297-1001-821

DMS-100 Family

Menu Commands

Historical Reference Manual

NIU through RTECTRL, Volume 8 of 10

Through BCS36 Standard 04.01 June 1999

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DMS-100 Family

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About this document

This reference manual describes all menu commands used at a maintenance and administration position (MAP) in a Nortel Networks DMS-100 switch.

When to use this document

Nortel Networks software releases are referred to as batch change supplements (BCS) and are identified by a number, for example, BCS29. This document is written for DMS-100 Family offices that have BCS36 and up.

More than one version of this document may exist. The version and issue are indicated throughout the document, for example, 01.01. The first two digits increase by one each time the document content is changed to support new BCS-related developments. For example, the first release of a document is 01.01, and the next release of the document in a subsequent BCS is 02.01. The second two digits increase by one each time a document is revised and rereleased for the same BCS.

To determine which version of this document applies to the BCS in your office, check the release information in *DMS-100 Family Guide to Northern Telecom Publications*, 297-1001-001.

How to identify the software in your office

The *Office Feature Record* (D190) identifies the current BCS level and the feature packages in your switch. You can list a specific feature package or patch on the MAP (maintenance and administration position) terminal by typing

>PATCHER;INFORM LIST identifier

and pressing the Enter key.

where

identifier is the number of the feature package or patch ID

You can identify your current BCS level and print a list of all the feature packages and patches in your switch by performing the following steps. First, direct the terminal response to the desired printer by typing

>SEND printer_id
and pressing the Enter key.

where
printer_id is the number of the printer where you want to print the data

Then, print the desired information by typing

>PATCHER;INFORM LIST;LEAVE
and pressing the Enter key.

Finally, redirect the display back to the terminal by typing

>SEND PREVIOUS
and pressing the Enter key.

How commands reference documentation is organized

This reference manual is one of two commands reference manuals for all commands used at a MAP in a Nortel Networks DMS-100 switch. The two commands reference manuals are the following:

Number	Title
297-1001-820	*DMS-100 Nonmenu Commands Reference Manual* describes all nonmenu commands used at a MAP in a Nortel Newtorks DMS-100 switch.
297-1001-821	*DMS-100 Menu Commands Reference Manual* describes all menu commands used at a MAP in a Nortel Networks DMS-100 switch.

What are menu and nonmenu commands

For the commands reference documents the commands used at a MAP position have been divided into two categories, menu and nonmenu:

- Menu commands are associated with a MAP display containing a numbered list or menu of commands and parameters when the level or sublevel from which the commands are entered has be accessed. Commands that can be executed from an accessed menu, but are not displayed, are called hidden commands. The level from which the command may be entered is referred to as its menu or menu level.

  Note 1: Menus may not always appear when a menu level or sublevel has been accessed, such as when displays have been suppressed with the command mapci nodisp.

  mapci nodisp↵

  Note 2: Hidden commands may be seen when the menu level has been accessed by entering the listst command and printing the top directory.

liststt↵

print *dir*↵

- Nonmenu commands are not associated with a MAP display, even when the level or sublevel from which they may be entered has been accessed. The level from which a nonmenu command is entered is referred to as its directory or directory level.

  Note: Nonmenu commands can be seen when the directory level has been accessed by entering the print command with the name of the directory.

  print *dir*↵

How this manual is organized

The organization of this manual is designed to provide rapid access to comprehensive commands information, in an easy-to-use and easy-to-understand format. The manual has a modular structure designed around chapters, which group commands according to the menu from which they are accessed. Special tables are provided to allow quick location of any command.

How volumes are organized

The reference manual is divided into into 10 volumes. Each volume contains a publication history section, an about this document section, and the first chapter containing the reference tables. The front cover and title page of each volume indicates the range of command levels within that volume. Since menus are in alphabetical order, the volume containing the menu one wishes to reference is easily determined. Within volumes, page numbers begin with same letter of the alphabet as the menu.

How the command reference tables chapter is organized

The first chapter, “Commands reference tables,” includes two tables and a chart:

- menu description table-contains a list of all menus in alphabetical order and provides a brief description of each
- menu cross-reference table-lists all of the documented commands in alphabetical order and cross references them to the menu to which they pertain and the page where they are documented
- menu level and sublevel chart-illustrates the hierarchical relationship between all menu levels and sublevels

How the menu chapters are organized

Each chapter following the “Commands reference tables” documents one menu and all its commands. The names of the chapters are the same as the names of the menus (levels or sublevels) which they document. The chapters are organized in alphabetical order.

Each menu chapter consists of an overview section, which introduces the menu level, followed by a separate section for each command.

How the overview section is organized

The overview section of each chapter contains the following:

- a brief description of the menu
- instructions for accessing the menu level
- a menu commands table listing all the commands available from the menu cross-referenced to the page where they are described
- a graphic representation of the MAP menu display, including hidden commands
- a status code table for the menu level
- a common responses table, included only when all or most of the commands at a level have many of the same responses
- other tables of common information, included only when all or most of the commands at a level share the same information, such as alarms or status displays

How command sections are organized

Each command section consists of the following elements in the order listed:

- a brief description of the use and function of the command
- a commands expansion table
- a qualifications section describing any special characteristics, exceptions, restrictions, limitations, cautions, or warnings
- an examples table
- a responses table

What command convention is used

The following is the description of the commands convention used in this manual.

How commands are represented

The command convention is used for two distinct representations of commands. One representation includes all parameters, variables, and syntactic relationships and is called a command expansion. The other representation is of commands as they are actually entered and is called a command example.

How the convention is used in command expansions

A special command table is used for a command expansion. It consists of two sections. The first section is the command expansion itself in which the following characteristics are represented:

- all parameters
- all variables
- hierarchy (the order in which elements must be entered)
- syntax (specific requirements of command strings)
- truncated and abbreviated forms, when allowed
- defaults

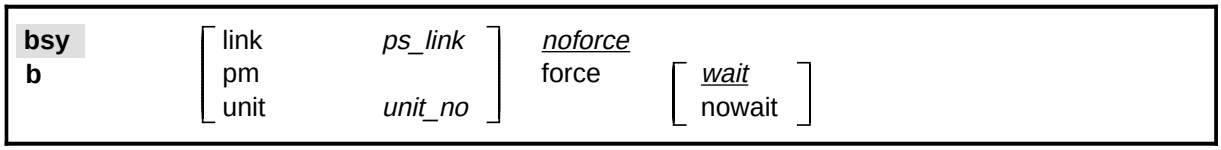
The second section is a description of all the parameters and variables.

Command elements are represented exactly as they are to be entered in actual commands, except when italic font is used indicating the element is not entered as represented, such as for variable names and certain defaults.

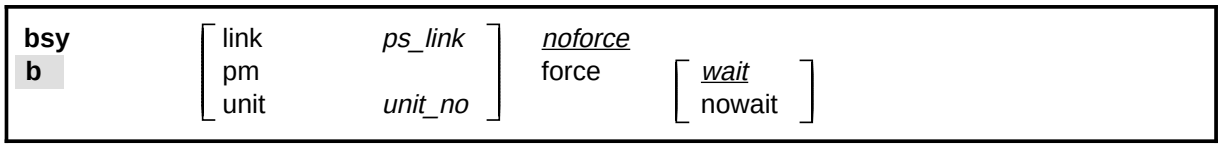
> ***Note:*** Italics always indicates an element that is not entered as part of a command in the form in which it is shown. It is either a variable that must be replaced with a value, a range or another element; or, it is a default condition which is not entered as part of a command.

How command words are presented

The actual command word is represented in lowercase, boldface, except where uppercase is required by case sensitivity. The command appears to the left of all other elements in the command expansion (parameters and variables).



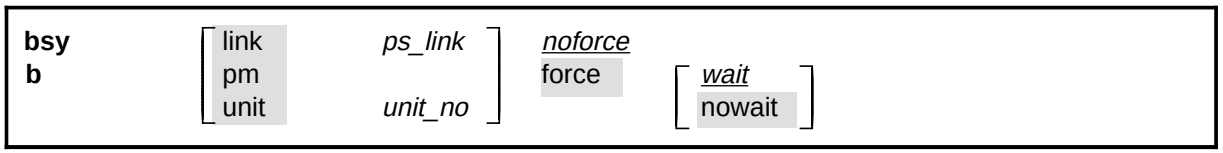
If a truncated or abbreviated form of a command is allowed, it will appear directly beneath the long form of the command.



> ***Note:*** The b command is not a true truncated form of the bsy command and is used merely for illustration.

How parameters are presented

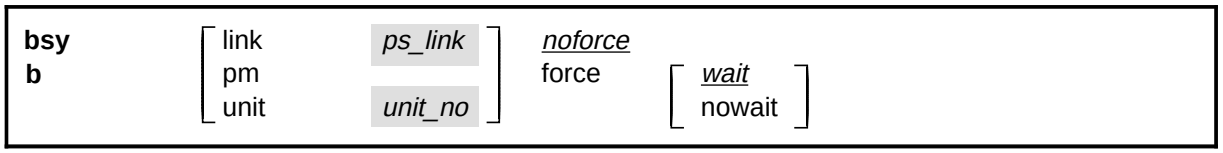
Parameters are lowercase, regular type (not boldface), except where uppercase is required by command case sensitivity.



How variables are presented

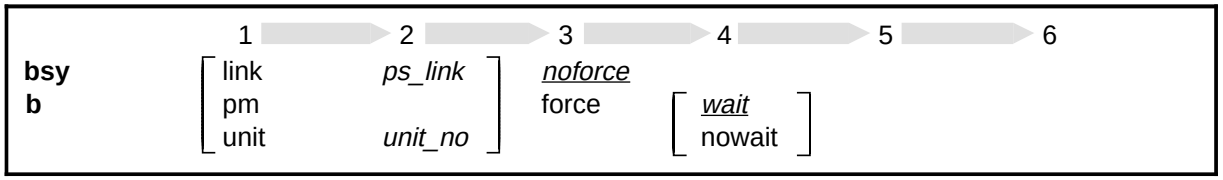
Variable names are in italics. Italics indicates that the variable is not entered as shown, but must be replaced with some other element, such as a value, range, number, or item from a list.

The numbers, values, ranges, and lists that represent the substitutions or actual entries for variable names are not represented in the expansion of the command. These are described in detail for each variable in the description section below the expansion.

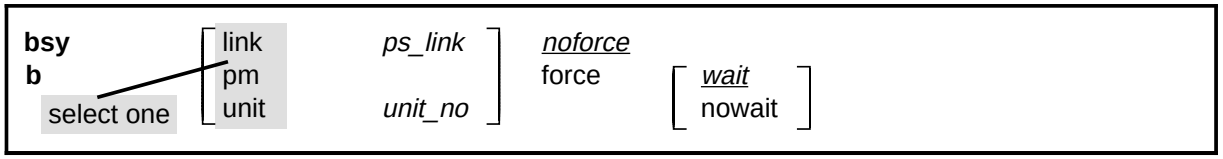


How hierarchy is presented

The order in which elements must be entered is represented by their order of appearance from left to right.



When several elements appear in the same horizontal position (that is, in a vertical list), one of them must be selected for that position, except when there is a default.



How long command expansions are presented

Some commands that have many parameters and variables with very long hierarchies require the expansion row to be continued. When this occurs, the horizontal lines of parameters and variables are numbered so that they

can be easily followed from one row to the next. Only numbered lines that are required to make syntax clear are in subsequent expansion rows (like row 2 in the third expansion continuation of the example).

command	parameter	[*variable* parameter	parameter *variable*	*variable* parameter	parameter *variable*	*variable* parameter	(1) (2)
command (continued)	(1) (2)	parameter *variable*	*variable* parameter	parameter *variable*	*variable* parameter	]	(1) (2)
command (continued)	(2)	parameter	*variable*	parameter			(end)

How defaults are indicated

A default parameter is underlined. If, in a vertical list, an element may be entered, but is not required, the system must act as if some element were entered. The action the system takes when an element is not entered is called a default action and is usually an action indicated by one of the elements that can be selected. Occasionally, the default action is something other than a selectable action. These nonselectable defaults are represented by the word, “default,” or another word which indicates the action, and is in italics, to indicate that it cannot be entered. The default is fully described in the parameters and variables description section.

bsy **b**	[link pm unit	*ps_link* *unit_no*]	*noforce* force	[*wait* nowait]	

How relationships between groups of elements are indicated

As a general rule of relationship, whenever an element is directly followed horizontally by another element; if the first element is selected, the second element is required.

bsy **b**	[link pm unit	*ps_link* *unit_no*]	*noforce* force	[*wait* nowait]	

Within a command expansion, elements or groups of elements (parameters or variables) sometimes relate to elements that precede or follow them, but not all the elements that precede or follow them. To distinguish which elements relate to which, brackets surround those elements that, as a group, pertain to other elements. Only those elements that horizontally directly precede or follow the brackets are related to the elements within the

brackets. When elements are not in brackets, only individual elements that directly precede or follow other elements are related.

bsy **b**	[link *ps_link*] pm [unit *unit_no*]	*noforce* force [*wait*] [nowait]

How parameters and variables are described

The parameters and variables description contains a list of every parameter and variable that apply to the command, in alphabetical order. Each of these command elements is fully described, including replacement values and ranges for variables.

Following is an example of a command expansion table including the parameters and variables description.

bsy command parameters and variables

Command	**Parameters and variables**
bsy **b**	[link *ps_link*] pm [unit *unit_no*] *noforce* force [*wait*] [nowait]

Parameters and variables	**Description**
force	This parameter overrides all other commands and states in effect on the specified units. If the whole peripheral module (PM) is to be taken out-of-service, confirmation (yes or no) is required.
link	This parameter busies one of the P-side links specified by *the ps_link* variable.
noforce	This default parameter indicates the condition when force parameter is not entered. Busy will not be forced.
nowait	This parameter enables the MAP to be used for other command entries before the bsy force command action is confirmed. The nowait parameter is used only with the force parameter.
pm	This parameter causes both units of the PM to be made busy.
ps_link	This variable specifies which of the P-side links is to be busied. The range is 0-3.
unit	This parameter causes the PM unit specified by the *unit_no* variable to be made busy.

-continued-

bsy command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable specifies which unit of the PM is to be busied. The range is 0-1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the bsy force command action is confirmed before additional commands can be entered at the MAP.

-end-

How the convention is used in command examples

Command examples use the same convention as a command expansion, except that all command elements are boldface. Commands can be entered exactly as they appear in examples except when an example does not use an actual variable entry, but a variable name shown in italics.

The following may be entered as shown.

bsy link 2↵

The variable *ps_link* must be replaced by an actual value before it can be entered.

bsy link *ps_link*↵

How other command conventions relate to reference convention

The command convention used in this reference document is different from conventions used in some older Nortel Networks documents and from command information at a MAP terminal. This difference is intentional. The convention in this document is used to simplify explanations of command syntax and to eliminate possible confusion. For example, when the command information provided in a MAP help screen is unclear, reference to that command represented in a different convention, such as in this reference manual, should eliminate the ambiguity, whereas the same or a similar convention would merely repeat the confusion.

How to compare conventions

To take advantage of the benefits of the convention in this book, a comparison of the convention used in this document with the most common convention used in MAP help screens is provided in Table 1.

Table 1xxx
Command conventions comparison

Element	Commands reference manual	MAP screen
Commands	lowercase or case sensitive specific: **bsy**	uppercase: `BSY`
Truncated commands or abbreviations.	shown directly below long form: **bsy** **b**	Abbreviated form all uppercase, rest of command lowercase: `Bsy`
Parameters	lowercase or case sensitive specific: link	uppercase: `LINK`
Variables	italic, lowercase: *ps_link*	in angled brackets: `<ps_link>` ***note:*** angle brackets also indicate the the variable is mandatory.

Hierarchy	horizontal order, left to right:
	l pdtc *pm_numbers circuit*
		top to bottom:
		`{L <PDTC> {PDTC}`
		`<PM_NUMBERS> {0 TO 255}`
		`[<CIRCUIT> {0 to 16}]`

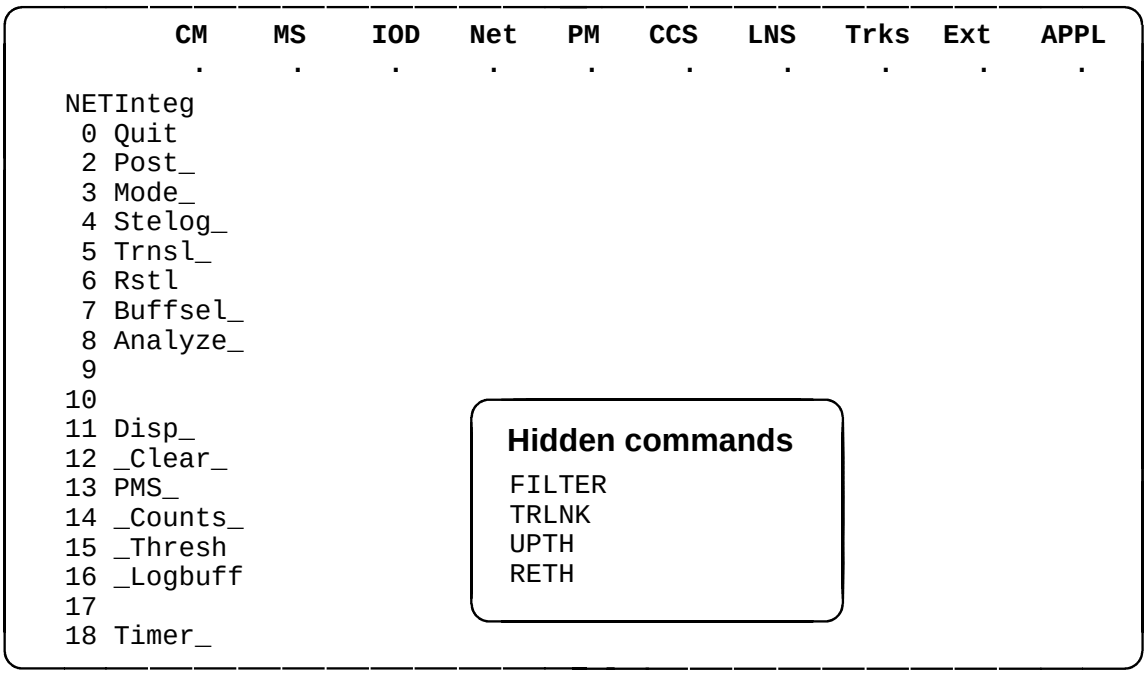
Defaults	underlined: *wait* nowait	no specific method established, but "optional" elements (meaning they do not have to be entered, implying defaults), are represented by square brackets: `[<CIRCUIT> {0 to 16}]`

Selectable elements	a vertical list:
	link
	pm
	unit
		curly braces, separated by vertical bars:
		`{link | pm | unit}`
		or vertical list, separated by commas:
		`{link,`
		`pm,`
		`unit}`

Variable replacement values	defined under parameters and variables description	curly braces: `{0 to 16}`

How menu command syntax is used

In the graphic representation of the MAP menu display, all commands, except hidden commands are numbered.



Numbered commands may be entered using their associated number rather than the actual command. For example, the quit command is usually the first command in a menu, that is, number 0, and may be entered in either of the following ways:

quit↵

0↵

The numbered list of commands frequently contains parameters as well as commands. Commands and parameters can be distinguished by the underscores that follow commands or precede parameters as follows:

- `Tst_` a command that requires a parameter
- `_CPU` a parameter
- `_Card_` a parameter that requires another parameter
- `DpSync` a command not requiring a parameter or variable
- `Quit` a command that accepts a parameter or variable but does not require one

Parameters appearing in the numbered list of commands may also be entered using their associated number rather than the actual parameter. A parameter cannot be entered by number unless the command has also been entered by

number. It is not necessary to enter the parameter by number even if the command is entered by number.

One very important difference in the way commands and parameters are entered using their number rather than the actual commands and parameters is that no space is allowed between numbers but one is required between actual commands and parameters.

For an example of the proper syntax for entering commands using or not using numbers, assume that `Tst_` is number 6 and that `_Card_` is number 10 in the numbered list, then any of the following represents a valid entry for testing card 5 in unit 2:

- **6105 2↵**
- **6card 5 2↵**
- **6 card 5 2↵**
- **tst card 5 2↵**

What precautionary messages mean

Danger, warning, and caution messages in this document indicate potential risks. These messages and their meanings are listed in the following chart.

Message	Significance
DANGER	Possibility of personal injury
WARNING	Possibility of equipment damage
CAUTION	Possibility of service interruption or degradation

Examples of the precautionary messages follow.

DANGER
Risk of electrocution
The inverter contains high voltage lines. Do not open the front panel of the inverter unless fuses F1, F2, and F3 have been removed first. Until these fuses are removed, the high voltage lines inside the inverter are active, and you risk being electrocuted.

WARNING
Damage to backplane connector pins
Use light thumb pressure to align the card with the connectors. Next, use the levers to seat the card into the connectors. Failure to align the card first may result in bending of the backplane connector pins.

CAUTION
Loss of service
Subscriber service will be lost if you accidentally remove a card from the active unit of the peripheral module (PM). Before continuing, confirm that you are removing the card from the inactive unit of the PM.

Commands reference tables

To assist the user in locating a command description, two commands reference tables are provided in this chapter, the menu description table and the menu cross reference table.

In addition to the tables, a menu chart is provided. The menu chart provides a quick overview of the entire menu structure. The relationships between menus and and sub-menus, sometimes called systems and sub-systems, are illustrated by means of this chart.

Menu descriptions

The menu description table provides a brief description of every menu documented in this manual.

Menu description table

Menu	Description
ACTIVITY	Use to provide an on-screen display of minute-by-minute indications of the performance status of the switch.
ALT	Use to perform automatic line testing (ALT) tests on subscriber lines without manual intervention by maintenance personnel.
ALTBAL	Use to perform on-hook balance network tests (BAL) on the ALT.
ALTCKTST	Use to perform keyset line circuit tests (CKTST) on the ALT.
ALTDIAG	Use to perform the extended diagnostic test (DIAG) on the ALT.
ALTLIT	Use to perform line insulation tests (LIT) on the ALT.
ALTSDIAG	Use to perform the short diagnostic tests (SDIAG) on the ALT.

-continued-

Menu description table (continued)

Menu	Description
AOSSSEL	Use to analyze calls that originate on Auxiliary Operator Services System (AOSS), Traffic Operator Position System (TOPS), Super Centralized Automatic Message Accounting (SCAMA), or Intertoll (IT) incoming trunks and require AOSS operator assistance.
APUX	Use to perform maintenance for an application processing unit with UNIX (APUX).
ATT	Use to monitor and control automatic trunk testing (ATT).
AUTOCTRL	Use to list, apply, remove, disable, or enable automatic network management (NWM) controls.
BERP	Use to set up bit error rate performance (BERP) tests and to perform bit error rate tests (BERT).
BERT	Use to measure the overall performance of the hardware components which form the enhanced network (ENET) switching matrix by querying information, defining parameters, and performing functions for a BERT.
CARD	Use to query information and perform maintenance actions on cards.
CARD	Use to maintain the enhanced network (ENET) on a card basis arranged by slot.
CARRIER	Use to monitor and maintain the trunks that are associated with carriers.
CCIS6	Use to monitor and maintain the Common Channel Interoffice Signaling No. 6 (CCIS6) subsystem.
CCS	Use to monitor and maintain the Common Channel Signaling (CCS) system and access the CCS subsystem displays.
CCS7	Use to test and maintain Common Channel Signaling No. 7 (CCS7) trunks.
CHAIN	Use to perform maintenance actions and display status information on the cards of the specified chain.
CLOCK	Use to test and maintain the message controller clock.
CLOCK	Use to control the message switch (MS) clocks and synchronize them to a clock source extracted from incoming digital trunks, an external direct clock source, or internal clock.
CM	Use to access commands that control and display the status of the paired central processing units (CPU) that comprise the computing module (CM).

-continued-

Menu description table (continued)

Menu	Description
CMMNT	Use to query specific information about the performance and the available memory of the computing module (CM) and to control the load image and CM maintenance (CMMnt) level alarms.
CODECTRL	Use to list, apply, or remove code controls on specified code types.
CONS	Use to access commands that test or change the status of a device controller (DC) and the console connected to it.
CPSTATUS	Use to access the CPSTATUS tool to measure all CPU occupancies, measure of additional CPU time available for call processing work, and to indicate overload and switch performance with respect to the switch's engineering
C6TTP	Use to monitor and maintain CCIS6 trunks.
C7BERT	Use to evaluate the performance of a CCS7 signaling link before putting it into service or during fault isolation activities. A C7BERT test repeatedly transmits a 2047-bit pseudorandom pattern and subsequently checks the pattern to verify that no bit errors have occurred.
C7LKSET	Use to query and change the status of the links within a selected linkset.
C7MSUVER	Use to build message signaling units (MSUs), subject them to the screening rules of the CCS7 link interface unit 7 (LIU7), and display the results of screening rules that were encountered.
C7RTESET	Use to display information about or change the state of a routeset.
C7TTP	Use to test and maintain CCS7 trunks.
DCAP	Use to obtain status information for applications and links on the data communications applications (DCAP).
DCH	Use to interact with the D-channel handler (DCH) maintenance subsystem.
DCTLTP	Use to access the data call tester (DCT) menu commands from the LTP level.
DCTTTP	Use to access the data call tester (DCT) menu commands from the TTP level.
DDU	Use to test and change the status of the disk drive units (DDU).

-continued-

Menu description table (continued)

Menu	Description
DEVICES (CFI)	Use to obtain information about and perform maintenance functions on a channel frame interface (CFI).
DELAYS (LGC)	Use to obtain information on call processing delays.
DELAYS (RCC)	Use to obtain information on call processing delays.
DEVICES (FP)	Use to display status indicators of the file processor (FP) and to execute commands which produce these displays.
DEVICES (LMX)	Use to obtain information about and perform maintenance functions on a channel frame interface (LMX).
DEVICES (NIU)	Use to display information about link interface unit (LIU) components connected to the network interface unit (NIU).
DEVICES (PSP)	Use to obtain information about and perform maintenance functions on a programmable signal processor (PSP).
DIRP	Use to access the commands used to control the files and recording volumes of the device independent recording package (DIRP).
DISPLAY	Use to monitor, maintain, and display information about the trunks that are associated with carriers.
DLC	Use to test and change the status of the data link controller (DLC).
DPNSS	Use to enter the Digital Private Network Signaling System (DPNSS) system and query and change the status of the links within a selected linkset.
DRAM	Use to access and perform maintenance on a DRAM module.
DRM	Use to perform control and review functions for a distributed recording manager (DRM).
DTC	Use to perform maintenance functions for a digital trunk controller (DTC).
DTCI	Use to maintain an digital trunk controller integrated digital network services (ISDN) (DTCI).
ENET	Use to access all other levels of the ENET system. The ENET level expands the top level alarm and allows the craftsperson to decide where to go next in order to correct a fault.
EXND	Use to access and perform maintenance functions for an external node (EXND).

-continued-

Menu description table (continued)

Menu	Description
FBUS	Use to perform maintenance on a frame transport bus (FBUS).
FMT	Use to monitor and maintain the fiber multiplex terminals (FMT). Maintenance actions are performed on posted FMTs. When posting an FMT using the post command, the FMT sublevel is accessed, from which maintenance actions are conducted.
FP	Use to maintain and administer a file processor (FP).
FRIU	Use to perform maintenance activities on the frame relay I/F unit (FRIU).
GRPCTRL	Use to list, apply, or remove group controls on selected trunk groups.
IBNCON	Use to maintain and monitor Integrated Business Network (IBN) attendant consoles.
ICRM	Use to perform maintenance functions on an integrated cellular remote module (ICRM).
IDT	Use to perform maintenance functions on an intelligent digital transmission (IDT) device.
INTCCTRL	Use to list, apply, and remove code controls for the DMS-200/300 and DMS-300 switches.
INTEG	Use to analyze errors which occur along the speech links between the PM and the ENET.
IOC	Use to access commands that change or monitor the status of disk controller (DC) cards and the devices attached to them.
IOD	Use to access commands to change or monitor the status of the input/output devices (IOD).
IPML	Use to access the IPML maintenance menu.
IRLINK	Use to perform maintenance on the dual remote cluster controller (DRCC). The IRLINK level is accessed from the RCC level using the irlink command. Although the menu always shows the irlink command, it only affects a posted RCC that is part of a DRCC.
ISG	Use to maintain ISDN service groups (ISG) which are defined for a specific LGC or LTC. In addition, hardware independent access to the associated channels is available.

-continued-

Menu description table (continued)

Menu	Description
ISGACT	Use to access the ISGACT tool to analyze the real time use of the signaling processor (SP), the master processor (MP), and the ISDN signaling processor (ISP).
ISP	Use to make measurements and report information on channels of the ISDN signalling processor (ISP).
LAYER	Use to check the status of selected layers and bands.
LCM	Use to perform maintenance functions on a loop concentrating module (LCM).
LCME	Use to monitor and maintain an enhanced line concentrating module (LCME).
LCMI	Use to monitor and maintain an ISDN line concentrating module (LCMI).
LCOM	Use to perform maintenance functions for an link interface unit (LIU) communication (LCOM) PM type.
LGC	Use to perform maintenance functions for a line group controller (LGC)
LGCI	Use to maintain an LGC equipped to provide integrated services digital network (ISDN) services.
LIM	Use to perform maintenance functions on a link interface module (LIM).
LINESEL	Use to select the classification of lines to be presented for service analysis (SA).
LINKSET	Use to query and change the status of a selected linkset.
LIU7	Use to perform maintenance activities on the link interface unit 7 (LIU7).
LNS	Use to access subscriber line tests and associated maintenance actions through the LNS subsystems.
LNSTRBL	Use to maintain lines that are experiencing call processing trouble.
LTC	Use to perform maintenance functions for a line trunk controller (LTC).
LTP	Use to perform manual tests on the subscriber lines.
LTPDATA	Use to maintain control position data, posted set information, system status updates, and perform additional maintenance action on the line in the control position.
LTPISDN	Use to monitor and maintain Integrated Services Digital Network (ISDN) lines.

-continued-

Menu description table (continued)

Menu	Description
LTPLTA	Use to enter the line test position test access commands level.
LTPMAN	Use to enter the line test position of the manual test commands level.
MANUAL	Use to monitor and maintain trunks.
MATRIX	Use to access maintenance and diagnostic facilities for the switching matrix of the 128K ENET.
MC	Use to test and control the message controllers (MC).
MEMORY	Use to manipulate the contents of the memory cards.
MONITOR	Use to monitor call processing busy connections: listening, talking, or both.
MP	Use to perform maintenance on multipurpose positions (MPs) on TOPS position controllers (TPC) which subtend a TOPS Message Switch (TMS). The MP MAP level is accessed from the TPC level of the MAP.
MPC	Use to access the commands that test and query the card and link status of a specific multi-protocol controller (MPC).
MS	Use to access commands to query information and perform maintenance procedures on the MS and MS shelves.
MSB6	Use to maintain the message switch and buffer (MSB) handling Common Channel Interoffice Signaling No. 6 (CCIS6) and the CCITT No. 6 Signaling (CCITT6).
MSB7	Use to maintain the message switch and buffer (MSB) handling Common Channel Interoffice Signaling No. 7 (CCIS7) and the CCITT Signaling System No. 7 (CCITT7).
MTD	Use to test or change the status of specified magnetic tape drives (MTD).
MTM	Use to perform maintenance for a maintenance trunk module (MTM).
NET	Use to perform network maintenance and to access other network maintenance MAP levels.
NETINTEG	Use to access the analysis feature which identifies errors on speech links between PMs and the Network.
NETJCTRS	Use to display the status of the junctors in both planes of the specified network and perform maintenance functions for junctors.

-continued-

Menu description table (continued)

Menu	Description
NETLINKS	Use to display the status of the links in both planes of the specified network and perform maintenance functions for links.
NETPATH	Use to test faulty paths, store test information for each path tested, and display this information.
NETXPTS	Use to access and perform maintenance functions on the crosspoint (XPT) cards in both planes of a network module (NM).
NIU	Use to perform maintenance activities on the network interface unit (NIU).
NOP	Use to monitor and maintain communications between a DMS and a network operations system (NOS).
NWM	Use to access network management (NWM) control levels, to display the status of automatic and manual controls, and to change the switch operating mode.
OAU	Use to perform maintenance functions for an office alarm unit (OAU).
OFCINTEG	Use to access the bit error rate performance (BERP) and wideband error rate test (WBERT) sublevels.
OPMPES	Use to remotely control battery string switching, identify the alarm and state conditions of the OPMPES, identify the shelves and bay, and give the circuit location.
PERFORM	Use to display information about the processors of a posted PM of node type LGC, LTC, DTC, or RCC.
PLANE	Use to maintain and administer a file processor (FP).
PM	Use to access the PM maintenance system.
PMACT	Use to access the PMACT tool which is used to analyze the real-time use of the signaling processor (SP), the master processor (MP), and the ISDN signaling processor (ISP).
PMC	Use to control the peripheral message controllers (PMC) and their individual ports.
PORT	Use to control individual ports of the MC.
POST	Use to monitor and maintain the trunks that are associated with carriers.
POSTDEV	Use to maintain and administer the posted file processor (FP) devices.
PRADCH	Use to maintain DTCI B-channels and D-channels.

-continued-

Menu description table (continued)

Menu	Description
PVC	Use to query and change the status of the logical communication links between a signaling transfer point (STP) and the signaling engineering and administration system (SEAS).
RCC	Use to maintain a remote cluster controller (RCC).
RCCI	Use to maintain the integrated services digital network (ISDN) RCC (RCCI).
RTECTRL	Use to list, apply, or remove controls on specified reroutes.
SA	Use to perform service analysis (SA) on selected types of calls.
SAEDIT	Use to edit service analysis (SA).
SASELECT	Use to select the classification of calls to be presented for service analysis (SA). Also use the commands available from the the SASelect level to control the monitor and the traffic offices included in analysis.
SBS	Use to activate, deactivate or set backup for the billing server.
SBSCOMM	Use to access the SBS level.
SBSSEL	Use to perform S/DMS (or Formatter/Storage Agent [FSA]) (SBS) reporting and controling functions.
SBSSTAT	Use to display information about billing server data streams.
SBSTRM	Use to display information about billing server streams.
SCCPLOC	Use to query or change the state of one or more signaling connection control part (SCCP) local subsystems.
SCCPRPC	Use to query or change the state of a signaling connection control part (SCCP) remote point code.
SCCPRSS	Use to query or change the state of one or more signaling connection control part (SCCP) remote subsystems.
SCP	Use to post SCP services, display alarm information about SCP alarms, list datafilled SCP services, and access the SCPLoc level.
SCPLOC	Use to diagnose system faults and to carry out maintenance operations and corrective actions.
SEAS	Use to query, test, and change the operating state of the signaling engineering and administration system (SEAS). This level also has access to the PVC (permanent virtual circuits) level of maintenance.

-continued-

Menu description table (continued)

Menu	Description
SHELF	Use to maintain the enhanced network (ENET) as a collection of cards and to perform maintenance actions on the functions of a slot as a single entity.
SHELF	Use to access commands to query information and perform maintenance on the message switch (MS) shelves.
SLM	Use to access maintenance functions for the specified SLM.
SMS	Use to perform maintenance for a Subscriber Carrier Module-100S (SMS).
SMU	Use to perform maintenance for a Subscriber Carrier Module-100 Urban (SMU).
SPM	Use to perform maintenance for a service peripheral module (SPM).
SRUPES	Use to remotely control battery string switching, identify the alarm and state conditions of the SRUPES, to identify the shelves and bay, and give the circuit location.
STAT TKGRP	Use to monitor and maintain trunk groups.
STAT TRKS	Use to monitor and maintain individual trunks.
STC	Use to maintain signal terminal controllers (STC) attached to message switch and buffers (MSB).
SYSTEM	Use to maintain the enhanced network (ENET) processing complexes.
TMS	Use to maintain a TOPS message switch.
TPC	Use to access the Traffic Operator Position Controller (TPC). Feature package NTXA83AA is required for this level to be operational.
TRKCONV	Use to monitor and maintain trunks.
TRKS	Use to access the sublevels of trunk maintenance.
TRKSTRBL	Use to provide trunk maintenance through thresholding and alarm generation, and buffering of trunk trouble information. This level is used only for identifying troubled trunks and their problems.
TSTEQUIP	Use to display and post stand-alone test equipment.
TTP	Use to monitor and maintain trunk status and access the trunk maintenance sublevels.
XFER	Use to transfer data and to perform maintenance on the data transfer system.

-continued-

Menu description table (continued)	
Menu	**Description**
XLIU	Use to perform maintenance activities on the x.25/x.75 link I/F unit.
X75TTP	Use to monitor and maintain trunk status and access the trunk maintenance sublevels.
-end-	

Menu cross-reference

The menu cross-reference table provides a complete alphabetic list of every command and indicates its associated menu and the number of the page in this manual where that command is described.

Command/menu cross reference table		
Command	**Menu**	**Page**
abortx	XFER	X-57
abtk	CARD	C-7
abtk	CM	C-527
abtk	DCH	D-67
abtk	DEVICES (CFI)	D-367
abtk	DEVICES (FP)	D-419
abtk	DEVICES (LMX)	D-469
abtk	DEVICES (PSP)	D-523
abtk	DTC	D-823
abtk	DTCI	D-967
abtk	FP	F-57
abtk	ICRM	I-65
abtk	LGC	L-269
abtk	LGCI	L-413
abtk	LTC	L-741
abtk	MATRIX	M-67
abtk	MSB6	M-535
abtk	MSB7	M-643
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Command/menu cross reference table (continued)

Command	Menu	Page
abtk	OPMPES	O-43
abtk	RCC	R-5
abtk	RCCI	R-147
abtk	SHELF	S-565
abtk	SMS	S-703
abtk	SMU	S-845
abtk	SRUPES	S-1015
abtk	SYSTEM	S-1157
abtk	TMS	T-5
abtkmcr	PLANE	P-23
abtdly	C7LKSET	C-829
ack	SA	S-5
act	C7LKSET	C-831
act	LINKSET	L-619
act	SBS	S-57
actfsa	SBSSEL	S-85
actlap	DPNSS	D-669
addcos	LineSel	L-583
addcust	LineSel	L-585
adddwr	LineSel	L-587
addofc	LineSel	L-589
addsite	LineSel	L-591
adjust	Clock	C-445
alarm	CMMnt	C-609
alarm	ENET	E-47
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almstat	LTP	L-889
alm	LTPISDN	L-1241

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Command/menu cross reference table (continued)

Command	Menu	Page
alt	LNS	L-681
altinfo	ALT	A-23
altpath	NETPATH	N-163
alttest	CARD	C-11
alttest	NETPATH	N-167
alttype	NETPATH	N-171
analyze	INTEG	I-197
analyze	NET INTEG	N-61
ans	SA	S-7
aosssel	SASelect	S-143
apply	AUTOCTRL	A-347
apply	CODECTRL	C-665
apply	GRPCTRL	G-5
apply	INTCCTRL	I-177
apply	RTECTRL	R-269
att	TRKS	T-225
attcon	LineSel	L-593
attcon	SASelect	S-145
audit	DIRP	D-569
audit	DRM	D-735
audit	INTEG	I-203
audit	OPMPES	O-45
audit	SRUPES	S-1017
auditlink	DPNSS	D-671
autocnv	TRKCONV	T-131
autoctrl	NWM	N-341
autold	CMMnt	C-617
bal	ALT	A-29
bal	LTPMAN	L-1489

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Command/menu cross reference table (continued)

Command	Menu	Page
balnet	LTPLTA	L-1391
bchcon	LTPISDN	L-1243
bert	DATA	D-3
bert	ENET	E-51
bert	LTPDATA	L-1067
bert(isdn)	LTPDATA	L-1091
berttime	DATA	D-13
berttime	LTPDATA	L-1099
bpvo	LTPDATA	L-1103
bsy	APUX	A-367
bsy	Card	C-91
bsy	CARD	C-15
bsy	Chain	C-299
bsy	CONS	C-691
bsy	C6TTP	C-721
bsy	C7LKSET	C-847
bsy	C7RTESET	C-989
bsy	C7TTP	C-1015
bsy	DATA	D-17
bsy	DCH	D-69
bsy	DDU	D-299
bsy	DEVICES (CFI)	D-371
bsy	DEVICES (FP)	D-421
bsy	DEVICES (LMX)	D-473
bsy	DEVICES (PSP)	D-527
bsy	DPNSS	D-673
bsy	DRAM	D-699
bsy	DTC	D-825
bsy	DTCI	D-969

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Command/menu cross reference table (continued)

Command	Menu	Page
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bsy	ESA	E-119
bsy	ESTU	E-159
bsy	EXND	E-187
bsy	FBUS	F-5
bsy	FP	F-59
bsy	FRIU	F-101
bsy	IBNCON	I-7
bsy	ICRM	I-67
bsy	IDT	I-135
bsy	IOC	I-241
bsy	IPML	I-323
bsy	IRLINK	I-349
bsy	ISG	I-365
bsy	LAYER	L-5
bsy	LCM	L-31
bsy	LCME	L-109
bsy	LCMI	L-169
bsy	LCOM	L-225
bsy	LGC	L-271
bsy	LGCI	L-415
bsy	LIM	L-537
bsy	LINKSET	L-623
bsy	LIU7	L-641
bsy	LTC	L-743
bsy	LTP	L-901
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bsy	MATRIX	M-71

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Command/menu cross reference table (continued)

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bsy	MONITOR	M-279
bsy	MP	M-345
bsy	MPC	M-385
bsy	MS	M-441
bsy	MSB6	M-537
bsy	MSB7	M-645
bsy	MTD	M-753
bsy	MTM	M-781
bsy	NET	N-5
bsy	NET JCTRS	N-115
bsy	NET LINKS	N-141
bsy	NET XPTS	N-227
bsy	NIU	N-257
bsy	OAU	O-3
bsy	OPMPES	O-47
bsy	PLANE	P-25
bsy	PMC	P-159
bsy	POST	P-267
bsy	POSTDEV	P-329
bsy	PRADCH	P-357
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bsy	RCC	R-7
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bsy	SEAS	S-417

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Command/menu cross reference table (continued)

Command	Menu	Page
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bsy	SHELF	S-571
bsy	SLM	S-643
bsy	SMS	S-705
bsy	SMU	S-847
bsy	SRUPES	S-1019
bsy	STC	S-1123
bsy	SYSTEM	S-1159
bsy	TMS	T-7
bsy	TPC	T-103
bsy	TRKCONV	T-133
bsy	TTP	T-257
bsy	XLIU	X-81
bsy	X75TTP	X-3
bsychn	Shelf	S-445
bsyms	Card	C-103
bsyms	MS	M-449
bterm	DATA	D-21
buffsel	NET INTEG	N-67
bufpath	NETPATH	N-173
busy	IBNCON	I-11
busy	SA	S-9
callset	BERP	B-5
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calltrf	TTP	T-261
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card	Card	C-111
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Command/menu cross reference table (continued)

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carrier	TRKS	T-227
ccbcapture	INTEG	I-207
ccis6	CCS	C-255
ccs7	CCS	C-257
cdr	IOD	I-287
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chain	Card	C-115
chain	Chain	C-309
chain	Clock	C-455
chain	Shelf	S-455
charge	OPMPES	O-49
charge	SRUPES	S-1021
check	BERP	B-9
checkinv	CM	C-529
chklnk	NET	N-15
cic	C7TTP	C-1019
ckt	TTP	T-263
cktinfo	TTP	T-267
cktinfo	X75TTP	X-7
cktloc	LTP	L-915
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cktmon	MONITOR	M-283
ckttst	ALT	A-31

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Command/menu cross reference table (continued)

Command	Menu	Page
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claim	PLANE	P-31
cleanup	DIRP	D-573
clear	BERT	B-89
clear	C7MSUVER	C-925
clear	IBNCON	I-15
clear	INTEG	I-211
clear	NETPATH	N-181
clear	NOP	N-311
clkstat	NET	N-19
clock	Card	C-117
clock	Chain	C-311
clock	MC	M-141
clock	MS	M-457
clock	Shelf	S-457
close	DIRP	D-583
clr	DRAM	D-703
clr	MTM	M-783
clr	OAU	O-7
clralm	LNSTRBL	L-699
clralm	TRKSTRBL	T-199
clrbuf	LNSTRBL	L-703
clrbuf	TRKSTRBL	T-201
clrbuff	DDU	D-301
clrcnts	MC	M-143
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Command/menu cross reference table (continued)

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cmmnt	CM	C-531
cntrs	Memory	M-211
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coldst	LTPISDN	L-1249
commstat	SBSSEL	S-87
config.	Memory	M-215
config	PLANE	P-35
connect	LTPDATA	L-1109
connect	PRADCH	P-361
connlog	ENET	E-53
cont	IDT	I-137
cont	ISG	I-369
cont	PRADCH	P-375
conv	TRKCONV	T-137
copy	DRM	D-741
correct	SAEdit	S-43
cpos	MONITOR	M-285
cpstat	PM	P-103
cpu	ENET	E-55
cpypath	NETPATH	N-183
create_ttp	TTP	T-271
creatset	LNSTRBL	L-707
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Command/menu cross reference table (continued)

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c7lkset	CCS7	C-273
c7msuver	CCS7	C-275
c7rteset	CCS7	C-277
dat	DRM	D-753
data_screen	LTP	L-921
dav_screen	LTP	L-923
dch	LGCI	L-421
dch	RCCI	R-155
dch	TMS	T-13
dchcon	LTPISDN	L-1251
dchcon	LTPMAN	L-1497
dcrmoch	NWM	N-345
dcrsel	NWM	N-349
dcsig	LTPISDN	L-1255
dctltp	LTP	L-925
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dddin	SASelect	S-147
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deact	LINKSET	L-625
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define	ALTBAL	A-51
define	ALTCKTTST	A-95
define	ALTDIAG	A-139
define	ALTLIT	A-183
define	ALTSDIAG	A-229
define	BERP	B-19
define	BERT	B-93
define	XFER	X-59
defman	ALTBAL	A-61
defman	ALTCKTTST	A-105
defman	ALTDIAG	A-149
defman	ALTLIT	A-193
defman	ALTSDIAG	A-239
defpath	NETPATH	N-185
defschd	ALTBAL	A-63
defschd	ALTCKTTST	A-107
defschd	ALTDIAG	A-151
defschd	ALTLIT	A-195
defschd	ALTSDIAG	A-241
deftime	BERP	B-31
deftime	DCTLTP	D-113
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deftst	NETPATH	N-189
delcos	LineSel	L-595
delcust	LineSel	L-597
deldwr	LineSel	L-599
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delete_ttp	TTP	T-277
deload	CARD	C-25
deload	ENET	E-57
deload	MATRIX	M-75
deload	SHELF	S-581
deload	SYSTEM	S-1163
delofc	LineSel	L-601
delman	ATT	A-297
delsite	LineSel	L-603
det	LTPISDN	L-1259
detail	POST	P-271
devices	FP	F-63
devtype	IOC	I-247
dgttst	LTPLTA	L-1405
diag	ALT	A-35
diag	LTP	L-927
diag(isdn)	LTP	L-943
diagnose	IBNCON	I-17
dial	DCTLTP	D-131
dial	DCTTTP	D-221
dirasst	AOSSsel	A-273
dirp	IOD	I-291
disable	AUTOCTRL	A-349
disable	FMT	F-31
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Command/menu cross reference table (continued)

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disalm	STAT TRKS	S-1063
disp	APUX	A-371
disp	CARD	C-31
disp	CARRIER	C-213
disp	DCH	D-71
disp	DEVICES (CFI)	D-375
disp	DEVICES (LMX)	D-463
disp	DEVICES (PSP)	D-531
disp	DISPLAY	D-623
disp	DRAM	D-705
disp	DTC	D-833
disp	DTCI	D-975
disp	EIU	E-7
disp	ENET	E-61
disp	ESA	E-123
disp	Ext	E-207
disp	ICRM	I-73
disp	IDT	I-141
disp	LCM	L-37
disp	LCME	L-113
disp	LCMI	L-173
disp	LCOM	L-229
disp	LGC	L-279
disp	LGCI	L-423
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disp	LNSTRBL	L-711
disp	LTC	L-751
disp	MATRIX	M-81

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Command/menu cross reference table (continued)

Command	Menu	Page
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disp	MSB7	M-651
disp	MTM	M-785
disp	NET	N-9
disp	NET INTEG	N-69
disp	NET JCTRS	N-119
disp	NET LINKS	N-143
disp	NETPATH	N-193
disp	NET XPTS	N-231
disp	NIU	N-263
disp	OAU	O-9
disp	OPMPES	O-51
disp	PM	P-105
disp	POST	P-277
disp	RCC	R-15
disp	RCCI	R-157
disp	SHELF	S-587
disp	SMS	S-713
disp	SMU	S-855
disp	SMU	S-855
disp	SPM	S-987
disp	SRUPES	S-1023
disp	SYSTEM	S-1169
disp	TMS	T-15
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Command/menu cross reference table (continued)

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dispcnts	PMC	P-171
dispgrp	STAT TKGRP	S-1089
display	BERT	B-99
display	DCTLTP	D-143
display	DCTTTP	D-233
display	INTEG	I-213
display	NWM	N-351
display	SAEdit	S-47
dispopt	POST	P-285
disptrk	STAT TKGRP	S-1091
disptrk	STAT TRKS	S-1065
dmnt	DIRP	D-587
dmnt	XFER	X-61
door	OPMPES	O-53
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downld	MPC	M-389
dpnss	CCS	C-259
dpp	IOD	I-293
dpsync	Clock	C-383
dpsync	Clock	C-457
dpsync	CM	C-533
dpsync	CMMnt	C-619
dpsync	MC	M-151
dpsync	Memory	M-221
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dpsync	Port	P-223
dumpb	SBS	S-65

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Command/menu cross reference table (continued)

Command	Menu	Page
dumpb	SBSSTAT	S-105
ebsmsg	LTP	L-965
eiobkup	SBSSTAT	S-107
enable	AUTOCTRL	A-351
enable	FMT	F-33
enclock	ENET	E-63
endcld	SA	S-11
endclg	SA	S-13
equip	Ext	E-215
equip	LTPDATA	L-1123
equip	PRADCH	P-377
exclct	AOSSsel	A-275
exclqst	SASelect	S-153
exclst	SASelect	S-157
exclto	AOSSsel	A-279
exclto	SASelect	S-161
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fbus	LIM	L-543
fcnt	DDU	D-307
filter	INTEG	I-219
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frls	TTP	T-279

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Command/menu cross reference table (continued)

Command	Menu	Page
gwtrantst	SCCPLOC	S-207
gwtrantst	SCCPRSS	S-327
groupcmd	C7TTP	C-1023
grpctrl	NWM	N-355
haltatt	ATT	A-303
hcpygrp	STAT TKGRP	S-1095
hcpytrk	STAT TKGRP	S-1097
hcpytrk	STAT TRKS	S-1069
help	DCAP	D-51
history	OPMPES	O-55
history	SRUPES	S-1027
hold	C6TTP	C-727
hold	C7TTP	C-1025
hold	DATA	D-23
hold	DCTLTP	D-151
hold	DCTTTP	D-241
hold	LTP	L-971
hold	LTPDATA	L-1141
hold	LTPISDN	L-1265
hold	LTPLTA	L-1409
hold	LTPMAN	L-1501
hold	MANUAL	M-9
hold	MONITOR	M-291
hold	PRADCH	P-395
hold	TRKCONV	T-159
hold	TTP	T-281
hold	X75TTP	X-13
hset	MANUAL	M-11
hset	TTP	T-285

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Command/menu cross reference table (continued)

Command	Menu	Page
ibntrk	SASelect	S-165
icrmlogs	ICRM	I-77
idmtce	DEVICES (CFI)	D-377
idmtce	DEVICES (LMX)	D-477
idmtce	DEVICES (PSP)	D-533
lfsloop	C7BERT	C-779
iloss	LTPISDN	L-1267
image	CMMnt	C-623
imp	LTPISDN	L-1269
inclct	AOSSsel	A-283
inclqst	SASelect	S-167
inclst	SASelect	S-171
inclto	AOSSsel	A-285
inclto	SASelect	S-173
info	DRM	D-767
info	EXND	E-189
info	NETPATH	N-195
info	SPM	S-989
inh	C7LKSET	C-857
inhibit	MTD	M-757
inject	DCTLTP	D-153
inject	DCTTTP	D-243
injerr	C7BERT	C-785
insync	CM	C-541
intcctrl	NWM	N-357
integ	ENET	E-71
integ	NET	N-21
interms	MS	M-459
intmess	C7MSUVER	C-927

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Command/menu cross reference table (continued)

Command	Menu	Page
ioc	IOD	I-295
ipml	PM	P-109
irlink	RCC	R-23
irlink	RCCI	R-159
isg	LGCI	L-425
isg	RCCI	R-161
isg	TMS	T-17
isgact	PERFORM	P-7
ismd	DCAP	D-55
isncp	DCAP	D-57
item	STAT TKGRP	S-1101
jack	LTPMAN	L-1503
jack	MANUAL	M-13
jack	TTP	T-287
jctrs	NET	N-23
jctrs	NET JCTRS	N-121
kept	XFER	X-63
layer	CCIS6	C-243
lco	LTP	L-973
lco(isdn)	LTP	L-979
ldpmall	PM	P-111
level	LTP	L-987
level	TTP	T-289
linesel	SASelect	S-177
linetst	LCOM	L-231
link	CARD	C-33
links	NET	N-25
links	NET LINKS	N-145
linkset	CCIS6	C-245

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Command/menu cross reference table (continued)

Command	Menu	Page
list	AUTOCTRL	A-353
list	CODECTRL	C-673
list	Ext	E-217
list	FMT	F-35
list	GRPCTRL	G-13
list	INTCCTRL	I-181
list	RTECTRL	R-271
listalm	LNSTRBL	L-715
listalm	TRKSTRBL	T-207
listdev	CONS	C-693
listdev	DDU	D-311
listdev	DLC	D-649
listdev	IOD	I-297
listdev	MPC	M-393
listdev	MTD	M-759
listman	ATT	A-305
listset	APUX	A-373
listset	DTC	D-841
listset	DTCI	D-977
listset	EIU	E-9
listset	FRIU	F-103
listset	ICRM	I-79
listset	LCM	L-39
listset	LCOM	L-233
listset	LGC	L-287
listset	LGCI	L-427
listset	LIM	L-545
listset	LIU7	L-647
listset	LTC	L-759

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Command/menu cross reference table (continued)

Command	Menu	Page
listset	MSB6	M-543
listset	MSB7	M-653
listset	NIU	N-265
listset	RCC	R-25
listset	RCCI	R-163
listset	SMS	S-721
listset	SMU	S-863
listset	TMS	T-19
listset	XLIU	X-87
lit	ALT	A-37
litinfo	ALTLIT	A-197
lnsmp	LineSel	L-605
lnsmp	SASelect	S-179
lnstrbl	LNS	L-683
lntst	LTPLTA	L-1411
loadb	OPMPES	O-59
loadb	SRUPES	S-1031
loadcd	Card	C-119
loadcd	Chain	C-313
loadcd	Clock	C-463
loadcd	Shelf	S-459
loaden	SYSTEM	S-1173
loadenall	SYSTEM	S-1179
loadfw	TTP	T-293
loadms	Card	C-129
loadms	Chain	C-323
loadms	MS	M-461
loadms	Shelf	S-469
loadnotest	DTC	D-845

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Command/menu cross reference table (continued)

Command	Menu	Page
loadnotest	MSB6	M-545
loadnotest	MSB7	M-655
loadnotest	LGC	L-291
loadnotest	LGCI	L-431
loadnotest	LTC	L-763
loadnotest	RCC	R-29
loadnotest	RCCI	R-167
loadnotest	SMS	S-725
loadnotest	SMU	S-867
loadpm	APUX	A-375
loadpm	DCH	D-73
loadpm	DRAM	D-707
loadpm	DTC	D-847
loadpm	DTCI	D-981
loadpm	EIU	E-11
loadpm	ESA	E-125
loadpm	FP	F-65
loadpm	FRIU	F-105
loadpm	ICRM	I-81
loadpm	LCM	L-41
loadpm	LCME	L-115
loadpm	LCMI	L-175
loadpm	LCOM	L-235
loadpm	LGC	L-293
loadpm	LGCI	L-433
loadpm	LIM	L-547
loadpm	LIU7	L-649
loadpm	LTC	L-765
loadpm	MSB6	M-547

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Command/menu cross reference table (continued)

Command	Menu	Page
loadpm	MSB7	M-659
loadpm	MTM	M-787
loadpm	NIU	N-267
loadpm	OAU	O-11
loadpm	RCC	R-31
loadpm	RCCI	R-169
loadpm	SMS	S-727
loadpm	SMU	S-869
loadpm	STC	S-1125
loadpm	TMS	T-21
loadpm	XLIU	X-89
loc	NET	N-27
loc	NET XPTS	N-233
locate	CARD	C-35
locate	Clock	C-387
locate	CM	C-545
locate	DLC	D-653
locate	ENET	E-73
locate	MATRIX	M-83
locate	MC	M-155
locate	Memory	M-225
locate	PMC	P-175
locate	Port	P-227
locate	SCCPLOC	S-211
locate	SHELF	S-589
locate	SLM	S-653
locate	SYSTEM	S-1183
logformat	ENET	E-75
logmask	MC	M-157

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Command/menu cross reference table (continued)

Command	Menu	Page
logmask	PMC	P-177
logs	INTEG	I-223
loop	FRIU	F-107
loop	POST	P-289
loopbk	BERP	B-35
loopbk	EIU	E-15
loopbk	IDT	I-143
loopbk	ISG	I-373
loopbk	LCOM	L-237
loopbk	LIU7	L-653
loopbk	LTPDATA	L-1143
loopbk	PRADCH	P-397
loopbk	X75TTP	X-15
loopbk(isdn)	LTPDATA	L-1153
loss	LTPMAN	L-1507
loss	MANUAL	M-17
loss	TTP	T-297
lstband	LAYER	L-7
lstclli	ATT	A-307
lststop	ATT	A-313
lstwait	ATT	A-315
lta	LTPLTA	L-1413
ltloopbk	LTPISDN	L-1281
ltp	LNS	L-685
ltprsrc	LTP	L-989
ltp_aux_com	LTP	L-991
ltp_aux_gate_com	LTP	L-993
l1blmalm	LTPISDN	L-1273
l1thrsh	LTPISDN	L-1277

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Command/menu cross reference table (continued)

Command	Menu	Page
manual	TTP	T-301
match	Memory	M-227
match	PLANE	P-41
matejam	PLANE	P-45
matrix	CARD	C-37
matrix	ENET	E-79
matrix	SHELF	S-591
matrix	SYSTEM	S-1185
mc	CM	C-547
mdn	IOC	I-257
meas	OPMPES	O-61
meas	SRUPES	S-1033
memory	CM	C-549
memory	ENET	E-83
mnt	DIRP	D-591
mode	NET INTEG	N-81
monconn	AOSSsel	A-287
monconn	SASelect	S-183
monitor	DRM	D-783
monitor	TTP	T-303
monlink	MONITOR	M-297
monlta	LTPLTA	L-1417
monpost	MONITOR	M-301
monrel	AOSSsel	A-289
monrel	SASelect	S-185
montalk	MONITOR	M-305
mount	DRM	D-787
mtcchk	CM	C-551
mtcchk	CMMnt	C-629

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Command/menu cross reference table (continued)

Command	Menu	Page
mtcchk	Memory	M-231
mtcchk	MS	M-469
mtcchk	SLM	S-655
next	APUX	A-379
next	Card	C-135
next	C6TTP	C-729
next	C7LKSET	C-861
next	C7RTESET	C-993
next	C7TTP	C-1027
next	DATA	D-27
next	DCH	D-63
next	DCTLTP	D-159
next	DCTTTP	D-249
next	DEVICES (CFI)	D-381
next	DEVICES (FP)	D-427
next	DISPLAY	D-631
next	DPNSS	D-677
next	DRAM	D-711
next	DTC	D-865
next	DTCI	D-997
next	EIU	E-19
next	ESA	E-129
next	ESTU	E-161
next	FMT	F-37
next	FRIU	F-111
next	IBNCON	I-23
next	ICRM	I-85
next	IDT	I-147
next	IPML	I-327

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Command/menu cross reference table (continued)

Command	Menu	Page
next	ISG	I-377
next	LCM	L-55
next	LCME	L-119
next	LCMI	L-179
next	LCOM	L-239
next	LGC	L-311
next	LGCI	L-451
next	LIM	L-551
next	LIU7	L-657
next	LTC	L-783
next	LTP	L-995
next	LTPDATA	L-1167
next	LTPLTA	L-1423
next	LTPISDN	L-1287
next	LTPMAN	L-1509
next	MANUAL	M-19
next	MONITOR	M-309
next	MP	M-355
next	MSB6	M-563
next	MSB7	M-675
next	MTM	X-57
next	NETPATH	N-201
next	NIU	N-273
next	OAU	O-15
next	OPMPES	O-63
next	PM	P-113
next	POST	P-293
next	PRADCH	P-401
next	PVC	P-427

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Command/menu cross reference table (continued)

Command	Menu	Page
next	RCC	R-49
next	RCCI	R-187
next	SA	S-15
next	SCCPLOC	S-215
next	SCCPRSS	S-331
next	SCPLOC	S-379
next	SMS	S-745
next	SMU	S-887
next	SPM	S-993
next	SRUPES	S-1035
next	STC	S-1129
next	TMS	T-37
next	TPC	T-107
next	TRKCONV	T-163
next	TTP	T-305
next	XLIU	X-92
next	X75TTP	X-21
nextcall	SA	S-15
nextcall	SAEdit	S-49
nextdev	POSTDEV	P-333
nextgrp	STAT TKGRP	S-1103
nextls	C7LKSET	C-863
nextpage	NOP	N-313
nextpage	SBSSTAT	S-109
nextpage	SBSSTRM	S-129
nexttrk	STAT TKGRP	S-1105
nexttrk	STAT TRKS	S-1073
noise	LTPMAN	L-1519
noise	MANUAL	M-23

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Command/menu cross reference table (continued)

Command	Menu	Page
noise	TTP	T-309
nop	IOD	I-305
nse	LTPISDN	L-1297
nx25ci	IOD	I-307
offl	APUX	A-381
offl	Card	C-139
offl	CARD	C-39
offl	Chain	C-329
offl	CONS	C-697
offl	C7LKSET	C-865
offl	C7RTESET	C-995
offl	DCH	D-77
offl	DDU	D-315
offl	DEVICES (CFI)	D-383
offl	DEVICES (FP)	D-429
offl	DLC	D-655
offl	DPNSS	D-679
offl	DRAM	D-713
offl	DTC	D-867
offl	DTCI	D-999
offl	EIU	E-21
offl	ESA	E-131
offl	ESTU	E-163
offl	EXND	E-191
offl	FBUS	F-9
offl	FP	F-71
offl	FRIU	F-113
offl	ICRM	I-87
offl	IDT	I-149

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Command/menu cross reference table (continued)

Command	Menu	Page
offl	IOC	I-259
offl	IPML	I-329
offl	ISG	I-379
offl	LAYER	L-11
offl	LCM	L-57
offl	LCME	L-121
offl	LCMI	L-181
offl	LCOM	L-241
offl	LGC	L-313
offl	LGCI	L-453
offl	LIM	L-553
offl	LINKSET	L-627
offl	LIU7	L-659
offl	LTC	L-785
offl	MATRIX	M-87
offl	MPC	M-397
offl	MSB6	M-565
offl	MSB7	M-677
offl	MTD	M-763
offl	MTM	M-793
offl	NET	N-29
offl	NET JCTRS	N-123
offl	NIU	N-275
offl	OAU	O-17
offl	OPMPES	O-67
offl	POST	P-295
offl	POSTDEV	P-335
offl	PVC	P-429
offl	RCC	R-51

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Command/menu cross reference table (continued)

Command	Menu	Page
offl	RCCI	R-189
offl	SCCPLOC	S-217
offl	SCCPRPC	S-303
offl	SCCPRSS	S-333
offl	SCPLOC	S-381
offl	SEAS	S-419
offl	Shelf	S-475
offl	SHELF	S-593
offl	SLM	S-657
offl	SMS	S-747
offl	SMU	S-889
offl	SPM	S-995
offl	SRUPES	S-1039
offl	STC	S-1131
offl	SYSTEM	S-1187
offl	TMS	T-39
offl	TPC	T-109
offl	XLIU	X-95
offlchn	Shelf	S-483
oosremen	SYSTEM	S-1191
op	MANUAL	M-25
op	TTP	T-311
openckt	OPMPES	O-69
openckt	SRUPES	S-1041
opr	SA	S-19
orig	LTPLTA	L-1433
othopr	SA	S-21
outasst	SASelect	S-187
output	BERP	B-39

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Command/menu cross reference table (continued)

Command	Menu	Page
ovrride	ALTBAL	A-65
ovrride	ALTCKTTST	A-109
ovrride	ALTDIAG	A-153
ovrride	ALTLIT	A-199
ovrride	ALTSDIAG	A-243
pads	TTP	T-317
page	AUTOCTRL	A-357
page	CODECTRL	C-677
page	GRPCTRL	G-17
page	INTCCTRL	I-185
page	NWM	N-359
page	RTECTRL	R-273
parmset	BERP	B-43
patchxpm	DTCI	D-1003
patchxpm	TMS	T-43
path	NET	N-31
pathtest	ENET	E-85
perform	DTC	D-871
perform	DTCI	D-1005
perform	LGC	L-317
perform	LGCI	L-457
perform	LTC	L-789
perform	RCC	R-55
perform	RCCI	R-193
perform	SMS	S-751
perform	SMU	S-893
perform	TMS	T-45
pes	PM	P-115
pfquery	PERFORM	P-9

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Command/menu cross reference table (continued)

Command	Menu	Page
plane	FP	F-75
pmact	PERFORM	P-11
pmc	CM	C-553
pmloader	PM	P-117
pmloop	C7BERT	C-787
pmreset	DTC	D-877
pmreset	DTCI	D-1007
pmreset	FP	F-77
pmreset	LGC	L-323
pmreset	LGCI	L-463
pmreset	LIM	L-555
pmreset	LTC	L-795
pmreset	MSB6	M-569
pmreset	MSB7	M-681
pmreset	NIU	N-279
pmreset	RCC	R-61
pmreset	RCCI	R-199
pmreset	SMS	S-757
pmreset	SMU	S-899
pmreset	TMS	T-49
pms	INTEG	I-225
pms	NET INTEG	N-85
port	Card	C-145
port	MC	M-161
post	ALT	A-39
post	ALTBAL	A-69
post	ALTCKTTST	A-113
post	ALTDIAG	A-157
post	ALTLIT	A-203

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Command/menu cross reference table (continued)

Command	Menu	Page
post	ALTSDIAG	A-247
post	APUX	A-383
post	BERT	B-105
post	CARRIER	C-221
post	C6TTP	C-733
post	C7LKSET	C-867
post	C7MSUVER	C-929
post	C7RTESET	C-997
post	C7TTP	C-1031
post	DATA	D-31
post	DCH	D-79
post	DCTLTP	D-161
post	DCTTTP	D-251
post	DEVICES (CFI)	D-387
post	DEVICES (LMX)	D-481
post	DEVICES (PSP)	D-537
post	DISPLAY	D-633
post	DPNSS	D-681
post	DRAM	D-715
post	DTC	D-881
post	DTCI	D-1013
post	EIU	E-25
post	ESA	E-133
post	ESTU	E-165
post	FMT	F-39
post	FRIU	F-117
post	ICRM	I-91
post	IDT	I-151
post	IPML	I-331

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Command/menu cross reference table (continued)

Command	Menu	Page
post	ISG	I-381
post	LCM	L-59
post	LCME	L-123
post	LCMI	L-183
post	LCOM	L-245
post	LGC	L-327
post	LGCI	L-467
post	LIM	L-559
post	LINKSET	L-629
post	LIU7	L-663
post	LTC	L-799
post	LTP	L-1005
post	LTPDATA	L-1177
post	LTPISDN	L-1301
post	LTPLTA	L-1439
post	LTPMAN	L-1521
post	MANUAL	M-31
post	MONITOR	M-313
post	MP	M-357
post	MSB6	M-577
post	MSB7	M-689
post	MTM	M-795
post	NET INTEG	N-93
post	NETPATH	N-203
post	NIU	N-285
post	NOP	N-315
post	OAU	O-19
post	OPMPES	O-71
post	PM	P-121

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Command/menu cross reference table (continued)

Command	Menu	Page
post	POST	P-301
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post	PRADCH	P-405
post	RCC	R-65
post	RCCI	R-203
post	SCCPLOC	S-219
post	SCCPRPC	S-305
post	SCCPRSS	S-335
post	SCP	S-353
post	SCPLOC	S-387
post	SMS	S-761
post	SMU	S-903
post	SPM	S-997
post	SRUPES	S-1043
post	STC	S-1137
post	TMS	T-57
post	TPC	T-115
post	TRKCONV	T-167
post	TSTEquip	T-245
post	TTP	T-323
post	XLIU	X-99
post	X75TTP	X-25
postdev	DEVICES (FP)	D-435
post(isdn)	LTP	L-1023
postisg	ISGACT	I-395
postisp	ISP	I-415
post00	DTCI	D-1013
potsdiag	LTP	L-1039
pps	IDT	I-155

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Command/menu cross reference table (continued)

Command	Menu	Page
prefix	LTP	L-1043
prev	DPNSS	D-683
prevdm	IBNCON	I-27
prevpage	SBSSTAT	S-111
prevpage	SBSSTRM	S-131
print	SA	S-17
print	SAEdit	S-51
process	BERP	B-45
progress	IDT	I-161
protsw	CARRIER	C-231
protsw	POST	P-311
prtalm	STAT TKGRP	S-1107
prtalm	STAT TRKS	S-1075
prvpage	NOP	N-319
pside	MS	M-471
pvc	SEAS	S-421
qband	LAYER	L-13
qconline	IBNCON	I-29
qconv	MPC	M-401
qcustgrp	IBNCON	I-31
qipml	IPML	I-333
qlayer	LAYER	L-15
qlayer	LTPISDN	L-1319
qlayer2	LTPDATA	L-1201
qlink	MPC	M-405
qloop	LTPISDN	L-1323
ql1perf	LTPDATA	L-1195
qmpc	MPC	M-407
qmspw	SASelect	S-191

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Command/menu cross reference table (continued)

Command	Menu	Page
qnode	DLC	D-657
qnode	MPC	M-413
qrydev	POSTDEV	P-341
qryfepc	C7LKSET	C-871
qrysig	C6TTP	C-741
qrysig	C7TTP	C-1039
qsbsylk	MPC	M-415
qseated	IBNCON	I-35
qsup	LNSTRBL	L-719
qsup	TRKSTRBL	T-209
qtst	NET	N-33
qtst	NET XPTS	N-239
query	C7BERT	C-793
query	DIRP	D-601
query	FBUS	F-11
query	IOC	I-263
query	NOP	N-321
query	XFER	X-65
queryalm	CCS	C-261
querycd	Card	C-147
querycd	Chain	C-335
querycd	Shelf	S-489
queryclk	Clock	C-389
queryclk	CM	C-555
querycm	Clock	C-391
querycm	CM	C-557
querydv	DEVICES (CFI)	D-391
querydv	DEVICES (LMX)	D-485
querydv	DEVICES (PSP)	D-541

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Command/menu cross reference table (continued)

Command	Menu	Page
queryen	CARD	C-45
queryen	ENET	E-87
queryen	MATRIX	M-91
queryen	SHELF	S-601
queryen	SYSTEM	S-1195
queryflg	CM	C-565
queryflt	C7LKSET	C-873
queryflt	C7RTESET	C-1001
queryflt	PVC	P-435
queryflt	SCPLOC	S-391
queryflt	SEAS	S-423
queryfmt	FMT	F-43
queryfp	DEVICES (FP)	D-439
queryir	IRLINK	I-351
queryisg	ISGACT	I-399
querylap	DPNSS	D-685
querylk	LCOM	L-249
querylnk	DPNSS	D-687
querymcr	PLANE	P-49
queryms	Card	C-155
queryms	Chain	C-343
queryms	Clock	C-479
queryms	MS	M-473
queryms	Shelf	S-497
querypc	C7RTESET	C-1003
querypes	OPMPES	O-75
querypes	SRUPES	S-1047
querypl	PLANE	P-51
querypm	APUX	A-387

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Command/menu cross reference table (continued)

Command	Menu	Page
querypm	DCH	D-81
querypm	DRAM	D-717
querypm	DTC	D-885
querypm	DTCI	D-1017
querypm	EIU	E-29
querypm	ESA	E-135
querypm	EXND	E-193
querypm	FP	F-81
querypm	FRIU	F-121
querypm	ICRM	I-95
querypm	IDT	I-163
querypm	LCM	L-63
querypm	LCME	L-127
querypm	LCMI	L-187
querypm	LCOM	L-253
querypm	LGC	L-331
querypm	LGCI	L-471
querypm	LIM	L-561
querypm	LIU7	L-667
querypm	LTC	L-803
querymp	MP	M-361
querypm	MSB6	M-581
querypm	MSB7	M-693
querypm	MTM	M-797
querypm	NIU	N-289
querypm	OAU	O-21
querypm	RCC	R-69
querypm	RCCI	R-207
querypm	SMS	S-765

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Command/menu cross reference table (continued)

Command	Menu	Page
querypm	SMU	S-907
querypm	SPM	S-999
querypm	TMS	T-61
querypm	TPC	T-111
queryproc	CONS	C-699
queryproc	IOC	I-265
queryproc	MTD	M-765
queryrex	ENET	E-89
querysrv	SCP	S-355
queryss	SCCPLOC	S-223
queryss	SCCPRPC	S-307
queryss	SCCPRSS	S-339
querystc	STC	S-1141
querytape	MTD	M-767
querytrf	C7LKSET	C-891
querytrf	SCPLOC	S-395
querytty	CONS	C-701
queryupd	SCPLOC	S-399
queryusr	C7LKSET	C-897
queryusr	DPNSS	D-689
quit	ACTIVITY	A-5
quit	ALT	A-41
quit	ALTBAL	A-71
quit	ALTCKTTST	A-115
quit	ALTDIAG	A-159
quit	ALTLIT	A-205
quit	ALTSDIAG	A-249
quit	APUX	A-389
quit	ATT	A-317

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	AUTOCTRL	A-359
quit	BERP	B-51
quit	BERT	B-107
quit	Card	C-165
quit	CARRIER	C-233
quit	CCIS6	C-247
quit	CCS	C-265
quit	CCS7	C-285
quit	Chain	C-353
quit	Clock	C-399
quit	Clock	C-489
quit	CM	C-567
quit	CMMnt	C-635
quit	CODECTRL	C-679
quit	CONS	C-703
quit	CPSTATUS	C-715
quit	C6TTP	C-743
quit	C7BERT	C-799
quit	C7LKSET	C-899
quit	C7MSUVER	C-931
quit	C7RTESET	C-1005
quit	C7TTP	C-1041
quit	DATA	D-39
quit	DCAP	D-59
quit	DCH	D-83
quit	DCTLTP	D-165
quit	DCTTTP	D-255
quit	DDU	D-317
quit	DELAYS (LGC)	D-335

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	DELAYS (RCC)	D-351
quit	DEVICES (CFI)	D-397
quit	DEVICES (FP)	D-445
quit	DEVICES (LMX)	D-491
quit	DEVICES (NIU)	D-511
quit	DEVICES (PSP)	D-547
quit	DIRP	D-595
quit	DISPLAY	D-643
quit	DLC	D-659
quit	DPNSS	D-691
quit	DRAM	D-719
quit	DRM	D-789
quit	DTC	D-899
quit	DTCI	D-1023
quit	EIU	E-31
quit	ESA	E-141
quit	ESTU	E-167
quit	EXND	E-195
quit	Ext	E-219
quit	FBUS	F-13
quit	FMT	F-45
quit	FP	F-83
quit	FRIU	F-123
quit	GRPCTRL	G-19
quit	IBNCON	I-39
quit	ICRM	I-103
quit	IDT	I-165
quit	INTCCTRL	I-187
quit	INTEG	I-229

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	IOC	I-267
quit	IOD	I-309
quit	IPML	I-335
quit	IRLINK	I-353
quit	ISG	I-387
quit	ISGACT	I-401
quit	ISP	I-417
quit	LAYER	L-17
quit	LCM	L-71
quit	LCME	L-133
quit	LCMI	L-193
quit	LCOM	L-255
quit	LGC	L-345
quit	LGCI	L-479
quit	LIM	L-563
quit	LINKSET	L-631
quit	LIU7	L-669
quit	LNS	L-687
quit	LNSTRBL	L-721
quit	LTC	L-817
quit	LTP	L-1047
quit	LTPDATA	L-1203
quit	LTPISDN	L-1327
quit	LTPLTA	L-1457
quit	LTPMAN	L-1539
quit	MANUAL	M-39
quit	MATRIX	M-95
quit	MC	M-163
quit	Memory	M-233

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	MONITOR	M-321
quit	MP	M-363
quit	MPC	M-417
quit	MS	M-483
quit	MSB6	M-589
quit	MSB7	M-701
quit	MTD	M-769
quit	MTM	M-799
quit	NET	N-37
quit	NET INTEG	N-95
quit	NET JCTRS	N-125
quit	NET LINKS	N-147
quit	NET XPTS	N-235
quit	NETPATH	N-207
quit	NIU	N-293
quit	NOP	N-331
quit	NWM	N-361
quit	OAU	O-23
quit	PERFORM	P-15
quit	PLANE	P-55
quit	PM	P-125
quit	PMACT	P-137
quit	PMC	P-181
quit	Port	P-229
quit	POST	P-313
quit	POSTDEV	P-345
quit	PRADCH	P-409
quit	PVC	P-437
quit	RCC	R-83

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	RCCI	R-215
quit	RTECTRL	R-275
quit	SASelect	S-193
quit	SBSCOMM	S-77
quit	SBSSEL	S-91
quit	SBSSTAT	S-113
quit	SBSSTRM	S-133
quit	SCCPLOC	S-225
quit	SCCPRPC	S-309
quit	SCCPRSS	S-341
quit	SCP	S-357
quit	SCPLOC	S-403
quit	SEAS	S-425
quit	SBS	S-67
quit	SHELF	S-605
quit	Shelf	S-507
quit	SLM	S-661
quit	SMS	S-779
quit	SMU	S-921
quit	SPM	S-1001
quit	SRUPES	S-1051
quit	STAT TKGRP	S-1111
quit	STAT TRKS	S-1079
quit	SYSTEM	S-1199
quit	TMS	T-67
quit	TPC	T-113
quit	TRKCONV	T-175
quit	TRKS	T-229
quit	TRKSTRBL	T-211

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Command/menu cross reference table (continued)

Command	Menu	Page
quit	TSTEquip	T-249
quit	TTP	T-331
quit	XFER	X-67
quit	X75TTP	X-33
rab	LAYER	L-21
rcama	SASelect	S-195
rclli	TRKCONV	T-179
rdbuff	NET	N-45
readfw	SLM	S-665
recann	SA	S-23
record_dtsr	LTP	L-1051
recover	DTC	D-903
recover	LGC	L-349
recover	LGCI	L-483
recover	LTC	L-821
recover	NET	N-41
recover	PM	P-129
recover	RCC	R-87
recover	RCCI	R-219
recover	SMS	S-783
recover	SMU	S-925
release	DCTLTP	D-169
release	DCTTTP	D-259
release	IBNCON	I-43
release	NOP	N-335
remove	ALTBAL	A-75
remove	ALTCKTTST	A-119
remove	ALTDIAG	A-163
remove	ALTLIT	A-209

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Command/menu cross reference table (continued)

Command	Menu	Page
remove	ALTSDIAG	A-253
remove	AUTOCTRL	A-363
remove	CODECTRL	C-683
remove	GRPCTRL	G-23
remove	INTCCTRL	I-191
remove	RTECTRL	R-279
rename	DRM	D-793
report	C7BERT	C-803
res	LTPLTA	L-1461
reset	BERP	B-55
reset	DRM	D-797
reset	IOC	I-271
reset	LineSel	L-609
reset	NETPATH	N-205
resume	LNSTRBL	L-725
resume	TRKSTRBL	T-215
reth	NET INTEG	N-99
review	BERP	B-59
revive	DIRP	D-605
rex	LIM	L-567
rextst	CARD	C-53
rextst	Clock	C-403
rextst	CM	C-571
rextst	CMMnt	C-639
rextst	ENET	E-97
rextst	MATRIX	M-99
rextst	MC	M-167
rextst	Memory	M-237
rextst	PMC	P-185

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Command/menu cross reference table (continued)

Command	Menu	Page
rextst	Port	P-233
rextst	SHELF	S-609
rextst	SYSTEM	S-1203
ring	LTPLTA	L-1465
ring	SA	S-25
rlayer	LTPISDN	L-1331
rlayer2	LTPDATA	L-1209
rls	C6TTP	C-747
rls	C7TTP	C-1045
rls	DATA	D-43
rls	MANUAL	M-43
rls	MONITOR	M-325
rls	TTP	T-335
rls	X75TTP	X-37
rlsconn	LTPMAN	L-1543
rl1perf	LTPDATA	L-1207
rotate	DIRP	D-611
rotate	DRM	D-801
rotate	MEMORY	M-245
route	Clock	C-411
route	MC	M-175
route	Port	P-241
routecm	SBSSTAT	S-117
routeset	C7TTP	C-1047
rpb	LAYER	L-23
rsetvol	DIRP	D-615
rsti	NET INTEG	N-101
rtectrl	NWM	N-365
rts	APUX	A-393

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Command/menu cross reference table (continued)

Command	Menu	Page
rts	CARD	C-59
rts	Card	C-169
rts	Chain	C-357
rts	Clock	C-413
rts	CONS	C-707
rts	C6TTP	C-749
rts	C7LKSET	C-903
rts	C7RTESET	C-1009
rts	C7TTP	C-1049
rts	DCH	D-87
rts	DDU	D-321
rts	DEVICES (CFI)	D-401
rts	DEVICES (FP)	D-449
rts	DEVICES (LMX)	D-495
rts	DEVICES (PSP)	D-551
rts	DPNSS	D-695
rts	DLC	D-663
rts	DRAM	D-723
rts	DTC	D-907
rts	DTCI	D-1027
rts	EIU	E-35
rts	ESA	E-145
rts	ESTU	E-171
rts	EXND	E-199
rts	FBUS	F-17
rts	FP	F-87
rts	FRIU	F-129
rts	IBNCON	I-45
rts	ICRM	I-107

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Command/menu cross reference table (continued)

Command	Menu	Page
rts	IDT	I-169
rts	IOC	I-273
rts	IPML	I-339
rts	IRLINK	I-357
rts	ISG	I-391
rts	LAYER	L-25
rts	LCM	L-75
rts	LCME	L-137
rts	LCMI	L-197
rts	LCOM	L-259
rts	LGC	L-353
rts	LGCI	L-487
rts	LIM	L-569
rts	LINKSET	L-635
rts	LIU7	L-673
rts	LTC	L-825
rts	LTP	L-1055
rts	LTP	L-1055
rts	MANUAL	M-45
rts	MATRIX	M-105
rts	MC	M-177
rts	MONITOR	M-327
rts	MP	M-367
rts	MPC	M-427
rts	MS	M-487
rts	MSB6	M-593
rts	MSB7	M-705
rts	MTD	M-773
rts	MTM	M-803

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Command/menu cross reference table (continued)

Command	Menu	Page
rts	NET	N-47
rts	NET JCTRS	N-129
rts	NET LINKS	N-151
rts	NET XPTS	N-243
rts	NIU	N-297
rts	OAU	O-27
rts	OPMPES	O-83
rts	PLANE	P-59
rts	PMC	P-193
rts	POST	P-317
rts	POSTDEV	P-349
rts	PRADCH	P-413
rts	PVC	P-441
rts	RCC	R-91
rts	RCCI	R-223
rts	SCCPLOC	S-229
rts	SCCPRPC	S-313
rts	SCCPRSS	S-345
rts	SCPLOC	S-407
rts	SEAS	S-429
rts	Shelf	S-511
rts	SHELF	S-615
rts	SLM	S-671
rts	SMS	S-787
rts	SMU	S-929
rts	SPM	S-1005
rts	SRUPES	S-1055
rts	STC	S-1143
rts	SYSTEM	S-1209

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Command/menu cross reference table (continued)

Command	Menu	Page
rts	SYSTEM	S-1209
rts	TMS	T-71
rts	TPC	T-117
rts	TRKCONV	T-183
rts	TTP	T-337
rts	X75TTP	X-39
rtschn	Shelf	S-519
rtsms	MS	M-495
runatt	ATT	A-321
saedit	SA	S-27
saselect	AOSSsel	A-291
saselect	LineSel	L-611
saselect	SA	S-29
saselect	SAEdit	S-53
save	C7MSUVER	C-935
sbs	SBSCOMM	S-81
sbs	SBSSEL	S-95
sbs	SBSSTAT	S-119
sbs	SBSSTRM	S-137
sbsstat	SBSSEL	S-97
sortfsa	SBSSTAT	S-123
scanms	MS	M-503
scanms	Shelf	S-527
sccploc	CCS7	C-289
sccprpc	CCS7	C-291
sccprss	SCCPRPC	S-315
scp	CCS	C-269
scploc	SCP	S-361
screen	C7MSUVER	C-939

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Command/menu cross reference table (continued)

Command	Menu	Page
scur	LTPISDN	L-1335
sdiag	ALT	A-45
seas	CCS7	C-293
seize	C6TTP	C-753
seize	C7TTP	C-1053
seize	DATA	D-45
seize	IBNCON	I-49
seize	TTP	T-341
seize	X75TTP	X-43
select	BERP	B-63
select	DCTLTP	D-173
select	DCTTTP	D-263
select	GRPCTRL	G-25
select	IBNCON	I-53
selgrp	STAT TKGRP	S-1115
selgrp	STAT TRKS	S-1083
sendmsg	IBNCON	I-59
sent	XFER	X-75
set	NETPATH	N-211
setaction	POST	P-323
setafpc	C7MSUVER	C-945
setbkup	SBS	S-71
setcdpa	C7MSUVER	C-949
setcgpa	C7MSUVER	C-953
setdest	C7MSUVER	C-957
setdpc	C7MSUVER	C-961
seth0h1	C7MSUVER	C-965
setintg	INTEG	I-233
setlog	NET INTEG	N-103

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Command/menu cross reference table (continued)

Command	Menu	Page
setlpbk	LTPMAN	L-1545
setopc	C7MSUVER	C-967
setsc	Ext	E-223
setscmg	C7MSUVER	C-971
setsd	Ext	E-225
setsio	C7MSUVER	C-975
setstop	C7BERT	C-807
setstst	ATT	A-323
sgnl	MANUAL	M-49
sgnl	TTP	T-343
shelf	Card	C-183
shelf	Chain	C-365
shelf	Clock	C-493
shelf	ENET	E-103
shelf	MATRIX	M-109
shelf	MS	M-507
shelf	Shelf	S-531
shelf	SYSTEM	S-1215
showbackup	MS	M-509
showblock	ENET	E-105
showchn	Shelf	S-533
slm	IOD	I-313
snid	C6TTP	C-755
sortcoll	SBSSTAT	S-121
sortfsa	SBSSTAT	S-123
sortkey	BERP	B-69
sortstrm	SBSSTAT	S-125
spare	Memory	M-249
sparing	DCH	D-91

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Command/menu cross reference table (continued)

Command	Menu	Page
specsig	SA	S-35
spin	SLM	S-679
split	PMC	P-199
start	ACTIVITY	A-9
start	ALTBAL	A-77
start	ALTCKTTST	A-121
start	ALTDIAG	A-165
start	ALTLIT	A-211
start	ALTSDIAG	A-255
start	ATT	A-325
start	BERP	B-75
start	BERT	B-111
start	C7BERT	C-811
start	DDU	D-325
start	NETPATH	N-213
startchg	SA	S-31
startopr	SA	S-33
stat	TRKS	T-233
stat	TRKSTRBL	T-217
status	ALTBAL	A-81
status	ALTCKTTST	A-125
status	ALTDIAG	A-169
status	ALTLIT	A-215
status	ALTSDIAG	A-259
status	DDU	D-323
status	IOC	I-275
status	PM	P-133
stc	MSB6	M-605
stc	MSB7	M-717

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Command/menu cross reference table (continued)

Command	Menu	Page
stcload	MSB6	M-607
stcload	MSB7	M-719
stksdr	TTP	T-345
stop	ALTBAL	A-85
stop	ALTCKTTST	A-129
stop	ALTDIAG	A-173
stop	ALTLIT	A-219
stop	ALTSDIAG	A-263
stop	ATT	A-331
stop	BERP	B-79
stop	BERT	B-117
stop	C7BERT	C-817
stop	DCTLTP	D-185
stop	DCTTTP	D-275
stop	DDU	D-327
stop	DELAYS (LGC)	D-339
stop	DELAYS (RCC)	D-355
stop	ISGACT	I-405
stop	ISP	I-421
stop	NETPATH	N-217
stop	PMACT	P-141
stopdisp	LNSTRBL	L-729
stopdisp	TRKSTRBL	T-219
stoplog	ACTIVITY	A-13
stoplog	DELAYS (LGC)	D-341
stoplog	DELAYS (RCC)	D-357
stoplog	ISGACT	I-407
stoplog	ISP	I-423
stoplog	PMACT	P-143

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Command/menu cross reference table (continued)

Command	Menu	Page
strmstat	SBSSEL	S-99
strt	DELAYS (LGC)	D-343
strt	DELAYS (RCC)	D-359
strt	ISGACT	I-409
strt	ISP	I-425
strt	PMACT	P-145
strtlog	ACTIVITY	A-15
strtlog	DELAYS (LGC)	D-345
strtlog	DELAYS (RCC)	D-361
strtlog	ISGACT	I-411
strtlog	ISP	I-427
strtlog	PMACT	P-147
submit	ALTBAL	A-87
submit	ALTCKTTST	A-131
submit	ALTDIAG	A-175
submit	ALTLIT	A-221
submit	ALTSDIAG	A-265
summary	BERP	B-81
suppress	LNSTRBL	L-733
suppress	TRKSTRBL	T-221
sustate	LTPDATA	L-1211
sustate	LTPISDN	L-1339
sustate	LTPMAN	L-1547
sustate (isdn)	LTPDATA	L-1217
swact	Clock	C-417
swact	CM	C-579
swact	CMMnt	C-647
swact	DEVICES (CFI)	D-413
swact	DEVICES (LMX)	D-499

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Command/menu cross reference table (continued)

Command	Menu	Page
swact	DEVICES (PSP)	D-555
swact	DTC	D-921
swact	DTCI	D-1039
swact	ICRM	I-111
swact	LGC	L-367
swact	LGCI	L-501
swact	LTC	L-839
swact	MC	M-181
swact	Memory	M-255
swact	MSB6	M-611
swact	MSB7	M-723
swact	NIU	N-301
swact	PLANE	P-65
swact	PMC	P-205
swact	Port	P-243
swact	PRADCH	P-417
swact	RCC	R-103
swact	RCCI	R-235
swact	SMS	S-801
swact	SMU	S-943
swact	TMS	T-81
swcarr	Clock	C-495
swen	DEVICES (FP)	D-455
swmast	Clock	C-501
swmast	MS	M-511
swrg	LCM	L-83
swrg	LCME	L-143
swrg	LCMI	L-203
swtch	DCH	D-95

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Command/menu cross reference table (continued)

Command	Menu	Page
sync	Clock	C-509
sync	CM	C-583
sync	CMMnt	C-651
sync	MC	M-185
sync	Memory	M-259
sync	PLANE	P-69
sync	PMC	P-209
sync	Port	P-247
system	CARD	C-67
system	ENET	E-107
system	MATRIX	M-111
system	SHELF	S-623
system	SYSTEM	S-1217
talklta	LTPLTA	L-1469
tcopy	DRM	D-805
tdet	MANUAL	M-51
tdet	TTP	T-349
tei	LTPISDN	L-1357
test	LTPISDN	L-1361
testbook	DCTLTP	D-189
testbook	DCTTTP	D-279
testreq	ATT	A-337
testss	SCCPLOC	S-231
tgen	MANUAL	M-55
tgen	TTP	T-353
thr	LTPISDN	L-1373
thresh	INTEG	I-235
threshold	MTD	M-775
time	SA	S-37

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Command/menu cross reference table (continued)

Command	Menu	Page
timer	NET INTEG	N-105
tnsmp	SASelect	S-197
tonegen	LTPMAN	L-1549
tonegen (isdn)	LTPMAN	L-1557
trans	FMT	F-49
trantst	SCCPLOC	S-293
trantst	SCCPRPC	S-317
trantst	SCCPRSS	S-347
trkqry	C6TTP	C-757
trkqry	C7TTP	C-1055
trkstrbl	TRKS	T-235
trkstrbl	STAT TKGRP	S-1117
trlnk	NET INTEG	N-107
trnsl	Card	C-185
trnsl	CARD	C-71
trnsl	Chain	C-367
trnsl	DCH	D-103
trnsl	DEVICES (CFI)	D-405
trnsl	DEVICES (LMX)	D-501
trnsl	DEVICES (NIU)	D-515
trnsl	DEVICES (PSP)	D-559
trnsl	DRAM	D-727
trnsl	DTC	D-927
trnsl	DTCI	D-1041
trnsl	ESA	E-149
trnsl	FBUS	F-21
trnsl	ICRM	I-115
trnsl	IDT	I-173
trnsl	IOC	I-279

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Command/menu cross reference table (continued)

Command	Menu	Page
trnsl	IOD	I-315
trnsl	IPML	I-343
trnsl	IRLINK	I-359
trnsl	LCM	L-87
trnsl	LCME	L-147
trnsl	LCMI	L-207
trnsl	LGC	L-373
trnsl	LGCI	L-505
trnsl	LIM	L-573
trnsl	LTC	L-845
trnsl	MATRIX	M-115
trnsl	MC	M-195
trnsl	Memory	M-269
trnsl	MP	M-371
trnsl	MSB6	M-615
trnsl	MSB7	M-727
trnsl	MTM	M-807
trnsl	NET	N-51
trnsl	NET INTEG	N-109
trnsl	NET JCTRS	N-133
trnsl	NET LINKS	N-153
trnsl	OAU	O-31
trnsl	PLANE	P-77
trnsl	PMC	P-219
trnsl	Port	P-257
trnsl	RCC	R-109
trnsl	RCCI	R-239
trnsl	Shelf	S-535
trnsl	SHELF	S-627

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Command/menu cross reference table (continued)

Command	Menu	Page
trnsl	SLM	S-685
trnsl	SMS	S-807
trnsl	SMU	S-949
trnsl	STC	S-1147
trnsl	SYSTEM	S-1221
trnsl	TMS	T-83
trnsl	TPC	T-121
trnslvf	TTP	T-355
try	CARD	C-75
try	MATRIX	M-119
try	SHELF	S-629
try	SYSTEM	S-1223
tst	APUX	A-397
tst	Card	C-189
tst	CARD	C-79
tst	Chain	C-371
tst	Clock	C-431
tst	Clock	C-513
tst	CM	C-595
tst	CONS	C-709
tst	C6TTP	C-761
tst	C7LKSET	C-907
tst	C7TTP	C-1059
tst	DCH	D-107
tst	DDU	D-329
tst	DEVICES (CFI)	D-409
tst	DEVICES (FP)	D-457
tst	DEVICES (LMX)	D-505
tst	DEVICES (PSP)	D-563

-continued-

Command/menu cross reference table (continued)

Command	Menu	Page
tst	DLC	D-665
tst	DRAM	D-729
tst	DTC	D-931
tst	DTCI	D-1045
tst	EIU	E-39
tst	ESA	E-151
tst	ESTU	E-177
tst	EXND	E-203
tst	FBUS	F-23
tst	FP	F-91
tst	FRIU	F-127
tst	ICRM	I-121
tst	IOC	I-281
tst	IPML	I-345
tst	IRLINK	I-361
tst	LCM	L-89
tst	LCME	L-149
tst	LCMI	L-209
tst	LCOM	L-263
tst	LGC	L-377
tst	LGCI	L-509
tst	LIM	L-575
tst	LINKSET	L-637
tst	LIU7	L-677
tst	LTC	L-849
tst	MANUAL	M-57
tst	MATRIX	M-123
tst	MC	M-197
tst	Memory	M-273

-continued-

Command/menu cross reference table (continued)

Command	Menu	Page
tst	MONITOR	M-331
tst	MP	M-373
tst	MPC	M-433
tst	MS	M-517
tst	MSB6	M-619
tst	MSB7	M-729
tst	MTD	M-777
tst	MTM	M-809
tst	NET	N-53
tst	NET JCTRS	N-135
tst	NET LINKS	N-155
tst	NET XPTS	N-247
tst	NIU	N-305
tst	OAU	O-33
tst	OPMPES	O-85
tst	PLANE	P-81
tst	PMC	P-149
tst	Port	P-259
tst	POST	P-325
tst	POSTDEV	P-353
tst	PVC	P-445
tst	RCC	R-113
tst	RCCI	R-243
tst	Shelf	S-539
tst	SHELF	S-633
tst	SLM	S-687
tst	SMS	S-811
tst	SMU	S-953
tst	SPM	S-1007

-continued-

Command/menu cross reference table (continued)

Command	Menu	Page
tst	SRUPES	S-1057
tst	STC	S-1149
tst	SYSTEM	S-1227
tst	TMS	T-87
tst	TPC	T-123
tst	TTP	T-367
tst	X75TTP	X-45
tstchn	Shelf	S-553
tstdsalm	Ext	E-229
tstdtmf	LTPMAN	L-1569
tstms	MS	M-523
tstring	LTPMAN	L-1563
tstsgnl	LTPISDN	L-1377
tsttrnsl	C6TTP	C-771
ttp	TRKS	T-237
uinh	C7LKSET	C-915
undo	TRKCONV	T-187
upth	NET INTEG	N-111
vac	LTPLTA	L-1475
vdc	LTPLTA	L-1479
verpath	NETPATH	N-219
view	DRM	D-811
voice	SA	S-39
voice_screen	LTP	L-1061
wait	FP	F-97
wait	LIM	L-579
waitfmsg	IBNCON	I-61
warmswact	DTC	D-949
warmswact	DTCI	D-1057

-continued-

Command/menu cross reference table (continued)

Command	Menu	Page
warmswact	ICRM	I-129
warmswact	LGC	L-521
warmswact	LGCI	L-521
warmswact	LTC	L-867
warmswact	MSB6	M-629
warmswact	MSB7	M-739
warmswact	RCC	R-131
warmswact	RCCI	R-255
warmswact	SMS	S-829
warmswact	SMU	S-971
warmswact	TMS	T-97
xbert	MSB6	M-631
xbert	MSB7	M-741
xfer	IOD	I-317
xmit	XFER	X-77
xpmlogs	DTC	D-953
xpmlogs	DTCI	D-1059
xpmlogs	LGC	L-399
xpmlogs	LGCI	L-523
xpmlogs	LTC	L-871
xpmlogs	MSB6	M-633
xpmlogs	MSB7	M-745
xpmlogs	RCC	R-133
xpmlogs	RCCI	R-257
xpmlogs	SMS	S-831
xpmlogs	SMU	S-973
xpmlogs	TMS	T-99
xpmreload	DTC	D-955
xpmreload	LGC	L-401

-continued-

Command/menu cross reference table (continued)

Command	Menu	Page
xpmreload	LGCI	L-525
xpmreload	LTC	L-873
xpmreload	RCC	R-135
xpmreload	RCCI	R-259
xpmreload	SMS	S-833
xpmreload	SMU	S-975
xpmreset	DTC	D-957
xpmreset	LGC	L-403
xpmreset	LGCI	L-525
xpmreset	LTC	L-875
xpmreset	MSB6	M-635
xpmreset	MSB7	M-747
xpmreset	RCC	R-137
xpmreset	RCCI	R-261
xpmreset	SMS	S-835
xpmreset	SMU	S-977
xpts	NET	N-57
xpts	NET XPTS	N-251
zoom	ENET	E-111
zoom	MATRIX	M-127

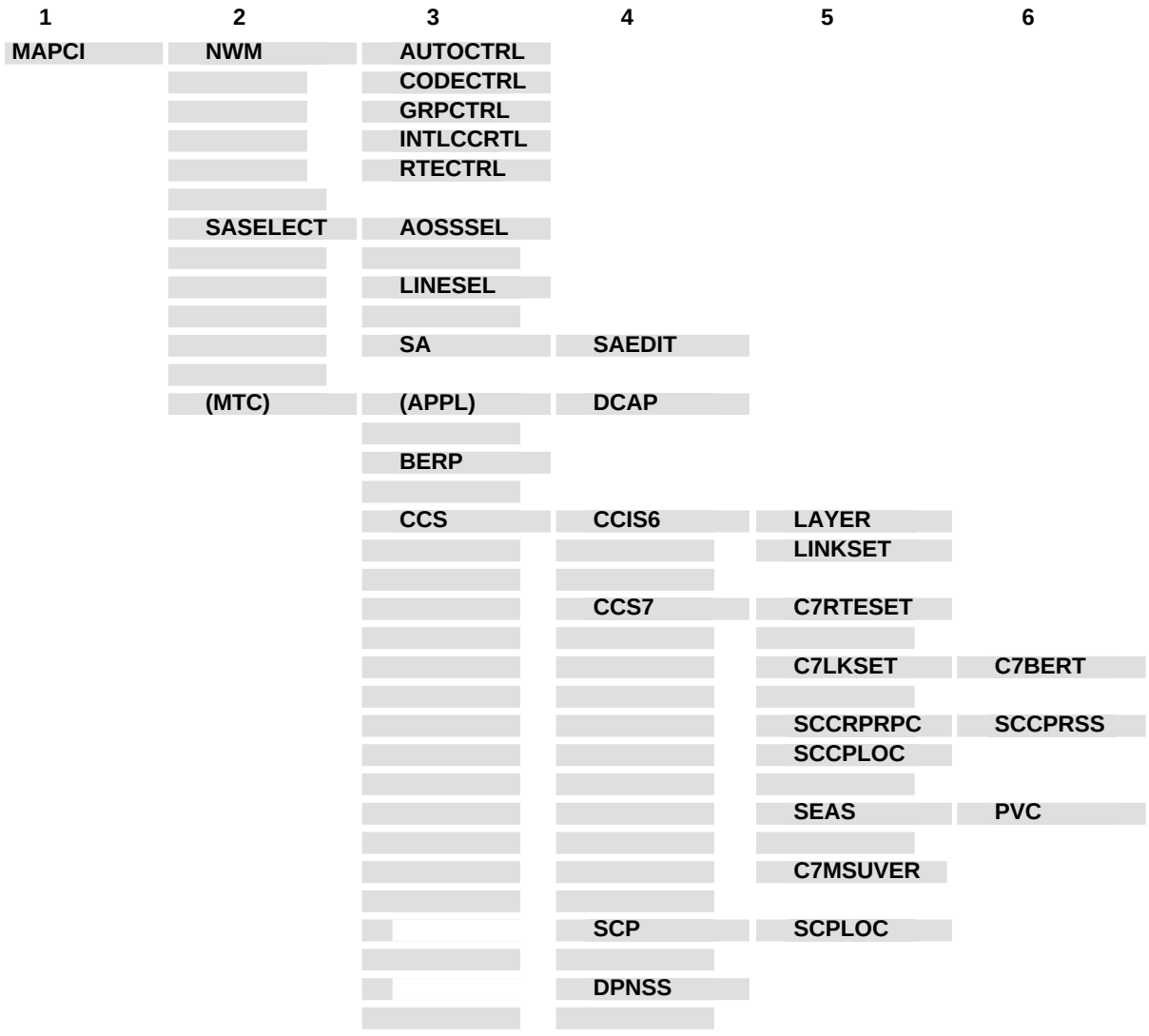
-end-

Menu chart

The menu chart illustrates the hierarchical relationship between menu levels and sublevels. In many cases the relationship between levels and sublevels is indicative of the command string required to reach that level, such as the following:

mapci;mtc;pm↵

which is used to reach the PM MAP level. This is not always the case, however, and should not be assumed. Sublevels of the PM level, for example, require a PM to be posted before subsequent levels can be accessed.



-continued-

1	2	3	4	5	6
MAPCI	***MTC***	**CM**	**CMMNT**		
			MC	**CLOCK**	
				PORT	
			MEMORY		
			PMC		
		CPSTATUS			
		ENET	**BERT**		
			INTEG		
			SYSTEM		
			MATRIX		
			SHELF	**CARD**	
		EXT	**EQUIP**	**DCME**	
				ECHOCAN	
		IOD	**DIRP**		
			DPP		
			IOC	**CONS**	
				DDU	
				DLC	
				DPAC	
				MPC	
				MTD	
			NOP		
			SLM		
			XFER		
		(LNS)	**ALT**	**ALTBAL**	
				ALTCKTTST	
				ALTDIAG	
				ALTLIT	
				ALTSDIAG	
			LNSTRBL		

-continued-

1	2	3	4	5	6
MAPCI	***MTC***	***(LNS)***	**LTP**	**CSDDS**	
				IBNCON	
				LTPDATA	
				LTPISDN	
				LTPLTA	
				LTPMAN	
		MS	**CLOCK**		
			SHELF	**CARD**	**CHAIN**
		(MTCNA)	**TSTEQUIP**	**ESTU**	
		NET	**NETINTEG**		
			NETJCTRS		
			NETLINKS		
			NETPATH		
			NETXPTS		
		PM	**APUX**		
			(CFI)	**DEVICES**	
			DTCI	**PERFORM**	
			DRAM		
			EIU		
			ESA		
			FMT		
			FP	**PLANE**	
				DEVICES	**POSTDEV**
			FRIU		
			GIC		
			ICRM		
			IDT		
			IDTC	**PERFORM**	
			Note: IDTC=ILGC, ILTC, PDTC, ADTC		

-continued-

1	2	3	4	5	6
MAPCI	***MTC***	***PM***	**IPE**		
			IPML		
			ISP		
			LCM		
			Note: LCM=LCME, LCMI, KILCM		
			LCME		
			LCMI		
			LCOM		
			LCR	**CCH**	
			LGC	**PERFORM**	**PMACT**
					DELAYS
			Note: LGC=DTC, LTC, RCC, SMU, SMR, SMS		
			LGCI	**PERFORM**	**PMACTX**
					ISGACT
				DCH	
				ISG	
			Note: LGCI=LTCI, RCCI,TMS		
			LIM	**FBUS**	
			LIU7		
			(LMX)	**DEVICES**	
			MSB6	**STC**	
			Note: MSB6=MSB7		
			MTM		
			Note: MTM=TM8, TM2, TM4, RMM, OAU, LM, DCM, STM, ATM, DES, ISLM, T8A, MMA, TAN		
			NIU	**DEVICES**	
			OAU		

-continued-

1	2	3	4	5	6
MAPCI	***MTC***	***PM***	**OPMPES**		
			PSP		
			RCC	**PERFORM**	**PMACT**
					DELAYS
				IRLINK	
			RCCI		
			RCS		
			RCT		
			Note: RCT=TCS		
			RCU		
			SRU	**SRUPES**	
				VCH	
			SMU	**RCU**	
			SMSR		
			SPM		
			SRUPES		
			TMS		
			TPC	**MP**	
			XLIU		
		TRKS	**ATT**		
			CARRIER	**POST**	
				DISPLAY	
			STATTKGRP	**STATTRKS**	
			TRKSTRBL		

-continued-

1	2	3	4	5	6
MAPCI	***MTC***	***TRKS***	**TTP**	**MANUAL**	
				MONITOR	
				C6TTP	
				DATA	
				C7TTP	
				PRADCH	
				TRKCONV	
				ECHOCTRL	
				XDCME	
				X75TTP	
			-end-		

NIU level commands

Use the NIU level of the MAP to perform maintenance activities on the network interface unit.

Accessing the NIU level

To access the NIU level, enter the following from the CI level:

mapci;mtc;pm;post niu *niu_number* ↵

where

*niu_numbe*r is the number of the NIU to be posted.

NIU commands

The commands available at the NIU MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

NIU commands

Command	Page
abtk	N-255
bsy	N-257
disp	N-263
devices	N-261
listset	N-265
loadpm	N-267
next	N-273
offl	N-275
pmreset	N-279
post	N-285

-continued-

NIU commands (continued)	
Command	**Page**
querypm	N-289
quit	N-293
rts	N-297
swact	N-301
tst	N-305
-end-	

NIU menu

The following figure shows the NIU menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .    4NIU  .     .     .     .     .


NIU                     SysB   ManBk   Offl   CBsy   IStb   InSv
 0 Quit           PM      0      0      0      0      4      14
 1                NIU     0      0      0      0      0      2
 2 Post
 3 ListSet      NIU  2:   In/sv
 4              Unit 0:   InAct InSv
 5              Unit 1:   Act   InSv
 6 Tst_
 7 Bsy_
 8 RTS_
 9 Offl
10 LoadPM_
11 Disp_
12 next
13 SwAct_
14 QueryPM_
15 Devices_
16
17
18
```

Hidden commands

```
abtk
pmreset
```

abtk (end)

Function

Use the abtk command to abort all active maintenance actions on a posted NIU.

abtk command parameters and variables	
Command	**Parameters and variables**
abtk	There are no parameters or variables.

Qualifications

The abtk command only affects the following commands at the NIU level:

- rts
- bsy
- tst
- offl
- offl
- pmreset
- loadpm

The querypm command is not affected by the abtk command.

Example

Not currently available.

Responses

Not currently available

bsy

Function

Use the bsy command to place the posted or all NIUs in the ManB state.

bsy command parameters and variables

Command	Parameters and variables				
bsy	all unit pm active inactive	*unit_no*	[*prompt* noprompt]	[*wait* nowait]	[*reply* noreply]

Parameters and variables	Description
active	This parameter causes the active NIU unit to be busied.
all	This parameter causes all posted NIU's to be busied.
inactive	This parameter causes the inactive NIU unit to be busied.
prompt	This default parameter, which is never entered, indicates that any warnings and prompts for responses that might occur will be allowed because the noprompt parameter was not entered.
noprompt	This parameter supresses any warnings and prompts for responses that might occur.
noreply	This parameter supresses any MAP responses that occur after the command has finished executing.
nowait	This parameter allows other commands to be entered at a MAP before the bsy command has completed executing.
pm	This parameter causes both units of the NIU to be busied.
reply	This default parameter, which is never entered, indicates that any MAP responses that occur after the command has finished executing will be allowed because the noreply parameter was not entered.
unit	This parameter causes only the unit specified by the *unit_no* variable to be busied.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable is the unit of the NIU to be busied and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the bsy command has completed executing because the nowait parameter was not entered.

-end-

Qualifications

None

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation

bsy PM ↵	**Task:** Busy both units of the posted NIU.
	
	Response:
	`NIU 2 Busy PM: Request has been submitted.`
	`NIU 2 Busy Unit 0: Command completed. The unit is manually busy.`
	`NIU 2 Busy Unit 1: Command completed. The unit is manually busy.`
	
	Explanation: Both units 0 and 1 of NIU 2 are successfully busied.

bsy (continued)

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`A bad impact assessment was received from the node.` `Do you wish to continue? (“YES” or “NO”).`	**Meaning:** An unexpected impact response was received and the impact of the busy command is not known. **Action:** If it is necessary to busy the NIU so maintenance can be performed on the NIU, enter “Yes”; otherwise, enter “No”.
`An Activity Switch will be required.` `Do you wish to continue? (“YES” or “NO”).`	**Meaning:** The active unit is providing service and a switch of activity is necessary if the active unit is to be busied. **Action:** If it is necessary to busy the active unit so maintenance can be performed on the NIU, enter “Yes”; otherwise, enter “No”.

`BSY of unit <0 or 1> will take down the following:`
`<list of affected ASUs>`
`Do you wish to continue? (“YES” or “NO”).`
	Meaning: Other peripherals may be connected to the NIU being busied, for example, several XLIUs may be connected to the NIU. Busying the posted NIU will cause these peripherals to go C-side busy until the NIU is returned to service.
	
	Action: If it is necessary to isolate these peripherals so maintenance can be performed on the NIU, enter “Yes”; otherwise, enter “No”.

`WARNING An assessment of the impact of the BSY cannot be made.` `Do you wish to continue? (“YES” or “NO”).`	**Meaning:** The maintenance system cannot determine if the busy request will affect service. **Action:** If it is necessary to busy the NIU so maintenance can be performed on the NIU, enter “Yes”; otherwise, enter “No”.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Command rejected.  The PM is changing state.`	**Meaning:** The PM is currently changing state and cannot be busied. **Action:** Wait until the PM has changed state, and if necessary, repeat the BSY command.
`Command rejected.  The PM is inaccessible.`	**Meaning:** Because the NIU unit is not accessible, requests from the MAP cannot be sent to it. **Action:** Schedule maintenance activity for the inaccessible NIU unit.
`Command rejected.  The PM is manually busy already.`	**Meaning:** The node is already in a manually busy state. **Action:** No action required.
`Command rejected.  You must busy the whole PM.`	**Meaning:** If the node is offline, one unit cannot be made manually busy. **Action:** Busy the NIU, and try BSY command again.

-end-

devices

Function

Use the devices command to access the DEVICES MAP level and the trnsl command.

devices command parameters and variables

Command	Parameters and variables
devices	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the devices command.

Example of the devices command

Example	Task, response, and explanation	
devices ↵		
	Task:	Access the DEVICES MAP level.
	Response:	(DEVICES level MAP display)
	Explanation:	The DEVICES level MAP provides the trnsl command.

-end-

devices (end)

Response

The following table provides an explanation of the response to the devices command.

Response for the devices command

MAP output	Meaning and action

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


DEVICE                   SysB  ManB  Offl  Cbsy  IStb  InSv

 0 Quit          PM      0     0     0     0     4     14
 2               NIU     0     0     0     0     0     0
 3
 4               NIU 2:    ISTb
 5 Trnsl         Unit o:   InAct ISTb
 6               Unit 1:   Act   InSv
 7
 8
 9
10
11
12
13
14
15
16
17
18
```

Meaning: MAP display for DEVICES level is displayed

Action: None

disp

Function

Use the disp command to display a list of all NIUs in a specified PM state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	niu

Parameters and variables	Description
niu	This parameter is the PM node-type parameter for the NIU.
pm_state	This variable is one of the following PM codes. ▪ CBsy central-side-busy ▪ Idl idle ▪ InSv in-service ▪ ISTb in-service trouble ▪ ManB manual busy ▪ NEQ not equipped ▪ Offl offline ▪ SysB system busy
state	This parameter is required before the PM state code.

Qualifications

None

Examples

The following table provides an example of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp state istb niu ↵	**Task:** Display all in-service trouble NIUs **Response:** `ISTb NIU: NONE` **Explanation:** There are no NIUs in the in-service trouble state.

disp

Responses

The following table describes the meaning and significance of responses to the disp command.

Responses for the disp command

MAP output	Meaning and action

`pm_state NIU:  NONE`
or
`pm_state NIU n, n`
	Meaning: There are no PM in the specified state.
	
	Action: None

listset

Function

Use the listset command to list the contents of the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	all *pm_type*

Parameters and variables	Description
all	This parameter causes all PMs in the posted set to be listed.
pm_type	This variable indicates a type of PM and only PMs of that type will be listed. Fot the NIU this variable should be niu.

Qualifications

None

Example

The following table provides an example of the listset command.

Example of the listset command

Example	Task, response, and explanation	
listset niu ↵		
	Task:	List all the posted NIUs
	Response:	`NIU 0, 6, 12, 18, 24, 30`
	Explanation:	All the posted NIUs as listed.

listset (end)

Responses

The following table provides explanations of the responses to the listset command.

Responses for the listset command

MAP output	Meaning and action
`NIU 0, 6, 12, 18, 24, 30`	**Meaning:** All posted NIUs are listed **Action:** None
`No PM posted` `Post set is empty`	**Meaning:** There are no posted LIUs **Action:** None

loadpm

Function

Use the loadpm command to load the NIUs with the software load specified in the inventory table, or an optional file.

loadpm command parameters and variables

Command	Parameters and variables				
loadpm	all unit pm inactive	*unit_no*	[*loadname*]	[*wait* nowait]	[*reply* noreply]

Parameters and variables	Description
all	This parameter causes all posted NIU's to be busied.
inactive	This parameter causes the inactive NIU unit to be busied.
noreply	This parameter supresses any MAP responses that occur after the command has finished executing.
nowait	This parameter allows other commands to be entered at a MAP before the bsy command has completed executing.
pm	This parameter causes both units of the NIU to be busied.
reply	This default parameter, which is never entered, indicates that any MAP responses that occur after the command has finished executing will be allowed because the noreply parameter was not entered.
unit	This parameter causes only the unit specified by the *unit_no* variable to be busied.
unit_no	This variable is the unit of the NIU to be busied and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the bsy command has completed executing because the nowait parameter was not entered.

Qualifications

The loadpm command is qualified by the following exceptions, restrictions, and limitations:

- The NIU or one of its units must be manually busy before being loaded with the load file.

loadpm (continued)

- The loadpm command , once issued, cannot be aborted. Wait until the loadpm task is completed before issuing another command.
- An ISTb alarm is not generated if a load mismatch occurs. There are two conditions in which this can happen:
  - one or more NIUs do not get updated with a new load after a patch has been applied
  - table NIUINV and table PMLOADS have not been updated with the new load name

loadpm (continued)

Example

The following table provides an example of the loadpm command.

Example of the loadpm command

Example	Task, response, and explanation
loadpm ↵	
	Task: Load both units of the posted NIU in the control position with software form the source specified in the inventory table.

	Response:
	`NIU 2 LOADPM PM: Request has been submitted.`
	`NIU 2 Load Unit 0: Command completed. The Unit contains the "NRX34BA" load.`
	`NIU 2 Load Unit 1: Command completed. The Unit contains the "NRX34BA" load.`

	Explanation: The NIU was successfully loaded with software and can be returned to service.

Responses

The following table provides explanations of the responses to the loadpm command.

Responses for the loadpm command

MAP output	Meaning and action
`Command aborted. Unable to find the load file <load_name>`	
	Meaning: The load file could not be found.
	Action: If the default load file is used, ensure that the datafill is correct. If the load name is specified, ensure that the disk volume containing the load file has been listed. Reissue the LOADPM command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action

`Command failed.`
`<Critical or Non-Critical> fault on unit <0 or 1> -`
`Fault id: <fault description>`
`-or-`
`<Critical or Non-Critical> fault on unit <0 or 1> -`
`No fault id available`
	Meaning: A fault was detected and the LOADPM command failed. A standard card list may be generated.
	
	Action: Replace the defective hardware component, if necessary, and then reenter the LOADPM command.

`Command rejected. The PM must be manually busy before it can be loaded.`	**Meaning:** The NIU or NIU unit must be in a manually busy state before it can be loaded with software. **Action:** Manually busy the NIU or NIU unit, and repeat the LOADPM command.

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
Command failed.	Base-system resources unavailable.
Command failed.	Could not fill in the status message.
Command failed.	Could not initiate firmware testing.
Command failed.	Could not send status message.
Command failed.	Could not start the boot loader.
Command failed.	Failed to prepare message path.
Command failed.	Failed to reopen some links to the PM.
Command failed.	Failed to reset the node.
Command failed.	Failed to restart communication audit.
Command failed.	Failed while sending boot records. Boot loader failure reason: <reason>
Command failed.	Maximum number of loads in progress.
Command failed.	No response from local node maintenance.
Command failed.	Node firmware is not responding.
Command failed.	The boot file’s file index is bad.
Command failed.	The PM failed firmware tests.
Command failed.	The PM must be manually busy first.
Command failed.	The status message was not acknowledged.

Meaning: Loading was not possible for the above reason.

Action: Try to load the NIU again.

-end-

next

Function

Use the next command to place the next higher PM of the set of posted NIUs into the control position.

next command parameters and variables

Command	Parameters and variables
next	*next* *pmtype*

Parameters and variables	Description
next	This default parameter, which is never entered, indicates that the next post PM, regardless of PM type will be placed in the control position because no *pmtype* variable is specified.
pmtype	This variable enables the system to select one of the PM types. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation
next ↵	**Task:** Place the next higher PM of the posted set in the control position. **Response:** `(Display of MAP screen for next PM)` **Explanation:** The next higher PM of the posted set is in the control position.

Response

The following table describes the meaning and significance of the response to the next command.

next (end)

Response for the next command	
MAP output	**Meaning and action**
`END OF POST SET`	
	Meaning: The currently displayed PM is the last in the posted set of PMs, or if only one PM number has been posted. The display returns to the next higher menu level.
	Action: None

offl

Function

Use the offl command to put NIUs in the offline state.

offl command parameters and variables

Command	Parameters and variables
offl	*posted* [*wait* / nowait] all

Parameters and variables	Description
all	This parameter causes all posted NIU's to be offlined.
nowait	This parameter allows other commands to ben entered at a MAP before the offl command has completed executing.
posted	This default parameter, which is never entered, indicates that only the posted NIU in the control position will be offlined because the all parameter was not entered.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the offl command has completed executing because the nowait parameter was not entered.

Qualifications

Before the NIU can be taken offline, it must be manually busied.

offl (continued)

Example

The following table provides an example of the offl command.

Examples of the offl command

Example	Task, response, and explanation
offl ↵	
	Task: Place the posted NIU in the control position offline.

	Response:
	`NIU 2 Offline PM: Request has been submitted.`
	`NIU 2 Offline Unit 0: Command completed. The unit is offline.`
	`NIU 2 Offline Unit 1: Command completed. The unit is offline.`

	Explanation: Both units of NIU 2 were successfully taken off line.

Responses

The following table provides explanations of the responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
`Command rejected.  The PM must be manually busy first`	
	Meaning: Before the the NIU unit can be taken off line, it must be manually busied.
	Action: Busy the node, and repeat the OFFL command.
`Command rejected.  The PM is offline already.`	
	Meaning: The NIU unit is already in an offline state.
	Action: No action required.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action

`NIU 2 Offline PM: Request has been submitted.`
`NIU 2 Offline Unit 0: Command completed. The unit is offline.`
`NIU 2 Offline Unit 1: Command completed. The unit is offline.`
	Meaning: The offl command was successful.
	
	Action: None

-end-

pmreset

Function

Use the pmreset command to re-initialize the posted NIU.

pmreset command parameters and variables

Command	Parameters and variables					
pmreset	*posted* unit pm active inactive all	*unit_no*	[*run* norun]	[*prompt* noprompt]	[*wait* nowait]	[*noreply* reply]

Parameters and variables	Description
active	This parameter causes the active unit of the NIU to be reinitialized.
all	This parameter causes all posted NIU's to be reinitialized.
norun	This parameter specifies a firmware reset only.
inactive	This parameter causes the inactive unit of the NIU to be reinitialized.
run	This default parameter, which is never entered, indicates that a firmware reset only is not specified because the norun parameter is not entered.
noprompt	This parameter suppresses any warnings that occur.
noreply	This default parameter, which is never entered, indicates
nowait	This parameter allows other commands to be entered at a MAP before the pmreset command has completed executing.
pm	This parameter causes both units of the posted NIU to be reinitialized.
posted	This default parameter, which is never entered, indicates that only the posted NIU in the control position will be reinitialized because the all parameter was not entered.
prompt	This default parameter, which is never entered, indicates any warnings that occur will be displayed because the noprompt parameter is not entered.
unit	This parameter indicates that a specifed unit of the NIU is to be reinitialized.

-continued-

pmreset (continued)

pmreset command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable specifies the unit to be reinitialized and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the pmreset command has completed executing because the nowait parameter was not entered.

- <item> <Expln>

-end-

Qualifications

The pmreset command is qualified by the following exceptions, restrictions, and limitations:

- To use the all option for the pmreset command, post a set of NIUs; otherwise, only the currently posted NIU will be reinitialized.
- The pmreset command, once issued, cannot be aborted. Wait until the pmreset task is completed before issuing another command.

Examples

The following table provides examples of the pmreset command.

Examples of the pmreset command

Example	Task, response, and explanation

pmreset pm ↵	**Task:** reset both units of the posted NIU.
	
	Response:
	`NIU 2 Reset PM: Request has been submitted.`
	`NIU 2 Reset Unit 0: Command completed. Reload restart completed successfully.`
	`NIU 2 Reset Unit 1: Command completed. Reload restart completed successfully.`
	
	Explanation: A firmware reset has been completed on unit 0 of NIU 2.

-continued-

pmreset (continued)

Examples of the pmreset command (continued)

Example	Task, response, and explanation

pmreset unit 0 norun ↵
where
 	
0 is the number of the NIU unit to be reinitialized.
	Task: Reset unit 0 of the posted NIU.
	
	Response:
	`NIU 2 Reset Unit 0: Request has been submitted.`
	`NIU 2 Reset Unit 0: Command completed. Reset to firmware completed successfully.`
	
	Explanation: A firmware reset has been completed on unit 0 of NIU 2.

-end-

Responses

The following table provides explanations of the responses to the pmreset command.

Responses for the pmreset command

MAP output	Meaning and action
`Issuing a reset will restart the software in the unit.` `Please confirm (“YES” or “NO”).`	**Meaning:** The system prompts for confirmation of the PMRESET command. **Action:** If it is necessary to restart the software in the unit, enter Yes; otherwise enter No.

-continued-

pmreset (continued)

Responses for the pmreset command (continued)

MAP output	Meaning and action
Command failed. Could not reset the PM. -or- Command failed. Could not send a status message to the PM. -or- Command failed. Failed to establish message path before reset. -or- Command failed. Failed to establish path after reset. -or- Command failed. Local node maintenance failed to respond. -or- Command failed. Maintenance is already in progress. -or- Command failed. Node firmware is not responding. -or- Command failed. No response from node when queried after reset. -or- Command failed. The PM is inaccessible. -or- Command failed. The reset was ignored.	**Meaning:** The reset could not be performed for the above reason. **Action:** Repeat the PMRESET command. If the problem persists, contact the next level of maintenance support.
Command failed. <Critical or Non-Critical> fault on unit <0 or 1> - Fault id: <fault description> -or- <Critical or Non-Critical> fault on unit <0 or 1> - No fault id available	**Meaning:** The PMRESET request failed because a fault was detected. A standard cardlist may be produced. **Action:** Correct the problem and reissue the PMRESET request.

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`Command rejected. The PM must be manually busy before it can be reset or restarted.`	**Meaning:** The PMRESET command could not be performed because the NIU or NIU unit was not manually busy. **Action:** Manually busy the NIU or NIU unit, if permissible, and try the PMRESET command again; otherwise, do not take any further action.
-end-	

post

Function

Use the post command to select a specific NIU upon which action is to be performed by other commands.

post command parameters and variables

Command	Parameters and variables
post	*posted* [*nnn*] *pm_type*

Parameters and variables	Description
nnn	This variable identifies the discrimination number of the NIU to be posted. The range is 0 to 24. More than one NIU may be specified by entering more than one discrimination number separated by spaces as in the following example: ... **8 12 16**↵
pm_type	This variable identifies a PM type. For an NIU the correct value is niu. If a level of the node-type is already accessed, the *pm_type* may be omitted from the command entry. A PM in the control position of the posted set is the default.
posted	This default parameter, which is never entered, indicates that the posted NIU currently in the control position will be posted because no *pm_type* is specified.

Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations.

- The post command must be used before using the commands trnsl, tst, bsy, rts, offl, loadpm, swact, querypm, or abtk.
- When the command string help post is entered to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

Examples

The following table provides an example of the post command.

post

Examples of the post command

Example	Task, response, and explanation
post niu 8 ↵ *where* 8 is the discrimination number of the NIU to be posted.	**Task:** Post NIU 8. **Response:** 0K **Explanation:** NIU 8 is posted.

Responses

The following table describes the meaning and significance of responses to the post command.

Responses for the post command

MAP output	Meaning and action
NO PM POSTED	**Meaning:** A PM level is accessed without posting a specific PM. **Action:** None

-continued-

Responses for the post command (continued)

MAP output **Meaning and action**

```
 pm  pm_number  n_state  LINKS OOS:  CSIDE  nn  PSIDE  nn
UNIT 0: activity  u_state  MTCE            /LOADING:  nnnn
UNIT 1: activity  u_state  MCTE            /LOADING:  nnnn
```

Meaning: When a PM is posted, its status is displayed, where:

pm	is one of the types of PM listed in Table A on page 18.
pm_number	is the discrimination number of the PM type.
n_state	is the state of the PM node. The displayed state depends on the state of one or both units. The n_states are the same as the u_states, which are listed in Table C on page 67.
LINKS_OOS	indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.
activity	indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing, INACT means the unit is on standby (inactive).
u_state	is the status of a unit. The status codes are listed and described and described in Table C on page 67.
MTCE	indicates the unit is undergoing maintenance invoked manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance is occurring.
/LOADING:	indicates the unit is being updated with datafill, where nnnn is an increment of the load.

Action: None

```
OK
```

Meaning: The specified PM is posted.

Action: None

-end-

querypm

Function

Use the QUERYPM command to display status information about an NIU.

querypm command parameters and variables

Command	Parameters and variables		
querypm	*posted*		*disp*
	unit	*unit_no*	flt

Parameters and variables	Description
disp	This default parameter, which is never entered, indicates that a normal querypm display is presented becasue the flt parameter was not entered.
flt	This parameter causes fault information for the NIU to be displayed.
posted	This default parameter, which is never entered, indicates that the posted NIU will be queried because the unit parameter is not entered.
unit	This parameter indicates that a specific unit is to be queried.
unit_no	This variable specifies the unit to be queried and has a range of 0-1.

Qualifications

None

querypm (continued)

Examples

The following table provides examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation

querypm flt ↵	**Task:** Query any faults on the posted NIU.
	
	Response:
	`NIU 1 Query PM: Request has been submitted.`
	`Critical fault on unit 0 - Fault id: 512-channel PRD`
	`Components: HICC 0`
	`Data tag : 0001`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 00 A00 NIU:001 02 CBC 18 EX25AA FRNT`
	`NIU 1 Query Unit 1: Command completed.`
	`NIU 1 Query Unit 0: Command completed.`
	
	Explanation: The display indicates a critical fault has occurred on unit 0 of NIU 1.

querypm ↵	**Task:** Query the posted NIU.
	
	Response:
	`NIU 1 Query PM: Request has been submitted.`
	`Critical fault on unit 0 - Fault id: 512-channel PRD`
	`Components: HICC 0`
	`Data tag : 0001`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 00 A00 NIU:001 02 CBC 18 EX25AA FRNT`
	`NIU 1 Query Unit 1: Command completed.`
	`NIU 1 Query Unit 0: Command completed.`
	
	Explanation: The display indicates units 0 and 1 of NIU 1 are manually busy.

querypm (end)

Responses

The following table provides an explanation of the responses to the querypm command.

Responses for the querypm command

MAP output	Meaning and action

`NIU 1 Query PM: Request has been submitted.`
`Critical fault on unit 0 - Fault id: 512-channel PRD`
`Components: HICC 0`
`Data tag  :  0001`
`Site  Flr RPos  Bay_id  Shf Description   Slot  EqPEC`
`HOST   00  A00  NIU:001  02  CBC           18   EX25AA FRNT`
`NIU 1 Query Unit 1: Command completed.`
`NIU 1 Query Unit 0: Command completed.`
	Meaning: Typical response to querypm command for NIU
	
	Action: None

`Command rejected.  The Unit is offline.`	**Meaning:** A query fault request cannot be made on an NIU unit in an offline state. **Action:** None

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the NIU level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NIU level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the NIU level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The NIU level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the NIU level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the NIU level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

Function

Use the rts command to run diagnostics and return to service and out-of-service NIU.

rts command parameters and variables

Command	Parameters and variables					
rts	*posted* unit pm active inactive all	*unit_no*	[*noforce* force]	[*prompt* noprompt]	[*wait* nowait]	[*reply* noreply]

Parameters and variables	Description
active	This parameter causes the active unit of the NIU to be returned to service.
all	This parameter causes all posted NIU's to be returned to service.
force	This parameter causes NIU inaccessibility to be ignored.
inactive	This parameter causes the inactive unit of the NIU to be returned to service.
noforce	This default parameter, which is never entered, indicates that NIUs that are not accessible will not be returned to service because the force parameter was not entered.
noprompt	This parameter suppresses any warnings that occur.
noreply	This parameter suppresses any MAP responses that occur after the command has finished executing.
nowait	This parameter allows other commands to be entered at a MAP before the rts command has completed executing.
pm	This parameter causes both units of the posted NIU to be returned to service.
posted	This default parameter, which is never entered, indicates that only the posted NIU in the control position will be returned to service because the all parameter was not entered.
prompt	This default parameter, which is never entered, indicates any warnings that occur will be displayed because the noprompt parameter is not entered.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
reply	This default parameter, which is never entered, indicates the responses from the MAP that occur after the command has finished executing are not suppressed because the noreply parameter is not entered.
unit	This parameter indicates that a specified unit of the NIU is to be returned to service.
unit_no	This variable specifies the unit to be returned to service and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the rts command has completed executing because the nowait parameter was not entered.

-end-

Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- The NIU will not be returned to service if the out-of-service diagnostics do not pass.
- The NIU must be in either the ManB or SysB state.
- To use the all parameter there must be a posted set of NIUs.

Example

The following table provides an example of the rts command.

rts (continued)

Examples of the rts command

Example	Task, response, and explanation
rts ↵	

Task: Return the posted NIU now in the control position to service.

Response:

```
NIU 2 RTS PM: Request has been submitted.
NIU 2 RTS Unit 0: Command completed. The unit is in service.
NIU 2 RTS Unit 1: Command completed. The unit is in service.
                                -or-
NIU 2 RTS PM: Command completed.  The PM is in service.
                                -or-
NIU 2 RTS PM: Command completed.  The PM is in-service
trouble.
                                -or-
NIU 2 RTS PM: Command completed.  The PM is system busy.
```

Explanation: Both units of NIU 2 are returned to service.

rts unit 0 ↵
where

0 is the number of the unit to be returned to service.

Task: Return to service unit 0 of NIU 2.

Response:

```
NIU 2 RTS Unit 0: Request has been submitted.
NIU 2 RTS Unit 0: Command completed. The unit is in service.
                            -or-
NIU 2 RTS Unit 0: Command completed. The unit is in-service
trouble.
                            -or-
NIU 2 RTS Unit 0: Command completed. The unit is system
busy.
```

Explanation: Unit 0 of NIU 2 is returned to service.

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`Request Invalid - NIU niu# is status` `No Action Taken`	**Meaning:** The NIU is in the incorrect state for the RTS command to be executed. The NIU must be in one of the following states: ▪ Manb ▪ SysB **Action:** None

`NIU niu# Failed`
`<failure reason>`
`<circuit location display>`
	Meaning: The command failed. A cardlist may be produced.
	Action: Go to the appropriate alarm clearing or card replacement procedure to troubleshoot the failure.

`NIU niu# RTS passed`	**Meaning:** The NIU is returned to service. **Action:** None
`NIU niu# RTS Rejected`	**Meaning:** The RTS was rejected by NIU resident maintenance. This should never occur. **Action:** The cause for the rejection must be determined. Escalate to the next higher level of maintenance.

swact

Function

Use the swact command to switch activity from one unit of a posted NIU to the other unit.

swact command parameters and variables

Command	Parameters and variables
swact <com>	*posted* / all [warm / force] [*prompt* / noprompt] [*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
all	This parameter causes all posted NIU's to undergo a switch of activity.
force	This parameter causes NIU inaccessibility to be ignored.
noprompt	This parameter suppresses any warnings that occur.
noreply	This parameter suppresses any MAP responses that occur after the command has finished executing.
nowait	This parameter allows other commands to be entered at a MAP before the swact command has completed executing.
posted	This default parameter, which is never entered, indicates that only the posted NIU in the control position will undergo a switch of activity because the all parameter was not entered.
prompt	This default parameter, which is never entered, indicates any warnings that occur will be displayed because the noprompt parameter is not entered.
reply	This default parameter, which is never entered, indicates the responses from the MAP that occur after the command has finished executing are not suppressed because the noreply parameter is not entered.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the swact command has completed executing because the nowait parameter was not entered.
warm	This parameter specifies a warm switch of activity.

swact (continued)

Qualifications

The swact command is qualified by the following exceptions, restrictions, and limitations:

- For an activity switch to occur, both units must be in an in-service (InSv) or in-service trouble (ISTb) state.
- For a warm SwAct to occur, the two units must be data synchronized or the command fails.
- Using the SWACT command with the force parameter can affect service, because a SwAct occurs even if the two units are not synchronized.

Example

The following table provides an example of the swact command.

Example of the swact command

Example	Task, response, and explanation
swact ↵	
	Task: Switch the active and inactive units of the posted NIU.
	Response: `Command completed. The node has switched activity.`
	Explanation: The active NIU unit is now inactive and the inactive NIU unit is now active.

Responses

The following table provides explanations of the responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`Command rejected.`	
	Meaning: One or both units of the posted node are not in in-service states (InSv or ISTb).
	Action: Place both units in an in-service state and try the SWACT command again.

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
`Command rejected.  A switch of activity would disrupt service.`	**Meaning:** The inactive unit could not successfully be data synchronized to the active unit. **Action:** Try the SWACT command again, using the FORCE option. Note that this option forces a switch of activity and can affect service.
`Command rejected.  The PM is offline.`	**Meaning:** No activity switch is needed when the node is off line (OFFL). **Action:** None.

`A SwAct will be performed, this may affect service.`
`Do you wish to continue?`
`Please confirm (Yes or No).`
	Meaning: You have tried to switch activity to an in-service trouble NIU. Switching activity to an in-service NIU may isolate peripherals.
	
	Action: If it is necessary to isolate these peripherals so maintenance can be performed, enter Yes; otherwise, enter No.

-end-

Function

Use the tst command to run diagnostics on the posted NIUs.

tst command parameters and variables

Command	Parameters and variables				
tst	*posted* unit pm active inactive all	*unit_no*	[*prompt* noprompt]	[*wait* nowait]	[*reply* noreply]

Parameters and variables	Description
active	This parameter causes the active unit of the NIU to be tested.
all	This parameter causes all posted NIU's to be tested.
inactive	This parameter causes the inactive unit of the NIU to be tested.
noprompt	This parameter suppresses any warnings that occur.
noreply	This parameter suppresses any MAP responses that occur after the command has finished executing.
nowait	This parameter allows other commands to be entered at a MAP before the tst command has completed executing.
pm	This parameter causes both units of the posted NIU to be tested.
posted	This default parameter, which is never entered, indicates that only the posted NIU in the control position will be tested because the all parameter was not entered.
prompt	This default parameter, which is never entered, indicates any warnings that occur will be displayed because the noprompt parameter is not entered.
reply	This default parameter, which is never entered, indicates the responses from the MAP that occur after the command has finished executing are not suppressed because the noreply parameter is not entered.
unit	This parameter indicates that a specified unit of the NIU is to be tested.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable specifies the unit to be tested and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that other commands cannot be entered at a MAP until the tst command has completed executing because the nowait parameter was not entered.

-end-

Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- The specific diagnostics run will be determined by the state of the NIU, that is in- service tests, or out-of-service tests.
- To use the all parameter there must be a posted set of NIUs.

Examples

The following table provides examples of the tst command.

Examples of the tst command

Example	Task, response, and explanation

tst pm ↵	**Task:** Test both units of the posted NIU.
	Response:
	`NIU 2 Test PM: Request has been submitted.`
	`NIU 2 Test PM: Command passed.`
	Explanation: Both units of NIU 2 have been successfully tested.

tst UNIT 0 ↵
where
0 is the number of the unit to be tested.
	Task: Test unit 0 of NIU 2.
	Response:
	`NIU 2 Test Unit 0: Request has been submitted.`
	`NIU 2 Test Unit 0: Command passed.`
	Explanation: Unit 0 of NIU 2 has been successfully tested. Note that NIU 2 must be the posted NIU.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`Command aborted.  Internal error.  Check for logs.`	**Meaning:** Test has been aborted due to an internal error. **Action:** Read the logs to determine why the test stopped.

`Command failed.`
`<Critical or Non-Critical> fault on unit <0 or 1> -`
`Fault id: <fault description>`
`-or-`
`<Critical or Non-Critical> fault on unit <0 or 1> -`
`No fault id available`
	Meaning: A failure in the node has occurred, and is reported using the standard cardlist.
	
	Action: Take corrective action against cards indicated and then reenter the TST command to confirm that errors have been cleared.

`Command rejected.  The PM is offline.`	**Meaning:** Tests cannot be executed on a node that is off line (OFFL). **Action:** Check to see why the NIU is off line. If permissible, manually busy the NIU and repeat the command; otherwise, do not take any further action.

NOP level commands

Use the network operations protocol (NOP) level of the MAP to monitor and maintain communications betwen a DMS and a network operations system (NOS).

Accessing the NOP level

To access the NOP level, enter the following from the CI level:

mapci;mtc;iod;nop ↵

NOP commands

All of the commands available at the NOP MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

NOP commands

Command	Page
clear	N-311
nxtpage	N-313
post	N-315
prvpage	N-319
query	N-321
quit	N-331
release	N-335

NOP menu

The following figure shows the NOP menu and status display.

```
         CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
          .     .     .     .     .    .     .     .     .     .


NOP           IOD     IOC     0     1     2     3     4
 0 Quit              Stat     .     .     .     .     .
 2 Post_
 3 Query_     DIRP:  .   XFER:  .  NOP :  .  SLM :  .  DPPP:  .
 4 Release_   DPPU:  .   NX25:  .  MLP :  .  CDR :  .
 5 Nxtpage
 6 Prvpage
 7 Clear      SE: 01234
 8            ST: .....
 9            ------------------------------------------------
10            SESS
11            ?
12
13
14
15 _Session
16 _Profile
17 _History
18 _Alarm
```

NOP status codes

The following table describes the status codes for the NOP status display.

Status codes	NOP menu status display	
Code	**Meaning**	**Description**
Stat		
.	idle	The NOP session is idle.
A	active	The NOP session is active.
L	logon	The NOP session is in the logon state.

clear

Function

Use the clear command to clear the history buffer that records the last 16 remote operations (RO). This command also cancels the NOP alarm.

clear command parameters and variables

Command	Parameters and variables
clear	There are no parameters or variables.

Qualification

The clear command is qualified by the following restriction: the NOP alarm in the history buffer remains until cleared or until pushed out of the circular history buffer by other entries.

Example

The following table provides an example of the clear command.

Example of the clear command

Example	Task, response, and explanation	
clear ↵		
	Task:	Clear the history buffer and cancel the NOP alarm.
	Response:	The alarm display changes to the inservice state.
	Explanation:	The history buffer is cleared and the NOP alarm is cancelled.

clear (end)

Response

The following table provides an explanation of the response to the clear command.

Response for the clear command

MAP output	Meaning and action
The alarm display changes to the in-service state.	**Meaning:** The alarm displayed beside the NOP header and under the input/output device (IOD) subsystem header changes to the inservice state when the alarm is cleared. This change indicates an OK status. **Action:** None

nxtpage

Function

Use the nxtpage command to displays the next page of data shown by the query command.

nxtpage command parameters and variables

Command	Parameters and variables
nxtpage	There are no parameters or variables.

Qualification

The nxtpage command is qualified by the following limitation: the nxtpage process does not have a timeout for a change of data display.

Example

The following table provides an example of the nxtpage command.

Example of the nxtpage command

Example	Task, response, and explanation	
nxtpage ↵		
	Task:	Display the next page of data.
	Response:	The next page of data is displayed.
	Explanation:	The next page of data is displayed.

Responses

The following table provides explanations of the responses to the nxtpage command.

Responses for the nxtpage command

MAP output	Meaning and action	
The next page of data is displayed.		
	Meaning:	The next screen of data is shown. The kind of data depends on the parameters of the query command.
	Action:	None

-continued-

nxtpage (end)

Responses for the nxtpage command (continued)

MAP output	Meaning and action
THIS IS THE LAST PAGE	**Meaning:** All the data has been displayed. **Action:** None

-end-

post

Function

Use the post command to select one of the sessions to be monitored. The word “session” is synonymous with Switched Virtual Circuit (SVC). It is available only for file transfer remote operation (RO) sessions.

post command parameters and variables

Command	Parameters and variables
post	*session*

Parameters and variables	Description
session	This variable is the discrimination number of one of the sessions shown in the NOP status display. Valid entries are 0-59.

Qualification

The post command is qualified by the following exception: the post command can only show the session number (SESS) and the application (APPL) in the display.

Example

The following table provides an example of the post command.

Example of the post command

Example	Task, response, and explanation

post 0 ↵
where
 	
0 is the session number of the session to be posted
	Task: Post session 0.
	
	Response:
	
	`SESS APPL RO FILENAME / NO. COUNT/ STATUS`
	`1 FT TF transfile /012345 12/ OK`
	
	Explanation: The system displays the session information.

post (continued)

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action
`NO INFORMATION AVAILABLE`	**Meaning:** The specified session is in the idle state or is out of range, or an RO for an application other than file transfer was selected. **Action:** None
`SESS APPL RO FILENAME / NO. COUNT/ STATUS` `1 FT TF transfile /012345 12/ OK`	**Meaning:** The fields under these display headers have the following ranges: ▪ The value under SESS is 0-59 for the number of the specified session. ▪ The value under APPL is the type of file application: CALM, centralized alarms; DCR, dynamically controlled routing; FT, file transfer; PTAE, passthru application entity; or, TRAN, transaction. ▪ The value under RO is the type of file for an RO: TF, transfer file, where an individual file is being sent; TR, transfer range, where a range of files is being sent by demand; TS, transfer stream, where a continuous stream of files is being sent. ▪ The name under FILENAME is the file name of the file stored in DIRP that is being, or has been sent. ▪ The value under NO is 0-99999 for the identification number of the last block of the file sent to NOS. Files consist of blocks of data that are sent one at a time in sequence. The identification number may be used to re-transmit the block. ▪ The value under COUNT is 0-9999 for the quantity of remaining blocks to be sent. This count is valid only when transmitting an active file. When collecting unprocessed files, the count starts at 32,767 and decrements from that number. Starting from 32,767 does not mean that there are 32,767 blocks to be sent.

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
	▪ The message under STATUS is the status of the last block sent to NOS, and has the following values: BAD indicates that a bad block is skipped. BSY indicates the file is skipped. The block NO. field contains a system error reason for skipping the file. EOF indicates that the end of file is reached and a new file is to come. EOTE indicates the end of transfer, but not the end of the file. EOTP indicates the end of transfer is premature (that is, has happened before the desired end block). OK indicates good data has been sent. SYS indicates a system error. If SYS is shown, the transmission has failed and the header NOP displays the alarm. The status display is updated as each block is sent. **Action:** None
	-end-

prvpage

Function

Use the prvpage command to display the previous page of data shown in response to the query command.

prvpage command parameters and variables

Command	Parameters and variables
prvpage	There are no parameters or variables.

Qualification

The prvpage command is qualified by the following exception: the query command must be entered before the prvpage command.

Example

The following table provides an example of the prvpage command.

Example of the prvpage command

Example	Task, response, and explanation	
prvpage ↵		
	Task:	Retrieve the previous page of data shown in response to the query command.
	Response:	The previous page of data is displayed.
	Explanation:	The previous page of data is retrieved.

Response

The following table provides an explanation of the response to the prvpage command.

Response for the prvpage command

MAP output	Meaning and action	
The previous page of data is displayed.		
	Meaning:	The display that appears depends on the parameters of the query command.
	Action:	None

query

Function

Use the query command to query information for one or all sessions.

query command parameters and variables

Command	Parameters and variables		
query	session idle logon active profile history alarm	*n*	detail

Parameters and variables	Description
active	This parameter displays data for all the sessions in the active state. An active state is when logon is verified, and data is being sent.
alarm	This parameter displays data for the NOP alarm.
detail	This parameter adds more information to the display of data for the specified session. It is only available for file transfer remote operations (RO).
history	This parameter displays the last sixteen RO. The history buffer that stores the record of of the RO changes as each RO is added and the oldest RO in the buffer is deleted.
idle	This parameter displays data for all the sessions in the idle state. An idle state is when no session is established.
logon	This parameter displays data for all the sessions in the logon state. A logon state is when a session is connected, but before the transmission of data has begun.
n	This variable is the discrimination number of one of the sessions shown in the NOP status display. Valid entries are 0-59.
profile	This parameter displays the maximum quantity of sessions for each application and the number of sessions that are currently in use.
session	This parameter specifies that a session is to be queried.

query (continued)

Qualifications

The query command is qualified by the following exceptions, restrictions and limitations:

- If a session number is not specified when entering the query command, general data for all sessions will be displayed.
- Logs are generated to indicate that a NOP communication problem has occurred with the last RO. The four logs and the circumstances that generate them are the following:
  - NOP100 invalid argument (ARG) errors (major)
  - NOP101 operation sequence (SEQ) errors (minor)
  - NOP102 resource (RES) errors (minor)
  - NOP103 system (SYS) errors (major)
- When these circumstances occur, the header NOP displays the code: ARG, SEQ, RES, or SYS and the quantity of each.
- The following is the priority of the alarms in order of severity:
  - ARG invalid argument errors
  - RES resource errors
  - SEQ operation sequence errors
  - SYS system errors

Example

The following table provides an example of the query command.

Example of the query command

Example	Task, response, and explanation
query history ↵	
	Task: Display the history information for the last 16 RO.

	Response:
	`HOUR MIN SEC SESS RO ID RESULT NO.`
	`12 12 12 0 CHANGE OK`
	`NEXT...`

	Explanation: The system displays the RO, one at a time.

query (continued)

Responses

The following table provides explanations of the responses to the query command.

Responses for the query command

MAP output	Meaning and action
<--PROFILE--> APPL. MAX USED RESD 1 0 DCR 6 0	**Meaning:** When the query profile command is entered, the profile of the maximum quantity of sessions for each application and the number of sessions that are currently in use are displayed. The maximum number of sessions is hard-coded in the DMS software load. Currently the maximum for each application is as follows: FT (6), PTAE (3), CALM (2), TRAN (1), and DCR (1). This response is displayed, where appl is the type of file application (APPL), and appl is one of the following: - CALM centralized alarm - DCR dynamically controlled routing - FT file transfer - PTAE passthru application entity - TRAN transaction **Action:** None
HOUR MIN SEC SESS RO ID RESULT NO. 12 23 53 0 SCROLL OK 12 21 39 0 SCROLL OK 12 18 13 0 ARG 11 (p=6) NEXT...	**Meaning:** Information appears under these headings for each RO. ▪ HOUR the hour the RO occurred. ▪ MIN the minute the RO occurred. ▪ SEC the second the RO occurred. ▪ SESS the discrimination number of the session.

-continued-

query (continued)

Responses for the query command (continued)

MAP output	Meaning and action
	▪ RO type of RO: - CHANGE TRAN RO (NOS to DMS) changes the state of unprocessed DIRP files to processed after being received at the NOS. - CILOGON PTAE RO (NOS to DMS) indicates a CI session has started at the NOS. - CILOGOUT PTAE RO (NOS to DMS) indicates a CI session has ended at the NOS. - DEMAND FT RO (NOS to DMS) indicates to the DMS the DIRP files that should be sent to the NOS. - DEVICE PTAE RO (NOS to DMS) request that a device for the current CMAP session be divided. - HT PTAE RO (NOS to DMS) halts the output of the CI command while the command is being executed. - HX PTAE RO (NOS to DMS) restarts the current CI session. - LIST TRAN RO (NOS to DMS) lists the available DIRP files at the DMS. - LOGON RO starts the interface between the RO service and an application over a particular SVC. - LOGOUT RO ends the interface between the RO service and an application over a particular SVC. - MAP PTAE RO (NOS to DMS) updates the MAP display at the NOS MAP. - REQUEST CALM RO (NOS to DMS) requests the status of alarms at the beginning of a session. - RT PRAE RO (NOS to DMS) resumes the output of the currently executing CI command. - TEST TRAN RO (NOS to DMS) verifies the DMS session is logged on. - TIME TRAN RO (NOS to DMS) requests the current time from the DMS. - SCROLL PTAE RO (NOS to DMS) requests the previous or next screen of data. - SEND FT RO (NOS to DMS) indicates to the DMS that the data for a particular data stream should be sent continuously.

-continued-

query (continued)

Responses for the query command (continued)

MAP output **Meaning and action**

- STOP FT RO (NOS to DMS) stops a DEMAND or START RO.
- TRIGGER PTAE RO (DMS to NOS) indicates the state of a session has changed.
- UPDATE CALM RO (DMS to NOS) updates the alarms at the NOS MAP automatically every four seconds in response to a REQUEST RO. If no alarms have changed, no update is sent.

- ID the short name of the file type that is involved in the active session. This is for file transfer ROs only.
- STATUS the status of the last block sent to NOS. The transmission is successful if OK appears. If any of the other status codes appear, contact the maintenance support personnel. The status display is updated as each block is sent. OK is shown until a block transmission fails. If SYS is shown the transmission has failed and the header NOP displays the alarm. Status is one of the following for FT application:
  - ARG invalid argument error. Log NOP100 is generated. Contact the maintenance support personnel.
  - COM communications problem. The call between the DNC and DMS is cleared.
  - OK the communications is completed successfully.
  - REJ RO rejected,
  - RES Resource problem error. Log NOP102 is generated. Contact the maintenance support personnel.
  - SEQ Operation sequence error. Log NOP101 is generated. Contact the maintenance support personnel.
  - SYS System problem error. Log NOP103 is generated. Contact the maintenance support personnel.
- NO. the error code to identify the reason for the status.
- NEXT... indicates there is more data to be displayed.

Action: None

-continued-

query (continued)

Responses for the query command (continued)

MAP output	Meaning and action
`NO INFORMATION AVAILABLE`	**Meaning:** The system does not have any information on the parameters you entered. **Action:** Reenter the command with appropriate parameters.

`SESS STATE APPL ID NODE`
`0 LOGON EXND 0220000123`
`1 LOGON PTAE 93900101`
`2 IDLE`
`NEXT...`
	Meaning: When query is entered without a parameter, the system displays the following data fields for all sessions:
	▪ SESS The discrimination number of a session.
	▪ STATE One of the session states:
	- IDLE the session is not being used (sending).
	- ACTIVE the user requests the transfer of a specific type of data related to an application.
	- LOGON the session is allocated for a specific application.
	▪ APPL The type of file application:
	- CALM centralized alarm
	- DCR dynamically controlled routing
	- FT file transfer
	- PTAE passthru application entity
	- TRAN transaction
	▪ ID The short name of the file type that is involved in active sessions. For applications FT and TRAN, it represents the type of data that is sent. For application PTAE, it represents the user identification.
	▪ NODE The NOS address to which the DMS sent the file.
	▪ NEXT... More data is to be displayed.
	
	Action: None

-continued-

query (continued)

Responses for the query command (continued)

MAP output **Meaning and action**

```
SESSION  STATE   ID    NO.    COUNT  STATUS   HOLD#
     1  ACTIVE  MODEM 012343    12      OK   <position>

          FILE          VOLUME      RO    DATA
          NAME                            ID
       <filename>       <volume>    TF     1
```

Meaning: With the query command using the parameters session and detail, the following data fields are added to the display:

- SESS The discrimination number of a session.
- STATE One of the session states:
  - IDLE the session is not being used (sending).
  - ACTIVE the user requests the transfer of a specific type of data related to an application.
  - LOGON the session is allocated for a specific application.
- ID The short name of the file type that is involved in active sessions. For applications FT and TRAN, it represents the type of data that is sent. For application PTAE, it represents the user identification.
- NO The identification number of the last block of the file sent to NOS.
- COUNT Remaining blocks of the file to be sent. The quantity will be 0 to 9999.
- STATUS Status of the last block sent to NOS:
  - BAD A bad block is skipped.
  - BSY File is skipped. The block NO. field contains a system error reason.
  - EOF End of file is reached. A new file is to come.
  - EOT End of transfer.
  - EOTE End of transfer, but not the end of the file.
  - EOTP End of transfer is premature (before desired end block).
  - OK Good data is sent.
  - SYS System error. The block NO. field contains the error parameter.

-continued-

query (continued)

Responses for the query command (continued)

MAP output	Meaning and action
	▪ HOLD# The position of the file in table DIRPHOLD. ▪ FILENAMEThe name of the file to be sent to NOS. ▪ VOLUME The identifier of the volume in DIRP where the file is stored before transmission. ▪ RO Type of RO: - TF transfer file - TR transfer range - TS transfer stream ▪ DATA ID The identification number of the transmitted data. This information is hardcoded in the DNC code. The information can be altered at the DMS XFER level using the define command. The number may vary according to office configuration, where in general the numbers represent: - 1 SMDR (station message detail recording) - 2 OM (operational measurements) - 3 KT (killer trunks) - 4 TTRF (automatic trunk testing facility) - 5 AMA (automatic message accounting) **Action:** None

-continued-

query (end)

Responses for the query command (continued)

MAP output	Meaning and action
SESS APPL ERROR NO DESCRIPTION 0 ARG 11 APL ID NOT RECOGNIZED	**Meaning:** With the query command and the alarm parameter, the following data fields are displayed for the session, or sessions, with the alarm: ▪ SESS The discrimination number of a session generating the alarm. ▪ APPL Type of file application, where appl is one of the following: - CALM centralized alarm - DCR dynamically controlled routing - FT file transfer - PTAE passthru application entity - TRAN transaction ▪ ERROR The source of the error. ▪ NO The error code. ▪ DESCRIPTION The description of the error code. **Action:** Logs are generated whenever an alarm is triggered. Check the generated logs.

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the NOP level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NOP level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the NOP level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The NOP level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the NOP level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the NOP level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

release

Function

Use the release command to set the state of the session to idle.

release command parameters and variables

Command	Parameters and variables
release	*session*

Parameters and variables	Description
session	This variable is the discrimination number of one of the sessions shown in the NOP status display. Valid entries are 0-59.

Qualifications

None

Example

The following table provides an example of the release command.

Example of the release command

Example	Task, response, and explanation
release 1 ↵ *where* 1 is the session number of the session to be released	**Task:** Release session 1 and set it to idle. **Response:** `PLEASE CONFIRM ("YES", "Y", "NO", or "N"):` **Explanation:** The system prompts for confirmation. If you reply with yes or y, the system sets session 1 to idle. The system does not provide any further messages to acknowledge your response to this prompt.

release (end)

Response

The following table provides an explanation of the response to the release command.

Response for the release command

MAP output	Meaning and action
PLEASE CONFIRM (“YES”, “Y”, “NO”, or “N”):	**Meaning:** Setting a session to the idle state may cancel its transmission. With yes, the state of the session changes from ACTIVE or LOGON to IDLE, and the posed session is canceled. With no, the state of the session remains the same and the release is aborted. The system does not provide any further messages to show that the command was carried out or aborted. **Action:** Enter yes to confirm, or no to abort the process.

NWM level commands

Use the network management (NWM) level of the MAP to access NWM control levels, to display the status of automatic and manual controls, and to change the switch operating mode.

Accessing the NWM level

To access the NWM level, enter the following from the CI level:

mapci;nwm ↵

NWM commands

The commands available at the NWM MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

NWM commands

Command	Page
autoctrl	N-341
codectrl	N-343
dcrmoch	N-345
dcrsel	N-349
display	N-351
grpctrl	N-355
intcctrl	N-357
page	N-359
quit	N-361
rtectrl	N-365

NWM menu

The following figure shows the NWM menu and status display.

```
Ctrl  ITS  RADR          CPU  Init  IDOC  CS    DCR      Fs
....     0    0%          2%    .     .    .    FHR       0
                                                TLCM

 NWM
  0 Quit
  2
  3
  4 Display
  5 _Finals
  6 _Groups_
  7
  8
  9
 10 DCRMOCH
 11 DCRSEL_
 12
 13 IntCCtrl
 14 RteCtrl
 15 AutoCtrl
 16 GrpCtrl
 17 CodeCtrl
 18 Page
```

Note: IntCCtrl, menu item number 13, is only in DMS-200/300 and DMS-300 offices.

NWM CI level commands

The following commands are CI level commands which are related to the network management function. These commands are documented in the *DMS-100 Family Nonmenu Commands Reference Manual*, 291-1001-820.

- masscall
- prepeg
- rerout
- esp
- llc
- tnp
- cpstat
- cpstatus

NWM status codes

The following table describes the status codes for the NWM status display.

Status codes NWM menu status display		
Field name	**Range**	**Description**
CPU	0-99	This indicates the percentage of the last minute that the central processing unit (CPU) was executing call processing or higher priority tasks. The percentage is taken from the CPOCC field of OM group CPUSTAT or is calculated from the classes of OM group MACHACTThe percentage does not include usage for the input/output interrupt processing. The cpstat and cpstatus commands display information about the occupancy of CPU real time. (The cpstat and cpstatus commands are nonmenu commands documented in the *DMS-100 Family Nonmenu Commands Reference Manual*, 297-1001-820.)
Ctrl	G, C, R, A, a	This indicates which NWM controls are active. The menu displays four of the possible six parameters from G, C, R, A, a, or . where: ▪ g is the group controls (GrpCtrl) ▪ C is the code controls (CodeCrtl) ▪ R is the route controls (RteCtrl) ▪ A is the automatic controls (AutoCtrl) ▪ a indicates automatic controls disabled ▪ . indicates controls inactive
DCR	FHR, TND, NTND, TCLM	This indicates the mode of operation of the switch as follows: ▪ FHR is fixed hierarchical routing ▪ TND is DCR operating as a tandem switch ▪ NTND is DCR operating as a nontandem switch ▪ TLCM Not currently available Only one mode can be active even if the dcrmoch both command string has been entered to allow the switch to participate in either DCR mode. If the DCR feature is not present in the office, none of the headers are displayed.
Fs	0-99	This indicates the total number of final trunk groups in an overflow condition. Only short common language location identifiers (SCLLI) with associated SD points are pegged for finals in overflow (Fs). An SD point is to be assigned for each final SCLI that is to be displayed. Up to 32 SCLLI may be specified in subtable NWMSDPT of Table NWMSD.

-continued-

Status codes NWM menu status display (continued)

Field name	Range	Description
IDOC	3, 2, 1	This indicates the active levels of internal dynamic overload control (IDOC) as 3, 2, 1, or . (dot) where: ▪ 3 indicates office loses processing ability ▪ 2 indicates percentage of time devoted to CPU call processing is greater than the set threshold ▪ 1 indicates the number of incoming MF calls waiting for a receiver exceeding the on-threshold value ▪ . indicates the level is inactive because there is no IDOC congestion.
Init	hh:mm	This indicates the time within the previous 30 minutes of an office initialization (warm or cold restart), where: ▪ h is hours with the range 00-23 ▪ mm is minutes with the range 00-59
ITS	0-9999	This indicates the total number of seizures, including abandons and failures, within the last minute of incoming trunk seizures.
RADR	0-99	This indicates the percentage of test calls for MF receivers within the last minute whose delay time was greater than the lower RADR threshold value.
sclli	sclli	This indicates the last six Fs (sclli1 through sclli6) with an overflow greater than zero. If more than six short cllli are in the Fs state, the sclli which most recently entered the state are displayed. The left column is filled first, starting at the top, then the right column, also starting at the top. If the sclli are not entered in subtable NWMSDPT, the Fs sclli are not displayed. The left column is filled first, starting at the top, then the right column is filled, starting at the top. Unless the sclli are entered in subtable NWMSDPT, the Fs sclli are not displayed.

-end-

autoctrl

Function

Use the autoctrl command to access the auto control (AutoCtrl) menu level of the MAP.

autoctrl command parameters and variables

Command	Parameters and variables
autoctrl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the autoctrl command.

Example of the autoctrl command

Example	Task, response, and explanation
autoctrl ↵	

Task: Access the AutoCtrl menu level of the MAP

Response: The system displays the AutoCtrl menu and adds the following fields to the display:

```
AutoCtrl
            IDOC  PPln AOCR
    Active    0     0    0
    Disabled  0     0    0
```

Explanation: The system didsplays numbers and types of active automatic controls. The the system updates the display whenever automatic control is applied or removed.

autoctrl (end)

Response

The following table provides an explanation of the response to the autoctrl command.

Response for the autoctrl command

MAP output	Meaning and action

The menu changes to the AutoCtrl menu, and the following fields are added to the display.
 	
`AutoCtrl`
`           IDOC  PPln AOCR`
`    Active    0     0    0`
`    Disabled  0     0    0`
	Meaning: The NWM level changes to the AutoCtrl level.
	
	Action: None

codectrl

Function

Use the codectrl command to access the code control (CodeCtrl) menu level of the MAP.

codectrl command parameters and variables

Command	Parameters and variables
codectrl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the codectrl command.

Example of the codectrl command

Example	Task, response, and explanation
codectrl ↵	

Task: Access the code CodeCtrl menu level of the MAP.

Response: The menu changes to the CodeCtrl menu, and the following fields are added to the display:

```
CodeCtrl
 CBkC  CBkA  CBkN  CBKP  PRPC  PRPA  PRPN  PRPP
    0     0     0     0     0     0     0     0

 HTRFC  HTRFA  HTRFN  HTRFP
    0      0      0      0
```

Explanation: The system displays the number of active code controls and updates the display whenever a control is applied or removed.

codectrl (end)

Response

The following table provides an explanation of the response to the codectrl command.

Response for the codectrl command

MAP output	Meaning and action

The menu changes to the CodeCtrl menu, and the following fields are added to the display:
 	
`CodeCtrl`
`CBkC CBkA CBkN CBKP PRPC PRPA PRPN PRPP`
`0 0 0 0 0 0 0 0`
 	
`HTRFC HTRFA HTRFN HTRFP`
`0 0 0 0`
	Meaning: The NWM level changes to the CodeCtrl level.
	
	Action: None

dcrmoch

Function

Use the dcrmoch command to change the switch operating mode between dynamically controlled routing (DCR) tandem and nontandem operation.

dcrmoch command parameters and variables

Command	Parameters and variables
dcrmoch	[both / tandem / nontandem] [on / off]

Parameters and variables	Description
both	This parameter turns DCR on or off for both tandem and nontandem modes.
nontandem	This patameter turns DCR on or off for nontandem mode only.
off	This parameter turns DCR off for tandem, nontandem, or both modes.
on	This parameter turns DCR on for tandem, nontandem, or both modes.
tandem	This parameter turns DCR on or off for tandem mode only.

Qualifications

The dcrmoch command is qualified by the following exceptions, restrictions and limitations:

- The dcrmoch command causes a change to the DCR mode only if parameter NUM_DCR_EXT_BLKS in Table OFCENG is set to a non-zero value.
- The dcrmoch command may be entered at any NWM MAP level.
- When DCR is deactivated, fixed hierarchical routing (FHR) is automatically activated.
- The non-menu command TRAVER can be used for DCR.

dcrmoch (continued)

Examples

The following table provides an examples of the dcrmoch command.

Examples of the dcrmoch command

Example	Task, response, and explanation	
dcrmoch tandem off ↵		
	Task:	Turn off the tandem DCR mode.
	Response:	`TANDEM mode is disabled`
	Explanation:	The tandem DCR mode is disabled. If the non-tandem DCR mode was on it remains on.
dcrmoch both off ↵		
	Task:	Disable both the tandem and non-tandem DCR modes.
	Response:	`TANDEM and NON TANDEM modes are both disabled`
	Explanation:	Both the tandem and non-tandem DCR modes are disabled. The FHR mode is enabled.
dcrmoch both on ↵		
	Task:	Enable both the tandem and non-tandem DCR modes.
	Response:	`NON TANDEM MODE IS ENABLED` `TANDEM MODE IS ENABLED`
	Explanation:	Both the tandem and non-tandem DCR modes are enabled.

Responses

The following table provides explanations of the responses to the dcrmoch command.

Responses for the dcrmoch command

MAP output	Meaning and action

`CANNOT ENABLE TANDEM MODE UNTIL NP ACKNOWLEDGES PREVIOUS MODE CHANGE REQUEST`
 	
or
 	
`CANNOT ENABLE NON TANDEM MODE UNTIL NP ACKNOWLEDGES PREVIOUS MODE CHANGE REQUEST`
	Meaning: Only one mode change can be completed at a time. If the currently active DRC mode is disabled by command DCRMOCH or by editing Table DCROPT, then the mode cannot be enabled until the network processor (NP) acknowledges the disabling.
	
	Action: None required but command may be resubmitted.

`DCR ROUTING IS DISABLED ... FHR ROUTING RESUMES`	**Meaning:** When both DCR modes are deactivated by editing Table DCROPT, the FHR mode is activated. **Action:** None

`TANDEM and NON TANDEM modes are both disabled`
 	
or
 	
`TANDEM mode is disabled`
 	
or
 	
`NON TANDEM mode is disabled`
	Meaning: The indicated modes are disabled and the FHR mode is enabled.
	
	Action: None

-continued-

dcrmoch (end)

Responses for the dcrmoch command (continued)

MAP output	Meaning and action
NON TANDEM MODE IS ENABLED TANDEM MODE IS ENABLED or NON TANDEM MODE IS ENABLED or TANDEM MODE IS ENABLED	**Meaning:** The indicated DCR modes are enabled. **Action:** None
TANDEM mode is disabled.	**Meaning:** The tandem DCR mode is disabled. If the non-tandem DCR mode was on it remains on. **Action:** None

-end-

dcrsel (end)

Function

Use the dcrsel command to select a network.

dcrsel command parameters and variables

Command	Parameters and variables
dcrsel	*net_name*

Parameters and variables	Description
net_name	This variable identifies the network to by name.

Qualifications

None

Example

The following table provides an examples of the dcrsel command.

Example of the dcrsel command

Example	Task, response, and explanation	
dcrsel telecom_dcr ↵		
	Task:	Select the telecom_dcr network.
	Response:	None
	Explanation:	The specified network is selected.

Responses

None

display

Function

Use the display command to show the NWM level header and the corresponding data fields.

display command parameters and variables

Command	Parameters and variables
display	finals
	groups *fsclli*

Parameters and variables	Description
finals	This parameter causes the traffic-related peg count, usage data and the group controls that are active for all trunk groups designated as final in table NWMCLLI to be shown. Each row represents one trunk group, such as, the short CLLI RAL214 and its full CLLI RALNC030214. If this command is entered, and there are more than ten final groups, the command PAGE sets up the next page of ten finals. The header Fs in the display is continually updated.
fsclli	This variable identifies the trunk group or groups to be displayed for the parameter groups. Up to nine full CLLI, short CLLI, or any combination of the two may be entered at a time. When entering more than one FSCLLI, they as separated by a space as in the following example: **... fsclli1 fsclli2 fsclli3 ... fsclli9**↵ If the entered string matches both a short CLLI and a full CLLI, the system selects the trunk group whose short CLLI is matched.
groups	This parameter causes the trunk group data header for trunk groups specified in table CLLIMTCE to be displayed.

Qualifications

None

Examples

The following table provides an example of the display command.

display (continued)

Examples of the display command

Example	Task, response, and explanation

display groups ralnc030214 ↵
finals
where

ralnc030214 is the groups cilli

Task: Display traffic-related peg counts for all trunk groups designated as final in Table NWMCLLI.

Response:

```
      SCLLI  CLLI        Ofrd Ovfl     ACH CCH ICCH CCS Defl
      RAL214 RALNC030214 234   40 17%   35 28   20 135  17
                         CTRLS:
```

Explanation: The display headers for this response have the following meanings:

- SCLLI Identifies the final or selected SCLLI (for example, RAL214).
- CLLI Is for the full CLLI of the SCLLI.
- OFRD Is for the peg count of the calls offered access to the trunk group. The count includes the calls deflected by NWM. OFRD is collected from the active class of OM group TRK.
- OVF If the overflow count for the specified trunk. The display includes a column for the percentage count of the total.
- ACH Gives the number of outgoing call attempts per circuit each hour (ACH) in the trunk group.
- CCH Is the number of outgoing connections per circuit per hour (CCH) in the trunk group.
- ICCH Is similar to CCH but displays the number of incoming connections for each circuit for each hour.
- CCS Displays the traffic usage in number of hundred call-seconds each hour on the trunk group and includes incoming and outgoing usage.
- DEFL Gives the number of calls deflected from the trunk group by any trunk group control.
- CTRLS Gives the identity of up to three controls which are active on the group (for example, DRE). If an asterisk follows the third control identifier, more than three controls are active. The data field remains blank if no control is active.

Note: The values in table NWMCLLI for overflow, ACH, and CCH initiate printouts. The values are also used by OM Table OMREPORT.

Responses

The following table provides explanations of the responses to the display command.

Responses for the display command

MAP output	Meaning and action
SCLLI CLLI Ofrd Ovfl ACH CCH ICCH CCS Def1 RAL214 RALNC030214 234 40 17% 35 28 20 135 17 CTRLS:	**Meaning:** The system displays the requested information. **Action:** None
TRUNK TYPE INVALID	**Meaning:** You gave an incorrect trunk type in the command string. **Action:** Reissue the command with the correct trunk type.

grpctrl

Function

Use the grpctrl command to access the group control (GrpCtrl) menu level of the MAP. The GrpCtrl menu displays the number of trunk groups that have active controls applied to them. The data is updated whenever a control is applied or removed.

grpctrl command parameters and variables

Command	Parameters and variables
grpctrl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the grpctrl command.

Example of the grpctrl command

Example	Task, response, and explanation
grpctrl ↵	

Task: Access the GrpCtrl menu level of the MAP.

Response: The menu changes to the GrpCtrl menu, and the following fields are added to the display:

```
GrpCtrl
 DRE    PRE    CanT    CanF    Skip    ITB     STR
  0      0       0       0       0      0       0

 FRR                    BSSKIP
  0                        0
```

Explanation: The system displays the GrpCtrl menu.

grpctrl (end)

Response

The following table provides an explanation of the response to the grpctrl command.

Response for the grpctrl command

MAP output	Meaning and action
The menu changes to the GrpCtrl menu, and the following fields are added to the display: GrpCtrl DRE PRE CanT CanF Skip ITB STR 0 0 0 0 0 0 0 FRR BSSKIP 0 0	**Meaning:** The NWM level changes to the GrpCtrl level. **Action:** None

intcctrl

Function

Use the intcctrl command to access the international code control (IntCCtrl) menu level of the MAP. The IntCCtrl menu displays data for the active code controls of trunks where country code (CCODE) blocks outgoing or transit international calls, and national code (NATL) blocks incoming international calls. The system updates the data every time a control is applied or removed.

intcctrl command parameters and variables

Command	Parameters and variables
intcctrl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the intcctrl command.

Example of the intcctrl command

Example	Task, response, and explanation
intcctrl ↵	

Task: Access the IntCCtrl menu.

Response: The menu changes to the IntCCtrl menu, and the following fields are added to the display:

```
IntCCtrl
 CBkC  CBkN          PRPC   PRPN
    0     0             0     0

 HTRFC  HTRFN    HTRPC  HTRPN
    0      0        0      0
```

Explanation: The system displays the IntCCtrl menu.

intcctrl (end)

Response

The following table provides an explanation of the response to the intcctrl command.

Response for the intcctrl command

MAP output	Meaning and action

The menu changes to the IntCCtrl menu, and the following fields are added to the display:
 	
`IntCCtrl`
`CBkC CBkN PRPC PRPN`
`0 0 0 0`
 	
`HTRFC HTRFN HTRPC HTRPN`
`0 0 0 0`
	Meaning: The NWM level changes to the IntCCtrl level.
	
	Action: None

page

Function

Use the page command to print or display the next page of data.

page command parameters and variables

Command	Parameters and variables
page	There are no parameters or variables.

Qualifications

The page command may be entered from any submenu of NWM.

Example

The following table provides an example of the page command.

Example of the page command

Example	Task, response, and explanation
page ↵	
	Task: Display the next page of data.
	Response: `NO MORE FINALS`
	Explanation: The displayed data is complete even if the data field is blank.

Responses

The following table provides explanations of the responses to the page command.

Responses for the page command

MAP output	Meaning and action
`NO LIST DONE YET`	
	Meaning: The list command has not been used so there is no list to display. Headers will be displayed with blank fields.
	Action: None

-continued-

page (end)

Responses for the page command (continued)

MAP output	Meaning and action
NO MORE CONTROLS	**Meaning:** All data has been supplied. **Action:** None
NO MORE FINALS	**Meaning:** The displayed data is complete even if the data field is blank. If more data is to be displayed it appears on consecutive screens. **Action:** None
SCLLI CLLLI OFRD OVF ACH CCH ICCH CCS DEFL CTRL	**Meaning:** The page response header of each list command varies for each of the control menus. **Action:** None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the NWM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The NWM level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mapci ↵ *where* mapci specifies the level higher than the NWM level to be exited	**Task:** Return to the CI level (one menu level higher than MAPCI). **Response:** The display changes to the CI display: `CI:` **Explanation:** The NWM level has returned to the CI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the NWM level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the NWM level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rtectrl

Function

Use the rtectrl command to access the route control (RteCtrl) menu level of the MAP. The RteCtrl menu displays data for the reroute controls that are currently active. The reroutes are initially specified in the routing subtable RTEREF and NEM table REROUTE.

rtectrl command parameters and variables

Command	Parameters and variables
rtectrl	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the rtectrl command.

Example of the rtectrl command

Example	Task, response, and explanation	
rtectrl ↵		
	Task:	Display reroute control data.

	Response:	The menu changes to the RteCtrl menu, and the following fields are added to the display.
		
		`RteCtrl`
		`  Rrte`
		`  0`

	Explanation:	Currently active reroute controls are displayed.

rtectrl (end)

Response

The following table provides an explanation of the response to the rtectrl command.

Response for the rtectrl command

MAP output	Meaning and action

The menu changes to the RteCtrl menu, and the following fields are added to the display.
 	
`RteCtrl`
`  Rrte`
`    0`
	Meaning: The NWM level changes to the RteCtrl level.
	
	Action: None

OAU level commands

Use the OAU level of the MAP to perform maintenance functions for an office alarm unit (OAU).

Accessing the OAU level

To access the OAU level, enter the following from the CI level:

mapci;mtc;pm;oau ↵

OAU commands

The commands available at the OAU MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

OAU commands

Command	Page
bsy	O-3
clr	O-7
disp	O-9
loadpm	O-11
next	O-15
offl	O-17
post	O-19
querypm	O-21
quit	O-23
rts	O-27
trnsl	O-31
tst	O-33

OAU menu

The following figure shows the OAU menu and status display. The insert with the hidden command is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


OAU           PM TYPE: OAU  PM NO.: n  NODE NO.: nnnn
 0 Quit       PM_STATUS: state NODE STATUS: status  CHKSUM:#value
 2 Post_      PP LOAD: accept PP EXECS: VALID FNAME: load_name
 3            PMS EQUIPPED: tt PM INT. #: x
 4            SITE FLR RPOS BAY_ID SHF DESCRIPTION SLOT EQPEC
 5 Trnsl_     TM ENTRIES: y TO z
 6 Tst_
 7 Bsy_
 8 RTS_
 9 Offl_
10 LoadPM_
11 Disp_
12 Next_
13
14 QueryPM_
15
16
17
18
```

Hidden command

clr

bsy

Function

Use the bsy command to change the state of a posted PM to the ManB state from any other state.

bsy command parameters and variables

Command	Parameters and variables
bsy	*pm_type* *pm_number*

Parameters and variables	Description
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0-2047.
pm_type	This variable selects one of the PM types listed in the PM state code table in the PM MAP level chapter. A PM in the control position of the posted set is the default.

Qualification

When the XPM is busied, the status displays for ManB are updated.

Examples

Not currently available

bsy (continued)

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
<nnn> LINES ARE IN CP BUSY STATE MATE ALREADY OUT OF SERVICE DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** The command bsy has been applied to LM bay in TAKEOVER condition which is performing call processing. Further action may affect calls in process of connection. Takeover provides improved reliability for the two LM bays which operate as a pair. When an LM is taken out-of-service the mate LM (being in service), takes control of all line drawers (and their line cards) of the out-of-service LM in addition to its own. This provides service to all line cards of both LMs of the LM mate-pair. The state of the taken-over LM remains SysB. When an LM is being taken over by its mate, the status display of the LM shows TOinProgress. **Action:** None
<nnn> LINES ARE IN CP BUSY STATE TRANSFER TO MATE WILL AFFECT CALLS DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** Further action invokes takeover which transfers the call processing load to the mate LM bay. Takeover action causes loss of calls in process of connection. **Action:** None
NO ACTION TAKEN	**Meaning:** NO is entered in response to a prompt and the command is aborted. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
OK	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None
<pm_type> <pm_number> IS MANUAL BUSY NO ACTION TAKEN	**Meaning:** The command bsy is applied to a PM that is already in the ManB state. **Action:** None
<nnn> TERMINALS ARE IN CP BUSY STATE DO YOU WISH TO CARRY ON? PLEASE CONFIRM “YES” OR “NO”	**Meaning:** The command bsy has been applied to a PM (other than LM) which is performing call processing. This response warns that further action may affect calls in process of connection. **Action:** None

-end-

clr

Function

Use the clr command to clear the ISTb state of the RAMP since the state remains until the PM is reloaded. The command clr is recommended for use by the maintenance support personnel.

A parity error with the Read Access Memory (RAM) indicates a “trap” in PM processing. When a RAM parity (RAMP) occurs, the PM reports it to the CC and the header RAMP appears with status ISTb on the PM display. To clear the ISTb state of the RAMP, enter the command string clr ramp.

clr command parameters and variables

Command	Parameters and variables
clr	ramp

Parameters and variables	Description
ramp	This parameter specifies that the RAM parity is to be cleared.

Qualifications

The clr command is qualified by the following exception, restrictions and limitations:

- The clr command is used when RAMP does not affect the operation of the PM.
- The PM is not taken out-of-service when the RAMP can be ignored.
- If there is no other ISTb for the RAMP, then its state changes to in service, and InSv is displayed. If the PM is out-of-service the RAMP header is not displayed.

Example

Not currently available

clr (end)

Response

The following table provides an explanation of the response to the clr command.

Response for the clr command

MAP output	Meaning and action
`display`	**Meaning:** The header RAMP on the status display disappears and the RAMP is cleared. The RAMP is cleared regardless of the state of the PM. If there is no RAMP, the command has no effect. **Action:** None

disp

Function

Use the disp command to display a list of a posted PM type that is in a specified maintenance state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	*pm_type*

Parameters and variables	Description
pm_state	This variable is one of the PM states listed in Tthe OAU state code table at the beginning of this chapter.
pm_type	This variable selects one of the PM types listed in the PM state code table in the PM MAP level chapter. A PM in the control position of the posted set is the default.
state	This parameter is required before the PM state code.

Qualification

If a pm_type is not entered, the display includes all PM in the specified state.

Examples

The following table provides an example of the disp command.

Examples of the disp command

Example **Task, response, and explanation**

disp state offl tm8 ↵
where

offl is the state of the PM to be displayed
tm8 is the PM type to be displayed.

Task: Identify all OAUs in the Offl state.

Response:
```
OFFL OAU:  7, 9, 24, 48.
```

Explanation: The discrimination numbers of OAUs that are in the Offl state are displayed.

disp (end)

Response

The following table provides an explanation of the response to the disp command.

Response for the disp command

MAP output	Meaning and action
`<state> <pm>: <n>, <n>, ... <n>`	**Meaning:** The display appears, where <state> and <pm> echo the specified state and PM type, and <n> is the discrimination number of the PM. **Action:** None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processor of a posted PM. The PM must be in the ManB state before entering the loadpm command.

loadpm command parameters and variables

Command	Parameters and variables
loadpm	exec [nowait] notest

Parameters and variables	Description
exec	This parameter selects the load mode to be executives (execs) only.
notest	This parameter allows loadpm to be completed without the ROM test.
no wait	This parameter allows another OAU to be posted and loaded without waiting for confirmation from the previous load request. The parameter nowait also enables the MAP to be used for other entries while loading proceeds. Error messages are printed in PM logs.

Qualifications

The loadpm command is qualified by the following exception, restrictions and limitations:

- When using the loadpm command, the load file name is taken from the data table. The load name is displayed by the querypm command.
- To determine the loads for each PM use the inform command.
- When the OAU is not loaded, the only programs that are present for testing are located in the ROM. If the ROM tests fail, the loadpm command cannot be used. If the ROM tests pass, the parameter notest bypasses the ROM tests. The time taken for a ROM test that is already known to succeed is not repeated.
- To reload a PM, enter the loadpm command on the inactive unit, then enter the command swact when it is completed, and then reenter the loadpm command for the newly inactive unit.

Example

Not currently available

loadpm (continued)

Responses

The following table provides explanations of the responses to the loadpm command.

Responses for the loadpm command

MAP output	Meaning and action
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. The load file resides on tape or disk. Use the listvol command to list the disk volume, or use the mount command to mount the tape that has the load file on it. For a description of the listvol command, refer to the chapter describing the DSKUT nonmenu directory in the Nonmenu Commands Reference Manual. For a description of the mount command, refer to chapter describing the SYS directory in the Nonmenu Commands Reference Manual. **Action:** None
`<pm_type> <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where <pm_type> is a PM in the posted set, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM must be ManB. **Action:** None
`<pm_type> <pm_number> OK.  CHECKSUM = # hhh`	**Meaning:** The PM has been successfully loaded. The checksum is the value associated with the data loaded into the PM. **Action:** None

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
<reason> NO ACTION TAKEN	**Meaning:** The command cannot be executed for a reason other than those given in the standard response. **Action:** For DMS-100 systems equipped with Disk Drive Units (DDU) refer to the nonmenu directory DSKUT, and use the commands listvol and dskut. For DMS-100 systems equipped with Magnetic Tape Drives (MTD) refer to the nonmenu directory SYS, and use the commands mount and list. The DSKUT and the SYS nonmenu directories are discussed in the Nonmenu Commands Reference Manual.

-end-

next

Function

Use the next command to post the next higher PM number of the set of posted PM.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable enables the system to select one of the PM types listed in the PM state code table in the PM MAP level chapter. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation	
next ↵		
	Task:	Post the next higher OAU. OAU 3 is the currently posted PM.
	Response:	0AU 4
	Explanation:	The next higher OAU is now posted.

next (end)

Response

The following table provides an explanation of the response to the next command.

Response for the next command	
MAP output	**Meaning and action**
END OF POST SET	**Meaning:** The currently displayed PM is the last in the posted set of PMs, or only one PM number has been posted. The display returns to the next higher menu level. **Action:** None

offl

Function

Use the offl command to change the state of a posted PM from ManB to offline. The PM is temporarily removed from service during maintenance action.

offl command parameters and variables

Command	Parameters and variables
offl	There are no parameters or variables.

Qualification

Before the offl command is used, the PM must first be set to ManB by using the command bsy.

Example

Not currently available

Responses

The following table provides explanations of the responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
OK	**Meaning:** The PM is made offline. **Action:** None

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** the PM is already offline or is in the incorrect state for being made offline, where <pm_type> is a PM in the posted set, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE SYSTEM BUSY the PM must be ManB. **Action:** For some PM types, REQUEST INVALID appears before the response NO ACTION TAKEN.

-end-

post

Function

Use the post command to select the corresponding menu and display for the PM or PM state.

post command parameters and variables

Command	Parameters and variables
post	*pm_state* *pm_type* *pm_number*

Parameters and variables	Description
pm_number	This variable identifies the discrimination number of the pm_type.
pm_state	This variable selects the state of the specified PM. The states are listed in the OAU state code table at the beginning of this chapter.
pm_type	This variable selects one of the PM types listed in the PM state code table in the PM MAP level chapter. If the level of a OAU node-type is already accessed, the default for pm_type is the PM in the control position.

Qualification

When the command string help post is entered to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

Example

Not currently available

post (end)

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action
`NO PM POSTED`	**Meaning:** The command string post pm_type accesses a PM level without posting a specific PM. **Action:** None
`<pm_state> <pm_type>: NONE`	**Meaning:** There are no PMs in the specified state. The variable <pm_state> is one of the codes listed in the OAU state code table at the beginning of this chapter, and pm_type echoes the posted PM. **Action:** None

querypm

Function

Use the querypm command to display information about a posted PM. The information is drawn from the DMS-100 data tables, and is used for debugging or office extensions. The information also includes the name of the valid load file which is used by the command loadpm.

querypm command parameters and variables

Command	Parameters and variables
querypm	There are no parameters or variables.

Qualifications

The querypm command is qualified by the following:

- The display for the querypm command is the same for all TM node-types.
- If parameters flt or cntrs are entered with the command querypm at the TM-node levels, the parameters are ignored and the same information is displayed (see the Example that follows). (The parameters flt and cntr are common to other PM levels that also have the querypm command.)

Example

The following table provides an example of the querypm command.

Example of the querypm command

Example	Task, response, and explanation
querypm ↵	

Task: Display information about the posted OAU.

Response:

```
PM TYPE: OAU  PM NO.: 0  NODE NO.: 18
PM STATUS: InSv NODE STATUS: OK,FALSE, CKSUM:#0244
PP LOAD: VALID  PP EXECS: VALID FNAME: TKTMKA02
PMS EQUIPPED: 21 PM INT.#: 3
Site Flr RPos Bay_id Shf Description Slot EqPEC
HOST 00  B00  DCE 000 65  OAU : 000       2X58Au
TM Entries: 0 TO 8
```

Explanation: Executing the querypm command results in the above display for the posted OAU.

querypm (end)

Response

The following table provides an explanation of the response to the querypm command.

Response for the querypm command

MAP output	Meaning and action

```
PM TYPE:<pm> PM NO.:<n> NODE NO.:<nnnn>
PM STATUS:<state> NODE STATUS:<status> CKSUM:#<value>
PP LOAD: <accept> PP EXECS: VALID FNAME:<load_name>
PMS EQUIPPED:<tt> PM INT.#: <x>
Site Flr RPos Bay_id Shf Description Slot EqPEC
TM Entries:<y> TO <z>
```

Meaning: The appropriate display appears, where:

- <pm> is the type of PM.
- <n> is the discrimination number of the PM type.
- <nnnn> is the PM node number.
- <state> is one of the PM states listed in the OAU state code table at the beginning of this chapter.
- <status> is one of
  - OK
  - FALSE
- <value> is a hexadecimal number for PM of node-type TM. The number is used to calculate the checksum (header CHKSUM) for each software load. After loading the peripheral and testing the PM, the checksum total is to be compared with the expected checksum total. If the totals match, the load is OK. If there is a mismatch, the load must be loaded again using the command loadpm. Each pm_type has a different checksum value for each load.
- <accept> is VALID or INVALID for the load file that the PM uses.
- <load_name> is the name of the load file that is used as a value for parameter l_name of the command loadpm.
- <tt> is the total of equipped PM for that office.
- <x> is 0-2047 for a location identifier of channel. ***See Channel Map Feature on page 203***.
- <y>, <z> is 0-127 for the range of PM that are posted.

Action: None

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the OAU level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The OAU level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the OAU level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The OAU level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the OAU level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the OAU level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rts

Function

Use the rts command to change the state of a posted PM from ManB to SysB or InSv.

rts command parameters and variables

Command	Parameters and variables	
rts	*pm_type*	*pm_number*
	sysb	all

Parameters and variables	Description
all	This parameter returns to service all posted PMs, regardless of status.
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0-2047.
pm_type	This variable selects one of the PM types listed in the PM state code table in the PM MAP level chapter. A PM in the control position of the posted set is the default.
sysb	This parameter returns all posted system busy PMs to service.

Qualifications

The rts command is qualified by the following exception, restrictions and limitations:

- Before the rts command is used, the PM must first be set from Offl to ManB by using the command bsy.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by 1 for each posted PM.
- When an XPM is made system busy (SysB state), the testing and loading of a return to service are automatically initiated.

Example

Not currently available

rts (continued)

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
CLOCK SOURCE SWITCHING TROUBLE	**Meaning:** A test is applied to the LM or DCM, and the ISTb state is caused by clock switching problems. **Action:** None
CS LINK UNAVAILABLE NO ACTION TAKEN	**Meaning:** The C-side links used for messages are both out-of-service, therefore, the PM cannot communicate with the CC. **Action:** None
OK	**Meaning:** The specified PM is returned to service. **Action:** None
<nnn> LINES ARE IN THE CP BUSY STATE LOAD TRANSFER FROM MATE WILL DISRUPT CALLS DO YOU WISH TO CARRY ON? PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** Further action invokes takeback which transfers the call processing load from the mate LM bay. Takeback action causes loss of calls in process of connection. **Action:** None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where <pm_type> echoes the posted PM, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM, must be ManB. **Action:** None
`TEST FAILED` `SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC`	**Meaning:** Results of tests are shown using the standard circuit display. A standard format, based on the DMS-100 Family equipment identification scheme, identifies the physical location of possible faulty circuit cards. When the circuit location display is part of the response to a failed test, the circuit cards are listed in order of the most likely cause of the fault, and therefore their recommended sequence of replacement. The characters listed under the header EQPEC are the hardware PEC of the suspected circuit card. shown without the prefix NT. **Action:** None
-end-	

trnsl

Function

Use the trnsl command to identify the various links between a posted PM type and the Network or subsidiary PM.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	There are no parameters or variables.

Qualifications

None

Example

Not currently available

Response

The following table provides an explanation of the response to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action

`trnsl`
`NM PAIR <n>: <n>  NM PORT <n>:<nn>`
`NM PAIR <n>: <n>  NM PORT <n>:<nn>`
`NM PAIR <n>: <n>  NM PORT <n>:<nn>`
`NM PAIR <n>: <n>  NM PORT <n>:<nn>`
	Meaning: The display is added to the PM display, where <n> is 0 or 1 for the plane number and <nn> is 0-31 for the NM number to which a port is connected.
	
	Action: None

tst

Function

Use the tst command to invoke test routines on a posted PM.

tst command parameters and variables

Command	Parameters and variables
tst	*pm_type* *pm_number*

Parameters and variables	Description
pm_number	This variable identifies the discrimination number of the pm_type. The range is 0-2047.
pm_type	This variable selects one of the PM types listed in the PM state code table in the PM MAP level chapter. A PM in the control position of the posted set is the default.

Qualifications

None

Example

Not currently available

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`CLOCK SOURCE SWITCHING TROUBLE`	**Meaning:** A test is applied to LM or DCM, and the ISTb states is caused by clock switching problems. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`OSVCE TEST INITIATED`	**Meaning:** Out-of-service testing is being performed on the posted PM which is in the ManB or SysB state. **Action:** None
`CS LINK UNAVAILABLE` `NO ACTION TAKEN`	**Meaning:** The C-side links used for messages are both out-of-service, therefore, the PM cannot communicate with the CC. **Action:** None
`INSVCE TESTS INITIATED` `<pm_type> <pm_number> TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None
`OK`	**Meaning:** The test was performed and the PM passed. **Action:** None
`<pm_type> <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for testing, where <pm_type> echoes the posted PM, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY OFFLINE The PM must be ManB. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number>, CHECKSUM=# <hhh>, AGREES.`	**Meaning:** The test passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the central control. This confirms that the PM load has not been completed. **Action:** None
`REQUEST INVALID`	**Meaning:** In-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if it is in the ManB or SysB state. **Action:** None
`TEST FAILED` `SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC`	**Meaning:** Results of tests are shown using the standard circuit display. A standard format, based on the DMS-100 Family equipment identification scheme, identifies the physical location of possible faulty circuit cards. When the circuit location display is part of the response to a failed test, the circuit cards are listed in order of the most likely cause of the fault, and therefore their recommended sequence of replacement. The characters listed under the header EQPEC are the hardware PEC of the suspected circuit card. shown without the prefix NT. **Action:** None
`TEST RESOURCES IN USE` `NO ACTION TAKEN`	**Meaning:** Test facilities are already in use for other maintenance actions. **Action:** None

-end-

OPMPES level commands

Use the OPMPES level of the MAP to remotely control battery string switching, identify the alarm and state conditions of the OPMPES, and to identify the shelves and bay and to give the circuit location.

Accessing the OPMPES level

To access the OPMPES level, enter the following from the CI level:

mapci;mtc;pm;pes ↵

OPMPES commands

The commands available at the OPMPES MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

OPMPES commands

Command	Page
abtk	O-43
audit	O-45
bsy	O-47
charge	O-49
disp	O-51
door	O-53
history	O-55
loadb	O-59
meas	O-61
next	O-63
offl	O-67
openckt	O-69

-continued-

OPMPES commands (continued)	
Command	**Page**
post	O-71
querypes	O-75
rts	O-83
tst	O-85
-end-	

OPMPES menu

The following figure shows the OPMPES menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
       CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
        .     .     .     .     .     .     .     .     .     .


OPMPES                    SysB   ManB   OffL   CBSY   ISTB   InSV
 0 Quit       PM            0      3      4      0      0      30
 2 Post_
 3                         RED      AMBER     GREEN     OFFL
 4             OPMPES       1          2         3         1
 5
 6 Tst_       OPMPES    2 Cond: GREEN   REM2     2   1   RMM   2
 7 Bsy_                                          Audit  Week  HBT
 8 RTS_        Common     Rectifiers                .      2    .
 9 Offl_         AC     FL0 FL1 CL0 CL1   BCCDVR  PESALRM  ECU FSP
10                .      .   .   .   .   .   .       .        .   .
11 Disp_      BCC    0    1    2    3    Temp     Door    BCCFUSES
12 Next_      0= W    .    .   O/C   -  EHT ELT  FRNT SIDE    0   1
13 Audit_     1= W    .    .   O/C   -   .   .    .    .      .   .
14 QueryPES
15 OpenCkt_
16 Charge_
17 LoadB
18 MEASure_
```

Hidden commands

abtk
door
history

OPMPES status codes

The following table describes the status codes for the OPMPES status display.

Status codes	OPMPES menu status display	
Code	**Meaning**	**Description**
RED		
n	Number	This identifies the number of OPMPES with condition RED.
AMBER		
n	Number	This identifies the number of OPMPES with condition AMBER.
GREEN		
n	Number	This identifies the number of OPMPES with condition GREEN.
OFFL		
n	Number	This identifies the number of OPMPES datafilled in Table OPMINV, but offline.
OPMPES		
x		The discrimination number of the displayed OPMPES.
cond		This identifies the condition of the OPMPES.
	RED	When one or more serious problems are detected. This causes a major alarm at the PM level if no other PM alarms. These are the detected alarms: ▪ AC failure ▪ FL0 detected ▪ FL1 detected ▪ CL0 detected ▪ CL1 detected ▪ EHT detected ▪ EHL detected ▪ FSP detected ▪ FRNT door open ▪ SIDE door open

-continued-

Status codes	**OPMPES menu status display** (continued)	
Code	**Meaning**	**Description**
	AMBER	There are one or more potentially serious problems are detected that are not yet serious problems. When any equipped battery string is not on the load bus, it causes a minor alarm at the PM level if no other PM alarms exist. These are the detected alarms: ▪ BCCF0 detected ▪ BCCF1 detected ▪ ECU detected The AMBER condition also occurs if the BCCDVR and the PESALRM cards are in the Peripheral Busy (P), System Busy (S), or Manual Busy (M) state.
	GREEN	There are no detectable alarms; all cards and facilities are in service (o) or normal.
	OFFL	Both BCCDVR and PESALRM cards are offline. This does not affect the PM command offl. The detectable alarms are ignored since it is for information only.
site	Site name	This is the site name of the remote PM.
y	Discrimination number	This is the discrimination numbers for the RMM to which the OPMPES is linked.
Common AC alarm		This is the common ac power detector alarm.
Rectifier alarms		
FL0		This is the rectifier 0 failure condition.
	.	no rectifier fault has been detected
	F	rectifier fault has been detected
FL1		This is the rectifier 1 failure condition.
	.	no rectifier fault has been detected
	F	rectifier fault has been detected
CL0		This is the rectifier 0 current limiting condition.
	.	current limiting circuitry is not active
	F	current limiting circuitry is active
CL1		This is the rectifier 1 current limiting condition.
	.	current limiting circuitry is not active
	F	current limiting circuitry is active

-continued-

Status codes	**OPMPES menu status display** (continued)	
Code	**Meaning**	**Description**
Temp		Temperature alarms
EHT		Extremely high temperature detector alarm
	.	EHT not detected
	F	EHT detected
ELT		Extremely low temperature detector alarm
	.	ELT not detected
	F	ELT detected
HBT		High battery temperature detector alarm
	.	HBT not detected
	F	HBT detected
Door		Door alarms
FRNT	Front door alarm	This is the OPM cabinet front door detector alarm.
	.	door is closed
	O	door is open
SIDE	Side door alarm	This is the OPM cabinet side door detector alarm.
	.	door is closed
	O	door is open
ECU	ECU alarm	this is the environmental control unit alarm.
	.	the ECU is not faulty.
	F	the ECU is faulty.
FSP	FSP alarm	This is any fuse or converter failure or other ECU failure alarm.
	.	the FSP is not faulty.
	F	the FSP is faulty.
BCC		battery charge controller strings
0		battery string pair 0
1		battery string pair 1
2		battery string pair 2
3		battery string pair 3
	condition	
	.	the string is connected to the load bus.
	F	the string has failed system testing.
	CHG	the string is connected to the charge bus.
	BSY	the string is manually busy of offline.

-continued-

Status codes	**OPMPES menu status display** (continued)	
Code	**Meaning**	**Description**
	O/C	the string is open-circuit.
	DIS	the string is connected to the discharge test bus.
	-	the string is not equipped.
BCCFUSES		State of the battery charger controller driver card
	.	fuses are not faulty
	F	a fuse is faulty
BCCDVR		State of the battery charger controller driver card
	.	in service, no faulty detected.
	M	manually busy
	S	system busy
	p	peripheral busy
PESALRM		State of the power and environmental system alarm scan card
	.	in service, no faulty detected.
	M	manually busy
	S	system busy
	p	peripheral busy
AUDIT		State of the battery rotation and testing audit
	.	audit is enabled
	F	audit is disabled
WEEK		Mode of battery rotation and testing audi8t
	N	(1-4) audit enabled for normal rotation and testing
	.	audit enabled, AC or rectifier failure
	P/S	post AC failure recovery mode (short outage)
	P/E	post AC failure recovery mode (extended outage)
		-end-

abtk

Function

Use the abtk command to abort the current task on the posted OPMPES in the control position. The current task may be testing or returning to service a driver card or a scan card.

abtk command parameters and variables

Command	Parameters and variables
abtk	There are no parameters or variables.

Qualification

The abtk command interrupts a task prematurely and should be used only in an emergency.

Example

The following table provides an example of the abtk command.

Example of the abtk command

Example	Task, response, and explanation	
abtk ↵		
	Task:	Halt all current taks on the posted OPMPES
	Response:	None
	Explanation:	All tasks are aborted.

Response

The following table provides an explanation of the response to the abtk command.

Response for the abtk command

MAP output	Meaning and action
no response	
	Meaning: The current task is stopped.
	Action: None

audit

Function

Use the audit command to enable and disable the standard battery rotation of test/charge cycles.

audit command parameters and variables

Command	Parameters and variables
audit	disable enable

Parameters and variables	Description
disable	This parameter disables normal battery rotation.
enable	This parameter enables battery rotation from the disabled state, starting with next charge or test/charge cycle in accordance with the regular schedule.

Qualifications

The audit command is qualified by the following:

- When the audit is enabled from the disabled state, battery rotation continues, starting with next charge or test/charge cycle in accordance with the regular schedule.

  Logs are generated whenever the audit state changes.
- While the AUDIT is enabled, attempts to change a battery's state, to connect the string to the Load Bus or the Charge Bus, or to open-circuit the string, will be rejected. A message will be displayed stating that the audit must be disabled before batteries can be manually manipulated.

  When the AUDIT is set to DIS, the OPM state is changed to AMBER and any string on the Charge Bus is open-circuited. Requests to manipulate the batteries manually will be accepted. When the command string querypes flt is entered, the resulting display shows the AUDIT being DIS as one of the reasons for the AMBER condition.
- This capability can be used to prevent the AUDIT from manipulating the batteries whenever maintenance or manual testing of the batteries is required.

Examples

The following table provides an example of the audit command.

audit (end)

Examples of the audit command

Example	Task, response, and explanation
audit enable ↵	

Task: Enable the the standard battery rotation of test/charge cycles.

Response:

```
                                        Audit  Week  HBT
   Common      Rectifiers                 .      2    .
     AC      FL0 FL1 CL0 CL1   BCCDVR  PESALRM  ECU FSP
```

Explanation: Standard battery rotation of test/charge cycles is enabled.

Responses

Not currently available

bsy

Function

Use the bsy command to change the state of the posted OPMPES to ManB.

bsy command parameters and variables

Command	Parameters and variables
bsy	bccdvr pesalrm

Parameters and variables	Description
bccdvr	This parameter busies the BCCDVR card (drive card).
pesalrm	This parameter busies the PESALRM card (scan card).

Qualifications

The bsy command is qualified by the following:

- If neither bccdvr nor pesalrm is specified, the default is to busy both cards.
- The hourly audit is inactive on the cards and the alarm displays are frozen while they are in the M, O, or P state.

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy ↵	

Task: Busy the posted OPM.

Response:

```
 BCC  0    1    2    3                  BCCFUSES
0=W  BSY  BSY  BSY   -  BCCDVR PESALRM   0   1
1=W  BSY  BSY  BSY   -     M      •      •   •
```

Explanation: The system displays the above response indicating that the OPMPES is ManB.

Response

The following table provides an explanation of the response to the bsy command.

bsy (end)

Response for the bsy command	
MAP output	**Meaning and action**
0K	**Meaning:** The specified card and the associated battery strings for card BCCDVR are busied. **Action:** If the OPMPES condition is GREEN, then it changes to AMBER and logs PES100 and PES103 are generated. For the PESALRM scan card, the display shows M to indicate that manual action is occurring. Battery strings for PESALRM are unaffected.

charge

Function

Use the charge command to connect the specified battery string pair onto the charge bus. The battery circuit must be open (O/C) and no other string is on the charge bus.

charge command parameters and variables

Command	Parameters and variables
charge	*string_number*
string_number	This variable identifies the battery string pair number to be connected to the charge bus. The range is 0-3.

Qualifications

None

Example

The following table provides an example of the charge command.

Example of the charge command

Example	Task, response, and explanation

charge 1 ↵
where
 	
1 is the battery string pair number
	Task: Connect battery string pair number 1 onto the charge bus.
	
	Response:
	
	`BCC 0 1 2 3 BCCFUSES`
	`0= . CHG . - BCCDVR PESALRM 0 1`
	`1= . CHG . - . . . .`
	
	Explanation: The system responds with “CHG” under the battery string number header to indicate that battery string number 1 is connected to the charge bus.

Responses

The following table provides explanations of the responses to the charge command.

charge (end)

Responses for the charge command

MAP output	Meaning and action
`INVALID STRING STATE, STRING MUST BE OPEN CIRCUIT`	**Meaning:** The specified battery string pair is not connected to the charge bus because the battery string pair is not O/C. **Action:** None
`OK`	**Meaning:** The specified battery string pair is connected to the charge bus. **Action:** The battery string state changes in the display from O/C to CHG.

`BCC 0 1 2 3 BCCFUSE`
`0= W . CHG . - BCCDVR PESALMRM 0 1`
`1= W . CHG . - . . . .`
 	
`OVERALL CONDITION IS UNSAFE TO PERMIT REQUESTED ACTION`
	Meaning: The specified battery string pair is not connected to the charge bus because a fault exists in the Common AC or one of the rectifiers.
	
	Action: None

disp

Function

Use the disp command to display a list of OPMPES in the specified condition.

disp command parameters and variables

Command	Parameters and variables
disp	[*all* / *condition*]

Parameters and variables	Description
all	This default parameter, which is never entered, indicates that all conditions are displayed because no condition is specified.
condition	This variable is one of the following OPMPES conditions: ▪ red ▪ amber ▪ green ▪ offl More than one condition at a time can be listed separated by spaces as in the following example: **disp red amber**↵

Qualification

If the disp command is entered without a condition, all conditions are displayed.

disp (end)

Example

The following table provides an example of the disp command.

Example of the disp command

Example	Task, response, and explanation
disp red ↵ *where* red is specified the OPMPES condition to be displayed.	**Task:** Identify OPMs in the RED condition. **Response:** `RED 5, 7` **Explanation:** OPM 5 and OPM 7 have triggered an alarm.

Response

The following table provides an explanation of the response to the disp command.

Response for the disp command

MAP output	Meaning and action
`<condition> <n>, <n>, ...<n>`	**Meaning:** The <condition> is one of red, amber, green, or offl, and <n> are the discrimination numbers of the OPMPES. **Action:** None

door

Function

Use the door command to enable or disable the open-door alarm for the doors to the OPMPES.

door command parameters and variables

Command	Parameters and variables
door	open close query

Parameters and variables	Description
open	This parameter disables the open-door alarm. This allows the door to be opened without triggering the alarm.
close	This parameter enables the open-door alarm. This causes the alarm to be triggered whenever the door is opened.
query	This parameter displays whether the open-door alarm is ignored (disabled) or acknowledged (enabled).

Qualifications

Door is an invisible command of the OPMPES level.

Example

The following table provides an example of the door command.

Example of the door command

Example	Task, response, and explanation
door open ↵	

Task: Disable the open-door alarm to allow the door to be opened.

Response:

```
OPEN DOOR ALARMS CURRENTLY BEING IGNORED FOR THIS OPMPES.
OPEN DOOR ALARMS WILL BE ACKNOWLEDGED WITHIN THE NEXT 2
HOURS.
```

Explanation: The open-door alarm is disabled.;

door (end)

Responses

The following table provides explanations of the responses to the door command.

Responses for the door command

MAP output	Meaning and action
`OPEN DOOR ALARMS ARE ACKNOWLEDGED FOR THIS OPMPES`	**Meaning:** With DOOR QUERY or DOOR CLOSE, the open-door alarm is enabled and will be triggered when the door is opened. **Action:** None
`OPEN DOOR ALARMS CURRENTLY BEING IGNORED FOR THIS OPMPES.` `OPEN DOOR ALARMS WILL BE ACKNOWLEDGED WITHIN THE NEXT 2 HOURS.`	**Meaning:** With DOOR OPEN, the open-door alarm is disabled for the next two hours. **Action:** None

history

Function

Use the history command to display the voltage measurement and power failure history data maintained by the hardware audit. The ten most recent power failures, in the order of occurrence are listed with their time and duration.

history command parameters and variables

Command	Parameters and variables
history	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the history command.

Example of the history command

Example	Task, response, and explanation
history ↵	

Task: Display voltage measurement and power failure history.

Response:

```
TEST AND POWER FAIL HISTORY FOR OPMPES 0
No power failures since last restart reload

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG           -55.0V PASS           -54.0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -51.0V PASS PASS
  Strg 0-7 -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG              .0V PASS           .0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -52.0V PASS PASS
  Strg 0-7 .0V   .0V    .0V    .0V    .0V     .0V    .0V    .0V
```

Explanation: The system response indicates that no power failures have occurred in just over one week. All values are measured and passed for pair 3 (strings 3 and 7). Pair 0 is in the midst of the test/charge cycle; the OC values were measured and passed. The discharge values were measured and passed. The values following the charge period have not yet been taken.

history (continued)

Responses

The following table provides explanations of the responses to the history command.

Responses for the history command

MAP output	Meaning and action

```
TEST AND POWER FAIL HISTORY FOR OPMPES 0
No power failures since last restart reload

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG           -55.0V PASS           -54.0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -51.0V PASS PASS
  Strg 0-7 -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V -53.0V

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG              .0V PASS           .0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -52.0V PASS PASS
  Strg 0-7 .0V   .0V    .0V    .0V    .0V     .0V    .0V    .0V
```

Meaning: The system response indicates that no power failures have occurred in just over one week. All values are measured and passed for pair 3 (strings 3 and 7). Pair 0 is in the midst of the test/charge cycle; the OC values were measured and passed. The discharge values were measured and passed. The values following the charge period have not yet been taken.

Action: None

-continued-

history (continued)

Responses for the history command (continued)

MAP output **Meaning and action**

```
TEST AND POWER FAIL HISTORY FOR OPMPES 0

Power failure on 1990 284 23 59 for 0 days 0 hrs 0 mins
Power failure on 1990 284 23 54 for 0 days 0 hrs 5 mins
Power failure on 1990 281 23 45 for 3 days 0 hrs 4 mins
Power failure on 1990 281 22 20 for 0 days 1 hrs 25 mins


Test/Charge: OCC  String 1 -53.0V PASS  String 5 -53.0V PASS
             CHG           -54.0V PASS           -55.0V PASS
     DIS_OR_MIN            -49.0V FAIL PASS       -51.0V PASS PASS
  Strg 0-7 -53.0V -53.0V -53.0V -55.0V -53.0V -53.0V -53.0V -54.0V

Test/Charge: OCC  String 2 -53.0V PASS  String 6 -53.0V PASS
             CHG           -55.0V PASS        -54.0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -52.0V PASS PASS
  Strg 0-7 .0V-55.0V -53.0V -53.0V .0V     -54.0V -53.0V -53.0V

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG           -55.0V PASS           -55.0V PASS
     DIS_OR_MIN            -51.0V FAIL PASS       -51.0V PASS PASS
  Strg 0-7 -53.0V -53.0V -53.0V -55.0V -53.0V -53.0V -53.0V -54.0V

Test/Charge: OCC  String 0 -53.0V PASS  String 4 -53.0V PASS
             CHG              .0V PASS              .0V PASS
     DIS_OR_MIN            -51.0V FAIL PASS       -51.0V PASS PASS
  Strg 0-7 -55.0V -53.0V -53.0V -53.0V -54.0V -53.0V -53.0V -53.0V

Test/Charge: OCC  String 3 -53.0V PASS  String 7 -53.0V PASS
             CHG              .0V PASS           .0V PASS
     DIS_OR_MIN            -51.0V PASS PASS       -52.0V PASS PASS
  Strg 0-7 .0V   .0V    .0V    .0V    .0V     .0V    .0V    .0V
```

-continued-

history (end)

Responses for the history command (continued)

MAP output	Meaning and action
	Meaning: This example shows that 4 power failures have occurred since the last restart reload. The most recent occurred on day 284 of 1990 at 11:59PM, and lasted for less than one minute. The one before that occurred at 11:54 the same day and lasted for 5 minutes. The previous one occurred at 11:45 PM of the day 281 of 1990 and lasted for 3 days, 0 hours and 4 minutes. The oldest occurred on the same day at 10:20 PM and lasted for 1 hour and 25 minutes. The voltage measurement history example has data for 4 full weeks and beginning of the fifth week. The data for pair 1 shows that string 1 failed the voltage test after discharge, but passed the test against OP,_MIN_CHG_VLT, and passed the test following the charge period. String 5 passed all tests. The data for pair 2 shows that both strings passed all tests during the test/charge cycle, but shows that the charge period for pair 0 was skipped that week. The pair may have failed the test for minimum voltage to connect to the Charge Bus, or a unable-to-charge condition may have existed for the complete charge period, or a power failure or extended power failure recovery may have been in progress during the charge period. The logs would indicate the particular reason. The data for pair 3 shows that a complete audit cycle occurred that week and all values passed. The data for pair 0 shows that the test/charge cycle was aborted after the discharge was complete, but before the test against OP,_VOLT_TST_CHG was done. This test is done after the OC period following the charge period. The data for the fifth week shows that the test/charge cycle is in progress. The voltages at the end of the 24-hour OC period were measured and passed. Either the discharge period is in progress or the test/charge cycle was aborted. **Action:** None

-end-

loadb

Function

Use the loadb command to connect the specified battery string pair onto the load bus.

loadb command parameters and variables

Command	Parameters and variables
loadb	*string_number*.
string_number	This variable identifies the battery string pair number to be connected onto the load bus. The range is 0-3.

Qualifications

The loadb command is qualified by the following exceptions, restrictions, and limitations:

- The battery circuit must be open (O/C).
- After the loadb command is executed the battery circuit should be in the InSv state.

Example

The following table provides an example of the loadb command.

Example of the loadb command

Example	Task, response, and explanation	
loadb ***2*** ↵		
	Task:	Connect battery string pair 2 to the load bus.
	Response:	0K
	Explanation:	Battery string 2 is connected to the load bus.

loadb (end)

Responses

The following table provides explanations of the responses to the loadb command.

Responses for the loadb command

MAP output	Meaning and action
`INVALID STRING STATE, STRING MUST BE OPEN CIRCUIT`	**Meaning:** The specified battery string pair is not connected to the load bus because the battery string pair is not O/C. **Action:** None
`OK`	**Meaning:** The specified battery string pair is connected to the load bus. **Action:** None

`OPMPES 2 Cond GREEN REM2 2 0 RMM 2`
 	
`Common Rectifiers Temp Door`
`AC FL0 FL1 CL0 CL1 EHT ELT FRNT SIDE ECU FSP`
`. . . . . . . . . . .`
`BCC 0 1 2 3 BCCFUSES`
`0=W . CHG . - BCCDVR PESALRM 0 1`
`1=W . CHG . - . . . .`
	Meaning: When all the equipped battery string pairs are on the load bus, the W (warning) under the header BCC changes to show the • (in-service) state.
	
	Action: None

meas

Function

Use the meas command to cause the voltages of the load bus, the BCCs, or battery strings to be measured and displayed.

meas command parameters and variables

Command	Parameters and variables
meas	all loadb bcc *str_n*

Parameters and variables	Description
all	This parameter causes the load bus, BCC 0 and 1 and all 8 battery strings, if present, to be measured.
loadb	This parameter causes the load bus only to be measured.
bcc	This parameter causes both BCCs to be measured.
str_no	This variable causes specified string to be measured. The range is 0-7.

Qualifications

None

meas (end)

Example

The following table provides an example of the meas command.

Example of the meas command

Example	Task, response, and explanation
meas all ↵	
	Task: Measure and display voltages for the load bus, BCC 0 and 1 and all 8 battery strings.
	Response: LOAD BUS = -<vv>V BCC 0 = -<vv>V BCC 1 = -<vv>V STRG 0 = -<vv>V STRG 4 = -<vv>V STRG 1 = -<vv>V STRG 5 = -<vv>V STRG 2 = -<vv>V STRG 6 = -<vv>V STRG 3 = -<vv>V STRG 7 = -<vv>V
	Explanation: Voltages for the load bus, BCC 0 and 1 and all 8 battery strings are displayed.

Response

The following table provides an explanation of the response to the meas command.

Response for the meas command

MAP output	Meaning and action
LOAD BUS = -<vv>V BCC 0 = -<vv>V BCC 1 = -<vv>V STRG 0 = -<vv>V STRG 4 = -<vv>V STRG 1 = -<vv>V STRG 5 = -<vv>V STRG 2 = -<vv>V STRG 6 = -<vv>V STRG 3 = -<vv>V STRG 7 = -<vv>V	**Meaning:** The measurement will be taken and the values displayed on the screen, where <vv> is the voltage measurement. This display is obtained when the parameter all is entered. For a battery string, the string is open-circuited, measured, and then restored to its former state. **Action:** None

next

Function

Use the next command to cause the status of the next OPMPES in the posted set to be displayed in the control position.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable enables the system to select one of the PM types listed in the PM state code table in the PM MAP level chapter. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

next (continued)

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation

next opm ↵
where
 	
opm is the pm type
	Task: Post the next opm in the posted set.
	
	Response:
	`RED AMBER GREEN OFFL`
	`OPMPES 1 2 3 1`
	
	`OPMPES 2 Cond: GREEN REM2 2 1 RMM 2`
	`Audit Week HBT`
	`Common Rectifiers . 2 .`
	`AC FL0 FL1 CL0 CL1 BCCDVR PESALRM ECU FSP`
	`. . . . . . . . . .`
	`BCC 0 1 2 3 Temp Door BCCFUSES`
	`0= W . . O/C - EHT ELT FRNT SIDE 0 1`
	`1= W . . O/C - . . . . . .`
	
	Explanation: The status for the next opm is displayed.

Responses

The following table provides explanations of the responses to the next command.

Responses for the next command

MAP output	Meaning and action
RED AMBER GREEN OFFL OPMPES 1 2 3 1 OPMPES 2 Cond: GREEN REM2 2 1 RMM 2 Audit Week HBT Common Rectifiers . 2 . AC FL0 FL1 CL0 CL1 BCCDVR PESALRM ECU FSP . . . . BCC 0 1 2 3 Temp Door BCCFUSES 0= W . . O/C - EHT ELT FRNT SIDE 0 1 1= W . . O/C -	**Meaning:** The display of the OPMPES level is replaced by another OPMPES status display. **Action:** None
NO OPMPES POSTED	**Meaning:** There are no OPMPES in the posted set of OPMPES. **Action:** None

offl

Function

Use the offl command to change the state of the specified card to offline (Offl) if the card is in the M (ManB) state.

offl command parameters and variables

Command	Parameters and variables
offl	bccdvr pesalrm

Parameters and variables	Description
bccdvr	This parameter specifies that the BCCDVR card (driver card) is to be made offline.
pesalrm	This parameter specifies that the PESALRM card (scan card) is to be made offline.

Qualifications

None

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation	
offl bccdvr ↵		
	Task:	Place the BCCDVR card in the offline state.
	Response:	0K
	Explanation:	The BCCDVR card is in the offline state.

Response

The following table provides an explanation of the response to the offl command.

offl (end)

Response for the offl command	
MAP output	**Meaning and action**
0K	
	Meaning: The specified card has been taken offline. The header BCCDVR changes to 0. The battery string states remain bsy and the PESALRM display changes to 0.
	Action: None

openckt

Function

Use the openckt command to remove the specified battery string pair from either the load bus or the charge bus. The string must be in the • (InSv) state or the CHG state.

openckt command parameters and variables

Command	Parameters and variables
openckt	*string_number*

Parameters and variables	Description
string_number	This variable identifies the battery string pair number to be removed from the load bus or the charge bus. The range is 0-3.

Qualifications

The openckt command is qualified by the following:

- All battery switching strings are switched in pairs.
- Battery switching to the load bus or to the charge bus must be from the O/C state.
- Battery string pairs may not be switched when alarm detection indicates
  - a failure in ac power, BCC 0 or 1, or rectifiers 0 or 1
  - detection of extremely high temperature (EHT).
- The commands bsy, tst, rts, and offl may be executed on the BCCDVR and PESALRM cards.

openckt (end)

Example

The following table provides an example of the openckt command.

Example of the openckt command

Example	Task, response, and explanation
openckt 0 ↵ *where* 0 is the battery string pair to be removed from the charge bus.	**Task:** Remove battery string pair 0 from the charge bus. **Response:** BCC 0 1 2 3 BCCFUSES 0=W O/C . . - BCCDVR PESALRM 0 1 1=W O/C . . - . . . . **Explanation:** This display means that battery strings 0 of BCC 0 and 1 have been switched to an open circuit..

Responses

The following table provides explanations of the responses to the openckt command.

Responses for the openckt command

MAP output	Meaning and action
INVALID STRING STATE, STATE MUST BE • or CHG	**Meaning:** The specified string must be in the • or the CHG state. **Action:** None
OK	**Meaning:** The specified battery string pair is removed from the load or charge bus. **Action:** The battery string state changes in the display from CHG to O/C.

post

Function

Use the post command to create a post set of one or more OPMPES and places one in the control position.

post command parameters and variables

Command	Parameters and variables
post	all *condition* *opmpes_number*

Parameters and variables	Description
all	This parameter selects all OPMPES associated with the host office.
condition	This variable identifies one of the OPMPES conditions. The range is red amber green offl
opmpes_number	This variable identifies the discrimination number of the OPMPES. The range is 0-199.

Qualification

When the command string help post is entered to query the parameters of the post command, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the PM types in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

post (continued)

Example

The following table provides an example of the post command.

Example of the post command

Example	Task, response, and explanation

post 2 ↵
where

2 is the discrimination number of the OPMPES to be posted.

Task: Post OPMPES 2

Response:

```
             RED      AMBER     GREEN     OFFL
 OPMPES        1         2         3        1

OPMPES    2 Cond: GREEN   REM2     2   1   RMM   2
                                   Audit  Week  HBT
 Common     Rectifiers                .      2    .
   AC     FL0 FL1 CL0 CL1   BCCDVR  PESALRM  ECU FSP
    .       .   .   .   .   .   .       .        .   .
 BCC    0    1    2    3    Temp     Door    BCCFUSES
0= W    .    .   O/C   -  EHT ELT  FRNT SIDE    0   1
1= W    .    .   O/C   -   .   .    .    .       .   .
```

Explanation: Seven OPMPES units are in the office (1+2+3+1=7). Posted OPMPES 2 is linked to the RLCM identified by REM2 2 0. Its condition is RED because the front door of the OPM cabinet is open. Six battery strings are equipped, with four on the load bus (.) and two as Open Circuit O/C. Two battery strings are unequipped (-). A warning (W) on both BCC means that not all of the equipped battery strings are on the load bus. Both BCCDVR and PESALRM cards are in service.

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action

<pre>RED AMBER GREEN OFFL
OPMPES 1 2 3 1
 	
OPMPES 2 Cond: GREEN REM2 2 1 RMM 2
Audit Week HBT
Common Rectifiers . 2 .
AC FL0 FL1 CL0 CL1 BCCDVR PESALRM ECU FSP
. . . .
BCC 0 1 2 3 Temp Door BCCFUSES
0= W . . O/C - EHT ELT FRNT SIDE 0 1
1= W . . O/C - . . . . . .</pre>
	Meaning: The status display for the conditions and the RMM appears when an OPM is posted. Refer to the “Example of the post command” table on the previous page for a representative display.
	
	Action: None

OK	**Meaning:** An OPMPES is placed in the control position. **Action:** None

querypes

Function

Use the querypes command to display information about the posted OPMPES in the control position.

querypes command parameters and variables

Command	Parameters and variables
querypes	flt

Parameters and variables	Description
flt	This parameter displays all faults only.

Qualifications

The BCCDVR card is in card slot 6 of the RMM. The PESALRM card is in card slot 8 of the RMM.

querypes (continued)

Examples

The following table provides an example of the querypes command.

Examples of the querypes command

Example	Task, response, and explanation

querypes ↵	**Task:** Display information on the posted OPMPES which is OPMPES 2.
	
	Response:
	`OPMPES 0 , CONDITION AMBER , KOPM 0 0 , RMM 3 ,`
	`BCCDVR CCTNO: 6 , PESALRM CCTNO: 10 ON RMM 3`
	`EHT .,ELT ., BCCF0 .,BCCF1 .,FL0 .,FL1 .,HBT F,FRNT .,SIDE .,`
	`BCC0: . F . . , FSP ., AC ., CL0 ., CL1 .,`
	`BCC1: . F . . , BCCDVR ., PESALRM ., EDU .`
	`AUDIT DIS AUDIT WEEK:`
	
	Explanation: The system displays information in OPMPES 2.

querypes flt ↵	**Task:** Display all faults on the posted OPMPES. **Response:** `EHT F, ELT F, BCCF0 F, BCCF1 F, FL0 F, FL1 F` **Explanation:** The system displayed the fields which have faults.

-end-

Responses

The following table provides explanations of the responses to the querypes command.

Responses for the querypes command

MAP output	Meaning and action
`CHARGE BUS TEST FAILED: BCC <n>`	**Meaning:** One or both of the BCC cards is faulty and must be replaced, where <n> is the BCC number. **Action:** None

-continued-

querypes (end)

Responses for the querypes command (continued)

MAP output	Meaning and action
OPMPES 0 , CONDITION AMBER , KOPM 0 0 , RMM 3 , BCCDVR CCTNO: 6 , PESALRM CCTNO: 10 ON RMM 3 EHT .,ELT ., BCCF0 .,BCCF1 .,FL0 .,FL1 .,HBT F,FRNT .,SIDE ., BCC0: . F . . , FSP ., AC ., CL0 ., CL1 ., BCC1: . F . . , BCCDVR ., PESALRM ., EDU . AUDIT DIS AUDIT WEEK:	**Meaning:** Several fields are shown which give the status of the posted OPMPES in the control position. **Action:** None
EHT F, ELT F, BCCF0 F, BCCF1 F, FL0 F, FL1 F	**Meaning:** The command string querypes flt is entered. **Action:** None
LOAD BUS LOW VOLTAGE ALARM	**Meaning:** One or both rectifiers (FL0 and FL1) have failed. **Action:** None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the OPMPES level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The OPMPES level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example **Task, response, and explanation**

quit mtc ↵
where

mtc specifies the level higher than the OPMPES level to be exited

Task: Return to the MAPCI level (one menu level higher than MTC).

Response: The display changes to the MAPCI menu display:

```
MAPCI:
```

Explanation: The OPMPES level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output **Meaning and action**

```
CI:
```

Meaning: The system exited all MAP menu levels and returned to the CI level.

Action: None

```
QUIT -- Unable to quit requested number of levels
Last parameter evaluated was: 1
```

Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.

Action: Reenter the command using an appropriate level number.

The system replaces the OPMPES level menu with a menu that is two or more levels higher.

Meaning: You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.

Action: None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the OPMPES level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rts

Function

Use the rts command to return the specified cards to the in-service state (InSv).

rts command parameters and variables

Command	Parameters and variables
rts	bccdvr pesalrm

Parameters and variables	Description
bccdvr	This parameter returns to service the BCCDVR card (driver card).
pesalrm	This parameter returns to service the PESALRM card (scan card).

Qualifications

The rts command is qualified by the following exception, restrictions and limitations:

- If no parameter is entered, both cards are returned to service.
- If no fault is detected by the RTS tests, the equipped battery strings are returned to their former state and the audit is re-enabled.
- For the PESALRM card, the rts command initiates a complete test in which all scan points are checked. If a failure is detected, RTS does not occur and M remains displayed under header PESALRM. Replace the PESALRM card.
- The hourly audit is inactive on the cards and the alarm displays are frozen while they are in the M, O, or P state.

rts (end)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation	
rts ↵		
	Task:	Return to service both the BCCDVR card (driver card) and the PESALRM card (scan card).
	Response:	0K
	Explanation:	Both the BCCDVR card (driver card) and the PESALRM card (scan card) have been returned to service.

Response

The following table provides an explanation of the response to the rts command.

Response for the rts command

MAP output	Meaning and action
0K	
	Meaning: The specified card(s) are returned to service.
	Action: None

tst

Function

Use the tst command to test a specified card if it is the M state.

tst command parameters and variables

Command	Parameters and variables
tst	bccdvr pesalrm chargebus

Parameters and variables	Description
bccdvr	This parameter specifies that the BCCDVR card (driver card) is to be tested.
pesalrm	This parameter specifies that the PESALRM card (scan card) is to be tested.
chargebus	This parameter specifies that the voltage of the BCC charging buses is to be tested, provided the OPM is in the Normal Battery Rotation Mode and the audit is idle. Otherwise, it is unsafe to permit the test.

Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- The charge bus should be tested to clear a BCC low voltage alarm after a faulty BCC card has been replaced.
- If none of the parameters is entered, all cards are tested.
- If one or more fail the test, try the command rts. If they still fail, replace the respective card(s).
- The hourly audit is inactive on the cards and the alarm displays are frozen while they are in the M, O, or P state.

tst (continued)

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation

tst pesalarm ↵	**Task:** Test the pesalarm card scan points.
	
	Response:
	`OPMPES 2 COND: AMBER REM2 2 0 RMM 2`
	`Audit Week HBT`
	`Common Rectifiers . 2`
	`AC FL0 FL1 CL0 CL1 BCCDVR PESALRM ECU FSP`
	`. . . . . F . . . . .`
	`BCC 0 1 2 3 TEMP DOOR BCCFUSES`
	`0=W . . O/C - EHT ELT FRNT SIDE 0 1`
	`1=W . . O/C - F . . . . .`
	
	Explanation: The F under header EHT means that a high temperature scan point failure is detected by the tests.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`BCCDVR CARD FAILURE`	**Meaning:** The BCCDVR card (driver card) fails the test. **Action:** None
`OK`	**Meaning:** The specified card(s) pass the tests. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
SCAN POINT FAILURE	**Meaning:** The PESALRM card (scan card) fails the test. **Action:** None
TST CHARGEBUS OK	**Meaning:** The charge bus test passes. **Action:** None
TST CHARGEBUS FAILED: CHECK LOGS.	**Meaning:** The logs indicate which card(s) have failed. The faulty card should be replaced. **Action:** None
TST CHARGEBUS NOT RUN: <reason>	**Meaning:** The charge bus cannot be run, where the < reason> is one of the following: • OVERALL CONDITION IS UNSAFE TO PERMIT REQUESTED • ACTION • MTA 3X09BA NOT PRESENT • NO LTU AVAILABLE • MTA CONNECTION FAIL • LTU MEASUREMENT FAIL **Action:** None

-end-

PERFORM level commands

Use the PERFORM level of the MAP to display information about the processors of a posted PM of node type LGC, LTC, DTC, or RCC.

Accessing the PERFORM level

To access the PERFORM level, enter the following from the CI level:

mapci;mtc;pm;post ***pm_type pm_num*****;perform** ↵

where

pm_type	is a PM of node type lgc, lgci, ltc, dtc, or rcc
pm_num	is then number of the PM and has a range 0-127.

PERFORM commands

The commands available at the PERFORM MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

PERFORM commands

Command	Page
delays	P-5
isgact	P-7
pfquery	P-9
pmact	P-11
quit	P-15

PERFORM menu

The following figure shows the PERFORM menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .

PERFORM                SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit     PM          4      0      10     3      3     130
 2 PMact    LGC         0      0       0     1      1       9
 3
 4 Delays   LGC    1 ISTb  Links OOS:  CSide  0  Pside  0
 5          Unit-0:  Act   InSv
 6          Unit-1:  InAct InSv
 7 ISGACT   LOAD NAME:  load_name
 8          STATUS: status REASON: reason LOGS: o/o TIME: hh.mm.ss
 9 PFQuery
10
11
12
13
14
15
16
17
18
```

PERFORM status codes

The following table describes the status codes for the PERFORM status display.

Status codes PERFORM menu status display

Code	Meaning	Description
load_name		This is the name of the load in the active unit of the posted XPM.
status		This identifies the state of the posted XPM.
RUNNING		This message indicates that the process is active.
START_PEND		This messge indicates that the measurements begin when the next central control (CC) minute starts.
STOP_ PEND		This message indicates that the measurements begin when the next central control (CC) minute ends.
STOPPED		This message indicates that the process is inactive.

-continued-

Status codes PERFORM menu status display (continued)

Code	Meaning	Description
reason		This identifies a reason for the current status.
COMMAND		This reason indicates that the command strt has started the performance process.
DCH_DROP		This reason indicates that the process stopped because the DCH is not InSv or ISTb.
DCH_SPARE		This reason indicates that the process stopped because DCH sparing has occurred.
NOT_STARTED		This reason indicates that the process has not been started
NO_STORE		This reason indicates that the PM has no temporary store available.
TIMEOUT		This reason indicates that a PM process has time out, causing one of the states described above.
UNKNOWN		This reason indicates that an unknown or unrecognized condition is preventing the PERFORM tool from continuing.
XPM DROP		This reason indicates that the process stopped because of a warm or cold SwAct in the PM.
o/o		This identifies under what situations logs are to be generated.
ON		This is where logs are generated when ▪ 15 minutes (or duration) has expired ▪ the command stop has been entered ▪ a warm or cold SwAct has occurred ▪ the time for the run has expired
OFF		This iswhere logs are generated only when a warm or cold SwAct occurs.
hh.mm.ss		This denotes the hours, minutes, and seconds remaining for the countdown of the performance process. When the times expires, the process automatically stops.

-end-

delays

Function

Use the delays command to access the delays level and to display information on call processing delays.

delays command parameters and variables

Command	Parameters and variables
delays	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the delays command.

Example of the delays command

Example	Task, response, and explanation	
delays ↵		
	Task:	Access the DELAYS level.
	Response:	`<Delays MAP menu display>`
	Explanation:	The Delays level is accessed.

Response

The following table provides an explanation of the response to the delays command.

Response for the delays command

MAP output	Meaning and action
`<Delays MAP menu display>`	
	Meaning: The DELAYS map level is accessed
	Action: None

isgact

Function

Use the isgact command to access the delays level and to display information on call processing delays.

isgact command parameters and variables

Command	Parameters and variables
isgact	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the isgact command.

Example of the isgact command

Example	Task, response, and explanation	
isgact ↵		
	Task:	Access the ISGACT level.
	Response:	`<ISGACT MAP menu display>`
	Explanation:	The ISGACT level is accessed.

Response

The following table provides an explanation of the response to the isgact command.

Response for the isgact command

MAP output	Meaning and action
`<Delays MAP menu display>`	
	Meaning: The ISGACT map level is accessed
	Action: None

pfquery

Function

Use the pfquery command to display up to five PMs undergoing the performance process.

pfquery command parameters and variables

Command	Parameters and variables
pfquery	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Responses

The following table provides an explanation of the response to the pfquery command.

Responses for the pfquery command

MAP output	Meaning and action

`PERIPHERALS IN USE ARE:`
`NODE:  <nn>`
`<pm_node>  PM: <pm_type>   <nn>      USER: <user_id>`
	Meaning: The system identifies the PMs that are undergoing analysis by PERFORM, where:
	<pm_node> is the system node number of the PM.
	<pm_type> is the LGC, LTC, DTC, or RCC.
	<pm_number>is the discrimination number of the PM.
	<nn> is 00-99 for the node number that the system assigns to each PM.
	<user_id> is the user identification of the MAP. If analysis is not occurring on a PM, NOT DISPLAYED replaces the user_id at the MAP.
	
	Action: None

pmact

Function

Use the pmact command to access the PMACT level and display the status of activities within the posted PM.

pmact command parameters and variables	
Command	**Parameters and variables**
pmact	There are no parameters or variables.

Qualifications

The pmact command is qualified by the following:

- The LOW PRIO BGND and CALL PROCESSING values indicate the amount of PM service.
- The PS_CHNL and UTR values are used to determine the rate of calls going through the PM.
- If the logs are started using the strt command at the PMACT level, Log PRFM200 displays the data from the last 15 sampling periods of a PM.

Examples

The following table provides an example of the pmact command.

Examples of the pmact command	
Example	**Task, response, and explanation**
pmact ↵	
	Task: Access the PMACT MAP level. **Response:** `See below` **Explanation:** Information for SIGP (MX73) is the amount of time (in percent) spent in the interrupt level (Call Processing Occupancy) during the last minute. Information for SIGP (MX73) is the amount of time (in percent) spent dealing with HDLC protocol during the last minute. (One new line has been added containing the information relative to the SIGP and the Message Card processor.

pmact (continued)

```
      CC    CMC    IOD   NEt   PM   CCS   Lns   Trks  Ext
         .     .     .     .     .     .     .     .     .


PMact                          Sysb  Manb  Offl  Cbsy  ISTb  INSV
 0 Quit          PM
2 Strt           RCC2
3 Strtlog
4 Stoplog        RCC2  1  InSv  Links_OOS:
5 Stop           Unit 0:  Act     InSv
6                Unit 1:  Inact   InSv
7                LOAD NAME:
8                STATUS:          REASON:     LOGS:    TIME:xx:xx:xx
9                                UP AVG ISP  AVG SIGP AVG  MX76  AVG
10
11               CALL PROCESSING xxx xxx xxx xxx xxx xxx xxx xxx
12               LOW PRIO BGND   xxx xxx xxx xxx
13                               ORIG    ORIGAVG   TERM  TERMAVG
14                                 xxx       xxx    xxx      xxx
15                               AVAIL     INUSE   HIGH
16               PS_CHNL           xxx       xxx    xxx
17               UTR               xxx       xxx    xxx
18
OPERATOR
TIME 09:34
```

pmact (continued)

Responses

The following table provides explanations of the responses to the pmact command.

Responses for the pmact command

MAP output	Meaning and action
FAILED TO INITIALIZE DIRECTORY	**Meaning:** A system problem is interfering with the access of the Perform tool. **Action:** Try again when more resources are available.
PMACT NOT VALID ON THIS PM	**Meaning:** The PMACT part of the Perform tool does not analyze the specified type of PM. **Action:** None
THERE ARE TEN USERS RUNNING PMACT PLEASE WAIT UNTIL SOMEONE QUITS	**Meaning:** The PMACT part of the Perform tool can analyze a maximum of ten peripherals at one time. **Action:** None
MP PMAVG SP SPAVG ISP ISPAVG CALL PROCESSING <nn> <nn> <nn> <nn> <nn> <nn> LOW PRIO BGND <nn> <nn> <nn> <nn> <nn> <nn> ORIG ORIGAVG TERM TERMAVG <nnn> <nnn> <nnn> <nnn> AVAIL INUSE HIGH PS_CHNL <nn> <nn> <nn> UTR <nnnnnn> <nnnnnn> <nnnnnn> PMACT:	

-continued-

Responses for the pmact command (continued)

MAP output	Meaning and action
	Meaning: The system displays information on the activity of the PM, where MP is the number of processors for the master processor. MPAVG is the average of the number of processes for the master processor. SP is the number of processes for the signaling processor. SPAVG is the average of the number of processes for the signaling processor. ISP is the number of processes for the ISP. If there are less than two ISDN NTBX01 cards for each LGC or LTC, the header ISPAVG does not appear in the status display and data for the Perform tool is not generated for the LGC or LTC. ISPABG is the average of the quantities of the processes for the ISP. If there are less than two ISDN NTBX01 cards for each LGC or LTC, the header ISPAVG does not appear in the status display and data for the Perform tool is not generated for the LGC or LTC. <nn> is 00-99 for the respective quantities. When the quantities are zero at the beginning of the performance process, the display shows a double dash (--). CALL PROCESSING is the call processing occupancy of the MP, MPAVG, SP, and SPAVG within the last minute. LOW PRIO BGND is the low priority background occupancy of the MP, MPAVG, SP, AND SPAVG within the last minute. This parameter monitors the processes for audits and tests. ORIG is the count of peak originations ORIGAVG is the average of the counts of peak originations TERM is the count of peak terminations. Terminations are calls that cause physical ringing TERMAVG is the average of the counts of peak terminations <nnn> is 000-999 for the respective quantities. When the quantities are zero at the beginning of the performance process, the display shows a double dash (--). AVAIL is the number of channels or universal tone receivers (UTR) that are available for call processing INUSE is the number of channels or UTRs that are being used for call processing HIGH is the highest number of channels or UTRs that were used for call processing during the performance process. <nnnnnn> is up to a six-digit number for the respective quantities. When the quantities are zero at the beginning of the performance process, the display shows a double dash (--). PS_CHNL is the quantity of P-side channel uses UTR is the number of UTRs **Action:** None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PERFORM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PERFORM level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PERFORM level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PERFORM level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PERFORM level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PERFORM level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

PLANE level commands

Use the PLANE level of the MAP to maintain and administer a file processor.

Accessing the PLANE level

To access the PLANE level, enter the following from the CI level:

mapci;mtc;pm;post fp *fp_no* ↵

to reach the FP level, from which enter the following:

plane ↵

PLANE commands

The commands available at the PLANE MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

PLANE commands

Command	Page
abtkmcr	P-23
bsy	P-25
claim	P-31
config	P-35
dpsync	P-39
match	P-41
matejam	P-45
querymcr	P-49
querypl	P-51
quit	P-55

-continued-

PLANE commands (continued)	
Command	**Page**
rts	P-59
swact	P-65
sync	P-69
trnsl	P-77
tst	P-81
-end-	

PLANE menu

The following figure shows the PLANE menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .
                              1 FP

Plane                          SysB  ManB  OffL  Cbsy  ISTb  InSv
 0 Quit              PM           0     0     0     0     0     0
 2                   FP           0     0     0     0     0     0
 3
 4              FP 0:     FPO_R256     Plane  Devices
 5 Trnsl        ISTb                   NoSync
 6 Tst_
 7 Bsy_          Sync              CPU    Jam DRAM Port MsgCh Plink
 8 RTS_          No             state act      0123 Card 0  1 0  1
 9                     Plane 0   .    A       -...   .  .  . .  .
10 LdMate              Plane 1   .    I   No  -...   .  .  . .  .
11 MateJam
12              Plane:
13
14 QueryPL_
15
16 SwAct
17 Sync
18 DpSync
```

Hidden commands

abtkmcr

PLANE status codes

The following table describes the status codes for the PLANE status display.

Status codes PLANE menu status display

Code	Meaning	Description
Synch	Synch	Yes indicates SuperNode is operating in duplex synchronism (in synch) as no will be indicated.
CPU	CPU	Indicates active side. A means active, I means inactive.
Jam	Jammed	Yes indicates one side is jammed, otherwise no indicates no side is jammed.
DRAM	DRAM	Dynamic random access memory, boards 0, 1, 2, or 3 are indicated.
Port	Port	Port
MsgCh	Message channel	Message channel
Plink	P-side link	P-side link

-end-

abtkmcr

Function

Use the abtkmcr command to abort a process currently claiming the mate communication register (MCR).

abtkmcr command parameters and variables

Command	Parameters and variables
abtkmcr	*prompt* noprompt [*wait* nowait] [*reply* noreply]

Parameters and variables	Description
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
prompt	This default parameter indicates the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates MAP responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears, allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

Example

The following table provides an example of the abtkmcr command.

Example of the abtkmcr command

Example	Task, response, and explanation
abtkmcr noprompt ↵	
	Task: Abort the process claiming the MCR and suppress MAP prompts.
	Response: `(Not currently available)`
	Explanation: The process claiming the MCR is aborted.

Responses

The following table provides explanations of the responses to the abtkmcr command.

Responses for the abtkmcr command

MAP output	Meaning and action

`Mate Communication Register is claimed by:`
`<Claimer>:  <Reason>`
`Current process claiming MCR will be aborted.`
`Please confirm (“YES” or “NO”).`
	Meaning: The MCR has been claimed by another maintenance process.
	Action: Enter YES to proceed, or NO to cancel the operation.

`Command failed.  Mate Communication Register could not be released.`	**Meaning:** The system was not able to abort the process claiming the MCR. **Action:** Contact next level of support.
`Command aborted.  Mate Communication Register is not claimed.`	**Meaning:** The inactive CPU is not performing any function under active CPU control. **Action:** None.

-end-

bsy

Function

Use the bsy command to busy a physical link or message channel on a port.

bsy command parameters and variables

Command	Parameters and variables					
bsy <com>	port	*plane_number*	[plink / mscgh]	*link_number*		(1) (2)
bsy (continued)	(1) (2)	[*prompt* / noprompt]	[*wait* / nowait]	[*reply* / noreply]		(end)

Parameters and variables	Description
link_number	This variable is the number of the link on the port to be busied and has a range of 0-1.
mscgh	This parameter indicates that a message channel number will be specified.
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
plink	This parameter indicates a physical link number will be specified.
plane_number	This variable is the number of the MS plane, where the port to be busied resides and has a range of 0-1.
port	This parameter indicates a port plane number will be specified.
prompt	This default parameter indicates the system will prompt the user if the noprompt parameter is not entered.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

-end-

Qualifications

None

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example **Task, response, and explanation**

bsy port 0 msgch 1 ↵
where

0 (first) is the port plane number
1 (second) is the message channel number

Task: Busy message channel 0 on plane 1.

Response:
```
Command completed.  The MsgCh is manually busy.
```

Explanation: The command executed successfully.

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action

`Busying this link will isolate the node.`
`Do you wish to continue?`
`Please confirm (″YES″ or ″NO″)`
	Meaning: You are about to busy the last available link, which will isolate the node.
	
	Action: Contact the next level of support

`ILM status message:` `Link maintenance currently in process.`
`or`
`Maintenance not able to run.`
`or`
`Link maintenance request threshold exceeded.`
	Meaning: The command did not complete normally.
	
	Action: Repeat the command.

`ILM status message:` `Link maintenance timed out.`
`or`
`Invalid request received by link maintenance.`
`or`
`Local maintenance is not accessible.`
`or`
`Maintenance action aborted.`
`or`
`Central link maintenance failure.`
`or`
`Objection caused by interested party.`
`or`
`Central link maintenance not available.`
	Meaning: The command could not complete normally.
	
	Action: Repeat the command. If problem persists, collect logs and contact next level of support.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
ILM status message:	Invalid identifier supplied. or An undefined problem occurred. or Check LOGS for more information. or Request not supported. or Invalid parameters received by link maintenance. or Internal error. or Invalid database. or A software error occurred. Check LOGs for more information. or Invalid context supplied. or The PLink or MsgCh is in-service.
	Meaning: An internal error occurred. **Action:** Collect logs and contact next level of support.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
Resource State Message: The PLink or MsgCh is in-service. or The PLink or MsgCh is in-service trouble. or The PLink or MsgCh is system busy. or The PLink is under test. or A local node required resource is unavailable. or A Message Switch required resource is unavailable. or The MsgCh is off-line. or The physical link is unavailable. or The link is closed. or The PLink is unequipped. or The resource is in an unknown state.	**Meaning:** The physical link or message channel is in the state described at the completion of the command. **Action:** Repeat the command. If the problem persists, collect logs and contact next level of support.
Diagnostic Message: No additional information is available.	**Meaning:** No information is available on the diagnostic that was run as part of the busy operation. **Action:** Contact next level of support.
Diagnostic Message: Test failed. Software error, look for swerrs.	**Meaning:** An internal error occurred. **Action:** Collect logs and contact next level of support.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Command aborted.  No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed.  The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted.  Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted.  External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP at which the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

claim

Function

Use the claim command to claim all free data store (DS) and program store (PC) memory as spare memory.

claim command parameters and variables

Command	Parameters and variables
claim	*prompt* noprompt [*wait* nowait] [*reply* noreply]

Parameters and variables	Description
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
prompt	This default parameter indicates that the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

The claim command should only be used during periods of low traffic. The node must be out-of-sync for the claim to be executed.

claim (continued)

Example

The following table provides an example of the claim command.

Example of the claim command

Example	Task, response, and explanation
claim ↵	
	Task: Reclaim any unused data store and program store as spare memory.

	Response:
	`The reclaiming of unused Data Store and Program Store to the Spare Pool should only be done if the node is NOT running under heavy load.`
	`Please confirm (“YES” or “NO”)`

	Explanation: The specified number of spares have been reclaimed from the configured DS/PS memory.

Responses

The following table provides explanations of the responses to the claim command.

Responses for the claim command

MAP output	Meaning and action
`Command failed. Cannot reclaim unused memory when the node is running in SYNC.`	
	Meaning: The system cannot claim DS or PS memory while the CPUs are running in sync.
	Action: Drop synchronization.
`Command failed. All allocated memory modules are in use.`	
	Meaning: All configured DS/PS is in use. No spares can be reclaimed.
	Action: None.

-continued-

claim (end)

Responses for the claim command (continued)

MAP output	Meaning and action
`Command failed.  Error occurred during reclaim operation.`	**Meaning:** A software error occurred while the spares were being reclaimed. A SWERR log is produced. **Action:** Collect SWERR logs and contact next level of support.
`Command aborted.  No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed.  The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted.  Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted.  External abort received by maintenance.`	**Meaning:** The abtk command has been entered on the same MAP where the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

config

Function

Use the config command to re-configure the memory after performing one of the following:

- extension of the memory by adding memory cards
- extension of the memory by upgrading memory cards
- reduction of the memory by removing memory cards

config command parameters and variables

Command	Parameters and variables
config	*prompt* noprompt [*wait* nowait] [*reply* noreply]

Parameters and variables	Description
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
prompt	This default parameter indicates the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

The config command should only be used during periods of low traffic. Memory can only be configured if the CPUs are running out of synchronization and the mate communication register (MCR) can be claimed. All the memory should be re-configured after memory on the inactive CPU has been modified and tested.

config (continued)

Example

The following table provides an example of the config command.

Example of the config command

Example	Task, response, and explanation
config ↵	
	Task: Initiate a memory configuration. **Response:** `WARNING:` `Memory configuration maps the inactive plane DRAM memory into the same Data Store and Program Store ranges currently existing on the active plane. This action could destroy the load running on the inactive plane. It should only be performed following a DRAM memory test involving a memory extension, reduction, or replacement.` `Please confirm (″YES″ or ″NO″)` **Explanation:** Inactive memory has been configured and mapped.

Responses

The following table provides explanations of the responses to the config command.

Responses for the config command

MAP output	Meaning and action
`WARNING:` `Memory configuration maps the inactive plane DRAM memory into the same Data Store and Program Store ranges currently existing on the active plane. This action could destroy the load running on the inactive plane. It should only be performed following a DRAM memory test involving a memory extension, reduction, or replacement.` `Please confirm (″YES″ or ″NO″)`	**Meaning:** Inactive memory configuration should only be done when one or more DRAM memory cards equipped on the inactive CPU have been changed and tested. **Action:** Enter YES to continue, or NO to cancel the command.

-continued-

config (continued)

Responses for the config command (continued)

MAP output	Meaning and action
`Command failed. The CPUs are running in SYNC.`	**Meaning:** The memory can only be configured when the CPUs are running out of synchronization. **Action:** Drop synchronization.
`Command failed. The inactive CPU does not have enough memory.`	**Meaning:** There is not enough memory to configure. **Action:** Ensure that there is sufficient memory on the inactive CPU to perform a memory configuration.

`Command failed. Unable to reset the inactive CPU.`
`or`
`An error occurred when configuring the inactive CPU via the MCR.`
`or`
`An error was detected in the inactive CPUs new inventory.`
`or`
`Unable to build memory Spare Pool on the inactive CPU.`
	Meaning: The configuration of the inactive memory has failed for the reason indicated.
	
	Action: Contact next level of support.

`Command aborted. No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed. The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.

-continued-

config (end)

Responses for the config command (continued)

MAP output	Meaning and action
`Command aborted.  Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted.  External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP where the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

dpsync

Function

Use the dpsync command to drop central processing unit (CPU) synchronization.

dpsync command parameters and variables

Command	Parameters and variables
dpsync	*prompt* noprompt [*wait* nowait] [*reply* noreply]

Parameters and variables	Description
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
prompt	This default parameter indicates the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears, allowing other commands to be entered when the nowait parameter is not entered.

Qualification

Before dropping synchronization, the inactive CPU must be jammed and the switch must be able to claim the MCR.

dpsync (end)

Example

The following table provides an example of the dpsync command.

Examples of the dpsync command

Example	Task, response, and explanation

dpsync ↵	**Task:** Drop CPU synchronization.
	
	Response:
	`If you intend to jam the inactive CPU, please do so before dropping synchronization.`
	`Please confirm (“YES” or “NO”)`
	
	>**yes**↵
	
	Command completed. Now running in simplex mode with CPU N active.
	
	Explanation: Synchronization has been successfully dropped.

Response

The following table provides an explanation of the response to the dpsync command.

Response for the dpsync command

MAP output	Meaning and action
`Command failed. Unable to drop CPU synchronization`	**Meaning:** The system could not drop synchronization and a SWERR log was produced. **Action:** Collect SWERRS and contact next level of support.

match

Function

Use the match command to match memory contents of the computing module planes.

match command parameters and variables

Command	Parameters and variables	
match	*card_number*	[*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
card_number	This variable identifies the number of the DRAM card to be matched and has a range of 0-3.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply paramtere is not entered.
wait	Thsi default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other commands to be entered when the nowait parameter is not entered.

-end-

Qualifications

Only memory that has been configured as data store (DS) or program store (PS) is matched when the MATCH command is used. If the CPUs are not synchronized when the memory match is performed, the command will only verify the contents of the active plane.

match (continued)

Example

The following table provides an example of the match command.

Example of the match command

Example	Task, response, and explanation
match 3 ↵ *where* 3 is the number of the DRAM card to be matched.	**Task:** Match the memory between CPUs on card 3. **Response:** `Command completed. Memory match was executed while the node was running in SYNC. Memory contents have been matched across the two planes.` **Explanation:** The specified memory was matched and no errors were encountered.

Responses

The following table provides explanations of the responses to the match command.

Responses for the match command

MAP output	Meaning and action
`Command aborted. Specified card is not equipped.`	**Meaning:** The specified card is not equipped on the active CPU. **Action:** None.
`Command failed. CPU synchronization dropped on match of card <card number>.`	**Meaning:** Memory inconsistencies for the indicated card causes the CPUs to drop synchronization. **Action:** Test the indicated card

-continued-

Responses for the match command (continued)

MAP output	Meaning and action
`Command aborted. Process may have trapped on memory fault. Check card status for remaining “t” indicator.`	**Meaning:** A fault was found on one of the memory cards. **Action:** Test the indicated card. If no faults are indicated, collect SWERRs and contact next level of support.
`Command aborted. No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed. The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted. Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted. External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP where the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed. Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

matejam

Function

Use the matejam command to jam or release the jam on the inactive central processing unit (CPU).

matejam command parameters and variables

Command	Parameters and variables
matejam	set [*wait* | nowait] [*reply* | noreply] release

Parameters and variables	Description
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
release	This parameter releases the jam on the active CPU.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
set	This parameter sets the jam on the inactive CPU.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

The matejam command is qualified by the following exceptions, restrictions, and limitations:

- The inactive CPU should not be jammed if the node is synchronized. When the inactive side is jammed, it cannot takeover activity if a fault condition occurs on the active side.
- The MATEJAM command will set the inactive CPU to a system jam (SysJam) state. Conversely, the MATEJAM command will release the inactive CPU from a SysJam state only.

matejam (continued)

Example

The following table provides an example of the matejam command.

Example of the matejam command

Example	Task, response, and explanation
matejam set ↵	
	Task: Jam the inactive CPU.
	Response: `Command completed. The inactive CPU is jammed.`
	Explanation: The mate CPU has been successfully jammed.

Responses

The following table provides explanations of the responses to the matejam command.

Responses for the matejam command

MAP output	Meaning and action
`Command failed. Could not claim RTIF for use.`	
	Meaning: The system could not access the RTIF.
	Action: Test the affected NT9X26 card.
`Command failed. Could not reset the mate CPU.`	
	Meaning: The jam setting on the mate CPU could not be reset.
	Action: Test the affected NT9X26 card.
`Command failed. Could not write to RTIF`	
	Meaning: The system cannot access the RTIF
	Action: Test the affected NT9X26 card.

-continued-

matejam (end)

Responses for the matejam command (continued)

MAP output	Meaning and action
`Command aborted.  No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed.  The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted.  Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted.  External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP at which the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

querymcr

Function

Use the querymcr command to query the claim status of the mate communication register (MCR).

querymcr command parameters and variables

Command	Parameters and variables
querymcr	*wait* nowait [*reply* noreply]

Parameters and variables	Description
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

It is possible the MCR could be claimed, but since the software cannot be forced to identify itself, no information is available on the claimer.

querymcr (end)

Example

The following table provides an example of the querymcr command.

Example of the querymcr command

Example	Task, response, and explanation	
querymcr ↵		
	Task:	query the claim status of the MCR.
	Response:	`Command completed.  Mate Communication Register is not claimed.`
	Explanation:	The inactive CPU is not performing any function under active CPU control.

-end-

Responses

None

querypl

Function

Use the querypl command to display information about the control processing unit (CPU).

querypl command parameters and variables

Command	Parameters and variables
querypl	[cpu / dram / port] *plane_no* flt [*wait* / nowait]

Parameters and variables	Description
cpu	This parameter causes CPU information to be displayed.
dram	This parameter causes dynamic random access memory (DRAM) information to be displayed.
flt	This parameter causes fault information to be displayed.
nowait	This parameter returns the MAP prompt immediately after the command is entered so other commands may be entered.
plane_no	This variable indicates the number of the plane to be queried and has a range of 0-1.
port	This parameter causes port information to be displayed.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

querypl (continued)

Examples

The following table provides examples of the querypl command.

Examples of the querypl command

Example	Task, response, and explanation
querypl cpu ↵	
	Task: Query the CPU status

	Response:
	`CPU 0 MMI status:  MMI_STATUS`
	`CPU 1 MMI status:  MMI_STATUS`

	Explanation: Information about the node condition is displayed.
querypl dram flt ↵	
	Task: Query the dram for fault information.

	Response:
	`CPU 0 DRAM 1 MMI Status:  MMI_STATUS`
	`DRAM 2 MMI Status:  MMI_STATUS`
	`DRAM 3 MMI Status:  MMI_STATUS`
	`Plane 0 DRAM Test Results:`
	`Card 1:  Unknown hardware fault`
	`Card 2:  Test passed`
	`Card 3:  Test passed`
	`REx Failure Result Unknown`

	Explanation: The critical faults found on the last CPU test are described.

Responses

The following table provides explanations of the responses to the querypl command.

Responses for the querypl command

MAP output	Meaning and action
`Command failed.  The PM is not responding.`	
	Meaning: The node is accessible, but it is not responding due to a hardware, software or a load problem.
	Action: Determine where the hardware, software or load problem is.

-continued-

querypl (end)

Responses for the querypl command (continued)

MAP output	Meaning and action
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PLANE level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PLANE level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PLANE level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PLANE level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PLANE level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PLANE level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return a physical link or message channel to service.

rts command parameters and variables

Command	Parameters and variables						
rts <com>	port	*;plane_number*	[plink / mscgh]	*link_number*	[*wait* / nowait]	[*reply* / noreply]	

Parameters and variables	Description
link_number	This variable specifies the number of the link and has a range 0-1.
mscgh	This parameter returns a message channel service.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
plane_number	This variable specifies the number of the plane and has a range of 0-1.
plink	This parameter returns a physical link to service.
port	This parameter returns a port to service.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

-end-

Qualifications

None

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation

rts PORT 0 MSGCH 0 ↵
where
 	
0 (first) is the, number of the message channel
(second) is the number of the plane
	Task: Return message channel 0 on plane 0 to service.
	
	Response:
	`Command completed.`
	`ILM Status Message:`
	`Resource State message: The MsgCh is in-service.`
	`Diagnostic Message: Test Passed.`
	
	Explanation: The return to service was successfully completed.

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action

`ILM Status Message:`
`Link maintenance currently in progress.`
`or`
`Maintenance not able to run.`
`or`
`Link maintenance request threshold exceeded.`
`or`
`Required resources are unavailable.`
	Meaning: The command could not execute because of other activity on the node.
	
	Action: Repeat the command.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
ILM Status Message: Link maintenance timed out. or Invalid request received by link maintenance. or Local maintenance is not accessible. or Maintenance action aborted. or Objection caused by interested party. or Central link maintenance not available.	**Meaning:** The command did not complete normally. **Action:** Collect SWERRs and other logs and contact next level of support.
ILM Status Message: Invalid identifier supplied. or An undefined problem occurred. or Check LOGS for more information. or Request not supported. or Invalid parameters received by link maintenance. or Internal error. or Invalid database. or A software error occurred. Check LOGs for more information. or Invalid context supplied.	**Meaning:** An internal error occurred. **Action:** Collect SWERRs and other logs and contact next level of support.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
Resource Status Message: The Plink or MsgCh is manually busy. or The Plink or MsgCh is system busy. or The PLink is under test. or A local node required resource is unavailable. or A Message Switch required resource is unavailable. or The physical link is unavailable. or The link is closed. or The PLink is unequipped. or The resource is in an unknown state.	**Meaning:** The physical link or message channel is in the state described at the completion of the command. **Action:** Contact next level of support.
Diagnostic Message: Cannot execute request. Reason: <reason>. or Not able to Run Test. or No Test Data Available. or No additional information is available.	**Meaning:** The test could not be executed, or the test data was not available. **Action:** Collect logs and contact next level of support.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action

`Diagnostic Message: Test Failed.`
`Fault: <fault description>`
`<standard cardlist header>`
`<standard cardlist>`
	Meaning: A fault was found and a cardlist was generated.
	
	Action: Replace the cards on the list .

`Diagnostic Message: Software errors, look for swerrs.`	**Meaning:** An internal error occurred. **Action:** Collect SWERRs and other logs and contact next level of support.
`Command aborted. No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed. The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted. Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.
`Command aborted. External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP at which the maintenance action was initiated. **Action:** Determine why the command was entered.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

swact

Function

Use the swact command to switch activity between central processing units (CPU)..

swact command parameters and variables

Command	Parameters and variables
swact	*no force* / force [*prompt* / noprompt] [*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
force	This parameter forces the maintenance system to switch activity between the CPUs.
no force	This default parameter indicates that the system will not force a switch of activity between the CPUs.
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
prompt	This default parameter indicates that the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

Activity switches performed when the switch is not running in synchronization will cause a cold restart on the newly active CPU. A SWACT can only be performed if the MCR can be claimed.

swact (continued)

Example

The following table provides an example of the swact command.

Example of the swact command

Example	Task, response, and explanation
swact ↵	
	Task: Switch activity between CPUsx
	Response: `Command completed.  CPU 0 is now running active.`
	Explanation: CPU activity has successfully switched.

Responses

The following table provides explanations of the responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`A cold restart will be performed if the PM is out of SYNC.` `Please confirm (″YES″ or ″NO″)`	
	Meaning: If the PM is running in sync, a cold restart will be performed on the newly active CPU.
	Action: Enter YES to continue, or NO to cancel the command.
`Command failed.  Could not switch activity between CPUs.`	
	Meaning: The switch was unable to switch activity.
	Action: Collect SWERRs and other logs and contact next level of support.

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
Command aborted. Activity switch inhibited due to degraded state of inactive plane. or Cannot switch activity while the CPUs are out of SYNC without specifying the FORCE option. or Activity switch not performed due to inhibiting node conditions.	**Meaning:** The command was aborted because of the fault condition specified. **Action:** Query the node for fault information.
Command aborted. The inactive CPU is jammed. or Activity switch not performed because MCR could not be claimed. or The PM is in Update Mode.	**Meaning:** The command was aborted due to the specified inhibiting condition. **Action:** Resolve the inhibiting condition.

-end-

sync

Function

Use the sync command to synchronize the central processing units (CPU) of the posted node.

sync command parameters and variables

Command	Parameters and variables			
sync <com>	normal nomatch notest nohands	[*prompt* noprompt]	[*wait* nowait]	[*reply* noreply]

Parameters and variables	Description
nohands	This parameter specifies that the CPUs are to be synchronized without enabling handshake-override. (This parameter will produce a CM NoOvr alarm.)
nomatch	This parameter specifies that the CPUs are to be synchronized without performing a memory match check.
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
normal	This parameter specifies that the CPUs are to be synchronized normally.
notest	This parameter specifies that the CPUs are to be synchronized without performing a CPU test or a memory match check.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
prompt	This default parameter indicates that the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

sync (continued)

Qualifications

The sync command can only be used if the mate communicating register can be seized by the maintenance system.

Example

The following table provides an example of the sync command.

Example of the sync command

Example	Task, response, and explanation
sync ↵	
	Task: Synchronize the CPUs of the posted PM.
	Response: `Command completed. The PM is now running in SYNC.`
	Explanation: The CPUs have been successfully synchronized.

Responses

The following table provides explanations of the responses to the sync command.

Responses for the sync command

MAP output	Meaning and action

`WARNING:`
`The NOTEST option should only be used under supervision of the technical assistance support group in an emergency`
`Please confirm (″YES″ or ″NO″)`	

	Meaning: This option will synchronize the CPUs without performing the normal CPU tests. This is potentially dangerous and should be done only in emergency situations and under the supervision of the technical assistance support group.
	Action: Contact your next level of support

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
WARNING: The inactive CPU has a different release number. Please confirm (″YES″ or ″NO″)	**Meaning:** The firmware on CPUs have different release codes and may not be compatible. **Action:** Type YES to continue, or NO to cancel the command
Command aborted. The inactive CPU is under test.	**Meaning:** The MCR is currently claimed by another process. **Action:** Wait for the maintenance activity in progress on the inactive CPU to complete.
Command aborted. The CPUs firmware releases are incompatible.	**Meaning:** The CPUs must have compatible firmware releases to synchronize. **Action:** Match the CPU firmware.
Command completed. Handshake-Override is not enabled.	**Meaning:** The CPUs have been synchronized, but Handshake-Override could not be enabled in the SYNC progression. **Action:** A memory configuration problem could exist. Contact next level of support.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
Command failed. Could not reset the mate CPU. or The links were not properly configured. or First rendezvous failed. Suspect the CPUs. or Second rendezvous failed. Suspect the CPUs. or Memory protect copy failure occurred. or The firmware SYNC kernel failed. Suspect the CPUs. or The mate's memory is not mapped into a contiguous address space. or Faults were detected in the active CPU's memory. or Could not get the mate on the same clock. or The CPU's hardware releases are incompatible. or A mismatch occurred while disabling ECC mode. or Mismatch occurred while enabling Handshake-Override. or Mismatch occurred while optimizing SYNC performance. or A mismatch caused a drop of synchronization. or Insufficient mate memory to hold the image. or MC 0 accesses will mismatch. or MC 1 accesses will mismatch.	**Meaning:** CPU synchronization failed for the reason indicated. **Action:** Contact next level of support.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action

`Command failed. Handshake-Override is not enabled.`
`or`
`The active CPU's highest page of program or data store is missing.`
`or`
`The active CPU's memory is not mapped into a contiguous address space.`
`or`
`The software load does not contain the correct software package.`
`or`
`An application failed it's memory copy.`
`or`
`An application failed it's memory match.`
`or`
`Subsystem clock 0 accesses will mismatch.`
`or`
`Subsystem clock 1 accesses will mismatch.`
	Meaning: CPU synchronization failed for the reason indicated.
	
	Action: Contact next level of support.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
Command failed. The mate test failed. The following tests failed: Maze test failed. or ROM Checksum test failed. or USART test failed. or FIR test failed. or MAU test failed. or Data Cache test failed. or Bus Access test failed. or Access Protection RAM test failed. or Static RAM test failed. or RTIF test failed.	**Meaning:** One or more of the mate tests failed. **Action:** Check for alarms and logs.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action

`Command failed. Could not configure the mate's memory.`
`DRAM card N failed its test.`
`.`
`.`
`The CPUs are running in SYNC.`
`or`
`Unable to build the memory spare pool on the inactive CPU.`
`or`
`Unable to reset the inactive CPU.`
`or`
`An error occurred when configuring the inactive CPU via the MCR.`
`or`
`Unable to get the inactive CPU's new inventory.`
`or`
`The inactive CPU does not have enough memory.`
	Meaning: A fault was discovered, but the CPUs have been synchronized.
	
	Action: Test the inactive CPU for faults.

`Command aborted. No communication path open to the node.`	**Meaning:** The node is not accessible because of errors on the links connecting the node to the maintenance host. **Action:** Determine whether problems exist with the link hardware.
`Command failed. The PM is not responding.`	**Meaning:** The node is accessible, but it is not responding due to a hardware, software or a load problem. **Action:** Determine where the hardware, software or load problem is.
`Command aborted. Maintenance in progress on the node.`	**Meaning:** Other maintenance actions are being executed on the node. **Action:** Wait until the current maintenance action is complete.

-continued-

sync (end)

Responses for the sync command (continued)

MAP output	Meaning and action
`Command aborted.  External abort received by maintenance.`	**Meaning:** The ABTK command has been entered on the same MAP at which the maintenance action was initiated. **Action:** Determine why the command was entered.
`Command failed.  Software inconsistency, check for swerrs.`	**Meaning:** The software received an unexpected return code and a SWERR log was produced. **Action:** Collect SWERRs and contact next level of support.

-end-

trnsl

Function

Use the trnsl command to determine the c-side link connections of the posted node.

trnsl command parameters and variables

Command	Parameters and variables		
trnsl	*plane_number*	*link_number*	[*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
link_number	This variable indicates the number of the link and has a range of 0-1.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
plane_number	This variable indicates the number of the plane and has a range of 0-1.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

trnsl (continued)

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation

trnsl ,.1 0 ↵
where
 	
1 is the number of the plane
0 is the number of the link
	Task: determine the physical location of link 0 on plane 1.
	
	Response:
	`MsfCh/pLing States  Description`
	`Plane 1, 0  ./.  FP 1, Slot 15/MS 1, Chain 6 Link 1`
	
	Explanation: Information describing the physical location of the link is displayed.

Responses

The following table provides explanations of the responses to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action

`Command failed. Maintenance not able to run.`
`or`
`An undefined problem occurred.`
`or`
`Central link maintenance failure.`
`or`
`Maintenance action aborted.`
	Meaning: The maintenance system was unable to execute the command for unknown reasons.
	
	Action: Contact your next level of support.

-continued-

Responses for the trnsl command (continued)

MAP output	Meaning and action

`Command failed. Link maintenance request threshold exceeded.`
`or`
`Link maintenance timed out.`
`or`
`Link maintenance currently in progress.`
`or`
`Local maintenance is not accessible.`
`or`
`Central link maintenance not available.`
`or`
`Required resources are unavailable.`
	Meaning: The link maintenance system could not process the request at that time.
	
	Action: Repeat the command.

-end-

Function

Use the tst command to test specified software or hardware components.

tst command parameters and variables

Command	Parameters and variables					
tst	REX	cpu mem port	[long short]	[stop continue]	[*wait* nowait]	[*reply* noreply]
	cpu	[hw	[maze rom usart fir mau cache bus apr sram rtif]			
		sw	image]			
	mem	*dram_card*				
	port	*plane_number*	[plink msgch]	*link_number*		

Parameters and variables	Description
apr	This parameter tests the CPU access protection register.
bus	This parameter tests the CPU bus access.
cache	This parameter tests the CPU cache memory.
continue	This parameter continues the routine exercise (REX) tests regardless of the number of tst failures.
cpu	This parameter tests the central processing unit.
dram_card	This variable indicates the DRAM card number and has a range of 0-3.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
fir	This parameter tests the CPU fault indication register.
hw	This parameter tests the CPU specified hardware.
image	This parameter tests the CPU image.
link_number	This variable indicates the link to be tested and has a range of 0-1.
long	This parameter performs all routine exercise (REX) tests.
mau	This parameter tests the CPU memory access unit.
maze	This parameter tests the CPU MAZE
mem	This parameter tests the CPU and memory cards.
msgch	This parameter tests a message channel.
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
plane_number	This variable indicates the plane on which the port card to be tested resides and has a range of 0-1.
plink	This parameter tests a port-side link.
port	This parameter tests a port-side link or message channel as specified.
prompt	This default parameter indicates that the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
rex	This parameter performs a routine exercise (REX) test.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
rom	This parameter tests the CPU read only memory.
rtif	This parameter tests the CPU reset terminal interface interrupt.
short	This parameter performs a short list of routine exercise (REX) tests.
sram	This parameter tests the CPU static random access memory.
stop	This parameter stops the REX tests at the first test failure.
sw	This parameter tests the CPU specified software.
usart	This parameter tests the CPU universal synchronous/asynchronous receiver transmitter.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

-end-

Qualifications

Routine exercise tests should be run during periods of low traffic and when the CPUs are synchronized. Routine exercise tests that are run during periods of high traffic will degrade system performance.

tst (continued)

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation
tst rex cpu ↵	
	Task: Run a manual rex test on the CPU
	Response: `Command completed. No errors detected by REX tests.`
	Explanation: The TEX test executed successfully and no faults were found.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action

`WARNING:`
`SYNC and CPU activity states will change during REX test.`
`Please confirm (″YES″ or ″NO″)`	

	Meaning: During the routine exercise, CPU activity will be switched and CPU synchronization dropped as required. Upon completion of REX tests, CPU synchronization will be restored unless there is a test failure.
	Action: Type YES to proceed or NO to cancel the command.
`Warning: CPU test of Static RAM will corrupt load in the inactive CPU.` `Please confirm (“YES” or “NO”)`	
	Meaning: Static RAM tests corrupt the inactive CPU load.
	Action: Enter YES to proceed or NO to cancel the command.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Node is out of SYNC. Only a partial REX test can be run.` `Please confirm: (“YES” or “NO”)`	**Meaning:** The memory and CPU on the active plane cannot be tested when the CPUs are not synchronized. **Action:** Enter YES to proceed with a partial test, or NO to cancel the command.
`Command aborted. Inactive CPU is jammed`	**Meaning:** REX tests cannot run when the inactive CPU was jammed. **Action:** Release the jam on the inactive CPU.

`Command aborted.`
`or`
`Command failed. Mismatch occurred during the pre-REX match of memory. Check memory indicators on the MAP for possible faults.`
	Meaning: The REX test could not run because a memory fault occurred.
	
	Action: Check for memory alarms.

`Command aborted. The CPU REX class did not run. CPU REX class resources were unavailable.` `Command failed. The Memory REX class did not run. Memory REX class resources were unavailable.`	**Meaning:** The REX test could not run because maintenance resources were already in use. **Action:** Wait for the maintenance action to finish.
`command aborted. Could not send request to the maintenance process.`	**Meaning:** The maintenance system could not receive the test request for unknown reasons. **Action:** Contact next level of support.
`Command failed. Failed test: <REX test name>`	**Meaning:** The specified REX test failed. A standard cardlist is also produced. **Action:** Replace indicated cards.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Command aborted. The processors are running in SYNC.`	**Meaning:** CPU tests cannot be run when the CPUs are synchronized. **Action:** Drop synchronization.

`Command failed. All tests failed.`
`or`
`Maze test failed.`
`or`
`ROM Checksum test failed.`
`or`
`USART test failed.`
`or`
`FIR test failed.`
`or`
`MAU test failed.`
`or`
`Data Cache test failed.`
`or`
`Bus Access test failed.`
`or`
`Access Protection RAM test failed.`
`or`
`Static RAM test failed.`
`or`
`RTIF test failed.`
	Meaning: The indicated tests failed. A standard cardlist is also produced.
	
	Action: Change the indicated cards.

`Datafill errors found.`	**Meaning:** One or more datafill inconsistency errors were found. **Action:** Modify the datafill or the hardware as required.
`Command aborted. This command is not yet implemented.`	**Meaning:** Image tests are not supported by software at this time. **Action:** None.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`Command failed. No response from inactive CPU.`
`or`
`Bus extension error occurred.`
`or`
`DRAM card is unequipped.`
`or`
`The processors are running in SYNC.`
`or`
`Test results include:`
`DRAM card <card_number>: Test failed.`
`or`
`Not tested. Non-DRAM card in slot.`
`or`
`Not tested. Card is unequipped.`
	Meaning: The test failed for the reason indicated. A standard cardlist is also generated.
	
	Action: Replace indicated cards.

`DRAM upgrade results:`
`DRAM card <card_number>: Replaced with a non-DRAM card.`
`or`
`Added a non-DRAM card.`
`or`
`Removed a non-DRAM card.`
`or`
`A DABM card has been added.`
`or`
`A DABM card has been removed.`
`or`
`DRAM card has been replaced with a DABM card.`
`or`
`No DRAM upgrade was performed.`
	Meaning: The indicated memory change was performed on the specified card.
	
	Action: Check memory cards.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
DRAM upgrade results: DRAM card <card_number>: DRAM extension failed, could not unprotect data store. or DRAM reduction failed, could not unprotect data store. or DRAM replacement failed, could not unprotect data store. or DRAM upgrade failed, check for logs. or Software inconsistency, check for swerrs.	**Meaning:** The indicated fault occurred. **Action:** Contact the next level of support.
Datafill errors found.	**Meaning:** One or more datafill inconsistency errors were found. **Action:** Modify the datafill or the hardware as required.
Command failed. Port maintenance not responding. or Resources Not Available. or Aborted. or Request not run. or Software inconsistency, check for swerrs.	**Meaning:** The port test could not be executed. **Action:** Collect SWERRs and other logs and contact next level of support.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`Command completed.`
`Port Card <plane number> <diagnostic>`
`<test result>`
`<standard card list>`
	Meaning: A port card failure has occurred.
	
	Action: Replace the indicated cards.

`ILM Status Message: Link maintenance currently in progress.`
`or`
`Required resources are unavailable.`
`or`
`Maintenance not able to run.`
`or`
`Link maintenance request threshold exceeded.`
	Meaning: The command could not execute.
	
	Action: Attempt the command again later.

`ILM Status Message: No action was taken.`
`or`
`Link maintenance timed out.`
`or`
`Invalid request received by link maintenance.`
`or`
`Local maintenance is not accessible.`
`or`
`Maintenance action aborted.`
`or`
`Central link maintenance failure.`
`or`
`Objection caused by interested party.`
`or`
`Central link maintenance not available.`
	Meaning: The command did not complete normally.
	
	Action: Collect SWERRs and other logs and contact the next level of support.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
ILM Status Message: Invalid identifier supplied. or An undefined problem occurred. or Check LOGS for more information. or Request not supported. or Invalid parameters received by link maintenance. or Internal error. or Invalid database. or A software error occurred. Check LOGs for more information. or Invalid context supplied.	**Meaning:** An internal error occurred. **Action:** Collect SWERRs and other logs and contact the next level of support.
Resource Status Message: A local node required resource is unavailable. or A Message switch required resource is unavailable. or The physical link is unavailable. or The link is closed. or The PLink is unequipped. or The resource is in an unknown state.	**Meaning:** The resource indicated is in the specified state. **Action:** Collect logs and contact the next level of support.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
Diagnostic Message: Cannot execute request. Reason: <reason> or Not able to run test. or No Test Data Available. or No additional information is available.	**Meaning:** The test could not execute normally. **Action:** The test should be attempted again. If the problem persists, collect SWERRs and other logs and contact the next level of support.
Diagnostic Message: Test Failed. Fault: <fault description> <standard cardlist header> <standard cardlist>	**Meaning:** A fault has been found. **Action:** Replace the indicated cards.
Diagnostic Message: Software error, look for swerrs.	**Meaning:** An internal error occurred. **Action:** Collect SWERRs and other logs and contact the next level of support.

-end-

PM level commands

Use the PM level of the MAP to access the PM maintenance system.

Accessing the PM level

To access the PM level, enter the following command from the CI (Command Interpreter) level:

mapci;mtc;pm ↵

PM commands

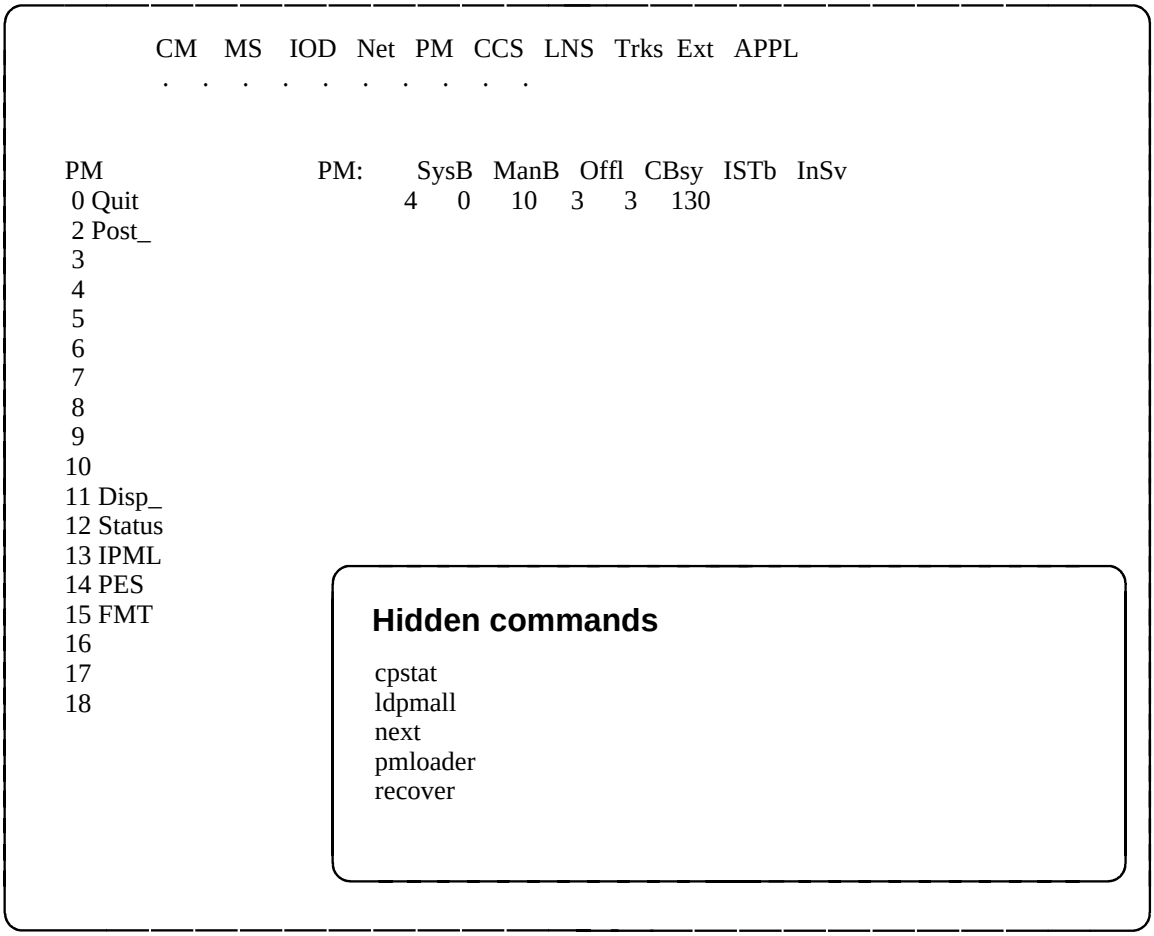
The commands available at the PM MAP level are described in this chapter. They are arranged in alphabetical order. The page number for each command is listed in the following table.

PM commands

Command	Page
cpstat	P-103
disp	P-105
fmt	P-107
ipml	P-109
ldpmall	P-111
next	P-113
pes	P-115
pmloader	P-117
post	P-121
quit	P-125
recover	P-129
status	P-133

PM menu

The following figure shows the PM menu and status display. The insert with hidden commands is not a visible part of the menu display.



PM status codes

The following table describes the status codes for the PM status display.

Status codes PM menu status display

Code	Meaning	Description
PM	PM type	This is a four character code, usually alphabetic, representing an abbreviation of the PM name. The discrimination consists of three or four digits in various formats, depending on the PM type. The discrimination number is the software identifier by which a PM is known to the system and to maintenance software.
ADTC	Austrian digital trunk controller	Austrian digital trunk controller (applies to Austrian offices only). Discrimination number range is 0-127.

Status codes PM menu status display (continued)

Code	Meaning	Description
ALGC	Austrian line group controller	Discrimination number range is 0-17.
ARCC	Austrian remote cluster controller	Discrimination number range is 0-255.
ATM	Austrian trunk module	Discrimination number range is 0-2047.
CSC	Cell site controller	Discrimination number range is 0-127.
CTM	Conference trunk module	Discrimination number range is 0-511.
DCM	Digital carrier module	Digital Carrier Module: DCM-B. Basic DCM-S. DCM-B with synchronized clock DCM-R. DCM equipped for RLM Discrimination number range is 0-511.
DCM	Digital controller module	Discrimination number range is 0-511.
DES	Digital echo suppressor	Discrimination number range is 0-511.
DFI	Direct Fiber Interface.	Discrimination number range is 0-255.
DLM	Digital line module	Discrimination number range is
DRAM	Digital recorded announce-ment machine	Discrimination number range is 0-2047.
DTC	Digital trunk controller	Supports DS-1. Discrimination number range is 0-127.
DTCI	Digital trunk controller ISDN	Discrimination number range is 0-255.
DTM	Digital trunk module	Discrimination number range is 0-255.
EIU	Ethernet interface unit	Discrimination number range is 0-750.

-continued-

Status codes PM menu status display (continued)

Code	Meaning	Description
ESA	Emergency standalone	Designates ESA processor of LCM or RCC. Discrimination number range is 0-255.
EXND	External node	Discrimination number range is 0-31
IAC	ISDN access controller	Integrated Services Digital Network (ISDN) Access Controller. Discrimination number range is 0-127.
ICP	Integrated cellular peripheral	Discrimination number range is 0-255.
IDTC	International digital trunk controller	Discrimination number range is 0-127.
ILCM	International Line concentrating module	Discrimination number range is 0-511 (frame), 0-9 (unit).
ILGC	International line group controller	Discrimination number range is 0-127.
ILTC	International line trunk controller	Discrimination number range is 0-127.
LCM	Line concentrating module	LCM at a Remote Site, for example as part of an RSC or convertible RLCM. Discrimination number range is 0-99 (REM 00 to 99 0) LCM at the host. (0 or 1 identifies the lower or upper module-pair of units in the LCE frame). Discrimination number range is 0-99. (HOST 00 to 99 1)
LCME	Line concentrating module (Enhanced)	Discrimination number range is 0-511 (frame), 0-9 (unit).
LCMI	ISDN line concentrating module	Discrimination numbers: Site: HOST Frames: 0-99 Unit: 0-3 and for lines only: Drawer: 0-23 Line Cards: 0-15

-continued-

Status codes PM menu status display (continued)

Code	Meaning	Description
LDT	Line appearance on a digital trunk (a virtual node)	Discrimination number range is 0-99(frame) or 0 (unit).
LGC	Line group controller	Controls LCM or RLCM/RCC. Discrimination number range is 0-127.
LGCI	Line group controller for ISDN	Discrimination number range is 0-127.
LIM	Link interface module	Discrimination number range is 0-17.
LIU	Line interface unit	Discrimination number range is 1-24.
LM	Line module	Discrimination numbers: At host: HOST 0 to 99 0 or REM2 0 to 99 1 At a remote site REM2 0 or 1 indicates left or right by in an LME frame
LTC	Line trunk controller	Combination of LGC and DTC-supports trunks and lines. Discrimination number range is 0-127.
LTCI	Line trunk controller for ISDN.	Discrimination number range is 0-127.
MMA		Discrimination number range is 0-2047.
MSB6	Message switch and buffer	MSB for CCIS6 and CCITT6. Discrimination number range is 0-4.
MSB7	Message switch and buffer	MSB for CCIS7 and CCITT7. Discrimination number range is 0-4.
MTM	Maintenance trunk module	Discrimination number range is 0-2047.
OAU	Office alarm unit	Discrimination number range is 0-2047.
OPM	Outside plant module	The OPM is not a PM type but is includes for convenience. Discrimination number range is 0-199.
PDTC	Digital trunk controller for 30 channel PCM	DTC for 30 channel PCM facilities (International). Discrimination number range is 0-127.

-continued-

Status codes PM menu status display (continued)

Code	Meaning	Description
PES	Power and environment system.	The power and environment system of an OPM or SRU. Discrimination number range is 0-99.
PHN		Discrimination number range is 0-20
PLGC	Line group controller for 30 channel PCM	LGC for 30 channel PCM facilities (International). Discrimination number range is 0-127.
PRCC	PCM30 remote cluster controller	Discrimination number range is 0-255.
PTM	Packaged trunk module	Discrimination number range is 0-2047.
RCC	Remote cluster controller	Must be connected to an LGC. Discrimination number range is 0-127.
RCCI	Remote cluster controller ISDN	Discrimination number range is 0-255.
RCC2	Remote cluster controller #2	Discrimination number range is 0-255.
RCO2	Remote switching center overseas #2	Discrimination number range is 0-255.
RCS	Remote concentrator subscriber	Connected to SMS. Discrimination number range is 0-99 (frame) or 0-9 (unit).
RCT	Remote concentrator terminal	Connected to SMR. Discrimination number range is 0-99 (frame) or 0-9 (unit).
RCU	Remote concentrator, urban	Connected to SMU. Discrimination number range is 0-99 (frame) or 0-9 (unit).
RLCM	Remote line concentrating module.	The RLCM is not a PM type but is included for clarity. REM1 SITE, discrimination number range is 0-9 (unit) or 0-99 (frame).

-continued-

Status codes PM menu status display (continued)

Code	Meaning	Description
RMM	Remote maintenance module	Discrimination number range is 0-99.
RSM	Remote service module	Controlled by RLM. Discrimination number range is 0-99.
SMR	Subscriber module, remote	Connected with RCT. Discrimination number range is 0-127.
SMS	Subscriber module SLC-96	Connected with RCS. Discrimination number range is 0-127.
SMS-R	Subscriber module SLC-96 remote	Located with RCC or RCC2 and connected with RCS). Discrimination number range is 0-127.
SMU	Subscriber module, urban	Connected with RCU. Discrimination number range is 0-127.
SRCC	Sonet Remote Cluster Controller	Discrimination number range is 0-255.
STC	Signal terminal controller	Discrimination number range is 0-511.
STM	Service trunk module	Contains two reduced-size MTM. Discrimination number range is 0-2047.
TAN		Discrimination number range is 0-2047.
TAU	Test and alarm unit	One per CSC. Discrimination number range is 0-63.
TDTC	Turkey digital trunk controller	Discrimination number range is 0-255.
TLGC	Turkey line group controller	Discrimination number range is 0-255.
TLTC	Turkey line trunk controller	Discrimination number range is 0-255.

-continued-

Status codes PM menu status display (continued)

Code	Meaning	Description
TMA	Trunk module Austria	Discrimination number range is 0-2047.
TMS	TOPS message switch	Discrimination number range is 0-255.
TM2	Trunk module, 2-wire	Trunk Module with 30 pairs (2-wire circuits) of conductors wired to the Distribution Frame (DF). Discrimination number range is 0-2047.
TM4	Trunk module, 4-wire	Trunk Module with 60 pairs (4-wire circuits) of conductors wired to the DF. Discrimination number range is 0-2047.
TM8	Trunk module, 8-wire	Trunk Module with 120 pairs (8-wire circuits) of conductors wired to the DF. Discrimination number range is 0-2047.
TPC	Traffic operator position controller	Discrimination number range is 0-254.
TRCC	Turkey remote cluster controller	Discrimination number range is 0-255
T8A	Trunk module, 8-wire with metallic test access	Trunk Module with 120 pairs (8-wire circuits) of conductors wired to the DF, and with metallic test access bus for access to CCITT circuits. Discrimination number range is 0-2047.
State		PM states (see Notes 1: and 2:)
CBsy	Central Side Busy	PMs connected to the Network are unable to communicate with the CC because the Network or the links used to carry messages between the PM and the P-side of the Network are unavailable. A PM that is connected to the Network by one or more PM is out-of-service because its C-side of the PM or the links of a PM are unavailable.
Idl	Idle	At the STC level, the ST is available in a pool for CCS7 use, but is not connected to a transmission link.
InSv	In Service	PMs are in service and available to support any intended process, for example, call processing.

-continued-

Status codes PM menu status display

Code	Meaning	Description
ISTb	In-Service Trouble	PMs are still in service but flagged by system maintenance because either: ▪ a minor error condition occurred ▪ the PM failed a REX or minor audit test ▪ the load is not listed in the corresponding data table Call processing service is not affected.
ManB	Manual Busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not Equipped	At the STC level, the ST discrimination number (STNO) is not listed in Table STINV.
Offl	Offline	PMs are temporarily made out-of-service.
SysB	System Busy	PMs are automatically removed from service by system maintenance.

Note 1:When an XPM status is displayed as manually busy (ManB), off-line (Offl), or unequipped (UNEQUIP), the activity display (Active--Act, or Inactive--Inact) remains blank. When the activity state is not displayed, the command strings rts inactive, loadpm inactive, and SwAct are not valid.
Note 2:When an XPM status is displayed as in service (InSv), in-service trouble (ISTb), C-side busy (CBsy), or system busy (SysB), the activity (Act or Inact) is also displayed.

-end-

Table 130-1xxx
Translate display and link status codes

Code	PM state
CAP	Capacity of the links as MS or S
MS	Message and speech
S	Speech
STATUS	State of the link as OK
OK	InSv or any other state listed in the previous table
C	C-side busy, that is, the PM is not communicating to its host because the host is busy.
P	P-side busy, that is, the PM is not communicating to its host because the links to the host are busy.
MSG COND	Message condition as CLS or OPN, and MTC or SPCH, where MTC is maintenance open SPCH is speech open

Table 130-1xxx
Translate display and link status codes

Code	PM state
CLS	Closed
OPN	Open
MTC	Maintenance open
SPCH	Speech open for message (MS) links only
Restricted	Indicates that the link carries speech but not messaging signals.
Unrestricted	Indicates that the link carries speech or messaging signals.

cpstat

Function

Use the cpstat command to display the software processing status for a given node number of a PM.

cpstat command parameters and variables

Command	Parameters and variables
cpstat	*node_num*

Parameters and variables	Description
node_num	This variable is the number of the PM node and has a range of 0-4095.

Qualifications

The cpstat command is qualified by the following exceptions, restrictions, and limitations:

- The PM node number (*node_num* variable) may be obtained by entering the command querypm.
- The CP node status is the same as the PM node status except that ISTb at t PM level is InSv for the CP status.
- For LM or RLM the CP node status includes whether or not lines on the LM can be reached. If an LM node of an LM pair is displayed as not inservice (ISRv) from a PM level, but the mate LM has taken over the LM lines, then the CP node status indicates that the line of the busy LM are still inservice.

Example

The following table provides an example of the cpstat command.

Example of the cpstat command

Example	Task, response, and explanation
cpstat 200 ↵ *where* 200 is the number of the PM node.	**Task:** Display the software status of the PM at node 200 **Response:** `LGC 200 InSv` **Explanation:** The LGC in inservice.

cpstat (end)

Responses

The following table provides explanations of the responses to the cpstat command.

Responses for the cpstat command

MAP output	Meaning and action
`CP NODE STATUS NOT AVAILABLE`	**Meaning:** The node is invalid because it is not a PM node. **Action:** None
`FAILED TO FINE PM ID`	**Meaning:** The node number is not for a PM. **Action:** None
`<pm_type> <node_number> <status>`	**Meaning:** The CP status is given where: ▪ <pm_type> is the one of the PM types listed at the beginning of this chapter ▪ <node_number> echoes the number entered ▪ <status> is one of the PM status codes listed at the beginning of this chapter. **Action:** None

disp

Function

Use the disp command to display a list of all PMs in a specified type and state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	*pm_type*

Parameters and variables	Description
pm_state	This variable is one of the state codes identified in the PM status codes table located at the beginning of this chapter.
pm_type	This variable is one of the PM types listed in the PM type status display.
state	This parameter indicates that the state of pms to be displayed is indicated.

Qualifications

The disp command is a PM level command that may be entered at any PM sublevel. If a pm_type is not specified, all PMs of the subsystem that are in the state are displayed.

Example

The following table provides an example of the disp command.

Example of the disp command

Example	Task, response, and explanation
disp state offl tm8 ↵ *where* offl is the state of the PM tm8 is the PM type selected	**Task:** Display all TM8s in the Offl state. **Response:** `Offl TM8: 7, 9, 24, 48` **Explanation:** The numbers to the right of header Offl TM8 are the discrimination numbers of the four TM8s shown as Offl in the status display.

disp (end)

Response

The following table provides an explanation of the response to the disp command.

Response for the disp command

MAP output	Meaning and action
<pm_state> <pm_type>: NONE or <pm_state> <pm_type>: <n>, <n>, ...	**Meaning:** There are no or some PMs in the specified state where <n> is the discrimination number of the PM. The <pm_state> is one of the codes identified in the PM state codes table at the beginning of this chapter. The disp display is added to the PM sublevel display (see Example). **Action:** No action is required.

Function

Use the fmt command to access the FMT level to perform maintenance functions for fiber multiplex terminals (FMT).

fmt command parameters and variables

Command	Parameters and variables
fmt	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the fmt command..

Example of the fmt command

Example	Task, response, and explanation
fmt ↵	
	Task: Access the FMT MAP level. **Response:** `FMT <display for FMT MAP level>` **Explanation:** The FMT level of the MAP iss accessed.

Response

The following table provides an explanation of the response to the fmt command.

Response for the fmt command

MAP output	Meaning and action
`display`	
	Meaning: The FMT menu and display appears. It is described in the chapter describing the FMT MAP level and its commands and Responses. **Action:** No action is required.

ipml

Function

Use the ipml command to access the IPML level to perform maintenance functions for interperipheral message links (IPML).

ipml command parameters and variables

Command	Parameters and variables
ipml	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the ipml command.

Examples of the ipml command

Example	Task, response, and explanation
ipml ↵	
	Task: Access the IPML MAP level. **Response:** `IPML <MAP display of IPML level>` **Explanation:** The IPML MAP level is accessed.

Response

The following table provides an explanation of the response to the ipml command.

Responses for the ipml command

MAP output	Meaning and action
`display`	
	Meaning: The IPML menu and display appears. It is described in the chapter that describes the IPML MAP level. **Action:** No action is required.

ldpmall

Function

Use the ldpmall command to load or reload more than one PM.

ldpmall command parameters and variables

Command	Parameters and variables
ldpmall	*l_name* *n_type*

Parameters and variables	Description
l_name	This variable is the load name of the data file to be loaded into the PM. The load name is entered in the PMINV data table field LOAD.
n_type	This variable is the node type of the group of PM to be loaded. The node types are the same as the PM types listed at the beginning of this chapter.

Qualifications

All PMs to be loaded must be of the same node-type, use the same load file and be in the ManB or SysB state.

Example

The following table provides an example of the ldpmall command.

Example of the ldpmall command

Example	Task, response, and explanation
ldpmall ltcdatx01 ltc ↵	
	Task: Load all LTCs from loadfile ltcdatx01.
	Response: `Not currently available`
	Explanation: All LTCs loaded.

ldpmall (end)

Responses

The following table provides explanations of the responses to the ldpmall command.

Responses for the ldpmall command

MAP output	Meaning and action
`LOADFILE NOT FOUND IN DIRECTORY`	**Meaning:** The data required bay be on a recording device which must be mounted before ldpmall can be executed. **Action:** None
`<pm_type> <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for the loading, where: ▪ <pm_type> is one of the PMs listed at the beginning of this chapter ▪ <pm_number> is the PM discrimination number ▪ <status> is one of the following: - CBsy - InSv - OffL **Action:** None
`<reason>` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **Action:** None

next

Function

Use the next command to place the next PM in the post set in the control position.

next command parameters and variables

Command	Parameters and variables
next	*pm_type*

Parameters and variables	Description
pm_type	This variable specifies one of the types of PMs listed at the beginning of this chapter. Use the disp command to display the list of PM types in the post set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation	
next ↵		
	Task:	Display the next PM in the post set.
	Response:	`<MAP status display for the next posted PM>`
	Explanation:	The next PM in the post set is now in the control position.

next (end)

Response

The following table provides an explanation of the response to the next command.

Response for the next command	
MAP output	**Meaning and action**
`END OF POST SET`	**Meaning:** The currently displayed PM is the last in the posted set of PMs or only one PM has been posted. The display returns to the next higher level. **Action:** None

pes

Function

Use the pes command to access the OPMPES level.

pes command parameters and variables

Command	Parameters and variables
pes	There are no parameters or variables.

Qualifications

None

Examples

The following table provides an example of the pes command.

Examples of the pes command

Example	Task, response, and explanation
pes ↵	
	Task: Access the OPMPES level of the MAP
	Response: `<OPMPES Map level display>`
	Explanation: OPMPES map level has been accessed

Responses

The following table provides an explanation of the response to the pes command.

Responses for the pes command

MAP output	Meaning and action
`display`	
	Meaning: The OPMPES menu and display appears. Refer to the chapter that describes the OPMPES MAP level.
	Action: No action is required.

pmloader

Function

Use the pmloader command to query the cause of the alarm PMLOAD that appears under header PM of the MTC subsystem status display or it forces the running of the audit that attempts autoloading.

pmloader command parameters and variables

Command	Parameters and variables
pmloader	alarm audit_now

Parameters and variables	Description
alarm	This parameter displays a list of the load names or the devices (or a combination of both) that were not located on the DDU or DDUs.
audit_now	This parameter forces the audit to run immediately. It is used especially when the cause of the alarm has been cleared and the user does not want to wait the five minutes for the audit to occur automatically.

Qualifications

None

Example

The following table provides an example of the pmloader command.

Example of the pmloader command

Example	Task, response, and explanation
pmloader audit_now ↵	
	Task: Force the audit to run immediately.
	Response: `AUDIT REQUEST SUBMITTED`
	Explanation: The audit has been submitted.

pmloader (continued)

Responses

The following table provides explanations of the responses to the pmloader command.

Responses for the pmloader command

MAP output	Meaning and action
`A MINOR ALARM IS BEING RAISED BY TABLE PMLOADS FOR THE FLOOWING REASON: <reason>`	**Meaning:** The alarm is caused by a load file nam,e that does not reside on a DDU, or by a device name that is not recognized as a DDU. The reason is either of the following: ▪ `FILE file_name CANNOT BE LOCATED ON DEVICE device_name` ▪ DEVICE device_name FOR FILE file_name CANNOT BE FOUND **Action:** None
`AUDIT REQUEST SUBMITTED`	**Meaning:** All the file names in tabel PMLOADS are being loacated. if all file names are found, the alarm pmload is removed. If at least one file name is not found, the alarm remains. **Action:** None
`FILE <file_name> CANNOT BE LOCATED ON DEVICE <device_name>`	**Meaning:** The load file is not stored on a DDU, where <file_name> is the mane of the load. **Action:** Copy the load file onto a DDU and run the auto-loading autie.
`DEVICE <device_name> FOR FILE <file_name> CANNOT BE FOUND`	**Meaning:** The device in which the load is stored is not a DDU, and is therefore not recognized, where device_name is the name of an input/output device (IOD). **Action:** If the device (where the load file is found) is identified, copy the load file from it onto a DDU and run the auto-loading audit.

-continued-

pmloader (end)

Responses for the pmloader command (continued)

MAP output	Meaning and action
TABLE PNMLOADS IS NOT CONTRIBUTING TO ANY PM ALARMS	**Meaning:** Because other PM alarms are given precedence for the status of the PM subsystem, it may not be apparent that the alarm PMLOAD has been triggered. The pmloader alarm command confirms that there is no PMLOAD alarm. **Action:** None

-end-

post

Function

Use the post command to access the PM sublevel for the specified PM, or sets of PMs, upon which action is to be performed by the corresponding menu of commands.

post command parameters and variables

Command	Parameters and variables
post	allpms *pm_state* *pm_type* [all / *pm_state* / *pm_number*]

Parameters and variables	Description
all	This parameter posts all PM numbers of the specified PM type.
all pms	This parameter posts all PMs.
pm_number	This variable is the discrimination number for the specified PM type. The format of the number varies depending on PM type, as identified in the PM status codes table at the beginning of this chapter. More than one pm_number at a time may abe entered. Two or more entries for pm_number are each to be separated by a space as below: `22 32 135 136 ...`
pm_state	This variable is any of the PM state codes identified in the PM status codes table at the beginning of this chapter.
pm_type	This variable is any PM type listed in the PM status display when the command status is entered or is one of the PM types identified in the PM status codes table provided at the beginning of this chapter. The default is the PM type of the MAP level, and may default to the PM in the control position of the posted set. Not all PM types have this default.

Qualifications

The post command is qualified by the following:

- If pm_type or allpms are entered alone, the post commands on the sublevel menus are used to select specific PM number(s).
- To determine which PMs are configured in an office, use the command disp to display a list of the PM types and their ranges of discrimination numbers.

post (continued)

- When the command string help post is entered to query the parameters of the post command, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

Examples

The following table provides examples of the post command.

Examples of the post command

Example **Task, response, and explanation**

post ↵

Task: Access the menu for PM type TM8 and specify PM number 3.

Response:

```
     SysB    ManB    Offl    Cbsy    ISTb    InSv
PM    4       0      10       3       3      130
TM8   0       0       4       1       1       40

TM8 3
```

Explanation: The PM menu changes to the TM menu. Of the ten PMs that are off-line, four are TM8s. By posting TM8 3, the other maintenance commands of the TM menu apply to TM8 3 only.

post tm8 3 5 6 dcm 2 4 ↵
or
post tm8 all dcm 2 3 5
where

tm8	is thefirst pm_type selected for the set
3 5 6	are the pm_numbers selected
dcm	is the second pm_type selected for the set
2 3 5	are the pm_numbers selected

Task: Select sets consisting of various PM numbers of TM8 and DCM.

Response:

Explanation:

-continued-

post (continued)

Examples of the post command (continued)

Example **Task, response, and explanation**

post insv istb ↵
where

insv is the pm_state selected
istb is the pm_state selected

Task: Select a set consisting of all PMs that are in service (InSv) and in-service trouble (ISTb).

Response:

Explanation:

post tm8 2 4 dcm all istb ↵
where

tm8 is the pm_type selected
2 4 are the pm_numbers selected
dcm is the pm_type selected
istb is the pm_state selected

Task: Select a mixed set consisting of some selected tm8 PM numbers, and all DCM that are ISTb.

Response:

Explanation:

-end-

post (end)

Responses

The following table describes the meaning and significance of responses to the post command.

Responses for the post command

MAP output	Meaning and action
`display`	**Meaning:** The menu and display level for the posted PM is accessed. The post command displays vary depending on the PM type and the posted PM set. **Action:** No action is required.
`INVALID POST SET` `FAILED TO CREATE NEW POST SET`	**Meaning:** Either an incorrect pm_number is entered, or the office is not configured for the specified pm_type. **Action:** No action is required.
`NO PM POSTED`	**Meaning:** With the command string post *pm_type*, the respective PM menu is accessed. A *pm_number* must be included to post a PM. Once the PM level is accessed, the variable *pm_type* is not entered for posting the PM type that corresponds to that MAP level. This applies to all PM sublevels. **Action:** No action is required.

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PM level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PM level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PM level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PM level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PM level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

recover

Function

Use the recover command to reload and return to service one unit of a set of XPMs that has lost memory of the load when the system requires powering up.

recover command parameters and variables

Command	Parameters and variables	
recover	*posted*	*wait*
	all	nowait

Parameters and variables	Description
all	This parameter simultaneously recovers all of the XPMs of the same type as the XPM in the current control position of the post set.
nowait	This parameter allows the recovery to proceed without waiting for confirmation from the system and enables additional commands to be entered at the MAP without waiting for the recover command to complete executing.
posted	This default parameter, which is never entered, indicates that only the PM currently in the control position will be recovered because the all parameter is not entered.
wait	This default parameter, which is never entered, indicates confirmation from the system is required before proceeding and additional commands cannot be entered at the MAP until the recover command has completed executing because the nowait parameter is not entered.

Qualifications

The recover command is qualified by the following exceptions, restrictions, and limitations:

- An XPM with the NT6X45BA card
  - is reloaded by the broadcast loading method
  - is not reloaded if it has an uncorrupted memory of the load since the power-up.
- XPMS with earlier versions of the card are automatically reloaded.
- The XPMs must be in either the ManB or SysB state.
- Table PMLOADS must be correctly datafilled or loading by the recover command cannot occur.
- The recover command overrides any system action that is still in progress

recover (continued)

- The recover command makes only one attempt to recover XPMs in a posted set. For XPMs that are not recovered, manual action is required to reload then return them to service.
- Loading and returning to service can occur simultaneously on different PMs of the same PM type.
- When the quantity of RCCs is greater than ten, the posted set is submitted in groups.

Example

The following table provides an example of the recover command.

Example of the recover command

Example	Task, response, and explanation
recover nowait ↵	
	Task: Immediately reload and return to service one unit of the currently posted PM.
	Response: `RTS REQUEST SUBMITTED`
	Explanation: The reload command is issued, and additional commands can be entered at the MAP immediately.

Responses

The following table provides explanations of the responses to the recover command. All responses to the command loadpm and rts for the respective PM types in the posted set also apply to the recover command.

Responses for the recover command

MAP output	Meaning and action

`<pm_type> <pm_number> FAILED`
or
`<pm_type> <pm_number> PASSED`	

	Meaning: The results of the loading are given. If the loading succeeds on at least one unit, a return to service is attempted on the PM. If the loading fails, no further action is attempted.
	Action: None

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action

`<pm_type> <pm_number>  RECOVER FAILED <reason>`
 	
or
 	
`<pm_type> <pm_number> RECOVER PASSED`
	Meaning: The results of the return to service are given.
	
	Action: None

`<pm_type> <pm_number>  RTS REQUEST SUBMITTED`	**Meaning:** The PM is not equipped with the BA or later version of the NT6X45 firmware card. Reloading is not attempted. **Action:** None
`<pm_type> <pm_number>  UNIT u RECOVER FAILED REQUIRE LOAD BUT NOT ATTEMPTED FOR SINGLE UNIT`	**Meaning:** The unit requires reloading, but its mate failed the test for load sanity. Both units must be available for broadcast loading to occur, therefore no further action is done to this XPM. **Action:** Use the command LOADPM on the identified PM
`<pm_type> pm UNIT u RELOADING REQUIRED.  RTS ATTEMPTED ON MATE`	**Meaning:** Although required, the identified unit cannot be reloaded. Since the mate unit has been successfully loaded, therefore the system is returning it to service instead. **Action:** None

-end-

status

Function

Use the status command to display the maintenance status of all PM types connected to the DMS-100 Family system.

status command parameters and variables

Command	Parameters and variables
status	There are no parameters or variables.

Qualifications

The status command may be entered at any PM sublevel.

Examples

The following table provides an example of the status command.

Examples of the status command

Example **Task, response, and explanation**

status ↵

Task: Execute the status command to display the maintenance status of all PM types.

Response:

```
PM      SysB  ManB  Offl  CBsy  ISTb  InSv
         4     0     10     3     3     130
TM8      0     0     4      1     1     40
LM       1     0     1      0     0     20
MTM      1     0     0      0     0     10
DCM      1     0     0      1     0     5
OAU      0     0     0      0     0     2
LTC      0     0     0      1     0     40
LCM      1     0     5      0     1     9
MSB      0     0     0      0     1     4
```

Explanation: PM types are listed vertically below the header PM. The PM types in this example are unique to the office being represented and may not include all the PM types that are identified in the PM status codes table at the beginning of this chapter. Also, the order of listing may vary from office to office. PM-state headers are displayed as a horizontal row to the right of the menu area. The PM subsystem status is displayed by numbers at the intersection of the PM type lines and the PM state columns. The numbers give the quantity of each PM type in a state. The PM status codes table at the beginning of this chapter provides a list and description of the PM state codes heading for each column. The discrimination numbers of all the PM of a specified state and type are given.

status (end)

Responses

The following table provides an explanation of the response to the status command.

Responses for the status command

MAP output	Meaning and action
PM SysB ManB Offl CBsy ISTb InSv <nnn> <nnn> <nnn> <nnn> <nnn> <nnn>	**Meaning:** The PM type menu and status display appears, where PM is the header to the list of displayed PM types, the other headers are the respective PM states (as identified in the PM status codes table at the beginning of this chapter), and <nnn> is the total number of PMs that are in the respective states. **Action:** None

PMACT level commands

Use the PMACT level of the MAP to access the PMACT tool which is used to analyze the real time use of the signaling processor (SP), the master processor (MP), and the ISDN signaling processor (ISP) in these categories:

- call processing integrity
- high priority background occupancy
- low priority background

The combination of the call processing and the high priority background occupancies provide the service of the PM. Low priority background processes are used for audits and for testing. The displayed data is updated once each minute with an average for the last 15 minutes.

The PMACT level is primarity used to monitor PM performance and display the following data including:

- peak and average use of the universal tone receivers (UTR) and of P-side channels
- origination and termination counts, where terminations are calls that cause ringing (or flashing), and counts include the quantity of channels available to call processing

Accessing the PMACT level

To access the PMACT level, enter the following from the CI level:

mapci;mtc;pm;post ***pm_type pm_num*****;perform;pmact** ↵

where

pm_type	is a PM of node type lgc, lgci, ltc, dtc, or rcc
pm_num	is then number of the PM and has a range 0-127.

PMACT commands

The commands available at the PMACT MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

PMACT commands Command	Page
quit	P-137
stop	P-141
stoplog	P-143
strt	P-145
strtlog	P-147

PMACT menu

The following figure shows the PMACT menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .     .     .     .     .     .


PMACT                  SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit    PM           4      0      10     3      3     130
 2 Strt_   LGC          0      0       0     1      1       9
 3 Strtlog
 4 Stoplog LGC    1 ISTb  Links OOS:  CSide  0  Pside  0
 5 Stop    Unit-0:  Act   InSv
 6         Unit-1:  InAct InSv
 7         LOAD NAME:  load_name
 8         STATUS: status  REASON: reason LOGS: o/o TIME: hh.mm.ss
 9                        MP    MPAVG  SP  SPAVG  ISP  ISPAVG
10         HIGH PRIO BGND  --       --  --   --     --     --
11         CALL PROCESSING --       --  --   --     --     --
12         LOW PRIO BGND  --        --  --   --     --     --
13                           ORIG      ORIGAVG   TERM     TERMAVG
14                             --           --     --          --
15                           AVAIL     INUSE     HIGH
16         PS_CHNL             --        --       --
17         UTR                 --        --       --
18         PMACT:
```

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PMACT level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PMACT level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PMACT level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PMACT level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PMACT level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PMACT level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

stop

Function

Use the stop command to stops the process (and timer) that was begun by the command strt, and display the latest data (if any).

stop command parameters and variables

Command	Parameters and variables
stop	There are no parameters or variables.

Qualification

If the value of Logs is ON, the stop command also generates the logs.

Example

The following table provides an example of the stop command.

Example of the stop command

Example	Task, response, and explanation
stop ↵	
	Task: Stop the process time and display the latest data.
	Response: `<display of current data>`
	Explanation: The timer is stopped

Responses

The following table provides explanations of the responses to the stop command.

Responses for the stop command

MAP output	Meaning and action
`FAILED TO STOP THE PMACT TOOL`	
	Meaning: The system cannot stop the Perform tool.
	Action: Try again later when the number of other activities has been reduced.

-continued-

stop (end)

Responses for the stop command (continued)

MAP output	Meaning and action
`STATUS: <status> REASON: <reason> LOGS: <o/o> TIME: <hh.mm.ss>`	**Meaning:** The value of <status> changes to STOP PEND, then STOPPED; the value of <reason> remains COMMAND. If the tool cannot be stopped, the value for <status> is STOP_FAIL and the value for <reason> is UNKNOWN. **Action:** Log PRFM210 is generated. Check for PM180 logs and report the information to maintenance support personnel.
`PERFORM LEVEL NOT IN PROCESS`	**Meaning:** The performance process is inactive. **Action:** None

-end-

stoplog

Function

Use the stoplog command to stop the process that was begun by the command strtlog. That is, it disables the generation of logs.

stoplog command parameters and variables

Command	Parameters and variables
stoplog	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the stoplog command.

Example of the stoplog command

Example	Task, response, and explanation	
stoplog ↵		
	Task:	Stop processing andff producing logs.
	Response:	OFF
	Explanation:	The value of LOGS changes to OFF.

Response

The following table provides an explanation of the response to the stoplog command.

Response for the stoplog command

MAP output	Meaning and action	
OFF		
	Meaning:	The value of LOGS changes to OFF. However, the logs for a warm or cold SwAct are not cancelled.
	Action:	If the tool has been running and the LOGS field indicated ON, log PRFM210 is generated and then no further logs are output to the printer.

Function

Use the strt command to start the timer and the performance process.

strt command parameters and variables

Command	Parameters and variables
strt	15 *duration*

15	This parameter is a default duration of 15 minutes.
duration	This variable identifies the quantity of minutes during which the performance process is to monitor the activities (or delays) of the PM. The range is 1-1440.

Qualification

If the process is already running, the timer continues without being reset.

Example

The following table provides an example of the strt command.

Example of the strt command

Example	Task, response, and explanation	
strt ↵		
	Task:	Start the processor for a duration of 15 minutes.
	Response:	`<status is displayed>`
	Explanation:	Process is started.

strt (end)

Response

The following table provides an explanation of the response to the strt command.

Responses for the strt command

MAP output	Meaning and action

```
STATUS: START_PEND  REASON: COMMAND  LOGS:??  TIME: 00.14.45
               MP     MPAVG   SP    SPAVG ISP  ISPAVG
HIGH PRIO BGND --        --   --     --   --       --
CALL PROCESSING--        --   --     --   --       --
LOW PRIO BGND  --        --   --     --   --       --
             ORIG      ORIGAVG   TERM     TERMAVG
                --          --      --          --
             AVAIL     INUSE     HIGH
PS_CHNL         --          --      --
UTR             --          --      --
```

Meaning: The values in the PMACT display change when the command strt is entered, as listed below:

- STATUS changes to START_PEND, then to STARTED when the performance process is in progress. If other tools are running, STATUS changes to START_FAIL.
- REASON changes to COMMAND, except when the status is START_FAIL, in which case it changes to
  - NO STORE because of insufficient temporary store
  - UNKNOWN because the system cannot identify the cause(s)
- LOGS remains the same
- TIME shows the time in hours, minutes, and seconds for a count down of the specified duration, or shows 00.14.59 (as the default).

Note 1: All the fields begin with no counts and are represented by the double dash (--). For the description of the counts, see the command PMACT on page 429.

Note 2: Other system tools should not be active when you attempt PERFORM.

Action: None

strtlog

Function

Use the strtlog command to enable the PM logs to be generated for the performance process.

strtlog command parameters and variables

Command	Parameters and variables
strtlog	There are no parameters or variables.

Qualifications

The strtlog command is qualified by the following:

- The PRFM210 log is also generated when:
  - a stop command is issued
  - the tool timer expires
  - the active unit of a PM becomes inactive

  The PM activity change includes one caused by a warm or cold XPM SwAct
- If the strtlog command is entered before the tool is started, the LOGS status field is set to ON but no logs are printed to the terminal.

Example

The following table provides an example of the strtlog command.

Example of the strtlog command

Example	Task, response, and explanation	
strtlog ↵		
	Task:	Start processing and producing logs.
	Response:	`<display>`
	Explanation:	Log reports will be produced.

strtlog (end)

Response

The following table provides an explanation of the response to the strtlog command.

Response for the strtlog command

MAP output	Meaning and action
`display`	
	Meaning: The value of LOGS changes to ON. The logs are not actually generated until the command strt is entered.
	Action: The PRFM210 log is generated every 15 minutes with the relevant PM activity data.

Function

Use the tst command to test the specified PMC or PMC port.

tst command parameters and variables

Command	Parameters and variables
tst	[*pmc_no* / *port* *port_no*] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
pmc_no	**This variable identifies the PMC to be tested. Valid entries are 0-1.**
noprompt	**This parameter directs the system to suppress the yes/no prompts. The system automatically enters yes.**
nowait	**This parameter allows the use of the MAP for other functions while the test is being run.**
port	**This parameter directs the system to test a port.**
port_no	**This variable is the port number. Valid entries are 0-1.**
prompt	**This default parameter directs the system to prompt for confirmation. Do not enter this parameter.**
wait	**This default parameter directs the system not to allow the use of the MAP for other functions while the test is being run. Do not enter this parameter.**

Qualifications

The tst command is qualified by the following exceptions, restrictions and limitations:

- The PMC must be busy before it can be tested.
- If the computing module (CM) is not in sync, the system runs a partial test that only tests the inactive side of the PMC through the active port card.

tst (continued)

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation

tst 0 ↵
where
 	
0 is the number of the PMC
	Task: Test PMC 0 with 16 messages.
	
	Response:
	`Maintenance action submitted.`
	`MC test passed.`
	`Link 0: 16 messages sent, 16 messages received`
	`Link 1: 16 messages sent, 16 messages received`
	`TOD 0 test passed.`
	`TOD 1 test passed.`
	
	Explanation: The MC passed the tests.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`Extension bus test results on CPU 0`	**Meaning:** The extension busy connectivity test failed for one or more of the following reasons. ▪ Cable J1, J2, or J3 has a faulty connection. ▪ Cables J1 and J2, J1 and J3, or J2 and J3 have faulty connections. ▪ Cables J1, J2, and J3 have faulty connections. ▪ Unable to access the 9X27AA on the CM shelf. ▪ Unable to access the 9X27BA on the Ext shelf. ▪ Unable to read ID PROM of the 9X27AA card. ▪ Unable to read ID PROM of the 9X27BA card. ▪ Mate not responding. ▪ Mate communication link failed. ▪ Unable to reset mate central processing unit (CPU). **Action:** None
`Failed.`	**Meaning:** The port failed the test, but the system could not determine a specific cause. **Action:** None
`Failed: Action was overridden.`	**Meaning:** The system did not test the specified PMC or port because a task with a higher system priority took precedence. **Action:** Try the tst command again.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Failed. Extension bus connectivity test.`	**Meaning:** The port failed the extension bus connectivity portion of the test. **Action:** Try the tst command again.
`Failed. Local paddleboard loopback test.`	**Meaning:** The port failed the local paddleboard loopback portion of the test. **Action:** Try the tst command again.
`Failed. Remote paddleboard loopback test.`	**Meaning:** The port failed the remote paddleboard loopback portion of the test. **Action:** Try the tst command again.
`Failed. Port card test.`	**Meaning:** The port failed the port card portion of the return-to-service test. **Action:** Try the tst command again.
`Node must be busied before test is performed.`	**Meaning:** The PMC must be busy before the test can be performed. **Action:** Use the bsy command to put the PMC in the manually-busy state, then retry the tst command.
`Passed.`	**Meaning:** The PMC node or port passed the test. **Action:** None
`Port must be busied before test is performed.`	**Meaning:** The port must be busy before the test can be performed. **Action:** Use the bsy command to put the port in the manually-busy state, then retry the tst command.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Port 0 TST: Passed.` `Port 1 TST: Passed.`	**Meaning:** The system displays the results of testing both potst. The possible results are: ▪ Failed. Local paddleboard loopback test. ▪ Failed. Remote paddleboard loopback test. ▪ Failed. Port card test. ▪ Passed. **Action:** None

`The following faults were detected`
`on PMC 1 Port 1`
`Unable to read the ID PROM on the 9X12 card.`
	Meaning: The test failed for the reasons specified. The possible reasons for failure are given in the following list:
	▪ Unable to read the ID PROM on the 9X12 card.
	▪ Unable to read the ID PROM on the 9X22 card.
	▪ SSC register on the 9X22 card is faulty.
	▪ Port loopback test failed.
	▪ PMC Split Mode Dest. Register test failed.
	▪ PMC UnSplit Mode Dest. Register test failed.
	▪ Unable to read ID PROM on local PMC 9X46.
	▪ Local paddleboard loopback test failed.
	▪ P-BUS Test Failed.
	▪ Control Signal Bus test Failed.
	▪ Remote Loopback Test Failed.
	Action: None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`TST PMC node aborted.`	**Meaning:** The PMC test was aborted because a task with a higher priority took precedence. **Action:** None
`TST PMC Port aborted.`	**Meaning:** The PMC port test was aborted because a task with a higher priority took precedence. **Action:** None

-end-

PMC level commands

Use the peripheral message controller (PMC) level of the MAP to control the PMCs and their individual ports.

Accessing the PMC level

To access the PMC level, enter the following from the CI level:

mapci;mtc;cm;pmc ↵

PMC commands

The commands available at the PMC MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

PMC commands

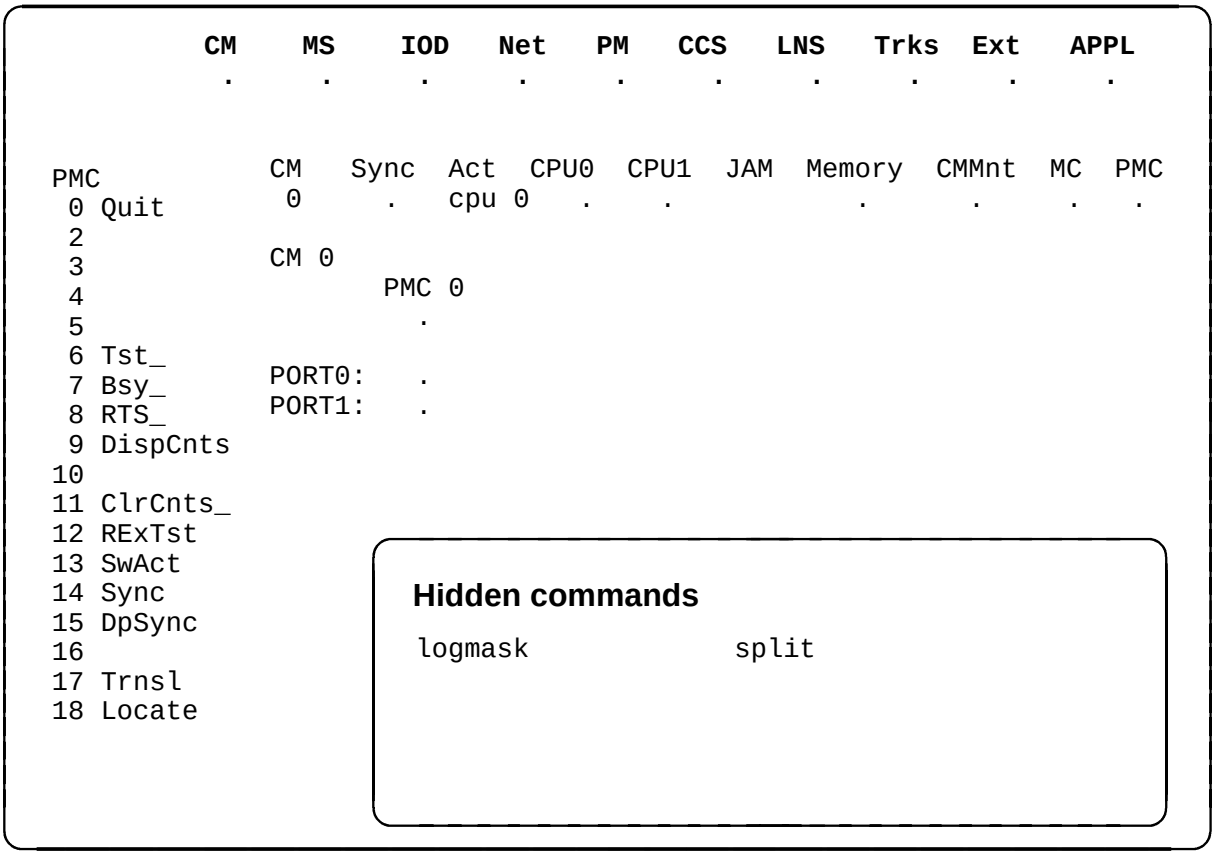
Command	Page
bsy	P-159
clrcnts	P-163
dispcnts	P-171
dpsync	P-167
locate	P-175
logmask	P-177
quit	P-181
rextst	P-185
rts	P-193
split	P-199
swact	P-205
sync	P-209

-continued-

PMC commands (continued)	
Command	**Page**
trnsl	P-219
tst	P-149
-end-	

PMC menu

The following figure shows the PMC menu and status display. The insert with hidden commands is not a visible part of the menu display.



PMC status codes

The following table describes the status codes for the PMC status display.

Status codes	**PMC menu status display** (continued)	
Code	**Meaning**	**Description**
PMC		
.	in service	The PMC is in service, and each system load module (SLM) can be accessed through two routes.
istb	in-service trouble	The PMC node has in-service trouble, and each SLM can be accessed through only one path.
sbsy	system busy	The PMC is system busy, and the SLMs cannot be accessed.
mbsy	manually busy	The PMC is manually busy.
Port 0, Port 1		
.	in service	The PMC port is in service, and the SLM connected to can be accessed.
sbsy	system busy	The PMC port is system busy because of a hardware or software fault.
mbsy	manually busy	The PMC port is manually busy.
pbsy	P-side busy	The PMC port is in service, but is peripheral-side (P-side) busy because the SLM that is connected to it is out-of-service.
-	unequipped	The PMC port is not equipped.

bsy

Function

Use the bsy command to busy the specified PMC or port.

bsy command parameters and variables

Command	Parameters and variables
bsy	*pmc_no* [*node* / port *port_no*] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
node	This default parameter directs the system to busy the node. Do not enter this parameter.
noprompt	This parameter directs the system to prompt for confirmation.
nowait	This parameter directs the system to allow use of the MAP for other functions while the PMC or port is being busied.
pmc_no	This variable is the number of the PMC to be busied. Valid entries are 0-1.
port	This parameter directs the system to busy a port.
port_no	This variable is the number of the port. Valid entries are 0-1.
prompt	This default parameter directs the system to suppress yes/no prompts. The system automatically enters yes. Do not enter this parameter.
wait	This default parameter directs the system to not allow use of the MAP for other functions while the PMC is busied. Do not enter this parameter.

Qualifications

None

bsy (continued)

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy ↵	
	Task: Busy the PMC node.
	Response: `Passed.`
	Explanation: The system places the PMC node in the manually-busy state.

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`Failed.`	
	Meaning: The system failed to busy the port, and cannot determine a specific reason for the failure.
	Action: None
`Failed: Action was overridden.`	
	Meaning: The system did not busy the specified PMC or port because a task with a higher system priority took precedence.
	Action: Try the bsy command again.
`Failed: P-side node in service.`	
	Meaning: The system cannot busy the port because the SLM that the port is connected to is in service.
	Action: Use the trnsl command to determine which SLM the port is connected to, and busy the SLM.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Maintenance action aborted-PMC REx tests are running.`	**Meaning:** The PMC cannot be made manually busy while the routine exercise (REx) tests are running. **Action:** Wait for the PMC REx tests to finish, then reenter the bsy command.
`Must busy the entire node.`	**Meaning:** You must busy the entire PMC. **Action:** None
`Node is already manually busy!`	**Meaning:** The PMC is already manually busy. **Action:** None
`Passed.`	**Meaning:** The system busied the port or PMC. **Action:** None
`Port is already manually busy!`	**Meaning:** The port is already manually busy. **Action:** None
`Please try again when the SLMs are not in use.`	**Meaning:** The SLM is in use and cannot be busied at this time. **Action:** Wait until the SLM is finished its task and try again.

`Request rejected.`
`Busying a PMC node requires the corresponding`
`P-side nodes to be MANBUSY and not reserved.`
	Meaning: The system cannot busy the PMC.
	
	Action: Ensure that the P-side nodes are busy and not reserved, then retry the bsy command.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`** WARNING **-The P-side nodes are in use!`
`Busy the PMC node may interrupt a critical operation.`
`Do you wish to continue.`
	Meaning: The SLM that is connected to this PMC is in use. If you busy this PMC, the SLM will be isolated from the computing module (CM).
	
	Action: Enter yes to busy the PMC. Enter no to abort the bsy command.

-end-

clrcnts

Function

Use the clrcnts command to clear the specified link fault counters for the specified circuit, link, or PMC. The link fault counters record the message transmission and reception problems that the PMC encounters.

clrcnts command parameters and variables

Command	Parameters and variables
clrcnts	[all / pmc *pmcno* / link *linkno*] [all / lh *lhfault* / bac *bacfault*]

Parameters and variables	Description
all	This default parameter directs the system to clear all link fault counters.
bac	This parameter indicates that the circuit is a bus access controller circuit.
bacfault	This variable is a bus access controller fault code. The value is one of the following:
	BAC0 This code indicates incoming tansfer timeout from link handler (LH) or to bus.
	BAC1 This code indicates incoming message overrun.
	BAC2 This code indicates incoming message error.
	BAC3 This code indicates outgoing message purge completed.
	BAC4 This code indicates outgoing message transfer to LH timeout.
	BAC5 This code indicates outgoing message transfer to buffer timeout.
	BAC6 This code indicates outgoing buffer full
	BAC7 This code indicates outgoing message parity error.
lh	This parameter indicates that the circuit is a link handler circuit.

-continued-

clrcnts (continued)

clrcnts command parameters and variables (continued)

Parameters and variables	Description	
lhfault	This variable is a link handler fault code. The value is one of the following.	
	LH4	This code indicates unused.
	CRC	This code indicates cyclic redundancy check error.
	CV	This code indicates code violation.
	WACK	This code indicates wait for acknowledgement timeout.
	WAN	This code indicates wait for idle timeout.
	WAM	This code indicates wait for message timeout.
	WAS	This code inidcates wait for send timeout.
	2NACK	This code indicates double negative acknowlegement (NACK).
link	This parameter directs the system to clear the link fault counters for a link.	
linkno	This variable indicates the link to be cleared. Valid entries are 0-1.	
pmc	This parameter directs the system to clear the link fault counters for a PMC.	
pmcno	This variable indicates the PMC to be cleared. Valid entries are 0-1.	

-end-

Qualifications

None

Example

The following table provides an example of the clrcnts command.

Example of the clrcnts command

Example	Task, response, and explanation
clrcnts pmc 0 ↵ *where* 0 indicates that the PMC link fault counters to be cleared are those for PMC 0	**Task:** Clear the link fault counters for both links on PMC 0. **Response:** `THE REQUESTED PMC LH LINKHIT COUNTERS HAVE BEEN CLEARED.` **Explanation:** The link handler fault counters for PMC 0 have been reset to zero.

Responses

The following table provides explanations of the responses to the clrcnts command.

Responses for the clrcnts command

MAP output	Meaning and action
`The requested BAC LH linkhit counters have been cleared.`	**Meaning:** The bus access controller fault counters specified have been reset to zero. **Action:** None
`The requested PMC LH linkhit counters have been cleared.`	**Meaning:** The link handler fault counters specified have been reset to zero. **Action:** None

dpsync

Function

Use the dpsync command to drop the synchronization of the central processing unit (CPU) pair.

dpsync command parameters and variables

Command	Parameters and variables
dpsync	[*wait* / nowait] [*prompt* / noprompt] [*match* / nomatch]

Parameters and variables	Description
match	This default parameter directs the system to perform a match test. Do not enter this parameter.
nomatch	This parameter directs the system to suspend the match test.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
nowait	This parameter directs the system to allow use of the MAP for other functions while the system is dropping sync.
wait	This default parameter directs the system to not allow the use of the MAP for other functions while the system is dropping sync. Do not enter this parameter.

Qualifications

None

dpsync (continued)

Example

The following table provides examples of the dpsync command.

Example of the dpsync command

Example	Task, response, and explanation
dpsync ↵	
	Task: Drop the syncronization of the CPU pair.
	Response: `SYNCHRONIZATION DROPPED`
	Explanation: Synchronization of the pair has been dropped.

Responses

The following table provides explanations of the responses to the dpsync command.

Responses for the dpsync command

MAP output	Meaning and action
`Aborted, active CPU 0 has faulty processor clock.`	
	Meaning: The active CPU clock is faulty and manual drop syncronization is disallowed.
	Action: None
`Drop synchronization failed.`	
	Meaning: The CPU is still in sync.
	Action: None
`If you intend to jam the mate CPU, please do so before dropping synchronization.` `Do you wish to continue? Please confirm (”YES” or ”NO”).`	
	Meaning: The system is offering the opportunity to abort this process and jam the inactive CPU before sync is dropped.
	Action: Enter yes to drop sync without jamming the inactive CPU. Enter no to abort this drop sync, then jam the inactive CPU.

-continued-

dpsync (end)

Responses for the dpsync command (continued)

MAP output	Meaning and action
`No reply from request`	**Meaning:** A computing module (CM) process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Running in simplex mode with active CPU 0.`	**Meaning:** Synchronization has been dropped and the indicated CPU is active. **Action:** None
`Software inconsistency - Action aborted.`	**Meaning:** A software fault has occured. **Action:** None
`Synchronization dropped`	**Meaning:** CPU synchronization has been dropped. **Action:** None

-end-

dispcnts

Function

Use the dispcnts command to display the link fault counters for the specified circuit, link, or PMC. The link fault counters record message transmission and reception problems that the message controllers encounter.

dispcnts command parameters and variables

Command	Parameters and variables		
dispcnts	[all / lh / bac]	[all / pmc / link]	*pmcno* / *linkno*

Parameters and variables	Description
all	This default parameter directs the system to display all link fault counters.
bac	This parameter indicates that the circuit is a bus access controller circuit.
lh	This parameter indicates that the circuit is a link handler circuit.
link	This parameter directs the system to display the link fault counters for a link.
linkno	This variable indicates the link to be displayed. Valid entries are 0-1.
pmc	This parameter directs the system to display the link fault counters for a PMC.
pmcno	This variable indicates the PMC to be displayed. Valid entries are 0-1.

Qualifications

None

dispcnts (continued)

Example

The following table provides an example of the dispcnts command.

Example of the dispcnts command

Example	Task, response, and explanation
dispcnts lh link 1 ↵ *where* 1 indicates the link number	**Task:** Display the link fault counters for the link 1 link handler circuits. **Response:** LH WAM WAN WACK WAS unused 2NACK CRC CV ---------- PMC 0 1 . . . . PMC 1 1 . . . 11 12 3 . . **Explanation:** The specified link fault counters are displayed.

Responses

The following table provides explanations of the responses to the dispcnts command.

Responses for the dispcnts command

MAP output	Meaning and action

```
BAC   i/c xfr   i/c      i/c     o/g    o/g    o/g xfer  o/g buf   o/g
0->7  timeout  overrun  error   purge  LH to.   to buf    full    parity
-------------------------------------------------------------------------
PMC 0     .       .        .       .      .         .        .        .
PMC 1     .       .        .       .      .         .        .        .
```

Meaning: The top line of the display lists the circuit type, bus access controller (BAC), followed by the name of each link fault counter. The remaining lines list the number or faults that were detected in each category, on line for each message controller and link specified. In the first column, the first digit following PMC is the PMC number, the next digit is the link number, then one of the following characters appears under each link fault counter to indicate the count:

- an integer indicates the number of faults
- a dot indicates a count of zero
- an asterisk indicates that the count has exceeded 32,767

Action: None

```
LH      WAM     WAN     WACK    WAS  unused   2NACK   CRC   CV
-------------------------------------------------------------
PMC 0     .       .        .      .      .      .      .     .
PMC 1     .       .        .      .      .      .      .     .
```

Meaning: The top line of the display lists the circuit type, link handler (LH), followed by the name of each link fault counter. The remaining lines list the number or faults that were detected in each category, on line for each message controller and link specified. In the first column, the first digit following PMC is the PMC number, the next digit is the link number, then one of the following characters appears under each link fault counter to indicate the count:

- an integer indicates the number of faults
- a dot indicates a count of zero
- an asterisk indicates that the count has exceeded 32,767

Action: None

locate

Function

Use the locate command to display the slot and shelf of the specified PMC.

locate command parameters and variables

Command	Parameters and variables
locate	*pmc_no*

Parameters and variables	Description
pmc_no	This variable is the PMC number. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the locate command.

Example of the locate command

Example	Task, response, and explanation

locate 1 ↵
where
 	
1 is the PMC number
	Task: Display the slot and shelf of PMC 1.
	
	Response:
	`Site Flr RPos  Bay_id  Shf  Description   Slot  EqPEC`
	`HOST  00  A00  CMDC:00  18  PMC01:00:1:0   21    9X12AB FRNT`
	`HOST  00  A00  CMDC:00  18  PMC01:00:1:0   22    9X12AB FRNT`
	`HOST  00  A00  CMDC:00  18  PMC01:00:1:0   21    9X20AA BACK`
	`HOST  00  A00  CMDC:00  18  PMC01:00:1:0   22    9X20Aa BACK`
	
	Explanation: The system displays the location information.

locate (end)

Responses

The following table provides explanations of the responses to the locate command.

Responses for the locate command

MAP output	Meaning and action
Site Flr RPos Bay_id Shf Description Slot EqPEC HOST 00 A00 CMDC:00 18 PMC01:00:1:0 21 9X12AB FRNT HOST 00 A00 CMDC:00 18 PMC01:00:1:0 22 9X12AB FRNT HOST 00 A00 CMDC:00 18 PMC01:00:1:0 21 9X20AA BACK HOST 00 A00 CMDC:00 18 PMC01:00:1:0 22 9X20Aa BACK	**Meaning:** The system displays the location information. **Action:** None
SPCEIFIED CARD DOES NOT EXIST PMC NUMBER: 1.	**Meaning:** The specified card is not equipped, or an invalid card number was entered. The PMC number is 0 or 1. **Action:** None

logmask

Function

Use the logmask command to specify or query which link faults are to generate a CM128 link fault data report log.

logmask command parameters and variables

Command	Parameters and variables		
logmask	suppress	lh	*lhfault*
		bac	*bacfault*
	resume	lh	*lhfault*
		bac	*bacfault*
	query		
	sethex	lh	*maskvalue*
		bac	*maskvalue*
	setdefault		

Parameters and variables	Description
bac	This parameter indicates that the link fault is to be for a bus access controller (BAC) circuit.
bacfault	This variable specifies the BAC fault code. Valid entries are one or more of the following: BAC0, BAC1, BAC2, BAC3, BAC4, BAC5, BAC6, or BAC7.
lh	This parameter indicates that the link fault is to be for a link handler (LH) circuit.
lhfault	This variable specifies the LH fault code. Valid entries are one or more of the following: WAM, WAN, WACK, WAS, LH4, 2NACK, CRC, and CV.
maskvalue	This variable specifies which fault types generate a CM128 log. Valid entries are 0-255.
query	This parameter directs the system to query which link faults currently generate a CM128 log.
resume	This parameter directs the system to resume generation of a CM128 log by the specified link faults.
setdefault	This parameter directs the system to set the LH and BAC logmasks to their default values.

-continued-

logmask (continued)

logmask command parameters and variables (continued)	
Parameters and variables	**Description**
sethex	This parameter specifies which link faults are to generate a CM128 log. Sethex can be used instead of suppress and resume.
suppress	This parameter prevents the specified link faults from generating a CM128 log.
-end-	

Qualifications

The logmask command is qualified by the following exceptions, restrictions and limitations:

- There are two logmasks: one for the LH, and one for the BAC.
- The logmask is an 8-bit binary word that sets each fault code on or off. Bit 0 is the least significant bit; bit 7 is the most significant bit.
- The following table shows the mask bit numbers and the meanings that correspond to the fault codes.

Link handler fault codes		
WAM	0	wait for message timeout
WAN	1	wait for idle timeout
WACK	2	wait for acknowledgement
WAS	3	wait for send timeout
LH4	4	unused
2NACK	5	double negative acknowledgement (NACK)
CRC	6	cyclic redundancy check error
CV	7	code violation
Bus access controller fault codes		
BAC0	0	incoming transfer timeout, from LH or to bus
BAC1	1	incoming message overrun
BAC2	2	incoming message error
BAC3	3	outgoing message purge completed
BAC4	4	outgoing message transfer to LH timeout
BAC5	5	outgoing message transfer to buffer timeout
BAC6	6	outgoing buffer full
BAC7	7	outgoing message parity error

- The default values for the logmasks are 20 hex for the LH logmask, and FF hex for the BAC logmask. The switch sets the logmasks to these vaules when the logmask setdefault command string is entered, and anutomatically after a reload restart.
- The fault types to generate a CM128 log can be specified by entering the logmasks directly, using the sethex parameter.
- Logmasks can be entered in decimal or hexidecimal form.
- To set the logmask in hexadecimal format, precede the hexadecimal value, with the hexadecimal quanitifier, #.

Example

The following table provides an example of the logmask command.

Example of the logmask command

Example	Task, response, and explanation
logmask sethex lh #0F ↵ *where* #0F	specifies the hexadecimal value of the LH circuit to generate a CM128 log
	Task: Specify that LH fault codes WASN, WAM, WACK and WAS will generate a CM128 log.
	Response: `CM128 LH LOGMASK: OLD MASK #20, NEW MASK #0F`
	Explanation: The LH fault codes to generate a CM128 log have been changed as specified.

Responses

The following table provides explanations of the responses to the logmask command.

Responses for the logmask command

MAP output	Meaning and action
`CM128 LH LOGMASK: OLD MASK #20, NEW MASK #0F.`	
	Meaning: The logmask is altered as specified.
	Action: None

-continued-

logmask (end)

Responses for the logmask command (continued)

MAP output	Meaning and action
THE OCCURRENCE OF ONE OF THE FOLLOWING ERRORS WILL CAUSE A CM128 LINKHIT LOG TO BE GENERATED: LH: #20 {2NACK} BAC:#FF {bac0, bac1, bac2, bac3, bac4, bac5, bac6, bac7}	**Meaning:** The logmask for CM128 logs was queried. The value of the logmask for LH and BAC is given in hexadecimal format as nn. A list of the types of LH link faults that will generate a CM128 log is given under lhfaults, and a list of the types of BAC link faults that will generate a CM 128 log is given under bacfaults. **Action:** None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PMC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PMC level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PMC level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PMC level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PMC level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PMC level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rextst

Function

Use the rextst command to run routine exercise (REx) tests on the computing module (CM). The CM must be synchronized for the full test to be run.

rextst command parameters and variables

Command	Parameters and variables
rextst	[short | long] [all | cpu | mem | link | pmc] [stop | continue] [*noreset* | resethits] [*wait* | nowait] [*prompt* | noprompt] (1) (2) (3) (4) (5)
rextst (continued)	(1) (2) (3) (4) (5) [*noreset* | resetcounts] [*noverbose* | verbose] (end)

Parameters and variables	Description
all	This default parameter directs the system to run all REx tests.
continue	This parameter directs the system to generate a log when an error is encountered and the system continues the test.
cpu	This parameter directs the system to run only central processing unit (CPU) tests.
link	This parameter directs the system to run only the link tests.
long	This parameter directs the system to run all tests for the specified type regardless of how much time they take.
mem	This parameter directs the system to run only the memory REx tests.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
noreset	This default parameter directs the system not to reset. Do not enter this parameter.

-continued-

rextst (continued)

rextst command parameters and variables (continued)

Parameters and variables	Description
noverbose	This default parameter directs the system not to return completion messages after each individual REx test. Do not enter this parameter.
nowait	This parameter directs the system to allow use of the MAP for other functions while the REx test is running.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
pmc	This parameter directs the system to run only the peripheral message controller (PMC) REx tests.
resetcounts	This parameter directs the system to reset all but the cancelled REx fault counts.
resethits	This parameter directs the system to reset link hit counts.
short	This parameter directs the system to run only fast diagnostics.
stop	This parameter directs the system to stop running the type of test it is running when an error is encountered.
verbose	This parameter directs the system to return completion messages after each individual REx test.
wait	This default parameter directs the system to not allow the use of the MAP for other functions while the REx test is running. Do not enter this parameter.

-end-

Qualifications

The restrictions that must be observed when running a REx test are built into the system responses to the command. Any attempt to run a test which would violate one or more of the conditions the REx test requires to run will result in a warning message or a cancellation of the requested test.

Example

The following table provides an example of the rextst command.

Example of the rextst command

Example	Task, response, and explanation
rextst nowait ↵	
	Task: Run REx tests on the CM.
	Response: `MAINTENANCE ACTION SUBMITTED.`
	Explanation: The system accepted the command and started the test.

Responses

The following table provides explanations of the responses to the rextst command.

Responses for the rextst command

MAP output	Meaning and action
`Aborted. CPU is jammed inactive.`	
	Meaning: You cannot run REx tests because the mate central processing unit (CPU) is jammed inactive. The CM must be able to switch activity for the REx test to be run.
	Action: Unjam the inactive CPU by entering /releasejam at the reset terminal for the inactive CPU, then reenter the rextst command.
`Abort-systems not equipped with PMCs`	
	Meaning: The system is not equipped with peripheral-side message controllers (PMC). Therefore, you cannot run the PMC test.
	Action: None
`Aborted-REx disallowed for 5 minutes after a restart.`	
	Meaning: The system cannot run the REx test within the named number of minutes after a restart.
	Action: Wait the specified time and reissue the rextst command.

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`Cannot run test as mate CPU is jammed inactive.`	**Meaning:** As part of the REx test, the CM switches activity. However, this is not possible because the mate CPU is jammed inactive. **Action:** Unjam the inactive CPU by entering /release jam at the reset terminal for the inactive CPU, then reenter the rextst command.
`Cannot run test when in synchronism.`	**Meaning:** The test cannot be run while the CPUs are synchronized. **Action:** Drop sync using the dpsync command and retry the rextst command.
`Caution: CM sync and activity states will change.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** The full REx test includes activity switches. **Action:** Enter yes to run the full REx test. Enter no to abort the command.
`CM is out of sync. Only partial test can be performed.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** Since the CM is not synchronized, only a partial test will be run. **Action:** Enter yes to continue with a partial test. Enter no to abort the command.
`CPU REX test did not run-CPU resources in use.`	**Meaning:** Another process is using the resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`Hit counts have been cleared.`	**Meaning:** The link hit counts were cleared after completion of a REx test, where resethits was included in the command string. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`Hit counts have not been cleared.`	**Meaning:** The system could not clear the hit counts. **Action:** Replace the cards in the card list. Repeat the test. Contact maintenance support personnel if the problem persists.
`Maintenance action not performed, resources in use.`	**Meaning:** The resources required to perform one or more of the individual REx tests were not available. **Action:** Retry the rextst command.

`Maintenance action started.`
 	
or
 	
`Maintenance action already started.`
	Meaning: Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`Mate is already under test.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`MC REX test did not run-MC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`MEM REX test did not run-MEM resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`No mailbox available.`	**Meaning:** The system encountered an error during the test. **Action:** Try the rextst command again.
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`PMC REX test did not run-PMC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`RESETHITS option is only valid with the LINK and ALL classes. Counts will not be cleared.`	**Meaning:** The resethits parameter is not valid with some classes of tests. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`REXTST not run. A PRE-REX match of memory resulted in a mismatch. Please check memory indicators for possible faults.`	**Meaning:** The REx test was not run because memory errors occurred during the memory match. **Action:** Access the Memory level, clear the memory faults, and attempt to run the REx test again.
`RExTst failed. Test name= CPU`	**Meaning:** One or more REx tests failed. The system displays only the first failure in this response and displays the failed test. The system displays a list of the cards that may be defective. **Action:** None
`RExTst passed`	**Meaning:** The test ran without failure. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`SSC REX test did not run-SSC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`Switch is out of Sync. Only a partial test can be performed. Please confirm (“YES” or “NO”):`	**Meaning:** The system cannot run full tests when the switch is out of sync. **Action:** Enter yes to continue with the partial test. Enter no to abort the command.

-continued-

rextst (end)

Responses for the rextst command (continued)

MAP output	Meaning and action
`SYSTEM NOT EQUIPPED WITH A PMC-PMC REX TEST WILL NOT RUN.`	**Meaning:** The PMC is not equipped and cannot be tested. **Action:** None
`UNABLE TO RUN MEM REX TEST.`	**Meaning:** The system cannot run the specified type of REx test because the device to be tested is in use. The test type is cpu, mem, mc, ssc, or pmc. **Action:** None
`VERBOSE cannot be used with NOWAIT.`	**Meaning:** You entered the verbose and nowait parameters in the same command string, and they are mutually exclusive. **Action:** Reissue the rextst command with one or the other parameter.
`Warning: Running of a REx test is not recommended at this time due to exceeded error thresholds. Use the QUERYCM RExSchd command for more details concerning the errors which have occurred.`	**Meaning:** One or more counts of stability-effecting error conditions has exceeded a preset threshold. **Action:** Wait for the fault counts to fall below the stability thresholds and retry the rextst command. Use the rextst resetcounts command string to clear the counts if the error condition is known and has been corrected.
`Warning: The clearing of the error counts is not recommended until the source of the errors is corrected. Use the QUERYCM RExSch command for more details concerning the errors which have occurred. A successful REx test will also clear the error counts.` `Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The system prompts for confirmation before clearing the error counts. **Action:** Enter yes or y to continue. Enter no or n to abort the command.

-end-

Function

Use the rts command to test the PMC and return it to service.

rts command parameters and variables

Command	Parameters and variables
rts	*pmc_no* [*node* / port *port_no*] [*wait* / nowait]

Parameters and variables	Description
node	This default parameter directs the system to return the node to service. Do not enter this parameter.
nowait	This parameter directs the system to allow use of the MAP for other functions while the system tests and returns the PMC to service.
pmc_no	This variable is the number of the PMC to be returned to service. Valid entries are 0-1.
port	This parameter directs the system to return a port to service.
port_no	This variable is the number of the port. Valid entries are 0-1.
wait	This default parameter directs the system not to allow use of the MAP for other functions while the system tests and returns the PMC to service. Do not enter this parameter.

Qualifications

None

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts ↵	
	Task: Return the PMC node to service.
	Response: `Passed.`
	Explanation: The system returns the PMC to service.

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`Extension bus test results on CPU 0`	
	Meaning: The extension busy connectivity test failed for one or more of the following reasons. ▪ Cable J1, J2, or J3 has a faulty connection. ▪ Cables J1 and J2, J1 and J3, or J2 and J3 have faulty connections. ▪ Cables J1, J2, and J3 have faulty connections. ▪ Unable to access the 9X27AA on the CM shelf. ▪ Unable to access the 9X27BA on the Ext shelf. ▪ Unable to read ID PROM of the 9X27AA card. ▪ Unable to read ID PROM of the 9X27BA card. ▪ Mate not responding. ▪ Mate communication link failed. ▪ Unable to reset mate central processing unit (CPU). **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`Failed.`	**Meaning:** The port failed a return-to-service test, but the system could not determine a specific cause. **Action:** None
`Failed: Action was overridden.`	**Meaning:** The system did not return the specified PMC or port to service because a task with a higher system priority took precedence. **Action:** Try the rts command again.
`Failed.  Extension bus connectivity test.`	**Meaning:** The port failed the extension bus connectivity portion of the return-to-service test. **Action:** Try the rts command again.
`Failed.  Local paddleboard loopback test.`	**Meaning:** The port failed the local paddleboard loopback portion of the return-to-service test. **Action:** Try the rts command again.
`Failed.  Remote paddleboard loopback test.`	**Meaning:** The port failed the remote paddleboard loopback portion of the return-to-service test. **Action:** Try the rts command again.
`Failed.  Port card test.`	**Meaning:** The port failed the port card portion of the return-to-service test. **Action:** Try the rts command again.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`Node is already in service!`	**Meaning:** The PMC is already in service. **Action:** None
`Passed.`	**Meaning:** The system returns the port or PMC to service. **Action:** None
`Please try again when the SLMs are not in use.`	**Meaning:** The SLM is in use and cannot be returned to service at this time. **Action:** Wait until the SLM is finished its task and try again.
`PMC must be busy before attempting to RTS.`	**Meaning:** An PMC can return to service only from the manually busy state. **Action:** Use the bsy command to place the PMC in the manually-busy state, then try the rts command again.
`PMC RTS action overridden.`	**Meaning:** The system did not return the MC to service because an operation with a higher system priority overrode the rts command. **Action:** None
`Port 0 TST: Passed.` `Port 1 TST: Passed.`	**Meaning:** The system displays the results of testing both ports. The possible results are: ▪ Failed. Local paddleboard loopback test. ▪ Failed. Remote paddleboard loopback test. ▪ Failed. Port card test. ▪ Passed. **Action:** None

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action
`Port is already in service!`	**Meaning:** The port is already in service. **Action:** None

-end-

split

Function

Use the split command to manually place the PMCs in split mode.

split command parameters and variables

Command	Parameters and variables
split	on off

Parameters and variables	Description
off	This parameter directs the system to take the PMCs out of split mode.
on	This parameter directs the system to place the PMCs in split mode.

Qualifications

The split command is qualified by the following exceptions, restrictions, and limitations:

CAUTION
Use only in matcher failure emergencies
Split the PMCs only to reboot the inactive plane to recover from a matcher failure. Do not use the split command except under the strict supervision of high level technical assistance personnel.

- The PMCs should only be split in emergency situations when you need to manually reboot the inactive plane to recover from a matcher failure. While the PMC node is split, you can use special firmware commands on the inactive reset terminal interface (RTIF) to manually boot the inactive plane from the inactive side system load module (SLM). Do not use the split command except under the strict supervision of high level technical assistance personnel.

split (continued)

CAUTION
You must use split off if you use split on
The system does not provide automatic recovery from split mode. You must use the split off command string any time you use the split on command string.

- The system does not have any automatic recovery mechanisms to restore normal operation of the PMCs from split mode. Any time you use the split on command string, you must use the split off command string after you have completed your maintenance activities.

Example

The following table provides an example of the split command.

Example of the split command

Example	Task, response, and explanation	
split on ↵		
	Task:	Place the PMCs in split mode.

	Response:	`WARNING:`
		`This command will split the PMC using LDMATE resources until it is manually unsplit.`
		`A manual boot can then be invoked from the INACTIVE RTIF. This command should only be used by Technical Assistance Groups.`
		
		`Continue (“YES”, “Y”, “NO” or “N”):`

	Explanation:	The system prompts for confirmation before splitting the PMCs.

split (continued)

Responses

The following table provides explanations of the responses to the split command.

Responses for the split command

MAP output	Meaning and action
`PMC is already split.` `Request aborted.`	**Meaning:** The PMCs are already in split mode. **Action:** Perform the required maintenance functions, then use the split off command string to return the PMCs to normal functioning.
`Request submitted.` `Could not allocate an event.`	**Meaning:** The system aborts the command because it can not allocate the resources required by the split command. **Action:** None
`Request submitted.` `Could not claim Mate Communication register.`	**Meaning:** The system aborts the command because it can not claim the mate communication register. **Action:** None
`Request submitted.` `Could not split PMC node.`	**Meaning:** The system was unable to split the PMCs for unknown reasons. **Action:** Try the split command again.
`Request submitted.` `Failed on allocate resources.`	**Meaning:** The system aborts the command because it can not allocate the resources required by the split command. **Action:** None

-continued-

split (continued)

Responses for the split command (continued)

MAP output	Meaning and action
`Request submitted.` `File system operations must be halted before initiating PMC split.`	**Meaning:** The system aborts the command because there are active file system operations on the switch. **Action:** Halt the file system operations, then retry the split command.

`Request submitted.`
`PMC is now split.`
`You may now manually boot inactive plane.`
	Meaning: The PMCs are split and ready for maintenance actions.
	
	Action: Perform the required maintenance functions, then use the split off command string to return the PMCs to normal functioning.

`Request submitted.` `PMC node is unsplit.`	**Meaning:** The system returned the PMCs from split mode to normal functioning. **Action:** None
`Request submitted.` `SLM is out of service.`	**Meaning:** The system checked the sanity of the SLM being given to the inactive plane and rejected the SLM. The system aborts the split command. **Action:** Check the SLMs on the SLM level. Retry the split command when the SLMs are in service with no faults.
`Request submitted.` `Switch must be out of SYNC to split PMC.`	**Meaning:** The system aborts the command because the switch is in sync. **Action:** Use the dpsync command to drop sync, then retry the split command.

-continued-

split (end)

Responses for the split command (continued)

MAP output	Meaning and action
`Request submitted.` `System error.`	**Meaning:** The system detects an error and aborts the split command. **Action:** Try the split command again.

`WARNING:`
`This command will split the PMC using LDMATE`
`resources until it is manually unsplit.`
`A manual boot can then be invoked from the`
`INACTIVE RTIF. This command should only be used`
`by Technical Assistance Groups.`
 	
`Continue (“YES”, “Y”, “NO” or “N”):`
	Meaning: The system prompts for confirmation after displaying a warning.
	
	Action: Enter yes to continue with the split. Enter no to abort the command.

-end-

Function

Use the swact command to switch activity (SwAct) to the mate central processing unit (CPU).

swact command parameters and variables

Command	Parameters and variables
swact	[*prompt* | noprompt] [*check* | nocheck] [*noforce* | force] [*match* | nomatch]

Parameters and variables	Description
check	This default parameter directs the sysstem to check the common processor clock source of the computing module (CM). The clock source check is performed automatically before SwAct. If the check finds that the CM would be running on the inactive CPU processor clock after the SwAct, a prompt is displayed at the MAP to ask for permission to automatically drop sync; then sync the CM again after the SwAct. Do not enter this parameter,
force	This parameter directs the system to perform the SwAct when the CPU is out of sync.
match	This default parameter directs the system to perform a match test. Do not enter this parameter.
nocheck	This parameter directs the system to bypass the checking of the common processor clock source of the CM. The nocheck parameter is used to switch activities without sync being dropped. CM sync status should not be altered if the CPU occupancy is over 50 percent.
noforce	This defualt parameter directs the system to not allow SwAct when the CPU is out of sync. Do not enter this paramter.
nomatch	This parameter directs the system to suspend the match test.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
prompt	This default parameter directs the system to enable yes and no prompts. Do not enter this parameter.

Qualifications

None

swact (continued)

Example

The following table provides an example of the swact command.

Example of the swact command

Example	Task, response, and explanation
swact noprompt force ↵	
	Task: To switch activity to the mate CPU.

	Response:
	`ACTIVITY SWITCH ON CPU 0`
	`***SOS COLD RESTART NO.8 AT AUGUST-17 00:00:00`

	Explanation: The CPUs were not in sync, therefore SwAct caused a cold restart.

Responses

The following table provides explanations of the responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`Aborted. CM is not in sync and the 'force' option is not specified.`	
	Meaning: The CPUs are out of sync. Therefore, the force parameter must be used to switch activity. The command is terminated.
	Action: Synchronize the CPUs first using the sync command and then SwAct. If a cold restart is acceptable, use the force parameter with the SwAct command.
`Aborted. Inactive CPU 1 has a faulty clock and should not be allowed to gain activity.`	
	Meaning: The inactive CPU has a faulty clock and should not be allowed to gain activity.
	Action: Drop sync and perform a mate CPU clock test. If the test fails, replace the faulty CPU card.

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action
`Mate is jammed inactive.`	**Meaning:** The system cannot switch activity because the mate CPU is out of sync. **Action:** None
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Switch of activity failed.`	**Meaning:** Activity has not been switched. **Action:** None
`Switch of activity successful.`	**Meaning:** Activity has been switched. **Action:** None
`Switch of activity successful. Drop synchronization in progress. running in simplex mode with active CPU 0. Synchronization in progress...synchronization successful.`	**Meaning:** The activity switch has been successful. Sync is dropped automatically to switch the clock source to the active CPU. The CM is then resynchronized automatically. **Action:** None

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
`Switch of activity will cause a cold restart. Do you wish to continue? (TYPE YES/NO)`	**Meaning:** The CPUs are not synchronized. If you switch the activity of the CPU, the system will initiate a cold restart. **Action:** Enter yes if a SwAct through a cold restart is acceptable. Enter no to abort the command.
`Switch of activity will cause the CM to be running on the inactive CPU'S processor clock. System will drop sync and then re-sync in order to switch to the active CPU'S clock. Do you wish to continue? Please confirm (YES OR NO):`	**Meaning:** The CM would be running on the newly inactive CPU clock after the activity switch. To enhance the fault tolerance of the CM in sync operation, the system should drop sync and then re-sync, in order to switch to the newly active CPU clock. **Action:** Enter yes to continue with the command. Enter no if a change to the sync status is not acceptable.
-end-	

sync

Function

Use the sync command to synchronize the computing module (CM). This command copies the memory of the active central processing unit (CPU), performs a match test between CPUs, and tests the inactive CPU. If all the tests are passed, the system completes the sync.

sync command parameters and variables

Command	Parameters and variables
sync	[*none* / optimum] [normal / nomatch / notest / nohands] [*none* / eccoff / eccon] [*wait* / nowait] [*prompt* / noprompt]

Parameters and variables	Description
eccoff	This parameter directs the system to disable memory error correction.
eccon	This parameter directs the system to enable memory error correction.
nohands	This parameter directs the system to disable handshake-override. Handshake-override is a feature that speeds CPU operation by overriding the handshake synchronization of memory access between CPUs. The handshake-override feature is available only on CMs that are equipped with NT9X14BB or NT9X14DA memory cards, or a combination of both. It is implemented automatically when the CM is synchronized. Use the nohands parameter to disable the handshake-override feature, or contact maintenance support personnel to take the feature out of service. The nohands parameter triggers the NoOvr alarm.
nomatch	This parameter directs the system to suspend the match test. Use the nomatch parameter in emergency situations only.
none	This default parameter directs the system not to perform optimum tests, or not to change the condition of error correction. Do not enter this parameter.
noprompt	This parameter directs the system to suppress system prompts. The system automatically enters yes.
normal	This default parameter indicates that a normal sync operation is to be performed.

-continued-

sync (continued)

sync command parameters and variables (continued)

Parameters and variables	Description
notest	This parameter directs the system to suspend all the tests that the system usually performs during synchronization. Use the notest parameter in emergency situations only.
nowait	This parameter directs the system to allow use of the MAP for other functions while the CM is being synchronized.
optimum	This parameter directs the system to synchronize the CM using an optimum memory mapping for the inactive mate CPU. The sync command with the optimum parameter disables the handshake-override feature and triggers the NoOvr alarm. Use this parameter only when performing memory extensions on a CM that can support a mixed memory configuration. A mixed memory configuration can be supported if program store and data store are aligned along 8-megabyte block boundaries.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
wait	This default parameter directs the system not to allow the use of the MAP for other functions while the CM is being synchronized. Do not enter this parameter.

-end-

Qualifications

The sync command is qualified by the following restriction: the system will sync the CM only if it can claim the mate communication register.

Example

The following table provides an example of the sync command.

Example of the sync command

Example	Task, response, and explanation	
sync nowait noprompt ↵		
	Task:	Put the CPUs in sync, with no waiting and no prompts for confirmation.
	Response:	`SYNCHRONIZATION SUCCESSFUL`
	Explanation:	The CPU's are in sync.

sync (continued)

Responses

The following table provides explanations of the responses to the sync command.

Responses for the sync command

MAP output	Meaning and action
`Aborted. CM is already running in sync.`	**Meaning:** The two CPUs are already synchronized. **Action:** None
`Aborted. Optimum configuration can only be attempted when memory has been aligned along 8 mbyte block boundaries. Memory can be aligned using the MEMORY MAP level ALIGN command.`	**Meaning:** The current memory of the mate (inactive) CPU is not aligned to support mixed memory. Therefore, an optimum configuration is not possible. Use the sync optimum command string only when performing memory extensions on a CM that can support a mixed memory configuration. A CM can support a mixed memory configuration if program store and data store are aligned along 8-megabyte block boundaries. **Action:** Clear the problem and retry the command.
`Aborted. The CPU releases are not compatible.`	**Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs is not compatible. **Action:** None
`Cannot synchronize-cannot configure mate memory.`	**Meaning:** Either too many memory faults exist in the memory of the inactive CPU or the active CPU cannot communicate with the inactive CPU. **Action:** Clear the problem and retry the command.
`Cannot synchronize-cannot reset mate CPU.`	**Meaning:** The inactive CPU did not respond to a request from the active CPU. **Action:** None

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-could not get mate on same clock.`	**Meaning:** The inactive CPU cannot switch the processor clocking source to the active CPU processor clock. **Action:** Test the inactive CPU.
`Cannot synchronize-CPUs have different firmware.`	**Meaning:** The system cannot synchronize the CM because the two CPUs contain different firmware. **Action:** Test the inactive CPU.
`Cannot synchronize-different CPU hardware vintage.`	**Meaning:** The system cannot synchronize the CM because the suffixes of the product engineering codes (PEC) on the two CPU cards are different and the cards are incompatible. **Action:** Change the inactive CPU card to one that has the same PEC and suffix as the active CPU card.
`Cannot synchronize-firmware sync kernel failed.`	**Meaning:** The failure of a firmware synchronization kernel has prevented CM synchronization. **Action:** None
`Cannot synchronize-first rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-faults exist in active CPU memory.`	**Meaning:** Faults in the memory of the active CPU are preventing synchronization. **Action:** Clear the problem and retry the command.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-invalid link configuration.`	**Meaning:** A problem exists with inter-CPU links. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mate memory is not contiguous.`	**Meaning:** Faults in the memory of the inactive CPU are preventing synchronization. **Action:** Clear the problem and try the command again.
`Cannot synchronize-mate test failed.`	**Meaning:** The inactive CPU failed presynchronization diagnosis. **Action:** Check status indicators for faults, then test the inactive CPU.
`Cannot synchronize-MC 1 accesses will mismatch.`	**Meaning:** A problem exists with a message controller which causes a mismatch if the CM is synchronized. **Action:** Test the message controllers and clear any problems.
`Cannot synchronize-memory copy failed.`	**Meaning:** Memory cannot be copied. **Action:** Try to synchronize again.
`Cannot synchronize-memory protect copy failure.`	**Meaning:** A problem occurred while the system was copying protected memory. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mismatch while disabling ECC.`	**Meaning:** A mismatch of memory occurred while the system was disabling error checking and correction. **Action:** Check the logs and status displays for faults.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-mismatch while enabling handshake-override.`	**Meaning:** A mismatch occurred while the system was enabling handshake-override. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-mismatch while optimizing sync performance.`	**Meaning:** A mismatch of memory occurred during synchronization. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-not enough memory on mate.`	**Meaning:** Not enough memory is available on the inactive CPU to permit the system to copy memory. **Action:** Use the config command at the Memory level of the MAP to configure the memory of the inactive CPU , then try to synchronize the CM again.
`Cannot synchronize-second rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-software package inconsistency.`	**Meaning:** The system cannot synchronize the CM because the software load in the DMS-core is not compatible with the NT9X13 processor cards that are currently installed. **Action:** Contact maintenance support personnel.
`Cannot synchronize-SSC 1 accesses will mismatch.`	**Meaning:** There is a problem with the specified subsystem clock (SSC) that causes a mismatch if the CM is synchronized. **Action:** Test the SSCs and clear any problems.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-synchronization dropped during match.`	**Meaning:** Either there are too many memory faults on the inactive CPU or a mismatch occurred during synchronization. **Action:** Clear the problem and retry the command.

`Maintenance action started.`
 	
or
 	
`Maintenance action already started.`
	Meaning: Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Synchronization successful`	**Meaning:** The CPUs are in sync. **Action:** None

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Synchronization successful. Handshake-override is not enabled.`	**Meaning:** The CM is synchronized. The handshake-override feature is in service but was disabled during synchronization. If you entered the sync command to enable handshake-override, then a memory configuration problem may have prevented the action. **Action:** Contact maintenance support personnel.

`WARNING:`
`Memory Error Correction will be DISABLED in SYNC.`
 	
`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before disabling error correction.
	
	Action: Enter yes or y to disable error correction. Enter no or n to abort the command.

`WARNING:`
`Memory Error Correction will be ENABLED in SYNC.`
 	
`Memory mismatches will not occur due to correctable single bit memory faults but a degradation in service will result due to the enabling of memory error correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before enabling error correction.
	
	Action: Enter yes or y to enable error correction. Enter no or n to abort the command.

-continued-

Responses for the sync command (continued)

MAP output	Meaning and action
WARNING The inactive cpu has a different release number. Please confirm (″YES″ or ″NO″).	**Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs might not be compatible. **Action:** Enter yes to continue. Enter no to abort the command.
WARNING: The notest option should only be used under the supervision of the technical assistance support group in an emergency. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter. **Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel.
WARNING: The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided. However, under this configuration, a CM running in sync will have handshake-override disabled. Please confirm (″YES″ or ″NO″).	**Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

0.Function

Use the trnsl command to display which SLM the port is connected to and the P-side port status.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*pmc_no*

Parameters and variables	Description
pmc_no	This variable is the number of the PMC to be queried. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation
trnsl 1 ↵ *where* 1 indicates the number of the MC	**Task:** Display the configuration and status for the C-side link of MC 1. **Response:** `MC 1 LINK 0 IS CONNECTED TO MS1 PORT 1.` **Explanation:** The system displays the configuration of the link.

trnsl (end)

Responses

The following table provides explanations of the responses to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action
`MC 1 LINK 0 IS CONNECTED TO MS1 PORT 1.`	**Meaning:** The system displays the configuration of the link. **Action:** None
`PMC1 Port 1 Failed to translate P-side node.`	**Meaning:** A problem with an SLM may be preventing the translation. **Action:** Check the SLM level for possible failures.
`PMC1 Port 1 is connected to SLM 1` `  Port status is ok.`	**Meaning:** The system displays the SLM connection information and the status. The possible status messages are C-bsy, P-Bsy, ok, SysB, ManB, Offl, and Uneq. **Action:** None

Port level commands

Use the Port level of the MAP to control individual ports of the message controllers (MC).

Accessing the Port level

To access the Port level, enter the following from the CI level:

mapci;mtc;cm;mc;port ↵

Port commands

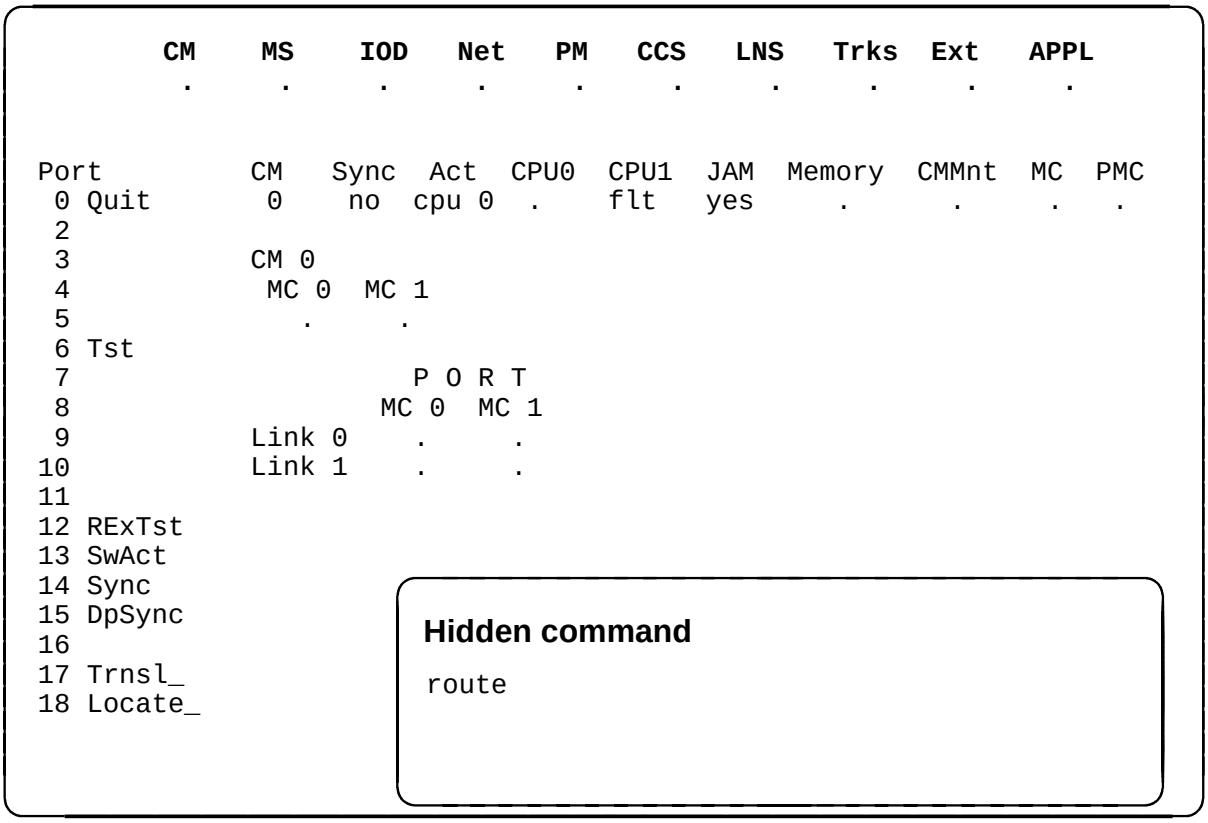
The commands available at the Port MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

Port commands

Command	Page
dpsync	P-223
locate	P-227
quit	P-229
rextst	P-233
route	P-241
swact	P-243
sync	P-247
trnsl	P-257
tst	P-259

Port menu

The following figure shows the Port menu and status display. The insert with hidden commands is not a visible part of the menu display.



Port status codes

The following table describes the status codes for the Port status display.

Status codes Port menu status display		
Code	**Meaning**	**Description**
MC 0 or MC 1		
.	no faults	The port is in-service with no faults.
sp	split mode	The port cannot be accessed because the computing module (CM) is in split mode.
oos	out-of-service	The port is out of service because it has a fault or is manually busy.

dpsync

Function

Use the dpsync command to drop the synchronization of the CPU (central processing unit) pair.

dpsync command parameters and variables

Command	Parameters and variables
dpsync	[*noforce* / force] [*prompt* / noprompt] [*match* / nomatch]

Parameters and variables	Description
force	This parameter directs the system to force the MC to drop synchronization, regardless of system activity.
match	This default parameter directs the system to perform a match test. Do not enter this parameter.
noforce	This default parameter directs the system to not force the drop sync. Do not enter this parameter.
nomatch	This parameter directs the system to suspend the match test.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.

Qualifications

None

dpsync (continued)

Example

The following table provides examples of the dpsync command.

Example of the dpsync command

Example	Task, response, and explanation
dpsync ↵	
	Task: Drop the syncronization of the CPU pair.
	Response: `SYNCHRONIZATION DROPPED`
	Explanation: Synchronization of the pair has been dropped.

Responses

The following table provides explanations of the responses to the dpsync command.

Responses for the dpsync command

MAP output	Meaning and action
`Aborted, active CPU 0 has faulty processor clock.`	
	Meaning: The active CPU clock is faulty and manual drop syncronization is disallowed.
	Action: None
`Drop synchronization failed.`	
	Meaning: The CPU is still in sync.
	Action: None
`If you intend to jam the mate CPU, please do so before dropping synchronization.` `Do you wish to continue? Please confirm (”YES” or ”NO”).`	
	Meaning: The system is offering the opportunity to abort this process and jam the inactive CPU before sync is dropped.
	Action: Enter yes to drop sync without jamming the inactive CPU. Enter no to abort this drop sync, then jam the inactive CPU.

-continued-

dpsync (end)

Responses for the dpsync command (continued)

MAP output	Meaning and action
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Running in simplex mode with active CPU 0.`	**Meaning:** Synchronization has been dropped and the indicated CPU is active. **Action:** None
`Software inconsistency - Action aborted.`	**Meaning:** A software fault has occured. **Action:** None
`Synchronization dropped`	**Meaning:** CPU synchronization has been dropped. **Action:** None

-end-

locate

Function

Use the locate command to display the physical location of the specified MC port in standard card list form.

locate command parameters and variables

Command	Parameters and variables	
locate	*mc_no*	*plane_no*

Parameters and variables	Description
cpu_no	This variable is the number of the MC the port is on. Valid entries are 0 or 1.
cpu_no	This variable is the number of the plane the port is on. Valid entries are 0 or 1.

Qualifications

None

Examples

The following table provides an example of the locate command.

Examples of the locate command

Example	Task, response, and explanation

locate 1 1 ↵
where
 	
1 is MC 1
1 is plane 1
	Task: Display the location of the port on MC 1, plane 1.
	
	Response:
	
	`Site Flr RPos  Bay_id  Shf  Description  Slot  EqPEC`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0  22  9X12AB FRNT`
	`HOST  00  A00  CMDC:00  18  MC01:00:1:0  22  9X20AA BACK`
	
	Explanation: The system displays the requested information.

locate (end)

Responses

The following table provides an explanation of the responses to the locate command.

Responses for the locate command

MAP output	Meaning and action
`NO REPLY FROM REQUEST`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`SOFTWARE INCONSISTENCY-ACTION ABORTED.`	**Meaning:** The system detected a software error and aborted the command. **Action:** Try the locate command again.

`Site Flr RPos Bay_id Shf Description Slot EqPEC`
`HOST 00 A00 CMDC:00 18 MC01:00:1:0 22 9X12AB FRNT`
`HOST 00 A00 CMDC:00 18 MC01:00:1:0 22 9X20AA BACK`
	Meaning: The command has executed properly.
	
	Action: None

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the Port level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The Port level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the Port level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The Port level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the Port level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the Port level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

Function

Use the rextst command to run routine exercise (REx) tests on the computing module (CM). The CM must be synchronized for the full test to be run.

rextst command parameters and variables

Command	Parameters and variables
rextst	[short | long] [all | cpu | mem | link | pmc] [stop | continue] [*noreset* | resethits] [*wait* | nowait] [*prompt* | noprompt] (1) (2) (3) (4) (5)
rextst (continued)	(1) (2) (3) (4) (5) [*noreset* | resetcounts] [*noverbose* | verbose] (end)

Parameters and variables	Description
all	This default parameter directs the system to run all REx tests.
continue	This parameter directs the system to generate a log when an error is encountered and the system continues the test.
cpu	This parameter directs the system to run only central processing unit (CPU) tests.
link	This parameter directs the system to run only the link tests.
long	This parameter directs the system to run all tests for the specified type regardless of how much time they take.
mem	This parameter directs the system to run only the memory REx tests.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
noreset	This default parameter directs the system not to reset. Do not enter this parameter.

-continued-

rextst (continued)

rextst command parameters and variables (continued)

Parameters and variables	Description
noverbose	This default parameter directs the system not to return completion messages after each individual REx test. Do not enter this parameter.
nowait	This parameter directs the system to allow use of the MAP for other functions while the REx test is running.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
pmc	This parameter directs the system to run only the peripheral message controller (PMC) REx tests.
resetcounts	This parameter directs the system to reset all but the cancelled REx fault counts.
resethits	This parameter directs the system to reset link hit counts.
short	This parameter directs the system to run only fast diagnostics.
stop	This parameter directs the system to stop running the type of test it is running when an error is encountered.
verbose	This parameter directs the system to return completion messages after each individual REx test.
wait	This default parameter directs the system to not allow the use of the MAP for other functions while the REx test is running. Do not enter this parameter.

-end-

Qualifications

The restrictions that must be observed when running a REx test are built into the system responses to the command. Any attempt to run a test which would violate one or more of the conditions the REx test requires to run will result in a warning message or a cancellation of the requested test.

Example

The following table provides an example of the rextst command.

Example of the rextst command

Example	Task, response, and explanation
rextst nowait ↵	
	Task: Run REx tests on the CM.
	Response: `MAINTENANCE ACTION SUBMITTED.`
	Explanation: The system accepted the command and started the test.

Responses

The following table provides explanations of the responses to the rextst command.

Responses for the rextst command

MAP output	Meaning and action
`Aborted. CPU is jammed inactive.`	
	Meaning: You cannot run REx tests because the mate central processing unit (CPU) is jammed inactive. The CM must be able to switch activity for the REx test to be run.
	Action: Unjam the inactive CPU by entering /releasejam at the reset terminal for the inactive CPU, then reenter the rextst command.
`Abort-systems not equipped with PMCs`	
	Meaning: The system is not equipped with peripheral-side message controllers (PMC). Therefore, you cannot run the PMC test.
	Action: None
`Aborted-REx disallowed for 5 minutes after a restart.`	
	Meaning: The system cannot run the REx test within the named number of minutes after a restart.
	Action: Wait the specified time and reissue the rextst command.

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`Cannot run test as mate CPU is jammed inactive.`	**Meaning:** As part of the REx test, the CM switches activity. However, this is not possible because the mate CPU is jammed inactive. **Action:** Unjam the inactive CPU by entering /release jam at the reset terminal for the inactive CPU, then reenter the rextst command.
`Cannot run test when in synchronism.`	**Meaning:** The test cannot be run while the CPUs are synchronized. **Action:** Drop sync using the dpsync command and retry the rextst command.
`Caution: CM sync and activity states will change.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** The full REx test includes activity switches. **Action:** Enter yes to run the full REx test. Enter no to abort the command.
`CM is out of sync. Only partial test can be performed.` `Please confirm (″YES″ or ″NO″).`	**Meaning:** Since the CM is not synchronized, only a partial test will be run. **Action:** Enter yes to continue with a partial test. Enter no to abort the command.
`CPU REX test did not run-CPU resources in use.`	**Meaning:** Another process is using the resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`Hit counts have been cleared.`	**Meaning:** The link hit counts were cleared after completion of a REx test, where resethits was included in the command string. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`Hit counts have not been cleared.`	**Meaning:** The system could not clear the hit counts. **Action:** Replace the cards in the card list. Repeat the test. Contact maintenance support personnel if the problem persists.
`Maintenance action not performed, resources in use.`	**Meaning:** The resources required to perform one or more of the individual REx tests were not available. **Action:** Retry the rextst command.

`Maintenance action started.`
 	
or
 	
`Maintenance action already started.`
	Meaning: Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`Mate is already under test.`	**Meaning:** The mate communication register (MCR) flag is in use and cannot be claimed. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`MC REX test did not run-MC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`MEM REX test did not run-MEM resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`No mailbox available.`	**Meaning:** The system encountered an error during the test. **Action:** Try the rextst command again.
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`PMC REX test did not run-PMC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`RESETHITS option is only valid with the LINK and ALL classes. Counts will not be cleared.`	**Meaning:** The resethits parameter is not valid with some classes of tests. **Action:** None

-continued-

rextst (continued)

Responses for the rextst command (continued)

MAP output	Meaning and action
`REXTST not run. A PRE-REX match of memory resulted in a mismatch. Please check memory indicators for possible faults.`	**Meaning:** The REx test was not run because memory errors occurred during the memory match. **Action:** Access the Memory level, clear the memory faults, and attempt to run the REx test again.
`RExTst failed. Test name= CPU`	**Meaning:** One or more REx tests failed. The system displays only the first failure in this response and displays the failed test. The system displays a list of the cards that may be defective. **Action:** None
`RExTst passed`	**Meaning:** The test ran without failure. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`SSC REX test did not run-SSC resources in use.`	**Meaning:** Another process is using resources required to run the test specified. The test type is cpu, mem, mc, ssc, or pmc. **Action:** Check logs and status displays for faults that may prevent the test from running.
`Switch is out of Sync. Only a partial test can be performed. Please confirm ("YES" or "NO"):`	**Meaning:** The system cannot run full tests when the switch is out of sync. **Action:** Enter yes to continue with the partial test. Enter no to abort the command.

-continued-

rextst (end)

Responses for the rextst command (continued)

MAP output	Meaning and action
`SYSTEM NOT EQUIPPED WITH A PMC-PMC REX TEST WILL NOT RUN.`	**Meaning:** The PMC is not equipped and cannot be tested. **Action:** None
`UNABLE TO RUN MEM REX TEST.`	**Meaning:** The system cannot run the specified type of REx test because the device to be tested is in use. The test type is cpu, mem, mc, ssc, or pmc. **Action:** None
`VERBOSE cannot be used with NOWAIT.`	**Meaning:** You entered the verbose and nowait parameters in the same command string, and they are mutually exclusive. **Action:** Reissue the rextst command with one or the other parameter.
`Warning: Running of a REx test is not recommended at this time due to exceeded error thresholds. Use the QUERYCM RExSchd command for more details concerning the errors which have occurred.`	**Meaning:** One or more counts of stability-effecting error conditions has exceeded a preset threshold. **Action:** Wait for the fault counts to fall below the stability thresholds and retry the rextst command. Use the rextst resetcounts command string to clear the counts if the error condition is known and has been corrected.
`Warning: The clearing of the error counts is not recommended until the source of the errors is corrected. Use the QUERYCM RExSch command for more details concerning the errors which have occurred. A successful REx test will also clear the error counts.` `Please confirm (“YES”, “Y”, “NO”, or “N”):`	**Meaning:** The system prompts for confirmation before clearing the error counts. **Action:** Enter yes or y to continue. Enter no or n to abort the command.

-end-

route

Function

Use the route command to display the primary and secondary MC routes for the frame pulse reference of the subsystem clocks (SSC), the validity of these routes, and the state of the SSCs.

route command parameters and variables

Command	Parameters and variables
route	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the route command.

Example of the route command

Example	Task, response, and explanation

route ↵	**Task:** Display the MC routes for the SSCs.
	
	Response:
	
	`SSC 0 - OK, Primary: Link 0 , Secondary: Link 1 .`
	`SSC 1 - OK, Primary: Link 0 , Secondary: Link 1 .`
	
	Explanation: The system displays the MC routes.

route (end)

Response

The following table provides an explanation of the response to the route command.

Response for the route command

MAP output	Meaning and action
SSC 0 - OK, Primary: Link 0 , Secondary: Link 1 . SSC 1 - OK, Primary: Link 0 , Secondary: Link 1 .	**Meaning:** The system displays the MC routes. **Action:** None

swact

Function

Use the swact command to switch activity (SwAct) to the mate central processing unit (CPU).

swact command parameters and variables

Command	Parameters and variables
swact	[*prompt* | noprompt] [*check* | nocheck] [*noforce* | force] [*match* | nomatch]

Parameters and variables	Description
check	This default parameter directs the sysstem to check the common processor clock source of the computing module (CM). The clock source check is performed automatically before the SwAct. If the check finds that the CM would be running on the inactive CPU processor clock after the SwAct, a prompt is displayed at the MAP to ask for permission to automatically drop sync and then sync the CM again after the SwAct. Do not enter this parameter,
force	This parameter directs the system to perform the SwAct when the CPU is out of sync.
match	This default parameter directs the system to perform a match test. Do not enter this parameter.
nocheck	This parameter directs the system to bypass the checking of the common processor clock source of the CM. The nocheck parameter is used to switch activities without sync being dropped. CM sync status should not be altered if the CPU occupancy is over 50 percent.
noforce	This defualt parameter directs the system to not allow the SwAct when the CPU is out of sync. Do not enter this paramter.
nomatch	This parameter directs the system to suspend the match test.
noprompt	This parameter directs the system to suppress the yes and no prompts. The system automatically enters yes.
prompt	This default parameter directs the system to enable yes and no prompts. Do not enter this parameter.

Qualifications

None

swact (continued)

Example

The following table provides an example of the swact command.

Example of the swact command

Example	Task, response, and explanation
swact noprompt force ↵	
	Task: To switch activity to the mate CPU.

	Response:
	`ACTIVITY SWITCH ON CPU 0`
	`***SOS COLD RESTART NO.8 AT AUGUST-17 00:00:00`

	Explanation: The CPUs were not in sync, therefore SwAct caused a cold restart.

Responses

The following table provides explanations of the responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`Aborted. CM is not in sync and the 'force' option is not specified.`	
	Meaning: The CPUs are out of sync. Therefore, the force parameter must be used to switch activity. The command is terminated.
	Action: Synchronize the CPUs first using the sync command and then SwAct. If a cold restart is acceptable, use the force parameter with the SwAct command.
`Aborted. Inactive CPU 1 has a faulty clock and should not be allowed to gain activity.`	
	Meaning: The inactive CPU has a faulty clock and should not be allowed to gain activity.
	Action: Drop sync and perform a mate CPU clock test. If the test fails, replace the faulty CPU card.

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action
`Mate is jammed inactive.`	**Meaning:** The system cannot switch activity because the mate CPU is out of sync. **Action:** None
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Switch of activity failed.`	**Meaning:** Activity has not been switched. **Action:** None
`Switch of activity successful.`	**Meaning:** Activity has been switched. **Action:** None
`Switch of activity successful. Drop synchronization in progress. running in simplex mode with active CPU 0. Synchronization in progress...synchronization successful.`	**Meaning:** The activity switch has been successful. Sync is dropped automatically to switch the clock source to the active CPU. The CM is then resynchronized automatically. **Action:** None

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
`Switch of activity will cause a cold restart. Do you wish to continue? (TYPE YES/NO)`	**Meaning:** The CPUs are not synchronized. If you switch the activity of the CPU, the system will initiate a cold restart. **Action:** Enter yes if a SwAct through a cold restart is acceptable. Enter no to abort the command.
`Switch of activity will cause the CM to be running on the inactive CPU'S processor clock. System will drop sync and then re-sync in order to switch to the active CPU'S clock. Do you wish to continue? Please confirm (YES OR NO):`	**Meaning:** The CM would be running on the newly inactive CPU's clock after the activity switch. To enhance the fault tolerance of the CM in sync operation, the system would drop sync and then re-sync in order to switch to the newly active CPU's clock. **Action:** Enter yes to continue with the command. Enter no if a change to the sync status is not acceptable.

-end-

sync

Function

Use the sync command to synchronize the computing module (CM). This command copies the memory of the active central processing unit (CPU), performs a match test between CPUs, and tests the inactive CPU. If all the tests are passed, the system completes the sync.

sync command parameters and variables

Command	Parameters and variables
sync	[*none* | optimum] [normal | nomatch | notest | nohands] [*none* | eccoff | eccon] [*wait* | nowait] [*prompt* | noprompt]

Parameters and variables	Description
eccoff	This parameter directs the system to disable memory error correction.
eccon	This parameter directs the system to enable memory error correction.
nohands	This parameter directs the system to disable handshake-override. Handshake-override is a feature that speeds CPU operation by overriding the handshake synchronization of memory access between CPUs. The handshake-override feature is available only on CMs that are equipped with NT9X14BB or NT9X14DA memory cards, or a combination of both. It is implemented automatically when the CM is synchronized. Use the nohands parameter to disable the handshake-override feature, or contact maintenance support personnel to take the feature out of service. The nohands parameter triggers the NoOvr alarm.
nomatch	This parameter directs the system to suspend the match test. Use the nomatch parameter in emergency situations only.
none	This default parameter directs the system not to perform optimum tests, or not to change the condition of error correction. Do not enter this parameter.
noprompt	This parameter directs the system to suppress system prompts. The system automatically enters yes.
normal	This default parameter indicates that a normal sync operation is to be performed.

-continued-

sync (continued)

sync command parameters and variables (continued)

Parameters and variables	Description
notest	This parameter directs the system to suspend all the tests that the system usually performs during synchronization. Use the notest parameter in emergency situations only.
nowait	This parameter directs the system to allow use of the MAP for other functions while the CM is being synchronized.
optimum	This parameter directs the system to synchronize the CM using an optimum memory mapping for the mate (inactive) CPU. The sync command with the optimum parameter disables the handshake-override feature and triggers the NoOvr alarm. Use this parameter only when performing memory extensions on a CM that can support a mixed memory configuration. A mixed memory configuration can be supported if program store and data store are aligned along 8-megabyte block boundaries.
prompt	This default parameter directs the system to prompt for confirmation. Do not enter this parameter.
wait	This default parameter directs the system not to allow the use of the MAP for other functions while the CM is being synchronized. Do not enter this parameter.

-end-

Qualification

The sync command is qualified by the following restriction: the system will sync the CM only if it can claim the mate communication register.

Example

The following table provides an example of the sync command.

Example of the sync command

Example	Task, response, and explanation	
sync nowait noprompt ↵		
	Task:	Put the CPUs in sync, with no waiting and no prompts for confirmation.
	Response:	`SYNCHRONIZATION SUCCESSFUL`
	Explanation:	The CPU's are in sync.

Responses

The following table provides explanations of the responses to the sync command.

Responses for the sync command

MAP output	Meaning and action
`Aborted. CM is already running in sync.`	**Meaning:** The two CPUs are already synchronized. **Action:** None
`Aborted. Optimum configuration can only be attempted when memory has been aligned along 8 mbyte block boundaries. Memory can be aligned using the MEMORY MAP level ALIGN command.`	**Meaning:** The current memory of the mate (inactive) CPU is not aligned to support mixed memory. Therefore, an optimum configuration is not possible. Use the sync optimum command string only when performing memory extensions on a CM that can support a mixed memory configuration. A CM can support a mixed memory configuration if program store and data store are aligned along 8-megabyte block boundaries. **Action:** Clear the problem and retry the command.
`Aborted. The CPU releases are not compatible.`	**Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs is not compatible. **Action:** None
`Cannot synchronize-cannot configure mate memory.`	**Meaning:** Either too many memory faults exist in the memory of the inactive CPU or the active CPU cannot communicate with the inactive CPU. **Action:** Clear the problem and retry the command.
`Cannot synchronize-cannot reset mate CPU.`	**Meaning:** The inactive CPU did not respond to a request from the active CPU. **Action:** None

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-could not get mate on same clock.`	**Meaning:** The inactive CPU cannot switch the processor clocking source to the active CPU processor clock. **Action:** Test the inactive CPU.
`Cannot synchronize-CPUs have different firmware.`	**Meaning:** The system cannot synchronize the CM because the two CPUs contain different firmware. **Action:** Test the inactive CPU.
`Cannot synchronize-different CPU hardware vintage.`	**Meaning:** The system cannot synchronize the CM because the suffixes of the product engineering codes (PEC) on the two CPU cards are different and the cards are incompatible. **Action:** Change the inactive CPU card to one that has the same PEC and suffix as the active CPU card.
`Cannot synchronize-firmware sync kernel failed.`	**Meaning:** The failure of a firmware synchronization kernel has prevented CM synchronization. **Action:** None
`Cannot synchronize-first rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-faults exist in active CPU memory.`	**Meaning:** Faults in the memory of the active CPU are preventing synchronization. **Action:** Clear the problem and retry the command.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-invalid link configuration.`	**Meaning:** A problem exists with inter-CPU links. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mate memory is not contiguous.`	**Meaning:** Faults in the memory of the inactive CPU are preventing synchronization. **Action:** Clear the problem and try the command again.
`Cannot synchronize-mate test failed.`	**Meaning:** The inactive CPU failed presynchronization diagnosis. **Action:** Check status indicators for faults, then test the inactive CPU.
`Cannot synchronize-MC 1 accesses will mismatch.`	**Meaning:** A problem exists with a message controller which will cause a mismatch if the CM is synchronized. **Action:** Test the message controllers and clear any problems.
`Cannot synchronize-memory copy failed.`	**Meaning:** Memory cannot be copied. **Action:** Try to synchronize again.
`Cannot synchronize-memory protect copy failure.`	**Meaning:** A problem occurred while the system was copying protected memory. **Action:** Contact maintenance support personnel.
`Cannot synchronize-mismatch while disabling ECC.`	**Meaning:** A mismatch of memory occurred while the system was disabling error checking and correction. **Action:** Check the logs and status displays for faults.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-mismatch while enabling handshake-override.`	**Meaning:** A mismatch occurred while the system was enabling handshake-override. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-mismatch while optimizing sync performance.`	**Meaning:** A mismatch of memory occurred during synchronization. **Action:** Check the logs and status displays for faults.
`Cannot synchronize-not enough memory on mate.`	**Meaning:** Not enough memory is available on the inactive CPU to permit the system to copy memory. **Action:** Use the config command at the Memory level of the MAP to configure the memory of the inactive CPU , then try to synchronize the CM again.
`Cannot synchronize-second rendezvous failed, suspect CPUs.`	**Meaning:** A problem with the CPUs has prevented CM synchronization. **Action:** None
`Cannot synchronize-software package inconsistency.`	**Meaning:** The system cannot synchronize the CM because the software load in the DMS-Core is not compatible with the NT9X13 processor cards that are currently installed. **Action:** Contact maintenance support personnel.
`Cannot synchronize-SSC 1 accesses will mismatch.`	**Meaning:** There is a problem with the specified subsystem clock (SSC) that causes a mismatch if the CM is synchronized. **Action:** Test the SSCs and clear any problems.

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Cannot synchronize-synchronization dropped during match.`	**Meaning:** Either there are too many memory faults on the inactive CPU or a mismatch occurred during synchronization. **Action:** Clear the problem and retry the command.

`Maintenance action started.`
 	
or
 	
`Maintenance action already started.`
	Meaning: Either the CM process has just initiated a maintenance request, or a maintenance action is already in progress. The nowait parameter is not in effect.
	
	Action: None

`Maintenance action submitted.`	**Meaning:** The CM process has received the maintenance request. The nowait parameter is in effect. **Action:** None
`No reply from request`	**Meaning:** A CM process has taken too long to reply to a MAP request. The MAP request is terminated. **Action:** None
`Software inconsistency-action aborted.`	**Meaning:** A software fault has occurred. **Action:** None
`Synchronization successful`	**Meaning:** The CPUs are in sync. **Action:** None

-continued-

sync (continued)

Responses for the sync command (continued)

MAP output	Meaning and action
`Synchronization successful. Handshake-override is not enabled.`	**Meaning:** The CM is synchronized. The handshake-override feature is in service but was disabled during synchronization. If you entered the SYNC command to enable handshake-override, then a memory configuration problem may have prevented the action. **Action:** Contact maintenance support personnel.

`WARNING:`
`Memory Error Correction will be DISABLED in SYNC.`
 	
`Single bit memory faults will cause mismatches but performance will be enhanced due to the disabling of Memory Error Checking and Correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before disabling error correction.
	
	Action: Enter yes or y to disable error correction. Enter no or n to abort the command.

`WARNING:`
`Memory Error Correction will be ENABLED in SYNC.`
 	
`Memory mismatches will not occur due to correctable single bit memory faults but a degradation in service will result due to the enabling of memory error correction.`
`Do you wish to continue?`
`Please confirm (“YES”, “Y”, “NO”, or “N”):`
	Meaning: The system prompts for confirmation before enabling error correction.
	
	Action: Enter yes or y to enable error correction. Enter no or n to abort the command.

-continued-

sync (end)

Responses for the sync command (continued)

MAP output	Meaning and action
WARNING The inactive cpu has a different release number. Please confirm (”YES” or ”NO”).	**Meaning:** The NT release number on the active CPU firmware is different from the NT release number on the inactive CPU firmware. The firmware in the CPUs might not be compatible. **Action:** Enter yes to continue. Enter no to abort the command.
WARNING: The notest option should only be used under the supervision of the technical assistance support group in an emergency. Please confirm (”YES” or ”NO”).	**Meaning:** This warning is a reminder of the consequences of entering the sync command with the notest parameter. **Action:** Use the sync command with the notest parameter in emergency situations only. Consult maintenance support personnel.
WARNING: The optimum option should only be used when doing memory extensions. It will configure mate memory such that a maximum number of spares of each memory module size is provided. However, under this configuration, a CM running in sync will have handshake-override disabled. Please confirm (”YES” or ”NO”).	**Meaning:** This warning is a reminder of the consequences of using the sync command with the optimum parameter. **Action:** Enter yes to continue. Enter no to abort the command.

-end-

Function

Use the trnsl command to display the communications-side (C-side) information for and the link status of the specified port.

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	*mc_no*	*plane_no*

Parameters and variables	Description
mc_no	This variable is the MC number. Valid entries are 0-1.
plane_no	This variable is the plane number. Valid entries are 0-1.

Qualifications

None

Example

The following table provides an example of the trnsl command.

Example of the trnsl command

Example	Task, response, and explanation

trnsl 1 1 ↵
where
 	
1 is the MC number
1 is the plane number
	Task: Translate the C-side information for port 1 on MC 1.
	
	Response:
	
	`MC 1 Port 1 is connected to MS 0 Shelf 0 Card 25 link 0.`
	`Link status is OK.`
	
	Explanation: The translation information is displayed.

trnsl (end)

Responses

The following table provides explanations of the responses to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action
`Invalid port number entered (must be between 0-<nnn>)`	**Meaning:** The specified port number is out of the range equipped on the computing module (CM). The number of equipped ports on the CM replaces <nnn>. **Action:** None
`MC 1 Port 1 is connected to MS 0 Shelf 0 Card 25 link 0.` `Link status is OK.`	**Meaning:** The system gives the C-side information and the links status of the port. **Action:**

tst

Function

Use the tst command to test the specified MC port.

tst command parameters and variables

Command	Parameters and variables
tst	*mc_no* *plane_no* *messages* [*noreset* | resethits]

Parameters and variables	Description
messages	This variable is the number of messages to be sent by the test. Valid entries are 16-10000. If you do not specify a number of messages, the system will use its default value.
ms_no	This variable is the MC number. Valid entries are 0-1.
noreset	This default parameter directs the system not to reset the link hit counts. Do not enter this parameter.
plane_no	This variable is the plane number. Valid entries are 0-1.
resethits	This parameter directs the system to reset the link hit counts.

Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- The port can be tested while it is in-service or out-of-service, but not while the computing module (CM) is in split mode.
- Split mode is indicated by sp under the port header on the MAP display.

tst (continued)

Example

The following table provides examples of the tst command.

Example of the tst command

Example	Task, response, and explanation

tst 1 1 16 ↵
where
 	
1 is the MC number
1 is the plane number
16 is the number of messages to be sent in the test
	Task: Perform a test of the port at MC 1, plane 1 using 16 messages.
	
	Response:
	`Maintenance action submitted.`
	`In Service port test passed.`
	`16 messages sent, 16 messages received`
	
	Explanation: The port passed the in-service test.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`Maintenance action submitted.` `In Service port test failed.`	**Meaning:** The port failed the in-service test. **Action:** None

`Maintenance action submitted.`
`In Service port test passed.`
`16 messages sent, 16 messages received`
	Meaning: The port passed the in-service test.
	
	Action: None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`Maintenance action submitted.` `Out-of-service port test failed.`	**Meaning:** The port failed the out-of-service test. **Action:** None

`Maintenance action submitted.`
`Out-of-service port test passed.`
`16 messages sent, 16 messages received`
	Meaning: The port passed the out-of-service test.
	
	Action: None

-end-

POST level commands

Use the POST level of the MAP to monitor and maintain the trunks that are associated with carriers.

Accessing the POST level

To access the POST level, enter the following from the CI level:

mapci;mtc;trks;carrier ↵

Next, post a circuit. Posting a circuit at the CARRIER level will cause the POST level MAP display to appear.

POST commands

The commands available at the POST MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

Command	Page
bsy	P-267
detail	P-271
disp	P-277
dispopt	P-285
loop	P-289
next	P-293
offl	P-295
post	P-301
quit	P-313
rts	P-317

-continued-

Command	Page
setaction	P-323
tst	P-325
-end-	

POST menu

The following figure shows the POST menu and status display. The insert with the hidden command is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


POST       CLASS  ML OS ALARM SYSB MANB UNEQ OFFL CBSY PBSY INSV
 0 Quit_   TRUNKS  0  0     8    8    2    0    0    0    0    5
 2 Post_   REMOTE  0  0     0    0    0    0    0    0    0    4
 3         TIMING  0  0     0    0    0    0    0    0    0    0
 4
 5 Loop_
 6 Tst_
 7 Bsy_
 8 RTS_
 9 Offl_
10 DispOpt_
11 Disp_
12 Next
13
14 Detail
15
16
17
18
```

Hidden command

Setaction

POST status codes

The following table describes the status codes for the POST status display.

Status codes POST menu status display Description
ALARM This column shows the quantity of carriers that are causing alarms.
CBSY This column shows the quantity of C-side busy carriers.
INSV This column shows the quantity of in-service carriers.
MANB This column shows the quantity of manually busy carriers.
ML This column shows the maintenance limit.
OFFL This column shows the quantity of offline carriers.
OS This column shows the out-of-service limit.
PBSY This column shows the quantity of P-side busy carriers.
REMOTE This row shows the status of trunks at the remote end of the carrier.
SYSB This column shows the quantity of system busy carriers.
TIMING This row shows the status of the timing links.
TRUNKS This row shows the number of local trunks.
UNEQ This column shows the quantity of unequipped carriers.

bsy

Function

Use the bsy command to manually place the specified carrier in the busy state.

bsy command parameters and variables

Command	Parameters and variables
bsy	*carrier* all

Parameters and variables	Description
all	This parameter specifies that all posted carriers are to be busied.
carrier	This variable, ranging from 0-4, specifies the carrier number.

Qualifications

None

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy all ↵	

Task: Busy all posted circuits.

Response:

```
POSTED BY CONDITION : <condition>
bsy all
WARNING: All remaining carriers in the POST set
will be busied
Please confirm (“YES” or “NO”) :
```

Explanation: The command string bsy all has been entered, where <condition> represents a circuit state. Enter no to prevent the command from being invoked. Enter yes to confirm that the command will be invoked.

bsy (continued)

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  4    0       24   21     9     0    7    0    0   25
REMOTE  3    2        4    0     0     0    0    0    3   30
TIMING  1    0        1    0     0     0    0    0    0    2
PROTLN  1    1        2    0     0     0    0    0    0    2
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   1  0  C  SLIP    ML     0    0.0    0    0   INSV
1  TIMING   HOST   3  0  C  SLIP    ML     0    0.0    0    0   INSV

POSTED BY CONDITION : <condition>
bsy all
WARNING: All remaining carriers in the POST set will be busied
Please confirm (“YES” or “NO”) :
```

Meaning: The command string bsy all has been entered, where <condition> represents a circuit state.

Action: Enter no to prevent the command from being invoked. Enter yes to confirm that the command will be invoked.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  4    0       24   21     9     0    7    0    0   25
REMOTE  3    2        4    0     0     0    0    0    3   30
TIMING  1    0        1    0     0     0    0    0    0    2
PROTLN  1    1        2    0     0     0    0    0    0    2
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TRUNKS   HOST   1  0  C  SLIP    ML     0    0.0    0    0   INSV
1  TIMING   HOST   3  0  C  SLIP    ML     0    0.0    0    0   INSV

POSTED BY CONDITION : <condition>
bsy <condition>
```

Meaning: The command string bsy <condition> all has been entered, where <condition> represents a circuit state.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  4    0       24   21     9     0    7    0    0   25
REMOTE  3    2        4    0     0     0    0    0    3   30
TIMING  1    0        1    0     0     0    0    0    0    2
PROTLN  1    1        2    0     0     0    0    0    0    2
   DS1
N  CLASS   SITE TMS CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TRUNKS   HOST   0  4  C           0      0   -6.3    0    0   MANB
1  TRUNKS   HOST   0  5  C           0      0   -6.3    0    0   OFFL
2  TRUNKS   HOST   0  6  C           0      0   -6.3    0    0   OFFL
3  TRUNKS   HOST   0  7  C           0      0   -6.3    0    0   OFFL
4  TRUNKS   HOST   0  8  C           0      0   -6.3    0    0   OFFL

POSTED BY CONDITION : <condition>
bsy <n>
OK.
```

Meaning: The command string bsy offl has been entered and the posted carriers in the specified state are displayed. The command string bsy <n>, where <n> represents a specified carrier number ranging from 0-4 and <condition> represents a circuit state, has been entered and the carrier is made busy.

Action: None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`POSTED BY CONDITION : <condition>`
`bsy all`
`WARNING: All remaining carriers in the POST set will be busied`
`Please confirm (“YES” or “NO”) :`
	Meaning: The command string bsy all has been entered, where <condition> represents a circuit state.
	
	Action: Enter no to prevent the command from being invoked. Enter yes to confirm that the command will be invoked.

-end-

detail

Function

Use the detail command to display information about a specified carrier.

detail command parameters and variables

Command	Parameters and variables	
detail	*carrier*	[trks rem]

Parameters and variables	Description
carrier	This variable, ranging from 0-4, specifies the carrier number. The number is displayed under the header N.
rem	This parameter displays information about the remote end of the carrier.
trks	This parameter displays information about the trunks of a carrier.

Qualifications

The detail command is qualified by the following exceptions, restrictions, and limitations:

- CARRIER maintenance counts are not reported on links associated with remote line concentrating modules (RLCMs).
- When unavailable seconds (UAS) does not apply to the peripheral module (PM) that is connected to the carrier, <nnn> is displayed as zero.

detail (continued)

Example

The following table provides an example of the detail command.

Example of the detail command

Example	Task, response, and explanation
detail*<carrier>* **trks** ↵	
	Task: Display the quantity of unavailable seconds since the last reset.

	Response:
	`CLASS . . . . . TOSC UAS`
	`TRUNKS. . . . . <nnn><nnn>`

	Explanation: The display shows the quantity of unavailable seconds since the last reset, where: • CLASS is the class of the trunk (protln, remote, timing, trunks) • <nnn> is 0-999 • TOSC is the Temporarily Out-Of-Service Count, which increments the quantity of times that a carrier is made system busy (SB state). When the count exceeds a threshold, the value of <nnn> is stopped at a number and the carrier is made SB until its problem is manually corrected. Under the header STATE of the POST status display, SYSB-T indicates that the carrier is temporarily system busy, while SYSB-P indicates that the carrier is permanently system busy until manually corrected. • TRUNKS is the class of the trunk (used for call processing) • UAS shows the unavailable seconds

detail (continued)

Responses

The following table provides explanations of the responses to the detail command.

Responses for the detail command

MAP output	Meaning and action

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0       17   18     0     2    0    6    0   31
REMOTE  0    0        2    0     0     0    0    0   13   16
TIMING  0    0        1    0     0     0    0    1    0    1
PROTLN  0    0        0    0     0     0    0    0    0    2
   DS1
N  CLASS  SITE   DCM   CK   D  ALRM  SLIP  FRME  BER  ES  SES  STATE
0  REMOTE  HOST     0    0   C  CARD    0     0   0.0  0    0 <condition>
1  REMOTE  HOST     0    1   C  CARD    0     0   0.0  0    0 <condition>

POSTED BY CONDITION : <condition>

CLASS    SITE    DCM    CKT    D    CARD    RLB    TOSC    UAS    EC
REMOTE   HOST      0      1    C     OUT    OFF       0      0    UNEQ
```

Meaning: The command string post <condition> has been entered and the number of posted carriers in the specified state is displayed, where <condition> represents a state. After this command was entered, the command string detail 1 was entered and the information is displayed.

Action: None

-continued-

detail (continued)

Responses for the detail command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0       17   18     0     2    0    6    0   31
REMOTE  0    0        2    0     0     0    0    0   13   16
TIMING  0    0        1    0     0     0    0    1    0    1
PROTLN  0    0        0    0     0     0    0    0    0    2
   DS1
N  CLASS  SITE   DCM   CK   D  ALRM  SLIP  FRME  BER  ES  SES  STATE
0  REMOTE  HOST     0    0   C  CARD    0     0   0.0  0    0 <condition>
1  REMOTE  HOST     0    1   C  CARD    0     0   0.0  0    0 <condition>

POSTED BY CONDITION : <condition>

CLASS    SITE   DCM   CKT   D   CARD    RLB    TOSC    UAS    EC
REMOTE   HOST     0     1   C    OUT    OFF       0      0    <condition>
Detail 0 trks
Specified port has no trunks
```

Meaning: The command string post <condition> has been entered and the number of posted carriers in the specified state is displayed, where <condition> represents a state. After this command was entered, the command string detail 0 trks was entered, but no trunks information was found because the specified port does not have any trunks.

Action: None

-continued-

detail (continued)

Responses for the detail command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0       17   18     0     2    0    6    0   31
REMOTE  0    0        2    0     0     0    0    0   13   16
TIMING  0    0        1    0     0     0    0    1    0    1
PROTLN  0    0        0    0     0     0    0    0    0    2
   DS1
N  CLASS  SITE   DCM   CK   D  ALRM  SLIP  FRME  BER  ES  SES  STATE
0  REMOTE  HOST     0    0   C  CARD    0     0   0.0  0    0 <condition>
1  REMOTE  HOST     0    1   C  CARD    0     0   0.0  0    0 <condition>

POSTED BY CONDITION : <condition>

CLASS   SITE  LM    CK   D  ALRM  SLIP   FRME  BER   ES  SES  STATE
REMOTE  ERLM    0-0   0   P          0       0   0.0  0    0  <condition>
```

Meaning: The command string post <condition> has been entered and the number of posted carriers in the specified state is displayed, where <condition> represents a state. After this command was entered, the command string detail 0 rem was entered and the remote information is displayed.

Action: None

-continued-

detail (end)

Responses for the detail command (continued)

MAP output	Meaning and action
CLASS . . . . . TOSC UAS TRUNKS. . . . . <nnn><nnn>	**Meaning:** The display shows the quantity of unavailable seconds since the last reset, where: ▪ CLASS is the class of the trunk (protln, remote, timing, trunks) ▪ <nnn> is 0-999 ▪ TOSC is the Temporarily Out-Of-Service Count, which increments the quantity of times that a carrier is made system busy (SB state). When the count exceeds a threshold, the value of <nnn> is halted and the carrier is made SB until its problem is manually corrected. Under the header STATE of the POST status display, SYSB-T indicates that the carrier is temporarily system busy, while SYSB-P indicates that the carrier is permanently system busy until manually corrected. ▪ TRUNKS is the class of the trunk (used for call processing) ▪ UAS shows the unavailable seconds **Action:** None

-end-

disp

Function

Use the disp command to list all carriers of a specified state.

disp command parameters and variables

Command	Parameters and variables
disp	alarm cbsy insv manb ml offl os pbsy sysb uneq

Parameters and variables	Description
alarm	This parameter displays the carriers with alarms.
cbsy	This parameter displays the C-side busy carriers.
insv	This parameter displays the in-service carriers.
manb	This parameter displays the manually busy carriers.
ml	This parameter displays the maintenance limit.
offl	This parameter displays the offline carriers.
os	This parameter displays the out-of-service carriers.
pbsy	This parameter displays the P-side busy carriers.
sysb	This parameter displays the system busy carriers.
uneq	This parameter displays the unequipped carriers.

Qualifications

None

disp (continued)

Examples

The following table provides an example of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp manb ↵	
	Task: Display the carriers in the manb state.
	Response: See the response table within this section for the complete response.
	Explanation: The command string disp manb has been entered and the number of carriers in the specified state is displayed.

Responses

The following table provides explanations of the responses to the disp command.

Responses for the disp command

MAP output	Meaning and action
CLASS ML OS ALARM SYSB MANB UNEQ OFFL CBSY PBSY INSV TRUNKS 9 0 59 46 6 0 0 0 0 34 REMOTE 0 0 7 4 0 0 0 0 10 87 TIMING 2 0 2 0 0 0 0 0 0 2 PROTLN 0 0 3 3 0 0 0 0 0 2 disp cbsy Empty set	**Meaning:** The command string disp cbsy has been entered, but there are no carriers in the specified state. **Action:** None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output	Meaning and action

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp offl
Empty set
```

Meaning: The command string disp offl has been entered, but there are no carriers in the specified state.

Action: None

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp os
Empty set
```

Meaning: The command string disp os has been entered, but there are no carriers in the specified state.

Action: None

```
CLASS   ML    OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46     6     0    0    0    0   34
REMOTE   0     0        7    4     0     0    0    0   10   87
TIMING   2     0        2    0     0     0    0    0    0    2
PROTLN   0     0        3    3     0     0    0    0    0    2

disp uneq
Empty set
```

Meaning: The command string disp uneq has been entered, but there are no carriers in the specified state.

Action: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
DCM   0   0    DCM   1   0    DTC   0   1    DTC   0   2
DTC   0   5    DTC   0   6    DTC   0   7    DTC   0   8
DTC   0   9    DTC   0  10    DTC   0  11    DTC   0  12
DTC   0  13    DTC   0  16    DTC   0  17    DTC   0  18
DTC   0  19    LTC   1   8    LTC   2   8    LTC   2  10
LTC   2  11    SMU   0   1    SMU   0   5    SMU   0   6
SMU   0   7    LTC   0   9    LTC   0  11    LTC   3   8
LTC   3   9    LTC   4  18    LTC   4  19    RCC   0   2
RCCI  0   5    RCCI  1   5    RCC2  0   6    RCC2  0   7
SMSR  0   5    SMSR  0   6    SMSR  0   8    SMSR  1  12
MORE...
```

At this point, pressing the enter key will cause more alarm data to appear in the MAP display:

```
SMSR  1 14    SMSR  1  16     SMSR  2   0    SMSR  2   2
SMSR  2  4    SMSR  2   6     SMSR  2   8    SMSR  3   0
SMSR  3  1    SMSR  3   2     SMSR  3   3    SMSR  3   4
SMSR  3  5    SMSR  3   6     SMSR  3   7    SMSR  3   8
SMSR  3  9    SMSR  3  10     SMSR  3  11    SMSR  3  12
SMSR  3 13    SMSR  3  14     SMSR  3  15    SMSR  3  16
SMSR  3 17    SMSR  3  18     SMSR  3  19    SMSR  3  20

DISPLAYED BY CONDITION : ALARM
```

Meaning: The command string disp alarm has been entered and the number of carriers in the specified state is displayed.

Action: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
DCM   0   0    DCM   1   0    DTC   0   2    DTC   0   5
DTC   0   5    DTC   0   9    DTC   0  12    LTC   0   9
RCCI  0   5   RCCI   1   5

DISPLAYED BY CONDITION : ML
```

Meaning: The command string disp ml has been entered and the number of carriers in the specified state is displayed.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
LTC   2  10    LTC   2  11    LTC   3   8    LTC   3   9
LTC   4  18    LTC   4  19

DISPLAYED BY CONDITION : MANB
```

Meaning: The command string disp manb has been entered and the number of carriers in the specified state is displayed.

Action: None

-continued-

disp (continued)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       23   20     0     2    2    5    0   27
REMOTE 12    0       17    2     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
TMS   1   7    TMS   1   9

DISPLAYED BY CONDITION : OFFL
```

Meaning: The command string disp offl has been entered and the number of carriers in the specified state is displayed.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  9    0       59   46     6     0    0    0    0   34
REMOTE  0    0        7    4     0     0    0    0   10   87
TIMING  2    0        2    0     0     0    0    0    0    2
PROTLN  0    0        3    3     0     0    0    0    0    2

PM   NO  CKT   PM   NO  CKT   PM   NO  CKT   PM   NO  CKT
RCC2  0   24   RCC2  0   25   RCC2  0   26   RCC2  0   27
RCC2  0   28   RCC2  0   29   SMSR  1   12   SMSR  1   14
SMSR  2    0   SMSR  2    2   SMSR  2    4   SMSR  2    6

DISPLAYED BY CONDITION : PBSY
```

Meaning: The command string disp pbsy has been entered and the number of carriers in the specified state is displayed.

Action: None

-continued-

disp (end)

Responses for the disp command (continued)

MAP output	Meaning and action

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   9     0       59   46      6      0    0    0    0   34
REMOTE   0     0        7    4      0      0    0    0   10   87
TIMING   2     0        2    0      0      0    0    0    0    2
PROTLN   0     0        3    3      0      0    0    0    0    2

DISPLAYED BY CONDITION : SYSB
```

Meaning: The command string disp sysb has been entered and the number of carriers in the specified state is displayed.

Action: None

-end-

dispopt

Function

Use the dispopt command to display the data table assignments of a carrier of the posted set.

dispopt command parameters and variables

Command	Parameters and variables
dispopt	*carrier*

Parameters and variables	Description
carrier	This variable, ranging from 0-4, specifies the carrier number.

Qualifications

The dispopt command is qualified by the following exceptions, restrictions, and limitations:

- For digital carrier modules (DCMs), the following values are also displayed:
  - BPVML
  - BPVOL
  - FRAMEML
  - FRAMEOL
  - SLIPML
  - SLIPOL

dispopt (continued)

Example

The following table provides an example of the dispopt command.

Example of the dispopt command

Example	Task, response, and explanation

dispopt 0 ↵
where
 	
0 specifies carrier 0
	Task: Display the data table assignments of carrier 0.
	
	Response:
	`NT6X50AA, VoiceLaw=MU_LAW, ff=SF, zlg=ZCS`
	`berb=BPV, dlk=NILDL, iat=N, action=N`
	`rtsml=255, rtsol=255, berml=1.0E-6, berol=1.0E-3`
	`frameml=17, frameol=511, slipml=4, slipol=255`
	`lcgast=250, lcgacl=1000, crgast=50, rcgacl=50`
	`aisst=150, aiscl=1000, es=864, ses=100`
	
	Explanation: The system displays the data table assignments for carrier 0.

Responses

The following table provides explanations of the responses to the dispopt command.

Responses for the dispopt command

MAP output	Meaning and action
`NT6X50 ff=SF, zlg=ZCS, ....`	**Meaning:** For DS-1 interface cards between the peripheral modules (PMs) and the carriers, the tuples of data table CARRMTC are displayed. The following are the valid DS-1 interface cards: ▪ NT6X50AA ▪ NT6X50AB ▪ NT6X85AA ▪ NT6X85AB **Action:** None

loop

Function

Use the loop command to cancel or establish a loop between a carrier of the posted set and its DS-1 interface card.

loop command parameters and variables

Command	Parameters and variables	
loop	*carrier*	l r c

Parameters and variables	Description
c	This parameter cancels the loop.
carrier	This variable, ranging from 0-4, specifies the carrier number. The number is displayed under the header N.
l	This parameter establishes the local loop, which is the the loop towards the near end of the carrier.
r	This parameter establishes the remote loop, which is the the loop towards the far end of the carrier.

Qualifications

The loop command is qualified by the following exceptions, restrictions, and limitations:

- The carrier must be made manual busy (ManB) before a loop is established.
- If a peripheral module (PM) is to be involved in a loop, the PM must be in service.
- Establishing a loop causes alarms to be displayed at the CARRIER and PM levels of the MAP. Because of this, the loop command should be used in coordination with both ends of the carrier.
- The loop command is not supported for NDS0 carriers.

loop (continued)

Example

The following table provides an example of the loop command.

Example of the loop command

Example	Task, response, and explanation
loop ***carrier*** **l** ↵	
	Task: Establish a local loop between a carrier of the posted set and its DS-1 interface card.
	Response: OK
	Explanation: The loop is established.

Responses

The following table provides explanations of the responses to the loop command.

Responses for the loop command

MAP output	Meaning and action
OK	
	Meaning: The loop is cancelled or established.
	Action: None
NO ACTION TAKEN	
	Meaning: The command failed because either the carrier was not placed in the ManB state or the PM was not in service, or both. This response also appears if the DS-1 interface card is not one of the following: ▪ NT6X50AA ▪ NT6X50AB ▪ NT6X85AA ▪ NT6X85AB
	Action: None

-continued-

loop (end)

Responses for the loop command (continued)

MAP output	Meaning and action
REQUEST FAILED	**Meaning:** The PM to which the carrier is connected is not available for looping. The PM may have been taken out of service before while the loop was being set. **Action:** None

-end-

next

Function

Use the next command to display information on the next carriers in the posted set.

next command parameters and variables

Command	Parameters and variables
next	There are no parameters or variables.

Qualifications

None

Examples

Not currently available

Responses

Not currently available

offl

Function

Use the offl command to place the specified carrier in the offline state.

offl command parameters and variables

Command	Parameters and variables
offl	all *carrier*

Parameters and variables	Description
all	This parameter specifies that all carriers are placed in the offline state.
carrier	This variable, ranging from 0-4, specifies the carrier number. The number is displayed under the header N.

Qualifications

None

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation	
offl 0 ↵		
	Task:	Place circuit 0 in the offline state.
	Response:	See the response table within this section for the complete response.
	Explanation:	The command string post insv has been entered and the number of posted carriers in the specified state is displayed, where insv represents the in service state. After this command was entered, the command string offl 0 was entered, but no action was taken because circuit 0 was in service.

offl (continued)

Responses

The following table provides explanations of the responses to the offl command.

Responses for the offl command

MAP output	Meaning and action

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  3    0       23   21     8     0    8    0    0   25
REMOTE  2    1        2    0     0     0    0    0    0   30
TIMING  0    0        0    0     0     0    0    0    0    1
PROTLN  0    1        1    0     0     0    0    0    0    2
   DS1
N  CLASS  SITE  LTC   CK   D  ALRM  SLIP  FRME  BER   ES  SES  STATE
0  TRUNKS  HOST   0    13  C   FRME    0   ML  <-7.  338   0   INSV
1  TRUNKS  HOST   0    14  C   FRME    0   ML  <-7.  148   0   INSV
2  TRUNKS  HOST   0    15  C   FRME    0   ML  <-7.  296   4   INSV

POSTED BY CONDITION : INSV

offl 0
Carrier LTC 0 CKT 13 is INSV.  No Action Taken.
```

Meaning: The command string post insv has been entered and the number of posted carriers in the specified state is displayed, where insv represents the in service state. After this command was entered, the command string offl 0 was entered, but no action was taken because circuit 0 was in service.

Action: None

-continued-

offl (continued)

Responses for the offl command (continued)

MAP output **Meaning and action**

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   3     0       23   21      8      0    8    0    0   25
REMOTE   2     1        2    0      0      0    0    0    0   30
TIMING   0     0        0    0      0      0    0    0    0    1
PROTLN   0     1        1    0      0      0    0    0    0    2
   DS1
N  CLASS   SITE   DCM    CK    D  ALRM   SLIP   FRME   BER    ES   SES   STATE
0  TRUNKS  HOST    0       2   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    0       3   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    0       4   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    1       3   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    2       2   C   LAR      0      0  0.0     0     0   SYSB-T

POSTED BY CONDITION : SYSB

offl 1
Carrier DCM 0 CKT 3 is SYSB.  No Action Taken.
```

Meaning: The command string post sysb has been entered and the number of posted carriers in the specified state is displayed, where sysb represents the system busy state. After this command was entered, the command string offl 1 was entered, but no action was taken because circuit 1 was system busy.

Action: None

-continued-

offl (continued)

Responses for the offl command (continued)

MAP output **Meaning and action**

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   3     0       23   21      8      0    8    0    0   25
REMOTE   2     1        2    0      0      0    0    0    0   30
TIMING   0     0        0    0      0      0    0    0    0    1
PROTLN   0     1        1    0      0      0    0    0    0    2
   DS1
N  CLASS   SITE   DCM    CK    D  ALRM   SLIP   FRME   BER    ES   SES   STATE
0  TRUNKS  HOST    0       2   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    0       3   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    0       4   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    1       3   C   LAR      0      0  0.0     0     0   SYSB-T
0  TRUNKS  HOST    2       2   C   LAR      0      0  0.0     0     0   SYSB-T

POSTED BY CONDITION : SYSB

offl 4
Carrier DCM 2 CKT 3 is SYSB.  No Action Taken.
```

Meaning: The command string post sysb has been entered and the number of posted carriers in the specified state is displayed, where sysb represents the system busy state. After this command was entered, the command string offl 4 was entered, but no action was taken because circuit 4 was system busy.

Action: None

-continued-

Responses for the offl command (continued)

MAP output **Meaning and action**

```
CLASS   ML    OS    ALARM SYSB   MANB   UNEQ OFFL CBSY PBSY INSV
TRUNKS   3     0       23   21      8      0    8    0    0   25
REMOTE   2     1        2    0      0      0    0    0    0   30
TIMING   0     0        0    0      0      0    0    0    0    1
PROTLN   0     1        1    0      0      0    0    0    0    2
   DS1
N  CLASS   SITE  LTC    CK    D  ALRM  SLIP  FRME  BER   ES  SES  STATE
0  TRUNKS  HOST   0     13    C   FRME    0    ML  <-7.  338   0   INSV
1  TRUNKS  HOST   0     14    C   FRME    0    ML  <-7.  148   0   INSV
2  TRUNKS  HOST   0     15    C   FRME    0    ML  <-7.  296   4   INSV

POSTED BY CONDITION : INSV

offl all
Carrier LTC 0 CKT 13 is INSV.  No Action Taken.
Carrier LTC 0 CKT 14 is INSV.  No Action Taken.
Carrier LTC 0 CKT 15 is INSV.  No Action Taken.
Carrier SMS 0 CKT 1 is INSV.  No Action Taken.
Carrier SMS 0 CKT 10 is INSV.  No Action Taken.
Requests rejected
```

Meaning: The command string post insv has been entered and the number of posted carriers in the specified state is displayed, where insv represents the in service state. After this command was entered, the command string offl all was entered, but no action was taken because all the circuits were in service.

Action: None

-end-

post

Function

Use the post command to select specified carriers for maintenance action and display information for up to five carriers.

post command parameters and variables

Command	Parameters and variables
post	trunks remote timing protline ds0lnk ds1 d30 m20 ttc sonet nds0 cbsy pbsy insv manb sysb uneq offl alarm os ml ec *pm_type* *pm_no* [*carrier* [trks | rem | c] | *pcm_type*]

Parameters and variables	Description
alarm	This parameter displays information on carriers in alarm conditions.

-continued-

post (continued)

post command parameters and variables (continued)

Parameters and variables	Description
c	This parameter posts remote cluster controller (RCC) C-side carriers.
carrier	This variable, ranging from 0-19, specifies the carrier number.
cbsy	This parameter displays carriers in the C-side busy state.
d30	This parameter displays information about DMS-100 circuits using the PCM-30 format (D30).
ds0lnk	This parameter displays (Not currently available).
ds1	This parameter displays (Not currently available).
ec	This parameter displays (Not currently available).
insv	This parameter displays carriers in the in-service state.
m20	This parameter displays (Not currently available).
manb	This parameter displays carriers in the manual busy state.
ml	This parameter displays carriers which exceed the maintenance limit.
nds0	This parameter displays on NDS0 carriers.
offl	This parameter displays carriers in the offline state.
os	This parameter displays carriers which exceed the out-of-service limit.
pbsy	This parameter displays carriers in the P-side busy state.
pcm_type	This variable specified the type of pulse code modulation (PCM) used by the carrier and is specified where multiple PCM types are datafilled on the same peripheral module (PM). The types of pulse code modulation are: ▪ D30 ▪ DS0 ▪ DS1 ▪ M20

-continued-

post (continued)

post command parameters and variables (continued)

Parameters and variables	Description
pm_no	This variable, ranging from 0-511, specifies the discrimination number of the PM.
pm_type	This variable specifies one of the following PM types: ▪ adct-Not currently available ▪ algc-Not currently available ▪ arcc-Not currently available ▪ dca-Not currently available ▪ dcm-digital carrier module ▪ dct-Not currently available ▪ dfi-direct fiber interface ▪ dtc-digital trunk controller ▪ dtci-Integrated Services Digital Network (ISDN) digital trunk controller ▪ hsi2-Not currently available ▪ iac-ISDN access controller ▪ icp-Not currently available ▪ idtc-international digital trunk controller ▪ ilgc-international line group controller ▪ iltc-international line trunk controller ▪ itac-Not currently available ▪ lgc-line group controller ▪ pdtc-digital trunk controller for PCM-30 ▪ plgc-line group controller for PCM-30 ▪ prcc-Not currently available ▪ rcc-remote cluster controller ▪ rcc2-remote cluster controller 2 ▪ rcci-ISDN remote cluster controller

-continued-

post (continued)

post command parameters and variables (continued)

Parameters and variables	Description
	▪ rco2-Not currently available ▪ rmsc-Not currently available ▪ sma-Not currently available ▪ smr-subscriber module remote ▪ sms-subscriber module SCM-100 ▪ smsr-subscriber module remote ▪ smu-subscriber module urban ▪ srcc-Not currently available ▪ tac-Not currently available ▪ tdtc-Not currently available ▪ tlgc-Not currently available ▪ tltc-Not currently available ▪ tms-TOPS message switch ▪ trcc-Not currently available
protline	This parameter displays information on protection lines.
rem	This parameter displays information about the remote end of the carrier.
remote	This parameter displays information on the remote end of the carrier.
sonet	This parameter displays information about the Synchronous Optical Network (SONET).
sysb	This parameter displays carriers in the system busy state.
timing	This parameter displays information on timing links.
trks	This parameter displays information on trunks for the specified PM.
trunks	This parameter displays carrier-trunk information.

-continued-

post command parameters and variables (continued)	
Parameters and variables	**Description**
ttc	This parameter displays information about trunk test centers (TTC).
uneq	This parameter displays carriers in the unequipped state.
-end-	

Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations:

- For PMs which do not support ES or SES, the data field displays a 0 (zero).
- The display format depends on both the type of carriers being posted and on the condition selected.
- Generic classification of a carrier (trunks, remote, timing, protline) appears below the header STATE.
- When an SMS is posted at the CARRIER level, the command protsw is added to the menu.
- If all carriers on the PM are posted using the command string post plgc 0, the posted sets are displayed in groups by PCM type, the number of sets equal to the number of different PCM types datafilled on the PM. Use the next command to display the other PCM types.

Example

The following table provides an example of the post command.

Example of the post command		
Example	**Task, response, and explanation**	
post alarm ↵		
	Task:	Enter the command string post alarm and display the posted carriers in the specified state.
	Response:	See the response table within this section for the complete response.
	Explanation:	The command string post alarm has been entered and the posted carriers in the specified state are displayed.

post (continued)

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action
N CLASS SITE pm CKT D ALRM SLIP FRME BER ES SES STATE	**Meaning:** The system displays information for the set of posted carriers, where: • ALRM is one of the trunk alarms • BER is the bit error ratio (ber) • CKT is the circuit number on the PM to which the carrier is connected • CLASS is one of the following: protln, remote, timing, trunks • D specifies the direction of the posted carrier, either C-side or P-side • ES is the quantity of error seconds • FRME is the quantity of times the carrier has exceeded the 24-hour threshold for framing errors • N is the number of the carrier • pm is the type of PM to which the carrier is connected • SES is the quantity of severe error seconds • SITE host, which indicates a local carrier connected to the host, or rem, which indicates a remote carrier connected to a PM • SLIP is the quantity of times the carrier has exceeded the 24-hour threshold for slipping errors • STATE is one of the states listed in the CARRIER level status codes table at the beginning of this section **Action:** None

-continued-

post (continued)

Responses for the post command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV
2  TRUNKS   HOST   2  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : ALARM
```

Meaning: The command string post alarm has been entered and the posted carriers in the specified state are displayed

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   3  0  C          0      0    0.0    0    0   CBSY
1  TRUNKS   HOST   3  1  C          0      0    0.0    0    0   CBSY
2  TRUNKS   HOST   3  2  C          0      0    0.0    0    0   CBSY
3  TRUNKS   HOST   3  3  C          0      0    0.0    0    0   CBSY
4  TRUNKS   HOST   3  4  C          0      0    0.0    0    0   CBSY

POSTED BY CONDITION : CBSY
```

Meaning: The command string post cbsy has been entered and the posted carriers in the specified state are displayed.

Action: None

-continued-

post (continued)

Responses for the post command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE    PM    CKT   D   ALARM   SLIP   STATE   TLINK  MODE
0  TIMING   HOST   DCM  1   0   C   SLIP     ML    INSV    0  <condition>
1  TRUNKS   HOST   DCM  3   0   C              0   CBSY    1  <condition>

POSTED BY CONDITION : <condition>
```

Meaning: The command string post <condition>, where <condition> represents a specified condition, has been entered, but there are no carriers in the specified state.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   0  2  C           0      0    0.0    0    0   INSV
2  TRUNKS   HOST   0  3  C           0      0    0.0    0    0   INSV
3  TRUNKS   HOST   0  4  C           0      0    0.0    0    0   INSV
4  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : DS1
```

Meaning: The command string post ds1 has been entered and the number of posted carriers in the specified state is displayed.

Action: None

-continued-

post (continued)

Responses for the post command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   1  0  C  SLIP   ML      0    0.0    0    0   INSV
2  TRUNKS   HOST   2  0  C  SLIP   ML      0    0.0    0    0   INSV

POSTED BY CONDITION : ML
```

Meaning: The command string post ml has been entered and the number of posted carriers in the specified state is displayed.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 14    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE    PM    CKT   D   ALARM   SLIP   STATE   TLINK  MODE
0  TIMING   HOST   DCM  1   0   C   SLIP     ML    INSV    0  STANDBY
1  TRUNKS   HOST   DCM  3   0   C              0   CBSY    1  STANDBY

POSTED BY CONDITION : TIMING
```

Meaning: The command string post timing has been entered and the number of posted carriers in the specified state is displayed.

Action: None

-continued-

post (end)

Responses for the post command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
N  CLASS   SITE DCM CK  D  ALRM  SLIP   FRME  BER     ES  SES   STATE
0  TIMING   HOST   0  0  C  SLIP   ML      0    0.0    0    0   INSV
1  TRUNKS   HOST   0  2  C          0      0    0.0    0    0   INSV
2  TRUNKS   HOST   0  3  C          0      0    0.0    0    0   INSV
3  TRUNKS   HOST   0  4  C          0      0    0.0    0    0   INSV
4  TRUNKS   HOST   1  1  C          0      0    0.0    0    0   INSV

POSTED BY CONDITION : TRUNKS
```

Meaning: The command string post trunks has been entered and the number of posted carriers in the specified state is displayed.

Action: None

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  5    0       22   19     0     2    0    5    0   28
REMOTE 12    0       19    4     0     0    0    7    3   16
TIMING  1    0        1    0     0     0    0    1    0    1
   DS1
NO CLASS   SITE   DCM   CK   D   ALRM   SLIP  FRME  BER  ES  SES   STATE
0  TIMING   HOST     0    1   0            0     0   0.0  0    0    UNEQ
1  TRUNKS   HOST     2    1   0            0     0   0.0  0    0    UNEQ

POSTED BY CONDITION : UNEQ
```

Meaning: The command string post uneq has been entered and the number of posted carriers in the specified state is displayed.

Action: None

-end-

protsw

Function

Use the protsw command to control the protection switching for a subscriber module SCM-100 (SMS).

protsw command parameters and variables

Command	Parameters and variables
protsw	[opr *carrier* rls ena dis]

Parameters and variables	Description
ena	This parameter enables protection switching on the specified normline.
carrier	This variable is the MAP position of the posted carrier.
dis	This parameter disables protection switching on the specified normline.
ena	This parameter enables protection switching on the specified normline.
opr	This parameter operates the specified normline's protection line.
rls	This parameter releases the specified normline's protection line.

Qualifications

None

Examples

Not currently available

Responses

Not currently available

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any MAP level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mapci, or mtc.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the POST level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The POST level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the POST level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The POST level has returned to the MAPCI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the display of the POST level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the POST level menu with a menu that is two or more MAP levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-end-

Function

Use the rts command to return to service the specified carrier or carriers.

rts command parameters and variables

Command	Parameters and variables
rts	*carrier* all [force]

Parameters and variables	Description
all	This parameter specifies that all posted carriers are to be returned to service.
carrier	This variable, ranging from 0-4, specifies the carrier number. The number is displayed under the header N.
force	This parameter specifies that the system skips the tests before returning the carrier or carriers to service.

Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- The all parameter, with the force option added, is useful for returning looped back carriers to service.

CAUTION
Faulty carriers could be put in service when using the force parameter.
The force option skips the tests and faulty carriers could be put in service.

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation	
rts all ↵		
	Task:	Return all carriers to service.
	Response:	See the response table within this section for the complete response.
	Explanation:	The command string disp insv has been entered and the number of posted carriers in the specified state is displayed, where insv represents the insv state. After this command was entered, the command string rts all force was entered, but no action was taken because all the carriers are insv.

rts (continued)

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0        0    0     0     0   26    0    0    6
   DS1
N  CLASS  SITE  DTC   CK   D  ALRM  SLIP  FRME  BER    ES  SES  STATE
0  TRUNKS  HOST    0     0  C           0    0  -6.3    0    0  OFFL
1  TRUNKS  HOST    0     1  C           0    0  -6.3    0    0  OFFL
2  TRUNKS  HOST    0     2  C           0    0  -6.3    0    0  OFFL
3  TRUNKS  HOST    0     3  C           0    0  -6.3    0    0  OFFL
4  TRUNKS  HOST    0     6  C           0    0  -6.3    0    0  OFFL

POSTED BY CONDITION : OFFL

rts 0
Carrier DTC 0 CKT 0 is OFFL.  No Action Taken.
```

Meaning: The command string disp offl has been entered and the number of posted carriers in the specified state is displayed, where offl represents the offline state. After this command was entered, the command string rts 0 was entered, but no action was taken because circuit 0 was offline.

Action: None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0        0    0     0     0   26    0    0    6
   DS1
N  CLASS  SITE  DTC   CK   D  ALRM  SLIP  FRME  BER    ES  SES  STATE
0  TRUNKS  HOST    0     0  C           0    0  -6.3    0    0  OFFL
1  TRUNKS  HOST    0     1  C           0    0  -6.3    0    0  OFFL
2  TRUNKS  HOST    0     2  C           0    0  -6.3    0    0  OFFL
3  TRUNKS  HOST    0     3  C           0    0  -6.3    0    0  OFFL
4  TRUNKS  HOST    0     6  C           0    0  -6.3    0    0  OFFL

POSTED BY CONDITION : OFFL

rts 4 force
Carrier DTC 0 CKT 6 is OFFL.  No Action Taken.
```

Meaning: The command string disp offl has been entered and the number of posted carriers in the specified state is displayed, where offl represents the offline state. After this command was entered, the command string rts 4 force was entered, but no action was taken because circuit 0 was offline.

Action: None

-continued-

Responses for the rts command (continued)

MAP output **Meaning and action**

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY INSV
TRUNKS  0    0        0    0     0     0   26    0    0    6
   DS1
N  CLASS  SITE  DTC    CK  D  ALRM  SLIP  FRME  BER    ES  SES  STATE
0  TRUNKS  HOST    0     4  C           0    0  <-7.    0    0  INSV
1  TRUNKS  HOST    0     5  C           0    0  <-7.    0    0  INSV
2  TRUNKS  HOST    0     8  C           0    0  <-7.    0    0  INSV
3  TRUNKS  HOST    0     9  C           0    0  <-7.    0    0  INSV
4  TRUNKS  HOST    0    10  C           0    0  <-7.    0    0  INSV

POSTED BY CONDITION : INSV

rts all
Carrier DTC 0 CKT 4 is INSV.  No Action Taken.
Carrier DTC 0 CKT 5 is INSV.  No Action Taken.
Carrier DTC 0 CKT 8 is INSV.  No Action Taken.
Carrier DTC 0 CKT 9 is INSV.  No Action Taken.
Carrier DTC 0 CKT 10 is INSV.  No Action Taken.
Carrier DTC 0 CKT 11 is INSV.  No Action Taken.
Requests rejected.
```

Meaning: The command string disp insv has been entered and the number of posted carriers in the specified state is displayed, where insv represents the insv state. After this command was entered, the command string rts all force was entered, but no action was taken because all the carriers are insv.

Action: None

-end-

setaction

Function

Use the setaction command to specify whether or not to remove carriers when out of service (OS) limits are reached..

setaction command parameters and variables

Command	Parameters and variables
setaction	all *carrier* [query remove r notremove n]

Parameters and variables	Description
all	This parameter specifies that all carriers are removed when OS limits are reached.post
carrier	This variable, ranging from 0-4, specifies the carrier number. The number is displayed under the header N.
n	This parameter specifies that carriers are not removed when OS limits are reached.
notremove	This parameter specifies that carriers are not removed when OS limits are reached.
query	Not currently available
r	This parameter specifies that carriers are removed when OS limits are reached.
remove	This parameter specifies that carriers are removed when OS limits are reached.

Qualification

This command does not apply to the bit error ratio (BER).

Examples

Not currently available

Responses

Not currently available

tst

Function

Use the tst command to tests the circuit in the control position.

tst command parameters and variables

Command	Parameters and variables
tst	*carrier*

Parameters and variables	Description
carrier	This variable, ranging from 0-4, specifies the carrier number.

Qualifications

None

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation
tst ↵	
	Task: Test the circuit in the control position.
	Response: See the response table within this section for the complete response.
	Explanation: The command string post offl has been entered and the number of posted carriers in the specified state is displayed, where offl represents the offl state. After this command was entered, the command string test 0 was entered, but no action was taken because the carrier is not manual busy (ManB).

tst (end)

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action

```
CLASS  ML   OS    ALARM SYSB  MANB  UNEQ OFFL CBSY PBSY OFFL
TRUNKS  0    0        0    0     0     0   26    0    0    6
   DS1
N  CLASS  SITE  DTC    CK  D  ALRM  SLIP  FRME  BER    ES  SES  STATE
0  TRUNKS  HOST    0     0  C           0    0  -6.3    0    0  OFFL
1  TRUNKS  HOST    0     1  C           0    0  -6.3    0    0  OFFL
2  TRUNKS  HOST    0     2  C           0    0  -6.3    0    0  OFFL
3  TRUNKS  HOST    0     3  C           0    0  -6.3    0    0  OFFL
4  TRUNKS  HOST    0     6  C           0    0  -6.3    0    0  OFFL

POSTED BY CONDITION : OFFL

tst 0
Carrier is not MAN-BUSY : request not executed
Carrier DTC 0 CKT 0 is OFFL. No Action Taken.
```

Meaning: The command string post offl has been entered and the number of posted carriers in the specified state is displayed, where offl represents the offl state. After this command was entered, the command string test 0 was entered, but no action was taken because the carrier is not manual busy (ManB).

Action: None

POSTDEV level commands

Use the POSTDEV level of the MAP to maintain and administer the posted file processor (FP) devices..

Accessing the POSTDEV level

To access the POSTDEV level, enter the following from the CI level:

mapci;mtc;pm;post fp ***fp_no*** ↵

from this FP level enter the following:

devices↵

and from this DEVICES level enter the following:

postdev ***scsi_bus_no device_no***↵

or

postdev ***scsi_bus_no*** **all**↵

or

postdev type ***device_no***↵

POSTDEV commands

The commands available at the POSTDEV MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

POSTDEV commands

Command	Page
bsy	P-329
nextdev	P-333
offl	P-335
postdev	P-339
qrydev	P-341

-continued-

POSTDEV commands (continued)	
Command	**Page**
quit	P-345
rts	P-349
tst	P-353
-end-	

POSTDEV menu

The following figure shows the POSTDEV menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
 CM     MS     IOD    Net    PM    CCS    LNS    Trks   Ext    APPL
CBsyMC ManB    AmA  B   .    1LIM    .      .      .   1 Maj     .
  M     M      *C*            *C*                        M

  PostDEV                        SysB  ManB  OffL  CBsy  ISTb  InSv
   0 Quit             PM           1     4    26     0     7     5
   2 Post DEV_        FP           0     1     6     -     3     0
   3
   4              FP 0:    FP0_R256   Plane  Devices
   5              ISTb                PrtTbl
   6 Tst
   7 Bsy                    CTRL0      CTRL1          DEVICE
   8 RTS          DAMB        .                     0 1 2 3 4 5
   9 Offl         SCSI 0      .   (EN)   .   (DIS)    M _ _ _ _ _
  10              SCSI 1      .   (EN)   .   (DIS)    M _ _ _ _ _
  11
  12              DK00    Type    DISK      SCSI bus    0 Device  0
  13              Shelf 3 Status ManB     Shadow set  Use SHADOWUT
  14 QueryDEV     Quad  0 Drive   Spinning  User        SYSTEM
  15
  16
  17
  18
```

bsy

Function

Use the bsy command to manually busy a posted file processor (FP) device.

bsy command parameters and variables

Command	Parameters and variables
bsy	*prompt* noprompt [*wait* nowait] [*reply* noreply]

Parameters and variables	Description
noprompt	This parameter suppresses the display of all prompts. The default response to all prompts is yes, which corresponds to the *wait* and *reply* default conditions.
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
prompt	This default parameter indicates that the system will prompt the user if the noprompt parameter is not entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

Do not use the BSY command to manually busy disk drives that are members of a shadow set. Use the stopshadow command of the shadow utility (SHADOWUT) to manually busy disk drives that are members of a shadow set. Failure to use the stopshadow command of the shadow utility to manually busy disk drives that are members of a shadow set will severely degrade application performance. The MAP display for the POSTDEV level on page P-328 shows an example of a disk drive (DK00) that is a member of a shadow set.

bsy (continued)

Example

The following table provides examples of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy ↵	
	Task: Busy the posted device.
	Response: `Command passed.`
	Explanation: Device has been made busy.

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`Command failed. The PM is not responding.`	
	Meaning: The BSY command failed because either FP maintenance system did not receive the request or because it received the request and did not respond to it.
	Action: Contact the personnel responsible for the next level of support.
`Request has been submitted.`	
	Meaning: The FP has just received the request.
	Action: None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action

`Command rejected. The device is already busy.`
 	
or
 	
`Command rejected. Maintenance already in progress.`
 	
or
 	
`Command rejected. The device is already manually busy.`
 	
or
 	
`Command rejected. The device is under test.`
 	
or
 	
`Command rejected. Device is not available. Check SCSI on enabled CTRL.`
	Meaning: The bsy command is rejected due to the indicated reason.
	
	Action: None

`Command passed.`	**Meaning:** Device has been successfully mad busy. **Action:** None

-end-

nextdev

Function

Use the nextdev command to display the next device in the posted set.

nextdev command parameters and variables

Command	Parameters and variables
nextdev	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the nextdev command.

Example of the nextdev command

Example	Task, response, and explanation
nextdev ↵	

Task: Display the next device in the posted set

Response:

```
  FP 0:     FP0_R256      Plane   Devices
  ISTb                    PrtTbl   2ManB

             CTRL0          CTRL1              DEVICE
   DABM       .              .              0 1 2 3 4 5
   SCSI 0     .   (EN)       .   (DIS)      . M - - - -
   SCSI 1     .   (EN)       .   (DIS)      . . - - - -

   DK01      Type    DISK         SCSI bus     0  Device   1
   Shelf  3  Status  ManB         Shadow set  Use SHADOWUT
   Quad   0  Drive   Spinning     User        SYSTEM
```

Explanation: Disk drive DK01 is the next device in the posted set.

Responses

None

offl

Function

Use the offl command to offline the posted file processor (FP) device.

offl command parameters and variables

Command	Parameters and variables
offl	[*wait* | nowait] [*reply* | noreply]

Parameters and variables	Description
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

The posted device must be manually busied before the OFFL command is used.

offl (continued)

Example

The following table provides an example of the offl command.

Examples of the offl command

Example	Task, response, and explanation
offl ↵	
	Task: Place the posted device in the offline mode.
	Response: `FP 1 Offline Dev 0 0`
	Explanation: Device 0 on SCSI bus 0 in FP1 is busy.

Responses

The following table provides explanations of the responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
`Command rejected.  The device is already offline.`	
	Meaning: The OFFL command was rejected because the posted device is already offline.
	Action: None
`Command failed.  The PM is not responding.`	
	Meaning: The OFFL command failed because either the FP maintenance system did not receive the request or did not respond to it.
	Action: Contact the personnel responsible for the next level of support.
`Command rejected. The device must be manually busy first.`	
	Meaning: The OFFL command was rejected because the posted device was not manually busied first.
	Action: Manually busy the posted device using the BSY command then offline the device using the OFFL command.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`Command rejected. Device is not available. Check SCSI on enabled CTRL.`	**Meaning:** The OFFL command was rejected because the the device is not available to the FP maintenance system. **Action:** Check the status of the SCSI bus connected to the enabled (EN) controller or look for alarms under the PM header of the MAP display.

-end-

postdev

Function

Use the postdev command to post a file processor (FP) device.

postdev command parameters and variables

Command	Parameters and variables	
postdev	*scsi_bus_no*	*device_no*

Parameters and variables	Description
device_no	This variable is the number of the device and has a range of 0-5.
scsi_bus_no	This variable is the number of the SCSI bus the device connected to and has a range of 0-1.

Qualifications

None

Examples

The following table provides an example of the postdev command.

Examples of the postdev command

Example	Task, response, and explanation
postdev 0 1 ↵ *where* 0 is the number of the SCSI bus 1 is the number of the device.	**Task:** Post device 1 of SCSI bus 0 **Response:** `FP 1 PostDEV 0 1` **Explanation:** Device 1 of SCSI bus 0 is posted.

postdev (end)

Response

The following table provides an explanation of the response to the postdev command.

Response for the postdev command

MAP output	Meaning and action
`Command failed. The PM is not responding.`	**Meaning:** The POSTDEV command failed because the FP maintenance did not receive the request or because it did not respond to it. **Action:** Contact the personnel responsible for the next level of support.

qrydev

Function

Use the qrydev command to display a variety of information about the posted device.

qrydev command parameters and variables

Command	Parameters and variables
qrydev	users [*wait* | nowait] flt cntrs [*noclear* | clear]

Parameters and variables	Description
clear	This parameter clears the counters of the posted device.
cntrs	This parameter queries the counters of the posted device. This parameter can only be used when the clear option is used.
flt	This parameter queries the posted device for fault information.
noclear	This default parameter indicates that the clear parameter has not been entered and the counters of the posted device will not be cleared.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
users	This parameter queries all users of the posted device.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

qrydev (continued)

Example

The following table provides an example of the qrydev command.

Examples of the qrydev command

Example	Task, response, and explanation
qrydev flt ↵	

	Task: Obtain fault information about the posted device.
	
	Response:
	`Dev Name SCSI Dev Type Quad Shelf Slot Status`
	`-------- ---- --- ---- ---- ----- ---- ------`
	`DK00 0 0 dk 0 2 8 InSv`
	`No fault bit was set for this device`
	
	Explanation: No fault was found with the posted device.

Responses

The following table provides explanations of the responses to the qrydev command.

Responses for the qrydev command

MAP output	Meaning and action
`Command failed. The PM is not responding.`	
	Meaning: The QRYDEV command failed because either the FP maintenance system did not receive the request of it did not respond to it. **Action:** Contact the personnel responsible for the next level of maintenance.
`Command rejected. The device is under test.`	
	Meaning: The QRYDEV command was rejected because the device was already under test. **Action:** Wait for the test to finish, then enter the QRYDEV command.

-continued-

qrydev (end)

Responses for the qrydev command (continued)

MAP output	Meaning and action
`Command rejected. Maintenance already in progress.`	**Meaning:** The QRYDEV command was rejected because a maintenance process was already in progress. **Action:** Wait for the maintenance process to finish, then enter the QRYDEV command.

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the POSTDEV level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The POSTDEV level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the POSTDEV level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The POSTDEV level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the POSTDEV level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the POSTDEV level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return a posted file processor (FP) device to service.

rts command parameters and variables

Command	Parameters and variables
rts	[*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

rts (continued)

Example

The following table provides an example of the rts command.

Examples of the rts command

Example	Task, response, and explanation
rts ↵	
	Task: Return the posted FP device to service.
	Response: `FP 1 RTS DEV 0 0`
	Explanation: Device 0 on SCSI bus 0 in FP1 was returned to service.

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`Command failed. The PM is not responding.`	
	Meaning: The RTS command failed because either the FP maintenance system did not receive the request or it did not respond to it.
	Action: Contact the personnel responsible for the next level of maintenance.
`Command rejected. The device is under test.`	
	Meaning: The RTS command was rejected because the posted device was under test.
	Action: Wait for the test to finish, then enter the RTS command.
`Command rejected. The device must be manually busy first.`	
	Meaning: The RTS command was rejected because the posted device was not manually busy.
	Action: Busy the device using the BSY command, then enter the RTS command.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`Command rejected. Maintenance already in progress.`	**Meaning:** The RTS command was rejected because a maintenance process was already in progress **Action:** Wait for the maintenance process to finish, then enter the RTS command.

-end-

tst

Function

Use the tst command to test a posted file processor (FP) device.

tst command parameters and variables

Command	Parameters and variables
tst	[*wait* / nowait] [*reply* / noreply]

Parameters and variables	Description
noreply	This parameter suppresses all MAP responses resulting from the execution of the command.
nowait	This parameter returns the MAP prompt immediately after the command is entered so that other commands may be entered.
reply	This default parameter indicates map responses will result from execution of the command when noreply parameter is not entered.
wait	This default parameter indicates the system waits until the command has completed before a MAP prompt appears allowing other command to be entered when the nowait parameter is not entered.

Qualifications

None

tst (end)

Example

The following table provides an example of the tst command.

Examples of the tst command

Example	Task, response, and explanation	
	Task:	Test the posted FP device.
	Response:	`FP 0 Test DEV 0 0: Command passed.`
	Explanation:	The posted device passed the test.

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`Command failed. The PM is not responding.`	
	Meaning: The command failed because FP maintenance either did not receive the request or it did not respond to it.
	Action: Contact the personnel responsible for the next level of support.
`Command rejected. Maintenance already in progress.`	
	Meaning: The TST command has been rejected because another maintenance process is already in progress.
	Action: Wait for the maintenance process to finish, then enter the TST command.
`Command rejected.  The device is already under test.`	
	Meaning: The TST command has been rejected because the device is being tested already.
	Action: None

PRADCH level commands

Use the PRADCH level of the MAP to maintain Integrated Services Digital Network (ISDN) digital trunk controller (DTCI) B-channels and D-channels. B-channels are 64-kb/s digital bidirectional channels used to carry circuit-switched voice, data, or packet-switched data. D-channels are channels used to carry call control messages between a terminal on an ISDN interface and the exchange termination.

Accessing the PRADCH level

To access the PRADCH level, enter the following from the CI level:

mapci;mtc;trks;ttp;pradch ↵

PRADCH commands

The commands available at the PRADCH MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

Command	Page
bsy	P-357
connect	P-361
cont	P-375
equip	P-377
hold	P-395
loopbk	P-397
next	P-401
post	P-405
quit	P-409
rts	P-413
swact	P-417

PRADCH menu

The following figure shows the PRADCH menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


PRADCH
 0 Quit     POST          DELQ        BUSYQ   DIG
 2 Post_    TTP 6-005
 3          CKT TYPE      PM NO.  COM LANG    STA S R DOT TE
 4 Equip_   2W IS IS DTCI 10 0 19 PRACLLI0 D1 INS
 5 Connect_
 6
 7 BSY
 8 RTS
 9 SWACT
10
11 HOLD
12 Next
13
14
15 CONT
16 LOOPBK
17
18
```

bsy

Function

Use the bsy command to remove the posted circuit from service by changing the state to the specified busy state.

bsy command parameters and variables

Command	Parameters and variables	
bsy	mb inb	[*both* d1 d2 all]

Parameters and variables	Description
all	This parameter removes all the channels in the posted set from service. For circuits that were previously posted by group (by the command string post g), all circuits in the group are made busy.
both	This represents a system default. When only the channel state parameter mb or inb is entered with the command, the system automatically places both channels in the specified busy state.
d1	This parameter indicates the primary D-channel.
d2	This parameter indicates the secondary D-channel.
inb	This parameter places the channel in the installation busy state.
mb	This parameter places the channel in the manual busy (ManB) state. The B-channel indicates ManB, the D-channel indicates ManB.

Qualifications

The bsy command is qualified by the following exceptions, restrictions, and limitations:

- Busying a circuit makes it unavailable for call processing. Circuits can be busied either manually when maintenance personnel put the circuit into the ManB state or automatically when the system performs the same action.
- Manual busy has priority to override any out-of-service state.
- The specified group of circuits or the entire posted set can be busied by placing the circuits in BUSYQALL. As circuits become available, they are busied and deleted from the BUSYQALL.

bsy (continued)

- If any circuits in the BUSYQALL do not become available within 4 minutes of being queued, the system no longer attempts to busy them.
- When busying transmission links in an office equipped with Common Channel Signaling (CCIS6), CCITT6, and CCS7, an outage of the entire associated trunk group may occur.
- The bsy command is the only command that has an effect on trunks involved in a wideband IT Integrated Service Digital Network user part (ISUP). If a trunk is call processing busy (CPB) and the bsy command is done on a trunk in the control position, the trunk state is changed to call processing deloaded (CPD). CPD is an indication to call processing software that a trunk is not to be set idle (IDL) when the call is released. The trunk state is changed from CPD to ManB and the trunk is no longer available for call processing.
- If the entire wideband IT ISUP trunk group is posted in the control position and the busy all command string bsy all is issued, all trunks that are CPB are changed to CPD and set to ManB upon call disconnect.

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy mb d1 ↵ *where* mb d1	 places the channel in the manual busy state. indicates the primary D-channel.
	Task: Place the primary D-channel in the ManB state. **Response:** `STATE CHANGED.` **Explanation:** The header shows the d1 channel is in the ManB state.

bsy (continued)

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`D1 OR D2 IS INVALID`	**Meaning:** There is no valid D-channel 1 or 2. **Action:** None
`FAILED, NO CIRCUIT`	**Meaning:** The command failed because no circuit was posted. **Action:** None
`Failed to seize CKT`	**Meaning:** The command failed to seize a circuit. **Action:** None

`INVALID PARAMETER 1`
`PARAMETER IS INB`
or
`INVALID PARAMETER 1`
`PARAMETER IS MB`
or
`PARAMETER 1 DOES NOT EXIST`
	Meaning: An attempt was made to busy the posted circuit into an invalid state, that is, a state not included in the parameter list.
	
	Action: None

`INVALID PARAMETER 2` `PARAMETER 2 IS D1 OR D2`	**Meaning:** An attempt was made to busy a D-channel using a wrong command option for parameter 2 while both D-channels are in the post position. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`STATE CHANGED.`	**Meaning:** The posted trunks have been placed in the requested state. **Action:** None
`THESE WILL PUT DTCI XX X XX DCH OUT OF SERVICE` `PLEASE CONFIRM (YES OR NO)?`	**Meaning:** An attempt was made to busy a D-channel in the INS state. To leave the D-channel in the INS state, enter NO. To busy the designated D-channel, enter YES. ***Note:*** If both D-channels are posted, NO causes the STB D-channel to be made busy, and YES causes both D-channels to be made busy. **Action:** None
-end-	

connect

Function

Use the connect command to connect the monitoring equipment reserved with the equip command to a PRI D-channel for the purpose of monitoring it. The PRI D-channel can be posted by any means available at the PRADCH level. Once posted, the connect command followed by the equip# can be issued.

connect command parameters and variables

Command	Parameters and variables
connect	*eqno* [*chnl* | rls | verify]

Parameters and variables	Description
chnl	This variable indicates that the channel is valid only when a primary and backup PRI D-channel are posted together. The valid entries are d1 or d2.
eqno	This variable specifies the monitoring equipment number (given when the monitoring equipment was reserved with the equip command) to be used in the DTA connection. The range is 1-20.
rls	This parameter causes the channel currently connected to be released.
verify	This parameter verifies the currently connected channel.

Qualifications

The connect command is qualified by the following exceptions, restrictions, and limitations:

- The connect command also allows DTA connections to be verified and removed.
- DTA allocates channels on links between the monitoring equipment and the monitored point, and makes connections across peripheral and network modules between those channels. These channels are unavailable to call processing while the DTA connection is active.
- If the PRI D-channel has a backup D-channel posted as well, d1 or d2 must be entered to distinguish between the two D-channels.
- d1 or d2 can only be entered when both the primary and secondary D-channels are posted together.

connect (continued)

Example

The following table provides an example of the connect command.

Example of the connect command

Example	Task, response, and explanation

connect d1 ↵
where
 	
d1 specifies the channel to be connected.
	Task: Connect monitoring equipment with number 1.
	
	Response:
	`CKT TYPE PM NO. COM LANG STA S R DOT TE RESULT`
	`2W IS IS LTC 0 8 24 LTC0TOLTC1 DCH INS`
	
	Explanation: This is typical display response to connect 1 command.

Responses

The following table provides explanations of the responses to the connect command.

Responses for the connect command

MAP output	Meaning and action
`DTA cannot be connected, PRI node does not have UP processors.`	**Meaning:** You issued the connect command with a posted PRI D-channel which was supported by an XPM without UP processor cards. **Action:** Post a PRI D-channel supported by an XPM with UP processor cards and issue the connect command again or convert the existing XPM so it has UP processor cards.
`DTA cannot be connected, PRI node has enhanced timeswitch.`	**Meaning:** You issued the connect command with a posted PRI D-channel which was supported by an XPM with an enhanced timeswitch. **Action:** Post a PRI D-channel supported by an XPM without an enhanced timeswitch and issue the connect command again or convert the existing XPM so it has a 6X44 timeswitch.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
`ERROR: Remove DTA connections before changing CSLINKS and/or` `ERROR: Delete Network SPECCONN connections before changing CSLINKS.`	**Meaning:** You tried to change the CSIDE LINKS on an XPM involved in a DTA or network SPECCONN connection. **Action:** Remove DTA using the connect command with the rls option available at the PRADCH MAP level or remove network SPECCONN connections from Table SPECCONN and then change the CSIDE LINKS.
`Posted channel is not a PRI-D channel.`	**Meaning:** You issued a connect command when the posted channel was not a PRI D-channel. **Action:** Post the PRI D-channel that is to be monitored and issue the connect command again.
`Remove DTA from PRI D-channel before changing/deleting tuple.`	**Meaning:** You tried to change or delete a tuple in Table TRKSGRP which involved a PRI D-channel being monitored by DTA. **Action:** Remove DTA using the connect command with the rls option available at the PRADCH MAP level and then change the TRKSGRP tuple.
`CANNOT CONNECT MONITOR RX`	**Meaning:** When the command connect and the parameter mtr were invoked on a data line in the control position, a system fault prevented the receive direction monitor connection from being made to the data line. **Action:** Contact the support group to determine the maintenance action that is required.
`CANNOT CONNECT MONITOR TX`	**Meaning:** When the command connect and the parameter mtr were invoked on a data line in the control position, a system fault prevented the transmit direction monitor connection from being made to the data line. **Action:** Contact the support group to determine the maintenance action that is required.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
COMMAND IS NOT APPROPRIATE FOR RCU LINE	**Meaning:** The command connect was invoked on a RCU line in the control position. **Action:** None
COMMAND NOT ALLOWED FOR SPECIAL SERVICE LINES	**Meaning:** The system cannot perform the connect command on a nailed-up special service connection. **Action:** None
COULD NOT CONNECT TEST LINE	**Meaning:** The command connect and the parameter test were invoked on a data line in the control position when the data line is in an improper state, or a system fault prevented the connection of the test line to the data line. **Action:** The first or both of the following actions is required: ▪ Post the monitor line by DN and verify that it is in the state IDL. ▪ If the line is in the state IDL, contact the support group to determine the maintenance action that is required.
COULD NOT CONNECT DN	**Meaning:** When the command connect and the parameters d dn were invoked on a data line in the control position, the attempted force connection of a data line to the data line in the control position was prevented due to either the line in the control position being in an improper state or due to a system fault. **Action:** The first or both of the following actions is required: ▪ Post the monitor line by DN and verify that it is in the state IDL. ▪ If the line is in the state IDL, contact the support group to determine the maintenance action that is required.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
DN CONNECTED	**Meaning:** The command connect and the parameters d and dn were invoked on a data line in the control position causing the specified data line to be force connected to the data line in the control position. **Action:** None
DN dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST	**Meaning:** When the command connect and the parameters d and dn were invoked on a data line in the control position, the line that is being force connected to the line in the control position, is currently connected to the DN that is specified at the end of the response. **Action:** None
DN NOT CONNECTED	**Meaning:** When the command connect and the parameter string c clli dn were invoked, the trunk for the directory number was not force connected because the state of the data line in the control position or in the remote switch is not suitable. **Action:** The following sequence of actions is required: **1** Verify that the state of the data line in the control position is IDL. **2** Verify that the state of the remote data line is IDL.
DN RELEASED	**Meaning:** The command connect and the parameter rls were invoked on a data line in the control position that was connected to a remote data line, causing the remote line to be released. **Action:** None

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
INVALID CLLI	**Meaning:** When the command connect and the parameter string c clli dn were invoked at the switch that contains the DU that is under test, a digital trunk is not seized because the CLLI of the specified trunk group is not valid in that switch. **Action:** None
IDENTIFIER IS NOT THAT OF A TRUNK	**Meaning:** The command connect or the command equip is invoked with the parameter c and an associated CLLI that does not identify a trunk group. **Action:** None
MONITOR CALL CONNECTED	**Meaning:** The command connect and the parameter call were invoked at the CMC switch, causing the monitor data line card at the CMC to be connected to the equipped digital trunk. **Action:** None
MONITOR CALL NOT CONNECTED	**Meaning:** When the command connect and the parameter call were invoked at the CMC switch, the monitor data line in the control position could not be connected to the equipped digital trunk. **Action:** One or more of the following actions is required: ▪ Verify that the data line in the control position is in the state IDL. ▪ Diagnose the data line in the control position. ▪ Return the data line in the control position to service and then invoke the command and parameters again.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
MON RX CONNECTED	**Meaning:** The command connect and the parameter mtr were invoked on a data line in the control position after the command equip and the parameter string mtr rx d dn were invoked, causing the seized receive direction monitor equipment to be connected to the line in the control position, either directly or via a digital trunk. **Action:** None
MON RX NOT CONNECTED	**Meaning:** When the command connect and one of the following parameter strings was invoked: -mtr -d dn -c clli dn, the receiving direction monitor equipment was not connected for one or more of the following reasons: ▪ the monitor trunk is not connected to the line in the control position ▪ the DN of the monitor DU was not outpulsed to the CMC switch ▪ the data line is not in the appropriate state ▪ the digital trunk is not in appropriate CLLI state. **Action:** The following courses of action are required when they are applicable: ▪ Verify that the monitor trunk is connected to the data line in the control position. ▪ Diagnose the data line that is under test. ▪ Verify that the state of the data line under test and the state of the monitor DU data line are IDL. ▪ Verify that the state of the digital trunk is either IDL or INI.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
MON RX RELEASED	**Meaning:** The command connect and the parameter rls were invoked on a data line in the control position whose receive path was connected to a monitor circuit, causing the monitor circuit connection to release. **Action:** None
MON TX CONNECTED	**Meaning:** The command connect and the parameter mtr were invoked on a data line in the control position, after the command equip and the parameter string mtr tx d dn were invoked, causing the seized transmit direction monitor equipment to be connected to the line in the control position, either directly or via a digital trunk. **Action:** None

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
MON TX NOT CONNECTED	**Meaning:** When the command connect and one of the following parameter strings was invoked: -mtr -d dn -c clli dn, the transmitting direction monitor equipment was not connected for one or more of the following reasons: ▪ the monitor trunk is not connected to the line in the control position ▪ the DN of the monitor DU was not outpulsed to the CMC switch ▪ the data line is not in the appropriate state ▪ the digital trunk is not in CLLI appropriate state. **Action:** The following courses of action are required when they are applicable: ▪ verify that the monitor trunk is connected to the data line in the control position. ▪ diagnose the data line that is under test. ▪ verify that the state of the data line under test and the state of the monitor DU data line are IDL. ▪ verify that the state of the digital trunk is either IDL or INI.
MON TX RELEASED	**Meaning:** The command connect and the parameter rls were invoked on a data line in the control position whose transmit path was connected to a monitor circuit, causing the monitor equipment to be released. **Action:** None
NO EQUIPMENT CONNECTED	**Meaning:** When the command connect and the parameters rls all were invoked, there was no test or monitor equipment connected to any data lines. **Action:** None

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
NO EQUIPMENT CONNECTED TO POSTED LINE	**Meaning:** The command connect and the parameter rls were invoked on a data line in the control position when no monitor or test equipment is connected to the line. **Action:** None
NO MONITOR LINE EQUIPPED	**Meaning:** The command connect and the parameter mtr were invoked on a data line in the control position when monitor equipment has not been seized **Action:** None
NO MONITOR LINE SEIZED	**Meaning:** The command connect and the parameter mtr were invoked on a data line in the control position, when a monitor line is not currently seized. **Action:** None
NO POSTED LINE	**Meaning:** The command connect and the parameter were invoked when there is no line in the control position. **Action:** None
NO TEST LINE EQUIPPED	**Meaning:** The command connect and the parameter test was invoked when there is not test line seized. **Action:** None
POSTED LINE IS NOT A DATA LINE	**Meaning:** The command connect and the parameter call were invoked on a line in the control position at the CMC switch that is not a data line. **Action:** None

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
PRIVILEGED COMMAND	**Meaning:** The command connect and the parameter test was invoked on a data line in the control position by a tester that is not authorized to access this command. **Action:** None
TEST LINE ALREADY CONNECTED TO dn	**Meaning:** The command connect and the parameter test was invoked when the test line is connected to a DN. The characters dn represent the directory number to which the test line is connected. **Action:** None
TEST LINE CONNECTED	**Meaning:** The command connect and the parameter test were invoked on a data line in the control position, causing the test line to be connected to the line in the control position. **Action:** None
TEST LINE NOT SEIZED	**Meaning:** The command connect and the parameter test were invoked on a data line in the control position, causing the test line to be connected to the line in the control position. **Action:** None
TEST RELEASED	**Meaning:** The command connect and the parameter rls were invoked on a data line in the control position that was connected to a test line, causing the test line to be disconnected from the line in the control position. **Action:** None

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
TEST TRUNK CONNECTED	**Meaning:** The command connect and the parameter test, or the parameter string test mtr, were invoked at the switch that contains the DU that is under test causing a two-way digital trunk from the CMC switch to be connected to the data line that is in the control position. **Action:** None
TEST TRUNK NOT CONNECTED	**Meaning:** When the command connect and the parameter test, or the parameter string test mtr, were invoked at the switch that contains the DU that is under test, a digital trunk from the CMC switch was not connected to the data line that is in the control position. **Action:** One or both of the following actions is required: ▪ Verify that the data line in the control position is in the state IDL. ▪ Verify that the digital trunk is in the state IDL or the state INI.
TEST TRUNK NOT SEIZED	**Meaning:** The command connect and the parameter test were invoked on a data line in the control position when the test trunk is not seized. **Action:** None
THIS COMMAND DOES NOT APPLY TO RCS LINES	**Meaning:** The command connect was invoked on a SLC-96 line in the control position. **Action:** None
TRUNK FOR DN NOT SEIZED	**Meaning:** When the command connect and the parameter string c clli dn were invoked at the switch that contains the DU that is under test, a digital trunk to the CMC switch was not seized. **Action:** Verify that the digital trunk is in the state IDL or the state INI.

-continued-

connect (continued)

Responses for the connect command (continued)

MAP output	Meaning and action
TRUNK FOR DN SEIZED	**Meaning:** The command connect and the parameter string c clli dn were invoked at the switch that contains the DU that is under test, causing a digital trunk to the CMC switch to be seized. **Action:** None
TRUNK IS NOT TWO WAY, PLEASE SELECT ANOTHER AND RE-ISSUE THE COMMAND	**Meaning:** When the command connect and the parameter string test c clli dn were invoked at the switch that contains the DU that is under test, a clli for a one-way trunk group was specified rather than a clli for a two-way trunk group. **Action:** None
TRUNK MUST BE EITHER DP OR MF	**Meaning:** When the command connect and the parameter string c clli dn were invoked at the switch that contains the DU that is under test, the trunk that was specified by the clli is neither a dp type nor a mf type. **Action:** None
TRY CONNECT RELEASE ALL	**Meaning:** The command connect and the parameter rls were invoked when there is no line in the control position. **Action:** None

-continued-

connect (end)

Responses for the connect command (continued)

MAP output	Meaning and action
UNABLE TO SEIZE POSTED LINE	**Meaning:** When the command connect and the parameter string c clli dn were invoked, the data line in the control position could not be seized. **Action:** One or more of the following actions is required: ▪ diagnose the data line in the control position. ▪ release any connections to the data line in the control position and invoke the command and these parameters again. ▪ return the data line in the control position to service and then invoke the command and parameters again.

-end-

Function

Use the cont command to run a continuity test on the posted D-channel.

cont command parameters and variables

Command	Parameters and variables	
cont	int ext	[*both* d1 d2]

Parameters and variables	Description
both	This represents a system default. When only the test parameter (ext or int) is entered with the command, the system automatically selects both channels for the continuity test.
d1	This parameter selects the primary D-channel for continuity test.
d2	This parameter selects the secondary D-channel for continuity test.
ext	This parameter runs an external continuity test. The effect on calls and the D-channel is the same as for an internal continuity test.
int	This parameter runs an internal continuity test. All calls associated with the posted D-channel are dropped, the D-channel is removed from service, a loopback point is set, and the test is performed. After testing, the loopback point is removed and the D-channel is returned to service.

Qualifications

The cont command is qualified by the following exceptions, restrictions and limitations:

- Before invoking the cont command, the D-channel must be in the manual busy (ManB) state.
- When the system runs either the internal or external continuity test, the following sequence of events takes place:
  1 all calls associated with the posted D-channel are dropped
  2 the D-channel is removed from service
  3 a loopback point is set
  4 the test is performed
  5 the loopback point is removed

cont (end)

6 the D-channel is returned to service

- Request the far end to set a loopback point for the circuit, and after the test is completed to remove the loopback point.

Examples

Not currently available

Responses

The following table provides explanations of the responses to the cont command.

Responses for the cont command

MAP output	Meaning and action
`CARRIER FAIL: REQUEST REJECTED`	**Meaning:** You attempted a continuity test on the posted D-channel, but the associated carrier is out of service. **Action:** None
`PM DOWN: REQUEST REJECTED`	**Meaning:** You attempted a continuity test on the posted D-channel, but its Integrated Services Digital Network digital trunk controller (DTCI) is down. **Action:** None
`REQUEST INVALID - D CHANNEL IS NOT MANB`	**Meaning:** Since the posted D-channel is not in the ManB state, the continuity test was not applied. **Action:** Return the D-channel to the INS state, then manually busy the channel before requesting the continuity test to be performed.
`REQUEST INVALID - POSTED CIRCUIT IS NOT A D CHANNEL`	**Meaning:** The continuity test was not applied because the posted circuit is not a D-channel. **Action:** None

equip

Function

Use the equip command to reserve a BRI ISDN line card or two DS-0 channels for use in DTA monitoring.

equip command parameters and variables

Command	Parameters and variables					
equip	ds1	*xpm*				
		upchnl				
		downchnl				
	len	*nosite*	*frame*	*unit*	*drawer*	*circuit*
		site				
	query	*posted*				
		all				
	reset	*equipno*				

Parameters and variables	Description
all	This parameter specifies that all DTA connections are to be queried regardless of what their state is (optional).
circuit	This variable specifies the LCM circuit number. The range is 0-99.
len	This parameter specifies that a specific LEN is to be reserved as DTA monitoring equipment.
downchnl	This variable specifies the timeslot on the trunk which carries the downstream data. The range is 1-24.
drawer	This variable specifies the LCM drawer number. The range is 0-31.
ds1	This parameter specifies that a ds1 is to be reserved as DTA monitoring equipment.
equipno	This variable specifies the number returned when the monitoring equipment was originally reserved. The range is 1-20.
frame	This variable specifies the LCM frame number. The range is 0-511.
nosite	This default parameter, which is never entered, indicates that no site name is entered as part of the len specification.

-continued-

equip (continued)

equip command parameters and variables (continued)

Parameters and variables	Description
port	This variable specifies the XPM pside port to which the test equipment is attached. For standard XPM's, the range is 0-19. For RCC2, the range is 0-47.
posted	The default parameter, which is never entered, indicates that only information about the posted DTA equipment will be displayed because the all parameter is not entered.
query	Thie parameter provides information on DTA equipment currently reserved or connected.
reset	This parameter frees monitoring equipment that was previously reserved.
site	This variable specifies the LCM string name.
unit	This variable specifies the LCM unit number. The range is 0-9.
upchnl	This variable specifies the timeslot on the trunk which carries the upstream data. The range is 1-24.
xpm	This variable defines the type of node the DS1 (which is used as monitoring equipment) resides on. Valid entries include the following: ▪ dtci *xpmno port* ▪ ltc *xpmno port* ▪ dt *xpmno port*c ▪ lgc *xpmno port* ▪ lgc *xpmno port* ▪ rcc2 *xpmno port* where: ▪ *xpmno* is number in the range 0-5111 ▪ *port* is a number in the range 0-47
xpmno	This variable specifies the peripheral module number. The range is 0-511.

-end-

Qualifications

The equip command is qualified by the following exceptions, restrictions, and limitations:

- The resources reserved for DTA cannot be used for any other purposes until they are released.

- The BRI ISDN line card must reside on either an LCME or LCMI and must be datafilled as HASU in Table LNINV and have a line status of INB.
- The DS-0 channels must be provisioned for 64kb/s clear transmission and must reside on one of the following peripheral typed:
  - DTCI
  - LTC
  - LGC
  - DTC
  - RCC2

Example

The following table provides an example of the equip command.

Example of the equip command

Example	Task, response, and explanation
equip query ↵	
	Task: Query for inormation about equipment that is already reserved or connected.

	Response:
	`MTR EQUIP US DS CONNECT CHNL STAT`
	`1 LTC 4 15 5 6`

	Explanation: LTC 4 Port 15 channel 5 is reserved as an upstream DTA monitor and LTC 4 port 15 channel 6 is reserved as a downstream DTA monitor.

Responses

The following table provides explanations of the responses to the equip command.

Responses for the equip command

MAP output	Meaning and action
`COMMAND IS NOT APPROPRIATE FOR RCU LINE`	
	Meaning: The system cannot perform the equip command for an RCU line.
	Action: None

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
COULD NOT ALLOCATE A MAILBOX	**Meaning:** A system fault is preventing the planned action from taking place. **Action:** Contact the support group to determine the required maintenance action.
EQUIPMENT FOR MON RX RELEASED	**Meaning:** The command equip and the parameters mtr rx rls were invoked, causing the previously seized monitor equipment to be released. If the CMC is remote from the DU under test, the digital trunk for the receive path is released. **Action:** None
EQUIPMENT FOR MON TX RELEASED	**Meaning:** The command equip and the parameters mtr tx rls were invoked, causing the previously seized monitor equipment to be released. If the CMC is remote from the DU under test, the digital trunk for the transmit path is released. **Action:** None
EQUIPMENT FOR TEST LINE RELEASED	**Meaning:** The command equip and the parameters test rls were invoked, causing the previously seized test equipment to be released. If the CMC is remote from the DU under test, the digital trunk is released. **Action:** None
INVALID CHARACTER	**Meaning:** The command equip and the parameters mtr tx d dn, or mtr rx d dn, or test d dn were invoked using a letter instead of a number in one or more of the dn character positions. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
INVALID CLLI	**Meaning:** The command equip and any of the following parameter strings were invoked at the switch that contains the DU that is under test, when the CLLI of the specified trunk group is not valid in that switch: ▪ mtr tx c clli dn ▪ mtr rx c clli dn ▪ test c clli dn **Action:** None
INVALID DIRECTORY NUMBER	**Meaning:** The command equip and the parameters mtr tx d dn, or mtr rx d dn, or test d dn were invoked using a directory number that does not exist in this office. **Action:** None
INVALID OFFICE CODE	**Meaning:** The command equip and the parameters mtr tx d dn, or mtr rx d dn, or test d dn were invoked using an office code that does not exist in this office. **Action:** None
MON RX ALREADY SEIZED	**Meaning:** The command equip and the parameter previous or the parameters mtr previous were invoked when the receive direction monitor is currently seized. **Action:** None
MON RX clli IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST	**Meaning:** The command equip was invoked with the parameters mtr rx c clli dn or with parameters mtr rx rls, when the receive direction monitor equipment is currently connected to the DN that is displayed in the response. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
`MON RX dn IS ALREADY CONNECTED TO dn` `PLEASE RELEASE THE CONNECTION FIRST`	**Meaning:** The command equip was invoked with the parameters mtr rx d dn, or with the parameters mtr rx rls, when the monitor for the receive path is currently connected to the dn that is displayed in the response. **Action:** None
`MON RX` `EQUIPMENT NOT SPECIFIED`	**Meaning:** The command equip and the parameters mtr previous were invoked after the receive direction monitor equipment has been subjected to the command equip and the parameter reset, or the monitor equipment is not seized. **Action:** None
`MON RX` `EQUIPMENT SEIZED`	**Meaning:** The command equip and the parameters mtr rx d dn were invoked, causing the receive direction monitor to be seized. This response is also displayed when the command equip and the parameters mtr previous were invoked, causing a released receive direction monitor to be reseized. **Action:** None
`MON RX` `UNABLE TO SEIZE LINE`	**Meaning:** When the command equip and the parameter mtr rx were invoked, a system fault prevented the receive direction monitor equipment from being seized. **Action:** The first or both of the following actions is required: ▪ post the monitor line by DN and verify the state IDL of the line ▪ if the line is in the state IDL, contact the support group to determine the maintenance action that is required.

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
`MON TX ALREADY SEIZED`	**Meaning:** The command equip was invoked with the parameters mtr previous, or with the parameter previous, when the transmit direction monitor is currently seized. **Action:** None
`MON TX clli IS ALREADY CONNECTED TO dn` `PLEASE RELEASE THE CONNECTION FIRST`	**Meaning:** The command equip was invoked with the parameters mtr tx c clli dn or with the parameters mtr tx rls, when the transmit direction monitor equipment is currently connected to the DN that is displayed in the response. **Action:** None
`MON TX dn IS ALREADY CONNECTED TO dn` `PLEASE RELEASE THE CONNECTION FIRST`	**Meaning:** The command equip was invoked with the parameters mtr tx d dn, or with the parameters mtr tx rls, when the transmit direction monitor equipment is currently connected to the DN that is displayed in the response. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
MON TX dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR MON TX RELEASED or no MON TX text is displayed and MON RX dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR MON RX RELEASED or no MON RX text is displayed and TEST dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR TEST RELEASED or no TEST text is displayed and DN dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST	

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action

or
 	
`EQUIPMENT FOR DN IS RELEASED`
or
 	
`no DN text is displayed`
	Meaning: The command equip and the parameter rls were invoked, causing all seized test and monitor equipment that is not connected to a data line to be released. If any equipment is connected to a data line the DN of that data line is displayed. There is no text displayed for equipment that is not seized.
	
	Action: None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
MON TX dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR MON TX RELEASED or	no MON TX text is displayed and MON RX dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR MON RX RELEASED or no MON RX text is displayed and TEST dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or EQUIPMENT FOR TEST RELEASED or no TEST text is displayed and DN dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST or

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
EQUIPMENT FOR DN IS RELEASED or no DN text is displayed EQUIPMENT RELEASED	**Meaning:** The command equip and the parameter reset were invoked, causing all seized test and monitor equipment that is not connected to a data line to be released beyond retrieval by any previous parameter. If any equipment is connected to a data line, the DN of that data line is displayed. The command is ignored for equipment that is not seized. **Action:** None
MON TX EQUIPMENT NOT SPECIFIED	**Meaning:** The command equip and the parameters mts previous were invoked when the transmit direction monitor equipment has been subjected to the command equip and the parameter reset, or the monitor equipment is not seized. **Action:** None
MON TX EQUIPMENT SEIZED	**Meaning:** The command equip and the parameters mtr tx d dn were invoked, causing the transmit direction monitor equipment to be seized. This response is also displayed when the command equip and the parameters mtr previous are invoked, causing a released transmit direction monitor to be reseized. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
MON TX UNABLE TO SEIZE LINE	**Meaning:** When the command equip and the parameters mtr tx were invoked, a system fault prevented the monitor equipment from being seized. **Action:** The first or both of the following actions is required: ▪ post the monitor line by DN and verify the state IDL of the line ▪ if the line is in the state IDL, contact the support group to determine the maintenance action that is required.
NO DU EQUIPMENT HAS BEEN EQUIPPED IN THIS OFFICE	**Meaning:** The command equip and the parameter string query all were invoked when no test or monitor equipment has been previously seized at any MAP of that switch, or after the command equip and the parameter reset has been invoked. **Action:** None
NO EQUIPMENT FOR MON RX SEIZED	**Meaning:** The command equip and the parameters mtr rls or the parameters mtr rx rls are invoked when one of the following conditions exists: ▪ the receive direction monitor equipment is not currently seized ▪ the previous command and parameter string is equip mtr rx c clli dn ▪ the previous command and parameter string is equip mtr rx d dn **Action:** None
NO EQUIPMENT FOR MON TX SEIZED	**Meaning:** The command equip and the parameters mtr rls or the parameters mtr tx rls are invoked when one of the following conditions exists: ▪ the transmit direction monitor equipment is not currently seized ▪ the previous command and parameter string is equip mtr tx c clli dn ▪ the previous command and parameter string is equip mtr tx d dn **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
PRIVILEGED COMMAND	**Meaning:** The command equip was invoked by a user that is not authorized for data activity (Note 3). **Action:** None
TEST clli IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST	**Meaning:** The command equip was invoked with the parameters test c clli dn or with the parameters test rls, when the test equipment is currently connected to the DN that is displayed in the response. **Action:** None
TEST dn IS ALREADY CONNECTED TO dn PLEASE RELEASE THE CONNECTION FIRST	**Meaning:** The command equip was invoked with the parameters test d dn, or with the parameters test rls, when the test line is currently connected to the DN that is displayed in the response. **Action:** None
TEST EQUIPMENT SEIZED	**Meaning:** The command equip and the parameters test d dn, or the parameters test previous, were invoked, causing a test line to be seized. **Action:** None
TEST ALREADY SEIZED	**Meaning:** The command equip and the parameters test previous, or the parameter previous, were invoked when a test line is currently seized. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
TEST EQUIPMENT NOT SPECIFIED	**Meaning:** The command equip and the parameters test previous were invoked on a test line when the command equip and the parameter reset has been invoked previously, or when the test line is not seized. **Action:** None
TEST LINE UNABLE TO SEIZE LINE	**Meaning:** When the command equip and the parameters test d dn were invoked, a system fault prevented the test equipment from being seized. **Action:** The first or both of the following action is required: ▪ post the test line by DN and verify that the state of the line is IDL. ▪ if the line is in the state of IDL, contact the support group to determine the maintenance action that is required. ▪
TRUNK FOR MON RX NOT SEIZED	**Meaning:** When the command equip and the parameter string mtr rx c clli dn were invoked at the switch that contains the DU that is under test, seizure of a digital trunk to the CMC switch failed for one of the following reasons: ▪ there are no idle trunks in the trunk group ▪ a system fault prevented a trunk from being seized. **Action:** The following sequence of steps are required: ▪ verify that there is an idle trunk in the trunk group ▪ contact the support group to determine the maintenance action that is required.

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
TRUNK FOR MON TX NOT SEIZED	**Meaning:** When the command equip and the parameter string mtr tx c clli dn were invoked at the switch that contains the DU that is under test, seizure of a digital trunk to the CMC switch failed for one of the following reasons: ▪ there are no idle trunks in the trunk group ▪ a system fault prevented a trunk from being seized. **Action:** The following sequence of steps are required: ▪ verify that there is an idle trunk in the trunk group ▪ contact the support group to determine the maintenance action that is required.
TRUNK FOR MON RX SEIZED	**Meaning:** The command equip and the parameter string mtr rx c clli were invoked at the switch that contains the DU that is under test, causing a digital trunk to the CMC switch to be seized. **Action:** None
TRUNK FOR MON TX SEIZED	**Meaning:** The command equip and the parameter string mtr rx c clli were invoked at the switch that contains the DU that is under test, causing a digital trunk to the CMC switch to be seized. **Action:** None

-continued-

equip (continued)

Responses for the equip command (continued)

MAP output	Meaning and action
TRUNK FOR TEST NOT SEIZED	**Meaning:** When the command equip and the parameter string test c clli dn were invoked at the switch that contains the DU that is under test, seizure fo a digital trunk to the CMC switch failed for one of the following reasons: ▪ there are no idle trunks in the trunk group ▪ a system fault prevented a trunk from being seized. **Action:** The following sequence of steps are required: ▪ verify that there is an idle trunk in the trunk group ▪ contact the support group to determine the maintenance action that is required.
TRUNK FOR TEST SEIZED	**Meaning:** The command equip and the parameter string test c clli were invoked at the switch that contains the DU that is under test, causing a digital trunk to the CMC switch to be seized. **Action:** None
TRUNK IS NOT TWO-WAY, PLEASE SELECT ANOTHER AND RE-ISSUE THE COMMAND	**Meaning:** When the command equip and the parameter string test c clli dn were invoked at the switch that contains the DU that is under test, a SLLI for a one-way trunk group was specified rather than a CLLI for a two-way trunk group. **Action:** None

-continued-

equip (end)

Responses for the equip command (continued)

MAP output	Meaning and action
TRUNK MUST BE EITHER DP OR MF	**Meaning:** The command equip and any of the following parameter string were invoked at the switch that contains the DU that is under test, when the trunk group that was specified by the CLLI is neither a DP type nor a MF type: ▪ mtr tx c clli dn ▪ mtr rx c clli dn ▪ test c clli dn **Action:** None
WRONG NUMBER OF DIGITS	**Meaning:** The command equip was invoked with the parameters mtr rx d dn, or the parameters mtr tx d dn, or with the parameters test d dn; when the parameter dn contained more or less than seven digits. **Action:** None
YOU HAVE NO DU EQUIPMENT EQUIPPED	**Meaning:** The command equip and the parameter query were invoked when no test or monitor equipment has been previously seized at the MAP, or after the command equip and the parameter reset has been invoked. **Action:** None

-end-

hold

Function

Use the hold command to place the circuit in the control position in the first available hold position.

hold command parameters and variables

Command	Parameters and variables
hold	There are no parameters and variables.

Qualification

The hold command works regardless of the trunk state and has no effect on a wideband IT Integrated Services Digital Network user part (ISUP) call.

Example

The following table provides an example of the hold command.

Example of the hold command

Example	Task, response, and explanation	
hold		
	Task:	Place the circuit in the control position in the first available hold position.

	Response:	`OK, CIRCUIT ON HOLD`
		`SHORT CLLI IS : CF3P`
		`OK, CIRCUIT POSTED`

	Explanation:	The circuit with the short CLLI of CF3P has been placed in the first available hold position.

Responses

The following table provides explanations of the responses to the hold command.

hold (end)

Response for the hold command	
MAP output	**Meaning and action**
`FAILED, HOLD POSITIONS BUSY`	**Meaning:** All hold positions are occupied by a circuit. No hold position is available for holding more circuits. **Action:** Remove circuits from one or more of the three hold positions before reissuing the hold command.
`FAILED, NO CIRCUIT`	**Meaning:** The command failed because no circuit was posted. **Action:** None
`OK, CKT ON HOLD`	**Meaning:** The circuit in the control position has been placed in the first available hold position. **Action:** None
`OK, CKT ON HOLD` `NO CKT, SET IS EMPTY`	**Meaning:** The currently posted circuit in the control position is held in the available hold position. There was only one circuit in the posted set, and the posted set is now empty. **Action:** None
`OK, CKT ON HOLD` `SHORT CLLI IS: XXXXXXXX`	**Meaning:** The currently posted circuit in the control position is held in the available hold position. The next circuit in the post set is placed in the control position. If the hold command is for D-channel with a backup D-channel, both the primary D-channel and the secondary D-channel are shown on the MAP display. **Action:** None

loopbk

Function

Use the loopbk command to set, remove, or check the status of the loopback point for the posted D-channel.

loopbk command parameters and variables

Command	Parameters and variables
loopbk	set takedown query [*both* d1 d2]

Parameters and variables	Description
both	This represents a system default. When only an action parameter (query, set, or takedown) is entered with the command, the system automatically selects both the primary D-channel and secondary D-channel for the specified action.
d1	This parameter selects the primary D-channel.
d2	This parameter selects the secondary D-channel.
query	This parameter checks the current status of the loopback point.
set	This parameter sets a loopback point for the currently posted D-channel.
takedown	This parameter removes the loopback point set previously.

Qualifications

The loopbk command is qualified by the following exceptions, restrictions, and limitations:

- When a trunk is set by the loopback command, maintenance commands that would change the state of the trunk cannot be performed. If a maintenance command is entered after a trunk is set by the loopback command, an error message will appear informing the user that the maintenance command is not allowed and that a loopback is set.
- The trunk cannot be returned to service (RTS) until the loopback is removed.
- A loopback can be set only if there are no calls on the trunk.

loopbk (continued)

- A loopback cannot be set if the trunk state is call processing busy (CPB). An error message will be returned in this instance.
- The loopback point is required for performing an internal continuity test from the DMS-100 or an external continuity test from the far end.

Examples

Not currently available

Responses

The following table provides explanations of the responses to the loopbk command.

Responses for the loopbk command

MAP output	Meaning and action
`CARRIER FAIL: REQUEST REJECTED`	**Meaning:** You attempted to alter the state of a loopback point on the posted D-channel. **Action:** None
`D CHANNEL LOOPBACK POINT SET PASSED.` `LOOPBACK POINT ESTABLISHED.`	**Meaning:** The command string loopbk set was successful. **Action:** None
`FAILED, NO CIRCUIT POSTED`	**Meaning:** The command failed because no circuit was posted. **Action:** None
`Loopback already set`	**Meaning:** A loopback has already been set on the trunk. **Action:** None

-continued-

loopbk (continued)

Responses for the loopbk command (continued)

MAP output	Meaning and action
`Loopback is NOT set`	**Meaning:** The query parameter has been entered and the system responds that a loopback has not been set on the posted trunk. **Action:** None
`Loopback is set`	**Meaning:** The query parameter has been entered and the system responds that a loopback has been successfully set on the posted trunk. **Action:** None
`Loopback removed`	**Meaning:** The loopback has been successfully removed from the posted trunk. The trunk can now be returned to service. **Action:** None
`Loopback set`	**Meaning:** A loopback has been successfully set on the posted trunk. **Action:** None
`PM DOWN: REQUEST REJECTED`	**Meaning:** You attempted to alter the state of a loopback point on the posted D-channel, but its Integrated Services Digital Network digital trunk controller (DTCI) is down. **Action:** None
`REQUEST INVALID - D CHANNEL IS NOT MANB`	**Meaning:** The loopback point was not set because the posted D-channel is not in the ManB state. **Action:** Return the D-channel to the INS state, then manually busy the channel before requesting the loopback point to be set.

-continued-

loopbk (end)

Responses for the loopbk command (continued)

MAP output	Meaning and action
`REQUEST INVALID - POSTED CIRCUIT IS NOT A D CHANNEL`	**Meaning:** The loopback command was unsuccessful because the circuit posted is not a D-channel. **Action:** None
`There is no loopback to remove`	**Meaning:** A loopback cannot be removed because no trunk is looped. **Action:** None

-end-

next

Function

Use the next command to place another circuit in the control position.

next command parameters and variables

Command	Parameters and variables
next	s p [*delq* / *delttp* / s] *hold* [*delttp* / s / e]

Parameters and variables	Description
delq	This represents a system default. When only the next command is entered, the system takes the next circuit from the deload queue (DELQ) and places it in the control position. If there are no circuits available from the DELQ, the system takes a circuit from the posted set.
delttp	This represents a system default. When the parameters s or e are not entered, the system automatically deletes the outgoing circuit (if there is one) from the trunk test position (TTP).
e	This parameter exchanges the circuits in the control and hold positions.
hold	This variable specifies the hold position number from which the circuit is to be taken. The hold position number range is 1-3.
p	This parameter ensures that the next circuit to go in the control position is from the posted set, and not from the DELQ.
s	This parameter saves the circuit in the outgoing control position in the posted set. When only the next command is entered, the system takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set.

Qualifications

The next command is qualified by the following exceptions, restrictions, and limitations:

- Entering the next command without parameters takes the next circuit from the DELQ and places it in the control position. If there are no circuits available in the DELQ, the circuit is taken from the posted set.

next (continued)

- Without parameters s or e, the outgoing circuit is deleted from the trunk test position (TTP).
- The next command works regardless of the trunk state and has no effect on a wideband IT Integrated Services Digital Network user part (ISUP) call.

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation
next	
	Task: Place the next circuit in the control position.

	Response:
	`Next`
	`POSTED CKT IDLED`
	`SHORT CLLI IS : CF3P`
	`OK, CKT POSTED`

	Explanation: The next circuit has been placed in the control position. The name of the short common language location identifier (clli) is displayed.

Response

The following table provides explanations of the response to the next command.

Response for the next command

MAP output	Meaning and action
`FAILED, HOLD POSITION IDLE`	
	Meaning: The command string next 1 is issued but no circuit is held in the first hold position.
	Action: None
`NO CKT, SET IS EMPTY`	
	Meaning: No circuit has been posted.
	Action: None

-continued-

next (end)

Response for the next command (continued)

MAP output	Meaning and action
`OK, CKT POSTED`	**Meaning:** The next circuit has been placed in the control position. **Action:** Continue entering commands against the circuit you have placed in the control position.
`POSTED CKT IDLED`	**Meaning:** The next circuit has been placed in the control position. **Action:** Continue entering commands against the circuit you have placed in the control position.

`POSTED CKT IDLED`
`SHORT CLLI IS: XXXXXXXX`
`OK, CKT POSTED`
	Meaning: The next circuit in the posted set in now placed in the control position. The name of the short clli is displayed.
	
	Action: Continue entering commands against the circuit you have placed in the control position.

-end-

post

Function

Use the post command to select a specific circuit or set of circuits to undergo maintenance action.

post command parameters and variables

Command	Parameters and variables
post	d *pm_type* *pm_no* *ds1_no* *t_slot* g [*clli*] gd t

Parameters and variables	Description
clli	This variable represents the full or short common language location identifier (CLLI) code assigned to a circuit or group of circuits.
d	This parameter posts the digital circuit. The B-channel or D-channel is described by its digital equipment (DEQ) circuit number.
ds1_no	This variable represents the DS-1 circuit (port) number, ranging from 0-19.
g	This parameter posts a B-channel circuit or group of B-channel circuits by its CLLI
gd	This parameter posts the channels according to the following situations: ▪ if a backup D-channel is provided, posts the primary (d1) and secondary (d2) D-channels. ▪ if no backup D-channel is provided, posts the D-channel associated with the B-channel which is described by its CLLI
pm_no	This variable represents the discrimination number of the DTCI, ranging from 0-511.
pm_type	This variable represents the DTCI.
t	This parameter posts a B-channel as a trunk member by its CLLI.
t_slot	This variable represents the time slot number, ranging from 1-31.

post (continued)

Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations:

- Use the post command before entering the commands bsy, rts, next, or hold.
- A D-channel must be posted before entering the commands cont or loopbk.
- To get the total number of trunks in the wideband call, you must add the master trunk in the control position to the number of trunk circuits in the post set. Obtain the number of trunk circuits in the post set by looking at the post indicator in the trunk test position (TTP) display.
- The post command works regardless of the trunk state and has no effect on a wideband (WB) IT Integrated Services Digital Network user part (ISUP) call.

Examples

The following table provides examples of the post command.

Examples of the post command

Example	Task, response, and explanation
post g l2dpr64cl ↵ *where* g l2dpr64cl	posts a B-channel circuit or group of B-channel circuits by its CLLI is the CLLI.

Task: Post a B-channel circuit by using the g parameter with a valid CLLI.

Response:

```
CKT TYPE    PM NO       COM LANG    STA  S  R  DOT  TE
2W IS IS DTCI  10  4    PRABCH    0 IDL

LAST CKTN=5
POSTED CKT IDLED
SHORT CLLI IS PRABCH
OK, CKT POSTED
```

Explanation: The B-channel circuit has been posted.

-continued-

post (continued)

Examples of the post command (continued)

Example	Task, response, and explanation

post gd praclli0 ↵
where
 	
gd posts the primary and secondary (d1 and d2) D-channels.
praclli0 is the CLLI.
	Task: Post the primary and secondary D-channels.
	
	Response:
	
	`CKT TYPE PM NO COM LANG STA S R DOT TE`
	`2W IS IS DTCI 10 0 19 PRACLLI0 D1 IDL`
	
	`LAST CKTN=1`
	`POSTED CKT IDLED`
	`SHORT CLLI IS PRACLL`
	`OK, CKT POSTED`
	
	Explanation: The primary and secondary D-channels have been idled.

-end-

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action
`INVALID SHORT CLLI NAME`	**Meaning:** An attempt to post a circuit with parameter g has been made, but the clli entered is not datafilled in table TRKGRP. **Action:** None
`NO CKT, SET IS EMPTY`	**Meaning:** The PRADCH level has been entered without posting a specific circuit. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
OK, CKT POSTED.	**Meaning:** The circuit is posted. **Action:** None
POSTED CKT IDLED.	**Meaning:** The circuit is posted and idled. **Action:** None
TABLE TRKSGRP IS NOT DATAFILLED FOR THIS TRUNK	**Meaning:** An attempt has been made to post a D-channel which is not defined for the primary rate interface (PRI) in table TRKSGRP. **Action:** None
TEST ACCESS DENIED	**Meaning:** The TTP does not own the CLLI of the entered trunk. **Action:** None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

The quit command works regardless of the trunk state and has no effect on a wideband IT ISUP call.

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PRADCH level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PRADCH level has changed to the previous menu level.

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the PRADCH level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The PRADCH level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the PRADCH level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PRADCH level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

rts

Function

Use the rts command to return the posted B-channel or D-channel to service. Tests are run, and if they are successful, the circuits are returned to service. The circuits must be in the manual busy (ManB) state before issuing this command

rts command parameters and variables

Command	Parameters and variables	
rts	idl	[*both* / d1 / d2 / all]

Parameters and variables	Description
all	This parameter returns to service the channels in the posted set that were ManB. For circuits that were previously posted by group by the command string post g all circuits in the group are returned to service.
both	This represents a system default. When neither primary or secondary D-channel is specified, the system automatically returns both D-channels to service, if both channels are provided.
d1	This parameter specifies the primary D-channel.
d2	This parameter specifies the secondary D-channel.
idl	This parameter specifies the idle (IDL) state. If the posted circuit is a B-channel, it is returned to service in the idle state. If the posted circuit is a D-channel, and a backup D-channel is not provided, it is returned to service in the in service (INS) state.

Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations:

- The rts command does not affect trunks in call processing busy (CPB).
- The rts command at the MANUAL, MONITOR, and TTP levels will fail if the command is applied to a B-channel when its associated D-channel or DS-1 link is out of service.

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts ↵	
	Task: Release the connection.
	Response: `RTS OK`
	Explanation: The connection has been released.

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`ALREADY DONE`	
	Meaning: The circuit is already returned to service and an attempt has been made to return the circuit to service again.
	Action: None
`FAILED, NO CIRCUIT`	
	Meaning: There are no circuits to be returned to service.
	Action: None
`FAILED TO DO SO`	
	Meaning: An attempt was made to return to service a circuit that was not in a ManB for a B-channel and ManB for a D-channel.
	Action: None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
FAILED: D CHANNEL IS DOWN	**Meaning:** The rts command failed after being applied to a B-channel because its associated D-channel or DS-1 link is out of service. The B-channel has been made idle. **Action:** None
MAINTENANCE IN PROGRESS	**Meaning:** An attempt was made to return to service a posted circuit where maintenance is being performed. **Action:** None
NO LTID IS MAPPED IN TABLE LTMAP	**Meaning:** An attempt was made to return to service a D-channel which has no logical terminal identifier (LTID) mapped to its common language location identifier (CLLI) in table LTMAP. **Action:** Add or correct the datafill.
RTS OK	**Meaning:** The circuit has been returned to service. **Action:** None
SET IS EMPTY	**Meaning:** There are no circuits to be returned to service. **Action:** None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
WARNING TRUNK WAS TAKEN OUT OF SERVICE BY SYSTEM DUE TO EXCESSIVE CALL ERRORS. PLEASE CONTACT SUPPORT GROUP PRIOR TO RETURNING TRUNK TO SERVICE. DO YOU WANT TO RTS TRUNK? PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** An attempt was made to return to service a trunk that was taken out of service by the system due to excessive call processing errors. **Action:** Enter yes if to return the specified trunk to service; otherwise, enter no. Additional maintenance action may be required to clear the fault prior to returning the trunk to service.

-end-

swact

Function

Use the swact command to switch the D1 and D2 activity from in service (INS) to lockout (LO) and from STB to INS.

swact command parameters and variables

Command	Parameters and variables
swact	There are no parameters or variables.

Qualification

Before the swact command is entered, the posted D-channel must be in the INS and STB states.

Examples

Not currently available

Responses

The following table provides explanations of the responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`D-CHANNEL NOT IN VALID STATE FOR SWACT`	**Meaning:** The posted circuits are not in the INS and STB states. **Action:** None
`FAILED: INVALID STATE FOR D-CHANNEL SWACT`	**Meaning:** The primary rate interface (PRA) has a backup D-channel configured and the D-channel is not in the INS and STB state. **Action:** None
`FAILED: NO BACKUP D-CHANNEL CONFIGURED`	**Meaning:** The posted circuit does not have a backup D-channel configured. **Action:** None

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
FAILED: POSTED CKT IS NOT D-CHANNEL	**Meaning:** The posted circuit is a B-channel. **Action:** None
FAILED: SYNTAX ERROR	**Meaning:** The posted circuit does not have a backup D-channel configured. **Action:** None
POST CIRCUIT IS NOT D-CHANNEL	**Meaning:** The posted circuit is not a D-channel or is not in a backup configuration. **Action:** None
THIS WILL CAUSE D-CHANNEL SWITCH ACTIVITY IT MAY AFFECT THE SERVICE. PLEASE CONFIRM (YES OR NO)?	**Meaning:** The swact command was issued on the posted circuits which are in the INS and STB states. **Action:** Enter yes to cause the D-channel switch of activity. Enter no to abort the command.
-end-	

PVC level commands

Use the PVC (permanent virtual circuit) level of the MAP to query and change the status of the logical communication links between a signaling transfer point (STP) and the signaling engineering and administration system (SEAS).

Accessing the PVC level

To access the PVC level, enter the following from the CI level:

mapci;mtc;ccs;ccs7;seas;pvc ↵

This command also indicates the "path" from the CI level that is required to reach this level.

PVC commands

The commands available at the PVC MAP level are described in this chapter and are arranged in alphabetical order. The page number for each command is listed in the following table.

PVC commands

Command	Page
bsy	P-423
next	P-427
offl	P-429
post	P-431
queryflt	P-435
quit	P-437
rts	P-441
tst	P-445

PVC menu

The following figure shows the PVC menu and status display.

```
        CM    MS    IOD   Net   PM   CCS   LNS   Trks  Ext   APPL
         .     .     .     .     .    .     .     .     .     .


LEVEL      SEAS     Msg Blk Vol          Buffer Vol
 0 Quit    Offl    DOOOSEASBK UnAvail    DOOOSEASBF UnAvail
2
3          PVCs   Offl   ManB    RMB    SysB    InSv    INI
4           6       2      1       0      0       3      0
5
6          PVC  STATE   MPC  LINK  LC   PVC_TYPE   PVC_USAGE
7           0   state    m    l     c   pvc_type   pvc_usage
8
9
10
11
12
13
14
15
16
17
18
```

PVC status codes

The following table describes the status codes for the PVC status display.

Status codes PVC menu status display		
Code	**Meaning**	**Description**
PVC		
0-7	PVC number	This is the discrimination number of the posted PVC.
STATE		
INI	Initializing	This is a temporary state in which the PVC is attempting to enter the in-service state by exchanging GM messages with the far end.
InSv	In service	This is an in-service PVC that has successfully exchanged GM messages with the far end. The PVC is available for handling SEAS traffic.
ManB	Manual busy	This is an inactive PVC in the manual busy state. This is not a protected state. It attempts to return to service after a restart.

-continued-

Status codes PVC menu status display (continued)

Code	Meaning	Description
Offl	Offline	This is a protected state in which the PVC has been defined in system tables but is not active. The PVC remains offline after a restart. The PVC must be in the offline state to make changes to its tuple in Table SEASMPC.
RMB	Random make busy	This is not a protected state in which the PVC has received a GN5 message from the far end requesting removal from service. The PVC remains in this state until a GM1 message has been received from the far end, or operating company personnel manually busied the PVC. The PVC moves to the INI state after a restart.
SysB	System busy	A fault has been detected in the PVC.
MPC		
m	MPC number	This is the discrimination number of the multiprotocol controller (MPC) that is connected to the PVC.
LINK		
l	Link number	This is one of four MPC link numbers.
LC		
c	Channel number	This is the number of the logical channel.
PVC_TYPE		
C N	Time critical Nontime critical	This identifies the types of channels.
PVC_USAGE		This identifies how the PVC is being used.
ALL CMDS		

-end-

bsy

Function

Use the bsy command to remove the posted PVCs from service. The bsy command is valid when the posted PVC is in the INI, InSv, Offl, RMB, or SysB state.

bsy command parameters and variables

Command	Parameters and variables	
bsy	all *pvc_number*	[*wait* nowait]

Parameters and variables	Description
all	This parameter specifies all posted PVCs.
nowait	This parameter specifies that MAP control be returned to the operating company personnel immediately rather than after the command is processed. Responses to the bsy command are bypassed, but the status in the PVC display in the contro position of the posted set changes to ManB.
pvc_number	This variable identifies the PVC number to be busied. The range is 0-7.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the command bsy action is confirmed before additional commands can be entered at the MAP.

Qualifications

The bsy command is invalid if applied to the last in-service PVC. If the bsy command is given to the last in-service PVC, the following occur:

- with the nowait parameter, no error message is displayed at the MAP and the PVC remains in service
- without the nowait parameter, an error message is displayed at the MAP and the PVC remains in service

Executing the bsy command causes a transition into the ManB state for all PVCs in the posted set.

Example

The following table provides an example of the bsy command.

bsy (continued)

Example of the bsy command (continued)

Example	Task, response, and explanation
bsy ↵	
	Task: (Not currently available)
	Response: `(Not currently available)`
	Explanation: (Not currently available)

Responses

The following table provides explanations of the responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`PVC <pvc_number> -- BUSY FAILED`	
	Meaning: The PVC cannot enter the manual busy state, where <pvc_number> echoes the posted PVC. (The status display of the posted PVCs does not change.)
	Action: None
`PVC <pvc_number> -- BUSY PASSED`	
	Meaning: The PVC is removed from service and placed in the manual busy state, where <pvc_number> echoes the posted PVC. (The status display of the posted PVC changes to ManB.)
	Action: None
`PVC <pvc_number> -- CANNOT BUSY LAST INSV PVC`	
	Meaning: The system cannot busy the last remaining in-service PVC, where <pvc_number> echoes the posted PVC.
	Action: Return to service another PVC, then reenter the command on the original PVC.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`PVC <pvc_number> -- INVALID STATE`	**Meaning:** The PVC cannot be made busy because it is not in a valid state, where <pvc_number> echoes the posted PVC. **Action:** Verify that the PVC is in one of the following states, then re-enter the command. ▪ InSv ▪ INI ▪ Offl ▪ RMB ▪ SysB
-end-	

next

Function

Use the next command to display the next four posted PVCs. Since the post command lists only the first four PVCs in a posted set, the next command displays the remainder of the set. If there are less then four PVCs in the posted set, the next command displays the response `END OF POSTED SET`.

next command parameters and variables

Command	Parameters and variables
next	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the next command.

Example of the next command

Example	Task, response, and explanation	
next ↵		
	Task:	(Not currently available)
	Response:	`(Not currently available)`
	Explanation:	(Not currently available)

Responses

The following table provides an explanation of the responses to the next command.

next (end)

Responses for the next command

MAP output	Meaning and action
PVC STATE MPC LINK LC PVC_TYPE PVC_USAGE <n> <state> <m> <1> <c> <pvc_type> <pvc_usage>	**Meaning:** The status of the remaining posted PVCs is displayed. The fields are described in the status display presented in the opening discussion of this chapter. **Action:** None
END OF POSTED SET	**Meaning:** There are no more posted PVCs. **Action:** None

offl

Function

Use the offl command to remove a manually busied PVC from system maintenance. SEAS must be in the manual busy state before entering the offl command. Office data modifications (ODM) can be done to PVCs in the offline (Offl) state.

offl command parameters and variables

Command	Parameters and variables
offl	all *pvc_number* [*wait* nowait]

Parameters and variables	Description
all	This parameter specifies that all posted PVCs are to be made offline.
nowait	This parameter specifies that MAP control be returned to the operating company personnel immediately rather than after the command is processed. Responses to the offl command are bypassed, but the status in the PVC display in the control position of the posted set changes to Offl.
pvc_number	This variable identifies the discrimination number of the PVC to be made offline. The range is 0-7.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the bsy command action is confirmed before additional commands can be entered at the MAP.

Qualifications

None

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation
offl ↵	
	Task: (Not currently available)
	Response: `(Not currently available)`
	Explanation: (Not currently available)

offl (end)

Responses

The following table provides explanations of the responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
`PVC <pvc_number> -- INVALID STATE`	**Meaning:** The PVC could not be put into the manual busy state because it was in an invalid state. It is possible that the PVC is already in the manual busy state. **Action:** Verify that the PVC is in the manual busy state, then reenter the command.
`PVC <pvc_number> -- OFFL FAILED`	**Meaning:** The system cannot make the PVC offline. (The status display of the PVC does not change.) **Action:** None
`PVC <pvc_number> -- OFFL PASSED`	**Meaning:** The PVC is made offline. (The status display of the posted PVC changes to offline.) **Action:** None

post

Function

Use the post command to select PVCs for maintenance actions. Posting a PVC does not affect its operation. If more than four PVCs are in the posted set, only the first PVCs are displayed.

post command parameters and variables

Command	Parameters and variables
post	all *pvc_number* state

Parameters and variables	Description
all	The parameter specifies that all PVCs in the office are to be posted.
pvc_number	This variable identifies the discrimination number of the PVC to be posted. The range is 0-7. More than one PVC can be specified by entering the desired pvc_number and separating each pvc_number with a space.
state	This variable specifies that only those PVCs in the specified state or states are posted. The range of values for this variable is ▪ offl ▪ manb ▪ rmb ▪ sysb ▪ insv ▪ ini More than one state can be specified by entering the desired states and separating each state with a space.

Qualification

Only those PVCs that are datafilled in Table SEASMPC can be posted.

Example

The following table provides an example of the post command.

post (continued)

Example of the post command (continued)

Example	Task, response, and explanation
post all ↵	

Task: Post all the PVCs in the office

Response:

```
SEAS          Msg Blk Vol                    Buffer Vol
Offl    DOOOSEASBK UnAvail           DOOOSEASBF UnAvail

PVCs    Offl    ManB     RMB     SysB     InSv     INI
 6       2       1        0       0        3        0

PVC   STATE    MPC   LINK   LC   PVC_TYPE   PVC_USAGE
 0     InSv     0      3     1    Timecrt   Commands
 1     InSv     0      3     2    Timecrt   All
 2     InSv     0      3     3   Ntimecrt   All
 3     ManB     0      3     4   Ntimecrt   All
```

Explanation: All the PVCs and their states are displayed.

Responses

The following table provides explanations of the responses to the post command.

Responses for the post command

MAP output	Meaning and action
`NO PVC POSTED`	**Meaning:** The PVC level of the MAP is accessed without posting a PVC or without having a previously posted PVC. **Action:** None
`PVC: <pvc_number> -- NOT DATAFILLED`	**Meaning:** The specified PVC cannot be posted because it is not in Table SEASMPC. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
`PVC STATE MPC LINK LC PVC_TYPE PVC_USAGE` `<n> <state> <m> <1> <c> <pvc_type> <pvc_usage>`	**Meaning:** The status of the remaining posted PVCs is displayed. The values for the fields in this display are discussed at the beginning of this chapter. **Action:** None

-end-

queryflt

Function

Use the queryflt command to display information about the faults of posted PVCs.

queryflt command parameters and variables

Command	Parameters and variables
queryflt	There are no parameters or variables.

Qualifications

Although the command can be entered when the PVC is in any state, the display of the information may depend on the current maintenance action.

Example

The following table provides an example of the queryflt command.

Example of the queryflt command

Example	Task, response, and explanation
queryflt ↵	
	Task: (Not currently available)
	Response: `(Not currently available)`
	Explanation: (Not currently available)

Responses

The following table provides explanations of the responses to the queryflt command.

Responses for the queryflt command

MAP output	Meaning and action
`PVC: <pvc_number> -- MPC NOT AVAILABLE`	
	Meaning: The MPC is not available for this PVC, where <pvc_number> echoes the discrimination number of the posted PVC.
	Action: Check the status of the MPC. Use the IOC/IOD MAP level.

-continued-

queryflt (end)

Responses for the queryflt command (continued)

MAP output	Meaning and action
`PVC: <pvc_number> -- SYNCHRONIZATION IN PROGRESS`	**Meaning:** The PVC faults cannot be queried because it is currently undergoing synchronization, where <pvc_number> echoes the discrimination number of the posted PVC. **Action:** Repeat the command later.

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualification

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the PVC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The PVC level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc	specifies the level higher than the PVC level to be exited
	Task: Return to the MAPCI level (one menu level higher than MTC).
	Response: The display changes to the MAPCI menu display: `MAPCI:`
	Explanation: The PVC level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	
	Meaning: The system exited all MAP menu levels and returned to the CI level.
	Action: None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	
	Meaning: You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit.
	Action: Reenter the command using an appropriate level number.
The system replaces the PVC level menu with a menu that is two or more levels higher.	
	Meaning: You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher.
	Action: None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the PVC level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rts

Function

Use the rts command to return PVCs to service from the ManB state. The system attempts to communicate with the SEAC by placing the PVC in the initializing state (displayed as INI).

rts command parameters and variables

Command	Parameters and variables	
rts	*pvc_number* all	[nowait *wait*]

Parameters and variables	Description
all	This parameter specifies that all posted PVCs are returned to service.
nowait	This parameter specifies that MAP control be returned to operating company personnel immediately rather than after the command is processed. If the nowait parameter is specified, no responses from the command are displayed. Responses to the rts command are bypassed, but the status in the PVC display in the control position of the posted set changes to InSv or ISTb if the tests pass.
pvc_number	This variable specifies the discrimination number of the posted PVC to be returned to service. The range is 0-7.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the action is confirmed before additional commands can be entered at the MAP.

Qualifications

If there are insufficient resources to return the PVC to service (displayed as InSv), the PVC is made system busy (displayed as SysB).

Example

The following table provides an example of the rts command.

rts (continued)

Example of the rts command

Example	Task, response, and explanation
rts ↵	
	Task: (Not currently available)
	Response: `(Not currently available)`
	Explanation: (Not currently available)

Responses

The following table provides explanations of the responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`PVC: <pvc_number> -- CANNOT BUSY LAST INSV PVC`	
	Meaning: The PVC cannot be put into the busy state because it is the last remaining PVC in service.
	Action: Check the status of the PVC.
`PVC: <pvc_number> -- INVALID STATE`	
	Meaning: The specified PVC cannot be returned to service because it is not in the manually busy or system busy state (displayed as ManB or SysB), or the PVC may already be in service (displayed as InSv or ISTb). The discrimination number of the specified PVC is echoed by the value of <pvc_number>.
	Action: Verify that the PVC is in the manually busy state, then reenter the command.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`PVC: <pvc_number> -- RTS FAILED`	**Meaning:** The system could not return the PVC to service, where <pvc_number> echoes the discrimination number of the specified PVC. If there are insufficient resources available for the return, the PVC is made system busy (SysB). **Action:** Check the status of the MPC. Use the IOC/IOD MAP level. The status display remains the same with SysB or changes from ManB to SysB. Try the rts command again later.
`PVC: <pvc_number> -- RTS PASSED`	**Meaning:** The PVC is returned to service, where <pvc_number> echoes the discrimination number of the specified PVC. **Action:** None

-end-

tst

Function

Use the tst command to test the operation of posted, in-service PVCs. The test is executed if

- the PVC is in the in-service state (displayed as InSv or ISTb)
- the SEAS is in the in-service or in-service trouble state (displayed as ISTb)

A message for the maximum time of wait is displayed before the command is executed. A user program layer (UPL) message is transmitted through the PVC to the SEAS and a response from the SEAS is verified.

tst command parameters and variables

Command	Parameters and variables
tst	all *pvc_number*

Parameters and variables	Description
all	This parameter identifies that all of the PVCs in the posted set are to be tested.
pvc_number	This variable identifies the discrimination number of the PVC to be tested. The range is 0-7.

Qualifications

None

Example

The following table provides an example of the tst command.

Example of the tst command

Example	Task, response, and explanation
tst ↵ *where*	

Task:	(Not currently available)
Response:	`(Not currently available)`
Explanation:	(Not currently available)

tst (end)

Responses

The following table provides explanations of the responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
`PVC: <pvc_number> -- TEST FAILED (NO SEAS RESPONSE)`	**Meaning:** A test message was sent to the SEAS, but the SEAS did not respond within a specified time. The discrimination number of the PVC to have been tested is echoed by the value of <pvc_number>. **Action:** None
`PVC: <pvc_number> -- TEST FAILED (TEST MESSAGE CORRUPTED)`	**Meaning:** A test message was sent to the SEAS and returned, but it was corrupted during the process. The discrimination number of the PVC to have been tested is echoed by the value of <pvc_number>. **Action:** None
`PVC: <pvc_number> -- TEST PASSED`	**Meaning:** A test message was sent to the SEAS and the response is verified as correct where <pvc_number> echoes the discrimination number of the PVC that passed the test. **Action:** None
`THIS COMMAND MAY TAKE UP TO 5 MINUTES`	**Meaning:** The tests could take up to 5 minutes to complete. This response is displayed immediately after the tst command is entered. **Action:** If the tests are to be cancelled, enter the abort or abtk command.

RCC level commands

Use the RCC level of the MAP to perform maintenance functions for a remote cluster controller (RCC).

Accessing the RCC level

To access the RCC level, enter the following from the CI (Command Interpreter) level:

mapci:mtc;post rcc ***rcc_no*** ↵

where

rcc_no is the number of the RCC to be posted

RCC commands

The commands available at the RCC MAP level are described in this chapter. They are arranged in alphabetical order. The page number for each command is listed in the following table.

RCC commands (continued)

Command	Page
abtk	R-5
bsy	R-7
disp	R-15
irlink	R-23
listset	R-25
loadnotest	R-29
loadpm	R-31
next	R-49
offl	R-51
perform	R-55

-continued-

RCC commands (continued)

Command	Page
pmreset	R-61
post	R-65
querypm	R-69
quit	R-83
recover	R-87
rts	R-91
swact	R-103
trnsl	R-109
tst	R-113
warmswact	R-131
xpmlogs	R-133
xpmreload	R-135
xpmreset	R-137

-end-

RCC menu

The following figure shows the RCC menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM    CCS   LNS   Trks  Ext   APPL
         .     .     .     .   4SysB   .     .     .     .     .
                                 M

RCC                      SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit          PM        4      0     10      3      3     130
 2 Post          RCC       0      0      0      1      1      40
 3 ListSet
 4               RCC  0 ISTb     ,Links OOS: Cside 0 ; Pside 0
 5 Trnsl_        Unit 0:   Act   ISTb
 6 Tst_          Unit 1:   InAct ManB
 7 Bsy_
 8 RTS_
 9 Offl
10 LoadPM_
11 Disp_
12 Next_
13 SwAct
14 QueryPM_
15
16 Irlink
17 Perform
18
```

Hidden commands

```
abtk                warmswact
loadnotest          xpmlogs
pmreset             xpmreload
recover             xpmreset
```

RCC status codes

The following table describes the status codes for the RCC status display.

Status codes RCC menu status display

Code	Meaning	Description
State		PM states (see Notes 1: and 2:)
CBsy	Central Side Busy	PMs connected to the network are unable to communicate with the CC because either the network or the links used to carry messages between the PM and the P-side of the network are unavailable. A PM that is connected to the Network by one or more PMs are out-of-service because the C-side of the PM or the links of a PM are unavailable.
Idl	Idle	At the STC level, the ST is available in a pool for CCS7 use, but is not connected to a transmission link.

Status codes RCC menu status display (continued)

Code	Meaning	Description
InSv	In Service	PMs are in service and available to support any intended process, for example, call processing.
ISTb	In-Service Trouble	PMs are still in service but flagged by system maintenance because either: ▪ a minor error condition occurred ▪ the PM failed a REX or minor audit test ▪ the load is not listed in the corresponding data table Call processing service is not affected.
ManB	Manual Busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not Equipped	At the STC level, the ST discrimination number (STNO) is not listed in Table STINV.
Offl	Offline	PMs are temporarily made out-of-service.
SysB	System Busy	PMs are automatically removed from service by system maintenance.

Note 1: When an XPM status is displayed as manually busy (ManB), off-line (Offl), or unequipped (UNEQUIP), the activity display (Active--Act, or Inactive--Inact) remains blank. When the activity state is not displayed, the command strings rts inactive, loadpm inactive, and SwAct are not valid.
Note 2: When an XPM status is displayed as in service (InSv), in-service trouble (ISTb), C-side busy (CBsy), or system busy (SysB), the activity (Act or Inact) is also displayed.

abtk

Function

Use the abtk command to abort all active maintenance actions on a posted RCC. The state of the RCC remains the same.

abtk command parameters and variables

Command	Parameters and variables
abtk	There are no parameters or variables.

Qualifications

The abtk command is qualified by the following:

- Use the abtk command when using the loadpm command to cancel the entry of a wrong *l_name* parameter, or when the unit is executing maintenance processes.
- The loadpm command without the nowait parameter "locks" the terminal keyboard so that other commands cannot be entered until the process is completed. The abtk command unlocks the keyboard by cancelling the loading.

Example

The following table provides an example of the abtk command.

Example of the abtk command (continued)

Example	Task, response, and explanation	
abtk ↵		
	Task:	Stop all current maintenance action on the posted RCC
	Response:	`<display changes>`
	Explanation:	All current maintenance procedures halted.

abtk (end)

Responses

The following table provides explanations of the responses to the abtk command.

Responses for the abtk command

MAP output	Meaning and action
`<display changes>`	**Meaning:** The following line, for example, is deleted from the loadpm display: `LoadPM UNIT 1 /Loading 200` **Action:** The abtk command deletes any part of the display associated with a previous active maintenance command such as: swact, tst, bsy, rts, offl, loadpm. It returns units to previous states. The displays for the following commands are unaffected: trnsl, disp, next, querypm. The post command is not cancelled and the previous RCC posting is unaffected.
`ABORTING MAINTENANCE ON THIS PM WILL AFFECT MAINTENANCE ON OTHER PMS. PLEASE CONFIRM (“YES” OR “NO”)`	**Meaning:** Aborting a broadcast loading affects the loading of all PMs in the parallel loading of the posted set. **Action:** Entering YES aborts the loading. Groups of XPMs that have already been loaded remain loaded, while the group that has loading in progress retains the current load. Entering NO allows the maintenance action to proceed.

bsy

Function

Use the bsy command to change the state of one or all posted remote cluster controllers (RCC) to ManB. The bsy command can be applied to one or all units, the whole RCC or all RCCs, or one P-side link of one RCC of the posted set.

bsy command parameters and variables

Command	Parameters and variables				
bsy	pm		[*wait*	[*noforce*	[*posted*
	unit	*unit_no*	nowait]	force]	all]
	active				
	inactive				
	link	*ps_link*			

Parameters and variables	Description
active	This parameter busies one or all of the units in the active state.
all	This parameter simultaneously busies all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With the all parameter, greater numbers of XPMs take longer times to complete busying. Other maintenance activities must wait until the bsy command has completed executing.
force	This parameter forces the busying to occur even though maintenance actions are already in progress (for example, while RCC is undergoing REX testing).
inactive	This parameter busies one or all of the units in the inactive state.
link	This parameter applies the bsy command to a specified P-side link between the posted RCC and one of its associated line concentrating modules (LCM).
noforce	This default parameter, which is never entered, indicates that the bsy will not execute until any current maintenance action is completed because the force parameter is not entered.
nowait	This parameter allows other maintenance actions to occur before bsy is completed.
pm	This parameter busies all units of the posted RCC(s).
posted	This default parameter, which is never entered, indicates that only the currently posted RCC be made bsy because the all parameter is not entered.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
ps_link	This variable specifies which P-side link is to be made ManB. The range is 0-19.
unit	This parameter busies one or all units of the posted RCC(s).
unit_no	This variable specifies which unit of the posted RCC(s) is to be made ManB. The range is 0 or 1.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered until the bsy command has completed because the nowait parameter is not entered.

-end-

Qualifications

None

Examples

The following table provides examples of the bsy command.

Examples of the bsy command

Example	Task, response, and explanation
bsy ↵	
	Task: Busy the posted RCC **Response:** OK **Explanation:** The posted RCC is posted.
bsy active ↵	
	Task: Busy the active unit of the RCC. **Response:** `A swar SwAct will be performed please confirm ("YES" or "NO"):` **Explanation:** Typical response when active side of RCC is busied.

-end-

bsy (continued)

Responses

The following table describes the meaning and significance of responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
ALL OPTION NOT SUPPORTED FOR LINK PARAMETER	**Meaning:** The all parameter does not apply to links because they must be busied one at a time. **Action:** Use the parameter link without the all parameter to busy a link.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action

```
RCC 2 BSY refused by SwAct Controller
Inactive unit has a history of:
    <history text>
Inactive unit is reporting:
     <XPM text>
To override the SwAct Controller, type
SWACT FORCE,  and then re-issue BSY command.
```

Meaning: The bsy command has been refused by the SwAct controller because the resulting swat has been refused. This occurs only under the following conditions:

- Both units of the XPM are in-service.
- The BSY is executed on the active unit only, causing a warm SwAct to be attempted.
- The SwAct controller denies the SwAct request.

When a SwAct is refused, the reason is indicated. The refusal reason text may include either <history text>, <XPM text>, or both, where:

- <history text> is one of the following:
  - IMC link failures
  - Message link failures
  - Parity audit failures
  - Superframe sync failures
  - Inactive unit was unable to keep activity last time
  - Dropping activity due to <autonomous drop reason>
  - PreSwAct query failure
- <XPM text> is one of the following:
  - Unit is jammed Inactive
  - Unit is in overload
  - Message link failure
  - Static data corruption
  - IMC link failure
  - PreSwAct difficulties

Action: The bsy command may be reissued after a forced SwAct.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
RCC 2 IS MANUAL BUSY NO ACTION TAKEN	**Meaning:** The bsy command is applied to a PM that is already in the Manb state. **Action:** None
RCC 2 MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The RCC cannot be busied because it is already undergoing maintenance action. **Action:** When the all parameter is entered, the RCC is bypassed from the posted set of RCCs only for the duration of the busying.
LTC nn UNIT u BSY PASSED	**Meaning:** The specified RCC or unit is confirmed to be ManB, where *nnn* and *u* are the discrimination numbers. **Action:** None
MTCE IN PROGRESS	**Meaning:** The PM or unit cannot be busied while maintenance actions are already in progress. To override (and cancel) the actions, use the force parameter. **Action:** None
NO ACTION TAKEN	**Meaning:** NO is entered in response to a prompt and the command is aborted. **Action:** None
NO PM POSTED	**Meaning:** The PM must be posted before using the bsy command. Posting a PM identifies to the system the PM that is to have maintenance action. **Action:** None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
OK	**Meaning:** Indicates yes has been entered in response to a prompt and that the PM is busied. **Action:** None
SUMMARY: nnn PASSED nnn NO SUBMITTED	**Meaning:** With the all parameter, a summary is given of the quantity (nnn) of XPMs in the posted set of RCCs only for the duration of the busying. **Action:** None
THIS ACTION MAY CAUSE SWACT PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** When trying to busy an active unit, calls may be lost. Calls are not lost if the unit is inactive. **Action:** Use SwAct to switch the activity states to the two units so that the unit to be busied is inactive.
THIS ACTION WILL TAKE AN LCM OUT-OF-SERVICE PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** This warning follows the entry of the command string bsy link (with or without the force command) if the link is a message link to the LCM. Log PM182 (for information only) is generated whenever the command string bsy link is initiated to make a P-side link ManB. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
THIS ACTION WILL TAKE THIS PM AND ALL OF ITS SUBTENDING NODES OUT-OF-SERVICE PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** This warning follows the entry of either of the following command strings: bsy pm bsy unit *unit_no* bsy unit *unit_no* force It applies to the active unit while the other unit is out-of-service. The active unit is made ManB while the inactive unit is made SysB or CBsy. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCS PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of nnn RCCs in the posted set is to be busied. **Action:** If the user enters YES, the XPMs are busied If the user enters NO, the action is aborted. When the user responds with YES, the status display of the RCC in the current position of the posted set changes to ManB and the status display for the PM level, under the header ManB, will be incremented by one.

-end-

disp

Function

Use the disp command to display a list of all RCCs in a specified PM state.

disp command parameters and variables

Command	Parameters and variables
disp	diaghist [*posted* | *pm_type*] state *pm_state* [*all* | *pm_type*]

Parameters and variables	Description
diagnist	This parameter causes a summary of the history of diagnostic failures for the selected PMs.
pm_state	This variable is one of the following PM states: ▪ SysB system busy ▪ ManB manual busy ▪ OffL offline ▪ CBsy C-side busy ▪ ISTb in-service trouble ▪ InSv in-service
pm_type	This variable indicates the type of PMs for which information is to be displayed. For RCCs the PM type is RCC.
posted	This default parameter, which is never entered, indicates that all PMs will be affected by the display command because no PM type is specified.
state	This parameter indicates that PMs in the specified state are to be displayed. This parameter must be followed by a *pm_state* variable.

Qualifications

The disp command is qualified by the following exceptions, restrictions, and limitations:

- The diaghist parameter pertains only to XPMs supported by feature AF5006.
- Two sets of counters are used to save information for the diaghist parameter function, long term failures (LTF) and short term failures (STF).

disp (continued)

- The following diagnostics are supported by the PM Diagnostic History feature, AF5006, and may be reported in a diagnostic history.

Diagnostic name	Description	Type (solicited or audit)	Required by SwAct controller
AB DIAG	A/B Bits	solicited	no
AMUDIAG	6X50 External Loop	solicited	no
CDS1 DG	CSide DS1	solicited	no
CMRDIAG	CMR Card0	both	no
CONT DG	Continuity Diag	solicited	no
CSMDIAG	CSM Diag	solicited	no
CS SPCH	Network Links	solicited	no
DCHIALB	DCH Inactive Loopback	solicited	no
DS1DIAG	PSide DS1	solicited	no
DS30A	6X48 / MX74 Audit	audit	no
FORMATR	Local Formatter	solicited	no
ISPHDLC	ISP HDLC Diag	solicited	no
ISPSPHI	ISP Speech Bus Internal	solicited	no
ISPSPHF	ISP Speech Bus Full	solicited	no
MSGDIAG	6X69 Messaging Card	solicited	yes
MSG IMC	IMC Link	both	yes
MX76MSG	MX76 Messaging Card	solicited	yes
PADRING	6X80 Pad/Ring	solicited	no
PARITY	Parity Audit	audit	yes
PS LOOP	PSide Loops	solicited	no
PS SPCH	PSide Speech Links	solicited	no
RCC FMT	Remote Formatter	solicited	no
SCM AB	6X81 A/B Bits	solicited	no
SCM MSG	SCM A/B DDL Msg	solicited	no
SPCH DG	Speech Path	solicited	no
STRDIAG	Special Tone Receiver	solicited	no
SYNC DG	Sync Diag	both	yes
FAC AUD	Facility Audit	audit	no
TONE DG	Tone Diag	both	no
TS DIAG	Time Switch Diag	solicited	no
UTRDIAG	UTR Card	solicited	no

disp (continued)

- The following cards are supported by the AF5006 feature and may be reported in a diagnostic history.

Card name	Description
NT6X40	Net Interface Link
NT6X41	Speech Bus Formatter and Clock
NT6X42	CSM
NT6X44	Timeswitch and A/B Bit Logic
NT6X45	Master/Signalling/File Processor
NT6X46	SP Memory
NT6X47	MP Memory
NT6X48	DS30A Interface
NT6X50	DS1 Interface
NT6X55	DS0 Interface
NT6X62	STR Card
NT6X69	Messaging Card
NT6X70	Continuity Card
NT6X72	RCC Host Link Formatter
NT6X78	CLASS Modem Resource (CMR)
NT6X79	Tone Generator
NT6X80	SCM Pad/Padring
NT6X81	SCM A/B Bit
NT6X85	SCM DS1
NT6X86	SCM MSG
NT6X92	Universal Tone Receiver (UTR)
NT8X18	SMSR CSide DS30A Interface
NTBX01	ISDN Signalling Processor (ISP)
NTBX02	DCH
NTMX76	CSM + MSG Card
NTMX77	68020 Processor (UP)

disp (continued)

Examples

The following table provides examples of the disp command.

Examples of the disp command

Example **Task, response, and explanation**

disp state bsy rcc ↵

Task: Display all busy RCCs

Response:

```
Bsy RCC 0, 1
```

Explanation: There is one busy RCC, LGG 0 unit 1.

disp diaghist ↵

Task: Display the diagnostic history for all XPMs.

Response:

```
LTC 0  Long-Term Failure (LTF) last reset: 92/07/01 03:12:14
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/03 03:10:23
           Last diagnostic failure: 92/07/04 13:35:50
            DIAGLIST     STF         LTF
              AB DIAG      3           3
            CARDLIST     STF         LTF
              NT6X44       2           2
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/01 03:12:14
           Last diagnostic failure: 92/06/02 14:00:31
            No failures recorded
                  .
                  .
                  .
RCC 0  Long-Term Failure (LTF) last reset: 92/07/01 07:19:41
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/02 02:31:20
          No failures recorded
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/03 02:01:55
          No failures recorded
                  .
                  .
                  .
```

Explanation: No failures have been recorded on unit 1 of LTC 0 since the last LTF reset time. The last diagnostic failure was before the LTF reset time. RCC 0 displays no last diagnostic failure line because it has no failures in its lifetime.

-continued-

disp (continued)

Examples of the disp command (continued)

Example	Task, response, and explanation

disp diaghist rcc ↵

Task: Display the diagnostic history for all RCCs

Response:

```
RCC 0  Long-Term Failure (LTF) last reset: 92/07/01 03:12:14
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/03 03:10:23
           Last diagnostic failure: 92/07/04 13:35:50
            No failures recorded
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/01 03:12:14
           Last diagnostic failure: 92/06/02 14:00:31
            DIAGLIST     STF         LTF
              AB DIAG      1           3
            CARDLIST     STF         LTF
              No cards reported by the XPM
```

Explanation: Only the history for the RCC is displayed.

-end-

disp (continued)

Responses

The following table describes the meaning and significance of responses to the disp command.

Responses for the disp command

MAP output	Meaning and action
<pm_state> RCC: NONE or <pm_state> RCC n, n	**Meaning:** There are no PMs in the specified state, or all in the state are listed, where <pm_state> is the state specified in the command. **Action:** None

-continued-

disp (end)

Responses for the disp command (continued)

MAP output **Meaning and action**

```
<PMID> Long-Term Failure (LTF) last reset : <yr-month-day> <hr:min:sec>
  UNIT 0 Short-Term Failure (STF) last reset: <yr-month-day> <hr:min:sec>
         Last diagnostic failure: <yr-month-day> <hr:min:sec>
          DIAGLIST            STF             LTF
         <diag_name>         <counts>        <counts>
               .                 .               .
               .                 .               .
         <diag_name>         <counts>        <counts>

          CARDLIST            STF             LTF
         <card_name>         <counts>        <counts>
               .                 .               .
               .                 .               .
         <card_name>         <counts>        <counts>

  UNIT 1 Short-Term Failure (STF) last reset: <yr-month-day> <hr:min:sec>
         Last diagnostic failure: <yr-month-day> <hr:min:sec>
          DIAGLIST            STF             LTF
         <diag_name>         <counts>        <counts>
               .                 .               .
               .                 .               .
         <diag_name>         <counts>        <counts>

          CARDLIST            STF             LTF
         <card_name>         <counts>        <counts>
               .                 .               .
               .                 .               .
         <card_name>         <counts>        <counts>
```

Meaning: This is the response to a disp diaghist command, where

- <PMID> is the type of PM such as RCC, LTC, or RCC
- <yr-month-day> year, month, and day
- <hr:min:sec> hour, minute, and second
- <diag_name> the name of the diagnostic test
- <counts> the number of short term or long term failures

Action: None

-end-

irlink

Function

Use the irlink command to access the IRLINK level if feature package NTX380 is present. The command irlink is available when an RCC is posted from the PM level . The IRLINK level is used to maintain the interlinks of a Dual RCC.

irlink command parameters and variables

Command	Parameters and variables
irlink	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the irlink command.

Example of the irlink command

Example	Task, response, and explanation	
irlink ↵		
	Task:	Access the IRLINK level of the MAP.
	Response:	`<IRLINK MAP level display>`
	Explanation:	The IRLINK level is accessed and displayed.

irlink (end)

Responses

The following table provides explanations of the responses to the irlink command.

Responses for the irlink command

MAP output	Meaning and action
`display`	**Meaning:** The IRLINK menu and display appears. **Action:** None
`NO INTERLINKS ARE DATAFILLED.  IRLINK LEVEL CANNOT BE ENTERED.`	**Meaning:** The command irlink does not display a MAP level if no interlinks are datafilled. No Dual RCCIs are present. **Action:** None

listset

Function

Use the listset command to list the discrimination numbers of the PM types included in the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	*posted* *pm_type* all

Parameters and variables	Description
pm_type	This variable specifies the type of PM in the posted set that is to be listed with all of its discrimination numbers.
posted	This default parameter, which is never entered, indicates that all PMs of the same type as the PM currently posted will be listed because neither a *pm_type* nor the all parameter is specified.
all	This parameter lists all of the PM types that are in the posted set including their discrimination numbers.

Qualifications

The listset command is qualified by the following exceptions, restrictions, and limitations:

- use the listset command to plan maintenance actions on sets of XPMs of the same type.
- entering the command string help listset to display the syntax of the command at the MAP shows all of the PM types that use the listset command; however, only PMs included in the office configuration can be selected.

listset (continued)

Example

The following table provides an example of the listset command.

Example of the listset command

Example	Task, response, and explanation
listset all ↵	
	Task: List all of the PM types that are in the posted set.

	Response:
	`pm_type pm_number, pm_number ...`
	`:`
	`:`
	`pm_type pm_number, pm_number ...`

	Explanation: The discrimination numbers of all the specified PM types in the posted set are listed.

Responses

The following table describes the meaning and significance of responses to the listset command.

Responses for the listset command

MAP output	Meaning and action

`pm_type pm_number, pm_number ...`
`:`
`:`
`pm_type pm_number, pm_number ...`
	Meaning: The discrimination numbers of all the specified PM types in the posted set are listed.
	Action: None

`NO PMS FOUND`	**Meaning:** The posted set of XPMs is empty. **Action:** None

-continued-

listset (end)

Responses for the listset command (continued)

MAP output	Meaning and action
NO PMS OF SPECIFIED PM TYPE FOUND	**Meaning:** The posted set does not contain XPMs of the specified type. **Action:** None

-end-

loadnotest (end)

Function

The loadnotest command is obsolete. Use the loadpm command with the force parameter. See the loadpm command for details.

loadpm

Function

Use the loadpm command to load the peripheral program files into the processors of one or all posted RCCs. The PMs must be ManB or SysB before entering the loadpm command.

loadpm command parameters and variables

Command	Parameters and variables
loadpm	inactive pm unit *unit_no* [cc] [full / data / exec / cmr] [*l_name*] [*noforce* / force] [*wait* / nowait] [*posted* / all [*defile* / *r_name*]]

Parameters and variables	Description
all	This parameter simultaneously loads all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set.
cc	This parameter specifies that the source of the load data is to be the DMS-100 central control (CC) data store.
cmr	This parameter specifies that the CMR card will be loaded for the specified unit or units of the posted RCC.
data	This parameter selects the load which consists of the static data and execs, but not the basic RCC software. Static data and tables define the configuration of the RCC and subtending PMs. When loading static data into the PM the NT6X78 CLASS Modem Resource (CMR) card in the RCC is also loaded if table LTCINV is datafilled.
defile	This default parameter, which is never entered, indicates that the file used with the all parameter for loading will be the default file specified by the *l_name* variable because no *r_name* variable is specified.
exec	This parameter selects the load mode to be execs only. Execs are sets of instructions executed by the RCC in response to a CC request or DMS action. Execs behave like mini-programs to handle call processing.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
l_name	This variable is the name of the CC data file for the posted RCCs. Load names are listed in data table LTCINV, field LOAD. The load's file name also appears on the display of the command querypm next to FNAME. The device on which the load resides is specified in data table PMLOADS. By not specifying a load's file name, with parameter all, the XPMs are loaded with the file name recorded in the respective XPM inventory tables. More than one load can be used to load more than one PM.
force	This parameter bypasses the running of the ROM tests while loading occurs.
full	This parameter selects the load mode which consists of the basic RCC software, plus the execs and the static data in the CC. The parameter full is the default if no load mode is entered.
inactive	This parameter loads the unit(s) that are in the inactive state. If the parameter all is specified, XPMs with firmware card NT6X45BA or later are loaded by the mate unit. If the status display for the the unit (s) activity is blank, the CC prevents the loading. The action must be done by using explicit parameters. During an upgrade of XPM software, and with parameter all, the inactive units that are to be loaded from their mate units display broadcast mate as their maintenance flag.
noforce	This default parameter, which is never entered, indicates that the ROM tests will be run because the force parameter was not entered.
nowait	This parameter allows another RCC to be posted and loaded without waiting for confirmation from the previous load request. The parameter nowait also enables the MAP to be used for other entries while loading proceeds. Error messages for the loadpm command are generated in PM logs.
pm	This parameter loads both units of one or all posted RCCs.
posted	This default parameter, which is never entered, indicates that only the posted RCC in the control position will be loaded because the all parameter is not entered.
unit	This parameter loads one unit of one or all posted RCCs.
r_name	This variable is the name of the load that is to replace the load's file name (l_name) for those PMs that cannot be loaded by the l_name load. Replacement names for such PMs must be listed in data table LTCINV. The device on which the load resides is specified in table PMLOADS.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable specified which unit of the posted RCC is to be loaded. The range is 0 or 1.
wait	This default parameter, which is never entered, indicates that load request confirmation and error messages will not be suppressed, and the MAP cannot be used for additional commands until the loadpm command has completed executing because the nowait parameter was not entered.

-end-

Qualifications

The loadpm command is qualified by the following exceptions, restrictions, and limitations:

- While loading occurs, a series of maintenance flags display its progress.
- With the parameter all, the more XPMs there are, the longer it takes to complete the loading. Other maintenance activities will be delayed.
- When using the parameter pm, the load file name is taken from the data table, and displayed by the command querypm.
- When the RCC is not loaded, the only programs that are present for testing are located in the ROM. If the ROM test fails, the loadpm command cannot be used. If the ROM tests have already passed, the unlisted menu command loadnotest bypasses the ROM tests. The time taken for a ROM test that is already successful is not repeated.
- To reload a PM, enter the loadpm command on the inactive unit, then enter the swact command when it is completed, and then re-enter loadpm for the newly inactive unit.
- When loading for the PM occurs, the NT6X78 CMR card in the RCC is also loaded if the data table LTCINV is datafilled.
- To locate a load's file name, use the commands dskut and listvol. Load file names are listed in data table PMLOADS.
- The failure reasons that prevent PMs in a posted set from being loaded by broadcast loading are described alphabetically as follows:

  ```
  - LOAD NOT RECEIVED FROM BROADCAST LOADER
  ```

  The PM through which the load was to be sent has not sent the load. It may be out of service.

loadpm (continued)

- NO RESPONSE FROM IPML SETUP MESSAGE

  The XPM has not responded to the IPML setup that is required for broadcast loading to occur.

- NO RESPONSE FROM NIL EVENT TIMEOUT MESSAGE

  The XPM has not responded to the nil event timeout message.

- NO RESPONSE FROM ROM/RAM QUERY MESSAGE

  The XPM has not responded to the ROM and RAM query message.

Examples

The following table provides examples of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation

loadpm unit 1 ↵
where
 	
1 is the unit number of the posted RCC to be loaded
	Task: Load the peripheral program files into the processor of of RCC unit 1.
	
	Response:
	`LTC 0 ISTb Links_OOS: CSide 0 PSide 0`
	`Unit 0: Act InSv`
	`Unit 1: InAct ManB Mtce /Loading: 0200`
	`LOADPM UNIT 1`
	
	Explanation:

loadpm (continued)

Responses

The following table describes the meaning and significance of responses to the loadpm command.

Responses for the loadpm command

MAP output	Meaning and action
6X45 PEC MISMATCH available_pecs	**Meaning:** Loading cannot occur because the data entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** The equipped PECs of NT6X45 cards are listed, where pecs. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in inventory table LTCINV.
FAILED TO SEND RESET MESSAGE card_list	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where *card_list* is one of: NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None

-end-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`FAILED TO SEND STATUS MESSAGE card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of: NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPMs. The XPM(s) must be in service. **Action:** The activity display for the XPM(s) is blank **Action:** To load the XPM(s) that are bypassed from the posted set, busy the XPMs with the command bsy and use the command loadpm with the parameter unit or pm.
`LOAD FILE file_name NOT FOUND IN SYMBOL TABLE`	**Meaning:** The variables *l_name* or *r_name* is not found in the system's symbol table. The symbol table is a pseudo-table for storing data for the duration of a MAP session. It is not a data table and is emptied by a reload or a restart. **Action:** Check for a typo or check data table LTCINV for the applicable *r_name*. Unless the location of the load file is listed in data table PMLOADS, list the volume with the load's file name.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the command list to list the disk volume or the command mount to mount the tape that has the load file on it. The list and mount commands are described in the *Nonmenu Commands Reference Manual*, 297-1001-820. **Action:** None
`LTC pm_number UNIT u BROADCAST LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the mate units, where *pm_number* and unit *u* are the discrimination numbers of the specific PM(s). **Action:** None
`pm_type pm_number IS status` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where *pm_type* is a PM listed in table A on page 18, *pm_number* is the discrimination number of the PM, and status is one of the following: CBSY INSV OFF-LINE The PM must be ManB. **Action:** None
`RCC pm_number LOADED`	**Meaning:** The PM has been successfully loaded. **Action:** None
`RCC pm_number UNIT u LOAD FILE file_name IS NOT AVAILABLE`	**Meaning:** The already parameter has been used and the PM load *file_name* has already been identified as being unavailable. **Action:** The PM in the posted set is bypassed from the loading

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCC pm_number LOAD FILE IN INVENTORY TABLE NOT FOUND` `ENSURE THAT TABLE PMLOADS IS DATAFILLED CORRECTLY`	**Meaning:** The load's file name (parameter *l_name*) is not specified and the file name in the inventory data table does not correspond to a valid device in table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading.

`RCC pm_number UNIT u LOADPM FAILED`
`reason`
`CAUSED FAILURE OF BROADCAST LOADER`
	Meaning: As a member of the posted set intended for participation with broadcast loading, a PM's failure to be loaded prevents the broadcast loading from occurring. Reasons for the failure are listed in qualifications.
	
	Action: None of the PMs to be loaded by the broadcast method are loaded. PMs in the posted set using the single loading method are loaded
	
	Action: To allow the broadcast loading to proceed, remove the PM with the failure from the posted set and try again.

`RCC pm_number LOADPM FAILED` `LOAD NOT RECEIVED VIA BROADCAST LOADER`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, this RCC is not loaded because of a failure in another PM. **Action:** None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set using the single loading method are loaded **Action:** Investigate the cause of the failure to load the PM that is identified by the response CAUSED FAILURE OF BROADCAST LOADER. To proceed with the broadcast loading, remove the failed PM from the posted set and try the loadpm command again.
`RCC pm_number UNIT u LOAD REQUEST SUBMITTED`	**Meaning:** Only the PM in the current position of the posted set is being loaded from the CC. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCC cannot be loaded because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the RCC. **Action:** With parameter all, the RCC is bypassed from the posted set of RCCs only for the duration of the loading.
`RCC pm_number NOT SUBMITTED AS INACTIVE UNIT NO LONGER MANB OR ACTIVE UNIT IS NOW OOS`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PM is no longer manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`RCC pm_number NOT SUBMITTED AS STATE NO LONGER MANB`	**Meaning:** The PM's units are not both manually busy (ManB state). **Action:** The PM in the posted set is bypassed from the loading.
`LTC pm_number UNIT u REPLACEMENT NAME MISMATCH WITH INVENTORY TABLE`	**Meaning:** The specified load replacement file name does not match the file name datafilled in the inventory table of this PM. **Action:** The PM in the posted set is bypassed from the loading.
`reason` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory does not match the PEC of the NT6X45 card or there is no response to the ROM/RAM query. If the parameter nowait is specified, this response does not appear. **Action:** The maintenance flag `ROM/RAM QUERY` appears for the duration of the query. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in table LTCINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO WAIT RECEIVED AFTER RESET` `card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where *card_list* is one of NT6X40 NT6X41 NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X46 (FP memory) NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
`PM FAILED TO INITIALIZE` `TRY RELOADING THE PM`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.
`RCC pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an XPM in the posted set cannot be loaded because it is not in the manually busy state. **Action:** The PM in the posted set is bypassed from the loading. **Action:** To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command loadpm.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST card_list	**Meaning:** The results of the tests by the mate unit indicate that the cards are preventing the loading, where *card_list* is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command loadpm.
SUMMARY: nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully loaded or that have been bypassed by the loading. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCC PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** A quantity of nnn RCCs in the posted set is to be loaded. **Action:** Entering Yes loads the RCC(s) Entering No aborts the action. **Action:** With YES, the status display of the RCC in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading.
TOO MANY CHARACTERS IN REPLACEMENT NAME	**Meaning:** The variable *r_name* must be a string of eight characters or less. **Action:** Check for a type or check data table LTCINV for the applicable *r_name.*

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
TOO MANY DIFFERENT LOAD FILES REQUIRED. TRY A SMALLER SET OF PMS	**Meaning:** This response is to the command string loadpm pm all when the quantity of load file names in the respective inventory data tables is too large. **Action:** Use the command post to create a posted set either with fewer PMs or with PMs that use the same load file name, and re-enter the command.
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Mate loading is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Mate loading cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, loading from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.
WAITING FOR RESOURCES TO BECOME AVAILABLE	**Meaning:** The system must wait to do maintenance action because the maximum quantity of loading requests has been submitted. **Action:** Wait for the loading to complete or cancel the request with command abtk.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`WARNING: LOAD FILE file_name HAS SAME NAME AS DATAFILLED IN INVENTORY TABLE BUT IS NOT ON THE SAME DEVICE AS INDICATED BY TABLE PMLOADS`	**Meaning:** Two load file names are the same in a PM inventory data table and in table PMLOADS. The specified file name matches the name in the inventory table, but not the name in table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading. **Action:** Check table PMLOADS for the correct file name.
`Load file on command line not supported when loading the CMR`	**Meaning:** When loading the CMR, it is not valid to specify a load file on the command line. The load file specified in the inventory table will be used. **Action:** Reissue the loadpm command without specifying the CMR load name.
`CMR file <CMR_file_name> not found on the device indicated in table PMLOADS or in symbol table`	**Meaning:** A loadpm command was issued and the load file name indicated by `<CMR_file_name>` `in the response` and datafilled in the inventory table is not found on the device indicated in PMLOADS or in the user's symbol table. **Action:** Ensure that the CMR load datafilled in the inventory table exists on the device indicated by Table PMLOADS, or list the device where the loadfile resides, such as dskut;listvol d010pmload all.
`RCC X Unit Y request submitted.`	**Meaning:** The nowait parameter is entered. This message is produced to indicate the load request has been submitted, where x is the RCC number Y is the unit number of the RCC. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCC x Unit Y LoadPM Aborted` `Reason: ABTK from user <username>`	**Meaning:** The loading process has been aborted by another user, where x is the RCC number Y is the unit number of the RCC <username> is the name of the user submitting the abtk command. **Action:** Investigate the reason the other user aborted the loading.

`RCC x WARNING: CMR file >CMR_file_name> has same name`
`as datafilled in inventory table but`
`is not on the same device as`
`indicated by table PMLOADS`
	Meaning: The CMR file to be loaded has the same name as that datafilled in the inventory table. This file is not the same as the one defined in table PMLOADS. Two load files of the same name exist. The CMR will not be loaded.
	
	Action: None

`RCC X Unit Y CMR not datafilled in inventory table.`	**Meaning:** The optional card CMR and its load name are not datafilled in the inventory table, where x is the RCC number Y is the unit number of the RCC. **Action:** Add CMRxx, where xx specifies the slot number, to the OPTCARD list and the CMR load name to the CMRLOAD filed in the inventory table for the specified RCC. Ensure that the CMR card is in the correct slot as specified by xx.
`RCC x Unit y CMR card must be ManB`	**Meaning:** The CMR card must be manually busy to be loaded where x is the RCC number Y is the unit number of the RCC. **Action:** Busy the CMR card with the bsy command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCC x Unit y  Unit not InSv`	**Meaning:** The RCC must be in service, either InSv or IsTb for the CMR to be loaded, where x is the RCC number Y is the unit number of the RCC. **Action:** Ensure the RCC is in service.
`RCC x Unit y  LoadPM failed.` `<reason>`	**Meaning:** The PM has a failure which is indicated where x is the RCC number Y is the unit number of the RCC <reason> is the reason for the failure. **Action:** Investigate and correct the failure.
`Force parameter not valid when loading CMR`	**Meaning:** The force parameter was entered with the load cmr command. **Action:** Enter the command without the force parameter.
`ALL parameter not valid when loading the CMR`	**Meaning:** The all parameter was entered with the load cmr command. **Action:** Enter the command without the all parameter.

`Loading a CMR on an Active Unit will`
`degrade RCC call processing real time.`
`Do you still want to LOAD the CMR?`
	Meaning: A CMR in an active unit of an XPM is to be loaded. This message explains that the XPM call processing real time will be impacted.
	
	Action: To continue the loading process enter “yes.” To terminate the loading process enter “no.”

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCC x Unit y  No action taken - Mtce in Progress`	**Meaning:** The RCC was loading the CMR when an attempt was made to bsy the RCC unit. The loading of the CMR continues. This is an output message, where x is the RCC number Y is the unit number of the RCC. **Action:** None
`RCC x  Request Invalid` `Mtce in progress on either or both units`	**Meaning:** The RCC was loading the CMR when an attempt was made to SwAct the XPM. Loading continues. **Action:** None

-end-

next (end)

Function

Use the next command to place the next higher PM of the set of posted RCCs into the control position.

next command parameters and variables

Command	Parameters and variables
next	*any* *pm_type*

Parameters and variables	Description
any	This default parameter, which is never entered, indicates that the next PM in the post set, regardless of type, will be posted because no pmtype is specified.
pm_type	This variable specifies a pm type and enables the system to select a specific PM type to post. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Examples

Not currently available

Responses

The following table describes the meaning and significance of responses to the next command.

Responses for the next command

MAP output	Meaning and action
`END OF POST SET`	**Meaning:** The currently displayed PM is the last in the posted set of PMs. **Action:** None

offl

Function

Use the offl command to place the specified RCC or RCCs in the offline state.

offl command parameters and variables

Command	Parameters and variables
offl	*posted* all

Parameters and variables	Description
posted	This default parameter, which is never entered, indicates that only the currently posted RCC will be affected by the offl command because the all parameter was not entered.
all	This parameter makes offline all XPMs, or their specified units, which are the same node type as the XPM currently posted.

Qualifications

This command is qualified by the following limitation:
An off-line RCC remains in this state through all restarts.

Examples

Not currently available

Responses

The following table describes the meaning and significance of responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
0K	**Meaning:** The posted RCC is made offline. **Action:** None

-continued-

offl (continued)

Responses for the offl command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is already offline or is in the incorrect state for being made offline, where *pm_type* is a PM listed in Table A on page 18, *pm_number* is the discrimination number of the PM, and status is one of CBSY OFF-LINE SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`RCC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCC cannot be made off-line because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the RCC. **Action:** With parameter all, the RCC is bypassed from the posted set of RCCs only for the duration of being made offline
`RCC pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an RCC in the posted set cannot be made off-line because it is not in the manually busy state. **Action:** The RCC is the posted set is bypassed from being made offline. **Action:** To proceed with the maintenance, wait until the action on the posted set is completed, then make the RCC busy with the command bsy before trying the command offline.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
SUMMARY nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (*nnn*) of XPMs in the posted set that have been successfully made offline or that have been bypassed by the request. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** A quantity of *nnn* RCCs in the posted set is to be made off-line. **Action:** Entering YES makes the RCCs off-line. Entering NO aborts the action. **Action:** With YES, the status display of the RCC in the current position of the posted set changes to offl and the status display under the header OFFL is increased by one.
-end-	

perform

Function

Use the perform command to access the perform level where details of the activity and performance of a posted PM can be monitored. This feature requires feature package NTX827 or NTX750.

perform command parameters and variables

Command	Parameters and variables
perform	*nolab* lab

Parameters and variables	Description
nolab	This default parameter, which is never entered, cancels the setup for the office because lab parameter is entered.
lab	This parameter specifies a setup for the office as the menu and display of the posted PM is accessed. The setups automatically vary according to the type of PM that is posted. This parameter is for lab use only.

Qualifications

The perform command is qualified by the following exceptions, restrictions, and limitations:

- The posted PM must be in service (status InSv) or have in-service trouble (status ISTb).
- Only the active unit is monitored.
- Only one user at at time can monitor the performance of the posted PM.
- The measurements are recorded for the status displays within one hour of starting the measurements. The maximum measuring duration is one hour from its starting.
- Measurements are not maintained during or after a warm or cold SwAct.
- Measurements are maintained during a busying or returning to service of an active unit.
- The performance process can monitor up to five PMs.

perform (continued)

Example

The following table provides an example of the perform command.

Example of the perform command

Example	Task, response, and explanation
perform ↵	
	Task: Access the perform level for the currently posted RCC.
	Response: LOAD NAME: NLG35CN STATUS: REASON: LOGS: TIME:
	Explanation: The PERFORM level is accessed.

-end-

perform (continued)

Responses

The following table describes the meaning and significance of responses to the perform command.

Responses for the perform command

MAP output	Meaning and action
`display`	**Meaning:** The perform display and menu appears. **Action:** None
`DISPLAY PROCESS DIED`	**Meaning:** The Perform tool cannot be accessed until the display process is restored. **Action:** None
`FAILED TO INITIALIZE DIRECTORY`	**Meaning:** A system problem is interfering with the access of the Perform tool. **Action:** Try again later when more resources are likely to be available.
`MAXIMUM NUMBER OF PMS IN USE` `PLEASE WAIT UNTIL SOMEONE QUITS`	**Meaning:** A maximum of ten peripherals can be analyzed by the Perform tool at the same time. **Action:** Wait until the analysis is complete on one of the ten peripherals.
`MAXIMUM NUMBER OF DISPLAYS IN USE` `PLEASE WAIT UNTIL SOMEONE QUITS`	**Meaning:** A maximum of five MAPs can access the Perform level or its sublevels at the same time. **Action:** Wait until a MAP is made available.

-continued-

perform (continued)

Responses for the perform command (continued)

MAP output	Meaning and action
PERFORM ALREADY BEING USED ON THIS PM BY map_id	**Meaning:** Another MAP has already specified the PM for posting for the perform analysis. **Action:** Wait until the peripheral is no longer posted for perform command.
PERFORM NOT VALID ON THIS PM	**Meaning:** The perform tool does not analyze the type of specified PM. **Action:** None
PERIPHERAL IN USE	**Meaning:** The PM is already undergoing the performance process. **Action:** None
PERIPHERAL IS NOT INSV OR ISTB	**Meaning:** The active unit of the PM must be in the in-service (InSv) or in-service (ISTb) state. **Action:** None
PM LOAD DOES NOT SUPPORT THE PERFORM TOOL	**Meaning:** The feature package that provides the Perform analysis does not include this type of PM. **Action:** A software reload may be required as an upgrade to allow perform to analyze the specified type of PM.
POST COMMAND NOT VALID IN THIS TOOL TO POST THE PERIPHERAL, FIRST QUIT FROM PERFORM	**Meaning:** While the Perform tool is accessed, PMs cannot be added to the posted set. The PMs to be analyzed by perform must be posted before the tool is accessed. **Action:** None

-continued-

perform (end)

Responses for the perform command (continued)

MAP output	Meaning and action
THERE ARE FIVE USERS USING THIS TOOL PLEASE WAIT UNTIL A PROCESS IS STOPPED	**Meaning:** The performance process can monitor only up to five PMs simultaneously. **Action:** None
XPM DOES NOT SUPPORT PERFORM TOOL	**Meaning:** If the XPM does not respond to the command perform within a 10-second timeout, it is assumed that the XPM does not use the Perform tool. **Action:** You cannot enter other commands at the MAP during the timeout.

-end-

pmreset

Function

Use the pmreset command to reinitialize a posted RCC or one of its units after being reloaded using the loadpm command. This reset verifies that the reload is correct.

pmreset command parameters and variables

Command	Parameters and variables		
pmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted RCC.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

pmreset (continued)

Example

The following table provides an example of the pmreset command.

Example of the pmreset command

Example	Task, response, and explanation

pmreset unit 0 ↵
where
 	
0 is the number of the unit to be reset.
	Task: Reset unit 0 of the posted RCC.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES” OR “NO”)`
	
	Explanation: The resetting of an RCC equipped with ESA cancels calls.

pmreset (continued)

Responses

The following table provides explanations of the responses to the pmreset command.

Responses for the pmreset command

MAP output	Meaning and action
RCC <pm_number> UNIT <n> DETERMINATION OF ESA STATUS FAILED NO REPLY FROM PM REQUEST PROCEEDING	**Meaning:** The central control (CC) is unaware that the specified RCC is in the ESA mode, where <pm_number> is the discrimination number of the RCC and <n> is the RCC unit number (0 or 1). The system attempts to reset the RCC unit(s) anyway. **Action:** None
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the resetting, where card_list is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** None
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** The mate test reset is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Resetting for the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, resetting from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance actions(s) to complete.
UNIT <n> IN ESA MODE THIS ACTION WILL CAUSE ESA EXIT AND ABORT <nnn> CALLS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** The resetting of an RCC equipped with ESA cancels calls, where <nnn> is the current quantity of calls in progress. **Action:** None

-end-

post

Function

Use the post command to select a specific RCC upon which action is to be performed by other commands.

post command parameters and variables

Command	Parameters and variables	
post	*pm_type*	*nnn ...nnn*

Parameters and variables	Description
pm_type	This variable identifies a PM of note-type RCC. If a level of the node-type is already accessed, the *pm_type* may be omitted from the command entry. A PM in the control position of the posted set is the default.
nnn	This variable identifies the discrimination number of the RCC to be posted. The range is 0-127. When more than one PM is to be posted, the discrimination numbers are entered with a blank space separating them.

Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations.

- The post command must be used before using the commands trnsl, tst, bsy, rts, offl, loadpm, swact, querypm, or abtk.
- When the command string help post is entered to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

post (continued)

Examples

The following table provides an example of the post command.

Examples of the post command

Example	Task, response, and explanation

post RCC 8 ↵
where
 	
8 is the descrimination number of the RCC to be posted.
	Task: Post RCC 8.
	
	Response:
	`RCC  8 InSv  Links_OOS: CSide 0, PSide 0`
	`Unit0:  Act   InSv`
	`Unit1:  Inact InSv`
	
	Explanation: RCC 8 is posted.

Responses

The following table describes the meaning and significance of responses to the post command.

Responses for the post command

MAP output	Meaning and action
`NO PM POSTED`	**Meaning:** A PM level is accessed without any PM being posted. **Action:** None

-continued-

Responses for the post command (continued)

MAP output **Meaning and action**

```
 pm  pm_number  n_state  LINKS OOS:  CSIDE  nn  PSIDE  nn
UNIT 0: activity  u_state  MTCE            /LOADING:  nnnn
UNIT 1: activity  u_state  MCTE            /LOADING:  nnnn
```

Meaning: When a PM is posted, its status is displayed, where:

pm	is one of the types of PM listed in Table A on page 18.
pm_number	is the discrimination number of the PM type.
n_state	is the state of the PM node. The displayed state depends on the state of one or both units.
LINKS_OOS	indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.
activity	indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing, INACT means the unit is on standby (inactive).
u_state	is the status of a unit.
MTCE	indicates the unit is undergoing maintenance initiated manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance is occurring.
/LOADING:	indicates the unit is being updated with datafill, where nnnn is an increment of the load.

Action: None

```
<PM>  <num> InSv  Links_OOS: CSide 0, PSide 0
Unit0:  Act   InSv
Unit1:  Inact InSv
```

Meaning: The specified <PM> nunmber <num> is posted.

Action: None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted RCC.

querypm command parameters and variables

Command	Parameters and variables
querypm	cntrs diaghist [*both* | card | diag | reset] flt

Parameters and variables	Description
card	This parameter causes only card counts to be displayed for the diagnostic history.
cntrs	This parameter displays the contents of the RCC maintenance counters which record the number of times that each fault (flt) condition has occurred. It also displays the ROM and RAM load names.
both	This default parameter, which is never entered, indicates that both diagnostic counts and card counts will be displayed for the diagnostic history.
diag	This parameter causes only diagnostic counts to be displayed for the diagnostic history.
diaghist	This parameter causes a diagnostic history to be displayed.
flt	This parameter displays fault information for both units of the posted PM.
reset	This parameter causes the LTF counter to be reset to zero.

Qualifications

The querypm command is qualified by the following exceptions, restrictions, and limitations.

- Other fault conditions are:
  - Init-A CC restart has occurred. RTS is attempting during restart.
  - Diagnostics Failed-The unit has failed TST or RTS.
  - Trap-The unit has sent an “initialization complete” message to the CC after an auto-restart.
  - Activity Dropped-A system-generated SwAct has occurred.

querypm (continued)

- Audit-The internal software state of the active or inactive unit is incorrect. The active unit internal state should be RUNNING. The inactive unit internal state should be READY. Fault indications are: BUSY, RESTART, or SYNCING.
- Unsolicited Message Limit Exceeded-The unit has sent more than 100 unsolicited messages to CC within 1 minute.
- CS Links-The CS message links have failed the periodic in-service C-side links test (which occurs once per minute).

- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out-of-service. Until the card is returned to service or replaced, the XPM cannot be returned to service or tested by in-service tests.
  - PM180-The NT6X78 CMR card has a faults and a reset has been or is being attempted.
  - PM181-The NT6X78 CMR card has failed a card test and therefore has caused the XPM to have in-service trouble (ISTb).
  - PM601-When a querypm diaghist reset command is issued, a summary of LTF counters is recorded in a PM106 log before LTF counter is reset.
- Two sets of counters are used to save information for the diaghist parameter function, long term failures (LTF) and short term failures (STF).
- Whenever the queypm diaghist reset command is executed a warning is issued indicating the LTF counter data collected for the posted PM will be lost.
- The following diagnostics are supported by the AF5006 feature and may be reported in a diagnostic history.

Diag name	Description	Type (solicited or audit)	Required by SwAct controller
AB DIAG	A/B Bits	solicited	no
AMUDIAG	6X50 External Loop	solicited	no
CDS1 DG	CSide DS1	solicited	no
CMRDIAG	CMR Card0	both	no
CONT DG	Continuity Diag	solicited	no
CSMDIAG	CSM Diag	solicited	no
CS SPCH	Network Links	solicited	no
DCHIALB	DCH Inactive Loopback	solicited	no
DS1DIAG	PSide DS1	solicited	no

querypm (continued)

Diag name	Description	Type (solicited or audit)	Required by SwAct controller
DS30A	6X48 / MX74 Audit	audit	no
FORMATR	Local Formatter	solicited	no
ISPHDLC	ISP HDLC Diag	solicited	no
ISPSPHI	ISP Speech Bus Internal	solicited	no
ISPSPHF	ISP Speech Bus Full	solicited	no
MSGDIAG	6X69 Messaging Card	solicited	yes
MSG IMC	IMC Link	both	yes
MX76MSG	MX76 Messaging Card	solicited	yes
PADRING	6X80 Pad/Ring	solicited	no
PARITY	Parity Audit	audit	yes
PS LOOP	PSide Loops	solicited	no
PS SPCH	PSide Speech Links	solicited	no
RCC FMT	Remote Formatter	solicited	no
SCM AB	6X81 A/B Bits	solicited	no
SCM MSG	SCM A/B DDL Msg	solicited	no
SPCH DG	Speech Path	solicited	no
STRDIAG	Special Tone Receiver	solicited	no
SYNC DG	Sync Diag	both	yes
FAC AUD	Facility Audit	audit	no
TONE DG	Tone Diag	both	no
TS DIAG	Time Switch Diag	solicited	no
UTRDIAG	UTR Card	solicited	no

- The following cards are supported by the AF5006 feature and may be reported in a diagnostic history.

Card name	Description
NT6X40	Net Interface Link
NT6X41	Speech Bus Formatter and Clock
NT6X42	CSM
NT6X44	Timeswitch and A/B Bit Logic
NT6X45	Master/Signalling/File Processor
NT6X46	SP Memory
NT6X47	MP Memory
NT6X48	DS30A Interface

querypm (continued)

Card name	Description
NT6X50	DS1 Interface
NT6X55	DS0 Interface
NT6X62	STR Card
NT6X69	Messaging Card
NT6X70	Continuity Card
NT6X72	RCC Host Link Formatter
NT6X78	CLASS Modem Resource (CMR)
NT6X79	Tone Generator
NT6X80	SCM Pad/Padring
NT6X81	SCM A/B Bit
NT6X85	SCM DS1
NT6X86	SCM MSG
NT6X92	Universal Tone Receiver (UTR)
NT8X18	SMSR CSide DS30A Interface
NTBX01	ISDN Signalling Processor (ISP)
NTBX02	DCH
NTMX76	CSM + MSG Card
NTMX77	68020 Processor (UP)

querypm (continued)

Examples

The following table provides examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation
querypm ↵	
	Task: Display information about the currently posted RCC.

	Response:
	`PM Type: RCC PM No.: 0 PM Int. No.: 0 Node_no.:31`
	`PMs Equipped: 51 Loadname: NLG36BL`
	`WARM SWACT is supported and available.`
	`RCC 0 is included in the REX schedule.`
	`REX on RCC 0 has not been performed.`
	`Node Status: {OK, FALSE}`
	`Unit 0 Inact, Status: {OK, FALSE}`
	`Unit 1 Act, Status: {OK, FALXE}`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 01 E31 LTE 00 51 RCC : 000 6X02AA`

	Explanation: Typical display for querypm command.
querypm flt ↵	
	Task: Display fault information for both units of the posted PM.

	Response:
	`Node is ISTb`
	`One or both Units inservice trouble`
	`Unit 0`
	`The following inservice troubles exist:`
	`PM Load mismatch with Inventory table`
	`Unti 1`
	`The following inservice troubles exist:`
	`PM Load mismatch with Inventory table`

	Explanation: Typical display for querypm flt command.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example **Task, response, and explanation**

querypm diaghist ↵

Task: Display the diagnostic history for the posted PM.

Response:

```
LTC 1  Long-Term Failure (LTF) last reset: 92/07/01 03:12:14
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/03 03:10:23
           Last diagnostic failure: 92/07/04 13:35:50
            DIAGLIST  CARDLIST            STF         LTF
              AB DIAG: Total failures      2           3
                     : NT6X44              0           3
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/01 03:12:14
           Last diagnostic failure: 92/06/02 14:00:31
            DIAGLIST  CARDLIST            STF         LTF
              AB DIAG: Total failures      1           1
                     : NT6X44              0           1
              SPCH DG: Total failures      1           4
                     : NT6X44              0           1
                     : NT6X41              0           3
                     : NT6X43              0           1
```

Explanation: Unit 0 has failures of the AB diagnostic while unit one has failures for both the AB and speech path diagnostics.

querypm diaghist diag ↵

Task: Display the diagnostic history for the posted PM, diagnostics only.

Response:

```
LTC 1  Long-Term Failure (LTF) last reset: 92/07/01 03:12:14
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/03 03:10:23
           Last diagnostic failure: 92/07/04 13:35:50
            DIAGLIST                      STF         LTF
              AB DIAG: Total failures      2           3
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/01 03:12:14
           Last diagnostic failure: 92/06/02 14:00:31
            DIAGLIST                      STF         LTF
              AB DIAG: Total failures      1           1
              SPCH DG: Total failures      1           4
```

Explanation: Unit 0 has failures of the AB diagnostic while unit one has failures for both the AB and SPEECH diagnostics. Only diagnostics are displayed.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example **Task, response, and explanation**

querypm diaghist card ↵

Task: Display the diagnostic history for the posted PM, card lists only.

Response:

```
LTC 1  Long-Term Failure (LTF) last reset: 92/07/01 03:12:14
   UNIT 0 Short-Term Failure (STF) last reset: 92/07/03 03:10:23
          Last diagnostic failure: 92/07/04 13:35:50
                     CARDLIST            STF         LTF
                     : NT6X44             0           3
   UNIT 1 Short-Term Failure (STF) last reset: 92/07/01 03:12:14
          Last diagnostic failure: 92/06/02 14:00:31
                     CARDLIST            STF         LTF
                     : NT6X44             0           1
                     : NT6X41             0           3
                     : NT6X43             0           1
```

Explanation: Unit 0 has one failing card and unit one has three failing cards. Card lists only are displayed.

-end-

querypm (continued)

Responses

The following table describes the meaning and significance of responses to the querypm command

Responses for the querypm command

MAP output	Meaning and action
`Diagnostic History is not supported for this PM type`	**Meaning:** The querypm diaghist command was issued for a PM or XPM not supported by AF5006 feature. **Action:** None
`LTF counters reset to zero`	**Meaning:** This response indicates that yes was entered to the confirmation request for the querypm diaghist reset command. **Action:** None
`WARNING: The Long Term Failure (LTF) counters will be ZEROed.` `Please confirm (“YES” or “NO”):`	**Meaning:** The warning and confirmation request are always issued when the querypm diaghist reset command is executed. **Action:** Enter yes to continue resetting the LTF counter, or enter no to abort the command.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output **Meaning and action**

```
PM TYPE: type  PM NO.:  nnn  PM INT.#:  n  NODE NO.:  nnnn
PMS EQUIPPED: xxx  LOADNAME:  l_name
WARM SWACT IS SUPPORTED
status info
LAST REX DATE WAS day mmdd  AT hh.mm; results
NODE STATUS: {OK, FALSE}
UNIT 0 STATUS: {status, FALSE}
UNIT 1 STATUS: {status, FALSE}
SITE FLR RPOS  BAY_ID  SHF DESCRIPTION  SLOT EQPEC
```

Meaning: PM information is displayed, where:

type	is a PM type.
nnn	is 0-127 for the discrimination number of the PM type.
n	is a software internal number
nnnn	is 0-2047 for the PM node number of PM number nnn.
l_name	is the name of the load file for the PM type.
status_info	is a reason for the status of a unit or node, where status_info can be:

`6X45 PEC MISMATCH BETWEEN INVENTORY TABLE & PM`

The mismatch means the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. Check the PECs of the NT6X45 cards in use by entering querypm or by inspecting the card and ensure that the PEC with the lowest suffix is the one datafilled in Table LTCINV.

`NOT LOADED SINCE POWER UP`

The RCC has not been loaded with software after having been powered up. The fault query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return to service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively).

`type nnn IS INCLUDED IN THE REX SCHEDULE`

The PM is automatically scheduled for REX testing by the system.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	day — is an abbreviation for the day of the week, for example, MON for Monday. mmdd — is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7. hh.mm — denotes the time in hours and minutes that the REX test occurred results — gives the result of the last REX test (PASSED or FAILED) status — is one of the PM status codes. SITE — begins the header string which identifies the location of a circuit according to the standard scheme. card_list — is the list of potentially faulty cards. **Action:** None

`NODE IS <status>`
`  <reason>`
`UNIT 0`
`  state`
`UNIT 1`
`  state`
	Meaning: PM fault information is displayed, where:
	
	<status> — is one of the PM status codes.
	<reason> — is one or more of the following:
	
	`CLASS MODEM RESOURCE CARD 6X78AA OUT OF SERVICE` means the CMR NT6X78 card in the RCC is a cause of the XPM having in-service trouble (ISTb status).
	
	`DATA NOT UP TO DATE`
	
	`DISTRIBUTED DATA MISMATCH`
	
	`NODE REDUNDANCY LOST (A UNIT IS OOS)` means that one unit is out-of-service (OOS) and that SwAct cannot be done. For unit1, there has been a recent SwAct and the inactive unit is still SysB. The fault condition is caused by one unit being out-of-service.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	ONE OR BOTH UNITS INSERVICE TROUBLE NON-CRITICAL HARDWARE FAULT means there is a fault with the NT6X69 card of the posted XPM. The XPM has been made ISTb because the IMC link between the units is faulty and the CC hasclosed the link. See Testing the IMC link on page 37 for details. NOT LOADED SINCE POWER-UP means the RCC has not been loaded with software after having been powered up. The query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return-to-service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). PSIDE LINKS OUT-OF-SERVICE RESET WARMSWACT DISABLED: DATASYNC FAILURE OR TURNED OFF means the node has exhibited ISTb trouble because either dynamic data sync has failed or turned off through RTS of the inactive unit with NODATASYNC option. MISMATCH FOUND IN NODE TABLE BETWEEN TWO XPM UNITS means a mismatch was found between the node tables of the two units after the inactive unit was returned to service. Clear the trouble as soon as possible since warm SwAct capability is disabled because of the above node ISTb reason.
state	is one of NO FAULT EXISTS NOT status OR status status SYSTEM BUSY REASON: XPM SWACT ACTION REX failed

Action: None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
`SYSTEM BUSY REASON: HARD PARITY FAULT WAS EXECUTED`	**Meaning:** The XPM unit was put to OOS state because to a hard parity fault. **Action:** Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence.
`SYSTEM BUSY REASON: SOFT PARITY FAULT WAS DETECTED IN ps_ds`	**Meaning:** The XPM unit was put to OOS state because to the detection of a soft parity fault in either program store or data store in MP, SP, EP, or FP memory. **Action:** None
`SYSTEM BUSY REASON: INTERMITTENT PARITY FAULT WAS DETECTED`	**Meaning:** The XPM unit was put to OOS state because of the detection of an intermittent fault in MP, SP, EP, or FP memory. The system will RTS the faulty unit with new static data. **Action:** None
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `INTERMITTENT PARITY FAULT WAS DETECTED IN xx MEMORY`	**Meaning:** The XPM unit went ISTb because of an intermittent fault in MP, SP, or FP memory, where xx indicates what processor contains the faulty memory. Busy and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `HARD PARITY FAULT WAS DETECTED IN xx MEMORY`	**Meaning:** The XPM unit went ISTb because of a hard parity fault in MP, SP, FP, or EP memory, where xx indicates what processor contains the faulty memory. Busy the faulty unit. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence **Action:** None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output **Meaning and action**

```
UNSOLICITED MSG LIMIT = ttt,  UNIT 0 = nnn,  UNIT 1 = nnn
UNIT 0
   count_info
UNIT 1
   count_info
MP: available_pec  SP: available_pec
```

Meaning: PM counter information is displayed where:

ttt — is the threshold limit for the number of unsolicited messages from the CC. If the threshold is reached, the PM may cancel calls in progress.

nnn — is the number of unsolicited messages that have accumulated for each unit.

count_info — is one of
RAM LOAD: l_name1
ROM LOAD: l_name2
or
FAILED TO READ COUNTERS
or
nnn

where:
l_name1 is the name of the load file for the unit,
l_name 2 is the firmware load file in the PM, and nnn is the count. The counters cannot be read because the respective unit is out-of-service.

available_pec — for an in-service unit, is a list of the available PECs of the equipped NT6X45 cards. MP indicates the master processor card while SP indicates the signaling processor card. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card.

Action: None

-continued-

querypm (end)

Responses for the querypm command (continued)

MAP output **Meaning and action**

```
<PMID> Long-Term Failure (LTF) last reset : <yr-month-day> <hr:min:sec>
  UNIT 0 Short-Term Failure (STF) last reset: <yr-month-day> <hr:min:sec>
          Last diagnostic failure: <yr-month-day> <hr:min:sec>
           DIAGLIST     CARDLIST      STF             LTF
          <diag_name> <card list>   <counts>        <counts>
                .          .            .             .
                .          .            .             .
          <diag_name> <card list>   <counts>        <counts>
  UNIT 1 Short-Term Failure (STF) last reset: <yr-month-day> <hr:min:sec>
          Last diagnostic failure: <yr-month-day> <hr:min:sec>
           DIAGLIST     CARDLIST      STF             LTF
          <diag_name> <card list>   <counts>        <counts>
                .          .            .             .
                .          .            .             .
          <diag_name> <card list>   <counts>        <counts>
```

Meaning: This is the response to a querypm diaghist command, where

- <PMID> is the type of PM such as RCC, LTC, or RCC
- <yr-month-day> year, month and day
- <hr:min:sec> hour, minute and second
- <diag_name> the name of the diagnostic test
- <card list> the PEC for a spcific card
- <counts> the number of short term or long term failures

Action: None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the RCC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The RCC level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the RCC level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The RCC level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the RCC level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the RCC level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

recover

Function

Use the recover command to reload and return to service one unit of a set of RCCs that has lost its memory of the load when the system requires powering up.

recover command parameters and variables

Command	Parameters and variables
recover	[*posted* / all] [*wait* / nowait]

Parameters and variables	Description
all	This parameter simultaneously recovers all of the XPMs of the same type as the XPM in the current position of the posted set.
nowait	This parameter allows the recovery to proceed without waiting for confirmation from the system. The parameter nowait enables the MAP to be used for other maintenance commands while the recovery is in progress.
posted	This default parameter, which is never entered, indicates that only the currently posted RCC will be affected by the recover command because the all parameter is not entered.
wait	This default parameter, which is never entered, indicates that the user must wait for the recover command to complete executing before entering additional commands at the MAP because the nowait parameter is not entered.

Qualifications

The recover command is qualified by the following exceptions, restrictions, and limitations:

- The XPMs must be either the manual busy (ManB) or the system busy (SysB) state.
- If table PMLOADS is not correctly datafilled loading with the recover command cannot occur.
- The recover command overrides any system action that is still in progress.
- The recover command makes only one attempt to recover XPMs in a posted set. For XPMs that are not recovered, manual action is required to reload and return them to service.
- Loading and returning to service can occur simultaneously on different PMs of the same PM type.

recover (continued)

Example

Not currently available

Responses

The following table describes the meaning and significance of responses to the recover command.

Note: All responses to the commands loadpm and rts for the respective PM type in the posted set also apply to the command recover. Other responses are described alphabetically as follows.

Responses for the recover command

MAP output	Meaning and action

`<pm_type> <pm_number> FAILED`
`<reason>`
`or`
`<pm_type> <pm_number> PASSED`
	Meaning: These are the results of the loading. If the loading succeeds on at least one unit, a return to service is attempted on the PM.
	
	Action: None

`<pm_type> <pm_number> RECOVER FAILED`
`<reason>`
`or`
`<pm_type> <pm_number> RECOVER PASSED`
	Meaning: These are the results of the return to service.
	
	Action: None

`<pm_type> <pm_number> RTS REQUEST SUBMITTED`	**Meaning:** The PM is not equipped with the BA or later version of the NT6X45 Firmware card. Reloading is not attempted. **Action:** None

-continued-

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number> UNIT <u> RECOVER FAILED REQUIRE LOAD BUT NOT ATTEMPTED FOR SINGLE UNIT`	**Meaning:** The unit must be reloaded, but its mate failed the test for load sanity. Both units must be available for broadcast loading to occur, therefore no further action is done to this XPM. **Action:** Use the command loadpm on the identified PM.
`<pm_type> <pm> UNIT <u> RELOADING REQUIRED. RTS ATTEMPTED ON MATE`	**Meaning:** The identified unit cannot be reloaded. The mate unit has been successfully loaded; therefore the system is returning it to service instead. **Action:** None

-end-

Function

Use the rts command to return to service one or all RCCs in a posted set, or one P-side link of the RCC in the control position of the posted set. Tests are done and a return to service occurs if the tests succeed. Each unit must be in the ManB or SysB state.

rts command parameters and variables

Command	Parameters and variables					
rts	pm unit active inactive	*unit_no*	*datasync* nodatasync	*noforce* force	*wait* nowait	*posted* all
	link sysb	*ps_link*				

Parameters and variables	Description
active	This parameter returns to service one or all of the units in the active state.
all	This parameter returns to service all posted PMs, regardless of status.
datasync	This default parameter, which is never entered, indicates that the PM will attempt data sync after RTS because the nodatasync parameter is not entered.
force	This parameter bypasses pre-rts test routines. It overrides all other commands that may be in effect on a unit unless maintenance actions are already in progress.
inactive	This parameter returns to service one or all units in the inactive state.
link	This parameter returns to service a specified P-side link between the posted RCC and one of its associated LCMs.
nodatasync	This parameter causes static data to be sent to the inactive unit, but the PM will not attempt data sync after RTS.
noforce	This default parameter, which is never entered, indicates that pre-rts tests will be run, and if there are failures, rts will not occur, because the force parameter was not entered.
nowait	This parameter allows other maintenance commands to be entered before bsy is commanded.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
pm	This parameter returns to service both units of one or all posted RCCs.
posted	This default parameter, which is never entered, indicates that only the currently posted RCC will be returned to service, because the all parameter was not entered.
ps_link	This variable specifies which P-side link is to be returned to service. The range is 0 -19.
sysb	This parameter returns all posted system busy PMs to service.
unit	This parameter returns to service one unit of one or all posted RCCs.
unit_no	This variable specifies which unit of the posted RCCs is to be returned to service. The range is 0-1.
wait	This default parameter, which is never entered, indicates that the user must wait until the rts command has executed before entering additional commands at the MAP because the nowait parameter was not entered.

-end-

Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations.

- When an XPM is made system busy (SysB state), the testing and loading of a return to service are automatically initiated..
- The nodatasync parameter does not apply to PMs equipped with a small load.
- If the UNIT, PM, or LINK is CBsy, RTS is executed without any testing and the status becomes CBsy.
- When the active unit of the RCC is returned to service, all P-side links are set to SysB, and then to RTS with a test performed on each link as it passes the test, unless the links are ManB.
- While the status of one PM is displayed, the responses indicate the test initiations and results for the other PMs of the posted set. The discrimination number of the displayed PM does not change.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by 1 for each posted PM.

rts (continued)

- While PMs are tested and returned to service, the status display of the posted PM in the control position changes the maintenance flag (Mtce) beside the unit's status, and by the progression of the tests beside the header RG. Tests occur, one unit at a time, and progression is shown by a series of messages displayed in the following order:

```
Initializing
Reset
Status
Run
Reset
Run
```

- If the NT6X78 CMR card fails the tests during an attempt to return the PM to service, the PM cannot be returned to service until the card is seated properly or replaced.
- The force parameter should not be used on the RCC when the NT6X78 CMR card is present. If the card is in the process of initializing itself while the XPM is returning to service, the XPM remains in the manual busy (ManB) or system (SysB) state. The return to service must be repeated when the CMR is initialized.
- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out of service. Until the card is returned to service or replaced, the XPM cannot be returned to service.
  - PM180-The NT6X78 CMR card has a fault and a reset has been or is being attempted. The return to service has not occurred.
  - PM181-The NT6X78 CMR card has failed a card test and therefore cannot be returned to service.
  - PM184-A P-side link is returned to service.

Examples

Not currently available

rts (continued)

Responses

The following table describes the meaning and significance of responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `available_pecs`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. If parameter nowait is entered, this response does not appear. **Action:** SYSTEM: While the table query is occurring, the maintenance flag ROM/RAM QUERY is displayed. The equipped PECs of NT6X45 cards are listed, where available_pecs is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in inventory Table LTCINV.
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	**Meaning:** The parameter all does not apply to links because they must be returned to service one at a time. **Action:** None
`/CLEAR DATA`	**Meaning:** With feature package NTX270, RCCs do not undergo the second restart for command rts that other XPMs undergo. Therefore, the resetting of the Static Data occurs before the initial restart, and the system confirms that the Static Data is reset (cleared). **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`/DISTRIBUTED DATA ?does this belong for a RCC, ntx041 applies to ccs7!`	**Meaning:** With feature package NTX041, at least one DTC is being loaded while the command rts is in progress. The loading is required because of a mismatch of data between the DTC and the CC. **Action:** Depending on the result of the loading, a log is generated.
`FAILED TO SEND RESET MESSAGE card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not reset. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
`FAILED TO SEND STATUS MESSAGE card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPMs. The XPM(s) must be in service. **Action:** SYSTEM: The activity display for the XPM(s) is blank. USER: To return the XPM(s) to service, re-enter the command rts with the parameter unit or pm.
`RCC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCC cannot be returned to service because it is already undergoing maintenance action, where pm_number is the discrimination number of the RCC. **Action:** SYSTEM: With parameter all, the RCC is bypassed from the posted set of XPMs only for the duration of the return to service.
`RCC pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With the all parameter, an RCC in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** SYSTEM: The RCC in the posted set is bypassed by the return to service. USER: To proceed with the maintenance, wait until the action on the posted set is completed, then busy the RCC with the bsy command before trying the command rts.
`RCC pm_number UNIT u RTS PASSED`	**Meaning:** The tests are confirmed, where pm_number and u echo the discrimination numbers of the RCC and its unit. **Action:** SYSTEM: The RCC or unit is made InSv.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If nowait parameter is specified, this response does not appear. **Action:** SYSTEM: The maintenance flag ROM/RAM QUERY appears while the load is being queried/ USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
NO WAIT RECEIVED AFTER RESET card_list	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X46 (FP, memory) NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
OPERATIONS ON TRUNK CARRIERS MUST BE DONE AT CARRIER MAP LEVEL	**Meaning:** With the link command, there are two kinds of connections to the RLCM: links or trunks. The trunks are operated from the CARRIER level. **Action:** Use the command trnsl to display which *ps_link* assignment is a link and which is a trunk.
OK	**Meaning:** The test passes and the PM is returned to service. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being performed on the posted PM. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
PM FAILED TO INITIALIZE TRY RELOADING THE PM	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not initialized. **Action:** USER: Reload the XPM by entering the command pmreset or loadpm at the MAP.
PM IS OFFLINE NO ACTION TAKEN	**Meaning:** The command cannot be executed because the PM is in the Offl state. **Action:** None
PM NOT LOADED SINCE POWER UP	**Meaning:** The RCC cannot be returned to service because it has not been loaded with software after having been powered up. If nowait parameter is entered, this response does not appear. Using the command querypm indicates which load for the NT67X45 card. the system tries to auto-load the units before a return to service. When auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). **Action:** SYSTEM: The maintenance flag ROM/RAM QUERY appears while the load is being queried. Log PM181 records the occurrence of this response.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where pm_type is a PM listed in Table A on page 18, pm_number is the discrimination number of the PM , and status is one of CBSY INSV OFF-LINE The PM must be ManB. **Action:** None
`REPLACE CARDS IN CARDLIST` `card_list`	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the return to service, where card_list is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
`REQUEST INVALID` `MSBx pm_number IS pm_state`	**Meaning:** By the command string rts pm force, the state of one of the MSB units that is connected to the RCC prevents the whole PM from being made in service. That is, one unit may be ISTb. The value of x is either 6 or 7 for the type of MSB. **Action:** None
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command rts.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
RTS FAILED TRY THE RTS COMMAND ON ONE UNIT	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because both units are ManB or a card is pulled. The unit(s) must be reloaded. **Action:** Uses the command rts to reload the static data into the unit(s).
SUMMARY: nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully returned to service or that have been bypassed by the return to service. **Action:** None
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC card_list	**Meaning:** Results of test are displayed using the standard circuit display. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCC PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of nnn RCCs in the posted set is to be returned to service. **Action:** Enter YES to test, reload, and then return the RCC(s) to service. Enter NO to abort the action.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command rts.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`**WARNING**  UNIT u MAY NOT HAVE A VALID LOAD`	**Meaning:** A unit of a PM of node-type RCC has undergone the ROM tests, where u is either 0 or 1. The RAM load is erased. **Action:** Reload the unit using the command loadpm.
`STATIC DATA WILL BE SENT.  DATA SYNC WILL NOT BE ATTEMPTED AFTER THE INACTIVE UNIT IS RTSED. PLEASE CONFIRM ("YES" OR  "NO"):`	**Meaning:** Whenever the nodatasync option is entered at the MAP and screened to be acceptable, the CC will warn the user on the impact of the option. The craftperson will also be prompted YES/NO before the rts command processing can proceed. If YES is entered, the CC will reset static data in the CPM and send down static data during the rts of the inactive unit. The PM will not attempt data sync after the inactive unit is returned to service. Warm SwAct is disabled. **Action:** None
`PM IS OOS, NODATASYNC PARM DOES NOT APPLY`	**Meaning:** The nodatasync option is rejected because the PM is not in service. **Action:** None
`PM IS EQUIPPED WITH SMALL LOAD. NODATASYNC PARM DOES NOT APPLY`	**Meaning:** The nodatasync command option is rejected because the PM is equipped with a small load. **Action:** None

-end-

swact

Function

Use the swact command to cause the posted RCCs to switch the activity of the pairs of units (unit-0 and unit-1). The active unit is made inactive, the inactive unit is made active. Units 0 and 1 must be InSv or ManB.

swact command parameters and variables

Command	Parameters and variables			
swact	[*posted* or all	*noforce* or force	*notnow* or now	*notest* or test]

Parameters and variables	Description
all	This parameter simultaneously switches the activities of all RCCs (or all XPMs of the same node type as the XPM in the current position of the posted set).
force	This parameter overrides the SwAct decision of the SwAct controller and forces a SwAct to take place.
noforce	This default parameter, which is never entered, indicates that a SwAct will not be forced because the force parameter is not entered.
notest	This default parameter, which is never entered, indicates that the RCC will not undergo out-of-service (OOS) testing, because the test parameter is not entered.
notnow	This default parameter, which is never entered, indicates that an immediate SwAct will not be performed because the now parameter is not entered.
now	This parameter executes an immediate SwAct.
posted	This default parameter, which is never entered, indicates that only the currently posted RCC will be subject to the swact command, because the all parameter is not entered.
test	This parameter causes a newly inactive unit to receive full OOS diagnostics when RTS occurs.

Qualifications

The swact command is qualified by the following exceptions, restrictions, and limitations:

- If the RCC is not ManB, confirmation YES or NO is required. If the RCC is ManB no confirmation is required.
- Log PM181 is generated when SwAct is executed, identifying the newly-active unit. This log is for information only and there is no alarm.

swact (continued)

Examples

The following table provides examples of the swact command.

Examples of the swact command

Example	Task, response, and explanation
swact ↵	

	Task: Perform a switch of activity on the posted RCC.
	
	Response:
	`A Warm SwAct will be performed after data sync of active terminals.`
	`Please confirm (“YES”, “Y”, “NO”, “N”):`
	
	Explanation: When y is entered, a warm SwAct is executed unless refused by the SwAct controller.

swact now test ↵	

	Task: Switch the activity on the posted RCC immediately, and perform OOS diagnostics for the unit being returned to service.
	
	Response:
	`A Warm SwAct will immediately be performed.`
	`1 active terminals may be affected.`
	`Please confirm (“YES”, “Y”, “NO”, “N”):`
	
	Explanation: When y is entered, a warm SwAct is executed and test performed unless refused by the SwAct controller.

swact force ↵	

	Task: Force a switch of activity on the posted RCC.
	
	Response:
	`A warm SwAct will be performed after data sync of active terminals.`
	`Overriding the SwAct Controller.`
	`Please confirm (“YES”, “Y”, “NO”, “N”):`
	
	Explanation: When y is entered, a warm SwAct is executed even if it would be refused by the SwAct controller when the force parameter is not entered.

swact (continued)

Responses

The following table describes the meaning and significance of responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`A COLD SWACT WILL BE PERFORMED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The RCC is not ManB and the unlisted menu command warm SwAct is off. During a cold SwAct, both units are SysB and call processing is lost until the active unit is returned to service. A cold SwAct drops all calls. **Action:** If YES is entered the response is `RCC pm_number SWACT PASSED` which indicates SwAct is successful.

`A Warm SwAct will be performed after`
`data sync of active terminals.`
`Please confirm (“YES”, “Y”, “NO”, “N”):`
	Meaning: A swact command has been entered. When y is entered, a warm SwAct is executed unless refused by the SwAct controller.
	
	Action: None

`A Warm SwAct will immediately be performed.`
`1 active terminals may be affected.`
`Please confirm (“YES”, “Y”, “NO”, “N”):`
	Meaning: A swact now command has been entered. When y is entered, a warm SwAct is executed and test performed unless refused by the SwAct controller.
	
	Action: None

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action
A warm SwAct will be performed after data sync of active terminals. Overriding the Swact Controller. Please confirm (“YES”, “Y”, “NO”, “N”):	**Meaning:** When y is entered, a warm SwAct is executed even if it would be refused by the SwAct controller without the force parameter. **Action:** None
A WARM SWACT WILL BE PERFORMED AFTER DATA SYNC OF ACTIVE TERMINALS THE INACTIVE UNIT MAY NOT BE CAPABLE OF GAINING ACTIVITY. (PLEASE CHECK LOGS). DO YOU WISH FOR THE SWACT TO CONTINUE, REGARDLESS? PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** The pre-SwAct audit has determined that the unit should not assume activity and the warm SwAct operation should be terminated. **Action:** The user is prompted to confirm or reject command execution. If the user confirms, the warm SwAct is carried out. If the user rejects the command, it is aborted.
RCC 2 A WARM SWACT WILL BE PERFORMED	**Meaning:** RCC 2 is to have the activity of its units switched. Calls in progress are allowed to complete. **Action:** None
RCC 2 SWACT PASSED	**Meaning:** The activity of the two RCC units is switched. **Action:** None
REQUEST INVALID INACT UNIT MUST BE INSV OR BOTH UNITS MUST BE MANB	**Meaning:** The units cannot be switched because one or both are in the wrong state. **Action:** None

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action
`SWACT OPERATION NOT VALID ON OOS PM`	**Meaning:** When an XPM is in an out-of-service state (ManB, SysB, CBsy, or Offl), a SwAct cannot occur. **Action:** The activity display for the XPM(s) is blank.

`SwAct refused by SwAct Controller`
`Inactive unit has a history of:`
`<history text>`
`Inactive unit is reporting:`
`<XPM text>`
	Meaning: The swact command has be refused by the SwAct controller for the reason indicated. The refusal reason text may include either <history text>, <XPM text>, or both, where:
	▪ <history text> is one of the following:
	- IMC link failures
	- Message link failures
	- Parity audit failures
	- Superframe sync failures
	- InActive unit was unable to keep activity last time
	- Dropping activity due to <autonomous drop reason>
	- PreSwAct query failure
	▪ <XPM text> is one of the following:
	- Unit is jammed Inactive
	- Unit is in overload
	- Message link failure
	- Static data corruption
	- IMC link failure
	- PreSwAct difficulties
	
	Action: No action is required. If the user wishes to override the SwAct controller, the swact command may be reissued using the force parameter.

-end-

trnsl

Function

Use the trnsl command to identify the C-side or P-side links of a posted RCC and show the status of the DS30 links to the network (C-side), or the DS30A or DS-1 links to the subsidiary PM (P-side).

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	c p	[*allinks* *link_no*]
	msg	[*both* c p]

Parameters and variables	Description
alllinks	This default parameter, which is never entered, indicates all the links on the selected side or sides to be affected by the command because no *link_no* is specified..
both	This default parameter, which is never entered, indicates that both C-side and P-side links will be affected by the command becasue neither the c or p parameter is entered.
c	This parameter selects the C-side links.
p	This parameter selects the P-side links.
link_no	This variable identifies one link for the C-side. The range is 0-31. This variable also identifies one link for the P-side. The range is 0-19 . If *link_no* is omitted, all the C-side or P-side links are displayed.
msg	This parameter specifies all the message links of the C- or P-sides of the RCC.

Qualifications

None

trnsl (continued)

Examples

The following table provides an example of the trnsl command.

Examples of the trnsl command (continued)

Example **Task, response, and explanation**

trnsl c ↵
where

c identifies the C-side links of the posted RCC.

Task: Identify the C-side links and show the status of the DS30 links to the network.

Response:

```
LINK 0 NET0 0 10;CAP:MS;STATUS:OK  ;MSGCOND:OPN, Unrestricted
LINK 1 NET1 0 10;CAP:MS;STATUS:MBsy;MSGCOND:CLS, Unrestricted
LINK 2 NET0 0 11;CAP:MS;STATUS:OK  ;
LINK 3 NET1 0 11;CAP:MS;STATUS:MBsy;
LINK 4 NET0 1 52;CAP:MS;STATUS:OK  ;MSGCOND:OPN, Unrestricted
LINK 5 NET1 1 52;CAP:MS;STATUS:OK  ;MSGCOND:CLS, Unrestricted
```

Explanation: In this example, there are four DS30 links (0-3) to NM-0 and two links (4,5) to NM-1. RCC-0 has been selected.

trnsl p ↵
where

p identifies the P-side links of the posted RCC.

Task: Identify the P-side links and show the status of the DS30A or DS-1 links to a subsidiary PM.

Response:

```
LINK 0 LCM 0 0;CAP:MS;STATUS:OK  ;MSGCOND:OPN
LINK 1 LCM 0 1;CAP:MS;STATUS:MBsy;MSGCOND:CLS
LINK 2 LCM 0 2;CAP: S;STATUS:OK  ;MSGCOND:OPN
LINK 3 LCM 1 0;CAP:MS;STATUS:MBsy;MSGCOND:CLS
LINK 4 LCM 1 1;CAP:MS;STATUS:OK
```

Explanation: In this example, there are three (0-2) DS30A links to LCM-0, and two links (3,4) to LCM-1. RCC-0 has been selected.

Responses

The following table describes the meaning and significance of responses to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action
`display`	**Meaning:** The trnsl display appears. **Action:** None
`PM HAS NO PSIDE INFORMATION`	**Meaning:** The P-side parameter has been specified for a PM that has no associated P-side links. **Action:** None

-end-

tst

Function

Use the tst command to test one or all units of one or all posted RCCs, or to test one specified P-side link.

tst command parameters and variables

Command	Parameters and variables		
tst	link	*ps_link*	
	pm unit	*unit_no*	[all cmr rom]
	rex	[off on now query]	[*wait* nowait]

Parameters and variables	Description
all	This default parameter causes all tests to be performed when neither the cmr nor rom parameter is entered.
cmr	This parameter tests the cmr card in the selected unit of the posted RCC.
link	This parameter applies the test to a specified P-side link between the posted RCC and one of its associated LCMs, RLCMs or RCCs.
now	This parameter performs a manual REX test. The nowait parameter used with this command returns control to the MAP terminal, suppressing messages and allowing commands to be entered before the REX testing is completed.
off	This parameter causes the posted RCC to be removed form the system REX schedule.
on	This parameter causes the posted RCC to be included in the system REX schedule.
ps_link	This variable specifies which of the P-side links is to be tested. The range is 0-3.
pm	This parameter tests both units of one or all posted RCCs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the posted RCC.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
rex	This parameter enables rex testing to be scheduled, unscheduled or performed immediately for the posted RCC.
rom	This parameter tests the ROM for the posted RCC or specified unit.
unit	This parameter tests one unit of the posted RCC and must be followed by the unit number.
unit_no	This variable specifies which unit of the posted RCC is to be tested. The range is 0-1.
wait	This default parameter, which is never entered, indicates that the user must wait until the command has executed before additional commands can be entered at the MAP.

-end-

Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- The node under test must be InSv, ISTb, ManB, or SysB.
- If the RCC is ManB, the full test is preceded by a message looparound pilot test.
- Units that have been tested by parameter ROM must be manually reloaded before being returned to service.
- During the progress of maintenance testing, Mtce appears on the display beside the respective units.
- When the warm swact command is disabled for an XPM, a REX test in progress still allows the commands bsy, tst, and rts to be entered for the inactive unit. However, if the warm swact command is disabled before the REX test starts, and because the inactive unit must be in service. the test cannot be run. The command string tst rex now cannot be used.
- The CMR card must be busied before it can be tested.
- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out-of-service. Until the card is returned to service or replaced, the XPM cannot be tested by the in-service tests of the tst command.

tst (continued)

- PM180-The NT6X78 CMR card has a fault and a reset has been or is being attempted. Testing has not occurred.
- PM181-The NT6X78 CMR card has failed a card test.

- The following diagnostics are supported by the AF5008 REX control feature.

Diagnostic name	Description	Type (solicited or audit)	Required by SwAct controller
ISPHDLC	ISP HDLC Diag	solicited	no
ISPSPHI	ISP Speech Bus Internal	solicited	no
ISPSPHF	ISP Speech Bus Full	solicited	no
MSGDIAG	6X69 Messaging Card	solicited	yes
MSG IMC	IMC Link	both	yes
MX76MSG	MX76 Messaging Card	solicited	yes
PADRING	6X80 Pad/Ring	solicited	no
PARITY	Parity Audit	audit	yes
PS LOOP	PSide Loops	solicited	no
PS SPCH	PSide Speech Links	solicited	no
RCC FMT	Remote Formatter	solicited	no
SMS AB	6X81 A/B Bits	solicited	no
SMS MSG	SCM A/B DDL Msg	solicited	no
SPCH DG	Speech Path	solicited	no
STRDIAG	Special Tone Receiver	solicited	no
SYNC DG	Sync Diag	both	yes
TONE DG	Tone Diag	both	no
TS DIAG	Time Switch Diag	solicited	no
UTRDIAG	UTR Card	solicited	no

tst (continued)

Examples

The following table provides examples of the tst command.

Examples of the tst command

Example	Task, response, and explanation
tst unit 0 ↵ *where* 0 is the unit of the RCC to be tested.	**Task:** Test unit 0 of the posted RCC. **Response:** `Tst Passed` **Explanation:** Test of unit 0 of the posted RCC passed.
bsy unit 0 cmr ↵ **tst unit 0 cmr** ↵ *where* 0 is the unit of the RCC to be tested.	**Task:** Test the CMR card in unit 0 of the posted RCC. **Response:** `CMR Tst Passes` **Explanation:** Test the CMR card in unit 0 of the posted RCC passed.

tst rex query ↵	**Task:** Display a record of REX maintenance.
	
	Response:
	`DTC 0 is included in REX schedule.`
	`Last REX date was THU. 1992/06/20 at 09:53:57; FAILED.`
	`REX test Failed - OOS tests of Inactive Unit 1`
	`Diagnostic Failures: UTRDIAG`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 01 N02 LTE 00 18 DTC: 000 17 6X92`
	`Prior REX failure was TUE. 1992/06/27 at 10:02:47.`
	`First pass after prior failure was WED. 1992/06/28 at 02:15:24`
	
	Explanation: A diagnostic has failed during inactive out-of-service tests. The REX failure string has changed from REX test failed-Inactive OOS tests to REX test failed-OOS tests of InActive Unit 1.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst rex query ↵

Task: Display a record of REX maintenance.

Response:

```
SMS 0 is included in the REX schedule.
Last REX date was THU. 1992/06/29 at 09:53:57; FAILED.
REX test Failed - OOS test of InActive Unit 1 before SwAct

Diagnostic Failures: MSGDIAG, SPCH DG, TS DIAG, TONESDG
                     FORMATR,  CSMDIAG, UTRDIAG,  PADRING
                      SMS AB , MSG IMC, SYNC DG
Site flr RPos Bay_id    Shf Description   Slot     EqPEC
HOST 01  L15  LTE  00   18  SMR : 000     20       6X42
HOST 01  L15  LTE  00   18  SMR : 000     21       6X41
HOST 01  L15  LTE  00   18  SMR : 000     18       6X69
HOST 01  L15  LTE  00   18  SMR : 000     14       6X44
HOST 01  L15  LTE  00   18  SMR : 000     19       6X80

Prior REX failure was TRU. 1992/06/27 at 10:02:47.
First pass after prior failure was WED. 1992/06/28 at
02:15:24
```

Explanation: The REX test fails because the multiple diagnostics fail during the RTS of the inactive unit before a SwAct.

-end-

tst (continued)

Responses

The following table describes the meaning and significance of responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
6X45 PEC MISMATCH available_pecs	**Meaning:** The tests cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
A WARM SWACT WILL BE ATTEMPTED DURING THE REX SEQUENCE PLEASE CONFIRM (“YES” OR “NO”) YES REQUEST SUBMITTED	**Meaning:** In response to the command string tst rex now nowait, the system requests a warm SwAct after a user response. After a YES response, a warning is given that REX will perform a warm SwAct. The user has chosen to proceed with the REX test. After the “Request Submitted” response, the user may proceed with other commands from the MAP terminal while the REX test is being performed. REX results are suppressed on the MAP screen. Peripheral states and maintenance progress indicators are displayed as usual. The system performs a REX test on the posted peripheral. Logs are output and the REX maintenance record is updated as usual. **Action:** REX progress can be followed by viewing maintenance progress indicators on the MAP display of the posted peripheral. Refer to logs and/or REX maintenance record (command string tst rex query after posting the desired peripheral) for results of the REX test.
CMR Tst Passes	**Meaning:** The NT6X78 CMR card test passed. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
CS LINK UNAVAILABLE NO ACTION TAKEN	**Meaning:** The C-side links used for messages are both out-of-service; therefore, the PM cannot communicate with the CC. **Action:** None
INSVCE TESTS INITIATED RCC 0 TST PASSED	**Meaning:** In-service testing is being performed on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None
LAST REX DATE WAS day mmdd AT hh.mm; results the response is displayed with: LTC 0 IS INCLUDED IN THE REX SCHEDULE LTC 0 IS REMOVED FROM THE REX SCHEDULE	**Meaning:** With the command string tst rex query, the date of the last REX test is given where day is an abbreviation for the day of the week, for example, MON for Monday mmdd is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7 hh.mm denotes the time in hours and minutes that the REX test occurred results gives the results of the last REX test (PASSED or FAILED) **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output **Meaning and action**

```
RCC 0 is included in the REX schedule.
Last REX date was TUE. 1990/11/27 at 10:02:47; FAILED
REX test Failed - Inactive OOS tests after SWACT
Site Flr RPos Bay_id Shf Description Slot EqPEC
HOST 01  N02  LTE 00 18   RCC : 00    17   6X62
No prior REX failure.
```

Meaning: In response to the command string tst rex query, information is displayed showing that RCC 0 received last REX test on Tue., Nov 27 1990 at 10:02 am, and the test failed during Out of Service tests on the Inactive unit after the SwAct. A list of one card which may be defective is given in standard card display format. The REX test had not failed prior to this most recent REX.

Action: The user should perform further analysis on the card listed, the XPM unit indicated, or the XPM node to determine the exact cause of the REX failure and correct it. Consult the logs for further information.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

```
RCC 0 is included in REX schedule.
Last REX date was THU. 1992/06/20 at 09:53:57; FAILED.
REX test Failed - SwAct to Unit <unit> refused by SwAct Controller
  Inactive Unit 1 has a history of:
     <history text>
  Inactive Unit 1 is reporting:
     <xpm_text>
Prior REX failure was TUE. 1992/06/27/ at 10:02:47
First pass after prior failure was WED> 1992/06/28 at 02:15:24
```

Meaning: This the response for a preSwAct failure, where:

- <unit> is the RCC unit and has a range of 0-1
- <history text> is one of the following:
  - PreSwAct query failure
  - IMC link failures
  - Message link failures
  - Parity audit failures
  - Superframe sync failures
  - Failure to maintain activity
- <xpm_txt> is one of the following:
  - Unit is jammed inactive
  - Unit is in overload
  - Message link failure
  - Static data corruption
  - IMC link failure
  - <act> MSGDIAG failure
  - <act> AB DIAG failure
  - <act> CSMDIAG failure
  - <act> TS DAIG failure
  - <act> TONESDG failure
  - <act> CONT DG failure
  - <act> SPCH DG failure
  - <act> SMS AB failure

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
	- <act> PADRING failure - <act> SMS MSG failure - <act> UTRDIAG failure - <act> RDD FMT failure - <act> 6X48AUD failure - <act> PS LOOP failure - <act> FORMATR failure - <act> STRDIAG failure - <act> AMUDIAG failure - <act> MX76 MSG failure ▪ <act> is one of the following: - Active inservice - Active out of service - InActive inservice - Inactive out of service **Action:** None
`RCC 0, CHECKSUM=# hhh, AGREES.` `OK`	**Meaning:** The test passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the CC. This confirms that the PM load has not been completed. **Action:** None

`RCC 0 IS rex_status`	**Meaning:** The REX tests are deactivated or queried, where rex_status is either:
	`INCLUDED IN THE REX SCHEDULER`
	or
	`REMOVED FROM THE REX SCHEDULER`
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`RCC 0 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCC cannot be tested because it is already undergoing maintenance action. **Action:** SYSTEM: With parameter all, the RCC is bypassed from the posted set of XPMs only for the duration of the testing.
`RCC 0 REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an RCC in the posted set cannot be tested because it is not in the manually busy state. The RCC in the posted set is bypassed by the testing. **Action:** To proceed with the maintenance, wait until the action on the posted set is completed, then make the RCC busy with the bsy command before trying the tst command.
`NON-DESTRUCTIVE ROM TEST AND` `OSVCE TESTS WILL BE RUN`	**Meaning:** The non-destructive tests occur for both the in-service and out-of-service unit or XPM. The maintenance flag NONDESTR ROM TST appears while testing occurs. Log PM181 records when the XPM is at the ROM level of maintenance. **Action:** Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
`NON-DESTRUCTIVE ROM TEST WILL BE RUN`	**Meaning:** The non-destructive tests occur for the in-service unit or PM. The maintenance flag NONDESTR ROM TST appears while testing occurs. **Action:** Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
NO PM POSTED	**Meaning:** The PM must be posted before using the tst command. Posting a PM identifies to the system the PM that is to have maintenance action. **Action:** None
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The testing cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the system does not reply to the ROM/RAM query. The maintenance flag ROM/RAM QUERY appears while the load is being queried. Log PM181 records when the XPM is at the ROM level of maintenance. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
OSVCE TESTS INITIATED RCC n UNIT n TST PASSED	**Meaning:** One unit of the RCC has been tested, where n is the respective discrimination number. If both units are tested, the response occurs for each unit. **Action:** None
REPLACE CARDS IN CARDLIST: card_list	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where card_list is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
REQUEST INVALID	**Meaning:** The in-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if the PM is in the ManB or SysB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command tst.
REX REQUEST INVALID: MTCE IN PROGRESS	**Meaning:** A REX test cannot be started on the PM because other maintenance actions are already in progress. **Action:** None
REX TEST PASSED	**Meaning:** The REX test is successful. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`REX test failed - <fail_reason>`	**Meaning:** The REX test failed or is incomplete because of one of <fail reasons> listed below: ▪ InSv tests of inactive unit 0 before SwAct ▪ InSv tests of inactive unit 1 before SwAct ▪ OOS tests of inactive unit 0 ▪ OOS tests of inactive unit 1 ▪ RTS of inactive unit 0 ▪ RTS of inactive unit 1 ▪ InSv tests of active unit 0 after SwAct (card list also produced) ▪ InSv tests of active unit 1 after SwAct (card list also produced) ▪ InSv tests of inactive unit 0 after SwAct (card list also produced) ▪ InSv tests of inactive unit 1 after SwAct (card list also produced) ▪ RTS of inactive unit 0 after SwAct ▪ RTS of inactive unit 1 after SwAct ▪ Achieving superframe/data synbc of unit 0 ▪ Achieving superframe/data synbc of unit 1 ▪ Achieving superframe/data synbc of unit 0 after SwAct ▪ Achieving superframe/data synbc of unit 1 after SwAct ▪ REX test failed-warm SwAct ▪ REX test failed-terminated due to warm SwAct turned off ▪ REX test failed-terminated due to preSwAct Audit failure ▪ REX test failed-terminated due to an autonomous SwAct **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
SUMMARY: nnn PASSED nnn NOT SUBMITTED	**Meaning:** With the all parameter, summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully tested or that have been bypassed by the testing. **Action:** None
SMS 0 is included in the REX schedule. Last REX date was THU. 1992/06/29 at 09:53:57; FAILED. REX test Failed - OOS test of InActive Unit 1 before SwAct Diagnostic Failures: MSGDIAG, SPCH DG, TS DIAG, TONESDG FORMATR, CSMDIAG, UTRDIAG, PADRING SMS AB , MSG IMC, SYNC DG Site flr RPos Bay_id Shf Description Slot EqPEC HOST 01 L15 LTE 00 18 SMR : 000 20 6X42 HOST 01 L15 LTE 00 18 SMR : 000 21 6X41 HOST 01 L15 LTE 00 18 SMR : 000 18 6X69 HOST 01 L15 LTE 00 18 SMR : 000 14 6X44 HOST 01 L15 LTE 00 18 SMR : 000 19 6X80 Prior REX failure was TRU. 1992/06/27 at 10:02:47. First pass after prior failure was WED. 1992/06/28 at 02:15:24	**Meaning:** The REX test fails because the multiple diagnostics fail during the RTS of the inactive unit before a SwAct. **Action:** None
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC card_list	**Meaning:** Results of tests are displayed using the standard. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance actions. **Action:** None
THE ROM TEST IS DESTRUCTIVE THE RAM LOAD WILL BE LOST FOR UNIT u (PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** The RAM load is erased in the unit(s) because of the ROM test, where u is 0 or 1. **Action:** To replace the RAM load, reload the units using the loadpm command.
THIS OPERATION WILL BE EXECUTED ON nnn LTC (PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** A quantity of nnn RCCs in the posted set is to be tested. **Action:** Entering YES tests the RCC(s). Entering NO aborts the action. With YES, the status display of the RCC in the current position of the posted set shows the maintenance flag Mtce while testing is in progress.
TRY PMRESET	**Meaning:** For XPMs with an NT6X69 messaging card, testing cannot occur because the static data must be reloaded. **Action:** Use the pmreset command
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Testing by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on the mate unit. **Action:** Wait for the maintenance action(s) to complete.

-end-

warmswact

Function

Use the warmswact command to turn on or off or query the state of the automatic switch of activity feature of the units of the posted RCC.

warmswact command parameters and variables

Command	Parameters and variables		
warmswact	on off query	*posted* all	*prompt* noprompt

Parameters and variables	Description
all	This parameter includes all XPM units of the posted set.
noprompt	This parameter is used to avoid confirmation requests for each unit affected when command string warmswact on all is entered.
off	This parameter cancels the automatic switching of the activity states of the XPM units.
on	This parameter allows the automatic switching of the activity states of the XPM units.
posted	This default parameter, which is never entered, indicates that only the RCC currently posted will be affected by the command because the all parameter is not entered.
prompt	This default parameter, which is never entered, indicates that confirmation requests prompts will be displayed for each unit affected requiring yes or no response because the noprompt parameter is not entered.
query	This parameter gives the status of warm SwAct as on or off.

Qualifications

The warmswact command is qualified by the following:

- When the command string warmswact on is executed, calls in process are maintained when the activity states of the units are switched.
- When the command string warmswact off is executed, calls in process are dropped when the activity states of the units are switched.
- If an attempt to change the warm SwAct capability is made while a SwAct is in progress, a message will be displayed stating that the attempt is disallowed and no action will be taken.

warmswact (end)

Example

The following table provides an example of the warmswact command.

Example of the warmswact command

Example	Task, response, and explanation
warmswact on ↵	
	Task: Enable warmswact for the posted RCC.
	Response: `WARM SWACT FOR RCC 22 IS ENABLED`
	Explanation: Warm SwAct is enabled for RCC 22.

Response

The following table provides an explanation of the response to the warmswact command.

Response for the warmswact command

MAP output	Meaning and action
`WARM SWACT FOR RCC <n> UNIT <n> IS <status>`	
	Meaning: If the command swact (menu item 13) is used, a warm SwAct occurs, where <n> is the discrimination number of the RCC and unit.
	Action: None

xpmlogs

Function

Use the xpmlogs command to enable logs to be generated from the XPM and to report internal XPM software errors (SWERRS).

xpmlogs command parameters and variables

Command	Parameters and variables
xpmlogs	on off query

Parameters and variables	Description
on	This parameter enables logs to be printed.
off	This parameter prevents logs from being printed.
query	This parameter gives the status of XPM_LOGS as on or off.

Qualification

The xpmlogs command is cancelled by a reload or restart by a default setting.

Example

The following table provides an example of the xpmlogs command.

Example of the xpmlogs command

Example	Task, response, and explanation
xpmlogs on ↵	
	Task: Enable log reporting for the posted RCC
	Response: `LOGS FROM RCC 22 ARE ENABLED`
	Explanation: Log reports for the posted RCC will be generated.

xpmlogs (end)

Responses

The following table provides explanations of the responses to the xpmlogs command.

Responses for the xpmlogs command

MAP output	Meaning and action
RCC n UNIT n XPMLOGS PASSED or RCC n UNIT n XPMLOGS PASSED	**Meaning:** The response occurs in pairs, one for each RCC or RCC unit. **Action:** None
LOGS FROM XPM ARE DISABLED or LOGS FROM XPM ARE ENABLED	**Meaning:** The status of xpmlogs is given in the display. **Action:** None

xpmreload (end)

Function

Use the xpmreload command to reload selected segments in the XPM or in a unit of the XPM.

xpmreload command parameters and variables

Command	Parameters and variables			
xpmreload	*pm_type*	unit	*unit_no*	*file_name*

Parameters and variables	Description
file_name	This variable is the name of the segment reload file.
pm_type	This parameter identifies the PM type targeted for segment reloading, which in this case is the RCC. The *pm_type* will be RCC.
unit	This parameter indicates that a unit is to be specified.
unit_no	This variable specifies the unit of the RCC to be loaded and has a range of 0-1.

Qualifications

Not currently available

Examples

Not currently available

Responses

Not currently available

xpmreset

Function

Use the xpmreset command to reinitialize a posted RCC or one of its units after being reloaded. This reset verifies that the reload is correct.

xpmreset command parameters and variables

Command	Parameters and variables		
xpmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted RCC.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

xpmreset (continued)

Example

The following table provides an example of the xpmreset command.

Example of the xpmreset command

Example	Task, response, and explanation

xpmreset unit 0 ↵
where
 	
0 is the number of the unit to be reset.
	Task: Reset unit 0 of the posted RCC.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES” OR “NO”)`
	
	Explanation: The resetting of an RCC equipped with ESA cancels calls.

xpmreset (continued)

Responses

The following table provides explanations of the responses to the xpmreset command.

Responses for the xpmreset command

MAP output	Meaning and action
FAILED TO SEND RESET MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-continued-

xpmreset (continued)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
FAILED TO SEND STATUS MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
NO RESPONSE FROM PM	**Meaning:** If the response occurs for norun before the reset status, there is a hardware fault for transmitting or a fault in the ROM. If the response occurs for nodata during initialization, the load is not acceptable after the following display messages: ▪ /Reset ▪ /Status ▪ /Run ▪ /Initializing **Action:** Use the command loadpm to reload the PM.

-continued-

xpmreset (continued)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

xpmreset (end)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
`NO WAI RECEIVED AFTER RESET` `<card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the cards listed below ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-end-

RCCI level commands

Use the RCCI level of the MAP to perform maintenance functions for a remote cluster controller (RCCI).

Accessing the RCCI level

To access the RCCI level, enter the following from the CI (Command Interpreter) level:

mapci:mtc;post rcci ***rcci_no*** ↵

where

rcci_no is the number of the RCCI to be posted.

RCCI commands

The commands available at the RCCI MAP level are described in this chapter. They are arranged in alphabetical order. The page number for each command is listed in the following table.

RCCI commands (continued)

Command	Page
abtk	R-147
bsy	R-149
dch	R-155
disp	R-157
irlink	R-159
isg	R-161
listset	R-163
loadnotest	R-167
loadpm	R-169
next	R-187

-continued-

RCCI commands (continued)

Command	Page
offl	R-189
perform	R-193
pmreset	R-199
post	R-203
querypm	R-207
quit	R-215
recover	R-219
rts	R-223
swact	R-235
trnsl	R-239
tst	R-243
warmswact	R-255
xpmlogs	R-257
xpmreload	R-259
xpmreset	R-261

-end-

RCCI menu

The following figure shows the RCCI menu and status display. The insert with hidden commands is not a visible part of the menu display.

```
        CM    MS    IOD   Net   PM    CCS   LNS   Trks  Ext   APPL
         .     .     .     .   4SysB   .     .     .     .     .
                                 M

RCCI                    SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit          PM       4      0     10      3      3     130
 2 Post          RCCI     0      0      0      1      1      40
 3 ListSet
 4               RCCI  0 ISTb     ,Links OOS: Cside 0 ; Pside 0
 5 Trnsl_        Unit 0:   Act   ISTb
 6 Tst_          Unit 1:   InAct ManB
 7 Bsy_
 8 RTS_
 9 Offl
10 LoadPM_
11 Disp_
12 Next_
13 SwAct
14 QueryPM_
15 Dch
16 Irlink
17 Perform
18 ISG
```

Hidden commands

```
abtk                warmswact
irlink              xpmlogs
loadnotest          xpmreload
pmreset             xpmreset
recover
```

RCCI status codes

The following table describes the status codes for the RCCI status display.

Status codes RCCI menu status display

Code	Meaning	Description
State		PM states (see Notes 1: and 2:)
CBsy	Central Side Busy	PMs connected to the network are unable to communicate with the CC because either the network or the links used to carry messages between the PM and the P-side of the network are unavailable. A PM that is connected to the Network by one or more PMs are out-of-service because the C-side of the PM or the links of a PM are unavailable.
Idl	Idle	At the STC level, the ST is available in a pool for CCS7 use, but is not connected to a transmission link.

Status codes RCCI menu status display (continued)

Code	Meaning	Description
InSv	In Service	PMs are in service and available to support any intended process, for example, call processing.
ISTb	In-Service Trouble	PMs are still in service but flagged by system maintenance because either: ▪ a minor error condition occurred ▪ the PM failed a REX or minor audit test ▪ the load is not listed in the corresponding data table Call processing service is not affected.
ManB	Manual Busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not Equipped	At the STC level, the ST discrimination number (STNO) is not listed in Table STINV.
Offl	Offline	PMs are temporarily made out-of-service.
SysB	System Busy	PMs are automatically removed from service by system maintenance.

Note 1: When an XPM status is displayed as manually busy (ManB), off-line (Offl), or unequipped (UNEQUIP), the activity display (Active--Act, or Inactive--Inact) remains blank. When the activity state is not displayed, the command strings rts inactive, loadpm inactive, and SwAct are not valid.
Note 2: When an XPM status is displayed as in service (InSv), in-service trouble (ISTb), C-side busy (CBsy), or system busy (SysB), the activity (Act or Inact) is also displayed.

abtk

Function

Use the abtk command to abort all active maintenance actions on a posted RCCI. The state of the RCCI remains the same.

abtk command parameters and variables

Command	Parameters and variables
abtk	There are no parameters or variables.

Qualifications

The abtk command is qualified by the following:

- Use the abtk command when using the loadpm command to cancel the entry of a wrong *l_name* parameter, or when the unit is executing maintenance processes.
- The loadpm command without the nowait parameter "locks" the terminal keyboard so that other commands cannot be entered until the process is completed. The abtk command unlocks the keyboard by cancelling the loading.

Example

The following table provides an example of the abtk command.

Example of the abtk command (continued)

Example	Task, response, and explanation	
abtk ↵		
	Task:	Stop all current maintenance action on the posted RCCI
	Response:	`<display changes>`
	Explanation:	All current maintenance procedures halted.

abtk (end)

Responses

The following table provides explanations of the responses to the abtk command.

Responses for the abtk command

MAP output	Meaning and action
`<display changes>`	**Meaning:** The following line, for example, is deleted from the loadpm display: `LoadPM UNIT 1 /Loading 200` **Action:** The abtk command deletes any part of the display associated with a previous active maintenance command such as: swact, tst, bsy, rts, offl, loadpm. It returns units to previous states. The displays for the following commands are unaffected: trnsl, disp, next, querypm. The post command is not cancelled and the previous RCCI posting is unaffected.

`ABORTING MAINTENANCE ON THIS PM WILL AFFECT`
`MAINTENANCE ON OTHER PMS.`
`PLEASE CONFIRM (“YES” OR “NO”)`
	Meaning: Aborting a broadcast loading affects the loading of all PMs in the parallel loading of the posted set.
	
	Action: Entering YES aborts the loading. Groups of XPMs that have already been loaded remain loaded, while the group that has loading in progress retains the current load. Entering NO allows the maintenance action to proceed.

bsy

Function

Use the bsy command to change the state of one or all posted remote cluster controllers ISDN (RCCI) to ManB. The bsy command can be applied to one or all units, the whole RCCI or all RCCIs, or one P-side link of one RCCI of the posted set.

bsy command parameters and variables

Command	Parameters and variables				
bsy <com>	pm		*wait*	*noforce*	*posted*
	unit	*unit_no*	nowait	force	all
	active				
	inactive				
	link	*ps_link*			

Parameters and variables	Description
active	This parameter busies one or all of the units in the active state.
all	This parameter simultaneously busies all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set. ***Note:*** With all parameter, the larger the quantity of XPMs to be busied concurrently, the longer it takes to complete the busying. Other maintenance activities must wait until the bsy command has completed executing.
force	This parameter forces the busying to occur even though maintenance actions are already in progress (for example, while it is undergoing REX testing).
inactive	This parameter busies one or all of the units in the inactive state.
link	This parameter applies the bsy command to a specified P-side link between the posted RCCI and one of its associated line concentrating modules (LCM).
noforce	This default parameter, which is never entered, indicates that the bsy will not execute until any current maintenance action is completed because the force parameter is not entered.
nowait	This parameter allows other maintenance actions to occur before bsy is completed.
pm	This parameter busies all units of the posted RCCIs.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
posted	This default parameter, which is never entered, indicates that only the currently posted RCCI be made bsy because the all parameter is not entered.
ps_link	This variable specifies which P-side link is to be made ManB. The range is 0-19.
unit	This parameter busies one or all units of the posted RCCI(s).
unit_no	This variable specifies which unit of the posted RCCI(s) is to be made ManB. The range is 0 or 1.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered until the bsy command has completed because the nowait parameter is not entered.

-end-

Qualifications

None

Examples

The following table provides examples of the bsy command.

Examples of the bsy command

Example	Task, response, and explanation
bsy ↵	**Task:** Busy the posted RCCI **Response:** 0K **Explanation:** The posted RCCI is posted.

-continued-

bsy (continued)

Examples of the bsy command (continued)

Example	Task, response, and explanation
bsy active ↵	
	Task: Busy the active unit of the RCCI. **Response:** `A swar SwAct will be performed` `please confirm (“YES” or “NO”):` **Explanation:** Typical response when active side of RCCI is busied.

-end-

bsy (continued)

Responses

The following table describes the meaning and significance of responses to the bsy command.

Responses for the bsy command

MAP output	Meaning and action
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	**Meaning:** The all parameter does not apply to links because they must be busied one at a time. **Action:** Use the parameter link without the all parameter to busy a link.
`RCCI 2 IS MANUAL BUSY` `NO ACTION TAKEN`	**Meaning:** The bsy command is applied to a PM that is already in the Manb state. **Action:** None
`RCCI 2 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCCI cannot be busied because it is already undergoing maintenance action. **Action:** The RCCI is bypassed from the posted set of RCCIs only for the duration of the busying when the parameter all is executed.
`LTC nn UNIT u BSY PASSED`	**Meaning:** The specified RCCI or unit is confirmed to be ManB, where *nnn* and *u* are the discrimination numbers. **Action:** None
`MTCE IN PROGRESS`	**Meaning:** The PM or unit cannot be busied while maintenance actions are already in progress. To override (and cancel) the actions, use the parameter force. **Action:** None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
NO ACTION TAKEN	**Meaning:** NO is entered in response to a prompt and the command is aborted. **Action:** None
NO PM POSTED	**Meaning:** The PM must be posted before using the bsy command. Posting a PM identifies to the system the PM that is to have maintenance action. **Action:** None
OK	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None
SUMMARY: nnn PASSED nnn NO SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (nnn) of XPMs in the posted set of RCCIs only for the duration of the busying. **Action:** None
THIS ACTION MAY CAUSE SWACT PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** When trying to busy an active unit, calls may be lost. Calls are not lost if the unit is inactive. **Action:** Use SwAct to switch the activity states to the two units so that the unit to be busied is inactive.

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
THIS ACTION WILL TAKE AN LCM OUT-OF-SERVICE PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** This warning follows the entry of the command string bsy link (with or without the force command) if the link is a message link to the LCM. Log PM182 (for information only) is generated whenever the command string bsy link is initiated to make a P-side link ManB. **Action:** None
THIS ACTION WILL TAKE THIS PM AND ALL OF ITS SUBTENDING NODES OUT-OF-SERVICE PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** This warning follows the entry of either of the following command strings: bsy pm bsy unit *unit_no* bsy unit *unit_no* force if it applies to the active unit while the other unit is out-of-service. The active unit is made ManB while the inactive unit is made SysB or CBsy. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCIS PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of nnn RCCIs in the posted set is to be busied. **Action:** If the user enters YES, the XPMs are busied If the user enters NO, the action is aborted. When the user responds with YES, the status display of the RCCI in the current position of the posted set changes to ManB and the status display for the PM level increments under the header ManB.

-end-

dch

Function

Use the dch command to enter the ISDN DCH level of the MAP to post and maintain the DCHs associated with any RCCI.

dch command parameters and variables

Command	Parameters and variables
dch	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the dch command.

Example of the dch command (continued)

Example	Task, response, and explanation
dch ↵	
	Task: Access the DCH MAP level. **Response:** `<DCH MAP display>` **Explanation:** The DCH MAP level is displayed.

Response

The following table provides an explanation of the response to the dch command.

Responses for the dch command

MAP output	Meaning and action
`ISDN DCH subsystem is not bound in`	
	Meaning: The DCH MAP level is unavailable. **Action:** None

disp

Function

Use the disp command to display a list of all RCCI in a specified PM state.

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	[*all* / *pm_type*]

Parameters and variables	Description
pm_state	This variable is one of the following PM states: ▪ SysB system busy ▪ ManB manual busy ▪ OffL offline ▪ CBsy C-side busy ▪ ISTb in-service trouble ▪ InSv in-service
pm_type	This variable indicates the type of pms for which information is to be displayed. For RCCIs the PM type is rcci.
state	This parameter indicates that PMs in the specified state are to be displayed. This parameter must be followed by a *pm_state* variable.

Qualifications

None

disp (end)

Examples

The following table provides examples of the disp command.

Examples of the disp command

Example	Task, response, and explanation
disp state bsy rcci ↵	
	Task: Display all busy RCCIs
	Response: `Bsy RCCI 0, 1`
	Explanation: There is one busy RCCI, LGG 0 unit 1.

Responses

The following table describes the meaning and significance of responses to the disp command.

Responses for the disp command

MAP output	Meaning and action

`<pm_state> RCCI: NONE`
or
`<pm_state> RCCI n, n`	

	Meaning: There are no PMs in the specified state, or all in the state are listed, where <pm_state> is the state specified in the command.
	Action: None

irlink

Function

Use the irlink command to access the IRLINK level if feature package NTX380 is present. The command irlink is available when an RCCI is posted from the PM level . The IRLINK level is used to maintain the interlinks of a Dual RCCI.

irlink command parameters and variables

Command	Parameters and variables
irlink	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the irlink command.

Example of the irlink command

Example	Task, response, and explanation	
irlink ↵		
	Task:	Access the IRLINK level of the MAP.
	Response:	`<IRLINK MAP level display>`
	Explanation:	The IRLINK level is accessed and displayed.

irlink (end)

Responses

The following table provides explanations of the responses to the irlink command.

Responses for the irlink command

MAP output	Meaning and action
`display`	**Meaning:** The IRLINK menu and display appears. **Action:** None
`NO INTERLINKS ARE DATAFILLED.  IRLINK LEVEL CANNOT BE ENTERED.`	**Meaning:** The command irlink does not display a MAP level if no interlinks are datafilled. No Dual RCCIIs are present. **Action:** None

isg

Function

Use the isg command to access the ISG level of the MAP for the posted RCCI.

isg command parameters and variables

Command	Parameters and variables
isg	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the isg command.

Example of the isg command

Example	Task, response, and explanation
isg ↵	
	Task: Access the ISG level of the MAP.
	Response: The ISG menu appears.
	Explanation: The system displays the ISG menu .

Response

The following table provides an explanation of the isg command.

Response for the isg command

MAP output	Meaning and action
`display`	
	Meaning: The system accesses the ISG level of the MAP and the ISG menu appears. Refer to the ISG MAP level chapter for a representative display.
	Action: None

listset

Function

Use the listset command to list the discrimination numbers of the PM types included in the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	*posted* *pm_type* all

Parameters and variables	Description
pm_type	This variable specifies the type of PM in the posted set that is to be listed with all of its discrimination numbers.
posted	This default parameter, which is never entered, indicates that all PMs of the same type as the PM currently posted will be listed because neither a *pm_type* nor the all parameter is specified.
all	This parameter lists all of the PM types that are in the posted set including their discrimination numbers.

Qualifications

The listset command is qualified by the following exceptions, restrictions, and limitations:

- use the listset command to plan maintenance actions on sets of XPMs of the same type.
- entering the command string help listset to display the syntax of the command at the MAP shows all of the PM types that use the listset command; however, only PMs included in the office configuration can be selected.

listset (continued)

Example

The following table provides an example of the listset command.

Example of the listset command

Example	Task, response, and explanation
listset all ↵	
	Task: List all of the PM types that are in the posted set.

	Response:
	`pm_type pm_number, pm_number ...`
	`:`
	`:`
	`pm_type pm_number, pm_number ...`

	Explanation: The discrimination numbers of all the specified PM types in the posted set are listed.

Responses

The following table describes the meaning and significance of responses to the listset command.

Responses for the listset command

MAP output	Meaning and action

`pm_type pm_number, pm_number ...`
`:`
`:`
`pm_type pm_number, pm_number ...`
	Meaning: The discrimination numbers of all the specified PM types in the posted set are listed.
	Action: None

`NO PMS FOUND`	**Meaning:** The posted set of XPMs is empty. **Action:** None

-continued-

listset (end)

Responses for the listset command (continued)

MAP output	Meaning and action
NO PMS OF SPECIFIED PM TYPE FOUND	**Meaning:** The posted set does not contain XPMs of the specified type. **Action:** None

-end-

loadnotest

Function

The loadnotest command is obsolete. Use the loadpm command with the force parameter. See the loadpm command for details.

loadpm

Function

Use the loadpm command to load the peripheral program files into the processors of one or all posted RCCIs. The PMs must be ManB or SysB before entering the loadpm command.

loadpm command parameters and variables

Command **Parameters and variables**

loadpm inactive pm unit *unit_no* [cc] [full data exec cmr] [*l_name*] [*noforce* force] [*wait* nowait] [*posted* all [*defile* *r_name*]]

Parameters and variables	Description
all	This parameter simultaneously loads all of the specified unit(s) or XPMs of the same node type as the XPM in the current position of the posted set.
cc	This parameter specifies that the source of the load data is to be the DMS-100 central control (CC) data store.
cmr	This parameter specifies that the CMR card will be loaded for the specified unit or units of the posted RCCI.
data	This parameter selects the load which consists of the static data and execs, but not the basic RCCI software. Static data and tables define the configuration of the RCCI and subtending PMs. When loading static data into the PM the NT6X78 CLASS Modem Resource (CMR) card in the RCCI is also loaded if table LTCINV is datafilled.
defile	This default parameter, which is never entered, indicates that the file used with the all parameter for loading will be the default file specified by the *l_name* variable because no *r_name* variable is specified.
exec	This parameter selects the load mode to be execs only. Execs are sets of instructions executed by the RCCI in response to a CC request or DMS action. Execs behave like mini-programs to handle call processing.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
l_name	This variable is the name of the CC data file for the posted RCCIs. Load names are listed in data table LTCINV, field LOAD. The load's file name also appears on the display of the command querypm next to FNAME. The device on which the load resides is specified in data table PMLOADS. By not specifying a load's file name, with parameter all, the XPMs are loaded with the file name recorded in the respective XPM inventory tables. More than one load can be used to load more than one PM.
force	This parameter bypasses the running of the ROM tests while loading occurs.
full	This parameter selects the load mode which consists of the basic RCCI software, plus the execs and the static data in the CC. The parameter full is the default if no load mode is entered.
inactive	This parameter loads the unit(s) that are in the inactive state. If the parameter all is specified, XPMs with firmware card NT6X45BA or later are loaded by the mate unit. If the status display for the the unit (s) activity is blank, the CC prevents the loading. The action must be done by using explicit parameters. During an upgrade of XPM software, and with parameter all, the inactive units that are to be loaded from their mate units display broadcast mate as their maintenance flag.
noforce	This default parameter, which is never entered, indicates that the ROM tests will be run because the force parameter was not entered.
nowait	This parameter allows another RCCI to be posted and loaded without waiting for confirmation from the previous load request. The parameter nowait also enables the MAP to be used for other entries while loading proceeds. Error messages for the loadpm command are generated in PM logs.
pm	This parameter loads both units of one or all posted RCCIs.
posted	This default parameter, which is never entered, indicates that only the posted RCCI in the control position will be loaded because the all parameter is not entered.
unit	This parameter loads one unit of one or all posted RCCIs.
r_name	This variable is the name of the load that is to replace the load's file name (l_name) for those PMs that cannot be loaded by the l_name load. Replacement names for such PMs must be listed in data table LTCINV. The device on which the load resides is specified in table PMLOADS.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
unit_no	This variable specified which unit of the posted RCCI is to be loaded. The range is 0 or 1.
wait	This default parameter, which is never entered, indicates that load request confirmation and error messages will not be suppressed, and the MAP cannot be used for additional commands until the loadpm command has completed executing because the nowait parameter was not entered.

-end-

Qualifications

The loadpm command is qualified by the following exceptions, restrictions, and limitations:

- While loading occurs, a series of maintenance flags display its progress.
- With the parameter all, the more XPMs there are, the longer it takes to complete the loading. Other maintenance activities will be delayed.
- When using the parameter pm, the load file name is taken from the data table, and displayed by the command querypm.
- When the RCCI is not loaded, the only programs that are present for testing are located in the ROM. If the ROM test fails, the loadpm command cannot be used. If the ROM tests have already passed, the unlisted menu command loadnotest bypasses the ROM tests. The time taken for a ROM test that is already successful is not repeated.
- To reload a PM, enter the loadpm command on the inactive unit, then enter the swact command when it is completed, and then re-enter loadpm for the newly inactive unit.
- When loading for the PM occurs, the NT6X78 CMR card in the RCCI is also loaded if the data table LTCINV is datafilled.
- To locate a load's file name, use the commands dskut and listvol. Load file names are listed in data table PMLOADS.
- The failure reasons that prevent PMs in a posted set from being loaded by broadcast loading are described alphabetically as follows:

  ```
  - LOAD NOT RECEIVED FROM BROADCAST LOADER
  ```

  The PM through which the load was to be sent has not sent the load. It may be out of service.

loadpm (continued)

- NO RESPONSE FROM IPML SETUP MESSAGE

  The XPM has not responded to the IPML setup that is required for broadcast loading to occur.

- NO RESPONSE FROM NIL EVENT TIMEOUT MESSAGE

  The XPM has not responded to the nil event timeout message.

- NO RESPONSE FROM ROM/RAM QUERY MESSAGE

  The XPM has not responded to the ROM and RAM query message.

Examples

The following table provides examples of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation

loadpm unit 1 ↵
where
 	
1 is the unit number of the posted RCCI to be loaded
	Task: Load the peripheral program files into the processor of of RCCI unit 1.
	
	Response:
	`LTC 0 ISTb Links_OOS: CSide 0 PSide 0`
	`Unit 0: Act InSv`
	`Unit 1: InAct ManB Mtce /Loading: 0200`
	`LOADPM UNIT 1`
	
	Explanation:

loadpm (continued)

Responses

The following table describes the meaning and significance of responses to the loadpm command.

Responses for the loadpm command

MAP output	Meaning and action
6X45 PEC MISMATCH available_pecs	**Meaning:** Loading cannot occur because the data entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** The equipped PECs of NT6X45 cards are listed, where pecs. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in inventory table LTCINV.
FAILED TO SEND RESET MESSAGE card_list	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where *card_list* is one of: NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None

-end-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`FAILED TO SEND STATUS MESSAGE card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of: NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPMs. The XPM(s) must be in service. **Action:** The activity display for the XPM(s) is blank **Action:** To load the XPM(s) that are bypassed from the posted set, busy the XPMs with the command bsy and use the command loadpm with the parameter unit or pm.
`LOAD FILE file_name NOT FOUND IN SYMBOL TABLE`	**Meaning:** The variables *l_name* or *r_name* is not found in the system's symbol table. The symbol table is a pseudo-table for storing data for the duration of a MAP session. It is not a data table and is emptied by a reload or a restart. **Action:** Check for a typo or check data table LTCINV for the applicable *r_name*. Unless the location of the load file is listed in data table PMLOADS, list the volume with the load's file name.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LOAD FILE NOT IN DIRECTORY`	**Meaning:** The system cannot find the location of the load file. It resides on tape or disk. Use the command list to list the disk volume or the command mount to mount the tape that has the load file on it. The list and mount commands are described in the *Nonmenu Commands Reference Manual*, 297-1001-820. **Action:** None
`LTC pm_number UNIT u BROADCAST LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the mate units, where *pm_number* and unit *u* are the discrimination numbers of the specific PM(s). **Action:** None
`pm_type pm_number IS status` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where *pm_type* is a PM listed in table A on page 18, *pm_number* is the discrimination number of the PM, and status is one of the following: CBSY INSV OFF-LINE The PM must be ManB. **Action:** None
`RCCI pm_number LOADED`	**Meaning:** The PM has been successfully loaded. **Action:** None
`RCCI pm_number UNIT u LOAD FILE file_name IS NOT AVAILABLE`	**Meaning:** The already parameter has been used and the PM load *file_name* has already been identified as being unavailable. **Action:** The PM in the posted set is bypassed from the loading

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCCI pm_number LOAD FILE IN INVENTORY TABLE NOT FOUND` `ENSURE THAT TABLE PMLOADS IS DATAFILLED CORRECTLY`	**Meaning:** The load's file name (parameter *l_name*) is not specified and the file name in the inventory data table does not correspond to a valid device in table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading.

`RCCI pm_number UNIT u LOADPM FAILED`
`reason`
`CAUSED FAILURE OF BROADCAST LOADER`
	Meaning: As a member of the posted set intended for participation with broadcast loading, a PM's failure to be loaded prevents the broadcast loading from occurring. Reasons for the failure are listed in qualifications.
	
	Action: None of the PMs to be loaded by the broadcast method are loaded. PMs in the posted set using the single loading method are loaded
	
	Action: To allow the broadcast loading to proceed, remove the PM with the failure from the posted set and try again.

`RCCI pm_number LOADPM FAILED` `LOAD NOT RECEIVED VIA BROADCAST LOADER`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, this RCCI is not loaded because of a failure in another PM. **Action:** None of the PMs to be loaded by the broadcast method is loaded. PMs in the posted set using the single loading method are loaded **Action:** Investigate the cause of the failure to load the PM that is identified by the response CAUSED FAILURE OF BROADCAST LOADER. To proceed with the broadcast loading, remove the failed PM from the posted set and try the loadpm command again.
`RCCI pm_number UNIT u LOAD REQUEST SUBMITTED`	**Meaning:** Only the PM in the current position of the posted set is being loaded from the CC. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCCI cannot be loaded because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the RCCI. **Action:** With parameter all, the RCCI is bypassed from the posted set of RCCIs only for the duration of the loading.
`RCCI pm_number NOT SUBMITTED AS INACTIVE UNIT NO LONGER MANB OR ACTIVE UNIT IS NOW OOS`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PM is no longer manually busy (ManB state) or the active unit is no longer in service. **Action:** The PM in the posted set is bypassed from the loading.
`RCCI pm_number NOT SUBMITTED AS STATE NO LONGER MANB`	**Meaning:** The PM's units are not both manually busy (ManB state). **Action:** The PM in the posted set is bypassed from the loading.
`LTC pm_number UNIT u REPLACEMENT NAME MISMATCH WITH INVENTORY TABLE`	**Meaning:** The specified load replacement file name does not match the file name datafilled in the inventory table of this PM. **Action:** The PM in the posted set is bypassed from the loading.
`reason` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where *card_list* is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory does not match the PEC of the NT6X45 card or there is no response to the ROM/RAM query. If the parameter nowait is specified, this response does not appear. **Action:** The maintenance flag `ROM/RAM QUERY` appears for the duration of the query. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in table LTCINV.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`NO WAIT RECEIVED AFTER RESET` `card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where *card_list* is one of NT6X40 NT6X41 NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X46 (FP memory) NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
`PM FAILED TO INITIALIZE` `TRY RELOADING THE PM`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not initialized. **Action:** Reload the XPM by entering the command pmreset or loadpm at a MAP.
`RCCI pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an XPM in the posted set cannot be loaded because it is not in the manually busy state. **Action:** The PM in the posted set is bypassed from the loading. **Action:** To proceed with the maintenance, wait until the action on the posted set is completed, then busy the XPM with the command bsy before trying the command loadpm.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
REPLACE CARDS IN CARDLIST card_list	**Meaning:** The results of the tests by the mate unit indicate that the cards are preventing the loading, where *card_list* is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command loadpm.
SUMMARY: nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully loaded or that have been bypassed by the loading. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCI PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** A quantity of nnn RCCIs in the posted set is to be loaded. **Action:** Entering Yes loads the RCCI(s) Entering No aborts the action. **Action:** With YES, the status display of the RCCI in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading.
TOO MANY CHARACTERS IN REPLACEMENT NAME	**Meaning:** The variable *r_name* must be a string of eight characters or less. **Action:** Check for a type or check data table LTCINV for the applicable *r_name.*

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
TOO MANY DIFFERENT LOAD FILES REQUIRED. TRY A SMALLER SET OF PMS	**Meaning:** This response is to the command string loadpm pm all when the quantity of load file names in the respective inventory data tables is too large. **Action:** Use the command post to create a posted set either with fewer PMs or with PMs that use the same load file name, and re-enter the command.
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Mate loading is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Mate loading cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, loading from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.
WAITING FOR RESOURCES TO BECOME AVAILABLE	**Meaning:** The system must wait to do maintenance action because the maximum quantity of loading requests has been submitted. **Action:** Wait for the loading to complete or cancel the request with command abtk.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`WARNING: LOAD FILE file_name HAS SAME NAME AS DATAFILLED IN INVENTORY TABLE BUT IS NOT ON THE SAME DEVICE AS INDICATED BY TABLE PMLOADS`	**Meaning:** Two load file names are the same in a PM inventory data table and in table PMLOADS. The specified file name matches the name in the inventory table, but not the name in table PMLOADS. **Action:** The PM in the posted set is bypassed from the loading. **Action:** Check table PMLOADS for the correct file name.
`Load file on command line not supported when loading the CMR`	**Meaning:** When loading the CMR, it is not valid to specify a load file on the command line. The load file specified in the inventory table will be used. **Action:** Reissue the loadpm command without specifying the CMR load name.
`CMR file <CMR_file_name> not found on the device indicated in table PMLOADS or in symbol table`	**Meaning:** A loadpm command was issued and the load file name indicated by `<CMR_file_name>` `in the response` and datafilled in the inventory table is not found on the device indicated in PMLOADS or in the user's symbol table. **Action:** Ensure that the CMR load datafilled in the inventory table exists on the device indicated by Table PMLOADS, or list the device where the loadfile resides, such as dskut;listvol d010pmload all.
`RCCI X Unit Y request submitted.`	**Meaning:** The nowait parameter is entered. This message is produced to indicate the load request has been submitted, where x is the RCCI number Y is the unit number of the RCCI. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCCI x Unit Y LoadPM Aborted` `Reason: ABTK from user <username>`	**Meaning:** The loading process has been aborted by another user, where x is the RCCI number Y is the unit number of the RCCI <username> is the name of the user submitting the abtk command. **Action:** Investigate the reason the other user aborted the loading.

`RCCI x WARNING: CMR file >CMR_file_name> has same name`
`as datafilled in inventory table but`
`is not on the same device as`
`indicated by table PMLOADS`
	Meaning: The CMR file to be loaded has the same name as that datafilled in the inventory table. This file is not the same as the one defined in table PMLOADS. Two load files of the same name exist. The CMR will not be loaded.
	
	Action: None

`RCCI X Unit Y CMR not datafilled in inventory table.`	**Meaning:** The optional card CMR and its load name are not datafilled in the inventory table, where x is the RCCI number Y is the unit number of the RCCI. **Action:** Add CMRxx, where xx specifies the slot number, to the OPTCARD list and the CMR load name to the CMRLOAD filed in the inventory table for the specified RCCI. Ensure that the CMR card is in the correct slot as specified by xx.
`RCCI x Unit y CMR card must be ManB`	**Meaning:** The CMR card must be manually busy to be loaded where x is the RCCI number Y is the unit number of the RCCI. **Action:** Busy the CMR card with the bsy command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCCI x Unit y  Unit not InSv`	**Meaning:** The RCCI must be in service, either InSv or IsTb for the CMR to be loaded, where x is the RCCI number Y is the unit number of the RCCI. **Action:** Ensure the RCCI is in service.
`RCCI x Unit y  LoadPM failed.` `  <reason>`	**Meaning:** The PM has a failure which is indicated where x is the RCCI number Y is the unit number of the RCCI <reason> is the reason for the failure. **Action:** Investigate and correct the failure.
`Force parameter not valid when loading CMR`	**Meaning:** The force parameter was entered with the load cmr command. **Action:** Enter the command without the force parameter.
`ALL parameter not valid when loading the CMR`	**Meaning:** The all parameter was entered with the load cmr command. **Action:** Enter the command without the all parameter.

`Loading a CMR on an Active Unit will`
`degrade RCCI call processing real time.`
`Do you still want to LOAD the CMR?`
	Meaning: A CMR in an active unit of an XPM is to be loaded. This message explains that the XPM call processing real time will be impacted.
	
	Action: To continue the loading process enter “yes.” To terminate the loading process enter “no.”

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`RCCI x Unit y  No action taken - Mtce in Progress`	**Meaning:** The RCCI was loading the CMR when an attempt was made to bsy the RCCI unit. The loading of the CMR continues. This is an output message, where x is the RCCI number Y is the unit number of the RCCI. **Action:** None
`RCCI x  Request Invalid` `Mtce in progress on either or both units`	**Meaning:** The RCCI was loading the CMR when an attempt was made to SwAct the XPM. Loading continues. **Action:** None

-end-

next

Function

Use the next command to place the next higher PM of the set of posted RCCIs into the control position.

next command parameters and variables

Command	Parameters and variables
next	*any* *pm_type*

Parameters and variables	Description
any	This default parameter, which is never entered, indicates that the next PM in the post set, regardless of type, will be posted because no pmtype is specified.
pm_type	This variable specifies a pm type and enables the system to select a specific PM type to post. Use the disp command to display the list of PM types in the posted set. The system selects the PMs in the sequence displayed by this list.

Qualifications

None

Examples

Not currently available

Responses

The following table describes the meaning and significance of responses to the next command.

Responses for the next command

MAP output	Meaning and action
`END OF POST SET`	**Meaning:** The currently displayed PM is the last in the posted set of PMs. **Action:** None

offl

Function

Use the offl command to place the specified RCCI or RCCIs in the offline state.

offl command parameters and variables

Command	Parameters and variables
offl	*posted* all

Parameters and variables	Description
posted	This default parameter, which is never entered, indicates that only the currently posted RCCI will be affected by the offl command because the all parameter was not entered.
all	This parameter makes offline all XPMs, or their specified units, which are the same node type as the XPM currently posted.

Qualifications

This command is qualified by the following limitation:
An off-line RCCI remains in this state through all restarts.

Examples

Not currently available

Responses

The following table describes the meaning and significance of responses to the offl command.

Responses for the offl command

MAP output	Meaning and action
0K	**Meaning:** The posted RCCI is made offline. **Action:** None

-continued-

offl (continued)

Responses for the offl command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is already offline or is in the incorrect state for being made offline, where *pm_type* is a PM listed in Table A on page 18, *pm_number* is the discrimination number of the PM, and status is one of CBSY OFF-LINE SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`RCCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCCI cannot be made off-line because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the RCCI. **Action:** With parameter all, the RCCI is bypassed from the posted set of RCCIs only for the duration of being made offline
`RCCI pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an RCCI in the posted set cannot be made off-line because it is not in the manually busy state. **Action:** The RCCI is the posted set is bypassed from being made offline. **Action:** To proceed with the maintenance, wait until the action on the posted set is completed, then make the RCCI busy with the command bsy before trying the command offline.

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
SUMMARY nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (*nnn*) of XPMs in the posted set that have been successfully made offline or that have been bypassed by the request. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCIS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** A quantity of *nnn* RCCIs in the posted set is to be made off-line. **Action:** Entering YES makes the RCCIs off-line. Entering NO aborts the action. **Action:** With YES, the status display of the RCCI in the current position of the posted set changes to offl and the status display under the header OFFL is increased by one.
-end-	

perform

Function

Use the perform command to access the perform level where details of the activity and performance of a posted PM can be monitored. This feature requires feature package NTX827 or NTX750.

perform command parameters and variables

Command	Parameters and variables
perform	*nolab* lab

Parameters and variables	Description
nolab	This default parameter, which is never entered, cancels the setup for the office because lab parameter is entered.
lab	This parameter specifies a setup for the office as the menu and display of the posted PM is accessed. The setups automatically vary according to the type of PM that is posted. This parameter is for lab use only.

Qualifications

The perform command is qualified by the following exceptions, restrictions, and limitations:

- The posted PM must be in service (status InSv) or have in-service trouble (status ISTb).
- Only the active unit is monitored.
- Only one user at at time can monitor the performance of the posted PM.
- The measurements are recorded for the status displays within one hour of starting the measurements. The maximum measuring duration is one hour from its starting.
- Measurements are not maintained during or after a warm or cold SwAct.
- Measurements are maintained during a busying or returning to service of an active unit.
- The performance process can monitor up to five PMs.

perform (continued)

Example

The following table provides an example of the perform command.

Example of the perform command

Example	Task, response, and explanation
perform ↵	
	Task: Access the perform level for the currently posted RCCI
	Response: LOAD NAME: NLG35CN STATUS: REASON: LOGS: TIME:
	Explanation: The PERFORM level is accessed.

-end-

perform (continued)

Responses

The following table describes the meaning and significance of responses to the perform command.

Responses for the perform command

MAP output	Meaning and action
`display`	**Meaning:** The perform display and menu appears. **Action:** None
`DISPLAY PROCESS DIED`	**Meaning:** The Perform tool cannot be accessed until the display process is restored. **Action:** None
`FAILED TO INITIALIZE DIRECTORY`	**Meaning:** A system problem is interfering with the access of the Perform tool. **Action:** Try again later when more resources are likely to be available.
`MAXIMUM NUMBER OF PMS IN USE` `PLEASE WAIT UNTIL SOMEONE QUITS`	**Meaning:** A maximum of ten peripherals can be analyzed by the Perform tool at the same time. **Action:** Wait until the analysis is complete on one of the ten peripherals.
`MAXIMUM NUMBER OF DISPLAYS IN USE` `PLEASE WAIT UNTIL SOMEONE QUITS`	**Meaning:** A maximum of five MAPs can access the Perform level or its sublevels at the same time. **Action:** Wait until a MAP is made available.

-continued-

perform (continued)

Responses for the perform command (continued)

MAP output	Meaning and action
PERFORM ALREADY BEING USED ON THIS PM BY map_id	**Meaning:** Another MAP has already specified the PM for posting for the perform analysis. **Action:** Wait until the peripheral is no longer posted for perform command.
PERFORM NOT VALID ON THIS PM	**Meaning:** The perform tool does not analyze the type of specified PM. **Action:** None
PERIPHERAL IN USE	**Meaning:** The PM is already undergoing the performance process. **Action:** None
PERIPHERAL IS NOT INSV OR ISTB	**Meaning:** The active unit of the PM must be in the in-service (InSv) or in-service (ISTb) state. **Action:** None
PM LOAD DOES NOT SUPPORT THE PERFORM TOOL	**Meaning:** The feature package that provides the Perform analysis does not include this type of PM. **Action:** A software reload may be required as an upgrade to allow perform to analyze the specified type of PM.
POST COMMAND NOT VALID IN THIS TOOL TO POST THE PERIPHERAL, FIRST QUIT FROM PERFORM	**Meaning:** While the Perform tool is accessed, PMs cannot be added to the posted set. The PMs to be analyzed by perform must be posted before the tool is accessed. **Action:** None

-continued-

perform (end)

Responses for the perform command (continued)

MAP output	Meaning and action
THERE ARE FIVE USERS USING THIS TOOL PLEASE WAIT UNTIL A PROCESS IS STOPPED	**Meaning:** The performance process can monitor only up to five PMs simultaneously. **Action:** None
XPM DOES NOT SUPPORT PERFORM TOOL	**Meaning:** If the XPM does not respond to the command perform within a 10-second timeout, it is assumed that the XPM does not use the Perform tool. **Action:** You cannot enter other commands at the MAP during the timeout.

-end-

pmreset

Function

Use the pmreset command to reinitialize a posted RCCI or one of its units after being reloaded using the loadpm command. This reset verifies that the reload is correct.

pmreset command parameters and variables

Command	Parameters and variables		
pmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted RCCI.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

pmreset (continued)

Example

The following table provides an example of the pmreset command.

Example of the pmreset command

Example	Task, response, and explanation

pmreset unit 0 ↵
where
 	
0 is the number of the unit to be reset.
	Task: Reset unit 0 of the posted RCCI.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES” OR “NO”)`
	
	Explanation: The resetting of an RCCI equipped with ESA cancels calls.

pmreset (continued)

Responses

The following table provides explanations of the responses to the pmreset command.

Responses for the pmreset command

MAP output	Meaning and action
RCCI <pm_number> UNIT <n> DETERMINATION OF ESA STATUS FAILED NO REPLY FROM PM REQUEST PROCEEDING	**Meaning:** The central control (CC) is unaware that the specified RCCI is in the ESA mode, where <pm_number> is the discrimination number of the RCCI and <n> is the RCCI unit number (0 or 1). The system attempts to reset the RCCI unit(s) anyway. **Action:** None
REPLACE CARDS IN CARDLIST <card_list>	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the resetting, where card_list is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** None
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** The mate test reset is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** Resetting for the mate tests cannot occur when key software modules are missing from the load. **Action:** Wait for the resources to become available.
UNABLE TO DIAGNOSE FROM MATE MATE MTCE IN PROGRESS - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, resetting from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance actions(s) to complete.
UNIT <n> IN ESA MODE THIS ACTION WILL CAUSE ESA EXIT AND ABORT <nnn> CALLS PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** The resetting of an RCCI equipped with ESA cancels calls, where <nnn> is the current quantity of calls in progress. **Action:** None

-end-

post

Function

Use the post command to select a specific RCCI upon which action is to be performed by other commands.

post command parameters and variables

Command	Parameters and variables	
post	*pm_type*	*nnn ...nnn*

Parameters and variables	Description
pm_type	This variable identifies a PM of note-type RCCI. If a level of the node-type is already accessed, the *pm_type* may be omitted from the command entry. A PM in the control position of the posted set is the default.
nnn	This variable identifies the discrimination number of the RCCI to be posted. The range is 0-127. When more than one PM is to be posted, the discrimination numbers are entered with a blank space separating them.

Qualifications

The post command is qualified by the following exceptions, restrictions, and limitations.

- The post command must be used before using the commands trnsl, tst, bsy, rts, offl, loadpm, swact, querypm, or abtk.
- When the command string help post is entered to query the parameters of post, not all of the displayed parameters apply to an office or office network. The applicability of the parameters depends on the types of PMs that are present in the office configuration. For parameters that do not apply, one of several responses indicates that it is ignored.

post (continued)

Examples

The following table provides an example of the post command.

Examples of the post command

Example	Task, response, and explanation

post RCCI 8 ↵
where
 	
8 is the descrimination number of the RCCI to be posted.
	Task: Post RCCI 8.
	
	Response:
	`RCCI  8 InSv  Links_OOS: CSide 0, PSide 0`
	`Unit0:  Act   InSv`
	`Unit1:  Inact InSv`
	
	Explanation: RCCI 8 is posted.

Responses

The following table describes the meaning and significance of responses to the post command.

Responses for the post command

MAP output	Meaning and action
`NO PM POSTED`	**Meaning:** A PM level is accessed without any PM being posted. **Action:** None

-continued-

Responses for the post command (continued)

MAP output **Meaning and action**

```
 pm  pm_number  n_state  LINKS OOS:  CSIDE  nn  PSIDE  nn
UNIT 0: activity  u_state  MTCE            /LOADING:  nnnn
UNIT 1: activity  u_state  MCTE            /LOADING:  nnnn
```

Meaning: When a PM is posted, its status is displayed, where:

pm	is one of the types of PM listed in Table A on page 18.
pm_number	is the discrimination number of the PM type.
n_state	is the state of the PM node. The displayed state depends on the state of one or both units.
LINKS_OOS	indicates the quantity of equipped C-side and P-side links that are out-of-service because they are either system busy or manually busy.
activity	indicates which unit is available for call processing and which unit is on standby. ACT means the unit is active and able to handle call processing, INACT means the unit is on standby (inactive).
u_state	is the status of a unit.
MTCE	indicates the unit is undergoing maintenance initiated manually or by the system (displayed with u_states ManB and SysB, respectively). MTCE is present only while maintenance is occurring.
/LOADING:	indicates the unit is being updated with datafill, where nnnn is an increment of the load.

Action: None

```
<PM>  <num> InSv  Links_OOS: CSide 0, PSide 0
Unit0:  Act   InSv
Unit1:  Inact InSv
```

Meaning: The specified <PM> nunmber <num> is posted.

Action: None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted RCCI.

querypm command parameters and variables

Command	Parameters and variables
querypm	cntrs flt

Parameters and variables	Description
cntrs	This parameter displays the contents of the RCCI maintenance counters which record the number of times that each fault (flt) condition has occurred. It also displays the ROM and RAM load names.
flt	This parameter displays fault information for both units of the posted PM.

Qualifications

The querypm command is qualified by the following exceptions, restrictions, and limitations.

- Other fault conditions are:
  - Init-A CC restart has occurred. RTS is attempting during restart.
  - Diagnostics Failed-The unit has failed TST or RTS.
  - Trap-The unit has sent an “initialization complete” message to the CC after an auto-restart.
  - Activity Dropped-A system-generated SwAct has occurred.
  - Audit-The internal software state of the active or inactive unit is incorrect. The active unit internal state should be RUNNING. The inactive unit internal state should be READY. Fault indications are: BUSY, RESTART, or SYNCING.
  - Unsolicited Message Limit Exceeded-The unit has sent more than 100 unsolicited messages to CC within 1 minute.
  - CS Links-The CS message links have failed the periodic in-service C-side links test (which occurs once per minute).
- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out-of-service. Until the card is returned to service or replaced, the XPM cannot be returned to service or tested by in-service tests.

querypm (continued)

- PM180-The NT6X78 CMR card has a faults and a reset has been or is being attempted.
- PM181-The NT6X78 CMR card has failed a card test and therefore has caused the XPM to have in-service trouble (ISTb).
- PM601-When a querypm diaghist reset command is issued, a summary of LTF counters is recorded in a PM106 log before LTF counter is reset.

Examples

The following table provides examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation
querypm ↵	
	Task: Display information about the currently posted RCCI.

	Response:
	`PM Type: RCCI PM No.: 0 PM Int. No.: 0 Node_no.:31`
	`PMs Equipped: 51 Loadname: NLG36BL`
	`WARM SWACT is supported and available.`
	`RCCI 0 is included in the REX schedule.`
	`REX on RCCI 0 has not been performed.`
	`Node Status: {OK, FALSE}`
	`Unit 0 Inact, Status: {OK, FALSE}`
	`Unit 1 Act, Status: {OK, FALXE}`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 01 E31 LTE 00 51 RCCI : 000 6X02AA`

	Explanation: Typical display for querypm command.
querypm flt ↵	
	Task: Display fault information for both units of the posted PM.

	Response:
	`Node is ISTb`
	`One or both Units inservice trouble`
	`Unit 0`
	`The following inservice troubles exist:`
	`PM Load mismatch with Inventory table`
	`Unti 1`
	`The following inservice troubles exist:`
	`PM Load mismatch with Inventory table`

	Explanation: Typical display for querypm flt command.

querypm (continued)

Responses

The following table describes the meaning and significance of responses to the querypm command

Responses for the querypm command

MAP output	Meaning and action

`PM TYPE: type  PM NO.:  nnn  PM INT.#:  n  NODE NO.:  nnnn`
`PMS EQUIPPED: xxx  LOADNAME:  l_name`
`WARM SWACT IS SUPPORTED`
`status info`
`LAST REX DATE WAS day mmdd  AT hh.mm; results`
`NODE STATUS: {OK, FALSE}`
`UNIT 0 STATUS: {status, FALSE}`
`UNIT 1 STATUS: {status, FALSE}`
`SITE FLR RPOS  BAY_ID  SHF DESCRIPTION  SLOT EQPEC`
	Meaning: PM information is displayed, where:
	
	type is a PM type.
	nnn is 0 to 127 for the discrimination number of the PM type.
	n is a software internal number
	nnnn is 0 to 2047 for the PM node number of PM number nnn.
	l_name is the name of the load file for the PM type.
	status_info is a reason for the status of a unit or node, where status_info can be:
	
	`6X45 PEC MISMATCH BETWEEN INVENTORY TABLE & PM` The mismatch means the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. Check the PECs of the NT6X45 cards in use by entering querypm or by inspecting the card and ensure that the PEC with the lowest suffix is the one datafilled in Table LTCINV.
	
	`NOT LOADED SINCE POWER UP` The RCCI has not been loaded with software after having been powered up. The fault query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return to service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively).
	
	type nnn IN INCLUDED IN THE REX SCHEDULE
	
	The PM is automatically scheduled for REX testing by the system.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	day is an abbreviation for the day of the week, for example, MON for Monday. mmdd is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7. hh.mm denotes the time in hours and minutes that the REX test occurred results gives the result of the last REX test (PASSED or FAILED) status is one of the PM status codes. SITE begins the header string which identifies the location of a circuit according to the standard scheme. card_list is the list of potentially faulty cards. **Action:** None

`NODE IS <status>`
`  <reason>`
`UNIT 0`
`  state`
`UNIT 1`
`  state`
	Meaning: PM fault information is displayed, where:
	
	<status> is one of the PM status codes.
	<reason> is one or more of the following:
	
	`CLASS MODEM RESOURCE CARD 6X78AA OUT OF SERVICE` means the CMR NT6X78 card in the RCCI is a cause of the XPM having in-service trouble (ISTb status).
	
	`DATA NOT UP TO DATE`
	
	`DISTRIBUTED DATA MISMATCH`
	
	`NODE REDUNDANCY LOST (A UNIT IS OOS)` means that one unit is out-of-service (OOS) and that SwAct cannot be done. For unit1, there has been a recent SwAct and the inactive unit is still SysB. The fault condition is caused by one unit being out-of-service.

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
	ONE OR BOTH UNITS INSERVICE TROUBLE NON-CRITICAL HARDWARE FAULT means there is a fault with the NT6X69 card of the posted XPM. The XPM has been made ISTb because the IMC link between the units is faulty and the CC has closed the link. See Testing the IMC link on page 37 for details. NOT LOADED SINCE POWER-UP means the RCCI has not been loaded with software after having been powered up. The query of the NT6X45 card indicates the need for a load. The system tries to auto-load the units before a return-to-service. If auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). PSIDE LINKS OUT-OF-SERVICE RESET WARMSWACT DISABLED: DATASYNC FAILURE OR TURNED OFF means the node has exhibited ISTb trouble because to either dynamic data sync has failed or turned off through RTS of the inactive unit with NODATASYNC option. MISMATCH FOUND IN NODE TABLE BETWEEN TWO XPM UNITS means a mismatch was found between the node tables of the two units after the inactive unit was returned to service. Clear the trouble as soon as possible since warm SwAct capability is disabled because of the above node ISTb reason.
state	is one of NO FAULT EXISTS NOT status OR status status SYSTEM BUSY REASON: XPM SWACT ACTION REX failed

Action: None

-continued-

querypm (continued)

Responses for the querypm command (continued)

MAP output	Meaning and action
SYSTEM BUSY REASON: HARD PARITY FAULT WAS EXECUTED	**Meaning:** The XPM unit was put to OOS state because to a hard parity fault. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None
SYSTEM BUSY REASON: SOFT PARITY FAULT WAS DETECTED IN ps_ds	**Meaning:** The XPM unit was put to OOS state because to the detection of a soft parity fault in either program store or data store in MP, SP, EP, or FP memory. Depending on where the soft parity fault is detected, the system attempts different action. If it is a soft fault in program store, the system will reload and RTS the faulty unit. If it is a soft fault in data store, the system will RTS the faulty unit with new static data and execs. **Action:** None
SYSTEM BUSY REASON: INTERMITTENT PARITY FAULT WAS DETECTED	**Meaning:** The XPM unit was put to OOS state because of the detection of an intermittent fault in MP, SP, EP, or FP memory. The system will RTS the faulty unit with new static data. **Action:** None
THE FOLLOWING INSERVICE TROUBLES EXIST: INTERMITTENT PARITY FAULT WAS DETECTED IN xx MEMORY	**Meaning:** The XPM unit went ISTb because of the detection of an intermittent fault in MP, SP, or FP memory, where xx indicates what processor contains the faulty memory. Busy and RTS the faulty unit. Continue monitoring for recurrence. **Action:** None

-continued-

querypm (end)

Responses for the querypm command (continued)

MAP output	Meaning and action
`THE FOLLOWING INSERVICE TROUBLES EXIST:` `HARD PARITY FAULT WAS DETECTED IN xx MEMORY`	**Meaning:** The XPM unit went ISTb because of the detection of a hard parity fault in MP, SP, FP, or EP memory, where xx indicates what processor contains the faulty memory. Busy the faulty unit. Perform a ROM diagnostic to locate the faulty memory card. Replace the appropriate memory card, reload and RTS the faulty unit. Continue monitoring for recurrence **Action:** None

-end-

querypm (end)

Responses for the querypm command

MAP output	Meaning and action

```
UNSOLICITED MSG LIMIT = ttt,  UNIT 0 = nnn,  UNIT 1 = nnn
UNIT 0
   count_info
UNIT 1
   count_info
MP: available_pec  SP: available_pec
```

Meaning: PM counter information is displayed where:

ttt — is the threshold limit for the number of unsolicited messages from the CC. If the threshold is reached, the PM may cancel calls in progress.

nnn — is the number of unsolicited messages that have accumulated for each unit.

count_info — is one of
RAM LOAD: l_name1
ROM LOAD: l_name2
or
FAILED TO READ COUNTERS
or
nnn

where l_name1 is the name of the load file for the unit, l_name 2 is the firmware load file in the PM, and nnn is the count. The counters cannot be read because the respective unit is out-of-service.

available_pec for an in-service unit, is a list of the available PECs of the equipped NT6X45 cards. MP indicates the master processor card while SP indicates the signaling processor card. If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card.

Action: None

-end-

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the RCCI level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The RCCI level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mtc ↵ *where* mtc specifies the level higher than the RCCI level to be exited	**Task:** Return to the MAPCI level (one menu level higher than MTC). **Response:** The display changes to the MAPCI menu display: `MAPCI:` **Explanation:** The RCCI level has returned to the MAPCI level.

-end-

Responses

The following table provides an explanation of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the RCCI level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the RCCI level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None

-end-

recover

Function

Use the recover command to reload and return to service one unit of a set of RCCIs that has lost its memory of the load when the system requires powering up.

recover command parameters and variables

Command	Parameters and variables
recover	[*posted* / all] [*wait* / nowait]

Parameters and variables	Description
all	This parameter simultaneously recovers all of the XPMs of the same type as the XPM in the current position of the posted set.
nowait	This parameter allows the recovery to proceed without waiting for confirmation from the system. The parameter nowait enables the MAP to be used for other maintenance commands while the recovery is in progress.
posted	This default parameter, which is never entered, indicates that only the currently posted RCCI will be affected by the recover command because the all parameter is not entered.
wait	This default parameter, which is never entered, indicates that the user must wait for the recover command to complete executing before entering additional commands at the MAP because the nowait parameter is not entered.

Qualifications

The recover command is qualified by the following exceptions, restrictions, and limitations:

- The XPMs must be either the manual busy (ManB) or the system busy (SysB) state.
- If table PMLOADS is not correctly datafilled loading with the recover command cannot occur.
- The recover command overrides any system action that is still in progress.
- The recover command makes only one attempt to recover XPMs in a posted set. For XPMs that are not recovered, manual action is required to reload and return them to service.
- Loading and returning to service can occur simultaneously on different PMs of the same PM type.

recover (continued)

Example

Not currently available

Responses

The following table describes the meaning and significance of responses to the recover command.

Note: All responses to the commands loadpm and rts for the respective PM type in the posted set also apply to the command recover. Other responses are described alphabetically as follows.

Responses for the recover command

MAP output	Meaning and action

`<pm_type> <pm_number> FAILED`
`<reason>`
`or`
`<pm_type> <pm_number> PASSED`
	Meaning: These are the results of the loading. If the loading succeeds on at least one unit, a return to service is attempted on the PM.
	
	Action: None

`<pm_type> <pm_number> RECOVER FAILED`
`<reason>`
`or`
`<pm_type> <pm_number> RECOVER PASSED`
	Meaning: These are the results of the return to service.
	
	Action: None

`<pm_type> <pm_number> RTS REQUEST SUBMITTED`	**Meaning:** The PM is not equipped with the BA or later version of the NT6X45 Firmware card. Reloading is not attempted. **Action:** None

-continued-

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action
`<pm_type> <pm_number> UNIT <u> RECOVER FAILED REQUIRE LOAD BUT NOT ATTEMPTED FOR SINGLE UNIT`	**Meaning:** The unit must be reloaded, but its mate failed the test for load sanity. Both units must be available for broadcast loading to occur, therefore no further action is done to this XPM. **Action:** Use the command loadpm on the identified PM.
`<pm_type> <pm> UNIT <u> RELOADING REQUIRED. RTS ATTEMPTED ON MATE`	**Meaning:** The identified unit cannot be reloaded. The mate unit has been successfully loaded; therefore the system is returning it to service instead. **Action:** None

-end-

rts

Function

Use the rts command to return to service one or all RCCIs in a posted set, or one P-side link of the RCCI in the control position of the posted set. Tests are done and a return to service occurs if the tests succeed. Each unit must be in the ManB or SysB state.

rts command parameters and variables

Command	Parameters and variables					
rts	pm unit active inactive	*unit_no*	*datasync* nodatasync	*noforce* force	*wait* nowait	*posted* all
	link sysb	*ps_link*				

Parameters and variables	Description
active	This parameter returns to service one or all of the units in the active state.
all	This parameter returns to service all posted PMs, regardless of status.
datasync	This default parameter, which is never entered, indicates that the PM will attempt data sync after RTS because the nodatasync parameter is not entered.
force	This parameter bypasses pre-rts test routines. It overrides all other commands that may be in effect on a unit unless maintenance actions are already in progress.
inactive	This parameter returns to service one or all units in the inactive state.
link	This parameter returns to service a specified P-side link between the posted RCC and one of its associated LCMs.
nodatasync	This parameter causes static data to be sent to the inactive unit, but the PM will not attempt data sync after RTS.
noforce	This default parameter, which is never entered, indicates that pre-rts tests will be run, and if there are failures, rts will not occur, because the force parameter was not entered.
nowait	This parameter allows other maintenance commands to be entered before bsy is commanded.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
pm	This parameter returns to service both units of one or all posted RCCIs.
posted	This default parameter, which is never entered, indicates that only the currently posted RCCI will be returned to service, because the all parameter was not entered.
ps_link	This variable specifies which P-side link is to be returned to service. The range is 0 -19.
sysb	This parameter returns all posted system busy PMs to service.
unit	This parameter returns to service one unit of one or all posted RCCIs.
unit_no	This variable specifies which unit of the posted RCCIs is to be returned to service. The range is 0-1.
wait	This default parameter, which is never entered, indicates that the user must wait until the rts command has executed before entering additional commands at the MAP because the nowait parameter was not entered.

-end-

Qualifications

The rts command is qualified by the following exceptions, restrictions, and limitations.

- When an XPM is made system busy (SysB state), the testing and loading of a return to service are automatically initiated..
- The nodatasync parameter does not apply to PMs equipped with a small load.
- If the UNIT, PM, or LINK is CBsy, RTS is executed without any testing and the status becomes CBsy.
- When the active unit of the RCCI is returned to service, all P-side links are set to SysB, and then to RTS with a test performed on each link as it passes the test, unless the links are ManB.
- While the status of one PM is displayed, the responses indicate the test initiations and results for the other PMs of the posted set. The discrimination number of the displayed PM does not change.
- As PMs are returned to service, the PM status display decrements under the header ManB and increments under ISTb or InSv. If the return to service fails, the header ManB decrements and either header CBsy or SysB increments by 1 for each posted PM.

- While PMs are tested and returned to service, the status display of the posted PM in the control position changes the maintenance flag (Mtce) beside the unit's status, and by the progression of the tests beside the header RG. Tests occur, one unit at a time, and progression is shown by a series of messages displayed in the following order:

```
Initializing
Reset
Status
Run
Reset
Run
```

- If the NT6X78 CMR card fails the tests during an attempt to return the PM to service, the PM cannot be returned to service until the card is seated properly or replaced.
- The force parameter should not be used on the RCCI when the NT6X78 CMR card is present. If the card is in the process of initializing itself while the XPM is returning to service, the XPM remains in the manual busy (ManB) or system (SysB) state. The return to service must be repeated when the CMR is initialized.
- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out of service. Until the card is returned to service or replaced, the XPM cannot be returned to service.
  - PM180-The NT6X78 CMR card has a fault and a reset has been or is being attempted. The return to service has not occurred.
  - PM181-The NT6X78 CMR card has failed a card test and therefore cannot be returned to service.
  - PM184-A P-side link is returned to service.

Examples

Not currently available

rts (continued)

Responses

The following table describes the meaning and significance of responses to the rts command.

Responses for the rts command

MAP output	Meaning and action
`6X45 PEC MISMATCH` `available_pecs`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. If parameter nowait is entered, this response does not appear. **Action:** SYSTEM: While the table query is occurring, the maintenance flag ROM/RAM QUERY is displayed. The equipped PECs of NT6X45 cards are listed, where available_pecs is one or more card(s). If a question mark (?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in inventory Table LTCINV.
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	**Meaning:** The parameter all does not apply to links because they must be returned to service one at a time. **Action:** None
`/CLEAR DATA`	**Meaning:** With feature package NTX270, RCCIs do not undergo the second restart for command rts that other XPMs undergo. Therefore, the resetting of the Static Data occurs before the initial restart, and the system confirms that the Static Data is reset (cleared). **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`/DISTRIBUTED DATA ?does this belong for a RCCI, ntx041 applies to ccs7!`	**Meaning:** With feature package NTX041, at least one DTC is being loaded while the command rts is in progress. The loading is required because of a mismatch of data between the DTC and the CC. **Action:** Depending on the result of the loading, a log is generated.
`FAILED TO SEND RESET MESSAGE` `card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not reset. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
`FAILED TO SEND STATUS MESSAGE` `card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, returning to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`INACTIVE PARAMETER NOT VALID FOR OOS PM`	**Meaning:** The parameter inactive does not apply to out-of-service XPMs. The XPM(s) must be in service. **Action:** SYSTEM: The activity display for the XPM(s) is blank. USER: To return the XPM(s) to service, re-enter the command rts with the parameter unit or pm.
`RCCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCCI cannot be returned to service because it is already undergoing maintenance action, where pm_number is the discrimination number of the RCCI. **Action:** SYSTEM: With parameter all, the RCCI is bypassed from the posted set of XPMs only for the duration of the return to service.
`RCCI pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With the all parameter, an RCCI in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** SYSTEM: The RCCI in the posted set is bypassed by the return to service. USER: To proceed with the maintenance, wait until the action on the posted set is completed, then busy the RCCI with the bsy command before trying the command rts.
`RCCI pm_number UNIT u RTS PASSED`	**Meaning:** The tests are confirmed, where pm_number and u echo the discrimination numbers of the RCCI and its unit. **Action:** SYSTEM: The RCCI or unit is made InSv.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS card_list`	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not communicating. The card is one or more of the listed cards, where card_list is one of NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X47 NT6X69 **Action:** None
`NO RESPONSE FROM ROM/RAM QUERY MESSAGE`	**Meaning:** The return to service cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. If nowait parameter is specified, this response does not appear. **Action:** SYSTEM: The maintenance flag ROM/RAM QUERY appears while the load is being queried/ USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
NO WAIT RECEIVED AFTER RESET card_list	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the listed cards, where card_list is one of NT6X40 NT6X41 NT6X45 (FP, International) NT6X45 (MP) NT6X45 (SP) NT6X46 NT6X46 (FP, memory) NT6X47 NT6X50 NT6X69 NT6X72 **Action:** None
OPERATIONS ON TRUNK CARRIERS MUST BE DONE AT CARRIER MAP LEVEL	**Meaning:** With the link command, there are two kinds of connections to the RLCM: links or trunks. The trunks are operated from the CARRIER level. **Action:** Use the command trnsl to display which *ps_link* assignment is a link and which is a trunk.
OK	**Meaning:** The test passes and the PM is returned to service. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being performed on the posted PM. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
PM FAILED TO INITIALIZE TRY RELOADING THE PM	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because a card is not initialized. **Action:** USER: Reload the XPM by entering the command pmreset or loadpm at the MAP.
PM IS OFFLINE NO ACTION TAKEN	**Meaning:** The command cannot be executed because the PM is in the Offl state. **Action:** None
PM NOT LOADED SINCE POWER UP	**Meaning:** The RCCI cannot be returned to service because it has not been loaded with software after having been powered up. If nowait parameter is entered, this response does not appear. Using the command querypm indicates which load for the NT67X45 card. the system tries to auto-load the units before a return to service. When auto-loading fails, the XPM must be manually busied and loaded (by the commands bsy and loadpm respectively). **Action:** SYSTEM: The maintenance flag ROM/RAM QUERY appears while the load is being queried. Log PM181 records the occurrence of this response.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`pm_type pm_number IS status.` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for returning to service, where pm_type is a PM listed in Table A on page 18, pm_number is the discrimination number of the PM , and status is one of CBSY INSV OFF-LINE The PM must be ManB. **Action:** None
`REPLACE CARDS IN CARDLIST` `card_list`	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the return to service, where card_list is the list of cards. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
`REQUEST INVALID` `MSBx pm_number IS pm_state`	**Meaning:** By the command string rts pm force, the state of one of the MSB units that is connected to the RCCI prevents the whole PM from being made in service. That is, one unit may be ISTb. The value of x is either 6 or 7 for the type of MSB. **Action:** None
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command rts.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
RTS FAILED TRY THE RTS COMMAND ON ONE UNIT	**Meaning:** For XPMs with an NT6X69 messaging card, a return to service cannot occur because both units are ManB or a card is pulled. The unit(s) must be reloaded. **Action:** Uses the command rts to reload the static data into the unit(s).
SUMMARY: nnn PASSED nnn NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully returned to service or that have been bypassed by the return to service. **Action:** None
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC card_list	**Meaning:** Results of test are displayed using the standard circuit display. **Action:** None
THIS OPERATION WILL BE EXECUTED ON nnn RCCI PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of nnn RCCIs in the posted set is to be returned to service. **Action:** Enter YES to test, reload, and then return the RCCI(s) to service. Enter NO to abort the action.
RETRY LAST COMMAND	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. **Action:** Re-enter the command rts.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`**WARNING**  UNIT u MAY NOT HAVE A VALID LOAD`	**Meaning:** A unit of a PM of node-type RCCI has undergone the ROM tests, where u is either 0 or 1. The RAM load is erased. **Action:** Reload the unit using the command loadpm.
`STATIC DATA WILL BE SENT.  DATA SYNC WILL NOT BE ATTEMPTED AFTER THE INACTIVE UNIT IS RTSED. PLEASE CONFIRM (“YES” OR  “NO”):`	**Meaning:** Whenever the nodatasync option is entered at the MAP and screened to be acceptable, the CC will warn the user on the impact of the option. The craftperson will also be prompted YES/NO before the rts command processing can proceed. If YES is entered, the CC will reset static data in the CPM and send down static data during the rts of the inactive unit. The PM will not attempt data sync after the inactive unit is returned to service. Warm SwAct is disabled. **Action:** None
`PM IS OOS, NODATASYNC PARM DOES NOT APPLY`	**Meaning:** The nodatasync option is rejected because the PM is not in service. **Action:** None
`PM IS EQUIPPED WITH SMALL LOAD. NODATASYNC PARM DOES NOT APPLY`	**Meaning:** The nodatasync command option is rejected because the PM is equipped with a small load. **Action:** None

-end-

swact

Function

Use the swact command to cause the posted RCCIs to switch the activity of the pairs of units (unit-0 and unit-1). The active unit is made inactive, the inactive unit is made active. Units 0 and 1 must be InSv or ManB.

swact command parameters and variables

Command	Parameters and variables
swact	*posted* [*notest*] all [test]

Parameters and variables	Description
all	This parameter simultaneously switches the activities of all RCCIs (or all XPMs of the same node type as the XPM in the current position of the posted set).
notest	This default parameter, which is never entered, indicates that the RCCI will not undergo out-of-service (OOS) testing, because the test parameter is not entered.
posted	This default parameter, which is never entered, indicates that only the currently posted RCCI will be subject to the swact command, because the all parameter is not entered.
test	This parameter causes a newly inactive unit to receive full OOS diagnostics when RTS occurs.

Qualifications

The swact command is qualified by the following exceptions, restrictions, and limitations:

- If the RCCI is not ManB confirmation, yes or no, is required. If the RCCI is ManB no confirmation is required.
- Log PM181 is generated when SwAct is executed, identifying the newly-active unit. This log is for information only and no alarm is invoked.

swact (continued)

Example

The following table provides an example of the swact command.

Examples of the swact command

Example	Task, response, and explanation

swact ↵	**Task:** Perform a switch of activity on the posted RCCI.
	
	Response:
	`A Warm SwAct will be performed after data sync of active terminals.`
	`Please confirm (“YES”, “Y”, “NO”, “N”):`
	
	Explanation: When y is entered, a warm SwAct is executed unless refused by the SwAct controller.

Responses

The following table describes the meaning and significance of responses to the swact command.

Responses for the swact command

MAP output	Meaning and action
`A COLD SWACT WILL BE PERFORMED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** The RCCI is not ManB and the unlisted menu command warm SwAct is off. During a cold SwAct, both units are SysB and call processing is lost until the active unit is returned to service. A cold SwAct drops all calls. **Action:** If YES is entered the response is `RCCI pm_number SWACT PASSED` which indicates that SwAct is executed.

-continued-

Responses for the swact command (continued)

MAP output	Meaning and action
A WARM SWACT WILL BE PERFORMED AFTER DATA SYNC OF ACTIVE TERMINALS THE INACTIVE UNIT MAY NOT BE CAPABLE OF GAINING ACTIVITY. (PLEASE CHECK LOGS). DO YOU WISH FOR THE SWACT TO CONTINUE, REGARDLESS? PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** The pre-SwAct audit has determined that the unit should not assume activity and the warm SwAct operation should be terminated. **Action:** The user is prompted to confirm or reject command execution. If the user confirms, the warm SwAct is carrier out. If the user rejects. the command is aborted.
RCCI 2 A WARM SWACT WILL BE PERFORMED	**Meaning:** RCCI 2 is to have the activity of its units switched. Calls in progress are allowed to complete. **Action:** None
RCCI 2 SWACT PASSED	**Meaning:** The activity of the two RCCI units is switched. **Action:** None
REQUEST INVALID INACT UNIT MUST BE INSV OR BOTH UNITS MUST BE MANB	**Meaning:** The units cannot be switched because one or both are in the wrong state. **Action:** None
SWACT OPERATION NOT VALID ON OOS PM	**Meaning:** When an XPM is in an out-of-service state (ManB, SysB, CBsy, or Offl), a switch of activity cannot occur. **Action:** SYSTEM: The activity display for the XPM(s) is blank.

-end-

trnsl

Function

Use the trnsl command to identify the C-side or P-side links of a posted RCCI and show the status of the DS30 links to the network (C-side), or the DS30A or DS-1 links to the subsidiary PM (P-side).

trnsl command parameters and variables

Command	Parameters and variables	
trnsl	c p	[*allinks* *link_no*]
	msg	[*both* c p]

Parameters and variables	Description
alllinks	This default parameter, which is never entered, indicates all the links on the selected side or sides to be affected by the command because no *link_no* is specified..
both	This default parameter, which is never entered, indicates that both C-side and P-side links will be affected by the command becasue neither the c or p parameter is entered.
c	This parameter selects the C-side links.
p	This parameter selects the P-side links.
link_no	This variable identifies one link for the C-side. The range is 0-31. This variable also identifies one link for the P-side. The range is 0-19 . If *link_no* is omitted, all the C-side or P-side links are displayed.
msg	This parameter specifies all the message links of the C- or P-sides of the RCCI.

Qualifications

None

trnsl (continued)

Examples

The following table provides an example of the trnsl command.

Examples of the trnsl command (continued)

Example **Task, response, and explanation**

trnsl c ↵
where

c identifies the C-side links of the posted RCCI.

Task: Identify the C-side links and show the status of the DS30 links to the network.

Response:

```
LINK 0 NET0 0 10;CAP:MS;STATUS:OK  ;MSGCOND:OPN, Unrestricted
LINK 1 NET1 0 10;CAP:MS;STATUS:MBsy;MSGCOND:CLS, Unrestricted
LINK 2 NET0 0 11;CAP:MS;STATUS:OK  ;
LINK 3 NET1 0 11;CAP:MS;STATUS:MBsy;
LINK 4 NET0 1 52;CAP:MS;STATUS:OK  ;MSGCOND:OPN, Unrestricted
LINK 5 NET1 1 52;CAP:MS;STATUS:OK  ;MSGCOND:CLS, Unrestricted
```

Explanation: In this example, there are four DS30 links (0-3) to NM-0 and two links (4,5) to NM-1. RCCI-0 has been selected.

trnsl p ↵
where

p identifies the P-side links of the posted RCCI.

Task: Identify the P-side links and show the status of the DS30A or DS-1 links to a subsidiary PM.

Response:

```
LINK 0 LCM 0 0;CAP:MS;STATUS:OK  ;MSGCOND:OPN
LINK 1 LCM 0 1;CAP:MS;STATUS:MBsy;MSGCOND:CLS
LINK 2 LCM 0 2;CAP: S;STATUS:OK  ;MSGCOND:OPN
LINK 3 LCM 1 0;CAP:MS;STATUS:MBsy;MSGCOND:CLS
LINK 4 LCM 1 1;CAP:MS;STATUS:OK
```

Explanation: In this example, there are three (0-2) DS30A links to LCM-0, and two links (3,4) to LCM-1. RCCI-0 has been selected.

Responses

The following table describes the meaning and significance of responses to the trnsl command.

Responses for the trnsl command

MAP output	Meaning and action
`display`	**Meaning:** The trnsl display appears. **Action:** None
`PM HAS NO PSIDE INFORMATION`	**Meaning:** The P-side parameter has been specified for a PM that has no associated P-side links. **Action:** None

-end-

tst

Function

Use the tst command to test one or all units of one or all posted RCCIs, or on one specified P-side link.

tst command parameters and variables

Command	Parameters and variables		
tst	link	*ps_link*	
	pm unit	*unit_no*	[all cmr rom]
	rex	[off on now query]	[*wait* nowait]

Parameters and variables	Description
all	This default parameter causes all tests to be performed when neither the cmr or rom parameters are entered.
cmr	This parameter tests the cmr card in the selected unit of the posted RCCI.
link	This parameter applies the test to a specified P-side link between the posted RCCI and one of its associated LCMs or RLCMs.
now	This parameter performs a manual REX test. The nowait parameter used with this command returns control to the MAP terminal, suppressing messages and allowing commands to be entered before the REX testing is completed.
off	This parameter causes the posted RCCI to be removed form the system REX schedule.
on	This parameter causes the posted RCCI to be included in the system REX schedule.
ps_link	This variable specifies which of the P-side links is to be tested. The range is 0-3.
pm	This parameter tests both units of one or all posted RCCIs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the posted RCCI.

-continued-

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
rex	This parameter enables rex testing to be scheduled, unscheduled or performed immediately for the posted RCCI.
rom	This parameter tests the ROM for the posted RCCI or specified unit.
unit	This parameter tests one unit of the posted RCCI and must be followed by the unit number.
unit_no	This variable specifies which unit of the posted RCCI is to be tested. The range is is 0-1.
wait	This default parameter, which is never entered, indicates that the user must wait until the command has finished executing before additional commands can be entered at the MAP.

-end-

Qualifications

The tst command is qualified by the following exceptions, restrictions, and limitations:

- The node under test must be InSv, ISTb, ManB, or SysB.
- If the RCCI is ManB, the full test is preceded by a message looparound pilot test.
- Units that have been tested by parameter ROM must be manually reloaded before being returned to service.
- During the progress of maintenance testing, Mtce appears on the display beside the respective units.
- When the warm swact command is disabled for an XPM, a REX test in progress still allows the commands bsy, tst, and rts to be entered for the inactive unit. However, if the warm swact command is disabled before the REX test starts, and since the inactive unit must be in service. the test cannot be run. The command string tst rex now cannot be used.
- The CMR card must be busied before it can be tested.
- The following logs are generated when the indicated maintenance actions occur:
  - PM128-The NT6X78 CMR card is out-of-service. Until the card is returned to service or replaced, the XPM cannot be tested by the in-service tests invoked by the command tst.

- PM180-The NT6X78 CMR card has a fault and a reset has been or is being attempted. The testing has not occurred.
- PM181-The NT6X78 CMR card has failed a card test.

Examples

The following table provides examples of the tst command.

Examples of the tst command

Example	Task, response, and explanation
tst unit 0 ↵ *where* 0 is the unit of the RCCI to be tested.	**Task:** Test unit 0 of the posted RCCI. **Response:** `Tst Passed` **Explanation:** Test of unit 0 of the posted RCCI passed.
bsy unit 0 cmr ↵ **tst unit 0 cmr** ↵ *where* 0 is the unit of the RCCI to be tested.	**Task:** Test the CMR card in unit 0 of the posted RCCI. **Response:** `CMR Tst Passes` **Explanation:** Test the CMR card in unit 0 of the posted RCCI passed.

-end-

tst (continued)

Responses

The following table describes the meaning and significance of responses to the tst command.

Responses for the tst command

MAP output	Meaning and action
6X45 PEC MISMATCH available_pecs	**Meaning:** The tests cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** SYSTEM: The equipped PECs of NT6X45 cards are listed, where available PECs is one or more card(s). If a question mark(?) is present instead of a PEC, the PEC can only be obtained by inspecting the appropriate card. USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
A WARM SWACT WILL BE ATTEMPTED DURING THE REX SEQUENCE PLEASE CONFIRM (“YES” OR “NO”) YES REQUEST SUBMITTED	**Meaning:** In response to the command string tst rex now nowait, the system requests a warm SwAct after a user response. After a YES response, a warning is given that REX will perform a warm SwAct. The user has chosen to proceed with the REX test. After the “Request Submitted” response, the user may proceed with other commands from the MAP terminal while the REX test is being performed. REX results are suppressed on the MAP screen. Peripheral states and maintenance progress indicators are displayed as usual. **Action:** SYSTEM: The system performs a REX test on the posted peripheral. Logs are output and the REX maintenance record is updated as usual. USER: REX progress can be followed by viewing maintenance progress indicators on the MAP display of the posted peripheral. Refer to logs and/or REX maintenance record (command string tst rex query after posting the desired peripheral) for results of the REX test.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`CMR Tst Passes`	**Meaning:** The NT6X78 CMR card test passed. **Action:** None
`CS LINK UNAVAILABLE` `NO ACTION TAKEN`	**Meaning:** The C-side links used for messages are both out-of-service, therefore, the PM cannot communicate with the CC. **Action:** None
`INSVCE TESTS INITIATED` `RCCI 0 TST PASSED`	**Meaning:** In-service testing is being performed on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None

`LAST REX DATE WAS day mmdd AT hh.mm; results`
the response is displayed with:
`LTC 0 IS INCLUDED IN THE REX SCHEDULE`
`LTC 0 IS REMOVED FROM THE REX SCHEDULE`
	Meaning: With the command string tst rex query, the date of the last REX test is given where:
	day — is an abbreviation for the day of the week, for example, MON for Monday
	mmdd — is an abbreviation for the month and includes the date of the day, for example, SEP07 for September 7
	hh.mm — denotes the time in hours and minutes that the REX test occurred
	results — gives the results of the last REX test (PASSED or FAILED)
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`RCCI 0 is included in the REX schedule.`
`Last REX date was TUE. 1990/11/27 at 10:02:47; FAILED`
`REX test Failed - Inactive OOS tests after SWACT`
`Site Flr RPos Bay_id Shf Description Slot EqPEC`
`HOST 01 N02 LTE 00 18 RCCI : 00 17 6X62`
`No prior REX failure.`
	Meaning: In response to the command string tst rex query, information is displayed showing that RCCI 0 was last REXed on Tue., Nov 27 1990 at 10:02 am, and the test failed during Out of Service tests on the Inactive unit after the SwAct. A list of one card which may be defective is given in standard card display format. The REX test had not failed prior to this most recent REX.
	
	Action: The user should perform further analysis on the card listed, the XPM unit indicated, or the XPM node to determine the exact cause of the REX failure and correct it. Logs should be consulted for further information.

`RCCI 0, CHECKSUM=# hhh, AGREES.` `OK`	**Meaning:** The TST passes. The checksum agreement referred to (AGREES) is between a recent value for the data in the PM and the load-time value as stored in the central control. This confirms that the PM load has not been completed. **Action:** None

`RCCI 0 IS rex_status`	**Meaning:** The REX tests are deactivated or queried, where rex_status is either:
	`INCLUDED IN THE REX SCHEDULER`
	or
	`REMOVED FROM THE REX SCHEDULER`
	
	Action: None

`RCCI 0 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The RCCI cannot be tested because it is already undergoing maintenance action. **Action:** SYSTEM: With parameter all, the RCCI is bypassed from the posted set of XPMs only for the duration of the testing.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
RCCI 0 REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM	**Meaning:** With parameter all, an RCCI in the posted set cannot be tested because it is not in the manually busy state. **Action:** SYSTEM: The RCCI in the posted set is bypassed by the testing. USER: To proceed with the maintenance, wait until the action on the posted set is completed, then make the RCCI busy with the command bsy before trying the command tst.
NON-DESTRUCTIVE ROM TEST AND OSVCE TESTS WILL BE RUN	**Meaning:** The non-destructive tests occur for both the in-service and out-of-service unit or XPM. **Action:** SYSTEM: The maintenance flag NONDESTR ROM TST appears while testing occurs. Log PM181 records when the XPM is at the ROM level of maintenance. USER: Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
NON-DESTRUCTIVE ROM TEST WILL BE RUN	**Meaning:** The non-destructive tests occur for the in-service unit or PM. **Action:** SYSTEM: The maintenance flag NONDESTR ROM TST appears while testing occurs. USER: Wait for the tests to complete. If the tests fail, check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
NO PM POSTED	**Meaning:** The PM must be posted before using the tst command. Posting a PM identifies to the system the PM that is to have maintenance action. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
NO RESPONSE FROM ROM/RAM QUERY MESSAGE	**Meaning:** The testing cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card or because the ROM/RAM query is not replied to. **Action:** SYSTEM: The maintenance flag ROM/RAM QUERY appears while the load is being queried. Log PM181 records when the XPM is at the ROM level of maintenance. USER: Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in Table LTCINV.
OSVCE TESTS INITIATED RCCI n UNIT n TST PASSED	**Meaning:** One unit of the RCCI has been tested, where n is the respective discrimination number. If both units are tested, the response occurs for each unit. **Action:** None
REPLACE CARDS IN CARDLIST: card_list	**Meaning:** The results of the tests by the mate unit indicate that cards are preventing the loading, where card_list is the list of cards. For information on mate testing. **Action:** Replace the cards. If one of them is a processor card, reload the unit.
REQUEST INVALID	**Meaning:** The in-service tests occur if the selected PM is in the InSv state, or out-of-service tests occur if it is in the ManB or SysB state. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`RETRY LAST COMMAND`	**Meaning:** The results of the tests by the mate unit do not have a list of suspected cards. For information on mate testing, see Testing XPM Units by the Mate on page 39. **Action:** Re-enter the command tst.
`REX REQUEST INVALID: MTCE IN PROGRESS`	**Meaning:** A REX test cannot be started on the PM because other maintenance actions are already in progress. **Action:** None
`REX TEST PASSED`	**Meaning:** The REX test is successful. **Action:** None

`SUMMARY:`
`nnn PASSED`
`nnn NOT SUBMITTED`
	Meaning: With parameter all, summary is given of the quantity (nnn) of XPMs in the posted set that have been successfully tested or that have been bypassed by the testing.
	
	Action: None

`TEST FAILED`
`SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC`
`card_list`
	Meaning: Results of tests are displayed using the standard.
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance actions. **Action:** None
THE ROM TEST IS DESTRUCTIVE THE RAM LOAD WILL BE LOST FOR UNIT u (PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** The RAM load is erased in the unit(s) because of the ROM test, where u is 0-1. **Action:** To replace the RAM load the units must be reloaded by the command loadpm.
THIS OPERATION WILL BE EXECUTED ON nnn LTC (PLEASE CONFIRM “YES” OR “NO”):	**Meaning:** A quantity of nnn RCCIs in the posted set is to be tested. **Action:** Entering YES tests the RCCI(s). Entering NO aborts the action. With YES, the status display of the RCCI in the current position of the posted set shows the maintenance flag Mtce while testing is in progress.
TRY PMRESET	**Meaning:** For XPMs with an NT6X69 messaging card, testing cannot occur because the static data must be reloaded. **Action:** Use the pmreset command
UNABLE TO DIAGNOSE FROM MATE MATE NOT ACT/INSV - TRY AGAIN LATER	**Meaning:** Testing by the mate test is cancelled if the status or the activity of the active unit changes. **Action:** Wait for the changes to complete.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
UNABLE TO DIAGNOSE FROM MATE NO RESOURCES - TRY AGAIN LATER	**Meaning:** As part of the maintenance actions for testing a unit by its active mate, testing from the mate unit cannot occur when maintenance is already in progress on it. **Action:** Wait for the maintenance action(s) to complete.

-end-

warmswact

Function

Use the warmswact command to turn on or off or query the state of the automatic switch of activity feature of the units of the posted RCCI.

warmswact command parameters and variables

Command	Parameters and variables		
warmswact	on off query	*posted* all	*prompt* noprompt

Parameters and variables	Description
all	This parameter includes all XPM units of the posted set.
noprompt	This parameter is used to avoid confirmation requests for each unit affected when command string warmswact on all is entered.
off	This parameter cancels the automatic switching of the activity states of the XPM units.
on	This parameter allows the automatic switching of the activity states of the XPM units.
posted	This default parameter, which is never entered, indicates that only the RCCI currently posted will be affected by the command because the all parameter is not entered.
prompt	This default parameter, which is never entered, indicates that confirmation requests prompts will be displayed for each unit affected requiring yes or no response because the noprompt parameter is not entered.
query	This parameter gives the status of warm SwAct as on or off.

Qualifications

The warmswact command is qualified by the following:

- When the command string warmswact on is executed, calls in process are maintained when the activity states of the units are switched.
- When the command string warmswact off is executed, calls in process are dropped when the activity states of the units are switched.
- If an attempt to change the warm SwAct capability is made while a SwAct is in progress, a message will be displayed stating that the attempt is disallowed and no action will be taken.

warmswact (end)

Example

The following table provides an example of the warmswact command.

Example of the warmswact command

Example	Task, response, and explanation
warmswact on ↵	
	Task: Enable warmswact for the posted RCCI.
	Response: `WARM SWACT FOR RCCI 22 IS ENABLED`
	Explanation: Warm SwAct is enabled for RCCI 22.

Response

The following table provides an explanation of the response to the warmswact command.

Response for the warmswact command

MAP output	Meaning and action
`WARM SWACT FOR RCCI <n> UNIT <n> IS <status>`	
	Meaning: If the command swact (menu item 13) is used, a warm SwAct occurs, where <n> is the discrimination number of the RCCI and unit.
	Action: None

xpmlogs

Function

Use the xpmlogs command to enable logs to be generated from the XPM and to report internal XPM software errors (SWERRS).

xpmlogs command parameters and variables

Command	Parameters and variables
xpmlogs	on off query

Parameters and variables	Description
on	This parameter enables logs to be printed.
off	This parameter prevents logs from being printed.
query	This parameter gives the status of XPM_LOGS as on or off.

Qualification

The xpmlogs command is cancelled by a reload or restart by a default setting.

Example

The following table provides an example of the xpmlogs command.

Example of the xpmlogs command

Example	Task, response, and explanation
xpmlogs on ↵	
	Task: Enable log reporting for the posted RCC
	Response: `LOGS FROM RCCI22 ARE ENABLED`
	Explanation: Log reports for the posted RCCIwill be generated.

xpmlogs (end)

Responses

The following table provides explanations of the responses to the xpmlogs command.

Responses for the xpmlogs command

MAP output	Meaning and action

`RCCI n UNIT n XPMLOGS PASSED`
`or`
`RCCI n UNIT n XPMLOGS PASSED`
	Meaning: The response occurs in pairs, one for each RCCI or RCCI unit.
	
	Action: None

`LOGS FROM XPM ARE DISABLED`
`or`
`LOGS FROM XPM ARE ENABLED`
	Meaning: The status of xpmlogs is given in the display.
	
	Action: None

xpmreload

Function

Use the xpmreload command to reload selected segments in the XPM or in a unit of the XPM.

xpmreload command parameters and variables

Command	Parameters and variables			
xpmreload	*pm_type*	unit	*unit_no*	*file_name*

Parameters and variables	Description
file_name	This variable is the name of the segment reload file.
pm_type	This parameter identifies the PM type targeted for segment reloading, which in this case is the RCCI. The *pm_type* will be RCCI
unit	This parameter indicates that a unit is to be specified.
unit_no	This variable specifies the unit of the RCCI to be loaded and has a range of 0-1.

Qualifications

Not currently available

Examples

Not currently available

Responses

Not currently available

xpmreset

Function

Use the xpmreset command to reinitialize a posted RCCI or one of its units after being reloaded. This reset verifies that the reload is correct.

xpmreset command parameters and variables

Command	Parameters and variables		
xpmreset	pm unit	*unit_no*	[*tstdat* nodata norun]

Parameters and variables	Description
pm	This parameter reinitializes both units of the posted RCCI.
norun	This parameter resets the PM without initializing or sending static data and execs.
unit	This parameter reinitializes one unit of the posted PM.
unit_no	This parameter specifies which unit of the posted PM is to be reset. The range is 0 -1.
nodata	This parameter resets the units after initialization without sending data and execs.
tstdat	This default parameter, which is never entered, resets the units after initialization and sending data and execs, because neither the nodata or norun parameters are entered.

Qualifications

None

xpmreset (continued)

Example

The following table provides an example of the xpmreset command.

Example of the xpmreset command

Example	Task, response, and explanation

xpmreset unit 0 ↵
where
 	
0 is the number of the unit to be reset.
	Task: Reset unit 0 of the posted RCCI.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES” OR “NO”)`
	
	Explanation: The resetting of an RCCI equipped with ESA cancels calls.

xpmreset (continued)

Responses

The following table provides explanations of the responses to the xpmreset command.

Responses for the xpmreset command

MAP output	Meaning and action
FAILED TO SEND RESET MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not reset. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-continued-

xpmreset (continued)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
FAILED TO SEND STATUS MESSAGE <card_list>	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X40 ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None
NO RESPONSE FROM PM	**Meaning:** If the response occurs for norun before the reset status, there is a hardware fault for transmitting or a fault in the ROM. If the response occurs for nodata during initialization, the load is not acceptable after the following display messages: ▪ /Reset ▪ /Status ▪ /Run ▪ /Initializing **Action:** Use the command loadpm to reload the PM.

-continued-

xpmreset (continued)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
`NO RESPONSE FROM PM AFTER ROMTEST <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 **Action:** None
`NO RESPONSE FROM PM AFTER STATUS <card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not communicating. The card is one or more of the listed cards, where <card_list> is one of ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X47 ▪ NT6X69 **Action:** None

-continued-

xpmreset (end)

Responses for the xpmreset command (continued)

MAP output	Meaning and action
`NO WAI RECEIVED AFTER RESET` `<card_list>`	**Meaning:** For XPMs with an NT6X69 messaging card, loading cannot occur because a card is not present. The card is one or more of the cards listed below ▪ NT6X40 ▪ NT6X41 ▪ NT6X45 (FP, International) ▪ NT6X45 (MP) ▪ NT6X45 (SP) ▪ NT6X46 ▪ NT6X46 (FP memory) ▪ NT6X47 ▪ NT6X50 ▪ NT6X69 ▪ NT6X72 **Action:** None

-end-

RteCtrl level commands

Use the RteCtrl level of the MAP to list, apply, or remove controls on specified reroutes. Routes must have been entered in the routing subtables TREREF and OFRT/OVR and in the network management (NWM) table REROUTE.

Accessing the RteCtrl level

To access the RteCtrl level, enter the following from the CI level:

mapci;nwm;rtectrl ↵

RteCtrl commands

The commands available at the RteCtrl MAP level are described in this chapter and arranged in alphabetical order. The page number for each command is listed in the following table.

RteCtrl commands

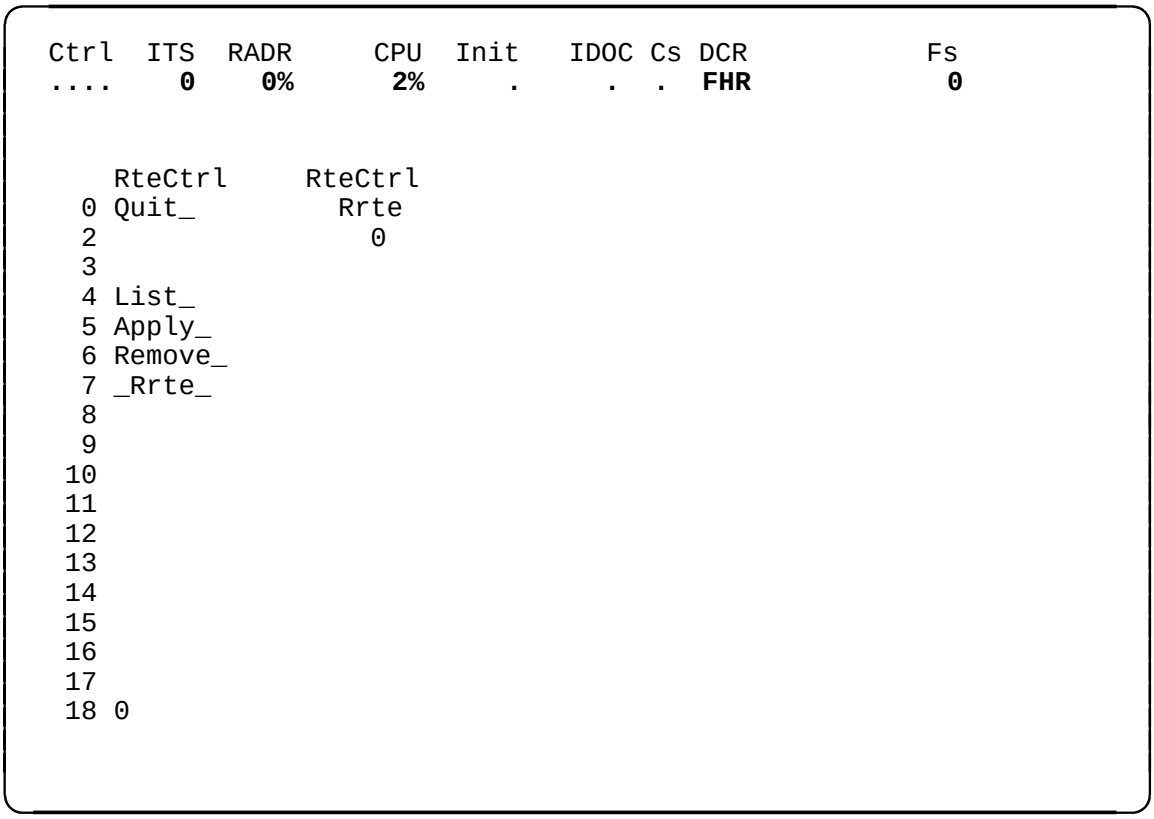
Command	Page
apply	R-269
list	R-271
page	R-273
quit	R-275
remove	R-279

CI level rerout commands

Without accessing the RteCtrl menu, reroute (RRTE) controls may be applied by the rerout commands on the CI level. The commands and parameters for both the CI level rerout commands the RteCtrl menu are the same. The CI level rerout commands are documented in the *DMS-100 Family Nonmenu Commands Reference Manual*, 297-1001-820.

RteCtrl menu

The following figure shows the RteCtrl menu and status display.



apply

Function

Use the apply command to activate a specified route number for the RRTE control.

apply command parameters and variables

Command	Parameters and variables			
apply	rrte	*rrtno*	*rrtsub*	*tabrrte* *level*

Parameters and variables	Description
rrte	This parameter species that the RRTE control is to be activated.
rrtno	This variable is the range of reroute numbers that are active as defined in table REROUTE and has a range of 0-1023.
rrtsub	This value is a subrange of the rrtno variable and has a range of 0-15.
tabrrte	This deafault parameter indicates that action is applied to the values entered in table REROUTE when no value for level is entered. Do not enter this parameter.
level	This variable is the percent of control to be applied. If it is not used, the command string defaults to the value entered in table REROUTE.

Qualification

In any reroute subtable, only one RRTE subrange can be activated at a time.

apply (end)

Example

The following table provides an example of the apply command.

Example of the apply command

Example	Task, response, and explanation
apply rrte 370 0 25 ↵ *where* 370 is the range of reroute numbers that are active 0 is the subrange or active reroute numbers 25 is the percent of control to be applied	**Task:** Apply 25% control to route number 370. **Response:** 0K **Explanation:** The control is applied to the route number.

Responses

The following table provides explanations of the responses to the apply command.

Responses for the apply command

MAP output	Meaning and action
INVALID CONTROL INDEX	**Meaning:** The parameters are inaccurate or in the wrong order. **Action:** None
0K	**Meaning:** The control is applied to the route number. The system updates the display fields as each ctrl is applied. **Action:** None

list

Function

Use the list command to display data associated with either a specified reroute number or all active reroute numbers.

list command parameters and variables

Command	Parameters and variables
list	rrte [all / *rrtno*]

Parameters and variables	Description
all	This parameter substitutes all the reroute numbers that are active.
rrte	This parameter species that the RRTE control is to be activated.
rrtno	This variable is the range of reroute numbers that are active as defined in table REROUTE and has a range of 0-1023.

Qualifications

None

Example

The following table provides an example of the list command.

Example of the list command

Example	Task, response, and explanation
list rrte all ↵	

Task: List all active reroute numbers.

Response:

```
Rrte                                Page 1 of 1
RrtNo RrtSub Level NewRoute              Peg Source
   1      2   10% OFRT
```

Explanation: The system displays all active reroute numbers.

list (end)

Responses

The following table provides explanations of the responses to the list command.

Responses for the list command

MAP output	Meaning and action

`Rrte Page 1 of 1`
`RrtNo RrtSub Level NewRoute Peg Source`
`1 2 10% OFRT`
	Meaning: The system displys all active reroute numbers.
	
	Action: None

`Control not active.`	**Meaning:** There are no RRTE controls active. **Action:** None

page

Function

Use the page command to display the next page of data.

page command parameters and variables

Command	Parameters and variables
page	There are no parameters or variables.

Qualifications

None

Example

The following table provides an example of the page command.

Example of the page command

Example	Task, response, and explanation
page ↵	
	Task: Display the next page of data.
	Response: `DIGITS LEVEL ANN PEG SNPA/STS GAP`
	Explanation: The system displays the next screen of data with values under the display headers.

Response

The following table provides an explanation of the response to the page command.

Responses for the page command

MAP output	Meaning and action
`DIGITS LEVEL ANN PEG SNPA/STS GAP`	
	Meaning: The system displays the next screen of data with values under the display headers.
	Action: None

quit

Function

Use the quit command to exit from the current menu level and return to a previous menu level.

quit command parameters and variables

Command	Parameters and variables
quit	1 all *incrname* *n*

Parameters and variables	Description
1	This default parameter causes the system to display the next higher MAP level.
all	This parameter causes the system to display the CI level from any level.
incrname	This variable causes the system to exit the specified level and all sublevels. The system displays the next level higher than the one specified. Values for *incrname* are menu level names, such as lns, mtc, or mapci.
n	This variable identifies a specified number of retreat levels from the current level. The range of retreat levels is 0-6. However, the system cannot accept a level number higher than the number of the current level.

Qualifications

None

Examples

The following table provides examples of the quit command.

Examples of the quit command

Example	Task, response, and explanation	
quit ↵		
	Task:	Exit from the RteCtrl level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The RteCtrl level has changed to the previous menu level.

-continued-

quit (continued)

Examples of the quit command (continued)

Example	Task, response, and explanation
quit mapci ↵ *where* mapci specifies the level higher than the RteCtrl level to be exited	**Task:** Return to the CI level (one menu level higher than MAPCI). **Response:** The display changes to the CI display: `CI:` **Explanation:** The RteCtrl level has returned to the CI level.

-end-

Responses

The following table provides explanations of the responses to the quit command.

Responses for the quit command

MAP output	Meaning and action
`CI:`	**Meaning:** The system exited all MAP menu levels and returned to the CI level. **Action:** None
`QUIT -- Unable to quit requested number of levels` `Last parameter evaluated was: 1`	**Meaning:** You entered an invalid level number. The number you entered exceeds the number of MAP levels from which to quit. **Action:** Reenter the command using an appropriate level number.
The system replaces the RteCtrl level menu with a menu that is two or more levels higher.	**Meaning:** You entered the quit command with an *n* variable value of 2 or more or an *incrname* variable value corresponding to two or more levels higher. **Action:** None

-continued-

quit (end)

Responses for the quit command (continued)

MAP output	Meaning and action
The system replaces the display of the RteCtrl level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

remove

Function

Use the remove command to deactivate a specific reroute number or all active reroute numbers.

remove command parameters and variables

Command	Parameters and variables	
remove	rrte	all *rrtno*

Parameters and variables	Description
all	This parameter indicates that all the reroute numbers that are active are to be removed.
rrte	This parameter indicates RRTE control data is to be listed.
rrtno	This variable is the range of the reroute numbers, defined in table REROUTE, that are active and has a range of 0-1023.

Qualifications

None

Example

The following table provides an example of the remove command.

Example of the remove command

Example	Task, response, and explanation	
remove rrte all ↵		
	Task:	Deactivate all active reroute numbers.
	Response:	0K
	Explanation:	The system deactivates all active reroute numbers.

remove (end)

Responses

The following table provides explanations of the responses to the remove command.

Responses for the remove command

MAP output	Meaning and action
CONTROL NOT ACTIVE	
	Meaning: The control must be active before it can be deactivated. **Action:** None
OK	
	Meaning: The system deactivates the control or controls. **Action:** None

DMS-100 Family

Menu Commands

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