Digital Facility Test Circuit (ADFTC) or Maintenance Test Circuit Pack (MTCP), or basic rate interface (BRI) for a remote carrier group.

94 - Terminal must be unassigned from Dedicated Switch Connection (DSC) first with Procedure 360 Word 1.

95 - Remove Automatic Message Waiting with Procedure 063 Word 1.

96 - Remove one-button-transfer buttons with Procedure 055 Word 2.

97 - Invalid terminal endpoint identifier (TEI) or nonunique TEI.

98 - Terminal adjuncts must have the same number of buttons (change only).

PROCEDURE 051 WORD 2 — BRI TERMINAL SPID TRANSLATION

Purpose

Use Procedure 051 Word 2 to administer ISDN Service Profile Identifiers (SPIDs). The SPID is used during BRI terminal initialization.

Prerequisite Procedures

For terminal types 100-200 (other vendor and undefined AT&T multiappearance voice terminals and data modules), use Procedure 050 Word 1 to administer a multiappearance voice terminal or data module definition.

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 051, WORD: 2
                     BRI TERMINAL SPID TRANSLATION

TERMINAL EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.         ISDN SPID: ----------
 7. Service SPID Flag: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 6.
Add:	Fields 1-6.
Change:	Fields 1-6.
Remove:	Fields 1-6.
Next Data:	If an equipment location is entered, next data displays the ISDN SPID. If an ISDN SPID is entered, next data displays the equipment location.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module — 0-30
2. Cabinet — 0 for universal and XE modules only
3. Carrier — c-e for universal and XE modules only
4. Slot — 1-20 for universal modules, and 1-18 for XE modules
5. Circuit — 0, 2, 4, ... 22
6. ISDN SPID — 0-9999999999

   ISDN SPIDs must be unique system wide. Embedded and trailing blanks are not allowed in a SPID. Leading blanks are allowed. The ISDN SPID must be assigned in this procedure and at the terminal and the two SPIDs must be the same.

   A specific pattern should be used to select the SPID. This pattern includes: the primary extension of the terminal plus a two-digit code that represents the shared (bridged) appearance of that extension number. You can have up to 16 shared appearances of an extension. If you number those 16 appearances from 00-15, you now have the two-digit code.

   For example, extension 34552 is the primary extension on a voice terminal and that appearance is the only one on any voice terminal. This makes a SPID of 34552+00 or 3455200. If extension 4223 is the primary extension on a voice terminal but it is shared appearance number five (in our two-digit code 04), this makes a SPID of 4223+04 or 422304.
7. Service SPID Flag — 1 Add, change, remove, or display the service SPID

   Setting this field to 1 administers the ISDN SPID in field 6 as the system service SPID. The service SPID in field 6 can then be used to test any BRI terminal.

Special Error Codes

81 - When the service SPID flag (field 7) is set, fields 1-5 must be dashed.

PROCEDURE 051 WORD 3 — DATA LINE CIRCUIT - LINE PORTS

Purpose

Use Procedure 051 Word 3 to administer the characteristics of a line port on a Data Line Circuit (DLC) board (TN726). The DLC can only be assigned to equipment locations in a universal or XE module cabinet.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a DLC to an equipment location. Assign the DLC as an EIA board (type 7). See the Notes section for the default line port characteristics.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 051, WORD: 3
                    DATA LINE CIRCUIT - LINE PORTS

EQUIPMENT LOCATION                      DATA RATE
   1.  Module: --                         15. 19200 bps: -
   2. Cabinet: -                          16.  9600 bps: -
   3. Carrier: -                          17.  4800 bps: -
   4.    Slot: --                         18.  2400 bps: -
   5. Circuit: --                         19.  1200 bps: -
PERMISSIONS                               20.   300 bps: -
   6. Keyboard Dialing: -                 21. Low Speed: -
   7.    Configuration: -
OPTIONS
   8.          Auto Adjust: -
   9.      Permit Mismatch: -
  10.            Dial Echo: -
  11.          Answer Text: -
  12.  Disconnect Sequence: -
  13. Connected Indication: -
  14.               Parity: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Fields 1-21.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1. Module — 0-30
2. Cabinet — 0
3. Carrier — c-e
4. Slot — 1-20 for universal modules and 1-18 for XE modules
5. Circuit — 0-7

PERMISSIONS (Fields 6-7)

0 Disable
1 Enable

6. Keyboard Dialing — 0-1

   Keyboard dialing gives a data endpoint the ability to send and receive text during call origination or termination. Keyboard dialing should be enabled unless the data endpoint is receive only or the user does not need to setup data calls. Some options require keyboard dialing.

7. Configuration — 0-1

   When configuration is enabled, port options can be examined and changed from the Data Terminal Equipment (DTE). Configuration is typically enabled for an originate/receive DTE such as a CRT and disabled for an intelligent device such as a computer. Enable keyboard dialing if enabling configuration.

OPTIONS (Fields 8-21)

8. Auto Adjust — 0 Disable, 1 Enable

   When the auto adjust option is enabled, the DLC port determines and matches the speed at which the local DTE is transmitting.

   The parity is matched and used only during dialing. If selected, the DTE's parity may be changed according to the far end device, without resetting the DLC's options. All the speeds at which the DTE can operate can be enabled in addition to the auto adjust option. Enable keyboard dialing if enabling auto adjust.

9. Permit Mismatch

0 Disable
1 Enable

The permit mismatch option allows the EIA interface to operate at a higher rate of speed than agreed to during handshaking between the DLC and the far end module. Setting this option sets the DTE at the highest possible speed. The DLC port always selects the highest speed, but the DLC reports the highest speed plus all lower speeds to the far end module during handshaking.

The permit mismatch option should not be used if the DTE can transmit data at a higher speed for a sustained period of time than that of the far end (data may be lost). For example, if the DTE were a PC transmitting files at 1200 bps to a far end device operating at 300 bps, the far-end device would not be able to keep up.

10. Dial Echo

0 Disable
1 Enable

Enabling the dial-echo option allows the DLC to echo characters received during keyboard dialing back to the DTE.

The dial-echo option should be disabled if the DTE is an intelligent device that does not need the visual feedback. Keyboard dialing must also be enabled.

11. Answer Text

0 Disable
1 Enable

Enabling, the answer-text option allows the DTE to receive text feedback (e.g., INCOMING CALL, ANSWERED, etc.) from the DLC and the DEFINITY Generic 2 switch when answering an incoming call or disconnecting a call. The answer-text option should be disabled if the DTE is an intelligent device that does not need the visual feedback. Keyboard dialing must also be enabled.

12. Disconnect Sequence

0 One break greater than two seconds
1 Two breaks within one second

The disconnect sequence option selects the signal to be interpreted as ‘‘DISCONNECTED’’ (on-hook). This allows the user to enter either one break greater than two seconds, or two breaks within one second as the disconnect signal. Enable keyboard dialing if disconnect sequence equals 1.

13. Connected Indication

0 CONNECTED is not sent to DTE
1 CONNECTED is sent to DTE

When enabled, the connected-indication option allows the text ‘‘CONNECTED’’ to be sent to the DTE after a connection has been established. It is useful for connecting computers to Generic 2 when the computer may need the Keyboard Dialing capability but does not want to receive any text after connection. Keyboard dialing must also be enabled.

14. Parity

0 Space
1 Mark
2 Even
3 Odd

Space - The parity bit is set to 0 and parity is not checked.

Mark - The parity bit is set to 1 and parity is not checked.

Even - The parity bit is set to 1 and even parity is checked.

Odd - The parity bit is set to 1 and odd parity is checked.

Parity is generated by the DLC when sending call setup text to the DTE; it is not checked by the DLC when receiving dialing characters.

DATA RATE (Fields 15-21)

0 Disable
1 Enable

15. 19200 bps 0-1

16. 9600 bps 0-1

17. 4800 bps 0-1

18. 2400 bps 0-1

19. 1200 bps 0-1

20. 300 bps 0-1

21. Low Speed 0-1

Low speed is used for special devices (e.g., vision impaired devices) and keyboard dialing cannot be enabled during their use.

Notes

1. The DLC can only be assigned to equipment locations in a universal or XE module cabinet (cannot be assigned to a traditional port, module control, or unduplicated common control cabinet).
2. If there are any ports on a DLC board administered as trunks, line ports cannot be administered on the same board.
3. The DLC board (TN726) is similar to the EIA board (SN238). The most significant differences are:

   — The EIA board has four ports, the DLC board has eight ports.

   — The DLC board has more administrable port characteristics than the EIA board.

   — The EIA board has on-board switches that are used to set or change the port characteristics. The DLC board is given a set of default port characteristics when it is assigned (Procedure 051 Word 1). The default port characteristics can be changed using this procedure (051 Word 3) or from the terminal, if fields 6 and 7 = 1. The default line port characteristics are as follows.

Option	Value	Option	Value
Keyboard Dialing	1	Parity	even
Configuration	1	19200 bps data rate	1
Auto adjust	1	9600 bps data rate	1
Permit mismatch	0	4800 bps data rate	1
Dial echo	1	2400 bps data rate	1
Answer text	1	1200 bps data rate	1
Disconnect sequence	1	300 bps data rate	1
Connected Indication	0	Low data rate	0

Special Error Codes

81 - The equipment location must be EIA type (Procedure 051 Word 1 field 6, terminal type 7).

82 - Enable at least one data rate (fields 15-21).

83 - Enable keyboard dialing (field 6).

84 - Low speed cannot be enabled (field 21) when keyboard dialing is enabled (field 6).

PROCEDURE 052 WORD 1 — MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEAR

Purpose

Use Procedure 052 Word 1 to administer one or more images of a line appearance for a multiappearance voice terminal or data module. This procedure is also used to administer:

— Line type

— Ringing type

— Home terminal

— Originating only

— Send All Calls (SAC) group.

Prerequisite Procedures

The extension (field 8) must be a valid extension in the numbering plan. Use Procedures 350 Word 1 and 354 Word 1 to redefine the numbering plan, if necessary.

Use Procedure 000 Word 1 to assign a class of service to an extension.

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Prime line preference (Procedure 051 Word 1 field 10) must be assigned before a prime line can be assigned.

Maintenance Test Circuit Pack (Procedure 051 Word 1, field 6, encode 8 and 9) button zero is the only valid button in this Procedure for these encodes.

Before an extension can be removed, it must first be removed from all coverage paths using Procedure 011 Word 1.

All one-button-transfer buttons referring to a particular data module must be removed (Procedure 055 Word 2) before its extension can be removed.

Before an equipment location associated with a Dedicated Switch Connection (DSC) can be changed, the DSC assignment must be removed using Procedure 360 Word 1.

Related Procedures

A ringing type of 2 or 3 (field 11) indicates that the abbreviated/delayed ringing function is associated with a line appearance of the extension (field 8) and additional administration is required.

— To assign either automatic or manual transfer of ringing, use Procedure 052 Word 2 field 3.

— To assign a button for manual transfer of ringing, use Procedure 054 Word 1.

— To specify the number of ringing cycles before automatic transfer of ringing, use Procedure 061 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 052, WORD: 1
            MULTIAPPEARANCE TERMINAL/DATA MODULE - LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION              DEVICE ID
   1.  Module: --                           6.     Device Type: -
   2. Cabinet: -                            7. Member (button): --
   3. Carrier: -                         EXTENSION APPEARANCE ID
   4.    Slot: --                           8.       Extension: -----
   5. Circuit: --                           9. Line Appearance: --

10.        Line Type: -
11.     Ringing Type: -
12.    Home Terminal: -
13. Originating Only: -
14.        SAC Group: -

DISPLAY ONLY
  15. Button Type: --



Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7.
Add:	Fields 1-14 (12 optional).
Change:	Fields 10-14.
Remove:	Fields 6-14.
Next Data:	Displays button assignments.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
5.	Circuit	0-23

DEVICE ID (Fields 6-7)

For a straight line set (SLS) or a single channel data module, enter zeros in fields 6 and 7.

6. Device Type
   - 0 Basic set
   - 1 Feature module
   - 2 Coverage module
   - 3 Display module
   - 4 ADFTC/MTCP

7. Member (button) 0-62

   If field 6 = 0, the range for field 7 is 0-62.

   If field 6 = 1, the range for field 7 is 1-24.

   If field 6 = 2, the range for field 7 is 1-20.

   If field 6 = 3, the range for field 7 is 1-7.

   If field 6 = 4, the range for field 7 is 0-1.

   When administering data on a DCP set, member 0 must be administered.

EXTENSION APPEARANCE ID (Fields 8-9)

8. Extension 000-99999

   Extensions used here have automatically been given Bearer Capability COS 0 when they were assigned in Procedure 000 Word 1. Extensions designated for use with data modules in this procedure are then reassigned to Bearer Capability COS 1. The Bearer Capability COS is set in Procedure 014 Words 1 and 2.

9. Line Appearance 1-12

   A line appearance may be shared by no more than 16 terminals. The sharing of a line appearance creates images of that appearance. Use Procedure 052 Word 2 to display images of an appearance (field 15).

   Use line appearance #1 for data modules.

10. Line Type

0 No prime line
1 Prime line
2 Automatic line appearance
3 Prime data line
4 Data appearance

An automatic line appearance (2) cannot be assigned to a straight-line set (SLS). The SLS is terminal type 1 in Procedure 051 Word 1.

For the appearance on a DCP data module, enter 1 in field 10.

Use encodes 3 and 4 for data appearances on BRI voice terminals. You can have only one prime data line appearance (encode 3) on a voice terminal and that appearance must belong to the home terminal (field 12). A second data appearance (encode 4) can be assigned to a BRI voice terminal but that appearance cannot be administered to the home terminal (field 12).

11. Ringing Type

0 No ringing
1 Ringing
2 Delayed ringing
3 Abbreviated ringing

A ringing type must be specified for each assignment, including each image of a line appearance.

Assign abbreviated ringing to the primary terminal and delayed ringing to the secondary terminal.

12. Home Terminal

0 No
1 Yes

13. Originating Only

0 No
1 Yes

If field 13 is changed, all images of the line appearance are changed.

14. SAC Group

0 No
1 Yes

Setting this field to 1 marks the extension in field 8 as being part of a group of extensions used with the Send All Calls attribute of Call Coverage. The ‘‘Send All Calls - group of extensions’’ button is administered in Procedure 054 Word 1.

DISPLAY ONLY (Field 15)

15. Button Type	0	Unassigned
	1	Line appearance (052w1)
	2	Intercom - Manual (056w1)
	3	Intercom - Automatic (056w1)
	4	Intercom - Dial (056w1)
	5	Personal CO line appearance (057w1)
	6	Hold (054w3)
	7	Manual Signaling (053w1)
	8	Manual Exclusion (054w1)
	9	Message Waiting (controlling) (053w2)
	10	Message Waiting (signaled) (053w2)
	11	Ringing Cutoff (054w1)
	12	Ringing Transfer (054w1)
	13	Ringing - Abbreviated and Delayed (052w1, 054w1)
	14-16	Custom calling (054w2)
	18	Automatic Dialing (059w4)
	19	Send All Calls - group of extensions (054w1)
	20	Consult (054w1)
	21	Display features (054w4)
	22	Leave Word Calling - activate (054w1)
	23	Coverage Callback (054w1)
	24	One button transfer/return to voice (055w2)
	25	Abbreviated Dialing - list access (059w3)
	26	ACD features (054w1)
	27	Recall (054w1)
	28	Malicious Call Trace - activate (054w2)
	29	Send All Calls - extension (054w1)
	30	Wait for principal (054w1)
	33	Automatic Message Waiting (063w1)
	34	Terminal Busy Indication (055w1)

Special Error Codes

40 - Lines are not allowed on feature or display module buttons.

50 - If an automatic line appearance is assigned, the terminal must have no originating and no terminating preference (Procedure 051 Word 1 fields 10 and 11).

51 - If extension has an automatic line appearance, field 11 can only be changed from 0 to 1, 1 to 0, 2 to 3, or 3 to 2.

52 - You can administer only one automatic answer image per line appearance.

53 - This terminal can answer only one extension automatically.

54 - An automatic line appearance cannot be originating only.

56 - This equipment location is assigned as a DSC. Remove from Procedure 360 Word 1 before making changes, additions, or deletions.

57 - Automatic Message Waiting (AMW) lamp assignment must be removed from this terminal in Procedure 063 Word 1.

58 - If the Send All Calls group is set to 1 for an extension, an image of line appearance 1 must be assigned to that terminal.

59 - All automatic answer images of an extension must be on same terminal.

81 - Button is already assigned.

82 - Maximum of 16 images per line appearance.

83 - Wrong device ID (fields 6 and 7).

84 - Prime line preference must be assigned to terminal (Procedure 051 Word 1, field 10) before prime line can be assigned.

85 - Only fields 10-14 can be changed.

86 - Only 1 SLS per line.

87 - This extension cannot be an associated extension.

88 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

89 - Data module extensions or extensions in a DSC cannot be bridged.

90 - Remove all one-button-transfer buttons referring to this data module (Procedure 055 Word 2) before removing its extension.

91 - Hot line extensions (Procedure 000 Word 3) cannot have multiple appearances and cannot be bridged.

93 - Extension must be removed from call coverage path in Procedure 011 Word 1.

94 - Leave Word Calling messages must be retrieved before extension can be removed.

96 - This line appearance is already assigned to this terminal.

97 - If home terminal is set to 1 for an extension, an image of line appearance 1 must be assigned to that terminal.

98 - Automatic line appearances must be assigned in sequential order.

PROCEDURE 052 WORD 2 — MULTIAPPEARANCE TERMINAL/DATA MODULE - ABBREVIATE

Purpose

Use Procedure 052 Word 2 to administer the Ringing - Abbreviated and Delayed and Ringing Transfer features for a multiappearance voice terminal or data module. This procedure is also used to specify whether or not a multiappearance voice terminal has an automatic line appearance and whether or not line appearances are being assigned to the home terminal.

Prerequisite Procedures

The extension (field 1) must be a valid extension in the numbering plan. Use Procedures 350 Word 1 and 354 Word 1 to redefine the numbering plan, if necessary.

Use Procedure 000 Word 1 to assign a class of service to an extension.

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Use Procedure 052 Word 1 to administer one or more images of a line appearance to a multiappearance voice terminal or data module.

Related Procedures

If a terminal is assigned manual transfer of ringing (field 3 = 1), use Procedure 054 Word 1 to assign the manual transfer button.

If a terminal is assigned automatic transfer of ringing (field 3 = 2), use Procedure 061 Word 1 to specify the number of ringing cycles before the automatic transfer occurs.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 052, WORD: 2
     MULTIAPPEARANCE TERMINAL/DATA MODULE - ABBREVIATED AND DELAYED RINGING

EXTENSION APPEARANCE ID                  13. Automatic Appearance: -
   1.       Extension: -----             14.        Home Terminal: -
   2. Line Appearance: --                15.       Bridged Images: --

 3.      A/D Ringing: -
 4. Ringing Transfer: -
DISPLAY ONLY
   5. Ringing Type: -
  TERMINAL EQUIPMENT LOCATION
     6.  Module: --
     7. Cabinet: -
     8. Carrier: -
     9.    Slot: --
    10. Circuit: --
  DEVICE ID
    11.     Device Type: -
    12. Member (button): --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Not allowed.
Change:	Fields 3 and 4.
Remove:	Not allowed.
Next Data:	Displays images of the line appearance specified in field 2.

Field Ranges and Encodes

EXTENSION APPEARANCE ID (Fields 1-2)

1. Extension 000-99999
2. Line Appearance 1-12
3. A/D Ringing
   1 Manual
   2 Automatic

   Use Procedure 061 Word 1 to specify the number of ringing cycles before automatic transfer of ringing.

4. Ringing Transfer	0	No ringing transfer
	1	Ringing when active
	2	No ringing when active

DISPLAY ONLY (Fields 5-15)

5. Ringing Type	0	No ringing
	1	Ringing
	2	Delayed ringing
	3	Abbreviated ringing

TERMINAL EQUIPMENT LOCATION (Fields 6-10)

6. Module	0-30
7. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
8. Carrier	0-3 for traditional modules, c-e for universal and XE modules
9. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
10. Circuit	0-23

DEVICE ID (Fields 11-12)

11. Device Type	0	Basic set
	2	Coverage module
	4	ADFTC/MTCP
12. Member (button)	0-62	
	If field 11 = 0, the range for field 12 is 0-62.	
	If field 11 = 2, the range for field 12 is 1-20.	
	If field 11 = 4, the range for field 12 is 0-1.	
13. Automatic Appearance	-	None
	0	No
	1	Yes
	A dash in field 13 means the extension (field 1) has no automatic line appearances. A zero means the line appearance (field 2) is not an automatic appearance.	
14. Home Terminal	0	No
	1	Yes
15. Bridged Images	1-16	

Special Error Codes

81 - Extension must be assigned in Procedure 000 Word 1 and cannot be an associated extension.

82 - Attempted administration of this button does not agree with the button template administered in Procedure 050 Word 2.

PROCEDURE 053 WORD 1 — MULTIAPPEARANCE TERMINAL - MANUAL SIGNALING

Purpose

Use Procedure 053 Word 1 to administer the Manual Signaling feature for multiappearance voice terminals. This feature permits a multiappearance voice terminal user to signal one or more multiappearance voice terminals assigned to the same switch. Any number of terminals may signal the same terminal.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign an equipment location to both the signaling and signaled terminals.

Related Procedures

Use Procedure 056 Word 1 to administer the Intercom-Manual feature.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 053, WORD: 1
                  MULTIAPPEARANCE TERMINAL - MANUAL SIGNALING

SIGNALING TERMINAL                        SIGNALED TERMINAL
  EQUIPMENT LOCATION                        EQUIPMENT LOCATION
     1.  Module: [--]                          8.  Module: [--]
     2. Cabinet: [-]                           9. Cabinet: [-]
     3. Carrier: [-]                          10. Carrier: [-]
     4.    Slot: [--]                         11.    Slot: [--]
     5. Circuit: [--]                         12. Circuit: [--]
  DEVICE ID
     6.     Device Type: [-]
     7. Member (button): [--]

  DISPLAY ONLY (Signaling Terminal)
    13. Button Type: [--]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5, 1-7, or 8-12.
Add:	Fields 1-12.
Change:	Not allowed.
Remove:	Fields 8-12.
Next Data:	Displays the equipment location and button assignments of the signaling terminal or the equipment location of the signaled terminal(s), depending on the information entered.

Field Ranges and Encodes

SIGNALING TERMINAL (Fields 1-7)
EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules

4. Slot — 0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE

   Use slot 0 for the MTCP in a universal module.

5. Circuit — 0-23

DEVICE ID (Fields 6-7)

6. Device Type
   - 0 Basic set
   - 1 Feature module
   - 2 Coverage module
   - 3 Display module
   - 4 ADFTC/MTCP

7. Member (button) — 0-62

   If field 6 = 0, the range for field 7 is 0-62.

   If field 6 = 1, the range for field 7 is 1-24.

   If field 6 = 2, the range for field 7 is 1-20.

   If field 6 = 3, the range for field 7 is 1-7.

   If field 6 = 4, the range for field 7 is 0-1.

SIGNALED TERMINAL (Fields 8-12)
EQUIPMENT LOCATION (Fields 8-12)

8. Module — 0-30
9. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
10. Carrier — 0-3, for traditional modules, c-e for universal and XE modules
11. Slot — 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
12. Circuit — 0-23

DISPLAY ONLY (Signaling Terminal) (Field 13)

13. Button Type

0 Unassigned
1 Line appearance (052w1)
2 Intercom - Manual (056w1)
3 Intercom - Automatic (056w1)
4 Intercom - Dial (056w1)
5 Personal CO line appearance (057w1)
6 Hold (054w3)
7 Manual Signaling (053w1)
8 Manual Exclusion (054w1)
9 Message Waiting (controlling) (053w2)
10 Message Waiting (signaled) (053w2)
11 Ringing Cutoff (054w1)
12 Ringing Transfer (054w1)
13 Ringing - Abbreviated and Delayed (052w1, 054w1)
14-16 Custom calling (054w2)
18 Automatic Dialing (059w4)
19 Send All Calls - group of extensions (054w1)
20 Consult (054w1)
21 Display features (054w4)
22 Leave Word Calling - activate (054w1)
23 Coverage Callback (054w1)
24 One button transfer/return to voice (055w2)
25 Abbreviated Dialing - list access (059w3)
26 ACD features (054w1)
27 Recall (054w1)
28 Malicious Call Trace - activate (054w2)
29 Send All Calls - extension (054w1)
30 Wait for principal (054w1)
33 Automatic Message Waiting (063w1)
34 Terminal Busy Indication (055w1)

Field 13 displays the button type associated with the member (button) in field 7.

Special Error Codes

81 - This button cannot be assigned. The terminal is assigned as a no-button set.

82 - This button is already assigned.

83 - Wrong button type.

84 - The maximum number of manual signaling assignments (17) have been entered for this button.

85 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

PROCEDURE 053 WORD 2 — MULTIAPPEARANCE TERMINAL - MESSAGE WAITING

Purpose

Use Procedure 053 Word 2 to administer the Message Waiting — Manual feature for multiappearance voice terminals. Neither the signaling nor signaled terminal can be a straight line set (SLS).

Prerequisite Procedures

Use Procedure 051 Word 1 to assign an equipment location to the controlling and signaled terminals.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 053, WORD: 2
                  MULTIAPPEARANCE TERMINAL - MESSAGE WAITING

CONTROLLING TERMINAL                    SIGNALED TERMINAL
  EQUIPMENT LOCATION                      EQUIPMENT LOCATION
     1.  Module: --                          9.  Module: --
     2. Cabinet: -                          10. Cabinet: -
     3. Carrier: -                          11. Carrier: -
     4.    Slot: --                         12.    Slot: --
     5. Circuit: --                         13. Circuit: --
  DEVICE ID                               DEVICE ID
     6.     Device Type: -                  14.     Device Type: -
     7. Member (button): --                 15. Member (button): --

  DISPLAY ONLY (Controlling Terminal)
     8. Button Type: --

  DISPLAY ONLY (Signaled Terminal)
    16. Button Type: --


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5, 1-7, 9-13, or 9-15.
Add:	Fields 1-7 and 9-15.
Change:	Not allowed.
Remove:	Fields 8 and 16 (button types) are set to 0 (unassigned).
Next Data:	Displays the equipment location and button assignments of the controlling or signaled terminal, depending on the information entered.

Field Ranges and Encodes

CONTROLLING TERMINAL (Fields 1-8)

EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62	
	If field 6 = 0, the range for field 7 is 0-62.	
	If field 6 = 1, the range for field 7 is 1-24.	
	If field 6 = 2, the range for field 7 is 1-20.	
	If field 6 = 3, the range for field 7 is 1-7.	
	If field 6 = 4, the range for field 7 is 0-1.	

DISPLAY ONLY (Controlling Terminal) (Field 8)

8. Button Type	0	Unassigned
	1	Line appearance (052w1)
	2	Intercom - Manual (056w1)
	3	Intercom - Automatic (056w1)
	4	Intercom - Dial (056w1)
	5	Personal CO line appearance (057w1)
	6	Hold (054w3)

7 Manual Signaling (053w1)
8 Manual Exclusion (054w1)
9 Message Waiting (controlling) (053w2)
10 Message Waiting (signaled) (053w2)
11 Ringing Cutoff (054w1)
12 Ringing Transfer (054w1)
13 Ringing - Abbreviated and Delayed (052w1, 054w1)
14-16 Custom calling (054w2)
18 Automatic Dialing (059w4)
19 Send All Calls - group of extensions (054w1)
20 Consult (054w1)
21 Display features (054w4)
22 Leave Word Calling - activate (054w1)
23 Coverage Callback (054w1)
24 One button transfer/return to voice (055w2)
25 Abbreviated Dialing - list access (059w3)
26 ACD features (054w1)
27 Recall (054w1)
28 Malicious Call Trace - activate (054w2)
29 Send All Calls - extension (054w1)
30 Wait for principal (054w1)
33 Automatic Message Waiting (063w1)
34 Terminal Busy Indication (055w1)

SIGNALED TERMINAL (Fields 9-16)

EQUIPMENT LOCATION (Fields 9-13)

9. Module	0-30
10. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
11. Carrier	0-3 for traditional modules, c-e for universal and XE modules
12. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
13. Circuit	0-23

DEVICE ID (Fields 14-15)

14. Device Type	0 Basic set 1 Feature module 2 Coverage module 3 Display module 4 ADFTC/MTCP

15. Member (button) 0-62

If field 14 = 0, the range for field 15 is 0-62.

If field 14 = 1, the range for field 15 is 1-24.

If field 14 = 2, the range for field 15 is 1-20.

If field 14 = 3, the range for field 15 is 1-7.

If field 14 = 4, the range for field 15 is 0-1.

DISPLAY ONLY (Signaled Terminal) (Field 16)

16. Button Type

0	Unassigned
1	Line appearance (052w1)
2	Intercom - Manual (056w1)
3	Intercom - Automatic (056w1)
4	Intercom - Dial (056w1)
5	Personal CO line appearance (057w1)
6	Hold (054w3)
7	Manual Signaling (053w1)
8	Manual Exclusion (054w1)
9	Message Waiting (controlling) (053w2)
10	Message Waiting (signaled) (053w2)
11	Ringing Cutoff (054w1)
12	Ringing Transfer (054w1)
13	Ringing - Abbreviated and Delayed (052w1, 054w1)
14-16	Custom calling (054w2)
18	Automatic Dialing (059w4)
19	Send All Calls - group of extensions (054w1)
20	Consult (054w1)
21	Display features (054w4)
22	Leave Word Calling - activate (054w1)
23	Coverage Callback (054w1)
24	One button transfer/return to voice (055w2)
25	Abbreviated Dialing - list access (059w3)
26	ACD features (054w1)
27	Recall (054w1)
28	Malicious Call Trace - activate (054w2)
29	Send All Calls - extension (054w1)
30	Wait for principal (054w1)
33	Automatic Message Waiting (063w1)
34	Terminal Busy Indication (055w1)

Notes

1. Only one message waiting signaled button can be assigned per multiappearance voice terminal.

Special Error Codes

81 - Neither the controlling or signaled terminal can be a straight line set (SLS).

82 - This button is already assigned.

83 - Wrong button type.

84 - Only one message waiting signaled button can be assigned per terminal.

85 - Attempted administration of this button does not agree with the button template administered in Procedure 050 Word 2.

PROCEDURE 054 WORD 1 — MULTIAPPEARANCE TERMINAL - MISCELLANEOUS FEATURES

Purpose

Use Procedure 054 Word 1 to administer buttons on a multiappearance voice terminal for the following features and capabilities:

— Automatic Call Distribution (ACD)

— Consult

— Coverage callback

— Leave Word Calling - activate

— Manual exclusion

— Recall

— Ringing Cutoff

— Ringing Transfer

— Ringing - Abbreviated and Delayed

— Send All Calls - extension

— Send All Calls - group of extensions

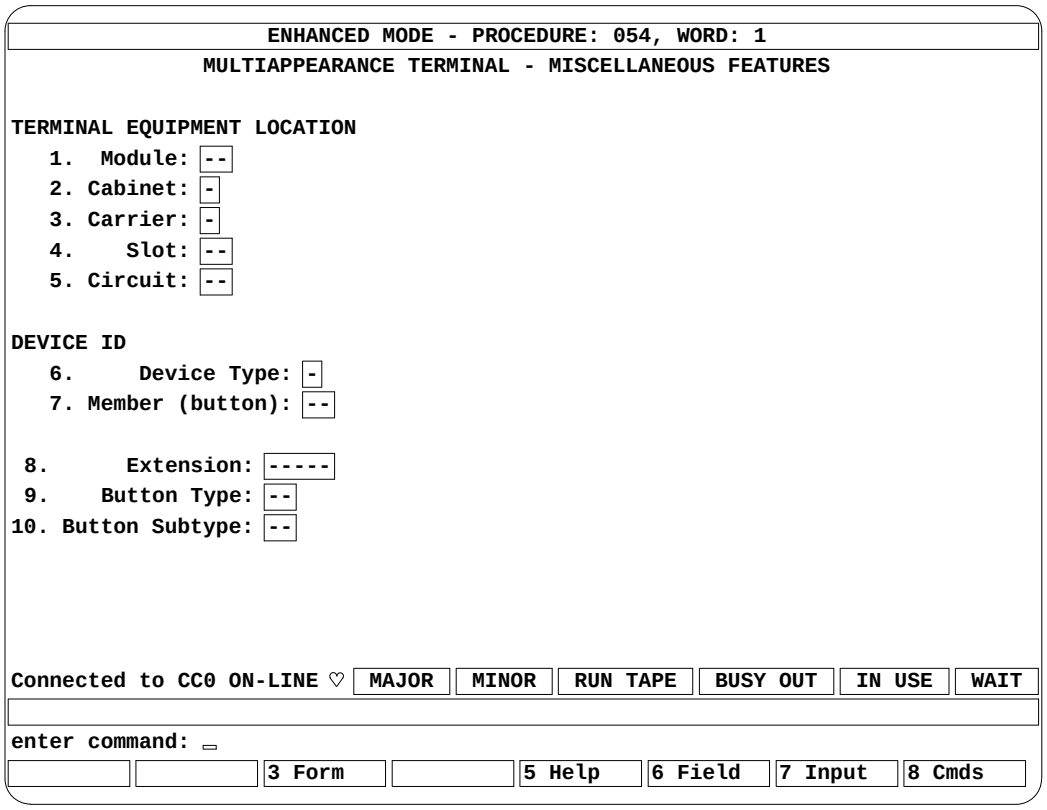
— Wait for principal.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

For button types 8, 12, 13, and 26 with subtypes 2-5, use Procedure 052 Word 1 to associate an extension with an equipment location.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5, fields 1-7, fields 8 and 9, or fields 8-10.
Add:	Fields 1-7, fields 8 and 9 (for button types 8, 12, 13, 29), or fields 8-10 (for button type 26 with subtypes 2-5).
Change:	Fields 8-10 (for button types 8, 12, 13, and 26 with subtypes 2-5). Only the extension (field 8) can be changed.
Remove:	Only after a display routine.
Next Data:	Displays button assignment(s) or equipment location(s), depending on the information entered.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules

4. Slot — 0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE

   Use slot 0 for the MTCP in a universal module.

5. Circuit — 0-23

DEVICE ID (Fields 6-7)

6. Device Type
   - 0 Basic set
   - 1 Feature module
   - 2 Coverage module
   - 3 Display module
   - 4 ADFTC/MTCP

7. Member (button) — 0-62

   If field 6 = 0, the range for field 7 is 0-62.

   If field 6 = 1, the range for field 7 is 1-24.

   If field 6 = 2, the range for field 7 is 1-20.

   If field 6 = 3, the range for field 7 is 1-7.

   If field 6 = 4, the range for field 7 is 0-1.

8. Extension — -, 000-99999

9. Button Type
   - 0 Unassigned
   - 1 Line appearance (052w1)
   - 2 Intercom - Manual (056w1)
   - 3 Intercom - Automatic (056w1)
   - 4 Intercom - Dial (056w1)
   - 5 Personal CO line appearance (057w1)
   - 6 Hold (054w3)
   - 7 Manual Signaling (053w1)
   - 8 Manual Exclusion (054w1)
   - 9 Message Waiting (controlling) (053w2)
   - 10 Message Waiting (signaled) (053w2)
   - 11 Ringing Cutoff (054w1)
   - 12 Ringing Transfer (054w1)
   - 13 Ringing - Abbreviated and Delayed (052w1, 054w1)
   - 14-16 Custom calling (054w2)
   - 18 Automatic Dialing (059w4)
   - 19 Send All Calls - group of extensions (054w1)
   - 20 Consult (054w1)
   - 21 Display features (054w4)
   - 22 Leave Word Calling - activate (054w1)
   - 23 Coverage Callback (054w1)
   - 24 One button transfer/return to voice (055w2)
   - 25 Abbreviated Dialing - list access (059w3)
   - 26 ACD features (054w1)
   - 27 Recall (054w1)

28 Malicious Call Trace - activate (054w2)
29 Send All Calls - extension (054w1)
30 Wait for principal (054w1)
33 Automatic Message Waiting (063w1)
34 Terminal Busy Indication (055w1)

Button types 8, 12, 13, 26 (with subtypes 2-5), and 29 require an extension (field 8). The extension must be associated with an equipment location in Procedure 052 Word 1.

Only one ringing transfer button can be assigned to an extension.

The Ringing - Abbreviated and Delayed button can only be assigned to a multiappearance voice terminal that has a line appearance of the extension (field 8).

Wait for principal (Button Type 30) can only be assigned to a terminal assigned as type 99 (PC/PBX) in Procedure 051 Word 1.

10. Button Subtype

\- Unequipped
1 Release
2 Auto in
3 Manual in
4 Auxiliary work
5 Staff
6 Repeat city of origin
9 Call work codes
10-19 Stroke counts 0 through 9.

Stroke counts are collected by CMS as a tally for situations that may occur when an ACD agent is processing a call. Stroke count 0 (button subtype 0) is reserved for use when agents experience audio difficulties on a call. Stroke counts 1-9 (button subtypes 11-19) can be used for other purposes as defined by CMS. An agent can enter an occurrence for a particular stroke count by pressing that button.

Special Error Codes

81 - Ringing Transfer, Manual Exclusion, and ACD (with subtypes 2-5 and 10-19) can be assigned to only one button per extension.

82 - Enter fields 8 and 9 to display a terminal equipment location(s) assigned to button types 8, 12, and 13. Enter fields 8-10 to display a terminal equipment location(s) assigned to button type 26 with subtypes 2-5.

83 - Wrong button type or subtype.

84 - Button is already assigned.

85 - This button cannot be assigned. The terminal is assigned as a no-button set.

86 - Only one button type 19 may be assigned per terminal.

87 - A wait for principal button can only be assigned to a terminal administered as type 99 (PC/PBX) in Procedure 051 Word 1.

88 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

89 - Only one Call Work Codes button may be assigned per terminal.

PROCEDURE 054 WORD 2 — MULTIAPPEARANCE TERMINAL - CUSTOM CALLING FEATURES

Purpose

Use Procedure 054 Word 2 to administer custom calling buttons for a multiappearance voice terminal.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 054, WORD: 2
              MULTIAPPEARANCE TERMINAL - CUSTOM CALLING FEATURES

TERMINAL EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

DEVICE ID
   6.     Device Type: -
   7. Member (button): --

 8. Custom Calling Button Type: --

DISPLAY ONLY
   9. Button Type: --




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
                           |       |       |          |          |        |      |
enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7.
Add:	Fields 1-8.
Change:	Field 8. The change routine can only be used to change an already assigned custom calling button to a different custom calling button assignment.
Remove:	Fields 6-8.
Next Data:	Displays button assignments.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62	
	If field 6 = 0, the range for field 7 is 0-62.	
	If field 6 = 1, the range for field 7 is 1-24.	
	If field 6 = 2, the range for field 7 is 1-20.	
	If field 6 = 3, the range for field 7 is 1-7.	
	If field 6 = 4, the range for field 7 is 0-1.	

8. Custom Calling Button Type

-	Not a custom calling button
0	Leave Word Calling - cancel
1	Last Number Dialed
2	Priority Calling
3	Call Forwarding - Follow Me
4	Call Forwarding - Busy and Don’t Answer
5	Override
6	Automatic Callback
7	Call Pickup
8	Service observing
9	Malicious Call Trace - emergency

Only one Call Pickup button (custom calling button type 7) can be assigned per terminal.

DISPLAY ONLY (Field 9)

9. Button Type	0	Unassigned
	1	Line appearance (052w1)
	2	Intercom - Manual (056w1)
	3	Intercom - Automatic (056w1)
	4	Intercom - Dial (056w1)
	5	Personal CO line appearance (057w1)
	6	Hold (054w3)
	7	Manual Signaling (053w1)
	8	Manual Exclusion (054w1)
	9	Message Waiting (controlling) (053w2)
	10	Message Waiting (signaled) (053w2)
	11	Ringing Cutoff (054w1)
	12	Ringing Transfer (054w1)
	13	Ringing - Abbreviated and Delayed (052w1, 054w1)
	14-16	Custom calling (054w2)
	18	Automatic Dialing (059w4)
	19	Send All Calls - group of extensions (054w1)
	20	Consult (054w1)
	21	Display features (054w4)
	22	Leave Word Calling - activate (054w1)
	23	Coverage Callback (054w1)
	24	One button transfer/return to voice (055w2)
	25	Abbreviated Dialing - list access (059w3)
	26	ACD features (054w1)
	27	Recall (054w1)
	28	Malicious Call Trace - activate (054w2)
	29	Send All Calls - extension (054w1)
	30	Wait for principal (054w1)
	33	Automatic Message Waiting (063w1)
	34	Terminal Busy Indication (055w1)

Notes

1. A custom calling capability can only be assigned to an unassigned button or a button that is defined as a custom calling button.
2. The following table lists the custom calling button encodes (field 8) and the button type encodes (field 9).

Custom Calling Feature	Field 8 Encode	Field 9 Encode	Number of Lamps Used
Automatic Callback	6	15	1
Call Forwarding-Busy and Don’t Answer	4	16	1
Call Forwarding-Follow Me	3	16	1
Call Pickup	7	14	1

Call Waiting-Originating	2	15	0
Last Number Dialed	1	16	0
Leave Word Calling-Cancel	0	15	0
Malicious Call Trace-Emergency	9	28	1
Override	5	15	0
Service Observing	8	15	1

Special Error Codes

81 - Assignments can only be made to buttons that are unassigned or already assigned as a custom button (field 8 is not dashed).

82 - Only one call pickup button (custom calling button type 7) can be assigned to a terminal.

83 - Wrong button type.

84 - This button cannot be assigned. The terminal is assigned as a no-button set.

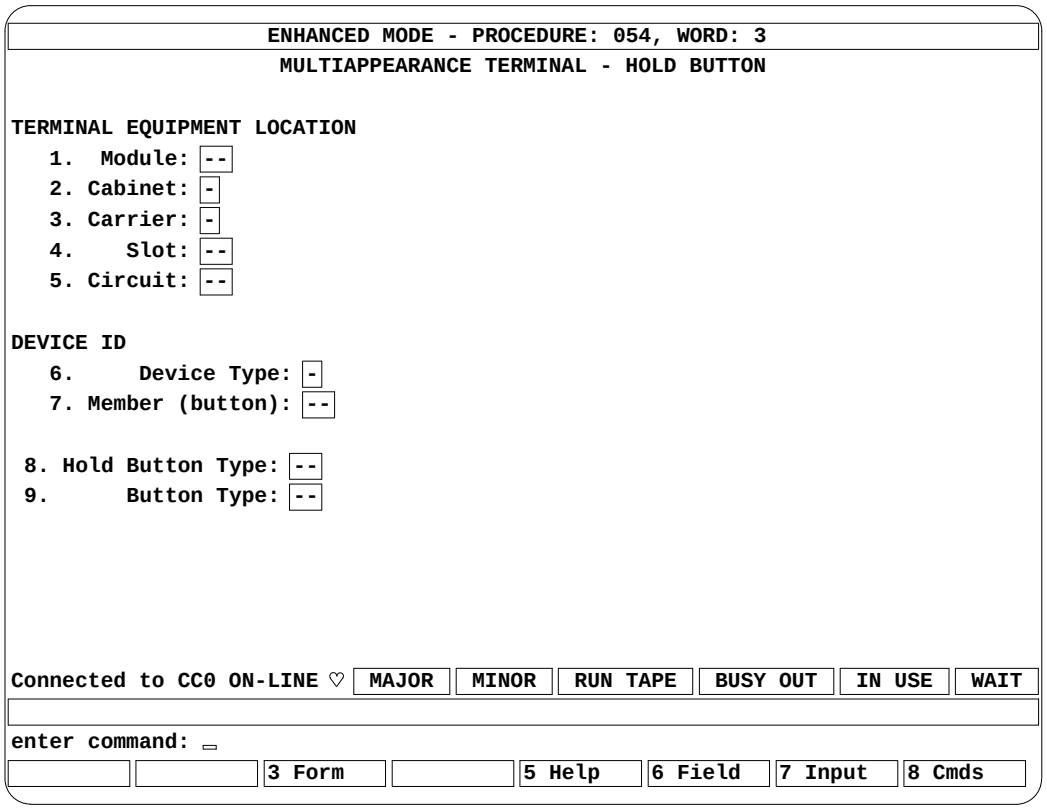
85 - Attempted administration of this button does not agree with the button template administered in Procedure 050 Word 2.

PROCEDURE 054 WORD 3 — MULTIAPPEARANCE TERMINAL - HOLD BUTTON

Purpose

Use Procedure 054 Word 3 to display the Hold feature button assignment for a multiappearance voice terminal. The Hold button is automatically assigned to button number one, and the assignment cannot be changed.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays button assignments.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module — 0-30
2. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
3. Carrier — 0-3 for traditional modules, c-e for universal and XE modules
4. Slot — 0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE

   Use slot 0 for the MTCP in a universal module.
5. Circuit — 0-23

DEVICE ID (Fields 6-7)

6. Device Type
   - 0 Basic set
   - 1 Feature module
   - 2 Coverage module
   - 3 Display module
   - 4 ADFTC/MTCP
7. Member (button) — 0-62

   If field 6 = 0, the range for field 7 is 0-62.

   If field 6 = 1, the range for field 7 is 1-24.

   If field 6 = 2, the range for field 7 is 1-20.

   If field 6 = 3, the range for field 7 is 1-7.

   If field 6 = 4, the range for field 7 is 0-1.
8. Hold Button Type
   - 0 Hold with music
9. Button Type
   - 0 Unassigned
   - 1 Line appearance (052w1)
   - 2 Intercom - Manual (056w1)
   - 3 Intercom - Automatic (056w1)
   - 4 Intercom - Dial (056w1)
   - 5 Personal CO line appearance (057w1)
   - 6 Hold (054w3)
   - 7 Manual Signaling (053w1)
   - 8 Manual Exclusion (054w1)
   - 9 Message Waiting (controlling) (053w2)
   - 10 Message Waiting (signaled) (053w2)
   - 11 Ringing Cutoff (054w1)
   - 12 Ringing Transfer (054w1)
   - 13 Ringing - Abbreviated and Delayed (052w1, 054w1)
   - 14-16 Custom calling (054w2)
   - 18 Automatic Dialing (059w4)
   - 19 Send All Calls - group of extensions (054w1)

20	Consult (054w1)
21	Display features (054w4)
22	Leave Word Calling - activate (054w1)
23	Coverage Callback (054w1)
24	One button transfer/return to voice (055w2)
25	Abbreviated Dialing - list access (059w3)
26	ACD features (054w1)
27	Recall (054w1)
28	Malicious Call Trace - activate (054w2)
29	Send All Calls - extension (054w1)
30	Wait for principal (054w1)
33	Automatic Message Waiting (063w1)
34	Terminal Busy Indication (055w1)

Special Error Codes

None.

PROCEDURE 054 WORD 4 — MULTIAPPEARANCE TERMINAL - DISPLAY BUTTONS

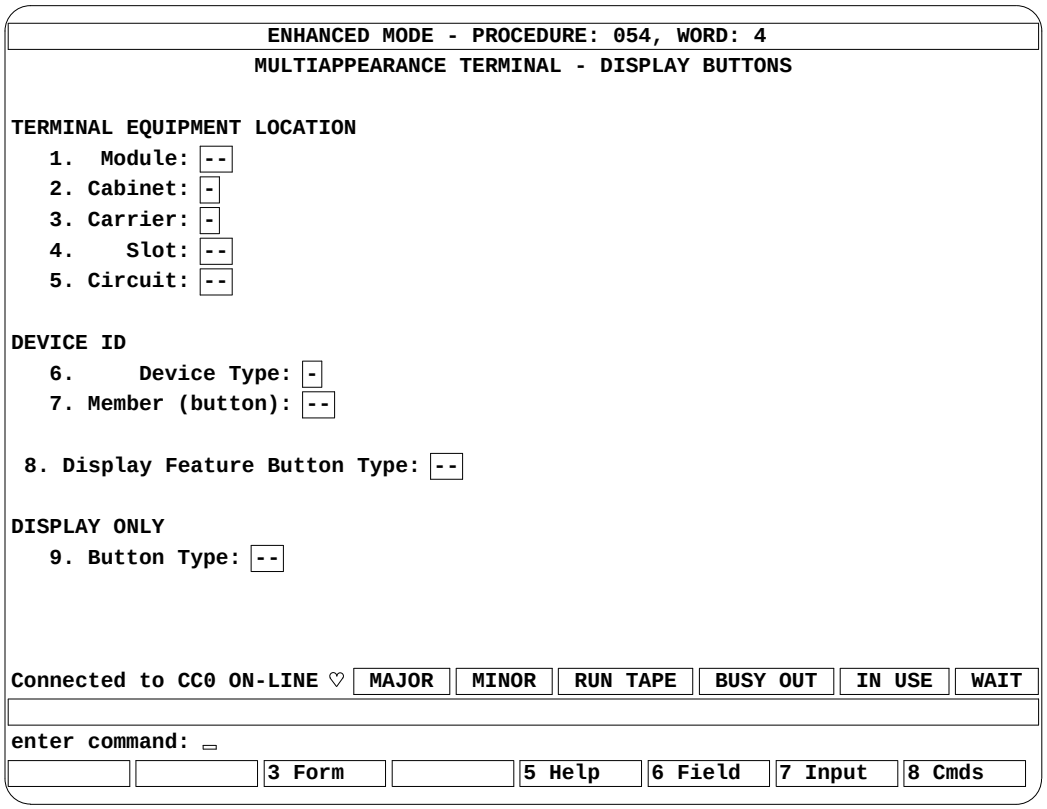
Purpose

Use Procedure 054 Word 4 to administer display buttons for a multiappearance voice terminal.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7.
Add:	Fields 1-8.
Change:	Field 8.
Remove:	Fields 6-8.
Next Data:	Displays button assignments.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62	
	If field 6 = 0, the range for field 7 is 0-62.	
	If field 6 = 1, the range for field 7 is 1-24.	
	If field 6 = 2, the range for field 7 is 1-20.	
	If field 6 = 3, the range for field 7 is 1-7.	
	If field 6 = 4, the range for field 7 is 0-1.	
8. Display Feature Button Type	0	Normal
	1	Inspect
	2	Time of day/date
	3	Message retrieval
	4	Coverage Message retrieval
	5	Step
	6	Delete
	7	Return call
	8	Elapsed time
	9	Scroll

DISPLAY ONLY (Field 9)

9. Button Type	0	Unassigned
	1	Line appearance (052w1)

2 Intercom - Manual (056w1)
3 Intercom - Automatic (056w1)
4 Intercom - Dial (056w1)
5 Personal CO line appearance (057w1)
6 Hold (054w3)
7 Manual Signaling (053w1)
8 Manual Exclusion (054w1)
9 Message Waiting (controlling) (053w2)
10 Message Waiting (signaled) (053w2)
11 Ringing Cutoff (054w1)
12 Ringing Transfer (054w1)
13 Ringing - Abbreviated and Delayed (052w1, 054w1)
14-16 Custom calling (054w2)
18 Automatic Dialing (059w4)
19 Send All Calls - group of extensions (054w1)
20 Consult (054w1)
21 Display features (054w4)
22 Leave Word Calling - activate (054w1)
23 Coverage Callback (054w1)
24 One button transfer/return to voice (055w2)
25 Abbreviated Dialing - list access (059w3)
26 ACD features (054w1)
27 Recall (054w1)
28 Malicious Call Trace - activate (054w2)
29 Send All Calls - extension (054w1)
30 Wait for principal (054w1)
33 Automatic Message Waiting (063w1)
34 Terminal Busy Indication (055w1)

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 055, WORD: 1
                    MULTIAPPEARANCE TERMINAL - TERMINAL BUSY

SIGNALING TERMINAL EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

SIGNALED TERMINAL                          DISPLAY ONLY
  DEVICE ID                                  13. Number of Signaled Terminals: --
     6.     Device Type: -
     7. Member (button): --
  EQUIPMENT LOCATION
     8.  Module: --
     9. Cabinet: -
    10. Carrier: -
    11.    Slot: --
    12. Circuit: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 8-12 or 6-12.
Add:	Fields 1-12.
Change:	Not allowed.
Remove:	Only after a display routine.
Next Data:	Displays the equipment location of the signaling or signaled terminal, depending on the information entered.

Field Ranges and Encodes

SIGNALING TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

SIGNALED TERMINAL (Fields 6-12)
DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62	

If field 6 = 0, the range for field 7 is 0-62.

If field 6 = 1, the range for field 7 is 1-24.

If field 6 = 2, the range for field 7 is 1-20.

If field 6 = 3, the range for field 7 is 1-7.

If field 6 = 4, the range for field 7 is 0-1.

EQUIPMENT LOCATION (Fields 8-12)

8. Module	0-30
9. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
10. Carrier	0-3 for traditional modules, c-e for universal and XE modules
11. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE

Use slot 0 for the MTCP in a universal module.

12. Circuit	0-23

DISPLAY ONLY (Field 13)

13. Number of Signaled Terminals	0-17

Notes

1. Only one signaling terminal can be assigned to a button on a signaled terminal.
2. As terminal busy assignments are added or removed, the number of signaled terminals (field 13) is automatically adjusted.
3. The Terminal Busy Indications feature can only be assigned to unassigned buttons.

Special Error Codes

81 - Terminal busy can only be assigned to an unassigned button.

82 - Terminal busy is not assigned.

83 - This button cannot be assigned. The terminal is assigned as a no-button set.

84 - Button is already assigned.

85 - This is a one-button-transfer button. Remove it in Procedure 055 Word 2.

86 - Attempted administration of this button does not agree with the button template administered in Procedure 050 Word 2.

87 - The maximum number of terminal busy assignments (17) have been entered.

PROCEDURE 055 WORD 2 — MULTIAPPEARANCE TERMINAL - ONE BUTTON TRANSFER/RET

Purpose

Use Procedure 055 Word 2 to administer one button transfer with or without return to voice for a multiappearance voice terminal. This procedure cannot be used to assign a one-button-transfer button to a BRI terminal. BRI terminals have fixed data buttons that are activated when the terminal is given the data option in Procedure 051 Word 1.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Related Procedures

Use Procedure 052 Word 1 to administer multiappearance voice terminal and data module extensions.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 055, WORD: 2
         MULTIAPPEARANCE TERMINAL - ONE BUTTON TRANSFER/RETURN TO VOICE

TERMINAL EQUIPMENT LOCATION             13. With Return: -
   1.  Module: --
   2. Cabinet: -                        DISPLAY ONLY
   3. Carrier: -                          14. Number of Terminals: --
   4.    Slot: --
   5. Circuit: --

DEVICE ID
   6.     Device Type: -
   7. Member (button): --

DATA MODULE EQUIPMENT LOCATION
   8.  Module: --
   9. Cabinet: -
  10. Carrier: -
  11.    Slot: --
  12. Circuit: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7 or 8-12.
Add:	Fields 1-13.
Change:	Not allowed.
Remove:	Only after a display routine.
Next Data:	If a terminal equipment location is entered, next data displays all data button assignments and the associated data module equipment location. If a data module equipment location is entered, next data displays the equipment location of all terminals that can access the data module.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62 If field 6 = 0, the range for field 7 is 0-62. If field 6 = 1, the range for field 7 is 1-24. If field 6 = 2, the range for field 7 is 1-20. If field 6 = 3, the range for field 7 is 1-7. If field 6 = 4, the range for field 7 is 0-1.	

DATA MODULE EQUIPMENT LOCATION (Fields 8-12)

8. Module	0-30
9. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
10. Carrier	0-3 for traditional modules, c-e for universal and XE modules
11. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE

12. Circuit	0-23	
13. With Return	0	Without return to voice
	1	With return to voice

DISPLAY ONLY (Field 14)

14. Number of Terminals	0-99

Notes

1. One-button-transfer buttons cannot be assigned to a BRI terminal.

Special Error Codes

81 - The data module requires an extension (see Procedure 052 Word 1).

82 - Button is already assigned.

83 - No data buttons on this terminal access this data module.

84 - This button does not access this data module.

85 - Neither equipment location can be a BRI terminal.

86 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

PROCEDURE 056 WORD 1 — MULTIAPPEARANCE TERMINAL - INTERCOMS

Purpose

Use Procedure 056 Word 1 to administer the Intercom-Automatic, Intercom-Dial, and Intercom-Manual features for multiappearance voice terminals.

Prerequisite Procedures

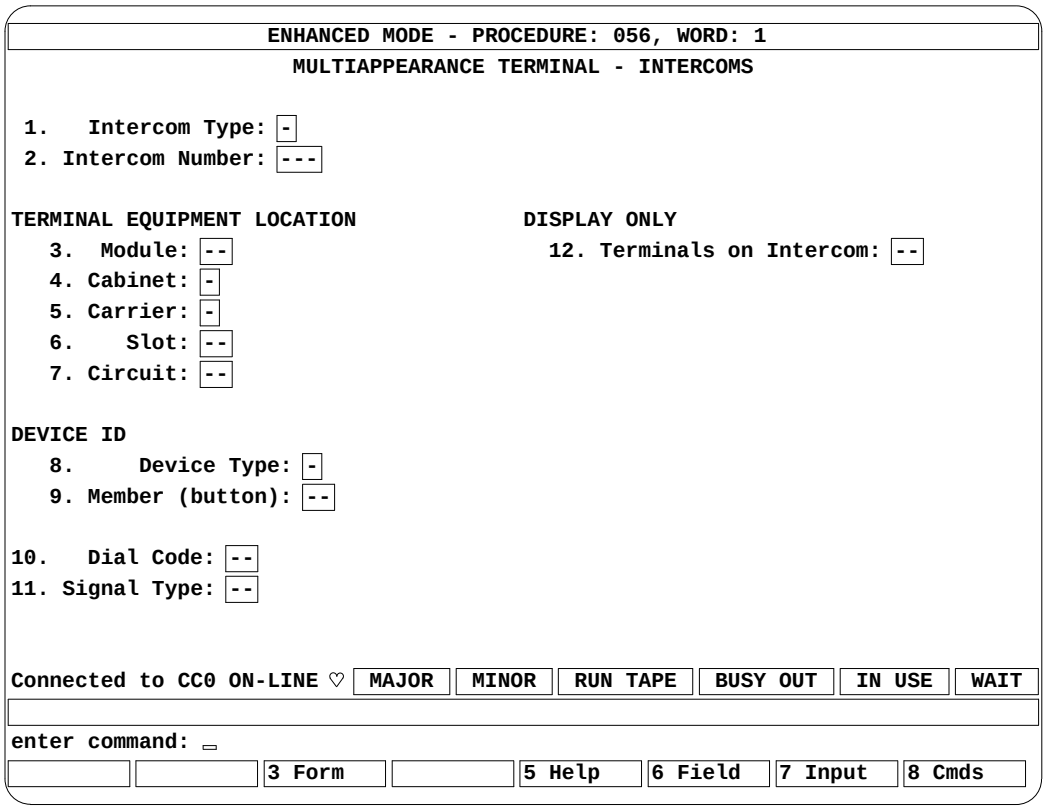
Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Related Procedures

Use Procedure 061 Word 1 to administer the intercom ring rate.

Use Procedure 053 Word 1 to administer the Manual Signaling feature.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2 or 3-7, or 3-9.
Add:	Fields 1-10 (dial intercom). Fields 1-9, and 11 (manual or automatic intercom).
Change:	Not allowed.
Remove:	Only after a display routine.
Next Data:	If an intercom number is entered, next data displays all equipment locations with intercom assignments. If an equipment location is entered, next data displays all intercom assignments and equipment locations.

Field Ranges and Encodes

1. Intercom Type	0	Manual or automatic
	1	Dial
2. Intercom Number	1-280 for dial intercoms, 1-300 for automatic or manual intercoms	

TERMINAL EQUIPMENT LOCATION (Fields 3-7)

3. Module	0-30
4. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
5. Carrier	0-3 for traditional modules, c-e for universal and XE modules
6. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
7. Circuit	0-23

DEVICE ID (Fields 8-9)

8. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
9. Member (button)	0-62	
	If field 8 = 0, the range for field 9 is 0-62.	
	If field 8 = 1, the range for field 9 is 1-24.	
	If field 8 = 2, the range for field 9 is 1-20.	
	If field 8 = 3, the range for field 9 is 1-7.	
	If field 8 = 4, the range for field 9 is 0-1.	

10. Dial Code -, 00-99

Each terminal assigned the Intercom-Dial feature must be assigned a unique dial code. Within an intercom group, a mixture of one-digit and two-digit dial codes is allowed. However, any number used as the first digit of a two-digit code cannot also be used as a one-digit code. Furthermore, no more than two digits can be used as the first digit of a two-digit code. The following is a valid set of dial codes: 0, 1, 3, 4, 6, 7, 8, 9, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59.

11. Signal Type
- - Dial
- 0 Manual
- 1 Automatic

DISPLAY ONLY (Field 12)

12. Terminals on Intercom 0-28

Notes

1. A dial intercom group may consist of up to 28 terminals. A manual and automatic intercom group may consist of up to 16 terminals. No more than two terminals per group may be assigned the Intercom-Automatic feature. Other terminals within the group must be assigned the Intercom-Manual feature.
2. The Intercom-Dial feature can only be assigned to an unassigned button.
3. A terminal cannot have multiple appearances of the same manual and automatic intercoms.
4. When the first automatic intercom appearance is assigned, it appears twice (as the first and second automatic intercom appearances) and signals itself. Also, the number of terminals on the intercom (field 12) increments by two.

Special Error Codes

81 - Only two automatic intercoms are allowed per intercom group (manual and automatic).

82 - Only 16 line appearances of manual and automatic intercoms and 28 line appearances of dial intercoms are allowed.

83 - A maximum of three tens-groups is allowed for intercom dial codes.

84 - A terminal cannot have multiple appearances of the same manual and automatic intercom.

85 - Only multiappearance voice terminals are allowed.

86 - Button is already assigned.

87 - Dial code is already assigned.

88 - Attempted administration of this button does not agree with the button template administered in Procedure 050 Word 2.

89 - Intercoms are not allowed on feature or display module buttons.

PROCEDURE 057 WORD 1 — MULTIAPPEARANCE TERMINAL - PERSONAL CO LINE APPEARA

Purpose

Use Procedure 057 Word 1 to administer a personal central office (CO) line for a multiappearance voice terminal.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign a multiappearance voice terminal to an equipment location.

Use Procedure 116 Word 1 or Procedure 150 Word 1 to assign a trunk to a personal CO line trunk group (types 19, 24, 26, 27).

Related Procedures

Use Procedure 057 Word 2 to search for all terminals that pick up a CO line.

Use Procedure 178 Word 1 to display information about trunks in a trunk group.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 057, WORD: 1
            MULTIAPPEARANCE TERMINAL - PERSONAL CO LINE APPEARANCE

TERMINAL EQUIPMENT LOCATION             TRUNK EQUIPMENT LOCATION
   1.  Module: --                          8.  Module: --
   2. Cabinet: -                           9. Cabinet: -
   3. Carrier: -                          10. Carrier: -
   4.    Slot: --                         11.    Slot: --
   5. Circuit: --                         12. Circuit: --

DEVICE ID                               13. Ringing Type: -
   6.     Device Type: -
   7. Member (button): --

DISPLAY ONLY
  14. Images of this CO Line: --
  15.            Button Type: --




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 1-7.
Add:	Fields 1-13.
Change:	Not allowed.
Remove:	Only after a display routine.
Next Data:	Displays trunk equipment locations.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.
5.	Circuit	0-23

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
7. Member (button)	0-62	

If field 6 = 0, the range for field 7 is 0-62.

If field 6 = 1, the range for field 7 is 1-24.

If field 6 = 2, the range for field 7 is 1-20.

If field 6 = 3, the range for field 7 is 1-7.

If field 6 = 4, the range for field 7 is 0-1.

TRUNK EQUIPMENT LOCATION (Fields 8-12)

8. Module	0-30
9. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
10. Carrier	0-3 for traditional modules, c-e for universal and XE modules
11. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
12. Circuit	0-23

13. Ringing Type	0	No ringing
	1	Ringing

DISPLAY ONLY (Fields 14-15)

14. Images of this CO Line	1-16	
15. Button Type	0	Unassigned
	1	Line appearance (052w1)
	2	Intercom - Manual (056w1)
	3	Intercom - Automatic (056w1)
	4	Intercom - Dial (056w1)
	5	Personal CO line appearance (057w1)
	6	Hold (054w3)
	7	Manual Signaling (053w1)
	8	Manual Exclusion (054w1)
	9	Message Waiting (controlling) (053w2)
	10	Message Waiting (signaled) (053w2)
	11	Ringing Cutoff (054w1)
	12	Ringing Transfer (054w1)
	13	Ringing - Abbreviated and Delayed (052w1, 054w1)
	14-16	Custom calling (054w2)
	18	Automatic Dialing (059w4)
	19	Send All Calls - group of extensions (054w1)
	20	Consult (054w1)
	21	Display features (054w4)
	22	Leave Word Calling - activate (054w1)
	23	Coverage Callback (054w1)
	24	One button transfer/return to voice (055w2)
	25	Abbreviated Dialing - list access (059w3)
	26	ACD features (054w1)
	27	Recall (054w1)
	28	Malicious Call Trace - activate (054w2)
	29	Send All Calls - extension (054w1)
	30	Wait for principal (054w1)
	33	Automatic Message Waiting (063w1)
	34	Terminal Busy Indication (055w1)

Notes

1. A maximum of 16 images per CO line are permitted.
2. A no-button set cannot be assigned to personal CO line.

Special Error Codes

81 - The trunk must be assigned to a trunk group used only for CO line appearance.

83 - Button is already assigned.

84 - Wrong button type.

85 - There is a maximum of 16 images per line appearance.

86 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

87 - Personal CO lines are not allowed on feature or display module buttons.

88 - This line appearance is already assigned to this terminal.

PROCEDURE 057 WORD 2 — MULTIAPPEARANCE TERMINAL - DISPLAY PERSONAL CO LINE

Purpose

Use Procedure 057 Word 2 to display information about the personal central office (CO) lines assigned to a trunk equipment location.

Prerequisite Procedures

Use Procedure 057 Word 1 to assign a trunk (as a personal CO line) to a multiappearance voice terminal.

Related Procedures

Use Procedure 178 Word 1 to display information about the trunks in a trunk group.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 057, WORD: 2
             MULTIAPPEARANCE TERMINAL - DISPLAY PERSONAL CO LINE

TRUNK EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

TERMINAL EQUIPMENT LOCATION
   6.  Module: --
   7. Cabinet: -
   8. Carrier: -
   9.    Slot: --
  10. Circuit: --

DEVICE ID
  11.     Device Type: -
  12. Member (button): --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the CO line pickup assignments.

Field Ranges and Encodes

TRUNK EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	0-23	

TERMINAL EQUIPMENT LOCATION (Fields 6-10)

6. Module	0-30	
7. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
8. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
9. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.	
10. Circuit	0-23	

DEVICE ID (Fields 11-12)

11. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
	4	ADFTC/MTCP
12. Member (button)	0-62	
	If field 11 = 0, the range for field 12 is 0-62.	
	If field 11 = 1, the range for field 12 is 1-24.	
	If field 11 = 2, the range for field 12 is 1-20.	
	If field 11 = 3, the range for field 12 is 1-7.	
	If field 11 = 4, the range for field 12 is 0-1.	

Special Error Codes

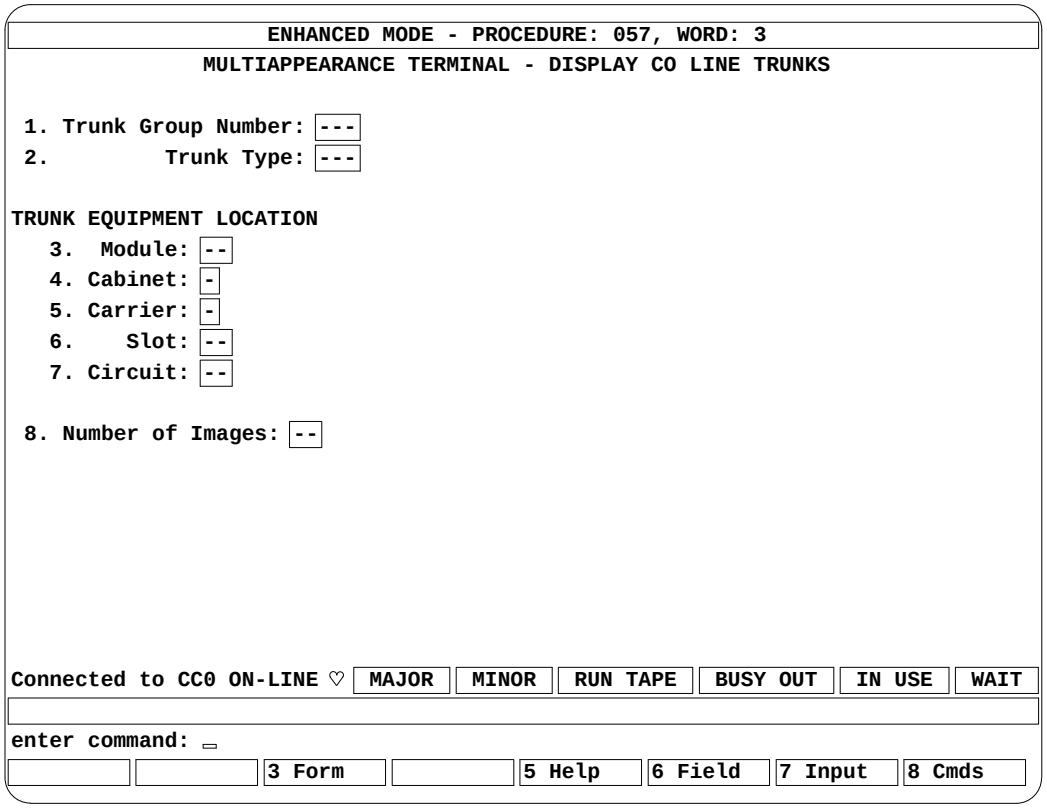
81 - This trunk group is not assigned to a CO line appearance trunk group.

PROCEDURE 057 WORD 3 — MULTIAPPEARANCE TERMINAL - DISPLAY CO LINE TRUNKS

Purpose

Use Procedure 057 Word 3 to display information about the trunks in a personal CO line trunk group.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or none. If no information is entered, the lowest personal CO line trunk group is displayed. If no trunks are assigned to a personal CO line trunk group, dashes are displayed in fields 3 through 8.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all personal CO line trunks and trunk groups.

Field Ranges and Encodes

1.	Trunk Group Number	-, 18-999	
2.	Trunk Type	19	2-way CO, automatic in, DOD
		24	2-way FX, automatic in, DOD
		26	1-way WATS, automatic in
		27	1-way WATS, DOD

TRUNK EQUIPMENT LOCATION (Fields 3-7)

3.	Module	0-30
4.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
5.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
6.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
7.	Circuit	0-23
8.	Number of Images	1-16

Special Error Codes

81 - This trunk group is not assigned to a CO line appearance.

PROCEDURE 058 WORD 1 — MULTIAPPEARANCE TERMINAL SWAP

Purpose

Use Procedure 058 Word 1 to exchange or swap translation data between two multiappearance voice terminals.

Prerequisite Procedures

Both sets must be assigned in Procedure 051 Word 1.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 058, WORD: 1
                    MULTIAPPEARANCE TERMINAL SWAP

TERMINAL A                              TERMINAL B
  EQUIPMENT LOCATION                      EQUIPMENT LOCATION
     1.  Module: --                          8.  Module: --
     2. Cabinet: -                           9. Cabinet: -
     3. Carrier: -                          10. Carrier: -
     4.    Slot: --                         11.    Slot: --
     5. Circuit: --                         12. Circuit: --

  DISPLAY ONLY (Terminal A)
     6. Terminal Type: ---
     7.        Option: --

  DISPLAY ONLY (Terminal B)
    13. Terminal Type: ---
    14.        Option: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 and 8-12.
Add:	Not allowed.
Change:	To swap two terminals, enter fields 1-5 and 8-12, do a display routine, then a change routine.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

TERMINAL A (Fields 1-7)

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

DISPLAY ONLY (Terminal A) (Fields 6-7)

6.	Terminal Type	1	PDM
		2	TDM
		3	Dual Port Data
		5	ADFTC
		7	EIA
		8	MTCP ATMS
		9	MTCP DCP
		10	SLS
		15	10-button MET
		16	20-button MET
		17	30-button MET
		21	7401 PLUS (Model 02A)
		22	7410 PLUS (Model 02A)
		23	7203H
		24	7407 PLUS (Model 03A)
		25	7205H
		26	7406 BIS (Model 05A) -- Integrated Display
		27	7406 BIS (Model 06A)
		28	7406 PLUS (Model 07A) -- Integrated Display
		29	7406 PLUS (Model 08A)
		33	7303S
		35	7305S
		40	7434D
		41	7401D (Model 01A)
		42	7410D (Model 01A)

43 7403D
44 7404D
45 7405D
46 7406D (Models 01A, 03A) -- Integrated Display
47 7407D (Models 01A, 01B, 02C)
48 7444D (Model 01A)
50 7500 BRI
55 7505 BRI
56 7506 BRI
57 7507 BRI
62 CallMaster(TM)
64 7406D (Models 02A, 04A)
91 510 BCT
95 515 BCT
99 PC/PBX
100-200 Undefined terminal type

7. Option

0 Data only
1 Voice only
2 Terminal, feature
3 Terminal, coverage
4 Terminal, feature, coverage
5 Terminal, display
6 Terminal, data
7 Terminal, feature, display
8 Terminal, feature, data
9 Terminal, coverage, data
10 Terminal, display, data
11 Terminal, feature, coverage, data
12 Terminal, feature, display, data

The ‘‘feature’’ option means the terminal has a feature key module.

The ‘‘coverage’’ option means the terminal has a call coverage module.

The ‘‘display’’ option means the terminal has built-in display capabilities or an adjunct display module.

The ‘‘data’’ option means the terminal has built-in data capabilities, a data stand, or digital terminal data module (DTDM).

TERMINAL B (Fields 8-14)
EQUIPMENT LOCATION (Fields 8-12)

8. Module — 0-30

9. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules

10. Carrier — 0-3 for traditional modules, c-e for universal and XE modules

11. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
12. Circuit	0-23

DISPLAY ONLY (Terminal B) (Fields 13-14)

13. Terminal Type	1	PDM
	2	TDM
	3	Dual Port Data
	5	ADFTC
	7	EIA
	8	MTCP ATMS
	9	MTCP DCP
	10	SLS
	15	10-button MET
	16	20-button MET
	17	30-button MET
	21	7401 PLUS (Model 02A)
	22	7410 PLUS (Model 02A)
	23	7203H
	24	7407 PLUS (Model 03A)
	25	7205H
	26	7406 BIS (Model 05A) -- Integrated Display
	27	7406 BIS (Model 06A)
	28	7406 PLUS (Model 07A) -- Integrated Display
	29	7406 PLUS (Model 08A)
	33	7303S
	35	7305S
	40	7434D
	41	7401D (Model 01A)
	42	7410D (Model 01A)
	43	7403D
	44	7404D
	45	7405D
	46	7406D (Models 01A, 03A) -- Integrated Display
	47	7407D (Models 01A, 01B, 02C)
	48	7444D (Model 01A)
	50	7500 BRI
	55	7505 BRI
	56	7506 BRI
	57	7507 BRI
	62	CallMaster(TM)
	64	7406D (Models 02A, 04A)
	91	510 BCT
	95	515 BCT
	99	PC/PBX
	100-200	Undefined terminal type

14. Option

0 Data only
1 Voice only
2 Terminal, feature
3 Terminal, coverage
4 Terminal, feature, coverage
5 Terminal, display
6 Terminal, data
7 Terminal, feature, display
8 Terminal, feature, data
9 Terminal, coverage, data
10 Terminal, display, data
11 Terminal, feature, coverage, data
12 Terminal, feature, display, data

The ‘‘feature’’ option means the terminal has a feature key module.

The ‘‘coverage’’ option means the terminal has a call coverage module.

The ‘‘display’’ option means the terminal has built-in display capabilities or an adjunct display module.

The ‘‘data’’ option means the terminal has built-in data capabilities, a data stand, or digital terminal data module (DTDM).

Notes

1. Terminals assigned to a Dedicated Switch Connection (DSC) cannot be swapped.
2. Only terminals that are comparably equipped should be swapped using this procedure. The following table shows which terminals may be swapped.

Compatibility of Terminal Types

TYPE	72XXH	73XXS	74XXD	510/515	SVT	MET	75XXBRI
72XXH	yes	yes**	yes*	no	no	yes	no
73XXS	yes**	yes	yes**	no	no	yes**	no
74XXD	yes*	yes**	yes	yes	no	yes*	no
510/515	no	no	yes	yes	no	no	no
SVT	no	no	no	no	no	no	no
MET	yes	yes**	yes*	no	no	yes	no
75XXBRI	no	no	no	no	no	no	yes***

* Compatible if neither terminal has a display module or data.

** Compatible if neither terminal has a display module, feature module, coverage module, or data.

*** Compatible if terminal endpoint identifiers (TEI)s remain

unique.

SVT = Single-appearance voice terminal.

3. With the following exceptions, the physical terminals may only be swapped if both are the same series. A 510 BCT, 515 BCT, or PC can be swapped with any 74-series terminal.
4. If the terminals being swapped have a different number of buttons, the terminal that has fewer buttons will not be able to access the extra buttons of the larger terminal.
5. A 510 BCT, 515 BCT, 7404D, or 7407D may only be swapped with another 74-series or BCT terminal.
6. A 72-series terminal cannot be swapped with a 74-series terminal with display or data options.
7. A 73-series terminal can only be swapped with a terminal assigned the voice only option.
8. ISDN BRI terminals can only be swapped with other ISDN BRI terminals and only if the terminal endpoint identifiers (TEI)s remain unique. Furthermore, a terminal being swapped to a location that supports more than one terminal must have this capability as defined in Procedure 050 Word 1.

Special Error Codes

81 - Only multiappearance voice terminals with or without data modules can be swapped.

82 - Incompatible terminal type and option.

83 - BRI terminals do not have the capability to be supported by equipment location configuration.

84 - Cannot swap terminals on DSC (see Procedure 360 Word 1).

85 - BRI terminals can not have the same fixed TEI in the same equipment location configuration.

86 - ISDN Advantage must be administered on a DCP voice set.

87 - ISDN Advantage requires a data module and a display module.

PROCEDURE 059 WORD 1 — ABBREVIATED DIALING - MANAGE LISTS

Purpose

Use Procedure 059 Word 1 to administer the following Abbreviated Dialing capabilities:

— Display and change information about a group list

— Create a group list

— Create list A or list B for a voice and/or data terminal

— Assign a personal list to a terminal

— Assign or deny voice terminal access to the system list

— Remove a group list.

Prerequisite Procedures

Use Procedure 030 Word 1 to remove a group list from Call Vectoring before removing it in this procedure.

Related Procedures

Use Procedure 059 Word 2 to administer Abbreviated Dialing list items.

Use Procedure 275 Word 3 to administer system list access on a system-wide basis.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 059, WORD: 1
                       ABBREVIATED DIALING - MANAGE LISTS

TERMINAL EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.             List Type: -
 7.     Group List Number: ----
 8.             List Size: --
 9. Group List Controller: -
10.    System List Access: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-6 or fields 6 and 7.
Add:	See the add table in the Notes section.
Change:	Fields 1-6 and 8, fields 1-6 and 10, fields 1-7 and 9, or fields 6-8.
Remove:	Fields 6-10.
Next Data:	Displays all terminal equipment locations that access the group list specified in field 7.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1.	Module	-, 0-30
2.	Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	-, 0-23

6. List Type
   - 0 Group list
   - 1 List A access
   - 2 List B access
   - 3 System list access

   A personal list cannot be converted to a group list or vice-versa.

   A group list cannot be removed while it's being shared by terminals.

7. Group List Number -, 1-9999

8. List Size -, 5-95 in increments of 5

9. Group List Controller
   - - Not applicable
   - 0 This terminal is not the controller
   - 1 This terminal is the controller

10. System List Access
    - - Not applicable
    - 0 No access
    - 1 Access

Notes

1. The following table shows input specifications for the add routine.

Purpose	Field					
	1-5	**6**	**7**	**8**	**9**	**10**
To administer group list	-	0	group #	size	-	-
To share terminal to a group list with control	equipment location	1,2	group #	-	1	-
To share terminal to a group list without control	equipment location	1,2	group #	-	0	-
To assign a personal list to a terminal	equipment location	1,2	-	size	-	-
To assign or deny terminal access to system list	equipment location	3	-	-	-	0,1

Special Error Codes

81 - Cannot decrease the size of the list.

82 - This list already exists.

83 - This list does not exist.

85 - Cannot convert a personal list to a group list or vice-versa.

86 - Cannot remove a group list when it is shared by terminals.

91 - This group list already has a controller.

92 - This group list (field 7) is already assigned to this terminal.

96 - Use Procedure 030 Word 1 to remove a group list from Call Vectoring before removing the list.

PROCEDURE 059 WORD 2 — ABBREVIATED DIALING - ADMINISTER LIST ITEMS

Purpose

Use Procedure 059 Word 2 to administer the items in a personal, group, or the system Abbreviated Dialing list.

Related Procedures

Use Procedure 275 Word 3 to administer the size of the system Abbreviated Dialing list and access to the system list on a system-wide basis.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 059, WORD: 2
                  ABBREVIATED DIALING - ADMINISTER LIST ITEMS

TERMINAL EQUIPMENT LOCATION              SEGMENT CHARACTERS
   1.  Module: [--]                        11. Character 1: [--]
   2. Cabinet: [-]                         12. Character 2: [--]
   3. Carrier: [-]                         13. Character 3: [--]
   4.    Slot: [--]                        14. Character 4: [--]
   5. Circuit: [--]

 6.                             List Type: [-]
 7. Group List Number or System List Item: [----]
 8.           Group or Personal List Item: [--]
 9.                               Segment: [-]
10.                        Read/Write Mode: [-]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-6, 8, and 9, fields 6-9, or fields 6, 7, and 9 (10 optional).
Add:	Not allowed.
Change:	Fields 1-14.
Remove:	Removes all segments of a list item.
Next Data:	Displays each segment of field 9, then: if field 10 = 1 or dash, next data displays the next item (fields 7 or 8) in the list, if field 10 = 0, next data displays the same item again. The change and next data routines may be used together to accumulate changes in the scratch-pad table before transferring the changes to the machine-used table. To do this, set the read/write mode (field 10) to 0. Make the required changes and then use next data to access the next segment. To transfer the data to the machine-used table, set the read/write mode to 1 and do a change routine.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	-, 0-30	
2. Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	-, 0-23	
6. List Type	0	Group list
	1	List A
	2	List B
	3	System list
7. Group List Number or System List Item	-, 0-9999 The system list size is administered in Procedure 275 Word 3. The system list item numbering is either 1-9, 00-99, 000-999, or 0000-9999.	
8. Group or Personal List Item	-, 1-95	
9. Segment	1	Characters 1-4
	2	Characters 5-8
	3	Characters 9-12
	4	Characters 13-16
	5	Characters 17-20
10. Read/Write Mode	-	Read/Write - machine-used table
	0	Read/Write - scratch-pad table
	1	Read/Write - machine-used table

Display (read) routine:
-, 1 = Read list item from machine-used table.
0 = Read list item from scratch-pad table.
Change (write) routine:
1 = Write list item to machine-used table.
0 = Write list item to scratch-pad table.

SEGMENT CHARACTERS (Fields 11-14)

0-9	Decimal digits
11	*
12	#
13	Function entry
14	Pause
15	Wait
16	Mark
17	Await dial tone
18	Manual digit entry
19	Suppress display
20	End of dialing

The function entry encode (13) must be followed by a special function encode (14-20). A special function encode must be preceded by the function entry encode. The function entry encode cannot be the last character in a list item.

The manual digit entry encode (18) must be followed by the number digits that will be entered manually (1-15).

11. Character 1	-, 0-9, 11-20
12. Character 2	-, 0-9, 11-20
13. Character 3	-, 0-9, 11-20
14. Character 4	-, 0-9, 11-20

Notes

1. The following table shows the input specifications for fields 1-10.

Purpose	Field					
	1-5	**6**	**7**	**8**	**9**	**10**
To assign group list item	-	0	group #	item #	1-5	-,0,1
To assign personal list item	equipment location	1,2	-	item #	1-5	-,0,1
To assign system list item	-	3	item #	-	1-5	-,0,1

2. The following defines the use of special functions:

— Function entry (13) - This encode is required before any of the following special functions.

— Pause (14) - This suspends dialing for 1.5 seconds. This is typically used after dialing a trunk dial access code (e.g., 9-13-14-2552323).

— Wait (15) - This suspends dialing for up to 10 seconds. This is used when a return dial tone from a distant switch may take this long.

— Mark (16) - This is required before the * or # characters (e.g., 13-16-11).

— Await dial tone (17) - This will suspend dialing until the switch actually receives dial tone from the other location.

— Manual digit entry (18) - This allows the user to manually enter digits at any point in the dialing sequence. It must always be followed by the number of digits expected (1-15). For example, a user might make many calls to people at one location. They can set up the initial digits ''91303538'' with a manual digit entry for a four-digit extension number. This translates into ''9-13-14-1303538-13-18-4''.

— Suppress display (19) - This is used when a security code, such as a password or authorization code, is used in an Abbreviated Dialing list entry and the user also has a display voice terminal. By enclosing the code digits within the suppress display function, the digits of the code are converted to ''s'' on the display, thus hiding the code from unauthorized persons. For example, the code ''5555'' can be suppressed by entering ''13-19-5555-13-19'' as part of the list item.

— End of dialing (20) - This is used to signify that Abbreviated Dialing will send no more digits and the originating register (OR) used for the call can be released. This signifies the same end of dialing as the pound (#) sign. The end of dialing function is recommended for all list items that access trunk facilities on the switch. By using this function, you can save on the holding time of ORs which will allow the switch to operate more efficiently.

3. If equipment in the call path requires special function encodes (encodes 14-20), then administer the telephone number to account for this. For example, some older electro-mechanical equipment cannot handle high-speed digit transmission, so you must put delays in the telephone number segments.

Special Error Codes

81 - This list does not exist.

82 - Cannot operate on a list if not the owner or controller.

83 - The list index exceeds the size of the list.

85 - You entered an illegal character. Function entry must be followed by a special function encode. A special function encode must be preceded by function entry. Function entry is illegal as the last character.

86 - Set field 10 to 1 to bring the list item into scratch-pad.

87 - The character following special function encode 18 is the number of manual digits and must be a number from 1 to 15.

PROCEDURE 059 WORD 3 — ABBREVIATED DIALING - LIST ACCESS AND SPECIAL FUNCTIO

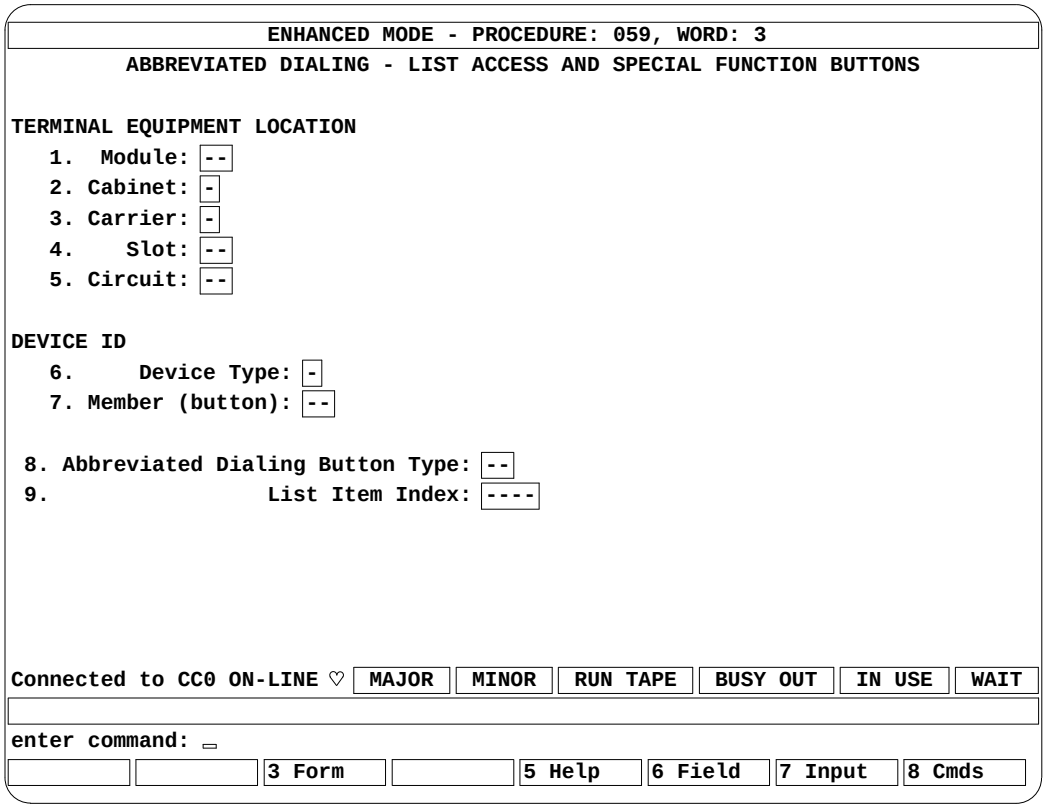
Purpose

Use Procedure 059 Word 3 to administer Abbreviated Dialing program, special function, and list access buttons.

Related Procedures

Use Procedure 059 Word 4 to administer automatic dialing buttons.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5 or fields 1-7.
Add:	Fields 1-8 or fields 1-9.
Change:	Not allowed.
Remove:	Fields 6-9.
Next Data:	Displays abbreviated dialing buttons that are assigned as program, special function, or list access buttons.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
7. Member (button)	0-62	
	If field 6 = 0, the range for field 7 is 0-62.	
	If field 6 = 1, the range for field 7 is 1-24.	
	If field 6 = 2, the range for field 7 is 1-20.	
	If field 6 = 3, the range for field 7 is 1-7.	
8. Abbreviated Dialing Button Type	1	List A item button
	2	List B item button
	3	System list item button
	4	List A access button
	5	List B access button
	6	System list access button
	7	Program button
	13	Function entry
	14	Pause
	15	Wait
	16	Mark
	18	Manual digit entry
	19	Suppress display
	20	End of dialing

The following table shows the recommended number of lamps for each button type.

Button Type	Number of Lamps
List A item button	0
List B item button	0
System list item button	0
List A access button	0
List B access button	0
System list access button	0
Program button	0
Function entry	0
Pause	0
Wait	1
Mark	1
Manual digit entry	0
Suppress display	0
End of dialing	0

9. List Item Index -, 1-9999 for system list, 1-95 for list A or list B

Special Error Codes

81 - The list index exceeds the size of the list.

82 - The equipment location is not assigned to a multiappearance terminal.

83 - This list does not exist.

84 - This is not a special function or a list access button.

88 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

PROCEDURE 059 WORD 4 — ABBREVIATED DIALING - AUTOMATIC DIALING/DEFAULT DIAL

Purpose

Use Procedure 059 Word 4 to administer default dialing for a data terminal or automatic dialing buttons for a multiappearance voice terminal.

Related Procedures

Use Procedure 059 Words 1-3 to administer abbreviated dialing list options.

Use Procedure 059 Words 1-2 to assign/program abbreviated dialing list A item 1. This will be used by BRI default dialing when enabled in word 4.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 059, WORD: 4
        ABBREVIATED DIALING - AUTOMATIC DIALING/DEFAULT DIALING BUTTONS

TERMINAL EQUIPMENT LOCATION              BUTTON ASSIGNMENT
   1.  Module: [--]                        10. Character 1: [--]
   2. Cabinet: [-]                         11. Character 2: [--]
   3. Carrier: [-]                         12. Character 3: [--]
   4.    Slot: [--]                        13. Character 4: [--]
   5. Circuit: [--]

DEVICE ID
   6.     Device Type: [-]
   7. Member (button): [--]

 8.         Segment: [--]
 9. Read/Write Mode: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or fields 1-7.
Add:	Fields 1-7 or fields 1-13.
Change:	Fields 1-13.
Remove:	Fields 6-13.
Next Data:	Displays each segment of field 8, then: if field 9 = 1 or dash, next data displays the next item (fields 6 or 7) in the list, if field 9 = 0, next data displays the same item again. Add or change and next data may be used together to accumulate additions or changes in the scratch-pad table before transferring the additions or changes to the machine-used table. To do this, set the read/write mode (field 9) to 0. Make the required additions or changes and then use next data to access the next segment. To transfer the data to the machine-used table, set the read/write mode to 1 and do an add or change routine.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	0-23	

DEVICE ID (Fields 6-7)

6. Device Type	0	Basic set
	1	Feature module
	2	Coverage module
	3	Display module
7. Member (button)	0-62	
	If field 6 = 0, the range for field 7 is 0-62.	
	If field 6 = 1, the range for field 7 is 1-24.	
	If field 6 = 2, the range for field 7 is 1-20.	
	If field 6 = 3, the range for field 7 is 1-7.	
8. Segment	-	Assign automatic dialing button
	1	Characters 1-4
	2	Characters 5-8
	3	Characters 9-12
	4	Characters 13-16
	5	Characters 17-20

9. Read/Write Mode

- Read/Write - machine-used table
0 Read/Write - scratch-pad table
1 Read/Write - machine-used table

Display (read) routine:

-, 1 = Read list item from machine-used table.

0 = Read list item from scratch-pad table.

Change (write) routine:

1 = Write list item to machine-used table.

0 = Write list item to scratch-pad table.

BUTTON ASSIGNMENT (Fields 10-13)

0-9 Decimal digits
11 *
12 #
13 Function entry
14 Pause
15 Wait
16 Mark
17 Await dial tone
18 Manual digit entry
19 Suppress display
20 End of dialing

The function entry encode (13) must be followed by a special function encode (14-20). A special function encode must be preceded by the function entry encode. The function entry encode cannot be the last character in a list item.

The manual digit entry encode (18) must be followed by the number digits that will be entered manually (1-15).

10. Character 1 -, 0-9, 11-20

11. Character 2 -, 0-9, 11-20

12. Character 3 -, 0-9, 11-20

13. Character 4 -, 0-9, 11-20

Notes

1. Adding a button without characters specified, assigns a button as an automatic dialing button or gives a data terminal access to default dialing. Dash fields 8-13).
2. To assign or display default dialing access for a data terminal, specify the equipment location in fields 1-5, device type (field 6 = 0) and member (field 7 = 0) for single channel, 0-1 for dual channel. To assign/display default dialing characters for BRI terminals, specify personal list A, item 1 in Words 1 and 2. Default dialing characters for DCP terminals are assigned/displayed in word 4 using fields 8-13.

Special Error Codes

81 - Enter a valid multiappearance terminal equipment location (fields 1-5).

82 - Not an automatic dialing button (for voice terminal), or default dialing not assigned (for data or BRI terminal).

83 - Enter segments in increasing sequence.

84 - Illegal character entered. Function entry (13) must be followed by special function encodes (14-20). Function entry is illegal as last character.

85 - The character following special function encode 18 must be a number from 1 to 15.

86 - The equipment location has no data terminal assigned for default dialing.

87 - Fields 8-13 must be dashed to enable default dialing for a BRI terminal. BRI terminals use list A, item 1 to store the default dial telephone number. Use Word 2 to modify list A, item 1.

88 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

PROCEDURE 059 WORD 5 — ABBREVIATED DIALING - DISPLAY CAPACITIES

Purpose

Use Procedure 059 Word 5 to display the remaining capacity for Abbreviated Dialing lists, list items, and automatic dialing buttons. The same area of memory is used for both Abbreviated Dialing list items and automatic dialing buttons. As one decreases, so does the other.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 059, WORD: 5
                    ABBREVIATED DIALING - DISPLAY CAPACITIES

REMAINING CAPACITY
   1.      Automatic Dialing Buttons: ------
   2.      Abbreviated Dialing Lists: -----
   3. Abbreviated Dialing List Items: ------









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

REMAINING CAPACITY (Fields 1-3)

1. Automatic Dialing Buttons — Depends on system configuration.
2. Abbreviated Dialing Lists — Depends on system configuration.
3. Abbreviated Dialing List Items — Depends on system configuration.

Special Error Codes

None.

PROCEDURE 060 WORD 1 — ACD DISPLAY - AGENT ASSIGNMENTS

Purpose

Use Procedure 060 Word 1 to administer the 106B display unit used with the Automatic Call Distribution (ACD) feature. The 106B display unit allows a split supervisor to monitor agent activity of an ACD split. The 106B shows agent status for up to 20 ACD agents. The status of each agent is represented on the display unit by a set of five vertical lamps (3 green, and 2 red, from top to bottom). These lamps represent the following:

a. First (top) lamp is lit - the agent is available to handle an ACD call.

b. Second lamp is lit - the agent is handling an ACD call.

c. Third lamp is lit - the agent is engaged in after-call work.

d. Fourth lamp is lit - the agent is in Auxiliary Work mode.

e. Fifth lamp is lit - the agent is not engaged in work-related activity.

f. All lamps off - the agent's position is in the unstaffed mode.

Related Procedures

Use Procedure 060 Word 2 to pair equipment locations. This is necessary only when more than 10 ACD agents are reporting to a single display unit. However, it is recommended that each display unit is administered with two equipment locations to ensure that all the lamps on the display unit light up when the test button on the display unit is pushed. Otherwise when using the test button, a split supervisor may think the right half of the display unit is inoperable.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 060, WORD: 1
                        ACD DISPLAY - AGENT ASSIGNMENTS

DISPLAY UNIT EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.      Display Column: -
 7. ACD Agent Extension: -----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or field 7.
Add:	Fields 1-7.
Change:	Not allowed.
Remove:	Fields 1-7.
Next Data:	Displays the ACD agent assignments for each display column.

Field Ranges and Encodes

DISPLAY UNIT EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 traditional, 1-20 universal, 1-18 for XE
5.	Circuit	0-23

6.	Display Column	0-9 Each column is associated with an ACD agent. An agent can only be assigned to one 106B display unit.
7.	ACD Agent Extension	000-99999

Notes

1. To determine how the display unit is connected to the switch, refer to *DEFINITY(TM) Communications System Generic 2 and System 85 Installation* (555-105-104).
2. The 106B display unit is added to the system when the first member is assigned. It is removed from the system when the last member is removed.
3. A 106B display unit may require two circuit packs if more than 10 agents are assigned to a display unit. The SN224 (traditional module) and the TN735 (universal or XE module) each have four circuits per pack. If a display unit requires more than one pack, use Procedure 060 Word 2 to pair the equipment locations.

Special Error Codes

81 - Select a different ACD agent. This ACD agent already appears on the display unit.

PROCEDURE 060 WORD 2 — ACD DISPLAY - PAIR ASSIGNMENTS

Purpose

Use Procedure 060 Word 2 to link the right and left halves of a 106B display unit. Use this procedure when more than 10 ACD agents are assigned to the same display unit. It is recommended that each display unit is administered with two equipment locations to ensure that all the lamps on the display unit light up when the test button on the display unit is pushed. Otherwise when using the test button, a split supervisor may think the right half of the display unit is inoperable.

Prerequisite Procedures

Assign the display unit's equipment locations in Procedure 060 Word 1 before assigning the equipment locations in fields 1-5 and 6-10.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 060, WORD: 2
                          ACD DISPLAY - PAIR ASSIGNMENTS

FIRST EQUIPMENT LOCATION FOR LEFT HALF OF DISPLAY UNIT
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

SECOND EQUIPMENT LOCATION FOR RIGHT HALF OF DISPLAY UNIT
   6.  Module: --
   7. Cabinet: -
   8. Carrier: -
   9.    Slot: --
  10. Circuit: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Fields 1-10.
Change:	Not allowed.
Remove:	Fields 1-10.
Next Data:	Not allowed.

Field Ranges and Encodes

FIRST EQUIPMENT LOCATION FOR LEFT HALF OF DISPLAY UNIT (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

SECOND EQUIPMENT LOCATION FOR RIGHT HALF OF DISPLAY UNIT (Fields 6-10)

6.	Module	0-30
7.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
8.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
9.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
10.	Circuit	0-23

Notes

To determine which half of the display unit is connected to the switch, refer to *DEFINITY(TM) Communications System Generic 2 and System 85 Installation* (555-105-104).

Special Error Codes

81 - This equipment location is already paired with another equipment location.

82 - A display-unit equipment location cannot be paired with itself.

PROCEDURE 061 WORD 1 — MULTIAPPEARANCE TERMINAL - INTERCOM RING RATES AND

Purpose

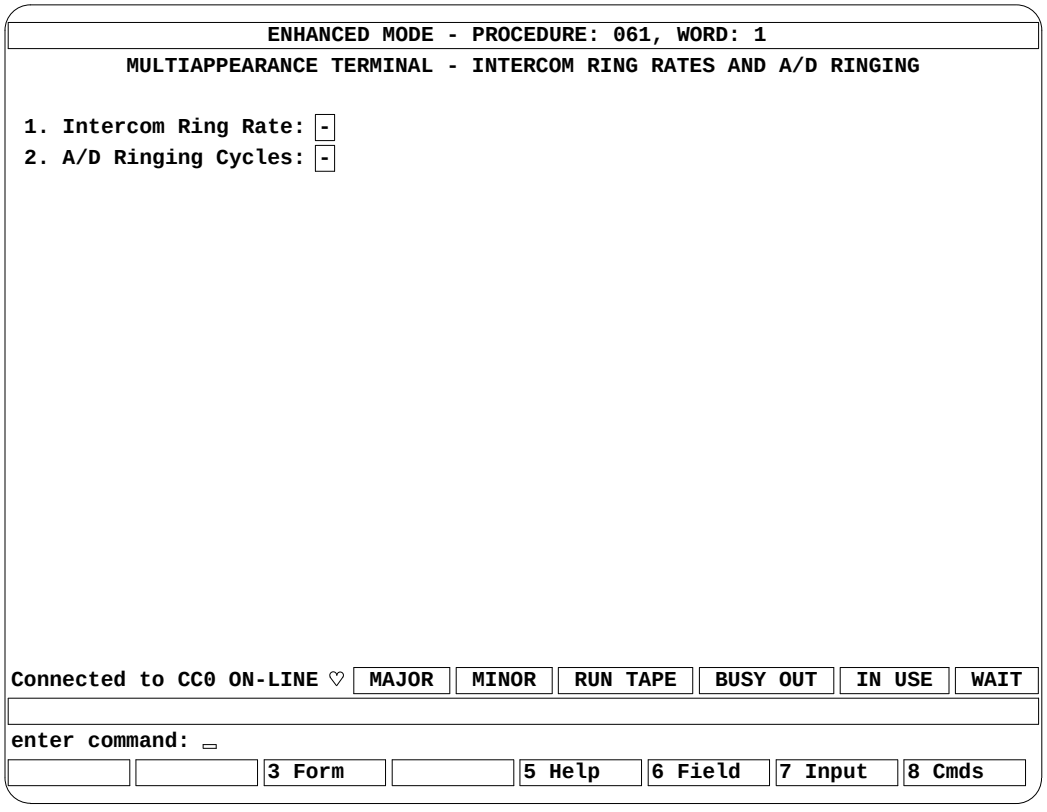
Use Procedure 061 Word 1 to administer intercom ringing rates and abbreviated/delayed ringing cycles for multiappearance voice terminals on a system-wide basis.

Prerequisite Procedures

Use Procedure 056 Word 1 to administer the Intercom features.

Use Procedure 052 Word 2 to administer the Ringing - Abbreviated and Delayed and Ringing Transfer features.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Intercom Ring Rate

0	Ring 1
1	Ring 2
2	Ring 3
3	Ring 4 (Ring-ping)
4	Buzz 1
5	Buzz 2

Ring 1 = 2 seconds of modulated ringing repeated every 5 seconds.

Ring 2 = one short ring, then a 2-second modulated ring. This pattern is repeated every 5 seconds.

Ring 3 = two short rings, then a 2-second modulated ring. This pattern is repeated every 5 seconds.

Ring 4 = one short modulated ring that is not repeated.

Buzz 1 = 1-second unmodulated tone that is repeated every 5 seconds.

Buzz 2 = a short unmodulated tone that is not repeated.

2. A/D Ringing Cycles

0	2 Cycles
1	4 Cycles
2	8 Cycles
3	16 Cycles

Special Error Codes

None.

PROCEDURE 063 WORD 1 — AUTOMATIC MESSAGE WAITING

Purpose

Use Procedure 063 Word 1 to administer Automatic Message Waiting (AMW) lamps.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 063, WORD: 1
                            AUTOMATIC MESSAGE WAITING

 1. Extension: -----

TERMINAL EQUIPMENT LOCATION
   2.  Module: --
   3. Cabinet: -
   4. Carrier: -
   5.    Slot: --
   6. Circuit: --

DEVICE ID
   7.     Device Type: -
   8. Member (button): --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 and fields 2-6, or fields 2-8.
Add:	Fields 1-6 or fields 1-8.
Change:	Not allowed.
Remove:	After display only.
Next Data:	Displays Automatic Message Waiting (AMW) lamp assignments.

Field Ranges and Encodes

1. Extension -, 000-99999

TERMINAL EQUIPMENT LOCATION (Fields 2-6)

2. Module 0-30
3. Cabinet 0-7 for traditional modules, 0 for universal modules
4. Carrier 0-3 for traditional modules, c-e for universal modules
5. Slot 0-3, 5-8, 13-16, 18-21 for traditional modules, 0-20 for universal modules

   Use slot 0 for the MTCP in a universal module.
6. Circuit 0-23

DEVICE ID (Fields 7-8)

A dash may be entered in fields 7 and 8 if fields 2 through 6 specify a single-appearance voice terminal.

7. Device Type
   - -,0 Basic set
   - 1 Feature module
   - 2 Coverage module
   - 3 Display module
   - 4 ADFTC/MTCP
8. Member (button) -, 0-62

   If field 7 = dash or 0, the range for field 8 is 0-62.

   If field 7 = 1, the range for field 8 is 1-24.

   If field 7 = 2, the range for field 8 is 1-20.

   If field 7 = 3, the range for field 8 is 1-7.

   If field 7 = 4, the range for field 8 is 0-1.

   The AMW lamp is usually assigned to button number 2 on multiappearance voice terminals or button 0 on single-appearance voice terminals. An AMW lamp can also be assigned to unassigned, DXS, and nonfixed HOLD buttons.

Special Error Codes

81 - Only three AMW lamp assignments per extension are allowed.

82 - An AMW lamp is already assigned to this extension (field 1) at this equipment location (fields 2-6).

83 - No AMW lamp is assigned.

84 - Associated extensions are not allowed.

85 - This lamp is assigned.

86 - An AMW lamp can only be assigned to an unassigned button.

87 - An extension must be assigned to this terminal.

89 - Attempted administration of this button does not agree with button template administered in Procedure 050 Word 2.

PROCEDURE 063 WORD 2 — AUTOMATIC MESSAGE WAITING

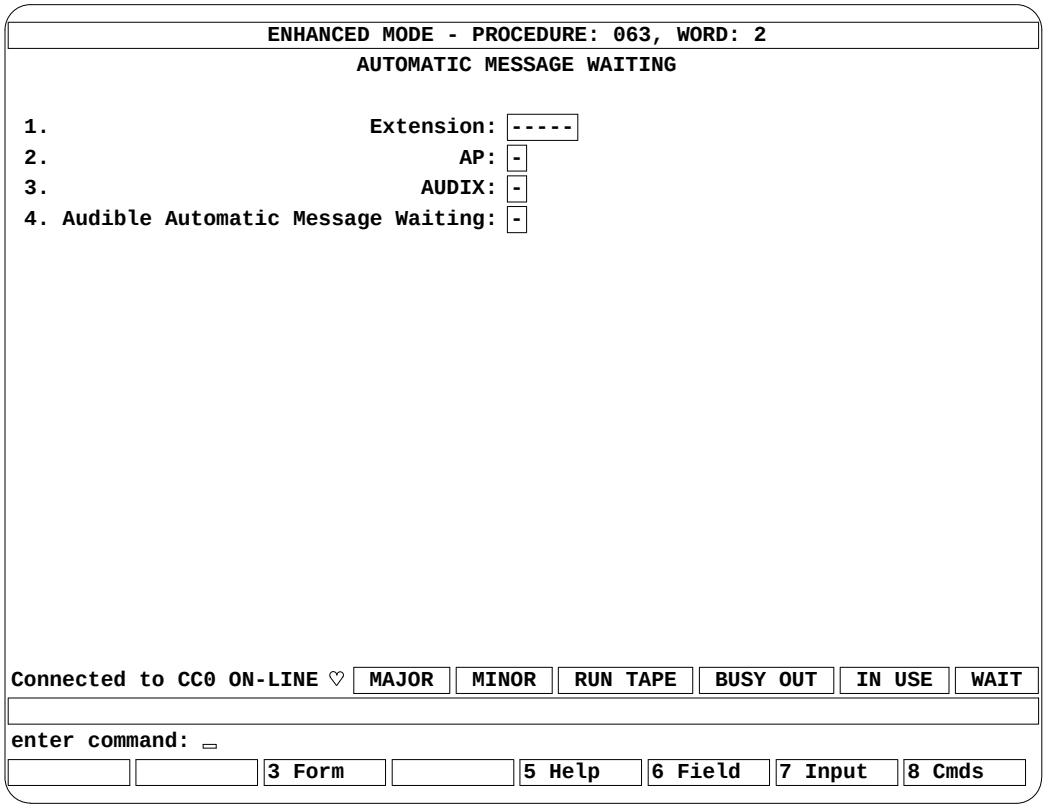
Purpose

Use Procedure 063 Word 2 to display extensions that are assigned Automatic Message Waiting (AMW) lamps, the associated AP or AUDIX machine number, and whether Audible Automatic Message Waiting is assigned.

Prerequisite Procedures

Use Procedure 000 Word 3 to administer Audible Automatic Message Waiting to an extension.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1, 2, or 3.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	If an assigned extension is entered in field 1, next data displays all extensions with Automatic Message Waiting (AMW) lamp assignments. If field 2 or 3 (but not both) is entered (and other fields are dashed), next data displays all extensions that are assigned AMW lamps and are associated with the specified machine number.

Field Ranges and Encodes

1.	Extension	000-99999	
2.	AP	-, 1-7	
3.	AUDIX	-, 1-8	
4.	Audible Automatic Message Waiting	-	Disabled
		1	Enabled

Special Error Codes

81 - Extension is not assigned Automatic Message Waiting (AMW) lamp.

82 - Associated extensions are not allowed.

83 - Either field 2 or 3 may be entered for display, but not both.

PROCEDURE 070 WORD 1 — MULTIAPPEARANCE TERMINAL ID/PERIPHERALS

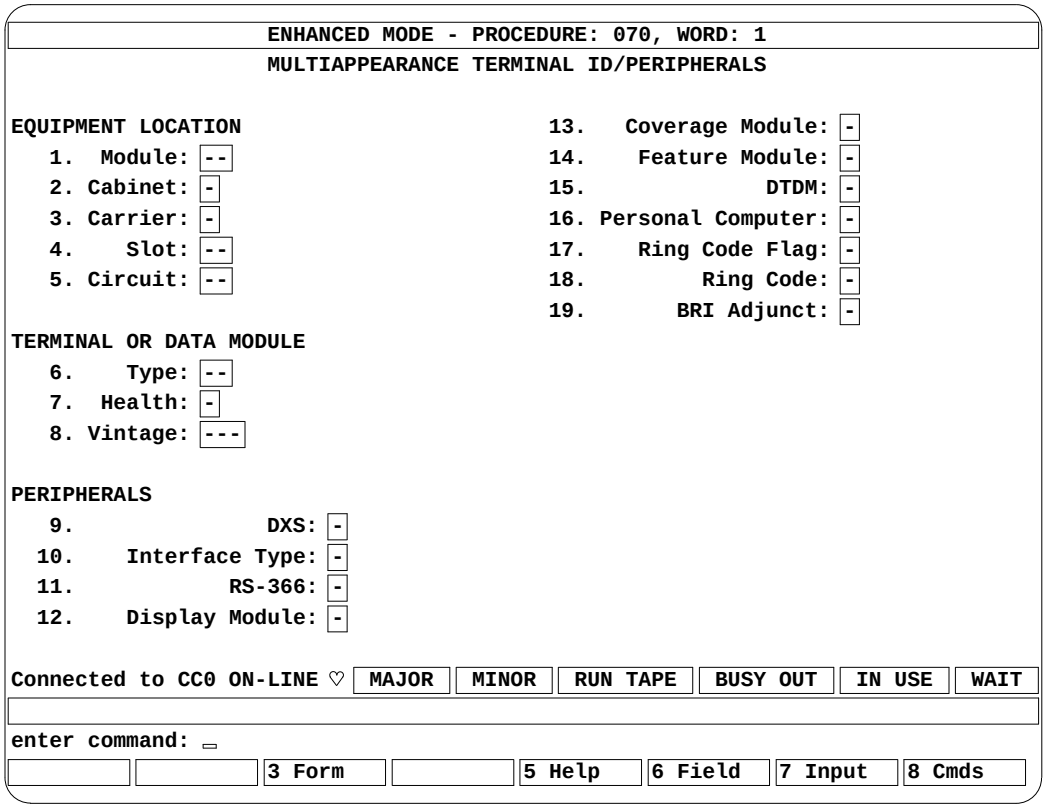
Purpose

Use Procedure 070 Word 1 to display information about multiappearance voice terminal and data module equipment. This information includes the set type, state of health, equipment vintage, and any peripherals attached to the terminal. This procedure only displays information administered in the 050-series of procedures or queried from the terminal.

Related Procedures

Use Procedure 070 Words 2-5 to display other information about multiappearance voice terminals and data modules.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the next assigned circuit or DTDM associated with a multiappearance terminal.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE Use slot 0 for the MTCP in a universal module.	
5. Circuit	0-23	

TERMINAL OR DATA MODULE (Fields 6-8)

6. Type	0	Non-standard terminal
	1	7403D
	2	7405D
	3	510 BCT
	4	7407D or 7407 PLUS
	5	7406D, 7406 BIS or 7406 PLUS
	7	7410D or 7410 PLUS
	9	PDM
	12	EIA port
	13	DTDM
	15	Dual Port Data
	16	TDM
	18	7444D
	22	ADFTC (digital) or MTCP DCP
	23	ADFTC (analog) or MTCP ATMS
	25	EIA
	32	72-series
	33	73-series
	35	CallMaster(TM)
	37	515 BCT
	46	7404D
	47	7401D or 7401 PLUS
	50	7500 BRI Data Module
	52	7434D

	56	3270C Data Module
	57	3270A or 3270T Data Module
	65	7505 BRI VOM
	66	7506 BRI VOM
	67	7507 BRI VOM
	75	7505 BRI ADM
	76	7506 BRI ADM
	77	7507 BRI ADM

A DTDM has the same equipment location as its associated 74-series terminal, but with a type of 13.

7. Health	0	Test passed or not done
	1	Test failed

The health is based on the results of an automatic self-test and only applies when field 6 is 9, 13 or 16.

8. Vintage 0-255

The terminal or data module vintage further identifies the model of a manufacturer's terminal.

PERIPHERALS (Fields 9-19)

9. DXS	-	Not available
	0	Absent
	1	Present
10. Interface Type	-	None
	0	RS-232-C
	1	V.35
	2	RS-449
11. RS-366	-	Not available
	0	Absent
	1	Present
12. Display Module	-	Not available
	0	Absent
	1	Present
13. Coverage Module	-	Not available
	0	Absent
	1	Present
14. Feature Module	-	Not available
	0	Absent
	1	Present
15. DTDM	-	Not available
	0	Absent
	1	Present

16. Personal Computer	-	Not available
	0	Absent
	1	Present

17. Ring Code Flag -, 0-1

When set to 0, personalized ringing is set at the voice terminal at power-up. When set to 1, personalized ringing is set by the voice terminal user.

18. Ring Code -, 0-7

The personalized ringing patterns are assigned at the voice terminal. Patterns 1-8 available on a voice terminal correspond with patterns 0-7 in this procedure.

19. BRI Adjunct	-	Not Available
	0	Absent
	1	Present

Special Error Codes

81 - Enter a valid multiappearance terminal equipment location in fields 1-5.

82 - The query failed because of a maintenance conflict.

83 - The query failed because of an unsuccessful scanner request.

84 - The query failed because of a scanner delay or disconnected or maintenance busied equipment.

85 - The query failed because this terminal does not accept management information messages (MIMs).

PROCEDURE 070 WORD 2 — DATA MODULE TRANSMISSION SETTINGS

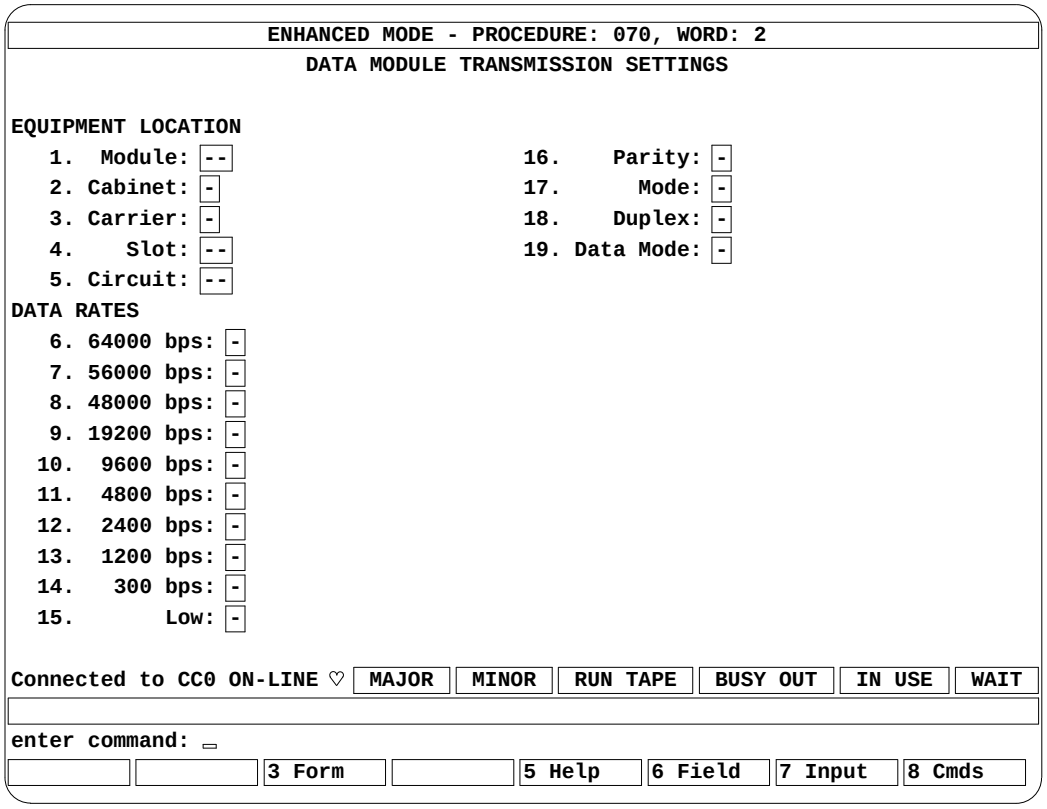
Purpose

Use Procedure 070 Word 2 to display data transmission settings for data modules as set by switches on the data module or as queried on the firmware of the data module. This procedure only displays information about data modules administered in the 050-series of procedures.

Related Procedures

Use Procedure 070 Words 1, 3, and 5 to display other information about these multiappearance voice terminals and data modules.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30	
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
5. Circuit	0-23	

DATA RATES (Fields 6-15)

0	Disabled
1	Enabled

6. 64000 bps	0-1	
7. 56000 bps	0-1	
8. 48000 bps	0-1	
9. 19200 bps	0-1	
10. 9600 bps	0-1	
11. 4800 bps	0-1	
12. 2400 bps	0-1	
13. 1200 bps	0-1	
14. 300 bps	0-1	
15. Low	0-1	
16. Parity	0	Zero parity
	1	One parity
	2	Even parity
	3	Odd parity
17. Mode	0	Asynchronous
	1	Synchronous
18. Duplex	0	Full duplex
	1	Half duplex

19. Data Mode	-	Unsupported data mode
	0	Mode 0
	1	Mode 1
	2	Mode 2
	3	Mode 3

BRI terminals only operate in modes 1 or 2 for Generic 2.

Special Error Codes

81 - Enter a valid data module equipment location in fields 1-5.

82 - The query failed because of a maintenance conflict.

83 - The query failed because of an unsuccessful scanner request.

84 - The query failed because of a scanner delay or disconnected or maintenance busied equipment.

85 - The query failed because this data module does not accept management information messages (MIMs).

86 - This BRI terminal is translated as a voice only terminal and it does not respond to the specific MIM(s) sent by this word.

PROCEDURE 070 WORD 3 — DATA MODULE EMULATION SETTINGS

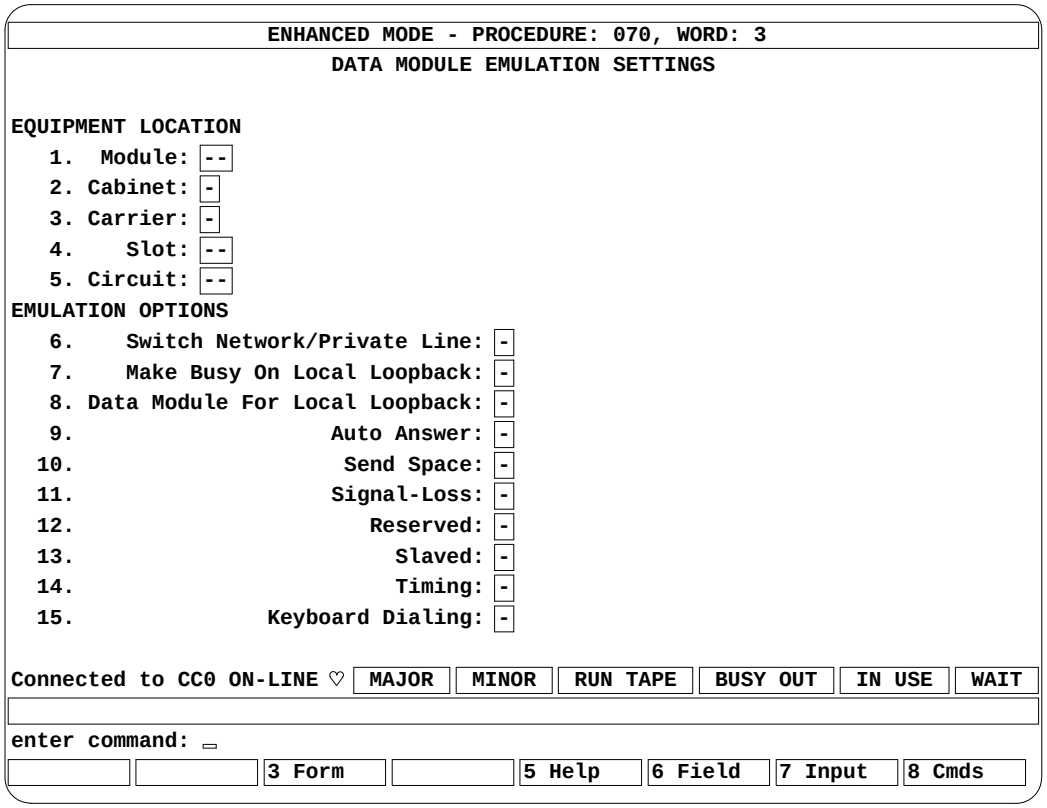
Purpose

Use Procedure 070 Word 3 to display data module emulation settings as queried by the switch. This procedure only displays information about data modules administered in the 050-series of procedures.

Related Procedures

Use Procedure 070 Words 1, 2, 4, and 5 to display other information about these multiappearance voice terminals and data modules.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

EMULATION OPTIONS (Fields 6-15)

6.	Switch Network/Private Line	0 1	Switch Network Private line
7.	Make Busy On Local Loopback	0 1	Disabled Enabled
8.	Data Module For Local Loopback	0 1	Disabled Enabled
9.	Auto Answer	0 1	Disabled Enabled
10.	Send Space	0 1	Disabled Enabled
11.	Signal-Loss	0 1	Disabled Enabled
12.	Reserved	0 1	Disabled Enabled
13.	Slaved	0 1	Unslaved Slaved
14.	Timing	0 1	Internal External
15.	Keyboard Dialing	0 1	Disabled Enabled

Special Error Codes

81 - Enter a valid data module equipment location in fields 1-5.

82 - The query failed because of a maintenance conflict.

83 - The query failed because of an unsuccessful scanner request.

84 - The query failed because of a scanner delay or disconnected or maintenance busied equipment.

85 - The query failed because this data module does not accept management information messages (MIMs).

86 - This BRI terminal is translated as a voice only terminal and it does not respond to the specific MIM(s) sent by this word.

PROCEDURE 070 WORD 4 — DATA MODULE EIA LEAD STATUS

Purpose

Use Procedure 070 Word 4 to display the status of the EIA interface leads on a data module. This procedure only displays information about data modules administered in the 050-series of procedures.

Related Procedures

Use Procedure 070 Words 1-3 and 5 to display other information about these multiappearance voice terminals and data modules.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 070, WORD: 4
                      DATA MODULE EIA LEAD STATUS

EQUIPMENT LOCATION                        15.       Data Set Ready: -
   1.  Module: --                         16.       Ring Indicator: -
   2. Cabinet: -                          17. Speed Mode Indicator: -
   3. Carrier: -                          18.            Test Mode: -
   4.    Slot: --                         19.       Signal Quality: -
   5. Circuit: --                         20.       Select Standby: -
                                          21.    Standby Indicator: -
EIA LEADS
   6.               Request to Send: -
   7.               Data Term Ready: -
   8.               Remote Loopback: -
   9.                Local Loopback: -
  10.                  Speed Select: -
  11.           Terminal In Service: -
  12.                    New Signal: -
  13.                 Clear to Send: -
  14. Received Line Signal Detector: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

EIA LEADS (Fields 6-21)

0 Off
1 On

6.	Request to Send	0-1
7.	Data Term Ready	0-1
8.	Remote Loopback	0-1
9.	Local Loopback	0-1
10.	Speed Select	0-1
11.	Terminal In Service	0-1
12.	New Signal	0-1
13.	Clear to Send	0-1
14.	Received Line Signal Detector	0-1
15.	Data Set Ready	0-1
16.	Ring Indicator	0-1
17.	Speed Mode Indicator	0-1
18.	Test Mode	0-1
19.	Signal Quality	0-1
20.	Select Standby	0-1
21.	Standby Indicator	0-1

Notes

1. Fields 11, 12, and 19-21 are meaningful for interface type RS-449 only.
2. This word is not implemented for the EIA board (TN726) and the ISDN/BRI board (TN556).

Special Error Codes

81 - Enter a valid data module equipment location in fields 1-5.

82 - The query failed because of a maintenance conflict.

83 - The query failed because of an unsuccessful scanner request.

84 - The query failed because of a scanner delay or disconnected or maintenance busied equipment. This word is not implemented for the data line circuit (TN726) and the ISDN/BRI board (TN556).

85 - The query failed because this data module does not accept management information messages (MIMs).

86 - This BRI terminal is translated as a voice only terminal and it does not respond to the specific MIM(s) sent by this word.

PROCEDURE 070 WORD 5 — BRI TERMINAL VENDOR AND SPID REQUEST

Purpose

Use Procedure 070 Word 5 to display the vendor ID of a terminal and the ISDN service profile identifier (SPID) assigned at a BRI terminal. This procedure only displays information about terminals administered in the 050-series of procedures.

Related Procedures

Use Procedure 070 Words 1-4 to display other information about these multiappearance voice terminals and data modules.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 070, WORD: 5
                      BRI TERMINAL VENDOR AND SPID REQUEST

TERMINAL EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6. Terminal Vendor: -----
 7.   Terminal SPID: ----------

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

TERMINAL EQUIPMENT LOCATION (Fields 1-5)

1. Module	0-30
2. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3. Carrier	0-3 for traditional modules, c-e for universal and XE modules
4. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5. Circuit	0-23
6. Terminal Vendor	0-65535
7. Terminal SPID	0-9999999999
	The SPID is administered in Procedure 051 Word 2 and assigned through button pushes at the BRI terminal. The SPID displyed here is obtained by the switch querying the terminal.

Special Error Codes

81 - Enter a valid BRI equipment location in fields 1-5.

82 - The query failed because of a maintenance conflict.

83 - The query failed because of an unsuccessful scanner request.

84 - The query failed because of a scanner delay or disconnected or maintenance busied equipment.

85 - The query failed because this BRI terminal does not accept management information messages (MIMs).

PROCEDURE 075 WORD 1 — EXTENSION-RELATED SEARCHES

Purpose

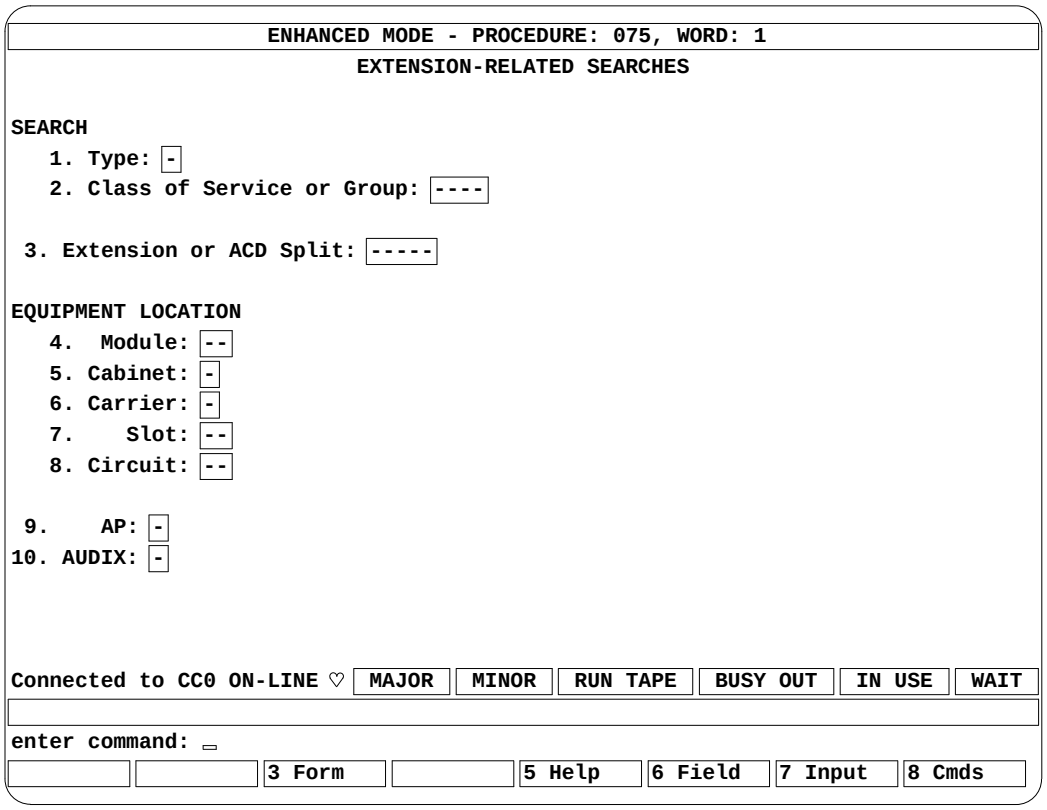
Use Procedure 075 Word 1 to display extensions and equipment locations assigned to a class of service (COS), Call Pickup group, Attendant Control of Voice Terminals restriction group, Call Coverage group, or Bearer Capability Class of Service.

Related Procedures

Use Procedure 000 Words 1, 2, and 3 to assign extensions to classes of service, Call Pickup groups, Call Coverage groups, attendant controlled restriction groups, and Bearer Capability classes of service.

Use Procedure 011 Word 1 to assign coverage points in a Call Coverage path.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2 (types 1-5 and 8) or fields 1 and 3 (types 6 and 7).
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next Data:	Displays all requested assignments.

Field Ranges and Encodes

SEARCH (Fields 1-2)

1. Type

1	Extension for class of service (000 Word 1)
2	Extension for Call Pickup group (000 Word 2)
3	Extension controlled by attendant (000 Word 2)
4	Principal for coverage group (000 Word 2)
5	Coverage points for coverage group (011 Word 1)
6	Coverage groups for coverage point extension (011 Word 1)
7	Coverage groups for coverage point ACD split or VDN (011 Word 1)
8	Extension for Bearer Capability class of service (000 Word 3)

Encode types 5 and 6 display dashes when the ACD split or VDN is a coverage point.

When the Call Vectoring feature is enabled, type 7 searches for Call Coverage groups containing the given VDN.

2. Class of Service or Group — -, 1-9999

   Enter 1-63 for COS, 1-999 for Call Pickup groups, 1-63 for Attendant Control of Voice Terminal groups, 1-4096 for Call Coverage groups, and 0-255 for Bearer Capability Class of Service.

3. Extension or ACD Split — -, 000-99999 for extensions or VDNs, 1-60 for ACD splits

EQUIPMENT LOCATION (Fields 4-8)

4. Module — -, 0-30
5. Cabinet — -, 0-7 for traditional modules, 0 for universal and XE modules
6. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
7. Slot — -, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
8. Circuit — -, 0-23
9. AP — -, 0-7
10. AUDIX — -, 0-8

Notes

1. If the extension and equipment location fields are dashed for a given COS, the COS number is unassigned.
2. For multiappearance terminals, the equipment location fields display dashes.

Special Error Codes

81 - Type 7 requires a VDN in field 3 when Call Vectoring is enabled.

82 - You cannot enter a VDN in field 3 when doing a type 6 search.

PROCEDURE 075 WORD 2 — TRUNK GROUP-RELATED SEARCHES

Purpose

Use Procedure 075 Word 2 to display trunk groups and pattern/preferences assigned to a bearer capability class of service or index.

Related Procedures

Use Procedure 014 Words 1 and 2 to administer bearer capability class of service attributes.

Use Procedure 100 Word 2 to assign a bearer capability class of service to a trunk group.

Use Procedure 318 to assign a bearer capability class of service or an index to a pattern/preference.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 075, WORD: 2
                      TRUNK GROUP-RELATED SEARCHES

SEARCH
   1.                      Type: -
   2.              Display Type: -
   3. Class of Service or Index: ----

 4. Trunk Group: ---
 5.     Pattern: ---
 6.  Preference: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-3.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next Data:	Displays all trunk groups or pattern/preferences assigned to a bearer capability class of service or index.

Field Ranges and Encodes

SEARCH (Fields 1-3)

1. Type	1	Bearer capability class of service
	2	Toll-free Index
	3	Digit Modification Index
	4	Digit Sending Index
	5	ISDN Sending Index
	6	Trunk Group
2. Display Type	1	Trunk group
	2	Pattern/Preference
3. Class of Service or Index	-, 0-4095	
	If field 1 = 1, range = 0 - 255.	
	If field 1 = 2, range = 0 - 63.	
	If field 1 = 3, range = 0 - 4095.	
	If field 1 = 4, range = 0 - 511.	
	If field 1 = 5, range = 0 - 1023.	
	If field 1 = 6, range = 18 - 999.	
4. Trunk Group	-, 18-999	
5. Pattern	-, 1-640	
6. Preference	-, 1-16	

Special Error Codes

None.

PROCEDURE 075 WORD 3 — NETWORK DIAL PLAN RELATED SEARCHES

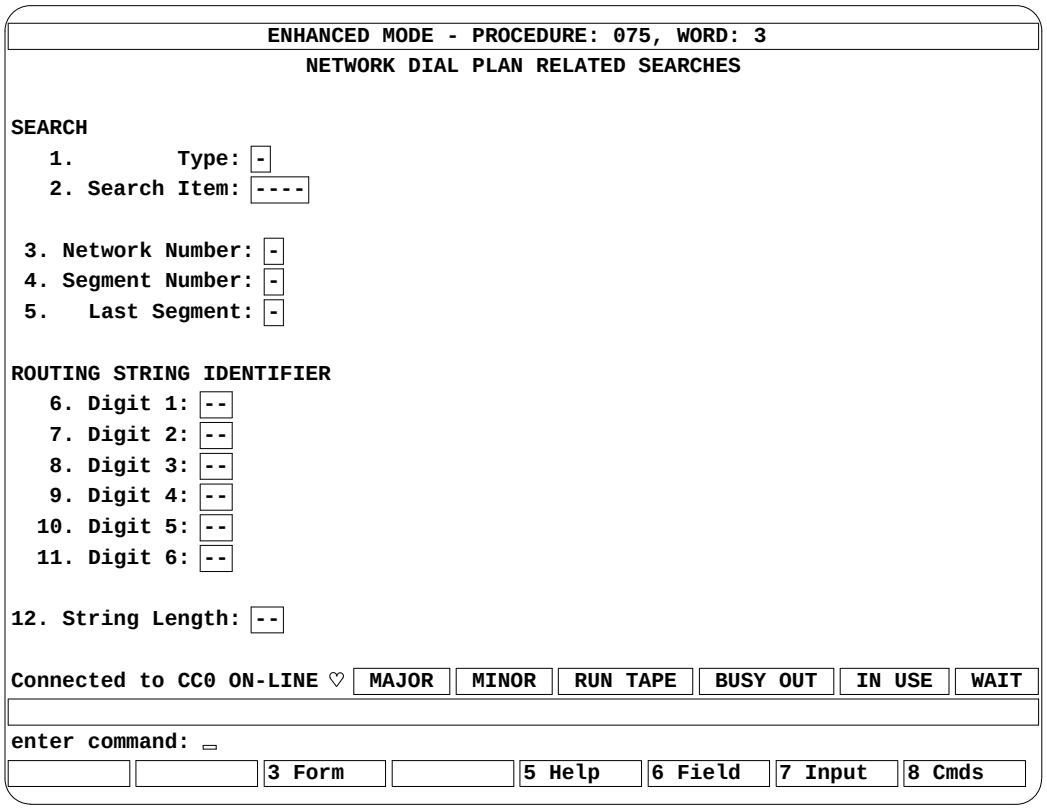
Purpose

Use Procedure 075 Word 3 to display World Class Routing (WCR) string identifiers.

Related Procedures

Use Procedure 314 Words 1 and 2 to administer WCR string identifiers.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-2.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Fields 1-2. Routing String Identifiers will be displayed in random order.

Field Ranges and Encodes

SEARCH (Fields 1-2)

1.	Type	1	Virtual Nodepoint Identifier (VNI)
		2	Digit Modification Index (DMI)
2.	Search Item	-, 1-4095	
3.	Network Number	-, 1-7	
4.	Segment Number	1	Digits 1-6
		2	Digits 7-12
		3	Digits 13-18
5.	Last Segment	0	Not the last segment
		1	Last segment - standard network
		2	Last segment - exception network

ROUTING STRING IDENTIFIER (Fields 6-11)

0-9	Decimal digits
11	*

6.	Digit 1	-, 0-9, 11(*)
7.	Digit 2	-, 0-9, 11(*)
8.	Digit 3	-, 0-9, 11(*)
9.	Digit 4	-, 0-9, 11(*)
10.	Digit 5	-, 0-9, 11(*)
11.	Digit 6	-, 0-9, 11(*)
12.	String Length	1-31

Special Error Codes

None.

PROCEDURE 076 WORD 1 — SEARCH FOR HUNTING ASSIGNMENTS

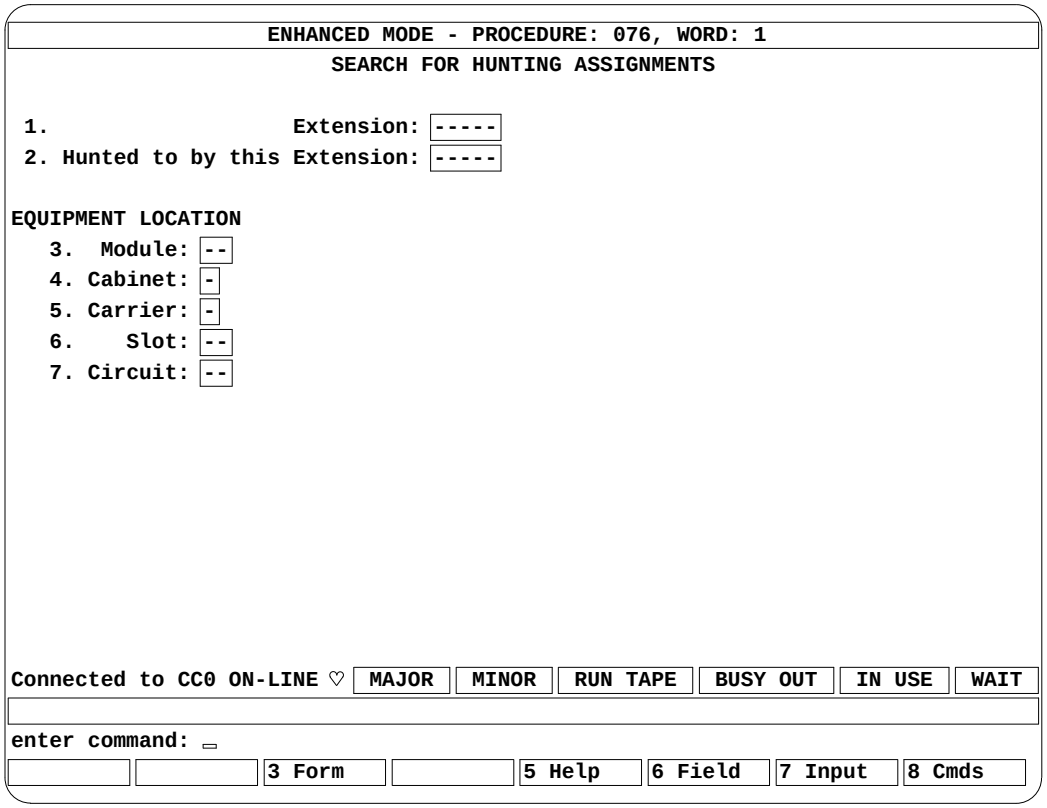
Purpose

Use Procedure 076 Word 1 to display extensions (with their assigned equipment location) that hunt to another specific extension.

Related Procedures

Use Procedure 000 Word 2 to assign extension hunting.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays assignments for an extension.

Field Ranges and Encodes

1.	Extension	000-99999
2.	Hunted to by this Extension	000-99999

EQUIPMENT LOCATION (Fields 3-7)

3.	Module	0-30
4.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
5.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
6.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
7.	Circuit	0-23

Notes

1. If field 2 is dashed for a given extension number, no hunting is administered.
2. For multiappearance terminals, the equipment location fields display dashes.

Special Error Codes

81 - You cannot hunt to an associated extension.

PROCEDURE 100 WORD 1 — TRUNK GROUP TRANSLATION

Purpose

Use Procedure 100 Word 1 to administer the following to trunk groups:

— Dial access codes (DACs)

— Trunk type

— Dial access restriction

— Personal central office (CO) line appearance (for multiappearance terminals).

Prerequisite Procedures

If assigning a DAC in this procedure, use Procedure 350 Word 1 to administer the first dialed digit and the number of digits for trunk DACs.

Before a given trunk group is removed in this procedure, verify that the trunk group information has been removed in all of the following procedures:

012 Word 1, 026 Word 1, 031 Word 2, 100 Words 2-4, 104 Words 1 and 2, 115 Word 1, 116 Word 1, 150 Word 1, 155 Word 1, 180 Word 1, 211 Word 2, and 212 Word 2.

Related Procedures

Use Procedure 012 Word 1 to administer a name to a trunk group for the name display related features.

Use Procedure 026 Word 1 to administer a queuing trunk group.

Use Procedure 027 Words 1-3 to administer auxiliary trunk equipment locations for recorded announcement.

Use Procedure 031 Word 2 to terminate a trunk group to a vector directory number (VDN).

Use Procedure 057 Words 1-3 to administer a CO line to a trunk equipment location.

Use Procedure 101 Words 1 and 2 to administer characteristics of trunks administered to a trunk group.

Use Procedure 102 Word 1 to administer miscellaneous trunk restriction groups.

Use Procedure 103 Word 1 to administer network trunk group translations.

Use Procedure 104 Words 1 and 2 to administer Main/Satellite trunk group translations.

Use Procedure 106 Word 1 to view trunk maintenance busy information.

Use Procedure 107 Words 1-7 to administer Automatic Transmission Measurement System (ATMS).

Use Procedure 108 Word 1 to administer Integrated Services Digital Network (ISDN) terminating test

line telephone digits to an ISDN trunk group.

Use Procedures 110 Word 1 and 111 Word 1 to administer trunk DACs and restricted DAC entry numbers.

Use Procedure 115 Word 1 to administer trunk group termination to special service (SS) attendants, Centralized Attendant Service (CAS), and Automatic Call Distribution (ACD).

Use Procedure 116 Word 1 to administer trunk assignments to a DS1/ISDN interface.

Use Procedure 120 Word 1 to administer Automatic Circuit Assurance (ACA) trunk group information.

Use Procedure 150 Word 1 to administer trunks to trunk groups.

Use Procedure 155 Word 1 to administer contact interface boards.

Use Procedure 175 Word 1 to view trunk restriction groups.

Use Procedure 178 Word 1 to view trunk characteristics.

Use Procedure 180 Word 1 to administer trunk groups to modem pools.

Use Procedures 202 Word 1 and 204 Word 1 for console administration with trunk groups.

Use Procedures 211 Word 1 and 212 Word 1 for CAS administration with trunk groups.

Use Procedure 257 Word 3 to administer Distributed Communications System (DCS) node and trunk group assignments.

Use Procedure 270 Word 5 to administer the association of a trunk group with extension or attendant partitions.

Use Procedure 301 Words 1 and 2 to administer code restriction and digit absorption to trunk groups and code restriction types.

Use Procedure 302 Word 1 to administer the numbering plan area (NPA) and office codes to trunk groups.

Use Procedure 305 Words 1 and 2 to administer AUTOVON trunk group routing patterns.

Use Procedure 318 Word 1 to administer a trunk group to World Class Routing (WCR).

Use Procedure 330 Words 1 and 2 to administer Queuing trunk group translations.

Use Procedure 354 Word 2 to administer extension number steering for access to trunk groups.

Cautions

If a given trunk group is removed in this procedure, remove translations for that trunk group using the following procedures. This is necessary if the trunk group number is going to be used again later. Any old trunk group translations that have not been removed may cause unwanted results.

> 027 Words 1-3, 057 Word 1, 100 Word 5, 101 Words 1 and 2, 102 Word 1, 103 Word 1, 106 Word 1, 107 Words 1-7, 108 Word 1, 110 Word 1, 111 Word 1, 120 Word 1, 202 Word 1, 204 Word 1, 211 Word 2, 212 Words 1 and 2, 257 Word 3, 270 Word 5, 301 Words 1 and 2, 302 Word 1, 305 Word 1, 309 Word 1, 321 Word 1, and 330 Words 1 and 2.

When the trunk type is changed in this procedure, information administered in Procedures 103

Word 1 and 104 Word 1 for the original trunk type may cause Main/Satellite or network problems.

Coordinate removal and change of trunk DACs with DAC assignments made in Procedure 354 Word 2.

Changing DACs affects users of Abbreviated Dialing and Mnemonic Dialing.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 100, WORD: 1
                          TRUNK GROUP TRANSLATION

 1. Trunk Group: ---

DIAL ACCESS CODE/TRUNK ID CODE
   2. Digit 1: --
   3. Digit 2: -
   4. Digit 3: -
   5. Digit 4: -

 6. Trunk Type: ---
 7.     Dial Access Restriction: -
 8. Personal CO Line Appearance: -

DISPLAY ONLY
   9. Signaling Type: ---




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-5.
Add:	Fields 1-9.
Change:	Fields 2-9.
Remove:	Fields 1-9.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group -, 18-999

DIAL ACCESS CODE/TRUNK ID CODE (Fields 2-5)

2. Digit 1 -, 0-9, 11 (*), 12 (#)
3. Digit 2 -, 0-9

4. Digit 3 -, 0-9

5. Digit 4 -, 0-9

6. Trunk Type

0 Unassigned
2 Touch-tone digit register (0)
5 Attendant Conference (0)
6 Queuing (0)
12 CCSA/APLT 2-way with dial tone out (9)
13 CCSA/APLT 2-way with dial tone out (10)
14 CCSA/APLT 2-way (8)
15 CCSA/APLT 2-way (5)
16 CO 1-way in attendant completing (1)
17 CO 1-way out DOD (1)
18 CO 1-way out DOD with party test (2)
19 CO 2-way attendant completing in/DOD out (1)
20 CO 2-way with party test attendant completing in/DOD out (2)
21 FX 1-way in attendant completing (1)
22 FX 1-way out DOD (1)
23 FX 1-way out DOD with party test (2)
24 FX 2-way attendant completing in/DOD out (1)
25 FX 2-way with party test attendant completing in/DOD out (2)
26 WATS 1-way in attendant completing (1)
27 WATS 1-way out DOD or toll terminal access for TSPS (1)
28 WATS 1-way out DOD with party test (2)
30 DID immediate start (30)
31 DID wink start (3)
32 TIE 1-way in dial repeating (4)
33 TIE 1-way out automatic (31)
34 TIE 1-way out dial repeating (4)
35 TIE 1-way in automatic (28)
36 TIE 2-way dial repeating in and out (4)
37 TIE 2-way dial repeating in/automatic out (31)
38 TIE 2-way automatic in/dial repeating out (28)
39 TIE 2-way automatic in and out (32)
40 TIE 1-way in dial repeating (8)
41 TIE ETN 2-way dial repeating (26)
42 TIE ETN 1-way in dial repeating (26)
43 TIE ETN 1-way out dial repeating (26)
44 TIE 2-way dial repeating (8)
45 TIE 2-way dial repeating in/automatic out (8)
46 TIE ETN 2-way dial repeating or delay dial in (24)
47 TIE ETN 2-way dial repeating (24)
50 Remote Access 2-way (1)
51 Telephone dictation interface (7)
52 Recorded Announcement interface (7)
53 Traditional Code Calling interface (Not for Universal Code

Calling) (7)
54 Loudspeaker Paging interface (7)
55 Touch-Tone sender (0)
57 CAS release link trunk 1-way outgoing from branch (13)
58 ANI interface (6)
62 Music on Hold interface (0)
65 SN241 contact interface (0)
66 CAS release link trunk 1-way incoming at main (14)
67 Audio interface (0)
70 Main/Satellite 1-way in (15)
71 Main/Satellite 1-way out (15)
72 Main/Satellite 2-way (15)
73 Main/Satellite 1-way in (16)
74 Main/Satellite 1-way out (16)
75 Main/Satellite 2-way (16)
76 Main/Satellite 1-way in (17)
77 Main/Satellite 1-way out (17)
78 Main/Satellite 2-way (17)
90 ACD first announcement or Call Vectoring announcement (7)
91 ACD second announcement (7)
92 ACD origin announcement (7)
93 Malicious Call Trace recorder (7)
100 Data-tones tone detector (0)
101 Analog data modem pool (27)
102 Digital data modem pool (18)
103 Host access PDM (18)
104 Host access TDM (18)
105 3B5 AP DCPI (18)
106 EIA 4 Port (18)
107 ISN/EIA port (18)
108 DMI host terminating, dial repeating in/automatic out (5)
109 DMI dial repeating in and out (11)
120 ISDN dynamic (20)

The default signaling encode is in parentheses after each trunk type encode. These signaling type encodes are defined in field 10.

When a code call interface is administered in this field, a trunk assignment is not required. This is for administration of the Traditional Code Calling feature only, it is not necessary for administration of the Universal Code Calling feature.

Legal trunk types for DCS are 32-47 and 73-78.

Legal trunk types for multiappearance terminal personal CO line appearances are 19, 24, 26, and 27.

It is recommended that you do not assign a trunk group with trunk type 30 to a WCR pattern.

7. Dial Access Restriction	0	Access is allowed using DAC
	1	Access only for tests and night service

When fields 2-5 are dashed, this field is automatically changed to a zero. This can be verified by doing a display routine.

If field 8 is 1, field 7 must be 1.

Do not assign dial access restriction to Main/Satellite trunks that use extension number steering.

8. Personal CO Line Appearance	0	Not used for CO line appearance
	1	Used for CO line appearance

DISPLAY ONLY (Field 9)

9. Signaling Type	0	No signaling required
	1	Ground start
	2	Ground start with party test
	3	Loop/reverse battery, wink start
	4	E&M immediate start in and out
	5	E&M wink start in, immediate start out
	6	ANI signaling
	7	Auxiliary equipment
	8	E&M delay dial in, immediate start out
	9	E&M delay dial in wink/delay with dial tone out
	10	E&M wink start in, wink/delay dial with dial tone out
	11	E&M wink start in, wink/delay dial out (universal sequence)
	12	E&M immediate start in, wink/delay dial out
	13	E&M release link trunk out
	14	E&M release link trunk in
	15	E&M Main/Satellite, immediate start
	16	E&M Main/Satellite, wink start
	17	E&M Main/Satellite, delay dial
	18	S-channel signaling, host access-GPP, host access EIA
	19	Loop start
	20	Digital multiplex interface ISDN message oriented signaling
	21	E&M wink start both ways
	22	E&M delay dial both ways
	23	E&M delay dial in, wink/delay dial out
	24	E&M delay dial in, wink/delay dial out with fail on timeout
	25	E&M immediate start in, wink/delay dial out with fail on timeout
	26	E&M wink start in, wink/delay dial out with fail on timeout
	27	Analog line loop
	28	E&M automatic in, immediate start out
	29	E&M automatic in, wink start out
	30	Loop/reverse battery, immediate start
	31	E&M immediate start in, automatic out

32 E&M automatic in, automatic out

Notes

1. ISDN Dynamic Trunk Type 120

   For ISDN trunk groups, as well as other types of trunk groups, the entered trunk type to some extent defines the call handling capabilities for the trunk group. For example, if a trunk group is administered as trunk type 19, all incoming calls over that trunk group are routed to the attendant console. For trunk types 30 and 31 the switch expects station number digits on all incoming trunks. In contrast, the ISDN dynamic trunk type (120) allows the trunk group to process calls as a different trunk type on a call by call basis. For example, one incoming call over the group may expect station number digits, while the next call over the trunk group may expect a network number. Trunk type 120 allows flexibility in processing calls as opposed to a fixed static trunk type. Trunk type 120 is recommended for call by call situations.

   Use the following rules to determine how to process incoming calls over the ISDN dynamic trunk type:

   1. If a network-specific facility (NSF) information element is present in the setup message and the feature/service indication is ‘‘service’’ then:
      a. If the service indicated is SDN, ETN, or Private Line, process the call like a trunk type 46 call.
      b. Otherwise process the call like a trunk type 31 call.
   2. If a network-specific facility information element is present in the setup message and the feature/service indication is feature or there is no NSF at all, then determine the trunk type as follows (based on values administered in Procedure 116 Word 1 field 10):
      a. If the endpoint specified is ‘‘PBX’’, the call is processed like a trunk type 41 call.
      b. If the endpoint specified is ‘‘Host Computer’’, the call is processed like a trunk type 108 call.
      c. If the endpoint specified is ‘‘Network’’, the call is processed like a call trunk type 31 call.

2. Trunk group 17 is automatically assigned to a touch-tone register (type 2). Assign the trunk group to touch tone sender circuits in Procedure 150 Word 1.

3. Trunk types 90, 91, and 92 have the following meanings based on whether the Call Vectoring feature is enabled or disabled (see Procedure 276 Word 1 field 5).

   Vectoring enabled:
   90 = Vector recorded announcement
   91 and 92 are not used

   Vectoring disabled:
   90 = ACD first recorded announcement
   91 = ACD second recorded announcement
   92 = ACD origin announcement

4. Party test signaling is used by COs to find out which member of a party line is using the line. You can assign party test to trunks on the switch, but this is not recommended.

Special Error Codes

45 - Remove the ASAI Gateway trunks in Procedure 100 Word 7 before changing the trunk type of this trunk group.

46 - Remove the ASAI Gateway trunks in Procedure 100 Word 7 before removing this trunk group.

47 - Remove the trunk group in Procedure 305 Word 1 before changing or removing this trunk group.

48 - Remove the trunk group in Procedure 212 Word 1 before changing or removing this trunk group.

49 - Remove Prefix Digit(s) in Procedure 101 Word 3 before changing the trunk type.

50 - You cannot change from ground start to loop start or loop start to ground start trunks.

51 - When Call Vectoring is enabled, trunk types 91 and 92 are not allowed.

52 - The trunk type is incompatible with ISDN signaling (see Procedure 100 Word 3).

53 - The signaling type is incompatible with the trunk type previously assigned (see Procedure 100 Word 3).

54 - Party test signaling is not valid for DS1 and universal ports (see Procedure 100 Word 3).

55 - Remove route advance for this trunk group in Procedure 100 Word 4 prior to assigning this trunk type.

56 - The DAC entered is not long enough.

57 - Remove the data in Procedure 100 Word 3 fields 3-7 prior to making a change.

58 - A trunk group assigned to a VDN must be removed in Procedure 031 Word 3 before it can be removed here.

59 - Set up the dialing plan in Procedure 350 Word 1.

80 - This DAC must be removed in Procedure 354 Word 2 before being removed here.

81 - All the trunks in a trunk group must be removed using Procedures 116 Word 1, 150 Word 1, 155 Word 1, and 180 Word 1 before the trunk group can be removed.

82 - Only 1 trunk group can be assigned as an outgoing RLT.

83 - This trunk group is assigned to ETA. The change or remove routine is not allowed. Remove the trunk group in Procedure 104 Word 1 first.

84 - If field 8 is 1, field 7 must be 1.

85 - The allowable trunk types for multiappearance terminal personal CO line appearance are 19, 24, 26, and 27.

86 - These trunk types are not compatible for this change (different circuit packs).

87 - The change routine is not allowed for either the original or changed trunk type.

88 - A queue trunk group assigned to CAS must be removed in Procedure 211 Word 1 before it can be removed here.

89 - A queue trunk group assigned to ACD must be removed in Procedure 026 Word 1 before it can be removed here.

90 - Trunk group is assigned. Remove it in Procedure 115 Word 1 before removing it here.

91 - Remove the trunk group assigned to name database in Procedure 012 Word 1 before removing it here.

92 - A change is not allowed for multiappearance terminal CO line appearances (i.e., changing field 8 from 0-1 or 1-0 is not allowed).

93 - Remove this trunk group in Procedure 318 Word 1 before removing here.

95 - Remove this trunk group in Procedure 301 Word 1 before removing here.

96 - Legal trunk types for DCS are 32-47 and 73-78.

98 - This is an illegal trunk type for a trunk group terminating at CAS, ACD, or VDN.

PROCEDURE 100 WORD 2 — TRUNK GROUPS - MODEM POOLING AND BCCOS

Purpose

Use Procedure 100 Word 2 to administer the assignment of the following to a trunk group:

— Bearer Capability Class of Service (BCCOS)

— Modem pool data characteristics

— Modem pool special requirements

— Host computer data characteristics

— Testing criteria for digital data trunks.

Prerequisite Procedures

For a digital data trunk modem pool, use Procedure 100 Word 1 to assign the digital data trunk group with trunk type 102. If dial access code is assigned, set field 7 = 0. If a dial access code is not assigned, set field 7 = 1.

Related Procedures

See the Prerequisite Procedures, Related Procedures, and Cautions in Procedure 100 Word 1 for information on trunk group administration.

Use Procedure 014 Words 1 and 2 to set the characteristics for a BCCOS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 100, WORD: 2
                     TRUNK GROUPS - MODEM POOLING AND BCCOS

 1.                        Trunk Group: [---]
 2. Bearer Capability Class of Service: [---]

MODEM POOLING
   3. Originate Mode: [-]
   4.    Answer Mode: [-]
   5.     Modem Type: [-]
   6.   First Choice: [-]

 7. Test Type: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-7.
Change:	Fields 2-7.
Remove:	Fields 1-7.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group — 18-999
2. Bearer Capability Class of Service — 0-255

   Trunk groups administered in Procedure 100 Word 1 default to BCCOS 4 (except host access trunks).

MODEM POOLING (Fields 3-6)

3. Originate Mode — 0 Disabled; 1 Enabled

4. Answer Mode	0	Disabled
	1	Enabled
5. Modem Type	0	Modem can only operate in one mode
	1	Modem can operate in both modes
6. First Choice	0	Disabled
	1	Enabled
7. Test Type	0	Disable digital facility testing
	1	No EIA loopback control
	2	EIA local loopback control
	3	EIA local and EIA remote loopback control

Notes

1. The following table lists data attributes for some AT&T analog data sets:

Modem	Duplex	Sync/ Async	Speed (bps)	Answer Mode	Originate Mode
103JR	full	async	up to 300	yes	yes
201CR	half	sync	2400	yes	yes
202SR	half	async	1200	yes	yes
208BR	half	sync	4800	yes	yes
212AR	full	async	low, 1200	yes	yes
212AR	full	sync	1200	yes	yes
2224A	full	async	300, 1200, 2400	yes	yes
2224A	full	sync	1200, 2400	yes	yes
2224G	full	async	300, 1200, 2400	yes	yes
2224G	full	sync	1200, 2400	yes	yes
2248A	full	async	4800	yes	yes
2296A	full	async	4800, 9600	yes	yes

Special Error Codes

81 - Assign the trunk Group in Procedure 100 Word 1 with trunk type 102-109 before using this procedure.

83 - Fields 3-6 are for modem pool trunk groups (trunk type 102).

84 - If modem pool mode is both originating and answering (fields 3 and 4 both = 1), then the modem type must operate in both modes (field 5 = 1).

PROCEDURE 100 WORD 3 — TRUNK GROUPS - SIGNALING AND OTHER PARAMETERS

Purpose

Use Procedure 100 Word 3 to administer the following to a trunk group:

— Signaling type

— Glare control

— Retry capability

— Outgoing permanent seizure on maintenance busy out

— Incoming permanent seizure alarming

— Failure threshold

— ISDN information element sending option

— Network service value (NSF).

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

Related Procedures

The signaling type administered in this procedure must be compatible with the trunk type assigned in Procedure 100 Word 1. See the tables in the Notes section.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 100, WORD: 3
                 TRUNK GROUPS - SIGNALING AND OTHER PARAMETERS

 1.    Trunk Group: [---]
 2. Signaling Type: [---]
 3.          Glare: [-]
 4.          Retry: [-]
 5. Outgoing Maintenance Busy Out Seizure: [-]
 6.            Incoming Permanent Seizure: [-]
 7.                     Failure Threshold: [--]
 8.   Optional ISDN Information Inhibited: [-]
 9.                 Network Service Value: [---]

DISPLAY ONLY
  10. Trunk Type: [---]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-8.
Change:	Fields 2-8.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group -, 18-999

2. Signaling Type

0	No signaling required
1	Ground start
2	Ground start with party test
3	Loop/reverse battery, wink start
4	E&M immediate start in and out
5	E&M wink start in, immediate start out
6	ANI signaling
7	Auxiliary equipment
8	E&M delay dial in, immediate start out
9	E&M delay dial in wink/delay with dial tone out
10	E&M wink start in, wink/delay dial with dial tone out
11	E&M wink start in, wink/delay dial out (universal sequence)
12	E&M immediate start in, wink/delay dial out
13	E&M release link trunk out
14	E&M release link trunk in
15	E&M Main/Satellite, immediate start
16	E&M Main/Satellite, wink start
17	E&M Main/Satellite, delay dial
18	S-Channel signaling, host access-GPP, host access EIA
19	Loop start
20	Digital Multiplex Interface ISDN message oriented signaling
21	E&M wink start both ways
22	E&M delay dial both ways
23	E&M delay dial in, wink/delay dial out
24	E&M delay dial in, wink/delay dial out with fail on timeout
25	E&M immediate start in, wink/delay dial out with fail on timeout
26	E&M wink start in, wink/delay dial out with fail on timeout
27	Analog line loop
28	E&M automatic in, immediate start out
29	E&M automatic in, wink start out
30	Loop/reverse battery, immediate start
31	E&M immediate start in, automatic out
32	E&M automatic in, automatic out

3. Glare

0 Treat glare as a single error (both ends redial)
1 Switch is in control (this switch is given priority)
2 Switch backs off (switch at other end is given priority)

Glare occurs when two switches attempt to seize the same trunk at the same time. This results in intercept treatment if this field is set to 0, and ISDN is not being used. Trunk group access priority must be given to one of the switches in order to avoid intercept treatment at one end.

In order to set this field to 1 or 2, the trunk type must be 41, 46, or 47 and the signaling type must be 21 or 22.

If one end of the trunk is administered as encode 0, the other end of the trunk must be administered as encode 0.

4. Retry

0 Disabled
1 Enabled

If this field is set to a 1 and trunk seizure fails, the switch attempts to place the call a second time without involving the user.

In order to set this field to a 1, the trunk type must be 41, 42, 43, 46, 47, or 120 or the signaling type must be 20.

5. Outgoing Maintenance Busy Out Seizure

0 Disabled
1 Enabled

Maintenance Busy Out (MBO) seizure is put on a trunk so the far end knows when the trunk is busied out. This bit can be set for outgoing trunks.

If this field is enabled at one end of the trunk, field 6 must be enabled at the opposite end.

6. Incoming Permanent Seizure

0 Disabled
1 Enabled

Permanent seizure is put on trunk, so the far end knows when the trunk is seized. This bit can be set for incoming trunks.

If field 5 is enabled at one end of the trunk, this field must be enabled at the opposite end.

7. Failure Threshold

0-99

This field is the maximum number of trunk seizure failures that is allowed before a trunk is automatically taken out of service.

In order to set this to a nonzero value, the trunk type must be 41, 42, 43, 46, or 47.

8. Optional ISDN Information Inhibited

- ISDN not available
0 Data included in ISDN message
1 Data not included in ISDN message

This field must be set to 0 to route Look-Ahead Interflow calls or DCS calls over the trunk group assigned in field 1.

9. Network Service Value

-, 1-511, 999

This field is typically administered to incoming trunk groups. This field can also be used to test incoming and outgoing trunk groups.

Outgoing trunk groups are typically administered with a Network Service Value as part of WCR administration in Procedure 322. The Network Service values administered in Procedures 322 take precedence over the Network Service Values administered in this field.

This field is defined with ISDN network characteristics that are used with the Network Specific Facility Information Element. See Procedure 279 Word 1.

DISPLAY ONLY (Field 10)

10. Trunk Type

0	Unassigned
2	Touch-tone digit register (0)
5	Conference - Attendant (0)
6	Queuing (0)
12	CCSA/APLT 2-way with dial tone out (9)
13	CCSA/APLT 2-way with dial tone out (10)
14	CCSA/APLT 2-way (8)
15	CCSA/APLT 2-way (5)
16	CO 1-way in attendant completing (1)
17	CO 1-way out DOD (1)
18	CO 1-way out DOD with party test (2)
19	CO 2-way attendant completing in/DOD out (1)
20	CO 2-way with party test attendant completing in/DOD out (2)
21	FX 1-way in attendant completing (1)
22	FX 1-way out DOD (1)
23	FX 1-way out DOD with party test (2)
24	FX 2-way attendant completing in/DOD out (1)
25	FX 2-way with party test attendant completing in/DOD out (2)
26	WATS 1-way in attendant completing (1)
27	WATS 1-way out DOD or toll terminal access for TSPS (1)
28	WATS 1-way out DOD with party test (2)
30	DID immediate start (30)
31	DID wink start (3)
32	TIE 1-way in dial repeating (4)
33	TIE 1-way out automatic (31)
34	TIE 1-way out dial repeating (4)
35	TIE 1-way in automatic (28)
36	TIE 2-way dial repeating in and out (4)

37 TIE 2-way dial repeating in/automatic out (31)
38 TIE 2-way automatic in/dial repeating out (28)
39 TIE 2-way automatic in and out (32)
40 TIE 1-way in dial repeating, delay dial (8)
41 TIE ETN 2-way dial repeating (26)
42 TIE ETN 1-way in dial repeating (26)
43 TIE ETN 1-way out dial repeating (26)
44 TIE 2-way dial repeating (8)
45 TIE 2-way dial repeating in/automatic out (8)
46 TIE ETN 2-way dial repeating or delay dial in (24)
47 TIE ETN 2-way dial repeating (24)
50 Remote Access 2-way (1)
51 Telephone dictation interface (7)
52 Recorded Announcement interface (7)
53 Code Calling interface (7)
54 Loudspeaker Paging interface (7)
55 Touch-Tone sender (0)
57 CAS release link trunk 1-way outgoing from branch (13)
58 ANI interface (6)
62 Music on Hold interface (0)
65 SN241 contact interface (0)
66 CAS release link trunk 1-way incoming at main (14)
67 Audio interface (0)
70 Main/Satellite 1-way in (15)
71 Main/Satellite 1-way out (15)
72 Main/Satellite 2-way (15)
73 Main/Satellite 1-way in (16)
74 Main/Satellite 1-way out (16)
75 Main/Satellite 2-way (16)
76 Main/Satellite 1-way in (17)
77 Main/Satellite 1-way out (17)
78 Main/Satellite 2-way (17)
90 ACD First announcement (7)
91 ACD Second announcement (7)
92 ACD Origin announcement (7)
93 Malicious Call Trace recorder (7)
100 Data-tones tone detector (0)
101 Analog data modem pool (27)
102 Digital data modem pool (18)
103 Host access PDM (18)
104 Host access TDM (18)
105 3B5 AP DCPI (18)
106 EIA 4 Port (18)
107 ISN/EIA port (18)
108 DMI host terminating, dial repeating in/automatic out (5)
109 DMI dial repeating in and out (11)
120 ISDN dynamic (20)

Notes

1. When changing signaling type for a particular trunk group, make sure the trunk type is compatible with the new signaling type. If trunks are assigned to the trunk group, the old and new signaling type must have the same board type.

   The following table contains, for each trunk code, a list of which signaling code(s) may be used with that trunk type. The signaling codes are defined as follows:

   E&M = Ear and mouth
   GS = Ground start
   RB = Reverse battery
   LS = Loop start
   ISDN = Digital

Trunk Type and Description	Signaling Codes					
Special Trunks:	E&M	GS	RB	LS	ISDN	Other
2 Touch-tone digit register						0
(5) Attendant Conference						(0)
6 Queuing						0
( ) = Not available on universal and XE modules						

Trunk Type and Description	Signaling Codes					
All 2-way CCSA/APLT Trunks:	E&M	GS	RB	LS	ISDN	Other
12 CCSA/APLT 2-way with delay dial out	9*					
13 CCSA/APLT 2-way with dial tone out	10*					
14 CCSA/APLT 2-way	8*					
15 CCSA/APLT 2-way	5*					
* = Default signaling						

Trunk Type and Description	Signaling Codes					
Regular CO Trunks:	E&M	GS	RB	LS	ISDN	Other
16 1-way in attendant completing	28,29#	1*		19	20	
17 1-way out DOD	28,29#	1*		19	20	
(18) 1-way out DOD with party test		(2*)				
19 2-way in attendant	28,29#	1*		19	20	

completing/DOD						
(20) 2-way with party test attendant completing in/DOD out		(2*)				
* = Default signaling # = Direct connects to 4 ESS with multifrequency signaling require wink start in ( ) = Not available on universal and XE modules						

Trunk Type and Description		Signaling Codes				
Foreign Exchange Trunks:	E&M	GS	RB	LS	ISDN	Other
21 1-way in attendant completing	28,29#	1*		19	20	
22 1-way out DOD	28,29#	1*		19	20	
(23) 1-way out DOD with party test		(2*)				
24 2-way attendant completing in /DOD out	28,29#	1*		19	20	
(25) 2-way with party test attendant completing in/DOD out		(2*)				
* = Default signaling # = Direct connects to 4 ESS with multifrequency signaling require wink start in ( ) = Not available on universal and XE modules						

Trunk Type and Description		Signaling Codes				
WATS Trunks:	E&M	GS	RB	LS	ISDN	Other
26 1-way in attendant completing	28,29#	1*		19	20	
27 1-way out DOD or toll terminal access for TSPS	28,29#	1*		19	20	
(28) 1-way out DOD with party test		(2*)				
* = Default signaling # = Direct connects to 4 ESS with multifrequency signaling require wink start in ( ) = Not available on universal and XE modules						

Trunk Type and Description	Signaling Codes					
DID Trunks:	E&M	GS	RB	LS	ISDN	Other
30 Immediate start	4		30*		20	
31 Wink start	11		3*		20	
* = Default signaling						

Trunk Type and Description	Signaling Codes					
Tie Trunks:	E&M	GS	RB	LS	ISDN	Other
32 1-way in dial repeating	4*					
33 1-way out automatic	31*					27#
34 1-way out dial repeating	4*	1				
35 1-way in automatic	28*	1				
36 2-way dial repeating both ways	4*					
37 2-way dial repeating in/auto out	31*					27#
38 2-way auto in/dial repeating out	28*	1				
39 2-way auto both ways	32*	1				
40 1-way in dial rep., delay dial	8*					
41 ETN 2-way dial repeating	11,21 22,26*				20	
42 1-way in dial repeating	11,21 22,26*				20	
43 1-way out dial repeating	11,21 22,26*				20	
44 2-way dial repeating	8*					
45 2-way dial repeating in/automatic out	8*					
46 ETN 2-way dial repeating or delay dial in	12,21 22,24*,25				20	
47 ETN 2-way dial repeating	21,22 23,24*				20	
* = Default signaling # = Valid when equipped with SN243 data port board on a traditional module or a TN746B or TN742 analog line pack on a universal or XE module						

Trunk Type and Description	Signaling Codes

Special Trunks:	E&M	GS	RB	LS	ISDN	Other
50 Remote access 2-way	4,21	1*			20	
51 Telephone dictation interface						7*
52 Recorded announcement interface						7*
53 Code calling interface						7*
54 Loudspeaker paging interface						7*
55 Touch-tone sender						0
57 CAS release link trunk 1-way outgoing from branch	13*					
58 ANI interface						(6*)
62 Music on hold interface						0
65 Contact interface						0
66 CAS release link trunk 1 way incoming at main	14*					
67 Audio interface						0
90 Vector off: ACD 1st rec. ann Vector on: Vector rec. ann.						7*
91 Vector off: ACD 2nd rec. ann Vector on: Not used						7*
92 Vector off: ACD origin ann Vector on: Not used						7*
93 Malicious Call Trace recorder						7*

* = Default signaling
( ) = Not available on universal and XE modules

Trunk Type and Description	Signaling Codes					
Main/Satellite Tie Trunks:	E&M	GS	RB	LS	ISDN	Other
70 1-Way in immediate start	15*					
71 1-way out immediate	15*					
72 2-way immediate start	15*					
73 1-way in wink start	16*					
74 1-way out wink start	16*					
75 2-way wink start	16*					
76 1-way in delay dial	17*					
77 1-way out delay dial	17*					
78 2-way delay dial	17*					

* = Default signaling

Trunk Type and Description	Signaling Codes					
Data Trunks	E&M	GS	RB	LS	ISDN	Other
100 Tone detector						0
101 Analog data modem pool						27*
102 Digital data modem pool						18*
103 Host access PDM						18*
104 Host access TDM						18*
105 3B5 AP DCPI						18*
106 EIA 4 port						18*
107 ISN/EIA port						18*
108 DMI host terminating dial repeating in/auto out	5*				20	
109 DMI dial repeating in and out	11*				20	
* = Default signaling						

Trunk Type and Description	Signaling Codes					
ISDN Trunks	E&M	GS	RB	LS	ISDN	Other
120 ISDN dynamic					20*	
* = Default signaling						

Special Error Codes

81 - Trunk group must be assigned in Procedure 100 Word 1.

82 - The signaling type is incompatible with the trunk type previously assigned.

83 - Cannot assign loop-start; this switch is not set up for DS1.

84 - The signaling type previously assigned is not compatible with the new signaling type; see Procedure 178 Word 1.

85 - This field is not allowed for the assigned trunk type (see Notes).

86 - This field is not allowed for the assigned signaling type (see Notes).

87 - This trunk type is not an outgoing trunk type.

88 - This trunk type is not an incoming trunk type.

89 - ISDN signaling does not allow this field to be set.

90 - This ISDN network service value must be assigned in Procedure 279 Word 1 first.

91 - Ground start with party test signaling is not valid for DS1.

92 - Change not allowed; at least one trunk in the trunk group is not DS1.

93 - Remove ASAI Gateway trunks in Procedure 100 Word 7 before changing the signaling type of this trunk group.

94 - Remove Prefix digit(s) in Procedure 101 Word 3 before changing the signaling type from ISDN signaling to non-ISDN signaling.

PROCEDURE 100 WORD 4 — TRUNK GROUPS - ROUTE ADVANCE

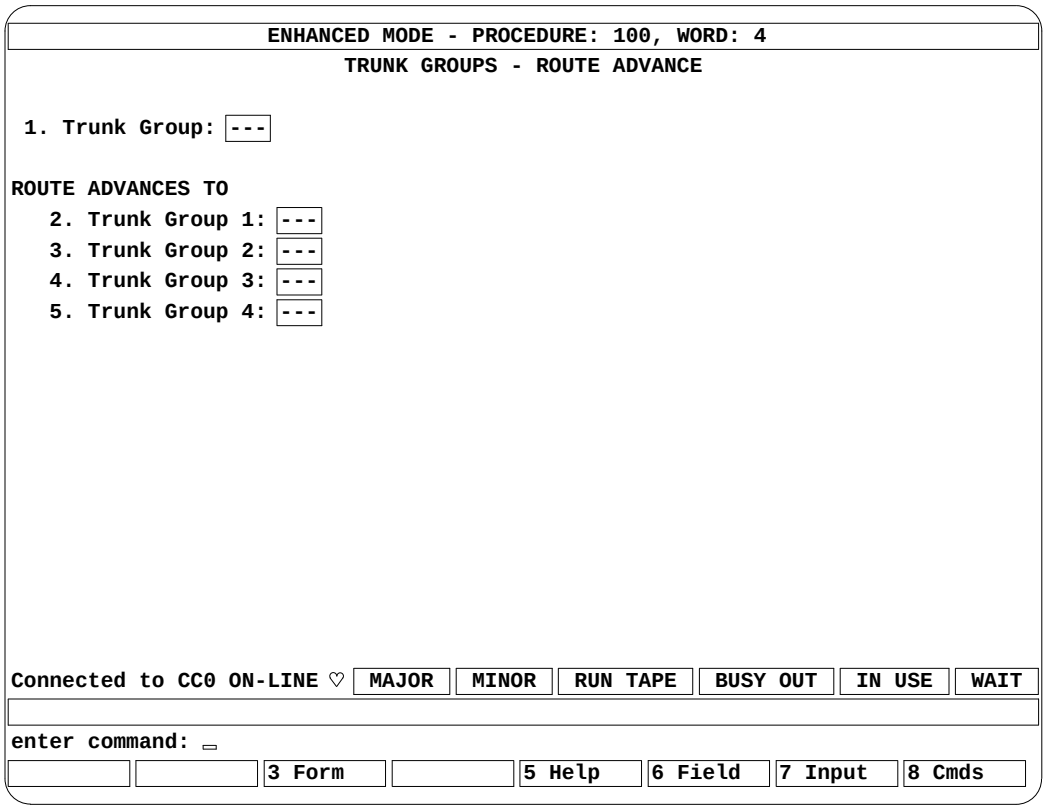
Purpose

Use Procedure 100 Word 4 to administer the trunk group Route Advance feature.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign the trunk group(s).

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-5.
Change:	Fields 2-5.
Remove:	Not allowed (remove a Route Advance trunk group by dashing out the fields and doing a change routine).
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group -, 18-999

ROUTE ADVANCES TO (Fields 2-5)

2. Trunk Group 1 -, 18-999
3. Trunk Group 2 -, 18-999
4. Trunk Group 3 -, 18-999
5. Trunk Group 4 -, 18-999

Notes

The following are the trunk types that can be administered to Route Advance (the default signaling type is given in parentheses).

2 = Touch-tone digit register (0)
6 = Queuing (0)
12 = CCSA/APLT 2-way with dial tone out (9)
13 = CCSA/APLT 2-way with dial tone out (10)
14 = CCSA/APLT 2-way (8)
15 = CCSA/APLT 2-way (5)
17 = CO 1-way out DOD (1)
18 = CO 1-way out DOD with party test (2)
19 = CO 2-way attendant completing in/DOD out (1)
20 = CO 2-way with party test attendant completing in/DOD out (2)
22 = FX 1-way out DOD (1)
23 = FX 1-way out DOD with party test (2)
24 = FX 2-way attendant completing in/DOD out (1)
25 = FX 2-way with party test attendant completing in/DOD out (2)
27 = WATS 1-way out DOD or toll terminal access for TSPS (1)
28 = WATS 1-way out DOD with party test (2)
33 = TIE 1-way out automatic (31)
34 = TIE 1-way out dial repeating (4)
36 = TIE 2-way dial repeating in and out (4)
37 = TIE 2-way dial repeating in/automatic out (31)
38 = TIE 2-way automatic in/dial repeating out (28)
39 = TIE 2-way automatic in and out (32)
41 = TIE ETN 2-way dial repeating (26)
43 = TIE ETN 1-way out dial repeating (26)
44 = TIE 2-way dial repeating (8)

45 = TIE 2-way dial repeating in/automatic out (8)
46 = TIE ETN 2-way dial repeating (25)
47 = TIE ETN 2-way dial repeating (24)
50 = Remote Access 2-way (1)
51 = Telephone dictation interface (7)
53 = Code Calling interface (7)
54 = Loudspeaker Paging interface (7)
58 = ANI interface (6)
65 = SN241 contact interface (0)
66 = CAS release link trunk 1-way incoming at main (14)
71 = Main/Satellite 1-way out (15)
72 = Main/Satellite 2-way (15)
74 = Main/Satellite 1-way out (16)
75 = Main/Satellite 2-way (16)
77 = Main/Satellite 1-way out (17)
78 = Main/Satellite 2-way (17)
93 = Malicious Call Trace recorder (7)
102 = Digital data modem pool (18)
103 = Host access PDM (18)
104 = Host access TDM (18)
105 = 3B5 AP DCPI (18)
106 = EIA 4 Port (18)
107 = ISN/EIA port (18)
108 = DMI host terminating, dial repeating in/automatic out (5)
109 = DMI dial repeating in and out (11)
120 = ISDN dynamic (20)

Special Error Codes

81 - Trunk group is not assigned in Procedure 100 Word 1.

82 - Trunk type does not allow Route Advance; all Route Advance fields must be dashed.

83 - Personal CO Line Pickup trunk group cannot have Route Advance.

PROCEDURE 100 WORD 5 — DATA LINE CIRCUIT - TRUNK GROUP PORTS

Purpose

Use Procedure 100 Word 5 to administer data-line circuit trunk group port parameters for ports administered as EIA or ISN data trunk groups. Default values are set in this procedure after the trunk group is administered with basic trunk group translations in Procedure 100 Word 1. See the table in the Notes section for the default values.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 100, WORD: 5
                 DATA LINE CIRCUIT - TRUNK GROUP PORTS

 1. Trunk Group: [---]                    DATA RATE
                                            12. 19200 bps: [-]
PERMISSIONS                                 13.  9600 bps: [-]
   2. Keyboard Dialing: [-]                 14.  4800 bps: [-]
   3.    Configuration: [-]                 15.  2400 bps: [-]
   4.         Busy Out: [-]                 16.  1200 bps: [-]
                                            17.   300 bps: [-]
OPTIONS                                     18.       Low: [-]
   5.          Auto Adjust: [-]
   6.      Permit Mismatch: [-]
   7.            Dial Echo: [-]
   8.          Answer Text: [-]
   9.  Disconnect Sequence: [-]
  10. Connected Indication: [-]
  11.               Parity: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-18.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group — 18-999

PERMISSIONS (Fields 2-4)

0 Disable
1 Enable

2. Keyboard Dialing — 0-1

Keyboard dialing gives a data endpoint the ability to send and receive text during call origination or termination. Keyboard dialing should be enabled unless the data endpoint is ‘‘receive-only’’ or the user does not need to setup data calls. Some options require keyboard dialing.

3. Configuration — 0-1

When configuration is enabled, port options from the Data terminal equipment (DTE) can be examined and changed. Configuration is typically enabled for an originate/receive DTE such as a CRT and disabled for an intelligent device such as a computer. Enable keyboard dialing if enabling configuration.

4. Busy Out — 0-1

When enabled, the busy out option allows the DEFINITY Generic 2 switch to be informed when the DTE control lead changes state. This permission is useful when the DLC ports are connected to hardware (i.e., an MADU) and it is desired to busy out a single port in a trunk group so that the switch will not terminate calls on it.

OPTIONS (Fields 5-18)

5. Auto Adjust — 0 Disabled
1 Enabled

When the auto adjust option is enabled, the data line circuit (DLC) port determines and matches the speed at which the local DTE is transmitting.

The parity is matched and used only during dialing. If selected, the DTE’s parity may be changed according to the far end device, without resetting the DLC’s options. All the speeds at which the DTE can operate can be enabled in addition to the auto adjust option. Enable keyboard dialing if enabling auto adjust.

6. Permit Mismatch

0 Disabled
1 Enabled

The permit mismatch option allows the EIA interface to operate at a higher rate of speed than agreed to during handshaking between the DLC and the far end module. Setting this option sets the DTE at the highest possible speed. The DLC port always selects the highest speed, but the DLC reports the highest speed plus all lower speeds to the far end module during handshaking.

The permit mismatch option should not be used if the DTE can transmit data at a higher speed for a sustained period of time than that of the far end (data may be lost). For example, if the DTE was a PC transmitting files at 1200 bps to a far end device operating at 300 bps, the far end device would not be able to keep up.

7. Dial Echo

0 Disabled
1 Enabled

When enabled, the dial echo option allows the DLC to echo characters received during keyboard dialing back to the DTE.

The dial echo option should be disabled if the DTE is an intelligent device that does not need the visual feedback. Keyboard dialing must also be enabled.

8. Answer Text

0 Disabled
1 Enabled

When enabled, the answer text option allows the DTE to receive text feedback (e.g., INCOMING CALL, ANSWERED, etc.) from the DLC and Generic 2 when answering an incoming call or disconnecting a call. The answer text option should be disabled if the DTE is an intelligent device that does not need the visual feedback. Keyboard dialing must also be enabled.

9. Disconnect Sequence

0 One break greater than two seconds
1 Two breaks within one second

The disconnect sequence option selects the signal to be interpreted as "DISCONNECTED" (on-hook). This allows the user to enter either one break greater than two seconds, or two breaks within one second as the disconnect signal. Keyboard dialing must also be enabled.

10. Connected Indication

0 CONNECTED is not sent to DTE
1 CONNECTED is sent to DTE

When enabled, the connected indication option allows the text ‘‘CONNECTED’’ to be sent to the DTE after a connection has been established. It is useful for connecting computers to the Generic 2 when the computer may need the Keyboard Dialing capability but does not want to receive any text after connection. Keyboard dialing must also be enabled.

11. Parity

0 Space
1 Mark
2 Even
3 Odd

Space - The parity bit is set to ‘‘0’’ and parity is not checked.

Mark - The parity bit is set to ‘‘1’’ and parity is not checked.

Even - The parity bit is set to ‘‘1’’ and even parity is checked.

Odd - The parity bit is set to ‘‘1’’ and odd parity is checked.

Parity is generated by the DLC when sending call setup text to the DTE; it is not checked by the DLC when receiving dialing characters.

DATA RATE (Fields 12-18)

0 Disable
1 Enable

12. 19200 bps 0-1

13. 9600 bps 0-1

14. 4800 bps 0-1

15. 2400 bps 0-1

16. 1200 bps 0-1

17. 300 bps 0-1

18. Low 0-1

Low speed is used for special devices (e.g., vision impaired devices) and keyboard dialing can not be enabled during their use.

Notes

1. If there are any ports on a DLC board administered as lines, then trunks cannot be added to that board until all lines are removed from that board.
2. The following table is a list of the default values for the DLC port administered as a trunk.

Option	Value	Option	Value
Keyboard Dialing	0	Parity	even
Configuration	0	19200 bps data rate	1
Auto adjust	0	9600 bps data rate	1
Busy out	0	4800 bps data rate	1
Permit mismatch	0	2400 bps data rate	1
Dial echo	0	1200 bps data rate	1
Answer text	0	300 bps data rate	1

Disconnect sequence	0	Low data rate	0
Disconnect Indication	0		

Special Error Codes

81 - This trunk group must be trunk type 106 (EIA 4 port) or 107 (ISN/EIA port) in Procedure 100 Word 1 field 6.

82 - Enable at least one data rate (fields 11-17).

83 - Enable keyboard dialing (field 2).

84 - Low speed cannot be enabled (field 17) when keyboard dialing is enabled (field 2).

85 - This configuration cannot be enabled for trunk groups.

PROCEDURE 100 WORD 7 — ASAI GATEWAY TRUNK GROUP ASSOCIATION

Purpose

Use Procedure 100 Word 7 to administer trunk groups to Adjunct/Switch Application Interface (ASAI) Gateway links, and to administer software trunk records.

Prerequisite Procedures

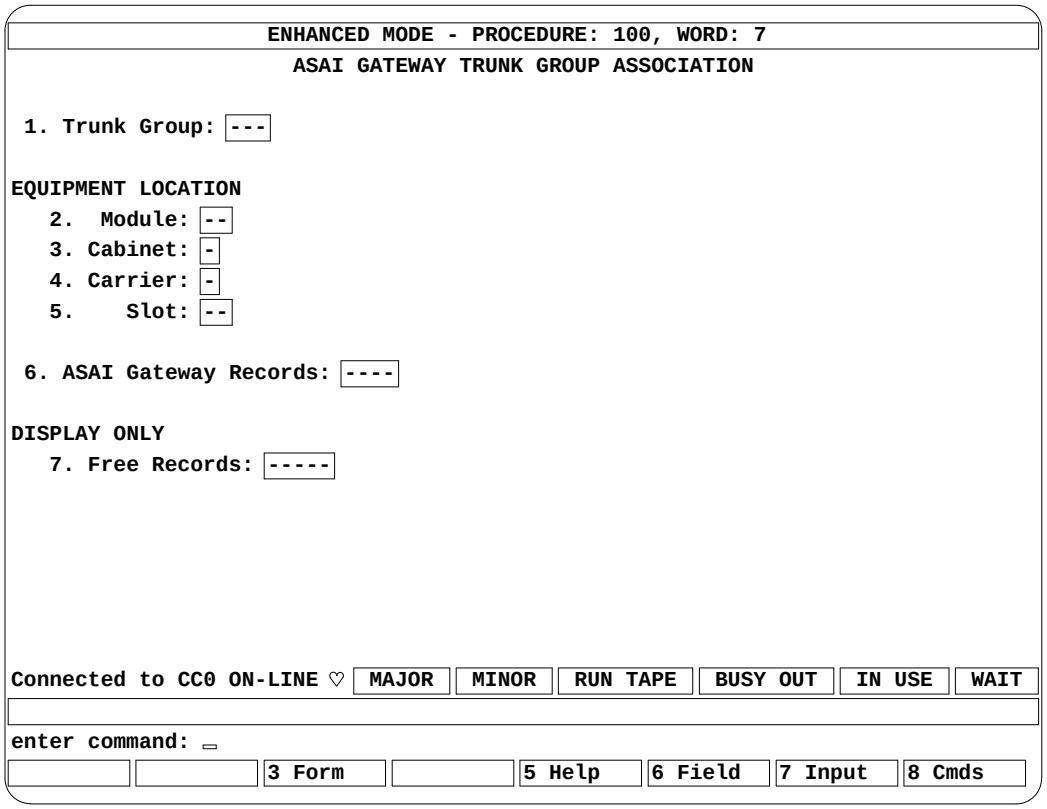
Use Procedure 100 Word 1 to administer trunk group translations.

Use Procedure 100 Word 3 to set up the trunk signaling type and other parameters.

Use Procedure 260 Word 1 to administer ISDN/PRI interface characteristics.

Use Procedure 262 Word 1 to administer ISDN/PRI board parameters.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2-5.
Add:	Not allowed. Use a change routine to change trunk groups from regular ISDN/PRI to ISDN/ASAI Gateway trunk groups.
Remove:	Fields 1-6. The remove routine disassociates trunk group records with ASAI Gateway. The D-channel trunk groups can then be added in Procedure 116 Word 1 (if desired) for use with B-channels.
Change:	Fields 1-6.
Next Data:	Displays the next assigned Integrated Telemarketing Gateway link.

Field Ranges and Encodes

1. Trunk Group -,18-999

EQUIPMENT LOCATION (Fields 2-5)

2. Module 0-30
3. Cabinet 0-7 for traditional modules, 0 for universal and XE modules
4. Carrier 0-3 for traditional modules, c-e for universal and XE modules
5. Slot 5 or 18 for traditional, 1-20 for universal, 1-18 for XE
6. ASAI Gateway Records 1-9999

   This field indicates the total number of ASAI Gateway records currently on the system. Only administer ASAI Gateway records that are needed. Excess administration of ASAI Gateway records can hinder system performance.

DISPLAY ONLY (Field 7)

7. Free Records 0-10500

   This field indicates the total number of free records on the entire system. Take the number in field 6 and subtract it from 10,500 to determine the total number of records available to ASAI Gateway.

Notes

1. Use Procedure 276 Word 1 to enable the ISDN/ASAI Gateway feature. ASAI Gateway translations are not automatically removed when the feature is disabled in Procedure 276 Word 1.
2. ISDN/ASAI Gateway trunk groups can be administered to be recorded by the Call Detail Recording feature.
3. To free records, do a remove routine on the trunk group in field 1. ASAI Gateway records cannot be removed if in use.

Special Error Codes

80 - This trunk group is not associated with an ASAI Gateway link.

81 - This equipment location is not an ISDN Board.

82 - This equipment location is not an ASAI Gateway link location.

83 - Trunk type must be 47; signaling type must be 20.

84 - All ASAI Gateway links are already assigned.

85 - A trunk group with physical trunks assigned is not allowed for ASAI Gateway links.

86 - There are not enough free records available for this request.

87 - Unable to free all the records that were requested.

88 - All circuits associated with this slot must be ASAI Gateway. Check slot number.

PROCEDURE 101 WORD 1 — TRUNK GROUP CHARACTERISTICS

Purpose

Use Procedure 101 Word 1 to administer the characteristics of trunks assigned to a trunk group.

Prerequisite Procedures

Use Procedure 100 Word 1 to add a trunk group.

Remove all trunks from a trunk group in Procedure 150 Word 1 before changing the DCS assignment in field 5.

Related Procedures

Use Procedure 275 Words 1 and 3 and Procedure 253 Word 1 if activating Call Detail Recording (CDR) on a trunk group.

Cautions

Do not change the pad group (field 13) in this procedure unless you are administering a specific network application. A default option is given automatically.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 101, WORD: 1
                          TRUNK GROUP CHARACTERISTICS

 1.         Trunk Group: [---]
 2.             Balance: [-]
 3.    Battery Reversal: [-]
 5.                 DCS: [-]
 6.       Touch-Tone In: [-]
 7.      Touch-Tone Out: [-]
 8.          CDR Active: [-]
 9. AIOD Billing Number: [----]

TIMED RECALL
  10.  Time: [--]
  11. Level: [-]
12.     CDR Variable Timer: [--]
13.              Pad Group: [-]
14.               Tie Toll: [-]
15.  APLT Features Allowed: [-]
16. Disconnect Supervision: [-]

Connected to CC0 ON-LINE ♡ [MAJOR] [MINOR] [RUN TAPE] [BUSY OUT] [IN USE] [WAIT]

enter command:
[          ] [          ] [3 Form] [          ] [5 Help] [6 Field] [7 Input] [8 Cmds]
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-16.
Change:	Fields 2-16.
Remove:	Not allowed. Enter dashes or zeros and do a change routine.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999

2. Balance

0 Disabled
1 Enabled

When this field is set to ‘‘1’’ for a trunk group, the switch inserts an extra 2 dB of loss to each trunk-to-trunk connection involving an analog Central Office (CO), Foreign Exchange (FX), Wide Area Telecommunications Service (WATS), or Direct Inward Dialing (DID) trunk. This field is set to reduce reflections (including echoes) on analog trunks where the serving CO is not providing enough impedance compensation (i.e., balance) for the trunk group. A trunk is considered balanced with an echo return loss of at least 16 dB.

Coordinate with the CO to determine if balance is needed.

3. Battery Reversal

0 Disabled
1 Enabled

Battery reversal is sent from the CO to inform this switch of toll calls.

Coordinate with the CO to determine if they are providing battery reversal.

5. DCS

- No DCS in the system
0 Disabled
1 Enabled

This field must match administration with the distant end.

6. Touch-Tone In

0 Disabled
1 Enabled

If ‘‘touch-tone in’’ is specified here, the distant end must specify ‘‘touch-tone out’’ and vice-versa.

7. Touch-Tone Out

0 Disabled
1 Enabled

If ‘‘touch-tone out’’ is specified here, the distant end must specify ‘‘touch-tone in’’ and vice-versa.

8. CDR Active

0 No
1 Yes
2 Yes and an account code is required

This field must be set to a 1 or a 2 for Call Detail Recording to be active on this trunk group.

Trunk group DACs should be administered to all trunk groups (Procedure 100 Word 1) reporting to CDR, otherwise the call record cannot identify which trunk facilities are being used.

9. AIOD Billing Number — -, 0000-9999

In field 9, leading zeros must be added if they appear on the service order.

If Automatic Identification of Outward Dialing (AIOD) is not enabled in Procedure 275 Word 1, this field will be dashed.

Coordinate this field with the CO for billing purposes.

TIMED RECALL (Fields 10-11)

10. Time

-,0 Disabled
1-31 Minutes

The amount of time in minutes which is allowed to pass before recall can be initiated.

11. Level

- Disabled
0 Recall occurs when recall time expires
1-7 Idle trunks remaining

The recall level indicates the number of idle trunks left in the trunk group when recall is to be initiated.

12. CDR Variable Timer

- Default (Procedure 275 Word 3 field 12)
1-99 Seconds

This is the time (in seconds) between trunk seizure and when CDR begins recording the call duration.

13. Pad Group

0 Determined by trunk type in Procedure 100 Word 1
1 ISL Tie (S/DTT or S/ATT)
2 EIA Tie (D/TT)
3 ISL DCO (D/CO option -3/3)
4 EIA DCO (D/CO option 0/6)
5 DTO (D/TO)
6 ATO (A/TO)
7 Reserved
8 Reserved

For more information on interfacing trunks, See *Private Branch Exchange Switching Equipment for Voiceband Applications (EIA/TIA-464A)* or *DEFINITY(TM) Communications System and System 75 and System 85 DS1/DMI/ISDN PRI Reference* (555-025-101).

The following is a list of acronyms and their definitions. These acronyms are used in the encode definitions for this field.

S/DTT - Digital trunk interface to digital satellite PBX tie trunk.

S/ATT - Analog trunk interface to analog satellite PBX tie trunk.

D/TT - Digital trunk interface to a digital tie trunk, combination tie trunk, or any other tie trunk with a digital termination at a PBX that uses the mu-law interfaces.

D/CO - Digital trunk interface to digital CO trunk, combination CO trunk, or any other CO trunk with a digital termination at a PBX that uses the mu-law interfaces.

D/TO - Digital trunk interface to digital toll office trunk, combination toll office trunk, or any other toll office trunk with a digital termination at a PBX that uses the mu-law interfaces.

A/TO - Analog trunk interface to an analog toll office trunk. Due to potential problems with feedback, the A/TO pad-group type should also be assigned to loudspeaker paging trunk groups that provide ‘‘all-zones’’ paging to three or more zones.

To administer a value other than 0, all module processors must be equipped with TN380D, TN580, or TN590 circuit packs.

Changes may require threshold changes in Procedure 107 Word 1.

Refer to network engineering documents for correct entries.

14. Tie Toll

0 Not toll restricted
1 Toll restricted

This field only applies to tie trunks.

15. APLT Allowed — Features

0 Disabled (CCSA trunk)
1 Enabled (APLT trunk)

A CCSA incoming trunk call is permitted access to attendant and terminals only.

An APLT incoming trunk call, in addition to attendant and terminal access, is permitted access to CO, FX, WATS, TIE, and paging trunks without attendant assistance.

APLT trunks should not have a prefix digit set in field 4.

16. Disconnect Supervision

0 Disabled
1 Enabled

Coordinate with the CO to determine if they provide disconnect supervision. If it’s not provided, enable this field to ensure that calls over this trunk group are properly disconnected at the end of a call.

This field is usually disabled because most central offices provide disconnect supervision.

Notes

1. The remove routine is not allowed. To delete characteristics from a trunk group, zero fields 2, 3, 5-8, 10, 11, and 13-16. Dash fields 9 and 12, and then use the change routine.

Special Error Codes

81 - When adding a new trunk group, use Procedure 100 Word 1 first.

82 - Field 14 is only used with tie trunks.

83 - Remove all trunks from the trunk group before changing the DCS assignment in field 5.

84 - This trunk group has an illegal trunk type for DCS. Legal trunk types are 32-47 and 73-78.

88 - The DCS trunk group number must be in the range of 18-255.

PROCEDURE 101 WORD 2 — TRUNK GROUP CHARACTERISTICS

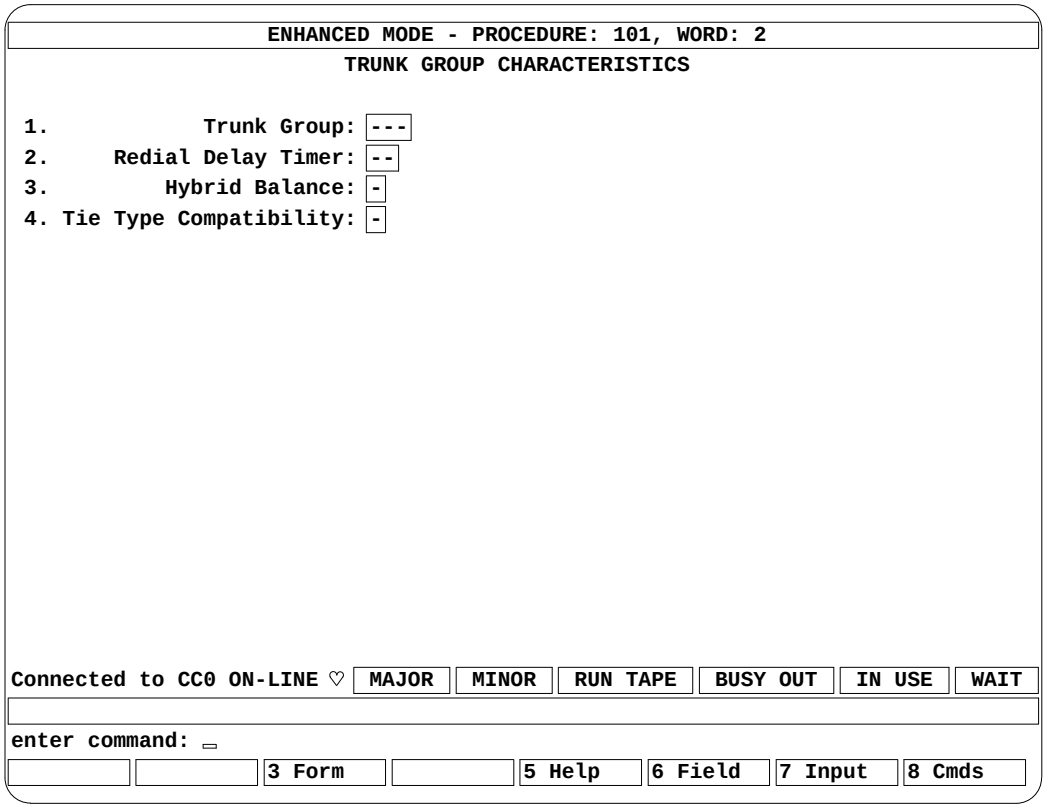
Purpose

Use Procedure 101 Word 2 to administer the redial delay timer, hybrid balance, and tie type compatibility for a trunk group.

Prerequisite Procedures

Assign the trunk group in Procedure 100 Word 1 before assigning characteristics here.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-4.
Change:	Fields 2-4.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group — 18-999

2. Redial Delay Timer — 0-50 (incremented in tenths-of-seconds; 0 is default)

   The redial delay timer is used only when a call is dialed using the Last Number Dialed feature and the call is directly accessing a CO or tie trunk that has ground start or loop/reverse battery signaling. The time delay added with this field is inserted between the trunk dial access code and the rest of the dialed digits.

   Typically, no delay is required if the trunks are connected to electronic switching systems. If the trunks are connected to older switching systems (e.g., step-by-step), try inserting a 3-second delay (enter ‘‘30’’ in this field). You may want to adjust this figure after a while. If the delay is too short, the calls will not complete; if the delay is too long, extra processor time will be used on the switch.

   This timer is not required for trunk groups that are used only in WCR patterns.

3. Hybrid Balance
   - \- Not ground start or loop/reverse battery
   - 0 RC coupling
   - 1 600 ohm coupling

4. Tie Type Compatibility
   - \- Trunk group does not use E&M signaling
   - 0 Type 1 format (default)
   - 1 Type 1 compatible
   - 2 Type 5 format

   This specifies the type of E&M trunk signaling used for this trunk group. This compatibility is only an issue with trunks using E&M signaling. The default is type 1 compatible. If one end is using type 1 format, the other end must be set to type 1 compatible. If this trunk group is used to connect to COs, use type 1 compatible since COs use type 1 format. Type 5 format is a European standard. If type 5 format is used, set both ends to type 5 format.

Special Error Codes

81 - Use Procedure 100 Word 1 to administer a new trunk group.

PROCEDURE 101 WORD 3 — TRUNK GROUP CHARACTERISTICS - PREFIXING

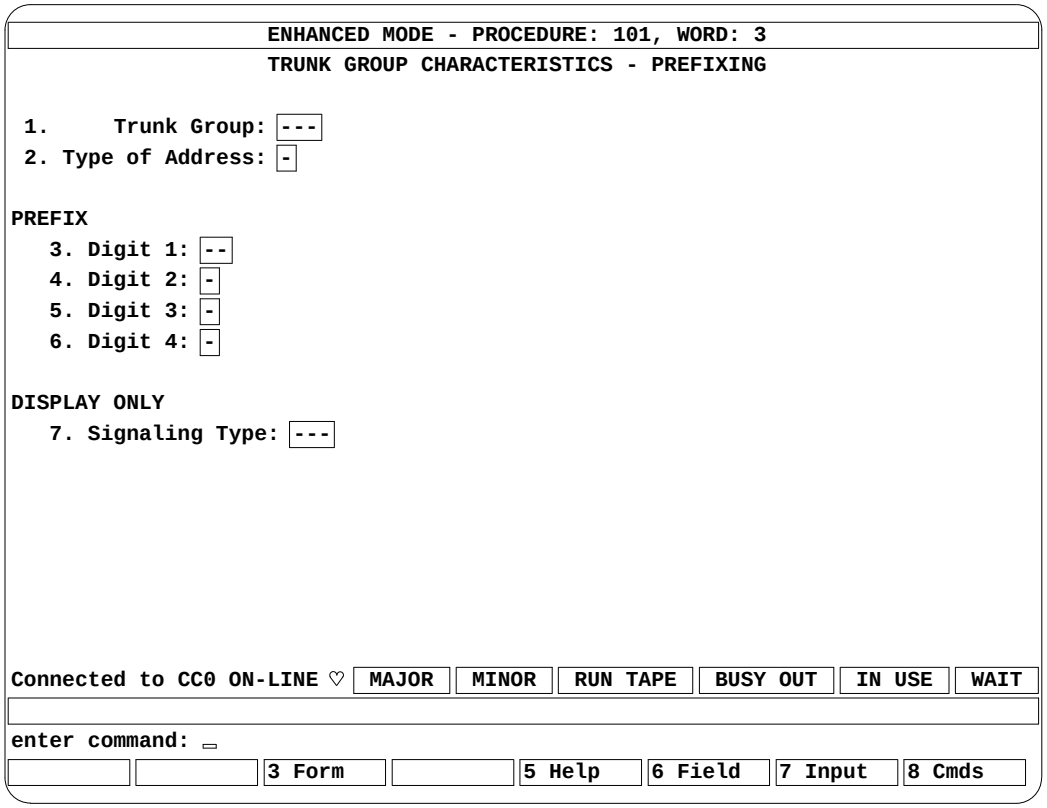
Purpose

Use Procedure 101 Word 3 to administer trunk group prefixing. The prefix digits administered here are prepended to the digit strings arriving on specified incoming trunk groups.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer trunk groups before assigning characteristics here.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or 1-2.
Add:	Not allowed
Change:	Fields 1-6, or 1 and 3-6.
Remove:	Not allowed.
Next Data:	Displays next assigned prefix.

Field Ranges and Encodes

1. Trunk Group 18-999

Trunk groups that have been assigned a trunk type in the list below can have prefixes assigned to them in this procedure. The default signaling type for each of the trunk types is in parentheses. The signaling type of a trunk group is displayed in field 7.

12=CCSA/APLT 2-way with dial tone out (9)
13=CCSA/APLT 2-way with dial tone out (10)
14=CCSA/APLT 2-way (8)
15=CCSA/APLT 2-way (5)
30=DID immediate start (30)
31=DID wink start (3)
32=TIE 1-way in dial repeating (4)
33=TIE 1-way out automatic (31)
34=TIE 1-way out dial repeating (4)
35=TIE 1-way in automatic (28)
36=TIE 2-way dial repeating in and out (4)
37=TIE 2-way dial repeating in/automatic out (31)
38=TIE 2-way automatic in/dial repeating out (28)
39=TIE 2-way automatic in and out (32)
40=TIE 1-way in dial repeating (8)
41=TIE ETN 2-way dial repeating (26)
42=TIE ETN 1-way in dial repeating (26)
43=TIE ETN 1-way out dial repeating (26)
44=TIE 2-way dial repeating (8)
45=TIE 2-way dial repeating in/automatic out (8)
46=TIE ETN 2-way dial repeating or delay dial in (24)
47=TIE ETN 2-way dial repeating (24)
70=Main/Satellite 1-way in (15)
71=Main/Satellite 1-way out (15)
72=Main/Satellite 2-way (15)
73=Main/Satellite 1-way in (16)
74=Main/Satellite 1-way out (16)
75=Main/Satellite 2-way (16)
76=Main/Satellite 1-way in (17)
77=Main/Satellite 1-way out (17)
78=Main/Satellite 2-way (17)
120=ISDN dynamic (20)

2. Type of Address

0	Unknown, default
1	International number
2	National number
3	Network specific number
4	Subscriber number
6	Abbreviated number
7	Reserved for extension

For trunk groups that have a signaling type other than signaling type 20 (ISDN), this field must be dashed.

Trunk groups utilizing the ISDN signaling type (20), regardless of trunk type assignment, will prefix each call based on the type of address specified in the Called Party Number Information Element. For example, one incoming call over the group may specify station number digits, while the next call over the trunk group may specify a public network number.

See the AT&T ISDN/PRI specification (PUB 41449) for the Called Party Number IE codings used with the Type of Address field. Current CCITT specifications define the encodes.

PREFIX (Fields 3-6)

If desired, fields 3-6 may be used to specify up to four digits to be prepended to incoming calls arriving on the trunk group specified in field 1. In some applications, the prefix digits are DACs that serve to start digit analysis in specific WCR networks. Do not specify prepending digits in cases where the prefix is contained in the incoming digit stream. Digits should be prepended when call processing needs a prefix but one is not provided in the digit stream.

If deferred prefixing (used with Main/Satellite) is designated in Procedure 104 Word 2 field 4 then this designation will prevent the prefix digits from being immediately prepended.

3. Digit 1 -, 0-9, 11(*), 12(#)
4. Digit 2 -, 0-9
5. Digit 3 -, 0-9
6. Digit 4 -, 0-9

DISPLAY ONLY (Field 7)

7. Signaling Type

0	No signaling required
1	Ground start
2	Ground start with party test
3	Loop/reverse battery, wink start
4	E&M immediate start in and out
5	E&M wink start in, immediate start out
6	ANI signaling
7	Auxiliary equipment
8	E&M delay dial in, immediate start out

9 E&M delay dial in wink/delay with dial tone out
10 E&M wink start in, wink/delay dial with dial tone out
11 E&M wink start in, wink/delay dial out (universal sequence)
12 E&M immediate start in, wink/delay dial out
13 E&M release link trunk out
14 E&M release link trunk in
15 E&M Main/Satellite, immediate start
16 E&M Main/Satellite, wink start
17 E&M Main/Satellite, delay dial
18 S-channel signaling, host access-GPP, host access EIA
19 Loop start
20 Digital multiplex interface ISDN message oriented signaling
21 E&M wink start both ways
22 E&M delay dial both ways
23 E&M delay dial in, wink/delay dial out
24 E&M delay dial in, wink/delay dial out with fail on timeout
25 E&M immediate start in, wink/delay dial out with fail on timeout
26 E&M wink start in, wink/delay dial out with fail on timeout
27 Analog line loop
28 E&M automatic in, immediate start out
29 E&M automatic in, wink start out
30 Loop/reverse battery, immediate start
31 E&M immediate start in, automatic out
32 E&M automatic in, automatic out

Special Error Codes

81 - The trunk group's trunk type is inappropriate for prefixing.

82 - A non-dashed prefix digit can not follow a dashed prefix digit.

83 - Field 2 must be dashed when the signaling type is not ISDN (20).

84 - Field 2 can not be dashed when the signaling type is ISDN (20)

PROCEDURE 102 WORD 1 — MISCELLANEOUS TRUNK RESTRICTION GROUPS

Purpose

Use Procedure 102 Word 1 to administer miscellaneous trunk restriction groups associated with a trunk group dial access code (DAC). Extensions are denied access to miscellaneous trunk restriction groups assigned in Procedure 010 Word 3.

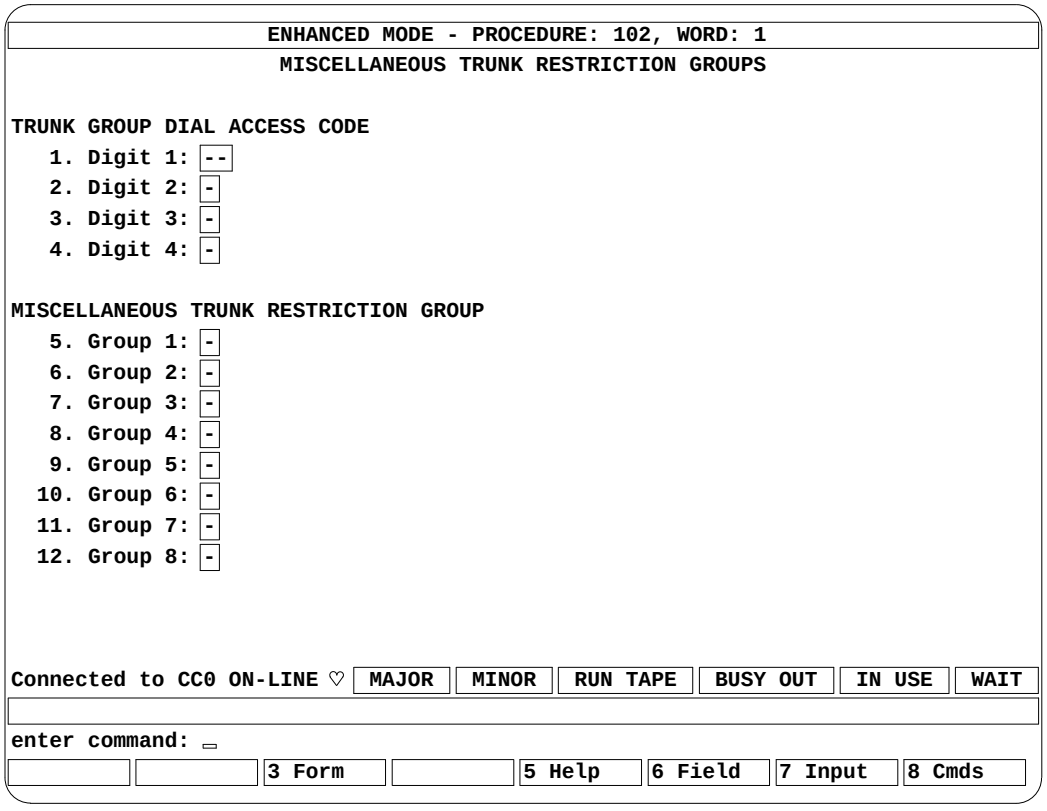
Prerequisite Procedures

Use Procedure 100 Word 1 to administer dial access codes to trunk groups.

Related Procedures

Use Procedure 175 Word 1 to find all trunk groups in a miscellaneous trunk restriction group.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-4.
Add:	Fields 1-12.
Change:	Fields 5-12.
Remove:	Not allowed (enter zeros in fields 5-12 and do a change routine).
Next Data:	Not allowed.

Field Ranges and Encodes

TRUNK GROUP DIAL ACCESS CODE (Fields 1-4)

1.	Digit 1	0-9, 11 (*), 12 (#)
2.	Digit 2	-, 0-9
3.	Digit 3	-, 0-9
4.	Digit 4	-, 0-9

MISCELLANEOUS TRUNK RESTRICTION GROUP (Fields 5-12)

0	Not restricted
1	Restricted

5.	Group 1	0-1
6.	Group 2	0-1
7.	Group 3	0-1
8.	Group 4	0-1
9.	Group 5	0-1
10.	Group 6	0-1
11.	Group 7	0-1
12.	Group 8	0-1

Notes

1. A trunk group DAC may be in more than one restriction group; a restriction group can have 4 trunk group DACs maximum.

Special Error Codes

80 - This DAC is not assigned to a trunk group (see Procedure 100 Word 1).

81 - This restriction group already has four DACs assigned.

PROCEDURE 103 WORD 1 — NETWORK TRUNK GROUP TRANSLATION

Purpose

Use Procedure 103 Word 1 to administer network features (and capabilities) associated with a trunk group. Translations administered by this procedure include:

— Facility Restriction Level (FRL)

— Network association of the trunk group

— Conditional routing traveling class mark (TCM) send/receive

— Symmetry

— World Class Routing (WCR) Network access by incoming tie trunks, and conditional routing count control flag for routing indicators

— Requirement for an Authorization Code by incoming trunks

— Bridge-on availability for testing

— Trunk reservation limit

— Dial tone detection (off or on)

— Trunk data protection (permanent)

— Remote access echo suppressor control

— Digit collection.

Prerequisite Procedures

Use Procedure 276 Word 1 first to activate the standard network feature group before using this procedure.

A trunk group must be assigned before a change can be made to any of its features or capabilities. Use the following procedures to assign a trunk group or change its characteristics:

— Use Procedure 100 Words 1-5 to administer basic trunk group translations.

— Use Procedure 101 Words 1-3 to administer trunk group characteristics.

Related Procedures

Use Procedure 150 Word 1 or Procedure 116 Word 1 to assign trunks to a trunk group.

Cautions

Errors made in the administration of this procedure may result in a change to all trunks in a group that can seriously hamper network operation.

Trunk groups used for conditional routing must be connected to switches capable of accepting a second TCM.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 103, WORD: 1
                          NETWORK TRUNK GROUP TRANSLATION

 1.                       Trunk Group: [---]
 2.       Facility Restriction Level: [-]
 3.            Traveling Class Marks: [-]
 4.                Symmetrical Route: [-]
 5. Incoming Tie/APLT Access to WCR: [-]
 6.     Authorization Code Required: [-]
 7.                 Bridge-On Allowed: [-]
 8.          Trunk Reservation Limit: [--]
 9.          Dial Tone Detect Ignore: [-]
10.     Data Protection (Permanent): [-]
11.   Remote Access Echo Suppressor: [-]
12.              Conditional Routing: [-]
13.           Route Selection Method: [-]
14.     Outgoing Overlapped Sending: [-]
15.        Suppress Dial Tone (WCR): [-]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-14.
Change:	Fields 2-14.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999

2. Facility Restriction Level

   0-7 (0 being the least restrictive, 7 being the most restrictive)

   FRLs administered on a trunk group basis are only checked on incoming calls tandeming through the switch where TCMs (Traveling Class Marks) are absent.

   FRLs should only be assigned to incoming or 2-way trunk groups. This field defaults to ‘‘0’’ if no other assignment is made.

   For outgoing calls, the FRL of the WCR preference is used, not the FRL of the trunk group.

3. Traveling Class Marks

   0 Do not send or expect to receive any TCMs
   1 Send and receive the FRL TCM
   2 Send and receive the FRL and Conditional Routing TCMs

4. Symmetrical Route

   0 No
   1 Yes

5. Incoming Tie/APLT Access to WCR

   0 Disabled
   1 Enabled

   Enable field 5 only if the trunk group is a tie trunk or an APLT trunk.

6. Authorization Code Required

   0 No
   1 Yes

   This field applies to incoming calls only.

7. Bridge-On Allowed

   0 No
   1 Yes

   This field applies to both network and nonnetwork trunks.

   Attempting to bridge-on with the following features to a trunk that has data protection (permanent) will result in intercept treatment:
   — Call Waiting
   — Override
   — Timed Recall on Outgoing Calls
   — Trunk Verification by Attendant
   — Trunk Verification by Terminal.

8. Trunk Reservation Limit

   0-15

   This field is used to reserve trunks in a trunk group for users of the first preference in any Network pattern. The number of trunks specified in this field are always reserved for the first preference, and cannot be seized by users of any other preference using this trunk group. This field is only useful when more than one preference uses the same trunk group to route calls.

9. Dial Tone Detect Ignore
   - 0 Dial tone detection active
   - 1 Dial tone detection not active

   If dial tone detection is active and dial tone is detected during the outgoing trunk sequence, digit sending begins as soon as the trunk sequence completes. The first pause specified in Procedure 321 Word 2 field 3 is ignored. If dial tone is detected during the first pause interval, digit sending begins immediately.

   If dial tone detection is inactive, digit sending begins after the pause interval specified in field 3 of Procedure 321 Word 2.

10. Data Protection (Permanent)
    - 0 Disabled
    - 1 Enabled

    Enabling this field blocks intrusions by bridge on features (e.g., Call Waiting, Override, Busy Verification) that would disrupt data transmissions. This field applies to network and nonnetwork trunks.

11. Remote Access Echo Suppressor
    - \- Dial tone
    - 0 Dial tone (default)
    - 1 Precursor tone/dial tone
    - 2 Abbreviated dial tone (1/2 second)

12. Conditional Routing
    - 0 Not a satellite facility
    - 1 Is a satellite facility

    Setting this field to 1 increments the hop count.

13. Route Selection Method
    - 0 Select after dialing the number
    - 1 Select when a VNI has been determined

    This field affects how Network Digit Collection operates and when route selection is attempted for network calls arriving on a trunk group.

    The differences between the two options for this field are easily illustrated with a simple example.

    Suppose a network's dialing plan has been administered in Procedure 314 and that the plan consists entirely of seven digit address strings that are differentiated by their first three digits (i.e. they all have three digit string identifiers).

    If this field is set to zero, Network Digit Analysis attempts to collect seven digits, plus any TCM that may have been sent, for all calls arriving on this trunk group. Once these digits have been collected, they are applied to the network's dialing plan, a Virtual Nodepoint Identifier (VNI) is determined, and route selection commences.

    If this field is set to one, Network Digit Analysis attempts to collect three digits for all calls arriving on this trunk group. Since

all strings can be identified (and a Virtual Nodepoint Identifier determined) by the first three digits, a route could be selected after receiving the third digit. Whether overlapped sending occurs for the rest of the seven digit number depends on the option selected in field 14 of this word for the trunk group referenced in the selected route. Please see field help for field 14.

Setting this field to one could adversely affect processor occupancy in high volume situations.

Setting this field for trunk groups that have ISDN signaling is inconsequential since Network Digit Analysis assumes that all digits applied to the Network Dial Plan are retrieved from the incoming Setup message.

14. Outgoing Overlapped Sending
    - 0 Collect all digits before sending
    - 1 Overlap sending

    If the route selection method for the calling facility indicates that route selection should be attempted as soon as a Virtual Nodepoint Identifier has been determined (field 13 equals 1) and this field is set to ‘‘1’’ for the trunk group referenced by the chosen route, then overlapped sending will occur for the remainder of the dialed number.

    NOTE: This is the only means by which overlapped sending can be accomplished.

15. Suppress Dial Tone (WCR)
    - 0 Apply dial tone
    - 1 Suppress dial tone

    This field is used to suppress dial tone after a WCR DAC is dialed or inferred via Procedure 101 Word 3.

Notes

1. The network trunk group translation can be displayed even though a trunk type encode has not been assigned to the trunk group. However, the trunk group number must be within the range of the maximum trunk group number for the system.
2. When assigning a trunk group to a WCR network, the following procedures are required to associate the trunk group with various network parameters:
   - — Use Procedure 318 Words 1-2 to administer the WCR patterns and preferences
   - — Use Procedure 319 Words 1 to administer the WCR toll tables
3. When a network trunk group translation is displayed, any field associated with a feature that does not apply will contain a dash. The associated translation cannot be changed.
4. If an APLT Authorization Code has been dialed and the trunk group is administered to send a TCM, the TCM is sent following the Authorization Code. The TCM has no meaning to the APLT switches. It can be suppressed by avoiding the network-tandem entry for the APLT trunk group.

Special Error Codes

81 - Field 13 must be zero for trunk groups which carry two TCMs.

82 - Field 13 must be zero when an authorization code is required.

83 - An authorization code cannot be required on a trunk group with TCMs.

84 - To administer TCMs, activate the standard network in Procedure 276 Word 1.

PROCEDURE 104 WORD 1 — MAIN/SATELLITE - SYSTEM TRANSLATION

Purpose

Use Procedure 104 Word 1 to administer system parameters for the Main/Satellite feature.

Prerequisite Procedures

Use Procedure 276 Word 1 to activate multipremise before using this procedure.

Use Procedure 100 Word 1 to assign trunk groups. You can only use trunk types 70-78 (special tie trunks for Main/Satellite).

Related Procedures

After assigning the Extended Trunk Access (ETA) trunk group in this procedure, go to Procedure 104 Word 2 to assign the trunk group translation and activate the Main/Satellite access trunk group.

Cautions

Minor changes made in this procedure may drastically affect the Main/Satellite system.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 104, WORD: 1
                      MAIN/SATELLITE - SYSTEM TRANSLATION

 1.    Main or Satellite: -
 2. Remote Dial Transfer: -
 3.      ETA Trunk Group: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-3.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Main or Satellite	0	Not available
		1	Satellite
		2	Main
2.	Remote Dial Transfer	0	Not active
		1	Active
		Remote dial transfer is used for satellites only.	
3.	ETA Trunk Group	-, 18-999	
		ETA is used for satellites only.	

Special Error Codes

81 - This is the wrong trunk type for a Main/Satellite access trunk.

82 - Remote dial transfer is for satellites only.

83 - ETA is for satellites only.

84 - The ETA trunk group must have a dial access code assigned.

PROCEDURE 104 WORD 2 — MAIN/SATELLITE - TRUNK GROUPS

Purpose

Use Procedure 104 Word 2 to administer a trunk group's function in the Main/Satellite system.

Prerequisite Procedures

Use Procedure 276 Word 1 to activate the multipremise feature group.

Use Procedure 100 Word 1 to assign trunk groups. You can only use trunk types 70-78 (special tie trunks for Main/Satellite).

Related Procedures

When the number of digits to be sent in field 3 agrees with the number to be sent in Procedure 275 Word 1 field 9, then all digits are sent.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 104, WORD: 2
                          MAIN/SATELLITE - TRUNK GROUPS

 1.           Trunk Group: [---]
 2.          Trunk Status: [-]
 3.           Digits Sent: [-]
 4.          Defer Prefix: [-]
 5. Transfer Action Type: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 2-5.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Trunk Group	18-999	
2.	Trunk Status	0	Disabled for Main/Satellite
		1	Enabled for Main/Satellite

3. Digits Sent -, 1-5

   If the system has a four-digit dialing plan, you can send 1-4 digits. If the system has a five-digit dialing plan, you can send 3-5 digits.

   With single-digit steering, if the number of digits to be sent is equal to the number of digits in the extension dialing plan, all digits are sent. Likewise, if you enter a dash in the field, all digits are sent.

   If the number of digits to be sent is less than the number of digits in the extension dialing plan, all but the first digit are sent. With extension number steering, the number of digits sent is the actual number specified. For example, if two digits are to be sent, when 4385 is dialed, 85 is sent.

4. Defer Prefix
   0 Disabled
   1 Enabled

   This field is used only for the main.

5. Transfer Action Type
   0 No action
   1 Attendant transfer
   2 Dial transfer

   If the transfer action type for the Main/Satellite trunk group is changed from 0 to a 1 or 2, the entire trunk group must be removed to change the encode back to 0. This field is used only for the main.

Special Error Codes

81 - This is not a Main/Satellite system. Set the multipremise bit in Procedure 276, Word 1. Also set the System as Main/Satellite in Procedure 104, Word 1.

82 - This is the wrong trunk type for deferred prefix/access code.

84 - Deferred prefix is for the main only (field 4 = 0).

85 - Transfer action type is for the main only (field 5 = 0).

86 - Wrong call type.

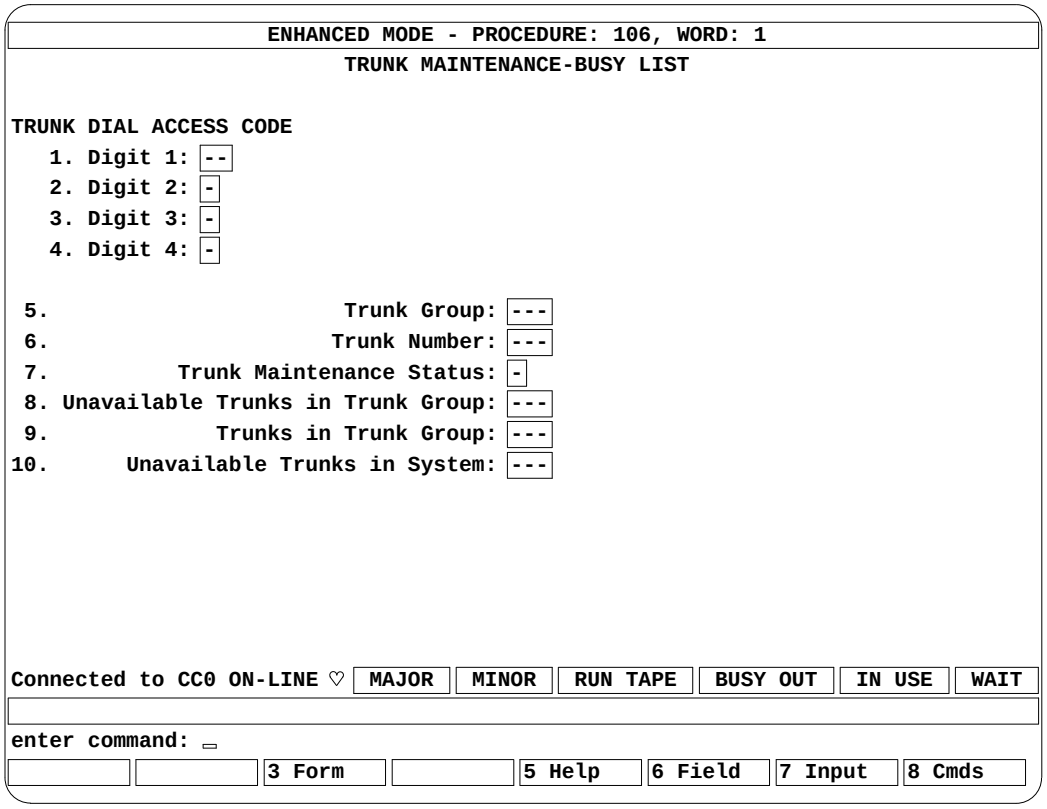
88 - Procedure 275 Word 1 field 9 must be set to the number of digits used in the extension numbering plan.

PROCEDURE 106 WORD 1 — TRUNK MAINTENANCE-BUSY LIST

Purpose

Use Procedure 106 Word 1 to display trunk maintenance busy and availability status for trunk groups having a dial access code.

Screen Display



Fields Used or Required for Command Routines

Display:	None, fields 1-4, fields 1-5, fields 1-4 and 6, fields 1-6, fields 5 and 6, or field 5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all the busied out trunks in the system. Field 10 is updated only at the start of the search. If there are no busied out trunks in the system, fields 1-9 show dashes and field 10 shows a zero.

Field Ranges and Encodes

TRUNK DIAL ACCESS CODE (Fields 1-4)

1.	Digit 1	0-9, 11 (*), 12 (#)	
2.	Digit 2	-, 0-9	
3.	Digit 3	-, 0-9	
4.	Digit 4	-, 0-9	
5.	Trunk Group	18-999	
6.	Trunk Number	1-999	
7.	Trunk Maintenance Status	0	Available
		1	Busied out by services
		2	Busied out by customer
		3	Automatically busied out
		4	Permanently seized on input
		5	Trunk in failure
		6	Maintenance busy out (far end)
		7	ISDN maintenance (near end)
		8	ISDN maintenance (far end)
8.	Unavailable Trunks in Trunk Group	0-999	
9.	Trunks in Trunk Group	0-999	
10.	Unavailable Trunks in System	0-999	

Special Error Codes

81 - This DAC is already assigned to a feature.

82 - The DAC entered is not assigned to the trunk group entered.

83 - Only trunk groups with DACs assigned to them can be displayed.

PROCEDURE 107 WORD 1 — ATMS - TERMINATING TEST LINE ASSIGNMENT

Purpose

Use Procedure 107 Word 1 to administer the terminating test line (TTL) assignment for the Automatic Transmission Measurement System (ATMS).

This procedure only applies to two-way and outgoing trunks.

Prerequisite Procedures

Use Procedure 000 Word 1 and Procedure 051 Word 1 to administer an analog/digital facility test circuit (ADFTC) or a Maintenance Test Circuit Pack (MTCP).

Use Procedure 107 Word 4 to remove the trunk group from a schedule before removing the test line assignment.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 107, WORD: 1
                    ATMS - TERMINATING TEST LINE ASSIGNMENT

 1.    Trunk Group: [---]
 2. Test Line Type: [--]

TTL TELEPHONE DIGITS
   3.  Digit 1: [-]                      11.  Digit 9: [-]
   4.  Digit 2: [-]                      12. Digit 10: [-]
   5.  Digit 3: [-]                      13. Digit 11: [-]
   6.  Digit 4: [-]                      14. Digit 12: [-]
   7.  Digit 5: [-]                      15. Digit 13: [-]
   8.  Digit 6: [-]                      16. Digit 14: [-]
   9.  Digit 7: [-]                      17. Digit 15: [-]
  10.  Digit 8: [-]                      18. Digit 16: [-]

DISPLAY ONLY
  19. Trunk Type: [---]



Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-18.
Change:	Fields 1-18.
Remove:	Fields 1-18.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999

2. Test Line Type
   - \- Unassigned
   - 0 Disabled
   - 1 102-type or old 100-type
   - 2 New 100-type
   - 3 LC145 or SN260A
   - 4 SN260B
   - 5 56A or 105-type without return loss
   - 6 SN261, TN771B, ZLC12, or 105 with return loss

TTL TELEPHONE DIGITS (Fields 3-18)

The TTL telephone number digits must be entered without gaps.

For trunks which send a Traveling Class Mark (TCM) digit (or digits if two TCMs are required), the TCM must be administered as part of the TTL Telephone Digits. The TCM digit or digits are placed at the end of the dialed number. Refer to Procedure 103 Word 1 Field 3 to determine if the trunk group is administered to send 0, 1, or 2 TCM digits.

Field 3 must not contain a dash when using the add or change routines.

3. Digit 1 -, 0-9
4. Digit 2 -, 0-9
5. Digit 3 -, 0-9
6. Digit 4 -, 0-9
7. Digit 5 -, 0-9
8. Digit 6 -, 0-9
9. Digit 7 -, 0-9
10. Digit 8 -, 0-9
11. Digit 9 -, 0-9
12. Digit 10 -, 0-9
13. Digit 11 -, 0-9
14. Digit 12 -, 0-9
15. Digit 13 -, 0-9

16. Digit 14 -, 0-9

17. Digit 15 -, 0-9

18. Digit 16 -, 0-9

DISPLAY ONLY (Field 19)

19. Trunk Type

12	CCSA/APLT 2-way with dial tone out (9)
13	CCSA/APLT 2-way with dial tone out (10)
14	CCSA/APLT 2-way (8)
15	CCSA/APLT 2-way (5)
17	CO 1-way out DOD (1)
18	CO 1-way out DOD with party test (2)
19	CO 2-way attendant completing in/DOD out (1)
20	CO 2-way with party test attendant completing in/DOD out (2)
22	FX 1-way out DOD (1)
23	FX 1-way out DOD with party test (2)
24	FX 2-way attendant completing in/DOD out (1)
25	FX 2-way with party test attendant completing in/DOD out (2)
27	WATS 1-way out DOD or toll terminal access for TSPS (1)
28	WATS 1-way out DOD with party test (2)
33	TIE 1-way out automatic (31)
34	TIE 1-way out dial repeating (4)
36	TIE 2-way dial repeating in and out (4)
37	TIE 2-way dial repeating in/automatic out (31)
38	TIE 2-way automatic in/dial repeating out (28)
39	TIE 2-way automatic in and out (32)
41	TIE ETN 2-way dial repeating (26)
43	TIE ETN 1-way out dial repeating (26)
44	TIE 2-way dial repeating (8)
45	TIE 2-way dial repeating in/automatic out (8)
46	TIE ETN 2-way dial repeating/delay dial in (24)
47	TIE ETN 2-way dial repeating (24)
50	Remote Access 2-way (1)
71	Main/Satellite 1-way out (15)
72	Main/Satellite 2-way (15)
74	Main/Satellite 1-way out (16)
75	Main/Satellite 2-way (16)
77	Main/Satellite 1-way out (17)
78	Main/Satellite 2-way (17)
120	ISDN dynamic (20)

Special Error Codes

81 - This trunk type is not valid for this feature.

82 - Remove this trunk group from the schedule using Procedure 107 Word 4 before removing or disabling the test line.

83 - The digits must be entered in fields 3-18 without gaps between the numbers.

PROCEDURE 107 WORD 2 — ATMS - MARGINAL THRESHOLDS FOR TESTS

Purpose

Use Procedure 107 Word 2 to administer the marginal thresholds for the Automatic Transmission Measurement System (ATMS) tests.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 107, WORD: 2
                      ATMS - MARGINAL THRESHOLDS FOR TESTS

 1.          Trunk Group: [---]
 2. 1004 Hz Loss Maximum: [--]
 3. 1004 Hz Loss Minimum: [--]
404 Hz MAXIMUM
   4. Positive Deviation: [-]
   5. Negative Deviation: [-]
2804 Hz MAXIMUM
   6. Positive Deviation: [-]
   7. Negative Deviation: [-]

 8.                  Noise without Tone: [--]
 9.                     Noise with Tone: [--]
10.  Low Frequency, Singing Return Loss: [--]
11.                    Echo Return Loss: [--]
12. High Frequency, Singing Return Loss: [--]
DISPLAY ONLY
  13. Test Line Type: [--]

Connected to CC0 ON-LINE ♡ [MAJOR] [MINOR] [RUN TAPE] [BUSY OUT] [IN USE] [WAIT]

enter command:
[          ] [          ] [3 Form] [          ] [5 Help] [6 Field] [7 Input] [8 Cmds]
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-12. A dash in any of fields 2 through 12 indicates a threshold that is not valid for the test line type in field 13 and cannot be changed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999
2. 1004 Hz Loss Maximum
   0-21 dB
   91 -1 dB
   92 -2 dB

   Field 2 cannot be less than field 3.
3. 1004 Hz Loss Minimum
   0-21 dB
   91 -1 dB
   92 -2 dB

   Field 3 cannot be more than field 2.

404 Hz MAXIMUM (Fields 4-5)

4. Positive Deviation -, 0-9 (dB)
5. Negative Deviation -, 0-9 (dB)

2804 Hz MAXIMUM (Fields 6-7)

6. Positive Deviation -, 0-9 (dB)
7. Negative Deviation -, 0-9 (dB)
8. Noise without Tone -, 15-55 (dBrnC)
9. Noise with Tone -, 34-74 (dBrnC)
10. Low Frequency, Singing Return Loss -, 0-40 (dB)
11. Echo Return Loss -, 0-40 (dB)
12. High Frequency, Singing Return Loss -, 0-40 (dB)

DISPLAY ONLY (Field 13)

13. Test Line Type
    - Unassigned
    0 Disabled
    1 102-type or old 100-type
    2 New 100-type
    3 LC145 or SN260A
    4 SN260B
    5 56A or 105-type without return loss
    6 SN261, TN771B, ZLC12, or 105-type with return loss

Notes

1. The thresholds are initially set to their least restrictive levels.
2. For fields 4-7, a dash means no failures are reported when the test line type is 3-6 (field 13).
3. Fields 8 and 9 display values in dBrnC (decibels relative to reference noise level with C-message weighting). The noise reference level for dBrnC is -90dBm.

Special Error Codes

81 - This trunk type is not valid for this feature.

82 - A dash in any of fields 2 through 12 indicates a threshold that is not valid for the test line type in field 13 and cannot be changed.

83 - Thresholds must not be less restrictive than those of Procedure 107 Word 6.

PROCEDURE 107 WORD 3 — ATMS - TEST SCHEDULE

Purpose

Use Procedure 107 Word 3 to administer the schedule number(s), the starting hour, duration, day(s) of the week, and the week(s) between tests, and to display the number of weeks since the last test execution.

Prerequisite Procedures

Use Procedure 107 Word 4 to remove all trunks from the test schedule before removing the schedule in this word.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 107, WORD: 3
                          ATMS - TEST SCHEDULE

 1. Schedule Number: --
 2.   Test Schedule: --
 3.   Starting Hour: --
 4.         Duration: --

DAYS OF THE WEEK
   5.     Monday: -
   6.    Tuesday: -
   7. Wednesday: -
   8.   Thursday: -
   9.     Friday: -
  10.   Saturday: -
  11.     Sunday: -

DISPLAY ONLY
  12. Weeks Since Last Test: --


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-11.
Change:	Fields 1-11.
Remove:	Fields 1-11.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Schedule Number	1-16	
2.	Test Schedule	0	Schedule run only once
		1-99	Weeks between test runs
3.	Starting Hour	0	midnight
		1	1 am
		2	2 am
		3	3 am
		4	4 am
		5	5 am
		6	6 am
		7	7 am
		8	8 am
		9	9 am
		10	10 am
		11	11 am
		12	noon
		13	1 pm
		14	2 pm
		15	3 pm
		16	4 pm
		17	5 pm
		18	6 pm
		19	7 pm
		20	8 pm
		21	9 pm
		22	10 pm
		23	11 pm
4.	Duration	0	Disabled
		1-24	hours

DAYS OF THE WEEK (Fields 5-11)

0	Not active on this day
1	Active on this day

5.	Monday	0-1
6.	Tuesday	0-1
7.	Wednesday	0-1

8. Thursday	0-1
9. Friday	0-1
10. Saturday	0-1
11. Sunday	0-1

DISPLAY ONLY (Field 12)

12. Weeks Since Last Test 0-99

Notes

1. Setting field 4 and/or fields 5-11 to 0 will in effect disable the schedule.

Special Error Codes

81 - Before a schedule can be removed, all trunks must be removed from this schedule in Word 4.

PROCEDURE 107 WORD 4 — ATMS - TRUNK ASSIGNMENT TO SCHEDULE

Purpose

Use Procedure 107 Word 4 to administer the trunk groups to be tested and the type of testing to be done for each schedule.

Prerequisite Procedures

A test line must be assigned to a trunk group in Procedure 107 Word 1 before that trunk group can be assigned in this procedure.

A schedule must be assigned in Procedure 107 Word 3 before anything can be assigned to it here.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 107, WORD: 4
                      ATMS - TRUNK ASSIGNMENT TO SCHEDULE

 1. Schedule Number: --
 2.     Trunk Group: ---
 3.       Test Type: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Fields 1-3.
Change:	Field 3.
Remove:	Fields 1-3.
Next Data:	Displays all assigned trunk groups and test types for each schedule.

Field Ranges and Encodes

1. Schedule Number	1-16	
2. Trunk Group	18-999	
	The same trunk group cannot be assigned more than once to the same schedule.	
3. Test Type	0	All tests
	1	All tests except return loss
	2	All 105 tests except self test
	3	All 105 tests except self test and return loss
	4	Supervision test only

Special Error Codes

81 - A test line must be assigned to a trunk group in Procedure 107 Word 1 before that trunk group can be assigned in this procedure.

82 - The same trunk group cannot be assigned more than once to the same schedule.

83 - A schedule must be assigned in Procedure 107 Word 3 before anything can be assigned to it in this procedure.

PROCEDURE 107 WORD 5 — ATMS - DISPLAY OF TRUNK ASSIGNMENTS BY SCHEDULE

Purpose

Use Procedure 107 Word 5 to display trunk group assignments with their scheduled test types. Each display shows five trunk groups at a time.

Related Procedures

Use Procedure 107 Word 4 to administer the trunk groups to be tested.

Use Procedure 107 Word 1 to assign test lines to a trunk group.

Use Procedure 107 Word 3 to assign schedules.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 107, WORD: 5
                ATMS - DISPLAY OF TRUNK ASSIGNMENTS BY SCHEDULE

 1. Schedule Number: --

ASSIGNMENT 1, 6, 11...
   2. Trunk Group: ---
   3.   Test Type: -
ASSIGNMENT 2, 7, 12...
   4. Trunk Group: ---
   5.   Test Type: -
ASSIGNMENT 3, 8, 13...
   6. Trunk Group: ---
   7.   Test Type: -
ASSIGNMENT 4, 9, 14...
   8. Trunk Group: ---
   9.   Test Type: -
ASSIGNMENT 5, 10, 15...
  10. Trunk Group: ---
  11.   Test Type: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next data:	Displays all trunk assignments in groups of five.

Field Ranges and Encodes

1. Schedule Number 1-16

ASSIGNMENT 1, 6, 11... (Fields 2-3)

2. Trunk Group 18-999

3. Test Type
   - 0 All tests
   - 1 All tests except return loss
   - 2 All 105 tests except self test
   - 3 All 105 tests except self test and return loss
   - 4 Supervision test only

ASSIGNMENT 2, 7, 12... (Fields 4-5)

4. Trunk Group 18-999

5. Test Type
   - 0 All tests
   - 1 All tests except return loss
   - 2 All 105 tests except self test
   - 3 All 105 tests except self test and return loss
   - 4 Supervision test only

ASSIGNMENT 3, 8, 13... (Fields 6-7)

6. Trunk Group 18-999

7. Test Type
   - 0 All tests
   - 1 All tests except return loss
   - 2 All 105 tests except self test
   - 3 All 105 tests except self test and return loss
   - 4 Supervision test only

ASSIGNMENT 4, 9, 14... (Fields 8-9)

8. Trunk Group 18-999

9. Test Type
   - 0 All tests
   - 1 All tests except return loss
   - 2 All 105 tests except self test
   - 3 All 105 tests except self test and return loss
   - 4 Supervision test only

ASSIGNMENT 5, 10, 15... (Fields 10-11)

10. Trunk Group 18-999

11. Test Type	0	All tests
	1	All tests except return loss
	2	All 105 tests except self test
	3	All 105 tests except self test and return loss
	4	Supervision test only

Special Error Codes

None.

PROCEDURE 107 WORD 6 — ATMS - BUSY OUT THRESHOLDS

Purpose

Use Procedure 107 Word 6 to administer the threshold percentage of trunks that may be busied out automatically because of unacceptable measurements. Also use this procedure to set the unacceptable thresholds at their minimum and maximum values for the scheduled and periodic tests.

Related Procedures

Thresholds are not allowed to be more restrictive than the thresholds administered in Word 2.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 107, WORD: 6
                              ATMS - BUSY OUT THRESHOLDS

 1.          Trunk Group: [---]
 2. 1004 Hz Loss Maximum: [--]
 3. 1004 Hz Loss Minimum: [--]
MAXIMUM 404 Hz
   4. Positive Deviation: [-]
   5. Negative Deviation: [-]
MAXIMUM 2804 Hz
   6. Positive Deviation: [-]
   7. Negative Deviation: [-]
 8.                  Noise Without Tone: [--]
 9.                     Noise with Tone: [--]
10.  Low Frequency, Singing Return Loss: [--]
11.                     Echo Return Loss: [--]
12. High Frequency, Singing Return Loss: [--]
13.                          Percent Busy: [-]
DISPLAY ONLY
  14. Test Line Type: [--]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-13 (a dash in any of fields 2 through 12 indicates a threshold that is not valid for the test line type in field 14, and cannot be changed).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group — 18-999
2. 1004 Hz Loss Maximum — 0-21 dB; 91 -1 dB; 92 -2 dB

   Field 2 cannot be less than field 3.
3. 1004 Hz Loss Minimum — 0-21 dB; 91 -1 dB; 92 -2 dB

   Field 3 cannot be more than field 2.

MAXIMUM 404 Hz (Fields 4-5)

4. Positive Deviation — -, 0-9 (dB)
5. Negative Deviation — -, 0-9 (dB)

MAXIMUM 2804 Hz (Fields 6-7)

6. Positive Deviation — -, 0-9 (dB)
7. Negative Deviation — -, 0-9 (dB)
8. Noise Without Tone — -, 15-55 (dBrnC)
9. Noise with Tone — -, 34-74 (dBrnC)
10. Low Frequency, Singing Return Loss — -, 0-40 (dB)
11. Echo Return Loss — -, 0-40 (dB)
12. High Frequency, Singing Return Loss — -, 0-40 (dB)

13. Percent Busy	0	0%
	1	25%
	2	50%
	3	75%
	4	100%

This is the maximum percentage of trunks that may be automatically busied out if transmission quality thresholds have been exceeded.

DISPLAY ONLY (Field 14)

14. Test Line Type	-	Unassigned
	0	Disabled
	1	102-type or old 100-type
	2	New 100-type
	3	LC145 or SN260A
	4	SN260B
	5	56A or 105-type without return loss
	6	SN261, TN771B, ZLC12, or 105-type with return loss

Notes

1. The thresholds are initially set to their least restrictive levels.
2. Fields 8 and 9 display values in dBrnC (decibels relative to reference noise level with C-message weighting). The noise reference level for dBrnC is -90dBm.
3. For fields 4-7, a dash means no failures are reported when the test line type is 3-6 (field 14).

Special Error Codes

81 - This trunk type is not valid for this test.

82 - A dash in any of fields 2 through 12 indicates a threshold that is not valid for the test line type in field 14 and cannot be changed.

83 - Thresholds must not be more restrictive than those of Procedure 107 Word 2.

PROCEDURE 107 WORD 7 — ATMS - ALARM THRESHOLDS

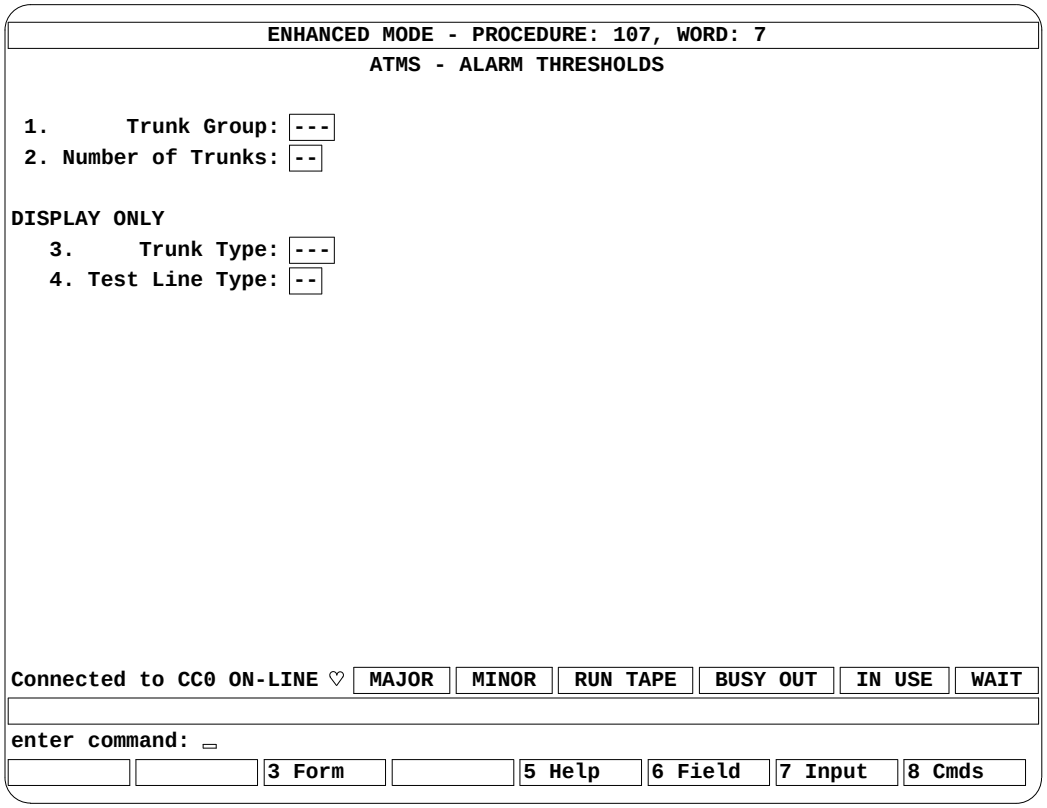
Purpose

Use Procedure 107 Word 7 to administer the number of trunks that are allowed to be maintenance busied (e.g., the quantity of trunks that fail the unacceptable threshold twice) before a minor alarm is raised.

Prerequisite Procedures

Use Procedure 107 Word 1 to assign trunk groups.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999
2. Number of Trunks 1-60

   This is the number of trunks which can fail the unacceptable thresholds twice before a minor alarm is raised.

DISPLAY ONLY (Fields 3-4)

3. Trunk Type	12	CCSA/APLT 2-way with dial tone out (9)
	13	CCSA/APLT 2-way with dial tone out (10)
	14	CCSA/APLT 2-way (8)
	15	CCSA/APLT 2-way (5)
	17	CO 1-way out DOD (1)
	18	CO 1-way out DOD with party test (2)
	19	CO 2-way attendant completing in/DOD out (1)
	20	CO 2-way with party test attendant completing in/DOD out (2)
	22	FX 1-way out DOD (1)
	23	FX 1-way out DOD with party test (2)
	24	FX 2-way attendant completing in/DOD out (1)
	25	FX 2-way with party test attendant completing in/DOD out (2)
	27	WATS 1-way out DOD or toll terminal access for TSPS (1)
	28	WATS 1-way out DOD with party test (2)
	33	TIE 1-way out automatic (31)
	34	TIE 1-way out dial repeating (4)
	36	TIE 2-way dial repeating in and out (4)
	37	TIE 2-way dial repeating in/automatic out (31)
	38	TIE 2-way automatic in/dial repeating out (28)
	39	TIE 2-way automatic in and out (32)
	41	TIE ETN 2-way dial repeating (26)
	43	TIE ETN 1-way out dial repeating (26)
	44	TIE 2-way dial repeating (8)
	45	TIE 2-way dial repeating in/automatic out (8)
	46	TIE ETN 2-way dial repeating (25)
	47	TIE ETN 2-way dial repeating (24)
	50	Remote Access 2-way (1)
	71	Main/Satellite 1-way out (15)
	72	Main/Satellite 2-way (15)
	74	Main/Satellite 1-way out (16)
	75	Main/Satellite 2-way (16)
	76	Main/Satellite 1-way in (17)
	77	Main/Satellite 1-way out (17)
	78	Main/Satellite 2-way (17)
	120	ISDN dynamic (20)
4. Test Line Type	-	Unassigned
	0	Disabled
	1	102-type or old 100-type
	2	New 100-type
	3	LC145 or SN260A
	4	SN260B
	5	56A or 105-type without return loss
	6	SN261, TN771B, ZLC12, or 105-type with return loss

Special Error Codes

81 - This trunk type is not valid for this feature.

82 - The trunk group must be assigned in Procedure 107 Word 1.

PROCEDURE 108 WORD 1 — ISDN TERMINATING TEST LINE ASSIGNMENT

Purpose

Use Procedure 108 Word 1 to administer the ISDN terminating test line (TTL) telephone digits to an ISDN trunk group.

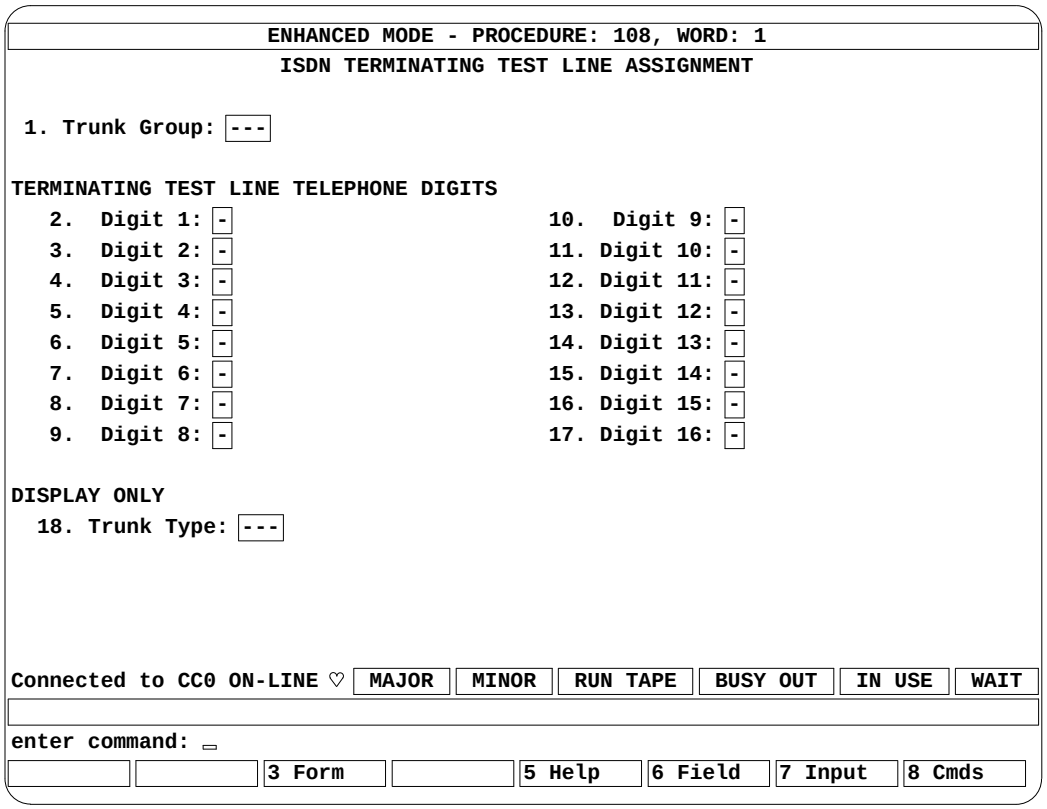
Prerequisite Procedures

Use Procedure 100 Word 1 to administer the trunk groups.

Related Procedures

Use Procedure 107 Words 2-7 to administer testing parameters for the ISDN test line.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-17 (field 2 must not contain a dash).
Change:	Fields 2-17 (field 2 must not contain a dash).
Remove:	Fields 1-17.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Trunk Group 18-999

TERMINATING TEST LINE TELEPHONE DIGITS (Fields 2-17)

The TTL telephone number digits must be entered without gaps.

For trunks which send a Traveling Class Mark (TCM) digit (or digits if two TCMs are required), the TCM must be administered as part of the TTL Telephone Digits. The TCM digit or digits are placed at the end of the dialed number. Refer to Procedure 103 Word 1 Field 3 to determine if the trunk group is administered to send 0, 1, or 2 TCM digits.

Field 2 must not contain a dash when using the add or change routines.

2. Digit 1 -, 0-9
3. Digit 2 -, 0-9
4. Digit 3 -, 0-9
5. Digit 4 -, 0-9
6. Digit 5 -, 0-9
7. Digit 6 -, 0-9
8. Digit 7 -, 0-9
9. Digit 8 -, 0-9
10. Digit 9 -, 0-9
11. Digit 10 -, 0-9
12. Digit 11 -, 0-9
13. Digit 12 -, 0-9
14. Digit 13 -, 0-9
15. Digit 14 -, 0-9
16. Digit 15 -, 0-9
17. Digit 16 -, 0-9

DISPLAY ONLY (Field 18)

18. Trunk Type	16	CO 1-way attendant completing
	17	CO 1-way out DOD
	19	CO 2-way attendant completing in/DOD out
	21	FX 1-way in attendant completing
	22	FX 1-way out DOD
	24	FX 2-way attendant completing in/DOD out
	26	WATS 1-way in attendant completing
	27	WATS 1-way out DOD or toll terminal access for TSPS
	28	WATS 1-way out DOD with party test
	30	DID immediate start
	31	DID wink start
	41	TIE ETN 2-way dial repeating
	42	TIE ETN 1-way in dial repeating
	43	TIE ETN 1-way out dial repeating
	46	TIE ETN 2-way dial repeating
	47	TIE ETN 2-way dial repeating
	50	Remote access 2-way
	108	DMI host terminating, dial repeating in/automatic out
	109	DMI dial repeating in and out
	120	ISDN dynamic

Special Error Codes

81 - This trunk type is not valid for this application.

82 - The telephone line digits must be entered in fields 2-17 without any gaps.

PROCEDURE 110 WORD 1 — TRUNK DAC FOR TANDEM TIE/TRUNK-TO-TRUNK RESTRICTIO

Purpose

Use Procedure 110 Word 1 to administer trunk dial access codes (DAC) to restricted dial code entry numbers for tandem tie trunk and trunk-to-trunk restrictions.

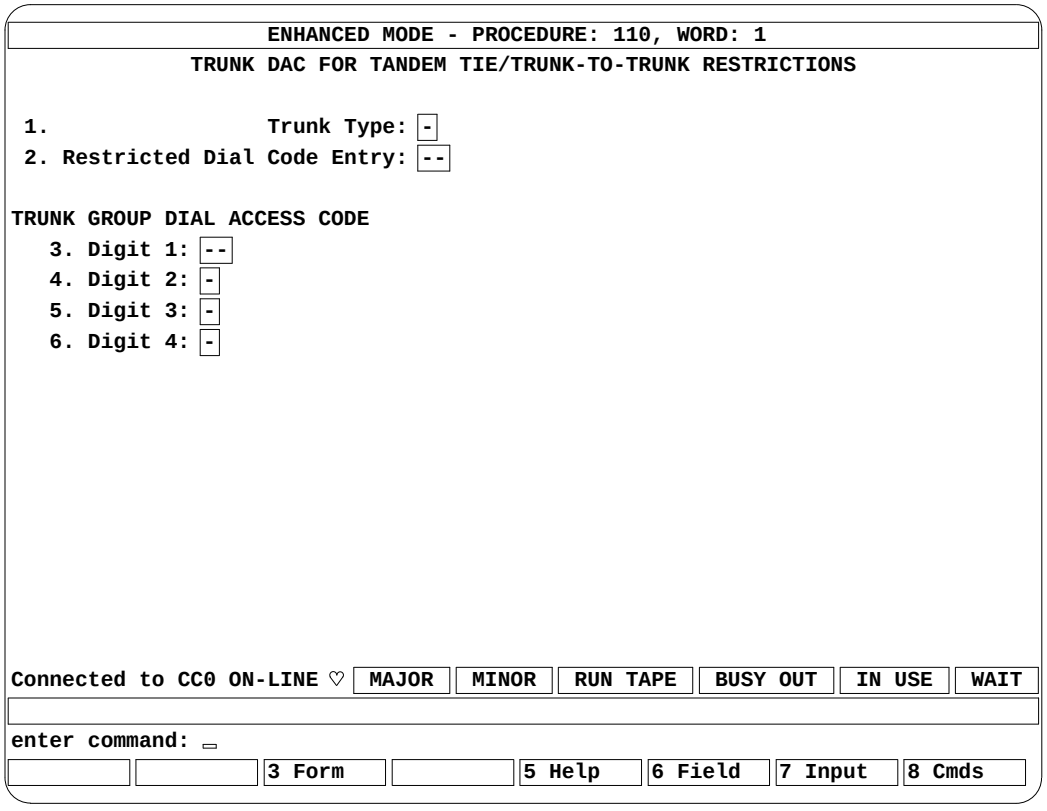
Prerequisite Procedures

Use Procedure 100 Word 1 to associate a trunk group with a DAC.

Related Procedures

After assigning restricted entries here, use Procedure 111 Word 1 to associate these entries with trunk groups.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-6.
Change:	Fields 3-6.
Remove:	Not allowed (enter dashes in fields 3-6 and use the change routine).
Next Data:	Displays all restricted trunk dial access codes (DACs).

Field Ranges and Encodes

1.	Trunk Type	0	Tandem tie trunk
		1	Trunk-to-trunk
2.	Restricted Dial Code Entry	1-16	

TRUNK GROUP DIAL ACCESS CODE (Fields 3-6)

3.	Digit 1	-, 0-9, 11 (*), 12 (#)
4.	Digit 2	-, 0-9
5.	Digit 3	-, 0-9
6.	Digit 4	-, 0-9

Special Error Codes

83 - The entry numbers in field 2 are 1-16.

PROCEDURE 111 WORD 1 — TANDEM TIE/TRUNK-TO-TRUNK RESTRICTIONS

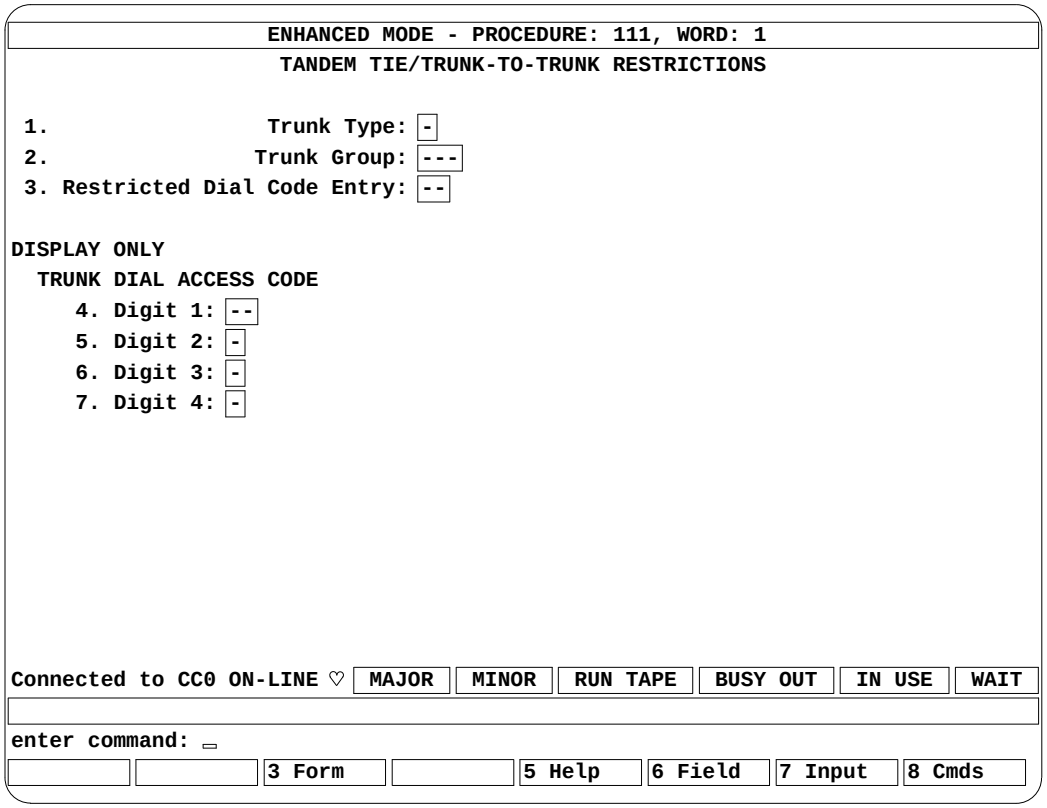
Purpose

Use Procedure 111 Word 1 to administer restricted dial code entry numbers associated with trunk groups for tandem tie trunk and trunk-to-trunk restrictions.

Prerequisite Procedures

Procedure 110 Word 1 must be used to assign restricted dial code entry numbers to trunk DACs.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-3.
Change:	Field 3.
Remove:	Fields 1-3.
Next Data:	Displays all entry numbers and DACs.

Field Ranges and Encodes

1. Trunk Type	0	Tandem tie trunk
	1	Trunk-to-trunk
2. Trunk Group	18-999	
3. Restricted Dial Code Entry	1-16, 99 Encode 99 will assign this trunk group to all restricted dial code entry numbers.	

DISPLAY ONLY (Fields 4-7)
TRUNK DIAL ACCESS CODE (Fields 4-7)

4. Digit 1	0-9, 11 (*), 12 (#)
5. Digit 2	0-9
6. Digit 3	0-9
7. Digit 4	0-9

Special Error Codes

83 - Dial access codes must be assigned to entry numbers in Procedure 110 Word 1 before entry numbers can be assigned in this procedure.

84 - The entry number in field 3 can be 1-16 for individual DACs or 99 for all DACs assigned in Procedure 110 Word 1.

PROCEDURE 115 WORD 1 — TRUNK GROUP TERMINATION

Purpose

Use Procedure 115 Word 1 to administer non-dialing incoming trunk groups to terminate on any of the following services:

— Local attendant at a CAS branch location

— Centralized Attendant Service (CAS)

— Automatic Call Distribution (ACD).

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

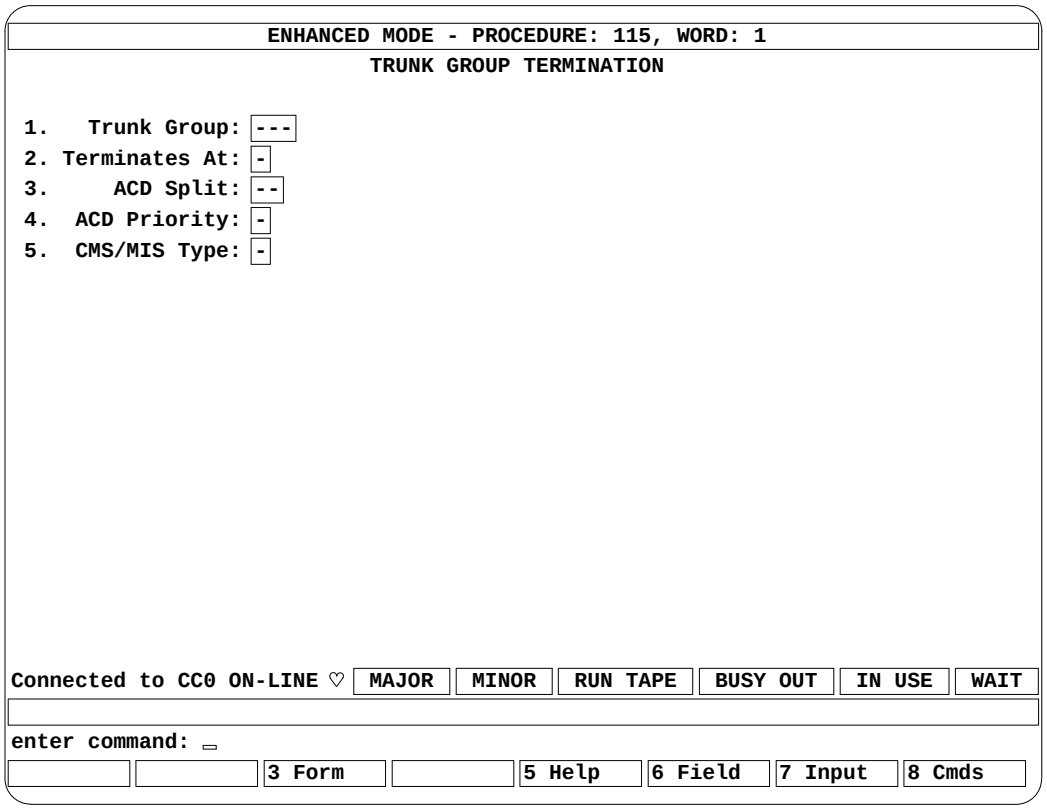
Use Procedure 026 Word 1 to assign ACD split numbers.

Use Procedure 028 Word 1 to busy out CMS before changing translations.

Related Procedures

This procedure only displays vector directory number (VDN) information. If field 2 = 2, the trunk group terminates to a VDN. Use Procedure 031 Word 3 to change the VDN information.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 3.
Add:	Not allowed.
Change:	Fields 2-5.
Remove:	Not allowed.
Next Data:	Displays all trunk groups that terminate at an ACD split. When Call Vectoring is enabled, it operates like a display routine.

Field Ranges and Encodes

1. Trunk Group — 18-999 (18-255 for trunk groups measured by CMS)

   The following are the valid trunk types for trunk group termination:

   16 = CO 1-way in attendant completing
   19 = CO 2-way attendant completing in/DOD out
   20 = CO 2-way with party test attendant completing in/DOD out
   21 = FX 1-way in attendant completing
   24 = FX 2-way attendant completing in/DOD out
   25 = FX 2-way with party test attendant completing in/DOD out
   26 = WATS 1-way in attendant completing
   35 = TIE 1-way in automatic
   38 = TIE 2-way automatic in/dial repeating out
   39 = TIE 2-way automatic in and out
   66 = CAS release link trunk 1-way incoming at main

   Type 50 (Remote Access 2-way) is available when speaker verification is enabled in Procedure 285 Word 1.

2. Terminates At
   - ACD split
   0 Local attendant
   1 CAS attendant
   2 VDN (see Procedure 031 Word 3)

3. ACD Split — -, 1-60

4. ACD Priority
   - Nonpriority ACD split termination
   1 Priority ACD split termination

5. CMS/MIS Type
   - Group not measured by CMS
   1 Outgoing measurements by CMS
   2 Incoming measurements by CMS
   3 Two-way measurements by CMS

Special Error Codes

81 - The trunk type of the trunk group in field 1 is not allowed for CAS, ACD, or local attendant.

82 - Field 2 or field 3 must be dashed.

83 - The trunk group must be assigned with ACD termination to set the priority in field 4.

84 - The ACD split must be assigned in Procedure 026 Word 1.

85 - Busy out CMS using Procedure 028 Word 1 before changing translations.

86 - CMS-measured trunk groups must be within the range of 18-255.

87 - When Call Vectoring is enabled, the ACD split and ACD priority must be dashed.

88 - A trunk group terminated at a VDN can only be changed in Procedure 031 Word 3.

89 - Cannot change termination to go to a VDN. It must be changed in Procedure 031 Word 3.

90 - A trunk group must have trunks administered for the trunk group to be measured.

PROCEDURE 116 WORD 1 — DS1 AND ISDN TRUNK ASSIGNMENTS

Purpose

Use Procedure 116 Word 1 to administer trunks to a DS1/ISDN interface.

Prerequisite Procedures

Use Procedure 028 Word 1 to busy out CMS before making changes.

Use Procedure 260 Word 1 to administer DS1/ISDN equipment locations.

Use Procedure 100 Word 1 to administer trunk groups.

Use Procedure 100 Word 3 to administer signaling types to be compatible with a DS1/ISDN trunk group.

Use Procedure 262 Words 1 and 2 to administer D-channel assignments.

Use Procedure 211 Word 2 to remove release link trunk assignments before removing that trunk in this procedure.

Use Procedure 360 Word 1 to remove assignments for Dedicated Switch Connections (DSC).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 116, WORD: 1
                          DS1 AND ISDN TRUNK ASSIGNMENTS

EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.            Trunk Group: ---
 7.         Night Terminal: -----
 8.      Disable Signaling: -
 9.  AIOD Equipment Number: ----
10.     Interface Endpoint: -
11. D-Channel Group Number: ---




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Fields 1-11.
Change:	Fields 6-11.
Remove:	Fields 1-11.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-2, 5-7, 13-15, 18-20 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-3 for traditional modules, 0-11 for universal and XE modules
6.	Trunk Group	18-999

7. Night Terminal

-, 000-99999

8. Disable Signaling

- ISDN signaling
0 Signaling enabled (for robbed bit signaling)
1 Signaling disabled (use with DSC)

Enter a ‘‘1’’ to disable signaling for clear channel DS1 applications.

A dash (-) in this field is required for ISDN. Without a dash, field 10 cannot be administered. A dash is also required when administering facilities for nodal service and MEGACOM access.

9. AIOD Equipment Number

-, 0000-9999

The AIOD number (field 9) is applicable to 1-way out, 2-way CO, and CCSA/APLT trunks. If automatic number identification is provided, the associated central office supplies the AIOD equipment number.

Leading zeros must be entered in this field if they are on the service order.

10. Interface Endpoint

0 PBX
1 Host computer
2 Network

For incoming calls over a trunk whose type is ISDN dynamic; and if a Network Specific Facility (NSF) information element is present in the SETUP message and the feature/service indication is set to feature; or if there is no NSF at all:

— 0 (PBX) means that the call will be processed like a call with trunk type 41
— 1 (host computer) means that the call will be processed like a call with trunk type 108
— 2 (network) means that the call will be processed like a call with trunk type 31.

11. D-Channel Group Number

-, 1-255

The D-channel group number specified here may be assigned a backup D-channel in Procedure 262 Word 2.

If you are administering NFAS, you must administer the PRI Interface Identifier in Procedure 262 Word 1.

Notes

1. If an ISDN board is configured with 23 B-channels and 1 D-channel, then either all or none of the trunks on that board can be assigned a D-channel group number in this procedure. That is, you cannot have some assigned to a D-channel group number and some not assigned to a D-channel group number. If an ISDN board is configured with 24 B-channels, then the trunks on that board must be assigned D-channel group numbers in this procedure. The 24 B-channels on a given board do not all have to be administered to the same D-channel group number.

2. The following table illustrates the physical equipment-location-to-channel-number conversion for DS1 trunks in a traditional module:

	SLOT					
CIRCUIT	0 or 13	1 or 14	2 or 15	5 or 18	6 or 19	7 or 20
0	13	14	15	1	2	3
1	16	17	18	4	5	6
2	19	20	21	7	8	9
3	22	23	24	10	11	12

The following table illustrates the physical equipment-location-to-channel-number conversion for DS1 trunks in a universal or XE module:

1 through 24 are the DS1 channel numbers, and ‘‘x’’ is the physical circuit pack in the odd numbered slots. x + 1 is the logical circuit pack.

	CIRCUIT											
SLOT	0	1	2	3	4	5	6	7	8	9	10	11
X*	1	2	3	4	5	6	7	8	9	10	11	12
X+1*	13	14	15	16	17	18	19	20	21	22	23	24
* X is the slot where the board is located and X+1 is the adjacent slot to the right (e.g., 2 and 2+1, 5 and 5+1).												

When connecting DS1 trunks between two DEFINITY(TM) Generic 2 switch traditional modules or two Generic 2 universal or XE modules, use the same DS1 channel number on each end of the connection (i.e., channel 1 to channel 1, channel 2 to channel 2, etc), then find the logical slot and circuit for each connection.

Special Error Codes

42 - Trunk/trunk group assigned to CO line appearance - see Procedure 057 Words 1-3.

43 - The D-channel on this trunk's interface has been assigned to a D-channel group in Procedure 262 Word 2. A D-channel group must be assigned to the trunk. Note that they may be the same or different D-channel group numbers.

44 - In Procedure 262 Word 1, the entered trunk's interface was assigned an Interface Identifier which is the same as that assigned to a different physical interface. This other interface has trunks which have been assigned to the same entered D-channel Group. This is not allowed. Interface IDs must be unique among all physical interfaces assigned to a particular D-channel Group.

45 - The entered D-channel group does not have a primary D-channel assignment. Assign it in Procedure 262 Word 2 for NFAS.

46 - The number of physical interfaces in the NFAS arrangement is limited to 20.

48 - This trunk's interface has no D-channel on it. A D-channel group number must be assigned to this trunk.

49 - An interface identifier has been assigned to the trunk's interface. Either assign the trunk to a D-channel group number or remove the interface identifier in Procedure 262 Word 1.

50 - Remove this assignment from the DSC (Procedure 360 Word 1).

51 - You cannot mix ground start and loop start trunks in the same pair.

52 - An AIOD number is valid for APLT trunk types 12-15 and CO trunk types 17-20.

53 - This slot already has a line assigned; you cannot add a trunk.

54 - This port assignment is a line. Use Procedure 000 Word 1 to remove if appropriate.

55 - See Procedure 260 Word 1 to assign an equipment location. This trunk group uses ISDN signaling, but the equipment location is not reserved for ISDN.

56 - See Procedure 100 Word 3 to assign ISDN signaling to the trunk group. This equipment location is reserved for trunks with ISDN signaling only.

57 - Not assignable to ISDN trunks.

58 - Not assignable to non-ISDN trunks.

59 - Use Procedure 262 Word 1 to assign an interface identifier to the trunk for NFAS.

62 - You cannot add physical trunks to ASAI Gateway equipment location.

63 - You cannot add physical trunks to an ASAI Gateway trunk group.

81 - An associated extension cannot be used as a night terminal.

82 - Remove release link trunk assignments in Procedure 211 Word 2 before removing the trunk.

83 - The circuit number is limited by the type of circuit pack assigned.

84 - A change routine is not allowed for either the original or changed trunk type.

85 - A maximum of 255 trunks can be assigned to a trunk group (99 for types 103-107).

86 - The trunk type assigned to this trunk group is not correct for DS1.

87 - The equipment location is not allocated as a DS1 or DMI port. See Procedure 260 Word 1.

89 - For traditional modules, the allowed slots for DS1/ISDN are 0-2 and 5-7 for a circuit pack in slot 5, or 13-15 and 18-20 for a circuit pack in slot 18. Circuit numbers are 0-3.

90 - Trunk cannot be assigned to channel 24 if DS1/ISDN is arranged for 24th channel signaling. For traditional module, cannot use slot 2 circuit 3 for the circuit pack in slot 5, or slot 15 circuit 3 for the circuit pack in slot 18. For universal and XE modules, cannot use slot x+1 circuit 11. See Notes section.

91 - A trunk cannot be added to or taken away from a DCS trunk group using the change routine. It must be removed first then added.

92 - Only trunk types 103-107 are valid for a trunk in a remote carrier group (RCG).

93 - Busy out CMS using Procedure 028 Word 1.

94 - The disable signaling bit cannot be changed if the trunk is part of a DSC (Procedure 360 Word 1). If the trunk is not in a DSC, the trunk must be idle or maintenance busy before the disable signaling bit can be changed.

95 - This trunk type is not compatible with the other pair member. Pair members are circuits 0/1 and circuits 2/3. Compatibility groups are: 1) CO/FX/WATS/RA (ground start); 2) CO/FX/WATS (loop start); and 3) TIE/DID/APLT. This rule applies to the ANN11 board only.

96 - CO trunks must use robbed bit signaling.

97 - This equipment location is not a DS1 trunk board.

PROCEDURE 120 WORD 1 — AUTOMATIC CIRCUIT ASSURANCE

Purpose

Use Procedure 120 Word 1 to administer Automatic Circuit Assurance (ACA) trunk group information (short call limit, long call limit, and short call referral threshold) for any assigned incoming or outgoing, one-way or two-way trunk groups.

Minor changes in fields 2 and 3 can significantly affect the ACA feature.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer basic trunk group translations.

Use Procedure 101 Words 1 and 2 to administer trunk group characteristics.

Use Procedure 116 Word 1 or Procedure 150 Word 1 to assign trunks to a trunk group.

Related Procedures

Use Procedure 285 Word 1 and Procedure 286 Word 1 to enable and disable the Automatic Circuit Assurance for the system COS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 120, WORD: 1
                          AUTOMATIC CIRCUIT ASSURANCE

 1.                     Trunk Group: ---
 2. Short Call Limit (even seconds): ---
 3.          Long Call Limit (hours): --
 4.   Short Call Referral Threshold: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Fields 2-4.
Next Data:	Shows trunk groups that have ACA assignments.

Field Ranges and Encodes

1. Trunk Group — 18-999

   If the trunk group entered in this field has no dial access code associated with it, ACA timing can be assigned, but ACA referrals will never be conveyed to the attendant console.

2. Short Call Limit (even seconds)
   0 Disables short call threshold
   2-160 Enables short call threshold

   This field is the minimum time limit set for short calls made on a given trunk group. If a call is disconnected prior to the time set in this field, the switch adds a count to the short call referral threshold. When the short call threshold count is met, the switch notifies the designated attendant that this trunk group has met the limit.

3. Long Call Limit (hours)
   0 Disables long call limit
   1-24 Enables long call limit

   This field is the time limit set for all lengthy calls made on a given trunk group. If a call lasts longer than the number of hours designated in this field, the switch notifies the designated attendant that this trunk group has met the limit.

4. Short Call Referral Threshold
   0-30 (even number)

   This field is the even number of short calls made on the switch that will cause the switch to notify a designated attendant. For example, if the referral threshold is set at 6 for a given trunk group, and 6 calls are made on that trunk group that do not stay connected for the short call limit time (field 2), the attendant is notified.

Special Error Codes

81 - Entries for fields 2 and 4 must be even numbers.

82 - If either field 2 or 4 is set to zero, both must be set to zero.

PROCEDURE 150 WORD 1 — TRUNK - FEATURES

Purpose

Use Procedure 150 Word 1 to:

— Add or remove trunks to or from a trunk group

— Assign night terminals to a trunk

— Assign a central office trunk number to be used for Automatic Identified Outward Dialing (AIOD) billing, when the AIOD feature is provided

— Administer paging zone assignments to equipment locations.

— Assign recorded announcement numbers to equipment locations for Call Vectoring.

Use this procedure to administer the following applications to circuit packs:

Central office trunks (SN230B on traditional modules, TN747B on universal and XE modules)

Auxiliary trunks (SN231 on traditional modules, TN763B on universal and XE modules)

DID trunks (SN232B on traditional modules, TN753 on universal and XE modules)

Analog tie trunks (SN233C on traditional modules, TN760C on universal and XE modules)

Touch-Tone receivers (SN251 on traditional modules, TN748C on universal and XE modules)

Touch-Tone senders (SN252 on traditional modules, TN748C on universal and XE modules)

Conference-Attendant Six Party (SN254 on traditional modules, not applicable to universal and XE modules)

Tone detectors (SN255 on traditional modules, TN748C on universal and XE modules)

Analog and digital facility test circuit (SN261 on traditional modules)

General Purpose Port for PDM, MDM, and TDM applications (SN270B on traditional modules, TN754 as digital lines on universal and XE modules).

Prerequisite Procedures

Before making changes in fields 10 and 11, check Procedure 276 Word 1 to see if Call Vectoring is active or inactive. The encode definitions for these two fields are based on the status of Call Vectoring (enabled or disabled as administered in Procedure 276 Word 1 field 5).

Use Procedures 350 Word 1 and 354 Word 1 to place the night terminal number (field 7) in the dialing plan. The number must also be associated with a terminal line using Procedure 000 Word 1.

Use Procedure 100 Word 1 to administer trunk group translations.

Use Procedure 101 Words 1-3 to administer trunk group characteristics.

Use Procedure 155 Word 1 to administer the contact interface boards (SN241).

Before a trunk is removed, the trunk's translations in the following procedures must be removed.

— Use Procedure 027 Word 1 to remove the trunk from any ACD recorded announcement.

— Use Procedure 028 Word 1 to busy out CMS when CMS trunk translations are being altered.

— Use Procedure 030 Word 3 or Procedure 033 Word 1 to remove announcement trunk when vectoring is enabled.

— Use Procedure 211 Word 2 to remove the outgoing release link trunk translations (Type 57).

— Use Procedure 289 Word 1 to remove the recorded announcement number.

— Use Procedure 360 Word 1 to remove the trunk from a Dedicated Switch Connection (DSC).

Related Procedures

Use Procedure 116 Word 1 to administer trunks for remote-DS1, and signaling for ISDN trunk groups.

Use Procedure 155 Word 1 to administer SN241 contact interface boards.

Use Procedure 175 Word 1 to display miscellaneous trunk restriction groups.

Use Procedure 178 Word 1 to find all the trunks in a trunk group.

Use Procedure 180 Word 1 to assign a trunk to a modem pool.

Use Procedure 275 Word 1 when attempting to remove the Music-On-Hold trunk. Set the Music-on-Hold feature to 0. Return to this procedure and do a remove routine.

Use Procedure 290 Word 1 to search for unassigned equipment locations.

Cautions

Loudspeaker Paging zones must be assigned consecutively. If removing a paging zone results in nonconsecutive numbering, the remaining zones should be reassigned to maintain the proper number sequence.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 150, WORD: 1
                                TRUNK - FEATURES

EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.                Trunk Group: ---
 7.    Night Terminal Extension: -----
 8.       AIOD Equipment Number: ----
 9.                Paging Zone: --
10.       Recorded Announcement: ---
11. Continuous Announcement Bit: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Fields 1-11.
Remove:	Fields 1-11.
Change:	Fields 6-11.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE
5.	Circuit	0-7

6. Trunk Group — 17-999

   Trunk group 17 must always be assigned to touch-tone receivers (trunk type 2 in Procedure 100 Word 1).

7. Night Terminal Extension — -, 000-99999

8. AIOD Equipment Number — -, 0000-9999

   The AIOD number (field 8) is applicable to 1-way out, 2-way CO (Central Office), and common control switching arrangement/APLT trunks. If automatic number identification is provided, the associated central office supplies the AIOD equipment number.

   Leading zeros must be entered in field 8 if they are on the service order.

9. Paging Zone — -, 1-18

10. Recorded Announcement — -, 1-255

    The range of this field depends on the trunk type of the trunk group in field 6 (defined in Procedure 100 Word 1).

    When Call Vectoring is disabled (Procedure 276 Word 1), this field must be between 1-15 and field 11 must be dashed unless the trunk type is 90, 91, or 92, then this field is also dashed.

    When Call Vectoring is enabled, and the trunk type is 52, then this field must be between 1-15 and field 11 must be dashed. If the trunk type is 90, then this field must be between 1-255 and field 11 must be 0 or 1.

11. Continuous Announcement Bit — 0 Disabled, 1 Enabled

    When Call Vectoring is disabled (Procedure 276 Word 1), field 10 must be between 1-15 and this field must be dashed. When Call Vectoring is enabled, the range of field 10 depends on the trunk type of the trunk group in field 6 (defined in Procedure 100 Word 1). If the trunk type is 52, then field 10 must be between 1-15 and this field must be dashed. If the trunk type is 90, then field 10 must be between 16-99 and this field must be 0 or 1.

Notes

1. A busy trunk cannot be removed.
2. Tone detector circuits on a universal or XE module may be assigned to circuits 0-3, 4, and 8. Trunks in trunk groups with trunk types 55 or 100 must be assigned to circuits 4 and 8.
3. Trunks in trunk group 17 must be assigned to circuits 0-3.

Special Error Codes

50 - Before removing the trunk, it must be removed from all ACD recorded announcements in Procedure 027 Word 1 first.

51 - CMS must be busied out using Procedure 028 Word 1 before translations can be altered.

52 - Before removing the trunk, the DSC must first be removed in Procedure 360 Word 1.

53 - Use Procedure 116 Word 1 to administer trunks with ISDN signaling type.

54 - When Call Vectoring is enabled, use Procedure 030 Word 3 or Procedure 033 Word 1 to remove announcement trunk.

55 - Only one music source per module is allowed.

57 - This is an invalid equipment location for tone detector circuit on a universal or XE module.

58 - Trunk group has a signaling type which is not supported by this type of module.

81 - Circuit assigned to attendant interface. See Procedure 210 Word 1.

82 - Trunk group does not require trunks.

83 - Trunk/trunk group assigned to CO line appearance. See Procedure 057 Word 1.

84 - An associated extension cannot be used as a night terminal.

85 - Trunk/trunk group assigned to contact interface - see Procedure 155 Word 1.

86 - Release link trunk assignments must be removed in Procedure 211 Word 2 before being removed here.

87 - Circuit number input is limited by type of circuit pack being assigned.

88 - Trunk group assigned to modem pool. See Procedure 180 Word 1.

89 - Change not allowed for either original or changed trunk type.

90 - Cannot change recorded announcement trunk (type 52 or type 90 when Call Vectoring is enabled).

91 - Cannot assign night terminal to recorded announcement trunk (type 52 or type 90 when Call Vectoring is enabled).

92 - A maximum of 255 trunks can be assigned to a trunk group except for: a) trunk group 17 which allows a maximum of 458 trunks; b) trunk groups with trunk types 103 through 109, which allow a maximum of 99 trunks.

93 - Remove recorded announcement number in Procedure 289 Word 1 before removing it here.

94 - Can only assign AIOD number to APLT trunk types (12-15) and CO trunk types (17-20).

95 - Circuit pack assigned to voice or data terminal; you cannot administer it here. See Procedure 051 Word 1.

97 - Trunk group assigned as loop-start type. Use Procedure 116 Word 1 to administer.

98 - A trunk cannot change into or out of a DCS trunk group. It must be removed, then added back in.

PROCEDURE 155 WORD 1 — CONTACT INTERFACE

Purpose

Use Procedure 155 Word 1 to administer contact interface board translations. The SN241 traditional module contact interface board controls lamps on a 30A8 system status indicator (SSI). The SSI shows the status of release link trunks used by Centralized Attendant Service (CAS) or queue warning for Automatic Call Distribution (ACD) trunk groups.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign a trunk group with trunk type 65.

Related Procedures

Use Procedure 026 Word 1 to administer contact interface circuits for ACD queue status.

Use Procedure 212 Word 2 to administer contact interface circuits for CAS trunk status.

Cautions

Be careful when removing boards with this procedure to prevent electrical damage. Make sure that all contacts of a board are unassigned before removing the board.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 155, WORD: 1
                                CONTACT INTERFACE

 1. Equipment Type: -
 2.    Board Index: --

EQUIPMENT LOCATION
   3.  Module: --
   4. Cabinet: -
   5. Carrier: -
   6.    Slot: --

 7. Trunk Group: ---









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2 or fields 3-6.
Add:	Fields 1-7.
Change:	Not allowed.
Remove:	Fields 1-7.
Next Data:	Displays board assignments of a given equipment type.

Field Ranges and Encodes

1. Equipment Type
   - 1 CAS outgoing RLT status, branch
   - 2 CAS incoming RLT status, main
   - 3 ACD split status

2. Board Index

   0-13

   If field 1 = 1, field 2 = 0-2.

   If field 1 = 2, field 2 = 0-13.

   If field 1 = 3, field 2 = 0-7.

EQUIPMENT LOCATION (Fields 3-6)

3.	Module	0-30 for traditional modules, 0 for universal and XE modules
4.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
5.	Carrier	0-3 for traditional modules, c-e for universal modules and XE
6.	Slot	0-3, 5-8, 12-16, 18-20 for traditional, 1-20 for universal, 1-18 for XE
7.	Trunk Group	18-999 It is necessary to assign only one trunk group per system for all contact interface boards. This single trunk group can contain every type of assignment. This trunk group must be administered as trunk type 65 in Procedure 100 Word 1.

Notes

1. Circuits should be added and removed from service using the proper procedures after adding and before removing the board with this procedure. See the following table for those procedures:

Equipment Type	**Field 1**	**Field 2**	**See Procedure**
CAS outgoing RLT status	1	0-2	211 Word 2*
CAS incoming RLT status	2	0-13	212 Word 2
ACD split status	3	0-7	026 Word 1
* These circuits are automatically assigned.			

Special Error Codes

81 - This equipment location is not assigned to a contact interface board.

82 - This trunk group is not assigned as a contact interface type. See Procedure 100 Word 1 to find correct trunk group or to redefine this trunk group.

84 - To display all boards of a given type, use the next data routine. When changing fields 1 or 2, use the display routine to start the search over again.

PROCEDURE 175 WORD 1 — DISPLAY MISCELLANEOUS TRUNK RESTRICTION GROUPS

Purpose

Use Procedure 175 Word 1 to display the trunk groups assigned to a restriction group number. Up to four DACs (Dial Access Codes) can be displayed at one time using this procedure.

Related Procedures

Use Procedure 102 Word 1 to set up miscellaneous trunk restriction groups.

Use Procedure 100 Word 1 to assign Dial Access Codes (DACs) to trunk groups.

Use Procedure 350 Word 1 to place the first digit of the trunk group DAC in the dialing plan.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 175, WORD: 1
                 DISPLAY MISCELLANEOUS TRUNK RESTRICTION GROUPS

 1. Restriction Group: -

TRUNK GROUP 1                          TRUNK GROUP 3
   2. Digit 1: --                        10. Digit 1: --
   3. Digit 2: -                         11. Digit 2: -
   4. Digit 3: -                         12. Digit 3: -
   5. Digit 4: -                         13. Digit 4: -

TRUNK GROUP 2                          TRUNK GROUP 4
   6. Digit 1: --                        14. Digit 1: --
   7. Digit 2: -                         15. Digit 2: -
   8. Digit 3: -                         16. Digit 3: -
   9. Digit 4: -                         17. Digit 4: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Remove:	Not allowed.
Change:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Restriction Group	1-8
TRUNK GROUP 1 (Fields 2-5)		
2.	Digit 1	0-9, 11 (*), 12 (#)
3.	Digit 2	-, 0-9
4.	Digit 3	-, 0-9
5.	Digit 4	-, 0-9
TRUNK GROUP 2 (Fields 6-9)		
6.	Digit 1	0-9, 11 (*), 12 (#)
7.	Digit 2	-, 0-9
8.	Digit 3	-, 0-9
9.	Digit 4	-, 0-9
TRUNK GROUP 3 (Fields 10-13)		
10.	Digit 1	0-9, 11 (*), 12 (#)
11.	Digit 2	-, 0-9
12.	Digit 3	-, 0-9
13.	Digit 4	-, 0-9
TRUNK GROUP 4 (Fields 14-17)		
14.	Digit 1	0-9, 11 (*), 12 (#)
15.	Digit 2	-, 0-9
16.	Digit 3	-, 0-9
17.	Digit 4	-, 0-9

Special Error Codes

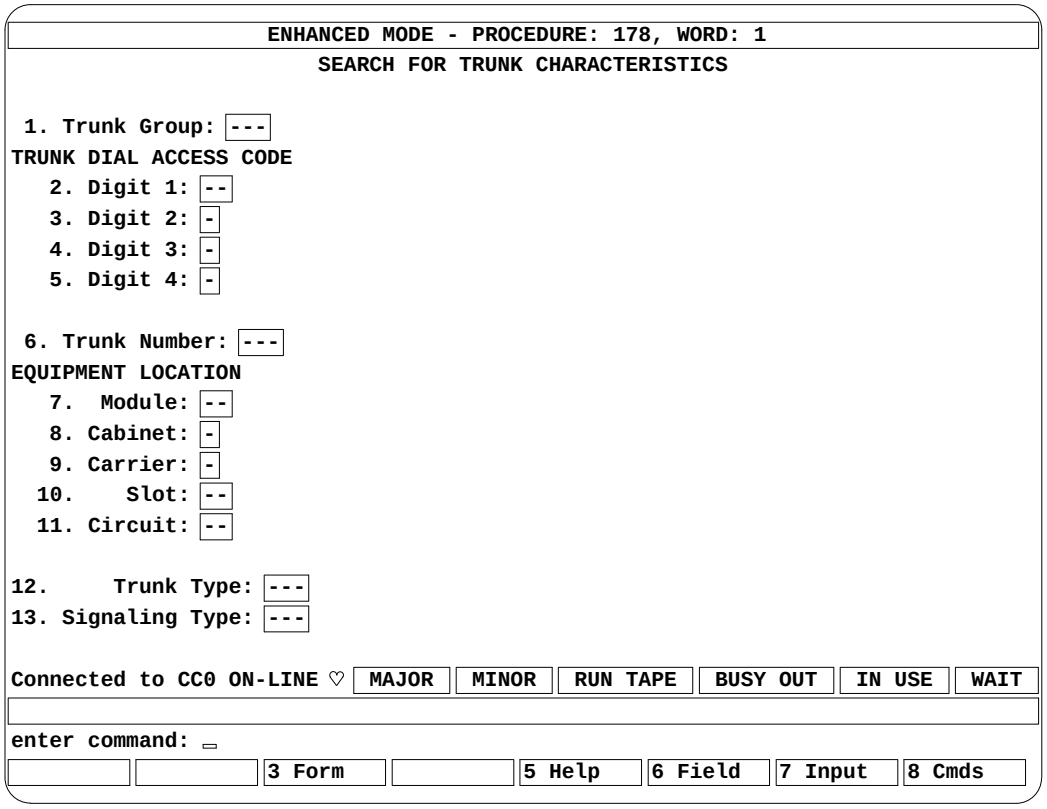
None.

PROCEDURE 178 WORD 1 — SEARCH FOR TRUNK CHARACTERISTICS

Purpose

Use Procedure 178 Word 1 to display trunk characteristics such as the dial access code (DAC), trunk number, equipment location, trunk type, and signaling used.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1, 2-5, 1-6, 2-6, 1 and 6, or 7-11.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the next trunk number if data is entered in fields 1, 2-5, 2-6 or 1-6. Fields 6-13 are dashed after the last trunk is displayed. This also displays each assigned circuit on a circuit pack if data is entered in fields 7-11.

Field Ranges and Encodes

1. Trunk Group 17-999

TRUNK DIAL ACCESS CODE (Fields 2-5)

2. Digit 1 -, 0-9, 11 (*), 12 (#)
3. Digit 2 -, 0-9
4. Digit 3 -, 0-9
5. Digit 4 -, 0-9
6. Trunk Number -, 1-255

EQUIPMENT LOCATION (Fields 7-11)

7. Module 0-30
8. Cabinet 0-7 for traditional modules, 0 for universal and XE modules
9. Carrier 0-3 for traditional modules, c-e for universal and XE modules
10. Slot 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
11. Circuit 0-23
12. Trunk Type

2	Touch-tone digit register (0)
5	Conference - Attendant Six-Party (0)
6	Queuing (0)
12	CCSA/APLT 2-way with dial tone out (9)
13	CCSA/APLT 2-way with dial tone out (10)
14	CCSA/APLT 2-way (8)
15	CCSA/APLT 2-way (5)
16	CO 1-way in attendant completing (1)
17	CO 1-way out DOD (1)
18	CO 1-way out DOD with party test (2)
19	CO 2-way attendant completing in/DOD out (1)
20	CO 2-way with party test attendant completing in/DOD out (2)
21	FX 1-way in attendant completing (1)
22	FX 1-way out DOD (1)
23	FX 1-way out DOD with party test (2)
24	FX 2-way attendant completing in/DOD out (1)
25	FX 2-way with party test attendant completing in/DOD out (2)
26	WATS 1-way in attendant completing (1)
27	WATS 1-way out DOD or toll terminal access for TSPS (1)
28	WATS 1-way out DOD with party test (2)
30	DID immediate start (30)
31	DID wink start (3)
32	TIE 1-way in dial repeating (4)
33	TIE 1-way out automatic (31)

34 TIE 1-way out dial repeating (4)
35 TIE 1-way in automatic (28)
36 TIE 2-way dial repeating in and out (4)
37 TIE 2-way dial repeating in/automatic out (31)
38 TIE 2-way automatic in/dial repeating out (28)
39 TIE 2-way automatic in and out (32)
40 TIE 1-way in dial repeating (8)
41 TIE ETN 2-way dial repeating (26)
42 TIE ETN 1-way in dial repeating (26)
43 TIE ETN 1-way out dial repeating (26)
44 TIE 2-way dial repeating (8)
45 TIE 2-way dial repeating in/automatic out (8)
46 TIE ETN 2-way dial repeating (25)
47 TIE ETN 2-way dial repeating (24)
50 Remote Access 2-way (1)
51 Telephone dictation interface (7)
52 Recorded Announcement interface (7)
53 Code Calling interface (7)
54 Loudspeaker Paging interface (7)
55 Touch-Tone sender (0)
57 CAS release link trunk 1-way outgoing from branch (13)
58 ANI interface (6)
62 Music on Hold interface (0)
65 SN241 contact interface (0)
66 CAS release link trunk 1-way incoming at main (14)
67 Audio interface (0)
70 Main/Satellite 1-way in (15)
71 Main/Satellite 1-way out (15)
72 Main/Satellite 2-way (15)
73 Main/Satellite 1-way in (16)
74 Main/Satellite 1-way out (16)
75 Main/Satellite 2-way (16)
76 Main/Satellite 1-way in (17)
77 Main/Satellite 1-way out (17)
78 Main/Satellite 2-way (17)
90 ACD First announcement (7)
91 ACD Second announcement (7)
92 ACD Origin announcement (7)
93 Malicious Call Trace recorder (7)
100 Data-tones tone detector (0)
101 Analog data modem pool (27)
102 Digital data modem pool (18)
103 Host access PDM (18)
104 Host access TDM (18)
105 3B5 AP DCPI (18)
106 EIA 4 Port (18)
107 ISN/EIA port (18)
108 DMI host terminating, dial repeating in/automatic out (5)
109 DMI dial repeating in and out (11)

	120	ISDN dynamic (20)
	The default signaling type encodes are shown in parentheses.	
13. Signaling Type	0	No signaling required
	1	Ground start
	2	Ground start with party test
	3	Loop/reverse battery, wink start
	4	E&M immediate start in and out
	5	E&M wink start in, immediate start out
	6	ANI signaling
	7	Auxiliary equipment
	8	E&M delay dial in, immediate start out
	9	E&M delay dial in wink/delay with dial tone out.
	10	E&M wink start in, wink/delay dial with dial tone out
	11	E&M wink start in, wink/delay dial out (universal sequence)
	12	E&M immediate start in, wink/delay dial out
	13	E&M release link trunk out
	14	E&M release link trunk in
	15	E&M Main/Satellite, immediate start
	16	E&M Main/Satellite, wink start
	17	E&M Main/Satellite, delay dial
	18	S-channel signaling, host access-GPP, host access EIA
	19	Loop start
	20	Digital multiplex interface ISDN message oriented signaling
	21	E&M wink start both ways
	22	E&M delay dial both ways
	23	E&M delay dial in, wink/delay dial out
	24	E&M delay dial in, wink/delay dial out with fail on timeout
	25	E&M immediate start in, wink/delay dial out with fail on timeout
	26	E&M wink start in, wink/delay dial out with fail on timeout
	27	Analog line loop
	28	E&M automatic in, immediate start out
	29	E&M automatic in, wink start out
	30	Loop/reverse battery, immediate start
	31	E&M immediate start in, automatic out

Notes

1. Contact interface and six-way conference has an entire board dedicated to each trunk.

Special Error Codes

81 - Circuit assigned to attendant interface (see Procedure 210 Word 1).

PROCEDURE 180 WORD 1 — MODEM POOL

Purpose

Use Procedure 180 Word 1 to administer a digital and analog data trunk pair for the modem pool.

Prerequisite Procedures

Use Procedure 100 Words 1 and 2 to assign a digital trunk group with trunk type 102.

Use Procedure 100 Word 1 to assign an analog trunk group with trunk type 101.

Use Procedure 100 Word 2 to set up trunk groups as a modem pool pair.

Use Procedure 360 Word 1 to remove a trunk from a Dedicated Switch Connection (DSC) before removing the trunk group from this procedure.

Related Procedures

Use Procedure 014 Words 1 and 2 to administer Bearer Capabilities.

Use Procedure 100 Word 4 to administer Route Advance for modem pool members.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 180, WORD: 1
                                  MODEM POOL

 1. Digital Trunk Group: [---]        8. Analog Trunk Group: [---]

DISPLAY ONLY
   2. Modem Pool Member: [---]

DIGITAL EQUIPMENT LOCATION              ANALOG EQUIPMENT LOCATION
   3.  Module: [--]                        9.  Module: [--]
   4. Cabinet: [-]                        10. Cabinet: [-]
   5. Carrier: [-]                        11. Carrier: [-]
   6.    Slot: [--]                       12.    Slot: [--]
   7. Circuit: [--]                       13. Circuit: [--]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or 8.
Add:	Fields 1-13.
Change:	Not allowed.
Remove:	Fields 1 and 3-13.
Next Data:	Shows all modem pool pairs for the entered trunk group.

Field Ranges and Encodes

1. Digital Trunk Group -, 18-999

DISPLAY ONLY (Field 2)

2. Modem Pool Member 1-99

DIGITAL EQUIPMENT LOCATION (Fields 3-7)

3. Module 0-30
4. Cabinet 0-7 for traditional modules, 0 for universal and XE modules

5.	Carrier	0-3 for traditional modules modules, c-e universal and XE modules
6.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
7.	Circuit	0-23
8.	Analog Trunk Group	-, 18-999

ANALOG EQUIPMENT LOCATION (Fields 9-13)

9.	Module	0-30
10.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
11.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
12.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
13.	Circuit	0-23

Notes

1. The first assignment of members to a digital trunk group and an analog trunk group links these trunk groups into a modem pool pair.
2. The trunks must be physically connected to each other as well as being paired by this procedure. This connection is done with RS-232C cables between the digital data module and the analog modem.

Special Error Codes

81 - Assign the digital trunk group in Procedure 100 Words 1 and 2 with trunk type 102.

82 - Assign the analog trunk group in Procedure 100 Word 1 with trunk type 101.

83 - A trunk group pair is already established.

84 - Use the display routine before using the next data routine.

85 - A maximum of 99 trunks can be assigned to a modem pooling trunk group.

86 - A trunk group pair is not established for this trunk group.

87 - You cannot assign the same trunk to both trunk groups.

88 - Remove this assignment from DSC (see Procedure 360 Word 1).

PROCEDURE 200 WORD 1 — CONSOLE FEATURES

Purpose

Use Procedure 200 Word 1 to administer:

— The type of consoles in the system

— The features assigned to the consoles

— The facility restriction level (FRL) for the consoles.

Related Procedures

Use Procedure 201 Word 1 to administer the console terminal Direct Extension Selection/Busy Lamp Field (DXS/BLF) group select buttons.

Use Procedure 201 Word 2 to administer Extended DXS buttons.

Use Procedure 202 Word 1 to provide the attendant with direct trunk group select buttons.

Use Procedure 203 Word 1 to assign control buttons to the various console features.

Use Procedure 204 Word 1 to assign console incoming call identification (ICI) lamps and alphanumeric character messages.

Use Procedure 210 Word 1 to assign the hardware locations for consoles.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 200, WORD: 1
                                CONSOLE FEATURES

 1.              Console Type: --
 2.               COS Display: -
 3. Direct Trunk Group Select: -
 4.       Don't Answer Timing: -
 5.     Interposition Calling: -
 6.                   Lockout: -
 7.                   Privacy: -
 8.                Trunk Test: -
 9.            Two-Party Hold: -
10.              Extended DXS: -
11.       Calls Waiting Level: --
12.                       FRL: -
13.   Display Trunk Group ICI: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-13.
Change:	Fields 1-13.
Remove:	Not allowed. Enter zeros in the fields you wish to disable, and use the change routine.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Console Type

30 No DXS/BLF buttons; 8 character display
33 6 DXS group buttons; 8 character display
34 18 DXS group buttons; 8 character display

The model numbers for the consoles are as follows:

30 = AAG-09AF-03
34 = AGJ-09AF-03

Console type 33 is not manufactured any more, but the encode is still valid for any existing equipment.

2. COS Display	0	Class of service number is displayed
	1	FULL, TOLL, REST, and NON are displayed
3. Direct Trunk Group Select	0	Disabled
	1	Enabled (see Procedure 202 Word 1)
4. Don't Answer Timing	1-8	Ringing cycles

This don't answer timing interval is used by the Call Forwarding - Don't Answer and Automatic Callback features.

5. Interposition Calling	0	Disabled
	1	Enabled
	2	Enabled plus extension to selected attendant

A 1 in this field allows calls to be placed between two console positions. A 2 in this field allows calls to be placed between two console positions and from voice terminal users to specific console positions.

6. Lockout	0	Disabled
	1	Enabled

When the Privacy feature is enabled, the Lockout feature must also be enabled (i.e., fields 6 and 7 must both equal 1).

7. Privacy	0	Disabled
	1	Enabled

When the Privacy feature is enabled, the Lockout feature must also be enabled (i.e., fields 6 and 7 must both equal 1).

8. Trunk Test	0	Disabled
	1	Enabled

This feature allows the attendant to do trunk verification.

9. Two-Party Hold	0	Disabled
	1	Enabled

This feature allows the attendant to place a two-party call on hold (2 stations, 2 trunks, etc.).

10. Extended DXS	0	Disabled (see Procedure 201 Word 1)
	1	Enabled (see Procedure 201 Word 2)

Extended DXS cannot be assigned with five-digit dialing plans.

11. Calls Waiting Level	1-99

This is the number of calls that can be waiting for processing by the attendant before the CW lamp lights on the console.

12. FRL	0-7 (0 is most restrictive, 7 is least restrictive)

13. Display Trunk Group ICI	0	Display ICI of LDN
	1	Display ICI of trunk group

Notes

1. For systems that do not have an attendant console, enter console type 30 (field 1) to administer the system-wide Don’t Answer Timing Interval (field 4) and set the Calls Waiting Level (field 11) to 1.

Special Error Codes

87 - Privacy (field 7) cannot be active without Lockout (field 6) being active.

88 - Extended DXS (field 10) cannot be active with five-digit dialing plans.

PROCEDURE 201 WORD 1 — CONSOLE DXS/BLF GROUP SELECT BUTTONS

Purpose

Use Procedure 201 Word 1 to administer the terminal extension hundreds group assignments of the Direct Extension Selection/Busy Lamp field (DXS/BLF) group select buttons on the console. This works only for console types 33 and 34 and cannot be used with systems that have a five-digit extension dialing plan. If Extended DXS is enabled in Procedure 200 Word 1, skip this procedure and use Procedure 201 Word 2.

Prerequisite Procedures

Use Procedure 200 Word 1 to assign console features including the Extended DXS feature. If administration has been done in Procedure 201 Word 1 for the standard DXS/BLF feature and then the Extended DXS feature is enabled in Procedure 200 Word 1, the administration in Procedure 201 Word 1 is not deleted. It is only masked from the user.

Use Procedure 354 Word 1 to define the dialing plan extension groups with which the hundreds groups are associated.

Related Procedures

Use Procedure 202 Word 1 to administer Direct Trunk Group Select (DTGS) buttons.

Use Procedure 203 Word 1 to administer console control buttons.

Use Procedure 204 Word 1 to administer incoming call identification (ICI) lamps and alphanumeric messages.

Use Procedure 210 Word 1 to administer console equipment locations.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 201, WORD: 1
                      CONSOLE DXS/BLF GROUP SELECT BUTTONS

BUTTON GROUPS
   1.   Left: -
   2. Middle: -
   3.  Right: -

HUNDREDS GROUP (numbered left to right)
   4. Button 1: --
   5. Button 2: --
   6. Button 3: --
   7. Button 4: --
   8. Button 5: --
   9. Button 6: --

DISPLAY ONLY
  10. Console Type: --
  11. Extended DXS: -


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 2 or 3.
Add:	Fields 1 or 2 or 3 plus fields 4-9.
Change:	Fields 1 or 2 or 3 plus fields 4-9.
Remove:	Not allowed (enter dashes in fields 4-9 and use the change routine).
Next Data:	Not allowed.

Field Ranges and Encodes

BUTTON GROUPS (Fields 1-3)

- `-` Not selected
- 1 Selected

1. Left -, 1
2. Middle -, 1
3. Right -, 1

HUNDREDS GROUP (numbered left to right) (Fields 4-9)

- 0-9 Three-digit dialing plan

00-99 Four-digit dialing plan

Each group select button assigned represents a group of 100 extensions. Each DXS button represents one extension in the hundreds. One-digit hundreds groups are used for three-digit dialing plans. Two-digit hundreds groups are used for four-digit dialing plans.

Assign the first group select button to a hundreds group even if multiple groups are not required.

4. Button 1 00-99
5. Button 2 00-99
6. Button 3 00-99
7. Button 4 00-99
8. Button 5 00-99
9. Button 6 00-99

DISPLAY ONLY (Fields 10-11)

10. Console Type
    - 30 No DXS/BLF buttons
    - 33 6 DXS group select buttons
    - 34 18 DXS group select buttons

    The model numbers for the consoles are as follows:

    30 = AAG-09AF-03
    34 = AGJ-09AF-03

    Console type 33 is not manufactured any more, but the encode is still valid for any existing equipment.

11. Extended DXS
    - 0 Disabled
    - 1 Enabled (use Procedure 201 Word 2)

Special Error Codes

81 - This procedure cannot be used with console type 30.

82 - Field 11 equals 1. You must use Procedure 201 Word 2.

83 - This procedure is not valid in a five-digit dialing plan.

PROCEDURE 201 WORD 2 — CONSOLE EXTENDED DXS

Purpose

Use Procedure 201 Word 2 to administer terminal extension hundreds groups to the attendant console extended Direct Extension Selection/Busy Lamp Field (DXS/BLF). This only applies to console types 33 and 34 and cannot be used with systems that have a five-digit extension dialing plan.

Prerequisite Procedures

Use Procedure 200 Word 1 to assign console features including the Extended DXS feature. If administration has been done in Procedure 201 Word 1 for the standard DXS/BLF feature, and then the Extended DXS feature is enabled in Procedure 200 Word 1, the administration in Procedure 201 Word 1 is not deleted. It is only masked from the user.

Use Procedure 354 Word 1 to define the terminal extension groups with which the thousands and hundreds groups are associated.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 201, WORD: 2
                              CONSOLE EXTENDED DXS

 1. Thousands Digit: -
 2.  Hundreds Digit: -

DISPLAY ONLY
   3. Hundreds Group: -

DISPLAY ONLY
   4. Hundreds Groups Still Available: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 1 and 2.
Add:	Fields 1 and 2.
Change:	Not allowed.
Remove:	Fields 1 and 2.
Next Data:	Displays all hundreds groups assigned to a thousands group.

Field Ranges and Encodes

1. Thousands Digit 0-9

   The only time you can put 0 in this field is when field 2 has a value from 1-9. You cannot have 0 as both the thousands digit and the hundreds digit. A 0 would be used typically with three-digit dialing plans.

2. Hundreds Digit 0-9

DISPLAY ONLY (Field 3)

3. Hundreds Group
   - 0 Is assigned
   - 1 Is not assigned

DISPLAY ONLY (Field 4)

4.	Hundreds Groups Still Available	0-99 When no hundreds groups have been assigned, 00 is displayed in this field. As each hundreds group is assigned, this number decrements by 1 (00, 99, 98, etc).

Notes

1. Every combination of a thousands digit and a hundreds digit is a hundreds group.
2. One-digit hundreds groups are used for three-digit dialing plans. Two-digit hundreds groups are used for four-digit dialing plans.

Special Error Codes

81 - Enable Extended DXS in Procedure 200 Word 1 before using this procedure.

82 - Every combination of a thousand and hundred digit is a group. Field 4 shows how many more groups can be added.

PROCEDURE 202 WORD 1 — CONSOLE DIRECT TRUNK GROUP SELECT BUTTONS

Purpose

Use Procedure 202 Word 1 to administer:

— Trunk-group select buttons to dial access codes

— Busy or busy and warning status lamps for a trunk group

— Warning levels for a trunk group.

Prerequisite Procedures

Use Procedure 350 Word 1 to assign the first-digit dialing plan for trunk dial access codes.

Use Procedure 100 Word 1 to assign dial access codes to a trunk group.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 202, WORD: 1
                  CONSOLE DIRECT TRUNK GROUP SELECT BUTTONS

BUTTON LOCATION
   1.    Row: -
   2. Column: -

DIAL ACCESS CODE/TRUNK ID CODE
   3. Digit 1: --
   4. Digit 2: -
   5. Digit 3: -
   6. Digit 4: -

 7. Busy/Warning Status: -
 8.       Warning Level: -
 9.         Remote Flag: -
REMOTE DAC
  10. Digit 1: --
  11. Digit 2: -
  12. Digit 3: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-12.
Change:	Fields 3-8.
Remove:	Fields 3-12.
Next Data:	Shows all trunk-group select button assignments.

Field Ranges and Encodes

BUTTON LOCATION (Fields 1-2)

1. Row — 1-4 (numbered bottom to top)
2. Column — 1-6 (numbered left to right)

DIAL ACCESS CODE/TRUNK ID CODE (Fields 3-6)

3. Digit 1 — -, 0-9, 11 (*), 12 (#)
4. Digit 2 — -, 0-9
5. Digit 3 — -, 0-9
6. Digit 4 — -, 0-9
7. Busy/Warning Status

   0 Busy for this trunk group only
   1 Busy for this and route advance trunk groups
   2 Busy/warning for this trunk group only
   3 Busy/warning for this and route advance trunk groups

   In field 7, encodes 2 and 3 cannot be used for rows 3 and 4 of the console. If field 7 is set to 0 or 1, the warning level (field 8) must be set to 0.

8. Warning Level — 0-7

   When the number of idle trunks is less than or equal to the number in this field, the applicable warning lamp will light. When the number in this field is 0 and all the trunks in the trunk group become busy, the busy and warning lamps will both light at once.

9. Remote Flag — 0-1

   Having encode 1 in this field when there is no DAC in fields 10-12 means that the trunk group (DAC in fields 3-6) homes on this switch, but may be controlled or selected by a remote switch.

   Having encode 1 in this field when there is a DAC in fields 10-12 means that the trunk group is remote to this switch, but may be controlled or selected by this switch. In this event, the local DAC (fields 3-6) will access the tie trunk to the remote switch.

REMOTE DAC (Fields 10-12)

Remote dial access codes (fields 10-12) must be three digits or less. This limit is because of DCIU link constraints.

10. Digit 1	-, 0-9, 11 (*), 12 (#)
11. Digit 2	-, 0-9
12. Digit 3	-, 0-9

Notes

1. Examples of typical trunk-group busy and warning level usage are as follows:

   — A customer has a group of one-way out central office (CO) trunks with route advance to a group of one-way CO trunks. Field 7 contains a 0 (busy indications on original trunk group only). When all the idle one-way trunks become busy, the busy lamp will come on for that original trunk group.

   — If, in the previous example, field 7 contained a 3 (busy and warning indications on original trunk and any route advance trunk groups), the warning lamp would come on only when the warning level was exceeded by both trunk groups.

Special Error Codes

83 - Field 8 cannot be 0 when field 7 is 2 or 3.

84 - Field 8 must be 0 when field 7 is 0 or 1.

85 - You cannot use the change routine when a remote DAC is assigned. You must first remove the assignment and then add it back in.

PROCEDURE 203 WORD 1 — CONSOLE CONTROL BUTTONS

Purpose

Use Procedure 203 Word 1 to administer console features to the control buttons on the console.

Related Procedures

Use Procedure 200 Word 1 to assign console features.

Use Procedure 210 Word 1 to assign console equipment locations.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 203, WORD: 1
                              CONSOLE CONTROL BUTTONS

BUTTON LOCATION
   1. Row: -

BUTTON ASSIGNMENTS (numbered left to right)
   2. Button 1: --
   3. Button 2: --
   4. Button 3: --
   5. Button 4: --
   6. Button 5: --
   7. Button 6: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-7.
Change:	Fields 2-7.
Remove:	Not allowed (enter zeros in fields 2-7 and use the change routine).
Next Data:	Not allowed.

Field Ranges and Encodes

BUTTON LOCATION (Field 1)

1. Row 1-3 (numbered bottom to top)

BUTTON ASSIGNMENTS (numbered left to right) (Fields 2-7)

0	Unassigned button
1	Class of Service display (CLASS)
2	Unattended console service (UNA)
3	Position busy (POSB)
4	Split (SPLIT)
5	Hold (HOLD)
6	Cancel (CANCL)
7	Busy verification (VERIFY)
8	Audible signal (AUDSIG)
10	Basic paging - all zones
11	Basic paging - zone 1
12	Basic paging - zone 2
13	Basic paging - zone 3
14	Basic paging - zone 4
15	Basic paging - zone 5
16	Basic paging - zone 6
17	Extended DXS group select (SELECT)
18	Extended DXS group display (DISPLY)
19	Alternate FRL (ALT FRL)
20	Priority paging - all zones
21	Priority paging - zone 1
22	Priority paging - zone 2
23	Priority paging - zone 3
24	Priority paging - zone 4
25	Priority paging - zone 5
26	Priority paging - zone 6
27	Display time-of-day route plan (PLAN)
28	Trunk ID (TRK ID)
29	RLT release (RLT)
42	Terminal ID (STA ID)
43	Manual preemption (MAN PRE)
44	Display call precedence level (DISP LEV)
45	Display called number (DISP NUM)
46	Flash (FLASH)
47	Set precedence level (SET PRE)

48 Malicious call trace activate (MCT ACT)
49 Malicious call trace control (MCT CTRL)

2. Button 1 0-8, 10-29, 42-49
3. Button 2 0-8, 10-29, 42-49
4. Button 3 0-8, 10-29, 42-49
5. Button 4 0-8, 10-29, 42-49
6. Button 5 0-8, 10-29, 42-49
7. Button 6 0-8, 10-29, 42-49

Notes

1. The console control buttons are located on the right one-third of the console. The rows are numbered from the bottom (1-3), beginning with first row above the START button. The buttons are numbered from left to right (1-6).
2. Priority paging (encodes 20-26) is part of the Loudspeaker Paging feature.
3. On system-generated ACA referral calls, the TRK ID button steps through the following data that is displayed on the console:
   a. Type of referral call (long or short)
   b. Trunk group dial access code
   c. Specific trunk number.
4. On attendant-related trunk calls, the TRK ID button steps through the following data:
   a. Trunk group dial access code
   b. Specific trunk number
   c. Original Incoming Call Identification (ICI).
5. To remove button assignments, fill the button fields (2-7) with zeros and use the change routine.
6. When removing a button from use on the attendant console, make sure that the associated lamp on the console is not lit. If the lamp is lit when the change is made, the lamp may not go off.

Special Error Codes

None.

PROCEDURE 204 WORD 1 — CONSOLE MESSAGES AND LISTED DIRECTORY NUMBERS

Purpose

Use Procedure 204 Word 1 to administer:

— The association between a trunk group or call type and an incoming call identification (ICI) indicator or alphanumeric message

— A message number to the alphanumeric message display

— Listed Directory Numbers (LDNs).

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

Use Procedure 200 Word 1 to assign console features.

Use Procedure 210 Word 2 to remove LDNs before removing them in this procedure.

Related Procedures

Use Procedure 026 Word 1 to assign display messages to ACD splits.

Cautions

In field 2, message numbers 1, 2, and 3 are initially assigned to the INC (incoming call), ATND (attendant call), and RCL (attendant recall) lamps on a type 30 console, respectively. On type 33 and 34 consoles, the messages are also INC, ATND, and RCL. These alphanumeric messages should only be changed under special circumstances.

When an LDN includes leading zeros, they must be entered if specified that way on the service order.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 204, WORD: 1
                 CONSOLE MESSAGES AND LISTED DIRECTORY NUMBERS

 1.        Trunk Group/Call Type: ----
 2. Message Number or CAS Branch: --

ICI MESSAGE
   3. Character 1: --
   4. Character 2: --
   5. Character 3: --
   6. Character 4: --

 7. Listed Directory Number: -----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1, field 2, or fields 1 and 2 (see Table 1 in the Notes section).
Add:	Fields 1-7 (see Table 2 in the Notes section).
Change:	Fields 3-7 (see Table 2 in the Notes section).
Remove:	Fields 1-7. After a remove, the data is not removed until a display is performed.
Next Data:	Displays all valid assigned trunk groups/call types.

Field Ranges and Encodes

1. Trunk Type — Group/Call
   - 18-999 Trunk group
   - 1001-1999 LDNs
   - 2290 Call Forwarding
   - 2291 Attendant Control of Trunk Group Access
   - 2292 Manual line termination
   - 2293 Controlled restriction
   - 2294 Timed recall on outgoing trunks
   - 2295 Recall from attendant conference
   - 2297 Interposition call

2298 ACA - short call
2299 ACA - long call
2300 Flash override
2301 Flash
2302 Immediate
2303 Priority
2304 Routine
2305 Calls to vacant dial access code
2306 Calls to restricted features or trunks
2307 Calls to recently disconnected terminal
2308 Attendant diversion to recorded announcement
2320 CAS branch identification

2. Message Number or CAS Branch
   - LDN call type (field 1 equals 1001-1999)
   0 Unassigned
   1-63 Message number (1-63) or CAS branch number (1-40)

ICI MESSAGE (Fields 3-6)

CHARACTER ENCODES			
0 = 0	A = 11	K = 21	U = 31
1 = 1	B = 12	L = 22	V = 32
2 = 2	C = 13	M = 23	W = 33
3 = 3	D = 14	N = 24	X = 34
4 = 4	E = 15	O = 25	Y = 35
5 = 5	F = 16	P = 26	Z = 36
6 = 6	G = 17	Q = 27	- = 37
7 = 7	H = 18	R = 28	blank = 10
8 = 8	I = 19	S = 29	
9 = 9	J = 20	T = 30	

3. Character 1 -, 0-37
4. Character 2 -, 0-37
5. Character 3 -, 0-37
6. Character 4 -, 0-37
7. Listed Directory Number 0000-99999

Notes

1. For display routines, Table 1 shows what fields require input.

TABLE 1	
Field 1	**Field 2**
18-999	dash
1001-1999	dash
2290-2295 2297-2308	dash
2320	1-40
dash	1-63

2. For add and change routines, Table 2 shows what fields require input:

TABLE 2			
Field 1	**Field 2**	**Fields 3 - 6**	**Field 7**
18-999	4-63	dash, 00-37	dash
1001-1999	dash	dash, 00-37	0000-99999
2290-2295 2297-2308	4-63	dash, 00-37	dash
2320	1-40	dash, 00-37	dash
dash	1-3	dash, 00-37	dash

3. To make an LDN assignment:
   a. Assign the first digit of the LDN to call type 1 (extensions) in Procedure 350 Word 1.
   b. Assign the extension number group in Procedure 354 Word 1.
   c. Assign the number as an LDN in Procedure 204 Word 1.
4. An LDN cannot be an associated extension number (Procedure 001 Word 1) or an assigned extension number (Procedure 000 Word 1).
5. Fields 3-6 are not used with ICI indicators (lamps) as found on console type 30.
6. For systems with DID, LDN calls first go to the attendant.
7. ICI information will be displayed when a CAS branch call is connected to a CAS main attendant.
8. Only one ICI message is allowed per CAS branch.
9. If error code 15 is displayed, the first digit of the LDN is already assigned as a trunk or feature dial access code (DAC) in Procedure 350 Word 1.
10. This procedure cannot remove an extension that is not an LDN.
11. To display messages assigned for ACD splits, enter the special queue trunk group number in field 1.
12. For CAS branch ID call type, field 2 is the branch number. Both fields 1 and 2 must be entered.
13. To change message numbers 1, 2, or 3, do a display routine, change fields 3-6, and do a change routine.

14. For fields 3-6, you cannot have a combination of dashed and nondashed fields.

Special Error Codes

81 - Remove the LDN in Procedure 210 Word 2 before removing it here.

PROCEDURE 210 WORD 1 — CONSOLE ASSIGNMENTS - HARDWARE

Purpose

Use Procedure 210 Word 1 to administer the attendant interface equipment location and data channel equipment location associated with each attendant console.

Prerequisite Procedures

A console cannot be removed until it is removed from any nonzero attendant partition (use Procedure 210 Word 2).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 210, WORD: 1
                          CONSOLE ASSIGNMENTS - HARDWARE

 1. Console Number: --

ATTENDANT INTERFACE EQUIPMENT LOCATION
   2.  Module: --
   3. Cabinet: -
   4. Carrier: -
   5.    Slot: --
   6. Circuit: --

DATA CHANNEL EQUIPMENT LOCATION
   7. Carrier: -
   8.    Slot: --
   9. Circuit: --




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-9.
Change:	Fields 2-6 or 7-9 (either the attendant interface equipment location or the data channel equipment location can be changed, but not both).
Remove:	Fields 1-9 (only the highest numbered console can be removed; you may not leave gaps between console numbers).
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Console Number	1-40

ATTENDANT INTERFACE EQUIPMENT LOCATION (Fields 2-6)

Use the SN233 for traditional modules and the TN760 for universal and XE modules.

2.	Module	0-30
3.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
4.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
5.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
6.	Circuit	0-3

DATA CHANNEL EQUIPMENT LOCATION (Fields 7-9)

Use the TN403 data channel circuit pack. This is found in the common control carrier.

7.	Carrier	0 (common control carrier)
8.	Slot	23-26
9.	Circuit	0-15

Notes

1. In multiconsole systems, the consoles must be numbered consecutively. Always remove the last console first. Do not leave gaps in numbering. To remove a console that is not the last console (highest numbered console), follow these steps:
   a. Record the equipment locations of the last console.
   b. Remove the recorded console assignment (last console).
   c. Insert the recorded equipment locations (last console) into the console number to be removed and use the change routine.
2. Before a console can be successfully removed, disconnect either the headset plug or the handset plug from the console jacks, or completely disconnect the console from the system at the wall field.

Special Error Codes

81 - In multiconsole systems, the consoles must be numbered consecutively. Do not leave gaps.

82 - Either the attendant interface equipment location or the data channel equipment location can be changed, but not both.

83 - Only the highest numbered console can be removed. You may not leave gaps between console numbers.

84 - A console cannot be removed until it is removed from any nonzero attendant partition (use Procedure 210 Word 2).

85 - The PCC board resides in this slot. Choose a different slot.

PROCEDURE 210 WORD 2 — CONSOLE ASSIGNMENTS - ATTENDANT PARTITIONS

Purpose

Use Procedure 210 Word 2 to administer an attendant partition to a console position and a console position as a partition's controlling attendant console. This administration is used with Tenant Services.

Prerequisite Procedures

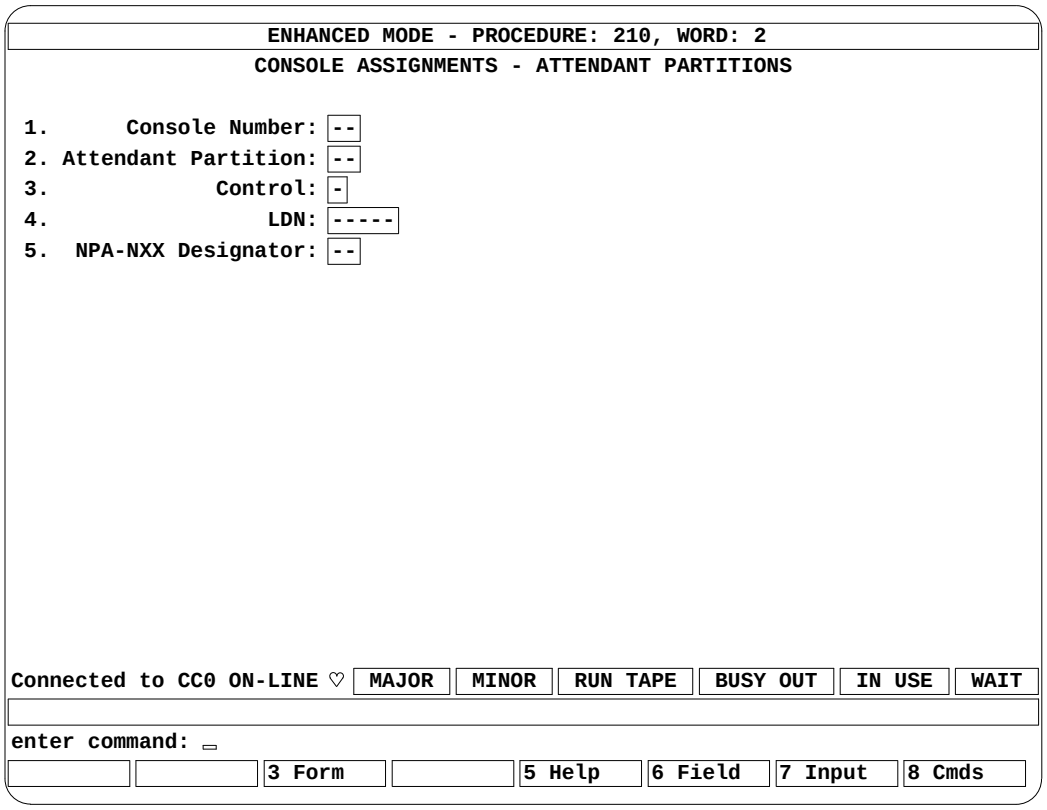
Use Procedure 276 Word 1 field 6 to enable the Tenant Services feature.

Use Procedure 210 Word 1 to administer the attendant interface and data channel equipment locations associated with each attendant console.

Administer the LDN and NPA-NXX designator in Procedure 204 Word 1 and Procedure 354 Word 3 before adding or changing them in this word.

Remove attendant partition associations from Procedure 270 Words 1-5 before removing the last console from an attendant partition.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 2 and 3, or field 4.
Add:	Fields 1-5.
Change:	Fields 3-5. The change routine cannot be used to move a console from one attendant partition to another.
Remove:	Fields 2 and 3. To remove fields 4 and 5, enter dashes in fields 4 and 5 and use the change routine or use the Word 1 remove routine.
Next Data:	Displays all attendant partitions assigned to a console.

Field Ranges and Encodes

1. Console Number 1-40
2. Attendant Partition -, 0-40

   Consoles not assigned to a specific tenant are assigned to attendant partition 0. An attendant in attendant partition 0 is allowed to place direct calls to any extension in the system.

3. Control	-	Not assigned
	0	Not the controlling console
	1	The controlling console

Only one console in an attendant partition can be the controlling console. If a console is the first one to be assigned to an attendant partition, it must be the controlling console. If a subsequent console is added and designated as the controlling console, control is automatically removed from the previous controlling console.

4. LDN	-, 000-99999
5. NPA-NXX Designator	-, 1-99

Special Error Codes

81 - The first console assigned to an attendant partition becomes the controlling console.

82 - Attendant partition associations must be removed from Procedure 270 Words 1-5 before the last console from an attendant partition is removed.

83 - The console being removed is the controlling console. Designate another console assigned to this attendant partition as the controlling console before removing the displayed console.

84 - This console must be removed from attendant partition(s) 1-40 before it may be assigned to partition 0. Also, a console cannot be removed from attendant partition 0. Also, the ACA console cannot be added to attendant partition(s) 1-40.

85 - Assign the LDN and NPA-NXX designator in Procedure 204 Word 1 and Procedure 354 Word 3 before adding or changing them in this word.

PROCEDURE 211 WORD 1 — CAS - BRANCH CHARACTERISTICS

Purpose

Use Procedure 211 Word 1 to administer the Centralized Attendant Service (CAS) branch timed reminder time, Listed Directory Number (LDN) tone, and Queue overflow level.

Prerequisite Procedures

Use Procedure 001 Word 1 to administer an associated extension if the recommended numbering plan is not used.

Use Procedure 100 Word 1 to administer trunk groups for the CAS call queue.

Use Procedure 252 Word 2 to administer auxiliary tone plants. This is not required for universal and XE modules.

Use Procedure 350 Words 1 and 2 to define CAS feature dial access codes.

Cautions

The remove routine deactivates all CAS call queuing at the branch location.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 211, WORD: 1
                           CAS - BRANCH CHARACTERISTICS

 1.  Timed Reminder Interval: --
 2.                  LDN Tone: -
 3.           CAS Queue Group: ---
 4. CAS Queue Overflow Level: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-4.
Change:	Fields 1-4.
Remove:	Fields 1-4.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Timed Reminder Interval — -, 1-31

   This is the number of two-second intervals before timed reminder is activated for outgoing calls held on the console. Use a dash if you don't want timed reminders.

2. LDN Tone
   - 0 ICI display is used for LDN calls
   - 1 Special tone is used for LDN calls

3. CAS Queue Group — 18-999

4. CAS Queue Overflow Level
   - \- No overflow warning
   - 1-99 CAS queue lamp lights on SSI box

Special Error Codes

82 - Assign a CAS queue group with Procedure 100 Word 1 first.

83 - Use the add routine when first adding data to this procedure. After that, use the change routine.

PROCEDURE 211 WORD 2 — CAS - BRANCH OUTGOING RELEASE LINK TRUNKS

Purpose

Use Procedure 211 Word 2 to administer outgoing release link trunks (RLTs) for the Centralized Attendant Service (CAS) branch. This procedure also assigns backup extensions associated with RLTs and start pulse signaling.

Prerequisite Procedures

Use Procedure 000 Word 1 to assign the backup extension and equipment location.

Use Procedure 100 Word 1 to assign a trunk group (trunk type 57) for outgoing RLTs.

Use Procedure 115 Word 1 to assign trunk group termination.

Use Procedure 116 Word 1 or Procedure 150 Word 1 to assign trunks to the outgoing RLT trunk group.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 211, WORD: 2
                  CAS - BRANCH OUTGOING RELEASE LINK TRUNKS

RLT EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6. Backup Extension: -----
 7.      Start Pulse: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5 or 6.
Add:	Fields 1-7.
Change:	Fields 1-7.
Remove:	Fields 1-7.
Next Data:	Displays all assigned RLTs.

Field Ranges and Encodes

RLT EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
5.	Circuit	0-23

6. Backup Extension — 000-99999

   A backup extension and equipment location must be administered in Procedure 000 Word 1 before it can be administered here.

   A backup extension must be assigned for each RLT. The backup extension receives calls that are directed to the RLT (fields 1-5) if the RLT is in backup mode. It is advised to put CAS in backup mode if the RLT is out of service. The same backup extension can be used for more than one RLT.

7. Start Pulse
   - 0 Disabled
   - 1 Enabled

   With a 1 in this field, wink signaling is sent over the RLT.

Special Error Codes

81 - The equipment location must be assigned as an outgoing RLT in Procedure 116 Word 1 or Procedure 150 Word 1.

82 - The backup extension cannot be an associated extension.

83 - No backup extension is assigned to this RLT; it must be entered before a change is allowed.

84 - This extension is assigned to a multiappearance terminal.

85 - All available RLTs are assigned.

87 - Can not assign Start Pulse operation to a trunk in a Universal module.

PROCEDURE 212 WORD 1 — CAS - MAIN BRANCH NUMBER ASSIGNMENT

Purpose

Use Procedure 212 Word 1 to administer the Centralized Attendant Service (CAS) feature for main locations by assigning branch and trunk group associations.

An incoming release link trunk (RLT) group, consisting of all RLTs from a given branch location, is assigned to a branch number. An indicator also defines whether or not the branch location is an ESS(TM) machine.

This procedure must be used to define the branch incoming RLT call recognition from the trunk group.

Prerequisite Procedures

Use Procedure 100 Word 1 to define the incoming RLT trunk groups from each branch. Define the trunk as trunk type 66 (CAS incoming RLT).

Use Procedure 116 Word 1 or Procedure 150 Word 1 to assign the incoming RLTs to the trunk groups.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 212, WORD: 1
                      CAS - MAIN BRANCH NUMBER ASSIGNMENT

 1.            Branch Number: --
 2. Incoming RLT Trunk Group: ---
 3.              Branch Type: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or field 2.
Add:	Fields 1-3.
Change:	Fields 1-3.
Remove:	Fields 1-3.
Next Data:	Displays all assigned branch locations.

Field Ranges and Encodes

1.	Branch Number	1-40	
2.	Incoming RLT Trunk Group	18-999 This trunk group must be administered as trunk type 66 in Procedure 100 Word 1.	
3.	Branch Type	0 1	Non-ESS branch ESS branch

Notes

1. Only one trunk group can be associated with a given branch and all RLTs from the branch must be in that trunk group.

Special Error Codes

82 - Assign this trunk group as an incoming RLT trunk type using Procedure 100 Word 1 first.

83 - Assign trunk groups to only one branch number.

PROCEDURE 212 WORD 2 — CAS - MAIN RELEASE LINK TRUNK LAMP ASSIGNMENT

Purpose

Use Procedure 212 Word 2 to administer lamp status assignments for each incoming release link trunk (RLT) used in the Centralized Attendant Service (CAS) feature for main locations.

Prerequisite Procedures

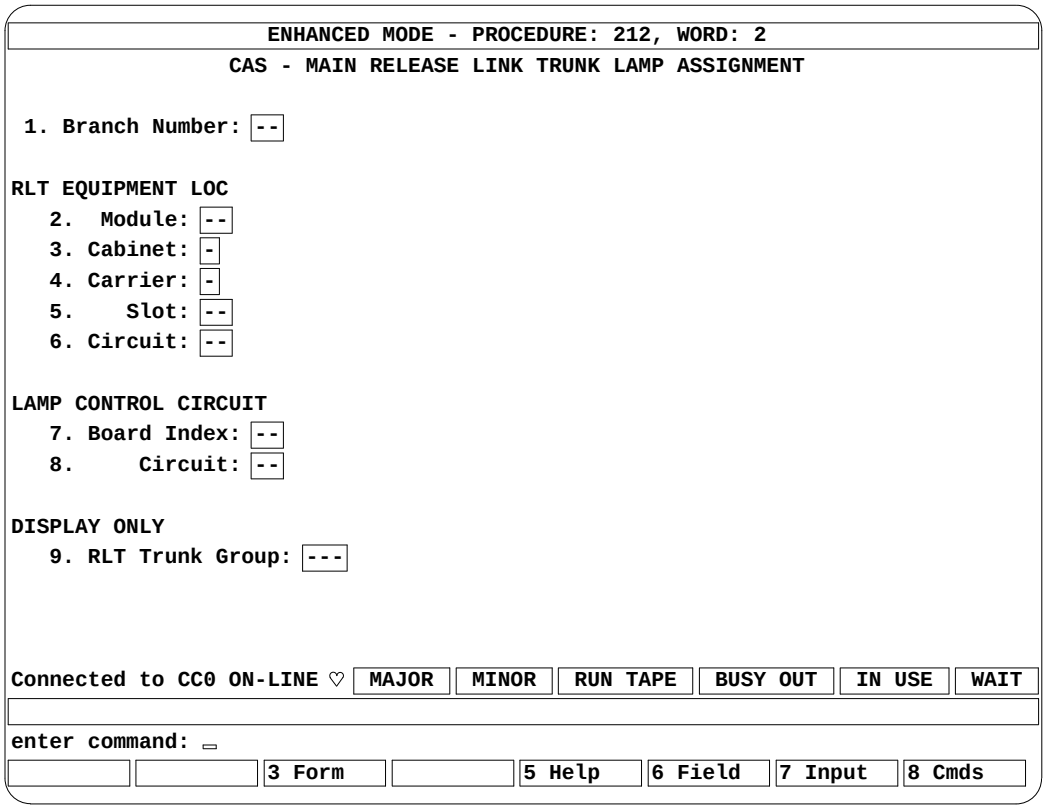
Use Procedure 100 Word 1 to add the RLT trunk type (66) to a trunk group.

Use Procedure 116 Word 1 or Procedure 150 Word 1 to add trunks to the RLT trunk group.

Use Procedure 212 Word 1 to associate the RLT trunk group with a branch.

Use Procedure 155 Word 1 to administer the contact interface boards (lamp control circuit).

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 2-6, or fields 7 and 8.
Add:	Fields 1-8.
Change:	Fields 1-8.
Remove:	Fields 1-8.
Next Data:	Displays all trunks associated with a branch.

Field Ranges and Encodes

1.	Branch Number	1-40

RLT EQUIPMENT LOC (Fields 2-6)

2.	Module	0-30
3.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
4.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
5.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
6.	Circuit	0-23

LAMP CONTROL CIRCUIT (Fields 7-8)

7.	Board Index	0-13 The board index is assigned in Procedure 155 Word 1.
8.	Circuit	0-7 This is a circuit on the contact interface board (SN241 for traditional modules).

DISPLAY ONLY (Field 9)

9.	RLT Trunk Group	18-255

Notes

1. The RLT can be used for CAS/Main operation without having a lamp assigned to it.
2. The remove routine removes only the lamp assignment. To remove the RLT, use Procedure 116 Word 1 or 150 Word 1.

Special Error Codes

82 - Assign the branch in Procedure 212 Word 1 first.

83 - Add an RLT to an incoming RLT trunk group with Procedure 116 Word 1 or Procedure 150 Word 1.

84 - Add a trunk group to the branch using Procedure 212 Word 1 first.

85 - Add the contact interface lamp control circuit board with Procedure 155 Word 1.

86 - Associate the lamp control circuit and the RLT with the branch in Procedure 212 Word 1.

87 - The lamp control circuit is already assigned to another RLT.

PROCEDURE 250 WORD 1 — CARRIERS

Purpose

Use Procedure 250 Word 1 to administer each carrier type to a carrier location within a cabinet. The carriers administered in this procedure are:

— Common control (CC)

— Remote module interface (RMI)

— Traditional, universal, and XE module control

— Time Multiplexed Switch (TMS)

— Traditional, universal, and XE port

— DS1 port.

Carriers must be administered before assigning any port circuit packs.

Prerequisite Procedures

Use Procedure 290 Word 1 to display ports (lines and trunks) or remote module interface (RMI) circuit pack assignments that must be removed before removing port, DS1, and RMI carriers. Extensions are removed in Procedure 000 Word 1, and trunks are removed in Procedure 150 Word 1. DS1 trunk assignments are removed in Procedure 116 Word 1. RMI circuit packs are removed in Procedure 260 Word 1.

Use Procedure 260 Word 1 to remove the system clock synchronization (SCS) reference before disabling the SCS circuit pack from a module control carrier in this procedure.

Use Procedure 275 Word 1 to set the common control to unduplicated before disabling the duplicated common control carrier.

Use Procedure 621 Test 2 to switch processors before removing a duplicated module control or TMS processor.

Related Procedures

Use Procedure 275 Word 1 to set the common control carrier as duplicated or unduplicated.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 250, WORD: 1
                                    CARRIERS

CARRIER LOCATION                        LOCAL RMI LOCATION
   1.  Module: [--]                       12.  Module: [--]
   2. Cabinet: [-]                        13. Cabinet: [-]
   3. Carrier: [-]                        14. Carrier: [-]
                                          15.    Slot: [--]
 4. Carrier Type: [--]

MODULE CONTROL
   5.        I/O: [-]
   6.        PDS: [-]
   7. Duplicated: [-]
   8.        TMS: [-]

 9. Port Electrical Carrier: [--]
10.  TMS Electrical Carrier: [-]
11.           SCS Equipped: [-]


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-3.
Add:	Fields 1-4, fields 1-4 and field 9, fields 1-4 and fields 10 and 11, or fields 1-8 and field 11.
Change:	Fields 5, 6, 8, 11, and fields 12-15.
Remove:	Fields 4-15.
Next Data:	Not allowed.

Field Ranges and Encodes

CARRIER LOCATION (Fields 1-3)

1. Module	0-30	Network
	99	Common control or TMS
2. Cabinet	0-3 for common control/TMS, 0-7 for traditional, 0 for universal and XE	

3. Carrier — 0-3 for common control/TMS/traditional, a-e for universal and XE

   When adding a new universal or XE module, use ‘‘0’’ instead of ‘‘a’’ to represent module control carrier 0 (the first carrier you must assign in a new module). After assigning this first carrier, the system recognizes this as being a universal or XE module, and the rest of the carriers can be assigned with the letters ‘‘b-e’’. On subsequent displays of universal or XE module control 0, an ‘‘a’’ will be displayed instead of a ‘‘0’’.

4. Carrier Type

0	Unequipped
1	Common control
2	Universal module control 0
3	Universal module control 1
4	TMS control 0
5	TMS growth 0
6	Traditional module control 0
7	Traditional module control 1
8	TMS control 1
9	TMS growth 1
10	Universal port
11	DS1 port
12	Traditional port
15	Remote module interface (RMI)
16	XE Universal module control 0
17	XE Universal module control 1
18	XE Universal port

   Refer to the table in the Notes section for legal entries based on carrier type.

MODULE CONTROL (Fields 5-8)

5. I/O — -, 1-3

   This is the number of TN400B circuit packs installed in a traditional module control carrier.

6. PDS — -, 1-6

   This is the number of TN440B circuit packs installed in a traditional module control carrier.

7. Duplicated

0	Disabled
1	Enabled

   You cannot enable duplicated module control carriers until you assign the second module control carrier (until that point, the system can only assume you have just one module control carrier). When you enable this on the second module control carrier (module control 1), it is automatically enabled on the first module control carrier (module control 0).

8. TMS

0 Disabled
1 Enabled

The TMS must be available (carrier type 4, 5, 8, or 9) if enabling this field for the module.

9. Port Carrier — Electrical

-, 0-11

As you add each port carrier in a traditional module, start with electrical carrier 0 and increment this number for each carrier. This is not required for universal module port carriers.

10. TMS Carrier — Electrical

- Not applicable
0 TMS control (serves modules 0-6)
1 TMS growth 1 (serves modules 7-14)
2 TMS growth 2 (serves modules 15-22)
3 TMS growth 3 (serves modules 23-30)

TMS growth carriers must be mounted in vertically adjacent positions starting at the lowest position in the cabinet. The carriers must be assigned and removed in numerical order (i.e., add field 10 as 0-1-2-3, and remove field 10 as 3-2-1-0).

11. SCS Equipped

0 Disabled
1 Enabled

This field enables the System Clock Synchronization (SCS) TN463 circuit pack. The SCS provides clock synchronization for all DS1 facilities residing on this switch. If this switch is a multimodule system, the SCS reference resides in the TMS carrier, otherwise it resides in the module control cabinet.

If a Synchronization Clock (Stratum 3) is being used as the clock source, this field should be disabled.

LOCAL RMI LOCATION (Fields 12-15)

12. Module — 0-30

13. Cabinet — 0-7 for traditional modules, 0 for universal modules

14. Carrier — 0-3 for traditional modules, a-b for universal modules

15. Slot — 0-25

The allowable slots for traditional modules are 0-3, 5-8, 13-16, 18-21, and 25.

The allowable slots for universal modules are 15-21.

Notes

1. The time multiplexed switch (TMS) must be available (carrier type 4, 5, 8, or 9) if enabling the TMS (field 8) for the module.
2. The following table shows the number of control circuit packs required per port electrical carrier number.

I/O (TN400B)	PDS (TN440B)	Port Electrical Carrier Number
1	1	0-1
	2	2-3
2	3	4-5
	4	6-7
3	5	8-9
	6	10-11

3. Module control carriers are set up based on the following:
   - — Two port data store (PDS) circuit packs (TN440B) may be entered for each I/O circuit pack (TN400B).
   - — For duplicated module controls, the I/O and PDS circuit packs must be equipped in the same way. That is, if one carrier has an I/O assigned, the other carrier must have an I/O assigned. Also, if module control 0 is remote, both module controls must be remote.
   - — Duplicated module controls must be in adjacent positions (carriers 0-1 or a-b).
   - — Module control 0 must be added before module control 1.
   - — Module control 1 must be removed before module control 0.
   - — If an RMI circuit pack is assigned to a local module control for a remote module control, the RMI circuit pack must be removed before the local module control carrier can be removed.
4. In the module control carrier, the change routine is allowed for fields 5, 6, 8, or 11. With a duplicated module control, the I/O, PDS, and SCS circuit packs in both carriers are changed with this routine. When reducing the number of PDS circuit packs or associated ports (lines and trunks), remove DS1 or RMI carriers first.
5. When a local RMI location is defined in fields 12-15, the module in field 1 is a remote module. If you dash out fields 12-15 and do a change routine, the module in field 1 becomes a local module.

   When changing a duplicated module control from a local to a remote, the primary module control must be changed first. When changing a duplicated module control from a remote to a local, the duplicated module control must be changed first. When there is no assignment in fields 12-15, the module in field 1 is a local module. If you add assignments in fields 12-15 and do a change routine, the module in field 1 becomes a remote module.

   Use the change routine to change the location of the RMI circuit pack. The module cannot have assignments of Calling Number Display to Station (see Procedure 253 Word 1).

6. Use the following tables to find the legal field entries for each carrier type. The first table shows the entries for fields 1-8 based on the carrier type in field 4. The second table shows the entries for fields 9-15 based on the carrier type in field 4.

Carr Equip.			Type	Mod Cntrl.			
Mod 1	**Cab 2**	**Car 3**	**4**	**I/O 5**	**PDS 6**	**Dup 7**	**TMS 8**
99	0-3	0-3	1	-	-	-	-
0-max	0	0(a)-b*	2,3	-	-	0-1	0-1
99	0-3	0-3	4,8 5,9	-	-	-	-
0-max	0-7	0-3	6,7	1-3	1-6	0-1	0-1
0-max	0-2	2	10	-	-	-	-
0-max	0-7	0-3	11	-	-	-	-
0-max	0-7	0-3	12	-	-	-	-
99	0-3	0-3	15	-	-	-	-
0-max	0-7	0-3		-	-	-	-
0-max	0	0(a)-b*	16,17	-	-	0-1	0-1
0-max	0	c-e	18	-	-	-	-

* When adding a new universal or XE module, use ‘‘0’’ instead of ‘‘a’’ to represent module control carrier 0 (the first carrier you must assign in a new module). After assigning this first carrier, the system recognizes this as being a universal or XE module, and the rest of the carriers can be assigned with the letters ‘‘b-e’’. On subsequent displays of universal or XE module control 0, an ‘‘a’’ will be now be displayed instead of a ‘‘0’’.

Type	Port Elec Carr	TMS Elec Carr	SCS	local RMI equip.			
				Mod	**Cab**	**Carr**	**Slot**
4	**9**	**10**	**11**	**12**	**13**	**14**	**15**
1	-	-	-	-	-	-	-
2,3	-	-	0-1	-	-	-	-
	-	-	0	0-max	0-7	0-3	25
	-	-	0	99*	0-3	0-3	0-3,5-8 13-16 18-21
	-	-	0	0-max*	0-7	0-3	0-3,5-8 13-16 18-21
	-	-	0	0-max+	0	0-1	15-21
4,8, 5,9	- -	0 1-3	0-1 -	- -	- -	- -	- -

	-	-	0-1	-	-	-	-
	-	-	0	0-max	0-7	0-3	25
	-	-	0	99*	0-3	0-3	0-3,5-8 13-16 18-21
6,7	-	-	0	0-max*	0-7	0-3	0-3,5-8 13-16 18-21
	-	-	0	0-max+	0	0-1	15-21
10	-	-	-	-	-	-	-
11	0-11	-	-	-	-	-	-
12	0-11	-	-	-	-	-	-
15	0-11	-	-	-	-	-	-
	-	-	0	0-max	0-7	0-3	25
	-	-	0	99*	0-3	0-3	0-3,5-8 13-16 18-21
16,17	-	-	0	0-max*	0-7	0-3	0-3,5-8 13-16 18-21
			0	0-max+	0	0-3 or a-b	15-21
18	-	-	-	-	-	-	-

* RMI carrier equipment location for fields 12-15
+ Universal carrier equipment location for fields 12-15

Special Error Codes

51 - A remote module cannot be used as the local module control for the assignment of an RMI circuit pack, an RMI carrier, or an SCS circuit pack.

52 - Modules greater than 0 cannot be assigned with a System 85 SE (R2V3 only). (See Procedure 276 Word 1.)

53 - You cannot activate a universal or XE module to work with AUTOVON.

54 - An XE module can only be a remote module.

55 - A module can not mix XE and non-XE carriers.

81 - TMS carriers (types 4, 5, 8, and 9) must be mounted in the common control cabinet.

82 - Only carrier types 1, 4, 5, 8, 9, or 15 can be mounted in common control cabinets.

83 - Module control carriers do not meet the proper criteria. See Notes.

84 - I/O and PDS circuit packs must be installed in the module control before the associated port, DS1, or RMI carriers can be installed. See Notes.

85 - The common control is duplicated. You cannot remove this carrier. See Procedure 275 Word 1 to change from duplicated to unduplicated.

86 - Port (lines and trunks), DS1, or RMI carriers are still assigned to the module control. Remove those assignments before removing the carrier.

87 - Ports or an RMI circuit pack are still assigned to a port, DS1, or RMI carrier. Remove those assignments before removing the carrier. See Procedure 290 Word 1.

88 - The change routine is unacceptable. See Notes.

89 - TMS carriers for duplicated TMS must meet the following criteria: TMS 0 (types 4 and 5) must be added before TMS 1 (types 8 and 9) and TMS 1 (types 8 and 9) must be removed before TMS 0 (types 4 and 5).

90 - TMS growth carriers must be mounted in vertically adjacent positions starting at the lowest position in the cabinet. The carriers must be assigned and removed in numerical order (i.e., add field 10 as 0-1-2-3, and remove field 10 as 3-2-1-0).

91 - The module control carrier is still assigned to the TMS carriers. It must be removed before the TMS carrier can be removed.

92 - In a multimodule system with TMS, the SCS must be mounted in the TMS carrier, not the module control carrier.

93 - The SCS reference must be removed in Procedure 260 Word 1 before the SCS circuit pack can be removed (using either the change or remove routine).

94 - Only the change routine is allowed for the SCS field in TMS 0 (type 4).

95 - The TMS carrier must be administered (carrier type 4, 5, 8 or 9) before enabling the TMS (field 8).

96 - You cannot remove a duplicated module control or TMS processor when it is on-line. Use Procedure 621 Test 2 to switch processors.

97 - The port electrical carrier for an RMI carrier (assigned to module in field 12) cannot be assigned to module 0, port electrical carrier 0. An RMI carrier cannot be assigned to common control cabinet 0, carrier 0. If an RMI carrier is in a network cabinet, fields 1 and 12 must be the same.

98 - Only four RMI carriers can be assigned per system.

PROCEDURE 252 WORD 1 — STANDARD TONE PLANTS

Purpose

Use Procedure 252 Word 1 to administer tone plants within a module. Tone plants provide call progress tones heard by users (such as ringback). For traditional modules, the standard tone plants (SN250) are administered in this procedure while the auxiliary tone plants (SN253), if needed, are administered in Procedure 252 Word 2. For universal or XE modules, one tone plant (TN768) includes both standard and auxiliary tones; therefore, Procedure 252 Word 2 is not needed.

Prerequisite Procedures

Use Procedure 250 Word 1 to administer carriers.

For traditional modules, use Procedure 252 Word 2 to remove the associated auxiliary tone plant before removing the last standard tone plant in this module.

For universal or XE modules, use Procedure 635 Test 1 to busy out an active tone plant before removing or changing it.

Related Procedures

Administer auxiliary tone plants for traditional modules with Procedure 252 Word 2.

Cautions

Removing the last tone plant in a universal or XE module can cause serious system ramifications. It is therefore recommended that this be the last piece of equipment removed from a module.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 252, WORD: 1
                              STANDARD TONE PLANTS

TONE PLANT 0
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

TONE PLANT 1
   6.  Module: --
   7. Cabinet: -
   8. Carrier: -
   9.    Slot: --
  10. Circuit: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-5 or 1-10. Use the add routine only when a new module is being added to the system.
Change:	Fields 1-10. Use the change routine to add or change tone plants. A tone plant can not be removed using the change routine.
Remove:	Fields 1-5 or 6-10.
Next Data:	Displays all assigned tone plants.

Field Ranges and Encodes

TONE PLANT 0 (Fields 1-5)

1.	Module	-, 0-30 At least one tone plant is required in each equipped module.
2.	Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules

4. Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional, 1 for universal and XE modules The tone plant in a universal module (TN768) is installed in slot 1.
5. Circuit	-, 0

TONE PLANT 1 (Fields 6-10)

6. Module	-, 0-30
7. Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules
8. Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules
9. Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional modules, 1 for universal and XE modules The tone plant in a universal module (TN768) is installed in slot 1.
10. Circuit	-, 0

Special Error Codes

81 - Use the add routine if adding a new module.

82 - If tone plant 0 and tone plant 1 are being added or changed, both module numbers must be the same.

83 - Use the change routine to add, remove, or change the second tone plant.

84 - Use circuit 0.

85 - Remove the associated auxiliary tone plant before removing the last standard tone plant in this module (see Procedure 252 Word 2).

86 - The circuit pack in this slot is not a tone plant.

87 - Tone plants 0 and 1 cannot have the same equipment location.

88 - Tone plant is in an invalid equipment location of a valid port carrier.

89 - Busy out the active tone plant in a universal or XE module using Procedure 635 Test 1 before removing it (active meaning currently accessed by call processing).

90 - A tone plant must be removed using the remove routine.

PROCEDURE 252 WORD 2 — AUXILIARY TONE PLANTS

Purpose

Use Procedure 252 Word 2 to administer auxiliary tone plants (SN253). This tone plant is used for Centralized Attendant Service (CAS), AUTOVON, tone detector, and Traditional Code Calling Access. Only traditional modules require this assignment. Auxiliary tones are automatically provided in universal and XE modules when the standard tone plant is assigned in Procedure 252 Word 1.

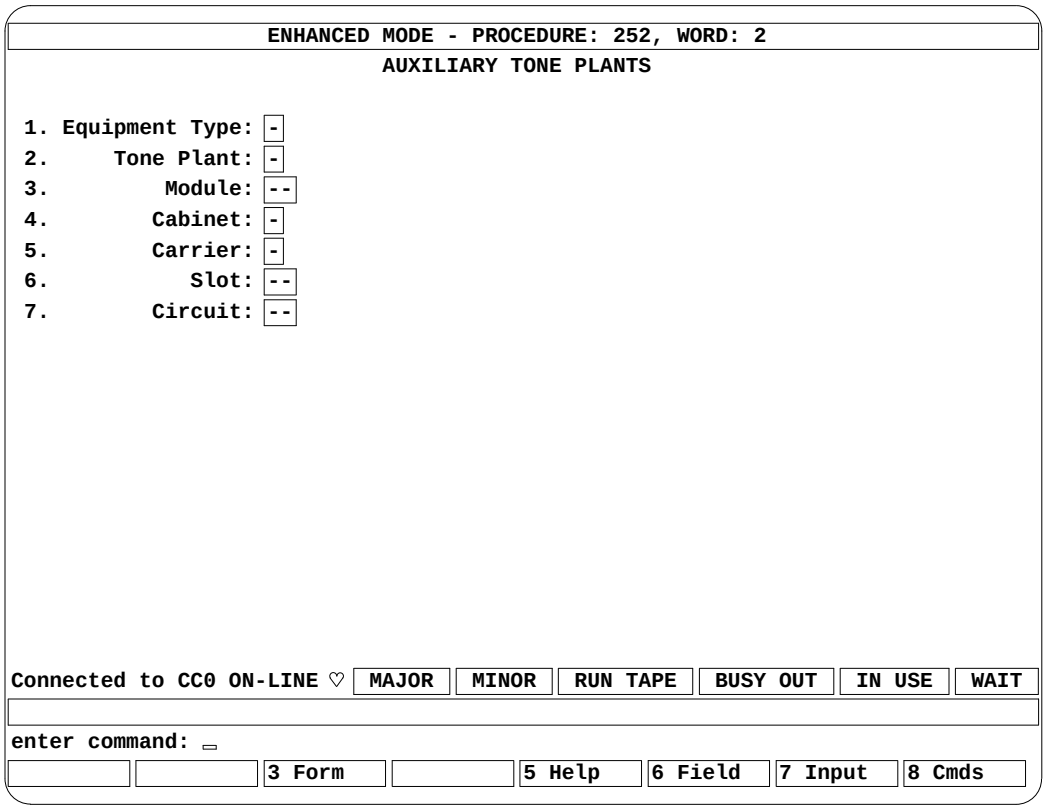
Prerequisite Procedures

Before administering an auxiliary tone plant, you must administer a standard tone plant in the same module (see Procedure 252 Word 1).

Use Procedure 275 Word 4 to disable Traditional Code Calling Access before changing or removing the assignment in this procedure.

Use Procedures 211 Word 1 and 212 Word 2 to disable CAS before removing the assignment here.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 2 and 3.
Add:	Fields 1-7.
Change:	Fields 1-7.
Remove:	Fields 1-7.
Next Data:	Displays all modules in the system and any assigned auxiliary tone plants.

Field Ranges and Encodes

1.	Equipment Type	1 CAS, AUTOVON, and tone detector 2 CAS, AUTOVON, and tone detector with Traditional Code Calling
		Equipment type 1 denotes that the CAS or AUTOVON features and tone detector trunks have been administered.
		Equipment type 2 denotes that the Traditional Code Calling Access, CAS, AUTOVON, or tone detector trunks have been administered (note that this is not applicable to the Universal Code Calling feature). The equipment location assignments with this type will be shared for CAS, AUTOVON, and Traditional Code Calling Access. Only one equipment location can be assigned with equipment type 2.
2.	Tone Plant	0-1
3.	Module	0-30
4.	Cabinet	0-7
5.	Carrier	0-3
6.	Slot	0-3, 5-8, 13-16, 18-21
7.	Circuit	0

Notes

1. At least one auxiliary tone plant is required in each equipped module if CAS is active.
2. An auxiliary tone plant is used for Traditional Code Calling Access or CAS, AUTOVON, and tone detector, or both.

Special Error Codes

81 - Use Procedure 252 Word 1 to assign the standard tone plant to this module before assigning the auxiliary tone plant.

82 - The Traditional Code Calling Access feature is not available. The equipment type must be CAS, AUTOVON, or tone detector (field 1 = 1).

83 - Traditional Code Calling Access equipment is assigned.

85 - Use Procedure 275 Word 4 to disable Traditional Code Calling Access before changing or removing this assignment.

86 - Use Procedures 211 Word 1 and 212 Word 1 to make CAS inactive before removing it here.

87 - The circuit number must be 0.

88 - The circuit pack in this slot is not an auxiliary tone plant.

89 - Next data is not allowed after changing data in fields 1, 2, or 3. First use the display routine then the next data routine.

90 - For universal or XE modules, auxiliary tones are provided by standard tone plant equipment (Procedure 252 Word 1).

PROCEDURE 253 WORD 1 — DATA CHANNELS

Purpose

Use Procedure 253 Word 1 to administer data channels for the following applications:

— Calling number display unit

— Station Message Detail Recording (SMDR)

— Force Administration Data System (FADS) display for Centralized Attendant Service (CAS)

— Centralized Message Detail Recording/Network Control Operations Support System (CMDR/NCOSS) port for call record data sent to a Local Storage Unit (LSU).

Also use this procedure to display other fixed data channel assignments and data channel assignments made in other procedures.

Prerequisite Procedures

Use Procedures 350 Word 1 and 354 Word 1 to administer extensions in the dialing plan before assigning an extension in field 5.

Related Procedures

Use Procedure 210 Word 1 to administer an attendant console interface equipment location and data channel equipment location.

Use Procedure 255 Word 1 to administer the Processor Communication Circuit (PCC).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 253, WORD: 1
                                 DATA CHANNELS

 1. Unit Type: --

EQUIPMENT LOCATION
   2. Carrier: -
   3.    Slot: --
   4. Circuit: --

 5. Unit or Extension: -----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-4.
Add:	Fields 1-5.
Change:	Fields 2-5. The change routine is used for unit type 1 only.
Remove:	Fields 1-5.
Next Data:	Displays all data channel assignments.

Field Ranges and Encodes

1. Unit Type

0	Not assigned
1	Calling number display
3	Attendant console (administer in Procedure 210 Word 1)
5	SMDR
13	FADS for CAS
14	CMDR/NCOSS (to LSU)
16	PCC (administer in Procedure 255 Word 1)

Unit types 3 and 16, can only be displayed in this procedure.

EQUIPMENT LOCATION (Fields 2-4)

SMDR (unit type 5) must be assigned to slot 23, circuit 15.

2. Carrier	0	Common control carrier
3. Slot	23-26	
4. Circuit	0-15	
	Unit type 14 (CMDR/NCOSS) can be assigned to circuits 14 and 15 only.	
5. Unit or Extension	-, 1-99999	
	Assign a unit number or extension to each unit type (except type 3) even if only one unit type is allowed per system (e.g., unit type 13, unit number 1). The range for unit type 1 is 000-99999. The range for unit types 5 and 13 is 000-9999. The range for unit type 14 is 1-8. The range for unit type 16 is the logical circuit number plus 1.	

Special Error Codes

83 - Unit type 3 (attendant console) is administered in Procedure 210 Word 1 and is displayed here for information only.

85 - Unit type 5 (SMDR) has a fixed equipment location which may be added or removed, but not changed (slot 23, circuit 15).

86 - This extension cannot be an associated extension.

87 - Unit type 14 (CMDR/NCOSS) may be added or removed but not changed.

88 - Unit type 14 (CMDR/NCOSS) must be assigned to circuits 14 and 15. The unit number range is 1-8.

89 - A PCC board resides in this slot. Translate the PCC board in Procedure 255 Word 1 and 2.

90 - Unit type 16 (PCC) is administered in Procedure 255 Word 1 and is displayed here for information only.

PROCEDURE 254 WORD 1 — DIAL PULSE ORIGINATING REGISTER AND INTERCOM RECORD

Purpose

Use Procedure 254 Word 1 to administer the number of active dial pulse originating register (OR) records and intercom records. A default number of records is set at installation, but the numbers can be changed as necessary.

Related Procedures

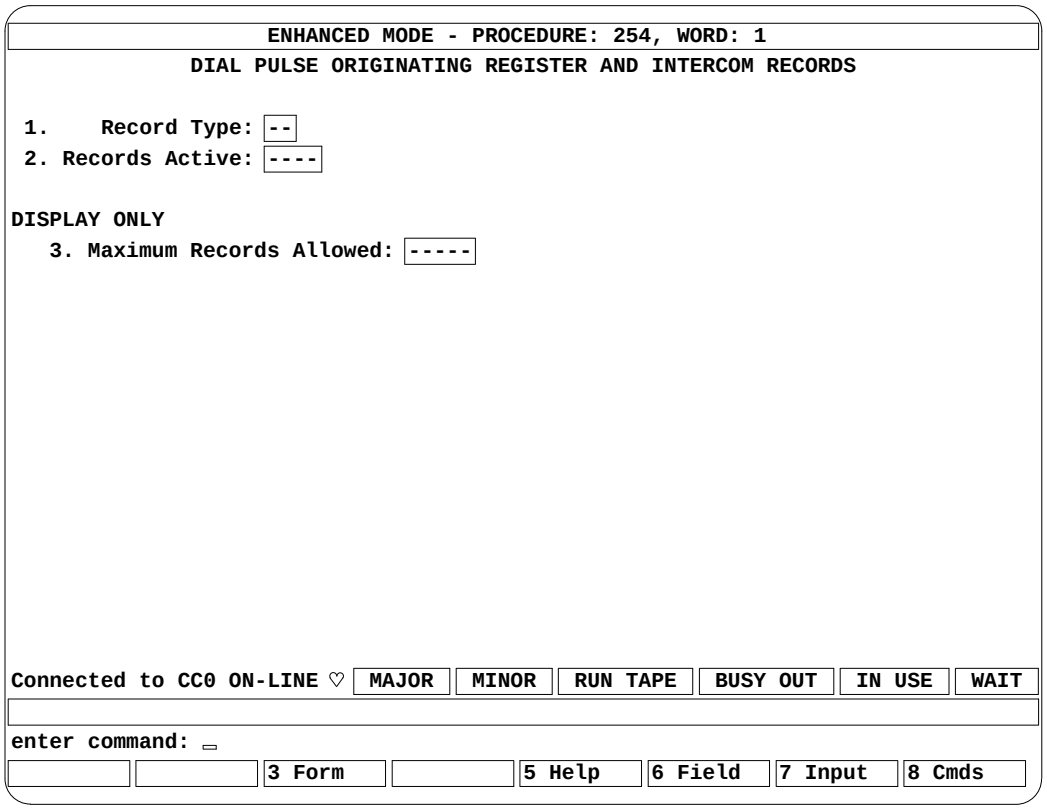
Each time a trunk is administered in Procedure 116 Word 1 and Procedure 150 Word 1, one intercom record is used.

Cautions

Making improper administration changes while using this procedure can adversely affect the traffic handling capacity of the system.

There is a short, traffic-dependent delay between the time of the request to remove intercom records and the time the requested records are actually removed from the idle intercom queue. Due to the random nature of the queue and the necessary real time delay in its restructure, a removed intercom may be selected for a call and the call is subsequently torn down in any of its states. To minimize the possible loss of calls, use this procedure during light traffic periods.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Field 2 (after display only).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Record Type

1 Dial pulse originating register record
2 Intercom record

Intercom records consist of trunk queues, physical trunk connections, trunk intercom records, and records used for station-to-station calls.

Always do a display on each record type to see how many records are allowed (field 3) before making any changes.

2. Records Active — 0-9999

   When increasing the number of active records, do not enter the maximum number shown in field 3. A number of spare records should always be maintained.

DISPLAY ONLY (Field 3)

3. Maximum Records Allowed — 0-246 for dial pulse records, 0-10494 for intercom records

   This number may vary from system to system, based on the configuration.

Special Error Codes

81 - Field 2 cannot be a larger number than field 3.

84 - This change is incomplete. There are not enough idle records available. Do a display routine to find the new number of active records.

PROCEDURE 255 WORD 1 — PCC - LINK ATTRIBUTES

Purpose

Use Procedure 255 Word 1 to administer the Processor Communications Circuit (PCC) to an equipment location and assign data characteristics to that circuit. The PCC is used for the Call Detail Recording (CDR) feature.

Prerequisite Procedures

Use Procedure 275 Word 1 to turn off CDR before making changes here.

Before making any changes to the PCC, it must be busied out:

a. Call in Procedure 651.

b. Select Test 2.

c. Enter the PCC carrier number, slot number, and circuit number.

d. Run the busy out routine twice.

After making changes to the PCC, the PCC must be released:

a. Call in Procedure 651.

b. Select Test 2.

c. Enter the PCC carrier number, slot number, and circuit number.

d. Run the release busy out routine.

Related Procedures

Use Procedure 253 Word 1 for the standard data channel assignments.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 255, WORD: 1
                          PCC - LINK ATTRIBUTES

 1. Application Type: --                FIFO THRESHOLDS
                                          OUT
EQUIPMENT LOCATION                          10.  Low: -
   2.    Slot: --                           11. High: -
   3. Circuit: --                         IN
                                            12.  Low: -
 4.             Baud: -                     13. High: -
 5.           Parity: -
 6.        Stop Bits: -                   DISPLAY ONLY
 7. Character Length: -                    14. Mismatched Data in Field: --

DATA TYPE
   8.        501-to-PCC: -
   9. PCC-to-Peripheral: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-13.
Change:	Fields 4-13.
Remove:	Fields 1-14.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Application Type 1 Call Detail Recording (CDR)

EQUIPMENT LOCATION (Fields 2-3)

2. Slot 24-26
3. Circuit 0, 1

4. Baud	2	300 bps
	3	600 bps
	4	1200 bps
	5	2400 bps
	6	4800 bps
	7	9600 bps
	8	19200 bps
5. Parity	0	No parity/not assigned
	1	Odd
	2	Even
6. Stop Bits	1	1 bit
	2	1-1/2 bits
	3	2 bits
7. Character Length	1	5-bit character
	2	6-bit character
	3	7-bit character
	4	8-bit character (default)

The BTC protocol is administer in Procedure 255 Word 2. If used, it requires an 8-bit character length in this field.

DATA TYPE (Fields 8-9)

8. 501-to-PCC	1	4 hex nibbles (default)
	2	2 ASCII characters
9. PCC-to-Peripheral	1	2 hex nibbles (default)
	2	1 ASCII character

FIFO THRESHOLDS (Fields 10-13)

0	0-999
1	1000-1999
2	2000-2999
3	3000-3999
4	4000-4999
5	5000-5999
6	6000-6999
7	7000-7999

The high FIFO thresholds cannot be less than or equal to the low FIFO thresholds.

OUT (Fields 10-11)

10. Low 0-7

Default for this field is 1.

11. High 0-7

Default for this field is 7.

IN (Fields 12-13)

12. Low	0-7 Default for this field is 1.
13. High	0-7 Default for this field is 7.

DISPLAY ONLY (Field 14)

14. Mismatched Data in Field	-, 4-13

Notes

1. The display always shows switch translations. If a PCC board is present, a comparison of board translations to switch translations is done. If any differences are present, the field number of the first difference is displayed in field 14. After making the correction, another display will show the next field that has a discrepancy, if any.

Special Error Codes

81 - This circuit is not a PCC. Use Procedure 253 Word 1 for dual speed data channels.

82 - The high FIFO threshold cannot be less than or equal to the low FIFO threshold.

83 - The PCC must be busied out before it can be changed or removed. Use Procedure 651 Test 2 to busy out the PCC.

84 - The application is not assigned to this equipment location.

85 - Unable to write to the PCC board.

86 - BTC protocol is administered in Procedure 255 Word 2 field 5. An 8-bit character length is required.

PROCEDURE 255 WORD 2 — PCC - APPLICATION ATTRIBUTES

Purpose

Use Procedure 255 Word 2 to administer the one-way communication, message, protocol, and failure threshold to the Processor Communications Circuit (PCC).

Prerequisite Procedures

Use Procedure 275 Word 1 to turn off Call Detail Recording (CDR) before making changes here.

Before making any changes to the PCC, it must be busied out:

a. Call in Procedure 651.

b. Select Test 2.

c. Enter the PCC carrier number, slot number, and circuit number.

d. Run the busy out routine twice.

After making changes to the PCC, the busy out must be released:

a. Call in Procedure 651.

b. Select Test 2.

c. Enter the PCC carrier number, slot number, and circuit number.

d. Run the release busy out routine.

Use Procedure 255 Word 1 to set up the PCC. An 8-bit character length must be assigned in field 7 before BTC protocol can be administered here.

Use Procedure 288 Word 1 to administer the 18-word CDR record before the direct output 18-word format is administered in this procedure.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 255, WORD: 2
                        PCC - APPLICATION ATTRIBUTES

 1.      Application Type: --
 2. One-Way Communication: -

MESSAGE
   3. Format: -
   4. Length: ---

 5.          Protocol: -
 6. Failure Threshold: --

DISPLAY ONLY
   7. Mismatched Field: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-6.
Change:	Fields 2-6.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Application Type	1	Call Detail Recording (CDR) (default)
2. One-Way Communication	1 (default)	

MESSAGE (Fields 3-4)

3. Format	1	Message length in message
	2	STX/ETX delimited (default)
	3	Fixed message length

STX/ETX stands for start of text/end of text. For CDR, this field must be set to 2.

4. Length — -, 1-128 (default is -)

   This specifies the number of characters sent in each call detail record. At this time, only 96 characters including spaces are used (24-word record with 4 characters per word as defined in Procedure 288 Words 1 and 2). A length must be specified if field 3 is 1 or 3 and this field must be dashed if field 3 is 2.

5. Protocol

   1 BTC protocol (default)
   2 Direct output - 18-word format
   3 Direct output - unformatted

   The BTC protocol (1) is required when field 3 is 2, Procedure 255 Word 1 field 7 is set to 8-bit characters, and 18-word CDR records are administered in Procedure 288 Word 1.

6. Failure Threshold — 1-15 (default is 3)

   This is the number of retries attempted to the peripheral before the call record will be deleted.

DISPLAY ONLY (Field 7)

7. Mismatched Field — -, 3-6

   The display routine always shows switch translations. If a PCC board is present, a comparison of board translations to switch translations is done. If any differences are present, the field number of the first difference is displayed in this field. After correction, another display will identify the next field that has a discrepancy, if any.

Special Error Codes

81 - Administer Procedure 255 Word 1 before using this procedure.

82 - The PCC must be busied out before it can be changed. Use Procedure 651 Test 2 to busy out the PCC.

83 - The message format must be ‘‘STX/ETX delimited’’ for CDR application.

84 - Procedure 288 Word 1 must have an 18-word CDR record administered before the direct output 18-word format may be used.

85 - The message length field must be assigned for formats 1 and 3.

86 - The message length field must be dashed for format 2.

87 - Unable to write to the PCC board. The PCC board may not be in the system.

88 - An 8-bit character length must be assigned in Procedure 255 Word 1 field 7 before BTC protocol may be administered.

PROCEDURE 256 WORD 1 — DCIU - LINK ASSIGNMENT

Purpose

Use Procedure 256 Word 1 to administer the following characteristics to a DCIU link:

— The assigned or unassigned status of the link

— The transmission speed used over the link

— The data terminal equipment (DTE) or data circuit-terminating equipment (DCE) status of the link

— The dial up status of the link

— The protocol used on the link

— The type of destination equipment connected to the local switch by the link

— The destination machine number.

Prerequisite Procedures

You cannot change the destination machine type or unassign a link if they are part of a network channel. Use Procedure 257 Word 1 to remove the network channel first.

Cautions

Link assignment (field 2), baud (field 3), dial-up (field 5), and protocol (field 6) must be administered the same at both ends of the communication link. DCE/DTE (field 4) must be assigned with one end of the communication link being DTE and the other end being DCE.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 256, WORD: 1
                              DCIU - LINK ASSIGNMENT

 1.                        Link: -
 2.                    Assigned: -
 3.                        Baud: --
 4.                Local DTE/DCE: -
 5.                      Dial-Up: -
 6.                    Protocol: -
 7.     Destination Machine Type: --
 8.  Destination Machine Number: ---
 9.              Table Indicator: -

DISPLAY ONLY
  10. Translation Equivalence: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 9.
Add:	Not allowed.
Change:	Fields 2-8.
Remove:	Not allowed.
Next Data:	Displays each link assignment.

Field Ranges and Encodes

1.	Link	1-8	
2.	Assigned	0	No
		1	Yes

3. Baud	0	None assigned
	1	300 bps
	2	600 bps
	3	1200 bps
	4	2400 bps
	5	4800 bps
	6	9600 bps
	7	19200 bps
4. Local DTE/DCE	0	This end is DTE
	1	This end is DCE
5. Dial-Up	0	Not a dial-up link
	1	Is a dial-up link
6. Protocol	1	BX.25
7. Destination Machine Type	1	AP 16
	2	3B5 AP
	3	AUDIX
	4	System 75 or DEFINITY Generic 1 (DCS)
	5	System 85 Release 1 (DCS)
	6	System 85 Release 2 or DEFINITY Generic 2 (DCS)
	7	Enhanced DIMENSION PBX (DCS)
	8	3B2 Messaging Server, CMS, or ISDN Gateway
8. Destination Machine Number	1-7 for APs, 1-8 for AUDIX, and 1-63 for DCS The values in this field depend on the machine type in field 7. If you put a 1, 2, or 8 in field 7, the range for field 8 is 1-7. If you put a 3 in field 7, the range for field 8 is 1-8. If you put a 4, 5, 6, or 7 in field 7, the range for field 8 is 1-63. These machine numbers may be administered in random order.	
9. Table Indicator	-	Display scratch-pad table values
	0	Display scratch-pad table values
	1	Display machine-used table values
DISPLAY ONLY (Field 10)		
10. Translation Equivalence	0	Scratch-pad and machine-used values differ
	1	Scratch-pad and machine-used values agree

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

82 - You cannot unassign a link that forms part of a network channel. Use Procedure 257 Word 1 to remove the network channel first.

83 - The maximum combined speed on the links has been exceeded (76800 bps).

84 - You cannot change the destination machine type if the link forms part of a network channel. Use Procedure 257 Word 1 to remove the network channel first.

85 - A link connected to an AP must be assigned as a DTE (field 4 = 0).

PROCEDURE 256 WORD 2 — DCIU - LEVEL 2 LINK CHARACTERISTICS

Purpose

Use Procedure 256 Word 2 to administer the DCIU link BX.25 level two timers and counters.

Prerequisite Procedures

Use Procedure 258 Word 1 to unprotect the DCIU translations in the scratch-pad tables before making changes in these tables.

Cautions

The DCIU level 2 characteristics must be the same at both ends of the link.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 256, WORD: 2
                      DCIU - LEVEL 2 LINK CHARACTERISTICS

 1. Link: -

BX.25 LEVEL 2 CHARACTERISTICS
   2.          Retransmission Timer: ---
   3.                   Idle Timer: ---
   4.       Maximum Retransmissions: --
   5. Maximum Unacknowledged Frames: -

 6. Table Indicator: -

DISPLAY ONLY
   7. Translation Equivalence: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 6.
Add:	Not allowed.
Change:	Fields 2-5.
Remove:	Not allowed.
Next Data:	Displays each link assignment.

Field Ranges and Encodes

1. Link — 1-8

BX.25 LEVEL 2 CHARACTERISTICS (Fields 2-5)

2. Retransmission Timer — 1-255 (in one-second intervals)

   This is the time (in seconds) before the DCIU will retransmit unacknowledged frames. A typical value for this field is 1.

3. Idle Timer — 1-255 (in one-second intervals)

   This is the time (in seconds) allowed without exchanging frames on the link. A typical value for this field is 10.

4. Maximum Retransmissions — 1-15

   This is the maximum number of retransmissions allowed for acknowledged frames. A typical value for this field is 2.

5. Maximum Unacknowledged Frames — 1-7

   This is the maximum number of frames transmitted without acknowledgement. A typical value for this field is 7.

6. Table Indicator
   - \- Display scratch-pad table values
   - 0 Display scratch-pad table values
   - 1 Display machine-used table values

DISPLAY ONLY (Field 7)

7. Translation Equivalence
   - 0 Scratch-pad and machine-used values differ
   - 1 Scratch-pad and machine-used values agree

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables, which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

PROCEDURE 256 WORD 3 — DCIU - LEVEL 3 LINK CHARACTERISTICS

Purpose

Use Procedure 256 Word 3 to administer the DCIU link BX.25 level 3 timers and counters.

Prerequisite Procedures

Use Procedure 258 Word 1 to unprotect the DCIU translations in the scratch-pad tables before making changes to these tables in this procedure.

Cautions

The DCIU communication link protocol level 3 characteristics must be the same at both ends.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 256, WORD: 3
                      DCIU - LEVEL 3 LINK CHARACTERISTICS

 1. Link: [-]

BX.25 LEVEL 3 CHARACTERISTICS
   2.                  Activity Timer: [---]
   3.           Acknowledgement Timer: [---]
   4.                 Interrupt Timer: [---]
   5.                     Reset Timer: [---]
   6.                   Restart Timer: [---]
   7.          Retransmission Counter: [-]
   8.                   Reset Counter: [--]
   9.                  Restart Counter: [--]
  10. Maximum Unacknowledged Packets: [-]

11. Table Indicator: [-]

DISPLAY ONLY
  12. Translation Equivalence: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 11.
Add:	Not allowed.
Change:	Fields 2-10.
Remove:	Not allowed.
Next Data:	Displays each link assignment.

Field Ranges and Encodes

1. Link 1-8

BX.25 LEVEL 3 CHARACTERISTICS (Fields 2-10)

2. Activity Timer 1-255

   This is the wait time (in seconds) before sending a window advancement packet to reflect the current condition of a logical channel. A typical value for this field is 180.

3. Acknowledgement Timer 1-255

   This is the wait time (in seconds) for acknowledgement of a data packet before resetting a logical channel. A typical value for this field is 20.

4. Interrupt Timer 1-255

   This is the wait time (in seconds) for confirmation of an interrupt packet before resetting a logical channel. A typical value for this field is 180.

5. Reset Timer 1-255

   This is the wait time (in seconds) for confirmation of a reset request packet before retransmission. A typical value for this field is 8.

6. Restart Timer 1-255

   This is the wait time (in seconds) for confirmation of a restart request packet before retransmission. A typical value for this field is 8.

7. Retransmission Counter -

   This is the maximum number of times an unacknowledged data packet is retransmitted. This field is not used at this time.

8. Reset Counter -

   This is the maximum number of times an unacknowledged reset request is retransmitted. This field is not used at this time.

9. Restart Counter	-	This is the maximum number of times an unacknowledged restart request is retransmitted. This field is not used at this time.
10. Maximum Unacknowledged Packets	1-7	This is the maximum number of unacknowledged data packets that can be transmitted. A typical value for this field is 4.
11. Table Indicator	-	Display scratch-pad table values
	0	Display scratch-pad table values
	1	Display machine-used table values

DISPLAY ONLY (Field 12)

12. Translation Equivalence	0	Scratch-pad and machine-used values differ
	1	Scratch-pad and machine-used values agree

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

PROCEDURE 257 WORD 1 — DCIU - NETWORK CHANNELS

Purpose

Use Procedure 257 Word 1 to administer the components, priority, and alternate routing status of DCIU network channels.

Prerequisite Procedures

Before changing assignments in this procedure, you must swap the machine-used and scratch-pad tables in Procedure 258 Word 2.

Assign the link in Procedure 256 Word 1 before adding a network channel.

The remote port must be designated for the local port in Procedure 257 Word 2 before including it in a network channel.

Designate alternate routing information in Procedure 257 Word 2 for the local port before including it in a network channel. Alternate routing may only be used on DCS machines (Procedure 256 Word 1 field 7).

Use Procedure 257 Word 3 to disassociate the local port from its trunk group and DCS nodes before removing the local port from a network channel.

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 257, WORD: 1
                              DCIU - NETWORK CHANNELS

NETWORK CHANNEL
  COMPONENT A
     1.                Link (switch): -
     2. Logical Channel (local port): ---
  COMPONENT B
     3.                Link (switch): -
     4. Logical Channel (local port): ---

 5.               Priority: -
 6. Alternate Routing Flag: -
 7.        Table Indicator: -

DISPLAY ONLY
   8. Translation Equivalence: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2 or fields 1, 2, and 7. Data entered into the Component A fields may move and be displayed in the Component B fields when appropriate.
Add:	Fields 1-6.
Change:	Field 5.
Remove:	Fields 1-7.
Next Data:	Displays all assigned network channels.

Field Ranges and Encodes

NETWORK CHANNEL (Fields 1-4)
COMPONENT A (Fields 1-2)

1.	Link (switch)	0	Local switch link
		1-8	Hardware links
2.	Logical Channel (local port)	1-64	

COMPONENT B (Fields 3-4)

3. Link (switch)
   - `-` Not assigned
   - `0` Local switch link
   - `1-8` Hardware links

   This field can be set to 0 only if field 1 is set to 0. That is, Component B may be a switch port only if Component A is a switch port. Setting both fields to 0 is used for loop around testing applications only.

4. Logical Channel (local port) — `-`, `1-64`

5. Priority
   - `0` Low
   - `1` High

   If high priority is set, messages using this link are processed before messages on a link that are set with low priority.

6. Alternate Routing Flag
   - `0` Not an alternate routed network channel
   - `1` Network channel (dash fields 3 and 4).

7. Table Indicator
   - `-` Display scratch-pad table values for Component A
   - `0` Display scratch-pad table values for Component A
   - `1` Display machine-used table values for Component A

DISPLAY ONLY (Field 8)

8. Translation Equivalence
   - `0` Scratch-pad and machine-used values for Component A differ
   - `1` Scratch-pad and machine-used values for Component A agree

Notes

1. Conceptually, the DCIU has nine links. Eight are hardware links that can be connected to remote devices (links 1-8). Link 0 is permanently connected to the local switch. Each link (0-8) supports up to 64 logical channels, which are called ports on the local switch link (link 0).
2. When assigning a local switch port to a network channel, additional administration is required in Procedure 257 Word 2 and Word 3 if the remote end of the network channel is a DCS node.
3. For ISDN Gateway, component A will be link 0 (switch) and logical channel 1, 10, 15, 30, 38, 46, or 54. Component B will be link 1-7 (depending on the link connected to the gateway machine) and logical channel 1. The priority (field 5) should be 1 and the alternate routing flag (field 6) should be 0.

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables that are currently protected (see Procedure 258 Word 1).

81 - You cannot do an add, change, or remove routine on the machine-used tables.

82 - The link must be assigned in Procedure 256 Word 1 before adding a network channel.

83 - This is not a valid network channel.

84 - This port is not permitted alternate routing status.

85 - This port is not permitted fixed network channel status.

86 - The switch/port component must be Component A.

87 - The remote port must be designated for the local port before inclusion in the network channel (Procedure 257 Word 2).

88 - Alternate routing information must be designated for the local port before inclusion in a network channel (Procedure 257 Word 2).

89 - Alternate routing information must be removed for the local port before removing it from a network channel (Procedure 257 Word 2).

90 - Component B may not be designated for alternate routed network channels.

91 - Components A and B of a network channel cannot be identical.

92 - Alternate routing may only be used on DCS machines (Procedure 256 Word 1 field 7).

93 - Disassociate the local port from its trunk group and DCS nodes before removing the local port from a network channel (Procedure 257 Word 3).

--r Hu 1

PROCEDURE 257 WORD 2 — DCIU - PORT CHARACTERISTICS

Purpose

Use Procedure 257 Word 2 to administer DCIU ports for the network channels.

Prerequisite Procedures

You cannot assign characteristics to an unreserved port. Use Procedure 257 Word 5 to reserve the port.

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Related Procedures

For destination routing codes with an alternate routed port, use Procedure 257 Word 4 to assign routes associated with the destination routing code.

Cautions

Internal range checks are not made for the various remote machine types.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 257, WORD: 2
                          DCIU - PORT CHARACTERISTICS

 1.  Local Port: [---]
 2. Remote Port: [---]

ALTERNATE ROUTING
   3. Destination Routing Code: [---]
   4.                  Postage: [---]

DISPLAY ONLY
   5. Port Assigned to Network Channel: [-]
   6.                          Priority: [-]
   7.           Alternate Routing Flag: [-]

 8. Table Indicator: [-]

DISPLAY ONLY
   9. Translation Equivalence: [-]


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 8.
Add:	Not allowed.
Change:	Fields 2-4.
Remove:	Not allowed.
Next Data:	Displays all available ports.

Field Ranges and Encodes

1. Local Port 1-64

   The applications assigned (reserved) for the local ports are done in Procedure 257 Word 5.

2. Remote Port -, 1-64

   The following ranges are possible for field 2 (remote port):
   1-11 = AP 16
   1-11 = 3B5 AP
   1-20 = AUDIX
   1-20 = System 85 Release 1
   1-64 = System 85 Release 2 or DEFINITY Generic 2
   1-20 = Enhanced DIMENSION PBX
   1-11 = 3B2 Messaging Server, CMS, or ISDN Gateway

   This field is dashed unless the port is assigned to the alternate routing network channel.

ALTERNATE ROUTING (Fields 3-4)

3. Destination Routing Code -, 1-255

   The destination routing code identifies the node for which a packet is intended. It must be common throughout the network. That is, a given destination routing code must identify the same destination switch from any node in the system. The destination routing code is used at each alternate routing DCIU to select up to three routes (a primary and two alternate routes) that can be used from that DCIU to reach the destination switch. At the DCIU serving the destination switch, only one route (the primary) is used. This route passes the packet to the designated port on the switch link.

   Use a dash (-) for ISDN Gateway.

4. Postage -, 2-255

   Postage is the system's way of keeping track of the number of hops that have been used trying to deliver a package to another system. Each time a delivery fails, the postage counter administered in this field is decremented. When the count reaches 0, the package is discarded. Setting the postage too high can cause unnecessary traffic on the DCIU links. Setting the postage too low can cause important packages to be lost.

   Use a dash (-) for ISDN Gateway.

DISPLAY ONLY (Fields 5-7)

5. Port Assigned to Network Channel
   0 No
   1 Yes

6. Priority
   0 Low
   1 High

   The priority is set in Procedure 257 Word 1.

7. Alternate Routing Flag
   0 Port not assigned (dash field 3 and 4)
   1 Port assigned (field 3 and 4 required)

8. Table Indicator	-	Display scratch-pad table values for the port
	0	Display scratch-pad table values for the port
	1	Display machine-used table values for the port

DISPLAY ONLY (Field 9)

9. Translation Equivalence	0	Scratch-pad and machine-used values differ
	1	Scratch-pad and machine-used values agree

Notes

1. Fields 3 and 4 must be administered (not dashed) when the port is assigned to an alternate routing network channel.

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

82 - A remote port may not be unassigned or changed because the local port is assigned to a network channel.

83 - Alternate routing information may not be removed because the local port is assigned to an alternate routing network channel.

84 - Alternate routing information may not be added because the local port is assigned to a fixed routed network channel.

85 - A local port is not permitted alternate routing status.

86 - A remote port must be designated when alternate routing information is specified.

87 - You cannot assign characteristics to an unreserved port. Use Procedure 257 Word 5 to reserve the port.

PROCEDURE 257 WORD 3 — DCIU - TRUNK GROUP AND DCS NODE ASSIGNMENT

Purpose

Use Procedure 257 Word 3 to administer DCS node and trunk group assignments.

Prerequisite Procedures

Use Procedure 256 Word 1 to assign a DCS node to a link.

Use Procedure 257 Word 1 to assign a DCIU network channel.

You cannot assign characteristics to an unreserved port. Use Procedure 257 Word 5 to reserve the port.

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 257, WORD: 3
                  DCIU - TRUNK GROUP AND DCS NODE ASSIGNMENT

 1.         Local Port: ---
 2. Trunk Group Number: ---
 3.    Remote DCS Node: ---
 4.    Table Indicator: -

DISPLAY ONLY
   5. Translation Equivalence: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1, 2, and 3, fields 1 and 4, fields 2 and 4, or fields 3 and 4.
Add:	Fields 1-3.
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	If the local port is entered, next data displays all trunk groups associated with the port. If the trunk group is entered, next data displays all local ports and nodes associated with the trunk group. If the DCS node is entered, next data displays all the ports and trunk groups associated with the DCS node.

Field Ranges and Encodes

1.	Local Port	1-64
2.	Trunk Group Number	18-255 Field 2 must be set to dashes or trunk groups must terminate at the DCS node shown in field 3.
3.	Remote DCS Node	1-63

4. Table Indicator	-	Display scratch-pad table values
	0	Display scratch-pad table values
	1	Display machine-used table values

DISPLAY ONLY (Field 5)

5. Translation Equivalence	0	Scratch-pad and machine-used tables differ
	1	Scratch-pad and machine-used tables agree

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables that are currently protected (see Procedure 258 Word 1).

81 - You cannot do an add or remove routine on the machine-used tables.

82 - The port has not been assigned to a network channel with Procedure 257 Word 1.

83 - You cannot assign more than one DCS node to a given local port.

84 - You cannot assign a trunk group or DCS node to a non-DCS port.

85 - You cannot assign characteristics to an unreserved port. Use Procedure 257 Word 5 to reserve the port.

PROCEDURE 257 WORD 4 — DCIU - ALTERNATE ROUTING

Purpose

Use Procedure 257 Word 4 to administer the alternate routes associated with a destination map.

Prerequisite Procedures

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 257, WORD: 4
                              DCIU - ALTERNATE ROUTING

 1. Destination Routing Code: [---]
 2.        Routing Algorithm: [-]
 3.         Number of Routes: [-]

ROUTE 1
   4.            Link: [-]
   5. Logical Channel: [---]
ROUTE 2
   6.            Link: [-]
   7. Logical Channel: [---]
ROUTE 3
   8.            Link: [-]
   9. Logical Channel: [---]

10. Table Indicator: [-]
DISPLAY ONLY
  11. Translation Equivalence: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 10.
Add:	Not allowed.
Change:	Fields 2-9.
Remove:	Not allowed.
Next Data:	Displays all destination routing codes.

Field Ranges and Encodes

1. Destination Routing Code — 1-255

   The destination routing code identifies the node for which a packet is intended. It must be common throughout the network. That is, a given destination routing code must identify the same destination switch from any node in the system. The destination routing code is used at each alternate routing DCIU to select up to three routes (a primary and two alternate routes) that can be used from that DCIU to reach the destination switch. At the DCIU serving the destination switch, only one route (the primary) is used. This route passes the packet to the designated port on the switch link.

2. Routing Algorithm
   - 0 Fixed routing
   - 1 Routing on failure

3. Number of Routes
   - 0 Fields 4-9 must be dashed
   - 1 Input expected in fields 4-5
   - 2 Input expected in fields 4-7
   - 3 Input expected in fields 4-9

ROUTE 1 (Fields 4-5)

4. Link
   - - Not assigned
   - 0 Local switch logical link
   - 1-8 Physical link

5. Logical Channel — -, 0-64

   When the local switch is the destination (field 1), a logical channel cannot be designated.

ROUTE 2 (Fields 6-7)

6. Link
   - - Not assigned
   - 0 Local switch logical link
   - 1-8 Physical link

7. Logical Channel — -, 0-64

   When the local switch is the destination (field 1), a logical channel cannot be designated.

ROUTE 3 (Fields 8-9)

8. Link	-	Not assigned
	0	Local switch logical link
	1-8	Physical link
9. Logical Channel	-, 0-64	
	When the local switch is the destination (field 1), a logical channel cannot be designated.	
10. Table Indicator	-	Display scratch-pad table values
	0	Display scratch-pad table values
	1	Display machine-used table values

DISPLAY ONLY (Field 11)

11. Translation Equivalence	0	Scratch-pad and machine-used tables differ
	1	Scratch-pad and machine-used tables agree

Notes

1. If field 4 is set to zero, put a zero in field 5 and leave fields 6-9 dashed.

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

82 - The logical channel must be set to 0 when the local switch is the destination.

83 - Only route 1 may be specified when the local switch is the destination.

PROCEDURE 257 WORD 5 — DCIU - PORT RESERVATION

Purpose

Use Procedure 257 Word 5 to administer port reservations for DCIU translations.

Prerequisite Procedures

Use Procedure 257 Word 2 for clearing port characteristics before changing the reservation of a port.

Use Procedure 257 Word 3 to clear trunk group and DCS node assignments before changing the reservation of a port.

Use Procedure 257 Word 6 to clear the enhanced services port routing information before changing the reservation of a port.

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 257, WORD: 5
                              DCIU - PORT RESERVATION

 1.      Port Number: --
 2. Application Type: --
 3.  Instance Number: --

DISPLAY ONLY
   4.            Port Assignment: -
   5.              Hardware Link: -
   6.   Destination Machine Type: --
   7. Destination Machine Number: ---
   8.   Destination Routing Code: ---

 9. Table Indicator: -

DISPLAY ONLY
  10. Translation Equivalence: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2 and 3.
Add:	Not allowed.
Change:	Fields 1-3.
Remove:	Not allowed.
Next Data:	If port is specified, port assignments are displayed. If application type is specified, the instance number is displayed. If nothing is specified, port assignments are displayed.

Field Ranges and Encodes

1. Port Number -, 1-64

2. Application Type	0	Unreserved
	2	AP clock synchronization (CLK)
	3	Message Center (MCS) or 3B2 ISDN Gateway
	4	LWC high priority (LWCH)
	5	LWC low priority (LWCL)
	6	Message Waiting-Automatic lamp (AMWL)
	7	Traffic (TRAF)
	8	Call Detail Recording (CDR)
	9	DCS
	10	DIP/DCIU test (TEST)
	11	Call Management System (CMS)
	12	Enhanced Services (ES)
	13	AUDIX
3. Instance Number	-, 1-64 (see Notes)	

DISPLAY ONLY (Fields 4-8)

4. Port Assignment	-	Not reserved
	0	Not assigned to network channel
	1	Assigned to network channel
5. Hardware Link	1-8	
6. Destination Machine Type	1	AP 16
	2	3B5 AP
	3	AUDIX
	4	System 75 or DEFINITY Generic 1 (DCS)
	5	System 85 Release 1 (DCS)
	6	System 85 Release 2 or DEFINITY Generic 2 (DCS)
	7	Enhanced DIMENSION PBX (DCS)
	8	3B2 Messaging Server, CMS, or ISDN Gateway
7. Destination Machine Number	1-63	
8. Destination Routing Code	1-255	
9. Table Indicator	-	Display scratch-pad table values for port
	0	Display scratch-pad table values for port
	1	Display machine-used table values for port

DISPLAY ONLY (Field 10)

10. Translation Equivalence	0	Scratch-pad and machine-used values differ
	1	Scratch-pad and machine-used values agree

Notes

1. The following table explains the encodes for fields 2 and 3:

	Application	**Instance**

	Type	Number
Unreserved	0	dash
AP clock synchronization (CLK)	2	dash, 1-7
Message Center (MCS) or 3B2 ISDN Gateway	3	dash, 1-7
Leave Word Calling, high priority (LWCH)	4	dash, 1-7
Leave Word Calling, low priority (LWCL)	5	dash, 1-7
Message Waiting-Automatic lamp (AMWL)	6	dash, 1-7
Traffic (TRAF)	7	dash, 1
Call Detail Recording (CDR)	8	dash, 1
Distributed Communication System (DCS)	9	dash, 1-63*
DIP/DCIU test (TEST)	10	dash, 1 and 2
Call Management System (CMS)	11	dash, 1
Enhanced Service (ES)	12	dash, 1-63*
AUDIX	13	dash, 1-8*
* These limits are provided for flexibility in the use of instance numbers. However, a maximum of 63 DCS and 40 ES ports can be reserved. For AUDIX ports, the instance number used must be the same as the AUDIX machine number.		

2. The following table represents the reserved ports by application type and instance number.

	Instance Number						
	1	2	3	4	5	6	7
Application	**Ports**						
CLK	8	9	14	19	37	45	53
MCS or 3B2 ISDN Gateway	1	10	15	30	38	46	54
LWCH	2	11	16	31	39	47	55
LWCL	3	12	17	32	40	48	56
AMWL	4	13	18	33	41	49	57
TRAF	5						
CDR	7						
CMS	64						

3. Use the following table when assigning the port in field 4:

	Field 5	Field 6	Field 7	Field 8
Alternate Routed Port	-	-	-	1-255
Nonalternate Routed Port	1-8	1-8	1-63	-

Special Error Codes

80 - The DCIU translations in the scratch-pad tables are currently protected (see Procedure 258 Word 1).

81 - You cannot do a change routine on the machine-used tables.

82 - All ports are reserved.

83 - This port cannot be reserved for this application type/instance number.

84 - Use the Procedure 257 Word 2 remove routine to clear port characteristics before changing the reservation of a port.

85 - Use the Procedure 257 Word 3 remove routine to clear trunk group and DCS node assignments before changing the reservation of a port.

86 - Application type/instance number is already reserved on another port.

87 - Use the Procedure 257 Word 6 remove routine to clear Enhanced Services port routing information before changing the reservation of a port.

88 - You are exceeding one of the following limits: only 63 DCS ports can be reserved; only 8 AUDIX ports can be reserved; only 40 Enhanced Services ports can be reserved.

PROCEDURE 257 WORD 6 — DCIU - ENHANCED SERVICES PORTS

Purpose

Use Procedure 257 Word 6 to administer the DCIU Enhanced Services (ES) ports.

Prerequisite Procedures

Use Procedure 257 Word 5 to reserve the ES port before using this word.

After completing the DCIU translations, the scratch-pad values must be moved to the machine-used area with Procedure 258 Word 1. Doing this does not eliminate the original machine-used values. If after using these new DCIU values, more changes are required, the new machine-used values must be moved back into the scratch-pad area. See Procedure 258 Word 1.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 257, WORD: 6
                      DCIU - ENHANCED SERVICES PORTS

 1. Enhanced Services Port: [---]
 2.  Network Adjunct Class: [--]
 3. Network Adjunct Number: [--]
 4.        Table Indicator: [-]

DISPLAY ONLY
   5. Translation Equivalence: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2 and 3.
Add:	Fields 1-3.
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	If field 1 is entered, the network adjunct class and the network adjunct number are displayed. If fields 2 and 3 are entered, the ES port is displayed.

Field Ranges and Encodes

1.	Enhanced Services Port	1-64	
2.	Network Adjunct Class	1	AP
		2	AUDIX
		3	DCS
3.	Network Adjunct Number	1-99 AP = 1-99 AUDIX = 1-99 DCS = 1-63	
4.	Table Indicator	-	Display scratch-pad table values
		0	Display scratch-pad table values
		1	Display machine-used table values

DISPLAY ONLY (Field 5)

5.	Translation Equivalence	0	Scratch-pad and machine-used tables differ
		1	Scratch-pad and machine-used tables agree

Special Error Codes

80 - You cannot change DCIU translations in the scratch-pad tables which are currently protected (see Procedure 258 Word 1).

81 - You cannot do a remove or add routine on the machine-used tables.

82 - The network adjunct number is assigned to another port.

83 - The ES port must be reserved in Procedure 257 Word 5 before using this word.

PROCEDURE 258 WORD 1 — REBOOT DCIU

Purpose

Use Procedure 258 Word 1 to copy translation changes made using Procedures 256 Words 1-3 and 257 Words 1-6 from scratch-pad translation tables (temporary tables) to the DCIU machine-used tables. This procedure should be used after all DCIU translation changes have been made.

Prerequisite Procedures

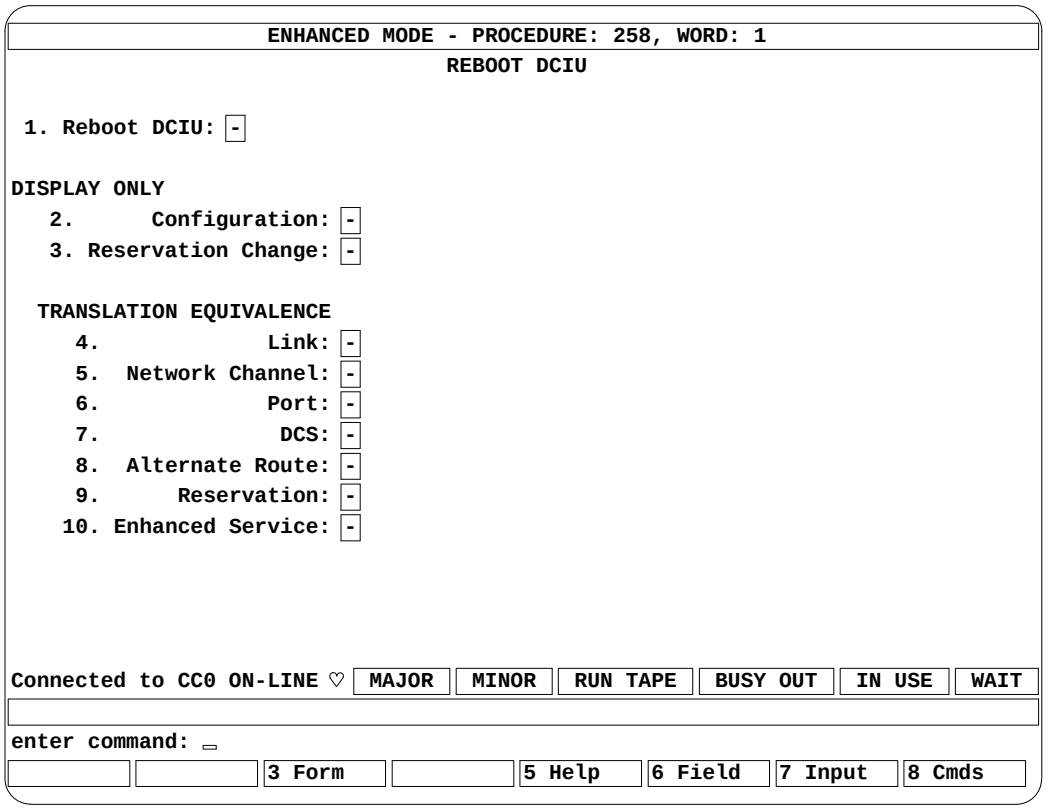
Use Procedure 258 Word 2 to refresh the scratch-pad translation tables. Do this before making changes with Procedures 256 Words 1-3 and 257 Words 1-6.

Use Procedures 256 Words 1-3 and 257 Words 1-6 to make the required changes to the DCIU translations.

Cautions

If field 3 has a 1 following a display routine, entering a 1 in field 1 and doing a change routine initializes all 64 ports causing all unprocessed messages to be lost.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Field 1. After doing a change, a dash is displayed in field 1. This prevents accidentally swapping configurations twice (see the Cautions).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Reboot DCIU	-	No reboot being done
	1	Reboot DCIU

DISPLAY ONLY (Fields 2-10)

2. Configuration	0	New translation in scratch-pad tables is unprotected
	1	Old translation in scratch-pad tables is protected
3. Reservation Change	0	No change
	1	Has been changed

TRANSLATION EQUIVALENCE (Fields 4-10)

0 Scratch-pad and machine-used tables differ
1 Scratch-pad and machine-used tables agree

4. Link 0-1

This translation is done in Procedure 256 Words 1-3.

5. Network Channel 0-1

This translation is done in Procedure 257 Word 1.

6. Port 0-1

This translation is done in Procedure 257 Words 1 and 2.

7. DCS 0-1

This translation is done in Procedure 257 Word 3.

8. Alternate Route 0-1

This translation is done in Procedure 257 Word 4.

9. Reservation 0-1

This translation is done in Procedure 257 Word 5.

10. Enhanced Service 0-1

This translation is done in Procedure 257 Word 6.

Notes

1. There are three uses for Procedure 258 Word 1:

   — **Swapping Configurations**

   The change routine swaps scratch-pad and machined-used configurations. After making DCIU translation changes with Procedures 256 Words 1-3 and 257 Words 1-6, set the reboot field (field 1) to 1 to move the new configuration in the scratch-pad to the machine-used tables. The old configuration will be moved to the scratch-pad and will be protected from any attempt to alter its values using Procedures 256 Words 1-3 and 257 Words 1-6. Thus the old configuration may be restored to the machine-used tables intact should the new configuration be incorrect. The two configurations may be swapped indefinitely by setting the reboot field (field 1) to 1.

   — **Keeping Track of Configurations**

   Field 2 will be set to 0 by a display routine when the scratch-pad tables contain the new configuration. Field 2 will be set to 1 by a display routine when the scratch-pad tables contain the old configurations. Field 2 allows you to keep track of where each configuration resides at all times.

   — **Protection of Old Configuration**

   When the old configuration resides in the scratch-pad, it is protected from any attempt to alter its values using Procedures 256 Words 1-6 and 257 Words 1-6. Additional work may be done on the new configuration by first performing a swap/change routine. If changes are to be made for a totally new DCIU configuration, use Procedure 258 Word 2 to release the protection placed upon the old configuration in the scratch-pad tables (the old configuration is irrevocably destroyed).

Special Error Codes

81 - The scratch-pad tables and the machine-used tables have been swapped, but the DCIU reboot failed.

PROCEDURE 258 WORD 2 — REFRESH DCIU SCRATCH-PAD TABLES

Purpose

Use Procedure 258 Word 2 to refresh the DCIU scratch-pad translation tables (temporary tables) prior to using Procedure 256 Words 1-3 and 257 Words 1-6. All changes to the DCIU translations made using Procedure 256 Words 1-3 and 257 Words 1-6 are stored in scratch-pad tables. The DCIU uses another set of tables while an administrative session is in progress. During an administrative session, changes to the DCIU translations are stored in the scratch-pad tables and later copied to the DCIU machine-used tables using Procedure 258 Word 1. Before an administrative session, use Procedure 258 Word 2 to refresh the scratch-pad table by setting field 1 equal to 1 and doing a change routine.

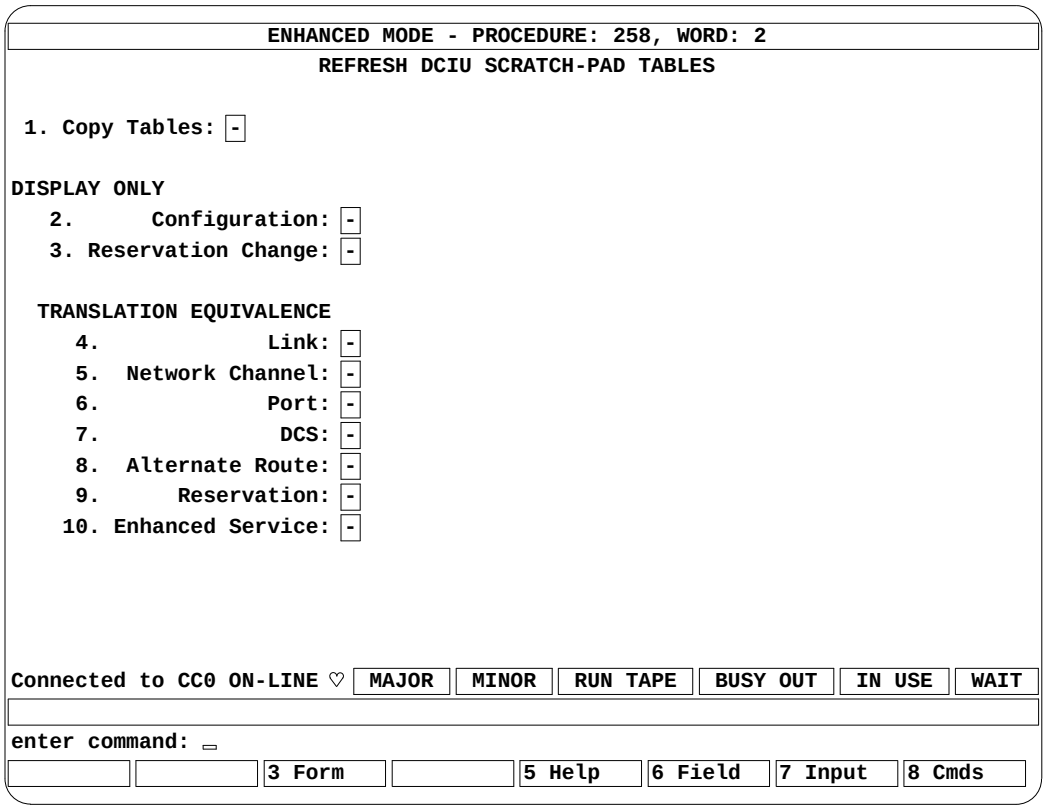
Prerequisite Procedures

Use Procedure 258 Word 1 to transfer changes to DCIU translations from the scratch-pad tables.

Cautions

Doing a refresh during a DCIU administrative session will erase all additions, changes, and deletions that have been made.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Field 1.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Copy Tables -, 1

DISPLAY ONLY (Fields 2-10)

2. Configuration
   - 0 New translation in scratch-pad tables is unprotected
   - 1 Old translation in scratch-pad tables is protected

3. Reservation Change
   - 0 No change
   - 1 Has been changed

TRANSLATION EQUIVALENCE (Fields 4-10)

- 0 Scratch-pad and machine-used tables differ

1 Scratch-pad and machine-used tables agree

4. Link 0-1

   This translation is done in Procedure 256 Words 1-3.

5. Network Channel 0-1

   This translation is done in Procedure 257 Word 1.

6. Port 0-1

   This translation is done in Procedure 257 Words 1 and 2.

7. DCS 0-1

   This translation is done in Procedure 257 Word 3.

8. Alternate Route 0-1

   This translation is done in Procedure 257 Word 4.

9. Reservation 0-1

   This translation is done in Procedure 257 Word 5.

10. Enhanced Service 0-1

    This translation is done in Procedure 257 Word 6.

Special Error Codes

None.

PROCEDURE 260 WORD 1 — DS1/ISDN AND RCG CIRCUIT PACK ASSIGNMENTS

Purpose

Use Procedure 260 Word 1 to administer the following interface characteristics:

— Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI) (trunks used for ISDN)

— DS1/DMI-MOS (trunks used to support connections to a compatible host computer)

— DS1/DMI-BOS (trunks and lines)

— Remote Carrier Group (RCG) on a traditional module

— System clock synchronizer (SCS) reference.

Prerequisite Procedures

Use Procedure 250 Word 1 to assign the SCS before enabling field 13 (SCS Reference) in this procedure.

Related Procedures

When moving the SCS circuit pack from one location to another, remove the SCS reference in Procedure 260 Word 1 using a change routine. Go to Procedure 250 Word 1 and remove the SCS circuit pack using a change routine. Add the SCS circuit pack to the new location using a change routine. Go back to Procedure 260 Word 1 and do a change routine to add the new SCS reference.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 260, WORD: 1
                  DS1/ISDN AND RCG CIRCUIT PACK ASSIGNMENTS

EQUIPMENT LOCATION                      SCS
   1.  Module: [--]                       12. Equipment Type: [-]
   2. Cabinet: [-]                        13.  SCS Reference: [-]
   3. Carrier: [-]
   4.    Slot: [--]                     14.   Application: [--]
                                        15. Bit Inversion: [-]
SIGNALING                               16.     Link Type: [-]
   6.   Framing: [-]                    17.         SA/FX: [-]
   7. 23B+D/24B: [-]                    18.   Loop Length: [-]
   8.   24C/RBS: [-]                    19.         E Bit: [-]
   9.  ZCS/B8ZS: [-]

10.   Slip Enable: [-]
11. External Loop: [-]

DISPLAY ONLY
  20. SCS Information: [--]

Connected to CC0 ON-LINE ♡ [MAJOR] [MINOR] [RUN TAPE] [BUSY OUT] [IN USE] [WAIT]

enter command:
[          ] [          ] [3 Form] [          ] [5 Help] [6 Field] [7 Input] [8 Cmds]
```

Fields Used or Required for Command Routines

Display:	Fields 1-4.
Add:	Fields 1-19.
Change:	Fields 6-13 and fields 15-19.
Remove:	Fields 1-19.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-4)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules

4. Slot — 0-20

This procedure is used to administer the ANN11 (TN767 for universal and XE modules) and the ANN35 (TN767 plus the TN555 for universal and XE modules) circuit pack. The TN767 can operate independent of the TN555 when the 24 B-channel option is used in field 7.

Use slots 5 and 18 for DS1 trunks or ISDN/PRI (application types 0, 1, 3, and 5) in traditional modules and slots 0, 5, 13, and 18 for DS1 lines (application type 2) in traditional modules.

Use slots 1-19 for DS1 trunks or ISDN/PRI (application types 0, 1, and 5) in universal modules and slots 1-17 in XE modules, and 1-20 for DS1 lines (application type 2) in universal modules and 1-18 in XE modules.

SIGNALING (Fields 6-9)

6. Framing
   - 0 D4 (SF)
   - 1 FE (ESF)

   The FE format, also known as extended superframe (ESF), is more reliable than D4 (superframe) for error detection.

7. 23B+D/24B
   - - Not applicable
   - 0 23 B + 1 D-channel
   - 1 24 B-channels

   This field is only administerable if field 14 = 5.

   The only application of the 24 B-channel options is ISDN NFAS.

   By specifying 23 B plus 1 D-channel for a universal or XE module, this tells the switch that the packet adjunct (TN555) is adjacent the TN767. The TN555 is automatically administered by the switch when you administer the TN767.

8. 24C/RBS
   - 0 24th channel
   - 1 Robbed bit

   24th channel signaling is used with ISDN/PRI, clear channel DS1, and RCG.

   Robbed bit signaling is only used with DS1 robbed bit.

9. ZCS/B8ZS
   - 0 Zero code suppression (restricted)
   - 1 Bipolar-8 zero substitution (unrestricted)

10. Slip Enable
    - 0 Slip count off
    - 1 Slip count on

    A slip is the repetition or deletion of one frame of data at the receiver. The default number of slips allowed per day before an alarm is raised is 88. Use slip enable to identify each DS1 interface board that is to have slip counts taken.

11. External Loop

0 Disabled
1 Enabled

Use external loop around to indicate if an external loop back capability is provided. Administer this field when testing in Procedure 620 Test 4 and 5.

SCS (Fields 12-13)

12. Equipment Type

0 None
1 DS1/T1 SCS

Enter a 1 in this field if the SCS reference (primary or secondary) to this circuit pack is generated by an incoming source (i.e., the CO, or an SCS on another switch).

Enter a 0 if this circuit pack is to provide an SCS reference to a distant switch or this switch has a synchronization clock (stratum 3).

The SCS reference on this switch is generated by a high accuracy clock on the TN463. The TN463 is located on the module processor (for single module systems) or the TMS carrier (for multi-module systems).

The TN463 provides the timing for all the digital facilities on this switch. See field 13 to determine when the incoming SCS reference is activated.

13. SCS Reference

0 None
1 Primary source
2 Secondary source

This field identifies the incoming SCS reference (if any) as the primary or the secondary source. When the primary or secondary source is specified in this field, the SCS reference is being supplied by the switch at the other end of the link.

Enter a 0 if this circuit pack is to provide an SCS reference to a distant switch or if this switch has a synchronization clock (stratum 3).

Enter a 1 if the SCS board on this switch is to be slaved by an SCS board on the other end of this DS1 link.

Enter a 2 if the SCS board on this switch is to be slaved by an SCS board on the other end of this DS1 link when the ‘‘primary source’’ is not functioning correctly.

The primary and the secondary SCS must never be connected to a link that is translated at the other end as a primary or a secondary.

14. Application

0 DS1 trunks/lines
1 DMI-BOS trunks
2 DS1 24-OPS
3 DS1 RCG
5 ISDN/PRI, DMI-MOS

The ‘‘DS1 trunks plus lines’’ option allows the mixing of both lines and trunks on the same DS1 facility. This arrangement uses the ANN11 (C, D, E) circuit pack on a traditional module, or the TN767 on a universal or XE module.

The ‘‘DMI-BOS trunks’’ option provides 64-kbps data to a host computer. This option can also provide voice and 64-kbps data to private or public networks that support DMI-BOS signaling. This arrangement uses the ANN11D or ANN11E circuit pack on a traditional module, or the TN767 on a universal or XE module.

The ‘‘24-OPS’’ option allows the DS1/DMI-BOS channels to be administered as off-premises stations (OPS). This option requires robbed bit signaling. This arrangement uses the ANN11 (C, D, E) circuit pack on a traditional module and the TN767 on a universal or XE module.

The ‘‘Remote Carrier Group’’ (RCG) option provides on-premises capability to an off-premises carrier without the use of a module processor. This arrangement uses the ANN15B circuit pack on a traditional module only.

The ISDN/PRI, DMI-MOS option provides twenty-four 64-kbps channels. These channels are arranged as a 23 B plus 1 D (24th-channel is used for signaling) or 24 B-channel (NFAS) configuration. These arrangements use the ANN35 circuit pack on a traditional module, and the TN767 supported by the TN555 on a universal or XE module. The addition of the TN555 is only required for 23 B plus 1 D arrangements, and is automatically administered upon administering the TN767.

15. Bit Inversion

- Not applicable
0 Yes
1 No

This field only applies to the D-channel. This field must match the bit inversion administered on the other end of the link.

If field 8 is set to a 0, this field is not applicable and a dash (-) means that it is not administrable and the bit is inverted.

If field 8 is set to a 1, either inversion or no inversion must be specified.

16. Link Type

- Not applicable
0 Copper (T1)
1 Fiber

17. SA/FX

- \- Not applicable
- 0 FX except Canada
- 1 SA except Canada

Use special access (SA) only when foreign exchange (FX) signaling and hardware to support it are not available. Special access only applies to ground start trunk groups, loop start trunk groups, and off-premises station lines. Special signaling should not be confused with special access to a 4 ESS(TM).

18. Loop Length

- \- Not applicable
- 0 0-133 feet
- 1 134-266 feet
- 2 267-399 feet
- 3 400-533 feet
- 4 534-655 feet

This field applies to universal and XE modules only. The TN767 (universal module DS1 interface pack) being administered uses the value entered here to select a transmission equalizer setting. The distance asked for is the cable length between the carrier backplane and cross-connect field or some other common specified point. The distances below assume 24 AWG cable. For 26 AWG cable distance ranges, or for more information about equalizer settings, see The DEFINITY Communications System, Generic 2 System Description (555–105–201).

19. E Bit

- \- Not applicable
- 0 Nonproprietary (BOS)
- 1 Proprietary signaling

The ‘‘Not applicable’’ encode applies to traditional modules, ISDN/PRI, and robbed bit signaling.

DISPLAY ONLY (Field 20)

20. SCS Information

- 0 No cables in place
- 1 Primary source in cable 0
- 2 Secondary source in cable 0
- 3 Primary source in cable 1
- 4 Secondary source in cable 1
- 5 Primary source in cable 0, primary source in cable 1
- 6 Primary source in cable 0, secondary source in cable 1
- 7 Secondary source in cable 0, primary source in cable 1
- 8 Secondary source in cable 0/1 or DS1 board reinitializing
- 99 Could not read information from DS1 board

Notes

1. The following chart shows the legal values for fields 6-19 based on the application type (field 14).

FIELD	VALUES				
14 (App.)	0=Trunk/Lines mixed	1=DMI-BOS	2=24-OPS	3=RCG	5=ISDN/PRI
6 (Framing)	0,1	0,1	0,1	0,1	0,1
7 (24B/ 23B+D)	-	-	-	-	0,1
8 (24C/RBS)	0,1	0	1	0	0
9 (ZCS/ B8ZS)	0,1	0,1	0,1	0,1	0,1
10 (Slip)	0,1	0,1	0,1	0	0,1
11 (Ext. Loop Around)	0,1	0,1	0,1	0,1	0,1
12 (Equip.)	0,1	0	0	0	0,1
13 (SCS Ref)	0,1,2	0	0	0	0,1,2
15 (Bit Inv)	-	-	-	-	0,1
16 (Trans. Type)	0,1	0,1	0,1	0,1	0,1
17 (FX/SA)	0,1	-	0,1	-	-
18* (Loop)	-,0-4	-,0-4	-	-	-,0-4
19* (E bit)	-,0,1	-,0,1	-	-	-,0,1
* Applies only to a universal or XE module. Use dashes for a board in a traditional module.					

Special Error Codes

50 - You cannot change field 14. You must use the remove or add routine.

51 - Bit inversion is not assignable for ISDN/PRI with zero-code-suppression (ZCS) line coding.

52 - Before changing ISDN boards from 24B to 23B+D, remove the interface identifier assigned in Procedure 262 Word 1.

53 - A remove or change from 23B+D to 24B is not allowed because the D-channel is assigned to a D-channel group in Procedure 262 Word 2.

54 - You cannot assign a board with application type of 0, 1, or 5 in universal module slot number 20 or XE module slot 18.

55 - Ports on this board are already assigned to another application. Since some applications cannot be mixed on one board, you must select another equipment location or readminister this board. This only applies to universal and XE modules.

56 - Before changing ISDN boards from 23B+D to 24B, assign an interface identifier to this board in Procedure 262 Word 1.

81 - The DS1 trunk circuit pack must be in slot 5 or 18 (traditional module only).

82 - Some ports are still assigned (see Procedure 116 Word 1 for DS1 or ISDN and Procedures 000 Word 1 and 150 Word 1 for RCG).

83 - Ports on this board are already assigned to another application. Since some applications cannot be mixed on one board, you must select another equipment location or readminister this board. This only applies to traditional modules.

84 - A DS1 or an ISDN circuit pack is not assigned to this equipment location.

86 - The primary SCS reference is already assigned.

87 - The secondary SCS reference is already assigned.

88 - The SCS primary reference must be assigned before the secondary reference can be assigned. The secondary reference must be removed before the primary reference can be removed.

89 - The SCS circuit pack is not assigned in Procedure 250 Word 1.

90 - This equipment location is assigned as primary SCS reference.

91 - This equipment location is assigned as secondary SCS reference.

92 - The trunk is assigned to the 24th channel port. You cannot change from robbed bit to 24th channel signaling.

93 - The SCS reference cannot be assigned to a DS1 interface in a remoted module.

94 - Wrong data; refer to table.

95 - The DS1 line board and RCG board must be in slot 0, 5, 13, or 18.

96 - Ports are assigned to slots 0-2 for the circuit pack in slot 0, 5-7 for the circuit pack in slot 5, 13-15 for the circuit pack in slot 13, or 18-20 for the circuit pack in slot 18.

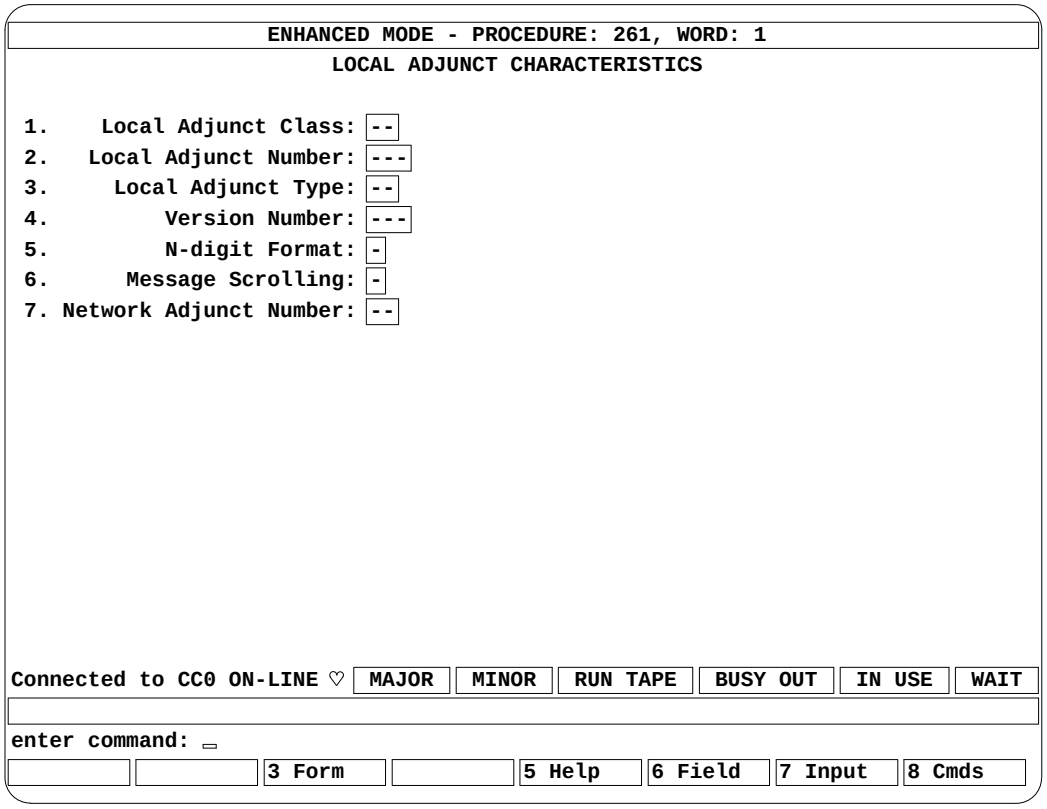
97 - A DS1 line board must have robbed bit signaling.

PROCEDURE 261 WORD 1 — LOCAL ADJUNCT CHARACTERISTICS

Purpose

Use Procedure 261 Word 1 to administer external adjunct message format, scrolling characteristics, and network adjunct number for the local external adjuncts.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Fields 3-7.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Local Adjunct Class
   - 1 AP
   - 2 AUDIX
   - 3 DCS
2. Local Adjunct Number — 1-7 for APs, 1-8 for AUDIX, 1-63 for DCS
3. Local Adjunct Type
   - 1 AP 16
   - 2 3B5 AP or 3B2 Messaging Server
   - 3 AUDIX
   - 4 System 75 or DEFINITY Generic 1
   - 5 System 85 Release 1
   - 6 System 85 Release 2 or DEFINITY Generic 2
   - 7 Enhanced DIMENSION PBX
4. Version Number — -, 0-999

   This version number is not currently used by software.
5. N-digit Format
   - - Does not apply
   - 0 Not supported by remote
   - 1 Supported by remote

   The N-digit format is determined by the adjunct, so this field is not currently used by software.
6. Message Scrolling
   - - Does not apply
   - 0 Not supported
   - 1 Supported

   Message scrolling is supported on the AP 16 1f.X software, the 3B5 AP Release 2, and the 3B2 Messaging Server.
7. Network Adjunct Number — -, 1-99

   The network adjunct number must be dashed if field 1 is 3 (DCS).

Special Error Codes

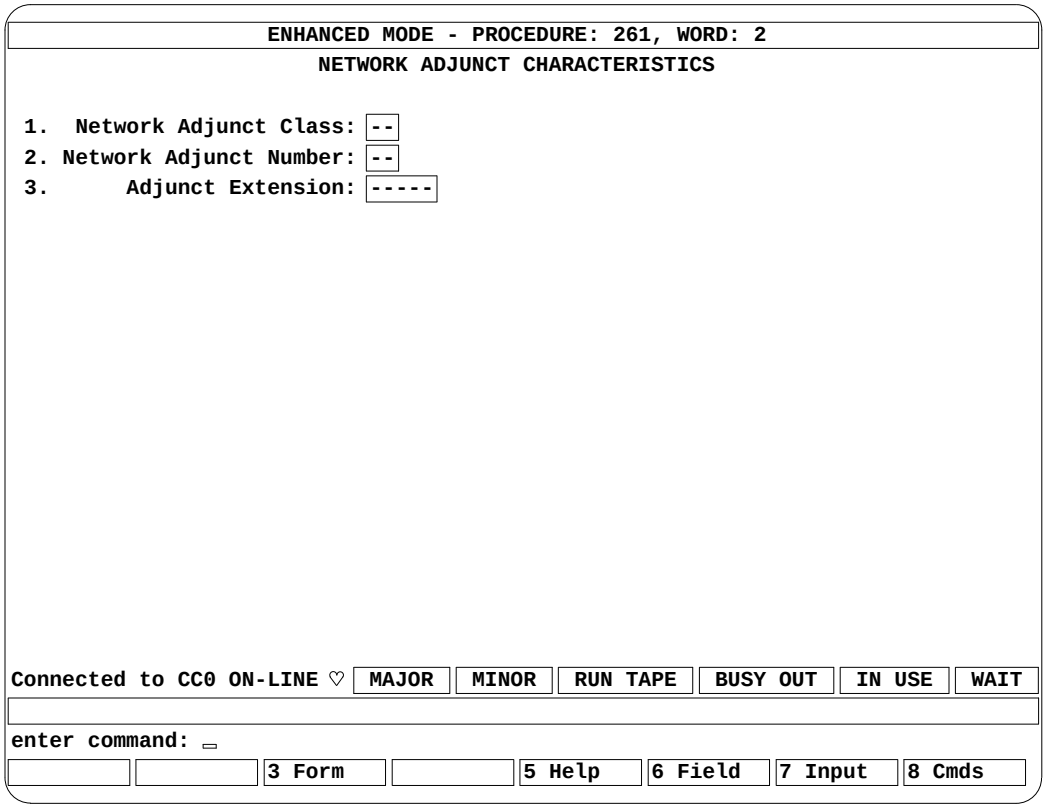
81 - Local adjunct numbers of the same local adjunct class must have unique network adjunct numbers.

PROCEDURE 261 WORD 2 — NETWORK ADJUNCT CHARACTERISTICS

Purpose

Use Procedure 261 Word 2 to administer the external network adjunct extension.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Field 3.
Remove:	Not allowed.
Next Data:	Displays all network adjuncts with extensions assigned.

Field Ranges and Encodes

1.	Network Class	Adjunct	1 2	AP AUDIX
2.	Network Number	Adjunct	1-99	
3.	Adjunct Extension		000-99999	

An extension cannot be assigned to more than one adjunct.

Special Error Codes

81 - This extension is already assigned to another adjunct.

PROCEDURE 262 WORD 1 — ISDN BOARD PARAMETERS

Purpose

Use Procedure 262 Word 1 to administer ISDN board parameters.

Prerequisite Procedures

Use Procedure 260 Word 1 to assign an ISDN/PRI circuit pack before using this procedure.

Use Procedure 116 Word 1 to remove all B-channels on the PRI interface before removing or adding an interface identifier in this procedure.

Use Procedure 051 Word 1 to assign the terminal type as ISDN/BRI before changing translations in this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 262, WORD: 1
                              ISDN BOARD PARAMETERS

EQUIPMENT LOCATION                        13. PRI Interface Identifier: --
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

PRI PARAMETERS
   6.               Interface Type: -
   7.           Facility Test Code: --
   8. Terminal Endpoint Identifier: ---

PRI AND BRI LAYER 2 PARAMETERS
   9.   Timer T203: ---
  10.   Timer T200: ---
  11. Counter N200: --
  12.    Counter K: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-4 or fields 1-5.
Add:	Not allowed.
Change:	Fields 5-13.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

For standard PRI links, use the ANN35 on a traditional module and the TN767/TN555 combination on a universal or XE module. In an NFAS configuration, at least one (maximum of two) TN555 is required to do the signaling for all the B-channels administered to a D-channel group. For BRI links, use the TN556 on a universal or XE module (BRI is not available on a traditional module).

1. Module — 0-30
2. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
3. Carrier — 0-3 for traditional modules, c-e for universal and XE modules
4. Slot — 1-20

   Use slots 5 and 18 for PRI trunks in traditional modules. Use slots 1-19 for PRI trunks in a universal module (1-17 in an XE module) and 1-20 for BRI lines in a universal module (1-18 for an XE module).
5. Circuit — - for PRI link, 0-11 for BRI circuit

PRI PARAMETERS (Fields 6-8)

Fields 6, 7, and 8 must be dashed for BRI (non-PRI) equipment locations.

When administering non D-channel NFAS equipment locations only enter data in fields 1-5, 7, and 13.

6. Interface Type
   - 0 User-side (far end is network-side)
   - 1 Network-side (far end is user-side)
7. Facility Test Code
   - 0 None
   - 1 Layer 2
   - 2 Layer 3
   - 3 Both layer 2 and 3

   This field is used by maintenance to enable testing on layer 2 and 3 protocols. Procedure 648 Test 2 tests layer 2 and Procedure 648 Test 3 tests layer 3.

8. Terminal Endpoint Identifier — 0-63, 128

   This information is not used at this time. Enter a 0.

PRI AND BRI LAYER 2 PARAMETERS (Fields 9-12)

9. Timer T203 — 0-255 (in increments of 1 second, default is 30)

10. Timer T200 — 0-255 (in increments of 0.1 second, default is 10)

11. Counter N200 — 1-10 (default is 3)

    This is the maximum number of retransmissions allowed.

12. Counter K — 1-7 (default is 7)

    This is the maximum number of outstanding data packets to be transmitted.

13. PRI Interface Identifier — -, 0-31

    An NFAS configuration may have several circuit packs signaling over one D-channel. The D-channel and an optional backup D-channel are administered as a D-channel group in Procedure 262 Word 2. Each circuit pack administered to a given D-channel group must have a unique PRI Interface Identifier.

    At this time, a maximum of 20 PRI Interface Identifiers should be administered to any one D-channel group.

Special Error Codes

81 - This is not assigned as an ISDN/PRI application in Procedure 260 Word 1.

82 - Remove all B-channels on the PRI interface using Procedure 116 Word 1 before changing an interface identifier.

83 - This is not assigned as an ISDN/BRI circuit pack in Procedure 051 Word 1.

84 - This field is not administrable for PRI circuit packs configured as having 24 B-channels in Procedure 260 Word 1.

85 - This field is not administrable for BRI circuits.

PROCEDURE 262 WORD 2 — ISDN NFAS/D-CHANNEL BACKUP

Purpose

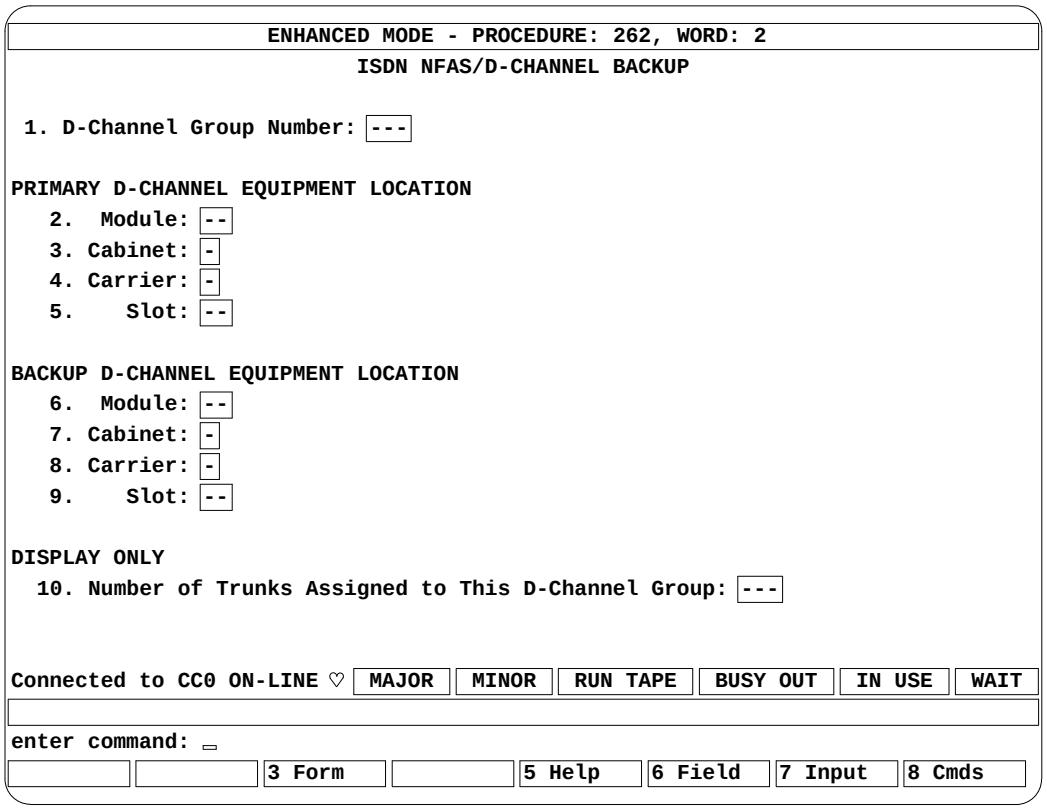
Use Procedure 262 Word 2 to administer a primary (and a backup if desired) D-channel to a D-channel group. This is used only for ISDN/PRI in an Non-Facility Associated Signaling (NFAS) configuration.

Prerequisite Procedures

Use Procedure 116 Word 1 to remove the D-channel group from all associated trunks before removing the D-channel group in this procedure.

Use Procedure 260 Word 1 to assign the primary and backup interface as type 23B+D. This is required for the circuit packs that contain D-channels for signaling.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 2-5, or fields 6-9.
Add:	Fields 1-5 or fields 1-9.
Change:	Fields 1-5 or fields 1-9.
Remove:	Fields 1-5 or fields 1-9.
Next Data:	Operates on D-channel group number.

Field Ranges and Encodes

1. D-Channel Group Number — 1-255

   This field administers D-channels for several B-channels to signal over. All trunk circuits within a D-channel group use one D-channel for signaling. Make sure the trunk circuits are administered to the correct D-channel group number in Procedure 116 Word 1 field 11.

PRIMARY D-CHANNEL EQUIPMENT LOCATION (Fields 2-5)

2. Module — 0-30
3. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
4. Carrier — 0-3 for traditional modules, c-e for universal and XE modules
5. Slot — 5 and 18 for traditional, 1-19 for universal, and 1-17 for XE

BACKUP D-CHANNEL EQUIPMENT LOCATION (Fields 6-9)

It is possible to assign a backup D-channel in fields 6-9 in case of a primary D-channel failure.

6. Module — 0-30
7. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
8. Carrier — 0-3 for traditional modules, c-e for universal and XE modules
9. Slot — 5 and 18 for traditional modules, 1-19 for universal modules

DISPLAY ONLY (Field 10)

10. Number of Trunks Assigned to This D-Channel Group — 0-479

Notes

1. Use the following administration rules:
   a. A primary D-channel cannot be also administered as a backup D-channel.
   b. A backup D-channel cannot be also administered as a primary D-channel.

Special Error Codes

81 - Both primary and backup D-channels must be ISDN/PRI interfaces.

82 - The primary or backup interface has not been assigned as 23B+D. See Procedure 260 Word 1.

83 - The primary and backup cannot be the same location.

84 - The entered primary is already being used as a backup.

85 - The entered backup is already being used as a primary.

86 - Busy out the primary (and backup channel if there is one) before changing the primary D–channel.

87 - Must remove the D-channel group from all trunks in Procedure 116 Word 1 before removing the group here.

88 - The entered D-channel is not a primary.

89 - The entered D-channel is not a backup.

90 - Valid slots for PRI interfaces in traditional modules are 5 and 18.

91 - Busy out the backup D-channel in Procedure 627 Test 2 before removing.

92 - Removing the backup D-channel at this time would leave the primary D-channel in an undefined state. Try again later or first busy out the primary in Procedure 627 Test 2.

PROCEDURE 262 WORD 3 — ISDN LINK PARAMETERS

Purpose

Use Procedure 262 Word 3 to administer the ISDN link parameters for codeset and codepoint mapping and BRI terminal hyperactivity management.

Codeset and codepoint mapping is used to ensure that messages sent between switches that use different codeset values are interpreted correctly. For instance, all the System 85 R2V4 outgoing messages with codeset 7 information elements must be mapped to codeset 6 in a DEFINITY Generic 2 system. Information elements from a Generic 2 to an R2V4 switch must be mapped from codeset 6 to codeset 7 respectively.

Hyperactivity management is used to shut off an ISDN link when too many messages are being sent across the link.

Prerequisite Procedures

Use Procedure 051 Word 1 to assign ISDN/BRI circuit packs. This is required only if administering hyperactivity management.

Use Procedure 260 Word 1 to assign ISDN/PRI (ANN35) circuit packs. Application type 5 must be specified to do ISDN/PRI and DMI-MOS administration in this procedure.

Use Procedure 280 Word 1 to administer the codeset mapping between two switches.

Related Procedures

Use Procedure 262 Words 1 and 2 to administer other ISDN parameters.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 262, WORD: 3
                              ISDN LINK PARAMETERS

EQUIPMENT LOCATION
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --
   5. Circuit: --

 6.       Codeset Map Number: --
 7. Hyperactivity Management: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-5.
Add:	Not allowed.
Change:	Fields 1-7.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-5)

1.	Module	0-30
2.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
3.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
4.	Slot	1-20 Use slots 5 and 18 for PRI trunks in traditional modules. Use slots 1-19 for PRI trunks in a universal module (1-17 in an XE module) and 1-20 for BRI lines in a universal module (1-18 in an XE module).

5. Circuit		-	PRI link
		0-11	BRI link
6. Codeset Number	Map	-	Unassigned
		0-15	Assigned
7. Hyperactivity Management		-	No ISDN circuit assigned
		0	Not assigned
		1	Assigned

Hyperactivity management (flow control) will shut down an ISDN link if too many messages are going across the link.

Special Error Codes

81 - This is not assigned as an ISDN/PRI circuit pack in Procedure 260 Word 1. Select a different equipment location.

82 - A codeset map number is not administerable to backup D-channels in NFAS arrangements. The backup is automatically assigned the same map number as the primary D-channel.

83 - This is not assigned as an ISDN/BRI circuit pack in Procedure 051 Word 1. Select a different equipment location.

84 - This field is not administerable for PRI circuit packs configured as having 24 B-channels in Procedure 260 Word 1.

85 - Field 6 is not administerable for BRI circuits.

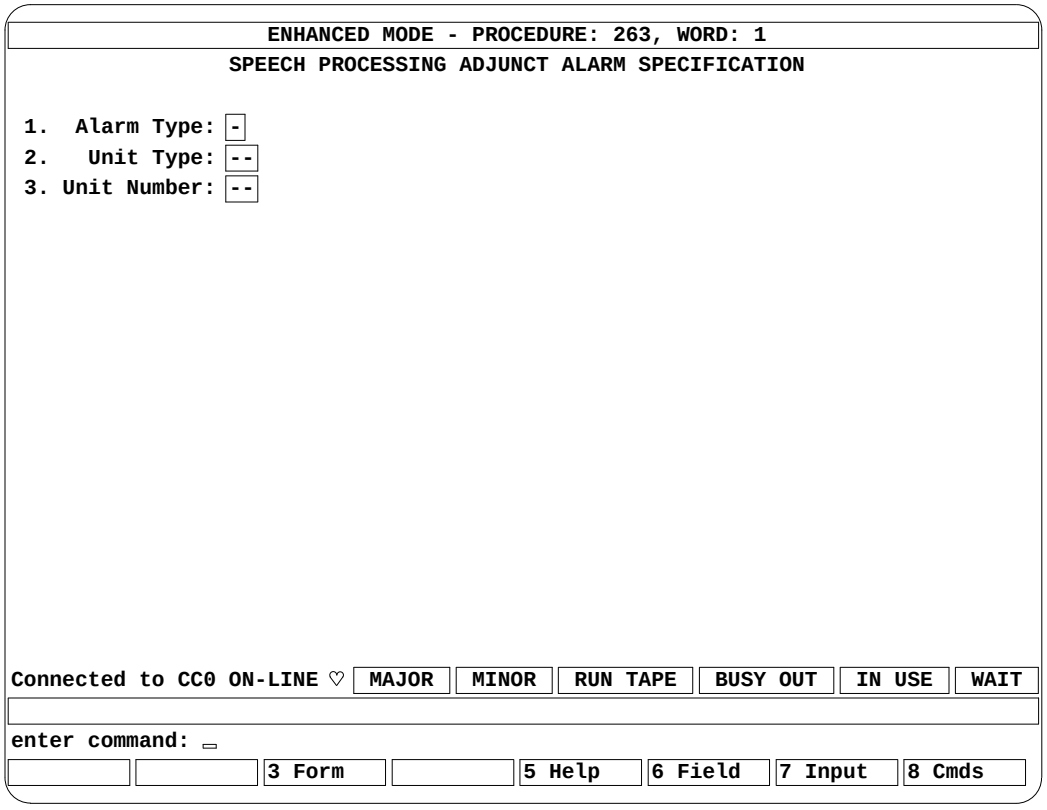
86 - This map number must be assigned in Procedure 280 Word 1.

PROCEDURE 263 WORD 1 — SPEECH PROCESSING ADJUNCT ALARM SPECIFICATION

Purpose

Use Procedure 263 Word 1 to specify alarm checks (addresses) for the Speech Processing Adjunct.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-3.
Change:	Fields 1-3.
Remove:	Fields 1-3.
Next Data:	Displays the next alarm type.

Field Ranges and Encodes

1. Alarm Type	1	Major alarm on the common control
	2	Minor alarm on the common control
2. Unit Type	63	SPA considered external equipment
	64	SPA considered external processor
	The unit type does not need to be the same for both alarm types.	
3. Unit Number	1-32	

Special Error Codes

None.

PROCEDURE 270 WORD 1 — TENANT SERVICES - EXTENSION PARTITIONS

Purpose

Use Procedure 270 Word 1 to administer an attendant partition association to one or more extension partitions and to associate one or more extension partitions to a partition group. One attendant partition may serve up to 999 extension partitions, and up to 500 partition groups can be built from the available extension partitions.

Prerequisite Procedures

Use Procedure 210 Word 2 to assign attendant consoles to attendant partitions.

Related Procedures

Use Procedure 276 Word 1 to enable the Tenant Services feature (field 6).

Use Procedure 000 Word 4 to administer extensions to extension partitions.

Use Procedure 270 Words 2-5 to administer other Tenant Services parameters.

Use Procedure 282 Word 1 to administer authorization codes for an extension partition.

Use Procedure 320 Words 2 and 3 to administer call categories to partitions.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 270, WORD: 1
                     TENANT SERVICES - EXTENSION PARTITIONS

 1. Extension Partition: [---]
 2. Attendant Partition: [--]
 3.     Partition Group: [---]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display: Field 1, field 2, or field 3.

Add: Not allowed.

Change: Fields 1 and 2, fields 1 and 3, or fields 1-3.

Remove: Not allowed.

Next Data: Beginning with an extension partition, it displays the attendant partition and partition group assigned to each extension partition. Beginning with an attendant partition, it displays the extension partition served by the attendant partition and the partition group associated to the extension partition. Beginning with a partition group entry, it displays each extension partition associated with the partition group, and the attendant partition that serves the extension partition.

Field Ranges and Encodes

1. Extension Partition -, 0-999

   Extension partitions are defined in Procedure 000 Word 4 when extensions are assigned to particular extension partitions. When this occurs, extensions from different partitions can only call each other through external access, not just by dialing an extension number.

2. Attendant Partition -, 0-40

   Attendant partitions are defined in Procedure 210 Word 2 when attendant consoles are assigned to particular attendant partitions. By assigning an attendant partition to an extension partition in field 1, you associate an attendant console to a group of extensions (an extension partition).

3. Partition Group -, 1-500

   In a partition group, two or more extension partitions can be associated so that calls between those extension partitions appear to be internal calls. The attendant partitioning remains unchanged.

Special Error Codes

81 - Assign a console to an attendant partition using Procedure 210 Word 2 before assigning it here.

PROCEDURE 270 WORD 2 — TENANT SERVICES - PARTITION OVERFLOW/RESTRICTIONS

Purpose

Use Procedure 270 Word 2 to administer attendant partition overflow parameters and attendant control of voice terminals restriction groups.

Prerequisite Procedures

Use Procedure 210 Word 2 to assign an attendant partition to a console before assigning an overflow condition.

Related Procedures

Use Procedure 276 Word 1 to enable the Tenant Services feature (field 6).

Use Procedure 270 Words 1 and 3-5 to administer other Tenant Services parameters.

Use Procedure 320 Words 2 and 3 to administer call categories to partitions.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 270, WORD: 2
                TENANT SERVICES - PARTITION OVERFLOW/RESTRICTIONS

 1. Attendant Partition: --

OVERFLOW DESTINATION
   2.     Attendant Partition: --
   3. Conditions for Overflow: -

 4. Attendant Control of Voice Terminal Group: --

DISPLAY ONLY
   5. Attendant Console: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-4.
Change:	Fields 2-4 (after display only).
Remove:	Fields 2-4.
Next Data:	Displays the next console and attendant control of voice terminals restriction group assigned to the attendant partition.

Field Ranges and Encodes

1. Attendant Partition 0-40

   The nonpartitioned attendant consoles are represented by 0.

   Attendant partition 0 cannot be assigned an overflow destination and has access to all restriction groups.

OVERFLOW DESTINATION (Fields 2-3)

2. Attendant Partition - Unassigned
   0-40 Assigned

3.	Conditions for Overflow	-	No overflow
		1	Position busy or headset removed
		2	Position busy, headset removed, or all switch loops busy
4.	Attendant Control of Voice Terminal Group	-	Unassigned
		1-63	Assigned

DISPLAY ONLY (Field 5)

5.	Attendant Console	-, 1-40

Notes

1. Fields 4 and 5 are not related. All consoles in an attendant partition have access to restriction groups.

Special Error Codes

81 - Assign a console to this attendant partition in Procedure 210 Word 2 before assigning an overflow condition.

PROCEDURE 270 WORD 3 — TENANT SERVICES - UNATTENDED CONSOLE SERVICE

Purpose

Use Procedure 270 Word 3 to administer an attendant partition's default night extension. Also shown is the attendant partition's common night extension. During certain times of the day, the attendant console will probably be unattended, and calls will be routed to the common extension. If a common extension is not assigned, calls will go to the default extension assigned in this procedure.

Related Procedures

Use Procedure 276 Word 1 to enable the Tenant Services feature (field 6).

Use Procedure 270 Words 1, 2, 4, and 5 to administer other Tenant Services parameters.

Use Procedure 320 Words 2 and 3 to administer call categories to partitions.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 270, WORD: 3
                  TENANT SERVICES - UNATTENDED CONSOLE SERVICE

 1. Attendant Partition: --
 2.   Default Extension: -----

DISPLAY ONLY
   3. Common Extension: -----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1 and 2.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Attendant Partition 0-40
2. Default Extension -, 000-99999

   The default extension must be a working primary extension and must also belong to an extension partition in Procedure 000 Word 4 that is assigned to the entered attendant partition.

DISPLAY ONLY (Field 3)

3. Common Extension -, 000-99999

Special Error Codes

81 - The default extension must belong to an extension partition that is related to the entered attendant partition.

82 - The default extension must be a working primary extension (not an associated extension).

83 - No consoles belong to this attendant partition.

PROCEDURE 270 WORD 4 — TENANT SERVICES - LISTED DIRECTORY NUMBERS

Purpose

Use Procedure 270 Word 4 to administer an attendant partition to a listed directory number (LDN). This LDN is used by callers outside the switch to access the attendant consoles assigned to an attendant partition. One attendant partition may have several LDNs, but an LDN cannot be used for two attendant partitions.

Prerequisite Procedures

Use Procedure 204 Word 1 to administer an LDN before assigning the LDN to an attendant partition in this procedure.

Use Procedure 210 Word 2 to assign an attendant partition to a console before assigning the attendant partition in this procedure.

Related Procedures

Use Procedure 276 Word 1 to enable the Tenant Services feature (field 6).

Use Procedure 270 Words 1-3 and 5 to administer other Tenant Services parameters.

Use Procedure 320 Words 2 and 3 to administer call categories to partitions.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 270, WORD: 4
                  TENANT SERVICES - LISTED DIRECTORY NUMBERS

 1. Listed Directory Number: -----
 2.     Attendant Partition: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or field 2.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	If an LDN is entered, it displays all LDN assignments in the system. If a partition is entered, it displays all LDNs for the partition.

Field Ranges and Encodes

1. Listed Directory Number — -, 000-99999
2. Attendant Partition — -, 0-40

Special Error Codes

81 - Assign an LDN in Procedure 204 Word 1 before assigning it to an attendant partition.

PROCEDURE 270 WORD 5 — TENANT SERVICES - TRUNK GROUPS

Purpose

Use Procedure 270 Word 5 to administer the association of a trunk group with one or more extension partitions or attendant partitions. Only trunk types 12-50, 70-78, 103-109, and 120 are partitionable. These trunks are assigned in Procedure 100 Word 1. They are used by members of an extension partition for access to and from the public network and private networks.

Related Procedures

Use Procedure 276 Word 1 to enable the Tenant Services feature (field 6).

Use Procedure 000 Word 4 to administer extensions to extension partitions.

Use Procedure 270 Words 1-4 to administer other Tenant Services parameters.

Use Procedure 282 Word 1 to administer authorization codes for an extension partition.

Use Procedure 320 Words 2 and 3 to administer call categories to partitions.

Cautions

If the trunk type of a trunk group is changed in Procedure 100 Word 1, a change may be required for that trunk group in this procedure. This ensures correct partitioning translations.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 270, WORD: 5
                      TENANT SERVICES - TRUNK GROUPS

 1.         Trunk Group: [---]
 2. Extension Partition: [---]

OUTGOING OR 2-WAY TRUNK
   4. Dedicated or Shared: [-]

INCOMING-ONLY TRUNK
   5. Attendant Partition: [--]

DISPLAY ONLY
   6.                Total Trunks: [---]
   7. Outgoing Attendant Partition: [--]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or field 2.
Add:	Fields 1, 2, and 4 for outgoing and two-way trunks. Fields 1, 2, 4, and 5 for incoming-only trunks.
Change:	Fields 2, 4, and 5 (after display only).
Remove:	Fields 1, 2, 4, and 5.
Next Data:	Displays each trunk group or extension partition number.

Field Ranges and Encodes

1. Trunk Group -, 18-999
2. Extension Partition -, 0-999

OUTGOING OR 2-WAY TRUNK (Fields 3-4)

4. Dedicated or Shared
   - \- Incoming only (must have data in field 5)
   - 0 Outgoing or 2-way shared
   - 1 Outgoing or 2-way dedicated

INCOMING-ONLY TRUNK (Field 5)

5. Attendant Partition -, 0-40

   This attendant partition will use the trunk group in field 1 for incoming calls. Don't put anything in this field if the trunk group is a 1-way outgoing trunk type.

DISPLAY ONLY (Fields 6-7)

6. Total Trunks 0-255

7. Outgoing Attendant Partition -, 0-40

   This field displays the outgoing attendant partition associated with a trunk group in field 1 and an extension partition in field 2.

Special Error Codes

81 - An attendant partition cannot be assigned to a 1-way outgoing trunk group.

82 - Always assign an attendant partition to a 1-way incoming or 2-way trunk group.

83 - Trunk groups associated with extension partition zero cannot be removed.

PROCEDURE 275 WORD 1 — SYSTEM COS - AIOD AND OTHER FEATURES

Purpose

Use Procedure 275 Word 1 to administer the system Class Of Service (COS) for:

— Automatic Identification of Outward Dialing (AIOD)

— Call Waiting

— Multiappearance voice terminals and data modules

— Paging/Code Calling Access

— Direct Inward Dialing (DID)/Common Control Switching Arrangement (CCSA)

— Duplicated or unduplicated common control

— Music on hold

— Call Detail Recording (CDR)

— Tandem tie trunk

— Trunk-to-trunk call for the Trunk-to-Trunk connection feature

— DCIU

— Cache Memory.

Prerequisite Procedures

Use Procedure 650 Test 2 to busy-out the DCIU before disabling or enabling the DCIU (field 17).

Related Procedures

Use Procedures 051 Word 1 through 070 Word 4 to find multiappearance terminal information.

Use Procedures 110 Word 1 and 111 Word 1 to find tandem tie trunk and trunk-to-trunk restrictions, as well as dial access codes.

The ANI number given in field 4 is used with extensions that do not have the auxiliary ANI number field activated in Procedure 000 Word 2.

When Call Waiting is enabled (field 5 equals 1), attendant call waiting is automatically enabled by software. This places a 1 in field 11 of Procedure 200 Word 1. Call Waiting and Priority Calling (formerly Call Waiting - Originating) are assigned to extensions by class of service.

Cautions

Disabling system call waiting in field 5 disables both attendant and extension Call Waiting. If only attendant call waiting is desired, disable extension Call Waiting using Procedure 010 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 275, WORD: 1
                      SYSTEM COS - AIOD AND OTHER FEATURES

AIOD                                    15.    Tandem Tie Trunk: -
   1.           Status: -                16. Trunk-Trunk Calling: -
   2.    Prefix Digits: --               17.                DCIU: -
   3. ANI Delay Timing: --               18.        Cache Memory: -
   4. Aux ANI Trunk Billing Number: ----

 5.               Call Waiting: -
 6. Multiappearance/Data Module: -
 7.         Paging/Code Calling: -
 9.             DID/CCSA Digits: -
10.                  Duplicated: -
11.               Music On Hold: -

CALL DETAIL RECORDING (CDR)
  12.                  Status: -
  13.     Account Code Length: --
  14. Incoming/Outgoing Calls: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-7 and 9-18.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

AIOD (Fields 1-4)

1. Status — 0 Disabled; 1 Enabled
2. Prefix Digits — -, 0-99

   Enter leading zeros in this field if they are significant. For example, if 04 was entered, it would be appended to a two-digit number to make a valid four-digit number (04XX).

   If no additional digits are required in field 2, use the clear entry command to dash the field.

3. ANI Delay Timing

-, 0-99 (in 0.1 second increments)

The data entered in this field is used to provide a time delay for ANI processing in the central office.

4. Aux ANI Trunk Billing Number

-, 0-9999

This is the CO billing number applied to any extension that has a 1 administered in Procedure 000 Word 2 field 3. The auxiliary ANI number is used for billing a group of extensions under the same number.

5. Call Waiting

0 Disabled
1 Enabled

6. Multiappearance/Data Module

0 Disabled
1 Enabled

7. Paging/Code Calling

0 Disabled
1 Enabled with audible ringback
2 Enabled with music

9. DID/CCSA Digits

0, 3-5

10. Duplicated

0 Unduplicated common control
1 Duplicated common control

11. Music On Hold

0 Disabled
1 Enabled

The Music On Hold feature is not administered the same as the Hold feature. Use Procedures 054 Word 3, 100 Word 1, and 150 Word 1 to administer Music On Hold.

CALL DETAIL RECORDING (CDR) (Fields 12-14)

12. Status

0 Disabled
1 Enabled

13. Account Code Length

-, 1-15

This field specifies the account code length for both optional and forced entry of account codes. This field cannot be administered with a dash or 0 once an account code has been assigned. This field applies only to account codes dialed after the CDR DAC. This field does not apply to account codes defined in Procedure 314 which are dialed after a WCR Network DAC and the CDR Account Code prefix digit.

14. Incoming/Outgoing Calls

0 Outgoing calls recorded
1 Incoming and outgoing calls recorded

This field specifies whether or not incoming and outgoing call data is recorded by CDR.

15. Tandem Tie Trunk	0	Disabled
	1	Enabled
	To test a remote trunk (local to this switch, remote to the distant switch), set this field to a 1.	
16. Trunk-Trunk Calling	0	Disabled
	1	Enabled
	This feature allows a user to connect an incoming or outgoing trunk call to an outgoing trunk.	
17. DCIU	0	Disabled
	1	Enabled
18. Cache Memory	0	Disabled
	1	Enabled

Special Error Codes

87 - Use Procedure 650 Test 2 to busy-out the DCIU.

PROCEDURE 275 WORD 2 — SYSTEM COS - UNATTENDED CONSOLE/REMOTE ACCESS

Purpose

Use Procedure 275 Word 2 to administer the system class of service (COS) for the Unattended Console Service and Remote Access features.

Prerequisite Procedures

The extension in field 8 and the attendant-entered common extension must be in the dialing plan. Define the first digit in Procedure 350 Word 1 and the extension in Procedure 354 Word 1 and Procedure 000 Word 1. Field 8 cannot be a vector directory number (VDN).

Use Procedure 270 Word 3 to deactivate the Tenant Services feature before administering field 8 in this procedure.

Related Procedures

When disabling Preselected Call Routing, use encodes 22-25 in Procedure 350 Word 2 to totally disable Unattended Console Service.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 275, WORD: 2
                 SYSTEM COS - UNATTENDED CONSOLE/REMOTE ACCESS

 1. Preselected Call Routing: -
 2.             CAAVT Status: -
CAAVT GONG EQUIPMENT LOCATION
   3.  Module: --
   4. Cabinet: -
   5. Carrier: -
   6.    Slot: --
   7. Circuit: --

 8. Default Extension: -----
DISPLAY ONLY
   9. Common Extension: -----

REMOTE ACCESS
  10. Sharing: -
  DISPLAY ONLY
    11. Barrier Code: ----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-8 and 10.
Remove:	Not allowed. To deactivate service, change the applicable field to zero and fill the gong equipment location fields with dashes.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	Preselected Call Routing	0	Disabled
		1	Enabled

2. CAAVT Status — 0 Disabled; 1 Enabled

When 1 is displayed in field 2, the assigned Call Answer Any Voice Terminal (CAAVT) gong equipment location, fields 3 through 7, must be filled before doing a change routine.

When a 0 is displayed in field 2, the assigned CAAVT gong equipment location must be dashed.

CAAVT GONG EQUIPMENT LOCATION (Fields 3-7)

CAAVT gong equipment must be assigned to an available line circuit (SN229). The line circuit selected cannot be used for an extension in Procedure 000 Word 1.

3. Module — -, 0-30
4. Cabinet — -, 0-7 for traditional modules, 0 for universal and XE modules
5. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
6. Slot — -, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
7. Circuit — -, 0-23
8. Default Extension — -, 000-99999

If preselected call routing is activated and the attendant-entered common extension is not assigned, the extension entered in this field is the one that receives all calls during unattended console operation. This field cannot contain a VDN.

DISPLAY ONLY (Field 9)

9. Common Extension — 000-99999

All attendant seeking calls are directed to the extension number displayed in this field during unattended console operation.

REMOTE ACCESS (Fields 10-11)

10. Sharing

0 Disabled
1 Enabled

If a Remote Access trunk group is not shared (this field equals 0), it is dedicated and available at all times. If the Remote Access feature shares trunk circuits with LDN service (this field equals 1), Remote Access is provided only when the system is in Unattended Console Service.

DISPLAY ONLY (Field 11)

11. Barrier Code — 0000-9999

The barrier code is the code dialed to permit remote access to system services. This code is created by the attendant.

Special Error Codes

82 - The CAAVT gong equipment location (fields 3-7) must be dashed if CAAVT is not active. Fields 3-7 cannot be dashed if CAAVT is active.

83 - The default extension (field 8) must be a working primary extension (not an associated extension or VDN).

84 - You cannot administer field 8 when Tenant Services is active. See Procedure 270 Word 3.

PROCEDURE 275 WORD 3 — SYSTEM COS - MISCELLANEOUS

Purpose

Use Procedure 275 Word 3 to administer the system Class of Service (COS) for:

— Call Coverage

— Abbreviated Dialing

— Multimachine nodes

— Demand Print password

— Call Detail Recording (CDR) default variable timer

— Terminal dial information

— CDR Calls Blocked

— CC/TMS configuration

— Attendant Conference.

Prerequisite Procedures

Use Procedure 276 Word 1 to enable multipremise (field 2) before specifying number portability in field 7 of this procedure. Also, use Procedure 350 Word 1 to specify five-digit dialing.

Use Procedure 354 Word 2 to remove the node number specification before assigning number portability and Distributed Communications System (DCS).

Related Procedures

Use Procedure 300 Word 1 to administer 0/1 toll nonrestricted codes.

Cautions

Failure to provide a local switch number (field 8) may result in lost messages when using DCS centralized messaging.

The default value for the CDR Calls Blocked field (field 14) is 0. This means that calls trying to access CDR reporting trunk groups are blocked when the switch cannot send CDR records out the PCC port. This is usually caused by a CDR peripheral failure. This field does not affect the SMDR port. If SMDR is used, the switch will not block any calls. See field 14.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 275, WORD: 3
                              SYSTEM COS - MISCELLANEOUS

CALL COVERAGE
   3.   Caller Response Interval: -
   4. Coverage Point DA Interval: --
ABBREVIATED DIALING LISTS
   5.   System List Size: -
   6. System List Access: -
MULTIMACHINE NODES
   7.            Switch Type: -
   8.    Local Switch Number: ---
   9. CAS Main Switch Number: --
11.      Demand Print Password: -
12. CDR Default Variable Timer: --
13.  Terminal Dial Information: -
14.          CDR Calls Blocked: -
15.            Combined CC/TMS: -
16.       Attendant Conference: -
17.               Service SPID: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-16.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

CALL COVERAGE (Fields 3-4)

3.	Caller Interval	Response	0	No interval assigned
			1-5	Number of two-second intervals

This period of time begins with a coverage tone that lets the caller make a choice of responses to a call that is being directed to coverage. If this field contains 0, the call goes to coverage immediately after sending the coverage tone.

4. Coverage Point DA Interval — 2-6 Ringing cycles

This is the number of ringing cycles that will elapse before a call redirected by Call Coverage goes to the next coverage point.

ABBREVIATED DIALING LISTS (Fields 5-6)

5. System List Size
   - 1 1-9
   - 2 01-99
   - 3 001-999
   - 4 0001-9999

6. System List Access
   - 0 Access is on a per terminal basis
   - 1 Accessible to all users

MULTIMACHINE NODES (Fields 7-9)

7. Switch Type
   - - No DCS, no number portability
   - 1 DCS switch number
   - 2 Number portability switch
   - 3 Both DCS and number portability

   The extension number portability feature will not work unless the standard network and multipremises options are enabled in Procedure 276 Word 1 fields 1 and 2.

8. Local Switch Number — -, 1-999

   DCS switch numbers are limited to 1-63. Non-DCS switches can be numbered from 1-999.

   For AUTOVON, make sure all far end switches have this switch number (field 8) translated in Procedure 305 Word 1 field 1.

9. CAS Main Switch Number
   - - No DCS
   - 0 DCS (no CAS)
   - 1-40 CAS main switch number

11. Demand Print Password
    - 0 Not required
    - 1 Required

    Activation of this field (field 11 = 1) requires terminal users to dial a password before printing out their Leave Word Calling and Message Center messages.

12. CDR Default Variable Timer
    - - 6 seconds
    - 1-99 seconds

    This field should be used only when answer supervision is not used. This field specifies when the call duration clock for CDR is to start. After the called number is dialed, the switch will wait the amount of time specified in this field before the call duration for CDR begins.

13. Terminal Dial Information
    - 0 Nothing printed
    - 1 Print info for terminal-dialed calls

14. CDR Calls Blocked
- Not available
0 All (default)
1 If not to attendant
2 None

This field is used to block or unblock incoming and outgoing calls that access CDR reporting trunk groups only. Calls are blocked when the switch is unable to send CDR records over the PCC. This is usually because of a failure at the CDR peripheral. This field never blocks calls going out the SMDR port.

15. Combined CC/TMS
0 No
1 Yes

If this field is set to 0, the CC and TMS carriers are located in different cabinets. If this field is set to 1, the CC and TMS carriers are located in the same physical cabinet.

16. Attendant Conference
0 Six-party
1 Five-party

When this field is set to 0, Conference — Attendant Six Party is active. This requires the use of an SN254 in a traditional module. When this field is set to 1, Conference — Attendant Five Party is active. Unlike six-party conference, five-party conference does not require administration of a circuit pack.

It is strongly recommended that five-party attendant conferencing be administered only when there are no traditional modules in the system. Unacceptable transmission may occur if a user administered to a traditional module is on the conference.

17. Service SPID
0 Disabled
1 Enabled

Notes

1. It is recommended that the node number be the same number as the RNX number of the switch.

Special Error Codes

81 - Remove extension translation in Procedure 350 Word 1.

82 - When a local switch number is provided, the type must be specified in field 7.

83 - The type (field 7) cannot be specified without a local switch number in field 8.

84 - Number portability can be specified only if multipremise and standard network are specified in Procedure 276 Word 1 (field 1 and 2) and a four/five-digit dialing plan is specified in Procedure 350 Word 1.

85 - The local switch number in field 8 is already assigned as a node number. It must first be removed in Procedure 354 Word 2 .

86 - Attendant conference trunk group must be removed in Procedure 100 Word 1 before type of attendant conferencing can be changed.

PROCEDURE 275 WORD 4 — SYSTEM COS - MISCELLANEOUS

Purpose

Use Procedure 275 Word 4 to define the following features and arrangements associated with the system:

— The number of digits in Traditional Code Calling

— Attendant release loop

— Maximum preemption level

— AUTOVON interface switch

— Automatic Call Distribution (ACD) abandon call search

— Multiple Logical Links (MLL)

— Call Management System (CMS)

— Integrated Services Digital Network (ISDN)

— Administrable alarms.

Prerequisite Procedures

Use Procedure 028 Word 1 to busy out CMS before deactivating it in this procedure.

Related Procedures

Use Procedure 203 Word 1 to assign the AUTOVON buttons to the attendant consoles.

Use Procedure 204 Word 1 to assign AUTOVON precedence identification and ICI.

Use Procedure 305 Words 1 and 2 to assign the AUTOVON destination node.

Use Procedure 350 Words 1 and 2 to assign the AUTOVON dial access code.

Use Procedures 115 Word 1, 150 Word 1, 155 Word 1, 211 Words 1 and 2, 212 Words 1 and 2, 275 Word 3, and 286 Word 1 to administer CAS.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 275, WORD: 4
                              SYSTEM COS - MISCELLANEOUS

 1. Traditional Code Calling Access Digits: -
 3.                Trunk-to-Trunk Transfer: -
ATTENDANT RELEASE LOOP OPERATION
   4.             Status: -
   5. Timed Recall Timer: --
                                          14. ISDN Status: -
 6. Default Recent Disconnect Interval: ---
MAXIMUM PREEMPTION LEVEL                  ADMINISTRABLE ALARMS
   7. All Incoming: -                       15. Even Port Peripherals: -
  OUTGOING                                  16.        Trunk Software: -
     8.  Terminal: -                        17.    Auxiliary Software: -
     9. Attendant: -                      DISPLAY ONLY
                                            18. Local Switch Number: ---
10. AUTOVON Interface Switch: --
11.  ACD Abandon Call Search: -
12.               MLL Status: -
13.               CMS Status: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1, 3-17.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Traditional Calling Access Digits

0	Disabled
2	2-digit called party code
3	3-digit called party code

This field is applicable to the Traditional Code Calling feature only. The Universal Code Calling feature always uses three digits and is administered in Procedure 000 Word 3.

3. Trunk-to-Trunk Transfer

0	Disabled
1	Enabled

Field 3 must contain a 1 if this is a CAS branch location.

ATTENDANT RELEASE LOOP OPERATION (Fields 4-5)

4. Status
   - 0 Disabled
   - 1 Enabled

   The Attendant Release Loop Operation feature applies to incoming trunk calls going to a station on this switch.

5. Timed Recall Timer — 0-98 (even numbered seconds)

   When this time expires, the switch activates an idle loop light telling the attendant that the call is still ringing at the station.

6. Default Recent Disconnect Interval — 1-511 (days)

MAXIMUM PREEMPTION LEVEL (Fields 7-9)

- \- Disabled
- 0 Flash override
- 1 Flash
- 2 Immediate
- 3 Priority
- 4 Routine

7. All Incoming — -, 0-4

   For Precedence Calling, field 7 should always contain a 0 (flash override).

OUTGOING (Fields 8-9)

8. Terminal — -, 0-4
9. Attendant — -, 0-4
10. AUTOVON Interface Switch — -, 1-40

    If this switch is an AUTOVON interface switch, then field 10 is the same as field 18.

11. ACD Abandon Call Search
    - 0 Not executed on CO disconnect
    - 1 Executed on CO disconnect

12. MLL Status
    - \- Not available
    - 0 Disabled
    - 1 Enabled

    This field will be used later with ISDN but should now be set to ‘‘0’’ (disabled).

13. CMS Status
    - 0 Disabled
    - 1 Enabled

14. ISDN Status
    - 0 Disabled
    - 1 Enabled

ADMINISTRABLE ALARMS (Fields 15-17)

15. Even Port Peripherals	-	Not available
	0	Enabled (default)
	1	Disabled
	2	Terminal alarming enabled
16. Trunk Software	-	Not available
	0	Enabled (default)
	1	Disabled
17. Auxiliary Software	-	Not available
	0	Enabled (default)
	1	Disabled

DISPLAY ONLY (Field 18)

18. Local Switch Number	1-999 If this switch is an AUTOVON interface switch, then field 18 is the same as field 10.

Special Error Codes

86 - Timed recall (field 5) is measured in even-numbered seconds, 0-98.

87 - CMS must be busied out using Procedure 028 Word 1 before disabling CMS here.

88 - ISDN must be active before MLL can be activated.

PROCEDURE 276 WORD 1 — FEATURE GROUP CLASS OF SERVICE

Purpose

Use Procedure 276 Word 1 to administer feature group permissions for access by the customer. Only certain system management agents can change the permissions in this procedure.

Prerequisite Procedures

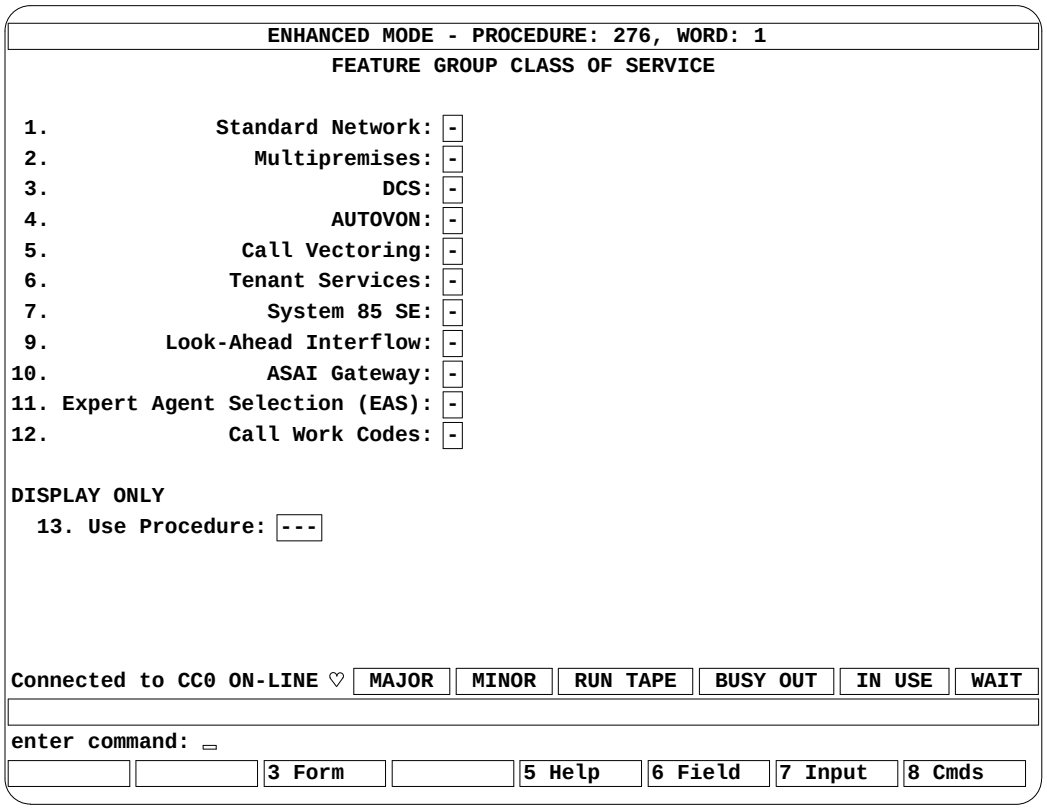
Use Procedure 104 Words 1 and 2 to add or remove translation for multipremise before enabling or disabling multipremise in this procedure.

Use Procedure 257 Words 1-4 and Procedure 275 Word 1 to add or remove DCS from DCIU translations before enabling or disabling DCS in this procedure.

Use Procedure 350 Word 2 to remove the EAS Skill Entry Dial Access Code before disabling Expert Agent Selection (EAS) in this procedure.

Use Procedure 350 Word 2 to remove the DACs for WCR Networks 2 - 7 before disabling Standard Network.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-13.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Standard Network

0 Disabled
1 Enabled

This field enables and disables WCR Networks 0 and 2-7. This field also enables and disables "restart" actions to Networks other than Network 1 in Procedure 314. The "Restart" action provides Network crossover and M-to-N conversions.

This field and field 2 must both be enabled for the extension number portability feature to work.

2. Multipremises
   0 Disabled
   1 Enabled

   This enables and disables the main/satellite feature.

   This field and field 1 must both be enabled for the extension number portability feature to work.

3. DCS
   0 Disabled
   1 Enabled

4. AUTOVON
   0 Disabled
   1 Enabled

5. Call Vectoring
   0 Disabled
   1 Enabled

   When disabled, Call Vectoring translations are not removed from the system, but they will no longer be accessed.

6. Tenant Services
   0 Disabled
   1 Enabled

   When disabled, the Tenant Services translations are not removed from the system, but they will no longer be accessed.

7. System 85 SE
   0 Disabled
   1 Enabled

   System 85 SE (single module) is not available at this time.

9. Look-Ahead Interflow
   0 Disabled
   1 Enabled

   Call Vectoring must be enabled before enabling Look-Ahead Interflow.

10. ASAI Gateway
    0 Disabled
    1 Enabled

    ISDN/PRI must be administered in order for this feature to work correctly. ISDN/ASAI Gateway translations are not automatically removed when this field is disabled. The ASAI Gateway requires a special trunk type and signaling type. See the *DEFINITY Generic 2 Administration of Features and Hardware* (555-105-507).

11. Expert Agent Selection (EAS)
    0 Disabled
    1 Enabled

    Call Vectoring must be administered in order for this feature to work correctly.

12. Call Work Codes	0	Disabled
	1	Enabled

When Call Work Codes are disabled, the CWC button translations are not removed from the system but the button presses will not be processed.

DISPLAY ONLY (Field 13)

13. Use Procedure	104	to remove translation for multipremises
	257	to remove DCS from DCIU
	275	to add or remove DCS
	305	to remove precedence capable trunks
	350	to remove EAS DAC or WCR Network DACs

Special Error Codes

80 - The change routine is denied for this system management agent.

81 - The display routine was unable to determine the status of the feature.

82 - Use the procedure displayed in field 13 to remove associated translations before disabling the feature group.

83 - Use the procedure displayed in field 13 to add associated translations before enabling the feature group.

84 - Tenant Services and AUTOVON cannot both be enabled.

85 - Use Procedure 028 Word 1 to busy out CMS before changing translations.

86 - Use the procedure displayed in field 13 to remove associated translations before enabling or disabling Call Vectoring.

87 - Use the procedure displayed in field 13 to remove associated translations before enabling System 85 SE (single module).

88 - Call Vectoring related feature must be disabled/enabled before enabling/disabling Call Vectoring feature.

89 - Call Vectoring must be enabled before enabling Call Vectoring related features. Call Vectoring related features must be disabled before disabling Call Vectoring.

PROCEDURE 277 WORD 1 — ASSIGN AGENTS TO A SET

Purpose

Use Procedure 277 Word 1 to administer operational support system (OSS) agents to a set. When an agent is assigned to a set in this procedure, the agent is only allowed to use the procedures and applications assigned to that set in Procedure 277 Word 2. Only superusers may make assignments with this procedure.

Agents that are not assigned to sets are allowed full access to all procedures and applications except for those procedures and applications that are assigned to a set and can only be accessed by certain agents. This includes Procedure 277 Word 4. Any agent trying to access a restricted procedure or application will receive Standard Error Code 77 (Access denied - see Procedure 277).

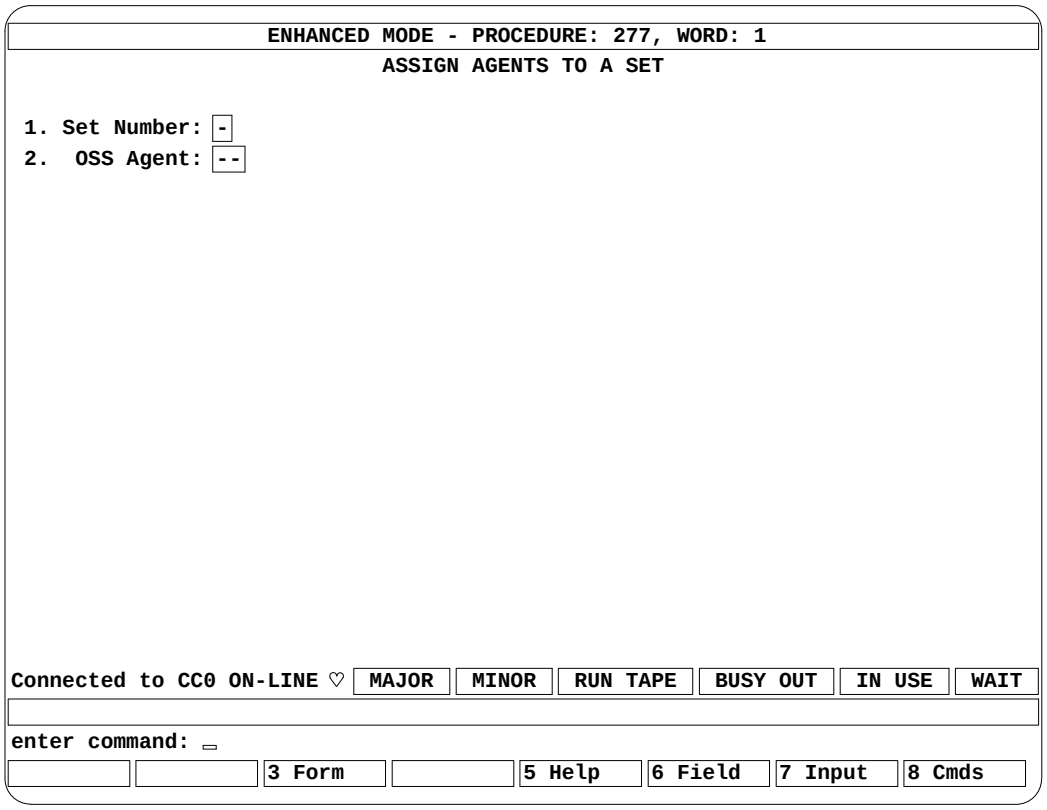
Prerequisite Procedures

Use Procedure 277 Word 4 to assign agent access before adding an agent in this procedure.

Related Procedures

Use Procedure 277 Word 2 to assign procedures and applications to a set.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1 and 2.
Change:	Not allowed.
Remove:	Fields 1 and 2.
Next Data:	Displays all set number assignments.

Field Ranges and Encodes

1.	Set Number	0-9

2. OSS Agent	3	RMATS II
	4	INADS - green
	5	INADS - red
	6	Remote Carrier Group maintenance
	7	TRACS
	8	Manager II - installation and maintenance
	9	SHOPS
	10	Run tape
	11	Delayed termination
	12	EMAP
	14	Park tape
	15	Trouble Tracker
	40	Monitor I - services
	41	Monitor I - customer
	50	Manager III - services
	51-59	Manager III - customer
	60	Manager IV - services
	61-69	Manager IV - customer
	70	Manager II - services
	71-79	Manager II - customer
	80	LMAAP
	99	Translation audit

Notes

1. The remove routine removes the tie between the set and the agent. This removes the restriction to that set of applications, permitting full access by any agent.
2. An agent assigned to a set in this procedure is not a superuser and may not make changes in Procedure 277 Words 1 or 2. Superuser agents may not be assigned to a set.

   The following is a list of predefined superusers:

   RMATS II = encode 3
   INADS - red = encode 5
   TRACS = encode 7
   SHOPS = encode 9
   Manager III - Services = encode 50
   Manager IV - Services = encode 60
   Manager II - Services = encode 70

Special Error Codes

80 - This agent may not make any changes in this procedure.

81 - Agents must first be assigned access in Procedure 277 Word 4.

82 - This agent may not be assigned to a set.

83 - Agents may not self-assign themselves to a set.

PROCEDURE 277 WORD 2 — ASSIGN APPLICATIONS TO A SET

Purpose

Use Procedure 277 Word 2 to administer procedures or system management application protocol (SMAP) applications to a set number. The set is associated with agents in Procedure 277 Word 1. Only agents assigned to a set can access the procedures and applications assigned to the set.

Related Procedures

An agent assigned to a set in Procedure 277 Word 1 is not a superuser and may not make changes in Procedure 277 Word 1 or this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 277, WORD: 2
                          ASSIGN APPLICATIONS TO A SET

 1.                     Set Number: -
 2. Type of Restricted Application: -
 3.  Procedure or SMAP Application: ---









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 2 and 3.
Add:	Fields 1-3.
Change:	Not allowed.
Remove:	Fields 1-3.
Next Data:	Displays all procedures or SMAP applications assigned to a set.

Field Ranges and Encodes

1. Set Number — 0-9

2. Type of Restricted Application
   - 0 Procedure
   - 1 SMAP administration
   - 2 SMAP data collection

3. Procedure or SMAP Application — 0-499

   Any leading zeros entered in field 3 are removed from the display (e.g., entering 054 only displays 54).

   If the type of restricted application is a procedure (field 2 = 0), the procedure number will be displayed in this field. Other encodes for this field are:

   If field 2=1 (Restricted SMAP-Administration)

   - Field 3=1 (Unused)
   - Field 3=2 (Recursive procedure execution-initialization)

   If field 2=2 (Restricted SMAP-Data collection number)

   - Field 3=1 (ATMS transmission exception measurements)
   - Field 3=2 (ATMS miscellaneous exception measurements)
   - Field 3=3 (ATMS group exception measurements)
   - Field 3=4 (ACA referral data)
   - Field 3=5 (Message Sequence Tracer)

Notes

1. The remove routine removes an application from a set. This removes the restriction from that application allowing any agent full access.
2. Each application can be assigned to only one set number.

Special Error Codes

81 - This application may not be restricted.

82 - This application is already assigned to this set.

83 - This application is already assigned to another set.

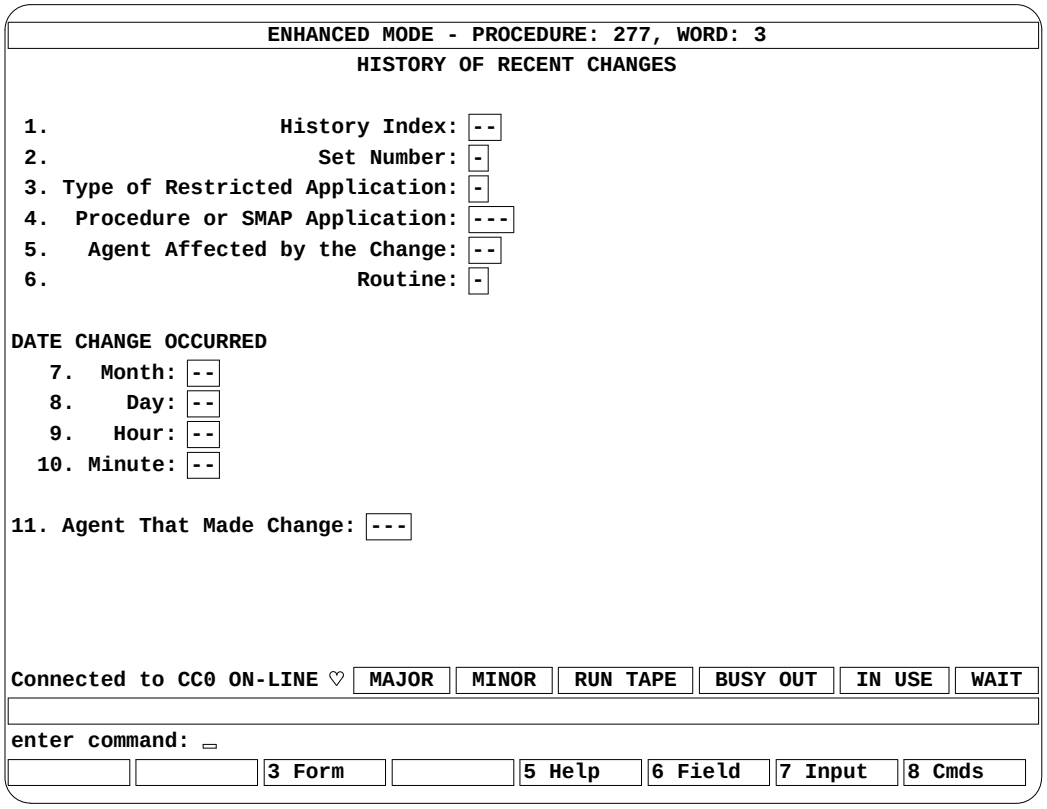
84 - This agent may not make changes in this procedure.

PROCEDURE 277 WORD 3 — HISTORY OF RECENT CHANGES

Purpose

Use Procedure 277 Word 3 to display the 16 most recent changes made on a given agent, procedure, and set number assignment.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the 16 most recent changes made to Procedure 277 Words 1, 2, and 4.

Field Ranges and Encodes

1.	History Index	1-16	
2.	Set Number	0-9	
3.	Type of Restricted Application	0	Procedure
		1	SMAP - administration
		2	SMAP - data collection
		3	Agent access (Procedure 277 Word 4)
4.	Procedure or SMAP Application	0-499	
5.	Agent Affected by the Change	3	RMATS II
		4	INADS - green
		5	INADS - red
		6	Remote Carrier Group maintenance
		7	TRACS
		8	Manager II - installation and maintenance
		9	SHOPS
		10	Run tape
		11	Delayed termination
		12	EMAP
		14	Park tape
		15	Trouble Tracker
		40	Monitor I - services
		41	Monitor I - customer
		50	Manager III - services
		51-59	Manager III - customer
		60	Manager IV - services
		61-69	Manager IV - customer
		70	Manager II - services
		71-79	Manager II - customer
		80	LMAAP
		99	Translation audit
6.	Routine	1	Remove
		2	Add
		3	Change

DATE CHANGE OCCURRED (Fields 7-10)

7.	Month	1-12	change was made
		99	Clock is invalid
8.	Day	1-31	of the month change was made
		99	Clock is invalid
9.	Hour	0-23	of the day change was made
		99	Clock is invalid
10.	Minute	0-59	of the hour change was made
		99	Clock is invalid

11. Agent That Made Change	3	RMATS II
	4	INADS - green
	5	INADS - red
	6	Remote Carrier Group maintenance
	7	TRACS
	8	Manager II - installation and maintenance
	9	SHOPS
	10	Run tape
	11	Delayed termination
	12	EMAP
	14	Park tape
	15	Trouble Tracker
	40	Monitor I - services
	41	Monitor I - customer
	50	Manager III - services
	51-59	Manager III - customer
	60	Manager IV - services
	61-69	Manager IV - customer
	70	Manager II - services
	71-79	Manager II - customer
	80	LMAAP
	99	Translation audit

Notes

1. Fields 3 and 4 will be set (indicating Procedure 277 Word 2 changed), or fields 3 and5 will be set (indicating Procedure 277 Word 4 changed), or only field 5 will be set (indicating Procedure 277 Word 1 changed).
2. If the type of restricted application is a procedure (field 3 = 0), the procedure number will be displayed in field 4. Field 4 encodes can also be:

   If field 3 = 1 (Restricted SMAP-Administration)

   Field 4 = 1 (Unused)
   Field 4 = 2 (Recursive procedure execution-initialization)

   If field 3 = 2 (Restricted SMAP-Data collection number)

   Field 4 = 1 (ATMS transmission exception measurements)
   Field 4 = 2 (ATMS miscellaneous exception measurements)
   Field 4 = 3 (ATMS group exception measurements)
   Field 4 = 4 (ACA referral data)

Special Error Codes

None.

PROCEDURE 277 WORD 4 — SWITCH ACCESS AUTHORIZATION

Purpose

Use Procedure 277 Word 4 to specify the agents who are allowed to access the switch system management.

Related Procedures

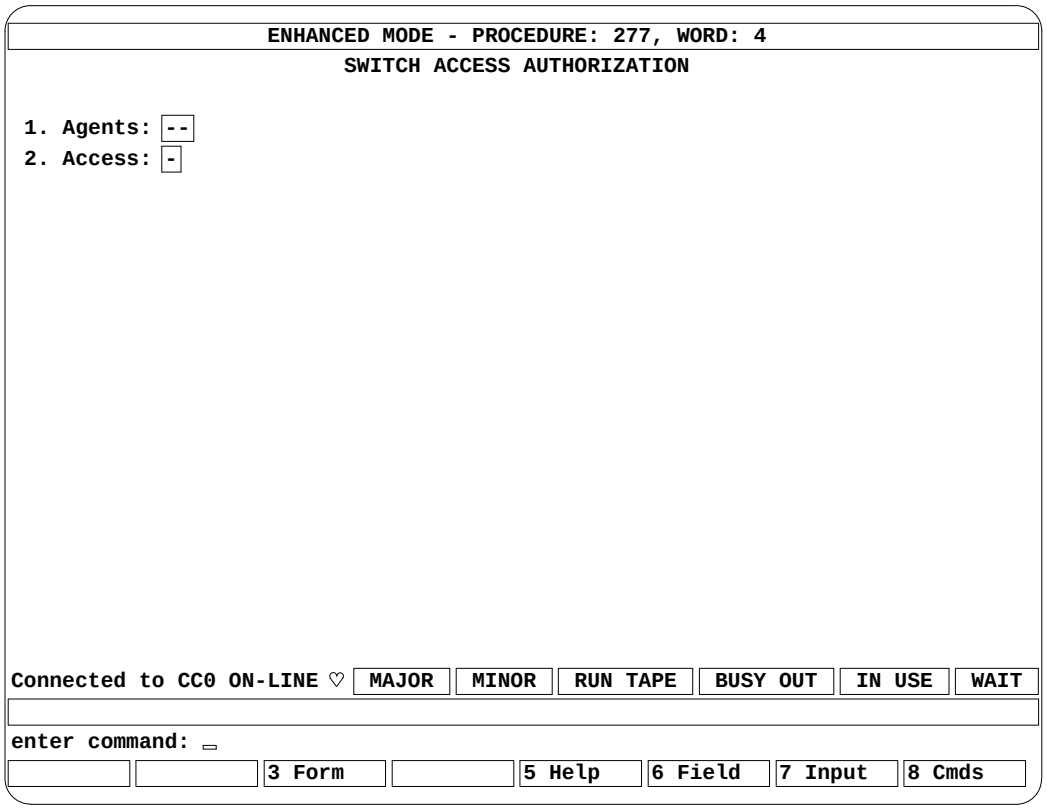
Use Procedure 276 Word 1 to set up the feature-group class of service.

A set of superuser agents are predefined to have switch access. These agents may not be unassigned in this procedure and may not be assigned to a set in Procedure 277 Word 1.

The following is a list of predefined superusers:

RMATS II = encode 3
INADS - red = encode 5
TRACS = encode 7
SHOPS = encode 9
Manager III - Services = encode 50
Manager IV - Services = encode 60
Manager II - Services = encode 70

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Displays each agent number and access permissions.

Field Ranges and Encodes

1. Agents	3	RMATS II
	4	INADS - green
	5	INADS - red
	6	Remote Carrier Group maintenance
	7	TRACS
	8	Manager II - installation and maintenance
	9	SHOPS
	10	Run tape
	11	Delayed termination
	12	EMAP
	14	Park tape
	15	Trouble Tracker
	40	Monitor I - services
	41	Monitor I - customer
	50	Manager III - services
	51-59	Manager III - customer
	60	Manager IV - services
	61-69	Manager IV - customer
	70	Manager II- services
	71-79	Manager II- customer
	80	LMAAP
	99	Translation audit
2. Access	0	Access not allowed
	1	Access allowed

Special Error Codes

80 - Only superusers can change access for this agent.

81 - Access for superusers cannot be changed.

PROCEDURE 279 WORD 1 — NETWORK-SPECIFIC FACILITY

Purpose

Use Procedure 279 Word 1 to administer the ISDN network-specific facility (NSF) value used by ISDN message creation for the NSF information element (IE). This identifies the type of service or feature that ISDN network calls will use. Default facilities are available with System 85 R2V4 to DEFINITY Generic 2 upgrades. For new Generic 2 switches, defaults do not exist. The facilities must be defined in this procedure.

Prerequisite Procedures

Use Procedure 275 Word 4 to activate ISDN before using this procedure.

Remove the ISDN network service value in Procedure 322 Word 1 before removing it here.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 279, WORD: 1
                              NETWORK-SPECIFIC FACILITY

 1. ISDN Network Service Value: [---]

ISDN NETWORK DEFINITION
   2. Parameterized - Binary: [-]
   3.      Feature - Service: [-]
   4.  Facility Coding Value: [--]

PARAMETERS
   5. Parameter 1: [--]
   6. Parameter 2: [--]
   7. Parameter 3: [--]
   8. Parameter 4: [--]
   9. Parameter 5: [--]
  10. Parameter 6: [--]
  11. Parameter 7: [--]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None, field 1, fields 1-4, fields 2 and 3, or fields 2-4.
Add:	Not allowed.
Change:	Fields 2-11.
Remove:	Fields 1-4.
Next Data:	If an ISDN Network Service Value is entered, it displays all assignments for the network service values. If the ISDN Network Definition is entered (fields 2-4), it displays any associated network service values.

Field Ranges and Encodes

1. ISDN Network Service Value -, 1-511

ISDN NETWORK DEFINITION (Fields 2-4)

All parameters must be left justified and sequential; and, if used, blanks (encode 50) must be the last character in the name.

2. Parameterized - Binary
   - 0 Parameterized
   - 1 Binary

3. Feature - Service
   - 0 Feature
   - 1 Service

4. Facility Coding Value -, 0-31

   The following features and services are currently available as facility coding value assignments as specified in the ISDN/PRI 2.1 specification:

   Parameterized-feature (when field 2=0 and field 3=0):
   - 8=Caller data

   Parameterized-service (when field 2=0 and field 3=1):
   - 1=Out-WATS band

   Binary-feature (when field 2=1 and field 3=0):
   - 1=Calling Party Number (SID preferred)
   - 2=Billing Number (ANI preferred)
   - 3=Calling Party Number (SID only)
   - 4=Billing Number (ANI only)
   - 5=Operator
   - 6=Presubscribed common carrier operator

   Binary-service (when field 2=1 and field 3=1):
   - 1=SDN
   - 2=MEGACOM(RG) 800 Service
   - 3=MEGACOM(RG) Service
   - 4=In-WATS

5=WATS maximal subscribed band
6=ACCUNET(RG) switched digital
7=Long distance
8=International 800
11=ETN
16=MultiQuest(RG)

PARAMETERS (Fields 5-11)

CHARACTER ENCODES					
21 = A	11 = Q	44 = g	94 = w	18 = ?	58 = -
22 = B	72 = R	45 = h	95 = x	19 = ;	59 = +
23 = C	73 = S	46 = i	96 = y	20 = :	60 = *
31 = D	81 = T	54 = j	15 = z	27 = "	67 = {
32 = E	82 = U	55 = k	00 = 0	28 = ’	68 = }
33 = F	83 = V	56 = l	01 = 1	29 = ‘	69 = |
41 = G	91 = W	64 = m	02 = 2	30 = ,	70 = \
42 = H	92 = X	65 = n	03 = 3	37 = (	77 = <
43 = I	93 = Y	66 = o	04 = 4	38 =)	78 = >
51 = J	12 = Z	74 = p	05 = 5	39 = _	79 = =
52 = K	24 = a	14 = q	06 = 6	40 = ~	80 = %
53 = L	25 = b	75 = r	07 = 7	47 = [	87 = #
61 = M	26 = c	76 = s	08 = 8	48 =]	88 = &
62 = N	34 = d	84 = t	09 = 9	49 = ^	89 = @
63 = 0	35 = e	85 = u	10 = . (period)	50 = blank	90 = $
71 = P	36 = f	86 = v	17 = !	57 = /	

Assignment of fields 5-11 is not allowed for binary network definition.

5. Parameter 1 -, 0-12, 14-15, 17-96
6. Parameter 2 -, 0-12, 14-15, 17-96
7. Parameter 3 -, 0-12, 14-15, 17-96
8. Parameter 4 -, 0-12, 14-15, 17-96
9. Parameter 5 -, 0-12, 14-15, 17-96
10. Parameter 6 -, 0-12, 14-15, 17-96
11. Parameter 7 -, 0-12, 14-15, 17-96

Notes

1. Encode 50 (blank) will become a dash after a change routine followed by a display routine.
2. Default facilities can be changed or deleted. New facilities can be created as features and services become available.
3. Parameterized Network Service Values can have several parameter combinations specified under a single Facility Coding Value. However, each new parameter combination must be associated with a unique Network Service Value.

Special Error Codes

81 - Assignment of duplicate ISDN network definitions is not allowed.

82 - Remove this entry in Procedure 322 before removing it here.

84 - A parameter specification is not allowed with binary network definition.

85 - All parameters must be left justified and sequential; and, if used, blanks (encode 50) must be the last character in the name.

PROCEDURE 280 WORD 1 — ISDN CODESET MAPPING

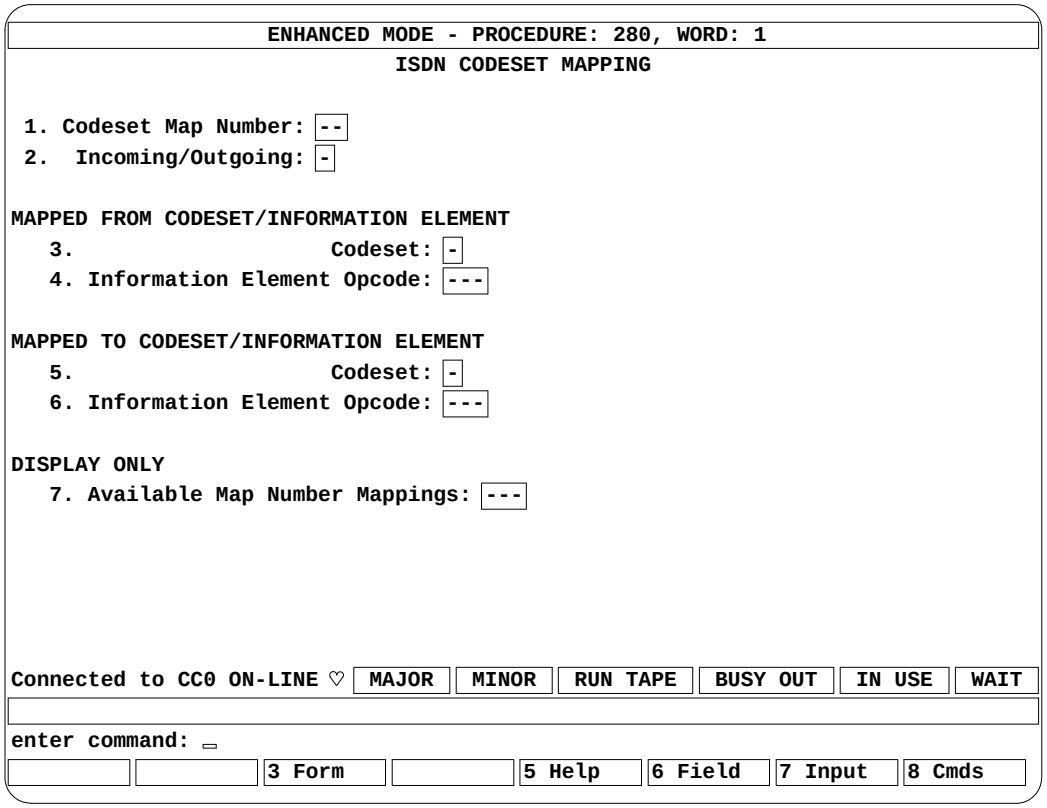
Purpose

Use Procedure 280 Word 1 to administer the ISDN codeset mapping translations. This allows the switch to send and receive the correct ISDN codesets for telephone display messages. For instance, codeset 7 in System 85 R2V4 must be mapped to codeset 6 in a DEFINITY Generic 2 switch.

Related Procedures

Use Procedure 262 Word 3 to administer ISDN link parameters.

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1-3 (for codeset mapping) or 1-4 (for information element mapping).
Add:	Fields 1-6.
Change:	Not allowed.
Remove:	Fields 1-6.
Next Data:	Displays all codeset assignments.

Field Ranges and Encodes

1. Codeset Number — Map
   - `-` Unassigned
   - `0-15` Assigned

2. Incoming/Outgoing
   - `0` Mapping for incoming messages
   - `1` Mapping for outgoing messages

MAPPED FROM CODESET/INFORMATION ELEMENT (Fields 3-4)

3. Codeset
   - `0` Basic information elements
   - `1` Reserved for future standards
   - `2` Reserved for future standards
   - `3` Reserved for future standards
   - `4` Reserved for future standards
   - `5` Reserved for future standards
   - `6` Local serving network information elements
   - `7` User-specific information elements

4. Information Element Opcode
   - `-, 0-127`

   The information element opcodes differ depending on the codeset. If you want all information elements mapped between codesets, enter a dash in this field. Put a dash in this field also if disabling a codeset (fields 5 and 6 also have dashes).

MAPPED TO CODESET/INFORMATION ELEMENT (Fields 5-6)

5. Codeset
   - `-` Codeset in field 3 is disabled (ignored)
   - `0` Basic information elements
   - `1` Reserved for future standards
   - `2` Reserved for future standards
   - `3` Reserved for future standards
   - `4` Reserved for future standards
   - `5` Reserved for future standards
   - `6` Local serving network information elements
   - `7` User-specific information elements

6. Information Element Opcode
   - `-, 0-127`

   The information element opcodes differ depending on the codeset. If you want all information elements mapped between codesets, enter a dash in this field. Put a dash in this field also if disabling a codeset (fields 4 and 5 also have dashes).

DISPLAY ONLY (Field 7)

7. Available Map Number Mappings

-, 0-255

This is affected by the number of information elements mapped in a codeset. There can be 256 incoming and 256 outgoing mappings per map number (field 1).

Notes

1. The codeset mappings are done as follows:

   When setting up a mapping for incoming messages (field 2 equals 0), the codeset in field 3 belongs to the remote facility and the codeset in field 5 belongs to the local facility (Generic 2).

   When setting up a mapping for outgoing messages (field 2 equals 1), the codeset in field 3 belongs to the local facility (Generic 2) and the codeset in field 5 belongs to the remote facility.

2. Use the following mappings for codesets between System 85 R2V4 (codeset 7) and Generic 2 (codeset 6):

Field 1	Field 2	Field 3	Field 4	Field 5	Field 6
1	0	7	1	6	64
1	0	7	2	6	62
1	0	7	4	6	26
1	0	7	8	6	8
1	0	7	40	6	40
2	1	6	64	7	1
2	1	6	62	7	2
2	1	6	26	7	4
2	1	6	8	7	8
2	1	6	40	7	40

Special Error Codes

80 - Field 4 cannot be entered without first entering a codeset value.

81 - A codeset/codepoint must be mapped to another codeset/codepoint or to nothing. If a codeset/codepoint is mapped to nothing, it will never be sent out in a message and will be deleted from any incoming ISDN message.

82 - The maximum number of mappings for this map number has already been administered.

83 - This map number does not have enough room to map an entire codeset. You must have 128 mappings available. See field 7.

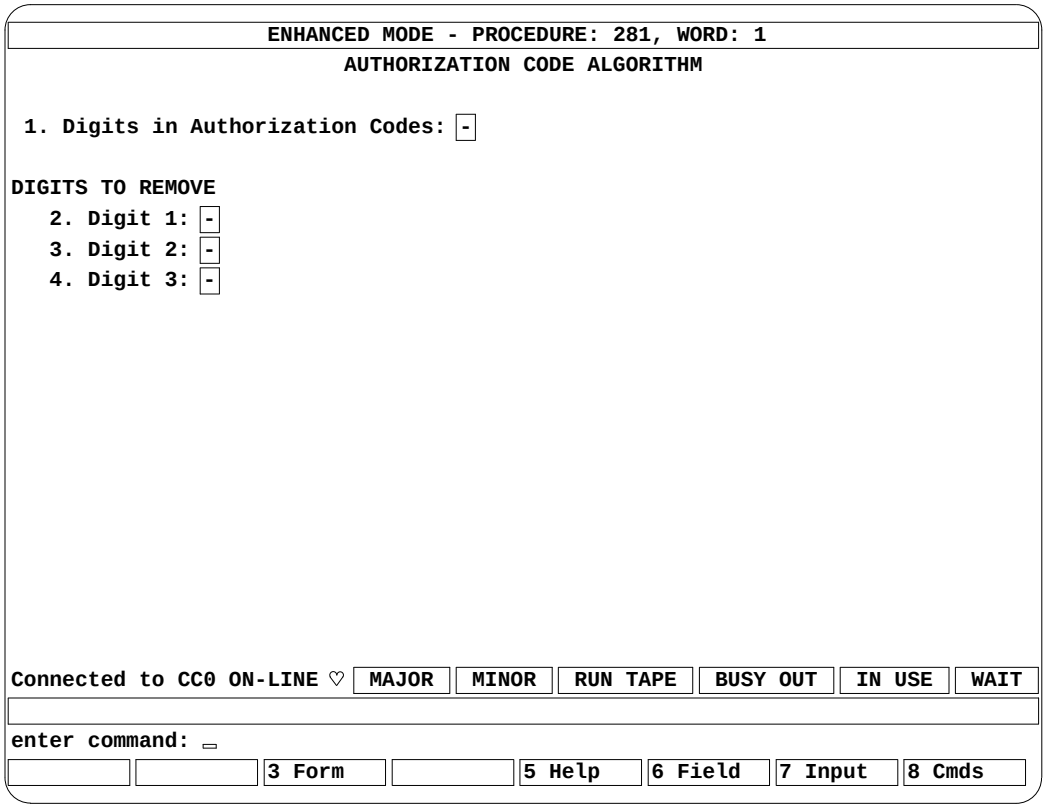
84 - Remove this map number from Procedure 262 Word 3 before removing the last entry of this mapping.

PROCEDURE 281 WORD 1 — AUTHORIZATION CODE ALGORITHM

Purpose

Use Procedure 281 Word 1 to administer the parameters used to store Authorization Codes.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-4 (only when there are no authorization codes administered in the system).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Digits in Authorization Codes 4-7

DIGITS TO REMOVE (Fields 2-4)

2. Digit 1 -, 1-7
3. Digit 2 -, 1-7
4. Digit 3 -, 1-7

Notes

1. If authorization codes are not randomly selected, set fields 2-4 to the digit positions which change least often (the digit positions are numbered left to right 7 through 1).

   Example: If all authorization codes are of the form XXXX524, where X is a number 0-9, then the data entered in this procedure should be 7, 3, 2, 1. If six digit authorization codes are used, and they are of the form 34XXXX, then the data entered in this procedure should be 6, 6, 5, -. If authorization codes are chosen randomly, fields 2-4 should not be changed.

   By identifying the digits that do not change, you can save space on storing the authorization codes.

2. The following chart shows the legal values for fields 2-4 based on the number of digits (field 1).

FIELDS			
1	**2**	**3**	**4**
4	-	-	-
5	1-5	-	-
6	1-6	1-6	-
7	1-7	1-7	1-7

Special Error Codes

81 - A Change routine is allowed only when no authorization codes are administered.

82 - Each digit to be removed (fields 2-4) must be a different number.

PROCEDURE 282 WORD 1 — AUTHORIZATION CODE PARAMETERS

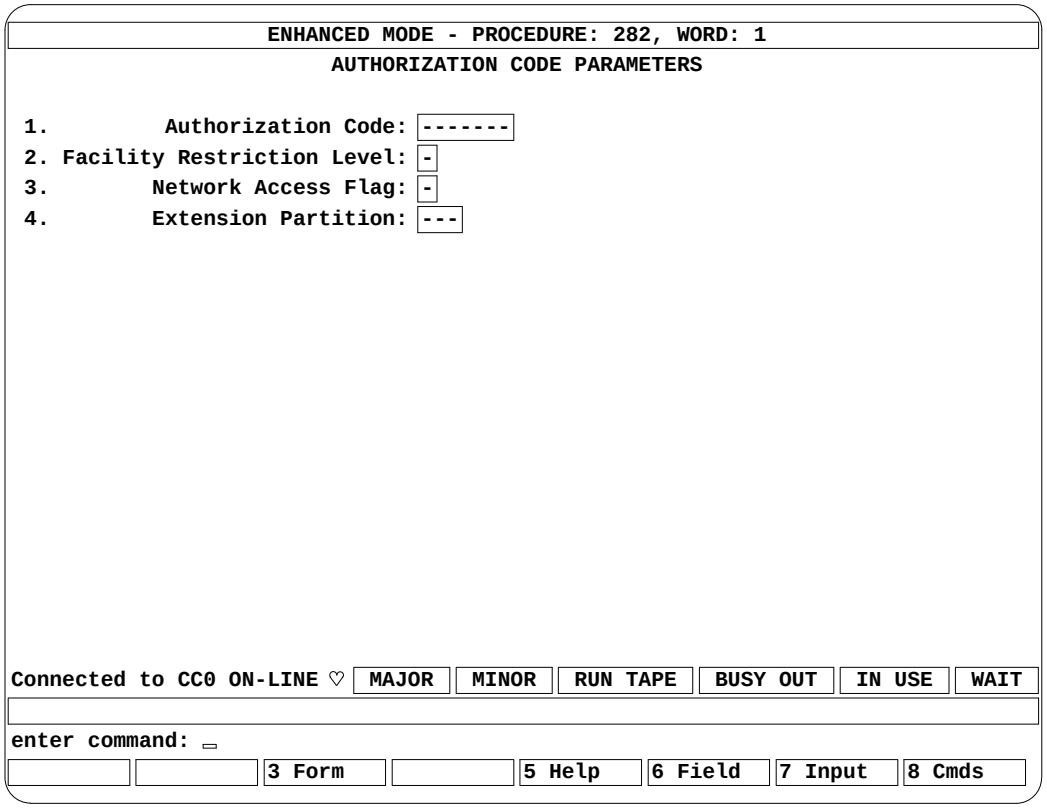
Purpose

Use Procedure 282 Word 1 to administer the facility restriction level (FRL), network access flag, and extension partition associated with a single authorization code.

Cautions

Any errors made in administering the authorization codes may result in unwanted access to or restriction from system features.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-4.
Change:	Fields 2-4.
Remove:	Fields 1-4.
Next Data:	Shows authorization codes in random order.

Field Ranges and Encodes

1. Authorization Code — 0000-9999999

   A maximum of 90,000 authorization codes can be administered.

   A valid authorization code cannot begin with the number 1.

2. Facility Restriction Level — 0-7 (0 being most restrictive, 7 being least restrictive)

3. Network Access Flag — 0 On-net access to off-net users not allowed
   1 On-net access to off-net users allowed

   Use the network access flag only for calls involving an incoming trunk.

4. Extension Partition — 0-999

Special Error Codes

81 - Enter a valid authorization code.

82 - This authorization code is already in the system. Use the change routine to change the FRL, network access flag, or extension partition.

83 - The maximum of 90,000 authorization codes has been reached. No more can be administered.

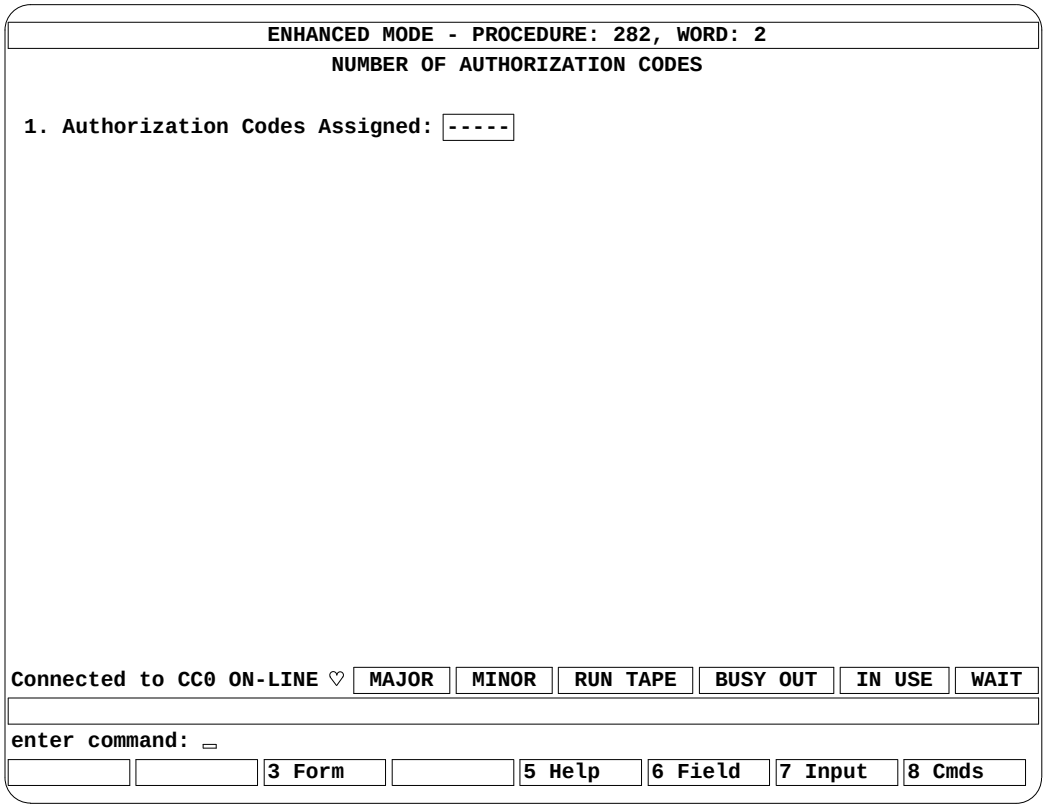
84 - The first digit of an authorization code cannot be 1.

PROCEDURE 282 WORD 2 — NUMBER OF AUTHORIZATION CODES

Purpose

Use Procedure 282 Word 2 to display the number of Authorization Codes in the system.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Authorization Codes Assigned 00000-90000

Special Error Codes

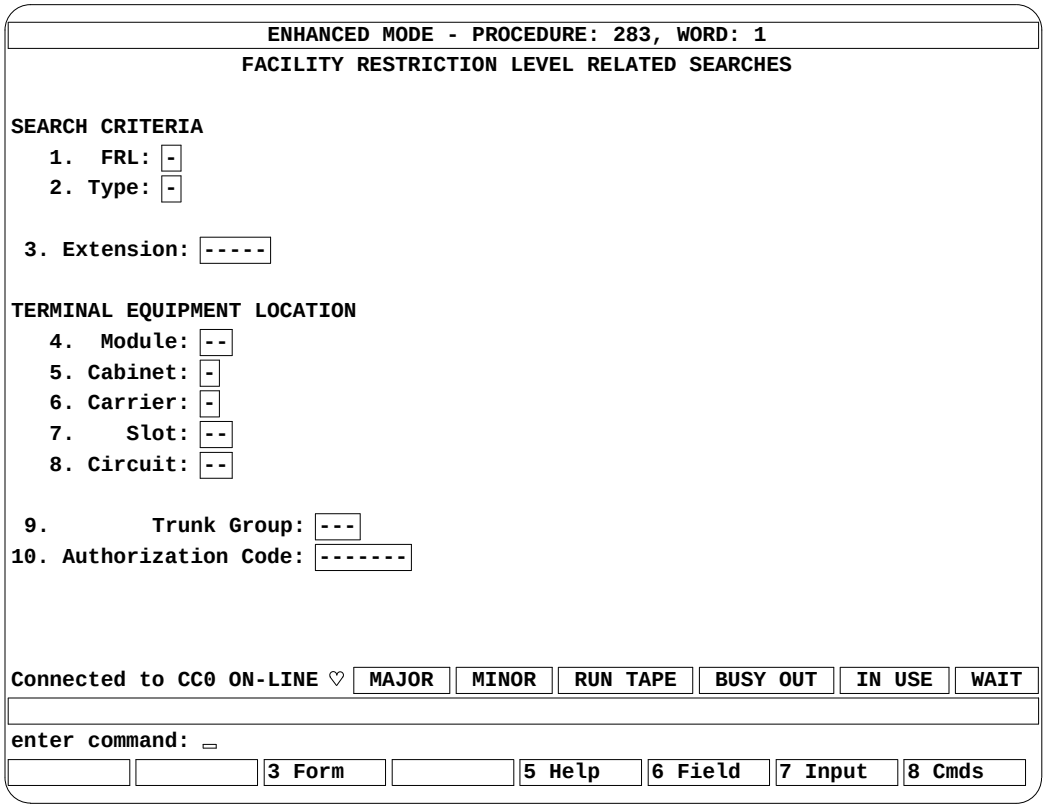
None.

PROCEDURE 283 WORD 1 — FACILITY RESTRICTION LEVEL RELATED SEARCHES

Purpose

Use Procedure 283 Word 1 to display all extensions, trunk groups, or Authorization Codes assigned a specific facility restriction level (FRL).

Screen Display



Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays the next extension, trunk group, or authorization code assigned to the specified FRL.

Field Ranges and Encodes

SEARCH CRITERIA (Fields 1-2)

1. FRL	0-7 (0 being most restrictive, 7 being least restrictive)	
2. Type	1	Search for extension
	2	Search for trunk group
	3	Search for authorization code
3. Extension	-, 000-99999	

TERMINAL EQUIPMENT LOCATION (Fields 4-8)

4. Module	0-30
5. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
6. Carrier	0-3 for traditional modules, c-e for universal and XE modules
7. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE
8. Circuit	0-23
9. Trunk Group	-, 18-999
10. Authorization Code	-, 0000-9999999

Notes

1. Search type encodes 1, 2, and 3 (field 2) correspond to fields 3-10 as follows:
   a. Searching on encode 1 will display extensions in field 3 and equipment locations for those extensions in fields 4-8.
   b. Searching on encode 2 will display trunk groups in field 9.
   c. Searching on encode 3 will display authorization codes in field 10.
2. Test lines are displayed last in the extension search. The test line equipment location is displayed but the extension field contains dashes.
3. For multiappearance terminals, the extension is displayed but the equipment location fields contain dashes.
4. The search for extensions start with the lowest numbered extension. The search for trunk groups start with the lowest numbered trunk group. Authorization codes are displayed in random order.

Special Error Codes

None.

PROCEDURE 284 WORD 1 — SYSTEM CLOCK

Purpose

Use Procedure 284 Word 1 to administer the hour, minute, month, day, and year of the system clock. The system clock is used for time-of-day plan switching, traffic studies, Call Detail Recording (CDR), and Force Administration Data System (FADS). Procedure 284 Word 1 displays the day of the week and the presence or absence of the translation for the system hardware clock synchronizer circuit (TN463).

Cautions

Resetting or changing the clock may cause data errors in traffic studies, Call Management System (CMS), and time-of-day plan.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 284, WORD: 1
                              SYSTEM CLOCK

 1.   Hour: --
 2. Minute: --
 3.  Month: --
 4.    Day: --
 5.   Year: ----

DISPLAY ONLY
   6.    Day of Week: -
   7. Hardware Clock: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-5.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Hour	0	Midnight
	12	Noon
	The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.	
2. Minute	0-59	
3. Month	1-12	
4. Day	1-31	
5. Year	1978-2099	

DISPLAY ONLY (Fields 6-7)

6. Day of Week	1	Monday
	2	Tuesday
	3	Wednesday
	4	Thursday
	5	Friday
	6	Saturday
	7	Sunday
7. Hardware Clock	0	Not installed
	1	Installed

Notes

1. Upon execution of the change routine, the clock is set to the values displayed.
2. The time displayed does not automatically change with the passage of time.
3. Changing the system clock may cause data errors in current traffic studies and CMS.

Special Error Codes

None.

PROCEDURE 285 WORD 1 — SYSTEM COS - NETWORK

Purpose

Use Procedure 285 Word 1 to administer the system class of service (COS) features and capabilities for the network. The following translation items are affected:

— Remote access code required

— Number of digits in the location code (part of the network uniform numbering plan)

— Number of extension digits (part of the network uniform numbering plan)

— Automatic Circuit Assurance (ACA) enable

— Symmetrical routing depth

— WCR Route Selection Method

— Designated extension for trunk verification by terminal (TVT)

— Remote maintenance extension for TVT

— Authorization code enabled for WCR (World Class Routing).

Prerequisite Procedures

Use Procedure 276 Word 1 to activate the standard network feature group before using Extension Number Portability.

Place the TVT access code in the dialing plan using Procedure 350 Words 1 and2 before using this procedure. Also associate the designated extension number and the remote maintenance terminal number with a terminal extension number using Procedure 000 Word 1.

Use Procedure 115 Word 1 to remove remote access trunk group termination before changing from speaker verification.

Related Procedures

Use Procedure 286 Word 1 to administer other network system COS features. Field 4 of this procedure and field 1 of Procedure 286 Word 1 must display ‘‘1’’ for the ACA feature to be active.

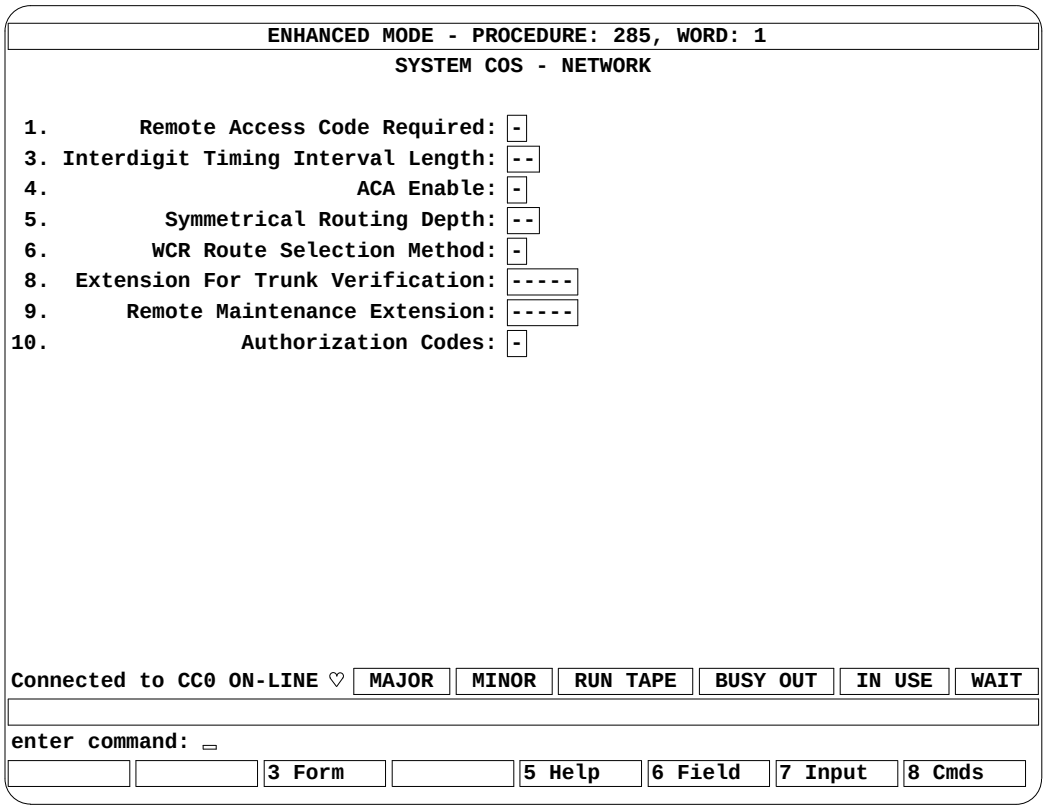
Use Procedure 318 Words 1-5 to administer WCR features.

Cautions

Changes made in this procedure affect the total network.

Setting field 6 to 1 could adversely affect processor occupancy in high volume situations.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-12.
Remove:	Not allowed. To remove extensions in fields 8 and 9, do a "clear entry" and use the change routine.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Remote Access Code Required

0	No barrier code required
1	Barrier code required
2	Authorization code required
3	Speaker verification required

3. Interdigit Timing Interval Length

2-20

This field specifies the duration of the interdigit timing interval that WCR digit analysis uses to distinguish between strings

(assigned in Procedure 314, Word 1) that have the same string identifier (SI) but have different lengths.

For instance, suppose that the digits ‘‘713’’ are both an area code and an office code. Then ‘‘713’’ could be assigned as the string identifier for both a 7-digit and a 10-digit string.

In this situation, WCR digit analysis collects the first seven digits using the normal 10-second interdigit timing interval. After the 7th digit has been collected, digit analysis uses the interdigit timing interval specified in this field. If the switch receives the 8th digit before this interval elapses, digit analysis infers that a 10-digit string is being dialed and collects the remaining digits using the normal interval. Conversely, if the interval elapses without a digit being dialed, the switch assumes a 7-digit string and continues routing the call.

Assigning an interval of 4 to 6 seconds reduces caller-perceived differences in call-setup times in situations like the previous example.

When this field is dashed, standard interdigit timing is used. Only even-numbered time intervals (2, 4, 6, ...) up to 20 seconds are allowed in this field.

4. ACA Enable
   - 0 Disabled for all trunk groups
   - 1 Enabled for all valid trunk groups

   Both this field and field 1 of Procedure 286 Word 1 must have ones for the ACA feature to be enabled.

5. Symmetrical Routing Depth
   - 0 Hierarchical routing
   - 1-16 Symmetrical Routing Pattern depth

   This field applies to incoming calls over trunks where symmetrical routing is set (Procedure 103 Word 1 field 4), and the WCR feature is selecting an outgoing preference on a tandem call.

   If this field is set to 0, the switch will check every preference.

   If this field is set to 1-16, the switch compares the preference being used to the value assigned in this field. If the preference is *less than or equal to* the value in this field, the switch will check the next preference in the pattern. If the preference is *greater than* the value in this field, the switch will continue processing the call as if all preferences were checked.

6. WCR Route Selection Method
   - 0 Select after dialing the number
   - 1 Select when VNI has been determined.

   This field affects how Network Digit Collection operates and when route selection is attempted. This field applies to station and attendant callers that access World Class Routing.

Network Digit Collection options for a trunk group are administered on a trunk group basis in Procedure 103 Word 1 field 13.

The two options for this field are illustrated with a simple example.

Suppose a network's dialing plan has been administered in Procedure 314 Word 1. The plan consists entirely of *seven-digit address strings* that are differentiated by their first three digits (i.e. they all have three-digit string identifiers).

When this field is 0 and a call originated by a station caller or attendant enters Network Digit Analysis, the switch attempts to collect seven digits. Once these digits have been collected, they are applied to the network's dialing plan, a Virtual Nodepoint Identifier (VNI) is determined, and route selection commences.

When this field is 1 and a call originated by a station caller or attendant enters Network Digit Analysis, the switch attempts to collect three digits. Since all strings can be identified (and a VNI determined) by the first three digits, a route may be selected after analysis of the third digit. **Setting this field to 1 could adversely affect processor occupancy in high volume situations**.

Whether or not overlapped sending will occur for the remaining four digits of the seven digit number depends on the option provisioned in Field 14 of Procedure 103 Word 1 for the trunk group referenced by the selected route.

8. Extension For Trunk Verification

-, 000-99999

Extensions in this field can access trunks even if they have dial access restriction in Procedure 100 Word 1.

9. Remote Maintenance Extension

-, 000-99999

10. Authorization Codes

0 Disabled
1 Enabled

When a 2 is entered in field 1 (remote access code required), this field must be enabled (1).

Notes

1. The extensions in fields 8 and 9 must be assigned in Procedure 000 Word 1 before entering them here.
2. When the COS translation is displayed, dashes appear in the fields associated with features that are not active on this system. In doing a change routine, only dashes are permitted in these fields.
3. Valid encodes for the account code prefix and reserved digit (fields 6 and 7), other than zero, cannot be the same. Zeros are permitted in the change sequence in fields 6 and 7 to indicate that there are no charge-code prefix and no reserved digit.

Special Error Codes

82 - Remove remote access trunk group termination in Procedure 115 Word 1 before changing from speaker verification.

83 - Field 3 must be an even number.

PROCEDURE 286 WORD 1 — CUSTOMER CHANGE SYSTEM COS - NETWORK

Purpose

Use Procedure 286 Word 1 to administer the following system class of service (COS) features for the network:

— Automatic Circuit Assurance (ACA)

— Alternate Facilities Restriction Level (FRL)

— World Class Routing (WCR) routing plan

— Ineffective attempts recorded by Call Detail Recording (CDR)

— Remote access to attendant.

Prerequisite Procedures

Features associated with the fields of this procedure must be included in the customer's system before the fields can be used.

Related Procedures

Use Procedure 285 Word 1 for other network system COS items.

Both field 1 of this procedure and field 4 of Procedure 285 Word 1 must have ones for the ACA feature to be active.

Cautions

Translation changes made using this procedure affect the entire network. Errors could seriously hamper network trunking.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 286, WORD: 1
                       CUSTOMER CHANGE SYSTEM COS - NETWORK

AUTOMATIC CIRCUIT ASSURANCE (ACA)
   1. Status: -
  ACA REFERRAL
     2.    Destination: -
     3. Console Number: --
ALTERNATE FACILITY RESTRICTION LEVEL (FRL)
   4. Status: -
   5.  FRL 0: -                          9.  FRL 4: -
   6.  FRL 1: -                         10.  FRL 5: -
   7.  FRL 2: -                         11.  FRL 6: -
   8.  FRL 3: -                         12.  FRL 7: -
PLAN
  13.    In Effect: -
  14. Control Mode: -

15.       Ineffective Attempts: -
16. Remote Access to Attendant: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-16. If the feature is not loaded, the associated field cannot be changed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

AUTOMATIC CIRCUIT ASSURANCE (ACA) (Fields 1-3)

1. Status
   - 0 Not active on any trunk group
   - 1 Active on all appropriate trunk groups

   Both this field and field 4 of Procedure 285 Word 1 must have ones for the ACA feature to be active.

ACA REFERRAL (Fields 2-3)

The following table shows the type of referral for attendant and consoles numbers based on the data in fields 2 and 3:

Type of referral	Field 2	Field 3
None	0	dash
Local attendant	1	1-40
CAS attendant	1	0
Remote	2	dash

2. Destination
   - 0 Failures are not referred to attendant
   - 1 Failures are referred to a local or CAS attendant
   - 2 Failures are referred to a remote system (e.g., CSM)

3. Console Number
   - \- No attendant console, or referred to a remote system
   - 0 Referrals are directed to CAS main switch
   - 1-40 Referrals are directed to a local switch attendant

   Only consoles assigned to attendant partition 0 can receive ACA referrals. See Procedure 210 Word 2.

ALTERNATE FACILITY RESTRICTION LEVEL (FRL) (Fields 4-12)

4. Status
   - 0 Disabled
   - 1 Enabled

   Changes to the status are indicated by the state of the alternate FRL key indicators on all consoles.

5. FRL 0 — 0-7 (0 being least restrictive, 7 being most restrictive)
6. FRL 1 — 0-7 (0 being least restrictive, 7 being most restrictive)
7. FRL 2 — 0-7 (0 being least restrictive, 7 being most restrictive)
8. FRL 3 — 0-7 (0 being least restrictive, 7 being most restrictive)
9. FRL 4 — 0-7 (0 being least restrictive, 7 being most restrictive)
10. FRL 5 — 0-7 (0 being least restrictive, 7 being most restrictive)
11. FRL 6 — 0-7 (0 being least restrictive, 7 being most restrictive)
12. FRL 7 — 0-7 (0 being least restrictive, 7 being most restrictive)

PLAN (Fields 13-14)

Do not change the plan in effect (field 13) if the plan is under automatic clock control (field 14 = 0) or when changing to automatic clock control.

Changes to fields 13 and 14 produce corresponding changes to the CDR/SMDR record. In addition, the code in field 14 effects the state of the route plan key indicators on all consoles. There may be some delay before the indicators change state.

If field 13 is 0, the switch clock is not valid and it is impossible to determine which plan is in use. Go to Procedure 284 and set the clock.

13. In Effect	1-7	
14. Control Mode	0	Automatic control of plan in effect
	1	Manual or clocked manual override
15. Ineffective Attempts	0	Not recorded by CDR/SMDR
	1	Recorded by CDR/SMDR
16. Remote Access to Attendant	0	Intercept after timeout
	1	Local attendant after timeout
	2	CAS attendant after timeout

Special Error Codes

81 - Do not change the plan in effect (field 13) if the plan is under automatic clock control (field 14 = 0) or when changing to automatic clock control.

82 - Local switch is CAS main or CAS is not active.

83 - Only consoles that are in attendant partition 0 can be assigned here.

PROCEDURE 287 WORD 1 — TIME OF DAY PLAN - CLOCKED MANUAL OVERRIDE

Purpose

Use Procedure 287 Word 1 to administer a clocked manual override or to return to the automatic Control Mode (WCR plan switching schedule). An override schedule can suspend the automatic WCR plan switching schedule. The override lasts for only seven days and is typically used to take advantage of price reduced lines (typically holiday rates) accessible by WCR.

Prerequisite Procedures

Reset the system real-time clock after the last system initialization by using either the hardware real-time clock (automatic) or by using Procedure 284 Word 1.

Related Procedures

Use Procedure 286 Word 1 to immediately override or return to automatic control.

Cautions

Upon completing an add, change, or remove routine with this procedure, a run tape should be done to prevent loss of information in the event of a system initialization.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 287, WORD: 1
                  TIME OF DAY PLAN - CLOCKED MANUAL OVERRIDE

CLOCKED MANUAL OVERRIDE
   1.         Day: -
   2.       Hours: --
   3.     Minutes: --
   4. Plan Number: -

RETURN TO AUTOMATIC
   5.     Day: -
   6.   Hours: --
   7. Minutes: --

DISPLAY ONLY
   8. Plan In Effect: -
   9.   Control Mode: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-4 and fields 5-7.
Change:	Fields 1-4 and fields 5-7.
Remove:	Fields 1-7.
Next Data:	Not allowed.

Field Ranges and Encodes

CLOCKED MANUAL OVERRIDE (Fields 1-4)

1. Day	1	Monday
	2	Tuesday
	3	Wednesday
	4	Thursday
	5	Friday
	6	Saturday
	7	Sunday

2. Hours — 0-23 (0 = midnight, 12 = noon)

   The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.

3. Minutes — 0, 15, 30, 45

4. Plan Number — 1-7

RETURN TO AUTOMATIC (Fields 5-7)

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

6. Hours — 0-23 (0 = midnight, 12 = noon)

   The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.

7. Minutes — 0, 15, 30, 45

DISPLAY ONLY (Fields 8-9)

8. Plan In Effect — 1-7

9. Control Mode
   - 0 Automatic (system clock controlled)
   - 1 Manual override (attendant controlled)
   - 2 Clocked manual override (system clock controlled)

Notes

1. Fields 8 and 9 are not updated automatically when a clocked switch occurs.
2. The remove routine removes both entries from translations. Use the change routine to remove a single entry.
3. Clocked manual override times remain set for seven days only. Override time must be reentered after each seven-day period.
4. Same day times entered must be greater than current time.

Special Error Codes

81 - The add routine cannot be used to change existing settings.

82 - The change routine cannot be used to add a new setting.

83 - The real-time clock needs to be reset (see Procedure 284 Word 1).

84 - Clocked manual override and return to automatic times must be different.

85 - Same day times must be greater than the current time.

PROCEDURE 288 WORD 1 — CALL DETAIL RECORDING - FORMAT OPTIONS

Purpose

Use Procedure 288 Word 1 to administer the Call Detail Recording (CDR) record length, the opcode indicator, format, and the SMDR message length.

Prerequisite Procedures

Disable CDR in Procedure 275 Word 1 field 12 before adding or removing data in this word.

Use Procedure 255 Word 2 (if you are using the PCC) to administer the desired format.

Remove data in Procedure 288 Word 2 before administering a standard format in this procedure.

Related Procedures

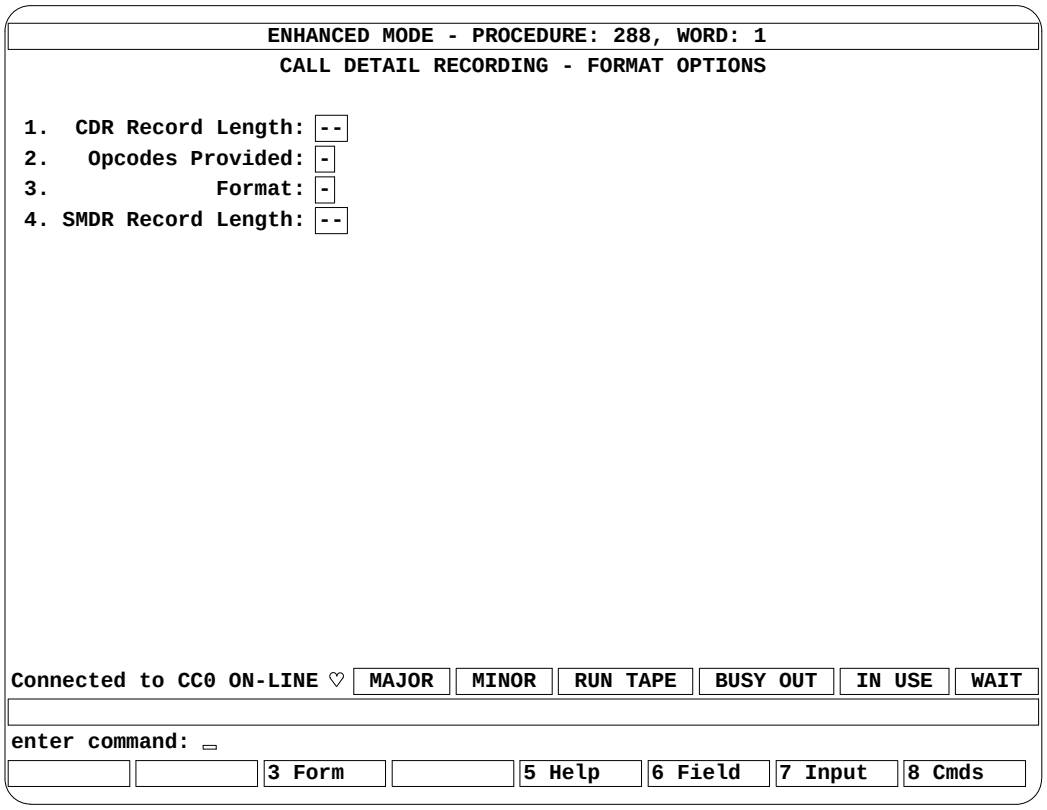
Use Procedure 253 Word 1 to administer data channels for direct output call detail records.

Use Procedure 255 Words 1 and 2 to administer the PCC.

Use Procedure 288 Word 2 to administer the variable format call record.

Use Procedure 101 Word 1 to enable CDR on a trunk-group basis.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-4.
Change:	Not allowed.
Remove:	Fields 1-4. When a standard format is removed in this procedure, all data that can be displayed in Procedure 288 Word 2 is removed. When a custom format is removed, the data in Procedure 288 Word 2 is not removed and can be changed for the new updated format.
Next Data:	Not allowed.

Field Ranges and Encodes

1. CDR Record Length — 15-24 words

   This field specifies the maximum length of a CDR record. The number entered in this field must be greater than or equal to the number entered in field 4.

2. Opcodes Provided
   - 0 Not provided (field 3 = 1)
   - 1 Provided

3.	Format		0 Default (field 1 = 15 or 18) 1 Custom
4.	SMDR Length	Record	15, 18 words This field is used only when setting up SMDR (unit type 5 in Procedure 253 Word 1). For an SMDR printer unit, this field must be a 15. If the record length is set to 18 for an SMDR printer unit, the first part of the record is overwritten by the last three words of the record. Consequently the time, condition code and FRL used are destroyed. Enter a 15 or 18 for an SMDR 9-track tape unit.

Special Error Codes

81 - To add or remove data in this word, disable CDR/SMDR in Procedure 275 Word 1 field 12.

82 - Standard format can only be used with 15-or 18-word record lengths and opcodes must be provided (field 2 = 1).

83 - Remove data in Word 2 before adding a standard format in this procedure.

84 - The SMDR record length cannot be greater than the CDR record length.

85 - An 18-word CDR record with opcodes must be administered when ‘‘direct output - 18-word format’’ is administered in Procedure 255 Word 2.

PROCEDURE 288 WORD 2 — CALL DETAIL RECORDING - VARIABLE FORMAT RECORD

Purpose

Use Procedure 288 Word 1 to administer Call Detail Recording (CDR) records by administering the data item's starting position (cell number) and length (in cells).

Prerequisite Procedures

Use Procedure 275 Word 1 field 12 to disable CDR before administering data in this procedure.

Use Procedure 288 Word 1 to set the CDR record length.

Related Procedures

If assigning a recommended format in Procedure 288 Word 1, use this word only to display the recommended standard format encode data. In other words, the format is an AT&T standard format and changes cannot be made to that format.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 288, WORD: 2
                CALL DETAIL RECORDING - VARIABLE FORMAT RECORD

 1.     Data Item Encode: [---]
 2. Starting Cell Number: [---]
 3.          Item Length: [--]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1. When a standard format is specified in Procedure 288 Word 1 field 3, this procedure can be used only to display the standard format encode data.
Add:	Fields 1-3 (not allowed for standard format encode data).
Change:	Not allowed.
Remove:	Fields 1-3 (not allowed for standard format encode data).
Next Data:	Displays all assigned data items.

Field Ranges and Encodes

1. Data Item Encode	0	Not used
	1	Call duration-hours
	2	Call duration-minutes
	3	Call duration-tenths of a minute
	4	Condition code
	5	Trunk access code dialed
	6	Trunk access code used
	7	Dialed number (Routed number for WCR)

8 Calling number
9 Account code
10 Authorization code
11 Time in queue
12 Facility restriction level used
13 Calling number, ten-thousands digit
14 Incoming circuit ID
15 Feature flags
16 Outgoing circuit ID
17 Outgoing circuit ID (hundreds digit)
18 Incoming circuit ID (hundreds digit)
19 Interexchange carrier code/ISDN network identifier
20 Time of day-hours
21 Time of day-minutes
22 Date-month
23 Date-day
24 Date-year
25 Incoming trunk dial access code
26 Precedence level digit
27 Attendant console number
28 ISDN network service value
29 Extension partition number
30 Node number
31 ISDN bearer capability
32 QDN/VDN
33 Agent login
34 ISDN cause value
35 User-to-User Information (UUI) counter
37 WCR Sent Number
38 Pattern Used
39 Preference Used
50 Time of day control mode
51 Time of day plan set
52 1st dial access code
53 2nd dial access code
54 3rd dial access code
55 4th dial access code
56 5th dial access code
57 6th dial access code
58 7th dial access code
59 8th dial access code
60 9th dial access code
61 10th dial access code
62 11th dial access code
63 12th dial access code
64 13th dial access code
65 14th dial access code
66 15th dial access code
67 16th dial access code

68 17th dial access code
69 18th dial access code
70 19th dial access code
71 20th dial access code
72 21st dial access code
73 22nd dial access code
74 23rd dial access code
75 24th dial access code

Data items 1-12, 25, and 50-59 are used for the standard 15 and 18 word formats.

Data items 13-19 are used for the standard 18 word format.

Data items 8, 9, 25, and 50 are left-justified in the record.

2.	Starting Number	Cell	1-96
3.	Item Length		1-31 (in cells)

Notes

1. The following table contains the cell numbers used in field 2 to identify the starting cell number for each data item. Use this chart to plan your call detail record format.

WORD	BIT 15 | 14 | 13 | 12	11 | 10 | 9 | 8	7 | 6 | 5 | 4	3 | 2 | 1 | 0
1	01	02	03	04
2	05	06	07	08
3	09	10	11	12
4	13	14	15	16
5	17	18	19	20
6	21	22	23	24
7	25	26	27	28
8	29	30	31	32
9	33	34	35	36
10	37	38	39	40
11	41	42	43	44
12	45	46	47	48
13	49	50	51	52
14	53	54	55	56
15	57	58	59	60
16	61	62	63	64
17	65	66	67	68
18	69	70	71	72
19	73	74	75	76
20	77	78	79	80
21	81	82	83	84
22	85	86	87	88
23	89	90	91	92
24	93	94	95	96

Special Error Codes

81 - Disable CDR using Procedure 275 Word 1 field 12 before using this procedure.

82 - The record length must be assigned in Procedure 288 Word 1 first.

83 - The number of cells (field 3) exceeds the number of cells available.

84 - Cell positions are already assigned for this encode.

85 - When opcodes are provided (Procedure 288 Word 1 field 2 = 1), cells 1, 5, 9 (etc. in increments of 4 to 93) cannot be used for starting positions for data items and are not counted for item length (field 3).

86 - Encodes 52-75 for status message dial access codes must be entered in consecutive order and removed in reverse order.

87 - When standard format is specified in Procedure 288 Word 1 field 3, this procedure can be used only to display the standard format encode data. Add and remove are not allowed for standard format encode data.

PROCEDURE 289 WORD 1 — PROGRAMMABLE INTERCEPT TREATMENT

Purpose

Use Procedure 289 Word 1 to administer the programmable intercept treatment. This procedure allows you to give different types of intercept treatment based on where the call came from and where the call was attempting to terminate.

Prerequisite Procedures

Use Procedure 150 Word 1 to administer the recorded announcement number before using this procedure to administer calls diverted to the attendant (field 2 = 2) for recorded announcement capability (as when the attendant is in Unattended Console Service).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 289, WORD: 1
                        PROGRAMMABLE INTERCEPT TREATMENT

INTERCEPT
   1. Call Type: --
   2. Treatment: -

 3. Recorded Announcement Number: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-3.
Change:	Fields 1-3.
Remove:	Field 2 is 0, field 3 is dashed.
Next Data:	Not allowed.

Field Ranges and Encodes

INTERCEPT (Fields 1-2)

1. Call Type

0	Attendant diversion to recorded announcement
1	Public network to a vacant DAC
2	Public network to restricted features or trunks
3	Public network to recently disconnected extensions
9	Private network to a vacant DAC
10	Private network to restricted features or trunks
11	Private network to recently disconnected extensions
17	Extension to a vacant DAC
18	Extension to restricted features or trunks
19	Extension to recently disconnected extensions

2. Treatment

0	Appropriate tone (intercept or reorder-based on source)
1	Recorded announcement
2	Diversion to attendant
3	Recorded announcement followed by diversion to attendant

This field must have a 1 when field 1 is 0.

3. Recorded Announcement Number

1-15

If field 2 is 1 or 3, this field must be administered (not dashed). If field 2 is 2, the code in field 3 (if any) represents the intercept treatment for attendant calls during Unattended Console Service.

Notes

1. The following table contains the encode (0-3, 9-11, 17-19) in field 1 in order to generate the various intercept cause for the given source.

	SOURCE		
INTERCEPT CAUSE	**Public**	**Private**	**Terminal**
Calls to vacant dial access codes	1	9	17
Calls to restricted features or trunks	2	10	18
Calls to recently disconnected extensions	3	11	19
Attendant diversion to recorded announcement	0	0	0

Special Error Codes

81 - If field 2 is 1 or 3, field 3 must be entered. If field 2 is 2, field 3 must be blank. The recorded announcement number must already be administered in Procedure 150 Word 1.

82 - Recorded announcement number not unique for intercept type 0 in field 1.

PROCEDURE 290 WORD 1 — DISPLAY CIRCUIT STATUS OF ASSIGNED PORT BOARDS

Purpose

Use Procedure 290 Word 1 to search for all assigned port boards and to display the status of each circuit on the board. Also use Procedure 290 Word 1 to search for partially equipped circuit board and unassigned circuits.

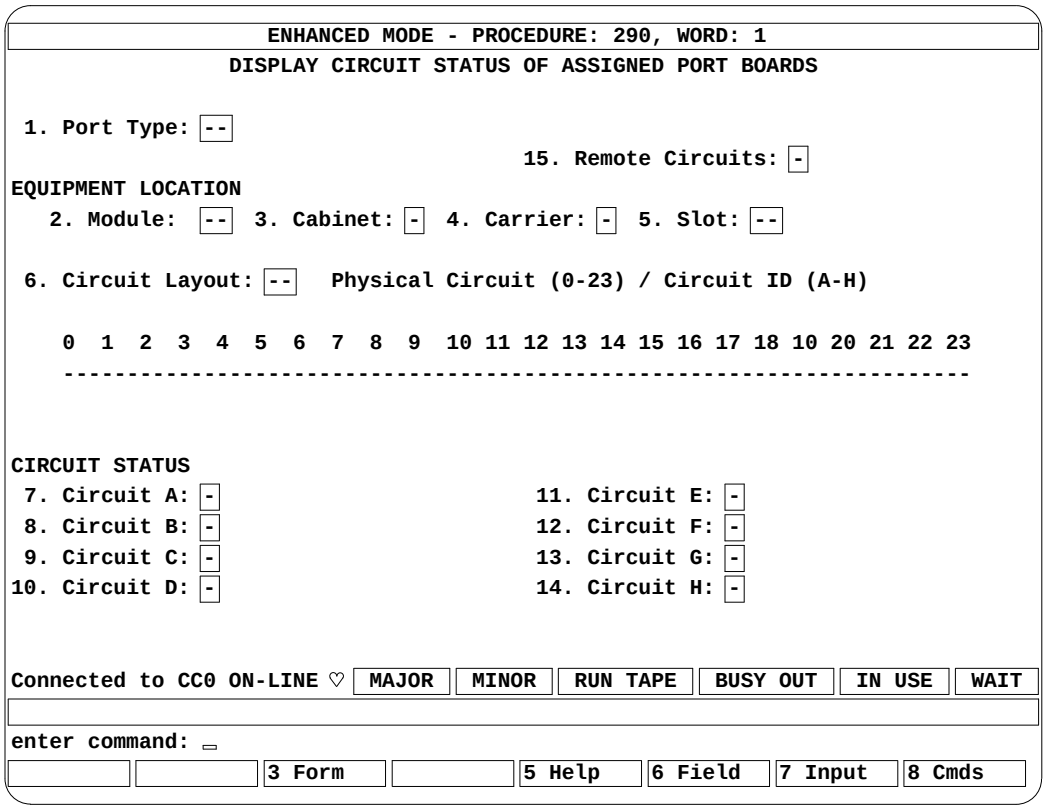
Prerequisite Procedures

When port type 5 is displayed, use Procedure 290 Word 2 to determine the port board in use.

Related Procedures

After displaying a port board that has unassigned circuits, you can go directly to either Procedure 000 Word 1 or 051 Word 1, do a display routine, and the first unassigned circuit on that board will be displayed in the equipment location fields.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 1 and 2, field 2, or fields 2-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays assigned port boards based on port type, module number, or complete equipment location. If a port type is input, all equipment administered as that port type can be displayed. If a module number is input, all the port boards on that module can be displayed. If an equipment location is input, all the circuits associated with that equipment location can be displayed.

Field Ranges and Encodes

1. Port Type	1	On-premises/analog line
	2	Off-premises/analog line
	3	Analog CO trunk
	4	Analog DID trunk
	5	Analog tie trunk/attendant interface
	6	Analog auxiliary trunk
	7	72-series terminal (MFET)/MET line
	8	GPP used as a line/digital line
	9	ANI signal distribution
	10	Call progress tone/clock
	11	TT receiver/tone detector
	12	TT sender/tone detector
	13	Auxiliary tone plant/clock
	14	Attendant conference
	15	Facility test circuit
	16	Data port/analog line
	17	Contact interface/analog line
	18	Tone detector
	19	73-series terminal (MFAT)/hybrid line
	20	ADFTC/MTCP
	21	DS1 real
	22	DS1 virtual
	23	EIA trunk and line/DLC
	24	GPP used as a data trunk/digital line
	25	ISDN real
	26	ISDN virtual
	27	ISDN BRI interface

EQUIPMENT LOCATION (Fields 2-5)

2. Module	0-30
3. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
4. Carrier	0-3 for traditional modules, c-e for universal and XE modules
5. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE
6. Circuit Layout	-,0-32

CIRCUIT STATUS (Fields 7-14)

-	does not exist
0	not assigned
1	assigned
2	DS1 OPS line
3	DS1 CO/FX/WATS/RA trunk
4	DS1 DID trunk
5	DS1 TIE trunk
6	Modem pool digital
7	Modem pool analog
8	ISDN trunk

7. Circuit A	-, 0-8	
8. Circuit B	-, 0-8	
9. Circuit C	-, 0-8	
10. Circuit D	-, 0-8	
11. Circuit E	-, 0-8	
12. Circuit F	-, 0-8	
13. Circuit G	-, 0-8	
14. Circuit H	-, 0-8	
15. Remote Circuits	-	No
	1	Yes

Notes

1. This procedure displays circuits in groups of eight unless there are fewer than eight circuits on the board. If there are fewer than eight, then all the circuits on that board are displayed at the same time. If sixteen circuits exist on a given board, this procedure initially displays the first eight, and a next data is required to display the remaining eight. Another next data routine is required to display the remaining eight circuits on a 24-circuit pack.

   If no more physical circuits exist on the board, the next data routine will either display the next equipment location or port type, depending on the initial field input.

   Field 6 is the circuit layout field which horizontally displays a range of physical circuit numbers (0-23). One of three types of information is displayed below the physical circuit numbers.

   — **Circuit IDs**

   Circuit IDs (A-H) correspond to physical circuits currently being displayed in fields 7-14.

   — ‘‘**x**’’

   An ‘‘x’’ corresponds to a physical circuit that exists on the board, but is not currently being displayed in fields 7-14.

   — ‘‘**- (dash)**’’

   A ‘‘-’’means the physical circuit number does not exist on the circuit board.

   The following are two examples of how circuit boards are displayed in this procedure.

   — If a 4 port circuit board is displayed in this procedure, the four circuits’ status is displayed in fields 7-10, with dashes (circuit does not exist) displayed in fields 11-15. The circuit layout field (field 6) shows four physical circuit positions with letters (A-D).

   — If a 16 port circuit board is displayed in this procedure, the initial display routine displays the status of physical circuits 0-7 in fields 7-14. While circuits 0-7 are being displayed, circuits 8-15 are displayed as ‘‘**x x x x x x x x**’’ in field 6 (circuit layout). These x’s indicate that the status of physical circuits 8-15 is not being displayed at this time. Another next data routine reveals the circuit status of physical circuits 8-15 and ‘‘**x x x x x x x x**’’ replace the letters under physical circuits 0-7.

2. Port boards without port circuits administered are not displayed in the search.

3. This table specifies the remote carrier slot numbers that correspond to the given ANN16 depending on the displayed slot number on the screen. For port type 5 (tie trunk), see Procedure 290 Word 2 for port board types.

		Remoted carrier slot numbers	
DS1 Carrier	**Slot Displayed**	**ANN16 in Slot 5**	**ANN16 in Slot 0**
ANN15 Real 0	0 5 13 18	4	1
Virtual 1	1 6 14 19	7	2
Virtual 2	2 7 15 20	8	3

For remote carrier groups, 24th channel signaling must be specified in Procedure 260 Word 1 field 8.

4. Use the following table to determine board type(s) correspond to particular port types.

	Traditional Module		Universal/XE Module	
Port Type	Code	Ports	Code	Ports
On-premises line analog line	SN229	8	TN746	16
Off-premises line analog line	SN228	8	TN742	8
72-series terminal MET line	SN224	4	TN735	4
Analog CO trunk	SN230	4	TN747	8
Analog auxiliary trunk	SN231	4	TN763	4
Analog DID trunk	SN232	4	TN753	8
Analog tie trunk attendant interface	SN233	4	TN760	4
EIA trunk and line Data line circuit (DLC)	SN238	4	TN726	8
Contact interface analog line	SN241	8	TN742 TN746	8 16
Computer data port analog line	SN243	4	TN742	8
ANI signal distribution	SN244	2	NA	NA
Call-progress tone clock	SN250	8	TN768	NA

TT receiver tone detector	SN251	4	TN748	8
TT sender tone detector	SN252	4	TN748	8
Auxiliary tone plant clock	SN253	1	NA	NA
Attendant conference	SN254	1	NA	NA
Tone detector	SN255	4	TN748	8
ADFTC/MTCP	SN261	4	TN771B	3
GPP line and trunk digital line	SN270	4	TN754	8
ISDN BRI Interface	NA	NA	TN556	12
DS1 interface real and virtual	ANN11 ANN15	24	TN767 NA	24 NA
73-series terminal hybrid line	ANN17	8	TN762	8
ISDN PRI real/virtual DS1 packet adjunct	ANN35	23B +D	TN767 TN555	23B +D

Special Error Codes

81 - The equipment location (fields 2-5) is not in a port carrier.

82 - Board type installed does not match translation.

PROCEDURE 290 WORD 2 — INSTALLED CIRCUIT PACK IDENTIFICATION

Purpose

Use Procedure 290 Word 2 to search for and display all circuit packs installed in module control, port, common control, or TMS carriers. Each circuit pack is identified by reading the ID chip provided on each circuit pack. By reading the ID chip, the type of circuit pack (vintage, vintage update, and series) is identified and displayed on the screen.

Procedure 290 Word 2 cannot be used to change circuit pack identification.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 290, WORD: 2
                      INSTALLED CIRCUIT PACK IDENTIFICATION

EQUIPMENT LOCATION                        17. Remote Board: -
   1.  Module: --
   2. Cabinet: -
   3. Carrier: -
   4.    Slot: --

CIRCUIT PACK
   5.  Prefix: -
   6.  Number: ---
   7.  Suffix: --
   8. Vintage: --
   9.  Series: --
  VINTAGE UPDATES
    10. 1: -                              14. 5: -
    11. 2: -                              15. 6: -
    12. 3: -                              16. 7: -
    13. 4: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-4 or fields 1-4 and 17.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all assignments in a carrier.

Field Ranges and Encodes

EQUIPMENT LOCATION (Fields 1-4)

1. Module — 0-30, 99 for common control and TMS
2. Cabinet — 0-7 for traditional modules, 0 for universal and XE modules
3. Carrier — 0-3 for traditional modules, a-e for universal and XE modules
4. Slot — 0-31

   The actual slot depends on the carrier type. For the common control carrier, the range is 0-31. For the TMS carrier, the range is 0-28. For the RMI carrier, it's 0-21. For the traditional module control carrier, it's 0-3, 6-22, and 25. For the traditional port carrier and the DS1 port carrier, it's 0-3, 5-8, 13-16, and 18-21. For the universal port carrier, it's 0-20. For the universal module control carrier, it's 1-21. For the XE port carrier, it's 1-18.

CIRCUIT PACK (Fields 5-16)

5. Prefix
   - 0 TN type
   - 1 SN type
   - 2 UN type
   - 3 ANN type
6. Number — 0-999
7. Suffix
   - 0 None
   - 1 B
   - 2 C
   - 3 D
   - 4 E
   - 5 F
   - 6 G
   - 7 H
   - 8 I
   - 9 J
   - 10 K
   - 11 L
   - 12 M
   - 13 N
   - 14 O
   - 15 P
8. Vintage — 0-31 for traditional modules, 0-99 for universal and XE modules

9. Series	0-15 for traditional modules, unused for universal and XE modules The series is of interest mainly to service technicians.

VINTAGE UPDATES (Fields 10-16)

0	Not installed
1	Installed

10. 1	0, 1	
11. 2	0, 1	
12. 3	0, 1	
13. 4	0, 1	
14. 5	0, 1	
15. 6	0, 1	
16. 7	0, 1	
17. Remote Board	-	Not a remote board
	1	RLC for slots 0, 5, 13, 18
	2	RCC for slots 0, 5, 13, 18
	3	Port board 1 for slots 1, 6, 14, 19
	4	Port board 2 for slots 1, 6, 14, 19
	5	Port board 3 for slots 2, 7, 15, 20

Notes

1. The displayed vintage number (field 8) corresponds to the vintage number stamped on the handle of the circuit pack or in the firmware of the circuit pack. This number is the base vintage number plus the highest vintage update.

   EXAMPLE:

   Base vintage = 3
   Vintage updates (fields 10-13 = 1)
   Highest vintage update = 4 (field 13 = 1)
   Vintage (field 8) displays (3+4) = 7

   The base vintage can be reconstructed by subtracting the highest vintage update from the number displayed in field 8.

   EXAMPLE:

   Field 8 display = 8
   Fields 12, 13, 15, and 16 = 0
   Fields 10, 11, and 14 = 1
   Highest vintage update = 5 (field 14 = 1)
   Base vintage is 8–5 = 3

2. The module number for the system control cabinet is 99. Since only the on-line common control can be displayed, enter 99, 0, -, 0 in fields 1 through 4, respectively, to display the common control (if 0 is entered in field 3, display changes it to a dash). In order to display the other common control, use Procedure 613 Test 3 to switch processors.

3. Since this procedure cannot tell whether a board is plugged into either slot 1 or 2, that board displays in both slots. (If a TN530 board is present in slot 15, then the module control carrier is duplicated and the TN481 board must be in slot 1. On the other hand, if no TN530 board is in slot 15, then the module control carrier is not duplicated and the TN481 board must be in slot 2.)

Special Error Codes

81 - Equipment location (fields 1-4) is not a module control carrier or a port carrier. Must be a common control carrier or a TMS carrier.

82 - A scanner I/O error occurred. Try again.

PROCEDURE 300 WORD 1 — 0/1 TOLL NONRESTRICTED CODES

Purpose

Use Procedure 300 Word 1 to administer the nonrestricted office or area codes that can be accessed by a toll restricted, code restricted, or toll restricted terminal.

Up to 10 nonrestricted office or area codes may be included in the list.

Any of the customer-selected three-digit codes on the free-call list can be accessed by restricted lines.

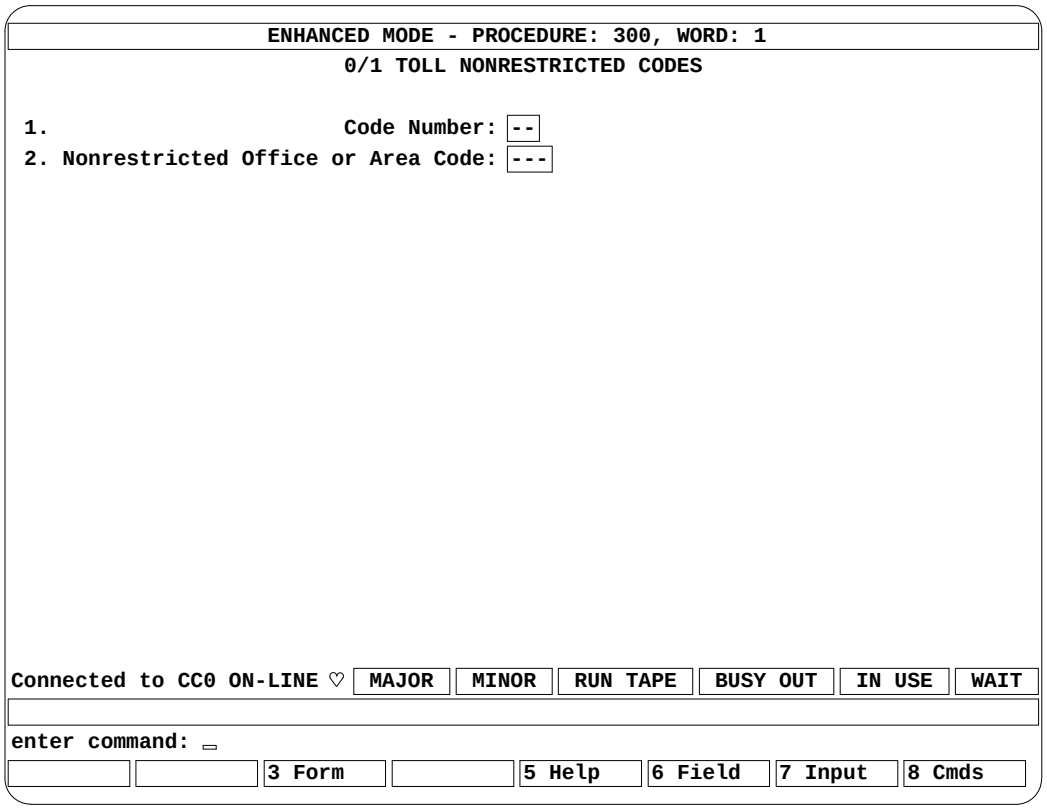
Extensions with 0/1 toll restriction assigned in Procedure 010 Word 3 may dial the nonrestricted codes in field 2. The codes can be NPA, office, or special service codes such as 911, 411, and 800.

Prerequisite Procedures

Use Procedure 010 Word 3 to establish the code restriction level for a voice terminal class of service.

Use Procedure 101 Word 1 field 3, to set the toll restriction type to 0 (0/1 toll restriction).

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1 and 2.
Change:	Field 2.
Remove:	Fields 1 and 2.
Next Data:	Displays all code numbers and nonrestricted codes.

Field Ranges and Encodes

1.	Code Number	1-10
2.	Nonrestricted Office or Area Code	100-999

Special Error Codes

None.

PROCEDURE 301 WORD 1 — CODE RESTRICTION - TRUNK GROUP AND TYPE

Purpose

Use Procedure 301 Word 1 to:

— Identify the code restriction trunk group type [central office (CO) or foreign exchange (FX)]

— Administer the dial-1 restriction for toll calls

— Assign the office code for a CO trunk, or the home numbering plan area (NPA) code for an FX trunk.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer trunk group translations.

Use Procedure 150 Word 1 to assign a trunks to trunk groups.

Use Procedure 010 Word 3 to administer code restriction levels to a voice terminal class of service.

Use Procedure 302 Word 1 and Procedure 301 Word 2 to remove trunk group data before the group is removed in this procedure.

Related Procedures

Use Procedures 301 Words 2 and 3 to assign code restriction digit absorption and code restriction levels, respectively.

Cautions

When adding or changing code restrictions, be careful. Office codes and NPA codes entered here can be dialed by the user.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 301, WORD: 1
                    CODE RESTRICTION - TRUNK GROUP AND TYPE

 1.          Trunk Group: [---]
 2.    Restriction Group: [-]
 3.              Dial 1: [-]
 4. Home Area Code (NPA): [---]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-4.
Change:	Fields 2-4.
Remove:	Fields 1-4.
Next Data:	Displays all trunk groups that have been assigned.

Field Ranges and Encodes

1. Trunk Group	18-999	
2. Restriction Group	1	Primary code restriction group (CO)
	2	Secondary code restriction group (FX)
	Central office (CO) and foreign exchange (FX) refer to code restriction trunk groups, not trunk types.	
3. Dial 1	0	1 is not required for toll calls
	1	1 is dialed for toll calls requiring an NPA code
	2	1 is dialed for all calls

4.	Home Area Code (NPA)	200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, 900-919

Notes

1. Code restriction provides selective calling restrictions for up to three groups of terminals (code restriction levels) and may be applied to a maximum of five trunk groups. For the trunk group designated as the primary code restriction group (CO), a list of three-digit (area code only) and six-digit (area code and office code) allowed codes may be provided. For the four other possible trunk groups designated as the secondary code restriction groups (FX), a list of six-digit allowed codes (one list per trunk group) may be provided (WCR observes FRLs, not code restrictions).

   Each code on these lists is assigned a code restriction level, 1, 2, or 3. A call is allowed if the code restriction level associated with the NPA or office code dialed is equal to or less than the code restriction level assigned to the calling terminal. In areas that do not dial 1 for toll, the code restriction feature eliminates the need for battery reversal toll restriction. In areas that do dial 1 for toll, the code restriction feature may replace or be combined with the toll restriction (battery reversal, 0/1) feature.

2. If a trunk group is not assigned to one of the five code restriction groups, the restriction definition of the primary code restriction group (CO) applies to that trunk group by default.

Special Error Codes

81 - The primary restriction group is limited to one per group. The trunk type must be CO.

82 - A change from a primary to secondary or a secondary to primary restriction group is not allowed.

83 - Remove the trunk group data in Procedure 302 Word 1 and Procedure 301 Word 2 before removing the trunk group in this procedure.

84 - A trunk must be assigned to the trunk group.

PROCEDURE 301 WORD 2 — CODE RESTRICTION - DIGIT ABSORPTION

Purpose

Use Procedure 301 Word 2 to administer the digit absorption treatment when the code restriction feature is being assigned to a trunk group that terminates in a digit absorbing, step-by-step central office (CO).

Prerequisite Procedures

Use Procedure 100 Word 1 to administer trunk group translations.

Use Procedure 150 Word 1 to assign trunks to trunk groups.

Use Procedure 301 Word 1 to add the trunk group to code restriction translations.

Use Procedure 010 Word 3 to assign code restriction levels to extensions.

Remove trunk groups in Procedure 302 Word 1 before removing them in this word.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 301, WORD: 2
                      CODE RESTRICTION - DIGIT ABSORPTION

 1.          Trunk Group: [---]
 2.                Digit: [-]
 3. Absorption Treatment: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-3.
Change:	Fields 2 and 3.
Remove:	Puts a zero in field 3 while leaving fields 1 and 2 intact.
Next Data:	Displays all the digit absorption assignments.

Field Ranges and Encodes

1.	Trunk Group	18-999
2.	Digit	2-9

3. Absorption Treatment	0	Digit not absorbed
	1	Digit absorbed repeatedly
	2	Digit absorbed once
	3	Digit absorbed only if first digit dialed
	4	Digit absorbed only if second digit dialed
	5	Digit absorbed only if first or second digit dialed

For a trunk group, the treatment must be either 0-2 or 3-5. Do not mix treatment groups.

Special Error Codes

81 - Add trunk group in Procedure 301 Word 1 before using this word.

82 - Remove this trunk group in Procedure 302 Word 1 before removing it here.

84 - Assign a trunk to the trunk group in Procedure 150 Word 1.

PROCEDURE 301 WORD 3 — ALLOWED CODES - PRIMARY RESTRICTION GROUP

Purpose

Use Procedure 301 Word 3 to assign a code restriction level to each three-digit allowed office or numbering plan area (NPA) code.

Prerequisite Procedures

To add a new NPA code to the primary 6-digit list, enter the NPA in this word and then define it further in Procedure 302 Word 1.

If a code restriction level of 3 is entered in field 3 for an NPA, the NPA must be defined in Procedure 302 Word 1.

Use Procedure 010 Word 3 to assign code restriction levels.

Use Procedure 100 Word 1 to assign trunk group translations.

Use Procedure 150 Word 1 to assign trunks to trunk groups.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 301, WORD: 3
                  ALLOWED CODES - PRIMARY RESTRICTION GROUP

 1.    Office or Area Code: [---]
 2.              Code Type: [-]
 3. Code Restriction Level: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-3.
Change:	Field 3.
Remove:	Changes the code restriction level to 0.
Next Data:	Displays the restriction level for all codes.

Field Ranges and Encodes

1.	Office or Area Code	200-999	
2.	Code Type	1	Office code
		2	NPA code
3.	Code Restriction Level	0	Accessible by ext. with code restriction 0
		1	Accessible by all extensions
		2	Accessible by ext. with restriction 0, 2, or 3
		3	Accessible by ext. with restriction 0 or 3

Special Error Codes

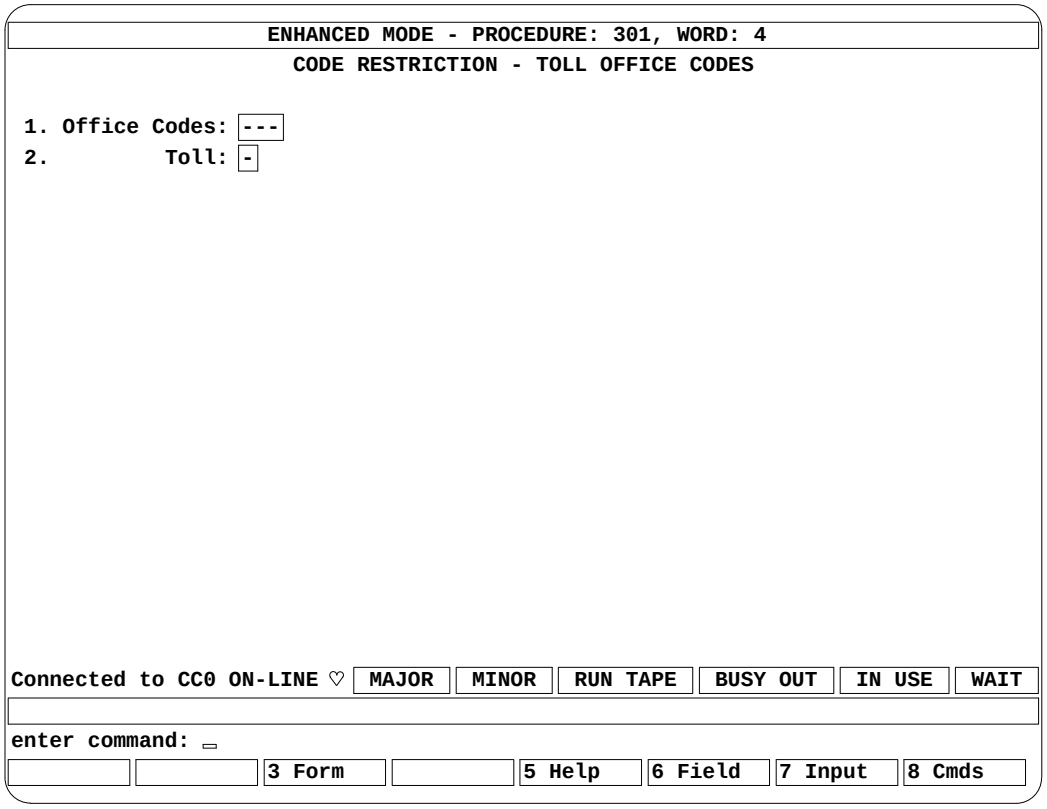
None.

PROCEDURE 301 WORD 4 — CODE RESTRICTION - TOLL OFFICE CODES

Purpose

Use Procedure 301 Word 4 to specify which office codes are toll. All office codes default to nontoll (field 2 equals 0).

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Displays each office code assignment.

Field Ranges and Encodes

1.	Office Codes	200-999	
2.	Toll	0	Nontoll office code
		1	Toll office code

Special Error Codes

None.

PROCEDURE 302 WORD 1 — CODE RESTRICTION - ALLOWED NPA AND OFFICE CODES

Purpose

Use Procedure 302 Word 1 to administer numbering plan area (NPA) codes and office codes to trunk groups.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

Use Procedure 150 Word 1 to assign trunks to trunk groups.

Use Procedure 301 Word 1 to assign an office code [central office (CO) trunk] or area code [foreign exchange (FX) trunk] to the trunk group.

Use Procedure 301 Word 3 to assign a code restriction level to the three-digit allowed office area codes.

Use Procedure 010 Word 3 to assign a code restriction level to a voice terminal class of service.

Cautions

Use care when adding or changing code restriction levels associated with NPAs to avoid user annoyance.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 302, WORD: 1
                CODE RESTRICTION - ALLOWED NPA AND OFFICE CODES

 1.            Trunk Group: ---
 2. Code Restriction Level: -
 3.        Area Code (NPA): ---
 4.            Office Code: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Fields 1-4.
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	Displays all codes for all restriction levels assigned to a trunk group.

Field Ranges and Encodes

1.	Trunk Group	18-999	
2.	Code Restriction Level	0	Accessible by extensions with code restriction 0
		1	Accessible by extensions with code restriction 0, 1, 2, or 3
		2	Accessible by extensions with code restriction 0, 2, or 3
		3	Accessible by extensions with code restriction 0 or 3
3.	Area Code (NPA)	-, 200-219, 300-319, 400-419, 500-519, 600-619, 700-719, 800-819, 900-919	
4.	Office Code	200-999	

Notes

1. For the primary restriction group, only foreign NPAs with office codes may be entered.
2. For secondary restriction groups, NPAs or NPAs with office codes may be entered.
3. Each NPA and office code entry in the trunk group table must be six digits long.

Special Error Codes

80 - Assign this trunk group in Procedure 301 Word 1 before using this procedure.

82 - Use Procedure 301 Word 3 to assign office codes for home NPA of primary restriction group.

83 - Use Procedure 301 Word 3 to assign office codes for foreign NPA of primary restriction group.

84 - Cannot add control restriction of 0 only.

PROCEDURE 305 WORD 1 — AUTOVON - TRUNK GROUP ROUTING PATTERNS

Purpose

Use Procedure 305 Word 1 to administer the AUTOVON outgoing trunk group routing patterns.

Related Procedures

Use Procedure 275 Word 3 on the destination switch (far end) to find the node number that goes in field 1, when this switch is part of the AUTOVON network.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 305, WORD: 1
                     AUTOVON - TRUNK GROUP ROUTING PATTERNS

 1.              Destination: --
 2.     Outgoing Trunk Group: ---
 3. Maximum Precedence Level: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT

enter command:
            |            | 3 Form |        | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 or 2.
Add:	Fields 1-3.
Change:	Field 3.
Remove:	Fields 1-3.
Next Data:	Displays all trunk group assignments for a given destination switch.

Field Ranges and Encodes

1. Destination

   0 AUTOVON switch
   1-40 Switch administered in Procedure 275 Word 3

   The destination switch is on the far end of the trunk group specified in field 2.

   If this switch is an AUTOVON interface switch, at least 1 trunk group must have this field set to 0 (to access AUTOVON network).

2. Outgoing Trunk Group

   18-999 (only 15 trunk groups can be assigned per destination switch)

3. Maximum Precedence Level

   - Nonprecedence
   0 Flash override
   1 Flash
   2 Immediate
   3 Priority
   4 Routine

   Nonprecedence trunks are selected for routine precedence calls when all routine precedence trunks are busy.

Special Error Codes

81 - Only 15 trunk groups can be assigned per destination.

82 - Nonprecedence (routine only) can only be assigned to the AUTOVON switch (0 in field 1).

PROCEDURE 305 WORD 2 — AUTOVON - NNXD ROUTING PATTERNS

Purpose

Use Procedure 305 Word 2 to administer the AUTOVON NNXD routing patterns.

Prerequisite Procedures

Use Procedure 275 Word 3 to administer system class of service (COS) for the destination node switch.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 305, WORD: 2
                          AUTOVON - NNXD ROUTING PATTERNS

 1. Destination: --

ROUTING DIGITS (NNXD)
   2.    AUTOVON NNX: ---
   3. 1000 Digit (D): -

 4. First Digit: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2 and 3 (see Notes).
Add:	Fields 1-4 (see Notes).
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	Displays NNXDs for a given destination.

Field Ranges and Encodes

1. Destination
   - 0 AUTOVON switch
   - 1-40 Switch administered in Procedure 275 Word 3

   All NXX digits with undefined destinations will be routed to the AUTOVON network (switch 0).

ROUTING DIGITS (NNXD) (Fields 2-3)

2. AUTOVON NNX — 220-299, 320-399, 420-499, 520-599, 620-699, 720-799, 820-899, 920-999
3. 1000 Digit (D) — -, 0-9

   A dash in this field means that any digit (0-9) is a valid 1000s digit for the displayed destination switch (field 1) and NNX number (field 2).
4. First Digit
   - - Not used
   - 0-9 Home switch and/or five-digit dialing plan

Notes

1. When a display routine is done with a value in field 2 and a dash in field 3, the first NNXD associated with field 1 is displayed. This is the NNXD that homes on the switch number in field 1.
2. On an add routine, a dash in field 3 creates 10 NNXD routing patterns corresponding to each of the possible values 0-9 in field 3. This is the NNXD that homes on the switch number in field 1.
3. Fields 2 and 3 contain the NNXD that homes on the switch number in field 1.

Special Error Codes

81 - The first digit is not assigned for extensions in Procedure 350 Word 1.

PROCEDURE 312 WORD 1 — WCR - ORIGINAL NETWORK INFORMATION

Purpose

Use Procedure 312 Word 1 to administer WCR network characteristics.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 312, WORD: 1
                      WCR - ORIGINAL NETWORK INFORMATION

 1.     Network Number: -
 2. Dial Tone Suppress: -
 3. CDR Account Code Required: -
 4. Dial Toll Prefix for Toll calls: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-4.
Remove:	Not allowed.
Next Data:	Displays information for each WCR Network.

Field Ranges and Encodes

1.	Network Number	0-7	
2.	Dial Tone Suppress	0	Not suppressed
		1	Suppressed after dialing the Network DAC
3.	CDR Account Code Required	0	Not required
		1	Must be dialed before WCR DAC
		2	May be dialed before or after WCR DAC
		This field assigns Forced Entry of Account Code (FEAC) on a per network basis. FEAC can also be assigned by extension class of service (Procedure 010 Word 1) or trunk group (Procedure 101 Word 1).	
4.	Dial Toll Prefix for Toll calls	0	Not required
		1	Required
		Toll prefix restrictions do not apply to calls routed with ‘‘operator assistance’’ or ‘‘international’’ string types (Procedure 314 Word 1 field 10).	

Special Error Codes

None.

PROCEDURE 314 WORD 1 — NETWORK DIGIT ANALYSIS - DIAL PLAN DEFINITION

Purpose

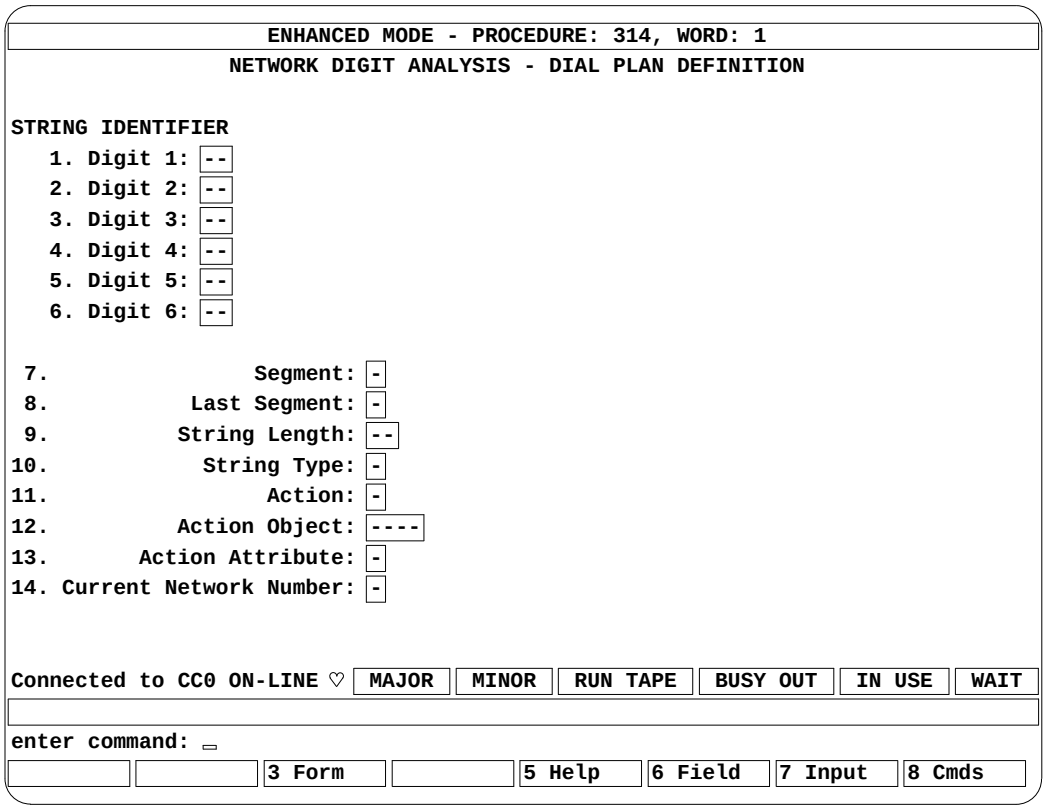
Use Procedure 314 Word 1 to administer the network digit analysis dial plan.

Related Procedures

Use Procedure 314 Word 2 to administer the network digit analysis string attributes.

Use Procedure 314 Word 3 to display network digit analysis unallocated node counts.

Screen Display



Fields Used or Required for Command Routines

Display: Fields 1-8 and field 14.
Add: Fields 1-14 (when field 8 = 1, fields 9-14 required).
Change: Fields 10-13 (field 8 must be greater than 0).
Remove: Fields 2-14.
Next Data: Displays each segment of field 7, then, if field 8 = 1, next data displays the next administered string length for the string identifier (SI).

If the SI identifies a standard string, then, when each administered string length has been displayed, next data displays the next administered standard string.

When every standard string in the Network has been displayed, next data displays the first administered exception string for the network.

When every administered string length for the exception string identifier has been displayed, next data displays the next administered exception string having the same string type.

When every exception string with the string type has been displayed, next data displays the next exception string administered with the next administered string type.

When every exception string has been displayed, next data displays the first standard string administered in the next administered network.

When every string has been displayed in every network, next data dashes the entire display.

Field Ranges and Encodes

STRING IDENTIFIER (Fields 1-6)

0-9 Decimal digits
11 Wild card digit

Strings in a network's dial plan are defined by three entities: a string identifier (SI), a string length, and a string type (e.g. ''713'' is part of a 10 digit address string).

A SI can be from 1 to 18 digits in length. SI digits are segmented into blocks of 6 digits. Thus there are a maximum of 3 segments (18 digits) for any SI. The segment number is specified in field 7. An indication of whether the segment is the last segment of digits in the SI is made in field 8.

Digit strings, if they exist, must occur in the following order: account code, IXC, toll prefix, international access, operator assistance, and then address string. If a digit string occurs out of order, the switch blocks the call.

Any digit string which results in the application of dial tone cannot be a subset or a superset of any SI in the network digit analysis tables.

1. Digit 1 -, 0-9, 11 (*)
2. Digit 2 -, 0-9, 11 (*)
3. Digit 3 -, 0-9, 11 (*)

4. Digit 4 -, 0-9, 11 (*)

5. Digit 5 -, 0-9, 11 (*)

6. Digit 6 -, 0-9, 11 (*)

7. Segment
   1 Digits 1-6
   2 Digits 7-12
   3 Digits 13-18

8. Last Segment
   0 Segment is not the last in the SI
   1 Last Segment - add to standard network
   2 Last Segment - add to exception network

9. String Length 1-31

10. String Type
    1 Account code
    2 Inter-exchange carrier
    3 Toll prefix
    4 International
    5 Operator assistance
    6 Address

    The only valid string types for restarts in network 0 are: international, operator assistance, and address. All other string types must be restarted in networks 1 through 7.

11. Action
    0 Resolve, field 12 is VNI, field 13 is UCC FRL
    1 Restart, field 12 is DMI, field 13 is network no.

    When a dialed number has been matched with an administered string identifier (SI), one of two actions will be performed.

    If the action specified in this field is ‘‘resolve,’’ then network digit analysis of the string (not necessarily the entire dialed number) is resolved to a virtual nodepoint identifier (VNI). A VNI of zero would prevent the given string from influencing route selection (this is useful for account codes among other strings). A call control facility restriction level can be specified as a resolution attribute to prevent unauthorized users from completing calls which include a given string (this is useful to block calls to certain inter-exchange carriers or 900-type numbers).

    If the action specified in this field is ‘‘restart,’’ then network digit analysis of the string is restarted. A digit modification index (DMI) can be specified to modify the string (it is in this manner that M to N conversions are accomplished). A network number must be provided in field 13 (Action Attribute) to indicate the network in which analysis should be restarted. It is in this manner that network crossover is accomplished.

    Exception strings cannot be longer than 31 digits.

    When performing a change operation and changing this field the data associated with Word 2 fields 2, 3, 4, and 6 is reset to default

values.

12. Action Object — 0-4095

When field 11 is ‘‘resolve,’’ then the action object field contains a VNI. The range of this field in this context is 0-1023. A zero in field 12 indicates that the string does not affect route selection. If call categories are assigned in Procedure 317, then the pattern number corresponding to a nonzero VNI resides in field 3 of Procedure 317, Word 2. If not, then the value of the pattern number is equal to the nonzero VNI.

When field 11 is ‘‘restart,’’ then the action object field contains a DMI for an M to N conversion. The range of this field in this context is 0-4095. Zero indicates that no modification of the string should take place.

13. Action Attribute — 0-7

When field 11 is "resolve", the action attribute field contains a facility restriction level for unauthorized call control. Zero allows all callers unconditional access to the dialed number.

When field 11 is "restart", the action attribute field contains the network number to restart digit analysis. If this field contains a zero, analysis is restarted in the internal dial plan.

14. Current Network Number — 0-7

This field is the network number associated with the SI in fields 1-6.

This field must be dashed when field 8 equals 0.

Notes

1.

Field 11	Field 12	Field 13
0 (resolve)	When field 11=0, this field specifies a Virtual Nodepoint Identifier. Zero in this field indicates that the string does not affect route selection.	When field 11=0, this field specifies a Facility Restriction Level for Unauthorized Call Control. Zero in this field allows all callers unconditional access to the dialed number.
1 (restart)	When field 11=1, this field specifies a digit modification index for the M to N conversion function. Zero in this field indicates that no modification of the string should take place.	When field 11=1, this field specifies the Network Number to restart digit analysis. Zero in this field results in an analysis restart to the internal dial plan.

Special Error Codes

81 - Fields 9 through 14 must be dashed when field 8 is set to 0 (i.e. fields 9 through 14 must be dashed if field 8 indicates that fields 1 through 7 do not contain the last segment).

82 - Dashed SI fields are not allowed between non-dashed SI fields. If field 8 is 0, dashed fields are not allowed.

83 - A SI cannot end with the wild card digit.

84 - Number of digits in a SI cannot exceed the length specified in field 9.

85 - Last segment of a SI must be displayed before a remove can be executed.

87 - Restart in Network 0: type must be address, international, operator assisted.

88 - String length conflicts with an existing variable length string.

89 - The SI is already administered with a string length other than the entered string length. The string rule definition in Word 2 for the existing string identifier/string length pair does not terminate digit collection. A string defined by the SI and the entered string length cannot be administered until Word 2 translation for the existing string identifier/string length pair is reset so that digit collection is terminated.

90 - When DMI 0 is used, specify a network other than the network in which the string is defined.

91 - A SI containing a wild card digit can not be added to the Standard Network.

92 - Must restart in network 1 when standard network is off in Procedure 276.

PROCEDURE 314 WORD 2 — NETWORK DIGIT ANALYSIS - STRING ATTRIBUTE SPECIFICATI

Purpose

Use Procedure 314 Word 2 to administer the network digit analysis string attributes.

Prerequisite Procedures

Use Procedure 314 Word 1 to administer the network digit analysis dial plan definition.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 314, WORD: 2
           NETWORK DIGIT ANALYSIS - STRING ATTRIBUTE SPECIFICATION

 1.         Continue: -
 2. Restart Analysis: -
 3.    VNI Operation: -
 4.       Freeze VNI: -
 5.   Maximum Length: --
 6.             Tone: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-6 (after Word 1 display, add, or change only).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Continue

   0 Terminate digit analysis
   1 Continue digit analysis

   A ‘‘0’’ in this field indicates that the terminating string has been analyzed. WCR software proceeds to route selection.

   A ‘‘1’’ in this field tells the WCR software that there is another string to analyze before selecting a route.

2. Restart Analysis — 0-1

   When analysis is being restarted:
   - A ‘‘0’’ in this field will reanalyze the (converted) string in the (new) network.
   - A ‘‘1’’ in this field allows digits to continue to be collected in the (new) network without reanalyzing the (converted) string.

   When analysis is being resolved, this field must be ‘‘0’’ (restart analysis inactive).

3. VNI Operation 0-1

The options in this field specify how a string influences the virtual nodepoint identifier (VNI) that will be used in selecting the route for a call.

A dialed number may consist of several strings (for instance, an IXC followed by a toll prefix followed by a 10-digit address string).

This field determines which VNI the WCR software resolves to. A call's VNI can be determined by one or more component strings of the dialed number. A single component string of the dialed number can solely determine a call's VNI, or each component string can contribute to the VNI.

When analysis is being restarted:

- A ''0'' in this field will reset the call's current VNI to zero
- A ''1'' in this field will allow the current VNI, which was established by a previous string (or strings) in the dialed number, to persist.

When analysis is being resolved:

- A ''0'' in this field will set the VNI to the VNI in Word 1, field 12
- A ''1'' in this field will combine the VNI in Word 1, field 12 with the current VNI which was established by a previous string (or strings) in the dialed number.

4. Freeze VNI 0-1

When analysis is restarted or subsequent digits are collected, this field indicates whether the current string's VNI can operate (i.e., set, reset, or combine) on the call's current VNI.

A ''0'' in this field will allow subsequent strings in the dialed number to operate on the current VNI.

A ''1'' in this field will not allow subsequent operations. Instead, the WCR software uses the current VNI which was established by any previous strings in the dialed number to determine route selection.

5. Maximum Length

0 Fixed string length (use Word 1, field 9)
2-31 Maximum string length

The value specified in this field and the value specified in Word 1 field 9 define a range of string lengths for which the string identifier in Word 1 identifies.

A ‘‘0’’ in this field indicates the string length specified in Word 1 Field 9 is the only acceptable string length for the string identifier.

A ‘‘2’’ through ‘‘31’’ in this field sets the upper bound on the range of string lengths. When an upper bound is specified, WCR software uses the value entered in Word 1 field 9 as the lower bound on the range of string lengths.

String Identifiers which are applicable to a range of string lengths are called variable length string identifiers. Other string identifiers are referred to as fixed length.

An example of when a variable length might be used is when it is desirable to have all strings with lengths 12-15 that begin with ‘‘011’’ route to the same VNI.

6. Tone

0 No dial tone added
1 Dial tone added

When a string continues, this field indicates whether dial tone should be applied after the defined string has been collected.

Special Error Codes

81 - Use Word 1 add, change, display or next data routine prior to Word 2 operation.

82 - The length in Field 5 must be greater than the length in Word 1 Field 9.

83 - Another SI is administered which identifies a string with a length that is in the range of string lengths which was attempted to be established for a variable length string identifier.

84 - Digit collection must be unconditionally terminated (ie. Fields 1, 2 = 0) when a Maximum String Length is specified in Field 5.

85 - Digit collection cannot be continued when the SI specified in Word 1 also identifies a greater length string.

86 - Exception strings cannot be variable length.

87 - An overflow to network 0 cannot continue digit collection.

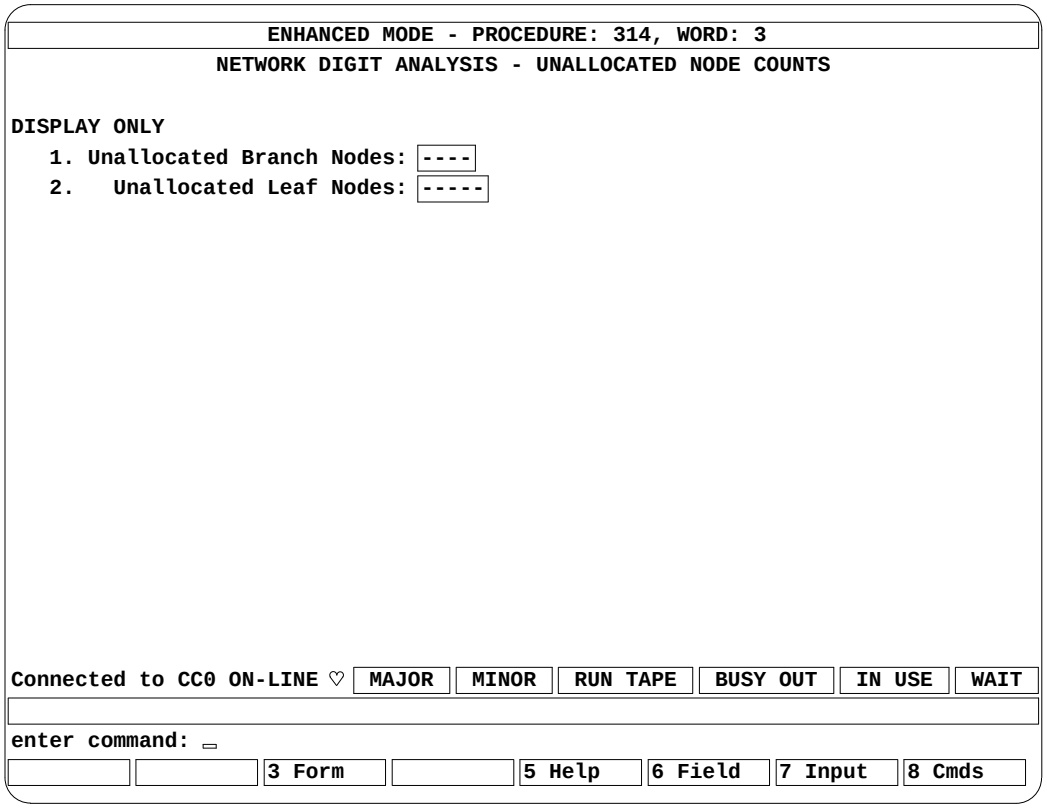
88 - To give tone, a string must continue and can not be reanalyzed.

PROCEDURE 314 WORD 3 — NETWORK DIGIT ANALYSIS - UNALLOCATED NODE COUNTS

Purpose

Use Procedure 314 Word 3 to display the number of unallocated branch and leaf nodes.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	None.

Field Ranges and Encodes

DISPLAY ONLY (Fields 1-2)

1. Unallocated Branch Nodes 0-8191
2. Unallocated Leaf Nodes 0-57344

Special Error Codes

None.

PROCEDURE 315 WORD 1 — NETWORK DIGIT ANALYSIS - PARSE STRING IDENTIFIER

Purpose

Procedure 315 shows the results from analyzing a digit string in a World Class Routing (WCR) network. Since this procedure does not alter translations, it can be accessed without the administration mode being set. After initially entering Procedure 315, but before entering digits, perform a remove-execute operation to clear the Procedure 315 status memory of any information that may be left from a previous analysis.

In Word 1, enter the WCR network number in which to begin digit analysis; then enter the dialed number in fields 2-19. Upon executing next-data, the Network Digit Analysis (NDA) module of WCR will analyze the digits and identify the first string.

The cursor is placed after the end of the identified digit string. Any digit modification translation for the identified digit string is performed in the dialed number fields (fields 2-19). Successive next-data operations will parse subsequent digit strings. If there are extra digits in the dialed number after the entire dialed number has been analyzed (ie. the number of digits entered exceeds the maximum string length), the digits from the cursor on are ignored. If the dialed number performs a 'restart' action, the new WCR network number is shown in field 20 in Word 1. This field may be different from the network in field 1.

The number of additional digits needed by NDA to continue analysis is shown in field 21 in Word 1. This indicates that the entire digit string has not been entered, or that the parsed string is administered as a continuing string in Procedure 314 Word 2.

The timing that is active between the previous digit collected and the next digit to be collected (the cursor is on the next digit to be collected in fields 3-19) is shown in field 22 in Word 1. If the special timer (administered in Procedure 285) is needed by NDA, this is displayed in the timing field. When the string administered in the dialed number fields is a variable length string, you must administer the timing field to indicate a timeout (set field 22 to a ''2'') so NDA knows it is not collecting any more digits.

To reset Procedure 315 at the beginning of the dialed digits, enter change-execute.

The Procedure 314 translation for each string parsed is shown in Word 2. The aggregate VNI is the VNI identified for the call by the digits in the dialed number fields in Word 1. This VNI may be different from the VNI in the identified string information field by combining or freezing the VNI for string identifiers in Procedure 314 Word 2.

Procedure 315 is designed such that the data in Procedure 315 is retained while executing other administration procedures. It is expected that you may need to access other WCR administration procedures while analyzing a digit string in Procedure 315. For example, you may enter a string in Procedure 315 and perform digit analysis by executing next-data. You may then go to Procedure 314 to verify or change translation for a specific string identifier, or to Procedure 320 to verify or change

digit modification translation. Upon re-entering Procedure 315, enter display-execute to re-display the information, or change-execute to repeat digit analysis for the digit string. If translation was changed, the new translation will be used.

If the procedure appears to be working strangely, do a remove-execute and start over! There is probably data already in the buffer from the previous analysis. You cannot change digits in the dialed number fields. You may enter additional digits at the end of the digits in the dialed number field as NDA requests additional digits to collect.

Prerequisite Procedures

Use Procedure 314 to administer the network digit-analysis dial-plan definition.

Related Procedures

Use Procedure 315 Word 2 to display additional information associated with the string displayed in Procedure 315 Word 1.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 315, WORD: 1
               NETWORK DIGIT ANALYSIS - PARSE STRING IDENTIFIER

 1. Network: -

DIALED NUMBER
   2.  Digit 1: -                      11. Digit 10: -
   3.  Digit 2: -                      12. Digit 11: -
   4.  Digit 3: -                      13. Digit 12: -
   5.  Digit 4: -                      14. Digit 13: -
   6.  Digit 5: -                      15. Digit 14: -
   7.  Digit 6: -                      16. Digit 15: -
   8.  Digit 7: -                      17. Digit 16: -
   9.  Digit 8: -                      18. Digit 17: -
  10.  Digit 9: -                      19. Digit 18: -

20.     Current Analysis Network: -
21. Additional Digits to Collect: --
22.                      Timing: -
23.                  Resolution: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display: Update the screen with the current values.
Add: None
Change: Save all digits entered and prepare to repeat analysis.
Remove: Delete all digits entered and start over.
Next Data: Displays the results of WCR digit analysis for the next complete string entered in in fields 2 through 19. If too few digits have been entered to identify the next string, the cursor is placed on the first empty digit position and field 21 shows the minimum number of additional digits required.

Subsequent NEXT DATA operations display successive strings.

NOTE: Word 2 can be displayed at any time and as often as desired without losing the digits entered in Word 1 or the WCR analysis that has been performed. After displaying Word 2, the user can return to Word 1 and redisplay the values in Word 1 by executing the DISPLAY command or can step to the next string by using NEXT DATA.

Field Ranges and Encodes

1. Network 0-7

DIALED NUMBER (Fields 2-19)

The digits to be analyzed in the network's dial plan are entered, strings will be identified via cursor placement in these fields. The dialed number can exceed 18 digits (it can be up to 64 digits) but only 18 digits can be seen or entered at a time. In order to enter more than 18 digits, it is necessary to enter 18 then parse and continue parsing until the procedure prompts for more digits.

2. Digit 1 -, 0-9
3. Digit 2 -, 0-9
4. Digit 3 -, 0-9
5. Digit 4 -, 0-9
6. Digit 5 -, 0-9
7. Digit 6 -, 0-9
8. Digit 7 -, 0-9
9. Digit 8 -, 0-9
10. Digit 9 -, 0-9
11. Digit 10 -, 0-9
12. Digit 11 -, 0-9
13. Digit 12 -, 0-9
14. Digit 13 -, 0-9

15. Digit 14	-, 0-9	
16. Digit 15	-, 0-9	
17. Digit 16	-, 0-9	
18. Digit 17	-, 0-9	
19. Digit 18	-, 0-9	
20. Current Analysis Network	0	Internal Dial Plan
	1-7	Network Number
21. Additional Digits to Collect	-,0-72	
22. Timing	0	Normal inter-digit
	1	Special inter-digit
	2	Timeout
23. Resolution	0	Network not administered, analysis fails
	1	String not recognized, more digits needed
	2	String not fully collected, need more digits
	3	String collected, need more digits
	4	String collected, dialed number analyzed
	5	Digit analysis returned failure
	6	Reserved for future use
	7	String identified, restarts analysis

Special Error Codes

80 - There are no dial pulse or touch tone OR's available for the check.

81 - Upon initial entry, do a display, change or remove before doing next data.

82 - The dialed digits do not use node number or UDP routing in Procedure 354.

PROCEDURE 315 WORD 2 — NETWORK DIGIT ANALYSIS - STRING DATA

Purpose

Procedure 315 shows the results from analyzing a digit string in a World Class Routing (WCR) network. Since this procedure does not alter translations, it can be accessed without the administration mode being set. After initially entering Procedure 315, but before entering digits, perform a remove-execute operation to clear the Procedure 315 status memory of any information that may be left from a previous analysis.

In Word 1, enter the WCR network number in which to begin digit analysis; then enter the dialed number in fields 2-19. Upon executing next-data, the Network Digit Analysis (NDA) module of WCR will analyze the digits and identify the first string.

The cursor is placed after the end of the identified digit string. Any digit modification translation for the identified digit string is performed in the dialed number fields (fields 2-19). Successive next-data operations will parse subsequent digit strings. If there are extra digits in the dialed number after the entire dialed number has been analyzed (ie. the number of digits entered exceeds the maximum string length), the digits from the cursor on are ignored.

If the dialed number performs a 'restart' action, the new WCR network number is shown in field 20 in Word 1. This field may be different from the network in field 1.

The number of additional digits needed by NDA to continue analysis is shown in field 21 in Word 1. This indicates that the entire digit string has not been entered, or that the parsed string is administered as a continuing string in Procedure 314 Word 2.

The timing that is active between the previous digit collected and the next digit to be collected (the cursor is on the next digit to be collected in fields 3-19) is shown in field 22 in Word 1. If the special timer (administered in Procedure 285) is needed by NDA, this is displayed in the timing field. When the string administered in the dialed number fields is a variable length string, you must administer the timing field to indicate a timeout (set field 22 to a ''2'') so NDA knows it is not collecting any more digits.

To reset Procedure 315 at the beginning of the dialed digits, enter change-execute.

The Procedure 314 translation for each string parsed is shown in Word 2. The aggregate VNI is the VNI identified for the call by the digits in the dialed number fields in Word 1. This VNI may be different from the VNI in the identified string information field by combining or freezing the VNI for string identifiers in Procedure 314 Word 2.

Procedure 315 is designed such that the data in Procedure 315 is retained while executing other administration procedures. It is expected that you may need to access other WCR administration procedures while analyzing a digit string in Procedure 315. For example, you may enter a string in Procedure 315 and perform digit analysis by executing next-data. You may then go to Procedure 314

to verify or change translation for a specific string identifier, or to Procedure 320 to verify or change digit modification translation. Upon re-entering Procedure 315, enter display-execute to re-display the information, or change-execute to repeat digit analysis for the digit string. If translation was changed, the new translation will be used.

If the procedure appears to be working strangely, do a remove-execute and start over! There is probably data already in the buffer from the previous analysis. You cannot change digits in the dialed number fields. You may enter additional digits at the end of the digits in the dialed number field as NDA requests additional digits to collect.

Prerequisite Procedures

Use Procedure 315 Word 1 to enter digits and perform digit analysis. No information will appear in Word 2 until this is done.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 315, WORD: 2
                      NETWORK DIGIT ANALYSIS - STRING DATA

IDENTIFIED STRING INFORMATION
   1.      String Type: -
   2.     Last Segment: -
   3.           Action: -
   4.          VNI DMI: ----
   5. Action Attribute: -
   6.    VNI Operation: -
   7.       Freeze VNI: -
   8.  Variable Length: -
   9.         Continue: -
  10.             Tone: -
  11.     Current Analysis Network: -
  12. Additional Digits to Collect: --
  13.           Timing: -
  14.       Resolution: -
AGGREGATE DIALED NUMBER INFORMATION
  15. VNI: ----           16. IDP: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Displays information resulting from the analysis of the digits entered in Word 1.
Add:	None
Change:	None
Remove:	None
Next Data:	None

Field Ranges and Encodes

IDENTIFIED STRING INFORMATION (Fields 1-14)

1. String Type

1	Account code
2	Inter-exchange carrier
3	Toll prefix
4	International
5	Operator assistance
6	Address

The only valid string types for restarts in network 0 are: international, operator assistance, and address. All other string types must be restarted in networks 1 through 7.

2. Last Segment

0	Standard network string
1	Exception network string

3. Action

0	Resolve, (field 4 is VNI, field 5 is UCC FRL)
1	Restart, (field 4 is DMI. field 5 is network number)

When a dialed number has been matched with an administered string identifier (SI), one of two actions will be performed.

If the action specified in this field is ‘‘resolve’’ then network digit analysis of the string (not necessarily the entire dialed number) is resolved to a virtual nodepoint identifier (VNI). A VNI of zero would prevent the given string from influencing route selection (this is useful for account codes, for example). A call control facility restriction level can be specified as a resolution attribute to prevent unauthorized users from completing calls which include a given string (this is useful to block calls to certain inter-exchange carriers or certain area codes such as 900).

If the action specified in this field is ‘‘restart’’ then network digit analysis of the string is restarted. A digit modification index (DMI) can be specified to modify the string (it is in this manner that M to N conversions are accomplished). A network number must be provided in field 5 (Action Attribute) to indicate in which network the analysis should be restarted. It is in this manner that network crossover is accomplished.

4. VNI DMI — 0-4095

When Field 3 is "resolve", this action object field contains a VNI. Zero indicates that the string does not affect route selection. The range of this field in this context is 0-1023.

When Field 3 is "restart", this action object field contains a DMI for an M to N conversion. Zero indicates that no modification of the string should take place. The range of this field in this context is 0-4095.

5. Action Attribute — 0-7

When Field 3 is "resolve", the action attribute field contains a facility restriction level for unauthorized call control. Zero allows all callers unconditional access to the dialed number.

When Field 3 is "restart", the action attribute field contains the network number to restart digit analysis. If this field contains a zero, analysis is restarted in the internal dial plan.

6. VNI Operation

0 Assign VNI given, or if restarting, zero aggregate VNI
1 Combine VNI, or if restarting, allow aggregate VNI to persist

The options in this field provide a simple yet robust mechanism for specifying how a string influences the virtual nodepoint identifier (VNI) that will be utilized in route selection for a call.

A dialed number may consist of several strings (for instance, an IXC followed by a toll prefix followed by a 10 digit address string).

This field facilitates the construction of the VNI, which are selective sums of the component strings of dialed numbers. A single component string of the dialed number can solely determine the VNI for the call, or each component string could contribute to the VNI.

When analysis is being resolved, a "0" in this field will set the VNI to the VNI in Word 1, field 12. A "1" in this field will combine the VNI in Word 1, field 12 with the VNI which has been established by a previous string (or strings) in the dialed number.

When analysis is being restarted, a "0" in this field will reset the VNI to zero. A "1" in this field will allow a VNI which has been established by a previous string (or strings) in the dialed number to persist.

7. Freeze VNI

0 Allow VNI modification
1 Freeze VNI at its current value

When analysis is restarted, or subsequent digits are collected, this field indicates whether subsequent VNIs can be operated on (set, reset or combine) with the current VNI.

A "0" in this field will allow subsequent strings in the dialed number to influence the VNI through sets, resets and combines.

A "1" in this field will not allow subsequent sets, resets and combines. Use the VNI which has been established by this string, and any other previous strings in the dialed number, to determine route selection.

8. Variable Length

0 String length is fixed
1 String length can vary

String Identifiers which are applicable to a range of string lengths are referred to as ‘‘variable length string identifiers’’. Other string identifiers are referred to as ‘‘fixed length’’.

9. Continue

0 Terminate digit collection
1 Continue digit collection

When analysis is being resolved, if field 9 equals "0" then terminate digit collection after the entire string and applicable traveling class marks have been collected. If field 9 equals "1" continue collecting digits after the entire string has been collected.

When analysis is being restarted, (this only applies when a VNI has already been frozen), if field 9 equals "0", terminate digit collection after the entire string and applicable Traveling Class Marks have been collected. If field 9 equals "1" continue collecting digits after the entire string has been collected.

For either encode, the M-to-N conversion is **not** performed when a VNI is already frozen.

10. Tone

0 No dial tone added
1 Dial tone added

When a string continues, this field is used to indicated whether a tone should be applied after the defined string has been collected.

11. Current Analysis Network

-,0-7

12. Additional Digits to Collect

-,0-72

13. Timing

0 Normal inter-digit
1 Special inter-digit
2 Timeout

14. Resolution	0	Network not administered, analysis fails
	1	String not recognized, more digits needed
	2	String not fully collected, need more digits
	3	String collected, need more digits
	4	String collected, dialed number analyzed
	5	Digit analysis returned failure
	6	Reserved for future use
	7	String identified, restarts analysis

AGGREGATE DIALED NUMBER INFORMATION (Fields 15-16)

15. VNI	0-1023 The VNI for the dialed number as calculated thus far. This number is used to generate a pattern which will be used to find a route for the dialed number.
16. IDP	0 Call is not destined for IDP 1 Call is destined for IDP This field indicates if the dialed number is specified by digit analysis to be reanalyzed, using the internal PBX dial plan.

Special Error Codes

None.

PROCEDURE 315 WORD 3

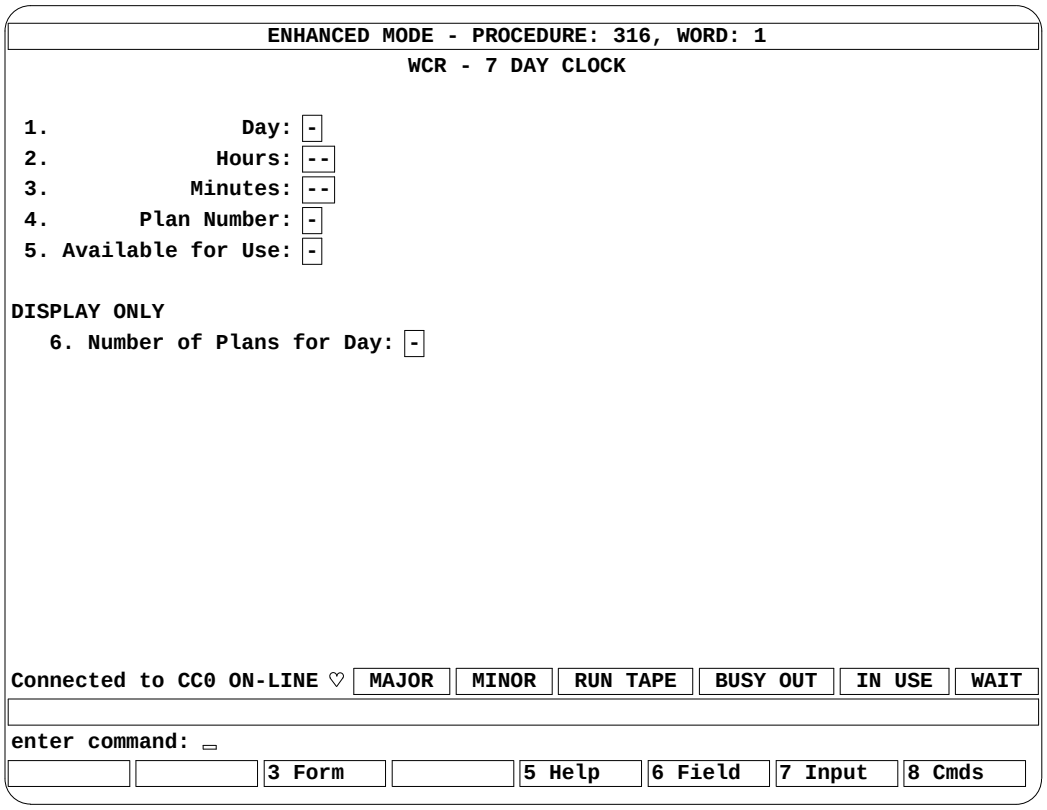
Procedure 315 Word 3 has been removed.

PROCEDURE 316 WORD 1 — WCR - 7 DAY CLOCK

Purpose

Use Procedure 316 Word 1 to administer WCR plan numbers with their associated plan change times. One of seven WCR plans can be administered to become active at six different times in a 24-hour period.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 (see Next Data).
Add:	Fields 1-5.
Change:	Fields 1-5. The change routine changes only the ‘‘available for use’’ field (from 1 to 0 or 0 to 1) and cannot be done in such a way as to create one time with two active plans.
Remove:	Fields 1-5.
Next Data:	Displays all translations for a single day.

Field Ranges and Encodes

1. Day	1	Monday
	2	Tuesday
	3	Wednesday
	4	Thursday
	5	Friday
	6	Saturday
	7	Sunday
2. Hours	0-23 (0 = midnight, 12 = noon)	
3. Minutes	0-59	
4. Plan Number	1-7	
5. Available for Use	0	No
	1	Yes

DISPLAY ONLY (Field 6)

6. Number of Plans for Day	0-6 The plan number can be changed a maximum of six times in one day.

Special Error Codes

81 - Six assignments can be made for one day.

82 - The change routine is allowed only when fields 1-4 describe an assigned plan.

PROCEDURE 317 WORD 1 — GRS - NETWORK CALL CATEGORY DEFINITION

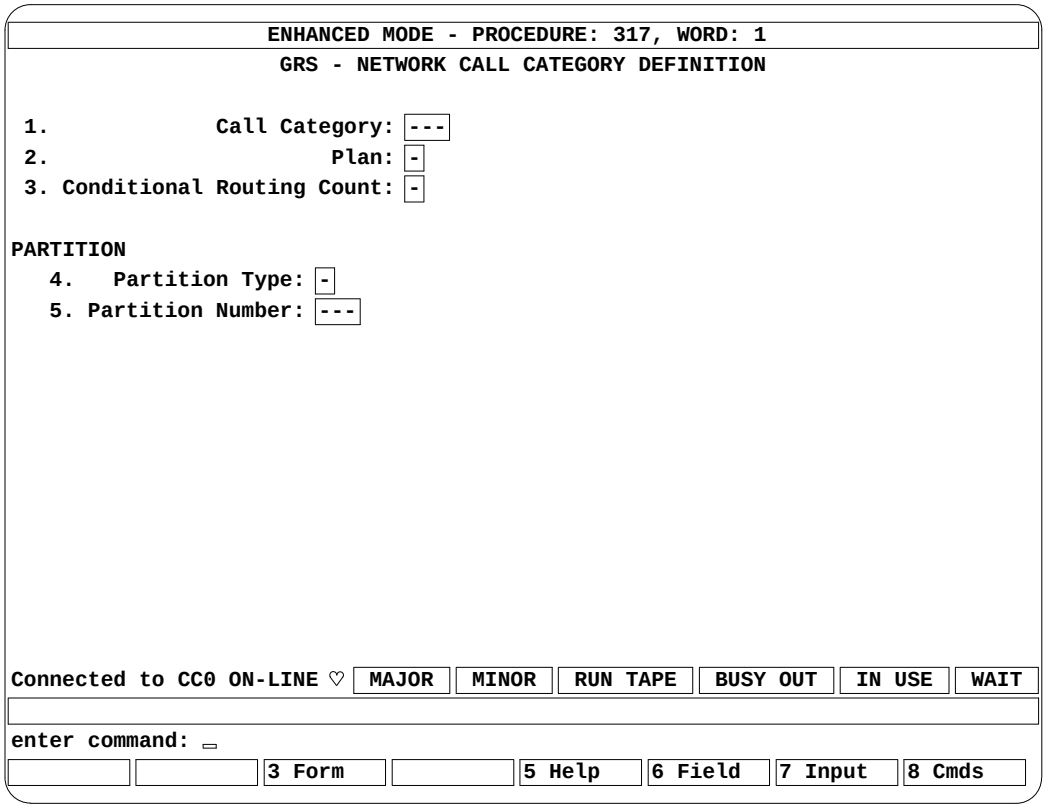
Purpose

Use Procedure 317 Word 1 to assign characteristics, such as satellite hop control or partition numbers, to call categories used by the Generalized Route Selection (GRS) module of the World Class Routing feature.

Related Procedures

Use Procedure 317 Word 2 to assign pattern number to a call category and VNI combination.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-5.
Add:	Not allowed.
Change:	Fields 1-5.
Remove:	Not allowed.
Next Data:	Displays all assigned Call Categories.

Field Ranges and Encodes

1. Call Category — 0-255 (0 is default call category)

2. Plan
   - 1-7 Plan number
   - 9 All plans

3. Conditional Routing Count
   - 0 No conditional routing links used
   - 1 One conditional routing link used
   - 2 Two conditional routing links used
   - 9 0, 1, or 2 conditional routing links used

   Counts the number of conditional routing links a call has used to reach the local switch. For example, conditional routing can prevent a call from accessing patterns containing satellite links.

PARTITION (Fields 4-5)

4. Partition Type
   - - Tenant Services feature is not active
   - 0 Extension partition
   - 1 Attendant partition
   - 9 All partitions

5. Partition Number
   - - Not applicable
   - 0-40 Attendant partion number (field 4=1)
   - 0-999 Extension partion number (field 4=0)

   A ‘‘-’’ signifies that either the Tenant Services feature is inactive or that ‘‘All partitions’’ (encode 9) was specified in field 4.

Special Error Codes

None.

PROCEDURE 317 WORD 2 — GRS - NETWORK ROUTING

Purpose

Use Procedure 317 Word 2 to assign a pattern number to a call category/VNI combination.

Related Procedures

Use Procedure 317 Word 1 to assign characteristics to a call category.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 317, WORD: 2
                              GRS - NETWORK ROUTING

 1. Virtual Nodepoint Identifier: ----
 2. Call Category: ---
 3. Pattern Number: ----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Fields 1-3.
Remove:	Fields 1-3.
Next Data:	Displays all assigned routes.

Field Ranges and Encodes

1.	Virtual Nodepoint Identifier	1-1023
2.	Call Category	0-255
3.	Pattern Number	-, 1-1023

Special Error Codes

None.

PROCEDURE 318 WORD 1 — WCR - NETWORK ROUTE TRANSLATION

Purpose

Use Procedure 318 Word 1 to administer World Class Routing translations.

Related Procedures

Use Procedure 075 Word 2 to search for trunk group and pattern/preferences assigned an index (DMI, digit sending, and ISDN sending).

Use Procedure 318 Word 2 to administer a BCCOS to a pattern/preference number.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 318, WORD: 1
                         WCR - NETWORK ROUTE TRANSLATION

 1.              Pattern Number: [----]
 2.          Preference Number: [--]
 3.                Trunk Group: [---]
 4. Facility Restriction Level: [-]
 5.               Warning Tone: [-]
 6.             Toll-free Index: [--]
 7.   Digit Modification Index: [----]
 8.         Digit Sending Index: [---]
 9.          ISDN Sending Index: [----]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1-2 or field 3.
Add:	Fields 1-9 (Add preference numbers starting with 1. Do not leave gaps). The add routine also administers a BCCOS (Word 2 field 3) based on the BCCOS of the trunk group specified in field 3.
Change:	Fields 3-9.
Remove:	Fields 3-9 (a remove routine also removes the data in Procedure 318 Word 2). When removing preference numbers, start with the highest number (lowest priority). When removing a preference number that is within a group of preference numbers, move the higher numbered preferences to fill gaps.
Next Data:	Displays all assigned patterns and preferences.

Field Ranges and Encodes

1. Pattern Number — 1-1023

2. Preference Number — 1-16

   The lower the preference number the higher the priority of the preference. For example, preference number 1 has a higher priority than preference number 2.

3. Trunk Group — 18-999

4. Facility Restriction Level — 0-7

   This field is administered on a per preference basis. FRLs may also be assigned on a trunk group and extension class of service basis.

5. Warning Tone
   - 0 Not given
   - 1 Warning on toll calls
   - 2 Warning on all calls

6. Toll-free Index
   - \- All numbers are toll-free calls
   - 0 All numbers are toll calls
   - 1-63 Toll-free index number

   This field assigns one of 63 possible toll-free indices (pointer to a toll-free table in memory) to a particular pattern and preference. The same toll-free index may be used for more than one pattern and preference.

   Use Procedure 075 Word 2 to search for trunk groups and pattern/preferences assigned to a particular toll-free index.

7. Digit Modification Index
   0 No digit modification
   1-4095 Digit modification index number

   Encodes 1-4095 provide the index to a set of digit modification attributes, administered in Procedure 320 Word 1, for a particular pattern and preference. The same index may be used for more than one pattern and preference.

   Use Procedure 075 Word 2 to search for trunk groups and preferences assigned to a particular DMI.

8. Digit Sending Index
   0 Use default sending attributes
   1-511 Digit sending index number

   Encodes 1-511 provide the index to a set of digit sending attributes, administered in Procedure 321 Word 1, for a particular pattern and preference. The same index may be used for more than one pattern and preference.

   Use Procedure 075 Word 2 to search for trunk groups and pattern/preferences assigned to a particular digit sending index.

9. ISDN Sending Index
   -, 0-1023

   This field provides the index to a set of ISDN sending attributes, administered in Procedure 322 Word 1, for a particular pattern and preference. The same index may be used for more than one pattern and preference.

   Use Procedure 075 Word 2 to search for trunk groups and pattern/preferences assigned to a particular ISDN sending index.

Special Error Codes

81 - Add preference numbers starting with 1. Do not leave gaps.

82 - Only the highest preference number can be removed. Use the change routine to move data from higher numbered preference numbers down and then remove the highest one. Procedure 318 Word 2 may have to be used.

83 - The signaling type of the trunk group entered in field 3, is not compatible with the data entered in field 9. If the trunk signaling type is ISDN, field 9 must be entered. If the trunk signaling type is not ISDN, field 9 must be dashed.

PROCEDURE 318 WORD 2 — NETWORK ROUTE TRANSLATION

Purpose

Use Procedure 318 Word 2 to administer a BCCOS to a WCR preference.

Prerequisite Procedures

Use Procedure 318 Word 1 to administer a WCR pattern and preference before administering a BCCOS in this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 318, WORD: 2
                              NETWORK ROUTE TRANSLATION

 1.        Pattern Number: ----
 2.     Preference Number: --
 3. Bearer Capability COS: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Fields 1 and 2.
Add:	Not allowed.
Change:	Fields 1-3.
Remove:	Not allowed.
Next Data:	Displays all the BCCOSs assigned to patterns and preferences.

Field Ranges and Encodes

1.	Pattern Number	1-1023
2.	Preference Number	1-16
3.	Bearer Capability COS	0-255 When a trunk group is added in Procedure 318 Word 1, field 3 defaults to the BCCOS value administered for the trunk group in Procedure 100 Word 2.

Special Error Codes

None.

PROCEDURE 319 WORD 1 — NETWORK TOLL-FREE INDEX

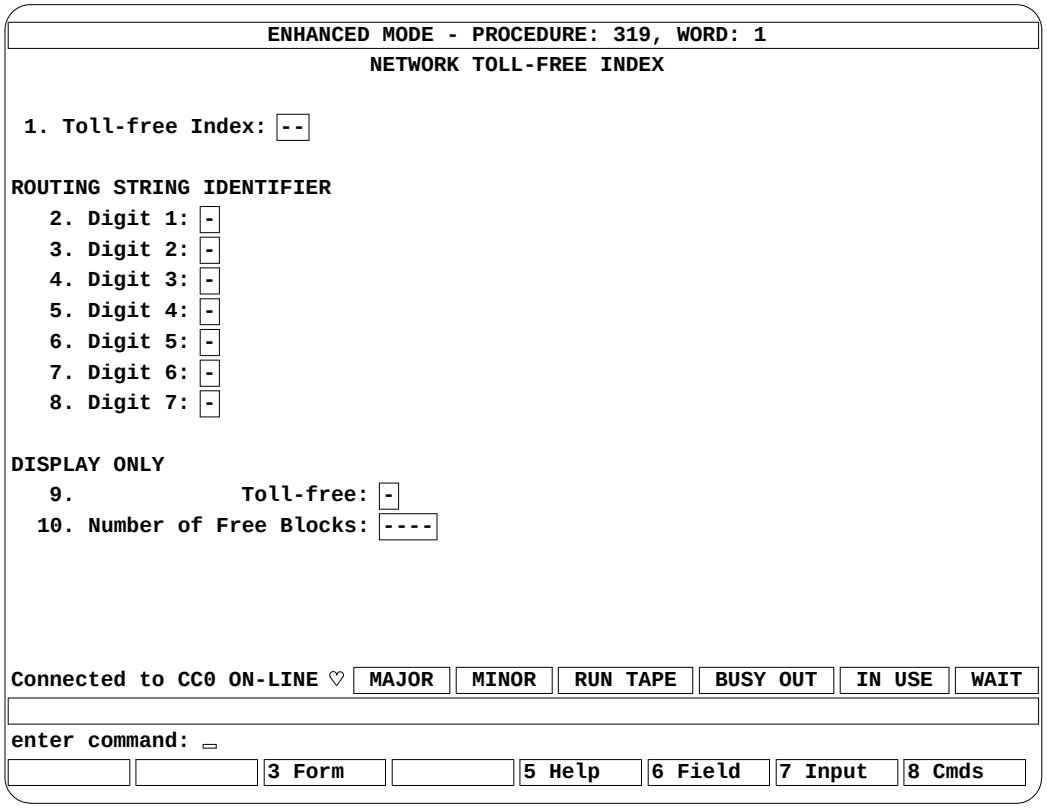
Purpose

Use Procedure 319 Word 1 to administer toll-free digit strings. One or more digit strings (up to 64) can be administered to one or more toll-free indices (to a table in memory) in field 1.

Related Procedures

Use Procedure 318 Word 1 to administer indices to WCR (World Class Routing) preferences.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 1-8.
Add:	Fields 1-8.
Change:	Not allowed.
Remove:	Fields 1-8.
Next Data:	Displays all digit strings that are marked as toll-free for the index (to a table in memory) entered in field 1. Each digit string is displayed in numerical order. After all toll-free digit strings for a given index are displayed, the next index with administered toll-free numbers is displayed. If there are no more indices with administered toll-free numbers, all dashes are displayed.

Field Ranges and Encodes

1. Toll-free Index -,0-63

   This field indexes one of 63 possible Toll-free tables to assign digit strings a toll-free indication. The toll-free index can then be assigned to World Class Routing (WCR) preferences in Procedure 318 Word 1.

   If a number is in the table, the number is considered toll-free. Any number not in the table is considered toll. One or more digit strings can be administered to each toll-free index.

ROUTING STRING IDENTIFIER (Fields 2-8)

0-9 Decimal digits

Routing Strings can be NPAs, RNXs, or any string of digits that need to be marked as toll. Do not leave gaps in digit strings.

2. Digit 1 -, 0-9
3. Digit 2 -, 0-9
4. Digit 3 -, 0-9
5. Digit 4 -, 0-9
6. Digit 5 -, 0-9
7. Digit 6 -, 0-9
8. Digit 7 -, 0-9

DISPLAY ONLY (Fields 9-10)

9. Toll-free 0 Toll
   1 Toll-free
10. Number of Free Blocks 0-511

Special Error Codes

81 - Toll-free digit string can not have gaps.

82 - Partial string already administered.

83 - Longer string(s) already administered. Must remove the longer string(s) before adding this string.

PROCEDURE 320 WORD 1 — WCR - NETWORK DIGIT MODIFICATION

Purpose

Use Procedure 320 Word 1 to define a digit modification index number. An index entry specifies the number of digits to delete from the front of a string and, after all deletions, the digits to be inserted at the front of that string.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 320, WORD: 1
                         WCR - NETWORK DIGIT MODIFICATION

 1. Digit Modification Index: ----
 2.         Digits To Delete: --
 3.           Segment Number: -

INSERTION DIGITS
   4. Digit 1,  9, 17, or 25: --
   5. Digit 2, 10, 18, or 26: --
   6. Digit 3, 11, 19, or 27: --
   7. Digit 4, 12, 20, or 28: --
   8. Digit 5, 13, 21, or 29: --
   9. Digit 6, 14, 22, or 30: --
  10. Digit 7, 15, 23, or 31: --
  11.     Digit 8, 16, or 24: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 3.
Add:	Not allowed.
Change:	Fields 1-11.
Remove:	Not allowed.
Next Data:	Displays all assigned indices.

Field Ranges and Encodes

1. Digit Modification Index	0	Display only, (default)
	1-4095	Digit modification index number
2. Digits To Delete	0	Default
	1-31	Number of digits to delete
	99	Delete all digits
3. Segment Number	0	No digits to insert, (default)
	1	Digits 1-8
	2	Digits 9-16
	3	Digits 17-24
	4	Digits 25-31

INSERTION DIGITS (Fields 4-11)

4. Digit 1, 9, 17, or 25	-, 0-9, 11(*), 12(#)
5. Digit 2, 10, 18, or 26	-, 0-9, 11(*), 12(#)
6. Digit 3, 11, 19, or 27	-, 0-9, 11(*), 12(#)
7. Digit 4, 12, 20, or 28	-, 0-9, 11(*), 12(#)
8. Digit 5, 13, 21, or 29	-, 0-9, 11(*), 12(#)
9. Digit 6, 14, 22, or 30	-, 0-9, 11(*), 12(#)
10. Digit 7, 15, 23, or 31	-, 0-9, 11(*), 12(#)
11. Digit 8, 16, or 24	-, 0-9, 11(*), 12(#)

Special Error Codes

80 - Dash field 11 for this segment. A maximum of 31 digits can be inserted.

81 - Field 2 cannot be dashed when field 3 is equal to 0 or 1.

82 - Field 2 must be dashed for this segment.

83 - Enter digits sequentially from 1-31 (fields 4-11). Specify all digits of a given segment before selecting the next segment, do not leave gaps.

84 - All digit fields (4-11) must be dashed when field 3 equals 0.

PROCEDURE 321 WORD 1 — WCR - DIGIT SENDING TRANSLATION

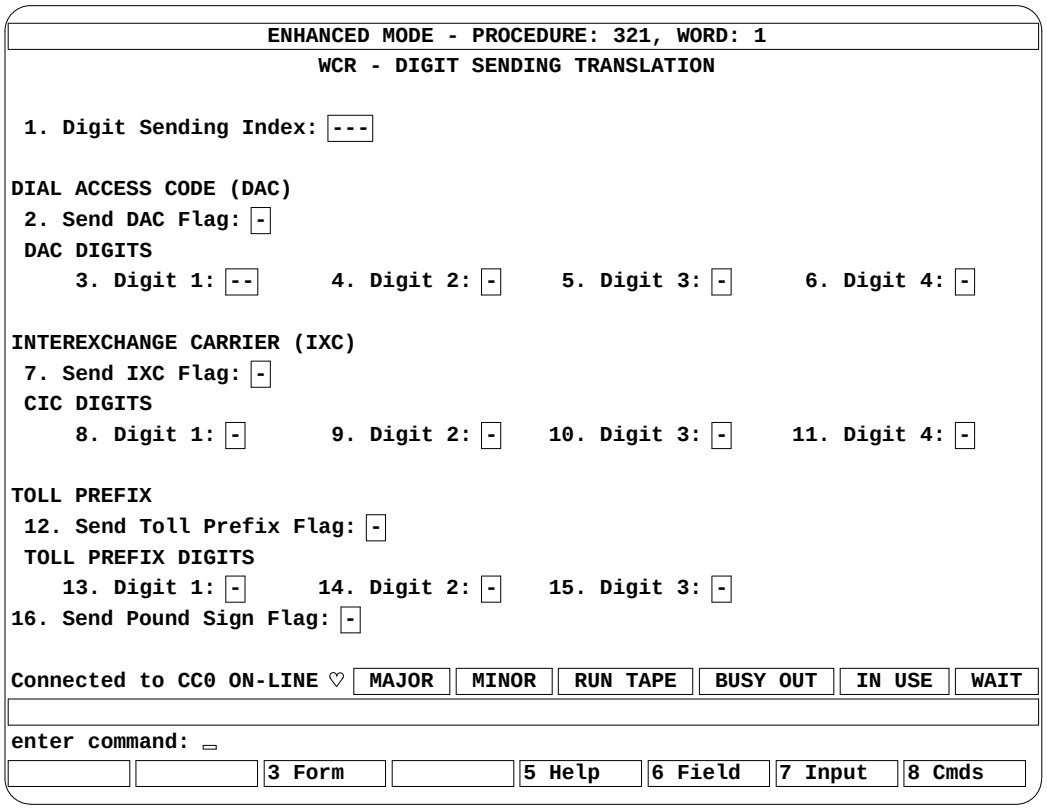
Purpose

Use Procedure 321 Word 1 to assign WCR digit sending instructions to a digit sending index.

Related Procedures

Use Procedure 321 Word 2 to specify pause insertion for a digit sending index.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-16.
Remove:	Not allowed.
Next Data:	Displays all assigned indices for this word. (Indices administered in word 2 but not in this word will NOT be displayed.)

Field Ranges and Encodes

1. Digit Sending Index
   - 0 Display only (default)
   - 1-511 Digit sending index number

DIAL ACCESS CODE (DAC) (Fields 2-6)

If this prefix is assigned, the DAC digits will be the leading digits in the outgoing digit stream.

2. Send DAC Flag
   - 0 Do not send any DAC (default)
   - 1 Send dialed DAC or else send no DAC
   - 2 Send dialed DAC or else send assigned DAC
   - 3 Send assigned DAC

DAC DIGITS (Fields 3-6)

3. Digit 1 — -, 0-9, 11(*), 12(#)
4. Digit 2 — -, 0-9
5. Digit 3 — -, 0-9
6. Digit 4 — -, 0-9

INTEREXCHANGE CARRIER (IXC) (Fields 7-11)

If a DAC prefix is assigned, the IXC prefix will follow in the outgoing digit stream. Otherwise, the IXC will be the leading digits in the outgoing digit stream.

7. Send IXC Flag
   - 0 Do not send any IXC (default)
   - 1 Send dialed IXC or else send no IXC
   - 2 Send dialed IXC or else send assigned IXC
   - 3 Send assigned IXC

   For encodes 2 and 3, the ‘‘administered’’ IXC is actually created by putting two or three digits in front of the carrier identification code (CIC) entered in fields 8-12. Specifically, when the CIC is 1, 2, or 3 digits, the digits ‘‘10’’ are put in front to form the IXC, and when the CIC is 4 digits, the digits ‘‘101’’ are put in front to form the IXC.

CIC DIGITS (Fields 8-11)

8. Digit 1 — -, 0-9

9. Digit 2	-, 0-9
10. Digit 3	-, 0-9
11. Digit 4	-, 0-9

TOLL PREFIX (Fields 12-15)

The toll prefix is always the last prefix sent in the outgoing digit stream. If the toll prefix is the only prefix assigned, the toll digits will be the leading digits in the outgoing digit stream.

12. Send Toll Prefix Flag	0	Do not send any prefix (default)
	1	Toll calls: send the dialed prefix
	2	Toll calls: send dialed prefix or else assigned prefix
	3	All calls: send the dialed prefix
	4	All calls: send dialed prefix or else assigned prefix
	5	Toll calls: send assigned prefix
	6	All calls: send assigned prefix

TOLL PREFIX DIGITS (Fields 13-15)

13. Digit 1	-, 0-9
14. Digit 2	-, 0-9
15. Digit 3	-, 0-9

16. Send Pound Sign Flag	0	Do not send pound sign (default)
	1	Send pound sign after all other digits sent

Special Error Codes

81 - Send flag (field 2, 7 or 12) specified for this group requires at least 1 digit to be added to this group.

82 - Send flag (field 2 or 12) specified for this group requires all digits for this group to be dashed.

83 - Enter digits sequentially, do not leave gaps.

PROCEDURE 321 WORD 2 — WCR - DIGIT GROUPING FOR SENDING

Purpose

Use Procedure 321 Word 2 to assign WCR digit groupings and pause insertion to a digit sending index.

Related Procedures

Use Procedure 321 Word 1 to specify digit sending instructions for a digit sending index.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 321, WORD: 2
                        WCR - DIGIT GROUPING FOR SENDING

 1. Digit Sending Index: [---]

GROUP ONE
   2.     Pause Length: [--]
   3. Number of Digits: [--]
   4.             Mode: [-]
GROUP TWO
   5.     Pause Length: [--]
   6. Number of Digits: [--]
   7.             Mode: [-]
GROUP THREE
   8.     Pause Length: [--]
   9. Number of Digits: [--]
  10.             Mode: [-]
GROUP FOUR
  11.     Pause Length: [--]
  12.             Mode: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-12.
Remove:	Not allowed.
Next Data:	Displays all assigned indices for this word. (Indices assigned in word 1 but not in this word are NOT displayed.)

Field Ranges and Encodes

1. Digit Sending Index
   - 0 Display only
   - 1-511 Digit sending index number

GROUP ONE (Fields 2-4)

2. Pause Length
   - 0 Begin sending after the trunk outgoing seizure completes
   - 2-16 Delay (sec.) before sending once outgoing seizure completes

   If dial tone is detected prior to this timer expiring, sending will begin. To ensure that sending does not begin until the timer has expired, set Procedure 103 Word 1 field 9 to ignore dial tone on the relevant trunk group.

3. Number of Digits
   - 1-31 Number of digits to be sent
   - 99 Send all remaining digits

4. Mode
   - 0 Touch-tone
   - 1 Rotary

   This field only applies to trunks in traditional modules. The sending mode for universal modules is determined by the translations defined for the trunk group in Procedure 101 Word 1 field 7.

GROUP TWO (Fields 5-7)

5. Pause Length
   - 0 No pause
   - 2-16 Delay (sec.) before sending digits in this group

6. Number of Digits
   - 1-31 Number of digits to be sent
   - 99 Send all remaining digits

7. Mode
   - 0 Touch-tone
   - 1 Rotary

   This field only applies to trunks in traditional modules. Sending mode for universal modules is determined by the translations defined for the trunk group in Procedure 101 Word 1 field 7.

GROUP THREE (Fields 8-10)

8. Pause Length
   - 0 No pause
   - 2-16 Delay (sec.) before sending digits in this group

9. Number of Digits	1-31	Number of digits to be sent
	99	Send all remaining digits.
10. Mode	0	Touch-Tone
	1	Rotary

This field only applies to trunks in traditional modules. Sending mode for universal modules is determined by the translations defined for the trunk group in Procedure 101 Word 1 field 7.

GROUP FOUR (Fields 11-12)

11. Pause Length	0	No pause
	2-16	Delay (sec.) before sending digits in this group
12. Mode	0	Touch-Tone
	1	Rotary

This field applies only to trunks in traditional modules. Sending mode for universal modules is determined by the translations defined for the trunk group in Procedure 101 Word 1 field 7.

Special Error Codes

81 - All fields must be dashed for groups following a group that specifies "send all remaining digits" (encode 99).

82 - If this is the last group and the group number is 1-3, use encode 99 "send all remaining digits" or administer group 4.

PROCEDURE 322 WORD 1 — WCR - OUTGOING ISDN FEATURE PARAMETERS

Purpose

Use Procedure 322 Word 1 to specify ISDN sending index parameters such as Network Specific Facilities (NSF) values and IXC messaging options.

Related Procedures

Use Procedure 279 Word 1 to assign the ISDN network service value.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 322, WORD: 1
                     WCR - OUTGOING ISDN FEATURE PARAMETERS

 1.            ISDN Sending Index: [----]
 2.    ISDN Network Service Value: [---]
 3.               Type of Address: [-]
 4. Numbering Plan Identification: [--]
 5.                    IXC Option: [-]

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-5.
Remove:	Not allowed.
Next Data:	Displays translations for the next index with nondefault values.

Field Ranges and Encodes

1. ISDN Sending Index — 0-1023

2. ISDN Network Service Value — -, 1-511

   A value must be specified in this field if an NSF IE is to be sent.

   This field is defined with ISDN network characteristics that are used with the Network Specific Facility Information Element. See Procedure 279 Word 1.

3. Type of Address

   0 Unknown, default
   1 International number
   2 National number
   3 Network specific number
   4 Subscriber number
   6 Abbreviated number
   7 Reserved for extension

   This field is defined with ISDN network characteristics that are used with the Called Party Number Information Element. To assure compatibility, this field should agree with the distant switch. Current CCITT specifications define the encodes.

4. Numbering Plan Identification

   0 Unknown, default
   1 ISDN/telephony numbering plan
   2 Telephony numbering plan
   3 Data numbering plan
   4 Telex numbering plan
   8 National numbering plan
   9 Private numbering plan
   15 Reserved for extension

   This field is defined with ISDN network characteristics that are used with the Called Party Number Information Element. Current CCITT specifications define the encodes.

5. IXC Option

   0 Code IXC in NSF IE or TNS IE
   1 Code IXC in CDN IE

Special Error Codes

81 - Assign the ISDN Network Service Value in Procedure 279 Word 1.

PROCEDURE 330 WORD 1 — QUEUING - SYSTEM TRANSLATION

Purpose

Use Procedure 330 Word 1 to administer the system translation for trunk queuing on outgoing calls.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign off-hook queuing (OHQ) on the audio trunk group (trunk type 67).

Use Procedure 150 Word 1 to assign audio trunks (one trunk per module maximum).

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 330, WORD: 1
                           QUEUING - SYSTEM TRANSLATION

 1.       Queuing Status: [-]
 2. Queue Records Active: [---]
 3.        Threshold FRL: [-]
 4.           Raised FRL: [-]
 5.  Terminal Queue Type: [-]

DISPLAY ONLY
   6. Audio Trunk Group: [---]

 7. Pattern Queuing Preference Level: [--]

DISPLAY ONLY
   8. Maximum Number of Queue Records: [---]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
                                                                                  |
enter command: _
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-5 and 7 (after display only).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Queuing Status
   - 0 Not active
   - 1 Active

2. Queue Records Active — 0-999

   The value in this field cannot exceed the value in field 8. Field 8 is shown after doing a display and is calculated based on the availability of intercom, trunk, queue, and unused records.

3. Threshold FRL — 0-7

   This FRL is a system-wide FRL that is compared against the caller's default FRL.

4. Raised FRL — 0-7

   A caller's FRL is raised so the switch can make a final attempt to connect the caller to an idle trunk. FRLs can be raised only if all the following conditions are met:
   1. The caller is using WCR.
   2. The caller is about to be dropped from the queue.
   3. The caller's FRL is greater than or equal to the threshold FRL (field 3).

5. Terminal Queue Type
   - 0 Off-hook queuing, nonpriority
   - 1 Off-hook queuing, priority
   - 2 Ringback queuing

   Nonpriority OHQ is the default for the system. Ringback queuing (RBQ) is always nonpriority.

   RBQ cannot be administered on two-way tie trunks (use Procedure 178 Word 1 to display assigned trunk types).

   If no audio trunk group is assigned, OHQ is disabled.

DISPLAY ONLY (Field 6)

6. Audio Trunk Group — -, 18-999

   The audio trunk group is assigned by a service technician.

7. Pattern Queuing Preference Level — 0-16

   If field 1 = 0, field 7 must be 0. If field 1 = 1, field 7 must be 1-16.

DISPLAY ONLY (Field 8)

8. Maximum Number of Queue Records 0-999

Special Error Codes

81 - The Raised FRL must be greater than the Threshold FRL (if an increase is possible). If no increase is possible, the Raised FRL must be 0.

PROCEDURE 330 WORD 2 — QUEUING - TRUNK GROUP TRANSLATION

Purpose

Use Procedure 330 Word 2 to administer trunk group translations for trunk queuing on outgoing calls.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups used by queuing.

Related Procedures

Queuing cannot be assigned to the audio trunk group (Procedure 100 Word 1, trunk type 67). If the the audio trunk group is already assigned, it can be displayed in Procedure 330 Word 1.

Cautions

Deactivating queuing in field 2 causes calls currently in queue to be dropped from the queue.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 330, WORD: 2
                        QUEUING - TRUNK GROUP TRANSLATION

 1. Trunk Group: [---]

OUTGOING TRUNK GROUP QUEUE DATA
   2.           Queuing Status: [-]
   3. Nonpriority Queue Length: [--]
   4.    Priority Queue Length: [--]
  WAIT TIME
     5. Nonpriority OHQ: [--]
     6.    Priority OHQ: [--]
     7.             RBQ: [--]
   8. Ringback Restriction: [-]
   9.        Route Advance: [-]

10. Incoming Trunk Queue Data: [-]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command: _
| | | 3 Form | | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-10.
Change:	Fields 2-10.
Remove:	Fields 1-10.
Next Data:	Displays the queuing data for each trunk group.

Field Ranges and Encodes

1. Trunk Group — 18-999

   If the trunk group is incoming only, fields 3, 4, 8 and 9 must be dashed.

OUTGOING TRUNK GROUP QUEUE DATA (Fields 2-9)

2. Queuing Status
   - 0 Not active
   - 1 Active

3. Nonpriority Queue Length — -, 0-63

   Nonpriority OHQ is the default for the system. RBQ is always nonpriority.

4. Priority Queue Length — -, 0-63

WAIT TIME (Fields 5-7)

5. Nonpriority OHQ
   - - No limit
   - 1-79 Wait time in 0.1-minute increments

6. Priority OHQ
   - - No limit
   - 1-79 Wait time in 0.1-minute increments

7. RBQ
   - - No Limit
   - 1-60 Wait time in one-minute increments

8. Ringback Restriction
   - 0 RBQ not restricted
   - 1 RBQ restricted
   - 2 Change RBQ to OHQ

   If RBQ is changed to OHQ in this field, the OHQ wait time now applies.

9. Route Advance
   - 0 Not allowed
   - 1 Allowed

10. Incoming Trunk Queue Data
    - - See Special Error Code 81
    - 0 OHQ nonpriority
    - 1 OHQ priority
    - 2 RBQ 2 digits in dial code of terminals
    - 3 RBQ 3 digits in dial code of terminals
    - 4 RBQ 4 digits in dial code of terminals
    - 5 RBQ 5 digits in dial code of terminals
    - 6 No queue

    Ringback queuing is not allowed on two-way tie trunks (use Procedure 178 Word 1 to display the administered trunk type).

Special Error Codes

81 - Data cannot be entered in this field for the trunk type specified.

82 - Queuing cannot be active with queue lengths of 0.

83 - Ringback queuing is not allowed for this type of trunk.

PROCEDURE 350 WORD 1 — DIALING PLAN - FIRST DIGIT

Purpose

Use Procedure 350 Word 1 to administer the first dialed digit of a dial access code (DAC) or extension number for the dialing plan. The first dialed digit is defined in terms of the number of digits expected and call type.

Prerequisite Procedures

Check all procedures that include an extension number or dial access code before removing or changing a first dialed digit.

Related Procedures

After defining a given call type (field 3), use the appropriate procedure(s) listed below to complete the administration.

a. For extension numbers (encode 1), use Procedure 354 Word 1.

b. For feature dial access codes (encode 2), use Procedure 350 Word 2.

c. For trunk dial access codes (encode 2), use Procedure 100 Word 1, and 104 Words 1 and 2.

d. For attendant dial access codes (encode 2), use Procedure 350 Word 2.

To change from a multidigit feature dial access code to a single-digit dial access code, do the following steps in the order shown:

a. Remove the multidigit feature dial access code using Procedure 350 Word 2.

b. Change the number of digits and call type using Procedure 350 Word 1 fields 2 and 3.

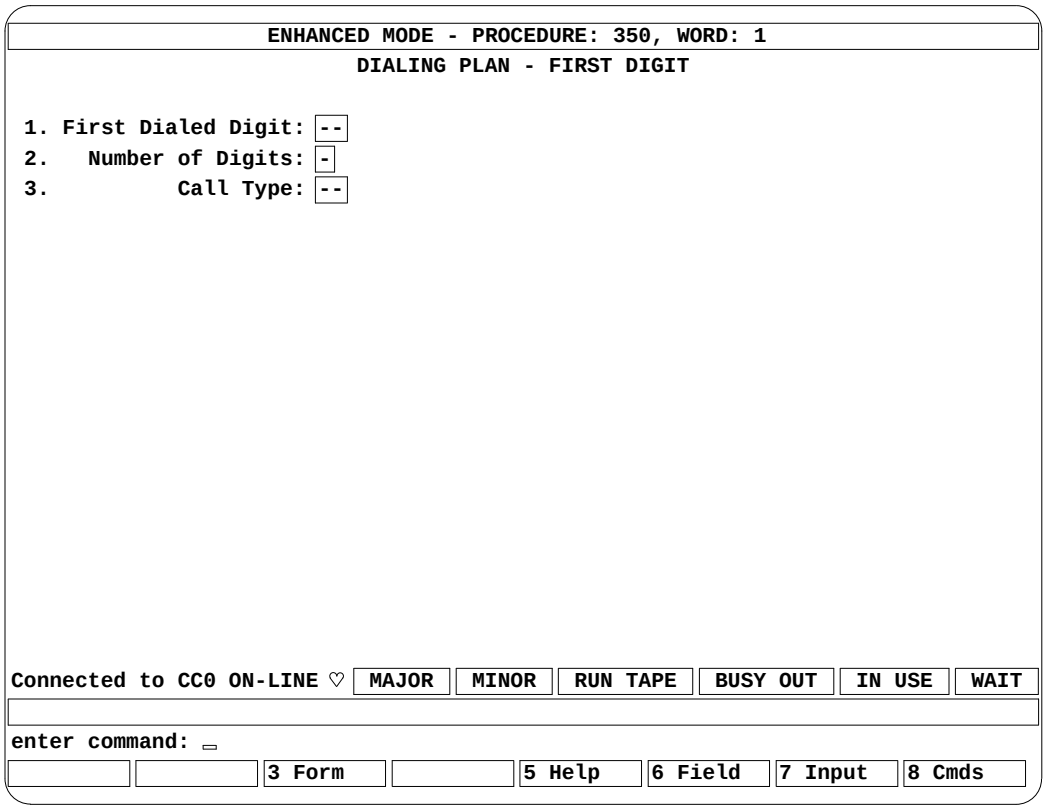
c. Add the single-digit feature dial access code using Procedure 350 Word 2.

Cautions

Field 1 = 12 and field 2 = 1 voids the burned-in code feature of Procedure 350 Word 3.

Using the change or remove routines may invalidate extension or dial code assignments made in other procedures (e.g., Procedures 000 Word 1, 100 Word 1, 350 Word 2). The first dialed digit of all extension numbers and dial access codes is affected by Procedure 350 Word 1. Improper use of this procedure can adversely affect system operation.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-3.
Change:	Fields 2 and 3.
Remove:	Fields 1-3.
Next Data:	Not allowed.

Field Ranges and Encodes

1.	First Dialed Digit	0-9, 11 (*), 12 (#) Either an * or # can be used as the first digit of a trunk, feature, or attendant dial access code (DAC), but not an extension.
2.	Number of Digits	1-5 (1-4 for trunks, features, and attendant DACs, 3-5 for extensions)
3.	Call Type	1 Extension number 2 Trunk, feature, or attendant DAC

Notes

1. When the first digit is dialed, the number of digits expected (field 2) is determined by the call type (field 3). The same initial digit cannot be used for different call types. For extension call types (encode 1), 3, 4, or 5 digits are expected. Extensions must all contain the same number of digits.

   For trunk, feature, and attendant DACs (encode 2), 1-4 digits are expected. This length can vary within the same system except that all trunk, feature, and attendant DACs using the same first digit must have the same length.

Special Error Codes

81 - Terminal-to-terminal call types must have the same number of digits.

82 - Change or remove routines are illegal. First remove previous assignments (see Procedure 354 Word 1).

PROCEDURE 350 WORD 2 — DIALING PLAN - FEATURE DIAL ACCESS CODES

Purpose

Use Procedure 350 Word 2 to administer the dial access codes (DACs) for terminal, attendant, and system features.

Prerequisite Procedures

Use Procedure 350 Word 1 to administer the first dialed digit.

Related Procedures

Use Procedure 350 Word 3 to add feature access buttons to fixed-feature terminals.

Coordinate removal or change of feature DAC with assignments (if any) made in Procedure 354 Word 2.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 350, WORD: 2
                    DIALING PLAN - FEATURE DIAL ACCESS CODES

 1. Feature: ---

DIAL ACCESS CODE
   2. Digit 1: --
   3. Digit 2: -
   4. Digit 3: -
   5. Digit 4: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-5.
Add:	Fields 1-5.
Change:	Field 1 or fields 2-5 (either the dial access code or the feature code can be changed, but not both).
Remove:	Fields 1-5.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Feature	1	Call Forwarding - Follow Me
	2	Call Forwarding - Busy and Don’t Answer
	3	Call Forwarding - cancel
	4	Call Hold
	5	Call Pickup
	6	Call Waiting - answer hold
	7	Priority Calling
	8	Attendant DAC

9 Cancel Automatic Callback/Queuing
10 Demand printing
11 Override
13 Data Protection (temporary)
14 Demand print access (for LWC)
16 Call Answer Any Voice Terminal (CAAVT) - answer
17 Paging answer-back
18 Traditional Code Calling - answer back
19 Automatic Callback
20 Attendant Control of Trunk Group Access - activate
21 Attendant Control of Trunk Group Access - cancel
22 Unattended Console Service - clear all terminals
23 Unattended Console Service - assign common terminal
24 Unattended Console Service - override common terminal
25 Unattended Console Service - assign terminal to trunk
26 Remote Access - change barrier code
27 Attendant control of voice terminals - single extension
28 Attendant control of voice terminals - group of extensions
29 Attendant interposition calling and transfer
30 Extension to selected attendant
31 Attendant Release Loop (ARL) time change (timed reminder)
32 WCR Network 1 toll-free access
33 WCR Network 1 toll access
36 Call Detail Recording - account code
37 Call Detail Recording - start
38 Call Detail Recording - stop
40 Terminal test
42 Maintenance busy a trunk
43 Maintenance unbusy a trunk
44 TVT trunk test access from terminal
45 CAS control - activate
46 CAS control of backup terminal
47 CAAVT - activate for CAS backup
48 CAS attendant puts remote call in hold state
49 Call to CAS attendant
50 CAS branch lamp test
53 Specific modem pool reservation
55 Send All Calls - activate
56 Send All Calls - cancel
57 Burned-in code - cancel/activate
58 Transfer - calls into AUDIX
59 Last Number Dialed
60 WCR plan change
61 WCR Network 2 access
62 Automatic Circuit Assurance - start
63 Automatic Circuit Assurance - stop
64 CAS main lamp test
66 Leave Word Calling - activate
67 Leave Word Calling - cancel

68 Message retrieval - lock
69 Message retrieval - unlock
70 ACD - auto in mode
71 ACD - auxiliary work mode
72 ACD - manual in mode
73 ACD - staffed mode
74 ACD - member add
75 ACD - member delete
76 ACD - announcement verify
77 ACD - agent override
78 ACD - agent override (tone)
79 ACD - reload lamp out
80 Divert attendant calls to recorded announcement - activate
81 Divert attendant calls to recorded announcement - cancel
82 AUTOVON - precedence calling
83 AUTOVON - attendant assistance
84 ACD overload - balance all
85 ACD overload - overflow
86 ACD overload - balance default
87 ACD overload - balance cancel
88 ACD - agent log in
89 ACD - agent log out
90 Dial the system list - touch-tone terminal
91 Dial list A - touch-tone terminal
92 Dial list B - touch-tone terminal
93 Program automatic dialing number or list
94 Dial the system list - rotary terminal
95 Dial list A - rotary terminal
96 Dial list B - rotary terminal
97 Unattended Console Service - activate
98 Unattended Console Service - deactivate
99 Malicious Call Trace - deactivate
100 Malicious Call Trace - activate
101 Speaker verification request
102 Speaker verification fail
103 Unadministered authorization code entered
104 No authorization code entered
105 Universal Code Calling/Chime Paging - access
106 Universal Code Calling/Chime Paging - answer back
107 Agent Skill Entry
108 WCR Network 3 access
109 WCR Network 4 access
110 WCR Network 5 access
111 WCR Network 6 access
112 WCR Network 7 access

DIAL ACCESS CODE (Fields 2-5)

2. Digit 1 0-9, 11 (*), 12 (#)
3. Digit 2 -, 0-9

4. Digit 3 -, 0-9
5. Digit 4 -, 0-9

Notes

1. Changing DACs affect users of Abbreviated Dialing and mnemonic dialing.
2. It is possible to double assign a single digit as a trunk (Procedure 100 Word 1) or feature (Procedure 350 Word 2) access code, and as a terminal number steering code (Procedure 354 Word 2). However, the actual use of the digit is determined by its assignment as a first digit. If defined as a trunk or feature access code, call processing treats the digit as a trunk or feature code. If the digit is defined as the first digit of a terminal code, the dialed digit(s) is treated as a steering code. The one exception to this rule is that if the digit is defined as a trunk access code and the dialing party is the attendant using a DXS key, the dialed digits are processed as a steering code. This provides attendant DXS capability to the terminal number steering feature.
3. The following list is a feature-to-encode cross-reference for the encodes used in field 1.

Feature Name	**Encode**
ACD - agent log in	88
ACD - agent log out	89
ACD - agent override	77
ACD - agent override (tone)	78
ACD - announcement verify	76
ACD - auto in mode	70
ACD - auxiliary work mode	71
ACD - manual in mode	72
ACD - member add	74
ACD - member delete	75
ACD - reload lamp out	79
ACD - staffed mode	73
ACD overload - balance all	84
ACD overload - balance cancel	87
ACD overload - balance default	86
ACD overload - overflow	85
AUTOVON - attendant assistance	83
AUTOVON - precedence calling	82
Agent Skill Entry	107
Attendant Control of Trunk Group Access - activate	20
Attendant Control of Trunk Group Access - cancel	21
Attendant DAC	8
Attendant Release Loop (ARL) time change (timed reminder)	31
Attendant control of voice terminals - group of extensions	28
Attendant control of voice terminals - single extension	27
Attendant interposition calling and transfer	29
Automatic Callback	19
Automatic Circuit Assurance - start	62

Automatic Circuit Assurance - stop	63
Burned-in code - cancel/activate	57
CAAVT - activate for CAS backup	47
CAS attendant puts remote call in hold state	48
CAS branch lamp test	50
CAS control - activate	45
CAS control of backup terminal	46
CAS main lamp test	64
Call Answer Any Voice Terminal (CAAVT) - answer	16
Call Detail Recording - account code	36
Call Detail Recording - start	37
Call Detail Recording - stop	38
Call Forwarding - Busy and Don’t Answer	2
Call Forwarding - Follow Me	1
Call Forwarding - cancel	3
Call Hold	4
Call Pickup	5
Call Waiting - answer hold	6
Call to CAS attendant	49
Cancel Automatic Callback/Queuing	9
Data Protection (temporary)	13
Demand print access (for LWC)	14
Demand printing	10
Dial list A - rotary terminal	95
Dial list A - touch-tone terminal	91
Dial list B - rotary terminal	96
Dial list B - touch-tone terminal	92
Dial the system list - rotary terminal	94
Dial the system list - touch-tone terminal	90
Divert attendant calls to recorded announcement - activate	80
Divert attendant calls to recorded announcement - cancel	81
Extension to selected attendant	30
Last Number Dialed	59
Leave Word Calling - activate	66
Leave Word Calling - cancel	67
Maintenance busy a trunk	42
Maintenance unbusy a trunk	43
Malicious Call Trace - activate	100
Malicious Call Trace - deactivate	99
Message retrieval - lock	68
Message retrieval - unlock	69
No authorization code entered	104
Override	11
Paging answer-back	17
Priority Calling	7
Program automatic dialing number or list	93
Remote Access - change barrier code	26
Send All Calls - activate	55

Send All Calls - cancel	56
Speaker verification fail	102
Speaker verification request	101
Specific modem pool reservation	53
TVT trunk test access from terminal	44
Terminal test	40
Traditional Code Calling - answer back	18
Transfer - calls into AUDIX	58
Unadministered authorization code entered	103
Unattended Console Service - activate	97
Unattended Console Service - assign common terminal	23
Unattended Console Service - assign terminal to trunk	25
Unattended Console Service - clear all terminals	22
Unattended Console Service - deactivate	98
Unattended Console Service - override common terminal	24
Universal Code Calling/Chime Paging - access	105
Universal Code Calling/Chime Paging - answer back	106
WCR Network 1 Toll route	33
WCR Network 1 Toll-free route	32
WCR Network 2 access	61
WCR Network 3 access	108
WCR Network 4 access	109
WCR Network 5 access	110
WCR Network 6 access	111
WCR Network 7 access	112
WCR plan change	60

Special Error Codes

80 - You cannot change codes that have not been assigned.

81 - This dial access code is already assigned as a trunk access code.

82 - The Standard Network feature must be turned on in Procedure 276 before a dial access code for features 61 or 108 - 112 can be administered.

83 - Either the access code or the feature encode can be changed, but not both.

84 - Burned-in cancel feature cannot be assigned to a dial access code.

86 - When vectoring is enabled, dial access codes 84-87 are not allowed.

87 - Code is assigned with more digits (see Procedure 354 Word 1).

88 - Set up the dialing plan first (Procedure 350 Word 1).

89 - Encodes 11 and 12 (* and #) are not valid for rotary-type encodes.

PROCEDURE 350 WORD 3 — BURNED-IN CODE FEATURE ASSIGNMENT

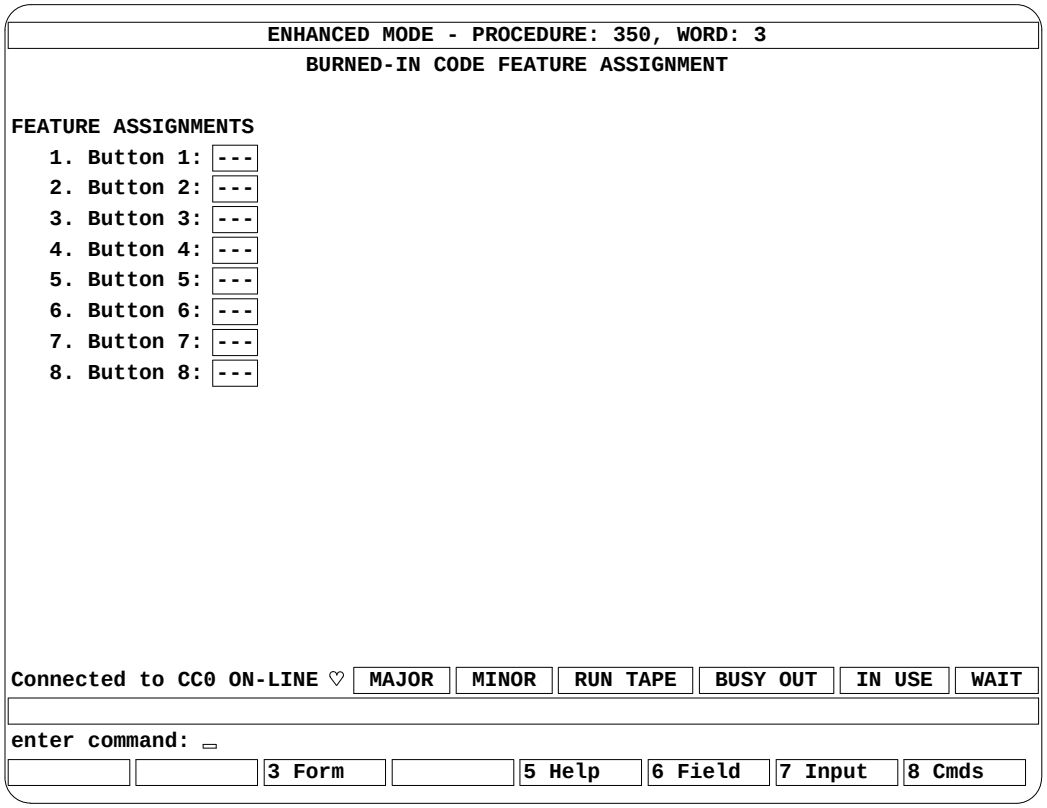
Purpose

Use Procedure 350 Word 3 to administer feature encodes for fixed-feature buttons on the 71-series voice terminals. The features administered in this procedure are active for all 71-series voice terminals in the system.

Prerequisite Procedures

Use Procedure 350 Word 2 to assign DACs for features, except for the Burned-In Cancel feature (code 5).

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-8.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

FEATURE ASSIGNMENTS (Fields 1-8)

0	Not assigned
1	Call Forwarding - Follow Me
2	Call Forwarding - Busy And Don’t Answer
3	Call Forwarding - Cancel
4	Hold
5	Call Pickup
6	Call Waiting - answer or hold
7	Priority Calling
8	Attendant DAC
9	Automatic Callback or Queuing - cancel
10	Demand printing
11	Override
13	Data protection - temporary
16	CAAVT code
17	Loudspeaker Paging - answer back
18	Traditional Code Calling Access - answer back
19	Automatic Callback - activate
30	Terminal to select attendant
32	WCR Network 1 Toll-free route
33	WCR Network 1 Toll route
36	Call Detail Recording (CDR) account code
55	Send All Calls - activate
56	Send All Calls - cancel
57	Burned-in code - cancel feature
61	WCR Network 2 access
66	Leave Word Calling - activate
67	Leave Word Calling - cancel
90	Abbreviated Dialing - access system list
91	Abbreviated Dialing - access list A
92	Abbreviated Dialing - access list B
93	Abbreviated Dialing - program
105	Universal Code Calling/Chime Paging - access
106	Universal Code Calling/Chime Paging - answer back
108	WCR Network 3 access
109	WCR Network 4 access
110	WCR Network 5 access
111	WCR Network 6 access
112	WCR Network 7 access

1. Button 1	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
2. Button 2	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
3. Button 3	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112

4. Button 4	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
5. Button 5	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
6. Button 6	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
7. Button 7	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112
8. Button 8	0, 1-11, 13, 16-19, 30, 32-33, 36, 55-57, 61, 66-67, 90-93, 105-112

Notes

1. Button features assigned in this procedure can also be assigned to 7103A 01C (programmable) terminals by the person using the terminal.

Special Error Codes

81 - Cannot assign that feature.

82 - Must assign DAC (Dial Access Code) to feature using Procedure 350 Word 2.

83 - Must assign DAC to corresponding feature cancel encode using Procedure 350 Word 2 (e.g., encodes 3, 9, 56, 67).

PROCEDURE 354 WORD 1 — EXTENSION GROUPS

Purpose

Use Procedure 354 Word 1 to administer the extension groups and node numbers that form the dialing plan for the system. Also use Procedure 354 Word 1 to administer block types and blocks of extensions in the dialing plan.

Prerequisite Procedures

Use Procedure 350 Word 1 to assign the first digit of an extension or to assign the prefix digit.

Use Procedure 000 Word 1 to remove all the extensions in a given group from service before the extension group can be removed in this procedure.

Use Procedure 354 Word 2 to remove a given DAC extension before the extension group is removed in this procedure.

Use Procedure 003 Word 1 to take extensions out of recent disconnect before changing or removing the block of extensions.

Use Procedure 275 Word 3 to specify number portability before entering a node number in field 3 of this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 354, WORD: 1
                                EXTENSION GROUPS

 1. First Extension: -----
 2.  Last Extension: -----
 3. ENP Node Number: ---

DISPLAY ONLY
   4. Block Type: -
   5. First Extension Assigned: -----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1 and 2 or 1-3. The first digit must be properly assigned in Procedure 350 Word 1. The first extension must be smaller than last extension.
Change:	Field 3
Remove:	Fields 1-5 (see Special Error Codes 83, 84, and 85).
Next Data:	Displays assigned blocks of extensions.

Field Ranges and Encodes

1. First Extension — 000-99990

   This extension must be smaller than the extension in field 2, and must end with a 0.

2. Last Extension — 009-99999

   This extension must be larger than the extension in field 1, and must end with a 9.

3. ENP Node Number -, 1-999

   To specify number portability, use Procedure 275 Word 3 before entering a node number in this field.

DISPLAY ONLY (Fields 4-5)

4. Block Type
   - 0 Extension
   - 1 DAC in block
   - 2 UDP in block
   - 3 Node numbers in block
   - 4 LDN in block
   - 5 Extensions in block are in recent disconnect
   - 6 VDNs in block
   - 7 Trunk group number in block based on DAC
   - 8 Feature number in block based on DAC

   For block type = 1, the unique DAC extensions or block of consecutive extensions can be found by stripping off the trailing 0/9 digit pairs from the first and last extension.

5. First Extension Assigned 000-99999

Notes

1. If first and last extensions are displayed, a 0 is displayed in field 4, and dashes are displayed in field 5; the range of the extension block is valid, but no extensions have been assigned in that group. If an extension number has been assigned in the block, the first extension is displayed.
2. If first and last extensions are displayed, a 2 is displayed in field 4, and a 1-, 2-, 3-, or 4-digit extension is displayed in field 5; the range of the extension block contains both extension and dial access codes. The first assigned number within the block is the number displayed in field 5.
3. If an extension code of 2 has been assigned, and the directory block 0-9 has been displayed, a 2 is displayed in field 4 and a 2 (the extension code) is displayed in field 5. In this example, since the extension code, 2, is a defined number, if a range of 20-29 is displayed as a block, a 1 is displayed in field 4, and dashes in field 5. This indicates that the extension code, 2, is defined as a single digit and cannot be used for a range of 20-29. To determine the unique extension code if that range is displayed, remove the trailing 0s and 9s from the first and last extension in the block. The same is true if the range is 200-299 or 2000-2999. Also, if the assigned extension codes are 2-5 and 20-59 is displayed, the trailing 0s and 9s can be removed to show a contiguous block of extension codes, 2 through 5.
4. If the first digit is assigned as a one-digit attendant DAC, then the block of extensions can only be assigned as LDNs (Procedure 204 Word 1).

Special Error Codes

81 - The first digit must be properly assigned in Procedure 350 Word 1.

82 - The first extension must be smaller than last extension and the first extension must end in 0 and the last extension must end in 9.

83 - Extensions must be removed in Procedure 000 Word 1 before the extension block can be removed or changed.

84 - The DAC, node, or UDP extension must be removed in Procedure 354 Word 2 before the extension block can be removed or changed.

85 - Extension(s) must be taken out of recent disconnect using Procedure 003 Word 1 before the extension block can be removed or changed.

86 - Must have a four/five-digit dialing plan to change the node number. The node number cannot be "this switch" and number portability must be specified in Procedure 275 Word 3.

87 - Number portability must be specified in Procedure 275 Word 3 to enter a node number in field 3.

88 - LDNs must first be removed in Procedure 204 Word 1.

89 - Trunk group DAC must be removed in Procedure 100 Word 1.

90 - Feature DAC must be removed in Procedure 350 Word 2.

PROCEDURE 354 WORD 2 — EXTENSION DESTINATION

Purpose

Use Procedure 354 Word 2 to administer dial access codes (DACs) to extensions and steering codes. Also use Procedure 354 Word 2 to assign DCS DACs to extensions on the first digit or first 2-digit positions for terminal routing. This procedure also associates extension numbers with node numbers for extension number portability.

Prerequisite Procedures

A code in field 1 cannot be already assigned as an extension in Procedure 000 Word 1. It can be assigned as a 1-4 digit code for trunks or features in Procedure 350 Word 1 or be undefined.

Use Procedure 100 Word 1 or 350 Word 2 to assign the trunk or feature dial access code, respectively.

The feature dial access code must correspond to the following feature encodes as defined in Procedure 350 Word 2 field 1: feature encode 8 is used for calls to system attendant; feature encode 49 is used for calls to CAS attendant.

The trunk dial access code must correspond to the following trunk types as defined in Procedure 100 Word 1 field 5: trunk types 33, 37, and 39 are used for OPX and DCA port access; trunk types 34, 36, and 38 are for special use only; trunk types 71, 72, 74, 75, 77, and 78 are used for Main/Satellite access.

Procedure 354 Word 2 does not prohibit the assignment of other trunk types or feature encodes. This allows certain flexibility for very special cases. Extreme care should be used if trunk types or feature encodes other than those above are used.

Cautions

To maintain DCS centralized messaging transparency, each extension assigned DAC, UDP, or node number routing (i.e., not local to this switch) must be associated to the node on which it resides. Failure to do so may result in lost messages.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 354, WORD: 2
                              EXTENSION DESTINATION

 1. Extension or Steering Code: [-----]
 2. Use: [--]

DAC
   3. Digit 1: [--]
   4. Digit 2: [-]
   5. Digit 3: [-]
   6. Digit 4: [-]

 7. Node Number: [---]

DISPLAY ONLY
   8. Trunk Group, Feature, or Partition: [---]
   9.          Code In Field 1 Conflicts: [---]




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-6.
Add:	Fields 1-2, fields 1-6, or fields 1-7.
Change:	Fields 2-6 or fields 2-7. To change from one type to another, do a remove then an add routine, except if a type 5 is displayed (see field 9).
Remove:	Fields 1-9.
Next Data:	See the next data table in Notes.

Field Ranges and Encodes

1. Extension or Steering Code — or — 000-99999 for extensions or 0-99999 for steering codes

2. Use	0	Not allocated (display only)
	1	Single extension on local switch (display only, Procedure 000 Word 1)
	2	Extension assigned to UDP
	3	Extension assigned to an ENP node number
	4	Extension assigned to a trunk DAC
	5	VDN on local switch (display and search only, Procedure 000 Word 1)
	6	Allocated, but unassigned (display and search only)
	7	Extension is recent disconnect (display only, Procedure 003 Word 1)
	8	Extension is an LDN (display only, Procedure 204 Word 1)
	9	DAC digits are specified and the entry is a trunk group
	10	DAC digits are specified and the entry is a feature

DAC (Fields 3-6)

3. Digit 1	-, 0-9, 11 (*), 12 (#)
4. Digit 2	-, 0-9
5. Digit 3	-, 0-9
6. Digit 4	-, 0-9
7. Node Number	-, 1-999
	This field is the node location for the extension in field 1.

DISPLAY ONLY (Fields 8-9)

8. Trunk Group, Feature, or Partition	-, 0-999
9. Code In Field 1 Conflicts	-, 0-999

Notes

1. The extension or steering code in field 1 is not restricted by a first digit dial definition requirement. Therefore, if a conflict should arise between the extension or steering code and a previously assigned 1-, 2-, or 3-digit code, Special Error Code 83 is displayed, and the conflicting code is displayed in field 9. If the displayed code is included in an assigned code with more digits (e.g., 2 is displayed, zero is assigned), Special Error Code 84 is displayed. To continue, remove all conflicting codes and the conflicting blocks in Procedure 354 Word 1.
2. If entering this procedure immediately after Special Error Code 84 is displayed in Procedure 354 Word 1, the extension displayed in field 5 of Procedure 354 Word 1 is used as the entry for field 1 of this procedure for a display (provided field 1 of Procedure 354 Word 2 is dashed).
3. Follow these steps to do the next data search sequence:
    a. Search on field 1: Enter data in field 1 and do a display routine. To continue, use the next data routine.
    b. To search for all ‘‘allocated extensions, but unassigned,’’ enter 5 in field 2 and leave the other fields dashed. This is the only case when an entry in field 2 alone is allowed.

c. Search on field 6: Enter dashes in fields 1-5 and data in field 6. Use the display routine. To continue use the next data routine.

4. The following table contains the fields that must be entered in order to do next data routines (search) on the given display type:

PROCEDURE 354 WORD 2 DISPLAY/NEXT DATA TABLE					
	FIELDS				
DISPLAY TYPE	1 Extension	2 Use	3-6 DAC	7 Node	Note on Next Data
Extension	extension	dash	dash	dash	finds type of next extension
VDN	extension	5	dash	dash	finds next VDN
Allocated extension but unassigned	extension	6	dash	dash	finds next allocated but unassigned extension
UDP	dash	2	dash	dash	finds next extension with UDP
DAC	dash	4	DAC	dash	finds next extension with this DAC
ENP Node number	dash	3	dash	node	finds next extension with this node number

5. The following table contains the field numbers and data types that must be entered in the specified fields in order to add or change the given routing type:

PROCEDURE 354 WORD 2 ADD/CHANGE TABLE				
	FIELDS			
	1	**2**	**3-6**	**7**
routing type	**extension**	**use**	**DAC**	**node**
UDP in DCS networks with centralized messaging	extension	2	dash	node
UDP in all networks without centralized messaging	extension	2	dash	[node]
ENP Node number	extension	3	dash	node

DAC in DCS networks with centralized messaging	extension	4	DAC	node
DAC in all networks without centralized messaging	extension	4	DAC	[node]

Brackets in the table indicate an optional item.

Special Error Codes

81 - Already assigned as a regular extension (Procedure 000 Word 1).

82 - Assign the trunk dial access code in Procedure 100 Word 1 and assign the feature dial code in Procedure 350 Word 2.

83 - To change from one type to another, do a remove routine then an add routine, except if a type 5 is displayed (see field 9).

84 - Code assigned with more digits, e.g., block is allocated (Procedure 354 Word 1)

85 - Extension is in recent disconnect (Procedure 003 Word 1).

87 - Assign number portability in Procedure 275 Word 3 before assigning a node number, when assigning ENP.

88 - Only allowed to administer UDP, DAC, or node.

89 - Extension is an LDN and must first be removed in Procedure 204 Word 1.

90 - For DAC use code (field 2) must be a 4 (DAC).

91 - Specify four or five digits in field 1 to add, change, or remove a node number when assigning ENP.

92 - Specify the node number (field 7) when requesting an ENP (field 2 = 3).

93 - The first digit must be properly assigned as an extension in Procedure 350 Word 1.

95 - The change routine cannot change the extension (field 1).

96 - Extension is a VDN and must first be removed in Procedure 031 Word 1 and Procedure 000 Word 1.

PROCEDURE 354 WORD 3 — NPA-NXX ASSIGNMENT

Purpose

Use Procedure 354 Word 3 to administer the calling connected numbers (NPA, NXX, and Thousands digit) for extensions based on their NPA-NXX designators. Use this procedure only if ISDN is supported.

Prerequisite Procedures

Use Procedure 000 Word 4 and Procedure 210 Word 2 to remove the NPA-NXX designator before removing it in this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 354, WORD: 3
                              NPA-NXX ASSIGNMENT

 1. NPA-NXX Designator: --
 2.                NPA: ---
 3.                NXX: ---
 4.   Thousand's Digit: -









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1, fields 2 and 3, or fields 2-4.
Add:	Fields 1-4.
Change:	Fields 1-4.
Remove:	Fields 1-4.
Next Data:	Field 1.

Field Ranges and Encodes

1.	NPA-NXX Designator	1-99
2.	NPA	000-999
3.	NXX	000-999
4.	Thousand's Digit	-, 0-9 This is used on systems that have a 3-digit extension numbering plan to create a dummy thousands digit. If used in a 4- or 5-digit dialing plan, it is used as the thousands digit in the digit stream regardless of the actual thousands digit.

Special Error Codes

81 - Remove the NPA-NXX designator in Procedure 000 Word 4 and Procedure 210 Word 2 before removing it from this word.

PROCEDURE 354 WORD 4 — NODE NUMBER TO VNI MAPPING

Purpose

Use Procedure 354 Word 4 to map a DCS node number to a World Class Routing (WCR) Virtual Nodepoint Identifier (VNI).

Screen Display

```
                ENHANCED MODE - PROCEDURE: 354, WORD: 4
                      NODE NUMBER TO VNI MAPPING

 1. Node Number: ---
 2. Virtual Nodepoint Identifier: ----

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |
enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 1-2.
Remove:	Not allowed.
Next Data:	Displays all assigned node numbers.

Field Ranges and Encodes

1.	Node Number	1-999
2.	Virtual Nodepoint Identifier	0-1023

Special Error Codes

None.

PROCEDURE 356 WORD 1 — PRECEDENCE CALLING - DIALED DIGIT ASSIGNMENT

Purpose

Use Procedure 356 Word 1 to administer the dialed digit assignment to the preemptive levels for the Precedence Calling feature.

Related Procedures

Use Procedure 010 Word 1 to administer the maximum precedence level to an extension class of service.

Use Procedure 100 Word 1 to assign APLT trunks and Route Advance.

Use Procedure 101 Word 1 to assign APLT feature allowed to trunk precedence capable trunks.

Use Procedure 203 Word 1 to administer the AUTOVON buttons to the attendant consoles.

Use Procedure 204 Word 1 to administer AUTOVON precedence identification and ICI.

Use Procedure 275 Word 4 to define the AUTOVON interface switch.

Use Procedure 305 Words 1 and 2 to administer the AUTOVON destination node.

Use Procedure 350 Words 1 and 2 to administer the AUTOVON dial access code.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 356, WORD: 1
                  PRECEDENCE CALLING - DIALED DIGIT ASSIGNMENT

ASSIGNMENTS
   1. Flash Override: --
   2.          Flash: --
   3.      Immediate: --
   4.       Priority: --
   5.        Routine: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not Allowed.
Change:	Fields 1-5.
Remove:	Not Allowed.
Next Data:	Not Allowed.

Field Ranges and Encodes

ASSIGNMENTS (Fields 1-5)

No two fields in this procedure can have the same digit.

1. Flash Override -, 0-9, 11 (*), 12(#)
2. Flash -, 0-9, 11(*), 12(#)
3. Immediate -, 0-9, 11(*), 12(#)
4. Priority -, 0-9, 11(*), 12(#)
5. Routine -, 0-9, 11(*), 12(#)

Special Error Codes

81 - This digit is already assigned in another field.

PROCEDURE 360 WORD 1 — DEDICATED SWITCH CONNECTION

Purpose

Use Procedure 360 Word 1 to administer a Dedicated Switch Connection (DSC) between two line or trunk ports.

Prerequisite Procedures

Use Procedures 150 Word 1, 116 Word 1, 000 Word 1, and 052 Word 1 to assign the ports as trunks or lines (as appropriate) before adding ports in this procedure.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 360, WORD: 1
                      DEDICATED SWITCH CONNECTION

 1. DSC Status: -
 2. DSC Number: ----

EQUIPMENT LOCATION 1                  EQUIPMENT LOCATION 2
   3.    Module: --                     10.    Module: --
   4.   Cabinet: -                      11.   Cabinet: -
   5.   Carrier: -                      12.   Carrier: -
   6.      Slot: --                     13.      Slot: --
   7.   Circuit: --                     14.   Circuit: --
   8. I-Channel: -                      15. I-Channel: -

DISPLAY ONLY (Equipment Location 1)
   9. DSC Type: -

DISPLAY ONLY (Equipment Location 2)
  16.         DSC Type: -
  17. Maintenance Busy: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 2, fields 3-7, or fields 3-8.
Add:	Field 2 or fields 3-8 and 10-15 (see Special Error Code 85).
Change:	Field 1.
Remove:	Fields 3-8 and 10-15.
Next Data:	Displays all assigned DSCs. If an equipment location is entered, then the next DSC associated with that equipment is shown.

Field Ranges and Encodes

1. DSC Status	0	Disabled
	1	Enabled
2. DSC Number	-	Switch automatically displays next DSC number
	1-1023	DSC number

EQUIPMENT LOCATION 1 (Fields 3-8)

3. Module	0-30	
4. Cabinet	0-7 for traditional modules, 0 for universal and XE modules	
5. Carrier	0-3 for traditional modules, c-e for universal and XE modules	
6. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE	
7. Circuit	0-23	
8. I-Channel	-	Port is not a GPP
	1	I-Channel 1 (PDM)
	2	I-Channel 2 (DTDM)

DISPLAY ONLY (Equipment Location 1) (Field 9)

9. DSC Type	0	Unknown
	1	DS1 or ISDN PRI trunk - 24th channel signaling, RBS disabled
	2	DS1 or ISDN PRI trunk - RBS enabled
	3	DMI trunk
	4	Analog line, DS1 line on line board, DCP voice line
	5	DS1 line on trunk board
	6	Analog trunk
	7	Data line (DCP or BRI)
	8	BRI terminal

EQUIPMENT LOCATION 2 (Fields 10-15)

10. Module	0-30
11. Cabinet	0-7 for traditional modules, 0 for universal and XE modules
12. Carrier	0-3 for traditional modules, c-e for universal and XE modules
13. Slot	0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE

14. Circuit	0-23	
15. I-Channel	-	Port is not a GPP
	1	I-Channel 1 (PDM)
	2	I-Channel 2 (DTDM)

DISPLAY ONLY (Equipment Location 2) (Fields 16-17)

16. DSC Type	0	Unknown
	1	DS1 or ISDN PRI trunk - 24th channel signaling, RBS disabled
	2	DS1 or ISDN PRI trunk - RBS enabled
	3	DMI trunk
	4	Analog line, DS1 line on line board, DCP voice line
	5	DS1 line on trunk board
	6	Analog trunk
	7	Data line (DCP or BRI)
	8	BRI terminal
17. Maintenance Busy	-	Not enabled
	0	Not busied out
	1	Busied out (both ports)

Notes

1. Signaling for dedicated switch connections cannot be transferred across modules.
2. This procedure will automatically display the next available DSC number (enter a dash in field 2) or a specific DSC number can be entered in field 2.
3. Each DSC requires two port circuits. Field 1 = 0 implies that the DSC is inactive, but not necessarily that both ports are inactive. To ensure that both ports are inactive, do a change routine on the DSC even though field 1 = 0. This change routine results in both ports being maintenance busied. Both ports will not be maintenance busied if either port on the DSC is on another active DSC.
4. For mode 3 data modules on data lines (DCP or BRI), the equipment location specified in fields 3-7 is considered an originator while the equipment location in fields 10-14 is considered a terminator.
5. When displaying DSC information for a general purpose port (GPP) using the equipment location, specify the I-channel or it will default to 1.
6. Neither port can be assigned as a multiappearance terminal or a business communication terminal (BCT) with more than one extension assigned.
7. The combinations and restrictions of permissible equipments are listed below. Note that a data DS1 trunk has robbed bit signaling disabled or 24th channel signaling.

    - Data line to data line (data only)
    - Data line to DMI trunk (data only)
    - Data line to DS1 trunk (data only)
    - Data DS1 trunk to data DS1 trunk (voice or data)
    - DMI trunk to data DS1 trunk (data only)
    - DMI trunk to DMI trunk (data only)
    - Analog line/trunk to analog line/trunk (voice only)
    - Analog line/trunk to any DS1 trunk (voice only)
    - Nondata DS1 trunk to any DS1 trunk (voice only).

    (Note: ‘‘Data lines’’ represent DCP or BRI.)

Special Error Codes

81 - The port must be assigned as a trunk (Procedure 150 Word 1 or 116 Word 1) or a line (Procedure 000 Word 1 or Procedure 052 Word 1) first.

82 - Port type or assignment is not compatible with the DSC feature.

83 - DSC could not be established or taken down. Try again.

84 - The port is not idle and not maintenance busy.

85 - The port is already active on a DSC.

86 - Equipment location 1 is not compatible with equipment location 2.

87 - DCP endpoints must be administered as lines, not trunks.

88 - The endpoint must have only one line appearance. The line appearance used for a DSC cannot have any shared appearances.

PROCEDURE 410 WORD 1 — TRAFFIC STUDIES - SYSTEM TRANSLATION AND CLOCK

Purpose

Procedure 410 Word 1 has five functional categories:

— Queue peg times

— Traffic clock (and offset)

— Peak and time-coincident translation copy

— Zero traffic study assignments

— Peak and time-coincident study size.

Prerequisite Procedures

Use Procedure 284 Word 1 to set the system clock which is used for traffic time of day (fields 3 and 4).

Related Procedures

Use Procedure 414 Words 1 and 2 to administer peak and time-coincident traffic studies.

Use Procedure 413 Word 2 to administer traffic studies for WCR, Call Coverage, and vector directory numbers (VDNs).

Use Procedure 413 Word 3 to administer traffic ISDN associations.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 410, WORD: 1
                 TRAFFIC STUDIES - SYSTEM TRANSLATION AND CLOCK

QUEUE PEG TIME
   1. Ringback Queue Peg Timing: --
   2. Off-Hook Queue Peg Timing: --

DISPLAY ONLY
  TIME OF DAY
     3.    Hour: --
     4. Minutes: --

 5.            Offset Minutes: --
 6.                     Reset: -
 7.          Copy Translation: -
 8.          Zero Translation: -
 9. Peak/Time Coincident Size: -

DISPLAY ONLY
  10. Clock Error: -

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2 and 5-9.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

QUEUE PEG TIME (Fields 1-2)

1. Ringback Queue Peg Timing
   - `-` Timing disabled
   - `1-99` In 0.1 minute increments

   Fields 1 and 2 are in units of 0.1 minute. The range of this field is from 1 to 99 corresponding to peg times of 0.1 to 9.9 minutes.

2. Off-Hook Queue Peg Timing
   - `-` Timing disabled
   - `1-99` In 0.1 minute increments

   Fields 1 and 2 are in units of 0.1 minute. The range of this field is from 1 to 99 corresponding to peg times of 0.1 to 9.9 minutes.

DISPLAY ONLY (Fields 3-4)

TIME OF DAY (Fields 3-4)

3. Hour — 0-23

   The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.

4. Minutes — 0-59

5. Offset Minutes — 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

   Offset cannot be changed without reinitializing traffic.

6. Reset
   - \- Do not reset offset or collection and output registers
   - 1 Reset offset and all traffic collection and output registers

   Changes in this field reinitialize traffic studies.

   To reset traffic collection and output registers, display correct offset in field 5, set this field to 1, and do a change routine.

7. Copy Translation
   - \- No change
   - 1 Use Procedures 454 Words 1 and 2 and 453 Word 3

   Changes in this field affect all traffic ISDN associations plus peak and time-coincident register assignments for traffic studies.

   Copy peak and time-coincident register assignments (as administered in Procedure 454 Words 1 and 2) and traffic ISDN associations (as administered in Procedure 453 Word 3) into this traffic translation. Verify copy using Procedures 413 Word 3 and 414 Words 1 and 2).

8. Zero Translation
   - \- No change
   - 1 Zero peak and time-coincident registers (Procedure 414 Words 1 and 2)
   - 2 Zero WCR Pattern studies (Procedure 413 Word 2)
   - 3 Reserved for Future Use
   - 4 Zero Call Coverage studies (Procedure 413 Word 2)
   - 5 Zero VDN studies (Procedure 413 Word 2)
   - 6 Zero ISDN associations (Procedure 413 Word 3)

   Changes in this field zero traffic study assignments.

   Zeroing peak and time-coincident traffic studies does not zero the traffic ISDN associations.

9. Peak/Time Coincident Size
   - \- No change
   - 0 Regular study size (2000 registers)
   - 1 Large study size (4000 registers)

DISPLAY ONLY (Field 10)

10. Clock Error
    - 0 No
    - 1 Yes (use Procedure 284 Word 1 to reset)

Special Error Codes

82 - The field 5 rightmost (units) digit must be 0 or 5.

83 - The offset cannot be changed without reinitializing traffic (see field 6).

84 - The peak and time-coincident translation to be copied (as administered in Procedure 454 Words 1 and 2) exceeds the regular study size.

85 - The regular study size cannot be administered when the current study (as administered in Procedure 414 Words 1 and 2) exceeds the regular study size or when a peak register greater than 2000 is assigned.

86 - One or more ISDN associations to be zeroed are under study in Procedure 414 Words 1 and 2.

PROCEDURE 411 WORD 1 — TRAFFIC STUDIES - LOAD BALANCE

Purpose

Use Procedure 411 Word 1 to administer load balance studies.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer basic trunk group translations.

Related Procedures

Use Procedure 421 Word 1 to display and reset the load balance measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 411, WORD: 1
                          TRAFFIC STUDIES - LOAD BALANCE

 1. Load Balance: -
 2.  Trunk Group: ---









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Load Balance	0	Inactive
	1	Active
	If no trunk group is specified, all trunk groups are studied.	
2. Trunk Group	-	All trunk groups
	18-999	Trunk groups 18-999

Special Error Codes

None.

PROCEDURE 411 WORD 2 — TRAFFIC STUDIES - CARRIER USAGE

Purpose

Use Procedure 411 Word 2 to assign line or trunk carriers for traffic usage studies.

Prerequisite Procedures

Use Procedure 250 Word 1 to administer carrier translations.

Related Procedures

Use Procedure 421 Word 1 to display and reset the carrier usage measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 411, WORD: 2
                        TRAFFIC STUDIES - CARRIER USAGE

 1. Carrier Usage: -

IN FIRST MODULE
   2. First Module: --

  FIRST QUARTER CARRIER OR SLOT          THIRD QUARTER CARRIER OR SLOT
     3.              Cabinet: -             9.              Cabinet: -
     4.              Carrier: -            10.              Carrier: -
     5. Slot Encode or Number: --          11. Slot Encode or Number: --

  SECOND QUARTER CARRIER OR SLOT         FOURTH QUARTER CARRIER OR SLOT
     6.              Cabinet: -            12.              Cabinet: -
     7.              Carrier: -            13.              Carrier: -
     8. Slot Encode or Number: --          14. Slot Encode or Number: --

                                           15. Second Module: --


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-15.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Carrier Usage
   - 0 Inactive
   - 1 Active

IN FIRST MODULE (Fields 2-14)

If the module specified in field 2 is a traditional module, the traffic studies are made on a quarter carrier basis (four slots). If a traditional module number is entered in field 2, fields 5, 8, 11, and 14 anticipate a beginning slot encode. Each slot encode (quarter carrier) corresponds to the following four physical slots on a traditional carrier.

Slot encode 0 = Quarter carrier 1 (slots 0-3)
Slot encode 1 = Quarter carrier 2 (slots 5-8)
Slot encode 2 = Quarter carrier 3 (slots 13-16)
Slot encode 3 = Quarter carrier 4 (slots 18-21)

If the module specified in field 2 is a universal or XE module, the traffic studies are made on a slot basis. If a universal or XE module number is entered in field 2; fields 5, 8, 11, and 14 anticipate a physical slot number (0-20 is the range of carrier slots in a universal module, 1-18 is the range of carrier slots in an XE module).

2. First Module — -, 0-30

FIRST QUARTER CARRIER OR SLOT (Fields 3-5)

3. Cabinet — -, 0-7 for traditional modules, 0 for universal and XE modules
4. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
5. Slot Encode or Number — -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

SECOND QUARTER CARRIER OR SLOT (Fields 6-8)

6. Cabinet — -, 0-6 for traditional modules, 0 for universal and XE modules
7. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
8. Slot Encode or Number — -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

THIRD QUARTER CARRIER OR SLOT (Fields 9-11)

9. Cabinet — -, 0-6 for traditional modules, 0 for universal and XE modules
10. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules

11.	Slot Number	Encode or -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

FOURTH QUARTER CARRIER OR SLOT (Fields 12-14)

12.	Cabinet	-, 0-6 for traditional modules, 0 for universal and XE modules
13.	Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules
14.	Slot Number	Encode or -, 0-3 for traditional, 0-20 for universal, 1-18 for XE
15.	Second Module	-, 0-30

Notes

1. No gaps are allowed when entering data in fields 3-14.

Special Error Codes

81 - Module 1 must be assigned.

83 - Data in fields 3-14 must be entered beginning to end with no gaps.

PROCEDURE 413 WORD 1 — TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS

Purpose

Use Procedure 413 Word 1 to assign trunk group combinations for traffic studies. Only 1-way, 2-way, Direct Inward Dialing (DID), Integrated Services Digital Network (ISDN) dynamic, and remote access trunks are allowed.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

Related Procedures

Use Procedure 414 Words 1 and 2 to establish peak and time-coincident measurements for total hundred-call seconds (CCS), incoming CCS, and outgoing CCS for the trunk group combinations assigned in this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 413, WORD: 1
                  TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS

 1. Combination Number: -
 2.            Segment: -
 3.      Trunk Group 1: ---
 4.      Trunk Group 2: ---
 5.      Trunk Group 3: ---
 6.      Trunk Group 4: ---
 7.      Trunk Group 5: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Fields 1-7. Using the add routine on a combination and segment number replaces any prior assignment for that segment (functions similar to the change routine).
Change:	Fields 1-7.
Remove:	Fields 2-7. The remove routine eliminates only the specified segment (field 2) of a trunk group combination and does not remove or change the other segments.
Next Data:	Displays all segments of all combinations (fields 1 and 2).

Field Ranges and Encodes

1.	Combination Number	1-3
2.	Segment	1-4
3.	Trunk Group 1	-, 8-999
4.	Trunk Group 2	-, 8-999
5.	Trunk Group 3	-, 8-999

6. Trunk Group 4 -, 8-999
7. Trunk Group 5 -, 8-999

Notes

1. Twenty trunk groups may be assigned to a combination by entering up to five trunk groups in each of four segments.

Special Error Codes

82 - Only 1-way, 2-way, DID, ISDN dynamic, and remote access trunks are allowed.

PROCEDURE 413 WORD 2 — TRAFFIC STUDIES - SPECIAL MEASUREMENT GROUPS

Purpose

Use Procedure 413 Word 2 to specify World Class Routing (WCR) patterns, Call Coverage groups, or vector directory numbers (VDNs) for traffic studies.

Prerequisite Procedures

Use Procedure 318 to administer WCR patterns.

Use Procedure 011 Word 1 to administer Call Coverage groups.

Use Procedure 000 Word 1 to administer VDNs.

Related Procedures

Use Procedure 421 Word 1 to display and reset the traffic measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 413, WORD: 2
                  TRAFFIC STUDIES - SPECIAL MEASUREMENT GROUPS

 1.             Type: -
 2. Measurement Item: -----

DISPLAY ONLY
   3. Number Assigned: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Fields 1 and 2.
Change:	Not allowed.
Remove:	Fields 1 and 2.
Next Data:	Displays all assigned routing patterns, Call Coverage groups, or VDNs (field 2).

Field Ranges and Encodes

1. Type
   - 1 WCR Patterns
   - 2 Reserved for Future Use
   - 3 Call Coverage
   - 4 VDN

2. Measurement Item — 000-99999

   The ranges for the different types are: WCR Patterns = 1-1023, Call Coverage = 1-4095, VDNs = 000-99999.

DISPLAY ONLY (Field 3)

3. Number Assigned 0-255

Field 3 counts the number of patterns, Call Coverage groups, or VDNs to be studied. Maximum: WCR Patterns = 63, Call Coverage = 25, VDNs = 255.

Special Error Codes

83 - The data table is full.

85 - The extension must be a VDN.

PROCEDURE 413 WORD 3 — TRAFFIC STUDIES - ISDN ASSIGNMENTS

Purpose

Use Procedure 413 Word 3 to define Integrated Services Digital Network (ISDN) associations for traffic studies.

Prerequisite Procedures

Use Procedure 279 Word 1 to define the ISDN network service.

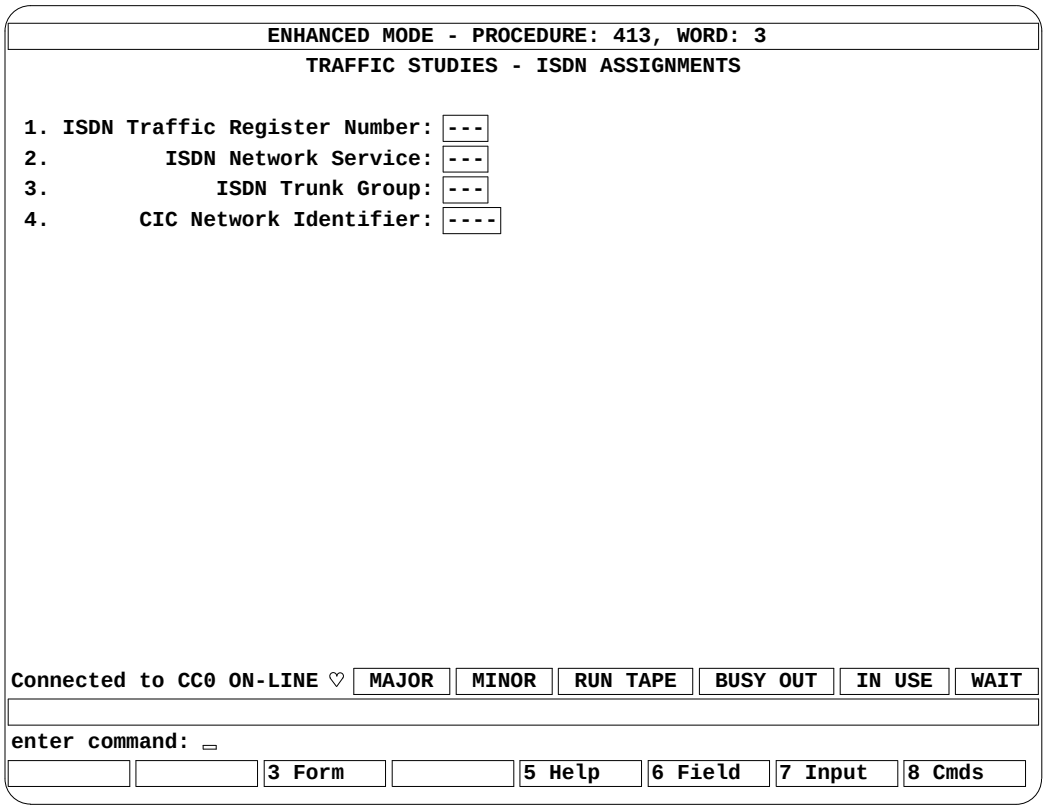
Use Procedure 321 Word 1 to assign a IXC network identifier for WCR.

Use Procedure 322 Word 1 to assign an ISDN network service for WCR.

Related Procedures

Use Procedure 414 Words 1 and 2 to establish peak and time-coincident measurements for total hundred-call seconds (CCS), incoming CCS, total peg count, incoming peg count, and overflow peg count for the ISDN associations assigned in this procedure.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-4.
Add:	Fields 1-4 or fields 2-4.
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	Displays all assigned ISDN traffic registers (field 1).

Field Ranges and Encodes

1. ISDN Traffic Register Number -, 1-255
2. ISDN Network Service
   - \- All network services
   - 0 Presubscribed network service
   - 1-511 Defined in Procedure 279 Word 1
   - 999 ACCUNET
3. ISDN Trunk Group
   - \- All trunk groups
   - 18-999 Trunk groups 18-999

4.	CIC Identifier	Network	-	All CICs
			0	Presubscribed CIC
			1-9999	CIC 288 is AT&T

Notes

1. The following limits are in effect for fields 2, 3, and 4, respectively: 61 different network services plus ACCUNET and the presubscribed network service, 63 different trunk groups, and 6 different inter-exchange carriers (IXCs) plus the presubscribed IXC can be studied.

Special Error Codes

81 - Field 2 and field 4 cannot both contain dashes.

82 - The maximum number of different elements for this field has been reached. The following limits are in effect: 61 different network services plus ACCUNET and the presubscribed network service, 63 different trunk groups, and 6 different inter-exchange carriers (IXCs) plus the presubscribed IXC can be studied.

83 - The traffic ISDN association is already defined.

84 - The ISDN traffic register to be removed is under study in Procedure 414 Words 1 and 2.

PROCEDURE 413 WORD 4 — TRAFFIC STUDIES - ISDN D-CHANNEL ENCODE DISPLAY

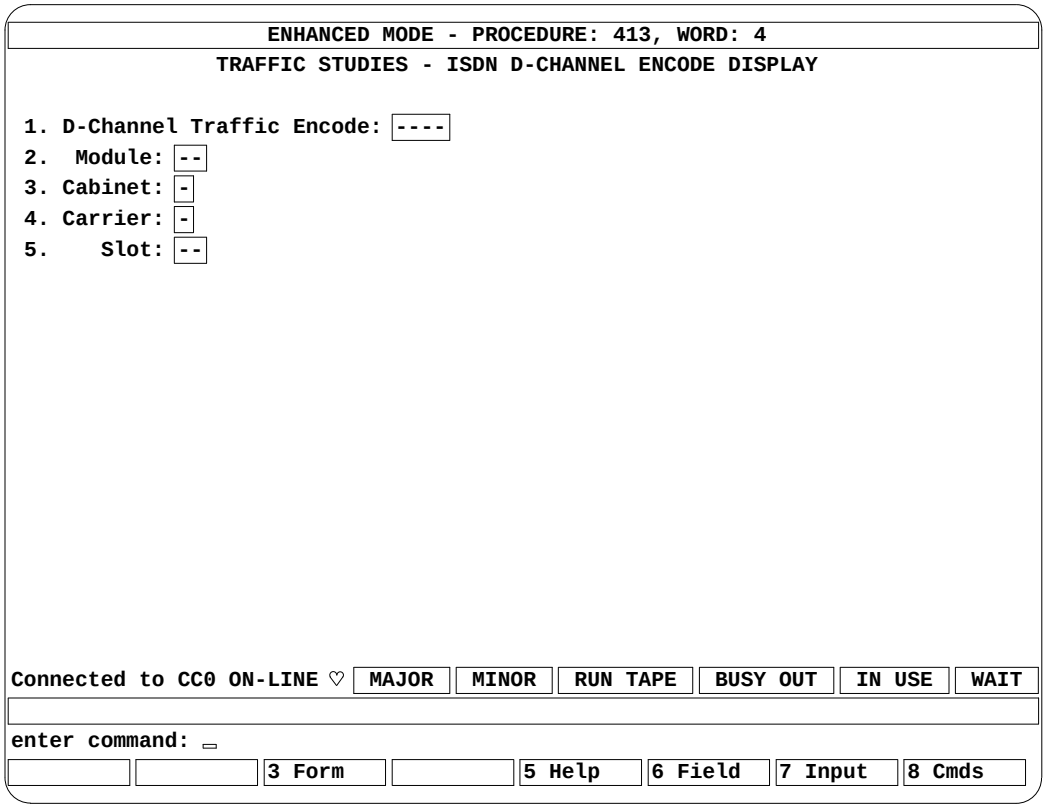
Purpose

Use Procedure 413 Word 4 to display the Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI) D-channel traffic encodes and equipment locations.

Related Procedures

Use Procedure 414 Words 1 and 2 to establish peak and time-coincident measurements for ISDN/PRI D-channels.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all the D-channel traffic encodes (field 1).

Field Ranges and Encodes

1.	D-Channel Traffic Encode	-, 1-1023
2.	Module	-, 0-30
3.	Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules
4.	Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules
5.	Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE

Notes

1. Encodes and equipment locations displayed in this procedure can only be for ISDN/PRI D-channels.

Special Error Codes

81 - The encode or equipment location specified does not correspond to an ISDN/PRI D-channel.

PROCEDURE 414 WORD 1 — TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS

Purpose

Use Procedure 414 Word 1 to assign peak registers for the traffic peak and time-coincident study.

Prerequisite Procedures

Use Procedure 410 Word 1 to copy the customer's peak and time-coincident register assignments (as administered in Procedure 454 Words 1 and 2) and to administer the peak and time-coincident study size.

Use Procedure 413 Word 1 to administer traffic trunk group combinations for measurement type 1 if applicable.

Use Procedure 413 Word 3 to administer ISDN associations for measurement types 75-79 if applicable.

Use Procedure 413 Word 4 to determine D-channel traffic encodes for measurement types 80-81 if applicable.

Related Procedures

Use Procedure 421 Word 1 to display and reset the peak and time-coincident measurements.

Cautions

The remove routine removes all time-coincident registers associated with the peak register removed.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 414, WORD: 1
                  TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS

 1. Peak Register: ----

PEAK
   2. Type: --
   3. Item: ----

DISPLAY ONLY
   4. Study Size: -
   5. Peak and Time Coincident Registers Assigned: ----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None, field 1, or fields 2 and 3.
Add:	Fields 1-3 or fields 2 and 3.
Change:	Not allowed.
Remove:	After display only.
Next Data:	Displays the traffic peak register assignments.

Field Ranges and Encodes

1. Peak Register — -, 1-4000

   If field 1 is dashed during the add routine, the first available peak register is selected.

PEAK (Fields 2-3)

2. Type

1	Traffic trunk group combination usage
3	Network and processor measurements
5-9	Trunk group measurements
10-12	Time slot interchanger measurements

13-14	Time multiplex switch measurements
15-17	Time division multiplex measurements
20	Attendant feature measurements (console totals)
21-23	Attendant feature measurements (per console)
30-34	Queuing measurements (priority queues)
40-44	Queuing measurements (nonpriority queues)
50-52	Main/satellite measurements
60	CAS measurements
61-63	ACD and Message Center measurements
65-66,68-69	Trunk group data measurements
70	Trunk group busy out usage
71-73	Trunk group glare measurements
74	Trunk group busy usage
75-79	ISDN/PRI trunk group measurements
80-81	ISDN/PRI D-channel measurements
99	ISDN call record measurements

3. Item 1-1023

DISPLAY ONLY (Fields 4-5)

4. Study Size
   - 0 Regular study (2000 registers)
   - 1 Large study (4000 registers)

5. Peak and Time Coincident Registers Assigned 0-5998

Notes

1. The maximum number of peak registers plus time-coincident registers assigned can be 2000-5998 depending on the mix of peak versus time-coincident assignments and the study size.
2. The following tables show the peak measurement type and item (fields 2 and 3):

Trunk Group Combination Usage

Measurement	Type	Item
Combination number 1		
Total usage	1	1
Incoming usage	1	2
Outgoing usage	1	3
Combination number 2		
Total usage	1	4
Incoming usage	1	5
Outgoing usage	1	6
Combination number 3		
Total usage	1	7
Incoming usage	1	8
Outgoing usage	1	9

Network and Processor Measurements

Measurement	Type	Item
Outgoing usage	3	1
Tandem usage	3	2
Reserved for future use	3	3
501CC occupancy	3	4
501CC overflow	3	5
Call processing stimuli	3	6
DCP stimuli	3	7
Dial tone delays > 3 seconds	3	8
Dial tone measured	3	9
Connection count	3	10
Intermodule usage	3	11
Audit cycles	3	12
Connection usage	3	13
Tone detector timeout	3	14
Call count	3	15
WCR Network 2	3	16
WCR Network 1	3	17
CDR records	3	18
CDR usage	3	19
System management occupancy	3	20
WCR Network 3	3	21
WCR Network 4	3	22
WCR Network 5	3	23
WCR Network 6	3	24
WCR Network 7	3	25
WCR Network 0	3	26

Trunk Group Measurements

Measurement	Type	Item
Trunk group total usage	5	8-999
Trunk group total calls	6	15-999
Trunk group total overflow	7	18-999
Trunk group incoming usage	8	18-999
Trunk group incoming calls	9	18-999

TSI Measurements

Measurement	Type	Item
TSI memory word blockage for modules 0-30, respectively	10	1-31
TSI memory word count for modules 0-30, respectively	11	1-31
TSI memory word usage for modules 0-30, respectively	12	1-31

TMS Measurements

Measurement	Type	Item
Mismatch blockage by module pair	13	1-465
Intermodule call count by module pair	14	1-465

TDM Measurements (applicable to universal and XE modules only)

Measurement	Type	Item
TDM time slot blockage for modules 0-30, respectively	15	1-31
TDM time slot call count for modules 0-30, respectively	16	1-31
TDM time slot usage for modules 0-30, respectively	17	1-31

Attendant Feature Measurements

Measurement	Type	Item
Console totals		
All consoles worked usage	20	1
All consoles attended usage	20	2
All consoles worked count	20	3
Incoming call queue		
Incoming call queue usage	20	4
Incoming call queue call count	20	5
Incoming call queue calls abandoned	20	6
Attendant calls		
LDN calls answered	20	7
Non-LDN calls answered	20	8
Attendant recall calls	20	9
Attendant originated calls	20	10

Attendant Feature Measurements Per Console

Measurement	Type	Item
Console worked usage	21	1-40
Console attended usage	22	1-40
Console worked count	23	1-40

Priority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	30	18-999
Trunk group queued call count	31	18-999
Trunk group queue overflow	32	18-999
Trunk group queue calls abandoned	33	18-999
Trunk group queue timeout	34	18-999

Nonpriority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	40	18-999
Trunk group queued call count	41	18-999
Trunk group queue overflow	42	18-999
Trunk group queue calls abandoned	43	18-999
Trunk group queue timeout	44	18-999

Main/Satellite Measurements		
Measurement	**Type**	**Item**
DID to main	50	1
DID to satellite 1-4	51	1-4
Attendant recall from satellite 1-4	52	1-4

CAS Measurements		
Measurement	**Type**	**Item**
CAS usage	60	1
CAS call count	60	2
CAS abandoned calls	60	3
RLT calls answered by attendant	60	4

ACD and Message Center Measurements		
Measurement	**Type**	**Item**
ACD queue threshold count	61	1-60
Message center service directed calls	62	1-60
Message center service redirected calls	63	1-60

Measurement	Type	Item
Trunk group data usage	65	8-999
Trunk group data calls	66	15-999
Trunk group incoming data usage	68	18-999
Trunk group incoming data calls	69	18-999

Trunk Group Maintenance Busy Usage

Measurement	Type	Item
Trunk group maintenance busy usage	70	4-999

Trunk Group Glare Measurements

Measurement	Type	Item
Trunk group glare count	71	18-999
Trunk group glare retry attempts	72	18-999
Trunk group glare retry failures	73	18-999

Trunk Group All Trunks Busy Measurements

Measurement	Type	Item
Trunk group all trunks busy usage	74	15-999

ISDN/PRI Trunk Group Measurements

Measurement	Type	Item
Total usage for ISDN associations 1-255	75	1-255
Total calls for ISDN associations 1-255	76	1-255
Overflow for ISDN associations 1-255	77	1-255
Incoming usage for ISDN associations 1-255	78	1-255
Incoming calls for ISDN associations 1-255	79	1-255

ISDN/PRI D-Channel Measurements

Measurement	Type	Item
I-field bytes for D-channels 1-1023	80	1-1023
I-field frames for D-channels 1-1023	81	1-1023

ISDN Call Record Measurements		
Measurement	**Type**	**Item**
Total seizures	99	1
Total releases	99	2
Blocked seizures	99	3
Parking lot seizures	99	4
Copy standby to regular queue	99	5

3. For TMS measurements (fields 2 and 5=13 or 14), the module pairs associated with codes 1-465 (fields 3 and 6) are given in **Appendix B**.

Special Error Codes

82 - Type 2 may not be assigned as a peak register.

83 - When the regular study size is administered (see field 4 and Procedure 410 Word 1 field 9), the peak register number cannot exceed 2000.

84 - The regular study size limit has been reached. To administer more registers, the large study size must be administered in Procedure 410 Word 1 field 9.

PROCEDURE 414 WORD 2 — TRAFFIC STUDIES - TIME-COINCIDENT REGISTER ASSIGNMENT

Purpose

Use Procedure 414 Word 2 to assign a traffic time-coincident register associated with a peak traffic register.

Prerequisite Procedures

Use Procedure 410 Word 1 to administer the peak and time-coincident study size.

Use Procedure 414 Word 1 to administer the peak register before using this procedure.

Use Procedure 413 Word 1 to administer traffic trunk group combinations for measurement type 1 if applicable.

Use Procedure 413 Word 3 to administer ISDN associations for measurement types 75-79 if applicable.

Use Procedure 413 Word 4 to determine D-channel traffic encodes for measurement types 80 and 81 if applicable.

Related Procedures

Use Procedure 421 Word 1 to display and reset the peak and time-coincident measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 414, WORD: 2
            TRAFFIC STUDIES - TIME-COINCIDENT REGISTER ASSIGNMENTS

 1. Peak Register: ----

DISPLAY ONLY
  PEAK
     2. Type: --
     3. Item: ----

DISPLAY ONLY
   4. Time Coincident Register: ----

TIME COINCIDENT
   5. Type: --
   6. Item: ----

DISPLAY ONLY
   7. Peak And Time Coincident Registers Assigned: ----


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None, field 1 or fields 1, 5, and 6.
Add:	Fields 1, 5, and 6.
Change:	Not allowed.
Remove:	Fields 1-6.
Next Data:	Displays all the time-coincident traffic assignments associated with all assigned peak registers.

Field Ranges and Encodes

1. Peak Register 1-4000

DISPLAY ONLY (Fields 2-3)
PEAK (Fields 2-3)

2. Type

1	Traffic trunk group combination usage
3	Network and processor measurements
5-9	Trunk group measurements
10-12	Time slot interchanger (TSI) measurements

	13-14	Time multiplex switch (TMS) measurements
	15-17	Time division multiplex (TDM) measurements
	20	Attendant feature measurements (console totals)
	21-23	Attendant feature measurements (per console)
	30-34	Queuing measurements (priority queues)
	40-44	Queuing measurements (nonpriority queues)
	50-52	Main/satellite measurements
	60	CAS measurements
	61-63	ACD and Message Center measurements
	65-66,68-69	Trunk group data measurements
	70	Trunk group busy out usage
	71-73	Trunk group glare measurements
	74	Trunk group busy usage
	75-79	ISDN/PRI trunk group measurements
	80-81	ISDN/PRI D-channel measurements
	99	ISDN call record measurements

3. Item 1-1023

DISPLAY ONLY (Field 4)

4. Time Coincident Register 1-5997

TIME COINCIDENT (Fields 5-6)

5. Type	1	Traffic trunk group combination usage
	2	Miscellaneous measurements
	3	Network and processor measurements
	5-9	Trunk group measurements
	10-12	Time slot interchanger measurements
	13-14	Time multiplex switch measurements
	15-17	Time division multiplex measurements
	20	Attendant feature measurements (console totals)
	21-23	Attendant feature measurements (per console)
	30-34	Queuing measurements (priority queues)
	40-44	Queuing measurements (nonpriority queues)
	50-52	Main/satellite measurements
	60	CAS measurements
	61-63	ACD and Message Center measurements
	65-66,68-69	Trunk group data measurements
	70	Trunk group busy out usage
	71-73	Trunk group glare measurements
	74	Trunk group busy usage
	75-79	ISDN/PRI trunk group measurements
	80-81	ISDN/PRI D-channel measurements
	99	ISDN call record measurements

6. Item 1-1023

DISPLAY ONLY (Field 7)

7. Peak And Time Coincident Registers Assigned — 0-5998

Notes

1. Each group of time-coincident register assignments for a given register peak begins with a 1 (field 4). The value displayed in field 4 is used as an index in Procedure 421 Words 1-3.
2. The maximum number of peak registers plus time-coincident registers assigned can be 2000-5998 depending on the mix of peak versus time-coincident assignments and the study size.
3. To remove peak and all corresponding time-coincident assignments, use Word 1.
4. The following tables show the peak measurement type and item (fields 2 and 3) and the time-coincident measurement type and item (fields 5 and 6):

Trunk Group Combination Usage

Measurement	Type	Item
Combination number 1		
Total usage	1	1
Incoming usage	1	2
Outgoing usage	1	3
Combination number 2		
Total usage	1	4
Incoming usage	1	5
Outgoing usage	1	6
Combination number 3		
Total usage	1	7
Incoming usage	1	8
Outgoing usage	1	9

Miscellaneous Measurements (time-coincident only)

Measurement	Type	Item
Time of day	2	1
WCR plan in effect	2	2

Network and Processor Measurements

Measurement	Type	Item
Outgoing usage	3	1
Tandem usage	3	2
Reserved for future use	3	3
501CC occupancy	3	4

501CC overflow	3	5
Call processing stimuli	3	6
DCP stimuli	3	7
Dial tone delays > 3 seconds	3	8
Dial tone measured	3	9
Connection count	3	10
Intermodule usage	3	11
Audit cycles	3	12
Connection usage	3	13
Tone detector timeout	3	14
Call count	3	15
WCR Network 2 calls	3	16
WCR Network 1 calls	3	17
CDR records	3	18
CDR usage	3	19
System management occupancy	3	20
WCR Network 3 calls	3	21
WCR Network 4 calls	3	22
WCR Network 5 calls	3	23
WCR Network 6 calls	3	24
WCR Network 7 calls	3	25
WCR Network 0 calls	3	26

Trunk Group Measurements

Measurement	Type	Item
Trunk group total usage	5	8-999
Trunk group total calls	6	15-999
Trunk group total overflow	7	18-999
Trunk group incoming usage	8	18-999
Trunk group incoming calls	9	18-999

TSI Measurements

Measurement	Type	Item
TSI memory word blockage for modules 0-30, respectively	10	1-31
TSI memory word count for modules 0-30, respectively	11	1-31
TSI memory word usage for modules 0-30, respectively	12	1-31

TMS Measurements		
Measurement	**Type**	**Item**
Mismatch blockage by module pair	13	1-465
Intermodule call count by module pair	14	1-465

TDM Measurements (applicable to universal and XE modules only)		
Measurement	**Type**	**Item**
TDM time slot blockage for modules 0-30, respectively	15	1-31
TDM time slot call count for modules 0-30, respectively	16	1-31
TDM time slot usage for modules 0-30, respectively	17	1-31

Attendant Feature Measurements		
Measurement	**Type**	**Item**
Console totals		
All consoles worked usage	20	1
All consoles attended usage	20	2
All consoles worked count	20	3
Incoming call queue		
Incoming call queue usage	20	4
Incoming call queue call count	20	5
Incoming call queue calls abandoned	20	6
Attendant calls		
LDN calls answered	20	7
Non-LDN calls answered	20	8
Attendant recall calls	20	9
Attendant originated calls	20	10

Attendant Feature Measurements Per Console		
Measurement	**Type**	**Item**
Console worked usage	21	1-40
Console attended usage	22	1-40
Console worked count	23	1-40

Priority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	30	18-999
Trunk group queued call count	31	18-999

Trunk group queue overflow	32	18-999
Trunk group queue calls abandoned	33	18-999
Trunk group queue timeout	34	18-999

Nonpriority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	40	18-999
Trunk group queued call count	41	18-999
Trunk group queue overflow	42	18-999
Trunk group queue calls abandoned	43	18-999
Trunk group queue timeout	44	18-999

Main/Satellite Measurements		
Measurement	**Type**	**Item**
DID to main	50	1
DID to satellite 1-4	51	1-4
Attendant recall from satellite 1-4	52	1-4

CAS Measurements		
Measurement	**Type**	**Item**
CAS usage	60	1
CAS call count	60	2
CAS abandoned calls	60	3
RLT calls answered by attendant	60	4

ACD and Message Center Measurements		
Measurement	**Type**	**Item**
ACD queue threshold count	61	1-60
Message center service directed calls	62	1-60
Message center service redirected calls	63	1-60

Trunk Group Data Measurements		
Measurement	**Type**	**Item**
Trunk group data usage	65	8-999

Trunk group data calls	66	15-999
Trunk group incoming data usage	68	18-999
Trunk group incoming data calls	69	18-999

Trunk Group Maintenance Busy Usage

Measurement	Type	Item
Trunk group maintenance busy usage	70	4-999

Trunk Group Glare Measurements

Measurement	Type	Item
Trunk group glare count	71	18-999
Trunk group glare retry attempts	72	18-999
Trunk group glare retry failures	73	18-999

Trunk Group All Trunks Busy Measurements

Measurement	Type	Item
Trunk group all trunks busy usage	74	15-999

ISDN/PRI Trunk Group Measurements

Measurement	Type	Item
Total usage for ISDN associations 1-255	75	1-255
Total calls for ISDN associations 1-255	76	1-255
Overflow for ISDN associations 1-255	77	1-255
Incoming usage for ISDN associations 1-255	78	1-255
Incoming calls for ISDN associations 1-255	79	1-255

ISDN/PRI D-Channel Measurements

Measurement	Type	Item
I-field bytes for D-channels 1-1023	80	1-1023
I-field frames for D-channels 1-1023	81	1-1023

ISDN Call Record Measurements

Measurement	Type	Item

Total seizures	99	1
Total releases	99	2
Blocked seizures	99	3
Parking lot seizures	99	4
Copy standby to regular queue	99	5

3. For TMS measurements (fields 2 and 5=13 or 14), the module pairs associated with codes 1-465 (fields 3 and 6) are given in **Appendix B**.

Special Error Codes

81 - The peak register must be assigned in Procedure 414 Word 1.

83 - When the regular study size is administered (Procedure 410 Word 1 field 9), the peak register number cannot exceed 2000.

84 - The regular study size limit has been reached. To administer more registers, the large study size must be administered in Procedure 410 Word 1 field 9.

85 - The type and item encodes for a time coincident register cannot match the type and item encodes for the corresponding peak register.

PROCEDURE 415 WORD 1 — TRAFFIC STUDIES - MAIN/SATELLITE TRANSLATION

Purpose

Use Procedure 415 Word 1 to assign a traffic satellite number to a Main/Satellite trunk group.

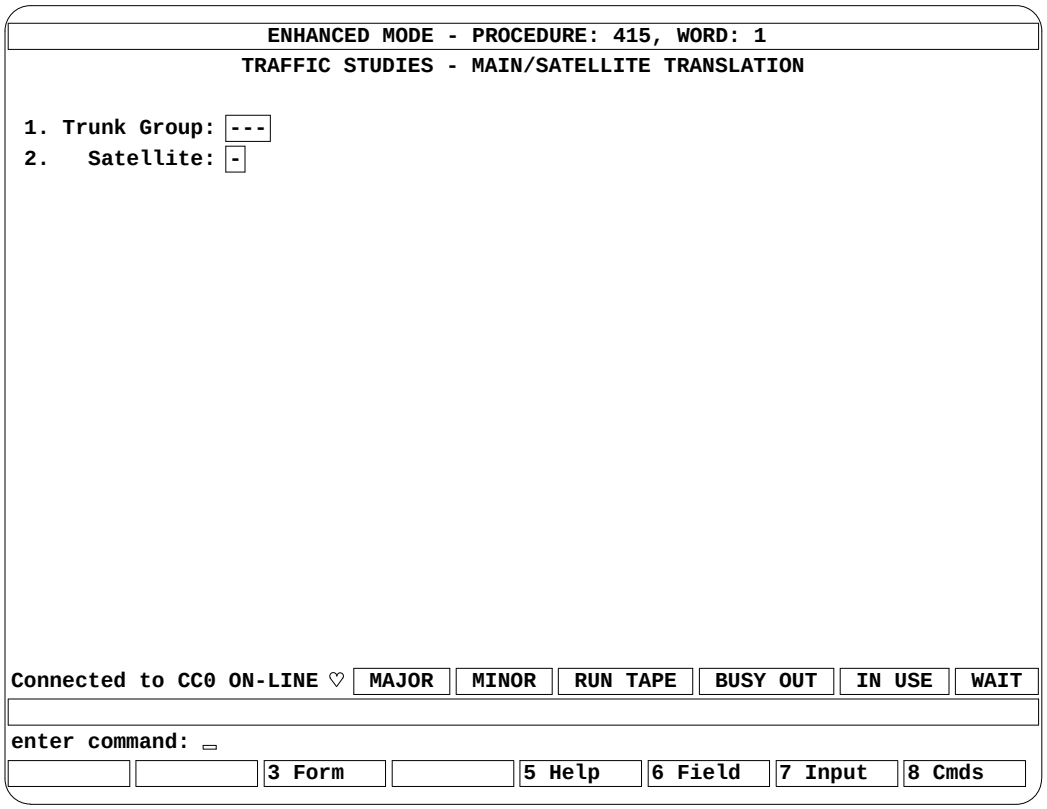
Prerequisite Procedures

Use Procedure 104 Words 1 and 2 to administer Main/Satellite trunk groups.

Related Procedures

Use Procedure 414 Words 1 and 2 to establish traffic Main/Satellite peak and time-coincident measurements.

Screen Display



Fields Used or Required for Command Routines

Display:	None or field 1.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed (dash field 2 and use the change routine).
Next Data:	Displays all trunk groups with traffic satellite assignments.

Field Ranges and Encodes

1. Trunk Group	18-999	
2. Satellite	-	Unassigned
	1-4	Satellite number

Satellites 1-4 are defined, for traffic study purposes, by administering satellite number 1-4 in this field to all relevant Main/Satellite trunk groups.

Special Error Codes

82 - If field 2 is 1-4, the trunk group must be administered as Main/Satellite in Procedure 104 Word 1.

PROCEDURE 420 WORD 1 — PROCESSOR DATA

Purpose

Use Procedure 420 Word 1 to display processor data that has been collected during the previous traffic hour. Four different types of data are displayed:

— Histogram of time, in milliseconds, remaining for base level maintenance tasks after call processing

— Call processing task interrupts

— Current ten-second processor occupancy

— 100-second occupancy values for the past hour.

Prerequisite Procedures

Use Procedure 284 Word 1 to set the system clock that is used to initiate traffic measurements.

Related Procedures

Use Procedure 410 Word 1 to set the traffic hour offset.

Cautions

Procedure 410 Word 1 field 9 must equal zero; otherwise, the system clock reading will be incorrect, affecting the accuracy of the processor data.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 420, WORD: 1
                                PROCESSOR DATA

 1. Type: -

DISPLAY ONLY
   2. Number: ---
   3.   Data: ----

DISPLAY ONLY
  TIME OF DAY
     4.   Hour: --
     5. Minute: --

   6. Offset: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays measurement data for types 1, 2, and 4.

Field Ranges and Encodes

1. Type -, 1-4

   Type 1 is the time left, in milliseconds, after call processing for base level maintenance tasks.

   Type 2 is the number of times each of the 128 call processing tasks was interrupted.

   Type 3 is the current ten-second processor occupancy.

   Type 4 is the past hour’s 100-second occupancy values.

See the help for fields 2 and 3 for related information.

DISPLAY ONLY (Fields 2-3)

2. Number 1-128

For type 1 (field 1), the value in this field is the period length, in milliseconds, that remained (1-10).

For type 2 (field 1), the value in this field is the task that was interrupted (1-128). The following is a listing of the tasks:

2 = Attendant console scanning
3 = Module state vector refresh
5 = DCIU state vector refresh
6 = Hyperactivity control
8 = Emergency system management task dispenser
11 = DCP message FIFO scanning
12 = Analog line and trunk scanning
13 = Trunk change processing
14 = Line change processing
15 = 25 ms timing map scan
17 = Digit collection FIFO scanning
20 = Low priority trunk change processing
21 = State-stimulus-translation queue server
23 = Originating register scan
24 = Dialing task for Abbreviated Dialing
26 = Attendant changes for processing
27 = Digit sending
28 = 100 ms timing map scan
29 = Universal and XE module download ISDN parameters
31 = FADS terminal key scanning
32 = Sends queued GPP messages via jumbo
34 = Outgoing station display messages
35 = Multiappearance terminal lamp and ringer
36 = ISDN queue server
37 = Call handler queue server task
38 = DCIU port scan
39 = Detect PCC peripheral response
41 = Attendant incoming call queue administration
42 = Scan ACD queues for waiting callers
44 = CAS branch-to-main call request
45 = Attendant console lamp flashing
47 = Tone detection processing
48 = ISDN level 3 timing
50 = Call Pickup lamp
51 = Multiappearance terminal timing
53 = Non-idle Send All Calls activation
54 = Send timed chime digits
55 = System management PPG port 0 interface
56 = ISDN jumbo I/O

57 = System management PPG port 1 interface
58 = System management DP port 0 interface
59 = System management DP port 1 interface
61 = CMS outgoing message
62 = ISDN incoming message verification
64 = FADS terminal key processing
65 = Tape subsystem request interface
67 = Module health check
68 = Message retrieval queue server
70 = Line origination buffer
71 = ISDN applications call processing queue server
72 = Multiappearance terminal custom feature lamp
73 = Two second timing map scan
75 = System time-of-day clock
76 = Scan and send CDR/SMDR records
78 = Console trunk group busy/warning lamps
79 = Maintain ACD queue warning lamps
81 = CAS RLT-in-use lamp controller
82 = Principal switchhook status check
84 = Update queued Send All Calls-extension lamps
85 = Multiappearance terminal ring-ping
87 = CMS incoming request
89 = Queuing available trunk detection
90 = Queuing timing on records in queue
92 = Analog Hold ringback
93 = Analog Call Waiting/Priority Calling ringback
94 = BRI terminal initialization
95 = Attendant timed recall/reminder timing
96 = CAS recall timer
98 = Call Vectoring backup queue scanning
99 = Process ACD group forwarding
101 = Process second ACD recorded announcement
102 = Process first ACD recorded announcement
104 = Programmable intercept recorded announcement
105 = CDR/SMDR active record audit
106 = Download translation via jumbo
107 = Detect short calls (ACA)
108 = Detect long calls (ACA)
110 = Message retrieval session timeout
111 = Make/break Dedicated Switch Connection
112 = Resource management handler queue server task
113 = Update PCC time-of-day
114 = Daily switch of WCR plan
115 = 20 minute Automatic Callback deactivation
116 = Automatic Message Waiting lamp update
117 = Vectoring route-to retry permanent seizure
118 = FADS usage count
119 = FADS data movement and RLT audit
120 = CDR/SMDR to record month and day at midnight

121 = FADS automatic print driver
122 = System monitoring tools interface
123 = Task to unload universal and XE module port exception FIFOs
124 = Task to unload universal and XE module maintenance response FIFOs
125 = Regular system management task dispenser
126 = Time available system management task dispenser
127 = Off-line X-ray entry

For type 3 (field 1), this field always displays a 1.

For type 4 (field 1), this field is the counter for the 36 occupancy values shown in field 3.

3. Data — 0-9999

For type 1 (field 1), multiply by 1000 the value appearing in this field to get the number of times the value in field 2 remained during each 10 millisecond cycle for the last traffic hour.

For type 2 (field 1), multiply by 100 the value appearing in this field to get the number of interrupts.

For type 3 (field 1), this field displays the current ten-second processor occupancy in percent as XX.XX%.

For type 4 (field 1), this field displays the past hour's 100-second occupancy values in reverse order (indexed by field 2), most current value first. There are 36 values, all shown in percent XX.XX%.

DISPLAY ONLY (Fields 4-6)
TIME OF DAY (Fields 4-5)

4. Hour — 0-23

The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.

Fields 4 and 5 display the system clock (set in Procedure 284 Word 1).

5. Minute — 0-59

Fields 4 and 5 display the system clock (set in Procedure 284 Word 1).

6. Offset — 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

This field displays the traffic hour offset (set in Procedure 410 Word 1).

Special Error Codes

None.

PROCEDURE 421 WORD 1 — TRAFFIC - DATA DISPLAY AND RESET

Purpose

Use Procedure 421 Word 1 to display and reset to zero traffic data in the output buffers (i.e., available for polling by an Operational Support System). The categories of this data are as follows:

Packet Number	Packet Name	Category Number	Category Name
2	Load Balance	1	Intramodule Load Balance
		2	Intermodule Load Balance
3	Carrier Usage	3	Carrier Usage
		4	Port Usage
5	Performance	5	Flag and Poll Information
		6	Total Blockages
		7	Ring Group Blockages
		8	Module Blockages
		9	Peak Hour - Summary
		10	Peak Hour - Module Occupancy
6	Peak and Time-Coincident	12	Peak Registers
		13	Time-Coincident Registers
7	WCR	14	WCR
8	Reserved	15	Reserved
9	Occupancy Data	16	Peak Hour Occupancy Value and Time
		17	Hundred Second Occupancy
10	Accumulated Values	18	Feature measurements
		30	Authorization Codes
11	DCIU	19	Level 2 protocol counters
		20	Level 3 protocol counters
		21	Port blocked counters
		22	Miscellaneous
		23	Messages blocked/queue usage
12	Call Coverage	24	Call Coverage
13	ACD	25	ACD measurements by agent extension
		26	ACD measurements by split
		27	ACD call redirection
		28	ACD Call Vectoring
		29	VDN measurements

Prerequisite Procedures

Use Procedure 410 Word 1 to administer queue peg times and the traffic clock (and offset).

Use Procedure 411 Word 1 to administer load balance studies.

Use Procedure 411 Word 2 to administer carrier usage studies.

Use Procedure 413 Word 2 to administer World Class Routing (WCR), Call Coverage, and vector directory number (VDN) studies.

Use Procedure 414 Words 1 and 2 to administer peak register and time-coincident studies.

Related Procedures

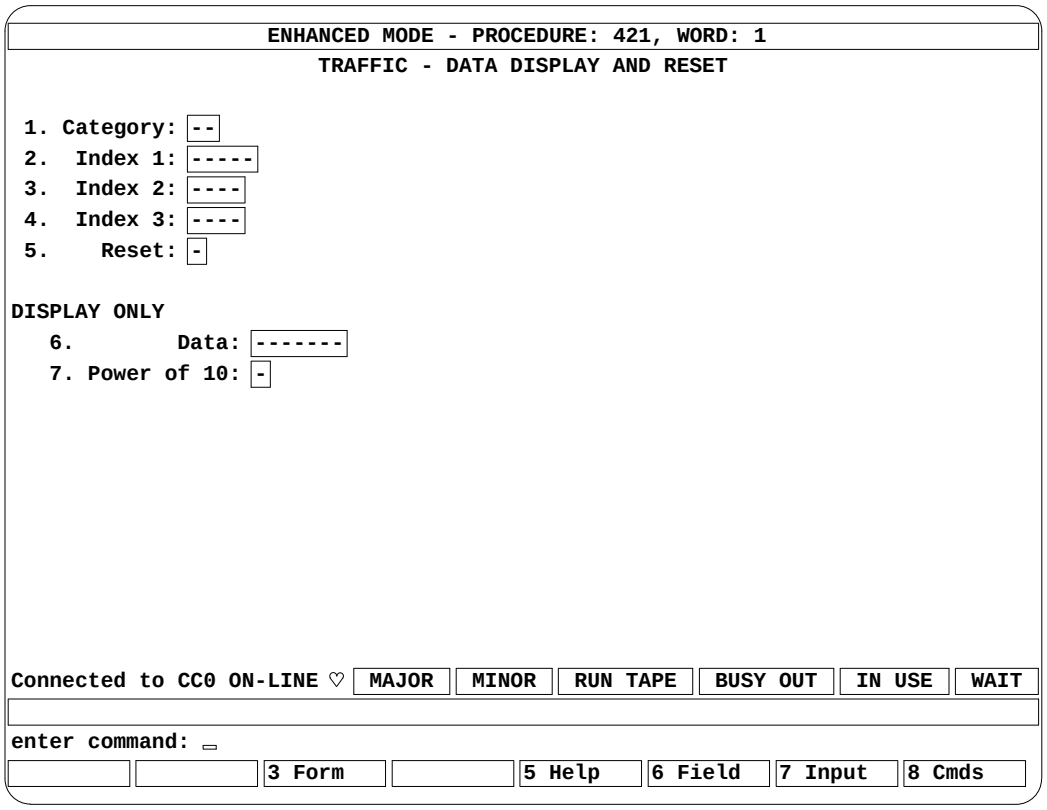
Use Procedure 421 Word 2 to display equipment locations associated with the data displayed in Word 1 for the carrier usage, port usage, and ring group blockage categories.

Use Procedure 421 Word 3 to display the network channel associated with the data displayed in Word 1 for DCIU category 20.

Cautions

When a category is zeroed, it also zeros all the categories in the packet.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 1 and 2, fields 1-3, or fields 1-4.
Add:	Not allowed.
Change:	Fields 1 and 5, fields 1, 2, and 5, fields 1-3 and 5, or fields 1-4 and 5.
Remove:	Not allowed.
Next Data:	Steps through any index of a category if the index to be stepped on is dashed.

Field Ranges and Encodes

1. Category

1	Intramodule Load Balance (packet 2)
2	Intermodule Load Balance (packet 2)
3	Carrier Usage (packet 3)
4	Carrier Port Usage (packet 3)
5	Flag and Poll Information (packet 5)
6	Total Blockages (packet 5)
7	Ring Group Blockages (packet 5)
8	Module Blockages (packet 5)
9	Peak Hour Summary (packet 5)
10	Peak Hour Module Occupancy (packet 5)
11	Reserved for future use
12	Peak Registers (packet 6)
13	Time-Coincident Registers (packet 6)
14	World Class Routing (WCR) (packet 7)
15	Reserved for Future Use (packet 8)
16	Peak Hour Occupancy Value and Time (packet 9)
17	Hundred Second Occupancy (packet 9)
18	Feature Measurements (packet 10)
19	DCIU Level 2 Protocol Counter (packet 11)
20	DCIU Level 3 Protocol Counters (packet 11)
21	DCIU Port Blocked Counters (packet 11)
22	DCIU Miscellaneous (packet 11)
23	DCIU Messages Blocked and Queue Usage (packet 11)
24	Call Coverage (packet 12)
25	ACD Measurements by Member (packet 13)
26	ACD Measurements by Split (packet 13)
27	ACD Call Redirection (packet 13)
28	ACD Call Vectoring (packet 13)
29	VDN Measurements (packet 13)
30	Authorization Codes (packet 10)

2. Index 1 -, 0-99999

3. Index 2 -, 1-5998

4. Index 3 -, 1-32

5. Reset

-	No reset
1	Reset single register to zero
9	Reset entire packet to zero

DISPLAY ONLY (Fields 6-7)

6. Data 0-9999999

7. Power of 10 -, 0-3

Notes

1. Field 7 is used when double precision data is displayed to specify the number of zeros to append to the data in field 6.

Special Error Codes

81 - For Category 2, the module number in Index 1 must be less than the module number in Index 2.

82 - The study is not active - see Procedure 411 Word 1.

83 - To reset (zero) a single traffic register: display register, set field 5 = 1, and execute the change routine. Fields 1-4 must not be changed after display.

84 - To reset (zero) an entire packet, enter any category in the packet in field 1, dash fields 2-4, set field 5 = 9, and execute the change routine.

85 - In Category 2, interload balance does not apply to a one-module system.

86 - This extension is not a member of an ACD group.

91 - The double precision data exceeds 99942399.

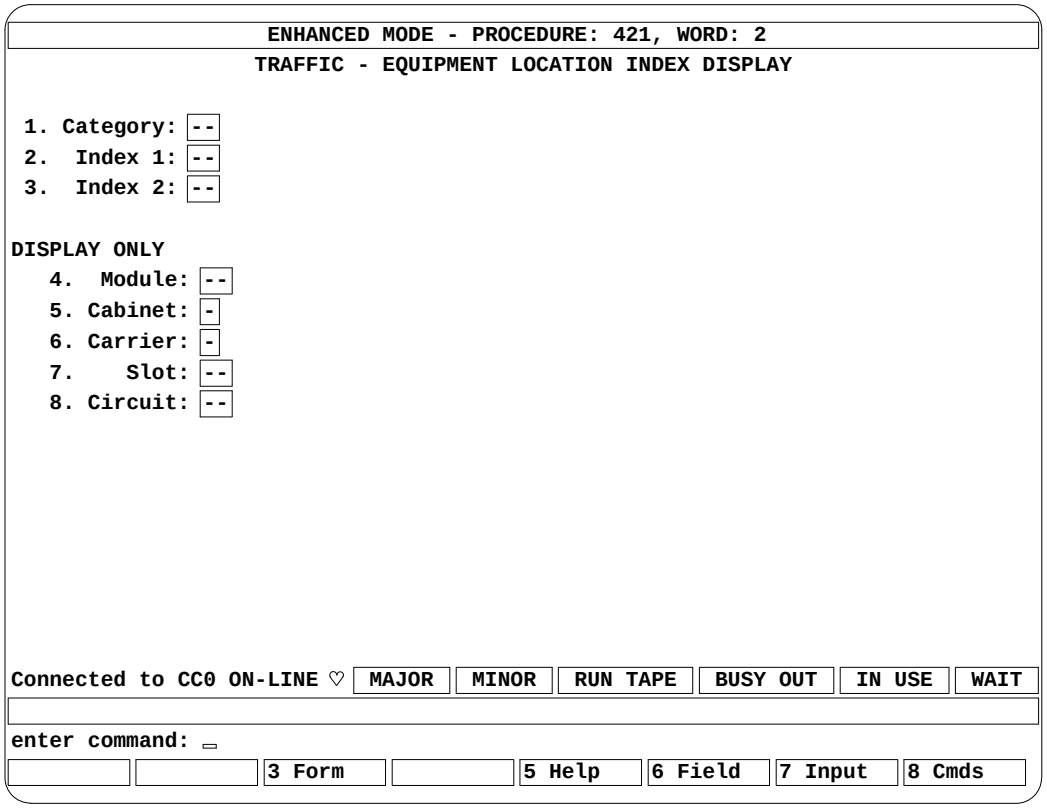
92 - This category is reserved for future use.

PROCEDURE 421 WORD 2 — TRAFFIC - EQUIPMENT LOCATION INDEX DISPLAY

Purpose

Use Procedure 421 Word 2 to display equipment locations associated with the data displayed in Word 1 for the carrier usage, port usage, and ring group blockage categories.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 1 and 2, or fields 1-3.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Steps on field 3 for categories 3 and 4. Steps on field 2 for category 7.

Field Ranges and Encodes

1.	Category	3 4 7	Carrier usage Port usage Ring group blockage
2.	Index 1	1-16	
3.	Index 2	1-63	

DISPLAY ONLY (Fields 4-8)

4.	Module	0-30
5.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
6.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
7.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE
8.	Circuit	0-23

Notes

1. The circuit field (field 8) is displayed for the port usage category only.
2. For traditional module quarter carriers and ring groups, the slot displayed is the first of four consecutive slots which make up the ring group or the quarter carrier.
3. The following tables contain the index values for the categories displayed in this procedure.

Category/ Index	Value	Description
3		Carrier Usage
Index 1	1 and 2	Indicates module number 1 or 2 assigned in Procedure 411 Word 2
Index 2	1-48 1-63	Indicates which one of 48 quarter carriers within traditional module in Index 1, or Indicates which one of 63 slots within universal module in Index 1.

Category/ Index	Value	Description
4		Port Usage
Index 1	1-4	Quarter carrier or slot assigned in Procedure 411 Word 2
Index 2	1-32	Indicates which one of 32 electrical

		ports within traditional module quarter carrier specified in Index 1, or
	1-63	Indicates which one of 24 electrical ports within universal module slot specified in Index 1

Category/ Index	Value	Description
7		Ring Group Blockages
Index 1	1-16	Ring group experiencing blockage

Special Error Codes

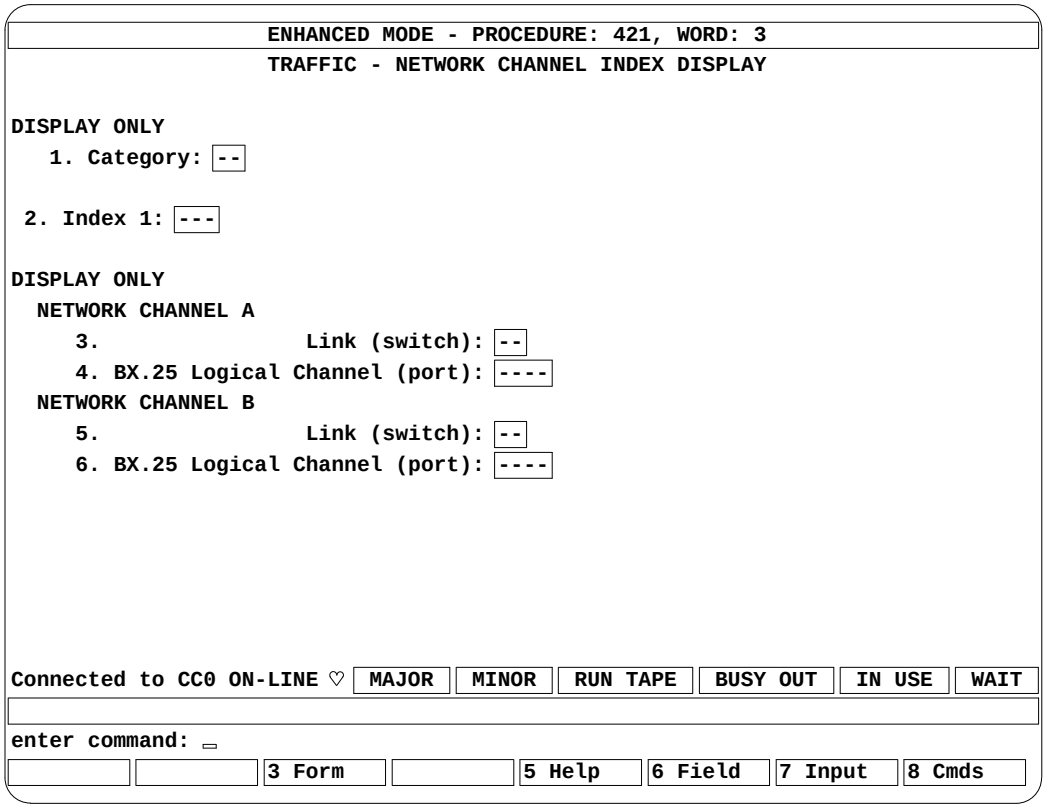
None.

PROCEDURE 421 WORD 3 — TRAFFIC - NETWORK CHANNEL INDEX DISPLAY

Purpose

Use Procedure 421 Word 3 to display the network channel associated with the data displayed in Procedure 421 Word 1 for DCIU category 20.

Screen Display



Fields Used or Required for Command Routines

Display:	None or field 2.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all Index 1 channel numbers.

Field Ranges and Encodes

DISPLAY ONLY (Field 1)

1.	Category	20	
2.	Index 1	-, 1-128	

DISPLAY ONLY (Fields 3-6)

NETWORK CHANNEL A (Fields 3-4)

3.	Link (switch)	0	Logical switch link
		1-8	Physical DCIU link
4.	BX.25 Logical Channel (port)	-, 1-64	

NETWORK CHANNEL B (Fields 5-6)

5.	Link (switch)	-	Alternate routing is in effect
		0	Logical switch link
		1-8	Physical DCIU link
6.	BX.25 Logical Channel (port)	-	Alternate routing is in effect
		1-64	Port

Special Error Codes

None.

PROCEDURE 426 WORD 1 — FORCE ADMINISTRATION DATA SYSTEM

Purpose

Use Procedure 426 Word 1 to display, add, or change Force Administration Data System (FADS) related translations. These translation items are:

— FADS activity

— FADS automatic print option

— FADS hourly traffic offset.

Prerequisite Procedures

Use Procedure 253 Word 1 to assign the low speed data channel (TN403) to a FADS terminal (type 13).

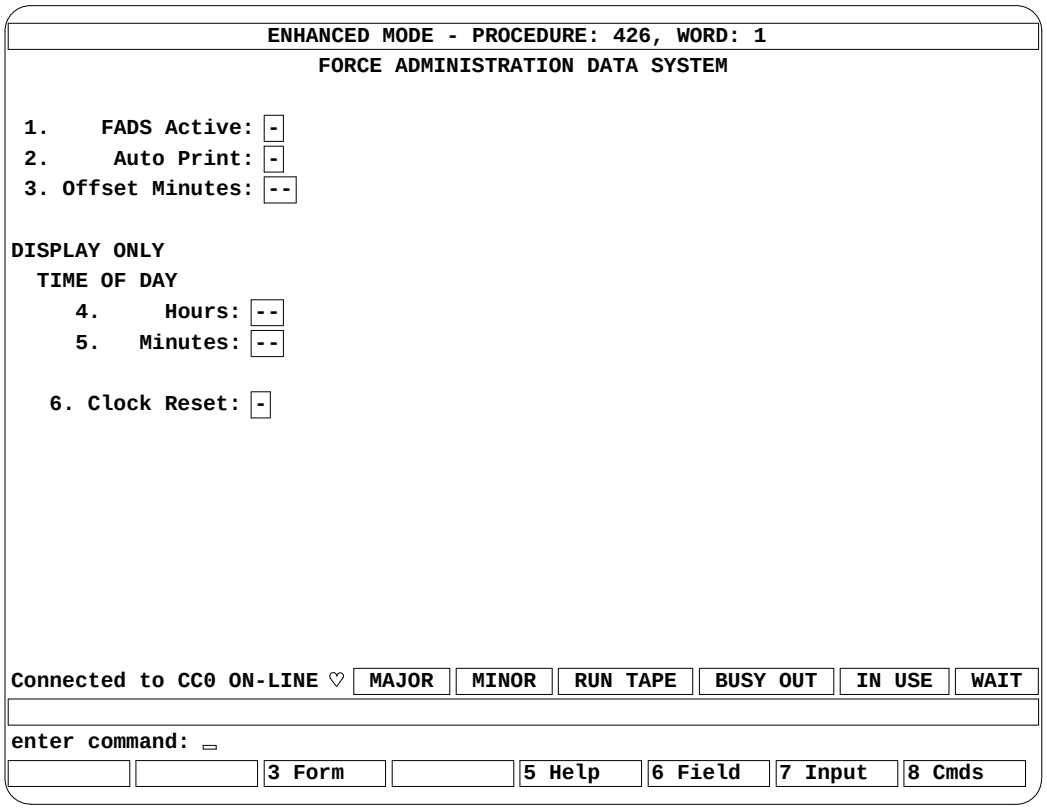
Use Procedure 284 Word 1 to set the system clock after each switch initialization.

Cautions

Changes in the hourly traffic offset cause the next set of traffic counts to be inconsistent with preceding counts. Traffic counts after the changed hourly traffic offset will be consistent with each other. These counts appear as dashes on the FADS terminal and as blanks on the FADS printer.

Changes in FADS activity causes the next set of traffic counts to be inconsistent with preceding counts if the feature is turned off for a portion of the hourly interval. This data is displayed as dashes on the FADS terminal and is printed as blanks on the FADS printer.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 1-3.
Change:	Fields 1-3.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. FADS Active	0	Not active
	1	Active
2. Auto Print	0	Not active
	1	Active
3. Offset Minutes	0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55	

DISPLAY ONLY (Fields 4-6)
TIME OF DAY (Fields 4-5)

4. Hours	0-23 (0 = midnight, and 12 = noon) The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.	
5. Minutes	0-59	
6. Clock Reset	0 1	No reset needed Reset needed (use Procedure 284 Word 1)

Notes

The system clock is set using Procedure 284 Word 1. If field 6 equals 1, the system clock must be reset.

Special Error Codes

82 - Field 3 must be 0-55 with the rightmost (units) digit being a 0 or a 5.

83 - Field 1 equaling 1 is only valid if the FADS terminal is assigned (Procedure 253 Word 1).

PROCEDURE 450 WORD 1 — CUSTOMER TRAFFIC STUDIES - SYSTEM TRANSLATION AND CI

Purpose

Procedure 450 Word 1 has five functional categories:

— Queue peg times

— Traffic clock (and offset)

— Peak and time-coincident translation copy

— Zero traffic study assignments

— Peak and time-coincident study size.

Prerequisite Procedures

Use Procedure 284 Word 1 to set the system clock which is used for traffic time of day (fields 3 and 4).

Related Procedures

Use Procedure 454 Words 1 and 2 to administer peak and time-coincident traffic studies.

Use Procedure 453 Word 2 to administer traffic studies for WCR, Call Coverage, and vector directory numbers (VDNs).

Use Procedure 453 Word 3 to administer traffic ISDN associations.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 450, WORD: 1
            CUSTOMER TRAFFIC STUDIES - SYSTEM TRANSLATION AND CLOCK

DISPLAY ONLY
  QUEUE PEG TIME
     1. Ringback Queue Peg Timing: --
     2. Off-Hook Queue Peg Timing: --
  TIME OF DAY
     3.    Hour: --
     4. Minutes: --

 5.            Offset Minutes: --
 6.                     Reset: -
 7.          Copy Translation: -
 8.          Zero Translation: -
 9. Peak/Time Coincident Size: -

DISPLAY ONLY
  10. Clock Error: -


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 5-9.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

DISPLAY ONLY (Fields 1-4)
QUEUE PEG TIME (Fields 1-2)

1. Ringback Queue Peg Timing	-	Timing disabled
	1-99	In 0.1 minute increments

Fields 1 and 2 are in units of 0.1 minute. The range of this field is from 1 to 99 corresponding to peg times of 0.1 to 9.9 minutes.

2. Off-Hook Queue Peg Timing
   - Timing disabled
   1-99 In 0.1 minute increments

   Fields 1 and 2 are in units of 0.1 minute. The range of this field is from 1 to 99 corresponding to peg times of 0.1 to 9.9 minutes.

TIME OF DAY (Fields 3-4)

3. Hour — 0-23

   The system clock uses military time, thus 0 = midnight and 12 = noon. For example, military time for 10:00 pm is 2200 hours.

4. Minutes — 0-59

5. Offset Minutes — 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

   Offset cannot be changed without reinitializing traffic.

6. Reset
   - Do not reset offset or collection and output registers
   1 Reset offset and all traffic collection and output registers

   Changes in this field reinitialize traffic studies.

   To reset traffic collection and output registers, display correct offset in field 5, set this field to 1, and do a change routine.

7. Copy Translation
   - No change
   1 Use Procedures 414 Words 1 and 2 and 413 Word 3

   Changes in this field affect all traffic ISDN associations plus peak and time-coincident register assignments for traffic studies.

   Copy peak and time-coincident register assignments (as administered in Procedure 414 Words 1 and 2) and traffic ISDN associations (as administered in Procedure 413 Word 3) into this traffic translation. Verify copy using Procedure 453 Word 3 and 454 Words 1 and 2).

8. Zero Translation
   - No change
   1 Zero peak and time-coincident registers (Procedure 454 Words 1 and 2)
   2 Zero WCR Pattern studies (Procedure 453 Word 2)
   3 Reserved for Future Use
   4 Zero Call Coverage studies (Procedure 453 Word 2)
   5 Zero VDN studies (Procedure 453 Word 2)
   6 Zero ISDN associations (Procedure 453 Word 3)

   Changes in this field zero traffic study assignments.

   Zeroing peak and time-coincident traffic studies does not zero the traffic ISDN associations.

9. Peak/Time Coincident Size
   - No change
   0 Regular study size (2000 registers)
   1 Large study size (4000 registers)

DISPLAY ONLY (Field 10)

10. Clock Error	0	No
	1	Yes (use Procedure 284 Word 1 to reset)

Special Error Codes

82 - The field 5 rightmost (units) digit must be 0 or 5.

83 - The offset cannot be changed without reinitializing traffic (see field 6).

84 - The peak and time-coincident translation to be copied (as administered in Procedure 414 Words 1 and 2) exceeds the regular study size.

85 - The regular study size cannot be administered when the current study (as administered in Procedure 454 Words 1 and 2) exceeds the regular study size or when a peak register greater than 2000 is assigned.

86 - One or more ISDN associations to be zeroed are under study in Procedure 454 Words 1 and 2.

PROCEDURE 451 WORD 1 — CUSTOMER TRAFFIC STUDIES - LOAD BALANCE

Purpose

Use Procedure 451 Word 1 to administer load balance studies.

Prerequisite Procedures

Use Procedure 100 Word 1 to administer basic trunk group translations.

Related Procedures

Use Procedure 461 Word 1 to display and reset the load balance measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 451, WORD: 1
                    CUSTOMER TRAFFIC STUDIES - LOAD BALANCE

 1. Load Balance: -
 2.  Trunk Group: ---









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Load Balance	0	Inactive
	1	Active
	If no trunk group is specified, all trunk groups are studied.	
2. Trunk Group	-	All trunk groups
	18-999	Trunk groups 18-999

Special Error Codes

None.

PROCEDURE 451 WORD 2 — CUSTOMER TRAFFIC STUDIES - CARRIER USAGE

Purpose

Use Procedure 451 Word 2 to assign line or trunk carriers for traffic usage studies.

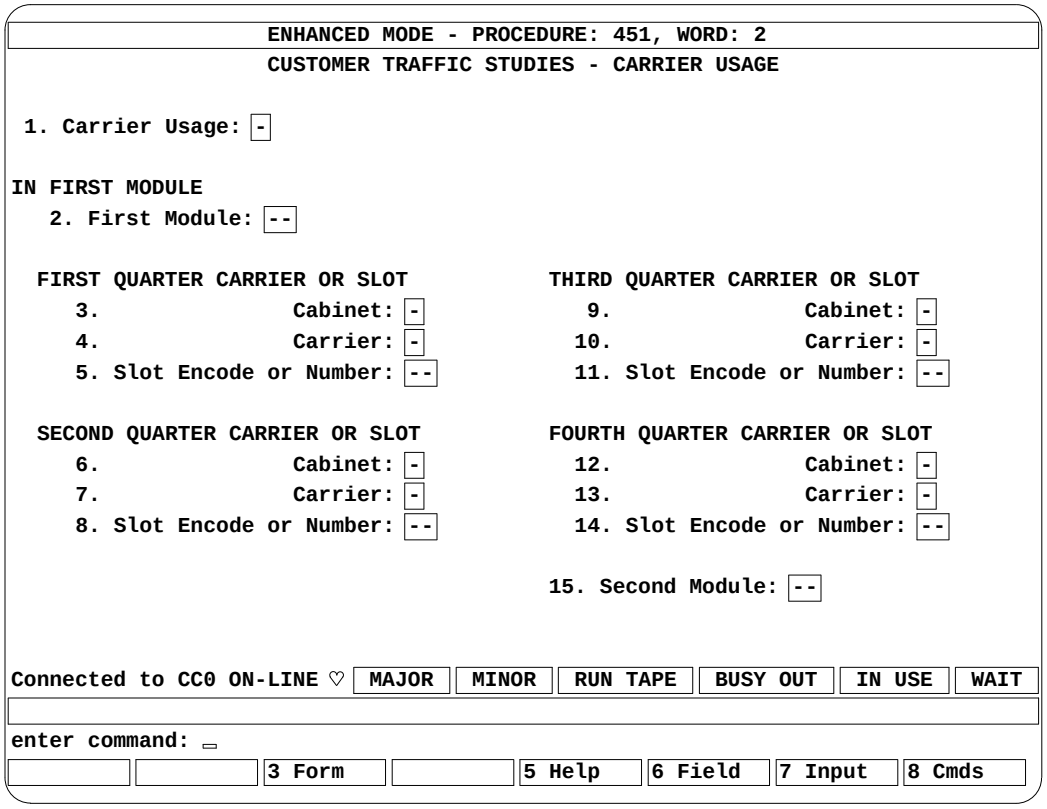
Prerequisite Procedures

Use Procedure 250 Word 1 to administer carrier translations.

Related Procedures

Use Procedure 461 Word 1 to display and reset the carrier usage measurements.

Screen Display



Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-15.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Carrier Usage
   - 0 Inactive
   - 1 Active

IN FIRST MODULE (Fields 2-14)

If the module specified in field 2 is a traditional module, the traffic studies are made on a quarter carrier basis (four slots). If a traditional module number is entered in field 2, fields 5, 8, 11, and 14 anticipate a beginning slot encode. Each slot encode (quarter carrier) corresponds to the following four physical slots on a traditional carrier.

Slot encode 0 = Quarter carrier 1 (slots 0-3)
Slot encode 1 = Quarter carrier 2 (slots 5-8)
Slot encode 2 = Quarter carrier 3 (slots 13-16)
Slot encode 3 = Quarter carrier 4 (slots 18-21)

If the module specified in field 2 is a universal or XE module, the traffic studies are made on a slot basis. If a universal or XE module number is entered in field 2; fields 5, 8, 11, and 14 anticipate a physical slot number (0-20 is the range of carrier slots in a universal module, 1-18 is the range of carrier slots in an XE module).

2. First Module — -, 0-30

FIRST QUARTER CARRIER OR SLOT (Fields 3-5)

3. Cabinet — -, 0-7 for traditional modules, 0 for universal and XE modules
4. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
5. Slot Encode or Number — -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

SECOND QUARTER CARRIER OR SLOT (Fields 6-8)

6. Cabinet — -, 0-6 for traditional modules, 0 for universal and XE modules
7. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
8. Slot Encode or Number — -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

THIRD QUARTER CARRIER OR SLOT (Fields 9-11)

9. Cabinet — -, 0-6 for traditional modules, 0 for universal and XE modules
10. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules

11. Slot Number — Encode or -, 0-3 for traditional, 0-20 for universal, 1-18 for XE

FOURTH QUARTER CARRIER OR SLOT (Fields 12-14)

12. Cabinet — -, 0-6 for traditional modules, 0 for universal and XE modules
13. Carrier — -, 0-3 for traditional modules, c-e for universal and XE modules
14. Slot Number — Encode or -, 0-3 for traditional, 0-20 for universal, 1-18 for XE
15. Second Module — -, 0-30

Notes

1. No gaps are allowed when entering data in fields 3-14.

Special Error Codes

81 - Module 1 must be assigned.

83 - Data in fields 3-14 must be entered beginning to end with no gaps.

PROCEDURE 453 WORD 1 — CUSTOMER TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS

Purpose

Use Procedure 453 Word 1 to assign trunk group combinations for traffic studies. Only 1-way, 2-way, Direct Inward Dialing (DID), Integrated Services Digital Network (ISDN) dynamic, and remote access trunks are allowed.

Prerequisite Procedures

Use Procedure 100 Word 1 to assign trunk groups.

Related Procedures

Use Procedure 454 Words 1 and 2 to establish peak and time-coincident measurements for total hundred-call seconds (CCS), incoming CCS, and outgoing CCS for the trunk group combinations assigned in this procedure.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 453, WORD: 1
              CUSTOMER TRAFFIC STUDIES - TRUNK GROUP COMBINATIONS

 1. Combination Number: -
 2.            Segment: -
 3.      Trunk Group 1: ---
 4.      Trunk Group 2: ---
 5.      Trunk Group 3: ---
 6.      Trunk Group 4: ---
 7.      Trunk Group 5: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Fields 1-7. Using the add routine on a combination and segment number replaces any prior assignment for that segment (functions similar to the change routine).
Change:	Fields 1-7.
Remove:	Fields 2-7. The remove routine eliminates only the specified segment (field 2) of a trunk group combination and does not remove or change the other segments.
Next Data:	Displays all segments of all combinations (fields 1 and 2).

Field Ranges and Encodes

1.	Combination Number	1-3
2.	Segment	1-4
3.	Trunk Group 1	-, 8-999
4.	Trunk Group 2	-, 8-999
5.	Trunk Group 3	-, 8-999

6. Trunk Group 4 -, 8-999
7. Trunk Group 5 -, 8-999

Notes

1. Twenty trunk groups may be assigned to a combination by entering up to five trunk groups in each of four segments.

Special Error Codes

82 - Only 1-way, 2-way, DID, ISDN dynamic, and remote access trunks are allowed.

PROCEDURE 453 WORD 2 — CUSTOMER TRAFFIC STUDIES - SPECIAL MEASUREMENT GROU

Purpose

Use Procedure 453 Word 2 to specify World Class Routing (WCR) patterns, Call Coverage groups, or vector directory numbers (VDNs) for traffic studies.

Prerequisite Procedures

Use Procedure 318 to administer WCR patterns.

Use Procedure 011 Word 1 to administer Call Coverage groups.

Use Procedure 000 Word 1 to administer VDNs.

Related Procedures

Use Procedure 461 Word 1 to display and reset the traffic measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 453, WORD: 2
            CUSTOMER TRAFFIC STUDIES - SPECIAL MEASUREMENT GROUPS

 1.            Type: -
 2. Measurement Item: -----

DISPLAY ONLY
   3. Number Assigned: ---

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 1 and 2.
Add:	Fields 1 and 2.
Change:	Not allowed.
Remove:	Fields 1 and 2.
Next Data:	Displays all assigned routing patterns, Call Coverage groups, or VDNs (field 2).

Field Ranges and Encodes

1. Type
   - 1 WCR Patterns
   - 2 Reserved for Future Use
   - 3 Call Coverage
   - 4 VDN

2. Measurement Item — 000-99999

   The ranges for the different types are: WCR Patterns = 1-1023, Call Coverage = 1-4095, VDNs = 000-99999.

DISPLAY ONLY (Field 3)

3. Number Assigned 0-255

Field 3 counts the number of patterns, Call Coverage groups, or VDNs to be studied. Maximum: WCR Patterns = 63, Call Coverage = 25, VDNs = 255.

Special Error Codes

83 - The data table is full.

85 - The extension must be a VDN.

PROCEDURE 453 WORD 3 — CUSTOMER TRAFFIC STUDIES - ISDN ASSIGNMENTS

Purpose

Use Procedure 453 Word 3 to define Integrated Services Digital Network (ISDN) associations for traffic studies.

Prerequisite Procedures

Use Procedure 279 Word 1 to define the ISDN network service.

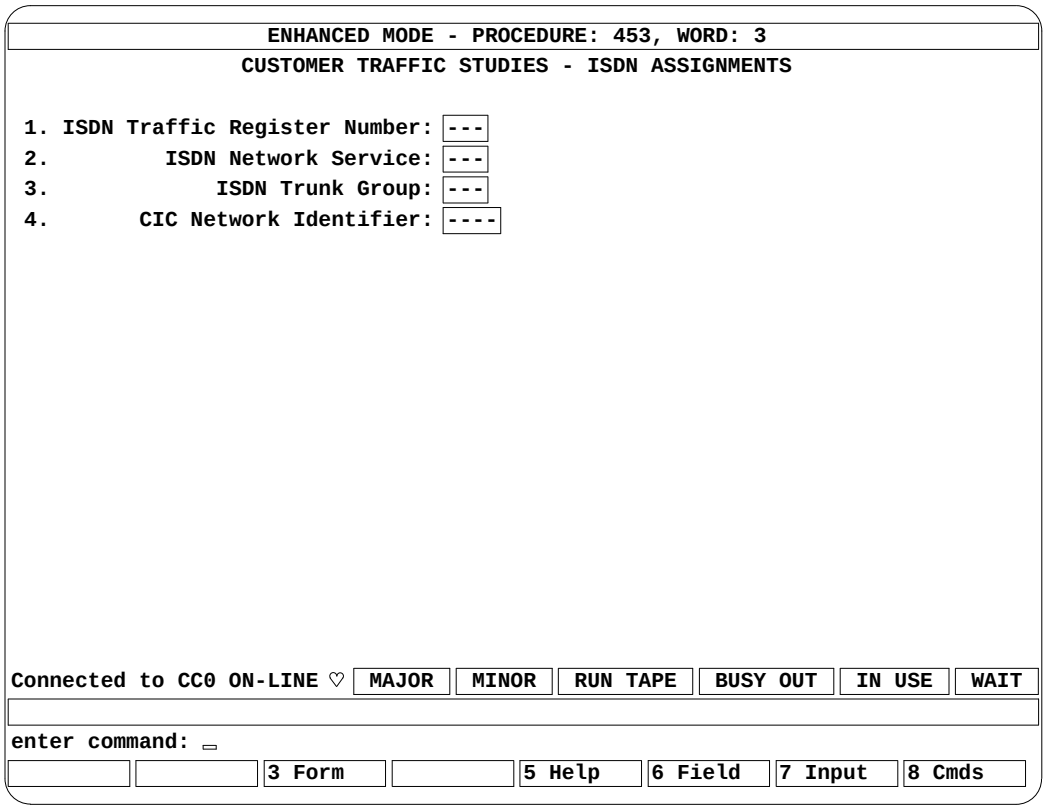
Use Procedure 321 Word 1 to assign an IXC network identifier for WCR.

Use Procedure 322 Word 1 to assign an ISDN network service for WCR.

Related Procedures

Use Procedure 454 Words 1 and 2 to establish peak and time-coincident measurements for total hundred-call seconds (CCS), incoming CCS, total peg count, incoming peg count, and overflow peg count for the ISDN associations assigned in this procedure.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-4.
Add:	Fields 1-4 or fields 2-4.
Change:	Not allowed.
Remove:	Fields 1-4.
Next Data:	Displays all assigned ISDN traffic registers (field 1).

Field Ranges and Encodes

1. ISDN Traffic Register Number -, 1-255
2. ISDN Network Service
   - All network services
   0 Presubscribed network service
   1-511 Defined in Procedure 279 Word 1
   999 ACCUNET
3. ISDN Trunk Group
   - All trunk groups
   18-999 Trunk groups 18-999

4.	CIC Identifier	Network	-	All CICs
			0	Presubscribed CIC
			1-9999	CIC 288 is AT&T

Notes

1. The following limits are in affect for fields 2, 3, and 4, respectively: 61 different network services plus ACCUNET and the presubscribed network service, 63 different trunk groups, and 6 different inter-exchange carriers (IXCs) plus the presubscribed IXC can be studied.

Special Error Codes

81 - Field 2 and field 4 cannot both contain dashes.

82 - The maximum number of different elements for this field has been reached. The following limits are in effect: 61 different network services plus ACCUNET and the presubscribed network service, 63 different trunk groups, and 6 different inter-exchange carriers (IXCs) plus the presubscribed IXC can be studied.

83 - The traffic ISDN association is already defined.

84 - The ISDN traffic register to be removed is under study in Procedure 454 Words 1 and 2.

PROCEDURE 453 WORD 4 — CUSTOMER TRAFFIC STUDIES - ISDN D-CHANNEL ENCODE DISP

Purpose

Use Procedure 453 Word 4 to display the Integrated Services Digital Network/Primary Rate Interface (ISDN/PRI) D-channel traffic encodes and equipment locations.

Related Procedures

Use Procedure 454 Words 1 and 2 to establish peak and time-coincident measurements for ISDN/PRI D-channels.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 453, WORD: 4
            CUSTOMER TRAFFIC STUDIES - ISDN D-CHANNEL ENCODE DISPLAY

 1. D-Channel Traffic Encode: ----
 2.  Module: --
 3. Cabinet: -
 4. Carrier: -
 5.    Slot: --

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1 or fields 2-5.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all the D-channel traffic encodes (field 1).

Field Ranges and Encodes

1.	D-Channel Traffic Encode	-, 1-1023
2.	Module	-, 0-30
3.	Cabinet	-, 0-7 for traditional modules, 0 for universal and XE modules
4.	Carrier	-, 0-3 for traditional modules, c-e for universal and XE modules
5.	Slot	-, 0-3, 5-8, 13-16, 18-21 for traditional, 1-20 for universal, 1-18 for XE

Notes

1. Encodes and equipment locations displayed in this procedure can only be for ISDN/PRI D-channels.

Special Error Codes

81 - The encode or equipment location specified does not correspond to an ISDN/PRI D-channel.

PROCEDURE 454 WORD 1 — CUSTOMER TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS

Purpose

Use Procedure 454 Word 1 to assign peak registers for the traffic peak and time-coincident study.

Prerequisite Procedures

Use Procedure 450 Word 1 to copy the AT&T peak and time-coincident register assignments (as administered in Procedure 414 Words 1 and 2) and to administer the peak and time-coincident study size.

Use Procedure 453 Word 1 to administer traffic trunk group combinations for measurement type 1 if applicable.

Use Procedure 453 Word 3 to administer ISDN associations for measurement types 75-79 if applicable.

Use Procedure 453 Word 4 to determine D-channel traffic encodes for measurement types 80-81 if applicable.

Related Procedures

Use Procedure 461 Word 1 to display and reset the peak and time-coincident measurements.

Cautions

The remove routine removes all time-coincident registers associated with the peak register removed.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 454, WORD: 1
              CUSTOMER TRAFFIC STUDIES - PEAK REGISTER ASSIGNMENTS

 1. Peak Register: ----

PEAK
   2. Type: --
   3. Item: ----

DISPLAY ONLY
   4. Study Size: -
   5. Peak and Time Coincident Registers Assigned: ----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None, field 1, or fields 2 and 3.
Add:	Fields 1-3 or fields 2 and 3.
Change:	Not allowed.
Remove:	After display only.
Next Data:	Displays the traffic peak register assignments.

Field Ranges and Encodes

1. Peak Register — -, 1-4000

   If field 1 is dashed during the add routine, the first available peak register is selected.

PEAK (Fields 2-3)

2. Type

1	Traffic trunk group combination usage
3	Network and processor measurements
5-9	Trunk group measurements
10-12	Time slot interchanger measurements

13-14	Time multiplex switch measurements
15-17	Time division multiplex measurements
20	Attendant feature measurements (console totals)
21-23	Attendant feature measurements (per console)
30-34	Queuing measurements (priority queues)
40-44	Queuing measurements (nonpriority queues)
50-52	Main/satellite measurements
60	CAS measurements
61-63	ACD and Message Center measurements
65-66,68-69	Trunk group data measurements
70	Trunk group busy out usage
71-73	Trunk group glare measurements
74	Trunk group busy usage
75-79	ISDN/PRI trunk group measurements
80-81	ISDN/PRI D-channel measurements
99	ISDN call record measurements

3. Item 1-1023

DISPLAY ONLY (Fields 4-5)

4. Study Size
   - 0 Regular study (2000 registers)
   - 1 Large study (4000 registers)

5. Peak and Time Coincident Registers Assigned 0-5998

Notes

1. The maximum number of peak registers plus time-coincident registers assigned can be 2000-5998 depending on the mix of peak versus time-coincident assignments and the study size.
2. The following tables show the peak measurement type and item (fields 2 and 3):

Trunk Group Combination Usage

Measurement	Type	Item
Combination number 1		
Total usage	1	1
Incoming usage	1	2
Outgoing usage	1	3
Combination number 2		
Total usage	1	4
Incoming usage	1	5
Outgoing usage	1	6
Combination number 3		
Total usage	1	7
Incoming usage	1	8
Outgoing usage	1	9

Network and Processor Measurements

Measurement	Type	Item
Outgoing usage	3	1
Tandem usage	3	2
Reserved for future use	3	3
501CC occupancy	3	4
501CC overflow	3	5
Call processing stimuli	3	6
DCP stimuli	3	7
Dial tone delays > 3 seconds	3	8
Dial tone measured	3	9
Connection count	3	10
Intermodule usage	3	11
Audit cycles	3	12
Connection usage	3	13
Tone detector timeout	3	14
Call count	3	15
WCR Network 2 calls	3	16
WCR Network 1 calls	3	17
CDR records	3	18
CDR usage	3	19
System management occupancy	3	20
WCR Network 3 calls	3	21
WCR Network 4 calls	3	22
WCR Network 5 calls	3	23
WCR Network 6 calls	3	24
WCR Network 7 calls	3	25
WCR Network 0 calls	3	26

Trunk Group Measurements

Measurement	Type	Item
Trunk group total usage	5	8-999
Trunk group total calls	6	15-999
Trunk group total overflow	7	18-999
Trunk group incoming usage	8	18-999
Trunk group incoming calls	9	18-999

TSI Measurements

Measurement	Type	Item
TSI memory word blockage for modules 0-30, respectively	10	1-31
TSI memory word count for modules 0-30, respectively	11	1-31
TSI memory word usage for modules 0-30, respectively	12	1-31

TMS Measurements

Measurement	Type	Item
Mismatch blockage by module pair	13	1-465
Intermodule call count by module pair	14	1-465

TDM Measurements (applicable to universal and XE modules only)

Measurement	Type	Item
TDM time slot blockage for modules 0-30, respectively	15	1-31
TDM time slot call count for modules 0-30, respectively	16	1-31
TDM time slot usage for modules 0-30, respectively	17	1-31

Attendant Feature Measurements

Measurement	Type	Item
Console totals		
All consoles worked usage	20	1
All consoles attended usage	20	2
All consoles worked count	20	3
Incoming call queue		
Incoming call queue usage	20	4
Incoming call queue call count	20	5
Incoming call queue calls abandoned	20	6
Attendant calls		
LDN calls answered	20	7
Non-LDN calls answered	20	8
Attendant recall calls	20	9
Attendant originated calls	20	10

Attendant Feature Measurements Per Console

Measurement	Type	Item
Console worked usage	21	1-40
Console attended usage	22	1-40
Console worked count	23	1-40

Priority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	30	18-999
Trunk group queued call count	31	18-999
Trunk group queue overflow	32	18-999
Trunk group queue calls abandoned	33	18-999
Trunk group queue timeout	34	18-999

Nonpriority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	40	18-999
Trunk group queued call count	41	18-999
Trunk group queue overflow	42	18-999
Trunk group queue calls abandoned	43	18-999
Trunk group queue timeout	44	18-999

Main/Satellite Measurements		
Measurement	**Type**	**Item**
DID to main	50	1
DID to satellite 1-4	51	1-4
Attendant recall from satellite 1-4	52	1-4

CAS Measurements		
Measurement	**Type**	**Item**
CAS usage	60	1
CAS call count	60	2
CAS abandoned calls	60	3
RLT calls answered by attendant	60	4

ACD and Message Center Measurements		
Measurement	**Type**	**Item**
ACD queue threshold count	61	1-60
Message center service directed calls	62	1-60
Message center service redirected calls	63	1-60

Measurement	Type	Item
Trunk group data usage	65	8-999
Trunk group data calls	66	15-999
Trunk group incoming data usage	68	18-999
Trunk group incoming data calls	69	18-999

Trunk Group Maintenance Busy Usage

Measurement	Type	Item
Trunk group maintenance busy usage	70	4-999

Trunk Group Glare Measurements

Measurement	Type	Item
Trunk group glare count	71	18-999
Trunk group glare retry attempts	72	18-999
Trunk group glare retry failures	73	18-999

Trunk Group All Trunks Busy Measurements

Measurement	Type	Item
Trunk group all trunks busy usage	74	15-999

ISDN/PRI Trunk Group Measurements

Measurement	Type	Item
Total usage for ISDN associations 1-255	75	1-255
Total calls for ISDN associations 1-255	76	1-255
Overflow for ISDN associations 1-255	77	1-255
Incoming usage for ISDN associations 1-255	78	1-255
Incoming calls for ISDN associations 1-255	79	1-255

ISDN/PRI D-Channel Measurements

Measurement	Type	Item
I-field bytes for D-channels 1-1023	80	1-1023
I-field frames for D-channels 1-1023	81	1-1023

ISDN Call Record Measurements		
Measurement	**Type**	**Item**
Total seizures	99	1
Total releases	99	2
Blocked seizures	99	3
Parking lot seizures	99	4
Copy standby to regular queue	99	5

3. For TMS measurements (fields 2 and 5=13 or 14), the module pairs associated with codes 1-465 (fields 3 and 6) are given in **Appendix B**.

Special Error Codes

82 - Type 2 may not be assigned as a peak register.

83 - When the regular study size is administered (see field 4 and Procedure 450 Word 1 field 9), the peak register number cannot exceed 2000.

84 - The regular study size limit has been reached. To administer more registers, the large study size must be administered in Procedure 450 Words 1 field 9.

PROCEDURE 454 WORD 2 — CUSTOMER TRAFFIC STUDIES - TIME COINCIDENT REGISTER A

Purpose

Use Procedure 454 Word 2 to assign a traffic time-coincident register associated with a peak traffic register.

Prerequisite Procedures

Use Procedure 450 Word 1 to administer the peak and time-coincident study size.

Use Procedure 454 Word 1 to administer the peak register before using this procedure.

Use Procedure 453 Word 1 to administer traffic trunk group combinations for measurement type 1 if applicable.

Use Procedure 453 Word 3 to administer ISDN associations for measurement types 75-79 if applicable.

Use Procedure 453 Word 4 to determine D-channel traffic encodes for measurement types 80 and 81 if applicable.

Related Procedures

Use Procedure 461 Word 1 to display and reset the peak and time-coincident measurements.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 454, WORD: 2
        CUSTOMER TRAFFIC STUDIES - TIME COINCIDENT REGISTER ASSIGNMENTS

 1. Peak Register: ----

DISPLAY ONLY
  PEAK
     2. Type: --
     3. Item: ----

DISPLAY ONLY
   4. Time Coincident Register: ----

TIME COINCIDENT
   5. Type: --
   6. Item: ----

DISPLAY ONLY
   7. Peak And Time Coincident Registers Assigned: ----


Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None, field 1 or fields 1, 5, and 6.
Add:	Fields 1, 5, and 6.
Change:	Not allowed.
Remove:	Fields 1-6.
Next Data:	Displays all the time-coincident traffic assignments associated with all assigned peak registers.

Field Ranges and Encodes

1. Peak Register 1-4000

DISPLAY ONLY (Fields 2-3)
PEAK (Fields 2-3)

2. Type	1	Traffic trunk group combination usage
	3	Network and processor measurements
	5-9	Trunk group measurements
	10-12	Time slot interchanger (TSI) measurements

	13-14	Time multiplex switch (TMS) measurements
	15-17	Time division multiplex (TDM) measurements
	20	Attendant feature measurements (console totals)
	21-23	Attendant feature measurements (per console)
	30-34	Queuing measurements (priority queues)
	40-44	Queuing measurements (nonpriority queues)
	50-52	Main/satellite measurements
	60	CAS measurements
	61-63	ACD and Message Center measurements
	65-66,68-69	Trunk group data measurements
	70	Trunk group busy out usage
	71-73	Trunk group glare measurements
	74	Trunk group busy usage
	75-79	ISDN/PRI trunk group measurements
	80-81	ISDN/PRI D-channel measurements
	99	ISDN call record measurements

3. Item 1-1023

DISPLAY ONLY (Field 4)

4. Time Coincident Register 1-5997

TIME COINCIDENT (Fields 5-6)

5. Type	1	Traffic trunk group combination usage
	2	Miscellaneous measurements
	3	Network and processor measurements
	5-9	Trunk group measurements
	10-12	Time slot interchanger measurements
	13-14	Time multiplex switch measurements
	15-17	Time division multiplex measurements
	20	Attendant feature measurements (console totals)
	21-23	Attendant feature measurements (per console)
	30-34	Queuing measurements (priority queues)
	40-44	Queuing measurements (nonpriority queues)
	50-52	Main/satellite measurements
	60	CAS measurements
	61-63	ACD and Message Center measurements
	65-66,68-69	Trunk group data measurements
	70	Trunk group busy out usage
	71-73	Trunk group glare measurements
	74	Trunk group busy usage
	75-79	ISDN/PRI trunk group measurements
	80-81	ISDN/PRI D-channel measurements
	99	ISDN call record measurements

6. Item 1-1023

DISPLAY ONLY (Field 7)

7.	Peak And Time Coincident Registers Assigned	0-5998

Notes

1. Each group of time-coincident register assignments for a given register peak begins with a 1 (field 4). The value displayed in field 4 is used as an index in Procedure 461 Words 1-3.
2. The maximum number of peak registers plus time-coincident registers assigned can be 2000-5998 depending on the mix of peak versus time-coincident assignments and the study size.
3. To remove peak and all corresponding time-coincident assignments, use Word 1.
4. The following tables show the peak measurement type and item (fields 2 and 3) and the time-coincident measurement type and item (fields 5 and 6):

Trunk Group Combination Usage

Measurement	Type	Item
Combination number 1		
Total usage	1	1
Incoming usage	1	2
Outgoing usage	1	3
Combination number 2		
Total usage	1	4
Incoming usage	1	5
Outgoing usage	1	6
Combination number 3		
Total usage	1	7
Incoming usage	1	8
Outgoing usage	1	9

Miscellaneous Measurements (time-coincident only)

Measurement	Type	Item
Time of day	2	1
WCR plan in effect	2	2

Network and Processor Measurements

Measurement	Type	Item
Outgoing usage	3	1
Tandem usage	3	2
Reserved for future use	3	3

501CC occupancy	3	4
501CC overflow	3	5
Call processing stimuli	3	6
DCP stimuli	3	7
Dial tone delays > 3 seconds	3	8
Dial tone measured	3	9
Connection count	3	10
Intermodule usage	3	11
Audit cycles	3	12
Connection usage	3	13
Tone detector timeout	3	14
Call count	3	15
WCR Network 2 calls	3	16
WCR Network 1 calls	3	17
CDR records	3	18
CDR usage	3	19
System management occupancy	3	20
WCR Network 3 calls	3	21
WCR Network 4 calls	3	22
WCR Network 5 calls	3	23
WCR Network 6 calls	3	24
WCR Network 7 calls	3	25
WCR Network 0 calls	3	26

Trunk Group Measurements

Measurement	Type	Item
Trunk group total usage	5	8-999
Trunk group total calls	6	15-999
Trunk group total overflow	7	18-999
Trunk group incoming usage	8	18-999
Trunk group incoming calls	9	18-999

TSI Measurements

Measurement	Type	Item
TSI memory word blockage for modules 0-30, respectively	10	1-31
TSI memory word count for modules 0-30, respectively	11	1-31
TSI memory word usage for modules 0-30, respectively	12	1-31

TMS Measurements

Measurement	Type	Item
Mismatch blockage by module pair	13	1-465
Intermodule call count by module pair	14	1-465

TDM Measurements (applicable to universal and XE modules only)		
Measurement	**Type**	**Item**
TDM time slot blockage for modules 0-30, respectively	15	1-31
TDM time slot call count for modules 0-30, respectively	16	1-31
TDM time slot usage for modules 0-30, respectively	17	1-31

Attendant Feature Measurements		
Measurement	**Type**	**Item**
Console totals		
All consoles worked usage	20	1
All consoles attended usage	20	2
All consoles worked count	20	3
Incoming call queue		
Incoming call queue usage	20	4
Incoming call queue call count	20	5
Incoming call queue calls abandoned	20	6
Attendant calls		
LDN calls answered	20	7
Non-LDN calls answered	20	8
Attendant recall calls	20	9
Attendant originated calls	20	10

Attendant Feature Measurements Per Console		
Measurement	**Type**	**Item**
Console worked usage	21	1-40
Console attended usage	22	1-40
Console worked count	23	1-40

Priority Queue Measurements		
Measurement	**Type**	**Item**
Trunk group queue usage	30	18-999
Trunk group queued call count	31	18-999
Trunk group queue overflow	32	18-999

Trunk group queue calls abandoned	33	18-999
Trunk group queue timeout	34	18-999

Nonpriority Queue Measurements

Measurement	Type	Item
Trunk group queue usage	40	18-999
Trunk group queued call count	41	18-999
Trunk group queue overflow	42	18-999
Trunk group queue calls abandoned	43	18-999
Trunk group queue timeout	44	18-999

Main/Satellite Measurements

Measurement	Type	Item
DID to main	50	1
DID to satellite 1-4	51	1-4
Attendant recall from satellite 1-4	52	1-4

CAS Measurements

Measurement	Type	Item
CAS usage	60	1
CAS call count	60	2
CAS abandoned calls	60	3
RLT calls answered by attendant	60	4

ACD and Message Center Measurements

Measurement	Type	Item
ACD queue threshold count	61	1-60
Message center service directed calls	62	1-60
Message center service redirected calls	63	1-60

Trunk Group Data Measurements

Measurement	Type	Item
Trunk group data usage	65	8-999
Trunk group data calls	66	15-999

Trunk group incoming data usage	68	18-999
Trunk group incoming data calls	69	18-999

Trunk Group Maintenance Busy Usage

Measurement	Type	Item
Trunk group maintenance busy usage	70	4-999

Trunk Group Glare Measurements

Measurement	Type	Item
Trunk group glare count	71	18-999
Trunk group glare retry attempts	72	18-999
Trunk group glare retry failures	73	18-999

Trunk Group All Trunks Busy Measurements

Measurement	Type	Item
Trunk group all trunks busy usage	74	15-999

ISDN/PRI Trunk Group Measurements

Measurement	Type	Item
Total usage for ISDN associations 1-255	75	1-255
Total calls for ISDN associations 1-255	76	1-255
Overflow for ISDN associations 1-255	77	1-255
Incoming usage for ISDN associations 1-255	78	1-255
Incoming calls for ISDN associations 1-255	79	1-255

ISDN/PRI D-Channel Measurements

Measurement	Type	Item
I-field bytes for D-channels 1-1023	80	1-1023
I-field frames for D-channels 1-1023	81	1-1023

ISDN Call Record Measurements

Measurement	Type	Item
Total seizures	99	1

Total releases	99	2
Blocked seizures	99	3
Parking lot seizures	99	4
Copy standby to regular queue	99	5

3. For TMS measurements (fields 2 and 5=13 or 14), the module pairs associated with codes 1-465 (fields 3 and 6) are given in **Appendix B**.

Special Error Codes

81 - The peak register must be assigned in Procedure 454 Word 1.

83 - When the regular study size is administered (Procedure 450 Word 1 field 9), the peak register number cannot exceed 2000.

84 - The regular study size limit has been reached. To administer more registers, the large study size must be administered in Procedure 450 Word 1 field 9.

85 - The type and item encodes for a time coincident register cannot match the type and item encodes for the corresponding peak register.

PROCEDURE 455 WORD 1 — CUSTOMER TRAFFIC STUDIES - MAIN/SATELLITE TRANSLATIO

Purpose

Use Procedure 455 Word 1 to assign a traffic satellite number to a Main/Satellite trunk group.

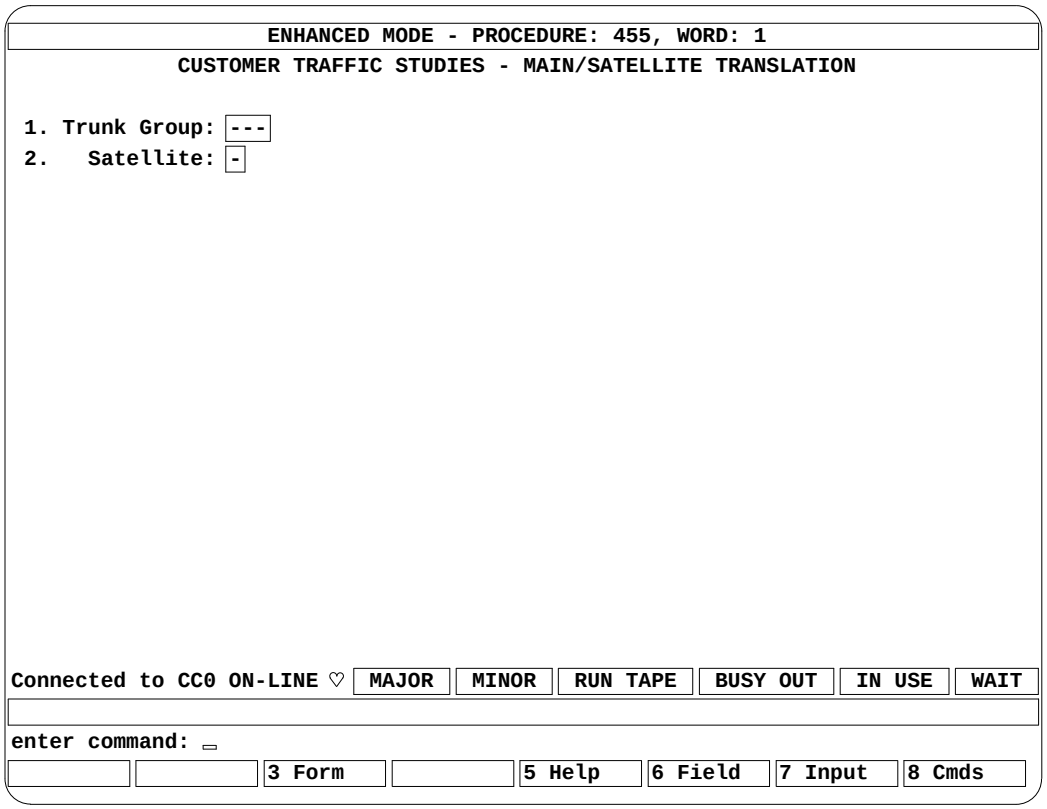
Prerequisite Procedures

Use Procedure 104 Words 1 and 2 to administer Main/Satellite trunk groups.

Related Procedures

Use Procedure 454 Words 1 and 2 to establish traffic Main/Satellite peak and time-coincident measurements.

Screen Display



Fields Used or Required for Command Routines

Display:	None or field 1.
Add:	Not allowed.
Change:	Fields 1 and 2.
Remove:	Not allowed (dash field 2 and use the change routine).
Next Data:	Displays all trunk groups with traffic satellite assignments.

Field Ranges and Encodes

1. Trunk Group	18-999	
2. Satellite	-	Unassigned
	1-4	Satellite number

Satellites 1-4 are defined, for traffic study purposes, by administering satellite number 1-4 in this field to all relevant Main/Satellite trunk groups.

Special Error Codes

82 - If field 2 is 1-4, the trunk group must be administered as Main/Satellite in Procedure 104 Word 1.

PROCEDURE 461 WORD 1 — CUSTOMER TRAFFIC - DATA DISPLAY AND RESET

Purpose

Use Procedure 461 Word 1 to display and reset to zero traffic data in the output buffers (i.e., available for polling by an Operational Support System). The categories of this data are as follows:

Packet Number	Packet Name	Category Number	Category Name
2	Load Balance	1	Intramodule Load Balance
		2	Intermodule Load Balance
3	Carrier Usage	3	Carrier Usage
		4	Port Usage
5	Performance	5	Flag and Poll Information
		6	Total Blockages
		7	Ring Group Blockages
		8	Module Blockages
		9	Peak Hour - Summary
		10	Peak Hour - Module Occupancy
6	Peak and Time-Coincident	12	Peak Registers
		13	Time-Coincident Registers
7	WCR	14	WCR
8	Reserved	15	Reserved
9	Occupancy Data	16	Peak Hour Occupancy Value and Time
		17	Hundred Second Occupancy
10	Accumulated Values	18	Feature measurements
		30	Authorization Codes
11	DCIU	19	Level 2 protocol counters
		20	Level 3 protocol counters
		21	Port blocked counters
		22	Miscellaneous
		23	Messages blocked/queue usage
12	Call Coverage	24	Call Coverage
13	ACD	25	ACD measurements by agent extension
		26	ACD measurements by split
		27	ACD call redirection
		28	ACD Call Vectoring
		29	VDN measurements

Prerequisite Procedures

Use Procedure 450 Word 1 to administer the traffic clock (and offset).

Use Procedure 451 Word 1 to administer load balance studies.

Use Procedure 451 Word 2 to administer carrier usage studies.

Use Procedure 453 Word 2 to administer World Class Routing (WCR), Call Coverage, and vector directory number (VDN) studies.

Use Procedure 454 Words 1 and 2 to administer peak register and time-coincident studies.

Related Procedures

Use Procedure 461 Word 2 to display equipment locations associated with the data displayed in Word 1 for the carrier usage, port usage, and ring group blockage categories.

Use Procedure 461 Word 3 to display the network channel associated with the data displayed in Word 1 for DCIU category 20.

Cautions

When a category is zeroed, it also zeros all the categories in the packet.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 461, WORD: 1
                  CUSTOMER TRAFFIC - DATA DISPLAY AND RESET

 1. Category: [--]
 2.  Index 1: [-----]
 3.  Index 2: [----]
 4.  Index 3: [----]
 5.    Reset: [-]

DISPLAY ONLY
   6.        Data: [-------]
   7. Power of 10: [-]









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1, fields 1 and 2, fields 1-3, or fields 1-4.
Add:	Not allowed.
Change:	Fields 1 and 5, fields 1, 2, and 5, fields 1-3 and 5, or fields 1-4 and 5.
Remove:	Not allowed.
Next Data:	Steps through any index of a category if the index to be stepped on is dashed.

Field Ranges and Encodes

1. Category
   - 1 Intramodule Load Balance (packet 2)
   - 2 Intermodule Load Balance (packet 2)
   - 3 Carrier Usage (packet 3)
   - 4 Carrier Port Usage (packet 3)
   - 5 Flag and Poll Information (packet 5)
   - 6 Total Blockages (packet 5)
   - 7 Ring Group Blockages (packet 5)
   - 8 Module Blockages (packet 5)
   - 9 Peak Hour Summary (packet 5)
   - 10 Peak Hour Module Occupancy (packet 5)
   - 11 Reserved for future use
   - 12 Peak Registers (packet 6)
   - 13 Time-Coincident Registers (packet 6)
   - 14 World Class Routing (WCR) (packet 7)
   - 15 Reserved for Future Use (packet 8)
   - 16 Peak Hour Occupancy Value and Time (packet 9)
   - 17 Hundred Second Occupancy (packet 9)
   - 18 Feature Measurements (packet 10)
   - 19 DCIU Level 2 Protocol Counter (packet 11)
   - 20 DCIU Level 3 Protocol Counters (packet 11)
   - 21 DCIU Port Blocked Counters (packet 11)
   - 22 DCIU Miscellaneous (packet 11)
   - 23 DCIU Messages Blocked and Queue Usage (packet 11)
   - 24 Call Coverage (packet 12)
   - 25 ACD Measurements by Member (packet 13)
   - 26 ACD Measurements by Split (packet 13)
   - 27 ACD Call Redirection (packet 13)
   - 28 ACD Call Vectoring (packet 13)
   - 29 VDN Measurements (packet 13)
   - 30 Authorization Codes (packet 10)
2. Index 1 — -, 0-99999
3. Index 2 — -, 1-5998
4. Index 3 — -, 1-32
5. Reset
   - - No reset
   - 1 Reset single register to zero
   - 9 Reset entire packet to zero

DISPLAY ONLY (Fields 6-7)

6. Data — 0-9999999
7. Power of 10 — -, 0-3

Notes

1. Field 7 is used when double precision data is displayed to specify the number of zeros to append to the data in field 6.

Special Error Codes

81 - For Category 2, the module number in Index 1 must be less than the module number in Index 2.

82 - The study is not active - see Procedure 451 Word 1.

83 - To reset (zero) a single traffic register: display register, set field 5 = 1, and execute the change routine. Fields 1-4 must not be changed after display.

84 - To reset (zero) an entire packet, enter any category in the packet in field 1, dash fields 2-4, set field 5 = 9, and execute the change routine.

85 - In Category 2, interload balance does not apply to a one-module system.

86 - This extension is not a member of an ACD group.

91 - The double precision data exceeds 99942399.

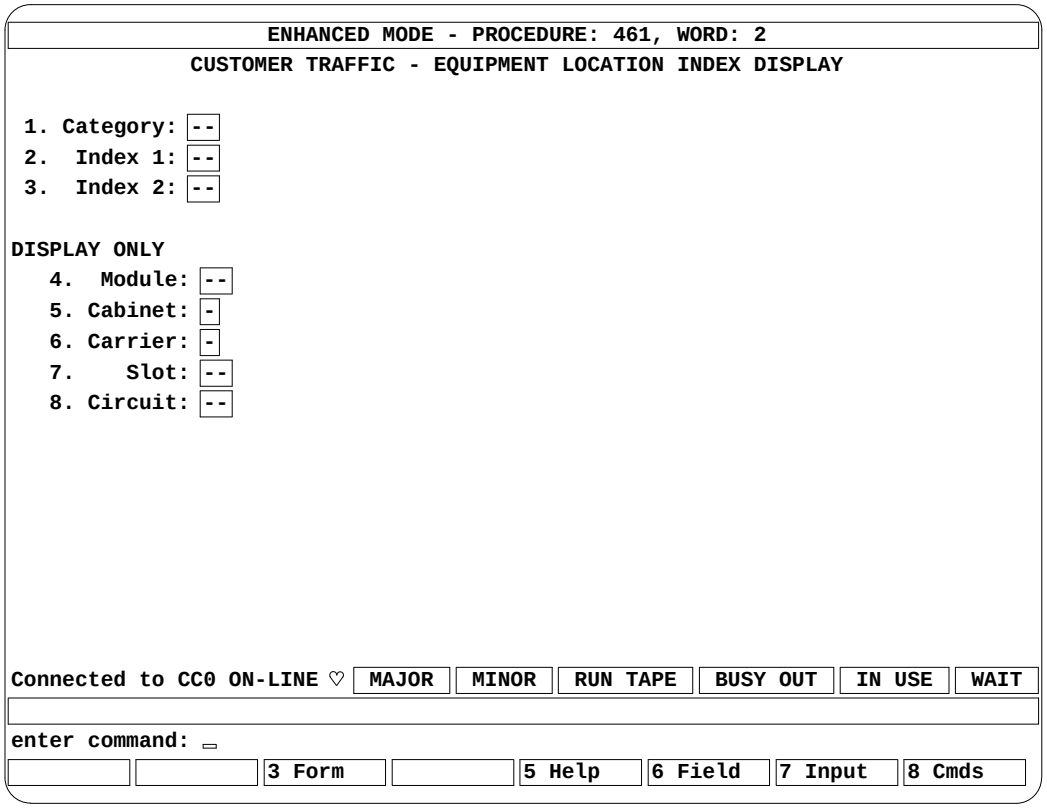
92 - This category is reserved for future use.

PROCEDURE 461 WORD 2 — CUSTOMER TRAFFIC - EQUIPMENT LOCATION INDEX DISPLAY

Purpose

Use Procedure 461 Word 2 to display equipment locations associated with the data displayed in Word 1 for the carrier usage, port usage, and ring group blockage categories.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1, fields 1 and 2, or fields 1-3.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Steps on field 3 for categories 3 and 4. Steps on field 2 for category 7.

Field Ranges and Encodes

1.	Category	3 4 7	Carrier usage Port usage Ring group blockage
2.	Index 1	1-16	
3.	Index 2	1-63	

DISPLAY ONLY (Fields 4-8)

4.	Module	0-30
5.	Cabinet	0-7 for traditional modules, 0 for universal and XE modules
6.	Carrier	0-3 for traditional modules, c-e for universal and XE modules
7.	Slot	0-3, 5-8, 13-16, 18-21 for traditional, 0-20 for universal, 1-18 for XE
8.	Circuit	0-23

Notes

1. The circuit field (field 8) is displayed for the port usage category only.
2. For traditional module quarter carriers and ring groups, the slot displayed is the first of four consecutive slots which make up the ring group or the quarter carrier.
3. The following tables contain the index values for the categories displayed in this procedure.

Category/ Index	**Value**	**Description**
3		Carrier Usage
Index 1	1 and 2	Indicates module number 1 or 2 assigned in Procedure 451 Word 2
Index 2	1-48 1-63	Indicates which one of 48 quarter carriers within traditional module in Index 1, or Indicates which one of 63 slots within universal module in Index 1.

Category/ Index	**Value**	**Description**
4		Port Usage
Index 1	1-4	Quarter carrier or slot assigned in Procedure 451 Word 2
Index 2	1-32	Indicates which one of 32 electrical

	1-63	ports within traditional module quarter carrier specified in Index 1, or Indicates which one of 24 electrical ports within universal module slot specified in Index 1

Category/ Index	Value	Description
7		Ring Group Blockages
Index 1	1-16	Ring group experiencing blockage

Special Error Codes

None.

PROCEDURE 461 WORD 3 — CUSTOMER TRAFFIC - NETWORK CHANNEL INDEX DISPLAY

Purpose

Use Procedure 461 Word 3 to display the network channel associated with the data displayed in Procedure 461 Word 1 for DCIU category 20.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 461, WORD: 3
                CUSTOMER TRAFFIC - NETWORK CHANNEL INDEX DISPLAY

DISPLAY ONLY
   1. Category: --

 2. Index 1: ---

DISPLAY ONLY
  NETWORK CHANNEL A
     3.                Link (switch): --
     4. BX.25 Logical Channel (port): ----
  NETWORK CHANNEL B
     5.                Link (switch): --
     6. BX.25 Logical Channel (port): ----









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None or field 2.
Add:	Not allowed.
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Displays all Index 1 channel numbers.

Field Ranges and Encodes

DISPLAY ONLY (Field 1)

1.	Category	20	
2.	Index 1	-, 1-128	

DISPLAY ONLY (Fields 3-6)

NETWORK CHANNEL A (Fields 3-4)

3.	Link (switch)	0	Logical switch link
		1-8	Physical DCIU link
4.	BX.25 Logical Channel (port)	-, 1-64	

NETWORK CHANNEL B (Fields 5-6)

5.	Link (switch)	-	Alternate routing is in effect
		0	Logical switch link
		1-8	Physical DCIU link
6.	BX.25 Logical Channel (port)	-	Alternate routing is in effect
		1-64	Port

Special Error Codes

None.

PROCEDURE 490 WORD 1 — PATCH BLOCK IDENTIFICATION

Purpose

Use Procedure 490 Word 1 to:

— Read patch directories (transparent to the user)

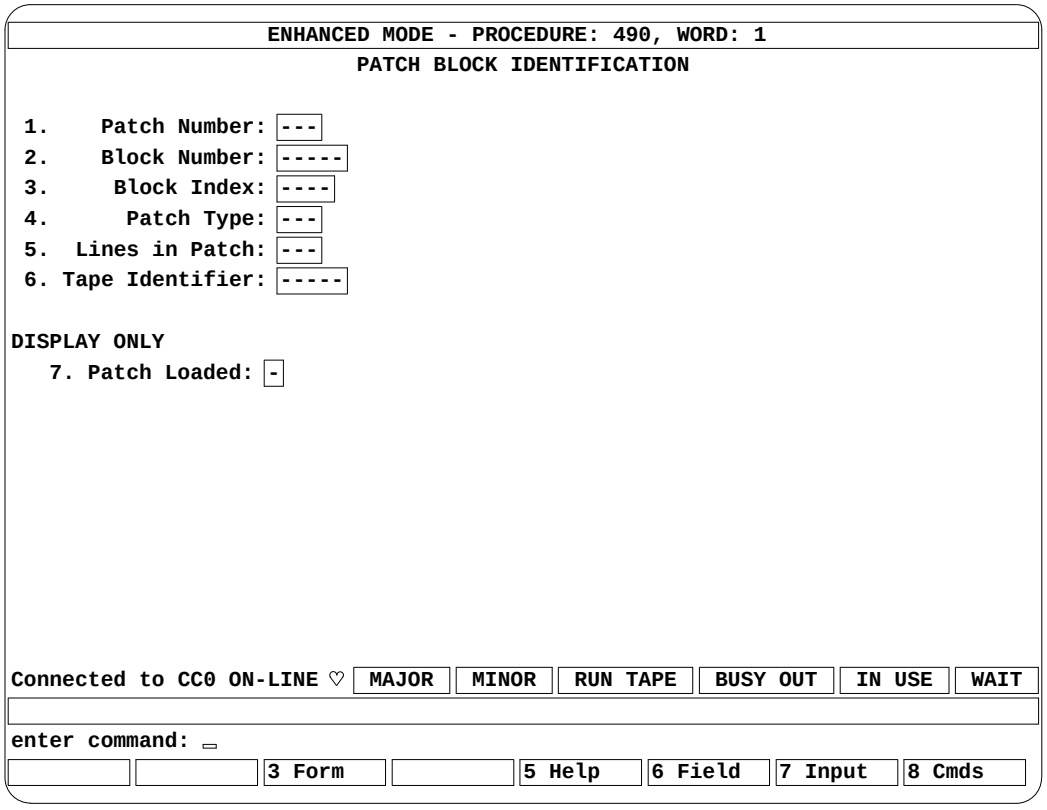
— Locate patches on the disk/tape system

— Set up which blocks will be used for new patches.

Related Procedures

Use Procedure 490 Word 2 to write software patches to memory, disk, and tape.

Screen Display



Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Fields 1-6 (after display only).
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Patch Number	1-999	
2. Block Number	-, 0-19999	
3. Block Index	-, 0-1777 (octal)	
4. Patch Type	000-099 Write to memory, disk, and tape 100-199 Write to disk and later to tape	
5. Lines in Patch	-, 1-999	
6. Tape Identifier	-, 0-99999	
DISPLAY ONLY (Field 7)		
7. Patch Loaded	0	No
	1	Yes

Notes

1. To check and see if the patch is on tape, do step ‘‘a’’ below. To add a new patch or to copy a patch onto another tape, do all the following steps:

    a. Enter the patch number, then use the display routine. After the wait lamp is off, field 7 is a 0 if the patch is not on tape, and is a 1 if the patch is on tape. The next data routine displays all patches on tape.

    b. Enter data for fields 2-6, and use the add routine.

    c. After the wait lamp is off, use Procedure 490 Word 2 to enter a new patch or to copy a patch to the tape.

Special Error Codes

80 - Cannot access the disk/tape system. Repeat the add or display routine and report trouble.

81 - Reenter fields 1-6.

82 - Disk/tape operation failed. Repeat the add or display routine and report trouble.

83 - System operation is on holdover power. Try again later.

84 - Insert cartridge in the tape drive and repeat the add or display routine.

85 - A display routine must be executed before an add routine.

89 - Disk is not ready. Try again later.

90 - Disk read operation failed. Try again later.

92 - Tape drive is not ready. Try again later.

PROCEDURE 490 WORD 2 — PATCH DATA

Purpose

Use Procedure 490 Word 2 to enter patches on the system disk and tape.

Prerequisite Procedures

Do a display routine on this procedure before doing an add routine.

Cautions

If field 4 is set to 5 (writing patch to tape), do two add routines prior to leaving this procedure to save all current patches on tape. If this procedure is exited without doing this add routine, the patches will not be saved on tape.

Screen Display

```
                ENHANCED MODE - PROCEDURE: 490, WORD: 2
                              PATCH DATA

DISPLAY ONLY
   1. Line Number: ---

 2.            Memory Address: ---------
 3. Contents of Memory Address: --------

DISPLAY ONLY
   4. Stage of Operation: -



   CAUTION: If field 4 is set to 5 (writing patch to tape), do two add
            routines prior to leaving this procedure to save all current
            patches on tape.  If this procedure is exited without doing
            this add routine, the patches will not be saved on tape!



Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Fields 2 and 3 (after display only).
Change:	Not allowed.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

DISPLAY ONLY (Field 1)

1. Line Number 1-999
2. Memory Address 0-777777777 (octal)
3. Contents of Memory Address 0-777777777 (octal)

DISPLAY ONLY (Field 4)

4. Stage of Operation
   - 1 Enter patch data
   - 2 Do an add routine to write the patch to memory
   - 4 Do an add routine to write the patch to disk
   - 5 Do an add routine to write the patch to tape

Notes

1. Steps to enter a new patch:
   a. Use the display routine (fields 1 and 4 = 1).
   b. Enter address and data, line-by-line. After the last line has been entered, fields 1-3 display dashes.
   c. When field 4 = 2, do an add routine to write the patch to memory.
   d. When field 4 = 4, do an add routine to write the patch to disk.
   e. When field 4 = 5, do two add routines. The first add routine puts out Special Error Code 94. The second add routine writes the patch(es), as well as the entire system including the translation read in Procedure 490 Word 1, to tape.
2. Steps to copy a patch to tape:
   a. Use the display routine (field 4 = 5).
   b. Insert tape cartridge so the patch can be copied.
   c. Use the add routine to get the warning on Special Error Code 94, then another add routine to actually write to tape. After the wait lamp is off, repeat steps a and b if necessary. This needs to be done before reloading the software.

Special Error Codes

80 - Cannot access the disk/tape system. Repeat the add or display routine and follow normal trouble reporting procedures.

81 - Reenter data in fields 2 and 3.

82 - Tape/disk operation failed. Repeat the add or display routine and follow the normal trouble reporting procedures.

83 - System is operating on holdover power. Try again later.

84 - Insert cartridge in tape drive and repeat routine.

85 - Reenter all data beginning with the Word 1 add routine.

86 - Do a display routine before doing an add routine.

87 - Tape cartridge is write protected.

88 - Wrong tape is in tape drive. The tape must be of the same issue as the one used in the Word 1 display.

89 - Disk is not ready. Try again later.

90 - Disk read operation failed. Try again later.

91 - Disk write operation failed. Try again later.

92 - Tape drive is not ready. Try again later.

93 - Disk backup operation failed. Try again later.

94 - **WARNING** The next add/execute will write the entire tape, which includes the translation read in the original tape used in Procedure 490 Word 1. To preserve translation on the new tape, reenter the procedure and reenter the patches.

PROCEDURE 497 WORD 1 — CUSTOMER SERIAL NUMBER AND SOFTWARE VERSION

Purpose

Use Procedure 497 Word 1 to display the software load currently installed on the switch. The customer serial number can be changed with this procedure, but this operation is not recommended.

Cautions

Do not change field 2. If field 2 is changed, your customer serial number may be confused with another customer's serial number.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 497, WORD: 1
                  CUSTOMER SERIAL NUMBER AND SOFTWARE VERSION

PRODUCT IDENTIFICATION
  DISPLAY ONLY
   1. System: -
   2. Serial Number: ---------

DISPLAY ONLY
   6.    Release (R): --
   4.    Version (V): --
   5. Official Issue: --
   3.      Dot Issue: --
   7.    Memory Size: -




Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|          |          | 3 Form |          | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Field 2 (changing the serial number is not recommended).
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

PRODUCT IDENTIFICATION (Fields 1-2)

DISPLAY ONLY (Field 1)

1.	System	0	DEFINITY Generic 2
2.	Serial Number	000000001-999999999	

DISPLAY ONLY (Fields 3-7)

3.	Dot Issue	00-99	
4.	Version (V)	5	Generic 2.1
5.	Official Issue	00-99	
6.	Release (R)	2	Definity Generic 2
7.	Memory Size	3	16 Mbytes

Special Error Codes

None.

PROCEDURE 497 WORD 2 — CUSTOMER IDENTIFICATION

Purpose

Use Procedure 497 Word 2 to administer the customer name. The customer name can be up to 20 characters long. The 20-character limit is based on using two 10-character segments.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 497, WORD: 2
                              CUSTOMER IDENTIFICATION

 1. Segment: -

CUSTOMER NAME
   2.  Character 1 or 11: --
   3.  Character 2 or 12: --
   4.  Character 3 or 13: --
   5.  Character 4 or 14: --
   6.  Character 5 or 15: --
   7.  Character 6 or 16: --
   8.  Character 7 or 17: --
   9.  Character 8 or 18: --
  10.  Character 9 or 19: --
  11. Character 10 or 20: --









Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:
|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	Field 1.
Add:	Not allowed.
Change:	Fields 2-11.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

1. Segment
   - 1 Characters 1-10
   - 2 Characters 11-20

   Use encode ‘‘1’’ to enter characters 1-10 and encode ‘‘2’’ to enter characters 11-20.

CUSTOMER NAME (Fields 2-11)

CHARACTER ENCODES					
21 = A	11 = Q	44 = g	94 = w	18 = ?	58 = -
22 = B	72 = R	45 = h	95 = x	19 = ;	59 = +
23 = C	73 = S	46 = i	96 = y	20 = :	60 = *
31 = D	81 = T	54 = j	15 = z	27 = "	67 = {
32 = E	82 = U	55 = k	00 = 0	28 = ’	68 = }
33 = F	83 = V	56 = l	01 = 1	29 = ‘	69 = |
41 = G	91 = W	64 = m	02 = 2	30 = ,	70 = \
42 = H	92 = X	65 = n	03 = 3	37 = (	77 = <
43 = I	93 = Y	66 = o	04 = 4	38 =)	78 = >
51 = J	12 = Z	74 = p	05 = 5	39 = _	79 = =
52 = K	24 = a	14 = q	06 = 6	40 = ~	80 = %
53 = L	25 = b	75 = r	07 = 7	47 = [	87 = #
61 = M	26 = c	76 = s	08 = 8	48 =]	88 = &
62 = N	34 = d	84 = t	09 = 9	49 = ^	89 = @
63 = 0	35 = e	85 = u	10 = . (period)	50 = blank	90 = $
71 = P	36 = f	86 = v	17 = !	57 = /	

You must enclose characters within double quotes (e.g., "AT&T") to enter more than one character at a time into fields 2-11. If you enter the characters one field at a time, the double quotes are no required.

2. Character 1 or 11 -, 00-12, 14-15, 17-96
3. Character 2 or 12 -, 00-12, 14-15, 17-96
4. Character 3 or 13 -, 00-12, 14-15, 17-96
5. Character 4 or 14 -, 00-12, 14-15, 17-96
6. Character 5 or 15 -, 00-12, 14-15, 17-96
7. Character 6 or 16 -, 00-12, 14-15, 17-96
8. Character 7 or 17 -, 00-12, 14-15, 17-96
9. Character 8 or 18 -, 00-12, 14-15, 17-96
10. Character 9 or 19 -, 00-12, 14-15, 17-96
11. Character 10 or 20 -, 00-12, 14-15, 17-96

Special Error Codes

None.

PROCEDURE 497 WORD 3 — CUSTOMER ALARM PHONE NUMBER

Purpose

Use Procedure 497 Word 3 to administer the alarm-reporting telephone number.

Screen Display

```
                    ENHANCED MODE - PROCEDURE: 497, WORD: 3
                          CUSTOMER ALARM PHONE NUMBER

ALARM REPORTING TELEPHONE NUMBER
   1.         Prefix: -
   2.      Area Code: ---
   3.    Office Code: ---
   4. Station Number: ----

 5. Security Code: ------

Connected to CC0 ON-LINE ♡ | MAJOR | MINOR | RUN TAPE | BUSY OUT | IN USE | WAIT |

enter command:

|  |  | 3 Form |  | 5 Help | 6 Field | 7 Input | 8 Cmds |
```

Fields Used or Required for Command Routines

Display:	None.
Add:	Not allowed.
Change:	Fields 1-5.
Remove:	Not allowed.
Next Data:	Not allowed.

Field Ranges and Encodes

ALARM REPORTING TELEPHONE NUMBER (Fields 1-4)

1.	Prefix	-, 0-9
2.	Area Code	-, 000-999
3.	Office Code	000-999
4.	Station Number	0-9999
5.	Security Code	000000-999999

Notes

1. Fields 3 and 4 are required entries for the alarm-reporting telephone number.
2. Fields 1 and 2 are optional entries for the alarm-reporting telephone number.

Special Error Codes

None.

A. STANDARD ERROR CODES

This appendix contains a listing of the standard error codes with an explanation of each code.

00=Wrong command

You have issued the wrong command. For example, you typed **`nf`** when it was not appropriate. This error typically occurs in maintenance procedures.

01=Either the field is NOT defined or it is display only

You have made a request to move to a data field that does not exist or is a ‘‘display only’’ field. For example, in a procedure with eight fields, you type in **`cf 10`**. Field 10 does not exist, so you get this error code.

02=Data out of limits

The value you entered in a field is outside of the valid range. Check the ‘‘Field Ranges and Encodes’’ section of each procedure or use the on-line field help.

03=Data wrong

The value you entered in a field is within the allowed limits for that field, but is not valid based on data in other fields. Check the ‘‘Field Ranges and Encodes’’ section of each procedure or use the on-line field help. This also occurs when you leave a required data field blank when doing a display. See the ‘‘Fields Used or Required for Command Routines’’ section of each procedure or use the on-line input help.

04=Digits 8 and 9 not allowed

This error is given when you have entered an 8 or a 9 in a field that is only expecting octal numbers (0-7). This can happen in Procedure 490.

05=Too many digits entered. If OK, press ENTER. If not, re-enter data.

This error occurs when you enter more digits into a field than the size of the field will accept.

06=Wrong command. Enter correct command to continue.

You have issued the wrong command. For example, you typed in **ax** when you should have typed **cx**, or vice versa. This also happens when you do a **rx** before doing a **dx**. See the ''Fields Used or Required for Command Routines'' section of each procedure or use the on-line input help.

07=Do not enter commands when wait lamp is on.

You attempted to issue a command while the WAIT indicator was active. Reissue your command after the WAIT indicator is off. This usually only happens while running maintenance tests. Most administration procedures allow you to ''type ahead''.

08=In use lamp on or feature/service active

This usually occurs when you try to remove equipment or a software feature that is currently being used by someone on the system. You must wait until the equipment is not in use or when the feature is not active before attempting to remove it.

09=Procedure must run on on-line processor

You have tried to execute a procedure while connected to the off-line processor but the procedure must be executed while connected to the on-line processor.

10=Equipment location type wrong

You have entered an equipment location of a circuit pack that is incompatible with the hardware you are trying to administer. For example, you are trying to administer a port on an analog voice terminal circuit pack (SN228/SN229 or TN742/TN746) but the equipment location you enter is really a touch-tone sender/tone detector (SN252 or TN748). Check the equipment location you are using. Use Procedure 290 Words 1 and 2 to find the correct equipment location.

11=Is not assigned

You have tried to display or activate a portion of hardware or software that has not been assigned. This often occurs when you try to assign a circuit of a circuit pack that is not installed. This also occurs when you try to assign a circuit on a circuit pack in a carrier that has not been assigned. When this happens, the cursor usually highlights the carrier field.

12=Is assigned

This occurs when you try to assign a feature or piece of equipment that is already assigned. Go ahead and type **dx** to see what is already assigned. The cursor will highlight the field in error. When an equipment location is the object that has already been assigned, the cursor highlights the module field.

13=Port 0 of each module is unassignable

This means that circuit 0 of the first available port circuit pack in a module cannot be assigned.

14=Is in recent disconnect

You are trying to add an extension to service that is in the ''recent disconnect'' state. You can use Procedure 003 Word 1 to find out how many days remain for this extension in ''recent disconnect'' and you can change that value to 0 if desired. You can also display the extension in Procedure 000 Word 1 and do another **rx**. This will allow you to reuse that extension.

15=Check first dial digit

You are trying to administer a dial access code but the first digit of the code is not administered. Go to Procedure 350 Word 1 to see which first digits have been administered. You can administer a new first digit there if necessary.

16=Dial Access Code (DAC) or Extension is not in dial plan

You are trying to administer a DAC or extension, but the correct information is not in the dialing plan. For the DAC, see Procedure 350 Word 1 to check the first digits assigned for DACs. For an extension, see Procedure 350 Word 1 to check the first digits assigned for extensions and then check Procedure 354 Word 1 to see if the blocks of extensions are enabled for the extension you are trying to assign. You also get this error when displaying assigned extension blocks using Procedure 354 Word 1 but no extension blocks have yet been assigned.

19=Is not assigned to MLP

Occurs in Procedure 054 Word 1 when attempting to add an extension that is assinged as an analog line.

21=Circuit is busied out

You are trying to busy out a circuit that is already busied out or the test being executed requires the circuit to not be busied out.

22=Circuit is not busied out

You are trying to release a circuit that is not busied out or the test being executed requires the circuit to be busied out first.

23=Invalid on Universal/XE equipment.

The feature you are trying to administer is not valid with equipment on a universal module. You must administer this feature to equipment on a traditional module.

24=Invalid on Traditional equipment.

The feature you are trying to administer is not valid with equipment on a traditional module. You must administer this feature to equipment on a universal module.

60=Special extension to DAC not administerable in this procedure

The extension you are trying to administer has already been assigned as a special steering code in Procedure 354 Word 2.

61=Vector directory number is not administerable in this procedure

The extension you are trying to administer is already assigned as a VDN, so it can’t be used here for other purposes.

70=Invalid Procedure

You have tried to access a procedure that is not part of the software. For example, you typed **`p150w1`** to call in Procedure 150 Word 1. This procedure does not literally have a ‘‘Word 1’’ so when you try to call in ‘‘Word 1’’, you get this error. Since the default for each procedure is Word 1, don’t bother adding **`w1`** to your commands if you only want Word 1. This also applies to procedures that don’t exist in the software (e.g., **`p307w6`**).

71=Feature not in switch program.

You are trying to administer an attribute of a feature when the feature has not been enabled in Procedure 276 Word 1 or the feature is not loaded on the software. For example, this error occurs when you try to administer attributes of Call Vectoring without enabling the feature in Procedure 276 Word 1.

72=Switch Memory space too small

The available memory space for this administration has been exhausted. For example, there is a limit on Abbreviated Dialing lists and the total number of buttons administered across all voice terminals.

73=Switch Program/Memory fault

A translation inconsistency has occurred. Do not continue with any other translations and escalate this problem.

74=Equipment not part of system

You are trying to administer DCIU translations when this equipment is not available on this switch.

75=Switch Memories mismatch

This error only occurs in systems with duplicated processors. When you make a change to the system, you get this error just as an information message to remind you that both processors need to be updated with this change. When you do a run tape, both processors are updated.

76=Mode unavailable. View current mode status using mode procedure (m).

This error has two distinct meanings.

The first occurs when you attempt to change translations without having control of the administration, run maintenance procedures without having control of the maintenance, or trying to do a Run Tape without having control of the disk/tape system.

The second occurs when you try to gain control of the administration, maintenance, or tape subsystems using Procedure Mode and another user (agent) previously has gained control of those subsystems. Use Procedure Mode to see if these subsystems are already controlled by another user.

77=Access denied (see Proc 277)

This error occurs when a user (agent) that is not a super-user tries to access a procedure or SMAP application that has been restricted from use with Procedure 277. Only superusers can restrict other users (agents) from accessing procedures or SMAP applications.

78=Procedure in use

This error occurs when you try to access a procedure that another user (agent) is already using. This restriction is more widespread than just a one-on-one basis. For example, if one user is using Procedure 000 Word 1, other users may not use Procedure 000 Words 1-4 because all of these procedures are tied together.

99=Do not run tape. Translations are corrupted. Reload and start over.

This error occurs when the system has had a fatal translation error. This may have happened if the system experiences a short reinitialization during an add or change operation, or if the translation audit finds inconsistent translation data. When this happens, you must reload the switch. Any translation changes you have made since the last Run Tape will be lost. Because of this possibility, it is recommended that you do a Run Tape on a regular basis. An automatic Run Tape is done every 29 hours.

B. TMS MEASUREMENT—MODULE PAIRS

This appendix gives the module pairs associated with codes 1-465 for TMS measurements in Procedure 414, Words 1 and 2, and Procedure 454, Words 1 and 2.

Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number
1	0	1	41	1	12	81	2	24
2	0	2	42	1	13	82	2	25
3	0	3	43	1	14	83	2	26
4	0	4	44	1	15	84	2	27
5	0	5	45	1	16	85	2	28
6	0	6	46	1	17	86	2	29
7	0	7	47	1	18	87	2	30
8	0	8	48	1	19	88	3	4
9	0	9	49	1	20	89	3	5
10	0	10	50	1	21	90	3	6
11	0	11	51	1	22	91	3	7
12	0	12	52	1	23	92	3	8
13	0	13	53	1	24	93	3	9
14	0	14	54	1	25	94	3	10
15	0	15	55	1	26	95	3	11
16	0	16	56	1	27	96	3	12
17	0	17	57	1	28	97	3	13
18	0	18	58	1	29	98	3	14
19	0	19	59	1	30	99	3	15
20	0	20	60	2	3	100	3	16
21	0	21	61	2	4	101	3	17
22	0	22	62	2	5	102	3	18
23	0	23	63	2	6	103	3	19
24	0	24	64	2	7	104	3	20
25	0	25	65	2	8	105	3	21
26	0	26	66	2	9	106	3	22
27	0	27	67	2	10	107	3	23
28	0	28	68	2	11	108	3	24
29	0	29	69	2	12	109	3	25
30	0	30	70	2	13	110	3	26
31	1	2	71	2	14	111	3	27
32	1	3	72	2	15	112	3	28
33	1	4	73	2	16	113	3	29
34	1	5	74	2	17	114	3	30
35	1	6	75	2	18	115	4	5
36	1	7	76	2	19	116	4	6
37	1	8	77	2	20	117	4	7
38	1	9	78	2	21	118	4	8
39	1	10	79	2	22	119	4	9
40	1	11	80	2	23	120	4	10

Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number
121	4	11	161	5	26	201	7	19
122	4	12	162	5	27	202	7	20
123	4	13	163	5	28	203	7	21
124	4	14	164	5	29	204	7	22
125	4	15	165	5	30	205	7	23
126	4	16	166	6	7	206	7	24
127	4	17	167	6	8	207	7	25
128	4	18	168	6	9	208	7	26
129	4	19	169	6	10	209	7	27
130	4	20	170	6	11	210	7	28
131	4	21	171	6	12	211	7	29
132	4	22	172	6	13	212	7	30
133	4	23	173	6	14	213	8	9
134	4	24	174	6	15	214	8	10
135	4	25	175	6	16	215	8	11
136	4	26	176	6	17	216	8	12
137	4	27	177	6	18	217	8	13
138	4	28	178	6	19	218	8	14
139	4	29	179	6	20	219	8	15
140	4	30	180	6	21	220	8	16
141	5	6	181	6	22	221	8	17
142	5	7	182	6	23	222	8	18
143	5	8	183	6	24	223	8	19
144	5	9	184	6	25	224	8	20
145	5	10	185	6	26	225	8	21
146	5	11	186	6	27	226	8	22
147	5	12	187	6	28	227	8	23
148	5	13	188	6	29	228	8	24
149	5	14	189	6	30	229	8	25
150	5	15	190	7	8	230	8	26
151	5	16	191	7	9	231	8	27
152	5	17	192	7	10	232	8	28
153	5	18	193	7	11	233	8	29
154	5	19	194	7	12	234	8	30
155	5	20	195	7	13	235	9	10
156	5	21	196	7	14	236	9	11
157	5	22	197	7	15	237	9	12
158	5	23	198	7	16	238	9	13
159	5	24	199	7	17	239	9	14
160	5	25	200	7	18	240	9	15

Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number
241	9	16	281	11	17	321	13	22
242	9	17	282	11	18	322	13	23
243	9	18	283	11	19	323	13	24
244	9	19	284	11	20	324	13	25
245	9	20	285	11	21	325	13	26
246	9	21	286	11	22	326	13	27
247	9	22	287	11	23	327	13	28
248	9	23	288	11	24	328	13	29
249	9	24	289	11	25	329	13	30
250	9	25	290	11	26	330	14	15
251	9	26	291	11	27	331	14	16
252	9	27	292	11	28	332	14	17
253	9	28	293	11	29	333	14	18
254	9	29	294	11	30	334	14	19
255	9	30	295	12	13	335	14	20
256	10	11	296	12	14	336	14	21
257	10	12	297	12	15	337	14	22
258	10	13	298	12	16	338	14	23
259	10	14	299	12	17	339	14	24
260	10	15	300	12	18	340	14	25
261	10	16	301	12	19	341	14	26
262	10	17	302	12	20	342	14	27
263	10	18	303	12	21	343	14	28
264	10	19	304	12	22	344	14	29
265	10	20	305	12	23	345	14	30
266	10	21	306	12	24	346	15	16
267	10	22	307	12	25	347	15	17
268	10	23	308	12	26	348	15	18
269	10	24	309	12	27	349	15	19
270	10	25	310	12	28	350	15	20
271	10	26	311	12	29	351	15	21
272	10	27	312	12	30	352	15	22
273	10	28	313	13	14	353	15	23
274	10	29	314	13	15	354	15	24
275	10	30	315	13	16	355	15	25
276	11	12	316	13	17	356	15	26
277	11	13	317	13	18	357	15	27
278	11	14	318	13	19	358	15	28
279	11	15	319	13	20	359	15	29
280	11	16	320	13	21	360	15	30

Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number	Item	Lower Module Number	Higher Module Number
361	16	17	401	19	21	441	23	27
362	16	18	402	19	22	442	23	28
363	16	19	403	19	23	443	23	29
364	16	20	404	19	24	444	23	30
365	16	21	405	19	25	445	24	25
366	16	22	406	19	26	446	24	26
367	16	23	407	19	27	447	24	27
368	16	24	408	19	28	448	24	28
369	16	25	409	19	29	449	24	29
370	16	26	410	19	30	450	24	30
371	16	27	411	20	21	451	25	26
372	16	28	412	20	22	452	25	27
373	16	29	413	20	23	453	25	28
374	16	30	414	20	24	454	25	29
375	17	18	415	20	25	455	25	30
376	17	19	416	20	26	456	26	27
377	17	20	417	20	27	457	26	28
378	17	21	418	20	28	458	26	29
379	17	22	419	20	29	459	26	30
380	17	23	420	20	30	460	27	28
381	17	24	421	21	22	461	27	29
382	17	25	422	21	23	462	27	30
383	17	26	423	21	24	463	28	29
384	17	27	424	21	25	464	28	30
385	17	28	425	21	26	465	29	30
386	17	29	426	21	27			
387	17	30	427	21	28			
388	18	19	428	21	29			
389	18	20	429	21	30			
390	18	21	430	22	23			
391	18	22	431	22	24			
392	18	23	432	22	25			
393	18	24	433	22	26			
394	18	25	434	22	27			
395	18	26	435	22	28			
396	18	27	436	22	29			
397	18	28	437	22	30			
398	18	29	438	23	24			
399	18	30	439	23	25			
400	19	20	440	23	26			

INDEX

1

106B Display Unit *66-1, 67-1*

2

24th Channel Signaling *142-3*

A

Abandon Call Search *157-1*
Abbreviated and Delayed Ringing *47-2*
Abbreviated Dialing
- Group List for Call Vectoring *33-1*
- List Items *62-1*
- List Type *61-3*
- Remaining Capacities *65-1*
- Special Functions *63-1*
- System List Access *156-1*
- System List Size *156-1*

Abbreviated/Delayed Ringing *68-1*
ACA *170-1*
- Console Number *171-3*
- Long Call Limit *106-3*
- Referral *171-3*
- Short Call Referral Threshold *106-3*
- Short Call Threshold *106-3*
- Status *171-2*
- Trunk Group *106-2*

Account Code Required *186-2*
ACD
- Abandon Call Search *157-1*
- Agent Override *11-1*
- Auto Available *25-3*
- Auxiliary Trunk *30-1*
- Auxiliary Trunk Location *29-2*
- City and Queue-of-Origin Announcement *31-1, 40-1*
- CMS Measurement *25-3*
- Display Splits Used by Vectors *39-1*
- Display Unit Agent Assignments *66-1*
- Display Unit Pair Assignments *67-1*

ACD—*Contd*
- Hunt Type *24-3*
- ICI Message Number *24-2*
- Inflow Level *24-3*
- Lamp Control Circuit *24-1*
- Machine Number *24-3*
- Member *11-1, 26-2*
- Member Extension *26-2*
- Multiple Call Handling *25-3*
- Outflow/Queue Level *24-3*
- Priority Extension *25-3*
- Queue Directory Number *25-2*
- Queue Display *11-1*
- Queuing Trunk Group *24-1*
- Second Recorded Announcement *30-1*
- Split Size *24-1*
- Split Type *24-1*
- Supervisor Extension *25-2*
- System Supervisor *27-2*
- Trunk Group Termination *104-3*
- Wait Time *29-3*
- Warning Tone *27-2*

Acknowledgement Timer *133-2*
Action Attribute
- NDA *187-4, 191-4*

Action Object
- NDA *187-4, 191-4*

Activity Timer *133-2*
A/D Ringing *47-2*
Adjunct Characteristics *143-1*
Advanced Private Line Termination (APLT) *86-5*
AIOD *86-4*
- ANI Timing *154-3*
- Auxiliary ANI Trunk Billing Number *154-3*

AIOD Equipment Number *105-3, 107-4*
- Prefix Digit *154-2*
- Status *154-2*

Alarm
- Administrable *157-1*
- Reporting Telephone Number *246-1*
- Speech Processing Adjunct *148-1*
- Terminal *43-7*

Alternate FRL *171-3*
Alternate FRLs
Console Buttons *116-1*
Alternate Routing *135-1*
DCIU *137-1*
ANI *6-3*
ANI Timing *154-3*
Answer Text *45-3, 84-3*
AP-External Network Adjunct *144-1*
APLT *86-5*
APLT-Off-Net *13-3*
Appearance-Image of *46-1*
Area Code
Code Restriction *181-1*
Home NPA *179-2*
Nonrestricted Code *178-1*
ASAI Gateway *85-1, 158-3*
Associated Extension *9-2*
ATMS
Display Trunk Group Assignments *98-1*
Marginal Thresholds *95-1*
Terminating Test Line *94-1, 101-1*
Test Line Digits *94-2, 101-2*
Test Schedule *96-1*
Test Type *97-1*
Thresholds *100-1*
Unacceptable Measurements *99-1*
Attendant
Attendant Console
Alphanumeric Display *117-1*
Attendant Console Buttons *116-1*
Calls Waiting Level *112-3*
Class of Service Display *112-1*
Direct Trunk Group Selection *112-1*
Don’t Answer Timing *112-3*
Extended DXS *112-3*
FRL *112-1*
Interposition Calling *112-3*
Lockout *112-3*
Privacy *112-3*
Trunk Verification *112-3*
Two-Party Hold *112-3*
Type *112-2*
Control of Voice Terminals *150-1*
Controlled Restrictions *6-1*
Attendant Partition *119-2*
Control *119-3*
LDN *152-1*
Night Extension *151-1*
Partition Overflow *150-1*
Attendant Partition—*Contd*
Release Loop Operation *157-3*
Trunk Group Select Buttons *115-1*
Audible Message Waiting
Automatic *7-1*
AUDIX-External Network Adjunct *144-1*
Authorization Code *165-1*
Digits to Remove *165-1*
Display Number Codes in System *167-1*
FRL *166-1*
Authorization Code Required *90-3*
WCR *170-4*
Auto Adjust *45-2, 84-2*
Auto Available *25-3*
Automatic Call Distribution
Associated Extension *9-1*
See ACD
Automatic Callback *11-1*
Automatic Circuit Assurance
See ACA
Automatic Dialing *64-1*
Automatic Identification of Outward Dialing
Billing Number *86-4*
Automatic Line Appearance *47-3*
Automatic Message Waiting Lamps *69-1, 70-1*
Automatic Number Identification (ANI) *6-3*
Automatic Transmission Measurement System
See ATMS
AUTOVON *158-1*
Console Buttons *116-1*
AUTOVON Interface Switch *157-3*
Routing Patterns *184-1, 185-1*
Auxiliary Tone Plant
AUTOVON *126-3*
CAS *126-3*
Tone Detector *126-3*
Auxiliary Trunk Location
ACD *29-2*

B

Backup Extension for RLT *121-3*
Balance *86-3*
Battery Reversal *86-3*
BCCOS
Attendant *23-4*
Bearer Capability *22-5*
Call Types and Action Taken *22-3*
Creating a New BCCOS *22-5*

BCCOS—*Contd*
Data Rates *23-3*
Default Capabilities *22-4*
Default Data Rate *23-3*
Extensions *7-1*
Information Type *22-3, 22-4*
Modem Pooling *81-2*
Predefined BCCOS *22-5*
Predefined Bearer Capability Classes of Service *23-4*
Bearer Capability
Bearer Capability Class of Service
Bearer Capability Class of Service (BCCOS) *197-3*
See BCCOS
Display *77-1*
Billing Number for AIOD *86-4*
Bit Inversion *142-5*
Bit Oriented Signaling
E Bit *142-6*
Block Type *208-3*
BRI
See ISDN
BRI Terminal
See ISDN
Bridge-On Allowed *90-3*
Busy Out *84-2*
Busy Out Call Management System *32-1*
Busy Verification
Console Buttons *116-1*
Busy/Warning Status *115-2*
Button Template *42-1*
BX.25 Level 3 Link Characteristics *133-1*

C

Cache Memory Enable *154-1*
Call Coverage
Caller Response Interval *156-2*
Coverage Groups *6-3*
Coverage Message Retrieval *6-3*
Coverage Point DA Interval *156-3*
Call Coverage Group
Coverage Points *15-3*
Criteria *15-3*
Principal Don't Answer Interval *15-3*
Send All Calls *46-4*
Traffic *218-1, 233-1*
Call Detail Recording
Call Detail Recording—*Contd*
See CDR
Call Forwarding *11-1*
Call Forwarding Off-Net *12-1*
Call Hold *11-1*
Call Pickup *6-1*
Call Vectoring *158-3*
Abbreviated Dialing Group List *33-1*
Administer Vectors *34-1*
City-of-Origin Announcement *40-1*
Condition *35-3*
Destination *35-3*
Display ACD Splits *39-1*
Incoming Call Identification (ICI) *36-1*
Priority Level *35-3*
Return-Call Indicator *36-3*
Split Number *35-5*
Step Type *35-3*
Threshold *35-5*
Trunk Group Termination *38-1*
VDN Override Flag *36-3*
Vector Directory Number (VDN) *36-3, 37-2*
Call Waiting *11-1*
Enable *154-1*
Caller Response Interval *156-2*
Calling Number Display *11-1*
Calls Blocked *156-4*
Calls Waiting Level *112-3*
Carriers *124-1*
CAS
Auxiliary Tone Plant *126-3*
Branch Number *122-2*
Branch Timed Reminder *120-1*
Branch Type *122-2*
Incoming RLT *122-2, 123-1*
Listed Directory Number *120-1*
Queue Overflow Level *120-1*
CCSA *86-5*
CC/TMS Cabinet *156-4*
CDR
Account Code Length *154-3*
Account Code Required *186-2*
Calls Blocked *156-4*
Data Items *174-1*
Default Variable Timer *156-3*
Enable *154-1*
FEAC *12-1, 186-2*
Ineffective Attempts *171-1*
Parameters *173-1*
Variable Format *174-1*

CDR—*Contd*
Variable Timer *86-4*
Centralized Attendant Service
See CAS
Channel Configuration *105-3, 105-4*
Circuit Pack Status Display *176-1*
City-of-Origin Announcement *31-1, 40-1*
Class of Service
Class of Service Display
Console Buttons *116-1*
Display Extension *112-1*
Extension *5-4*
Extension Features *11-1, 12-1*
Extension Restrictions *13-1, 14-1*
ISDN Routing *14-3*
Maximum Precedence Level *14-2*
Network Features *171-1*
System Attendant Console *155-1*
System Features *154-1*
System Miscellaneous *156-1, 157-1*
Clock Synchronization *169-1*
Clocked Manual Override *172-1*
CMS
Busy Out *32-1*
CMS Measurement *25-3*
Status *157-1*
Code Calling Access
Called Party Code *157-2*
Traditional *126-3, 157-2*
Code Restriction
Digit Absorption *180-1*
Code Restriction Level *13-3*
Nonrestricted Terminal *178-1*
Office Code/Area Code *181-1*
Primary/Secondary Code *179-2*
Codepoint Mapping *164-2*
Codeset Mapping *164-1*
Combined CC/TMS Cabinet *156-4*
Combined Common Control/Time Multiplexed Switch Cabinet *156-4*
Common Control Carrier *124-1*
Common Control Switching Arrangement (CCSA) *86-5*
Common Control-Duplicated/Unduplicated *154-1*
Common Port Carrier *124-1*
Condition for Call Vectoring *35-3*
Conference 3 Party/Transfer *11-1*
Conference-Attendant Five Party *156-4*
Conference-Attendant Six Party *156-4*
Connected Sequence *45-3*
Console
Busy/Warning Status *115-2*
Direct Trunk Group Select Buttons *114-1*
Hardware Assignments *118-1*
Trunk Group Select Buttons *115-1*
Warning Level *115-2*
Contact Interface
System Status Indicator (SSI) *108-1*
Continue
NDA *188-2, 191-5*
Continuous Announcement Bit *107-1*
Control Mode
Clocked Manual Override/Automatic *172-1*
Copy Mode
Name Database *16-3*
Coverage Point DA Interval *156-3*
Custom Calling
Button Type *51-3*
Member *51-2*
Customer Identification
Name *245-1*
Serial Number *244-1*
Software Version *244-1*

D

DAC
Attendant *206-1*
Extensions *209-1*
Feature *206-1*
First Dialed Digit *205-1*
Steering Codes *209-1*
Terminal *206-1*
Trunk Group *80-1, 205-1*
Data Channels
Calling Number Display Unit *127-1*
CMDR/NCOSS *127-1*
FADS Display For CAS *127-1*
PCC *129-1*
See DCIU *134-1*
SMDR *127-1*
Data Communications Interface Unit
See DCIU
Data Line Circuit-Line Port *45-1*
Data Mode *72-3*
Data Module
Data Mode *72-3*
Display EIA Interface Status *74-1*
Emulation Settings *73-1*

Data Module—*Contd*
Switch Settings *72-1*
Data Protection
Extension Class of Service *13-3*
Trunk Group *90-4*
Data Rate-Terminal *45-4*
Data Terminal Equipment-Configuration *45-2*
Data Terminal-Default Dialing *64-1*
D-Channel
Backup *146-1*
Bit Inversion *142-5*
D-Channel Group Number *105-1*
DCIU
Acknowledgement Timer *133-2*
Activity Timer *133-2*
Alternate Routing *135-1, 137-1*
Application Type *138-1*
BX.25 Level 3 Link Characteristics *133-1*
Component A *134-3*
Component B *134-3*
Components *134-1*
Copy Translations *140-1*
DCS *136-1*
Destination Machine Type *138-1*
Destination Routing Code *135-3, 137-2*
Display Network Channel *227-1, 241-1*
Enable *154-1*
Enhanced Services Ports *139-1*
Interrupt Timer *133-2*
Level Two timers and Counters *132-1*
Link Characteristics *131-1*
Link Priority *134-3*
Logical Channel *134-3*
Maximum Unacknowledged Packets *133-3*
Port Characteristics *135-1*
Port Reservation *138-1*
Postage *135-3*
Refresh Scratch-Pad Tables *141-1*
Reset Counter *133-2*
Reset Timer *133-2*
Restart Counter *133-3*
Restart Timer *133-2*
Retransmission Counter *133-2*
Routing Status *134-1*
DCS
DCIU Link *136-1*
Enable *158-1*
Multimachine Nodes *156-1*
Node Number to WCR VNI Mapping *211-1*
Trunk Group *86-3*
Dedicated Switch Connection
Messages *7-2*
See DSC
Default Dialing *64-1*
Default Variable Timer *156-3*
Defining New Terminals *41-1*
Demand Print Password *156-3*
Destination for Call Vectoring *35-3*
Destination Routing Code *135-3, 137-2*
Device ID *47-3*
Dial Access Code
See DAC
Dial Access Restriction *80-6*
Dial Echo *45-3, 84-3*
Dial Tone Suppression *186-2*
Dialing Plan
Block Type *208-3*
Extension Blocks *208-1*
First Dialed Digit *205-1*
Node Number *208-3*
DID Restriction *13-3*
DID/CCSA Digits *154-1*
Digit Absorption *180-1*
Digit Modification Index
Display *77-1*
Digit Modification Index (DMI)
WCR *196-3*
Digit Sending Index
Display *77-1*
Digit Sending Index (DSI)
WCR *196-3*
Digital Multiplexed Interface
See DMI
Direct Extension Selection *113-1*
Direct Trunk Group Selection *112-1*
Disable Signaling *105-3, 107-1*
Disconnect Sequence *45-3, 84-3*
Disconnect Supervision *86-5*
Display
Display Buttons
Member *53-2*
Display Circuit Pack Status *176-1*
unallocated nodes *189-1*
Display Unit
106B *66-1, 67-1*
Agent Assignments *66-1*
Pair Assignments *67-1*
Distributed Communications System
See DCS
DLC *45-1*

DLC—*Contd*
Answer Text *84-3*
Auto Adjust *84-2*
Busy Out *84-2*
Connected Indication *84-3*
Dial Echo *84-3*
Disconnect Sequence *84-3*
Parity *84-4*
Permit Mismatch *84-3*
See DLC
DMI
BOS Trunk Group *142-1*
DMI (Digit Modification Index) *187-4, 191-4*
MOS Trunk Group *142-1*
See Digit Modification Index
Don't Answer Timing *112-3*
DS1
Channel Configuration *105-4*
Clear Channel *105-3*
Disable Signaling *105-3*
DS1 Port Carrier *124-1*
Robbed Bit Signaling *142-3*
SCS Reference *142-1, 142-4*
Slip Enable *142-3*
Trunk Group *142-1*
Trunks and Lines option *142-5*
DSC
Enable *213-1*
DSI
See Digit Sending Index
Duplicated Common Control *154-1*

E

E Bit *142-6*
Emulation Settings for Data Modules *73-1*
Enhanced Services Ports *139-1*
Error Codes
Standard *A-1*
Extended DXS *112-3*
Console Buttons *116-1*
Extension *5-3*
BCCOS (Bearer Capability Class of Service) *7-1*
Extension Blocks *208-1*
Extension Class of Service Features
ACD Agent Override *11-1*
ACD Member *11-1*
ACD Queue Display *11-1*
Extension Class of Service Features—*Contd*
Automatic Callback *11-1*
Call Forwarding *11-1*
Call Forwarding Off-Net *12-1*
Call Hold *11-1*
Call Waiting *11-1*
Calling Number Display *11-1*
CDR/FEAC *12-1*
Conference 3 Party/Transfer *11-1*
Leave Word Calling *12-1*
Malicious Call Trace *12-1*
Override *11-1*
Priority Calling *11-1*
Priority Paging *11-1*
Ring Ping Immediate *11-1*
Send All Calls *11-1*
Stop Hunt *11-1*
Extension Class of Service Restrictions *13-1*
Display Hunt-to Extensions *79-1*
First Dialed Digit *205-1*
Extension Partitions *149-1*
See Tenant Services
Port Type *5-4*
Recent Disconnect *10-2*
Search on Feature Groups *76-1*
External Loop *142-4*
External Network Adjunct
AP *144-1*
AUDIX *144-1*

F

Facility Restriction Level-Alternate
See FRL
FADS *228-1*
Failure Threshold *82-4*
FEAC *186-2*
Feature Activation
ASAI Gateway *158-3*
AUTOVON *158-1*
Call Vectoring *158-3*
Call Work Codes *158-4*
DCS *158-1*
Expert Agent Selection (EAS) *158-3*
Look-Ahead Interflow *158-3*
Main/Satellite *158-1, 158-3*
System 85 SE *158-3*
Tenant Services *158-3*
WCR *158-2*

Feature Buttons *50-1*
Feature Dial Access Codes *206-1*
First Dialed Digit
DAC *205-1*
Extension *205-1*
Fixed Feature Buttons *207-1*
Force Administration Data System
See FADS
Foreign Exchange *142-6*
Framing *142-3*
Freeze VNI
NDA *188-3, 191-5*
FRL *112-1*
Alternate *171-3*
Authorization Code *166-1*
FRL (Facility Restriction Level)
NDA *187-4, 191-4*
FRL Restriction
Terminal *13-4*
Search For Authorization Code *168-1*
Search For Extension *168-1*
Search For Trunk Group *168-1*
Trunk Group *90-3*
WCR *196-2*

G

General Terminal Administration (GTA) *41-1*
Glare *82-4*
GTA *41-1*

H

Hold Button Display *52-1*
Home NPA
Code Restriction *179-2*
Host Computer Access Data Characteristics *81-1*
Hot Line *7-2*
Hunt Type for ACD Split *24-3*
Hunting *6-2*
Hybrid Balance *87-3*
Hyperactivity Management *147-3*

I

ICI *36-1*
ICI Message Number for ACD Split *24-2*
Image of Appearance *46-1*
Incoming Call Identification
See ICI
Incoming Permanent Seizure *82-4*
Incoming Tie *90-3*
Inflow Level for ACD Split *24-3*
Information Element Opcodes *164-2*
Installed Circuit Pack Identification *177-1*
Integrated Services Digital Network/Primary Rate Interface
See ISDN
Integrated Telemarketing Gateway
See ASAI Gateway
Intercom
Automatic *56-1*
Dial *56-1*
Manual *56-1*
Member *56-2*
Intercom Records
Active *128-3*
Maximum Records Allowed *128-3*
Type *128-2*
Intercom Ringing Rate *68-1*
Interface Endpoint *105-1*
Interposition Calling *112-3*
Interrupt Timer *133-2*
Inward Restriction *13-4*
ISDN *157-1*
ISDN Advantage *43-7*
Board Parameters *145-1*
BRI Layer Two Parameters *145-1*
BRI SPID *44-1*
BRI TEI *43-7*
Calling Connected Numbers *210-1*
Channel Configuration *105-3*
Code Set Map Number *147-2*
Codepoint Mapping *164-2*
Codeset Mapping *164-1*
Facility Coding Value *163-2*
Facility Test Code *145-2*
Hyperactivity Management *147-3*
Information Element Opcodes *164-2*
Information Inhibited *82-5*
Network Definition-Binary *163-2*
Network Definition-Parameterized *163-2*
Network Parameters *163-3*
Network Service Value *163-2*
ISDN Network Service Value *202-2*
Network Specific Facility *163-1*
Network Specific Facility Parameters *163-3*
NPA-NXX Designators *210-1*

ISDN Network Service Value—*Contd*
PRI and BRI Layer Two Parameters *145-3*
PRI D-Channel Backup *146-1*
PRI Layer Two Parameters *145-1*
PRI Traffic *219-1, 234-1*
PRI Trunk Group *142-1*
Routing *14-3*
Sending Index *196-3*
ISDN Sending Index
Display *77-1*
SPID *44-2*
Terminal Endpoint Identifier (TEI) *145-3*
Terminating Test Line *101-1*
Traffic *220-1, 235-1*
ITG
See ASAI Gateway

K

Keyboard Dialing *43-1, 45-2, 84-2*

L

Lamp Control Circuit for ACD Split *24-1*
Last Number Dialed Redial Delay Timer *87-3*
LDNs *117-1, 119-1, 152-1*
Leave Word Calling *12-1*
Leave Word Calling Global Message Retrieval *43-6*
Line Appearance *46-3*
Link Characteristics *131-1*
Listed Directory Numbers
See LDNs
Load Balance *215-1, 230-1*
Lockout *112-3*
Lock/Unlock *43-6*
Long Call Limit *106-3*
Look-Ahead Interflow *158-3*
Loop Length *142-6*
Loudspeaker Paging *107-1*
Console Buttons *116-1*

M

Machine-used Tables for the DCIU *140-1*
Main/Satellite *91-1, 158-1, 158-3*
Traffic *223-1, 238-1*
Trunk Group Function *92-1*
Malicious Call Trace *12-1*
Console Buttons *116-1*
Manager II *2-1*
Basic Mode *2-5*
Commands *2-8*
Connecting to a Switch *2-9*
Electronic Flipcharts *2-6*
Enhanced Mode *2-6*
Help *2-9, 2-17*
Installation *2-3*
Procedure Mode *2-10*
Screen Layout *2-4*
Software and Support Files *2-2*
Status Indicators *2-11*
Switch Support Base *2-6*
Task Mode *2-7*
Manual Line Termination Restriction *13-4*
Manual Signaling *48-1*
Member *47-3*
Marginal Thresholds
ATMS *95-1*
Maximum Precedence Level *14-2*
Maximum Preemption Level *157-3*
Maximum Unacknowledged Packets *133-3*
Member Extension for ACD *26-2*
Message Retrieval-Leave Word Calling Global *43-6*
Message Scrolling *143-2*
Message Waiting — Manual *49-1*
Messages
Dedicated Switch Connection *7-2*
Miscellaneous Trunk Restriction Groups *89-1*
MLL *157-1*
Mnemonic Dialing
Alphanumeric Characters *19-1*
Display Remaining Space *21-1*
Phone Number *20-1*
Mode *3-1*
Modem Pooling *81-1*
AT&T Analog Data Sets *81-3*
Bearer Capability Class of Service (BCCOS) *81-2*
Special Requirements *81-1*
Trunk Pair *111-1*
Multiappearance Terminal
Abbreviated/Delayed Ringing *68-1*
A/D Ringing *47-2*
Alarming *43-7*
Answer Text *45-3*
Auto Adjust *45-2*

Multiappearance Terminal—*Contd*
Automatic Dialing *64-1*
Automatic Line Appearance *47-3*
Configuration *45-2*
Connected Indication *45-3*
Custom Calling Button *51-2*
Custom Calling Button Type *51-3*
Data Rate *45-4*
Device ID *47-3*
Dial Echo *45-3*
Disconnect Sequence *45-3*
Display Buttons *53-2*
Display Hold Button *52-1*
Display Personal CO Line *58-1*
Feature Buttons *50-1*
Image of An Appearance *46-1*
Intercom *56-1*
Keyboard Dialing *43-1, 45-2*
Line Appearance *46-3*
Lock/Unlock *43-6*
LWC Global Message Retrieval *43-6*
Manual Signaling *48-1*
Message Waiting — Manual *49-1*
Miscellaneous Features *50-4*
One Button Transfer *55-1*
Originating Only *46-4*
Origination Preference *43-6*
Parity *45-4*
Permit Mismatch *45-3*
Personal CO Line *57-1*
Ringing Transfer *47-2*
Ringing Type *46-4*
TEI *43-7*
Terminal Busy Member *54-3*
Termination Preference *43-6*
Multiappearance Voice Terminals and Data Modules Enable *154-1*
Multiple Call Handling *25-3*
Multiple Extension
Associated Extension *9-2*
Primary Extension *9-2*
Multiple Logical Links
See MLL
Music On Hold
Enable *154-1, 154-3*

N

Name Database *17-1*
Name Database—*Contd*
Compaction *18-1*
Copy Mode *16-3*
Display Remaining Space *18-1*
Extension *16-2*
Trunk Group *16-2*
Vector Directory Number (VDN) *16-2*
Network Channel
Display DCIU Data *227-1, 241-1*
Network Channels
See DCIU
Network Digit Analysis
Network Digit Analysis (NDA)
Action Attribute *187-4, 191-4*
Action Object *187-4, 191-4*
Action (Resolve/Restart) *187-3, 191-3*
Continue *188-2, 191-5*
display unallocated nodes *189-1*
Freeze VNI *188-3, 191-5*
Maximum String Length *188-4*
Restart Analysis *188-2*
String Type *187-3, 191-3*
Tone *188-4, 191-5*
VNI Operation *188-3, 191-4*
SI *187-2*
Network Feature Class of Service
ACA *171-1*
Alternate FRL *171-1*
Remote Access To Attendant *171-1*
WCR Plan In Effect *171-1*
Network Number
NDA SI association *187-4*
Network Specific Facility (NSF) for ISDN *163-1*
NFAS
D-Channel Group *146-1*
PRI Interface Identifier *145-3*
Night Terminal Extension for Trunks *107-4*
Node Number *208-3*
Non-Facility Associated Signaling
See NFAS
Nonrestricted Terminal *178-1*
NPA
Home *179-2*
NPA-NXX Assignment *209-1*
NPA-NXX Designators-Calling Connected Numbers *210-1*
Number Portability *156-1*

O

Off Premises Stations
  24-OPS (off-premises stations) Option *142-5*
Off-Hook Queue Peg Timing *214-2, 229-3*
Office Code
  Code Restriction *181-1*
  Nonrestricted Code *178-1*
  Toll *182-1*
One Button Transfer *55-1*
Originating Terminal *46-4*
Origination Preference *43-6*
Origination Restriction *13-4*
OSS Agents *159-1*
Outflow/Queue Level for ACD Split *24-3*
Outgoing Maintenance Busy Out Seizure *82-4*
Outward Restriction *13-4*
Override *11-1*

P

Pad Group *86-4*
Paging Zone *107-1*
Paging Zone for Trunks *107-4*
Paging/Code Calling Enable *154-1*
Parameters for ISDN Network *163-3*
Parity *84-4*
  Terminal *45-4*
Patch Directories *242-1*
Patches for Software *243-1*
PCC
  Application Attributes *130-1*
  Data Characteristics *129-1*
Peak Traffic Register *222-1, 237-1*
Permit Mismatch *45-3, 84-3*
Personal CO Line
  Display *58-1, 59-1*
  Multiappearance Terminal *57-1*
  Trunk Appearance *80-1*
Port Board Status Display *176-1*
Port Circuit Cross-Reference *176-5*
Port Reservation *138-1*
Postage *135-3*
Precedence Calling
  Console Buttons *116-1*
  Maximum Preemption Level *157-3*
  Preemptive Levels *212-1*
Preference
  Display BCCOS *77-1*
  Display Index *77-1*
Preference—*Contd*
  Origination *43-6*
  Termination *43-6*
Prefix Digit
  AIOD *154-2*
PRI
  D-Channel Backup *146-1*
  See ISDN
Primary Extension *9-2*
Priority Calling *11-1*
Priority Extension for ACD *25-3*
Priority Level for Call Vectoring *35-3*
Priority Paging *11-1*
Privacy *112-3*
Processor Communications Circuit
  See PCC
Processor Data *224-1*

Q

Queue Directory Number for ACD *25-2*
Queue-of-Origin Announcement *31-1, 40-1*
Queuing
  Trunk *204-1*
Queuing Trunk Group for ACD Split *24-1*
  Trunk Queuing *203-1*

R

RCG *142-5*
Recall Timer *157-3*
Recent Disconnect *5-5, 10-2*
Recorded Announcement Trunks *107-4*
Redial Delay Timer *87-3*
Refresh Scratch-Pad Tables *141-1*
Release Loop Operation *157-3*
Release Loop Trunk, See RLT
  To
Remote Access
Remote Access Code Required *170-1*
  Trunk Sharing *155-1*
Remote Carrier Group (RCG) *142-5*
Remote Module Interface
  See RMI
Reset Counter *133-2*
Reset Timer *133-2*
Resolve
  NDA *187-3, 191-3*
Restart

Restart Analysis
NDA *188-2*
Restart Counter *133-3*
NDA *187-3, 191-3*
Restart Network Number
NDA *187-4, 191-4*
Restart Timer *133-2*
Restriction
APLT-Off-Net *13-3*
Attendant Control of Voice Terminals *150-1*
Code Restriction Level *13-3*
Data Protection *13-3*
Dial Code Entry Number *103-1*
Dial Code Entry Numbers for Trunks *102-1*
DID *13-3*
Extension Class of Service *13-1*
FRL *13-4*
Inward *13-4*
Manual Line Termination *13-4*
Miscellaneous Trunk Restriction Groups *89-1*
Origination *13-4*
Outward *13-4*
Primary/Secondary *179-2*
Terminal-to-Terminal Only *13-3*
Termination *13-4*
Toll *13-4*
WCR Toll *13-4*
Retransmission Counter *133-2*
Retry *82-4*
Return-Call Indicator *36-3*
Ring Ping Immediate *11-1*
Ringback Queue Peg Timing *214-2, 229-2*
Ringing
Abbreviated/Delayed *68-1*
Intercom Rate *68-1*
Ringing Transfer *47-2*
Ringing Type *46-4*
RLT
Backup Extension *121-3*
Start Pulse *121-3*
RMI *124-1*
Robbed Bit Signaling *142-3*
Route Advance *83-1*
Routing for AUTOVON *184-1*
Run Tape *4-1*

S

Scratch-Pad Tables *141-1*
SCS *124-4*
SCS Reference *142-1, 142-4*
Search
Bearer Capability Class of Service *77-1*
Extensions *76-1*
Hunting Assignments *79-1*
Installed Circuit Packs *177-1*
On Equipment Location *176-1*
Trunk Characteristics *110-1*
Second Recorded Announcement *30-1*
Send All Calls *11-1*
Call Coverage Group *46-4*
Serial Number *244-1*
Service Profile Identifier (SPID) *44-2*
Short Call Referral Threshold *106-3*
Short Call Threshold *106-3*
SI
See String Identifier
Signaling
24th Channel *142-3*
Channel Designation *142-3*
Robbed Bit *142-3*
Signaling Type-Trunk Group *82-1*
Slip Enable *142-3*
SMAP
Applications *160-1*
SMDR Message Length *173-1*
SN250 *125-1*
SN253 *125-1, 126-1*
Software Patches *243-1*
Special Access *142-6*
Speech Processing Adjunct Alarm Specifications *148-1*
SPID *44-2*
SPID Display *75-1*
Split Number for Call Vectoring *35-5*
Split Size for ACD *24-1*
Split Type for ACD *24-1*
SSB *2-6*
Standard Error Codes *A-1*
Stations
24-OPS (off-premises stations) Option *142-5*
Step Type for Call Vectoring *35-3*
Stop Hunt *11-1*
String Identifier (SI) *187-2, 198-2*
Type *187-3, 191-3*
String Length
NDA *188-4*
Supervisor Extension for ACD *25-2*
Swap Terminals *60-1*

Switch Settings for Data Modules *72-1*
Symmetrical Routing Depth *170-1*
System 85 SE *158-3*
System Access Agents *162-1*
System Clock Synchronization (SCS) *124-4*
System COS
  Cache Memory *154-1*
  Call Detail Recording (CDR) *154-1*
  Call Waiting *154-1*
  DCIU *154-1*
  Multiappearance Voice Terminals and Data Modules *154-1*
  Music On Hold *154-1, 154-3*
  Paging/Code Calling *154-1*
  Remote Access *155-1*
  Trunk-to-Trunk Connections *154-1*
  Unattended Console Service *155-1*
System Management Access *3-1*
  Agent Access *162-1*
  History of Recent Changes *161-1*
  OSS Agents *159-1*
  SMAP Applications *160-1*
  Superusers *162-1*
  System Access Agents *162-1*

T

TEI *43-7, 145-3*
Tenant Services *158-3*
  Attendant Partition *119-2*
  Attendant's Night Extension *151-1*
  Extension Groups *8-1*
  Extension Partition *153-1*
  Extension Partitions *8-3, 149-1*
  Listed Directory Number (LDN) *119-1*
  NPA-NXX Designator *119-1*
  Partition Overflow and Restrictions *150-1*
Terminal Alarming *43-7*
Terminal Busy
  Member *54-3*
Terminal Endpoint Identifier (TEI) *43-7*
Terminal Query *71-1*
Terminal Swap *60-1*
Terminal-to-Terminal Only Restriction *13-3*
Terminating Test Line *101-1*
Termination
  Preference *43-6*
  Restriction *13-4*
  Trunk Group *38-3, 104-3*
Test Schedule *96-1*
Threshold for Call Vectoring *35-5*
Tie Toll *86-5*
Tie Type Compatibility *87-3*
Time Coincident Register *222-1, 237-1*
Time Coincident Study *221-1, 236-1*
Time Multiplex Switch
  See TMS
Timed Recall *86-4*
Time-of-day Route Plan
  Console Buttons *116-1*
TMS *124-1*
TMS Control Carrier *124-1*
TMS Growth Carrier *124-1*
TMS Measurement Module Pairs *B-1*
TN463 *124-4*
TN726 (Data Line Circuit) *45-1*
TN768 *125-1*
Toll Calls-Dial 1 *179-2*
Toll Office Codes *182-1*
Toll Prefix *186-2*
Toll Restriction
  Extension Class of Service *13-4*
  Non restricted Terminal *178-1*
Toll-free Index *198-2*
  Display *77-1*
  WCR *196-2*
Tone
Tone Detectors *107-4*
  NDA *188-4, 191-5*
Tone Plants *125-1, 126-1*
Touch-Tone In *86-3*
Touch-Tone Out *86-3*
Touch-Tone Receivers *107-4*
Traditional Code Calling Access *126-3*
Traditional Module Control Carrier *124-1*
Traditional Port Carrier *124-1*
Traffic
  Call Coverage Group *218-1, 233-1*
  Copy Translation *214-3, 229-3*
  ISDN/PRI *219-1, 234-1*
  ISDN/PRI D-channel Encode Display *220-1, 235-1*
  Line or Trunk Carriers *216-1, 231-1*
  Load Balance *215-1, 230-1*
  Main/Satellite *238-1*
  Main/Satellite Trunk Group *223-1*
  Off-Hook Queue Peg Timing *214-2, 229-3*
  Peak Traffic Register *222-1, 237-1*
  Processor Data *224-1*

Traffic—*Contd*
Reset *214-3, 229-3*
Ringback Queue Peg Timing *214-2, 229-2*
Time Coincident *221-1, 236-1*
Time-Coincident Register *222-1, 237-1*
Traffic Peak *221-1, 236-1*
Trunk Group Combinations *217-1, 232-1*
VDN *218-1, 233-1*
WCR *218-1, 233-1*
Zero Translation *214-3, 229-3*
Zeroing Output Buffers *225-1, 239-1*
Transfer
Trunk-to-Trunk *157-2*
Trunk Billing Number
See AIOD
Trunk Group
Advanced Private Line Termination (APLT) *86-5*
AIOD Equipment Number *105-3*
Authorization Code Required *90-3*
Automatic Identification of Outward Dialing Billing Number *86-4*
Balance *86-3*
Battery Reversal *86-3*
Bridge-On Allowed *90-3*
CDR Variable Timer *86-4*
Common Control Switching Arrangement (CCSA) *86-5*
DAC *205-1*
Data Protection *90-4*
D-Channel Group Number *105-1*
Dial Access Restriction *80-6*
Digital *105-1*
Disable Signaling *105-3*
Disconnect Supervision *86-5*
Display BCCOS *77-1*
Display Index *77-1*
Display Trunk Maintenance Busy *93-1*
Distributed Communications System *86-3*
DMI-BOS *142-1*
DMI-BOS trunks option *142-5*
DMI-MOS *142-1*
DS1 *105-1, 142-1*
DS1 Trunks and Lines option *142-5*
Extension Partition *153-1*
Failure Threshold *82-4*
Foreign Exchange *142-6*
FRL *90-3*
Glare *82-4*
Hybrid Balance *87-3*
Trunk Group—*Contd*
Incoming Permanent Seizure *82-4*
Incoming Tie *90-3*
Interface Endpoint *105-1*
ISDN *105-1*
ISDN Information Inhibited *82-5*
ISDN/PRI *142-1*
ISDN/PRI option *142-5*
Loop Length *142-6*
Main/Satellite *91-1*
Miscellaneous Trunk Restriction Groups *89-1*
Numbering Plan Area (NPA) *183-1*
Office Code *183-1*
Outgoing Maintenance Busy Out Seizure *82-4*
Pad Group *86-4*
Personal CO Line Appearance *80-1*
Queuing *204-1*
Redial Delay Timer *87-3*
Retry *82-4*
Route Advance *83-1*
Search on Bearer Capability Class of Service *77-1*
Trunk Group Select Buttons *115-1*
Signaling Type *82-1*
Special Access *142-6*
Termination *38-3, 104-3*
Trunk Group Termination for Call Vectoring *38-1*
Tie Toll *86-5*
Tie Type Compatibility *87-3*
Timed Recall *86-4*
Touch-Tone In *86-3*
Touch-Tone Out *86-3*
Trunk Reservation Limit *90-3*
Trunk Types *80-5*
Unattended Console Service *105-1*
Trunk Maintenance Busy Display *93-1*
Trunk Queuing *203-1*
Trunk Reservation Limit *90-3*
Trunk Restriction Group *109-1*
Trunk Types *80-5*
Trunk Verification
Attendant *112-3*
Designated Extension *170-1*
Remote Maintenance Extension *170-1*
Trunks
AIOD Equipment Number *107-4*
Analog *107-1*
Continuous Announcement Bit *107-1*
Disable Signaling *107-1*
Loudspeaker Paging *107-1*

Trunks—*Contd*
Night Terminal Extension *107-4*
Paging Zone *107-1, 107-4*
Recorded Announcement *107-1, 107-4*
Search for Characteristics *110-1*
Tone Detectors *107-4*
Touch-Tone Receivers *107-4*
Unattended Console Service *107-1*
Trunk-to-Trunk Connections Enable *154-1*
Trunk-to-Trunk Transfer *157-2*
Two-Party Hold *112-3*

U

Unattended Console Service *155-1*
Console Buttons *116-1*
Preselected Call Routing *105-1, 107-1*
Unduplicated Common Control *154-1*
Universal Code Calling ID *7-3*
Universal Module Control Carrier *124-1*
Universal Port Carrier *124-1*

V

Variable Format CDR
See VFCDR
VDN *5-3, 36-3*
VDN Override Flag *36-3*
Traffic *218-1, 233-1*
Trunk Group Termination *38-3*
Vector Directory Number
See VDN ,
Vendor ID Display *75-1*
VFCDR *174-1*
VNI Operation
NDA *188-3, 191-4*
VNI (Virtual Nodepoint Identifier) *187-4, 191-4*
Voice Terminals
Definition *41-1*
Fixed Feature Buttons *207-1*

W

Warning Level *115-2*
Warning Tone
WCR *196-2*
WCR *158-2*
7 day clock *193-1*
WCR—*Contd*
Clocked Manual Override *172-1*
Control Mode *171-4*
Plan Change Times *193-1*
Plan In Effect *171-4*
Plan Switch *172-1*
WCR Toll Restriction *13-4*
Traffic *218-1, 233-1*
World Class Routing (WCR)
BCCOS *197-3*
Call Category Characteristics *194-1*
Call Category/VNI Combination *195-1*
Dial Tone Suppression *186-2*
Digit Grouping for Sending *201-1*
Digit Modification Index (DMI) *196-3*
Digit Sending Index (DSI) *196-3*
Digit Sending Translation *200-1*
FEAC *186-2*
FRL *196-2*
Generalized Route Selection (GRS) *194-1*
ISDN Sending Index *196-3*
Network Digit Modification *199-1*
Node Number to VNI Mapping *211-1*
Original Network Administration *186-1*
Outgoing ISDN Parameters *202-1*
Pattern Number *195-1*
Pattern/Preference *196-1*
Route Selection Method *170-1*
String Identifier *198-2*
Toll Prefix *186-2*
Toll-free Index *196-2*
Warning Tone *196-2*

X

XE Module Control Carrier *124-1*
XE Port Carrier *124-1*