

**Lucent Technologies**  
Bell Labs Innovations



**DACS II**  
**Release 8.2.3 PDS**  
**1.544 Mb/s Interface**  
Quick Reference Guide

365-353-223  
Issue 1  
February 1999

**Copyright © 1999 Lucent Technologies**  
**All Rights Reserved**  
**Printed in U.S.A**

## **Notice**

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

## **Mandatory Information**

### **Security Statement**

In rare instances, unauthorized individuals make connections to the telecommunications network through the use of remote access features. In such event, applicable tariffs require that the customer pay all network charges for traffic. Lucent Technologies cannot be responsible for such charges, and will not make any allowance or give any credit for charges that result from unauthorized access.

### **Acknowledgements**

This document was developed by the Lucent Technologies Customer Training and Information Products Organization.

### **Documentation Ordering Information**

The ordering number for this document is Lucent Technologies 365-353-223. To order this document, call the Lucent Technologies Customer Information Center in Indianapolis, Indiana, on 1-888-582-3688. For more ordering information, refer to "How to Order Documentation" in the section "About this Document."

### **Technical Support Telephone Number**

The Lucent Technologies Regional Technical Assistance Center (RTAC) provides a technical assistance telephone number which is staffed 24 hours a day. For technical assistance, simply call 1-800-225-RTAC.

### **Documentation Support Telephone Number**

Lucent Technologies provides a telephone number for you to report errors or to ask questions about the information in this document. The support telephone numbers are:

Outside North Carolina - 1-800-334-0404

Inside North Carolina - 1-910-727-6681.

Developed by The Lucent Technologies Customer Training & Information Products Organization.

# How Are We Doing?

Document Title: DACS II Release 8.2.3 PDS 1.544 Mb/s Interface Quick Reference Guide

Document No.: 365-353-223

Issue 1

Date: February 1999

Lucent Technologies welcomes your feedback on this document.

1. Please rate the effectiveness of this document in the following areas:

	Excellent	Good	Fair	Poor	Not Applicable
Ease of Use					////////////////////
Clarity					////////////////////
Completeness					////////////////////
Accuracy					////////////////////
Organization					////////////////////
Appearance					////////////////////
Examples					
Illustrations					
Overall Satisfaction					////////////////////

2. Feel free to write any comments below or on an attached sheet.

---

---

---

---

If we may contact you concerning your comments, please complete the following:

Name: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

Company/Organization: \_\_\_\_\_ Date: \_\_\_\_\_

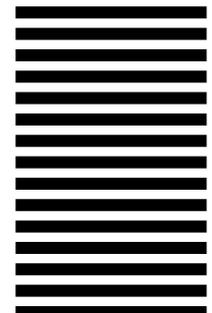
Address: \_\_\_\_\_

When you have completed this form, please return to the address on the back or Fax to: 910-727-3043.

**Lucent Technologies**  
Bell Labs Innovations



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



**BUSINESS REPLY MAIL**

FIRST CLASS PERMIT NO. 1999 GREENSBORO, N.C.

POSTAGE WILL BE PAID BY ADDRESSEE

**DOCUMENTATION SERVICES**  
**2400 Reynolda Road**  
**Winston-Salem, NC 27199-2029**



---

# Contents

---

<b>About This Document</b>	i
■ Purpose	vii
■ Intended Audiences	vii
■ How to Use This Document	vii
■ Contents	viii
■ Conventions Used	x
■ Related Documentation	x
■ How to Order Documentation	xiv
■ How to Comment on This Document	xvi
■ Electronic Documentation	xvi

---

<b>1 Link/Login/Logoff Commands</b>	1-1
-------------------------------------	-----

---

<b>2 Provisioning Commands</b>	2-1
--------------------------------	-----

---

<b>3 Performance Monitoring Commands</b>	3-1
--	-----

---

<b>4 Cross-Connect Commands</b>	4-1
---------------------------------	-----

---







---

# About This Document

---

## **Purpose**

---

The *DACS II Quick Reference Guide* provides a listing and syntax for input commands used by the craft personnel involved in the daily operation and maintenance of the Digital Access and Cross-connect System II.

## **Intended Audiences**

---

This document is for reference by a technician or craftsperson who already understands the commands and needs a reminder of syntax.

## **How to Use This Document**

---

There are two ways to access the information in this document:

- This index in the back of the manual
- The overall table of contents in the front of the manual.

Before you use this document, you should have completed the DACS II Operation and Maintenance course (TR3521). If you were not able to take the training course, you should carefully study the information in the *DACS II Operation and Maintenance Manual*. You should also become familiar with the reasons that a command could be denied; this information is presented in Chapter 1 of the *DACS II Operation and Maintenance Manual* and under the appropriate command in the *DACS II Command and Message Manual*.

## Contents

---

### ■ Chapter 1 - Link/Login/Logoff Commands

This chapter contains commands for adding user logins, logging in and logging off the DACS II, changing link provisioning options, and connecting data communications equipment to the DACS II.

### ■ Chapter 2 - Provisioning Commands

This chapter contains the commands to provision Network Processing Modules (NPMs), Network Processing Circuits (NPCs), Timing References, and Administrative Links.

### ■ Chapter 3 - Performance Monitoring Commands

This chapter contains commands for setting threshold values for certain parameters that are used to monitor the performance of the transmission lines that are connected to the DACS II.

### ■ Chapter 4 - Cross-connect Commands

This chapter contains the commands to establish various types of 64 kbit/s, Clear-DS1, and Channelized DS1 cross-connections, and to disconnect these cross-connections.

### ■ Chapter 5 - Macro and Map Commands

This chapter contains the commands to create, activate, change, and delete macro files and cross-connection maps.

■ **Chapter 6 - Roll Commands**

This chapter contains the commands to perform and disconnect the various facility and DS0 circuit rolls.

■ **Chapter 7 - Change Commands**

This chapter contains the commands to perform changes to various cross-connections, circuit and alarm parameters, NPC types and other options.

■ **Chapter 8 - Remove Commands**

This chapter contains the commands to remove links, NPCs, units, and TSIs.

■ **Chapter 9 - Restore Commands**

This chapter contains the commands to restore links, NPCs, units, and TSIs.

■ **Chapter 10 - Test Access Commands**

This chapter contains the commands to establish test ports and 64 kbit/s test connections.

■ **Chapter 11 - Subrate Commands**

This chapter contains the commands for creating subrate cross-connections and disconnections, establishing subrate channel, and creating and deleting subrate test access connections.

■ **Chapter 12 - Troubleshooting**

This chapter contains commands for isolating and clearing various DACS II troubles.

■ **Chapter 13 - Miscellaneous Commands**

This chapter contains miscellaneous DACS II commands.

## ■ Chapter 14 - Denial Codes

This chapter lists the denial codes and their meanings. This information is useful in determining problems with the DACS II.

## **Conventions Used**

---

This manual uses special fonts for the user to differentiate computer input/output. The **constant width font** indicates message formats, keywords, letter representations of parameters, parameter values, and messages as they would appear on a DACS II terminal screen.

## **Related Documentation**

---

The following documents support the DACS II system:

- DACS II Installation Manual:
  - IPH903 (DACS II CEF)
  - IPH903I (DACS II ESBF)

Audience: Customers planning to install the equipment

Content: Customer installation instructions.

- DACS II Release 7.0 Product Description Manuals:
  - 365-353-085 (24 Channel)
  - 365-353-086 (30 Channel)

Audience: Network planners, engineers, and others that need to know how the DACS II works and fits into the network

Content: Features, applications, and description and other reference information.

■ DACS II Release 8.2.3 Operation and Maintenance Manuals:

- 365-353-221 (PDS)
- 365-353-231 (MML)
- 365-353-241 (PDS 2.048-Mb/s Interface)
- 365-353-251 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Contents: Procedures to operate and maintain the DACS II.

■ DACS II Release 8.2.3 Command and Message Manuals:

- 365-353-222 (PDS)
- 365-353-232 (MML)
- 365-353-242 (PDS 2.048-Mb/s Interface)
- 365-353-252 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Content: Description of each software input message and its response along with a description of each system output report.

■ DACS II Release 8.2.3 Quick Reference Guides:

- 365-353-223 (PDS)
- 365-353-233 (MML)
- 365-353-243 (PDS 2.048-Mb/s)
- 365-353-253 (MML 2.048-Mb/s)

Audience: End-user maintenance personnel

Content: Abbreviated list of system commands and parameters.

■ DACS II Release 8.2.3 Software Release Description:

— Comcode C108460080

Audience: End-user maintenance personnel

Content: Upgrade procedures for the new software release, status of problems fixed in previous releases, and operating issues for the specified software release.

■ X.50/X.57 Subrate Application

Release 1.0.3 for DACS II

Release 1.0.4 for DACS II ISX

MML 2.048 Mbit/s Interface

User's Manual

— 365-350-101 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the X.50/X.57 Subrate application on the DACS II or DACS II ISX.

Commands and messages describing how to perform subrate cross-connects and subrate test access are included.

■ DDS Subrate and MJU Application

Release 1.0.4 for DACS II

Release 1.0.5 for DACS II ISX

User's Manual

— 365-350-110 (PDS),

— 365-350-111 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DDS Subrate and MJU application on the DACS II or DACS II ISX.

Commands and messages describing how to perform DDS subrate cross-connects, subrate test access, and subrate MJU operations are included.

- Digital Multipoint Bridge (DMB)  
DSP Platform Application  
Release 1.0.2 for DACS II  
Release 1.0.3 for DACS II ISX  
User's Manual
  - 365-353-144 (PDS)
  - 365-353-154 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DMB application on the DACS II or DACS II ISX. Commands and messages describing how to perform DMB cross-connects and DMB test access operations are included.

## **How to Order Documentation**

To order additional copies of this document, send or call in an order as follows:

- To order by Mail:

Lucent Technologies  
Customer Information Center  
Attention: Order Entry Section  
2855 N. Franklin Road  
P. O. Box 19901  
Indianapolis, IN 46219

- To order by Telephone (Monday through Friday);

Within the United States of America:

**1-888-LUCENT-8** (7:30 a.m. to 6:30 p.m. EST)  
**(1-888-582-3688)**

FAX within the United States of America:

**1-317-322-6484**

Australia and all European countries:

**Toll 317-322-6416**

Far East, North America, and other:

**Toll 317-322-6646**

FAX for all international:

**Toll 317-322-6699**

Regional Bell Operating Companies and Bell Operating Companies must process orders through their company documentation coordinator.

For commercial customers, a check, money order, purchase order number, or charge card number (*VISA*<sup>\*</sup> bank card, *American Express*<sup>†</sup> credit card services, or *Master Card*<sup>‡</sup> bank card) is required with all orders. Checks must be made payable to Lucent Technologies.

Lucent Technologies entities should use Form IND 1-80.80 FA, available through the Customer Information Center.

One-time orders include a binder (if applicable) and the document contents for the current issue in effect at the time of order. After placing a one-time order, you can request a standing order for any document revisions *of that software release*. Documents for new software releases do *not* go to standing-order customers. You will only get those documents if you order the new software release.

---

\* Registered trademark of VISA International Service Association

† Registered trademark of American Express Company

‡ Registered trademark of Mastercard International Incorporated

## **How to Comment on This Document**

---

A feedback form is located at the beginning of this publication, immediately after the title page. Please fill out the feedback form and return it (postage free) to the address on the back.

If the feedback form is missing, send comment on this publication to:

Lucent Technologies  
DACS II Documentation Coordinator  
Attn: Tabatha Wright  
Room 1B-320  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030 USA

## **Electronic Documentation**

---

Documentation for DACS II is now available in electronic form, on CD-ROM (compact disk, read-only memory). CD-ROM has many advantages over traditional paper documentation, including cost savings, search and retrieve capability, and the assurance of the most current documentation.

CD-ROM is available by annual subscription (on standing order).

- To order, call your Technical Information Resource Manager, your Lucent Technologies Account Executive, or the Lucent Technologies Customer Information Center (1-888-582-3688).
- For pricing information, contact your Lucent Technologies Network Systems Account Executive or the Lucent Technologies Customer Information Center (1-888-582-3688).
- For technical information, call Lucent Technologies Documentation Support (1-800-334-0404).

---

# Link/Login/Logoff Commands

# 1

---

[.36007]        Add TABS Link Parameters

```
ADD::LINK j,APPL {ASCS|ASCD|PM}[,L2AD aa][,POLL ttt]!
```

[.36003]        Add Link, X.25, Protocol, Data Link, Layer Parameters

```
ADD::LINK j[,K b][,T1 ee][,T3 ggg][,N2 aa][,FRMAD {A|B}]!
```

[.36001]        Add Link, Protocol, Baud

```
ADD::LINK j,PTCOL {S|X|T|M}[,BAUD bb][,ALM k]\  
[,BS e][,ENQ q][,XON x][,INIT]!
```

If the protocol is Snider:

```
ADD::LINK j,PTCOL S[,BAUD bb][,ALM k]\  
[,BS e][,ENQ q][,XON x][,INIT]!
```

If the protocol is X.25:

```
ADD::LINK j,PTCOL X[,ALM k][,INIT]!
```

If the protocol is TABS:

```
ADD::LINK j,PTCOL T[,BAUD bb][,ALM k][,INIT]!
```

If the protocol is Modified Snider:

```
ADD::LINK j,PTCOL M[,ALM k][,INIT]!
```

[I.36005] Add X.25 Link Parameters

```
ADD::LINK j[mm][,W c][,P ddd][,T20 iii][,T22 jjj]\
[,T23 kkk][,T25 lll][,T26 mmm][,R20 nn][,R22 p]\
[,R23 qq][,R25 r][,DBIT v][,VC(ppss,gghh)]!
```

[I.36103] Add User/Link Language, NPC Addressing and Priority

```
ADD::{USER <user id>|LINK j[mm][,INCL]|ALL}\
[,LANG {M|P|F}][,NPCAD {E|X|H}][,LEV(a,b,c,d,e,f)]\
[,,{RMON|RMOFF}][,RLK {A|I}][,INIT]!
```

[I.36101] Add User

```
ADD::USER <user id>[,NEW][,PASSWD <user password>]!
```

If the command is entered on a Snider link:

```
ADD::USER <user id>[,NEW]!
```

DACS II then generates the message below and a dialog is started.

**PASSWD:** (The frame administrator enters user password.)

**REENTER PASSWD:** (The frame administrator again enters the user password.)

Note that the user password is not echoed by DACS II.

## [1.38301] Change User Password

```
CHG::PASSWD[,OLD <old password>, NEW <new password>]!
```

If the user is on a Snider protocol administrative link, the command is entered as follows:

```
CHG::PASSWD!
```

Then DACS II will prompt the user for the old and new password:

```
OLD PASSWD: (user enters the old password)
```

```
NEW PASSWD: (user enters the new password)
```

```
PASSWD: (user re-enters the new password for verification)
```

## [1.38401] Change User/Link Screening

```
CHG::{USER <user id>|LINK j[mm][,INCL]}\
[,SCR n[,GR(a,b,c,d,e,f)]] [, {MCON|MCOFF}] [,INIT]!
```

## [1.37101] Delete User

```
DLT::USER <user id>!
```

## [1.39001] Log On To DACS II

```
LOGIN::USER <user id>[,PASSWD <user password>]!
```

If the user is on a Snider protocol administrative link, the command is entered as follows:

```
LOGIN::USER <user id>!
```

Then DACS II will prompt for the following:

```
PASSWD: <user enters the user password>
```

## [1.39101] Log Off User or Link

```
LOGOFF::{USER <user id>|LINK j[mm][,INCL]}!
```



---

# Provisioning Commands

# 2

---

[.36021]        Add Network Processing Circuit

```
ADD::NPC {[s]abc-[t]def|[s]abc[, [s]ghi]...[, [t]def]}!  
ADD::NPC {uvmnp-wxkqr|uvmnp[,edfgh]...[,wxkqr]}!
```

[.35021]        Configure Frame

```
CFR::FRAME!
```

[.35011]        Configure Synchronizer

```
CFR::SYNC a,FPLL!
```

[.32341]        Deprovision NPC

```
DGRTH::NPC [s]abc[-[t]def]!  
DGRTH::NPC uvmnp[-uvkqr]!
```

[.32401]        Deprovision Test-Access Group NPC

```
DGRTH::NPC [s]abc,NPCTG rrr[,TGR]!  
DGRTH::NPC uvmnp,NPCTG rrr[,TGR]!
```

- [1.32381] Deprovision Test Port NPC  
DGRTH::NPC [s]abc,NPCTP n[,TPR]!  
DGRTH::NPC uvvnp,NPCTP n[,TPR]!
- [1.32101] Deprovision Synchronizer Time Base  
DGRTH::SYNC,TB!
- [1.32121] Deprovision Synchronizer Timing Link Interface  
DGRTH::SYNC,TLI m[,SSP a]!
- [1.32421] Deprovision Test-Access Group  
DGRTH::TG mmm[-nnn]!
- [1.32411] Deprovision Test Port  
DGRTH::TP kk!
- [1.32211] Deprovision Unit  
DGRTH::UNIT [q]q!
- [1.32321] Deprovision Facility Terminating Module Interface  
DGRTH::UNIT [q]q,FTMI d!
- [1.32511] Deprovision Multiplexer Interface Unit  
DGRTH::UNIT [q]q,MIU c[-d]!
- [1.32501] Deprovision Multiplexer  
DGRTH::UNIT [q]q,MXR c[-d]!

- [.37211] Delete NPC Number With SLC® RT  
 DLT::{RT|DL} ffff[,DGA [s]aaa][,DGB [s]bbb\  
 [,DGC [s]ccc][,DGD [s]ddd][,DGP [s]ppp]!  
 DLT::{RT|DL} ffff[,DGA uvjab][,DGB uvkcd\  
 [,DGC uvlef][,DGD uvmgh][,DGP uvjpr]!
- [.30101] Provision Frame  
 GRTH::FRAME fg[,CHAR m][,UID <uid>!]
- [.31401] Provision Test-Access Group NPC  
 GRTH::NPC [s]abc,NPCTG rrr!  
 GRTH::NPC uvmnp,NPCTG rrr!
- [.31381] Provision Test Port NPC  
 GRTH::NPC [s]abc,NPCTP n!  
 GRTH::NPC uvmnp,NPCTP n!
- [.31331] Provision Digital Signal Processing Unit NPC  
 GRTH::NPC [s]abc[-[t]def],TYPE mnxyz!  
 GRTH::NPC uvmnp[-wxkqr],TYPE mnxyz!
- [.31351] Provision Digital Signal Processing Unit NPC  
 GRTH::NPC [s]abc,TYPE mnxyz!  
 GRTH::NPC uvmnp,TYPE mnxyz!
- [.31371] Provision NPC Type DS  
 GRTH::NPC [s]abc[-[t]def],TYPE DSxyz\  
 [,OPTS(rr/m [,rr/m][...])][,IW X'pq]!  
 GRTH::NPC uvmnp[-uvkqr],TYPE DSxyz\  
 [,OPTS(rr/m [,rr/m][...])][,IW X'pq]!

[.31341] Provision ANSI NPC

```
GRTH::NPC [s]abc[-[t]def],TYPE mnxyz[,OPTS(rr/m[,rr/m]\
[...])][,IW X'pq[,INCL]][,AIS {INFO|MJ|MN}][,PL {ENA|DSA}]!
GRTH::NPC uvmp[-uvkqr],TYPE mnxyz[,OPTS(rr/m[,rr/m]\
[...])][,IW X'pq[,INCL]][,AIS {INFO|MJ|MN}][,PL {ENA|DSA}]!
```

[.31352] Provision NPC

```
GRTH::NPC [s]abc[-[t]def][,TYPE mnxyz][,OPTS(rr/m[,rr/m]\
[,...])][,IW X'pq[,INCL]][,AIS {INFO|MJ|MN}]!
GRTH::NPC uvmp[-uvkqr][,TYPE mnxyz][,OPTS(rr/m[,rr/m]\
[,...])][,IW X'pq[,INCL]][,AIS {INFO|MJ|MN}]!
```

[.31101] Provision Synchronizer Time Base

```
GRTH::SYNC,TB,TYPE TBpqr!
```

[.31111] Provision Clock Reference Oscillator

```
GRTH::SYNC,TLI 3,TYPE TBpqr!
```

[.31121] Provision Synchronizer Timing Link Interface

```
GRTH::SYNC,TLI m,{TYPE texyz,SSP a,SRC p|TYPE TDxyz}!
```

[.31421] Provision Test-Access Group

```
GRTH::TG mmm,NPCTG (rrr,eee[-fff];sss,www[-xxx])[,<tc>]!
```

[.31411] Provision Test Port

```
GRTH::TP kk[,<tc>]!
```

[.31321] Provision Facility Terminating Module Interface

GRTH::UNIT [q]q,FTMI d,EQL(l,r)!

[.31501] Provision Multiplexer Interface Unit

GRTH::UNIT [q]q,MIU c[-d][,TYPE mnxyz]!

[.31511] Provision Multiplexer

GRTH::UNIT [q]q,MXR c[-d][,TYPE mnxyz][,BERM s]\  
[,BERT t][,LBO <b>]!

[.31211] Provision a Unit

For DACS II Non-CEF frames:

GRTH::UNIT q[,TYPE utxyz][,CONN(a[,b[,c[,d[,e [,f]]]]]]]!)

For DACS II CEF frames:

GRTH::UNIT [q]q[,TYPE utxyz]!

[.35311] Inhibit Switch MMFG

INHSW::UNIT [q]q,MMFG c[-d],[TOPRTN|TOSRVC]!

[.26141] Facility Loopback Activate

OPR::LPBK loop,NPC [s]abc,LOCN locn!

OPR::LPBK loop,NPC uvmp,LOCN locn!

[.28101] Facility Test Signal Activate

OPR::TSIG test,NPC [s]abc!

OPR::TSIG test,NPC uvmp!

- [1.26151] Facility Loopback Release  
RLS::LPBK loop,NPC [s]abc,LOCN locn!  
RLS::LPBK loop,NPC uvmp,LOCN locn!
- [1.28201] Facility Test Signal Deactivate  
RLS::TSIG test,NPC [s]abc!  
RLS::TSIG test,NPC uvmp!
- [1.33401] Remove Facility Line Interface  
RMV::UNIT [q]q,FLI k!
- [1.33411] Remove Formatter  
RMV::UNIT [q]q,FMT s!
- [1.33431] Remove Multiplexer Interface Unit  
RMV::UNIT [q]q,MIU c[-d][,INCL]!
- [1.33421] Remove MMFG  
RMV::UNIT [q]q,MMFG c[-d][,FRC[,INCL]]!
- [1.34401] Restore Facility Line Interface  
RST::UNIT [q]q,FLI k!
- [1.34411] Restore Formatter  
RST::UNIT [q]q,FMT s!
- [1.34431] Restore Multiplexer Interface Unit  
RST::UNIT [q]q,MIU c[-d][,INCL]!

[.34421]        Restore MMFG

**RST::UNIT [q]q,MMFG c[-d][,INCL]!**

[.27002]        Test Port Release

**TTST::TPR,ALL[,OOS]!**



---

# Performance Monitoring Commands

# 3

---

[1.51171] Allow DS1 Performance Monitoring Report

**ALW::PMREPT,{NPC [s]abc[-[t]def]|ALL}!**

**ALW::PMREPT,{NPC uvmpnp[-wxkqr]|ALL}!**

[1.51161] Inhibit DS1 Performance Monitoring Report

**INH::PMREPT,{NPC [s]abc[-[t]def]|ALL}!**

**INH::PMREPT,{NPC uvmpnp[-wxkqr]|ALL}!**

[1.56011] Utility Clear Counter or State of  
All In-Service NPCs

**UTL::CLR,<parameter>,ALL!**

[1.56061] Utility Clear Hardware/Software Error Recovery Log File

**UTL::CLR,ERR,{HWER|SWER}!**

- [I.56071] Utility Clear DA/TA/PA NPC Parameters  
 UTL::CLR,{NPC [s]abc[-[t]def]|ALL},<parameter>[,AI aaaaa]\  
 [,LOCN locn][,MONDAT dddd][,MONTIM tttt]!  
 UTL::CLR,{NPC uvmp[-wxkqr]|ALL},<parameter>[,AI aaaaa]\  
 [,LOCN locn][,MONDAT dddd][,MONTIM tttt]!
- [I.56051] Clear Facility Performance Parameters  
 UTL::CLR,NPC [s]abc,PARAMS!  
 UTL::CLR,NPC uvmp,PARAMS!
- [I.56001] Utility Clear Counter or State of a Single In-Service NPC  
 or Range of In-Service NPCs  
 UTL::CLR,<parameter>,{NPC [s]abc[-[t]def]|RT ffff|DL ffff}!  
 UTL::CLR,<parameter>,{NPC uvmp[-wxkqr]|RT ffff|DL ffff}!
- [I.51101] Utilities, Alarm Reporting  
 UTL::INIT,ALM a!
- [I.56091] Query Performance Monitoring Data for DA, TA,  
 and PA Type NPCs  
 UTL::QRY,{NPC [s]abc[-[t]def]|ALL},<parameter>,\  
 AI aaaaa [,LV 1111111111][,LOCN locn]\  
 [,MONDAT dddd][,MONTIM tttt]!  
 UTL::QRY,{NPC uvmp[-wxkqr]|ALL},<parameter>,\  
 AI aaaaa [,LV 1111111111][,LOCN locn]\  
 [,MONDAT dddd][,MONTIM tttt]!
- [I.51071] Retrieve Performance Monitoring Report Schedule  
 UTL::QRY,TOD,CFA!

## [.51141]            Schedule DS1 Performance Monitoring Report

```
UTL::SCHED,PMREPT,NPC [s]abc[-[t]def],RI rrrrr,ST ssss,\
NI nn,<parameter>,LV llllllllll,LOCN locn,AI aaaaa,\
TOF ttttt[-oooo][,LK p[vv][ q[vv]]]!
```

```
UTL::SCHED,PMREPT,NPC uvmp[-wxkqr],RI rrrrr,ST ssss,NI nn,\
<parameter>,LV llllllllll,LOCN locn,AI aaaaa,\
TOF ttttt[-oooo][,LK p[vv][ q[vv]]]!
```



---

## Cross-Connect Commands

# 4

---

### [l.14001] Alternate Cross-Connections

```
ACON::OLD [s]abcddd,NEW [t]ghijjj[,INCL]!  
ACON::OLD uvmpnppdd,NEW wxkqrjjj[,INCL]!
```

### [l.13002] Broadcast Cross-Connection

```
BCON::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\  
<tc>[, {NTR|LPD|CONV}] [, {CUS|INCL}] [,RDC]!  
BCON::FROM uvmpnppdd[-eee],TO wxkqrjjj[-kkk],\  
<tc>[, {NTR|LPD|CONV}] [, {CUS|INCL}] [,RDC]!
```

### [l.13021] Broadcast Connect

```
BCON::FROM [s]abc,TO [t]def[,RDC] [, {CUS|INCL}] \  
[, {NTR|LPD|CONV}]!  
BCON::FROM uvmpn,TO wxkqr[,RDC] [, {CUS|INCL}] \  
[, {NTR|LPD|CONV}]!
```

## [.13001] Broadcast Cross-Connections

```
BCON::FROM [s]abcd[ddd[-eee],TOX ([t]ghij[...],\
<tc>[,,{NTR|LPD|CONV}][,,{CUS|INCL}][,RDC]!
```

```
BCON::FROM uvmp[ddd[-eee],TOX (wxkqr[...],\
<tc>[,,{NTR|LPD|CONV}][,,{CUS|INCL}][,RDC]!
```

## [.13011] Broadcast Connect

```
BCON::FROM [s]abc,TOX ([t]def[,,[u]ghi[,,[v]jkl][...])[,RDC]\
[,,{CUS|INCL}][,,{NTR|LPD|CONV}]!
```

```
BCON::FROM uvmp,TOX (wxkqr[,edfhg][,stmno][,...])[,RDC]\
[,,{CUS|INCL}][,,{NTR|LPD|CONV}]!
```

## [.15201] Broadcast Disconnections

```
BDIS::FROM [s]abcd[ddd[-eee],TO [t]ghij[...][-kkk][,CONV]\
[,OOS][,DCC][,INCL]!
```

```
BDIS::FROM uvmp[ddd[-eee],TO wxkqr[...][-kkk][,CONV]\
[,OOS][,DCC][,INCL]!
```

## [.15231] Broadcast Disconnection

```
BDIS::FROM [s]abc,TO [t]ghi[,OOS][,INCL][,CONV]!
```

```
BDIS::FROM uvmp,TO wxkqr[,OOS][,INCL][,CONV]!
```

## [.15211] Broadcast Disconnection

```
BDIS::FROM [s]abcd[ddd[-eee],TOX ([t]ghij[...]\
[,,[u]klmnn . . .)][,CONV][,OOS][,DCC][,INCL]!
```

```
BDIS::FROM uvmp[ddd[-eee],TOX (wxkqr[...]\
[,edfhg . . .)][,CONV][,OOS][,DCC][,INCL]!
```

## [.15221] Broadcast Disconnect

```
BDIS::FROM [s]abc,TOX ([t]ghi[, [u]jkl][[, [v]mno][...]])\
[,OOS][,INCL][,CONV]!
```

```
BDIS::FROM uvmpnp,TOX (wxkqr[,edhfg][[,opqrs][...])\
[,OOS][,INCL][,CONV]!
```

## [.12121] One-Way Cross-Connect Terminated Multipoint Circuit

```
OCNT::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\
MPM(fmd,tmd),<tc>[, {CUS|INCL}][,RDC]!
```

```
OCNT::FROM uvmpnpddd[-eee],TO wxkqrjjj[-kkk],\
MPM(fmd,tmd),<tc>[, {INCL|CUS}][,RDC]!
```

## [.12101] One-Way Cross-Connection Terminate

```
OCNT::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\
<tc>[,RDC][, {CUS|INCL}][,PRIOUT]!
```

```
OCNT::FROM uvmpnpddd[-eee],TO wxkqrjjj[-kkk],\
<tc>[,RDC][, {CUS|INCL}][,PRIOUT]!
```

## [.12131] Terminated One-Way Cross Connect

```
OCNT::FROM [s]abc,TO [t]ghi[,RDC][, {CUS|INCL}][,PRIOUT]!
```

```
OCNT::FROM uvmpnp,TO wxkqr[,RDC][, {CUS|INCL}][,PRIOUT]!
```

## [.11121] One Way Cross-Connections

```
OCON::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\
MPM(fmd,tmd),<tc>[, {CUS|INCL}][,RDC]!
```

```
OCON::FROM uvmpnpddd[-eee],TO wxkqrjjj[-kkk],\
MPM(fmd,tmd),<tc>[, {INCL|CUS}][,RDC]!
```

## [.11101] One Way Cross-Connections

```

OCON::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\
<tc>[,RDC][{,CUS|,INCL}][,PRIOUT]!

```

```

OCON::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk],\
<tc>[,RDC][{,CUS|,INCL}][,PRIOUT]!

```

## [.11131] One-Way Non-Channelized Digital Signal Cross Connect

```

OCON::FROM [s]abc,TO [t]ghi[,RDC][,{CUS|INCL}][,PRIOUT]!

```

```

OCON::FROM uvmp,TO wxkqr[,RDC][,{CUS|INCL}][,PRIOUT]!

```

## [.15102] One-Way Multipoint Disconnections

```

ODIS::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk]\
[,INCL][,OOS][,DCC]!

```

```

ODIS::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk]\
[,INCL][,OOS][,DCC]!

```

## [.15101] One-Way Disconnect

```

ODIS::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk][,INCL]\
[,OOS][,DCC][,PRIOUT]!

```

```

ODIS::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk][,INCL]\
[,OOS][,DCC][,PRIOUT]!

```

## [.15111] One-Way Disconnect

```

ODIS::FROM [s]abc,TO [t]ghi[,OOS][,INCL][,PRIOUT]!

```

```

ODIS::FROM uvmp,TO wxkqr[,OOS][,INCL][,PRIOUT]!

```

## [.12001] Two-Way Cross-Connection Terminated

```

TCNT::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\
<tc>[,AIS][,{CUS|INCL}][,RDC][,PRIOUT]!

```

```

TCNT::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk],\
<tc>[,AIS][,{CUS|INCL}][,RDC][,PRIOUT]!

```

[.12021] Two-Way Cross-Connect Terminate, From, To,  
Multipoint Mode

```
TCNT::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],MPM(fmd,tmd),\  
<tc>[,NTR m][,RDC][,{CUS|INCL}]!
```

```
TCNT::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk],MPM(fmd,tmd),\  
<tc>[,NTR m][,RDC][,{CUS|INCL}]!
```

[.12051] Two-Way Cross-Connection Terminate

```
TCNT::FROM [s]abcddd,TO [t]ghijjj\  
[,{PFW(abcdefg,ijklmno)|NFW}]!
```

```
TCNT::FROM uvmpdd,TO wxkqrjjj\  
[,{PFW(abcdefg,ijklmno)|NFW}]!
```

[.12031] Terminated Two-Way Cross Connect

```
TCNT::FROM [s]abc,TO [t]ghi[,RDC][,{CUS|INCL}][,PRIOUT]!  
TCNT::FROM uvmp,TO wxkqr[,RDC][,{CUS|INCL}][,PRIOUT]!
```

[.11001] Two-Way Cross-Connection

```
TCON::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\  
<tc>[,AIS][,{CUS|INCL}][,RDC][,PRIOUT]!
```

```
TCON::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk],\  
<tc>[,AIS][,{CUS|INCL}][,RDC][,PRIOUT]!
```

[.11021] Two-Way Cross-Connect From, To Multipoint Mode

```
TCON::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk],\  
MPM(fmd,tmd),<tc>[,NTR m][,RDC][,{CUS|INCL}]!
```

```
TCON::FROM uvmpdd[-eee],TO wxkqrjjj[-kkk],\  
MPM(fmd,tmd),<tc>[,NTR m][,RDC][,{CUS|INCL}]!
```

## [.11051] Two-Way Cross-Connections

```
TCON::FROM [s]abcddd,TO [t]ghijjj\
[, {PFW(abcdefg,ijklmno)|NFW}]!
TCON::FROM uvmpddd,TO wxkqrjjj\
[, {PFW(abcdefg,ijklmno)|NFW}]!
```

## [.11011] Two-Way Non-Channelized Digital Signal Cross Connection

```
TCON::FROM [s]abc,TO [t]ghi[,RDC][,{CUS|INCL}][,PRIOUT]!
TCON::FROM uvmp,TO wxkqr[,RDC][,{CUS|INCL}][,PRIOUT]!
```

## [.15002] Two-Way Disconnections

```
TDIS::FROM [s]abcddd,TO [t]ghijjj[,INCL][,OOS][,DCC]!
TDIS::FROM uvmpddd,TO wxkqrjjj[,INCL][,OOS][,DCC]!
```

## [.15001] Disconnections, Cross-Connect Circuits

```
TDIS::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk][,INCL]\
[,OOS][,DCC][,PRIOUT]!
TDIS::FROM uvmpddd[-eee],TO wxkqrjjj[-kkk][,INCL]\
[,OOS][,DCC][,PRIOUT]!
```

## [.15011] Two-Way Disconnection

```
TDIS::FROM [s]abc,TO [t]ghi[,OOS][,INCL][,PRIOUT]!
TDIS::FROM uvmp,TO wxkqr[,OOS][,INCL][,PRIOUT]!
```

---

# Macro and Map Commands

# 5

---

[.39201]        Activate Alternate Maps

```
ACT::MAP <map name>[,CLR][,INCL]!
```

[.38501]        Change Macro Space

```
CHG::{MACRO|MAP},SPACE sss!
```

[.19051]        Delete Lines From Macro

```
DELETE[::{<starting line>|END}[-{<ending line>|END}]!]!
```

[.37201]        Delete Macro

```
DLT::{MACRO <macro name>|MAP <map name>}[,USER <user id>]!
```

[.37001]        Edit Delete Map

```
DLT::NPC {[s]abc-[t]def|[s]abc[, [s]ghi]...[, [t]def]}!
```

```
DLT::NPC {uvmnp-wxkqr|uvmnp[, abcde]...[, wxkqr]}!
```

- [I.19031]        Create Picture Alternate Map  
    **ED::CRET,MAP <new map name>,PIC <reference map name>!**
- [I.19001]        Create or Edit A Macro Or Map  
    **ED::{MACRO <macro name>|MAP <map name>}!**
- [I.39301]        Execute Macro  
    **EXC::MACRO <macro name>\**  
    **[,(<p1>[,<p2>[,<p3>[,...[,<p10>]]]])]!**
- [I.19071]        Query Line Number  
    **LINE!**
- [I.19061]        List Macro Contents  
    **LIST[::{<starting line>|END}[-{<ending line>|END}]]!**
- [I.19091]        Move Macro Lines  
    **MOVE::FROM {<starting line>|END}[-{<ending line>|END}],\**  
    **TO {<destination line>|END}!**
- [I.19081]        Save Component Commands  
    **SAVE!**
- [I.39311]        Stop Macro  
    **STOP::MACRO[,LINK 1[mm]]!**

---

# Roll Commands

# 6

---

[l.35001]        Configure Digroup Circuits

CFR::XC s[,INCL]!

[l.14021]        DS0 Circuit Roll - Bridge Command

SW::BCAST,OLD [s]abcddd[-eee],NEW [t]ghijjj[-kkk][,INCL]!

SW::BCAST,OLD uvmpnppdd[-eee],NEW wxkqrjjj[-kkk][,INCL]!

[l.14061]        Facility Roll - Bridge Command

SW::BCAST,OLD [s]abc,NEW [t]ghi[,INCL]!

SW::BCAST,OLD uvmpn,NEW wxkqr[,INCL]!

[l.14041]        DS0 Circuit Roll - Disconnect Command

SW::DISC [s]abcddd[-eee][,OOS]!

SW::DISC uvmpnppdd[-eee][,OOS]!

[l.14081] Facility Roll - Disconnect Command

SW::DISC [s]abc[,OOS]!

SW::DISC uvmpnp[,OOS]!

[l.14031] DS0 Circuit Roll- Roll Command

SW::ROLL,OLD [s]abcddd[-eee],NEW [t]ghijjj[-kkk]\  
[,INCL][,FRC][,OOS]!

SW::ROLL,OLD uvmpnpddd[-eee],NEW wxkqrjjj[-kkk]\  
[,INCL][,FRC][,OOS]!

[l.14071] Facility Roll - Roll Command

SW::ROLL,OLD [s]abc,NEW [t]ghi[,INCL][,FRC][,OOS][,TWAY]!

SW::ROLL,OLD uvmpnp,NEW wxkqr[,INCL][,FRC][,OOS][,TWAY]!

---

# Change Commands

# 7

---

[I.35013]        Configure Synchronizer  
          **CFR::SYNC,{MASTER|SLAVED}!**

[I.35012]        Configure Synchronizer Stratum  
          **CFR::SYNC,STRATUM {STR2|STR3}!**

[I.38621]        Change DS1 Alarm Suppression for DS1s Within a DS3"  
          **CHG::DS1ALMDS3 {ON|OFF}!**

[I.38611]        Change Unprotected Alarm Setting  
          **CHG::DS3UNPROTALM {ON|OFF}!**

[I.38261]        Change Subrate Error Correction Location  
          **CHG::ECLOC,TYPE {MJU|SRM}!**

## [.17011] Change Circuit Parameters

```
CHG::FROM [s]abc,TO [t]ghi[,NOT [u]rst],\
{TLA|TLR} {F|T|B|A}[ ,INCL]!
CHG::FROM uvmpnp,TO wxkqr[,NOT edhfg],\
{TLA|TLR} {F|T|B|A}[ ,INCL]!
```

## [.17001] Change Cross-Connect Termination Status

```
CHG::FROM [s]abcddd[-eee],TO [t]ghijjj[-kkk]\
[,NOT [u]rstvvv],{TLA|TLR} {F|T|B|L|G|A}[ ,INCL]!
CHG::FROM uvmpnpddd[-eee],TO wxkqrjjj[-kkk]\
[,NOT edhfgvvv],{TLA|TLR} {F|T|B|L|G|A}[ ,INCL]!
```

## [.17002] Change Circuit Parameters

```
CHG::FROM [s]abcddd,TO [t]ghijjj[,TLP(snn,smm)]\
[,NG nn][ ,ES ee][ ,INCL]!
CHG::FROM uvmpnpddd,TO wxkqrjjj[,TLP(snn,smm)]\
[,NG nn][ ,ES ee][ ,INCL]!
```

## [.138251] Change Hub Identification

```
CHG::HUBID O'ab!
```

## [.138281] Change NPC AIS Alarm Option

```
CHG::NPC [s]abc[-[t]ghi],{ALMOPT|PLOPT},\
{AIS {INFO|MJ|MN}|PL {ENA|DSA}}!
CHG::NPC uvmpnp[-wxkqr],{ALMOPT|PLOPT},\
{AIS {INFO|MJ|MN}|PL {ENA|DSA}}!
```

[1.38324] Change NPC Frame-Word Setting

CHG::NPC [s]abc[-[t]def],NFS abcdefghi!

CHG::NPC uvmdp[-uvkqr],NFS abcdefghi!

[1.38221] Change NPC Options

CHG::NPC [s]abc,OPTS(rr/m[,rr/m][...])!

CHG::NPC uvmdp,OPTS(rr/m[,rr/m][...])!

[1.38241] Change Options

CHG:: {NPC [s]abc|RT ffff|DL ffff|TYPE mnxyz},\  
OPTS(rr/m[,rr/m,...])!

CHG:: {NPC uvmdp|RT ffff|DL ffff|TYPE mnxyz},\  
OPTS(rr/m[,rr/m,...])!

[1.38321] Change NPC Time Slot Zero

CHG::NPC [s]abc[-[t]def],TS0 abcdefgh!

CHG::NPC uvmdp[-uvkqr],TS0 abcdefgh!

[1.38323] Change Time Slot Zero Monitor

CHG::NPC [s]abc[-[t]def],TS0M abcdefgh!

CHG::NPC uvmdp[-wxkqr],TS0M abcdefgh!

[1.38211] Change NPC Type

CHG::NPC [s]abc,TYPE mnxyz[,IW X'pq[,INCL]]!

CHG::NPC uvmdp,TYPE mnxyz[,IW X'pq[,INCL]]!

[1.38271] Change DS3U NPC Type

CHG::NPC [s]abc[-[t]def],TYPE mnxyz[,IW X'pq[,INCL]]!

CHG::NPC uvmdp[-uvkqr],TYPE mnxyz[,IW X'pq[,INCL]]!

- [.1.38311]        Change NPC Type for TH Type NPCs  
 CHG::NPC [s]abc,TYPE mnxyz[,IW X'pq[r]]!  
 CHG::NPC uvmpnp,TYPE mnxyz[,IW X'pq[r]]!
- [.1.38351]        Change Bank Number  
 CHG::{RT|DL} ffff,TO gggg!
- [.1.38481]        Change RT/DL  
 CHG::{RT|DL} ffff,{ZCS|B8ZS}!
- [.1.38361]        Change Pwr/Misc Option or FPC RT Retrofit Status  
 CHG::RT ffff,[{sss|RTF}][,SWMN x]!
- [.1.19581]        Change Subrate Cross-Connection  
 CHG::SCON,OLD [s]abcdddd[/ff],NEW [t]ghijjj[/11]!  
 CHG::SCON,OLD uvmpnpddd[/ff],NEW wxkqrjjj[/11]!
- [.1.19591]        Change Subrate Cross-Connection  
 CHG::SCON,OLD [s]abcdddd[/ff],NEW [t]ghijjj[/11],MPTM!  
 CHG::SCON,OLD uvmpnpddd[/ff],NEW wxkqrjjj[/11],MPTM!
- [.1.19501]        Change Subrate Established Channel  
 CHG::SECH,OLD [s]abcdddd[-eee],NEW [t]ghijjj[-kkk]\  
 [,PCH ppp][,DCC]!  
 CHG::SECH,OLD uvmpnpddd[-eee],NEW wxkqrjjj[-kkk]\  
 [,PCH ppp][,DCC]!

[.38201] Change/Set Options

CHG::SETOP rr,{TYPE mn|ALL},NPCOP(set1,set2,set3)!

[.18001] Change Circuit Parameters

CHG::SWCH,TOX([s]abcddd[, [t]ghijjj[, [u]klmnnn,...])[,INCL]!

CHG::SWCH,TOX(uvmnpddd[,wzkqrjjj,edhfgnnn,...])[,INCL]!

[.18011] Change Switch, TOX

CHG::SWCH,TOX([s]ghi[, [t]jkl][[, [v]mno][...])[,INCL]!

CHG::SWCH,TOX(uvmnp[,wzkqr][[,edhfg][...])[,INCL]!

[.38011] Change Priorities and/or Type,  
Synchronizer or NPC

CHG::SYNC,TLI m,SSP b,TYPE texyz!

CHG::SYNC,TLI, SRC(i/(a,b)[, j/(c,d)[, k/(e,f)[, l/(g,h)]])!]

[.19551] Change Subrate Terminate and Leave

CHG::{TLA|TLR} m,TO [s]abcddd[/ff]!

CHG::{TLA|TLR} m,TO uvmnpddd[/ff]!

[.19561] Change Terminate and Leave

CHG::{TLA|TLR} m,TO [s]abcddd[/ff],MJU ssss[,BRi]!

CHG::{TLA|TLR} m,TO uvmnpddd[/ff],MJU ssss[,BRi]!

[.38231] Change Type, Options

CHG::TYPE mnxyz,OPTS(rr/m[, rr/m][...])!

[.38101] Change Connectivity

CHG::UNIT q,CONN(a[,b[,c[,d[,e[,f]]]]])!]

[.38601]        Change DS3 Parameters

```
CHG::UNIT [q]q,DS3 c[-d][,BERM s][,BERT t][,LBO <b>]\  
[,TYPE mnxyz]!
```

[.38111]        Change FTMI Equalization

```
CHG::UNIT [q]q,FTMI d,EQL(l,r)!
```

---

## Remove Commands

# 8

---

[1.33202] Remove Cross-Connect Buffer (Non-CEF Only)

**RMV::CCB sf!**

[1.33251] Remove Clock Control Interface

**RMV::CCI s!**

[1.33201] Remove Cross-Connect Network Interface

**RMV::CCNI s!**

[1.33261] Remove ETSI

**RMV::ETSI sqq!**

[1.33271] Remove ETSIS All

**RMV::ETSIS,ECCN s,ALL!**

[I.33011] Remove Link

**RMV::LINK j!**

[I.33001] Remove Main Controller

**RMV::MC!**

[I.33351] Remove NPCs

**RMV::NPC [s]abc[-[t]def][,SIDE s][,INCL]!**

**RMV::NPC uvvnp[-uvkqr][,SIDE s][,INCL]!**

[I.33481] Remove RT/DL

**RMV::{RT|DL} ffff!**

[I.33211] Remove PMEM or SMEM

**RMV::{SMEM|PMEM}!**

[I.33101] Remove Synchronizer

**RMV::SYNC a!**

[I.33111] Remove Synchronizer Time Base AS A Clock Reference  
Oscillator

**RMV::SYNC,TLI 3,CRO!**

[I.33121] Remove Synchronizer's TLI or SSP

**RMV::SYNC a,TLI m[,SSP b]!**

[I.33221] Remove Time Slot Interchange

**RMV::TSI sft!**

[.33241]        Remove Time Slot Interchange (Non-CEF Only)

**RMV: :TSIS,CCN s,ALL!**

[.33231]        Remove Time Slot Interchange Connected  
                 to Unit (Non-CEF Only)

**RMV: :TSIS,CCN s,UNIT q[,CONN(a[,b[,c[,d[,e[,f]]]])]!]**

[.33331]        Remove Unit Format Converter

**RMV: :UNIT [q]q,FC sb!**

[.33321]        Remove FTMI or DSPI

**RMV: :UNIT [q]q,{FTMI d|DSPI}!**

[.33311]        Remove Unit Controller

**RMV: :UNIT [q]q,UC!**



---

## Restore Commands

# 9

---

[.34202]        Restore Cross-Connect Buffer  
          **RST::CCB sf!**

[.34251]        Restore Control and Clock Interface  
          **RST::CCI s!**

[.34201]        Restore Cross-Connect Network Interface  
          **RST::CCNI s!**

[.34261]        Restore Expanded Time Slot Interchanger  
          **RST::ETSI sqq!**

[.34271]        Restore All ETSIS  
          **RST::ETSIS,ECCN s,ALL!**

[1.34011] Restore Administrative Link

**RST::LINK j!**

[1.34001] Restore Main Controller

For Normal Operations:

**RST::MC[,{MCOND|NOJRNL|FRC}]!**

For Installation and Product Evaluation Only: (Can be used only if the AT&T security warning feature bit is set)

**RST::MC,CLR[,ALL]!**

[1.34351] Restore NPCs

**RST::NPC [s]abc[-[t]def][,SIDE s]!**

**RST::NPC uvmp[-uvkqr][,SIDE s]!**

[1.34211] Restore PMEM and/or SMEM

**RST::{PMEM|SMEM[,{CLR|[,FRC][,BKGRND]}]}!**

[1.34481] Restore RT/DL

**RST::{RT|DL} ffff!**

[1.34101] Restore Synchronizer

**RST::SYNC a!**

[1.34111] Restore Clock Reference Oscillator

**RST::SYNC,TLI 3,CRO!**

[.34121] Restore Synchronizer's Timing Link Interface

**RST::SYNC a,TLI m[,SSP b]!**

[.34221] Restore Time Slot Interchange

**RST::TSI sft!**

[.34241] Restore Time Slot Interchanges

**RST::TSIS,CCN s,ALL!**

[.34231] Restore Time Slot Interchange Connected to a Unit

**RST::TSIS,CCN s,UNIT q [,CONN(a[,b[,c[,d[,e[,f]]]])]!]!**

[.34331] Restore Unit

**RST::UNIT [q]q,FC sb!**

[.34321] Restore FTMI or DSPI

**RST::UNIT [q]q,{FTMI d|DSPI}!**

[.34311] Restore Unit Controller

**RST::UNIT [q]q,UC!**



---

## Subrate Commands

# 10

---

[.19321] Subrate Terminated Cross-Connection

```
SCNT::[RATE rr,]MPTM [s]abcddd[/ff],MJU ssss[,MA(tttt,u)],\  
<branch>[,<branch>][,<branch>][,<branch>]!
```

```
SCNT::[RATE rr,]MPTM uvmpddd[/ff],MJU ssss[,MA(tttt,u)],\  
<branch>[,<branch>][,<branch>][,<branch>]!
```

[.19301] Subrate Terminated Cross-Connection

```
SCNT::RATE rr[,TPT],FROM [s]abcddd[/ff],TO [t]ghijjj[/ll]!  
SCNT::RATE rr[,TPT],FROM uvmpddd[/ff],TO wxkqrjjj[/ll]!
```

## [.19311] Subrate Terminated Cross-Connection

USAGE: The following applies to a range of DS0A channels:

```
SCNT::RATE rr[,TPT],FROM [s]abcddd-eee[/01],\
TO [t]ghijjj-kkk[/01]!
```

USAGE: The following applies to a range of DS0B channels:

```
SCNT::RATE rr[,TPT],FROM [s]abcddd/ff-mm,TO [t]ghijjj/ll-nn!
```

USAGE: The following applies to a range of DS0A channels:

```
SCNT::RATE rr[,TPT],FROM uvmpddd-eee[/01],\
TO wxkqrjjj-kkk[/01]!
```

USAGE: The following applies to a range of DS0B channels:

```
SCNT::RATE rr[,TPT],FROM uvmpddd/ff-mm,TO wxkqrjjj/ll-nn!
```

## [.19221] Subrate Cross-Connection

```
SCON:[RATE rr,]MPTM [s]abcddd[/ff],MJU ssss[,MA(tttt,u)]\
[,<branch>][,<branch>][,<branch>][,<branch>]!
```

```
SCON:[RATE rr,]MPTM uvmpddd[/ff],MJU ssss[,MA(tttt,u)]\
[,<branch>][,<branch>][,<branch>][,<branch>]!
```

## [.19201] Subrate Cross-Connection

```
SCON::RATE rr[,TPT],FROM [s]abcddd[/ff],TO [t]ghijjj[/ll]!
```

```
SCON::RATE rr[,TPT],FROM uvmpddd[/ff],TO wxkqrjjj[/ll]!
```

## [l.19211] Subrate Cross-Connection

For a DS0A Channel

```
SCON::RATE rr,[TPT,]FROM [s]abcddd-eee[/01],\
TO [t]ghijjj-kkk[/01]!
```

For a DS0B Channel

```
SCON::RATE rr,[TPT,]FROM [s]abcddd/ff-mm,TO [t]ghijjj/ll-nn!
```

For a DS0A Channel

```
SCON::RATE rr,[TPT,]FROM uvmpddd-eee[/01],\
TO wxkqrjjj-kkk[/01]!
```

For a DS0B Channel

```
SCON::RATE rr,[TPT,]FROM uvmpddd/ff-mm,TO wxkqrjjj/ll-nn!
```

## [l.19151] Subrate Disestablish Channel

```
SDCH::TO [s]abcddd[-eee][,PCH[ppp]][,DCC]!
SDCH::TO uvmpddd[-eee][,PCH[ppp]][,DCC]!
```

## [l.19421] Subrate Disconnection

```
SDIS::[RATE rr,]MPTM [s]abcddd[/ff],MJU ssss,\
<branch>[,<branch>][,<branch>][,<branch>]!
SDIS::[RATE rr,]MPTM uvmpddd[/ff],MJU ssss,\
<branch>[,<branch>][,<branch>][,<branch>]!
```

## [l.19431] Subrate Disconnection

```
SDIS::[RATE rr,]MPTM [s]abcddd[/ff],MJU ssss [,ALL]!
SDIS::[RATE rr,]MPTM uvmpddd[/ff],MJU ssss [,ALL]!
```

## [.19401] Subrate Disconnection

```
SDIS::[RATE rr[,TPT],] FROM [s]abcdddd[/ff],\
TO [t]ghijjj[/ll]!
SDIS::[RATE rr[,TPT],] FROM uvmpddd[/ff],\
TO wxkqrjjj[/ll]!
```

## [.19411] Subrate Disconnection

```
SDIS::[RATE rr,][TPT,] FROM [s]abcdddd{-eee[/01]|/ff-mm},\
TO [t]ghijjj{-kkk[/01]|/ll-nn}!
SDIS::[RATE rr,][TPT,] FROM uvmpddd{-eee[/01]|/ff-mm},\
TO wxkqrjjj{-kkk[/01]|/ll-nn}!
```

## [.19101] Subrate Establish Channel

```
SECH::TO [s]abcdddd[-eee],{DS0A rr|DS0B nn}\
[, {SEC|PCH[ ppp]}]!
SECH::TO uvmpddd[-eee],{DS0A rr|DS0B nn}\
[, {SEC|PCH[ ppp]}]!
```

## [.19111] Subrate Establish Channel

```
SECH::TO [s]abcdddd[-eee],RATE rr[,DP][,PCH[ ppp]]!
SECH::TO uvmpddd[-eee],RATE rr[,DP][,PCH[ ppp]]!
```

## [.19621] Subrate Test Access

```
STST::MON,TO [s]abcdddd[/ff],MJU ssss,[BRi,]TP kk!
STST::MON,TO uvmpddd[/ff],MJU ssss,[BRi,]TP kk!
```

## [.19601] Subrate Test Access

```
STST::MON[,TO [s]abcdddd[/ff]],TP kk!
STST::MON[,TO uvmpddd[/ff]],TP kk!
```

[l.19651] Subrate Test Access Split

```
STST::SPL,TO [s]abcdddd[/ff],MJU ssss,[BRi,],TP kk!  
STST::SPL,TO uvmpddd[/ff],MJU ssss,[BRi,],TP kk!
```

[l.19631] Subrate Split Test Access

```
STST::SPL[,TO [s]abcdddd[/ff]],TP kk!  
STST::SPL[,TO uvmpddd[/ff]],TP kk!
```

[l.19661] Subrate Test Access

```
STST::{TLA|TLR} m,TP kk!
```

[l.19671] Subrate Test Access

```
STST::TPR,TP kk!
```



---

## Test Access Commands

# 11

---

- [l.20101]        Non-Channelized Test, Monitor, Split, Loop  
CTST::CTST::

[l.20111]        Non-Channelized Test FAD, Emode, Fmode  
CTST::FAD ([s]abc[, [t]def]){[,EMODE <emode>]\  
[,FMODE <fmode>]}[,INCL];  
CTST::FAD (uvvnp[,wxkqr]){[,EMODE <emode>]\  
[,FMODE <fmode>]}[,INCL];

[l.20001]        Non-Channelized Test Access (Monitor, Split, or Loop)  
CTST::FROM [u]ghi[,TO [v]jkl][,AIS][,INCL]!  
CTST::FROM eghij[,TO jklmn][,AIS][,INCL]!

[I.20031] Non-Channelized Test Hub

```
CTST::HUB,FAD [s]abc,TO [t]jkl[,INCL]!
CTST::HUB,FAD uvmpnp,TO wxkqr[,INCL]!
```

[I.20301] Non-Channelized Loop Test Access Facility

```
CTST::LPBKT,FAD [s]abc[,INCL]!
CTST::LPBKT,FAD uvmpnp[,INCL]!
```

[I.20202] Non-Channelized Test NPC Release

```
CTST::TNR,ALL[,OOS]!
```

[I.20201] Non-Channelized Test NPC Release

There are two alternate formats depending upon the number of FADs specified.

```
CTST::TNR,FAD [s]abc[,OOS]!
CTST::TNR,FAD ([s]abc[, [t]def)][,OOS]!
CTST::TNR,FAD uvmpnp[,OOS]!
CTST::TNR,FAD (uvmpnp[,wxkqr)][,OOS]!
```

[I.26161] Hybrid DS3 Loopback

```
OPR::LPBK d[t],UNIT [q]q,MMFG a!
```

[I.19681] Disconnect Test Access Time Slot

```
STST::TPR,{ALL|LINKS}!
```

[I.24021] Nx64 kbit/s Two-Way Test Access, Hub

```
TTST::HUB,TO ([s]abcddd,[t]ghijjj),TG mmm[,<tc>!
TTST::HUB,TO (uvmpnpddd,wxkqrjjj),TG mmm[,<tc>!]
```

- [I.24001] Two-Way Test Access, Hub  
 TTST::HUB,<tc>,TO [t]ghijjj,TP kk!  
 TTST::HUB,<tc>,TO uvmpjjj,TP kk!
- [I.29021] Nx64 kbit/s Looped Test Access  
 TTST::LPD,TG mmm[,<tc>!]
- [I.29001] Looped Test Access  
 TTST::LPD,TP kk,<tc>!
- [I.21031] Nx64 kbit/s Two-Way Test Access, Monitor  
 TTST::MON,TG mmm!
- [I.21021] Nx64 kbit/s Two-Way Test Access, Monitor  
 TTST::MON,TO [t]ghi(jjj[-kkk][,lll,...])[,<tc>,TG mmm!  
 TTST::MON,TO wxkqr(jjj[-kkk][,lll,...])[,<tc>,TG mmm!
- [I.21001] Two-Way Test Access, Monitor  
 TTST::MON[,TO [t]ghijjj][,<tc>,TP kk!  
 TTST::MON[,TO uvmpjjj][,<tc>,TP kk!
- [I.26101] Two-Way Test Access Line Loopback  
 TTST::RT ffff,{DGA|DGB|DGC|DGD|DGP},\  
 LLB[,{TO|FROM}],{INI|TRM|ALW|INH}!
- [I.23021] Nx64 kbit/s Two-Way Test Access, Split  
 TTST::SPL,TG mmm!

- [.23001] Two-Way Test Access  
TTST::SPL,TP kk!
- [.27021] Nx64 kbit/s Two-Way Test Access,  
Test-Access Group Release  
TTST::TGR,TG mmm[-nnn][,OOS]!
- [.25101] Two-Way Test Access  
TTST::TLA m[,NOT [t]rstvvv],TP kk!  
TTST::TLA m[,NOT uvvnpvvv],TP kk!
- [.25121] Nx64 kbit/s Two-Way Test Access,  
Terminate-And-Leave-Active  
TTST::TLA m,TG mmm!
- [.25501] Two-Way Test Access  
TTST::TLR m[,NOT [t]rstvvv],TP kk!  
TTST::TLR m[,NOT uvvnpvvv],TP kk!
- [.25521] Nx64 kbit/s Two-Way Test Access,  
Terminate-And-Leave-Release  
TTST::TLR m,TG mmm!
- [.27001] Two-Way Test Access  
TTST::TPR,TP kk[,OOS]!

---

## Troubleshooting Commands

# 12

---

[.81001] Query Facility Alarms

AUD: :QRY, {CFA | CGA | LOS} !

[.41211] Diagnose Cross-Connect Buffer

DGN: :CCB sf [ ,CFT X'vwxy] !

[.41251] Diagnostics, CCI and BT Packs

DGN: :CCI s [ ,CFT X'vwxy] !

[.41201] Diagnose CCNI

DGN: :CCNI s [ ,CFT X'vwxy] !

[.41031] Diagnose Communications Interface

DGN: :CI [ ,CFT X'vwxy] !

- [.41261] Diagnose ETSI  
DGN: :ETSI sqq[ ,CFT X'vwxy]!
- [.41271] Diagnose All Expanded Time Slot Interchangers on ECCN Side  
DGN: :ETSI S,ECCN s,ALL!
- [.41011] Diagnose Link  
DGN: :LINK a[ ,CFT X'vwxy]!
- [.41001] Diagnose Main Controller  
DGN: :MC[ ,CFT X'vwxy]!
- [.41021] Diagnose Main Processor  
DGN: :MP[ ,CFT X'vwxy]!
- [.41361] Diagnose Network Processing Circuits  
DGN: :NPC [s]abc-[t]def!  
DGN: :NPC uvmpnp-uvkqr!
- [.41351] Diagnose NPC  
DGN: :NPC [s]abc[ ,SIDE s][ ,CFT X'vwxy]!  
DGN: :NPC uvmpnp[ ,SIDE s][ ,CFT X'vwxy]!
- [.41051] Diagnose Memory Card  
DGN: : {PMEM|SMEM}[ , {CFT X'vwxy|EXCT|DBASE}][ ,VERIFY]!

[.41101] Diagnose Synchronizer

DGN::SYNC a!

[.41111] Diagnose Synchronizer

DGN::SYNC,TLI 3,CRO!

[.41121] Diagnose Synchronizer Timing Link Interface

DGN::SYNC a,TLI m[,SSP b]!

[.41221] Diagnose Time Slot Interchange

DGN::TSI sft[,CFT X'vwxy]!

[.41241] Diagnose Time Slot Interchanges

DGN::TSIS,CCN s,ALL!

[.41232] Diagnose Time Slot Interchanges

DGN::TSIS,CCN s,UNIT q,[,CONN(a[,b[,c[,d[,e[,f]]]]]]]!!

[.41341] Diagnose DSPU

DGN::UNIT [q]q,DSPI[,CFT X'vwxy]!

[.41331] Diagnose Format Converter

DGN::UNIT [q]q,FC sb[,CFT X'vwxy]!

[.41401] Diagnose FLI

DGN::UNIT [q]q,FLI k[,CFT X'vwxy]!

- [.41411] Diagnose FMT  
DGN::UNIT [q]q,FMT s[,CFT X'vwzxy]!
- [.41321] Diagnose Facility Terminating Module Interface  
DGN::UNIT [q]q,FTMI d[,CFT X'vwzxy]!
- [.41431] Diagnose MIU  
DGN::UNIT [q]q,MIU c[,CFT X'vwzxy]!
- [.41421] Diagnose MXR  
DGN::UNIT [q]q,MXR c[,DEV devc[,CFT X'vwzxy]]!
- [.41311] Diagnose Unit On UC  
DGN::UNIT [q]q,UC[,CFT X'vwzxy]!
- [.56052] Clear Power Supply or Backup Failure  
UTL::CLR,PWR pp!
- [.56401] Utility Location  
UTL::LOC,<entity>!
- [.56031] Utility Query All  
UTL::QRY,<parameter>,ALL!
- [.53104] Query All Common Equipment  
UTL::QRY,ALL,COMMON!

- [1.53101]        Query All  
          **UTL::QRY,ALL[,UNIT [q]q]!**
- [1.56331]        Query DS3 Alarms  
          **UTL::QRY,ALM,DS3!**
- [1.56021]        Utility Query, Alarm Option, AIS  
  
          **UTL::QRY,ALMOPT,NPC [s]abc[-[v]ghi],AIS!**  
          **UTL::QRY,ALMOPT,NPC uvvnp[-wkkqr],AIS!**
- [1.53111]        Utility Query Alarms  
          **UTL::QRY,ALMS!**
- [1.53151]        Utility Query Alarms  
          **UTL::QRY,ALMS,DBASE!**
- [1.53141]        Utility Query Alarms  
          **UTL::QRY,ALMS,{RT|DL} ffff!**
- [1.52101]        Query Broadcast All  
          **UTL::QRY,BCAST,ALL!**
- [1.52111]        Utility Query Broadcast  
          **UTL::QRY,BCAST,FROM [s]abcddd!**  
          **UTL::QRY,BCAST,FROM uvvnpddd!**

- [1.52121]           Utility Query Broadcast From  
          **UTL: :QRY,BCAST,FROM [s]abc!**  
          **UTL: :QRY,BCAST,FROM uvmpnp!**
- [1.52011]           Query Partial Cross-Connect Map  
          **UTL: :QRY,CMAP [s]abc[-[t]def]!**  
          **UTL: :QRY,CMAP uvmpnp[-wxkqr]!**
- [1.51091]           Utility Query Configure  
          **UTL: :QRY,CNFGR!**
- [1.53121]           Utility Query Circuit Status, NPC  
          **UTL: :QRY,CS,NPC [s]abc!**  
          **UTL: :QRY,CS,NPC uvmpnp!**
- [1.51031]           Query Date  
          **UTL: :QRY,DATE!**
- [1.52031]           Query Full Cross-Connect Map  
          **UTL: :QRY,DMAP!**
- [1.53221]           Utility Query DS3 Bit Error Rate  
          **UTL: :QRY,DS3,BERMT[ ,UNIT [q]q]!**
- [1.53231]           Query DS3 Line Build Out  
          **UTL: :QRY,DS3,LBO!**

- [1.51511]        Query Error Correction Location  
          **UTL: :QRY, ECLOC!**
- [1.53109]        Utility Query Equipage, Common  
          **UTL: :QRY, EQD, COMMON!**
- [1.53031]        Utility Query, Equipment Connectivity  
          **UTL: :QRY, EQD, CONN!**
- [1.53022]        Utilities, ETSIS  
          **UTL: :QRY, EQD, ETSIS!**
- [1.53201]        Query Equipped Multiplexer Interface Units  
          **UTL: :QRY, EQD, MIUS!**
- [1.53211]        Utilities, Query, Equipped Multiplexers  
          **UTL: :QRY, EQD, MXRS!**
- [1.53041]        Query Equipped NPCs  
          **UTL: :QRY, EQD, NPCS[ , {TOTAL|UNIT [q]q} ]!**
- [1.53021]        Utility Query Equipped  
          **UTL: :QRY, EQD, TSIS!**
- [1.53108]        Utility Query Entity Equipage  
          **UTL: :QRY, EQD[ , UNIT [q]q]!**

[1.53011] Utilities, Equipage Status

UTL::QRY,EQD,UNITS!

[1.55011] Query Software/Hardware Error Recovery

UTL::QRY,ERR,{SWER|HWER}[,{INT mn|[DATE moda[ce]yr,]\ TOD hrmnsc}] [,TN X'dddd][,EVENT X'eeee]\ [,ERCL{HARD|TRANS|APPINT}][,ENTY <entity>]!

[1.55401] Utility Query Error Source Register

UTL::QRY,ESR,CCN s!

[1.55411] Query ECCN Error Source Register

UTL::QRY,ESR,ECCN s!

[1.55111] Query Error Source Register Main Processor

UTL::QRY,ESR,MP!

[1.55601] Utility Query ESR for FTU or Subrate NPC

UTL::QRY,ESR,NPC [s]abc[,SIDE s]!  
UTL::QRY,ESR,NPC uvmpnp[,SIDE s]!

[1.55501] Utility Query Error Source Register

UTL::QRY,ESR,UNIT [q]q!

[1.55531] Query Error Source Register

UTL::QRY,ESR,UNIT [q]q,DSPI!

- [1.55521]        Query Error Source Register  
          **UTL::QRY,ESR,UNIT [q]q,FC sb!**
- [1.55801]        Query Error Source Register Facility Line Interface  
          **UTL::QRY,ESR,UNIT [q]q,FLI k!**
- [1.55811]        Query Error Source Register Formatter  
          **UTL::QRY,ESR,UNIT [q]q,FMT s!**
- [1.55511]        Query Error Source Register FTMI  
          **UTL::QRY,ESR,UNIT [q]q,FTMI d!**
- [1.55831]        Query Error Source Register Multiplexer Interface Unit  
          **UTL::QRY,ESR,UNIT [q]q,MIU c!**
- [1.55821]        Query Error Source Register Multiplexer  
          **UTL::QRY,ESR,UNIT [q]q,MXR c!**
- [1.51121]        Query Feature Package  
          **UTL::QRY,FPKG!**
- [1.52051]        Utility Query From  
          **UTL::QRY,FROM [s]abcddd[-eee]!**  
          **UTL::QRY,FROM uvmpddd[-eee]!**
- [1.52071]        Utility Query From  
          **UTL::QRY,FROM [s]abc!**  
          **UTL::QRY,FROM uvmp!**

[1.51501] Utility Query Hub Identifier

UTL::QRY,HUBID!

[1.54131] Utility Query List Macro

UTL::QRY,LIST,MACRO <macro name>[,USER <user id>]!

[1.54101] Utility Query List Map

UTL::QRY,LIST,MAP <name>[,USER <user id>]!

[1.52581] Utility Query, Load

UTL::QRY,LOAD,{NPC [s]abc|TOTAL}!

UTL::QRY,LOAD,{NPC uvmpnp|TOTAL}!

[1.54011] Query Log

UTL::QRY,LOG[,ALL]!

[1.53131] Utility Query Loopback

UTL::QRY,LPBK,NPC [s]abc[-[t]def]!

UTL::QRY,LPBK,NPC uvmpnp[-wxkqr]!

[1.53181] Utility Query Hybrid DS3 Loopback

UTL::QRY,LPBK,UNIT [q]q!

[1.54211] Query Macro Attributes

UTL::QRY,MACRO,ATTR[, {USER <user id>|ALL}]!

[1.54221] Utility Query Macro/Map Space

UTL::QRY,{MACRO|MAP},SPACE[, {USER <user id>|ALL|SYSTEM}]!

[.54121] Utility Query Macro

```
UTL: :QRY,MACRO <name>[,USER <user id>]!
```

[.54201] Utility Query Map

```
UTL: :QRY,MAP,ATTR[, {ALL|USER <user id>|MAPNM <name>}]!
```

**Note:** Only the DACS II frame administrator can use the ALL option.

[.52201] Utility Query Markings

```
UTL: :QRY,MARK [s]abc[-[t]def]!
```

```
UTL: :QRY,MARK uvmpnp[-wxkqr]!
```

[.52211] Query Channel Marks

```
UTL: :QRY,MARK [s]abcjjj[-kkk]!
```

```
UTL: :QRY,MARK uvmpnpjjj[-kkk]!
```

[.51001] Retrieve Memory Status

```
UTL: :QRY,MEMSTAT!
```

[.54111] Utility Query NPC Map

```
UTL: :QRY,NPC,MAP <name>[,USER <user id>]!
```

[.56041] Query Network Processing Circuit Parameter

```
UTL: :QRY,<parameter>,\n{NPC [s]abc[-[t]def]|RT ffff|DL ffff}!
```

```
UTL: :QRY,<parameter>,\n{NPC uvmpnp[-wxkqr]|RT ffff|DL ffff}!
```

- [1.53091]           Utility Query Test-Access Group NPC  
 UTL::QRY,NPCTG rrr[-sss]!
- [1.53051]           Utility Query Options NPCs  
 UTL::QRY,OPT[, {TYPE mn|ALL}],NPCS!
- [1.53105]           Utility Query Status Common Equipment  
 UTL::QRY,{PEST|FAIL|OOS},COMMON!
- [1.53103]           Utility Query Status of Entities/Equipment  
 UTL::QRY,{PEST|FAIL|OOS}[ ,UNIT [q]q]!
- [1.51151]           Query DS1 Performance Monitoring Report Schedule  
 UTL::QRY,PMSCHED,{NPC [s]abc[-[t]def]|ALL}!  
 UTL::QRY,PMSCHED,{NPC uvmpnp[-wzkqr]|ALL}!
- [1.56511]           Query Unit Protection State  
 UTL::QRY,PSTATE,UNIT [q]q!
- [1.52081]           Utility Query Roll DS0  
 UTL::QRY,ROLL,DS0,{NPC [s]abc[-[t]def]|ALL[,UNIT [q]q]}!  
 UTL::QRY,ROLL,DS0,{NPC uvmpnp[-wzkqr]|ALL[,UNIT [q]q]}!
- [1.52091]           Utility Query Roll DS1  
 UTL::QRY,ROLL,DS1,{NPC [s]abc[-[t]def]|ALL[,UNIT [q]q]}!  
 UTL::QRY,ROLL,DS1,{NPC uvmpnp[-wzkqr]|ALL[,UNIT [q]q]}!

- [1.52311] Utility Query, RTMAP, DLMAP  
UTL::QRY,{RTMAP|DLMAP}[ ffff]!
- [1.52511] Utility Query Subrate Far End Information  
UTL::QRY,SCON,CH,TO [s]abcddd[-eee]!  
UTL::QRY,SCON,CH,TO uvmpddd[-eee]!
- [1.52521] Query Subrate Cross-Connect  
UTL::QRY,SCON,TO [s]abcddd[/ff]!  
UTL::QRY,SCON,TO uvmpddd[/ff]!
- [1.54001] Query User|Link Screening Option  
UTL::QRY,SCR,{LINK j[mm[-jnn]]|USER <user id>|LINKS|USERS}!
- [1.52501] Utility Query  
UTL::QRY,SECH,TO [s]abcddd[-eee]!  
UTL::QRY,SECH,TO uvmpddd[-eee]!
- [1.52601] Query Trunk Signaling Conversion State  
UTL::QRY,SIGST abcddd  
UTL::QRY,SIGST uvmpddd
- [1.51131] Utility Query Sequence  
UTL::QRY,SQN!
- [1.52531] Utility Query Subrate Circuit/Hardware Trace  
UTL::QRY,SRHDW,TO [s]abcddd[/ff]!  
UTL::QRY,SRHDW,TO uvmpddd[/ff]!

[1.56501] Utility Query Subrate Framing Status

UTL::QRY,SROOF,{TO [s]abcddd[-eee]|ALL}!

UTL::QRY,SROOF,{TO uvvmpddd[-eee]|ALL}!

[1.54340] Utility Query State Alarm Cut Off

UTL::QRY,STATE,ACO!

[1.56311] Utility Query State

UTL::QRY,STATE,NPC [s]abc[-[t]def]!

UTL::QRY,STATE,NPC uvvmp[-wxkqr]!

[1.56314] Utility Query NPC State

UTL::QRY,STATE,NPC [s]abc[-[t]def]!

UTL::QRY,STATE,NPC uvvmp[-wxkqr]!

[1.52321] Utility Query SCDG

UTL::QRY[,STATE],SCDG,{NPC [s]abc|RT ffff|DL ffff|ALL}!

UTL::QRY[,STATE],SCDG,{NPC uvvmp|RT ffff|DL ffff|ALL}!

[1.56301] Utility Query

UTL::QRY,STATE,SYNC!

[1.56361] Query State Unit DS3

UTL::QRY,STATE,UNIT [q]q,DS3 c[-d]!

[1.55113] Query Link Status and Protocol

UTL::QRY,STR,LINK j[mm[-jnn]]!

- [1.55201]       Utility Query, Synchronizer  
          **UTL::QRY,STR,SYNC a!**
- [1.55311]       Utility Query, Timing Link Interface  
          **UTL::QRY,STR,SYNC a,TLI m!**
- [1.55321]       Utility Query SSP  
          **UTL::QRY,STR,SYNC a,TLI m,SSP b!**
- [1.55191]       Utility Query, Status Register  
          **UTL::QRY,STR,XC a!**
- [1.53001]       Utility Query, Synchronizer  
          **UTL::QRY,SYNC,TYPE!**
- [1.53081]       Utility Query Test-Access Group  
          **UTL::QRY,TGS mmm[-nnn]!**
- [1.52041]       Query Destination Cross-Connect  
          **UTL::QRY,TO [s]abcddd[-eee]!**  
          **UTL::QRY,TO uvmpddd[-eee]!**
- [1.52061]       Non-Channelized Utility Query To  
          **UTL::QRY,TO [s]abc!**  
          **UTL::QRY,TO uvmp!**
- [1.53061]       Utility Query, Test Ports  
          **UTL::QRY,TPS!**

- [1.53161]           Query ANSI NPC Test Signal  
          UTL::QRY,TSIG,NPC [s]abc[-[t]def]!  
          UTL::QRY,TSIG,NPC uvmpnp[-wxkqr]!
- [1.56323]           Query Time Slot Zero Monitor  
          UTL::QRY,TS0M,NPC [s]abc[-[t]def]!  
          UTL::QRY,TS0M,NPC uvmpnp[-wxkqr]!
- [1.56321]           Query NPC Time Slot Zero  
          UTL::QRY,TS0 s,NPC [s]abc[-[t]def]!  
          UTL::QRY,TS0 s,NPC uvmpnp[-wxkqr]!
- [1.53071]           Utility Query Equalization, Impedance  
          UTL::QRY,UNIT [q]q,FTMI b[,EQL]!
- [1.51041]           Utility Query Who  
          UTL::QRY,WHO!
- [1.55181]           Query Cross-Connect Status Bus  
          UTL::QRY,XCSB[,UNIT [q]q]!
- [1.51081]           Utility, Recovery, Password  
          UTL::RCY,PASSWD!

---

## Miscellaneous Commands

# 13

---

[I.55711]        Abort  
          **ABT!**

[I.36201]        Add NPC to SLC® Carrier Bank  
          **ADD::**{RT|DL} ffff,MD g[g][,DGA [s]aaa][,DGB [s]bbb\  
          [,DGC [s]ccc][,DGD [s]ddd][,DGP[s]ppp][,{sss|NDL|RTF}]!  
          **ADD::**{RT|DL} ffff,MD g[g][,DGA uvjab][,DGB uvkcd\  
          [,DGC uvlef][,DGD uvmggh][,DGP uvjpr][,{sss|NDL|RTF}]!

[I.35301]        Allow Switch of MMFG  
          **ALWSW::**UNIT [q]q,MMFG c[-d],{TOPRTN|TOSRVC}!

[I.19041]        Append Component Command  
          **APPEND[::**{<line number>|END}]!

[.31521] Copy NPC

```
COPY::NPC [s]abc,TO [t]def[-[u]ghi]!  
COPY::NPC uvmp,TO wxkqr[-ghikl]!
```

[.37301] Delete Feature Package Identification

```
DLT::FPKG nnnnnnnn!
```

[.39401] Switch

```
SW::{NPC [s]abc|RT ffff,xxx},{PSW|USW|ALW|INH}[ ,FRC][ ,INCL]!  
SW::{NPC uvmp|RT ffff,xxx},{PSW|USW|ALW|INH}[ ,FRC][ ,INCL]!
```

[.35101] Switch FLI To Protection

```
SW::UNIT [q]q,FLI,TOPRN!
```

[.35105] Switch FLI To Service

```
SW::UNIT [q]q,FLI,TOSRVC!  
See I.35101
```

[.35111] Switch MMFG To Protection

```
SW::UNIT [q]q,MMFG c,TOPRN[ ,FRC]!
```

[.35121] Switch MMFG To Service

```
SW::UNIT [q]q,MMFG c,TOSRVC!
```

[.51111] Alarm Cutoff

```
UTL::ACO!
```

[.55701] Backup Memory Transfer

UTL::BMTR, FROM <from>, TO <to>[, {EXCT|INCL}]!

[.58001] Utility Boot

UTL::BOOT, FRAME[, CLR]!

[.51021] Set Date

UTL::DATE <new-date>[, FORMAT ggg][, INT ii]!

[.51011] Set DACS II System Clock or Daily  
Facility Alarm Reporting Time

UTL::[TOD hrmnsc][, {CFA|FAC X'abcdef|PRIM X'ghij|MONDAT}]!

[.55731] Upgrade Frame

UTL::UPGRD!



---

## Denial Codes

# 14

---

**cc**    *Explanation*

- 00    No conditions
- 01    Assignment of single priority to multiple SSPs  
Backup required before executing this command  
Invalid range for specified NPC type  
No FADs were activated by link n  
No test ports were activated by link n  
Subject entity is equipped
- 02    Invalid NPC type for AIS insertion  
Manual Pending is Active  
One or more FADs could not be released  
One or more test ports could not be released  
Subject entity is not equipped
- 03    DS3U NPC already In-Service  
No RDC or CUS circuits and INCL keyword used  
Subject entity is in service  
This NPC type does not allow unframed Clear-DS1
- 04    MONDAT keyword is invalid for this feature  
No NPC's out of service and OOS keyword used  
Subject entity is out of service  
This NPC type does not allow Payload
- 05    Invalid parameter combination  
Invalid use of CONV keyword

**cc** *Explanation*

- Subject entity is pested
- This NPC type does not allow unframed Clear-DS1
- 06** Device failed to format
  - Invalid range for specified FROM NPC type
  - Mismatch between MXR and MIU HDW types
- 07** Device failed to initialize
  - Invalid range for specified TO NPC type
  - Mismatch between MXR and NPC types
- 08** Cannot remove own link
  - Invalid FROM NPC type for AIS insertion
  - Mismatch between service MXR and protection MXR types
- 09** Invalid TO NPC type for AIS insertion
  - Last link in service
  - Wrong MXR type grown for this MIU
- 0A** All CBTYPE NPCs out of service or failed
  - DGN on subject entity failed
  - Minor Slip threshold disabled before Major Slip threshold
- 0B** Another signal already active prevents this signal from being sent
  - BOOT on subject entity failed
  - Invalid CEPT NPC
- 0C** DGN on subject entity denied
  - PM scheduling report is already inhibited for this entity
  - The MONDAT and MONTIM parameters can not both be specified
- 0D** PM scheduling report is already allowed for this entity
  - Unpestering error registers for subj. entity failed
- 0E** No equalization for CEPT FTMI
  - Only one parameter is allowed
  - The specified parameter is not applicable to operation mode of the RT
- 0F** Frame time is not set
  - Side specified for non-duplicated NPC
- 10** NPC out of service or failed
  - RT's alarm exists
  - Unit is not equipped
- 11** NPC not equipped
  - PMEM type no longer supported

**cc** *Explanation*

- UC is out of service
- 12** Active CCN side not IS or failed or pested or hardware OOS  
First and Last NPCs are outside unit boundary  
UC is in service but failed
- 13** FTMI is not equipped  
First and Last NPCs are outside a module boundary  
UNIT not equipped, not in service, or failed
- 14** 1 hr  $\geq$  24 hr for DM opt  
CCB not eqd, not IS, or failed or inactive side CCB not eqd or not IS  
FTMI is out of service  
OFFSET range is invalid
- 15** 15 min  $\geq$  24 hr for SERS opt  
FTMI not equipped, not in service, or failed  
NPC is unequipped
- 16** 15 min  $\geq$  24 hr for ERS opt  
FC not eqd, not IS, or failed or inactive side FC not eqd or not IS  
FC not eqd, not IS, or failed or inactive side FC not eqd or not IS  
Only up to 4 historical data registers are allowed  
SYNC TB is not equipped
- 17** 15 min  $\geq$  24 hr for US opt  
Command did not execute for any entity specified in the command  
SYNC is out of service  
TSI not eqd, not IS, or failed or inactive side TSI not eqd or not IS
- 18** 15 min  $\geq$  24 hr for SLIP opt  
CCNI is out of service  
DSPI not equipped, not in service, or failed  
DSPI not in service or failed  
Exceeded limit of reports with accum. interval of 15 min. or less
- 19** Exceeded maximum limit of PM reports  
Mate CCN side is out of service  
Test ports must be on CAS
- 1A** Mate SYNC is out of service  
Report already exists  
Required FLI not equipped, not in service, or failed  
The facility parameter not programmable for specified x or z parameter

<b>cc</b>	<i>Explanation</i>
<b>1B</b>	CCN side s is in service Historical data can not be specified Required MXR not equipped, not in service, or failed Two digroups from same bank added to different FTMI's
<b>1C</b>	CCN side s is out of service Reqd FMT not eqd, not IS, or failed, or inact side FMT not eqd, or not IS
<b>1D</b>	Level field is not allowed Required MIU not equipped, not in service, or failed
<b>1E</b>	Customer control or red circuit exists Monitored Date field is not allowed Monitored Date field is not allowed
<b>1F</b>	FTMI is in service but failed Scheduled reporting for this npc is inhibited
<b>20</b>	Line format types are incompatible Only DAILY for accumulation interval is allowed Only DAILY for accumulation interval is allowed Option rr/m has not been set up on 2nd database Software Identification Block is not readable
<b>21</b>	Minor >= major for SLIP opt Only 15MIN for accumulation interval is allowed Only 15MIN for accumulation interval is allowed Software Identification Block failed comparison Trunk conditioning is invalid
<b>22</b>	FMC cannot be cross-connected in this format FTMI is PESTED Minor <= major for BER opt Release number mismatch
<b>23</b>	Minor >= major for COFA opt No PM data available No PM data available Point number mismatch
<b>24</b>	Monitored Time field is not allowed Monitored Time field is not allowed PDI Version number mismatch Unit type error

**cc** *Explanation*

- 25** Accumulation Interval field is missing  
FTMI type error  
Invalid FPI value
- 26** Feature deactivation would leave system with core software  
NPC type error
- 27** Disable not allowed - supports another feature  
Illegal connectivity specified  
Only historical data can be specified
- 28** Connectivity contains unequipped units  
Feature is active  
Scheduling report could not be found
- 29** Feature not enabled  
IW is UMUX (18) but NPC not type DE4yz  
This signal is already being sent
- 2A** DMI combined with T1DM  
Database not loaded  
Deny Clear-2MB for Alternate Maps  
Incorrect pack type in slot
- 2B** Bit c not settable  
Database corrupt  
Maj|Min BER threshold is 7, but not in T1DM or Fe mode  
Reading Feature Package Id from PMEM failed
- 2C** Write to CPR failed  
Writing Feature Package Id to PMEM failed  
not allowed for clear 2MB
- 2D** RTF keyword is used without DGA  
TS0 is crossconnected to TS0
- 2E** RTF keyword and the operation mode does not match  
bit value not allowed for NPC type
- 2F** Channels assigned, cannot be grown as test port  
TS0 connected to nonTS0 in Mode 2 - "a" should be "-" or equal to "b"  
The RT id entered is not a retrofit one
- 30** NPC not provisioned for CAS  
No signals active  
Termination is already assigned

**cc** *Explanation*

- Unit is not FTU type
- 31 Accumulation Interval field is not allowed  
Failed to switch SYNC side  
NPC not provisioned for NSA
- 32 Bit 3 provisioned for use as RAI3  
Termination is under test  
Threshold value is out of range
- 33 Bit 4 provisioned for use as RAIS  
NPC not DA or TA type.  
Termination is a test port  
Wrong TLI type
- 34 NPC type option xyz is unassigned  
NPC type option xyz is unassigned or invalid for feature package  
Termination is under customer control (CUS)
- 35 Invalid use of INCL keyword  
NPC has active circuit  
Termination is protected (RDC)  
The mate FLI is OOS and Protection MIU is equipped
- 36 DSPI not equipped  
INCL keyword needed when restricted Insertion Word specified  
TD on one(both) sync(s) is not equipped or not in-service  
Termination is not connected as indicated  
The mate FLI is OOS and Protection MXR is IS
- 37 DSPI out-of-service  
Major/Minor BER threshold value is invalid for SLC NPCs  
Selected FLI has LOC with at least one inservice MXR  
The mate FLI is OOS and at least one Service MXR is equipped  
Two confs. were prev. connected or the concat. cause BRD-BBL loop
- 38 Deny SP Type NPCs for Alternate Maps  
FC not equipped  
The selected FLI is IS and Pested and at least 1 Service MXR is eqd  
Unselected FLI has LOS with at least one inservice MXR
- 39 An autonomous switch is in progress  
MXR LOS with unselected FLI  
Not enough TSIs for CCB test

<i>cc</i>	<i>Explanation</i>
	Signaling state of the trunk failed for the channel
<b>3A</b>	Bit 4 provisioned for use as RBER Invalid FPI value Invalid poll time No unmapped slots on a bus
<b>3B</b>	Bit 5 provisioned for use as SFI Not valid for frame administrator Unspecified L2 address
<b>3C</b>	Bits 3 through 8 are provisioned for Transmic 1G Duplicate L2 address TS0 specified with width not 1
<b>3D</b>	Alarm bits cannot be passed through or inverted Illegal test access mode for TS0 No mapped slots on a tsi
<b>3E</b>	DSPI failed Mapped slots exist on a tsi TS16 specified for test with width not 1
<b>3F</b>	Conference exists in a DMB G4 to G4.1 retrofit failed Illegal test access mode for TS16
<b>40</b>	CCN denied request FC out of service Not enough DSPPs are equipped Only one channel allowed to have this language Signaling processing is not activated for the channel The service FLI is out of service or pested (TOSRVC option)
<b>41</b>	Failed to boot subject CCN side Language "F" provisioned for this channel Not enough DSPPs are in service The protection FLI is out of service or pested (TOPRTN option)
<b>42</b>	Change not valid DSPP not in service, or failed RST failed to boot program The service FLI is already selected (TOSRVC option)
<b>43</b>	(NPC) Hardware mismatch

- cc**    *Explanation*
- RST failed to boot DB  
The protection FLI is already selected (TOPRTN option)  
Trying to change in NTR direction
- 44**    Invalid direction specified for NTST TLA/TLR  
NPC not IU/TI type  
Service MXR is not equipped
- 45**    A DMB on the UNIT is OOS  
IU/TI type NPC failed  
NPC not provisioned as DGA  
Service MXR is out of service
- 46**    Failed to boot CONF file  
NPC Failed or Out of Service  
Service MIU is out of service  
virtual SLC NPC not provisioned
- 47**    Failed to boot DB  
IU/TI type NPC  
Invalid channel number  
Protection MXR is out of service
- 48**    Bad PRIM X'efgh values  
Failed to boot journal--recurrence indicates database corruption  
Invalid SLC Mode-III channel number  
Protection MIU is not equipped
- 49**    FAC keyword is invalid for this feature  
Failed to boot unit  
Protection MIU is out of service  
test group unequipped
- 4A**    PRIM keyword is invalid for this feature  
Red circuit, INCL not entered  
SMEM error, boot from PMEM  
The protection MMFG is serving another facility  
channel part of a TP or TG
- 4B**    Customer controlled circuit, INCL not entered  
PMEM error, boot from SMEM  
The Service MMFG is already under protection  
The common bit(s) is(are) not set in both FAC & PRIM

**cc** *Explanation*

- channel already under test
- 4C** BCON BBL has one or more legs under test  
Both FAC and PRIM values(keywords) are required  
Failed to boot CI  
The Service MMFG is not under protection
- 4D** DSPI is in service  
Gateway test access not supported  
MP database not consistent with Configuration file  
The switch is allowed (not inhibited)
- 4E** IW option is not allowed for new type of Clear-DS1 NPC  
RTBC conference exists  
The switch is already inhibited
- 4F** BER must not be less than 4 for Clear DS1  
NPC is not part of a one-way connection  
inconsistent BCON width for test access
- 50** CPR in buffer overflow condition  
Can't run test on active side  
Invalid MIU/MXR type specified  
Trunk conditioning doesn't match that of conference  
invalid channel designation for BCON
- 51** C-bit modify function is disabled  
CUS flag doesn't match that of conference  
General boot failure (vanilla flavor)  
TG width incompatible with circuit  
The pair MXR is not equipped
- 52** CPR is not equipped  
Database is empty  
FDL selected with width not 1  
RDC flag doesn't match that of conference  
The MMFG is protected
- 53** CPR is out of service  
Database is not empty  
TO side of two-way to be converted is not an FTU NPC  
The associated MMFG is under protection (for Service MIUs)  
inconsistent HUB width for specified TG

- cc**    *Explanation*
- 54**    Conversion leg is terminated  
Cross-connect to CPR is required  
The MIU is already equipped  
invalid mode for TLA/TLR
- 55**    Invalid CFT code  
Some associated NPCs are equipped  
Width of existing two way does not match conference width  
circuit already terminated
- 56**    FROM is a two-way and no CONV specified  
The MXR is in service  
Unrunnable CFT code  
circuit not terminated
- 57**    Designated TG or circuit to be tested in process of being rolled  
FROM is not a backbone leg  
SIDE must be specified for substrate NPC
- 58**    DSPU is not equipped  
NPC is OOS for a TGR command and OOS keyword not specified  
SLC 96 MD 1 RT DGP requires mate NPC to be unequipped  
Specified width does not match existing conference width
- 59**    DSPU unit controller is out of service  
Invalid TC specification  
NTR invalid since existing conference is not already NTR  
Number of DGPs on each unit is limited to 32
- 5A**    DSPU unit controller is failed  
LPD invalid since existing conference is not already LPD  
NPC not in service or failed
- 5B**    C-bit modify function is active  
TO is not a leg of this/any conference  
channel is OCON in opposite direction
- 5C**    Can't disconnect return leg unless entire conference disconnected  
Inconsistent or invalid circuit type for Nx64Kbit TA  
NPC providing timing to inservice SSP
- 5D**    Inconsistent Signaling on CEPT NPCTGs  
Sync source NPC is not inservice  
TO is the backbone leg of a conference

- cc**    *Explanation*
- 5E**    Sync source NPC is not equipped  
TO is a part of the same conference as a previous TO  
invalid test access mode
- 5F**    Conference is NTR: has no switchable return leg  
input channel out of range (SLC not supported)
- 60**    Conference is LPD: has no switchable return leg  
Selectable AIS not valid for specified NPC(s) type  
User macro/map space is full  
circuit contains mapped channels for HUB request
- 61**    All NPC(s) are either not valid or not grown  
System macro/map space is full  
TO is already the return leg  
not all FROM channels on same NPC
- 62**    File is being accessed  
IU type NPC(s) cannot be provisioned for Minor Alarm  
Invalid channel number  
NPC type mismatch  
None of the designated NPCTG(s) are equipped
- 63**    File already exists  
NPC is a DGP  
NPC is a channelized NPC  
None of the designated TG(s) are equipped
- 64**    File doesn't exist/can't be accessed  
Frame is not in MCOND  
NPC is a non-channelized NPC  
NPC is already grown and added as SLC digroup  
TG width too large for single NPCTG
- 65**    Another NPC is grown and added as this digroup  
Command invalid while backup in progress  
Ending channel is out of range  
Link being used is not Link 1
- 66**    DGP designated to bank without data link  
Map/macro file write deferred until backup is completed  
TG number previously assigned  
User login-id is not DAX

<i>cc</i>	<i>Explanation</i>
67	DGA is not added Improper roll command sequence NPC(s) actual type incompatible with TYPE keyword and/or alarm type User logged off during session
68	Incorrect language/addressing mode NDL option is used without DGA NEW NPC already cross-connect or mapped channel(s) on new
69	Incorrect number of parameters Mapped parity channel(s) on new Use of this NPC is RESERVED for SLC 96 MD 1
6A	NPC type is not DS type New in CGA or PBA No macro is currently executing
6B	Invalid line number No mapped channel on old Operation mode and digroup name don't match
6C	File is empty Framing format, digroup name & operational mode don't match Old and new chan on same NPC and within the range
6D	Counting sequence and operational mode don't match One NPC is a non-channelized type and the other is not
6E	DGA with NDL option is not provisioned with D4 or ESF framing format No edit session active Old or new is a non-channelized type in a DS0 command
6F	Adding two digroups from one bank on same DDC The OLD or NEW NPC is already being rolled. The session is terminated due to maintenance operation
70	Digroups from same bank have different modes NPC invalid type One of the FAR end channels is being rolled Some circuits not activated,cleared or pictured Try to add a BBL to VC,but the VC already has backbone
71	Digroups from same bank have different counting sequence NPC is a Facility Access Digroup The reference map does not exist

**cc** *Explanation*

- Try to delete a BBL leg from VC; however, VC has no BBL leg  
Unmapped channel(s) on old
- 72 Digroups from same bank are added to two different FTUs  
Invalid test mode for an unmapped test session  
One of the far NPC(s) is SLC  
The NPC of VC BBL leg doesn't match that in the input command  
The map is not valid
- 73 Both sides of CCN are OOS  
Channel has a FAR, which is within the range  
Invalid PWR/MISC alarm level  
Invalid test mode for a one-way test session  
The first channel of VC BBL leg doesn't match that in the input command
- 74 At least one UC is OOS or At least one UC is failed  
Old and new are the same NPC in a DS1 command  
PWR/MISC alarm is specified to a digroup other than DGA  
Try to delete a BRD leg from VC; however, VC has no BRD leg
- 75 At least one UC is not the correct type  
Old and new channels have not been paired by a BCAST command.  
Test session already exists  
The input BRD leg is not in VC
- 76 AIS not entered for SPLTE/SPLTF/SPLTEF/LOOPE/LOOPF  
Alarm option and bank mode don't match  
Channel or NPC not bridged  
The first channel of VC BRD leg doesn't match that in the input command
- 77 Obsolete circuit type  
Tried to disconnect a nonexisting VC  
Unassigned operational mode
- 78 Protection switch process failed  
Ranges of old and new do not match  
Try to operate a ONE-WAY conference with a TWO-WAY input command
- 79 DCTN conference channel cannot be rolled  
DGA/DGP of RT/DL Mode I must be assigned to one DDC  
NPC is not a Facility Access Digroup  
Try to operate a TWO-WAY conference with an ONE-WAY input command
- 7A Mode I RT/DL IDs don't match for DGA/DGP on same DDC

**cc** *Explanation*

- NPC is not an E-end  
 Testport/testgroup channel cannot be rolled  
 The NPC to delete has not been previously added to map
- 7B** Channel out of bound in a BCON/v.c  
 Invalid change from previous mode  
 Other NPC on this DDC not the same digroup for Mode I DGA/DGP
- 7C** Different DSxyz types are used for DGA/DGP on same DDC for Mode I  
 Logical conflicts found in the map  
 NPC is not a F-end  
 Parity channel out of bound on new
- 7D** Can't start new session - previous session still verifying  
 Not first channel in a BCON/virtual conf  
 The NDL options are different for DGA's on the same DDC for Mode I
- 7E** Bank id number not found  
 Framed/Unframed clear 2Mbit/s NPC invalid for Automatic CRC-4  
 Insufficient data for setting up a conference
- 7F** NPC is not added  
 No OOS keyword is given for out-of-service NPC  
 Unframed clear 2Mbit/s NPC invalid for TS0 processing
- 80** Database conference width does not match the range in input command  
 Framed/Unframed clear 2Mbit/s NPC invalid for Transmic 1G, 2G  
 Inconsistent channel range width  
 NPC number and bank id don't match  
 Some TSIs to degrow are in service
- 81** Conference Port is currently registered to a different channel  
 Frame ID is protected  
 Framed/Unframed clear 2Mbit/s NPC invalid for Firmware Timing  
 Invalid input BBL as fmd in ONE-WAY command  
 NPC number and digroup name don't match
- 82** Can not use 12-th TP when NPCTP is in the T1DM or DMI mode  
 DL ffff is used w/ operational mode other than Mode I  
 Invalid input BRD as tmd in ONE-WAY command  
 Unframed clear 2Mbit/s NPC invalid for Bit 4 used as RA IS/RBER
- 83** Attention: preceding ccode 83 is an anomaly - see problem list  
 Conference Port is already registered to the same group of channels

**cc** *Explanation*

- Invalid input BBL in terminated TWOWAY/ONEWAY command
- Language is not allowed
- NPC type is inconsistent with FTMI type
- Option not programmable for this NPC type
- 84** Channel(s) is already registered
- Incompatible types of NPCs in a DDC
- Mate NPC is not equipped
- NPC is non-channelized
- Problem occurred while accessing SMEM or unformatted SMEM
- Trying to add or delete a leg when a conference is under test
- 85** IW not allowed to be specified in Clear 2Mbit/s
- Input BRD (BBL) has same NPC and channel as BBL (BRD)
- NPC has been designated as NPCTP
- New bank id is an assigned one
- Problem occurred while accessing PMEM
- Using the 24th channel of a T1DM NPC
- 86** Attempt to remove DGA w/o INCL keyword or prior prot. sw. request
- NPC is NPCTG and chan 24 is used in a TG;Can't change to T1DM or DMI
- NPC number out of range
- Source does not contain requested information
- Using the 24th channel of a DMI NPC
- 87** Copy source NPC is not equipped
- DGP is protecting a primary digroup
- NPC as 12th test port can not change to DMI nor T1DM
- Old\_tape is a special install tape
- 88** Conference port is not registered
- NPC is not a NPCTP
- Report interval is not an integral number of accumulation interval
- SMEM is a normal SMEM
- 89** Can't delete because not all associated NPCs of the RT are entered
- Conference port is currently connected
- Interval is not valid/not available
- Interval is not valid/not available
- NPC is not designated for this NPCTP/NPCTG
- Problem occurred while accessing BOTH\_MEM

- cc**    *Explanation*
- 8A**    Mismatch between channel 0 crossconnect and keywords  
 NPCTP is not grown  
 x & z parameters on DSxyz are inconsistent
- 8B**    Channels and conference port do not match  
 Digroup name and bank id don't match  
 PMEM not in service or not ready  
 Test port is not idle or frame is not inservice
- 8C**    DB MP or units ram error  
 Digroup is protected  
 The two FADS entered are not associated with one another.
- 8D**    Clear gateway test access disallowed.  
 DB PMEM error OP-CL-RD-WR-SK  
 RT/DL has unrestored DGA
- 8E**    Attempt to add to a null transmitting port  
 DB can't send or receive mail  
 DGA protected; use INCL to remove, or unswitch protection  
 No mapped circuit under test; emode/fmode can't be changed.
- 8F**    Can't lock or unlock ram database  
 NPC not deleted  
 Number of transmitting ports does not match existing conference  
 One-way circuit under test; emode can't be changed.
- 90**    Can't mount or unmount BOTH\_MEM  
 DB can't get the slave mail box  
 Invalid change parameter combinations  
 NDL option is specified for DGA  
 The total number of receiving ports specified exceeds the max.  
 emode/fmode can't be changed under current test mode.
- 91**    Can't mount or unmount SMEM  
 Can't mount or unmount password recovery card  
 Duplicate ports specified  
 Option not programmable for this NPC type  
 SR NPC was specified - not allowed  
 Sync is not configured yet
- 92**    Boot TLI failed  
 Can't mount or unmount PMEM

**cc** *Explanation*

- Transmitting port cannot be dropped
- 93** All digroups not out of service
  - PA NPC threshold already in inhibit mode
  - SMEM is not present
  - TB type in hardware mismatches DB
  - The conference does not exist
- 94** Conference port is not in conference circuit
  - Mate RT/DL mode is different
  - PA NPC threshold already in allow mode
  - SMEM unit is not restored
- 95** Invalid option, mailbox or flag
  - Range overlapping between FROM and TO or between two TOs
  - TG East/West type inconsistent with each other or circuit
- 96** Conference already exists
  - Subject PWR to be cleared is not failed
  - Unit(s) OOS, and additional backup required
  - incompatible HUB feature types
- 97** Conference port cannot be dropped out of conference by switch command
  - Entity can't be addressed in this configuration
  - User quit the menu
  - option LOCAL already exists
- 98** Checksums verification failed
  - Error in input
  - Test Port release failed
  - Unable to verify Configuration file since MP DB not loaded
  - option REMOTE already exists
- 99** G1 SMEM for SMEM->PMEM w/journals
  - No Facility Line Interface (FLI) is In Service
  - Unit type (xyz) not supported
  - can't change option, protection switch is active
- 9A** Formatter (FMT) on active CCN side is Out-Of-Service
  - can't change option, inhibition is active
  - hub id not set when MJU pack grown
- 9B** INCL must be specified for SRDC ckts
  - Termination is under test or is a test port or group

**cc** *Explanation*

- The MXR is not grown
- 9C** Parity channel cannot be within the range of a DS0 command.  
SRDC timeslots are allocated on this NPC  
The MMFG is already In-Service
- 9D** Attempt to remove a Service MIU which is under protection  
NPC containing channel 000 is invalid type.  
current hub id specified in command
- 9E** MONDAT set to ALL is not allowed
- 9F** MONTIM set to ALL is not allowed  
current error corrector pack type specified in command
- A0** Illegal LEG LEG combination  
No SAFE alarm for DGP  
Not a CRO TLI  
TS16 specified for CAS TG  
The selected MXR associated with the NPC is Out-Of-Service
- A1** CRO type TLI (SSP portion not required)  
Illegal BBL BBL combination  
Loop back inhibited for digroup  
NPC has been designated as NPCTG  
The parameter specified does not match with the NPC type  
The selected MXR associated with the NPC is In-Service but failed
- A2** All channels assigned, cannot be grown as NPCTG  
Illegal BRD BRD combination  
SSP number is illegal  
The requested digroup is carrying service  
The selected MIU associated with the NPC is Out-Of-Service
- A3** Channels assigned, cannot be grown as test group  
Illegal SYM BRD combination  
LLB not initiated  
SSP number required  
The selected MIU associated with the NPC is In-Service but failed  
Transmic 1G NPC designated as SYNC source invalid
- A4** Both syncs are in-service  
Firmware timing invalid for Transmic 1G NPC  
Illegal BRD SYM combination

**cc** *Explanation*

- NPC is not a NPCTG  
The MXR diagnostics failed
- A5** (Timing Distributor) TLI is not equipped  
AIS keyword incompatible with NPC type  
Autonomous loopback is active on DGA  
FPI on SMEM does not match one on PMEM  
Illegal BBL SYM combination  
Test group is not idle or frame is not In Service
- A6** Deny SLC for Alternate maps  
Illegal SYM BBL combination  
Invalid switch request for DCLU  
Test group release failed  
The MIU diagnostics failed
- A7** Deny non-channelized NPCs for Alternate Maps  
LEG mode was assigned to a DSPU-type NPC on the input  
NPC has been designated as NPCTP  
Sync 0 is not in-service  
The MIU boot failed
- A8** A DMB mode was assigned to a FTU-type NPC on the input  
NPCTG not grown  
Sync 1 is not in-service  
The MMFG is Out Of Service
- A9** Both syncs are out-of-service  
Circuits TCONed itself cannot be UTST  
Cross-connect not consistent with feature package  
INCL not specified and at least one NPC In Service  
No unmapped time slot  
Trying to add a BBL to a DMB conference that already has one
- AA** DSPP pack UC Failed or Out of Service  
NPC is NPCTG, changing to CAS/NSA is not allowed  
Range entered without FRC keyword  
Syncs are equipped  
Trying to add a broadcast leg to a conference set up as SYM
- AB** Bad sync mode  
DSPP pack FTMI Failed or Out of Service

**cc** *Explanation*

- FRC specified for protection, and service MMFG is In Service  
Trying to add a SYM leg to conference set up as broadcast
- AC** DSPP pack NPC Failed or Out of Service  
No protection is available for the Service MMFG  
Timing Extractor type TLI (need SSP info)  
Trying to add a BBL leg to a conference set up as SYM
- AD** Not Timing Extractor type TLI (not SSP)  
The Protection MMFG is selected, and auto. switchback is unavailable
- AE** A substrate circuit pack is specified in the command line  
MXR is failed  
NPC used as a timing reference  
Wrong TLI type (need CRO grow command)
- AF** 3 Timing Distributor type TLIs are equipped  
Delete or change a leg from a conference that has no leg  
MIU is failed  
Number of SLC RT's on each unit is limited to 80
- B0** Bad use of INCL, cannot override the current state of the conference  
Combination of bit g (b7) and h (b8) is invalid  
FLI is out of service  
Unit 1 denied request
- B1** Bad use of INCL, cannot use keyword on conf.-to-conf. connection  
FMT is out of service  
Illegal priority value  
Unit 2 denied request
- B2** Illegal SSP type (not same as other SSPs)  
MXR is out of service  
Transmission parameters in command will not change existing settings  
Unit 3 denied request
- B3** MIU is already in service  
Trying to change level out on BRD leg  
Unit 4 denied request  
X option is illegal
- B4** NPC is channelized type  
Trying to change level in on BBL leg  
Unit 5 denied request

**cc** *Explanation*

- Y option is illegal
- B5** CPR circuit pack specified in the command  
NPC is a test port  
Unit 6 denied request  
Z option is illegal
- B6** C-bit operations are enabled  
Sync architecture is same  
TO side is not a DMB type NPC  
The MXR boot failed
- B7** Cannot perform DMB CHG on input direction F  
No DSP unit equipped  
Some TLIs are still equipped  
The associated MXR is In-Service but pested
- B8** CRO is still equipped  
Cannot perform DMB CHG on input direction T  
No CBTYP NPC equipped
- B9** Cannot perform DMB CHG on input direction B  
No CBTYP NPC capacity remaining  
Timing Extractor type TLIs are present
- BA** Inactive side NPC out of service and inactive side in service  
TLI 3 or 4 still equipped
- BB** Timeslot channel numbering not allowed with CAS
- BC** DGA and DGB must be specified together in the command  
SSP with 0 priority present
- BD** DGC and DGD must be specified together in the command  
Looped Circuit Access not allowed  
SSP with non 0 priority present
- BE** Hardware mismatch or not present  
NPC type option Y is invalid for SLC-96 NPC
- BF** MIU is not equipped  
Sync mode is same
- C0** Cannot perform DMB CHG on input direction L  
NPC addressing scheme selected is not allowed in the configuration file  
Sync stratum is same
- C1** Cannot perform DMB CHG on input direction G

**cc** *Explanation*

- Stratum not allowed
- c2** Cannot perform DMB CHG on input direction A  
ETSI cannot be initialized when ECCN side is OOS or inservice but pested  
SSP type(options) same
- c3** Can't perform DMB CHG because NTR flag set on FROM side  
Wrong SSP type(Timing Extractor type)  
XMIT continuity test won't be run: CFT code specified
- c4** Can't perform DMB CHG because NTR flag set on TO side  
Sync architecture different  
XMIT continuity test won't be run: no XMIT timeslots available
- c5** Option NOT leg can not appear with F, T, or B  
RCV continuity test won't be run: no available inservice NPCS for FC/FMT  
Some priority values required
- c6** No available timeslots on any of the inservice NPCS associated with FC/FMT  
Option NOT leg is not a FTU leg  
Some priority values not required
- c7** Option NOT leg is not in conference  
Priority values are same  
RCV continuity test won't be run: no DMB timeslots available
- c8** Exceeded depth limit of 6 on broadcast conference concatenation  
RCV continuity test won't be run: at least one timeslot in use  
Sync pack denied command
- c9** CATP due to skipping continuity test for FMT  
In-service NPC change not allowed  
Syncs failed to cross couple  
The INCL keyword is needed for DGA
- CA** Connectivity can not be specified for CEF unit  
Mate sync pack denied command  
New NPC same as existing one  
No protection switch is currently active
- CB** NPC parameter only valid with TU type TLI  
Protection entity out of service or failed  
Skip error summary since adjacent pack not in service or pested  
Sync not completely reset
- CC** NPC is still provisioned to provide sync timing

**cc** *Explanation*

- Protection entity is unequipped
- RCV continuity test won't be run: SYNC OOS or pested
- CD** Data link failed
  - NPC not designated as sync timing source
  - Subject NPC does not support CEPT BER feature
- CE** CCI is out of service
  - Far end failed to respond
  - NPC already allocated as sync timing source
- CF** MIU is out of service
  - NPC already grown as non-synchronization source
  - SYNC is inservice but failed
- D0** Command is Frame administrator (DAX) only.  
FROM NPC is not provisioned as DGA
- D1** CCI is not present
  - Cannot create any more users
  - Protection switch existing is autonomous
  - TO NPC is not provisioned as DGA
- D2** ETSI is not present
  - Protection switching is already inhibited
  - User has been created
- D3** CCNI is inservice but failed
  - Corresponding NPC for FROM virtual channel is not provisioned
  - Protection switching is already allowed
  - User does not exist
- D4** A user is already logged in on the link/vc
  - Active CCN side is out of service
  - CCI is inservice but failed
  - Corresponding NPC for TO virtual channel is not provisioned
- D5** Boot in progress, can't service request
  - CCB is not equipped
  - No user is logged in on the link/vc
- D6** CCB is out of service
  - Incorrect or missing password
  - Invalid FROM channel number
- D7** CCB is inservice but failed

<b>cc</b>	<i>Explanation</i>
	Cannot execute privileged command Invalid TO channel number
<b>D8</b>	Cannot remove Frame administrator ETSI is not equipped
<b>D9</b>	ETSI is out of service Invalid FROM channel number range User has logged in somewhere
<b>DA</b>	ETSI is inservice but failed Invalid TO channel number range User is not logged in
<b>DB</b>	FC is inservice but failed User still owns files
<b>DC</b>	A loopback is active on the FROM termination No zeros allowed for DAX privilege
<b>DD</b>	A loopback is active on the TO termination FMT is in service but failed Password recovery card is not READ-only
<b>DF</b>	Command and protocol are inconsistent FLI is inservice but failed Unmatched channel range
<b>E0</b>	Bad FAC value entered ETSI not equipped, not in service, or failed Hardware database mismatch Unmatched channel range involving SLC Mode III termination
<b>E1</b>	A locally switched channel is specified as BBL, LEG, or BRD No Memory Backup Has Been Scheduled Virtual circuit is not specified for X.25 link
<b>E2</b>	Attempt to one way cross-connect a locally switched channel Invalid link number specified
<b>E3</b>	Attempt to broadcast a locally switched channel Can't Use LCN 0/LGN 0 - designated as a supervisory channel only Invalid keyword(s) combination specified One way unassigned channel/NPC in QRY,TO
<b>E4</b>	Broadcast unassigned channel/NPC in QRY,TO Invalid NPC addressing scheme specified

**cc** *Explanation*

- NPC already has Equipment Loopback  
RT-DCLU cross-connect with different ids
- E5** Adding DL DGP forbidden for SLC 96 MD 1  
Invalid combination of "x" and "z" values  
No user/link needs to be changed  
RT-DCLU cross-connect with different channel number
- E6** Cross-connect a non Mode I channel to DCLU  
DB SMEM error OP-CL-RD-WR-SK  
No DL digroups can be added until the associated RT bank is created
- E7** Cross-connect a non SLC channel to DCLU  
Invalid combination of "x" and "y" values  
PMEM not restored
- E8** Other FLI is OOS  
SC invalid for cross-connection specified
- E9** MUX or TRB invalid for cross-connection specified  
There are no INS MXRs to run test on
- EA** AIS invalid for cross-connection specified  
XON/XOFF flow control is supported only on Snider link
- EB** ENQ/ACK flow control is supported only on Snider link  
NAM invalid for cross-connection specified
- EC** Invalid channel 000 cross-connection specified
- ED** Invalid channel 031 cross-connection specified  
OLD termination is not mapped
- EE** Trunk type is not allowed in the circuit specified
- EF** Invalid circuit type  
SSC circuit pack is still equipped; pull-out/remove SSC  
Software does not contain Enhanced CEPT feature
- F0** Clock absent for XPC to loop back  
Range not allowed for circuit type  
SSC Diagnostic Failure
- F1** File has already been cleared  
PMEM and SMEM synchronization fail  
Parameter only valid with PA, PB, or PC type NPCs
- F2** Invalid NPC number specified  
Not a DACS II compatible Flash Card

<b>cc</b>	<i>Explanation</i>
<b>F3</b>	Flash Card is empty Maximum number of CPRs have already been grown for this unit
<b>F4</b>	OLD and NEW channels cannot be the same PMEM and SMEM are different
<b>F5</b>	Conference first channel doesn't match input Flash Card is not present INCL keyword needed to perform this command
<b>F6</b>	Flash Card is bad Leg type mismatch T1DM or DMI mode and channel 24 is connected
<b>F7</b>	Can't mount or unmount old_tape Corresponding NPC for virtual channel is not provisioned OLD data channel cannot be parity channel type
<b>F8</b>	OLD and NEW Data and Parity channels partially overlap Old_tape is not present
<b>F9</b>	Cannot clear journals for OOS unit Mate NPC (DGA/DGP) is in service Old_tape unit is not restored
<b>FA</b>	Bad old_tape DB generic SSC software out of date The mode of the RT is not applicable
<b>FB</b>	Old_tape with journal PMEM verification failed
<b>FC</b>	Invalid executable on card Superuser logged on ZBTSL option is only valid with the ESF mode
<b>FD</b>	Command not allowed Line Loop Back is active NPC range crosses unit boundary Problem occurred while accessing old_tape

**cc** *Explanation*

- FE** AIS entered for MONE/MONF/MONEF/SPLTA/SPLTB/SPLTAB  
Change to non-ESF digroup with 16-state cross-connect  
Fail transfer DB from old\_tape to SMEM
- FF** Change to T1DM digroup with cross-connect that is not TRSP  
DB retrofit fail  
Termination is in process of being rolled

**cccc** *Explanation*

- 0000 No conditions
- 0001 CEC bit on PRISM not cleared
- 0002 Firmware error
- 0003 Transmit underrun threshold exceeded
- 0004 Bad EMXR Acknowledgement
- 0005 Timeout while waiting for msg from EMXR
- 0006 RAM data error
- 0007 Invalid code checksum
- 0008 Error in PRISM register
- 0009 Error in HSCC register
- 000A EPROM checksum error
- 000B Timer 1 error
- 000C Timer 2 error
- 000D DUART error
- 000E MIU access error
- 000F CPU internal bus error
- 0010 CPU parallel bus parity error
- 0011 CPU serial bus parity error
- 0012 FLI register bit stuck
- 0013 FLI lock and key alarm
- 0014 MXR DS3 loss of signal
- 0015 MXR unknown error
- 0020 BX Access Error
- 0021 BX Ram Parity Over Low Byte
- 0022 BX Ram Parity Over High Byte
- 0023 Fan Bank Zero Error Flag

<i>cccc</i>	<i>Explanation</i>
0024	D5 Spare Bit Error
0025	Fan Bank One Error Flag
0026	D7 Spare Bit Error
0027	BX stuck summary bit
0028	Unknown interrupt from BX
0029	Error from side 0 bus extension
002A	Error from side 1 bus extension
002B	Unknown interrupt from MTC
002C	MTC stuck summary bit
002D	Unused bits on MTC pack
002E	Error due to unused bit
002F	Error due unknown reasons
0030	Power Failure
0031	Sanity Time-out
0032	BX stuck CCNI summary bit
0033	FMT TF control bus error
0034	MXR M23 summary stuck error
0035	FMT multiple TF network data error
0036	FMT single TF network data error
0037	FMT TF device or clock receiver error
0038	FMT multiple TF clock error
0039	FMT single TF sync error
003A	FMT multiple TF sync error
003B	FLI access error
003C	FLI communication link error
003D	DPC ROM error
003E	DPC loss of timing
003F	OOS RAM test ran while IS
0040	Bus Error Alarm
0041	CIA Device Error
0042	CIB Device Error
0043	CIC Device Error
0044	Pack can't be accessed
0045	Loss of timing alarm
0046	Chip ID Comparison

<i>cccc</i>	<i>Explanation</i>
0047	Data Strobe Signal
0048	Address Parity Error
0049	FC Stuck Bit on FTMI
004A	DDC Stuck Bit on FTMI
004B	FTMI lost clock
004C	FC can't be accessed
004D	Timer Error
004E	Circuit ID Error
004F	Transmit Formatter Error
0050	Receiver Formatter Error
0051	Sanity Timer Interrupt
0052	RF bus error
0053	NPC bus error
0054	NPC can not be accessed
0055	NPC is alarming on FC
0056	Facility Processor Sanity Error
0057	SYNC Error
0058	Channel controller loss of clock
0059	Channel controller frame sync error
005A	CC configuration register error
005B	CC instruction ram error
005C	CC parity error
005D	CC transmit data error
005E	CC receiver data error
005F	CC exercise error
0060	CC summary bit error
0061	Hard RAM error
0062	Hard ROM check error
0063	Hard Error stuck bit
0064	Transceiver A stuck bit
0065	Transceiver A transmit slip
0066	Transceiver A Error
0067	Transceiver B stuck bit
0068	Transceiver B transmit slip
0069	Transceiver B Error

<i>cccc</i>	<i>Explanation</i>
006A	Circuit ID Error
006B	Facility errors
006C	NPC address parity error
006D	DSPI access error (e.g. pack not there)
006E	DSPI bus data parity error
006F	DSPI bus address parity error
0070	DMB access error (e.g. pack not there )
0071	DMB serial access error (pack not there)
0072	DMB parallel access error
0073	DMB bits stuck in exercise register
0074	DMB data processing error
0075	Multiple data parity error, CCB problem
0076	DMB clock error
0077	Multiple clock errors, CCB/SYNC problem
0078	DMB FIFO error
0079	Possible power failure on side
007A	DMB control memory error 0 (used for trans)
007B	DMB control memory error 1 (used for trans)
007C	Control Memory 0 control ram parity error
007D	Control Memory 1 control ram parity error
007E	Control Memory 0 control interface error
007F	Control Memory 1 control interface error
0080	Control Memory 0 loss of sync error
0081	Control Memory 1 loss of sync error
0082	Control Memory 0 DMB input data parity error
0083	Control Memory 1 DMB input data parity error
0084	DMB conference error 0 ( used for trans)
0085	DMB conference error 1 ( used for trans)
0086	Conference 0 control interface error
0087	Conference 1 control interface error
0088	Conference 0 control ram parity error
0089	Conference 1 control ram parity error
008A	Conference 0 DMB input data parity error
008B	Conference 1 DMB input data parity error
008C	Conference 0 DMB device (chip) error

<i>cccc</i>	<i>Explanation</i>
008D	Conference 1 DMB device (chip) error
008E	Bad Ram Data in DMB device (bits alarms)
008F	Bad Ram Data in DMB device (bits alarms)
0090	CCNI access error (cannot access pack)
0091	High data byte bus parity error
0092	Low data byte bus parity error
0093	Address bus parity error
0094	Autonomous switch enable error
0095	Bus status register parity error
0096	CCNI stuck register bit, summary set, no other alarms
0097	MXR communication link error
0098	CPR serial access error
0099	CPR clock error
009A	CPR processor interface failure
009B	CPR input data interface error
009C	CPR D-Bit interface parity error
009D	CPR control memory failure
009E	CPR control memory or state machine failure
009F	CPR FIFO FRDY/FFULL stuck bit
00A0	CCB packid error, wrong pack, can't read pack
00A1	CCB sync pulse error
00A2	CCB clock error
00A3	CCB input port alarm error
00A4	CCB zero bit is stuck at 1
00A5	Corresponding CCNI bit is stuck
00A6	MXR channel controller transmit data error
00A7	MXR channel controller receiver data error
00A8	MXR channel controller exercise error
00A9	MXR channel controller stuck bit error
00AA	MXR transceiver framer error
00AB	MXR transceiver receive sync error
00AC	MXR transceiver transmitter error
00AD	MXR M23 device error
00AE	MXR M12 device error
00AF	MXR M12 summary stuck error

<i>cccc</i>	<i>Explanation</i>
00B0	Pack id error, can't read pack
00B1	TSI stuck bit, summary bit set, no devices alarming
00B2	TSI device error
00B3	TSI device id error, cannot read device
00B4	Illegal exercise bits set
00B5	Bus address error
00B6	Device clock error
00B7	Device control ram parity error
00B8	Output data parity error (from an FTM)
00B9	Corresponding CCNI bit is stuck
00BA	FLI loss of clock
00BB	FLI loss of signal
00BC	FLI circuit id error
00BD	FLI frame sync or internal error
00BE	FLI address bus parity error
00BF	MJU serial access error
00C0	MJU clock error
00C1	MJU processor interface failure
00C2	MJU input data interface failure
00C3	MJU error correction circuitry failure
00C4	MJU control memory failure
00C5	MJU output block failure
00C6	MJU sampling circuitry failure
00C7	MJU control memory or state machine failure
00C8	SRM serial access error
00C9	SRM clock error
00CA	SRM processor interface failure
00CB	SRM input data interface failure
00CC	SRM error correction block failure
00CD	SRM control memory failure
00CE	SRM multiplexor block failure
00CF	SRM output block failure
00D0	CPU RAM Parity error
00D1	Source of error is unknown
00D2	Source of error was not found

<i>cccc</i>	<i>Explanation</i>
00D3	Stuck bit in register
00D4	Bad UBX pack
00D5	Illegal/unknown condition code
00D6	MIU communication link error
00D7	FMT communication link error
00D8	MXR ROM error
00D9	MXR LCA error
00DA	MXR queue overflow
00DB	MXR channel controller loss of clock
00DC	MXR channel controller frame sync error
00DD	MXR channel controller configuration register error
00DE	MXR channel controller instruction ram error
00DF	MXR channel controller parity error
00E0	Hardware database mismatch
00E1	Hardware Failure
00E2	Hardware Boot Failed
00E3	Can't access link
00E4	Transmit Time-out
00E5	Receiver Time-out
00E6	softerr failure which forces link removal
00E7	Unit could not be reset
00E8	Unit failed sanity check
00E9	failure to insert TCC
00EA	failure to remove TCC
00EB	failed to switch CCN sides
00EC	NPC's facility queue overflow condition
00ED	Duplex entity failed diagnostics
00EE	Lost Clear-To-Send signal on X.25 links
00EF	Frame Audit reboot DDC failure
00F0	FMT access error
00F1	FMT timing error
00F2	FMT link id error
00F3	FMT bus timeout
00F4	FMT serial address parity error
00F5	FMT 0-4TF timing error

**cccc**    *Explanation*

<b>00F6</b>	FMT 0-4TF timing error
<b>00F7</b>	FMT error summary 1 stuck bit
<b>00F8</b>	FMT timing error, RF data parity
<b>00F9</b>	FMT error summary 2 stuck bit
<b>00FA</b>	FMT lock override, active select or kill parity
<b>00FB</b>	FMT FIFO or control PROM error
<b>00FC</b>	FMT RF control bus error
<b>00FD</b>	FMT RF port and monitor alarms
<b>00FE</b>	FMT RF port alarm; no monitor alarms
<b>0101</b>	CCI pack is not present
<b>0102</b>	Can't communicate to CCI pack(incorrect version number)
<b>0103</b>	CCI pack's summary is set but has no errors
<b>0104</b>	CCIERR bit is stuck in system status reg
<b>0105</b>	TSIERR bit is stuck in system status reg
<b>0106</b>	PUERR bit is stuck in system status reg
<b>0107</b>	Bus Terminator pack is not present
<b>0108</b>	The 32 MHz clock is out of lock
<b>0109</b>	CCI 240 sync is misaligned with frame sync
<b>010A</b>	CCI loss of 240 Frame Sync
<b>010B</b>	CCI loss of 8 KHz Frame Sync
<b>010C</b>	CCI detected Address Parity error
<b>010D</b>	CCI detected low byte data parity error
<b>010E</b>	CCI detected high byte data parity error
<b>010F</b>	CCI -5.2 power supply has failed
<b>0110</b>	CCI detected Bus Status Parity error
<b>0111</b>	CCI Peripheral Unit Alarm
<b>0112</b>	SYNC summary is set on CCI circuit pack
<b>0120</b>	ETSI pack is not present
<b>0121</b>	Can't communicate to ETSI pack (incorrect version number)
<b>0122</b>	ETSI pack's summary is set on CCI but has no errors
<b>0123</b>	ETSI loss of 32.768 MHz clock
<b>0124</b>	ETSI loss of 240 frame sync
<b>0125</b>	ETSI Rcv MDX summary stuck bit
<b>0126</b>	ETSI control RAM summary stuck bit
<b>0127</b>	ETSI TX MDX summary stuck bit

<i>cccc</i>	<i>Explanation</i>
0128	ETSI loss of Vdd (3.3v) power
0129	Peripheral unit port alarm (RCV MDX)
012A	Receive MDX data source time slot parity error
012B	Receive MDX sync error
012C	Receive MDX address parity error
012D	Receive MDX write data parity error
012F	Receive MDX can't be accessed (incorrect chip Id)
0130	Transmit MDX data parity error
0131	Transmit MDX data source time slot parity error
0132	Transmit MDX sync error
0133	Transmit MDX address parity error
0134	Transmit MDX write data parity error
0135	Transmit MDX can't be accessed (incorrect chip Id)
0137	Control RAM parity error
0138	Control RAM sync alarm
0139	Control RAM port alarm
013A	Control RAM BIST flag is set
013B	Data RAM BIST flag is set
013C	Control RAM address parity error
013D	Control RAM write data parity error
013E	Control RAM device can't be accessed (incorrect chip Id)
013F	Control RAM circuit pack parity
0140	Control RAM device is in reset state
0141	Control RAM port alarm summary is stuck
0142	ETSI TRD3ST exercise bit is set
0143	ETSI ready high error on CCI
0144	ETSI ready time-out error on CCI(ETSI can't be accessed)
0145	Control RAM stuck bit error
016D	Invalid FPA state
016E	Invalid DDC pack id
01E1	MXR access error (can't access pack)
01E2	MXR hard error stuck bit
01E3	MXR facility error stuck bit
01E4	MXR pack is in reset state
01E5	MXR PIF Bus Parity Error

<b>cccc</b>	<i>Explanation</i>
<b>01E6</b>	MXR loss of clock from unselected FLI
<b>01E7</b>	MXR 45MHz is not phase locked to system clock
<b>01E8</b>	MXR firmware error
<b>01E9</b>	MXR HSCC device error
<b>01EA</b>	MXR PIF I/O device error
<b>01EB</b>	MXR M13 summary stuck bit error
<b>01EC</b>	MXR transceiver summary stuck bit error
<b>01ED</b>	MXR program error
<b>01EF</b>	MXR RAM error
<b>01F0</b>	EMXR Timer error
<b>01F1</b>	EMXR DUART error
<b>01F2</b>	MIU got reset
<b>01F3</b>	Timeout for Yellow Inhibit/Enable Request
<b>01F4</b>	Queue overflow error
<b>01F5</b>	Packet layer parameters are mismatched between DACS II and the network
<b>01F6</b>	Failed to write XPC register
<b>01F7</b>	Transmit time-out because Clear To Send lost
<b>01F8</b>	R20 counter reaches limit
<b>01F9</b>	T3 timer expires
<b>01FA</b>	Too many interrupts or illegal interrupt from XPC
<b>06B3</b>	Initialization of application in progress, retry command later
<b>E000</b>	CCNI summary bit set; no more info
<b>E001</b>	Sync says its down
<b>E002</b>	Sync says its time base is down
<b>E003</b>	SYNC autonomously restarted itself
<b>E004</b>	MP-SYNC communications failure
<b>E100</b>	Unknown DPLL error
<b>E101</b>	ROM checksum error
<b>E102</b>	RAM data error, RAM address line stuck
<b>E103</b>	Phase/frequency output latch error
<b>E104</b>	Loss of energy on output of frequency synth.
<b>E105</b>	Loss of energy on output of phase shifter
<b>E106</b>	Loss of energy on generated SYNC pulse
<b>E107</b>	Loss of energy on time base strobe signal

<i>cccc</i>	<i>Explanation</i>
<b>E108</b>	Interrupt controller error
<b>E109</b>	Interrupt holding register error
<b>E10A</b>	Uart error
<b>E10B</b>	Control data readable output latch error
<b>E200</b>	Unknown time base error
<b>E201</b>	Time base loss of energy detector
<b>E202</b>	TB i/o err. cant read TB packid or oven monitor
<b>E203</b>	Time base frequency drift
<b>E204</b>	Both syncs time base oven is cold
<b>E205</b>	Time base oven is cold
<b>E300</b>	Unknown PLL error,link went down before reading status
<b>E301</b>	PLL end of range
<b>E302</b>	PLL excessive phase error (125 uSec out of phase)
<b>E303</b>	PLL real time violations
<b>E304</b>	PLL fast start time out
<b>E305</b>	PLL end of range implicating TL
<b>E400</b>	Unknown mate error, link went down before read status
<b>E401</b>	Mate out of service
<b>E402</b>	Mate sync hardware error
<b>E403</b>	Cross couple loss of energy
<b>E404</b>	Cross couple loss of energy
<b>E405</b>	Mate link down
<b>E406</b>	Cross couple real time violation
<b>E407</b>	Cross couple fast lock range
<b>E408</b>	Cross couple frequency offset error
<b>E409</b>	Cross couple out of lock
<b>E500</b>	TLI error, link went down before status read
<b>E501</b>	TLI hardware error
<b>E600</b>	TL error reported, unknown
<b>E601</b>	TL out of service or loss of signal
<b>E602</b>	Timing Extractor type TLI has hardware problem
<b>E603</b>	Timing Extractor type TLI has autobaud failure
<b>E700</b>	CRO error, unknown due to link, SYNC error
<b>E701</b>	CRO loss of energy detected SYNC error
<b>E702</b>	CRO loss of energy CRO error

<b>cccc</b>	<i>Explanation</i>
<b>E703</b>	CRO frequency offset
<b>E704</b>	CRO declared OOS
<b>E805</b>	TL error cleared
<b>E806</b>	TLI error cleared
<b>EF00</b>	Unknown what sync switched to
<b>EF01</b>	SYNC switched to NORMAL mode
<b>EF02</b>	SYNC switched to HOLDOVER
<b>EF03</b>	SYNC switched to FAST mode
<b>EF04</b>	SYNC switched TLIs/SSPs
<b>EF05</b>	SYNC switched to cross couple

---

# Index

---

## A

Abort, 13-1  
About This Document, i  
Activate, 5-1  
Activate Alternate Maps, 5-1  
Activate Facility Loopback, 2-5  
Activate Facility Test Signal, 2-5  
Add  
    Link, Protocol, Baud, 1-1  
    Link, X.25, Protocol, Data Link, Layer  
        Parameters, 1-1  
    Network Processing Circuit, 2-1  
    NPC Addressing and Priority, 1-2  
    TABS Link Parameters, 1-1  
    User, 1-2  
    User/Link Language, 1-2  
    X.25 Link Parameters, 1-2  
Add NPC to SLC® Carrier Bank, 13-1  
Administrative Link, 9-2  
Administrative Link, Restore, 9-2  
Alarm Cut Off State, 12-14  
Alarm Cutoff, 13-2  
Alarm Option, AIS, 12-5  
Alarm Suppression,  
    Change for DS1s Within a DS3, 7-1  
Alarms, 12-5  
All, 12-4, 12-5  
All Common Equipment, 12-4  
All ETSIs, 8-1, 9-1  
All ETSIs on ECCN Side, 12-2  
Allow DS1 Performance Monitoring  
    Report, 3-1

Allow Switch of MMFG, 13-1  
Alternate, 4-1  
Alternate Cross-Connection, 4-1  
Alternate Maps,  
    Activate, 5-1  
    Create Picture, 5-2  
ANSI NPC, 2-4  
ANSI NPC Test Signal, 12-16  
Append Component, 13-1

---

## B

Backup Memory Transfer, 13-3  
Bank Number, 7-4  
Bridge, 6-1  
Broadcast, 4-1–4-3, 12-5  
Broadcast Cross-Connection, 4-1, 4-2  
Broadcast Cross-Connections, 4-2  
Broadcast Disconnection, 4-2, 4-3  
Broadcast Disconnections, 4-2  
Broadcast, All, 12-5  
Broadcast, From, 12-6  
Broadcast, Range, 4-2

---

## C

CCI and BT Packs, 12-1  
CCNI, 12-1  
CD-ROM Documentation, xvi  
Change, 7-2  
    Bank Number, 7-4  
    Circuit Parameters, 7-2, 7-5  
    Connectivity, 7-5  
    Cross-Connect Termination  
        Status, 7-2

- Change (Continued)
  - DS3 Parameters, 7-6
  - DS3U NPC Type, 7-3
  - FTMI Equalization, 7-6
  - Hub Identification, 7-2
  - NPC AIS Alarm Option, 7-2
  - NPC Options, 7-3
  - NPC Type, 7-3
  - Options, 7-3
  - Priorities and/or Type, Synchronizer or NPC, 7-5
  - Pwr/Misc Option for FPC RT Retrofit Status, 7-4
  - Subrate Cross-Connection, 7-4
  - Subrate Error Correction
    - Location, 7-1
  - Subrate Established Channel, 7-4
  - Subrate Terminate and Leave, 7-5
  - Switch, TOX, 7-5
  - Terminate and Leave, 7-5
  - Type, Options, 7-5
  - Unprotected Alarm Setting, 7-1
  - User Password, 1-3
  - User/Link Screening, 1-3
- Change DS1 Alarm Suppression for DS1s Within a DS3, 7-1
- Change for DS1s Within a DS3, 7-1
- Change Macro Space, 5-1
- Change NPC Frame-Word Setting, 7-3
- Change NPC Time Slot Zero, 7-3
- Change NPC Type for TH Type NPCs, 7-4
- Change RT/DL, 7-4
- Change Space, 5-1
- Change Termination Status, 7-2
- Change Time Slot Zero Monitor, 7-3
- Change/Set Options, 7-5
- Channel Marks, 12-11
- Circuit Disconnection, 4-6
- Circuit Parameters, 7-2, 7-5
  - Change, 7-2
- Circuit Parameters, Change, 7-5
- Circuit Status, NPC, 12-6
- Circuits, 4-6
- Clear Backup Failure, 12-4
- Clear Facility Performance
  - Performance, 3-2
- Clear Power Supply, 12-4
- Clock, 8-1
- Clock Control Interface, Remove, 8-1
- Clock Reference Oscillator, 2-4, 9-2
- Clock Reference Oscillator, Restore, 9-2
- Common Equipment Status, 12-12
- Communications Interface, 12-1
- Configure, 12-6
- Configure Digroup Circuits, 6-1
- Configure Frame, 2-1
- Configure Synchronizer, 2-1, 7-1
- Configure Synchronizer Stratum, 7-1
- Connectivity, 7-5
- Connectivity, Change, 7-5
- Contents of Document, viii
- Control and Clock Interface, 9-1
- Control and Clock Interface, Restore, 9-1
- Conventions Used, x
- Copy NPC, 13-2
- Create Picture, 5-2
- Create Picture Alternate Map, 5-2
- Create/Edit, 5-2
- Create/Edit a Macro or Map, 5-2
- Cross-Connect Buffer, 9-1, 12-1
- Cross-Connect Buffer (Non-CEF Only), 8-1
- Cross-Connect Buffer (Non-CEF Only), Remove, 8-1
- Cross-Connect Buffer, Restore, 9-1
- Cross-Connect Map,
  - Query Full, 12-6

- Cross-Connect Map (Continued)
  - Query Partial, 12-6
- Cross-Connect Network Interface, 8-1, 9-1
- Cross-Connect Network Interface, Remove, 8-1
- Cross-Connect Network Interface, Restore, 9-1
- Cross-Connect Status Bus, 12-16
- Cross-Connect Termination Status, 7-2
- Cross-Connection, 10-2, 10-3
  - Alternate, 4-1
  - Broadcast, 4-1, 4-2
  - Broadcast, Range, 4-2
  - Change Termination Status, 7-2
  - One-Way, 4-3, 4-4
  - One-Way Non-Channelized Digital Signal, 4-4
  - One-Way Terminated Multipoint, 4-3
  - One-Way, Terminate, 4-3
  - One-Way, Terminated, 4-3
  - Subrate, 10-2, 10-3
  - Subrate, Change, 7-4
  - Subrate, Terminated, 10-1, 10-2
  - Two-Way, 4-5, 4-6
  - Two-Way Non-Channelized Digital Signal, 4-6
  - Two-Way, Multipoint, 4-5
  - Two-Way, Terminate, 4-5
  - Two-Way, Terminated, 4-4, 4-5

---

## D

- Date, 12-6
- Deactivate Facility Test Signal, 2-6
- Delete, 5-1

- Delete (Continued)
  - NPC Number With SLC® RT, 2-3
- Delete Feature Package
  - Identification, 13-2
- Delete Lines, 5-1
- Delete Lines From Macro, 5-1
- Delete Macro, 5-1
- Delete User, 1-3
- Deprovision,
  - Facility Terminating Module Interface, 2-2
  - Multiplexer, 2-2
  - Multiplexer Interface Unit, 2-2
  - NPC, 2-1
  - Synchronizer Time Base, 2-2
  - Synchronizer Timing Link Interface, 2-2
  - Test Port, 2-2
  - Test Port NPC, 2-2
  - Test-Access Group, 2-2
  - Test-Access Group NPC, 2-1 Unit, 2-2
- Destination Cross-Connect, 12-15
- Diagnose,
  - All ETSIs on ECCN Side, 12-2
  - CCI and BT Packs, 12-1
  - CCNI, 12-1
  - Communications Interface, 12-1
  - Cross-Connect Buffer, 12-1
  - DSPU, 12-3
  - ETSI, 12-2
  - Facility Terminating Module Interface, 12-4
  - FLI, 12-3
  - FMT, 12-4
  - Format Converter, 12-3
  - Link, 12-2
  - Main Controller, 12-2
  - Main Processor, 12-2

- Diagnose (Continued)
  - Memory Card, 12-2
  - MIU, 12-4
  - MXR, 12-4
  - Network Processing Circuits, 12-2
  - NPC, 12-2
  - Synchronizer, 12-3
  - Synchronizer Timing Link Interface, 12-3
  - Time Slot Interchange, 12-3
  - Time Slot Interchanges, 12-3
  - Unit On UC, 12-4
- Digital Signal Processing Unit NPC, 2-3
- Disconnect, 6-1, 6-2
  - Circuits, 4-6
  - Test Access Time Slot, 11-2
- Disconnect Time Slot, 11-2
- Disconnection, 10-3, 10-4
  - Broadcast, 4-2, 4-3
  - Broadcast, Range, 4-2
  - One-Way, 4-4
  - One-Way, Multipoint, Range, 4-4
  - Subrate, 10-3, 10-4
  - Two-Way, 4-6
  - Two-Way, Range, 4-6
- Disconnection, Broadcast, 4-2
- Disestablish Channel, 10-3
- Disestablish Subrate Channel, 10-3
- Document Contents, viii
- DS0 Circuit Roll, 6-2
  - Bridge, 6-1
  - Disconnect, 6-1
- DS0 Roll, 12-12
- DS1 Performance Monitoring Report Schedule, 12-12
- DS1 Roll, 12-12
- DS3 Alarms, 12-5
- DS3 Bit Error Rate, 12-6
- DS3 Line Build Out, 12-6

- DS3 Parameters, 7-6
- DS3U NPC Type, 7-3
- DSPU, 12-3

---

## E

- ECCN Error Source Register, 12-8
- Edit Delete, 5-1
- Edit Delete Map, 5-1
- Electronic Documentation, xvi
- Emode, Non-Channelized Test FAD, 11-1
- Entity Equipage, 12-7
- Equalization, 12-16
- Equipage Status, 12-8
- Equipage, Common, 12-7
- Equipment Connectivity, 12-7
- Equipped, 12-7
- Equipped Multiplexer Interface Units, 12-7
- Equipped Multiplexers, 12-7
- Equipped NPCs, 12-7
- Error Correction Location, 12-7
- Error Recovery, Software/Hardware Query, 12-8
- Error Source Register, 12-8, 12-9
- Error Source Register, Facility Line Interface, 12-9
- Error Source Register, Formatter, 12-9
- Error Source Register, FTMI, 12-9
- Error Source Register, Main Processor, 12-8
- Error Source Register, Multiplexer, 12-9
- Error Source Register, Multiplexer Interface Unit, 12-9
- ESR for FTU/Subrate NPC, 12-8

- Establish Channel, 10-4
- Establish Subrate Channel, 10-4
- ETSI, 8-1, 12-2
- ETSI, Remove, 8-1
- ETSIs, 12-7
- ETSIs, Remove All, 8-1
- ETSIs, Restore All, 9-1
- Execute, 5-2
- Execute Macro, 5-2
- Expanded Time Slot Interchanger, 9-1
- Expanded Time Slot Interchanger, Restore, 9-1

---

## F

- Facility Alarms, 12-1
- Facility Line Interface, 2-6
- Facility Loopback Activate, 2-5
- Facility Loopback Release, 2-6
- Facility Roll, 6-2
  - Bridge, 6-1
  - Disconnect, 6-2
- Facility Terminating Module
  - Interface, 2-2, 2-5, 12-4
- Facility Test Signal Activate, 2-5
- Facility Test Signal Deactivate, 2-6
- Feature Package, 12-9
- FLI, 12-3
- FLI To Protection, 13-2
- FLI To Service, 13-2
- Fmode, Non-Channelized Test
  - FAD, 11-1
- FMT, 12-4
- Format Converter, 12-3
- Formatter, 2-6
- Frame, 2-3

- Frame, Configure, 2-1
- Frame, Provision, 2-3
- From, 12-9
- FTMI Equalization, 7-6
- FTMI/DSPI, 8-3, 9-3
- FTMI/DSPI, Remove, 8-3
- FTMI/DSPI, Restore, 9-3
- Full Cross-Connect Map, 12-6

---

## G

- Group Release, Nx64 kbit/s, 11-4

---

## H

- How to Comment on This Document, xvi
- How to Order Documentation, xiv
- How To Use This Document, vii
- Hub Identification, 7-2
- Hub Identification, Change, 7-2
- Hub Identifier, 12-10
- Hub, Non-Channelized, 11-2
- Hub, Two-Way Test Access, 11-3
- Hub, Two-Way Test Access, Nx64 kbit/s, 11-2
- Hybrid DS3,
  - Loopback, 11-2
  - Loopback, Query, 12-10
- Hybrid DS3 Loopback, 12-10

---

## I

Impedance, 12-16  
Inhibit DS1 Performance Monitoring Report, 3-1  
Inhibit Switch MMFG, 2-5  
Intended Audiences, vii

---

## L

Line Loopback, Test Access, 11-3  
Link, 8-2, 12-2  
Link Status and Protocol, 12-14  
Link, Protocol, Baud, 1-1  
Link, Remove, 8-2  
Link, X.25, Protocol, Data Link, Layer Parameters, 1-1  
List Contents, 5-2  
List Macro, 12-10  
List Macro Contents, 5-2  
List Map, 12-10  
Load, 12-10  
Location, 12-4  
Log, 12-10  
Log Off User/Link, 1-3  
Log On To DACS II, 1-3  
Loopback, 11-2, 12-10  
Loopback, Hybrid DS3, 11-2  
Loopback, Query, 12-10  
Looped, 11-3  
Looped Test Access, 11-3  
Looped Test Access, Nx64 kbit/s, 11-3  
Looped, Nx64 kbit/s, 11-3

---

## M

Macro, 12-11  
Macro Attributes, 12-10  
Macro/Map Space, 12-10  
Macros,  
    Change Space, 5-1  
    Create/Edit, 5-2  
    Delete, 5-1  
    Delete Lines, 5-1  
    Execute, 5-2  
    List Contents, 5-2  
    Move Lines, 5-2  
    Stop, 5-2  
Main Controller, 8-2, 9-2, 12-2  
Main Controller, Remove, 8-2  
Main Controller, Restore, 9-2  
Main Processor, 12-2  
Map, 12-11  
Maps,  
    Create/Edit, 5-2  
    Edit Delete, 5-1  
Markings, 12-11  
Memory Card, 12-2  
Memory Status, 12-11  
MIU, 12-4  
MMFG, 2-6, 2-7  
MMFG To Protection, 13-2  
MMFG To Service, 13-2  
MMFG, Allow Switch of, 13-1  
Monitor, Test Access, Nx64 kbit/s, 11-3  
Monitor, Two-Way Test Access, 11-3  
Move Lines, 5-2  
Move Macro Lines, 5-2  
Multiplexer, 2-2, 2-5  
Multiplexer Interface Unit, 2-2, 2-5, 2-6

MXR, 12-4

---

## N

Network Processing Circuit, 2-1  
Network Processing Circuit  
    Parameter, 12-11  
Network Processing Circuit, Add, 2-1  
Network Processing Circuits, 12-2  
Non-Channelized FAD,  
    Emode/Fmode, 11-1  
Non-Channelized Loop Test Access  
    Facility, 11-2  
Non-Channelized Test Access, 11-1  
Non-Channelized Test Hub, 11-2  
Non-Channelized Test NPC  
    Release, 11-2  
Non-Channelized, Loop, 11-1  
Non-Channelized, Loop Facility, 11-2  
Non-Channelized, Monitor, 11-1  
Non-Channelized, NPC Release, 11-2  
Non-Channelized, Split, 11-1  
Non-Channelized, To, 12-15  
NPC, 2-1, 2-4, 12-2  
NPC Addressing and Priority, 1-2  
NPC AIS Alarm Option, 7-2  
NPC Map, 12-11  
NPC Number With SLC<sup>®</sup> RT, 2-3  
NPC Options, 7-3, 12-12  
NPC State, 12-14  
NPC Time Slot Zero, 12-16  
NPC Type, 7-3  
NPC Type DS, 2-3  
NPCs, 8-2, 9-2  
NPCs, Remove, 8-2  
NPCs, Restore, 9-2

Nx64 kbit/s, Test Access, 11-2  
Nx64 kbit/s, Two-Way Test Access, 11-3,  
    11-4

---

## O

One Cross-Connection, Terminated  
    Multipoint, 4-3  
One-Way, 4-3, 4-4  
One-Way Cross-Connection, 4-3, 4-4  
One-Way Cross-Connection,  
    Terminate, 4-3  
One-Way Cross-Connection,  
    Terminated, 4-3  
One-Way Disconnection, 4-4  
One-Way Multipoint Disconnections, 4-4  
One-Way Non-Channelized Digital  
    Signal, 4-4  
One-Way Non-Channelized Digital  
    Signal Cross-Connect, 4-4  
One-Way Terminated Multipoint, 4-3  
One-Way, Multipoint, Range, 4-4  
One-Way, Terminate, 4-3  
One-Way, Terminated, 4-3  
Options, 7-3

---

## P

Partial Cross-Connect Map, 12-6  
Password Recovery, 12-16  
Performance Monitoring, Query DS1  
    Report Schedule, 12-12  
PMEM/SMEM, 8-2, 9-2  
PMEM/SMEM, Remove, 8-2

PMEM/SMEM, Restore, 9-2  
Priorities and/or Type, Synchronizer or NPC, 7-5  
Provision,  
    ANSI NPC, 2-4  
    Clock Reference Oscillator, 2-4  
    Digital Signal Processing Unit NPC, 2-3  
    Facility Terminating Module Interface, 2-5  
    Frame, 2-3  
    Multiplexer, 2-5  
    Multiplexer Interface Unit, 2-5  
    NPC, 2-4  
    NPC Type DS, 2-3  
    Synchronizer Time Base, 2-4  
    Synchronizer Timing Link Interface, 2-4  
    Test Port, 2-4  
    Test Port NPC, 2-3  
    Test-Access Group, 2-4  
    Test-Access Group NPC, 2-3  
    Unit, 2-5  
Purpose of Document, vii  
Pwr/Misc Option for FPC RT Retrofit Status, 7-4

---

**Q**

Query, 12-13  
    Alarm Cut Off State, 12-14  
    Alarm Option, AIS, 12-5  
    Alarms, 12-5  
    All, 12-4, 12-5  
    All Common Equipment, 12-4  
    ANSI NPC Test Signal, 12-16

Query (Continued)  
    Broadcast, 12-5  
    Broadcast, All, 12-5  
    Broadcast, From, 12-6  
    Channel Marks, 12-11  
    Circuit Status, NPC, 12-6  
    Common Equipment Status, 12-12  
    Configure, 12-6  
    Cross-Connect Status Bus, 12-16  
    Date, 12-6  
    Destination Cross-Connect, 12-15  
    DS0 Roll, 12-12  
    DS1 Performance Monitoring Report Schedule, 12-12  
    DS1 Roll, 12-12  
    DS3 Alarms, 12-5  
    DS3 Bit Error Rate, 12-6  
    DS3 Line Build Out, 12-6  
    ECCN Error Source Register, 12-8  
    Entity Equipage, 12-7  
    Equalization, 12-16  
    Equipage Status, 12-8  
    Equipage, Common, 12-7  
    Equipment Connectivity, 12-7  
    Equipped, 12-7  
    Equipped Multiplexer Interface Units, 12-7  
    Equipped Multiplexers, 12-7  
    Equipped NPCs, 12-7  
    Error Correction Location, 12-7  
    Error Source Register, 12-8, 12-9  
    Error Source Register, Facility Line Interface, 12-9  
    Error Source Register, Formatter, 12-9  
    Error Source Register, FTMI, 12-9  
    Error Source Register, Main Processor, 12-8  
    Error Source Register, Multiplexer, 12-9

### Query (Continued)

- Error Source Register, Multiplexer Interface Unit, 12-9
- ESR for FTU/Subrate NPC, 12-8
- ETSI, 12-7
- Facility Alarms, 12-1
- Feature Package, 12-9
- From, 12-9
- Full Cross-Connect Map, 12-6
- Hub Identifier, 12-10
- Hybrid DS3 Loopback, 12-10
- Impedance, 12-16
- Link Status and Protocol, 12-14
- List Macro, 12-10
- List Map, 12-10
- Load, 12-10
- Location, 12-4
- Log, 12-10
- Loopback, 12-10
- Macro, 12-11
- Macro Attributes, 12-10
- Macro/Map Space, 12-10
- Map, 12-11
- Markings, 12-11
- Memory Status, 12-11
- Network Processing Circuit Parameter, 12-11
- Non-Channelized, To, 12-15
- NPC Map, 12-11
- NPC Options, 12-12
- NPC State, 12-14
- NPC Time Slot Zero, 12-16
- Partial Cross-Connect Map, 12-6
- RTMAP/DLMAP, 12-13
- SCDG, 12-14
- Sequence, 12-13
- Software/Hardware Error Recovery, 12-8
- SSP, 12-15

### Query (Continued)

- State, 12-14
- Status of Entities/Equipment, 12-12
- Status Register, 12-15
- Subrate Channel Information, Far-end, 12-13
- Subrate Circuit/Hardware Trace, 12-13
- Subrate Cross-Connect, 12-13
- Subrate Framing Status, 12-14
- Synchronizer, 12-15
- Synchronizer State, 12-14
- Test Access Group NPC, 12-12
- Test Ports, 12-15
- Test-Access Group, 12-15
- Time Slot Zero Monitor, 12-16
- Timing Link Interface, 12-15
- Trunk Signaling Conversion State, 12-13
- Unit Protection State, 12-12
- User/Link Screening Option, 12-13
- Who, 12-16
- Query Circuit/Hardware Trace, 12-13
- Query Cross-Connect, 12-13
- Query Far-End Channel Information, 12-13
- Query Framing Status, 12-14
- Query Full, 12-6
- Query Line Number, 5-2
- Query Partial, 12-6
- Query Performance Monitoring Report Schedule, 3-2
- Query, Group, 12-12, 12-15

---

## R

Recover Password, 12-16

Related Documentation, x

Release Facility Loopback, 2-6

Release Test Port, 2-7

Remove,

- All ETSIs, 8-1

- Clock, 8-1

- Cross-Connect Buffer (Non-CEF Only), 8-1

- Cross-Connect Network Interface, 8-1

- ETSI, 8-1

- Facility Line Interface, 2-6

- Formatter, 2-6

- FTMI/DSPI, 8-3

- Link, 8-2

- Main Controller, 8-2

- MMFG, 2-6

- Multiplexer Interface Unit, 2-6

- NPCs, 8-2

- PMEM/SMEM, 8-2

- Synchronizer, 8-2

- Synchronizer Time Base/Clock Reference Oscillator, 8-2

- Synchronizer TLI/SSP, 8-2

- Time Slot Interchange, 8-2

- Time Slot Interchange (Non-CEF Only), 8-3

- Time Slot Interchange Connected to Unit (Non-CEF Only), 8-3

- Unit Controller, 8-3

- Unit Format Converter, 8-3

Remove RT/DL, 8-2

Restore,

- Administrative Link, 9-2

Restore (Continued)

- All ETSIs, 9-1

- Clock Reference Oscillator, 9-2

- Control and Clock Interface, 9-1

- Cross-Connect Buffer, 9-1

- Cross-Connect Network Interface, 9-1

- Expanded Time Slot

  - Interchanger, 9-1

- Facility Line Interface, 2-6

- Formatter, 2-6

- FTMI/DSPI, 9-3

- Main Controller, 9-2

- MMFG, 2-7

- Multiplexer Interface Unit, 2-6

- NPCs, 9-2

- PMEM/SMEM, 9-2

- Synchronizer, 9-2

- Synchronizer Timing Link Interface, 9-3

- Time Slot Interchange, 9-3

- Time Slot Interchange Connected to Unit, 9-3

- Time Slot Interchanges, 9-3

- Unit, 9-3

- Unit Controller, 9-3

Restore RT/DL, 9-2

Retrieve Memory Status, 12-11

Retrieve Performance Monitoring Report Schedule, 3-2

Roll DS0 Circuits, 6-2

Roll, Facility, 6-2

RTMAP/DLMAP, 12-13

## S

- Save Component, 5-2
- SCDG, 12-14
- Schedule DS1 Performance Monitoring Report, 3-3
- Sequence, 12-13
- Set Date, 13-3
- Set System Clock/Daily Facility Alarm Reporting Time, 13-3
- Software/Hardware Error Recovery, 12-8
- Split Test Access, 10-5
- Split, Subrate, 10-5
- SSP, 12-15
- State, 12-14
- Status of Entities/Equipment, 12-12
- Status Register, 12-15
- Stop, 5-2
- Stop Macro, 5-2
- Subrate, 10-2–10-5
  - Cross-Connection, 10-2, 10-3
  - Disconnection, 10-3, 10-4
  - Disestablish Channel, 10-3
  - Establish Channel, 10-4
  - Query Circuit/Hardware Trace, 12-13
  - Query Cross-Connect, 12-13
  - Query Far-End Channel Information, 12-13
  - Query Framing Status, 12-14
  - Split Test Access, 10-5
  - Terminated Cross-Connection, 10-1, 10-2
  - Test Access, 10-4, 10-5
- Subrate Channel Information, Far-end, 12-13
- Subrate Circuit/Hardware Trace, 12-13
- Subrate Cross-Connect, 12-13
- Subrate Cross-Connection, 7-4
- Subrate Error Correction Location, 7-1
- Subrate Established Channel, 7-4
- Subrate Established Channel, Change, 7-4
- Subrate Framing Status, 12-14
- Subrate Terminate and Leave, 7-5
- Subrate Terminate and Leave, Change, 7-5
- Subrate, Change, 7-4
- Subrate, Split, 10-5
- Subrate, Terminated, 10-1, 10-2
- Switch, 13-2
  - FLI To Protection, 13-2
  - FLI To Service, 13-2
  - MMFG To Protection, 13-2
  - MMFG To Service, 13-2
- Switch, TOX, 7-5
- Synchronizer, 8-2, 9-2, 12-3, 12-15
- Synchronizer State, 12-14
- Synchronizer Time Base, 2-2, 2-4
- Synchronizer Time Base/Clock Reference Oscillator, 8-2
- Synchronizer Time Base/Clock Reference Oscillator, Remove, 8-2
- Synchronizer Timing Link Interface, 2-2, 2-4, 9-3, 12-3
- Synchronizer Timing Link Interface, Restore, 9-3
- Synchronizer TLI/SSP, 8-2
- Synchronizer TLI/SSP, Remove, 8-2
- Synchronizer, Configure, 2-1
- Synchronizer, Remove, 8-2
- Synchronizer, Restore, 9-2

## T

- TABS Link Parameters, 1-1
- Terminate and Leave, 7-5
- Terminate and Leave, Change, 7-5
- Terminate-And-Leave-Active, Test Access, 11-4
- Terminate-And-Leave-Release, Test Access, 11-4
- Terminated Cross-Connection, 10-1, 10-2
- Terminated Two-Way Cross-Connection, 4-5
- Test Access, 10-4, 10-5
  - Disconnect Time Slot, 11-2
  - Group Release, Nx64 kbit/s, 11-4
  - Hub, Non-Channelized, 11-2
  - Looped, 11-3
  - Looped, Nx64 kbit/s, 11-3
  - Non-Channelized FAD, Emode/Fmode, 11-1
  - Non-Channelized, Loop, 11-1
  - Non-Channelized, Loop Facility, 11-2
  - Non-Channelized, Monitor, 11-1
  - Non-Channelized, NPC Release, 11-2
  - Non-Channelized, Split, 11-1
  - Query, Group, 12-12, 12-15
  - Split, Subrate, 10-5
  - Subrate, 10-4, 10-5
  - Subrate, Split, 10-5
  - Two-Way, 11-4
  - Two-Way, Hub, 11-3
  - Two-Way, Line Loopback, 11-3
  - Two-Way, Monitor, 11-3
  - Two-Way, Monitor Nx64 kbit/s, 11-3
- Test Access (Continued)
  - Two-Way, Nx64 kbit/s, 11-4
  - Two-Way, Nx64 kbit/s, Hub, 11-2
  - Two-Way, Split Nx64 kbit/s, 11-3
- Test Access Group NPC, 12-12
- Test Access Time Slot, 11-2
- Test Port, 2-2, 2-4
- Test Port NPC, 2-2, 2-3
- Test Port, Release, 2-7
- Test Ports, 12-15
- Test-Access Group, 2-2, 2-4, 12-15
- Test-Access Group NPC, 2-1, 2-3
- Time Slot Interchange, 8-2, 9-3, 12-3
- Time Slot Interchange (Non-CEF Only), 8-3
- Time Slot Interchange (Non-CEF Only), Remove, 8-3
- Time Slot Interchange Connected to Unit, 9-3
- Time Slot Interchange Connected to Unit (Non-CEF Only), 8-3
- Time Slot Interchange Connected to Unit (Non-CEF Only), Remove, 8-3
- Time Slot Interchange Connected to Unit, Restore, 9-3
- Time Slot Interchange, Remove, 8-2
- Time Slot Interchange, Restore, 9-3
- Time Slot Interchanges, 9-3, 12-3
- Time Slot Interchanges, Restore, 9-3
- Time Slot Zero Monitor, 12-16
- Timing Link Interface, 12-15
- TOX, Change Switch, 7-5
- Trunk Signaling Conversion State, 12-13
- Two-Way, 4-5, 4-6, 11-4
- Two-Way Cross-Connection, 4-5
- Two-Way Cross-Connection, Multipoint, 4-5
- Two-Way Cross-Connection, Terminated, 4-4

Two-Way Disconnection, 4-6  
Two-Way Disconnection, Range, 4-6  
Two-Way Non-Channelized Digital Signal, 4-6  
Two-Way Non-Channelized Digital Signal Cross-Connection, 4-6  
Two-Way Test Access, 11-4  
Two-Way Test Access, Group Release, 11-4  
Two-Way Test Access, Hub, 11-3  
Two-Way Test Access, Line Loopback, 11-3  
Two-Way Test Access, Monitor, 11-3  
Two-Way Test Access, Nx64 kbit/s, 11-4  
Two-Way Test Access, Split Nx64 kbit/s, 11-3  
Two-Way, Hub, 11-3  
Two-Way, Line Loopback, 11-3  
Two-Way, Monitor, 11-3  
Two-Way, Monitor Nx64 kbit/s, 11-3  
Two-Way, Multipoint, 4-5  
Two-Way, Nx64 kbit/s, 11-4  
Two-Way, Nx64 kbit/s, Hub, 11-2  
Two-Way, Range, 4-6  
Two-Way, Split Nx64 kbit/s, 11-3  
Two-Way, Terminate, 4-5  
Two-Way, Terminated, 4-4, 4-5  
Type, Options, 7-5

---

## U

Unit, 2-2, 2-5, 9-3  
Unit Controller, 8-3, 9-3  
Unit Controller, Remove, 8-3  
Unit Controller, Restore, 9-3  
Unit Format Converter, 8-3

Unit Format Converter, Remove, 8-3  
Unit On UC, 12-4  
Unit Protection State, 12-12  
Unit, Restore, 9-3  
Unprotected Alarm Setting, 7-1  
Upgrade Frame, 13-3  
User, 1-2  
User Password, 1-3  
User Password, Change, 1-3  
User/Link Language, 1-2  
User/Link Screening, 1-3  
User/Link Screening Option, 12-13  
User/Link Screening, Change, 1-3  
Utilities, Alarm Reporting, 3-2  
Utility Boot, 13-3  
Utility Clear Counter, State of All, 3-1  
Utility Clear Counter, State of Single NPC or Range of NPCs, 3-2  
Utility Clear DA/TA/PA NPC Parameters, 3-2  
Utility Clear Hardware/Software Error Recovery Log File, 3-1

---

## W

Who, 12-16

---

## X

X.25 Link Parameters, 1-2  
X.25 Link Parameters, Add, 1-2

