Critical Release Notice

Publication number: 297-1001-821
Publication release: Standard 04.02

The content of this customer NTP supports the SN07 (DMS) and ISN07 (TDM) software releases.

Bookmarks used in this NTP highlight the changes between the BCS36 baseline and the current release. The bookmarks provided are color-coded to identify release-specific content changes. NTP volumes that do not contain bookmarks indicate that the BCS36 baseline remains unchanged and is valid for the current release.

Bookmark Color Legend

Black: Applies to content for the BCS36 baseline that is valid through the current release.

Purple: Applies to new or modified content for ISN07 (TDM)/SN07 (DMS) that is valid through the current release.

Attention!
Adobe® Acrobat® Reader ™ 5.0 or higher is required to view bookmarks in color

Publication History

December 2004

Standard release 04.02 for software release ISN07 (TDM)/SN07 (DMS).

Volume 7

Modified command MONTALK for CR Q00859477-01.

Volume 8

Modified command BSY for CR QQ00854765-02.

297-1001-821

DMS-100 Family

Menu Commands

Historical Reference Manual

LAYER through LIM, Volume 5 of 10

Through BCS36 Standard 04.01 June 1999

NORTEL NETWORKS
How the world shares ideas.

DMS-100 Family

Menu Commands

Historical Reference Manual

LAYER through LIM, Volume 5 of 10

Publication number: 297-1001-821
Product release: Through BCS36
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Publication history

June 1999

BCS36 Standard 04.01 Reissued to place book in historical reference.

Contents

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 Historical Reference Manual* describes all nonmenu commands used at a MAP in a Nortel Networks DMS-100 switch.
297-1001-821	*DMS-100 Menu Commands Historical 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

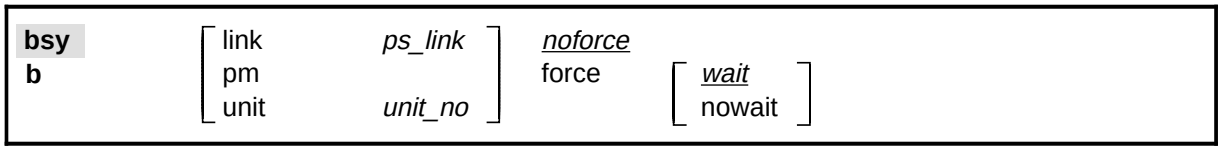
The second section is a description of all the parameters and variables.

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.

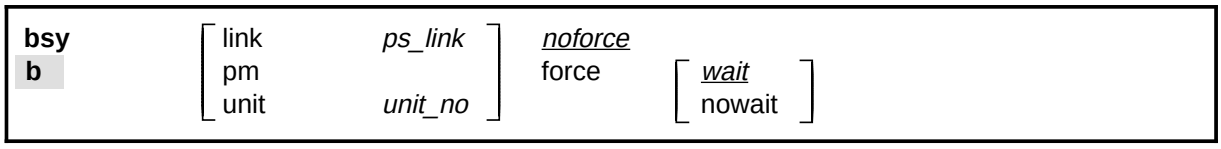
> ***Note:*** Italics always indicates an element that is not entered as part of a command in the form in which it is shown. It is either a variable that must be replaced with a value, a range or another element; or, it is a default condition which is not entered as part of a command.

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).



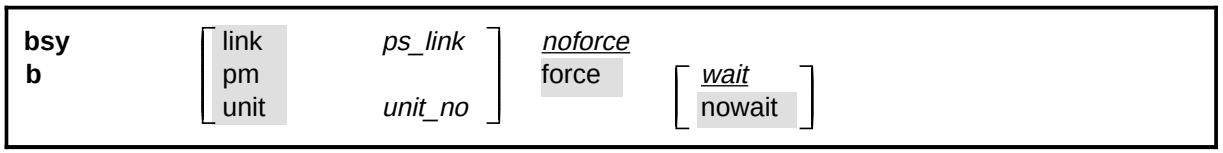
If a truncated or abbreviated form of a command is allowed, it will appear directly beneath the long form of the command.



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

How parameters are presented

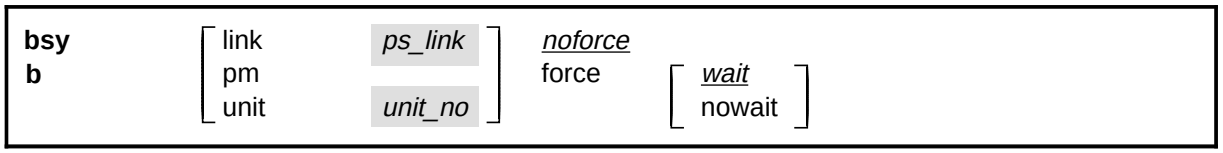
Parameters are lowercase, regular type (not boldface), except where uppercase is required by command case sensitivity.



How variables are presented

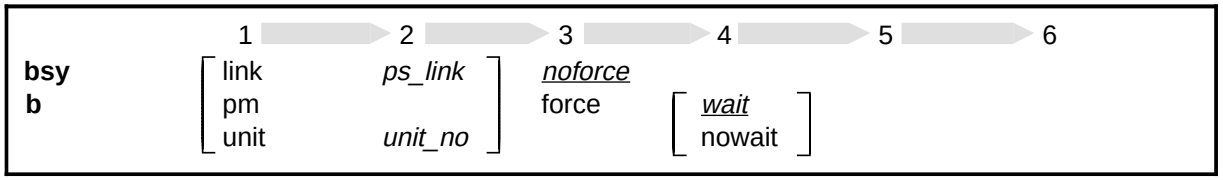
Variable names are in italics. Italics indicates that the variable is not entered as shown, but must be replaced with some other element, such as a value, range, number, or item from a list.

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.

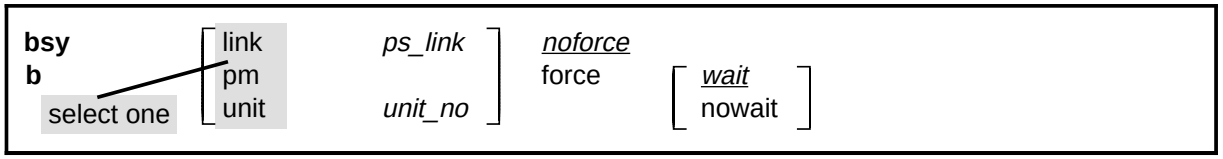


How hierarchy is presented

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}]`

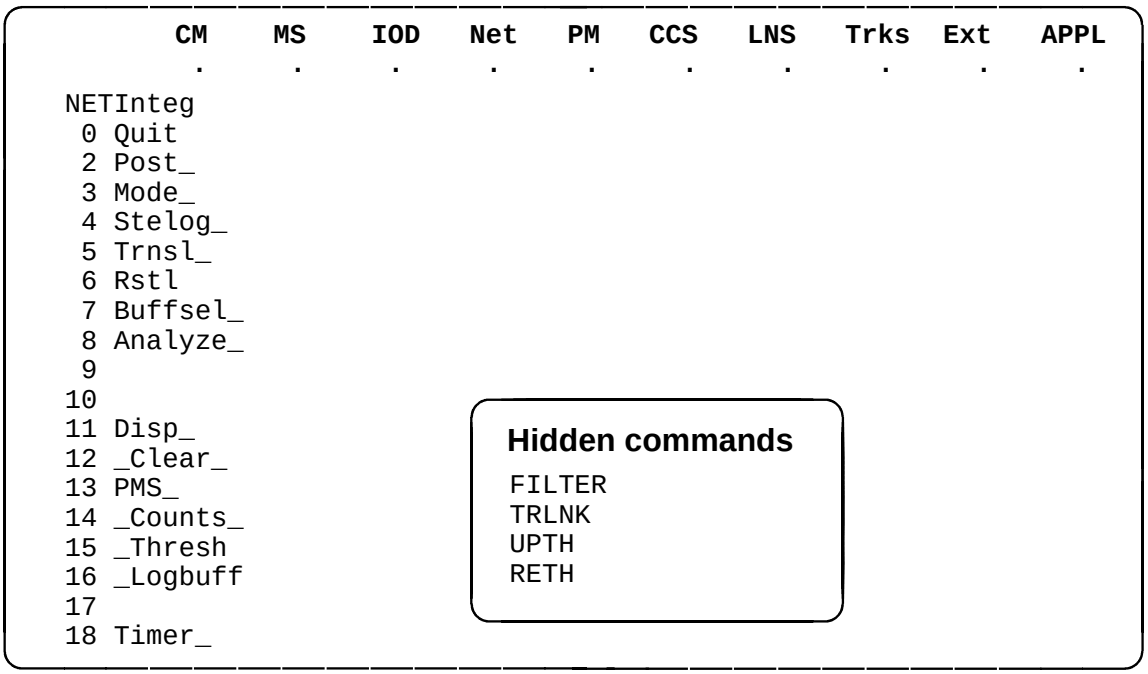
Defaults	underlined: *wait* nowait	no specific method established, but "optional" elements (meaning they do not have to be entered, implying defaults), are represented by square brackets: `[<CIRCUIT> {0 to 16}]`

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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alloc	DDU	D-295
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
bsy	EIU	E-3
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
bsy(isdn)	LTP	L-907
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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
bsy	PVC	P-423
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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
calltrf	MANUAL	M-7
calltrf	TTP	T-261
cap	LTPLTA	L-1395
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card	Chain	C-305

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Command/menu cross reference table (continued)

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card	Shelf	S-451
card	SHELF	S-579
cardlist	NETPATH	N-179
carrier	TRKS	T-227
ccbcapture	INTEG	I-207
ccis6	CCS	C-255
ccs7	CCS	C-257
cdr	IOD	I-287
cdrsrch	IOD	I-289
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
cktloc	TTP	T-269
cktloc	X75TTP	X-9
cktmon	MONITOR	M-283
ckttst	ALT	A-31

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Command/menu cross reference table (continued)

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ckttst	LTPMAN	L-1493
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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
clrcnts	PMC	P-163
clrfcnt	DDU	D-303
clrfw	SLM	S-647

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Command/menu cross reference table (continued)

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cmmnt	CM	C-531
cntrs	Memory	M-211
codectrl	NWM	N-343
coin	LTPLTA	L-1401
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
creatset	TRKSTRBL	T-203
cvbsy	TRKCONV	T-141
cvcot	TRKCONV	T-145
cvnext	TRKCONV	T-149
cvpost	TRKCONV	T-151
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Command/menu cross reference table (continued)

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c6state	C6TTP	C-725
c7bert	C7LKSET	C-851
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
dctttp	TTP	T-275
dddin	SASelect	S-147
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deact	C7LKSET	C-853
deact	LINKSET	L-625
deact	SBS	S-61
deactfsa	SBSSEL	S-89
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demount	DRM	D-763
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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
deftime	DCTTTP	D-203
deftst	NETPATH	N-189
delcos	LineSel	L-595
delcust	LineSel	L-597
deldwr	LineSel	L-599
delete	DCTLTP	D-123
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Command/menu cross reference table (continued)

Command	Menu	Page
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
disalm	CCIS6	C-239
disalm	CCS7	C-279
disalm	SCP	S-351
disalm	SCPLOC	S-375
disalm	STAT TKGRP	S-1087

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Command/menu cross reference table (continued)

Command	Menu	Page
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
disp	LIM	L-541
disp	LIU7	L-645
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
disp	MP	M-349
disp	MSB6	M-541
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
disp	TPC	T-105
disp	TRKSTRBL	T-205
disp	TSTEquip	T-243
disp	XLIU	X-85

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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
door	SRUPES	S-1025
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	PMC	P-167
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
e2alink	CM	C-537
fault	MTD	M-755
fbus	LIM	L-543
fcnt	DDU	D-307
filter	INTEG	I-219
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gwtrantst	SCCPRSS	S-327
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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
post	PVC	P-431
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

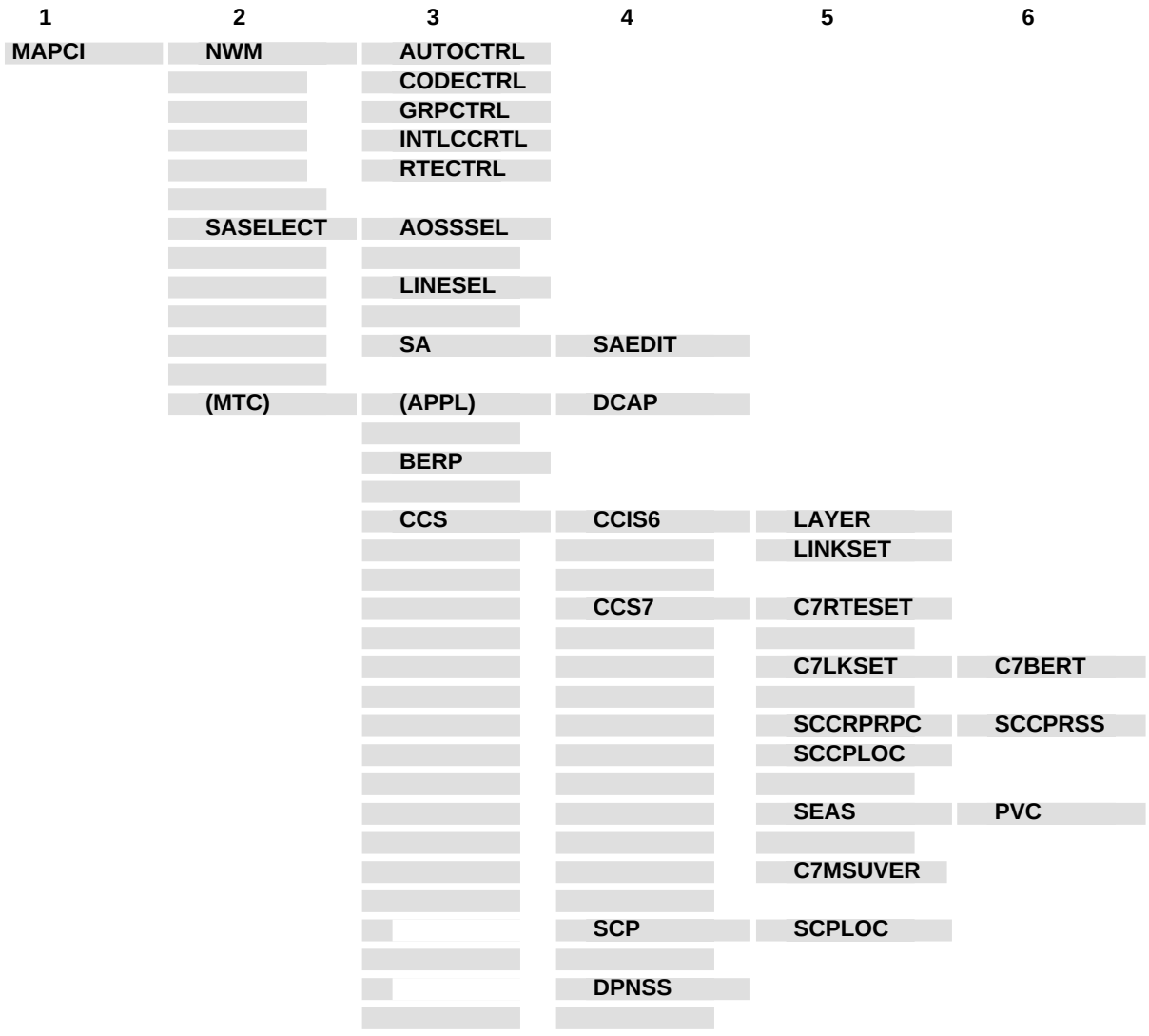
-end-

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-

LAYER level commands

Use the LAYER level of the MAP to check the status of selected layers and bands.

Accessing the LAYER level

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

mapci;mtc;ccs;ccis6;layer ↵

LAYER commands

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

LAYER commands

Command	Page
bsy	L-5
lstbnd	L-7
offl	L-11
qbnd	L-13
qlayer	L-15
quit	L-17
rab	L-21
rpb	L-23
rts	L-25

LAYER menu

The following figure shows the LAYER 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
         .     .     .     .     .    .     .     .     .     .


LAYER           CCS7     DPNSS    CCIS6
 0 Quit         1 RSC      .        .
 2                                  1111111111  2222222222
 3 QLayer_      Layers:     0123456789 0123456789 0123456789
 4 QBand_       States      ---------- ---------- ----------
 5 LstBand_
 6              LAYER
 7 Bsy_
 8 RTS_
 9 Offl
10
11
12
13
14
15 _Block_
16 _TFA_
17 _TFR_
18 _TFP_
```

Hidden commands

RAB
RPB

LAYER status codes

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

Status codes LAYER menu status display		
Code	**Meaning**	**Description**
Layer States		
-	Unequipped	The layer does not exist in the system software.
.	In service	The layer is in service and available to support route and traffic operations.
B	Blocked	The signaling on some bands has been blocked (no signaling on both linksets).
E	Emergency restart	A signaling office has lost signaling capability on both links in a layer, and an emergency restart procedure has begun.
L	Signaling link out of service	The layer is in the in-service trouble state because one of the links is faulty or has been removed from service.
M	Manual busy	The layer has been removed from service manually to perform maintenance operations.
O	Offline	The layer has been placed offline for maintenance operations.
P	Transfer prohibited	The signaling on some bands has no signaling ability on a linkset. These bands have been designated transfer-prohibited (TFP).
R	Transfer restricted	The signaling on some bands has a restricted signaling ability on a linkset. These bands have been designated transfer-restricted (TFR).
T	Test in progress	The layer is in a test mode.
Link Traffic State		
EXT	External error	The system has generated an error as a result of an external error condition.
InSv	In service	The linkset is in service and connected to a transmission link exchanging signaling messages.
ISTb	In-service trouble	The linkset is in service, but the system has reported that one of the standby transmision links is out-of-service.
ManB	Manual busy	The linkset has been removed from service manually.
Offl	offline	The linkset was removed from service to allow commissioning testing, datafilling, or maintenance actions.
RCG	Remote congestion	The originating signaling office has received a processor-signaling-congestion signal on one of its A or E links. The link is unavailable for 10 s. This period is extended for 8 s if congestion persists.

-continued-

Status codes LAYER menu status display (continued)

Code	Meaning	Description
RmB	Remote make busy	The linkset has been removed from service, as requested by the terminating office, to allow maintenance testing or other manual maintenance actions.
SysB	System busy	The system has detected a failure and removed the linkset from service.
UnEq	Unequipped	The linkset has not been datafilled into the office.

Note: The link traffic state codes appear when you access the qband and qlayer commands. The traffic states do not appear under a header.

-end-

bsy

Function

Use the bsy command to remove a layer from service and set its state to manual busy.

bsy command parameters and variables

Command	Parameters and variables
bsy	layer

Parameters and variables	Description
layer	This parameter represents the layer number, ranging from 0-29.

Qualification

If the layer is offline when the command is entered, the system immediately changes the layer state to manual busy and changes the layer state code on the MAP display to M. No cautionary message appears during this process.

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation
bsy 29 ↵ *where* 29 specifies layer 29	**Task:** Place layer 29 in the manual busy state. **Response:** LAYERS: 1111111111 2222222222 0123456789 0123456789 0123456789 STATES: ...B.L..PB P.-------- ---------M **Explanation:** Layer 29 was removed from service and placed in the manual busy state. The system updated the state code for layer 29 to M.

Responses

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

bsy (end)

Responses for the bsy command

MAP output	Meaning and action
CALL PROCESSING WILL BE DISABLED FOR ALL TRUNKS DEFINED IN THIS LAYER PLEASE CONFIRM (“YES” OR “NO”)	**Meaning:** This message occurs only when a layer is currently in service. If the word yes is entered, the system changes the layer status to manual busy and gives the following indications: ▪ changes the CCS status to 1 RSC and sets a critical alarm ▪ changes the selected layer status code to M **Action:** Enter the word yes to confirm the action or the word no to cancel the command.
M	**Meaning:** The code representing the manual busy state appears under the specified layer number on the MAP. **Action:** None

lstband

Function

Use the lstband command to list all bands with the specified transfer or blocked state that are within a specified layer.

lstband command parameters and variables

Command	Parameters and variables
lstband	block *layer* [tfa / tfp / tfr] *layer* *link*

Parameters and variables	Description
block	This parameter lists all blocked bands.
layer	This variable specifies the layer number, ranging from 0-29.
link	This variable specifies the link number, either 0 or 1.
tfa	This parameter lists all bands that are in the transfer-allowed state.
tfp	This parameter lists all bands that are in the transfer-prohibited state.
tfr	This parameter lists all bands that are in the transfer-restricted state.

Qualification

The CI level block command should not be confused with the block parameter for the lstband command. For use with the lstband command, the block parameter can function only as a parameter.

Examples

The following table provides examples of the lstband command.

lstband (continued)

Examples of the lstband command

Example	Task, response, and explanation

lstband block 29 ↵
where
 	
block specifies the type of band state
29 specifies layer 29
	Task: List the numbers of blocked bands in layer 29.
	
	Response:
	`List of blocked bands in layer 29:`
	`2, 5, 110, 511`
	
	Explanation: The MAP display lists the numbers of the blocked bands for the specified layer.

lstband tfp 10 1 ↵
where
 	
tfp specifies transfer-prohibited bands
10 specifies layer 10
1 specifies link1
	Task: List the tfp bands for layer 10, link 1.
	
	Response:
	`List of tfp bands in layer 10: link 1`
	`3, 34, 256`
	
	Explanation: The MAP display lists the individual tfp bands in layer 10, link 1.

Responses

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

Responses for the lstband command

MAP output	Meaning and action
`Layer no. is not data filled`	**Meaning:** The layer is not identified in system data tables. **Action:** None

-continued-

lstband (end)

Responses for the lstband command (continued)

MAP output	Meaning and action
`List of blocked bands in layer <layer>:` `<band>, <band>, <band>`	**Meaning:** The system lists the individual bands that are blocked in the specified layer. **Action:** None
`List of blocked bands in layer <layer>:` `NONE`	**Meaning:** The specified layer does not have any blocked bands. **Action:** None
`List of <transfer status> bands in layer <layer>: link <link>` `<band>, <band>`	**Meaning:** The system lists the tfa, tfp, or tfr bands in the specified layer and link. **Action:** None

-end-

offl

Function

Use the offl command to change a layer state from manual busy to offline.

offl command parameters and variables

Command	Parameters and variables
offl	layer

Parameters and variables	Description
layer	This parameter specifies the layer number, ranging from 0-29.

Qualifications

None

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation
offl 29 ↵ *where* 29 is the layer number	**Task:** Change the state of layer 29 from manual busy to offline. **Response:** LAYERS: 1111111111 2222222222 0123456789 0123456789 0123456789 STATES: ...B.L..PB P.-------- ---------O **Explanation:** The system changes the state of layer 29 from manual busy to offline and updates the state code to O.

offl (end)

Response

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

Response for the offl command

MAP output	Meaning and action
0	**Meaning:** The system changes the state of the specified layer from manual busy to offline and updates the corresponding layer state code to O. **Action:** None

qbnd

Function

Use the qbnd command to display the band status of a given layer and band.

qbnd command parameters and variables

Command	Parameters and variables	
qbnd	*layer*	*band*

Parameters and variables	Description
band	This variable specifies the band number, ranging from 0-511.
layer	This variable specifies the layer number, ranging from 0-29.

Qualifications

None

Example

The following table provides an example of the qbnd command.

Example of the qbnd command

Example	Task, response, and explanation

qbnd 29 511 ↵
where
 	
29 specifies layer 29
511 specifies band 511
	Task: Display the band status of layer 29, band 511.
	
	Response:
	
	`QBAND 29 511`
	`LAYER 29: Signaling layer out of service, 20 Blocked bands`
	`LINK 0: InSv, BAND STATUS = tfa`
	`LINK 1: RCG, BAND STATUS = tfp`
	
	Explanation: The system displays the band status on both links of the selected layer.

qbnd (end)

Response

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

Response for the qbnd command

MAP output	Meaning and action

`QBAND <layer>  <band>`
`LAYER <layer>: <layer and band status>`
`  LINK 0:  <link state>, BAND STATUS = <band state>`
`  LINK 1:  <link state>, BAND STATUS = <band state>`
	Meaning: The system lists the status of the selected band on both links of the selected layer, where
	▪ <layer> is the layer number (range: 0-29)
	▪ <band> is the band number (range: 0-511)
	▪ <layer and band status> is the general state of the layer and band (see the layer states table under the Layer status codes)
	▪ <link state> is the state of the link (see the link traffic state table in the Layer status codes section)
	▪ <band state> is the state for the selected band (values: tfa, tfr, or tfp)
	Action: None

qlayer

Function

Use the qlayer command to display the status of the linkset in an identified layer.

qlayer command parameters and variables

Command	Parameters and variables
qlayer	*layer*

Parameters and variables	Description
layer	This variable specifies the layer number, ranging from 0-29.

Qualifications

None

Example

The following table provides an example of the qlayer command.

Example of the qlayer command

Example	Task, response, and explanation

qlayer 29 ↵
where
 	
29 specifies layer 29
	Task: Display the linkset status for layer 29.
	
	Response:
	
	`LAYER 29: TFP on some Bands, 20 Blocked Bands`
	`LINK 0: InSv, 100 TFA, 0 TFR, 20 TFP`
	`LINK 1: InSv, 100 TFA, 0 TFR, 20 TFP`
	
	Explanation: The system displays a description of the status of all bands associated with the specified layer, along with the linkset status and number of bands for each transfer state.

qlayer (end)

Response

The following table provide an explanation of the response to the qlayer command.

Response for the qlayer command

MAP output	Meaning and action

`LAYER <n>: <description>`
`LINK 0: <status>, <nnn> TFA, <nnn> TFR, <nnn> TFP`
`LINK 1: <status>, <nnn> TFA, <nnn> TFR, <nnn> TFP`
	Meaning: This message describes the status of all the bands and their associated linkset in the selected layer, where:
	▪ <n> represents the layer number
	▪ <description> represents a description of the selected layer status
	▪ <status> represents the link status
	▪ <nnn> represents the number of bands with the associated transfer status
	The abbreviations tfa, tfr, and tfp stand for the transfer states transfer allowed, transfer restricted, and transfer prohibited.
	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.

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 LAYER level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LAYER 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 LAYER 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 LAYER 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 LAYER 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 LAYER level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rab

Function

Use the rab command to request the signaling transfer point (STP) to send a status of all bands.

rab command parameters and variables

Command	Parameters and variables	
rab	*layer*	*link*

Parameters and variables	Description
layer	This variable specifies the layer number, ranging from 0-29.
link	This variable specifies the link number, either 0 or 1.

Qualification

The rab command is used in a test environment.

Example

The following table provides an example of the rab command.

Example of the rab command

Example	Task, response, and explanation
rab 29 0 ↵ *where* 29 specifies layer 29 0 specifies link 0	**Task:** Display the status of all bands for layer 29, link 0. **Response:** Not currently available **Explanation:** The system shows the status for all bands associated with layer 29, link 0.

rab (end)

Responses

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

Responses for the rab command

MAP output	Meaning and action
LAYER NO. IS NOT DATA FILLED	**Meaning:** A RAB was requested for a layer that is not datafilled. **Action:** None
LINKSET IS NOT AVAILABLE FOR SERVICE	**Meaning:** The RAB signal cannot be transmitted to the STP because the linkset is not available for carrying signal traffic. **Action:** None
RAB ALREADY IN PROGRESS	**Meaning:** A RAB is already in progress. **Action:** None
RAB COMPLETED	**Meaning:** The band status table has been updated by the STP. The system forces a refresh of the entire band status table using data received from the STP. **Action:** None

rpb

Function

Use the rpb command to enter a manual request for a particular band status (RPB). The system replies with the status of a given band in a specified layer.

rpb command parameters and variables

Command	Parameters and variables		
rpb	*layer*	*link*	*band*

Parameters and variables	Description
band	This variable specifies the band number, ranging from 0-511.
layer	This variable specifies the layer number, ranging from 0-29.
link	This variable specifies the link number, either 0 or 1.

Qualifications

None

Example

The following table provides an example of the rpb command.

Example of the rpb command

Example	Task, response, and explanation
rpb 29 0 511 ↵ *where* 29 specifies layer 29 0 specifies link 0 511 specifies band 511	**Task:** Display the status of band 511 in layer 29, link 0. **Response:** (Not currently available) **Explanation:** The system displays the status of band 511 for layer 29, link 0.

rpb (end)

Responses

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

Responses for the rpb command

MAP output	Meaning and action
BAND NO. IS NOT DATA FILLED	**Meaning:** An RPB has been requested for a band that is not datafilled. The RPB request is rejected. **Action:** None
IN PROGRESS	**Meaning:** An RPB request has been initiated. The request forces a refresh of a particular band in the band status table using data received from the STP. **Action:** None
LAYER NO. IS NOT DATA FILLED	**Meaning:** An RPB has been requested for a layer that is not datafilled. The RPB request is rejected. **Action:** None
LINKSET IS NOT AVAILABLE FOR SERVICE	**Meaning:** An RPB is not sent to the STP because the linkset is not available for carrying signaling messages. The RPB request is rejected. **Action:** None
RAB ALREADY IN PROGRESS	**Meaning:** An RPB has been requested for a layer that is currently performing a RAB. The RPB request is rejected. **Action:** None

rts

Function

Use the rts command to return the layer to the in-service state from the manual busy state.

rts command parameters and variables

Command	Parameters and variables
rts	*layer*

Parameters and variables	Description
layer	This variable specifies the layer number, ranging from 0-29.

Qualifications

None

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts 15 ↵ *where* 15 specifies layer 15	**Task:** Return layer 15 to the in service-state. **Response:** LAYERS: 1111111111 2222222222 0123456789 0123456789 0123456789 STATES: ...B.L..PB P.---.---- ---------- **Explanation:** The system changes the state of layer 15 from manual busy to in service. On the MAP display, the state code for layer 15 changes from M to a dot (.).

rts (end)

Responses

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

Responses for the rts command

MAP output	Meaning and action
LAYER : <LAYER NUMBER> STATE : .	**Meaning:** The layer is made available for call processing. The system transfers the layer to the in-service state without testing the layer. The CCS alarm status is upgraded by one. If there is only one alarm indicated, the CCS status is upgraded to a no alarm condition. On the MAP display, the state code for the specified layer changes from M to a dot (.). **Action:** None
LAYER NOT MANB	**Meaning:** The layer is not in the correct state for performing the rts command. **Action:** None

LCM level commands

Use the LCM level of the MAP to perform maintenance functions on a loop concentrating module (LCM).

Accessing the LCM level

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

mapci;mtc;pm;post lcm ***lcm_no*** ↵

LCM commands

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

LCM commands

Command	Page
bsy	L-31
disp	L-37
listset	L-39
loadpm	L-41
next	L-55
offl	L-57
post	L-59
querypm	L-63
quit	L-71
rts	L-75
swrg	L-83

-continued-

LCM commands (continued)	
Command	**Page**
trnsl	L-87
tst	L-89
-end-	

LCM menu

The following figure shows the LCM 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
         .     .     .     .     .    .     .     .     .     .


LCM                    SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit      PM          4      0      10     3      3     130
 2 Post      LCM         1      0       5     0      1       9
 3 ListSet_
 4 SwRg_     LCM Host 02 0 ISTb  Links OOS:  CSide  1  Pside  0
 5 Trnsl_    Unit-0:  InSv Mtce Takeover /RG: 0
 6 Tst_      Unit-1:  ManB Mtce          /RG:0
 7 Bsy_
 8 RTS_                           11 11 11 11 11
 9 Offl_     Drwr:   01 23 45 67 89 01 23 45 67 89  RG: Pref 0 InSv
10 LoadPM_                                             Stby 1 InSv
11 Disp_
12 Next_
13
14 QueryPM_
15
16
17
18
```

LCM status codes

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

Status codes LCM 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 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.
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-

Resource table

The LCM maintenance counter names table in this section is provided to explain the maintenance counter names given in response to the command querypm entered at the LCM level.

LCM maintenance counter names	
Counter name	**Description**
CRC	The message must received has incorrect CRC.
DNACK	Received (double) negative acknowledgements
IDL_STATE	Spurious frame interrupt count
INV_NODE	Messages received with invalid PP (node) number
IUC_INVD_BYTE	Received invalid byte count
IUC_INVD_CHAR	Received invalid characters
IUC_INVD_CHKSUM	Invalid checksum
IUC_INVD_MSG	Invalid message
IUC_LINK_NACK	Inter-unit communication (IUC) link negative acknowledgement
NACK	Received (single) negative acknowledgements
NULL_MSG_RCVD	Null messages received which are not reset messages
OVFL	While receiving a message, more than the permitted number of bytes were counted without a ROM.
RCVD_SUCC	Messages successfully received
WFACK	Wait-for-acknowledgement (positive-PACK, negative-NACK) timeout on message to the LTC.
WFMSG	Wait-for-start-of-message timeout on message from the LTC
WFNR	Wait-for-idle from the LTC ater the LCM acknowledges or does not acknowledge a message
WFNX	Wait for link to go idle after NACK on message transfer
WFSND	Wait-for-send timeout on message to the LTC
XMIT_SUCC	Messages successfully transmitted

bsy

Function

Use the bsy command to change the state of one or all posted LCMs to ManB. The bsy command can be applied to one or all units of the posted LCMs, or to one specified P-side link from a remote LCM (RLCM) in the control position of the posted set.

bsy command parameters and variables

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

Parameters and variables	Description
all	This parameter simultaneously busies all of the specified unit(s) or LCMs of the same node type as the LCM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of LCMs to be busied concurrently, the longer it takes to complete the busying. Other maintenance activities must wait until completion.
drawer	This variable specifies which drawer is to be busied. The range is 0-19.
drwr	This parameter busies one of the drawers.
force	This parameter overrides all other commands and states in effect on the specified unit(s). If the whole LCM is to be taken out-of-service, confirmation YES or NO is required before execution.
link	This parameter busies one of the P-side links to the RMM. It is used only if the posted unit or PM is an RLCM.
noforce	This default parameter indicates the condition when no parameter is entered. The bsy command will not be forced.
nowait	This parameter enables the MAP to be used for other command entries before the command string bsy force is confirmed. The parameter nowait is used only with the parameter force.
pm	This parameter busies both units of one or all posted PMs.
ps_link	This variable specifies which of the P-side links is to be busied. The range is 0-3.

-continued-

bsy (continued)

bsy command parameters and variables (continued)

Parameters and variables	Description
unit	This parameter busies one unit of one or all posted LCMs.
unit_no	This variable specifies which unit of the posted LCMs is to be busied. The range is 0 or 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-

Qualification

To avoid causing a subtending RLCM to enter ESA mode, manually busy the RLCM before busying the host PM (LTC, LGC, or RCC).

Example

The following table provides an example of the bsy command.

Example of the bsy command

Example	Task, response, and explanation	
bsy ↵		
	Task:	Busy all posted LCMs
	Response:	0K
	Explanation:	The posted LCMs are manually busy

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
`ALL OPTION NOT SUPPORTED FOR DRWR PARAMETER`	**Meaning:** The parameter all does not apply to drawers because they must be busied one at a time. **Action:** To busy a link, use the parameter link without all.
`ALL OPTION NOT SUPPORTED FOR LINK PARAMETER`	**Meaning:** The parameter all does not apply to links because they must be busied one at a time. **Action:** To busy a link, uses the parameter link without all.
`CALLS ON UNIT MAY BE AFFECTED`	**Meaning:** With parameter force, confirmation YES or NO is requested. **Action:** None
`LCM HOST <nn> <n> DRWR <dd> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM ("YES", "Y", "NO", OR "N"):`	**Meaning:** A drawer of the LCM is still in service; calls may be dropped, where <nn> and <n> are the discrimination numbers of the LCM and <dd> is 0-19 or the drawer identifier. **Action:** If YES is entered, the response is: `LCM HOST nn n DRWR dd BSY: PASSED` If the drawer is offline or unequipped, or the LCM node is out of service, then the response is repeated without the colon(:), but has no actual effect.

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`LCM HOST <nn> <n> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM ("YES", "Y", "NO", OR "N"):`	**Meaning:** Busying the in-service units cancels calls in progress, where <nn> and <n> echo the discrimination numbers. **Action:** If YES is entered, the response is: `OK` If NO is entered, the command is aborted.
`LCM PAIR WOULD BE REMOVED FROM SERVICE`	**Meaning:** The mate unit is out-of-service, or the command would busy an in-service pair. **Action:** None
`LCM REM <n> <nn> <n> , LINK <n> TO RMM BSY PASSED`	**Meaning:** The specified link is busied for a posted RLCM, where <n> and <nn> echo the discrimination numbers. **Action:** None
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None
`OK`	**Meaning:** YES is entered in response to a prompt and the PM is busied. Log PM105 is generated whenever and LCM or associated unit is made ManB. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
LCM <pm_number> IS MANUAL BUSY. NO ACTION TAKEN	**Meaning:** The command bsy is applied to an LCM that is already in the ManB state. **Action:** None
LCM <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The LCM cannot be busied because it is already undergoing maintenance action. **Action:** With parameter all, the LCM is bypassed from the posted set of LCMs only for the duration of the busying.
SUMMARY <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of LCMs in the posted set that have been successfully busied or that have been bypassed by the busying. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> LCM PLEASE CONFIRM ("YES", "Y", "NO", OR "N"):	**Meaning:** A quantity of <nnn> LCMs is to be busied from the posted set. **Action:** Entering YES busies the LCM(s). With YES, the status display of the LCM in the current position of the posted set changes to ManB and the status display for the PM level increments under the header MANB. Entering NO aborts the action.

-end-

disp

Function

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

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	lcm

Parameters and variables	Description
lcm	This parameter identifies the node-type for this group of PMs.
pm_state	This variable is one of the PM state codes listed in the LCM status codes table at the beginning of this chapter.
state	This parameter is required before the PM state code.

Qualifications

None

Example

Not currently available

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> LCM: NONE or <pm_state> LCM <n>, <n>	**Meaning:** There are no PM in the specified state, or all in the state are listed, where <pm_state> is one of the state codes listed in the LCM status codes table at the beginning of this chapter. **Action:** None

listset

Function

Use the listset command to list the discrimination numbers of the PM types that are included in the posted set.

listset command parameters and variables

Command	Parameters and variables
listset	all *pm_type*

Parameters and variables	Description
all	This parameter specifies the type of PM in the posted set that is to be listed with all of its discrimination numbers.
pm_type	This variable lists all of the PM types that are in the posted set and includes their discrimination numbers.

Qualifications

The listset command is qualified by the following:

- Entering the listset command without a parameter lists the PMs of the same type as the PM in the current position of the posted set.
- 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 the PM types that use the listset command, however, the ability to use the command depends on the PMs included in the office configuration.

Example

Not currently available

Responses

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

listset (end)

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 PM types in the posted set are listed. The set varies according to office configuration.
	
	Action: None

`NO PMS FOUND`	**Meaning:** The posted set of XPMs is empty. **Action:** None
`NO PMS OF SPECIFIED PM TYPE FOUND`	**Meaning:** The posted set does not contain XPMs of the specified type. **Action:** None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processors of one or all posted LCMs that are manually busy (ManB state).

loadpm command parameters and variables

Command	Parameters and variables
loadpm	pm | unit *unit_no* [cc | mate *l_name*] [all | nowait *r_name*]

Parameters and variables	Description
all	This parameter simultaneously loads all of the specified unit(s) or LCMs of he same node type as the LCM in the current position of the posted set. ***Note:*** With parameter all, the larger the quantity of LCMs to be loaded concurrently, the longer it takes to complete the loading. Other maintenance activities must wait unit completion.
cc	This default parameter specifies that the source of the load data is to be the DMS-100 CC data store.
l_name	This variable is the load name of the CC data file to be loaded into the LCM according to data Table LCMINV. If the *l_name* variable is not entered, the default is the data in Table LCMINV. This name also appears next to FNAME when the command querypm is used. By not specifying a load file_name, with parameter all the LCMs are loaded with the file name recorded in inventory Table LCMINV. More than one load can be used to load more than one LCM.
mate	This parameter specifies that the source of the load data is to be the mate unit instead of the CC. The parameter mate causes the mate unit to be loaded by the inter-unit communication link. The mate must be in service. While loading from the mate is occurring, the flat “Mate Loading” appears beside header RG, in the unit’s status display.
nowait	This parameter allows another LCM to be posted and loaded without waiting for confirmation of the previous load request. It enables the MAP to be used for other command entries while loading proceeds.
pm	This parameter loads the specified l_name to both units of one or all posted LCMs. When the value for parameter *l_name* is not specified, the load file name is taken from data Table LCMINV.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
r_name	This variable is the name of the load that is to replace the load 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.
unit	This parameter loads one unit of one or all posted LCMs.
unit_no	This variable specifies which unit of the posted LCMs is to be loaded. The range is 0 or 1.

-end-

Qualifications

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

- When the LCM 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 are already pass, the command string loadnotest bypasses the ROM tests. The time taken for a ROM test that is already known to succeed is not repeated.
- When the value for parameter *l_name* is not specified, the load file name is taken from data Table LCMINV. It is displayed by information from the querypm command.
- To determine the loads for each PM, use the inform command.
- When using parameters PM or unit, if one unit is in service, a MATE load is done on the second unit. If both units are out-of-service, unit 0 is loaded first from the CC. If the load of unit 0 succeeds, a CC load of unit 1 is done.
- When loading more than ten units, the action occurs in groups, submitted one after the other. If the broadcast loader or the mate broadcast loader is used, the duration is equivalent to loading one unit. Broadcast loading takes precedence over requests for single unit or single XPM loading.
- To locate a load file name, use the nonmenu commands dskut and listvol. Load file names are listed in data Table PMLOADS.
- The other maintenance tasks on the C-side XPMs (LTC or LGC) should not be done while broadcast loading the LCMs by XPM Data Distributor, because doing so would abort the entire operation of broadcast loading of LCMs.

loadpm (continued)

- The failure reasons that prevent PMs in a posted set from being loaded by broadcast are described as follows:
  - `NO REPLY FROM C_SIDE PM`-The C-side XPM (LTC or LGC) which was supposed to sent the load has not done so. It may be out of service.
  - `NO FREE CHANNEL AVAILABLE ON CSIDE PM`-Attempt to allocate channels for the IPML between XPMs has failed because there were no free channels available.
  - `FAILED TO DEFINE IPML IN CSIDE PM`-The C-side XPM is unable to define IPML for the purpose of broadcast loading the LCMs.
  - `FAILED TO SUBMIT LOAD REQUEST TO CSIDE PM`-The load request could not be submitted to C-side XPM as some other maintenance operation was being performed on this XPM. Any other maintenance task on the XPM at the time of broadcast loading aborts the latter.
  - `NO LOADER TASKS AVAILABLE ON CSIDE PM`-The C-side XPM has reached the limit of four concurrent broadcast loading tasks, and an attempt at broadcast loading the LCMs at this point fails. Try again after the other loading tasks are done.
  - `CSIDE PM LOADING TASK ABORTED`-The loading task on the C-side XPM has been aborted. The XPM could be out of service, or it could be because of the abort (abtk) command on the XPM.
  - `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.
  - `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.

loadpm (continued)

Examples

The following table provides examples of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation

loadpm unit 1 mate ↵
where
 	
1 identifies the unit number of the posted LCM that is to be loaded
	Task: Load unit 1 for the posted LCM which is LCM HOST 02 0.
	
	Response:
	`LCM Host 02 0 ISTb LINKS_OOS: CSide 1`
	`Unit-0: InSv /RG: 0`
	`Unit-1: ManB Mtce /RG: 0 /Loading: 900`
	`RG: Preferred 0 : Ok Standby 1: Ok`
	`LoadPM UNIT 1`
	
	Explanation:

-continued-

loadpm (continued)

Examples of the loadpm command (continued)

Example **Task, response, and explanation**

loadpm pm cc lcm26e nowait all lcm27e ↵
where

lcm26e is the load name of the CC data file to be loaded into the LCMs
lcm27e is the name of the load that is to replace the load file name (*l_name*).

Task: Load a set of three posted LCMs.

Response:

```
THIS OPERATION WILL BE EXECUTED ON 3 LCM.
PLEASE CONFIRM (“YES” OR “NO”):

YES

LCM HOST OO O REPLACEMENT NAME MISMATCH WITH INVENTORY TABLE
LCM HOST 01 0 UNIT 1  LOAD REQUEST SUBMITTED
LCM HOST 01 0 UNIT 0  LOAD REQUEST SUBMITTED
LCM REM1 01 0 UNIT 1  LOAD REQUEST SUBMITTED
LCM REM1 01 0 UNIT 0  LOAD REQUEST SUBMITTED
LCM HOST 01 0 UNIT 1  LOADPM PASSED
LCM HOST 01 0 UNIT 0  LOADPM PASSED
LCM REM1 01 0 UNIT 1  LOADPM PASSED
LCM REM1 01 0 UNIT 0  LOADPM PASSED
SUMMARY:
4 UNITS PASSED
2 UNITS NOT SUBMITTED
```

Explanation: The system identifies the number of affected LCMs and prompts the user for confirmation. After entering YES, the system attempts to load the LCMs one unit at a time. There was a mismatch of a table name for LCM HOST 00 0, however, the loading was successful for the other two LCMs in the posted set.

-end-

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
`6X45 PEC MISMATCH` `<available_pecs>`	**Meaning:** The loading cannot occur because the datafilled entry in the inventory table does not match the PEC of the NT6X45 card. **Action:** The equipped PECs of NT6X45 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. Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in the appropriate inventory table (LTCINV, LCMINV, RCCINV, MSVINV, or XESAINV).
`HOST <pm_number> <u> A WARMSWACT WILL BE PERFORMED` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** The LCM in the posted set cannot be loaded by the broadcast method, that is, when the system automatically invokes the command loadpm for parameter all, and the units of the LCM switch activity. **Action:** The LCM is bypassed by the loading. To load the LCM, manually use the command loadpm after the broadcast loading ends.
`LCM <pm_number> UNIT <u> BROADCAST LOAD REQUEST SUBMITTED`	**Meaning:** The PMs in the posted set are being loaded by the broadcast method from the CC, where <pm_number> and UNIT <u> indicate the specific LCM(s). **Action:** None
`LCM <pm_number> UNIT <u> BROADCAST MATE LOAD REQUEST SUBMITTED`	**Meaning:** The LCMs in the posted set are being loaded by the broadcast method from the mate units, where <pm_number> and UNIT <u> indicate the specific LCM(s). **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LCM <pm_number> UNIT <u> LOAD FILE <filename> IS NOT AVAILABLE`	**Meaning:** With the parameter all, the LCM load file name has already been identified as being unavailable. Rather than have the system recheck resources for a load that is already unavailable once for a broadcast loading of many LCMs, the system remembers that a response has already stated the reason(s). It is possible that the LTC to which the LCM is connected, is out of service and therefore the LCM cannot receive the load from it. **Action:** Return to service the LTC and then try loading the LCMs. The LCM in the posted set is bypassed from the loading.
`LOAD FILE <filename> NOT FOUND`	**Meaning:** The parameter *l_name* or *r_name* is not found in the system's "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 file name using the nonmenu commands dskut and listvol.
`LCM <pm_number> LOAD FILE IN INVENTORY TABLE NOT FOUND` `ENSURE THAT TABLE PMLOADS IS DATAFILLED CORRECTLY`	**Meaning:** The load 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 LCM in the posted set is bypassed from the loading.

`LCM <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, an LCMs failure to be loaded prevents the broadcast loading from occurring. Reasons for the failure are listed in in the Qualifications.
	
	Action: None of the LCMs to be loaded by the broadcast method is loaded. LCMs in the posted set using the single loading method are loaded. To allow the broadcast loading to proceed, remove the LCM with the failure from the posted set, and try again.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LCM <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 LCM is not loaded because of a failure in another LCM. **Action:** None of the LCMs to be loaded by the broadcast is loaded. LCMs in the posted set using the single loading method are loaded. Investigate the cause of the failure to load the LCM that is identified by the response CAUSED FAILURE OF BROADCAST LOADER. To proceed with the broadcast loading, remove the failed LCM from the posted set and try the loadpm command again.
`LCM <pm_number> LOADPM FAILED` `C_SIDE PM LOADING TASK ABORTED`	**Meaning:** The task of broadcast loading by the C-side XPM was aborted and, as a result, this LCM is not loaded. **Action:** The entire broadcast loading by the C-side XPM is aborted. Investigate the cause of the failure of the C-side XPM broadcast loading task and try the loading again.
`LCM <pm_number> UNIT <u> LOAD REQUEST SUBMITTED`	**Meaning:** Only the LCM in the current position of the posted set is being loaded from the CC. **Action:** None
`LCM <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LCM cannot be loaded because it is already undergoing maintenance action, where pm_number indicates the discrimination number of the posted LCM(s). **Action:** With parameter all, the LCM is bypassed from the posted set of LCMs only for the duration of the loading.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LCM <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 LCM is no longer manually busy (ManB state) or the active unit is no longer in service. **Action:** The LCM in the posted set is bypassed from the loading.
`LCM <pm_number> NOT SUBMITTED AS STATE NO LONGER MANB`	**Meaning:** As a member of the posted set intended for participation with broadcast loading, the PMs units are not both ManB. **Action:** The LCM in the posted set is bypassed from the loading.
`LCM <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 LCMINV. **Action:** The LCM in the posted set is bypassed from the loading.
`LCM <pm_number> REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an LCM in the posted set cannot be loaded because it is not in the manually busy state. **Action:** The LCM in the posted set is bypassed from the loading. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the LCM with the command bsy before trying the loadpm command.

-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 load file. It 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 the chapter describing the SYS directory in the Nonmenu Commands Reference Manual. **Action:** None
`LCM <pm_number> <u> FAILED: FIRMWARE CONFIGURATION FAILED`	**Meaning:** The attempt to reconfigure the memory size for an NT6X51AB card from 64D to 256K or from 256K to 64K has caused a firmware problem. **Action:** Contact the maintenance support personnel.
`LCM <pm_number> <u> FAILED: LOAD SIZE DOES NOT MATCH MEMSIZE`	**Meaning:** The LCM is configured for a small software load and cannot accommodate a large load, or the LCM is configured for a large load and cannot accommodate a small load. **Action:** The loading is stopped and log PM181 records the reason for the failure. Choose a load to match the MEMSIZE in Table LCMINV.
`LCM <pm_number> <u> FAILED: NOT EQUIPPED W/ LARGE MEMORY BOARD`	**Meaning:** The value of field MEMSIZE in Table LCMINV is set to 256K, but the NT6X51 processor card does not support the additional memory. The AB version of NT6X51 is required for the 256K value. **Action:** Change the MEMSIZE to 64K or install an NT6X51AB card. The 64K is recommended for small software loads, while the 256K is for large loads.

-continued-

loadpm (continued)

Responses for the loadpm 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 loading, where <pm_type> is a PM type listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM must be ManB. **Action:** None
`MATE UNIT MUST BE INSERVICE FOR MATE LOAD`	**Meaning:** The mate unit is not in service. When using the mate command, the default depends on the state of the mate. If the mate unit is in service, the source of the load is the mate. If the source is the CC, the default for the load file is the load name in data Table LCMINV. **Action:** None
`<reason>` `NO ACTION TAKEN`	**Meaning:** The command cannot be executed for a reason other than those given in the standard responses. **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 SYS nonmenu directories are discussed in the Nonmenu Commands Reference Manual.

-continued-

loadpm (continued)

Responses for the loadpm 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 LCMs 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> <pm_type> PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of <nnn> LCMs is to be loaded, where <pm_type> is the type of LCM that is included in the posted set. **Action:** Entering YES loads the LCM(s). With YES, the status display of the LCM in the current position of the posted set shows the maintenance flag Mtce and shows the progression of the loading with the appearance of one at a time combination of: /Reset /Status ROM Test /Loading: nnnnK Initializing /Static Data Loading: Execs where nnnn changes according to the increment of kilobits. The rate of appearance of any of these flags depends on the amount of traffic on the switch. Entering NO aborts the action.
TOO MANY CHARACTERS IN REPLACEMENT NAME	**Meaning:** The parameter *r_name* must be a string of eight characters or less. **Action:** Check for a typo or check data Table LTCINV for the applicable r_name.

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
TOO MANY DIFFERENT LOAD FILES REQUIRED. TRY A SMALLER SET OF LCMS	**Meaning:** With the command string loadpm lcm all, if the quantity of load file names in the respective inventory data tables is too large, the loading cannot occur. **Action:** Use the command post to create a posted set with fewer LCMs or that require the same load file name, and reenter the command.
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.

-end-

next

Function

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

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 status codes table in the PM MAP level chapter. Use the disp command to display the list of PM types in the posted. 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 LCM in the posted set of LCMs
	Response:	`(Display for status of next LCM)`
	Explanation:	The next LCM in the posted set is 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 PM, or if only one PM number has been posted, the display returns to the next higher menu level. The next LCM in the posted set is displayed. **Action:** None

offl

Function

Use the offl command to set one or all units of the posted LCMs to the offline state. Both LCM units must be in the ManB state before being set offline (Offl).

offl command parameters and variables

Command	Parameters and variables
offl	all

Parameters and variables	Description
all	This parameter simultaneously makes offline all of the specified unit(s) or LCMs of the posted set.

Qualifications

An offline LCM remains in this state throughout all restarts.

Examples

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 LCM in the offline state.
	Response:	OK
	Explanation:	The posted LCM is in the offline state.

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
OK	**Meaning:** The LCM is in the offline state. **Action:** None
<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 the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE SYSTEM BUSY ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** The system will respond by generating log PM103.

post

Function

Use the post command to select a specific LCM upon which action is to be done by other commands. The post command must be entered before using command bsy, loadpm, offl, querypm, rts, swrg, trnsl, or tst.

post command parameters and variables

Command	Parameters and variables
post	all lcm site *ff* *m*

Parameters and variables	Description
all	This parameter specifies that all LCM modules are to be posted.
lcm	This parameter identifies the PM node-type for LCM, RLCM, or convertible RLCM.
site	This parameter specifies a PM that is not a host, and may include RCC, RLCM, or convertible RLCM. If the LCM is a host, the parameter site is optional; if the LCM is a remote, the parameter site is required.
ff	This variable identifies the discrimination number of the LCE frame housing the LCM to be posted. The range is 0-99.
m	The variable identifies the discrimination number of the LCM to be posted: lower pair of units, LCM 0; upper pair of units: LCM 1. The range is 0 or 1.

Qualifications

The post command is qualified by the following:

- If the posted LCM is not equipped with RG and data table LCMINV field RGEQUIP is edited to equip it with RG, the RG status display line in the LCM status display at the beginning of this chapter (below Unit 1:) shows

  ```
  RG: UNEQ
  ```

  until the unit is returned to service.
- Once a PM type is posted, other commands at the respective menu level apply to the posted PM.
- 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.

post (continued)

Examples

The following table provides an examples of the post command.

Examples of the post command

Example	Task, response, and explanation

post lcm 2 1 ↵
where
 	
2 is the discrimination number of the LCE frame housing the LCM to be posted.
1 is the discrimination number of the LCM to be posted, in this case the upper pair of units.
	Task: Post the upper LCM.
	
	Response:
	`LCM Host 02 1 ISTb LINKS_OOS: CSide 1`
	`Unit-0: InSv  Mtce TakeOver  /RG: 0`
	`Unit-1: ManB  Mtce           /RG: 0`
	`RG: Preferred 1: InSv  Standby 0: InSv`
	
	Explanation: LCM 2 1 has been posted.

post lcm rem1 1 0 ↵
where
 	
rem1 is the site, which is remote
1 is the discrimination number of the LCE frame housing the LCM to be posted
0 is the discrimination number of the LCM to be posted, in this case the lower pair of units.
	Task: Post RLCM LCM REM 1 1 0
	
	Response:
	`LCM REM1 01 0 ISTb LINKS_OOS: CSide 0, PSide 0`
	`Unit-0: InSv  Mtce TakeOver  /RG: 0`
	`Unit-1: InSv  Mtce           /RG: 0`
	`Preferred RG:  InSv  /Standby RG 1: InSv`
	
	Explanation: The RLCM at LCM REM1 1 0 is posted, where 10 is known by Table LCMINV to be associated with LCM1.

-end-

Responses

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

post (end)

Responses for the post command

MAP output	Meaning and action
NO PM POSTED	**Meaning:** The LCM level is accessed without posting a specific one. **Action:** None
OK	**Meaning:** One of the displays resulting from the post command appears, as in the LCM status display at the beginning of this chapter. All displays show: ▪ posted LCM discrimination, preceded by the SITE name ▪ both the node and the unit states of the posted LCM ▪ the number of out-of-service links ▪ the PM states of both units of the posted LCM with additional state information such as Mtce, Takeover, etc. ▪ the status of the preferred and standby RG for the posted LCM **Action:** None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted LCM.

querypm command parameters and variables

Command	Parameters and variables	
querypm	cntrs drwr flt	clear

Parameters and variables	Description
clear	This parameter resets the link and unit maintenance counters to be set to zero.
cntrs	This parameter displays the LCM link and unit maintenance counters.
drwr	This parameter queries the status of all the drawers.
flt	This parameter displays the fault conditions on the LCM units.

Qualifications

None

querypm (continued)

Examples

The following table provides an examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation

querypm ↵	**Task:** Post LCM 02 0, then obtain miscellaneous information on this LCM, by executing the querypm command.
	
	Response:
	
	`LCM Host 02 0 ISTb Links_OOS: CSide 1`
	`Unit-0: InSv /RG: 0`
	`Unit-1: ManB /RG: 0`
	`RG: Preferred 0: Ok Standby 1: Ok`
	
	`QUERYPM`
	
	`PM Type: LCM Int. No.: 0 Status index: 0 Node_No: 25`
	`Memory Size: 256K`
	`Loadnames:LCMINV - SMAB0902, Unit0:LMAC1213, Unit 1:XMAC1213`
	`Status-Node:{OK, FALSE}, Unit0:{OK, FALSE},Unit1:{OK, FALSE}`
	`Site Flr RPos Bay_id Shf Description Slot EqPEC`
	`HOST 03 BO2 LCE 00 04 LCM 02 0 6X04AA`
	`Next LCM for REx`
	`Templates: WL6X93CA, WL6X93AA, WL6C93BA, WL6X93DA`
	`WL6X93EA, WL6X98AA, WL6X17AC`
	
	Explanation: The load file name for Unit 1 is not given while it is ManB. The display contains standard circuit information under the heading EqPEC is the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. The other information is for the maintenance support group for debugging or office extension. If an ISTb is caused by excessive clock switchover, the information is added to the display.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example	Task, response, and explanation
querypm flt ↵	

Task: Post LCM 02 1. Obtain information on the fault conditions on the LCM units by executing the command string querypm flt.

Response:

```
LCM Host 02 1 InSv Links_OOS: CSide 0
Unit-0: ISTb                /RG: 0
Unit-1: InSv                /RG: 0
RG: Preferred     Preferred

QUERYPM FLT
LCM UNIT 0 In-service Troubles Exist:
Self Test Failed: Diagnostic Failed
LCM UNIT 1 InSv
```

Explanation: The system responds with information on the fault conditions in unit 0.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example **Task, response, and explanation**

querypm cntrs ↵

Task: Post LCM 02 1. Obtain miscellaneous information on the LCM link and unit maintenance counters on this LCM, execute the command string querypm flt.

Response:

```
LCM Host 02 1 InSv Links_OOS: CSide 0
Unit-0: InSv                /RG: 0
Unit-1: InSv                /RG: 0
RG: Preferred     Preferred

QUERYPM CNTRS
            LCM UNIT0 UNIT1               UNIT0 UNIT1
WFSND         0     0     | WFACK          0     0)
WFNX          0     0     | NACK           0     0)
DNACK         0     0     | WFMSG          0     0)
WFNR          0     0     | CRC            0     0)
OVFL          0     0     | NULL MSG       0     0)
IDL_STATE     0     0     | INV_NODE       0     0)
RCVD_SUCC   292     0     | XMIT_SUCC    593   789)
IUC_NACK      0     0     | IUC_INV_CHAR   2   340)
IUC_INV_BYTE  0     0     | IUC_INV_CKSM   2     0)
IUC_INV_MSG   0     0     |
```

Explanation: The contents of the maintenance counters are listed vertically under the headers UNIT0 and UNIT1. Refer to the “LCM maintenance counter names” table for the significance of the maintenance counter names.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example	Task, response, and explanation
querypm flt ↵	
	Task: Determine the failure reason when an LCM node is set ISTb.

	Response:
	`Node inservice troubles exist:`
	`  Drawer Fault`
	`LCM Unit 0 ISTb`
	`Ring Generator in Excess load`
	`LCM Unit 1 InSv`

	Explanation: The message indicates that the LCM is ISTb because one of its drawers is "I". This message is the result of the ring generator overload diagnostic. The unit controlling the faulty drawer is ISTb and the reason indicates the overload conditions. A test to the drawer or the unit will fail with ring overload reason. The user should test the drawer to verify the condition of ring generator overload. To identify the cards on the drawer set to "I". As each line card is pulled from its seat, retest the drawer. Once the drawer passes the test, the faulty card has been found. After the card is found, test the LCM to clear any problem.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example	Task, response, and explanation
querypm flt ↵	

Task: After posting LCM 00 0, the display indicates that one unit is ISTb. Determine the failure reason when an LCM node is set ISTb.

Response:

```
Node inservice troubles exist:
  Drawer Fault
LCM Unit 0 InSv
LCM Unit 1 System Busy Reason  Diag Failed - BIC Loop around
```

Explanation: The message indicates that the LCM is ISTb because one of its drawers is "I" and one of its units is system busy. This message is the result of an LCM unit being set to system busy because of a drawer failure.

The user should check the drawer set to "I" to identify whether the fault is in a DCC or drawer.

Prior to posting the LCM, an ISTb indication is shown to avoid outages. A SysB indication is displayed only when the LCM is posted. The command string querypm flt is used to define the fault. The contents of the maintenance counters are listed vertically under the headers UNIT0 and UNIT1. Refer to the "LCM maintenance counter names" table for the significance of maintenance counter names.

-end-

Responses

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

Responses for the querypm command

MAP output	Meaning and action
`display`	**Meaning:** The appropriate display appears. See the "Examples of the querypm command" table for the representative displays. **Action:** None

querypm (end)

Responses for the querypm command (continued)

MAP output	Meaning and action

```
                        11 11 11 11 11
DRWR:  01 23 45 67 89 01 23 45 67 89
      <ss ss ss ss ss ss ss ss ss ss>
```

Meaning: The status of all the drawers is displayed, where <ss> is one of the following states:

. (dot)	In service
I	In-service trouble
M	Manual busy
O	Offline
S	System busy
-	Unequipped

Action: None

```
NEXT LCM FOR REX
```

Meaning: The posted LCM is scheduled for the next REX test.

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 LCM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LCM 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 LCM 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 LCM 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 LCM 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 LCM 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 to service one or all units of one or all LCMs in the posted set, or one specified P-side link from a remote LCM that is 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 manually or system busied (ManB or SysB states).

rts command parameters and variables

Command	Parameters and variables				
rts	drwr link pm unit sysb	*drawer* *ps_link* *unit_no* all	[force nowait]	[all]	

Parameters and variables	Description
all	This parameter returns to service all posted PMs, regardless of status.
drawer	This parameter specifies which drawer is to be busied. The range is 0-19.
drwr	This parameter busies one of the drawers.
force	This parameter suspends RTS tests and unconditionally returns the unit(s) to service.
link	This parameter returns to service one of the P-side links to the RMM. It is used only if the posted unit or PM is an RLCM.
nowait	This parameter enables the MAP to be used for other command entries before the force command is confirmed.
pm	This parameter returns to service both units of one or all posted LCMs, first unit 0, then unit 1.
ps_link	This variable specifies which of the P-side links is to be returned to service.
sysb	This parameter all posted system busy PMs to service.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
unit	This parameter returns to service one unit of one or all posted LCMs.
unit_no	This variable specifies which unit of the posted LCM is to be returned to service. The range is 0 or 1. For RLCMs equipped with Emergency Stand Alone (ESA), the unit is checked for a current load or the validity of the ESA static data. If there is a mismatch, the ESA static data is automatically reloaded.

-end-

Qualifications

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

- Out-of-service tests routines occur as part of a return to service. If a minor fault is detected, the unit is RTS with an ISTb indication. If the test fails on a major fault, the unit is not returned to service and remains out-of-service.
- When an XPM is made system busy (SysB state), the testing and loading of a return to service are automatically initiated.
- If the unit is returned to service, the in-service tests occur. If results are satisfactory, the unit is left in service. If results are unsatisfactory, the unit may be left in service with ISTb, or may be set SysB.
- 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 while the status for others is shown for the units.
- 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 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. It is shown by the maintenance flag (Mtce) beside the unit's status, and by the progression of the tests beside the header RG. Tests occur to one unit at a time, and progression is shown in sequence by the following:

  Initializing
  Reset
  Status
  Run
  Reset
  Run

Example

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
`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. 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 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 the appropriate inventory table (LTCINV, LCMINV, RCCINV, MSBINV, or XESAINV).
`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

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
CALLS ON LCM MAY BE AFFECTED PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** When the force command is used, calls in process may by dropped. If tests fail, the standard circuit display appears and log PM181 is generated. Log PM106 is generated when the rts is executed. **Action:** None
INACTIVE PARAMETER NOT VALID FOR OOS PM	**Meaning:** The parameter inactive does not apply to out-of-service LCMs. The LCM(s) must be in service. **Action:** The activity display for the LCM(s) is blank. To return the LCM(s) service, reenter the command rts with the parameter unit or pm.
LCM HOST <nn> <n> UNIT <n> RTS PASSED	**Meaning:** The LCM(s) or the unit(s) are returned to service. **Action:** If the LCM is in the control position of the posted set, the status display changes from SysB or ManB to InSv.
LCM HOST <nn> <n> RTS PASSED	**Meaning:** The LCMs, units, drawers, or link is returned to service. **Action:** If the LCM is in the control position of the posted set, the status display changes from SysB or ManB to InSv for the LCM, or unit and changes to . (dot) for each drawer.
LCM <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS	**Meaning:** The LCM cannot be returned to service because it is already undergoing maintenance action, where <pm_number> indicates the LCMs discrimination number. **Action:** With parameter all, the LCM is bypassed from the posted set of LCMs only for the duration of the return to service.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`LCM <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB LCM`	**Meaning:** With parameter all, and LCM in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** The LCM in the posted set is bypassed by the return to service. To proceed with the maintenance, wait until the action on the posted set is completed, then busy the LCM with the command bsy before trying the command rts.
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None
`NO RESPONSE FORM 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 parameter nowait is specified, this response does not appear. **Action:** The maintenance flag ROM/RAM QUERY appears while the load is being queried. Check the PECS of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in the appropriate inventory table (LTCINV, LCMINV, RCCINV, MSBINV, or XESAINV).
`OK`	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None

`OOS TESTS INITIATED`
`LCM HOST <nn> <n> TEST PASSED`
`LCM HOST <nn> <n> RTS PASSED`
	Meaning: The drawer is manual busy while the LCM is in service.
	
	Action: None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`OSVCE TEST INITIATED`	**Meaning:** Out-of-service testing is being done on the posted PM which is in the ManB or SysB state. **Action:** None
`<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 type listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM must be ManB. **Action:** None

`REQUEST INVALID: <reason>`	**Meaning:** The LCM or unit cannot be returned to service because the unit is ISTb or already InSv, or because the unit is CBsy or Offl. For the LCM drawer, it is unequipped (UNEQ) or off-line (OFFL), where the <reason> is displayed as
	`LCM HOST nn n IS UNEQ`
	`LCM HOST nn n IS OFFL`
	
	Action: None

`SUMMARY:`
`<nnn> PASSED`
`<nnn> NOT SUBMITTED`
	Meaning: With parameter all, a summary is given of the quantity (<nnn>) of LCMs in the posted set that have been successfully returned to service or that have been bypassed by the returning.
	
	Action: None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`THIS OPERATION WILL BE EXECUTED ON <nnn> <pm_type>` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** A quantity of <nnn> LCMs is to be returned to service, where <pm_type> is the type of LCM that is included in the posted set. **Action:** Entering YES tests, reloads, and returns the LCM(s) to service. With YES, the status display of the LCM in the current position of the posted set shows the maintenance flag Mtce while testing and loading is in progress, then changes from ManB or SysB to InSv without Mtce and the status display for the LCM level increments under header INSV and decrements under the header MANB, SYSB, OR CBSY. Entering NO aborts the action.

-end-

swrg

Function

Use the swrg command to cause the ringing generator (RG) that is serving a specified unit of a specified LCM to be switched to serve the other unit.

swrg command parameters and variables

Command	Parameters and variables	
swrg	pm	
	unit	*unit_no*

Parameters and variables	Description
pm	This parameter switches both units to their alternative RG.
unit	This parameter indicates that a unit_no it to be specified.
unit_no	This variable specifies which unit of the posted LCM is to be affected. The range is 0 or 1.

Qualifications

None

swrg (continued)

Examples

The following table provides an examples of the swrg command.

Examples of the swrg command

Example	Task, response, and explanation

swrg unit 0 ↵
where
 	
0 the unit of the posted LCM that is to have the RG switched.
	Task: Switch the RG that is serving unit unit 0 to serve unit 1 for LCM 02 0.
	
	Response:
	`LCM HOST 02 0 UNIT 0 SWRG PASSED`
	
	The display changes from:
	
	`Unit 0:-----/RG:0`
	`Unit 1:-----/RG:0`
	
	to:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:0`
	
	Explanation: The system responds by switching the RG that was serving unit 0 to serve unit 1.

-continued-

swrg (continued)

Examples of the swrg command (continued)

Example **Task, response, and explanation**

swrg unit 1 ↵
where

1 the unit of the posted LCM that is to have the RG switched.

Task: After posting LCM 02 0, switch the RG that is serving unit unit 1 to serve unit 0.

Response:

```
LCM HOST 02 0 UNIT 1 SWRG PASSED
```

The display changes from:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:0
```

to:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:1
```

Explanation: The system responds by switching the RG that is serving unit 1 to serve unit 0.

swrg pm ↵

Task: Switch both units from normal RG operation (as was evidenced in the first example) to the alternative configuration.

Response:

```
LCM HOST 02 0 SWRG PASSED
```

The display changes from:

```
Unit 0:-----/RG:0
Unit 1:-----/RG:1
```

to:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:0
```

Explanation: The system responds by switching the ringing generator configuration as displayed.

-end-

swrg (end)

Responses

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

Responses for the swrg command

MAP output	Meaning and action
`LCM HOST <nn> <n> UNIT <n> SWRG PASSED`	**Meaning:** The execution of the swrg command is confirmed, where <n> and <nn> echo the specified discrimination numbers. **Action:** None
`RINGING MAY BE AFFECTED.  CONFIRMATION REQUESTED`	**Meaning:** The switching of RG occurs only if the LCM is InSv or ISTb. **Action:** None
`RING GENERATORS ARE NOT EQUIPPED`	**Meaning:** The command swrg has been entered for an LCM that is not equipped with RG. In data Table LCMINV field RGEQUIP is set to N. **Action:** None
`SWRG PASSED`	**Meaning:** Confirmation of the RG swap is given. **Action:** None
	-end-

trnsl

Function

Use the trnsl command to identify the C-side speech and message links, or P-side links (RLCM only), of a posted LCM. It also displays the status and type of the links.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	c p

Parameters and variables	Description
c	This parameter selects the C-side links for display.
p	This parameter selects the P-side links (if present) for display.

Qualification

For LCM and RLCM, entering the trnsl command without a parameter cause a prompt for the parameter c or p.

Example

Not currently available

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

`LINK <n> <pm> <n> <nn>;CAP;MS;STATUS.<status> ;MSGCOND:.OPN`
`or`
`LINK <n> <pm> <n> <nn>;CAP; S;STATUS.<status> ;MSGCOND:.CLS`
`or`
`LINK <n> RMM <n> <n>;CAP;MS; STATUS.<status> ;MSG COND:.CLS`
`or`
`LINK <n> RMM <n> <n>;CAP; S; STATUS.<status> ;MSG COND:.OPN`
	Meaning: The display in response to the command string trnsl c or trnsl p is added to the post display, where:
	
	<n> are the discrimination numbers of the hardware.
	<pm> is a PM type (for example, LCM).
	<status> is the state of the link
	
	The links status codes are listed in Table U on page 785. There is no display if P-side links are no present (posted LCM is HOST).
	
	Action: None

`ALL PSIDE LINKS ARE NOT EQUIPPED`	**Meaning:** There must be an RLCM for the command string trnsl p to obtain information on the P-side links to the RMM. **Action:** None

tst

Function

Use the tst command to test one or all units of one or all posted LCMs, or one specified P-side link from a remote LCM that is in the control position of the posted set. The node under test must be manually or system busied, be in service, or have in-service trouble (ManB, SysB, InSv, ISTb states).

tst command parameters and variables

Command	Parameters and variables		
tst	drwr	*drawer*	[*norelay* | relay]
	link	all	[*norom* | rom]
		ps_link	
	unit	all	
		unit_no	
	pm	*posted*	
		all	
	rex	on	
		off	
		query	
		now	[*wait* | nowait]

Parameters and variables	Description
all	This parameter simultaneously tests all of the specified units, LCMs, or links of the posted set.
drawer	This variable specifies which drawer is to be tested. The range is 0-19.
drwr	This parameter tests one of the drawers.
link	This parameter tests one of the P-side links to an RMM. It is used only if the posted unit or PM is an RLCM.
norom	This default parameter, which is never entered, indicates that a rom test will not be performed because the rom parameter is not entered.
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 LCM to be removed form the system REX schedule.

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
on	This parameter causes the posted LCM to be included in the system REX schedule.
posted	This default parameter, which is never entered, indicates that the posted LCM will be tested because neither a *unit_number* or the all parameter is specified.
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 LCMs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the poste LCM.
relay	This parameter performs a BIC relay test (BRT) on a single drawer.
rex	This parameter enables rex testing to be scheduled, unscheduled or performed immediately for the posted LCM.
rom	This parameter tests the ROM for the posted LCM or specified unit.
unit	This parameter tests one unit of one or all posted LCMs.
unit_no	This variable specifies which unit of the posted LCM 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.

Qualifications

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

- With parameter all, the larger the quantity of LCMs to be tested concurrently, the longer it takes to complete the testing. Other maintenance activities must wait until completion.
- The LCM drawer BIC relay test (BRT) cannot be run if the LCM node is OffL, ManB, SysB, or CBsy. The LCM must be InSv.

tst (continued)

- The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

WARNING
Possible service interruption
The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

- If conditions needed to perform a REX test are not met, a message will be displayed on the screen or a log output, but REX will not be performed and no changes will be made to the REX maintenance record.
- If REX is terminated by a manual action, a message is displayed or a log is output but no change is made to the REX maintenance record.
- The following list indicates all of the REX failure reasons displayed in the tst rex query command as a result of a failed REX test. Reasons preceded by an asterisk (*) may produce a card list.
  - REX test Failed - Inactive OOS tests
  - REX test Failed - Inactive RTS
  - REX test Failed - Achieving Superframe/Data Sync
  - REX test Failed - W ARM SWACT
  - REX test Failed - Active InSv tests after SW ACT
  - REX test Failed - Inactive OOS tests after SW ACT
  - REX test Failed - Inactive RTS after SW ACT
  - REX test Failed - Achieving Superframe/Data Sync after SW ACT
  - REX test Failed - Terminated due to W ARM SWACT turned off
  - REX test Failed - Terminated due to PreSW ACT Audit failure
  - REX test Failed - Terminated due to tan Autonomous SW ACT

tst (continued)

Examples

The following table provides an examples of the tst command.

Examples of the tst command

Example **Task, response, and explanation**

tst unit 0 ↵
where

0 identifies the unit of the posted LCM that is to be tested.

Task: Test unit 0 of posted LCM 02 0.

Response:

```
TST UNIT 0
InSvce Tests Initiated
LCM HOST 02 0 Unit 0 Tst Failed: Line Card Communication
Site Flr RPos Bay_Id  Shf  Description Slot EqPEC
HOST  03  A02  LCE    0-4  LCM 02 0  00:07   6X58AA
HOST  03  A02  LCE    0-4  LCM 02 0  03      6X51AA
```

Explanation: The header Slot shows the most likely cause of failure as 00:07; where 00 is the line subgroup identification, and 07 is the NT6X58AA line circuit card identification. The line below displays the next likely cause of failure.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst pm ↵

Task: Test LCM 02 1.

Response:

```
INSVCE TESTS INITIATED
 LCM HOST 02 1 UNIT 0 TST FAILED: LINE CARD COMMUNICATION
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT   EQPEC
 HOST  03  A02 LCE 02  03   LCM 02 1    18:14   LINE
OSVCE TESTS INITIATED
 LCM HOST 02 1 UNIT 1 TST FAILED: POWER CONVERTER FAILURE
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT EQPEC
 HOST  03  A02 LCE 02  17   LCM 02 1     00   PWRCNV
```

Explanation: The information for unit 0 indicates a line card is absent or not datafilled. The standard circuit location display shows where it is. Unit 1 is ManB or SysB and the out-of-service tests failed because the PWRCNV (6X43) card is faulty. Check the circuit breaker for the PWRCNV card to verify that the card must be replaced.

tst rex query ↵

Task: Display the REX maintenance record for the posted LCM.

Response:

```
    LCM 0 is included in the REX schedule.
    Lat REX date was Non. 1992/11/23 at 03:06:15; PASSED
    No prior REX failure.
```

Explanation: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst rex now nowait ↵

Task: Perform a manual REX test immediately, but use nowait to suppress

Response:

```
A Warm SwAct will be attempted during the REX sequence
Please confirm (“YES” or “NO”):

>YES
```

Explanation: A warning is given that REX will perform a warm swact. The has chosen to continue the test.

tst drwr 5 relay ↵
where

5 is the number of the drawer for have BRT performed.

Task: Perform BRT test on drawer 5 of the posted LCM

Response:

```
BIC RELAY tests Initiated
LCM Host 00 0 Drwr 5 Tst Passed
```

Explanation: BRT test performed and passed.

-end-

tst (continued)

Responses

The following table provides explanations of the 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. 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. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in the inventory Table LCMINV.
`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` `LCM <pm_number> TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None
`LCM HOST <nn> <n> TEST PASSED`	**Meaning:** The LCM drawer passes the REX tests. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`LCM <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LCM cannot be tested because it is already undergoing maintenance action, where <pm_number> indicates the LCMs discrimination number. **Action:** With parameter all, the LCM is bypassed from the posted set of LCMs only for the duration of the testing.
`LCM <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB LCM`	**Meaning:** With parameter all, an LCM in the posted set cannot be tested because it is not in the manually busy (ManB) state. **Action:** The LCM in the posted set is bypassed by the testing. To proceed with the maintenance, wait until the action on the posted set is completed, then make the LCM busy with the command bsy before trying the command tst.
`OK`	**Meaning:** The tests pass. **Action:** None

`OOS TESTS INITIATED`
`or`
`OSVCE TEST INITIATED`
	Meaning: Out-of-service testing is being done on the posted PM which is in the ManB or SysB state.
	
	Action: None

`PM IS OFFLINE`	**Meaning:** The LCM to which an RLCM is connected is offline. Communication cannot occur between the PM, and since the LCM does the tests on the RLCM, the RLCM cannot be tested. **Action:** None

-continued-

tst (continued)

Responses for the tst 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 testing, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY OFFLINE SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`<pm_type> <pm_number>, 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 central control. This confirms that the PM load has not been corrupted. **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

`SUMMARY:`
`<nnn> PASSED`
`<nnn> NOT SUBMITTED`
	Meaning: With parameter all, a summary is given of the quantity (<nnn>) of LCMs in the posted set that have been successfully tested or that have been bypassed by the testing.
	
	Action: None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance actions. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> <pm_type> PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of <nnn> XPMs is to be tested, where <pm_type> is the type of XPM that is included in the posted set. **Action:** Entering YES tests the XPM(s). With YES, that status display of the XPM in the current position of the posted set shows the maintenance flag Mtce while testing is in progress. Entering NO aborts the action.
DTC 0 is included in the REX schedule. REX on DTC 0 has not been performed	**Meaning:** DTC 0 is included in the REX schedule. This LCM has not been tested (by the system or manually) since the last reload restart; therefore, no other REX maintenance record data is available. This is illustrated below: Current Day: Sunday History: Su M Tu W Th F - **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

```
LCM 0 is included in the REX schedule.
Last REX date was Non. 1992/11/23 at 03:06:15; PASSED.
No prior REX failure.
```

Meaning: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.

Current Day: Sunday
History: Su M Tu W Th F
- P

Action: None

```
LCM 0 is included in the REX schedule.
Last REX date was Non. 1992/11/25 at 03:06:15; FAILED.
  REX test Failed - Inactive OOS tests after SWACT
 Site Flr RPos  Bay)id  Shf  Description   Slot   EqPEc
 HOST  01  N02  LTE  00  18  LCM : 000      17     6X62
Prior REX failure was TUE. 1992/11/27 at 10:02:47.
REX has not passed following prior failure.
```

Meaning: The last time a system or manual REX was performed was Wednesday, November 23 at 3:06 am. 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 most recent time REX failed prior to the REX was on Tuesday, November 27, 1992 at 10:02 am. REX has not passed since the failure on November 27.

Current Day: Sunday
History: Su M Tu W Th F
- P F F

Action: Perform further analysis on the card listed to determine exact cause of the REX failure and correct it. The previous history information indicates the REX has failed twice in 2 days without passing in between. For more information concerning the current or prior failures, the craftsperson should consult the logs.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Request Invalid` `REX not performed - Node <state>`	**Meaning:** This responses is to a tst rex now nowait command issued for an LCM in the node <state>, where <state> is any state except InSv. A REX test can only be performed on peripherals which are InSv or ISTb with a unit ISTb reason of “REX failed.” All other peripherals states will cause this response. **Action:** Return the LCM to service before performing the test.

`A Warm SwAct will be attempted during the REX sequence`
`Please confirm (“YES” or “NO”):`
 	
`>YES`
	Meaning: This is response to tst rex now nowait command.
	
	Action: A warning is given that REX will perform a warm swact. The has chosen to continue the test.

`TST DRWR 5 RELAY`
`BRT NOT RUN: Drawer must be ManB prior to test.`
`LCM HOST 00 0 Request Invalid: Drwr 5 is InSv`
	Meaning: The LCM drawer BRT (BIC Relay Test) cannot be run unless the drawer is ManB. The System does not run the test.
	
	Action: Manually busy the LCM before running the BRT.

`LCM Host 00 0 Request Invalid: PM is OffL.`	**Meaning:** The LCM drawer BRT cannot be run if the LCM node is OffL, ManB, SysB, or CBsy. The test is not run. **Action:** Return the LCM to service before performing the BRT.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`BIC RELAY tests Initiated` `LCM Host 00 0 Drwr 5 Tst Passed`	**Meaning:** The LCM drawer BRT passed. A PM181 LOG is generated. **Action:** None

`BIC RELAY tests Initiated`
`LCM Host 00 0 Drwr 5 Tst Not Run :No line card`
`available`
	Meaning: The LCM drawer BRT is not run. A PM181 indicating the test was not run and why it is generated.
	
	Action: Datafill a NT6X17 in the drawer and repeat the test.

`BIC RELAY tests initiated`
`LCM Host 00 0 Drwr 5 Tst Failed ;BIC REVERSAL Relay`
`Site Flr RPos Bay_id Shf Description Slot EqPec`
`HOST 00 M16 LCM 00 00 LCM 00 0 05:00 6X54`
	Meaning: The LCM drawer BRT REVERSAL test failed. The drawer is left in the MBsy state. A PM181 information LOG is generated. The node is set to the alarm state ISTb, with the reason , “Drawer Fault.”
	
	Action: Perform on of the following:
	▪ RTS the drawer to an ISTB state.
	- This causes the LCM node to be set ISTb. QUERYPM FLT command indicates a drawer fault and the drawer that has failed the BRT.
	- The drawer can be returned to service to an ISTb state to enable call processing to continue but there may be problems with ringing in the drawer.
	▪ Replace the NT6X54 and run the test again.

-end-

LCME level commands

Use the LCME level of the MAP to monitor and maintain an LCME (enhanced line concentrating module).

Accessing the LCME level

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

mapci;mtc;pm;post lcme *n* ↵

where

n is the discrimination number of the LCME to be posted.

LCME commands

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

LCME commands

Command	Page
bsy	L-109
disp	L-113
loadpm	L-115
next	L-119
offl	L-121
post	L-123
querypm	L-127
quit	L-133
rts	L-137
swrg	L-143

-continued-

LCME commands (continued)	
Command	**Page**
trnsl	L-147
tst	L-149
-end-	

LCME menu

The following figure shows the LCME 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
         .     .     .     .     .    .     .     .     .     .


LCME                    SysB  ManB  OffL  CBsy  ISTb  InSv
0 Quit_          PM       0     0     0     0     3    130
2 Post_          LCME     0     0     0     0     1      9
3
4 SwRg
5 Trnsl_         LCME HOST nn n status  Links_OOS:  C-side x
6 Tst_           Unit-0: status Mtce Takeover
7 Bsy_           Unit-1: status Mtce
8 RTS_
9 OffL_
10 LoadPM_                                    11  11  11
11 Disp_         Drwr: 01  23  45  67  89  01  23  45
12 Next                ss  ss  ss  ss  ss  ss  ss  ss
13
14 QueryPM_
15
16
17
18
```

LCME status codes

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

Status codes LCME menu status display		
Code	**Meaning**	**Description**
LCME nn		
0-99	LCME number	This is the discrimination number of the posted LCME.
LCME n		
0 or 1	LCME frame	This identifies the upper or lower unit of the LCME frame.
Cside x		
x		This identifies the number of C-side links that are out-of-service.
status		
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.
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 ▪ P-side link trouble ▪ static data that is not up to date ▪ a load that is not listed in Table LCMINV
ManB	Manual Busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not Equipped	PMs are not equipped in Table LCMINV or LTCINV.
Offl	Offline	PMs are out of service for office data modifications (ODM).
SysB	System Busy	PMs are automatically removed from service by system maintenance.
-end-		

Status codes LCME menu status display (continued)		
Code	**Meaning**	**Description**
Mtce		This indicates that the unit is undergoing maintenance.
Takeover		This indicates that the unit has taken over the operation of its mate while the mate is undergoing maintenance.
Drwr		
0-23	drawer number	Drawer numbers arranged in groups of three.
s		State of the drawer
•	In service	The drawer is in service, with no faults.
-	Unequipped	The drawer is unequipped and cannot be made offline unless T able LNINV is datafilled with line data.
I	In-service trouble	The drawer has in-service trouble because the bus interface card (BIC) looparound test has failed. For the LCME, this state also results from failure of the scan chip hardware access test, or of the point of use power supply (PUPS) diagnostic.
S	System busy	The drawer is busied by the system because the BIC to DCC looparound test has failed. For the LCME, it is also busied if the TCON status check or the S14 BIC scan test fails. Since a BIC in the LCMI is capable of serving three equipped drawers, all three drawers are busied when the BIC to DCC test fails. In this case, the status display for the drawer triplet is sss. A status of a drawer triplet with only one s is not possible.
M	Manual busy	The drawer is manual busy.
O	Offline	Line data is assigned to the drawer, but the drawer is offline. The drawer cannot be used until it is made busy and returned to service.
-end-		

Resource tables

The LCME maintenance counter names table in this section explains the maintenance counter names given in response to the command querypm entered at the LCME level.

LCME maintenance counter names	
Counter name	**Description**
CRC	The message just received has incorrect cyclic redundancy check (CRC).
DNACK	Received (double) negative acknowledgements
IDL_STATE	Spurious frame interrupt count
INV_NODE	Messages received with invalid PP (node) number
IUC_INVD_BYTE	Received invalid byte count
-end-	

LCME maintenance counter names (continued)

Counter name	Description
IUC_INVD_CHAR	Received invalid characters
IUC_INVD_CHKSUM	Invalid checksum
IUC_INVD_MSG	Invalid message
IUC_LINK_NACK	Inter-unit communication (IUC) link negative acknowledgement
NACK	Received (single) negative acknowledgements
NULL_MSG_RCVD	Null messages received which are not reset messages
OVFL	While receiving a message, more than the permitted number of bytes were counted without a ROM.
RCVD_SUCC	Messages successfully received
WFACK	Wait-for-acknowledgement (positive-PACK, negative-NACK) timeout on message to the LTC.
WFMSG	Wait-for-start-of-message timeout on message from the LTC
WFNR	Wait-for-idle from the LTC after the LCM acknowledges or does not acknowledge a message
WFNX	Wait for link to go idle after NACK on message transfer
WFSND	Wait-for-send timeout on message to the LTC
XMIT_SUCC	Messages successfully transmitted

-end-

The LCME maintenance states are the same as those identified in the LCME status codes table on page L-105. However, LCME states require further definition because of the dual-unit configuration of the LCME. The status display shows the PM state of the LCME as a whole (LCME node), and the states of the individual two units. The LCME maintenance states table that follows identifies the relationship between the state of the LCME node and the state of the unit.

LCME maintenance states			
LCME node state	**Unit state**	**Mate unit state**	**Description**
CBsy	ManB	CBsy	For a PM node to be C-side busy (CBsy), one or both units must be C-side busy.
	CBsy	ManB, CBsy	
InSv	InSv	InSv	For a PM node to be in service (InSv), both units must be in service. The node or unit is capable of call processing while it is InSv, including when one unit is in the takeover mode. Only in-service tests are done.
ISTb	CBsy, ManB, SysB	InSv, ISTb	When a unit is in-service trouble (ISTb) and its mate is busied by the system (SysB), the unit attempts to takeover its mate.
	InSv	CBsy, ISTb, ManB, SysB	
ManB	ManB	ManB	
Offl	Offl	Offl	
SysB	SysB	SysB	For a node to be system busy (SysB), one or both units must be system busy. Out-of-service tests are done.

bsy

Function

Use the bsy command to change the state of one or all posted LCMEs to ManB. The bsy command can be applied to one or all units of the posted LCMEs.

bsy command parameters and variables

Command	Parameters and variables			
bsy	drwr unit pm	*drawer* *unit_no*	[force	nowait]

Parameters and variables	Description
drawer	This variable specifies which drawer is to be busied. The range is 0-15. Both of the logical drawers in the physical drawer are busied.
drwr	This parameter busies one of the drawers.
force	This parameter overrides all other commands and states that are in effect on the specified unit(s). If the whole LCME is to be taken out-of-service, the system requires confirmation (YES or NO) before executing the command.
nowait	This parameter is used in conjunction with the parameter force. This allows other commands to be entered at the MAP before the command string bsy force is confirmed.
pm	This parameter busies both units of one or all posted PMs.
unit	This parameter busies one unit of one or all posted LCMEs.
unit_no	This variable specifies which unit of the posted LCMEs is to be busied. The range is 0 or 1.

Qualifications

None

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
`CALLS ON UNIT MAY BE AFFECTED`	**Meaning:** With parameter force, a confirmation of YES or NO is requested. **Action:** Enter YES to execute the command, or NO to abort it.
`CANNOT BUSY LCME FROM OFFLINE DURING RECONFIGURATION`	**Meaning:** A busy command has been entered for an LCME during reconfiguration when the PM is in the Offl state. The busy request has failed. **Action:** Try again later when reconfiguration is finished.
`LCME HOST <nn> <n> DRWR <dd> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM ("YES" OR "NO"):`	**Meaning:** A drawer of the LCME is still in service; calls may be dropped, where nn and n are the discrimination numbers of the LCME and dd is 0-15 for the drawer identifier. **Action:** If YES is entered, the response is: `LCME HOST nn n DRWR dd BSY: PASSED` Enter NO to abort the command. If the drawer is offline or unequipped, or the LCME node is out of service, then the response is repeated without the colon(:), but has no actual effect.
`LCME HOST <nn> <n> UNIT <u> BSY PASSED`	**Meaning:** The LCME unit is busied, where <u> is 0 or 1 to indicate the unit. Unless takeover of the unit occurs, all lines to it are also busied. **Action:** None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`LCME HOST <nn> <n> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** Busying the in-service units cancels calls that are in progress, where <nn> and <n> are the discrimination numbers. **Action:** Enter YES to execute the command, or NO to abort it. The LCME is out-of-service when all lines to the LCME are busied. The state of the lines is displayed as LMB. Calls being connected are dropped; calls already connected are maintained.
`LCME HOST <nn> <n> WILL BE TAKEN OUT OF SERVICE` `CALLS ON UNIT MAY BE AFFECTED PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** Using the parameter force causes all calls in progress to be dropped. **Action:** Enter YES to execute the command, or NO to abort it.
`LCME <pm_number> IS MANUAL BUSY.  NO ACTION TAKEN`	**Meaning:** The command bsy was applied to an LCME that is already in the ManB state. **Action:** None
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None
`OK`	**Meaning:** YES is entered in response to a prompt and the PM is busied. Log PM105 is generated whenever and LCME or associated unit is made ManB. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`REQUEST INVALID DRWR IS UNEQ`	**Meaning:** The specified drawer is unequipped and cannot be used by the system. To use the drawer, check the datafill in Table LNINV. **Action:** None

-end-

disp

Function

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

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	lcme

Parameters and variables	Description
lcme	This parameter identifies the node type for this group of PMs.
pm_state	This variable is one of the PM state codes identified in the LCME status codes table at the beginning of this chapter.
state	This parameter is required before the PM state code.

Qualifications

None

Example

Not currently available

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> LCME: NONE`
or
`<pm_state> LCME <n>, <n>, HOST <nn> <n>...`
	Meaning: There are no PM in the specified state, or all in the state are listed, where <pm_state> is one of the state codes identified in the LCME status codes table at the beginning of this chapter.
	
	Action: None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processors of one or all posted LCMEs.

loadpm command parameters and variables

Command	Parameters and variables				
loadpm	pm unit	*unit_no*	[cc mate]	*l_name*	[*wait* nowait]

Parameters and variables	Description
cc	This default parameter specifies that the source of the load data is to be the DMS-100 CC data store.
l_name	This variable specifies the load name of the CC data file that is to be loaded into the LCME, as listed in data Table LCMINV. If the *l_name* variable is not entered, the default is the data in Table LCMINV. This name also appears next to FNAME when the command querypm is used.
mate	This parameter specifies that the source of the load data is to be the mate unit instead of the CC. The parameter mate causes the mate unit to be loaded by the inter-unit communication link.
nowait	This parameter allows another LCME to be posted and loaded without waiting for confirmation of the previous load request. The nowait command enables the MAP to be used for other command entries while loading proceeds.
pm	This parameter loads the specified l_name to both units of one or all posted LCMEs. When the value for parameter *l_name* is not specified, the load filename is taken from data T able LCMINV. It is displayed by information from the command querypm.
unit	This parameter loads one unit of one or all posted LCMEs.
unit_no	This variable specifies which unit of the posted LCMEs is to be loaded. The range is 0 or 1.
wait	This default parameter indicates default condition when no parameter is entered. The user must wait until the loadpm command action is confirmed before additional commands can be entered at the MAP.

loadpm (continued)

Qualifications

The loadpm command is qualified by the following:

- When the LCME 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 have already passed, the command loadnotest bypasses the ROM tests.
- To determine the loads for each PM, use the nonmenu command inform.
- When using parameter PM or unit, if both units are out-of-service, unit 0 is loaded first from the CC. After unit 0 is successfully loaded, then unit 1 is loaded.
- While a unit is being loaded from the CC, the status display shows (beside 'Mtce'):

```
/Loading:  13K
/Loading:  26K
```

  When 26K appears and 'Mtce' disappears, loading is complete. If a unit is being loaded from its mate, the following is displayed beside 'Mtce' on the status display:

```
/Status
/Mate Load
```

  When 'Mtce' disappears, loading is complete.

Example

The following table provides an example of the loadpm command.

Example of the loadpm command

Example	Task, response, and explanation

loadpm unit 1 mate ↵
where
 	
1 identifies the unit number of the posted LCME that is to be loaded
	Task: Load unit 1 for the posted LCME which is LCME HOST 02 0.
	
	Response:
	`LCME Host 02 0 ISTb LINKS_OOS: CSide 0`
	`Unit-0: InSv`
	`Unit-1: ManB  Mtce  /Mate Load`
	`LoadPM UNIT 1 MATE`
	
	Explanation:

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 load file. It 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. **Action:** None
`LCME <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM must be ManB. **Action:** None
`MATE UNIT MUST BE INSERVICE FOR MATE LOAD`	**Meaning:** The mate unit is not in service. When using the mate command, the default depends on the state of the mate. If the mate unit is in service, the source of the load is the mate. If the source is the CC, the default for the load file is the load name in data Table LCMINV. **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 responses. **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 SYS nonmenu directories are discussed in the Nonmenu Commands Reference Manual.

-end-

next (end)

Function

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

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: Post the next LCME.
	Response: `(Display for next LCME)`
	Explanation: The next LCME is posted.

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 PM that is currently displayed is the last in the posted set of PMs. 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 make both units of the posted LCMEs offline. Both LCME units must be in the ManB state before being made Offl.

offl command parameters and variables

Command	Parameters and variables	
offl	drwr pm	*drawer*

Parameters and variables	Description
drawer	This variable identifies which drawer is to be made offline. The range is 0-15.
drwr	This parameter identifies that a drawer is to be made offline.
pm	This parameter makes both units of the LCME offline.

Qualification

An offline LCME remains in this state throughout all restarts.

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation	
offl pm ↵		
	Task:	Put the posted LCME in the offline state.
	Response:	0K
	Explanation:	The posted LCME is in the offline state.

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
OK	**Meaning:** The LCME is in the offline state. **Action:** None
LCME <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_number> is the discrimination number of the LCME, and <status> is one of CBSY INSV ISTB OFFLINE SYSTEM BUSY ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. The system will respond by generating log PM103. **Action:** None

post

Function

Use the post command to select a specific LCME upon which action is to be taken by other commands. The post command must be entered before using command bsy, loadpm, offl, querypm, rts, swrg, trnsl, or tst.

post command parameters and variables

Command	Parameters and variables
post	all lcme host *ff* *n*

Parameters and variables	Description
all	This parameter specifies that all LCME modules are to be posted.
ff	This variable identifies the discrimination number of the LCEI frame housing the LCME to be posted. The range is 0-99.
host	This default parameter specifies that the site of the LCME as a host.
lcme	This parameter identifies the PM node-type for LCME.
n	The variable identifies the discrimination number of the LCME to be posted. The lower pair of units is identified as LCME 0; upper pair of units is identified as LCME 1. The range is 0 or 1.

Qualification

Once an LCME is posted, other commands at the respective menu level apply to that LCME.

post (continued)

Example

The following table provides an example of the post command.

Example of the post command

Example	Task, response, and explanation

post lcme 2 1 ↵
where
 	
2 is the discrimination number of the LCEI frame housing the LCME to be posted.
1 is the discrimination number of the LCME to be posted.
	Task: Post the upper LCME.
	
	Response:
	`LCME Host 02 1 ISTb LINKS_OOS: CSide 0`
	`Unit-0: InSv  Mtce TakeOver`
	`Unit-1: ManB  Mtce`
	
	Explanation: LCME 2 1 has been posted.

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 LCME level is accessed without posting a specific one. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
OK	**Meaning:** One of the displays resulting from the post command shows: ▪ the discrimination number of the posted LCME, preceded by the SITE name ▪ the state of both the node and the unit states of the posted LCME ▪ the number of out-of-service links ▪ the PM states of both units of the posted LCME with additional state ▪ information such as Mtce and Takeover **Action:** None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted LCME.

querypm command parameters and variables

Command	Parameters and variables	
querypm	cntrs drwr flt	clear

Parameters and variables	Description
clear	This parameter resets the link and unit maintenance counters that are to be set to zero.
cntrs	This parameter displays the LCME link and unit maintenance counters.
drwr	This parameter queries the status of all the drawers.
flt	This parameter displays the fault conditions on the LCME units.

Qualifications

None

querypm (continued)

Examples

The following table provides an examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation
querypm ↵	

Task: After posting LCME 02 0, the display indicates that Unit 0 is InSv and Unit 1 is ManB. To obtain miscellaneous information on this LCME, execute the querypm command.

Response:

```
LCME Host 02 0 ISTb Links_OOS: CSide 0
Unit-0: InSv
Unit-1: ManB

QUERYPM

PM Type: LCME Int. No.: 18 Status Index: 9 Node_No: 136
Loadnames:LCMINV - LCMI31B, Unit0: LCMI31B
 Site Flr RPos Bay_id Shf  Description  Slot EqPEC
 HOST 01  D13  LCEI 20 04   LCME 02 0        BX30AB
```

Explanation: The load file name for Unit 1 is not given while it is ManB. The card information provided in the display under the heading EqPEC is the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example	Task, response, and explanation
querypm flt ↵	

Task: After posting LCME 02 1, the display indicates that Unit 0 is ISTb and Unit 1 is InSv. To obtain miscellaneous information and obtain information on the fault conditions on the LCME units, execute the command string querypm flt.

Response:

```
LCME Host 02 1 InSv Links_OOS: CSide 0
Unit-0: ISTb
Unit-1: InSv

QUERYPM FLT

LCME UNIT 0 In-service Troubles Exist:
Self Test Failed: Diagnostic Failed
LCME UNIT 1 InSv
```

Explanation: The message indicates that the LCME is ISTb because one of its drawers is ISTb. This message is the result of a failure of self test and diagnostic test. If the LCME becomes overloaded, the LCME status display changes to ISTb while both units are InSv. In addition, 'PM Overloaded' is also included in the response to the command string querypm flt. Logs PM128 and PM181 also indicate the overload condition. PM128 is generated with the message 'LCME Out of Overload' when normal call processing resumes.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example **Task, response, and explanation**

querypm cntrs ↵

Task: After posting LCME 02 1, the display indicates that both units are InSv. To obtain miscellaneous information and display the LCME link and unit maintenance counters on this LCME, execute the command string querypm cntrs.

Response:

```
LCME Host 02 1 InSv Links_OOS: CSide 0
Unit-0: InSv
Unit-1: InSv

QUERYPM CNTRS
Current Message Threshold are...
Unsolicited: Unit 0 = 0, Unit 1 = 0 (limit = 200)
Data      : Unit 0 = 0, Unit 1 = 0 (limit = 10)
Swerr     : Unit 0 = 0, Unit 1 = 0 (limit = 50)
Fault Limit = 1
               UNIT0  UNIT1   |            UNIT0 UNIT1
WFSND             0     0     | WFACK         0     0)
WFNX              0     0     | NACK          0     0)
DNACK             0     0     | WFMSG         0     0)
WFNR              0     0     | CRC           0     0)
OVFL              0     0     | NULL_MSG      0     0)
IDL_STATE         0     0     | INV_NODE      0     0)
RCVD_SUCC       292     0     | XMIT_SUCC    593  789)
IUC_NACK          0     0     | UC_INV_CHAR  234    0)
IUC_INV_BYTE      0     0     | IUC_INV_CKSM  2     0)
IUC_INV_MSG       0     0     |
```

Explanation: The system displays information on the unit counters. The contents of the maintenance counters are listed vertically under the headers UNIT0 and UNIT1. Refer to the LCME maintenance counter names table at the beginning of this chapter for the significance of the maintenance counter names.

-end-

Responses

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

Responses for the querypm command

MAP output	Meaning and action
`display`	**Meaning:** The appropriate display appears refer to the Examples of the querypm command table for a representative display. **Action:** None

`                    11 111 111 112 222`
`DRWR:  012 345 678 901 234 567 890 123`
`     <sss sss sss  sss sss sss sss sss>`
	Meaning: The status of all the drawers is displayed, where <s> is one of the following states identified in the LCME status codes table at the beginning of this chapter.
	
	Action: None

`                      11 11 11`
`DRWR:  01 23 45 67 89 01 23 45`
`       <ss ss ss ss ss ss ss ss>`
	Meaning: The status of all the drawers is displayed, where <s> is one of the following states identified in the LCME status codes table at the beginning of this chapter.
	
	Action: None

`NEXT LCME FOR REX`	**Meaning:** The posted LCME is scheduled for the next REX test. **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 LCME level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LCME 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 LCME 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 LCME 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 LCME 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 LCME 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 to service one or all units of one or all LCMEs in the posted set. Tests are performed and a return to service occurs if the tests succeed. Each unit must be manually or system busied (ManB or SysB states).

rts command parameters and variables

Command	Parameters and variables			
rts	drwr	*drawer*	[*noforce*	*wait*
	pm		force	nowait]
	unit	*unit_no*		

Parameters and variables	Description
drawer	This parameter specifies which drawer is to be busied. The range is 0-15.
drwr	This parameter busies one of the drawers.
force	This parameter suspends RTS tests and unconditionally returns the unit(s) to service.
noforce	This default parameter indicates the condition when no parameter is entered. The rts command action will not be forced.
nowait	This parameter enables the user to enter other commands while the return to service proceeds.
pm	This parameter makes both units offline.
unit	This parameter returns to service one unit of one or all posted LCMEs.
unit_no	This variable specifies which unit of the posted LCME is to be returned to service. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the rts command action is confirmed before additional commands can be entered at the MAP.

rts (continued)

Qualifications

The rts command is qualified by the following:

- Out-of-service tests routines occur as part of a return to service. If a minor fault is detected, the unit is RTS with an ISTb indication. If the test fails on a major fault, the unit is not returned to service and remains out-of-service.
- If the unit is returned to service, the in-service tests occur. If results are satisfactory, the unit is left in service. If results are unsatisfactory, the unit may be left in service with ISTb, or may be set SysB.

Example

None

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
`CALLS ON LCME MAY BE AFFECTED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** When the force command is used, calls in process may by dropped. If tests fail, the standard circuit display appears and log PM181 is generated. Log PM106 is generated when the rts is executed. The card information provided in the display under the heading EqPEC is the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
`LCME HOST <nn> <n> UNIT <n> RTS PASSED`	**Meaning:** The LCME(s) or the unit(s) are returned to service. **Action:** If the LCME is in the control position of the posted set, the status display changes from SysB or ManB to InSv.
`LCME HOST <nn> <n> UNIT <n> RTS PASSED`	**Meaning:** RTS is confirmed and the LCME or unit is placed in the InSv state. **Action:** None
`LCME HOST <nn> <n> RTS PASSED`	**Meaning:** The drawer or unit has been returned to service. **Action:** None
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
OK	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None
OOS TESTS INITIATED LCME HOST <nn> <n> TEST PASSED LCME HOST <nn> <n> RTS PASSED	**Meaning:** The drawer or unit is returned to service. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being done on the posted PM which is in the ManB or SysB state. While the return to service is in progress, one of the following stages of progress is displayed beside 'Mtce' at the MAP: ▪ /Reset ▪ /Status ▪ /Run ▪ /Reset ▪ /Initializing **Action:** The screen may be blank for a few seconds between displayed stages. The duration depends on the traffic load of the switch.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`LCME <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The LCME must be in the ManB state to be returned to service, where pm_number is the discrimination number of the LCME, and status is one of ▪ CBSY ▪ INSV ▪ OFFLINE ▪ SYSB The PM must be ManB. **Action:** None

`REQUEST INVALID: <reason>`	**Meaning:** The LCME or unit cannot be returned to service because the unit is ISTb, CBsy, or already Offl, or already InSv. For the LCME drawer, it is unequipped (UNEQ) or offline (OFFL), where the reason is displayed as
	`LCME HOST nn n IS UNEQ`
	`LCME HOST nn n IS OFFL`
	Action: None

-end-

swrg

Function

Use the swrg command to cause the ringing generator (RG) that is serving a specified unit of a specified LCME to be switched to serve the other unit.

swrg command parameters and variables

Command	Parameters and variables	
swrg	pm	
	unit	*unit_no*

Parameters and variables	Description
pm	This parameter switches both units to their alternative RG.
unit	This parameter specifies that a unit_no is to be specified, when switching the ringing generator for one unit of the posted LCME.
unit_no	This variable specifies which unit of the posted LCME is to be affected. The range is 0 or 1.

Qualifications

None

swrg (continued)

Examples

The following table provides an examples of the swrg command.

Examples of the swrg command

Example	Task, response, and explanation

swrg unit 0 ↵
where
 	
0 the unit of the posted LCME that is to have the RG switched.
	Task: After posting LCME 02 0, switch the RG that is serving unit 0 to serve unit 1.
	
	Response: `LCME HOST 02 0 UNIT 0 SWRG PASSED`
	
	The display changes from:
	
	`Unit 0:-----/RG:0`
	`Unit 1:-----/RG:0`
	
	to:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:0`
	
	Explanation: The display indicates the RG that is serving unit 0 is switched to serve unit 1.

-continued-

swrg (continued)

Examples of the swrg command (continued)

Example **Task, response, and explanation**

swrg unit 1 ↵
where

1 the unit of the posted LCME that is to have the RG switched.

Task: After posting LCME 02 0, switch the RG that is serving unit unit 1 to serve unit 0.

Response:

```
LCME HOST 02 0 UNIT 1 SWRG PASSED
```

The display changes from:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:0
```

to:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:1
```

Explanation: The display indicates the RG that is serving unit 1 is switched to serve unit 0 after posting LCME 02 0.

swrg pm ↵

Task: After posting LCME 02 0, switch both units from normal RG operation (as was evidenced in the first example) to the alternative configuration.

Response:

```
LCME HOST 02 0 SWRG PASSED
```

The display changes from:

```
Unit 0:-----/RG:0
Unit 1:-----/RG:1
```

to:

```
Unit 0:-----/RG:1
Unit 1:-----/RG:0
```

Explanation: The display demonstrates the switching of both units from normal RG operation to the alternative configuration.

-end-

swrg (end)

Responses

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

Responses for the swrg command

MAP output	Meaning and action
`LCME HOST <nn> <n> UNIT <n> SWRG PASSED`	**Meaning:** The execution of the swrg command is confirmed, where <n> and <nn> echo the specified discrimination numbers. **Action:** None
`RINGING MAY BE AFFECTED.  CONFIRMATION REQUESTED`	**Meaning:** The switching of RG occurs only if the LCME is InSv or ISTb. **Action:** None
`RING GENERATORS ARE NOT EQUIPPED`	**Meaning:** The command swrg has been entered for an LCME that is not equipped with RG. In data Table LCMINV field RGEQUIP is set to N. **Action:** None
`SWRG PASSED`	**Meaning:** Confirmation of the RG swap is given. **Action:** None

-end-

trnsl

Function

Use the trnsl command to identify the C-side speech and message links, or P-side links of a posted LCME. It also displays the status and type of the links.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	c p

Parameters and variables	Description
c	This parameter selects the C-side links for display.
p	This parameter selects the P-side links (if present) for display.

Qualification

Entering the trnsl command without a parameter causes a prompt for the parameter c or p.

Example

Not currently available

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

`LINK <n> <pm> <n> <nn>;CAP;MS;STATUS.<status> ;MSGCOND:.OPN`
`or`
`LINK <n> <pm> <n> <nn>;CAP; S;STATUS.<status> ;MSGCOND:.CLS`
`or`
`LINK <n> <pm> <n> <nn>;CAP; D;STATUS.<status> ;MSGCOND:.SPC`
	Meaning: The display in response to the command string trnsl c or trnsl p is added to the post display, where:
	
	<n> are the discrimination number of the hardware.
	<pm> is a PM type (for example, LCME).
	<status> is the state of the link, where
	OK means that the link is in service
	MBsy means that the link is manually busy
	SysB means that the link is system busy
	CBsy means that the link is C-side busy
	
	There is no display if P-side links are no present (posted LCME is HOST).
	
	Action: None

`ALL PSIDE LINKS ARE NOT EQUIPPED`	**Meaning:** An LCME must be equipped for the command string trnsl p to obtain information on the P-side links to the remote maintenance module (RMM). **Action:** None

tst

Function

Use the tst command to test one or all units of one or all posted LCMEs, or one specified P-side link from a remote LCME that is in the control position of the posted set. The node under test must be manually or system busied, be in service, or have in-service trouble (ManB, SysB, InSv, ISTb states).

tst command parameters and variables

Command	Parameters and variables		
tst	drwr	*drawer*	[*norelay* | relay]
	link	all	[*norom* | rom]
		ps_link	
	unit	all	
		unit_no	
	pm	*posted*	
		all	
	rex	on	
		off	
		query	
		now	[*wait* | nowait]

Parameters and variables	Description
all	This parameter simultaneously tests all of the specified units, LCMEs, or links of the posted set.
drawer	This variable specifies which drawer is to be tested. The range is 0-19.
drwr	This parameter tests one of the drawers.
link	This parameter tests one of the P-side links to an RMM. It is used only if the posted unit or PM is an RLCM.
norom	This default parameter, which is never entered, indicates that a rom test will not be performed because the rom parameter is not entered.
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 LCME to be removed form the system REX schedule.

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
on	This parameter causes the posted LCME to be included in the system REX schedule.
posted	This default parameter, which is never entered, indicates that the posted LCME will be tested because neither a *unit_number* or the all parameter is specified.
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 LCMEs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the posted LCME.
relay	This parameter performs a BIC relay test (BRT) on a single drawer.
rex	This parameter enables rex testing to be scheduled, unscheduled or performed immediately for the posted LCME.
rom	This parameter tests the ROM for the posted LCME or specified unit.
unit	This parameter tests one unit of one or all posted LCMEs.
unit_no	This variable specifies which unit of the posted LCME 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.

Qualifications

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

- With parameter all, the larger the quantity of LCMEs to be tested concurrently, the longer it takes to complete the testing. Other maintenance activities must wait until completion.
- The LCME drawer BIC relay test (BRT) cannot be run if the LCME node is OffL, ManB, SysB, or CBsy. The LCME must be InSv.

tst (continued)

- The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

WARNING
Possible service interruption
The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

- If conditions needed to perform a REX test are not met, a message will be displayed on the screen or a log output, but REX will not be performed and no changes will be made to the REX maintenance record.
- If REX is terminated by a manual action, a message is displayed or a log is output but no change is made to the REX maintenance record.
- The following list indicates all of the REX failure reasons displayed in the tst rex query command as a result of a failed REX test. Reasons preceded by an asterisk (*) may produce a card list.
  - REX test Failed - Inactive OOS tests
  - REX test Failed - Inactive RTS
  - REX test Failed - Achieving Superframe/Data Sync
  - REX test Failed - W ARM SWACT
  - REX test Failed - Active InSv tests after SW ACT
  - REX test Failed - Inactive OOS tests after SW ACT
  - REX test Failed - Inactive RTS after SW ACT
  - REX test Failed - Achieving Superframe/Data Sync after SW ACT
  - REX test Failed - Terminated due to W ARM SWACT turned off
  - REX test Failed - Terminated due to PreSW ACT Audit failure
  - REX test Failed - Terminated due to tan Autonomous SW ACT

tst (continued)

Examples

The following table provides an examples of the tst command.

Examples of the tst command

Example	Task, response, and explanation

tst unit 0 ↵
where
 	
0 identifies the unit of the posted LCME that is to be tested.
	Task: Test unit 0 of posted LCME 02 0.
	
	Response:
	
	`TST UNIT 0`
	`InSvce Tests Initiated`
	`LCME HOST 02 0 Unit 0 Tst Failed: Line Card Communication`
	`Site Flr RPos Bay_Id  Shf  Description Slot EqPEC`
	`HOST  03  A02  LCE    0-4  LCME 02 0  00:07   6X58AA`
	`HOST  03  A02  LCE    0-4  LCME 02 0  03      6X51AA`
	
	Explanation: The header Slot shows the most likely cause of failure as 00:07; where 00 is the line subgroup identification, and 07 is the NT6X58AA line circuit card identification. The line below displays the next likely cause of failure.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst pm ↵

Task: Test LCME 02 1.

Response:

```
INSVCE TESTS INITIATED
 LCME HOST 02 1 UNIT 0 TST FAILED: LINE CARD COMMUNICATION
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT   EQPEC
 HOST  03  A02 LCE 02  03   LCME 02 1    18:14   LINE
OSVCE TESTS INITIATED
 LCME HOST 02 1 UNIT 1 TST FAILED: POWER CONVERTER FAILURE
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT EQPEC
 HOST  03  A02 LCE 02  17   LCME 02 1     00   PWRCNV
```

Explanation: The information for unit 0 indicates a line card is absent or not datafilled. The standard circuit location display shows where it is. Unit 1 is ManB or SysB and the out-of-service tests failed because the PWRCNV (6X43) card is faulty. Check the circuit breaker for the PWRCNV card to verify that the card must be replaced.

tst rex query ↵

Task: Display the REX maintenance record for the posted LCME.

Response:

```
    LCME 0 is included in the REX schedule.
    Last REX date was Non. 1992/11/23 at 03:06:15; PASSED
    No prior REX failure.
```

Explanation: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.

-continued-

tst (continued)

Examples of the tst command (continued)

Example	Task, response, and explanation
tst rex now nowait ↵	
	Task: Perform a manual REX test immediately, but use nowait to suppress

	Response:
	`A Warm SwAct will be attempted during the REX sequence`
	`Please confirm (“YES” or “NO”):`
	
	`>YES`

	Explanation: A warning is given that REX will perform a warm swact. The has chosen to continue the test.
tst drwr 5 relay ↵ *where* 5 is the number of the drawer for have BRT performed.	
	Task: Perform BRT test on drawer 5 of the posted LCME

	Response:
	`BIC RELAY tests Initiated`
	`LCME Host 00 0 Drwr 5 Tst Passed`

	Explanation: BRT test performed and passed.

-end-

tst (continued)

Responses

The following table provides explanations of the 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. 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. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in the inventory Table LCMINV.
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 LCME <pm_number> TST PASSED.	**Meaning:** In-service testing is being done on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None
LCME HOST <nn> <n> TEST PASSED	**Meaning:** The LCME drawer passes the REX tests. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`LCME <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LCME cannot be tested because it is already undergoing maintenance action, where <pm_number> indicates the LCMEs discrimination number. **Action:** With parameter all, the LCME is bypassed from the posted set of LCMEs only for the duration of the testing.
`LCME <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB LCME`	**Meaning:** With parameter all, an LCME in the posted set cannot be tested because it is not in the manually busy (ManB) state. **Action:** The LCME in the posted set is bypassed by the testing. To proceed with the maintenance, wait until the action on the posted set is completed, then make the LCME busy with the command bsy before trying the command tst.
`OK`	**Meaning:** The tests pass. **Action:** None

`OOS TESTS INITIATED`
`or`
`OSVCE TEST INITIATED`
	Meaning: Out-of-service testing is being done on the posted PM which is in the ManB or SysB state.
	
	Action: None

`PM IS OFFLINE`	**Meaning:** The LCME to which an RLCM is connected is offline. Communication cannot occur between the PM, and since the LCME does the tests on the RLCM, the RLCM cannot be tested. **Action:** None

-continued-

tst (continued)

Responses for the tst 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 testing, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY OFFLINE SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
<pm_type> <pm_number>, 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 central control. This confirms that the PM load has not been corrupted. **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
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of LCMs in the posted set that have been successfully tested or that have been bypassed by the testing. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance actions. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> <pm_type> PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of <nnn> XPMs is to be tested, where <pm_type> is the type of XPM that is included in the posted set. **Action:** Entering YES tests the XPM(s). With YES, that status display of the XPM in the current position of the posted set shows the maintenance flag Mtce while testing is in progress. Entering NO aborts the action.
DTC 0 is included in the REX schedule. REX on DTC 0 has not been performed	**Meaning:** DTC 0 is included in the REX schedule. This LCME has not been tested (by the system or manually) since the last reload restart; therefore, no other REX maintenance record data is available. This is illustrated below: Current Day: Sunday History: Su M Tu W Th F - **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`LCM 0 is included in the REX schedule.`
`Last REX date was Non. 1992/11/23 at 03:06:15; PASSED.`
`No prior REX failure.`
	Meaning: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.
	
	Current Day: Sunday
	History: Su M Tu W Th F
	- P
	
	Action: None

`LCM 0 is included in the REX schedule.`
`Last REX date was Non. 1992/11/25 at 03:06:15; FAILED.`
`REX test Failed - Inactive OOS tests after SWACT`
`Site Flr RPos Bay)id Shf Description Slot EqPEc`
`HOST 01 N02 LTE 00 18 LCME : 000 17 6X62`
`Prior REX failure was TUE. 1992/11/27 at 10:02:47.`
`REX has not passed following prior failure.`
	Meaning: The last time a system or manual REX was performed was Wednesday, November 23 at 3:06 am. 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 most recent time REX failed prior to the REX was on Tuesday, November 27, 1992 at 10:02 am. REX has not passed since the failure on November 27.
	
	Current Day: Sunday
	History: Su M Tu W Th F
	- P F F
	
	Action: Perform further analysis on the card listed to determine exact cause of the REX failure and correct it. The previous history information indicates the REX has failed twice in 2 days without passing in between. For more information concerning the current or prior failures, the craftsperson should consult the logs.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Request Invalid` `REX not performed - Node <state>`	**Meaning:** This responses is to a tst rex now nowait command issued for an LCME in the node <state>, where <state> is any state except InSv. A REX test can only be performed on peripherals which are InSv or ISTb with a unit ISTb reason of "REX failed." All other peripherals states will cause this response. **Action:** Return the LCME to service before performing the test.

`A Warm SwAct will be attempted during the REX sequence`
`Please confirm ("YES" or "NO"):`
 	
`>YES`
	Meaning: This is response to tst rex now nowait command.
	
	Action: A warning is given that REX will perform a warm swact. The has chosen to continue the test.

`TST DRWR 5 RELAY`
`BRT NOT RUN: Drawer must be ManB prior to test.`
`LCM HOST 00 0 Request Invalid: Drwr 5 is InSv`
	Meaning: The LCME drawer BRT (BIC Relay Test) cannot be run unless the drawer is ManB. The System does not run the test.
	
	Action: Manually busy the LCME before running the BRT.

`LCM Host 00 0 Request Invalid: PM is OffL.`	**Meaning:** The LCME drawer BRT cannot be run if the LCME node is OffL, ManB, SysB, or CBsy. The test is not run. **Action:** Return the LCME to service before performing the BRT.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
BIC RELAY tests Initiated LCM Host 00 0 Drwr 5 Tst Passed	**Meaning:** The LCME drawer BRT passed. A PM181 LOG is generated. **Action:** None
BIC RELAY tests Initiated LCM Host 00 0 Drwr 5 Tst Not Run :No line card available	**Meaning:** The LCME drawer BRT is not run. A PM181 indicating the test was not run and why it is generated. **Action:** Datafill a NT6X17 in the drawer and repeat the test.
BIC RELAY tests initiated LCM Host 00 0 Drwr 5 Tst Failed ;BIC REVERSAL Relay Site Flr RPos Bay_id Shf Description Slot EqPec HOST 00 M16 LCME 00 00 LCME 00 0 05:00 6X54	**Meaning:** The LCME drawer BRT REVERSAL test failed. The drawer is left in the MBsy state. A PM181 information LOG is generated. The node is set to the alarm state ISTb, with the reason , “Drawer Fault.” **Action:** Perform on of the following: ▪ RTS the drawer to an ISTB state. - This causes the LCME node to be set ISTb. QUERYPM FLT command indicates a drawer fault and the drawer that has failed the BRT. - The drawer can be returned to service to an ISTb state to enable call processing to continue but there may be problems with ringing in the drawer. ▪ Replace the NT6X54 and run the test again.

-end-

LCMI level commands

Use the LCMI level of the MAP to monitor and maintain an ISDN line concentrating module (LCMI).

Accessing the LCMI level

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

mapci;mtc;pm;post lcmi *n* ↵

where

n is the discrimination number of the LCMI to be posted.

LCMI commands

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

LCMI commands

Command	Page
bsy	L-169
disp	L-173
loadpm	L-175
next	L-179
offl	L-181
post	L-183
querypm	L-187
quit	L-193
rts	L-197
swrg	L-203

-continued-

LCMI commands (continued)	
Command	**Page**
trnsl	L-207
tst	L-209
-end-	

LCMI menu

The following figure shows the LCMI 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
         .     .     .     .     .    .     .     .     .     .


LCMI                   SysB  ManB  OffL  CBsy  ISTb  InSv
0 Quit_         PM       0     0     0     0     3    130
2 Post_         LCMI     0     0     0     0     1      9
3
4 SwRg
5 Trnsl_        LCMI HOST nn n status  Links_OOS:  C-side x
6 Tst_          Unit-0: status Mtce Takeover
7 Bsy_          Unit-1: status Mtce
8 RTS_
9 OffL_
10 LoadPM_                                  11  11  11  RG: Uneq
11 Disp_        Drwr: 01  23  45  67  89  01  23  45
12 Next               ss  ss  ss  ss  ss  ss  ss  ss
13
14 QueryPM_
15
16
17
18
```

LCMI status codes

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

Status codes	LCMI menu status display	
Code	**Meaning**	**Description**
LCMI nn		
0-99	LCMI number	This is the discrimination number of the posted LCMI.
LCMI n		
0 or 1	LCMI frame	This identifies the upper or lower unit of the LCMI frame.
Cside x		
x		This identifies the number of C-side links that are out-of-service.
status		
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.
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 ▪ P-side link trouble ▪ static data that is not up to date ▪ a load that is not listed in Table LCMINV
ManB	Manual Busy	PMs are manually removed from service by command bsy to allow testing and other manual maintenance action.
NEQ	Not Equipped	PMs are not equipped in Table LCMINV or LTCINV.
Offl	Offline	PMs are out of service for office data modifications (ODM).
SysB	System Busy	PMs are automatically removed from service by system maintenance.

-continued-

Status codes LCMI menu status display (continued)		
Code	**Meaning**	**Description**
Mtce		This indicates that the unit is undergoing maintenance.
Takeover		This indicates that the unit has taken over the operation of its mate while the mate is undergoing maintenance.
Drwr		
0-23	drawer number	Drawer numbers arranged in groups of three.
s		State of the drawer
•	In service	The drawer is in service, with no faults.
-	Unequipped	The drawer is unequipped and cannot be made offline unless T able LNINV is datafilled with line data.
I	In-service trouble	The drawer has in-service trouble because the bus interface card (BIC) looparound test has failed. For the LCMI, this state also results from failure of the scan chip hardware access test, or of the point of use power supply (PUPS) diagnostic.
S	System busy	The drawer is busied by the system because the BIC to DCC looparound test has failed. For the LCMI, it is also busied if the TCON status check or the S14 BIC scan test fails. Since a BIC in the LCMI is capable of serving three equipped drawers, all three drawers are busied when the BIC to DCC test fails. In this case, the status display for the drawer triplet is sss. A status of a drawer triplet with only one s is not possible.
M	Manual busy	The drawer is manual busy.
O	Offline	Line data is assigned to the drawer, but the drawer is offline. The drawer cannot be used until it is made busy and returned to service.
-end-		

Resource tables

The LCMI maintenance counter names table in this section explains the maintenance counter names given in response to the command querypm entered at the LCMI level.

LCMI maintenance counter names	
Counter name	**Description**
CRC	The message just received has incorrect cyclic redundancy check (CRC).
DNACK	Received (double) negative acknowledgements
IDL_STATE	Spurious frame interrupt count
INV_NODE	Messages received with invalid PP (node) number
IUC_INVD_BYTE	Received invalid byte count
-end-	

LCMI maintenance counter names

Counter name	Description
IUC_INVD_CHAR	Received invalid characters
IUC_INVD_CHKSUM	Invalid checksum
IUC_INVD_MSG	Invalid message
IUC_LINK_NACK	Inter-unit communication (IUC) link negative acknowledgement
NACK	Received (single) negative acknowledgements
NULL_MSG_RCVD	Null messages received which are not reset messages
OVFL	While receiving a message, more than the permitted number of bytes were counted without a ROM.
RCVD_SUCC	Messages successfully received
WFACK	Wait-for-acknowledgement (positive-PACK, negative-NACK) timeout on message to the LTC.
WFMSG	Wait-for-start-of-message timeout on message from the LTC
WFNR	Wait-for-idle from the LTC after the LCM acknowledges or does not acknowledge a message
WFNX	Wait for link to go idle after NACK on message transfer
WFSND	Wait-for-send timeout on message to the LTC
XMIT_SUCC	Messages successfully transmitted

-end-

The LCMI maintenance states are the same as those identified in the LCMI status codes table on page L-165. However, LCMI states require further definition because of the dual-unit configuration of the LCMI. The status display shows the PM state of the LCMI as a whole (LCMI node), and the states of the individual two units. The LCMI maintenance states table that follows identifies the relationship between the state of the LCMI node and the state of the unit.

LCMI maintenance states			
LCMI node state	**Unit state**	**Mate unit state**	**Description**
CBsy	ManB	CBsy	For a PM node to be C-side busy (CBsy), one or both units must be C-side busy.
	CBsy	ManB, CBsy	
InSv	InSv	InSv	For a PM node to be in service (InSv), both units must be in service. The node or unit is capable of call processing while it is InSv, including when one unit is in the takeover mode. Only in-service tests are done.
ISTb	CBsy, ManB, SysB	InSv, ISTb	When a unit is in-service trouble (ISTb) and its mate is busied by the system (SysB), the unit attempts to takeover its mate.
	InSv	CBsy, ISTb, ManB, SysB	
ManB	ManB	ManB	
Offl	Offl	Offl	
SysB	SysB	SysB	For a node to be system busy (SysB), one or both units must be system busy. Out-of-service tests are done.

bsy

Function

Use the bsy command to change the state of one or all posted LCMIs to ManB. The bsy command can be applied to one or all units of the posted LCMIs.

bsy command parameters and variables

Command	Parameters and variables			
bsy	drwr unit pm	*drawer* *unit_no*	*noforce* force	*wait* nowait

Parameters and variables	Description
drawer	This variable specifies which drawer is to be busied. The range is 0-23.
drwr	This parameter busies one of the drawers.
force	This parameter overrides all other commands and states that are in effect on the specified unit(s). If the whole LCMI is to be taken out-of-service, the system requires confirmation (YES or NO) before executing the command.
noforce	This default parameter indicates the condition when no parameter is entered. The busy command action will not be forced.
nowait	This parameter is used in conjunction with the parameter force. This allows other commands to be entered at the MAP before the command string bsy force is confirmed.
pm	This parameter busies both units of one or all posted PMs.
unit	This parameter busies one unit of one or all posted LCMIs.
unit_no	This variable specifies which unit of the posted LCMIs is to be busied. The range is 0 or 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.

Qualifications

None

Example

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
`CALLS ON UNIT MAY BE AFFECTED`	**Meaning:** With parameter force, confirmation YES or NO is requested. **Action:** Enter YES to execute the command, or NO to abort it.
`CANNOT BUSY LCMI FROM OFFLINE DURING RECONFIGURATION`	**Meaning:** A busy command has been entered for an LCMI during reconfiguration when the PM is in the Offl state. The busy request has failed. **Action:** Try later when reconfiguration is finished.
`LCMI HOST <nn> <n> DRWR <dd> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** A drawer of the LCMI is still in service; calls may be dropped, where <nn> and <n> are the discrimination numbers of the LCMI and <dd> is 0-23 for the drawer identifier. **Action:** If YES is entered, the response is: `LCMI HOST nn n DRWR dd BSY: PASSED` If the drawer is offline or unequipped, or the LCMI node is out of service, then the response is repeated without the colon(:), but has no actual effect. Enter NO to abort the command.
`LCMI HOST <nn> <n> UNIT <u> BSY PASSED`	**Meaning:** The LCMI unit is busied, where <u> is 0 or 1 to indicates the unit. Unless takeover of the unit occurs, all lines to it are also busied. **Action:** None

-continued-

bsy (continued)

Responses for the bsy command (continued)

MAP output	Meaning and action
`LCMI HOST <nn> <n> WILL BE TAKEN OUT OF SERVICE` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** Busying the in-service units cancels calls that are in progress, where <nn> and <n> are the discrimination numbers. **Action:** Enter YES to execute the command, or NO to abort it. The LCMI is out-of-service when all lines to the LCMI are busied. The state of the lines is displayed as LMB. Calls being connected are dropped; calls already connected are maintained.
`LCMI HOST <nn> <n> WILL BE TAKEN OUT OF SERVICE` `CALLS ON UNIT MAY BE AFFECTED PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** Using the parameter force causes all calls in progress to be dropped. **Action:** Enter YES to execute the command, or NO to abort it.
`LCMI <pm_number> IS MANUAL BUSY.  NO ACTION TAKEN`	**Meaning:** The command bsy was applied to an LCMI that is already in the ManB state. **Action:** None
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None
`OK`	**Meaning:** YES is entered in response to a prompt and the PM is busied. Log PM105 is generated whenever and LCMI or associated unit is made ManB. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`REQUEST INVALID DRWR IS UNEQ`	**Meaning:** The specified drawer is unequipped and cannot be used by the system. To use the drawer, check the datafill in Table LNINV. **Action:** None

-end-

disp

Function

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

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	lcmi

Parameters and variables	Description
lcmi	This parameter identifies the node-type for this group of PMs.
pm_state	This variable is one of the PM state codes identified in the LCMI status codes table at the beginning of this chapter.
state	This parameter is required before the PM state code.

Qualifications

None

Examples

Not currently available

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> LCMI: NONE`
or
`<pm_state> LCMI <n>, <n>, HOST <nn> <n>...`
	Meaning: There are no PM in the specified state, or all in the state are listed, where <pm_state> is one of the identified in the LCMI status codes table at the beginning of this chapter.
	
	Action: None

loadpm

Function

Use the loadpm command to load the peripheral program files into the processors of one or all posted LCMIs.

loadpm command parameters and variables

Command	Parameters and variables				
loadpm	pm unit	*unit_no*	[cc mate]	*l_name*	[*wait* nowait]

Parameters and variables	Description
cc	This default parameter specifies that the source of the load data is to be the DMS-100 CC data store.
l_name	This variable specifies the load name of the CC data file that is to be loaded into the LCMI, as listed in data Table LCMINV. If the *l_name* variable is not entered, the default is the data in Table LCMINV. This name also appears next to FNAME when the command querypm is used.
mate	This parameter specifies that the source of the load data is to be the mate unit instead of the CC. The parameter mate causes the mate unit to be loaded by the inter-unit communication link.
nowait	This parameter allows another LCMI to be posted and loaded without waiting for confirmation of the previous load request. The nowait command enables the MAP to be used for other command entries while loading proceeds.
pm	This parameter loads the specified l_name to both units of one or all posted LCMIs. When the value for parameter *l_name* is not specified, the load filename is taken from data T able LCMINV. It is displayed by information from the command querypm.
unit	This parameter loads one unit of one or all posted LCMIs.
unit_no	This variable specifies which unit of the posted LCMIs is to be loaded. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is not entered. The user must wait until the loadpm command action is confirmed before additional commands can be entered at the MAP.

loadpm (continued)

Qualifications

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

- When the LCMI 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 have already passed, the command loadnotest bypasses the ROM tests.
- To determine the loads for each PM, use the nonmenu command inform.
- When using parameter PM or unit, if both units are out-of-service, unit 0 is loaded first from the CC. After unit 0 is successfully loaded unit 1 is loaded.
- While a unit is being loaded from the CC, the status display shows (beside 'Mtce'):

```
/Loading:  13K
/Loading:  26K
```

  When 26K appears and 'Mtce' disappears, loading is complete. If a unit is being loaded from its mate, the following is displayed beside 'Mtce' on the status display:

```
/Status
/Mate Load
```

  When 'Mtce" disappears, loading is complete.

Example

The following table provides an example of the loadpm command.

Example of the loadpm command

Example	Task, response, and explanation

loadpm unit 1 mate ↵
where
 	
1 identifies the unit number of the posted LCMI that is to be loaded
	Task: Load unit 1 for the posted LCMI which is LCMI HOST 02 0.
	
	Response:
	`LCMI Host 02 0 ISTb LINKS_OOS: CSide 0`
	`Unit-0: InSv`
	`Unit-1: ManB  Mtce  /Mate Load`
	`LoadPM UNIT 1 MATE`
	
	Explanation:

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 load file. It resides on tape or disk. Use the list command to list the disk volume, or use the mount command to mount the tape that has the load file on it. **Action:** None
`LCMI <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The PM is in the incorrect state for loading, where <pm_number> is the discrimination number of the PM, and <status> is one of CBSY INSV OFFLINE The PM must be ManB. **Action:** None
`MATE UNIT MUST BE INSERVICE FOR MATE LOAD`	**Meaning:** The mate unit is not in service. When using the mate command, the default depends on the state of the mate. If the mate unit is in service, the source of the load is the mate. If the source is the CC, the default for the load file is the load name in data Table LCMINV. **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 responses. **Action:** For DMS-100 systems equipped with disk drive units (DDU), see 297-1001-526 and use the commands listvol and dskut. For DMS-100 systems equipped with magnetic tape drives (MTD), see 297-1001-509 and use the commands mount and list.

-end-

next

Function

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

next command parameters and variables

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

Qualifications

None

Example

Not currently available

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 PM that is currently displayed is the last in the posted set of PMs. 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 make both units of the posted LCMIs offline. Both LCMI units must be in the ManB state before being made Offl.

offl command parameters and variables

Command	Parameters and variables
offl	drwr *drawer* pm

Parameters and variables	Description
drawer	This variable identifies which drawer is to be made offline. The range is 0-23.
drwr	This parameter identifies that a drawer is to be made offline.
pm	This parameter makes both units of the LCMI offline.

Qualification

An offline LCMI remains in this state throughout all restarts.

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 LCMI is in the offline state. **Action:** None

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`LCMI <pm_number> IS <status>.` `NO ACTION TAKEN`	**Meaning:** The LCMI is already off-line or is in the incorrect state for being made offline, where <pm_number> is the discrimination number of the LCMI, and <status> is one of CBSY INSV ISTB OFFLINE SYSTEM BUSY ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. The system will respond by generating log PM103. **Action:** None

-end-

post

Function

Use the post command to select a specific LCMI upon which action is to be taken by other commands. The post command must be entered before using command bsy, loadpm, offl, querypm, rts, swrg, trnsl, or tst.

post command parameters and variables

Command	Parameters and variables
post	all lcmi host *ff* *n*

Parameters and variables	Description
all	This parameter specifies that all LCMI modules are to be posted.
lcmi	This parameter identifies the PM node-type for LCMI.
host	This parameter specifies that the site of the LCMI as a host.
ff	This variable identifies the discrimination number of the LCEI frame housing the LCMI to be posted. The range is 0-99.
n	The variable identifies the discrimination number of the LCMI to be posted. The lower pair of units is identified as LCMI 0; upper pair of units is identified as LCMI 0. The range is 0 or 1.

Qualification

Once a PM type is posted, other commands at the respective menu level apply to that LCMI.

post (continued)

Example

The following table provides an example of the post command.

Example of the post command

Example	Task, response, and explanation

post lcmi 2 1 ↵
where
 	
2 is the discrimination number of the LCE frame housing the LCMI to be posted.
1 is the discrimination number of the LCMI to be posted.
	Task: Post the upper LCMI.
	
	Response:
	`LCMI Host 02 1 ISTb LINKS_OOS: CSide 0`
	`Unit-0: InSv  Mtce TakeOver`
	`Unit-1: ManB  Mtce`
	
	Explanation: LCMI 2 1 has been posted.

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 LCMI level is accessed without posting a specific one. **Action:** None

-continued-

post (end)

Responses for the post command (continued)

MAP output	Meaning and action
OK	**Meaning:** One of the displays resulting from the post command appears to show: ▪ the discrimination number of the posted LCMI, preceded by the SITE name ▪ the state of both the node and the unit states of the posted LCMI ▪ the number of out-of-service links ▪ the PM states of both units of the posted LCMI with additional state ▪ information such as Mtce and Takeover **Action:** None

-end-

querypm

Function

Use the querypm command to display miscellaneous information about a posted LCMI.

querypm command parameters and variables

Command	Parameters and variables	
querypm	cntrs drwr flt	clear

Parameters and variables	Description
clear	This parameter resets the link and unit maintenance counters that are to be set to zero.
cntrs	This parameter displays the LCMI link and unit maintenance counters.
drwr	This parameter queries the status of all the drawers.
flt	This parameter displays the fault conditions on the LCMI units.

Qualifications

None

querypm (continued)

Examples

The following table provides an examples of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation
querypm ↵	

Task: After posting LCMI 02 0, the display indicates that Unit 0 is InSv and Unit 1 is ManB. To obtain miscellaneous information on this LCMI, execute the querypm command.

Response:

```
LCMI Host 02 0 ISTb Links_OOS: CSide 0
Unit-0: InSv
Unit-1: ManB

QUERYPM

PM Type: LCMI Int. No.: 18 Status Index: 9 Node_No: 136
Loadnames:LCMINV - LCMI31B, Unit0: LCMI31B
 Site Flr RPos Bay_id Shf  Description  Slot EqPEC
 HOST 01  D13  LCEI 20 04   LCMI 02 0        BX30AB
```

Explanation: The load filename for Unit 1 is not given while it is ManB. The card information provided in the display under the heading EqPEC is the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example	Task, response, and explanation
querypm flt ↵	

Task: After posting LCMI 02 1, the display indicates that Unit 0 is ISTb and Unit 1 is InSv. To obtain miscellaneous information and obtain information on the fault conditions on the LCMI units, execute the command string querypm flt.

Response:

```
LCMI Host 02 1 InSv Links_OOS: CSide 0
Unit-0: ISTb
Unit-1: InSv

QUERYPM FLT

LCMI UNIT 0 In-service Troubles Exist:
Self Test Failed: Diagnostic Failed
LCMI UNIT 1 InSv
```

Explanation: The message indicates that the LCMI is ISTb because one of its drawers is ISTb. This message is the result of a failure of self test and diagnostic test. If the LCME becomes overloaded, the LCME status display changes to ISTb while both units are InSv. In addition, 'PM Overloaded' is also included in the response to the command string querypm flt. Logs PM128 and PM181 also indicate the overload condition. PM128 is generated with the message 'LCME Out of Overload' when normal call processing resumes.

-continued-

querypm (continued)

Examples of the querypm command (continued)

Example **Task, response, and explanation**

querypm cntrs ↵

Task: After posting LCMI 02 1, the display indicates that both units are InSv. To obtain miscellaneous information and display the LCMI link and unit maintenance counters on this LCMI, execute the command string querypm cntrs.

Response:

```
LCMI Host 02 1 InSv Links_OOS: CSide 0
Unit-0: InSv
Unit-1: InSv

QUERYPM CNTRS
Current Message Threshold are...
Unsolicited: Unit 0 = 0, Unit 1 = 0 (limit = 200)
Data       : Unit 0 = 0, Unit 1 = 0 (limit = 10)
Swerr      : Unit 0 = 0, Unit 1 = 0 (limit = 50)
Fault Limit = 1

                UNIT0  UNIT1                UNIT0 UNIT1
WFSND             0     0     | WFACK         0     0)
WFNX              0     0     | NACK          0     0)
DNACK             0     0     | WFMSG         0     0)
WFNR              0     0     | CRC           0     0)
OVFL              0     0     | NULL_MSG      0     0)
IDL_STATE         0     0     | INV_NODE      0     0)
RCVD_SUCC       292     0     | XMIT_SUCC    593  789)
IUC_NACK          0     0     | UC_INV_CHAR  234    0)
IUC_INV_BYTE      0     0     | IUC_INV_CKSM  2     0)
IUC_INV_MSG       0     0     |
```

Explanation: The system displays information on the unit counters. The contents of the maintenance counters are listed vertically under the headers UNIT0 and UNIT1. Refer to the LCMI maintenance counter names table at the beginning of this chapter for the significance of the maintenance counter names.

-end-

Responses

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

Responses for the querypm command

MAP output	Meaning and action
`display`	**Meaning:** The appropriate display appears. Refer to the "Examples of the querypm command" table for representative displays. **Action:** None

`                    11 111 111 112 222`
`DRWR:  012 345 678 901 234 567 890 123`
`     <sss sss sss  sss sss sss sss sss>`
	Meaning: The status of all the drawers is displayed, where <s> is one of the following states identified in the LCMI status codes table at the beginning of this chapter.
	
	Action: None

`                      11 11 11`
`DRWR:  01 23 45 67 89 01 23 45`
`      <ss ss ss ss ss ss ss ss>`
	Meaning: The status of all the drawers is displayed, where <s> is one of the following states identified in the LCMI status codes table at the beginning of this chapter.
	
	Action: None

`NEXT LCMI FOR REX`	**Meaning:** The posted LCMI is scheduled for the next REX test. **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 LCMI level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LCMI 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 LCMI 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 LCMI 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 LCMI 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 LCMI 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 to service one or all units of one or all LCMIs in the posted set. Tests are performed and a return to service occurs if the tests succeed. Each unit must be manually or system busied (ManB or SysB states).

rts command parameters and variables

Command	Parameters and variables			
rts	drwr	*drawer*	[*noforce*	*wait*
	pm		force	nowait]
	unit	*unit_no*		

Parameters and variables	Description
drawer	This parameter specifies which drawer is to be busied. The range is 0-23.
drwr	This parameter busies one of the drawers.
force	This parameter suspends RTS tests and unconditionally returns the unit(s) to service.
noforce	This default parameter indicates the condition when no parameter is entered. The rts command action will not be forced.
nowait	This parameter enables the user to enter other commands while the return to service proceeds.
pm	This parameter makes both units offline.
unit	This parameter returns to service one unit of one or all posted LCMIs.
unit_no	This variable specifies which unit of the posted LCMI is to be returned to service. The range is 0 or 1.
wait	This default parameter indicates the default condition when no parameter is entered. The user must wait until the rts command action is confirmed before additional commands can be entered at the MAP.

rts (continued)

Qualifications

The rts command is qualified by the following:

- Out-of-service tests routines occur as part of a return to service. If a minor fault is detected, the unit is RTS with an ISTb indication. If the test fails on a major fault, the unit is not returned to service and remains out-of-service.
- If the unit is returned to service, the in-service tests occur. If results are satisfactory, the unit is left in service. If results are unsatisfactory, the unit may be left in service with ISTb, or may be set SysB.

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts ↵ *where*	
	Task: **Response:** **Explanation:**

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
`CALLS ON LCMI MAY BE AFFECTED` `PLEASE CONFIRM (“YES” OR “NO”):`	**Meaning:** When the force command is used, calls in process may by dropped. If tests fail, the standard circuit display appears and log PM181 is generated. Log PM106 is generated when the rts is executed. The card information provided in the display under the heading EqPEC is the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
`LCMI HOST <nn> <n> UNIT <n> RTS PASSED`	**Meaning:** The LCMI(s) or the unit(s) are returned to service. **Action:** If the LCMI is in the control position of the posted set, the status display changes from SysB or ManB to InSv.
`LCMI HOST <nn> <n> UNIT <n> RTS PASSED`	**Meaning:** RTS is confirmed and the LCMI or unit is placed in the InSv state. **Action:** None
`LCMI HOST <nn> <n> RTS PASSED`	**Meaning:** The drawer or unit has been returned to service. **Action:** None
`NO ACTION TAKEN`	**Meaning:** No is entered in response to a prompt and the command is aborted. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
OK	**Meaning:** YES is entered in response to a prompt and the PM is busied. **Action:** None
OOS TESTS INITIATED LCMI HOST <nn> <n> TEST PASSED LCMI HOST <nn> <n> RTS PASSED	**Meaning:** The drawer or unit is returned to service. **Action:** None
OSVCE TEST INITIATED	**Meaning:** Out-of-service testing is being done on the posted PM which is in the ManB or SysB state. While the return to service is in progress, one of the following stages of progress is displayed beside 'Mtce' at the MAP: ▪ /Reset ▪ /Status ▪ /Run ▪ /Reset ▪ /Initializing **Action:** The screen may be blank for a few seconds between displayed stages. The duration depends on the traffic load of the switch.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`LCMI <pm_number> IS <status>` `NO ACTION TAKEN`	**Meaning:** The LCMI must be in the ManB state to be returned to service, where pm_number is the discrimination number of the LCMI, and status is one of ▪ CBSY ▪ INSV ▪ OFFLINE ▪ SYSB The PM must be ManB. **Action:** None

`REQUEST INVALID: <reason>`	**Meaning:** The LCMI or unit cannot be returned to service because the unit is ISTb, CBsy, or already Offl, or already InSv. For the LCMI drawer, it is unequipped (UNEQ) or offline (OFFL), where the reason is displayed as
	`LCMI HOST nn n IS UNEQ`
	`LCMI HOST nn n IS OFFL`
	Action: None

-end-

swrg

Function

Use the swrg command to cause the ringing generator (RG) that is serving a specified unit of a specified LCMI to be switched to serve the other unit.

swrg command parameters and variables

Command	Parameters and variables	
swrg	pm	
	unit	*unit_no*

Parameters and variables	Description
pm	This parameter switches both units to their alternative RG.
unit	This parameter specifies that a unit_no is to be specified , when switching the ringing generator for one unit of the posted LCMI.
unit_no	This variable specifies which unit of the posted LCMI is to be affected. The range is 0 or 1.

Qualifications

None

swrg (continued)

Examples

The following table provides an examples of the swrg command.

Examples of the swrg command

Example	Task, response, and explanation

swrg unit 0 ↵
where
 	
0 the unit of the posted LCMI that is to have the RG switched.
	Task: After posting LCMI 02 0, switch the RG that is serving unit unit 0 to serve unit 1.
	
	Response: `LCMI HOST 02 0 UNIT 0 SWRG PASSED`
	
	The display changes from:
	
	`Unit 0:-----/RG:0`
	`Unit 1:-----/RG:0`
	
	to:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:0`
	
	Explanation:

-continued-

swrg (continued)

Examples of the swrg command (continued)

Example	Task, response, and explanation

swrg unit 1 ↵
where
 	
1 the unit of the posted LCMI that is to have the RG switched.
	Task: After posting LCMI 02 0, switch the RG that is serving unit unit 1 to serve unit 0.
	
	Response: `LCMI HOST 02 0 UNIT 1 SWRG PASSED`
	
	The display changes from:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:0`
	
	to:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:1`
	
	Explanation:

swrg pm ↵	**Task:** After posting LCMI 02 0, switch both units from normal RG operation (as was evidenced in the first example) to the alternative configuration.
	
	Response: `LCMI HOST 02 0 SWRG PASSED`
	
	The display changes from:
	
	`Unit 0:-----/RG:0`
	`Unit 1:-----/RG:1`
	
	to:
	
	`Unit 0:-----/RG:1`
	`Unit 1:-----/RG:0`
	
	Explanation:

-end-

swrg (end)

Responses

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

Responses for the swrg command

MAP output	Meaning and action
`LCMI HOST <nn> <n> UNIT <n> SWRG PASSED`	**Meaning:** The execution of the swrg command is confirmed, where <n> and <nn> echo the specified discrimination numbers. **Action:** None
`RINGING MAY BE AFFECTED.  CONFIRMATION REQUESTED`	**Meaning:** The switching of RG occurs only if the LCMI is InSv or ISTb. **Action:** None
`RING GENERATORS ARE NOT EQUIPPED`	**Meaning:** The command swrg has been entered for an LCMI that is not equipped with RG. In data Table LCMIINV field RGEQUIP is set to N. **Action:** None
`SWRG PASSED`	**Meaning:** Confirmation of the RG swap is given. **Action:** None
	-end-

trnsl

Function

Use the trnsl command to identify the C-side speech and message links, or P-side links of a posted LCMI. It also displays the status and type of the links.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	c p

Parameters and variables	Description
c	This parameter selects the C-side links for display.
p	This parameter selects the P-side links (if present) for display.

Qualification

Entering the trnsl command without a parameter causes a prompt for the parameter c or p.

Example

Not currently available

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

`LINK <n> <pm> <n> <nn>;CAP;MS;STATUS.<status> ;MSGCOND:.OPN`
`or`
`LINK <n> <pm> <n> <nn>;CAP; S;STATUS.<status> ;MSGCOND:.CLS`
`or`
`LINK <n> <pm> <n> <nn>;CAP; D;STATUS.<status> ;MSGCOND:.SPC`
	Meaning: The display in response to the command string trnsl c or trnsl p is added to the post display, where:
	
	<n> are the discrimination number of the hardware.
	<pm> is a PM type (for example, LCMI).
	<status> is the state of the link, where
	OK means that the link is in service
	MBsy means that the link is manually busy
	SysB means that the link is system busy
	CBsy means that the link is C-side busy
	
	There is no display if P-side links are no present (posted LCMI is HOST).
	
	Action: None

`ALL PSIDE LINKS ARE NOT EQUIPPED`	**Meaning:** An LCMI must be equipped for the command string trnsl p to obtain information on the P-side links to the remote maintenance module (RMM). **Action:** None

tst

Function

Use the tst command to test one or all units of one or all posted LCMIs, or one specified P-side link from a remote LCMI that is in the control position of the posted set. The node under test must be manually or system busied, be in service, or have in-service trouble (ManB, SysB, InSv, ISTb states).

tst command parameters and variables

Command	Parameters and variables		
tst	drwr	*drawer*	[*norelay* / relay]
	link	all	[*norom* / rom]
		ps_link	
	unit	all	
		unit_no	
	pm	*posted*	
		all	
	rex	[on / off / query / now [*wait* / nowait]]	

Parameters and variables	Description
all	This parameter simultaneously tests all of the specified units, LCMIs, or links of the posted set.
drawer	This variable specifies which drawer is to be tested. The range is 0-19.
drwr	This parameter tests one of the drawers.
link	This parameter tests one of the P-side links to an RMM. It is used only if the posted unit or PM is an RLCM.
norom	This default parameter, which is never entered, indicates that a rom test will not be performed because the rom parameter is not entered.
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 LCMI to be removed form the system REX schedule.

tst (continued)

tst command parameters and variables (continued)

Parameters and variables	Description
on	This parameter causes the posted LCMI to be included in the system REX schedule.
posted	This default parameter, which is never entered, indicates that the posted LCMI will be tested because neither a *unit_number* or the all parameter is specified.
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 LCMIs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the poste LCMI.
relay	This parameter performs a BIC relay test (BRT) on a single drawer.
rex	This parameter enables rex testing to be scheduled, unscheduled or performed immediately for the posted LCMI.
rom	This parameter tests the ROM for the posted LCMI or specified unit.
unit	This parameter tests one unit of one or all posted LCMIs.
unit_no	This variable specifies which unit of the posted LCMI 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.

Qualifications

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

- With parameter all, the larger the quantity of LCMIs to be tested concurrently, the longer it takes to complete the testing. Other maintenance activities must wait until completion.
- The LCMI drawer BIC relay test (BRT) cannot be run if the LCMI node is OffL, ManB, SysB, or CBsy. The LCMI must be InSv.

tst (continued)

- The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

WARNING
Possible service interruption
The tst rex now and test rex now nowait will perform a warm swact. A warning to this effect is displayed and confirmation is required to continue the test.

- If conditions needed to perform a REX test are not met, a message will be displayed on the screen or a log output, but REX will not be performed and no changes will be made to the REX maintenance record.
- If REX is terminated by a manual action, a message is displayed or a log is output but no change is made to the REX maintenance record.
- The following list indicates all of the REX failure reasons displayed in the tst rex query command as a result of a failed REX test. Reasons preceded by an asterisk (*) may produce a card list.
  - REX test Failed - Inactive OOS tests
  - REX test Failed - Inactive RTS
  - REX test Failed - Achieving Superframe/Data Sync
  - REX test Failed - W ARM SWACT
  - REX test Failed - Active InSv tests after SW ACT
  - REX test Failed - Inactive OOS tests after SW ACT
  - REX test Failed - Inactive RTS after SW ACT
  - REX test Failed - Achieving Superframe/Data Sync after SW ACT
  - REX test Failed - Terminated due to W ARM SWACT turned off
  - REX test Failed - Terminated due to PreSW ACT Audit failure
  - REX test Failed - Terminated due to tan Autonomous SW ACT

tst (continued)

Examples

The following table provides an examples of the tst command.

Examples of the tst command

Example **Task, response, and explanation**

tst unit 0 ↵
where

0 identifies the unit of the posted LCMI that is to be tested.

Task: Test unit 0 of posted LCMI 02 0.

Response:

```
TST UNIT 0
InSvce Tests Initiated
LCME HOST 02 0 Unit 0 Tst Failed: Line Card Communication
Site Flr RPos Bay_Id  Shf  Description Slot EqPEC
HOST  03  A02  LCE    0-4  LCMI 02 0  00:07   6X58AA
HOST  03  A02  LCE    0-4  LCMI 02 0  03      6X51AA
```

Explanation: The header Slot shows the most likely cause of failure as 00:07; where 00 is the line subgroup identification, and 07 is the NT6X58AA line circuit card identification. The line below displays the next likely cause of failure.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst pm ↵

Task: Test LCMI 02 1.

Response:

```
INSVCE TESTS INITIATED
 LCMI HOST 02 1 UNIT 0 TST FAILED: LINE CARD COMMUNICATION
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT   EQPEC
 HOST  03  A02 LCE 02  03   LCMI 02 1    18:14   LINE
OSVCE TESTS INITIATED
 LCMI HOST 02 1 UNIT 1 TST FAILED: POWER CONVERTER FAILURE
 SITE FLR RPOS BAY_ID  SHF  DESCRIPTION SLOT EQPEC
 HOST  03  A02 LCE 02  17   LCMI 02 1     00   PWRCNV
```

Explanation: The information for unit 0 indicates a line card is absent or not datafilled. The standard circuit location display shows where it is. Unit 1 is ManB or SysB and the out-of-service tests failed because the PWRCNV (6X43) card is faulty. Check the circuit breaker for the PWRCNV card to verify that the card must be replaced.

tst rex query ↵

Task: Display the REX maintenance record for the posted LCMI.

Response:

```
    LCME 0 is included in the REX schedule.
    Lat REX date was Non. 1992/11/23 at 03:06:15; PASSED
    No prior REX failure.
```

Explanation: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.

-continued-

tst (continued)

Examples of the tst command (continued)

Example **Task, response, and explanation**

tst rex now nowait ↵

Task: Perform a manual REX test immediately, but use nowait to suppress

Response:

```
A Warm SwAct will be attempted during the REX sequence
Please confirm (“YES” or “NO”):

>YES
```

Explanation: A warning is given that REX will perform a warm swact. The has chosen to continue the test.

tst drwr 5 relay ↵
where

5 is the number of the drawer for have BRT performed.

Task: Perform BRT test on drawer 5 of the posted LCMI

Response:

```
BIC RELAY tests Initiated
LCMI Host 00 0 Drwr 5 Tst Passed
```

Explanation: BRT test performed and passed.

-end-

tst (continued)

Responses

The following table provides explanations of the 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. 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. **Action:** Check the PECs of the NT6X45 cards in use and ensure that the one with the lowest suffix is the one datafilled in the inventory Table LCMINV.
`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` `LCME <pm_number> TST PASSED.`	**Meaning:** In-service testing is being done on the posted PM which is in the InSv or ISTb state. PASSED appears when testing is satisfactorily completed. **Action:** None
`LCME HOST <nn> <n> TEST PASSED`	**Meaning:** The LCMI drawer passes the REX tests. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`LCME <pm_number> MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LCMI cannot be tested because it is already undergoing maintenance action, where <pm_number> indicates the LCMIs discrimination number. **Action:** With parameter all, the LCMI is bypassed from the posted set of LCMIs only for the duration of the testing.
`LCME <pm_number> REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB LCMI`	**Meaning:** With parameter all, an LCMI in the posted set cannot be tested because it is not in the manually busy (ManB) state. **Action:** The LCMI in the posted set is bypassed by the testing. To proceed with the maintenance, wait until the action on the posted set is completed, then make the LCMI busy with the command bsy before trying the command tst.
`OK`	**Meaning:** The tests pass. **Action:** None

`OOS TESTS INITIATED`
`or`
`OSVCE TEST INITIATED`
	Meaning: Out-of-service testing is being done on the posted PM which is in the ManB or SysB state.
	
	Action: None

`PM IS OFFLINE`	**Meaning:** The LCMI to which an RLCM is connected is offline. Communication cannot occur between the PM, and since the LCMI does the tests on the RLCM, the RLCM cannot be tested. **Action:** None

-continued-

tst (continued)

Responses for the tst 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 testing, where <pm_type> is a PM listed in the PM status codes table in the PM MAP level chapter, <pm_number> is the discrimination number of the PM, and <status> is one of CBSY OFFLINE SYSTEM BUSY The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
<pm_type> <pm_number>, 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 central control. This confirms that the PM load has not been corrupted. **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
SUMMARY: <nnn> PASSED <nnn> NOT SUBMITTED	**Meaning:** With parameter all, a summary is given of the quantity (<nnn>) of LCMs in the posted set that have been successfully tested or that have been bypassed by the testing. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
TEST FAILED SITE FLR RPOS BAY_ID SHF DESCRIPTIONS SLOT EQPEC	**Meaning:** Results of tests are displayed using the standard circuit display. The display contains standard circuit information under the heading EqPEC identifying the hardware PEC of the circuit card suspected of being faulty, shown without the prefix NT. In addition, when more than one card is listed, they are listed in the order of their recommended sequence of replacement. **Action:** None
TEST RESOURCES IN USE NO ACTION TAKEN	**Meaning:** Test facilities are already temporarily in use for other maintenance actions. **Action:** None
THIS OPERATION WILL BE EXECUTED ON <nnn> <pm_type> PLEASE CONFIRM (“YES” OR “NO”):	**Meaning:** A quantity of <nnn> XPMs is to be tested, where <pm_type> is the type of XPM that is included in the posted set. **Action:** Entering YES tests the XPM(s). With YES, that status display of the XPM in the current position of the posted set shows the maintenance flag Mtce while testing is in progress. Entering NO aborts the action.
DTC 0 is included in the REX schedule. REX on DTC 0 has not been performed	**Meaning:** DTC 0 is included in the REX schedule. This LCMI has not been tested (by the system or manually) since the last reload restart; therefore, no other REX maintenance record data is available. This is illustrated below: Current Day: Sunday History: Su M Tu W Th F - **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action

`LCM 0 is included in the REX schedule.`
`Last REX date was Non. 1992/11/23 at 03:06:15; PASSED.`
`No prior REX failure.`
	Meaning: The last time a system or manual REX was performed was Monday, November 23 at 3:06 am. The REX test passed at that time. No REX test has failed since the last reload restart.
	
	Current Day: Sunday
	History: Su M Tu W Th F
	- P
	
	Action: None

`LCM 0 is included in the REX schedule.`
`Last REX date was Non. 1992/11/25 at 03:06:15; FAILED.`
`REX test Failed - Inactive OOS tests after SWACT`
`Site Flr RPos Bay)id Shf Description Slot EqPEc`
`HOST 01 N02 LTE 00 18 LCMI : 000 17 6X62`
`Prior REX failure was TUE. 1992/11/27 at 10:02:47.`
`REX has not passed following prior failure.`
	Meaning: The last time a system or manual REX was performed was Wednesday, November 23 at 3:06 am. 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 most recent time REX failed prior to the REX was on Tuesday, November 27, 1992 at 10:02 am. REX has not passed since the failure on November 27.
	
	Current Day: Sunday
	History: Su M Tu W Th F
	- P F F
	
	Action: Perform further analysis on the card listed to determine exact cause of the REX failure and correct it. The previous history information indicates the REX has failed twice in 2 days without passing in between. For more information concerning the current or prior failures, the craftsperson should consult the logs.

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`Request Invalid` `REX not performed - Node <state>`	**Meaning:** This responses is to a tst rex now nowait command issued for an LCMI in the node <state>, where <state> is any state except InSv. A REX test can only be performed on peripherals which are InSv or ISTb with a unit ISTb reason of "REX failed." All other peripherals states will cause this response. **Action:** Return the LCMI to service before performing the test.

`A Warm SwAct will be attempted during the REX sequence`
`Please confirm ("YES" or "NO"):`
 	
`>YES`
	Meaning: This is response to tst rex now nowait command.
	
	Action: A warning is given that REX will perform a warm swact. The has chosen to continue the test.

`TST DRWR 5 RELAY`
`BRT NOT RUN: Drawer must be ManB prior to test.`
`LCM HOST 00 0 Request Invalid: Drwr 5 is InSv`
	Meaning: The LCMI drawer BRT (BIC Relay Test) cannot be run unless the drawer is ManB. The System does not run the test.
	
	Action: Manually busy the LCMI before running the BRT.

`LCM Host 00 0 Request Invalid: PM is OffL.`	**Meaning:** The LCMI drawer BRT cannot be run if the LCMI node is OffL, ManB, SysB, or CBsy. The test is not run. **Action:** Return the LCMI to service before performing the BRT.

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`BIC RELAY tests Initiated` `LCM Host 00 0 Drwr 5 Tst Passed`	**Meaning:** The LCMI drawer BRT passed. A PM181 LOG is generated. **Action:** None

`BIC RELAY tests Initiated`
`LCM Host 00 0 Drwr 5 Tst Not Run :No line card`
`available`
	Meaning: The LCMI drawer BRT is not run. A PM181 indicating the test was not run and why it is generated.
	
	Action: Datafill a NT6X17 in the drawer and repeat the test.

`BIC RELAY tests initiated`
`LCM Host 00 0 Drwr 5 Tst Failed ;BIC REVERSAL Relay`
`Site Flr RPos Bay_id Shf Description Slot EqPec`
`HOST 00 M16 LCMI 00 00 LCMI 00 0 05:00 6X54`
	Meaning: The LCMI drawer BRT REVERSAL test failed. The drawer is left in the MBsy state. A PM181 information LOG is generated. The node is set to the alarm state ISTb, with the reason , “Drawer Fault.”
	
	Action: Perform on of the following:
	▪ RTS the drawer to an ISTB state.
	- This causes the LCMI node to be set ISTb. QUERYPM FLT command indicates a drawer fault and the drawer that has failed the BRT.
	- The drawer can be returned to service to an ISTb state to enable call processing to continue but there may be problems with ringing in the drawer.
	▪ Replace the NT6X54 and run the test again.

-end-

LCOM level commands

Use the LCOM level of the MAP to perform maintenance functions for an link interface unit (LIU) communication (LCOM) PM type.

Accessing the LCOM level

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

mapci;mtc;pm post lcom ***lcom_num*** ↵

where

lcom_num is the number of the lcom in the range of 0-750

LCOM commands

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

LCOM commands

Command	Page
bsy	L-225
disp	L-229
linetst	L-231
listset	L-233
loadpm	L-235
loopbk	L-237
next	L-239
offl	L-241
post	L-245
querylk	L-249

-continued-

LCOM commands (continued)	
Command	**Page**
querypm	L-253
quit	L-255
rts	L-259
tst	L-263
-end-	

LCOM menu

The following figure shows the LCOM 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
         .     .     .     .     .     .     .     .     .     .


LEVEL                    SysB  ManB  Offl  Cbsy  ISTb  InSv
 0 Quit         PM         2     3     0     0     4     20
 2 Post_        LCOM       2     1     0     0     3     10
 3 Listset
 4              LCOM   120   InSv
 5
 6 Tst_
 7 Bsy_
 8 RTS_
 9 Offl
10 LoadPM_
11 Disp_
12 next
13
14 QueryPM
15 QueryLK
16 LoopBK_
17 LineTst_
18
```

bsy

Function

Use the bsy command to to place the selected LCOMs in a ManB state.

bsy command parameters and variables

Command	Parameters and variables		
bsy	*posted* all	*noforce* force	*wait* nowait

Parameters and variables	Description
all	This parameter causes all PMs in the post set to be busied.
force	This parameter causes the selected LCOMs to be busied without a request for confirmation to bring down services.
noforce	This default parameter, which is never entered, indicates that confirmation will be requested before selected LCOMs are busied, because the force parameter is not entered.
nowait	This parameter allows additional commands to be entered at a MAP without waiting for the bsy command to complete execution.
posted	This default parameter, which is never entered, indicates that only the currently posted LCOM will be busied because the all parameter is not entered.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered at a MAP until the bsy command to completes execution because the nowait parameter is not entered.

Qualifications

None

bsy (continued)

Example

The following table provides an example of the bsy command.

Examples of the bsy command

Example	Task, response, and explanation
bsy ↵	
	Task: Busy the currently posted LCOM.
	Response: `LCOM 30 BSY Passed`
	Explanation: The LCOM is ManB

Responses

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

Responses for the bsy command

MAP output	Meaning and action
`No PM posted`	
	Meaning: There is no LCOM (or any other PM) posted.
	Action: Post the LCOM to be busied and reissue the command.
`LCOM 120 Bsy Passed`	
	Meaning: The posted LCOM is ManB
	Action: None
`LCOM 120 BSY rejected`	
	Meaning: The posted LCOM is not ManB, possibly because the LCOM is in the wrong state. The LCOM cannot be SysB or ManB.
	Action: None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`Request Invalid, LCOM 120 is MANB, no action taken.`	**Meaning:** The LCOM is already ManB **Action:** None
-end-	

disp

Function

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

disp command parameters and variables

Command	Parameters and variables		
disp	state	*pm_state*	lcom

Parameters and variables	Description
lcom	This parameter is the PM node-type parameter for the LCOM.
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

disp (end)

Examples

The following table provides an example of the disp command.

Examples of the disp command

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

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

linetst

Function

Use the linetst command to test specified LCOM connections by sending out random patterns and comparing them when the remote end loops them back.

linetst command parameters and variables

Command	Parameters and variables
linetst	*posted* all

Parameters and variables	Description
all	This parameter causes the tests to be executed for all LCOMs in the post set.
posted	The default parameter, which is never entered, indicates that only the currently posted LCOM will have ists connection tested.

Qualifications

None

Example

The following table provides an example of the linetst command.

Example of the linetst command

Example	Task, response, and explanation	
linetst ↵		
	Task:	Test the connection of the currently posted LCOM.
	Response:	`<No error message displayed>`
	Explanation:	The connection tested and passed.

linetst (end)

Response

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

Responses for the linetst command

MAP output	Meaning and action
<error message>	**Meaning:** Command or test of connection failed. **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 LCOM this variable should be lcom.

Qualifications

None

Example

The following table provides an example of the listset command.

Example of the listset command

Example	Task, response, and explanation	
listset lcom ↵		
	Task:	List all the posted LCOMs
	Response:	`LCOM 0, 6, 12, 18, 24, 30`
	Explanation:	All the posted LCOMs 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
`LCOM 0, 6, 12, 18, 24, 30`	**Meaning:** All posted LCOMs are listed **Action:** None
`No PM posted` `Post set is empty`	**Meaning:** There are no posted LIUs **Action:** None

-end-

loadpm

Function

Use the loadpm command to load the currently posted LCOM.

loadpm command parameters and variables

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

Parameters and variables	Description
all	This parameter causes all PMs in the post set to be busied.
filename	This variable is the LCOM load name and is a string.
nowait	This parameter allows additional commands to be entered at a MAP without waiting for the bsy command to complete execution.
posted	This default parameter, which is never entered, indicates that only the currently posted LCOM will be busied because the all parameter is not entered.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered at a MAP until the bsy command to completes execution because the nowait parameter is not entered.

Qualifications

None

Example

The following table provides an example of the loadpm command.

Examples of the loadpm command

Example	Task, response, and explanation
loadpm dcc33aa ↵	
	Task: Load the currently posted LCOM using load file DCC33AA.
	Response: `LCOM 120 LOADPM Passed`
	Explanation: The LOCM is loaded

loadpm (end)

Responses

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

Responses for the loadpm command

MAP output	Meaning and action
`No PM posted`	**Meaning:** No LCOM (or any other PM) is posted to be loaded. **Action:** None
`LCOM 120 LOADPM Passed`	**Meaning:** The currently posted LCOM is loaded. **Action:** None
`LCOM 120 LOADPM Rejected`	**Meaning:** The LCOM is in the wrong state, the selected LCOM is not datafilled, or the specified load file does not exist. **Action:** None
`Request Invalid, LCOM 120 is OFFL, no action taken.`	**Meaning:** The LCOM must be inservice to be loaded. **Action:** None

loopbk

Function

Use the loopbk command to place the specified LCOM in a line loopback state such that any incoming data is looped back out on the selected line.

loopbk command parameters and variables

Command	Parameters and variables	
loopbk	c e s	[*posted* all]

Parameters and variables	Description
all	This parameter causes all LOCMs in the post set to be effected by the command.
c	This parameter clears line loopback.
e	This parameter enables line loopback.
s	This parameter causes the current loopback status to be displayed.
posted	This default parameter, which is never entered, indicates that only the currently posted LCOM will be effected by the command because the all parameter is not entered.

Qualifications

None

Example

The following table provides an example of the loopbk command.

Example of the loopbk command

Example	Task, response, and explanation	
loopbk c ↵		
	Task:	Clear line loopbacks for currently posted LCOM.
	Response:	`<No error display>`
	Explanation:	Loopbacks for currently posted LCOM are cleared.

loopbk (end)

Response

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

Responses for the loopbk command

MAP output	Meaning and action
`No PM posted`	**Meaning:** No LCOM (or any other PM) is posted. **Action:** None

next

Function

Use the next command to place the next higher PM of the set of posted LCOMs 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.

-end-

Response

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

next

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

-end-

offl

Function

Use the offl command to put LCOMs 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 LCOM'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 LCOM 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

The LCOM must be in the MBsy state before the offl command can be executed.

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 LCOM currently in the control position offline.
	Response: `LCOM 12 OFFL Passed`
	Explanation: LCOM is now offline.

-end-

Responses

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

Responses for the offl command

MAP output	Meaning and action
`Request Invalid - LCOM lcom# is <status>` `No Action Taken`	
	Meaning: The LCOM is in the incorrect state for the offl command to be executed. The LCOM must be in the ManB state.
	Action: None
`LCOM lcom# OFFL Passed`	
	Meaning: The offl command was successful
	Action: None

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`LCOM lcom# OFFL Rejected`	**Meaning:** The command was rejected by LIU resident maintenance. This should never occur. **Action:** The cause of the command rejection must be determined. Escalate to the next higher level of maintenance.

-end-

post

Function

Use the post command to post LCOMs for maintenance.

post command parameters and variables

Command	Parameters and variables
post	allpms *pm_type* *pm_num* *pm_state*

Parameters and variables	Description
allpms	This parameter posts all PMs in the office.
pm)_num	This variable is the discrimination number of the PM to be posted and for the LCOM has a range of 0-750.
pm_type	This variable indicates the PM is to be posted by type, which is one of the types listed at the beginning of the PM level chapter, and for the LCOM is the parameter lcom.
pm_state	This variable indicates the PM is to be posted according to the stat which is one of the following: ▪ sysb ▪ manb ▪ offl ▪ cbsy ▪ istb ▪ insv

Qualifications

None

post (continued)

Example

The following table provides an example of the post command.

Examples of the post command

Example	Task, response, and explanation
post LCOM 31 ↵ *where* 31 Is the discrimination number of the LCOM to be posted.	**Task:** Post LCOM 31 **Response:** 0K **Explanation:** LCOM 31 is posted.

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:** 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-

querylk

Function

Use the querylk command to display link configuration information.

querylk command parameters and variables

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

Qualifications

The querylk command displays the following kinds of link information:

- protocol
- baudrate
- electrical type
- format and size of data
- timer settings
- counter settings
- OM tuple number
- physical parameters
- logical parameters
- certain application parameters (SVCDNA)
- parameters datafilled in table DCOMLINK

Example

The following table provides an example of the querylk command.

Examples of the querylk command

Example	Task, response, and explanation	
querylk ↵		
	Task:	Display link configuration information for the posted LCOM.
	Response:	`<see Responses>`
	Explanation:	Information about the link is displayed.

querylk (continued)

Responses

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

Responses for the querylk command

MAP output	Meaning and action
`<Response as described>`	**Meaning:** Response for Asynchronous links is as follows ▪ LNKPRTCL ASYNC ▪ BAUDRATE A9600 ▪ MODMCTRL FULLMODM ▪ PHYSIDLY 0 ▪ LNKDOWN 25 ▪ STOPBITS S1 ▪ PARITY EVEN ▪ CHARBITS BIT7 ▪ LINEMODE FULL ▪ NCHARTMO 0 ▪ NCHTMOIN 30 ▪ ECHO OFF ▪ FLOWCTRL NOFLOW ▪ NABLEINT 4 ▪ NABLETIM 25 ▪ MAXDATA 0 ▪ ELECTRYP DTE ▪ APLDEFN TTYC ▪ FCHARCNT 0 ▪ LOGIDLY 0 ▪ XPARENT NODLE ▪ REMCTRL MCT ▪ FILLCHAR $ ▪ IEOL I $ ▪ EOM I $ ▪ SOM $ ▪ OEOL $ ▪ SOM $ ▪ OEOL $

-continued-

querylk (continued)

Responses for the querylk command (continued)

MAP output	Meaning and action
	• SOM $ • OEOL $ • OEOM $ • OSOM $ • OM TUPLE= 1 **Action:** None
<Response as described>	**Meaning:** Response for X.25 links is as follows • PROTOCOL X25 • BAUDRATE X56000 • CLKSRCE INTERNAL • ELECSPEC V35 • ELECTYPE DCE • NABLEINT 4 • NABLETIM 25 • FLAGCNT 1 • L2WINDOW 7 • L2MODULO MOD8 • NODETYPE DCE • N2 10 • T1_S 5 • T2_S 3 • T3_S 25 • T4_S 10 • T1_10MS 0 • T2_10MS 0 • T3_10MS 0 • T4_10MS 0 • L3WINDOW 2 • L3MODULO MOD8 • PKTSIZE P128 • THRUPT T2400 • NUMPVCS 5 • SVCS2WAY 0 • SVCSIN 0

-continued-

querylk (end)

Responses for the querylk command (continued)

MAP output	Meaning and action
	▪ SVCSOUT 0 ▪ T20 180 ▪ R20 1 ▪ T21 200 ▪ T22 180 ▪ R22 1 ▪ T23 180 ▪ R23 1 ▪ T25 0 ▪ R25 0 ▪ T26 180 ▪ <item> <Expln> ▪ L3ACK 0 ▪ PVCDEBIT DON ▪ FSTSLCT FSON ▪ NETCNFG PTTOPT ▪ SVCDN ▪ OM TUPLE= 0 **Action:** None
	-end-

querypm

Function

Use the querypm command to display information aobut the posted LCOM, its host LIM and its two FBUS PFI taps. The information displayed reflects the state of the host LMSs, message channels, PFI taps, LCOM locations, ISTB conditions, PFI taps, and linkset information.

querypm command parameters and variables

Command	Parameters and variables
querypm	*disp* flt

Parameters and variables	Description
disp	This default parameter, which is never entered, indicates that a normal querypm display is presented because the flt parameter was not entered.
flt	This parameter causes fault information for the LCOM to be displayed.

Qualifications

None

Example

The following table provides an example of the querypm command.

Examples of the querypm command

Example	Task, response, and explanation
querypm ↵	

Task: Display information about the posted LCOM.

Response:

```
PM type:  LCOM    PM no.: 2  States: Offl
No configured applications
LIM: 2 Shelf: 3 Sote:           LCOM FTA: 4244
1000
Default Load: DCX33AA
Running Load: DCX33AA
<typical response>
```

Explanation: Typical response for querypm command for LCOM.

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: LCOM PM no.: 2 States: Offl No configured applications LIM: 2 Shelf: 3 Sote: LCOM FTA: 4244 1000 Default Load: DCX33AA Running Load: DCX33AA Potential service affecting conditions: config Data Mismatch Msg Channel #0 NA Msg Channel #1 NA TAP #0 00S/NA TAP #1 00S/NA LMS Slots: Offl Offl Auditing: No No Msg Channels : NA NA Taps: 1 M(NA) M(NA)	**Meaning:** Typical response to querypm command for LCOM. **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 LCOM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LCOM 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 LCOM 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 LCOM 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 LCOM 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 LCOM 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 run diagnostics and return to service and out-of-service LCOM.

rts command parameters and variables

Command	Parameters and variables
rts	*posted* / all [*noforce* / force] [*wait* / nowait]

Parameters and variables	Description
all	This parameter causes all posted LCOMs to be returned to service.
force	This parameter causes LCOM inaccessibility to be ignored.
noforce	This default parameter, which is never entered, indicates that LCOMs that are not accessible will not be returned to service because the force parameter was not entered.
nowait	This parameter allows other commands to be entered at a MAP before the rts command has completed executing.
posted	This default parameter, which is never entered, indicates that only the posted LCOM in the control position will be returned to service 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 rts command has completed executing because the nowait parameter was not entered.

Qualifications

The LCOM will not be returned to service if the out-of-service diagnostics do not pass.

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 LCOM now in the control position to service.
	Response: `LCOM 12 RTS passed`
	Explanation: The LCOM 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 - LCOM lcom# is status` `No Action Taken`	
	Meaning: The LCOM is in the incorrect state for the RTS command to be executed. The LCOM must be in one of the following states: ▪ Manb ▪ SysB
	Action: None

`LCOM lcom# 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.

-continued-

rts (end)

Responses for the rts command (continued)

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

-end-

tst

Function

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

tst command parameters and variables

Command	Parameters and variables
tst	*posted* all

Parameters and variables	Description
all	This parameter causes all posted LCOM's to be tested.
posted	This default parameter, which is never entered, indicates that only the posted LCOM in the control position will be tested because the all parameter was not entered.

Qualifications

The specific diagnostics run will be determined by the state of the LCOM, that is in- service tests, or out-of-service tests.

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 posted LCOM currently in the control position.
	Response:	`LCOM 12 TST passed`
	Explanation:	The test of the posted LCOM currently in the control position passed

tst (end)

Response

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

Response for the tst command

MAP output	Meaning and action
`Request Invalid - LCOM lcom# is status` `No Action Taken`	**Meaning:** The LCOM is in the incorrect state for the tst command to be executed. The LCOM must be in one of the following states: ▪ ManB ▪ Insv ▪ Istb **Action:** None
`LIU lcom# failed - failure reason - circuit location display`	**Meaning:** The LCOM failed the test and the details of the failure are displayed. A cardlist may be displayed. **Action:** Go to the appropriate alarm clearing or card replacement procedure to correct the indicated problem.
`LCOM lcom# TST passed`	**Meaning:** The LCOM is tested and passes all tests. **Action:** None

LGC level commands

Use the LGC level of the MAP to perform maintenance functions for a line group controller (LGC).

Accessing the LGC level

To access the LGC level, enter the following from the CI (Command Interpreter) level:

mapci:mtc;post lgc ***lgc_no*** ↵

where

lgc_no is the number of the lgc to be posted

LGC commands

The commands available at the LGC 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.

LGC commands (continued)

Command	Page
abtk	L-269
bsy	L-271
disp	L-279
listset	L-287
loadnotest	L-291
loadpm	L-293
next	L-311
offl	L-313
perform	L-317
pmreset	L-323

-continued-

LGC commands (continued)	
Command	**Page**
post	L-327
querypm	L-331
quit	L-345
recover	L-349
rts	L-353
swact	L-367
trnsl	L-373
tst	L-377
warmswact	L-395
xpmlogs	L-399
xpmreload	L-401
xpmreset	L-403
-end-	

LGC menu

The following figure shows the LGC 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

LGC                     SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit          PM       4      0     10      3      3     130
 2 Post          LGC      0      0      0      1      1      40
 3 ListSet
 4               LTC  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
17 Perform
18
```

Hidden commands

```
abtk                warmswact
loadnotest          xpmlogs
pmreset             xpmreload
recover             xpmreset
```

LGC status codes

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

Status codes LGC 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 LGC 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 LGC. The state of the LGC 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 LGC
	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 LGC posting is unaffected.

`ABORTING MAINTENANCE ON THIS PM WILL AFFECT`
`MAINTENANCE ON OTHER PMS.`
`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	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 line group controllers (LGC) to ManB. The bsy command can be applied to one or all units, the whole LGC or all LGCs, or one P-side link of one LGC 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 LGC 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 LGC 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 LGC(s).
posted	This default parameter, which is never entered, indicates that only the currently posted LGC 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 LGC(s).
unit_no	This variable specifies which unit of the posted LGC(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 LGC **Response:** OK **Explanation:** The posted LGC is posted.
bsy active ↵	
	Task: Busy the active unit of the LGC. **Response:** A Warm SwAct will be performed please confirm (“YES”, “Y”, “NO”, OR “N”): **Explanation:** Typical response when active side of LGC 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

```
LGC 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
`LGC 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
`LGC 2 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGC cannot be busied because it is already undergoing maintenance action. **Action:** When the all parameter is entered, the LGC is bypassed from the posted set of LGCs only for the duration of the busying.
`LTC nn UNIT u BSY PASSED`	**Meaning:** The specified LGC 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 LGCs only for the duration of the busying. **Action:** None
THIS ACTION MAY CAUSE SWACT PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**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”, “Y”, “NO”, OR “N”)	**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-

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", "Y", "NO", OR "N")	**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 LGCS PLEASE CONFIRM ("YES", "Y", "NO", OR "N")	**Meaning:** A quantity of nnn LGCs 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 LGC 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 LGC 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
diaghist	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 LGCs the PM type is lgc.
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

- 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 lgc ↵

Task: Display all busy LGCs

Response:

```
Bsy LGC 0, 1
```

Explanation: There is one busy LGC, 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
                  .
                  .
                  .
LGC 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. LGC 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> LGC: NONE or <pm_state> LGC 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 LGC, 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-

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 LGCs. 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] [*actfile* / *l_name* / backup] [*noforce* / force] [*wait* / nowait] [*posted* / all [*defile* / *r_name*]]

Parameters and variables	Description
actfile	The default parameter, which is never entered, indicated that the load file will be the one specified in field ACTFILE of table PMLOADS, because neither a file name or backup were specified.
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.
backup	This parameter specifies that the backup file specified in field BKPFILE of table PMLOADS is the loadfile to be used.
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 LGC.
data	This parameter selects the load which consists of the static data and execs, but not the basic LGC software. Static data and tables define the configuration of the LGC and subtending PMs. When loading static data into the PM the NT6X78 CLASS Modem Resource (CMR) card in the LGC 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.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
exec	This parameter selects the load mode to be execs only. Execs are sets of instructions executed by the LGC in response to a CC request or DMS action. Execs behave like mini-programs to handle call processing.
l_name	This variable is the name of the CC data file for the posted LGCs. 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 LGC 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 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 LGC 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 LGCs.
posted	This default parameter, which is never entered, indicates that only the posted LGC 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 LGCs.

-continued-

loadpm (continued)

loadpm command parameters and variables (continued)

Parameters and variables	Description
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.
unit_no	This variable specified which unit of the posted LGC 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 LGC 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 LGC 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:

loadpm (continued)

- 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.

- 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 LGC to be loaded
	Task: Load the peripheral program files into the processor of LGC 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: The display indicates the loading is taking place.

loadpm pm cc full backup ↵	**Task:** Load the posted pm with the backup loadfile specified in table PMLOADS. **Response:** `Not currently available.` **Explanation:** Not currently available.

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
`LGC pm_number LOADED`	**Meaning:** The PM has been successfully loaded. **Action:** None
`LGC pm_number UNIT u LOAD FILE file_name IS NOT AVAILABLE`	**Meaning:** The parameter has already 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
`LGC 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.

`LGC 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.

`LGC 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 LGC 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.
`LGC 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
`LGC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGC cannot be loaded because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the LGC. **Action:** With parameter all, the LGC is bypassed from the posted set of LGCs only for the duration of the loading.
`LGC 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.
`LGC 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.
`LGC 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 LGC PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**Meaning:** A quantity of nnn LGCs in the posted set is to be loaded. **Action:** Entering Yes loads the LGC(s) Entering No aborts the action. **Action:** With YES, the status display of the LGC 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.
`LGC 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 LGC number Y is the unit number of the LGC. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LGC X Unit Y LoadPM Aborted` `Reason: ABTK from user <username>`	**Meaning:** The loading process has been aborted by another user, where X is the LGC number Y is the unit number of the LGC <username> is the name of the user submitting the abtk command. **Action:** Investigate the reason the other user aborted the loading.

`LGC 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

`LGC 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 LGC number Y is the unit number of the LGC. **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 LGC. Ensure that the CMR card is in the correct slot as specified by xx.
`LGC X Unit Y CMR card must be ManB`	**Meaning:** The CMR card must be manually busy to be loaded where X is the LGC number Y is the unit number of the LGC. **Action:** Busy the CMR card with the bsy command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LGC X Unit Y  Unit not InSv`	**Meaning:** The LGC must be in service, either InSv or IsTb for the CMR to be loaded, where X is the LGC number Y is the unit number of the LGC. **Action:** Ensure the LGC is in service.
`LGC X Unit Y  LoadPM failed.` `<reason>`	**Meaning:** The PM has a failure which is indicated where X is the LGC number Y is the unit number of the LGC <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 LGC 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
`LGC X Unit Y  No action taken - Mtce in Progress`	**Meaning:** The LGC was loading the CMR when an attempt was made to bsy the lgc unit. The loading of the CMR continues. This is an output message, where X is the LGC number Y is the unit number of the LGC. **Action:** None
`LGC X  Request Invalid` `Mtce in progress on either or both units`	**Meaning:** The LGC 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 LGCs 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 LGC or LGCs 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 LGC 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 LGC 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 LGC 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 OFFL SYSB The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`LGC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGC cannot be made off-line because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the LGC. **Action:** With parameter all, the LGC is bypassed from the posted set of LGCs only for the duration of being made offline.
`LGC pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an LGC in the posted set cannot be made off-line because it is not in the manually busy state. **Action:** The LGC 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 LGC 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 LGCS PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**Meaning:** A quantity of *nnn* LGCs in the posted set is to be made off-line. **Action:** Entering YES makes the LGCs off-line. Entering NO aborts the action. **Action:** With YES, the status display of the LGC 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 LGC.
	Response: LOAD NAME: NLG35CN STATUS: REASON: LOGS: TIME:
	Explanation: The PERFORM level is accessed.

-end-

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 LGC 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 LGC.
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 LGC.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	
	Explanation: The resetting of an LGC 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
LGC <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 LGC is in the ESA mode, where <pm_number> is the discrimination number of the LGC and <n> is the LGC unit number (0 or 1). The system attempts to reset the LGC 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”, “Y”, “NO”, OR “N”)	**Meaning:** The resetting of an LGC 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 LGC 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 LGC. 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 LGC 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 lgc 8 ↵
where
 	
8 is the descrimination number of the lgc to be posted.
	Task: Post LGC 8.
	
	Response:
	`LGC  8 InSv  Links_OOS: CSide 0, PSide 0`
	`Unit0:  Act   InSv`
	`Unit1:  Inact InSv`
	
	Explanation: LGC 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 LGC.

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 LGC 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 LGC.

	Response:
	`PM Type: LGC PM No.: 0 PM Int. No.: 0 Node_no.:31`
	`PMs Equipped: 51 Loadname: NLG36BL`
	`WARM SWACT is supported and available.`
	`LGC 0 is included in the REX schedule.`
	`REX on LGC 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 LGC : 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”, “Y”, “NO”, OR “N”):`	**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 LGC 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 LGC 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 LGC 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 l_name 2	is the name of the load file for the unit, 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 LGC, 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 LGC level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LGC 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 LGC 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 LGC 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 LGC 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 LGC 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 LGCs 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 LGC 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

The following table provides an example of the recover command.

Example of the recover command

Example	Task, response, and explanation
recover ↵	
	Task: Reload and return to service the posted LGC.
	Response: `LGC 0 PASSED`
	Explanation: The posted LGC has been reloaded and returned to service.

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

-continued-

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action
`<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 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 LGCs in a posted set, or one P-side link of the LGC 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	unit *unit_no* [*datasync* / nodatasync] [*notcmr* / cmr] [*noforce* / force] [*wait* / nowait] [*posted* / all] pm active inactive [*datasync* / nodatasync] link *ps_link* sysb

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.
cmr	This parameter returns to service the class modem resource (CMR) card.
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 LGC and one of its associated LCMs.
notcmr	This default parameter, which is never entered, indicates that the CMR card is not being returned to service because the cmr parameter is not entered.
nodatasync	This parameter causes static data to be sent to the inactive unit, but the PM will not attempt data sync after RTS.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
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 rts command is completed.
pm	This parameter returns to service both units of one or all posted LGCs.
posted	This default parameter, which is never entered, indicates that only the currently posted LGC 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 LGCs.
unit_no	This variable specifies which unit of the posted LGCs 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 LGC 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.

rts (continued)

- 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 LGC 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.

rts (continued)

Example

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation
rts pm ↵	
	Task: Return the posted LGC to service.
	Response: OK
	Explanation: The posted LGC has been returned to service.

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.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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, LGCs 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
`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

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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
`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.
`LGC pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGC cannot be returned to service because it is already undergoing maintenance action, where pm_number is the discrimination number of the LGC. **Action:** SYSTEM: With parameter all, the LGC is bypassed from the posted set of XPMs only for the duration of the return to service.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`LGC pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With the all parameter, an LGC in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** SYSTEM: The LGC 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 LGC with the bsy command before trying the command rts.
`LGC pm_number UNIT u RTS PASSED`	**Meaning:** The tests are confirmed, where pm_number and u echo the discrimination numbers of the LGC and its unit. **Action:** SYSTEM: The LGC or unit is made InSv.
`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

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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 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 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 LGC 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 NT6X45 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 LGC 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 LGC PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**Meaning:** A quantity of nnn LGCs in the posted set is to be returned to service. **Action:** Enter YES to test, reload, and then return the LGC(s) to service. Enter NO to abort the action.
WARNING UNIT u MAY NOT HAVE A VALID LOAD	**Meaning:** A unit of a PM of node-type LGC 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.

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
STATIC DATA WILL BE SENT. DATA SYNC WILL NOT BE ATTEMPTED AFTER THE INACTIVE UNIT IS RTSED. PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”):	**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-

Function

Use the swact command to cause the posted LGCs 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 LGCs (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 LGC 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 LGC 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 LGC is not ManB, confirmation YES or NO is required. If the LGC 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 LGC.
	
	Response:
	`A Warm SwAct will be performed after data sync of active terminals.`
	`Please confirm (“YES”, “Y”, “NO”, or “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 LGC immediately, and perform OOS diagnostics for the unit being returned to service.
	
	Response:
	`A Warm SwAct will immediately be performed. and 1 active terminals may be affected.`
	`Please confirm (“YES”, “Y”, “NO”, or “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 LGC.
	
	Response:
	`A warm SwAct will be performed after data sync of active terminals.`
	`Overriding the SwAct Controller.`
	`Please confirm (“YES”, “Y”, “NO”, or “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`
`This action will take this PM`
`temporarily out of service.`
`This PM has at least one PSQ link`
`and 0 active terminals may be affected.`
`Please confirm (“YES”, “Y”, “NO”, OR “N”):`
	Meaning: The LGC is not ManB and the unlisted menu command, warmswact, 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
	
	`LGC 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”, or “N”):`
	Meaning: A swact command has been entered. When y is entered, a warm SwAct is executed unless refused by the SwAct controller.
	
	Action: If YES is entered the response is
	
	`LGC pm_number SwAct Passed`
	
	which indicates SwAct is successful.

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action

`A Warm SwAct will immediately be performed.`
`1 active terminals may be affected.`
`Please confirm (“YES”, “Y”, “NO”, or “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: If YES is entered the response is
	
	`LGC pm_number SwAct Passed`
	
	which indicates SwAct is successful.

`A warm SwAct will be performed after data`
`sync of active terminals.`
`Overriding the Swact Controller.`
`Please confirm (“YES”, “Y”, “NO”, or “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”, “Y”, “NO”, OR “N”):`
	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.

`LGC 2 A WARM SWACT WILL BE PERFORMED`	**Meaning:** LGC 2 is to have the activity of its units switched. Calls in progress are allowed to complete. **Action:** None

-continued-

swact (continued)

Responses for the swact command (continued)

MAP output	Meaning and action
`LGC 2 SWACT PASSED`	**Meaning:** The activity of the two LGC 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 SwAct cannot occur. **Action:** The activity display for the XPM(s) is blank.

-continued-

swact (end)

Responses for the swact command (continued)

MAP output	Meaning and action

`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 LGC 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	[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.
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 LGC.

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 LGC.

	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. LGC-0 has been selected.

trnsl p ↵ *where* p	identifies the P-side links of the posted LGC.

	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. LGC-0 has been selected.

Response

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

Response for the trnsl command

MAP output	Meaning and action
`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

tst

Function

Use the tst command to test one or all units of one or all posted LGCs, 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 LGC.
link	This parameter applies the test to a specified P-side link between the posted LGC 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 LGC to be removed form the system REX schedule.
on	This parameter causes the posted LGC 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 0-63.
pm	This parameter tests both units of one or all posted LGCs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the posted LGC.

-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 LGC.
rom	This parameter tests the ROM for the posted LGC or specified unit.
unit	This parameter tests one unit of the posted LGC and must be followed by the unit number.
unit_no	This variable specifies which unit of the posted LGC 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 LGC 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.

- 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 LGC to be tested.	**Task:** Test unit 0 of the posted LGC. **Response:** `Tst Passed` **Explanation:** Test of unit 0 of the posted LGC passed.
bsy unit 0 cmr ↵ **tst unit 0 cmr** ↵ *where* 0 is the unit of the LGC to be tested.	**Task:** Test the CMR card in unit 0 of the posted LGC. **Response:** `CMR Tst Passes` **Explanation:** Test the CMR card in unit 0 of the posted LGC 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”, “Y”, “NO”, OR “N”) 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` `LGC 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**

```
LGC 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   LGC : 00    17   6X62
No prior REX failure.
```

Meaning: In response to the command string tst rex query, information is displayed showing that LGC 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**

```
LGC 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 LGC 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
`LGC 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

`LGC 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
`LGC 0 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGC cannot be tested because it is already undergoing maintenance action. **Action:** SYSTEM: With parameter all, the LGC is bypassed from the posted set of XPMs only for the duration of the testing.
`LGC 0 REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an LGC in the posted set cannot be tested because it is not in the manually busy state. The LGC 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 LGC 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 LGC n UNIT n TST PASSED	**Meaning:** One unit of the LGC 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”, “Y”, “NO”, OR “N”):	**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”, “Y”, “NO”, OR “N”):	**Meaning:** A quantity of nnn LGCs in the posted set is to be tested. **Action:** Entering YES tests the LGC(s). Entering NO aborts the action. With YES, the status display of the LGC 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 LGC.

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 LGC 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 (continued)

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 LGC. **Response:** `Warm SwAct turned ON for LGC 22 by WARMSWACT command` **Explanation:** Warm SwAct is enabled for LGC 22.

warmswact on all noprompt ↵	**Task:** Enable warm SwAct for all LGCs in the posted set.
	
	Response:
	`**WARNING** Inactive units of PMs in the current posted set may temporarilyt be removed from service`
	`This operation will be executed on <n> LGC`
	`Please confirm (“YES”, “Y”, “NO”, OR “N”):`
	
	Explanation: This warning results form the use of the noprompt parameter.

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 turned ON for LGC 22 by WARMSWACT command`	**Meaning:** This is response to a successful warmswact on command. **Action:** None

-continued-

warmswact (end)

Response for the warmswact command (continued)

MAP output	Meaning and action
`Warm SwAct turned OFF for LGC 0 by WARMSWACT command`	**Meaning:** This is the response to a warmswact off command. **Action:** None

`**WARNING** Inactive units of PMs in the current posted set may temporarilyt be removed from service`
`This operation will be executed on <n> LGC`
`Please confirm (“YES”, “Y”, “NO”, OR “N”):`
	Meaning: This is the warning and rewponse to a warmswact on all noprompt command.
	
	Action: Type yes or y to continue executing the command; type no or n to abort the command.

`This operation will be executed on <n> LGC` `Please confirm (“YES”, “Y”, “NO”, OR “N”):`	**Meaning:** This is the response to a warmswact on all command. **Action:** Type yes or y to continue executing the command; type no or n to abort the command.

-end-

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 LGC

Response:
```
LGC 0 unit 0   xpmlogs mtc Passed
LGC 0 unit 1   xpmlogs mtc Passed
```

Explanation: Log reports for the posted LGC 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
`LGC 0 unit 0   xpmlogs mtc Passed` `LGC 0 unit 1   xpmlogs mtc Passed`	**Meaning:** The response occurs in pairs, one for each LGC unit for either the xpmlogs on or xpmlogs off command. **Action:** None

`Logs from xpm are disabled`
`or`
`Logs from xpm are enabled`
	Meaning: The status of xpmlogs is given in the display in response to the xpmlogs query command.
	
	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* pm

Parameters and variables	Description
file_name	This variable is the name of the segment reload file.
pm	This parameter indicates that both units of the posted LGC are to be reloaded.
pm_type	This parameter identifies the PM type targeted for segment reloading, which in this case is the LGC. The *pm_type* will be lgc.
unit	This parameter indicates that a unit is to be specified.
unit_no	This variable specifies the unit of the LGC to be loaded and has a range of 0-1.

Qualifications

None

Examples

Not currently available

Responses

Not currently available

xpmreset

Function

Use the xpmreset command to reinitialize a posted LGC 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 LGC.
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 LGC.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	
	Explanation: The resetting of an LGC 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-

LGCI level commands

Use the LGCI level of the MAP to perform maintenance functions for a line group controller ISDN (LGCI).

Accessing the LGCI level

To access the LGCI level, enter the following from the CI (Command Interpreter) level:

mapci:mtc;post lgci ***lgci_no*** ↵

where

lgci_no is the number of the LGCI to be posted.

LGCI commands

The commands available at the LGCI 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.

LGCI commands (continued)

Command	Page
abtk	L-413
bsy	L-415
dch	L-421
disp	L-423
isg	L-425
listset	L-427
loadnotest	L-431
loadpm	L-433
next	L-451
offl	L-453

-continued-

LGCI commands (continued)

-end-

LGCI menu

The following figure shows the LGCI 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

LGCI                    SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit          PM       4      0     10      3      3     130
 2 Post          LGCI     0      0      0      1      1      40
 3 ListSet
 4               LGCI  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
17 Perform
18 ISG
```

Hidden commands

```
abtk                warmswact
loadnotest          xpmlogs
pmreset             xpmreload
recover             xpmreset
```

LGCI status codes

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

Status codes LGCI 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 LGCI 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 LGCI. The state of the LGCI 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 LGCI
	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 LGCI posting is unaffected.

`ABORTING MAINTENANCE ON THIS PM WILL AFFECT`
`MAINTENANCE ON OTHER PMS.`
`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	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 line group controllers ISDN (LGCI) to ManB. The bsy command can be applied to one or all units, the whole LGCI or all LGCIs, or one P-side link of one LGCI 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 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 LGCI 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 LGCIs.

-continued-

bsy

bsy command parameters and variables (continued)

Parameters and variables	Description
posted	This default parameter, which is never entered, indicates that only the currently posted LGCI 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 LGCI(s).
unit_no	This variable specifies which unit of the posted LGCI(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 LGCI **Response:** 0K **Explanation:** The posted LGCI is posted.

-continued-

Examples of the bsy command (continued)

Example	Task, response, and explanation
bsy active ↵	
	Task: Busy the active unit of the LGCI. **Response:** `A Warm SwAct will be performed` `please confirm (“YES”, “Y”, “NO”, OR “N”):` **Explanation:** Typical response when active side of LGCI is busied.

-end-

bsy

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.
`LGCI 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
`LGCI 2 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGCI cannot be busied because it is already undergoing maintenance action. **Action:** The LGCI is bypassed from the posted set of LGCIs only for the duration of the busying when the parameter all is executed.
`LTC nn UNIT u BSY PASSED`	**Meaning:** The specified LGCI 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-

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 LGCIs only for the duration of the busying. **Action:** None
THIS ACTION MAY CAUSE SWACT PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**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”, “Y”, “NO”, OR “N”)	**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”, “Y”, “NO”, OR “N”)	**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 LGCIS PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”):	**Meaning:** A quantity of nnn LGCIs 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 LGCI 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 (end)

Function

Use the dch command to enter the ISDN DCH level of the MAP to post and maintain the DCHs associated with any LGCI.

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 LGCI 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 LGCIs the PM type is LGCI.
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 lgci ↵	
	Task: Display all busy LGCIs
	Response: `Bsy LGCI 0, 1`
	Explanation: There is one busy LGCI, 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> LGCI: NONE`
or
`<pm_state> LGCI 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

isg (end)

Function

Use the isg command to access the ISG level of the MAP for the posted LGCI.

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 (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 LGCIs. 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 LGCI.
data	This parameter selects the load which consists of the static data and execs, but not the basic LGCI software. Static data and tables define the configuration of the LGCI and subtending PMs. When loading static data into the PM the NT6X78 CLASS Modem Resource (CMR) card in the LGCI 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 LGCI 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 LGCIs. 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 LGCI 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 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 LGCI 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 LGCIs.
posted	This default parameter, which is never entered, indicates that only the posted LGCI 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 LGCIs.
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 LGCI 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 LGCI 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 LGCI 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 LGCI to be loaded
	Task: Load the peripheral program files into the processor of of LGCI 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: The message indicates the loading is taking place.

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
`LGCI pm_number LOADED`	**Meaning:** The PM has been successfully loaded. **Action:** None
`LGCI pm_number UNIT u LOAD FILE file_name IS NOT AVAILABLE`	**Meaning:** The parameter has already 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
`LGCI 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.

`LGCI 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.

`LGCI 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 LGCI 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.
`LGCI 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
`LGCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGCI cannot be loaded because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the LGCI. **Action:** With parameter all, the LGCI is bypassed from the posted set of LGCIs only for the duration of the loading.
`LGCI 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.
`LGCI 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.
`LGCI 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 LGCI PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)	**Meaning:** A quantity of nnn LGCIs in the posted set is to be loaded. **Action:** Entering Yes loads the LGCI(s) Entering No aborts the action. **Action:** With YES, the status display of the LGCI 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.
`LGCI 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 LGCI number Y is the unit number of the LGCI. **Action:** None

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LGCI X Unit Y LoadPM Aborted` `Reason: ABTK from user <username>`	**Meaning:** The loading process has been aborted by another user, where X is the LGCI number Y is the unit number of the LGCI <username> is the name of the user submitting the abtk command. **Action:** Investigate the reason the other user aborted the loading.

`LGCI 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

`LGCI 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 LGCI number Y is the unit number of the LGCI. **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 LGCI. Ensure that the CMR card is in the correct slot as specified by xx.
`LGCI X Unit Y CMR card must be ManB`	**Meaning:** The CMR card must be manually busy to be loaded where X is the LGCI number Y is the unit number of the LGCI. **Action:** Busy the CMR card with the bsy command.

-continued-

loadpm (continued)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LGCI X Unit Y  Unit not InSv`	**Meaning:** The LGCI must be in service, either InSv or IsTb for the CMR to be loaded, where X is the LGCI number Y is the unit number of the LGCI. **Action:** Ensure the LGCI is in service.
`LGCI X Unit Y  LoadPM failed.` `  <reason>`	**Meaning:** The PM has a failure which is indicated where X is the LGCI number Y is the unit number of the LGCI <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 LGCI 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
`LGCI X Unit Y  No action taken - Mtce in Progress`	**Meaning:** The LGCI was loading the CMR when an attempt was made to bsy the lgci unit. The loading of the CMR continues. This is an output message, where X is the LGCI number Y is the unit number of the LGCI. **Action:** None
`LGCI X  Request Invalid` `Mtce in progress on either or both units`	**Meaning:** The LGCI 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 LGCIs 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 LGCI or LGCIs 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 LGCI 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 LGCI 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 LGCI 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 OFFL SYSB The PM must be ManB. ***Note:*** For some PM types, REQUEST INVALID appears before NO ACTION TAKEN. **Action:** None
`LGCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGCI cannot be made off-line because it is already undergoing maintenance action, where *pm_number* is the discrimination number of the LGCI. **Action:** With parameter all, the LGCI is bypassed from the posted set of LGCIs only for the duration of being made offline.
`LGCI pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With parameter all, an LGCI in the posted set cannot be made off-line because it is not in the manually busy state. **Action:** The LGCI 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 LGCI 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 LGCIS PLEASE CONFIRM ("YES", "Y", "NO", OR "N")	**Meaning:** A quantity of *nnn* LGCIs in the posted set is to be made off-line. **Action:** Entering YES makes the LGCIs off-line. Entering NO aborts the action. **Action:** With YES, the status display of the LGCI 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 LGCI.

	Response:
	`LOAD NAME: NLG35CN`
	`STATUS: REASON: LOGS: TIME:`

	Explanation: The PERFORM level is accessed.

-end-

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 LGCI 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 LGCI.
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 LGCI.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	
	Explanation: The resetting of an LGCI 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
LGCI <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 LGCI is in the ESA mode, where <pm_number> is the discrimination number of the LGCI and <n> is the LGCI unit number (0 or 1). The system attempts to reset the LGCI 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”, “Y”, “NO”, OR “N”)	**Meaning:** The resetting of an LGCI 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 LGCI 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 LGCI. 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 LGCI 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 lgci 8 ↵
where
 	
8 is the descrimination number of the lgci to be posted.
	Task: Post LGCI 8.
	
	Response:
	`LGCI  8 InSv  Links_OOS: CSide 0, PSide 0`
	`Unit0:  Act   InSv`
	`Unit1:  Inact InSv`
	
	Explanation: LGCI 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 LGCI.

querypm command parameters and variables

Command	Parameters and variables
querypm	cntrs flt

Parameters and variables	Description
cntrs	This parameter displays the contents of the LGCI 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

- 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 LGCI.
	
	Response:
	`PM Type: LGCI PM No.: 0 PM Int. No.: 0 Node_no.:31`
	`PMs Equipped: 51 Loadname: NLG36BL`
	`WARM SWACT is supported and available.`
	`LGCI 0 is included in the REX schedule.`
	`REX on LGCI 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 LGCI : 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.

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 LGCI 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

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 LGCI 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-

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 LGCI 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

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

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

-continued-

querypm (end)

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

-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 LGCI level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LGCI 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 LGCI 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 LGCI 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 LGCI 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 LGCI 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 LGCIs 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 LGCI 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

The following table provides an example of the recover command.

Example of the recover command

Example	Task, response, and explanation
recover ↵	
	Task: Reload and return to service the posted LGC.
	Response: `LGC 0 PASSED`
	Explanation: The posted LGC has been reloaded and returned to service.

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

-continued-

recover (end)

Responses for the recover command (continued)

MAP output	Meaning and action
`<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 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 LGCIs in a posted set, or one P-side link of the LGCI 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	unit *unit_no* [*datasync* / nodatasync] [*notcmr* / cmr] [*noforce* / force] [*wait* / nowait] [*posted* / all] pm active inactive [*datasync* / nodatasync] link *ps_link* sysb

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.
cmr	This parameter returns to service the class modem resource (CMR) card.
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 LGC and one of its associated LCMs.
notcmr	This default parameter, which is never entered, indicates that the CMR card is not being returned to service because the cmr parameter is not entered.
nodatasync	This parameter causes static data to be sent to the inactive unit, but the PM will not attempt data sync after RTS.

-continued-

rts (continued)

rts command parameters and variables (continued)

Parameters and variables	Description
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 rts command is completed.
pm	This parameter returns to service both units of one or all posted LGCs.
posted	This default parameter, which is never entered, indicates that only the currently posted LGC 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 LGCs.
unit_no	This variable specifies which unit of the posted LGCs 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 LGCI 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 LGCI 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.

rts (continued)

Examples

The following table provides an example of the rts command.

Example of the rts command

Example	Task, response, and explanation	
rts pm ↵		
	Task:	Return the posted LGC to service.
	Response:	0K
	Explanation:	The posted LGC has been returned to service.

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.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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, LGCIs 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
`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

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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
`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.
`LGCI pm_number MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGCI cannot be returned to service because it is already undergoing maintenance action, where pm_number is the discrimination number of the LGCI. **Action:** SYSTEM: With parameter all, the LGCI is bypassed from the posted set of XPMs only for the duration of the return to service.

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`LGCI pm_number REQUEST INVALID` `MANUAL ACTION ONLY VALID ON MANB PM`	**Meaning:** With the all parameter, an LGCI in the posted set cannot be returned to service because it is not in the manually busy state. **Action:** SYSTEM: The LGCI 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 LGCI with the bsy command before trying the command rts.
`LGCI pm_number UNIT u RTS PASSED`	**Meaning:** The tests are confirmed, where pm_number and u echo the discrimination numbers of the LGCI and its unit. **Action:** SYSTEM: The LGCI or unit is made InSv.
`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

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`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 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 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 LGCI 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 NT6X45 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 LGCI 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 LGCI PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”):	**Meaning:** A quantity of nnn LGCIs in the posted set is to be returned to service. **Action:** Enter YES to test, reload, and then return the LGCI(s) to service. Enter NO to abort the action.
WARNING UNIT u MAY NOT HAVE A VALID LOAD	**Meaning:** A unit of a PM of node-type LGCI 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.

-continued-

Responses for the rts command (continued)

MAP output	Meaning and action
STATIC DATA WILL BE SENT. DATA SYNC WILL NOT BE ATTEMPTED AFTER THE INACTIVE UNIT IS RTSED. PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”):	**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 LGCIs 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 LGCIs (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 LGCI 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 LGCI 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 LGCI is not ManB confirmation, yes or no, is required. If the LGCI 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

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 LGCI.
	
	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”, “Y”, “NO”, OR “N”):`	**Meaning:** The LGCI 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 `LGCI pm_number SWACT PASSED` which indicates that SwAct is executed.

-continued-

swact (end)

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”, “Y”, “NO”, OR “N”):	**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.
LGCI 2 A WARM SWACT WILL BE PERFORMED	**Meaning:** LGCI 2 is to have the activity of its units switched. Calls in progress are allowed to complete. **Action:** None
LGCI 2 SWACT PASSED	**Meaning:** The activity of the two LGCI 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 LGCI 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	[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..
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 LGCI.

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 LGCI.
	
	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. LGCI-0 has been selected.

trnsl p ↵
where
 	
p
	identifies the P-side links of the posted LGCI.
	
	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. LGCI-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
`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

tst

Function

Use the tst command to test one or all units of one or all posted LGCIs, 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 LGCI.
link	This parameter applies the test to a specified P-side link between the posted LGCI 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 LGCI to be removed form the system REX schedule.
on	This parameter causes the posted LGCI 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 0-63.
pm	This parameter tests both units of one or all posted LGCIs, first unit 0, then unit 1.
query	This parameter displays the REX maintenance record for the posted LGCI.

-continued-

tst

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 LGCI.
rom	This parameter tests the ROM for the posted LGCI or specified unit.
unit	This parameter tests one unit of the posted LGCI and must be followed by the unit number.
unit_no	This variable specifies which unit of the posted LGCI 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 LGCI 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 LGCI to be tested.	**Task:** Test unit 0 of the posted LGCI. **Response:** `Tst Passed` **Explanation:** Test of unit 0 of the posted LGCI passed.
bsy unit 0 cmr ↵ **tst unit 0 cmr** ↵ *where* 0 is the unit of the LGCI to be tested.	**Task:** Test the CMR card in unit 0 of the posted LGCI. **Response:** `CMR Tst Passes` **Explanation:** Test the CMR card in unit 0 of the posted LGCI passed.

-end-

tst

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”, “Y”, “NO”, OR “N”) 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-

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` `LGCI 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

Responses for the tst command (continued)

MAP output	Meaning and action

`LGCI 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 LGCI : 00 17 6X62`
`No prior REX failure.`
	Meaning: In response to the command string tst rex query, information is displayed showing that LGCI 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.

`LGCI 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

`LGCI 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

`LGCI 0 MTCE IN PROGRESS ON EITHER OR BOTH UNITS`	**Meaning:** The LGCI cannot be tested because it is already undergoing maintenance action. **Action:** SYSTEM: With parameter all, the LGCI is bypassed from the posted set of XPMs only for the duration of the testing.

-continued-

Responses for the tst command (continued)

MAP output	Meaning and action
LGCI 0 REQUEST INVALID MANUAL ACTION ONLY VALID ON MANB PM	**Meaning:** With parameter all, an LGCI in the posted set cannot be tested because it is not in the manually busy state. **Action:** SYSTEM: The LGCI 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 LGCI 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

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 LGCI n UNIT n TST PASSED	**Meaning:** One unit of the LGCI 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-

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

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”, “Y”, “NO”, OR “N”):	**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”, “Y”, “NO”, OR “N”):	**Meaning:** A quantity of nnn LGCIs in the posted set is to be tested. **Action:** Entering YES tests the LGCI(s). Entering NO aborts the action. With YES, the status display of the LGCI 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 LGCI.

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 LGCI 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 LGCI. **Response:** `WARM SWACT FOR LGCI 22 IS ENABLED` **Explanation:** Warm SwAct is enabled for LGCI 22.

warmswact on all noprompt ↵	**Task:** Enable warm SwAct for all LGCs in the posted set.
	
	Response:
	`**WARNING** Inactive units of PMs in the current posted set may temporarilyt be removed from service`
	`This operation will be executed on <n> LGC`
	`Please confirm (“YES”, “Y”, “NO”, OR “N”):`
	
	Explanation: This warning results form the use of the noprompt parameter.

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 tuned ON for LGCI 22 by WARMSWACT command`	**Meaning:** If the command swact (menu item 13) is used, a warm SwAct occurs, where <n> is the discrimination number of the LGCI 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 LGCI.

	Response:
	`LGCI 0 unit 0  xpmlogs mtc Passed`
	`LGCI 0 unit 1  xpmlogs mtc Passed`

	Explanation: Log reports for the posted LGCI 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
`LGCI 0 unit 0   xpmlogs mtc Passed` `LGCI 0 unit 1   xpmlogs mtc Passed`	**Meaning:** The response occurs in pairs, one for each LGCI or LGCI 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* pm

Parameters and variables	Description
file_name	This variable is the name of the segment reload file.
pm	This parameter indicates that both units of the posted LGCI are to be reloaded.
pm_type	This parameter identifies the PM type targeted for segment reloading, which in this case is the LGCI. The *pm_type* will be LGCI
unit	This parameter indicates that a unit is to be specified.
unit_no	This variable specifies the unit of the LGCI 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 LGCI 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 LGCI.
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 LGCI.
	
	Response:
	`UNIT 0 IN ESA MODE`
	`THIS ACTION WILL CAUSE ESA EXIT AND ABORT 3 CALLS`
	`PLEASE CONFIRM (“YES”, “Y”, “NO”, OR “N”)`
	
	Explanation: The resetting of an LGCI 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-

LIM level commands

Use the LIM level of the MAP to perform maintenance functions on a link interface module (LIM).

Accessing the LIM level

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

mapci;mtc;pm;post lim *lim_no* ↵

where

lim_no is the number of the LIM to be posted.

LIM commands

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

LIM commands

Command	Page
bsy	L-537
disp	L-541
fbus	L-543
listset	L-545
loadpm	L-547
next	L-551
offl	L-553
pmreset	L-555
post	L-559
querypm	L-561

-continued-

LIM commands (continued)	
Command	**Page**
quit	L-563
rex	L-567
rts	L-569
trnsl	L-573
tst	L-575
wait	L-579
-end-	

LIM menu

The following figure shows the LIM 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
         .     .     .     .     .    .     .     .     .     .


LIM                     SysB   ManB   Offl   CBsy   ISTb   InSv
 0 Quit         PM        0      0      0      0      0     123
 2 Post         LIM       0      0      0      0      0       5
 3 ListSet
 4              LIM 13 InSv
 5 Trnsl                      Links_OOS Taps_OOS
 6 Tst_         Unit 0 InSv         .         .
 7 Bsy_         Unit 1 InSv         .         .
 8 RTS_
 9 Offl_
10 LoadPM
11 Disp_
12 Next
13 REx_
14 QueryPM_
15
16
17
18
```

Hidden commands

```
PMReset
Wait
```

LIM status codes

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

Status codes LIM menu status display

Code	Meaning	Description
LIM	LIM number	Indicates the state, such as InSv of the LIM indicated.
Unit	unit number	Indicates the number of the unit. There is a line for both unit 0 and unit 1.
Links_OOS	out of service links	Indicates the total number of links out of service for a particular unit.
Taps_OOS	out of service taps	Indicates the total number of FBus taps out of service for a particular unit.

bsy

Function

Use the bsy command to busy one or both units of a posted LIM. It may also be used to busy an inter-unit link.

bsy command parameters and variables

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

Parameters and variables	Description
force	This parameter overrides all other commands and states or processes that are in progress in the LIM.
link	This parameter busies the specified link of a posted LIM.
link_no	This variable specifies the number of the link to be busied.
noforce	This default parameter, which is never entered, indicates that other commands and states or processes that are in progress in the LIM are not to be overridden because the force parameter was not entered.
nowait	This parameter allows other commands to be entered at a MAP before the bsy command has completed executing.
pm	This parameter busied both units of the posted LIM.
unit	This parameter busied the specified unit of the posted LIM.
unit_no	This variable specifies the number of the LIM unit to busied.
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

None

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
`LIM x UNIT y Busy failed because no HOST links exist.`	**Meaning:** This response means that although the LIM has been datafilled, no links connecting the LIM to the host message switch have been datafilled in table LIMPTINV. **Action:** Consult feature AI0040 and AI0116 for information about datafilling LIM ports.
`LIM x UNIT y Busy has been aborted by FORCE.`	**Meaning:** When the FORCE option is used to override maintenance actions which are in progress as a result of previous busy requests, the new busy request is completed. **Action:** None
`LIM x UNIT y Busy initiated`	**Meaning:** The busy has begun on the LIM. **Action:** None
`LIM x UNIT y Busy link failed because LINK n is unequipped.`	**Meaning:** The link specified as a parameter to the busy command is not equipped; that is, it has not been datafilled in the LIMPTINV table. **Action:** None
`LIM x UNIT y Busy passed`	**Meaning:** The posted LIM is manual busy. **Action:** None

-continued-

bsy (end)

Responses for the bsy command (continued)

MAP output	Meaning and action
`LIM x UNIT y Busy requires confirmation. Reason: it is not accessible and cannot be informed of the action. Please confirm (“Yes” or “No”):`	**Meaning:** When an LIM is not accessible, requests from the MAP cannot be sent to it. The busy is allowed and the unit will be notified when communication is reestablished; but, the operator should be aware that the LIM itself may not be busy. **Action:** None
`LIM x UNIT y has maintenance in progress; Busy action not taken.`	**Meaning:** Busy is disallowed when maintenance is already in progress on an LIM. The force parameter may be used to override the maintenance in progress. **Action:** None
`LIM x UNIT y is already ManB`	**Meaning:** The bsy command has been issued to an LIM which is already busy. This response will be returned whenever the FORCE option is used to kill maintenance which is running on a manual busy LIM. **Action:** None
`LIM x UNIT y is OffL; you must busy the whole PM.`	**Meaning:** When a LIM is offline, the units may not be busied individually. **Action:** None
`LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; Busy link action not taken.`	**Meaning:** Host links are those which connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level. **Action:** None

-end-

disp

Function

Use the disp command to display a list of all PMs in the given state.

disp command parameters and variables

Command	Parameters and variables
disp	state *pm_state* [*all* / *pm_type*]

Parameters and variables	Description
all	This default parameter, which is never entered, indicates that all PMs in the indicated state will be displayed, because no *pm_type* variable is specified.
pm_state	This variable indicates the state of PMs that are to be displayed.
pm_type	This variable indicates the type of PM to be displayed.
state	This parameter is required before the PM state code.

Qualifications

None

Examples

Not currently available

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

fbus

Function

Use the fbus command to access the FBUS level of the MAP to display information about the posted LIMs and FBuses and to perform maintenance functions on them.

fbus command parameters and variables

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

Qualifications

None

Example

The following table provides an example of the fbus command.

Example of the fbus command

Example	Task, response, and explanation	
fbus ↵		
	Task:	Access the FBUS level of the MAP
	Response:	(FBUS level MAP display)
	Explanation:	The FBUS level of the MAP has been accessed

Responses

Not currently available

listset

Function

Use the listset command to list the identification numbers of the LIM PMs that are included in the posted set..

listset command parameters and variables

Command	Parameters and variables
listset	all *pm_type*

Parameters and variables	Description
all	This parameter lists all LIMs in the posted set
pm_type	This variable indicates the type of PM to be listed.

Qualifications

None

Example

The following table provides an example of the listset command.

Example of the listset command

Example	Task, response, and explanation	
listset lim ↵		
	Task:	List all the posted LIMs
	Response:	`LIM 0, 6, 12, 18, 24, 30`
	Explanation:	All the posted LIMs 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
`LIM 0, 6, 12, 18, 24, 30`	**Meaning:** All posted LIMs are listed **Action:** None
`No PM posted` `Post set is empty`	**Meaning:** There are no posted LIM **Action:** None

-end-

loadpm

Function

Use the loadpm command to load one or both units of a posted LIM.

loadpm command parameters and variables

Command	Parameters and variables				
loadpm	pm unit	*unit_no*	[*nofile* *filename*]	[*test* notest]	[*wait* nowait]

Parameters and variables	Description
filename	This variable is the name of a specified file from which to load the LIM.
nofile	This default parameter, which is never entered, indicates that the software will be loaded from file name listed in table LIMINV because no *filename* is specified.
notest	This parameter prevents destructive memory tests being performed before being loaded.
nowait	This parameter allows additional commands to entered at the MAP before the loadpm command is completed.
pm	The parameter causes both units of the LIM to be loaded.
test	This default parameter, which is never entered, indicates destructive memory tests will be performed before it will be loaded, because the notest parameter was not entered.
unit	This parameter indicates that only one unit of the LIM is to be loaded.
unti_no	This variable specifies which unit of the LIM is to be loaded and has a range of 0-1.
wait	This default parameter, which is never entered, indicates that no additional commands can be entered at the MAP until the loadpm command is completed.

Qualifications

The units to be loaded must be manual busy (ManB).

Examples

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
`LIM x UNIT y firmware is not responding; LoadPM failed.`	**Meaning:** The firmware in the LIM unit is failing to respond to the messages which comprise the loading sequence. If this occurs after several attempts to the reset or load the Unit, there are most likely hardware or firmware problems. **Action:** Take appropriate maintenance action.
`LIM x UNIT y is <status>;  LoadPM action not taken.`	**Meaning:** The unit must be manually busy to be loaded. **Action:** None
`LIM x UNIT y LoadPM completed.`	**Meaning:** The LIM or specified unit is successfully loaded. **Action:** None
`LIM x UNIT y LoadPM failed; unable to find the load file`	**Meaning:** The system cannot find the location of the load file. List the disk volume or mount the tape containing the file. **Action:** None
`LIM x UNIT y LoadPM failed after loading n kilowords.  Message from loader: <message>.`	**Meaning:** the LIM maintenance software has experienced no problems preparing to load the unit but the loader itself has experienced an error indicated by the message it provides. **Action:** None

-continued-

loadpm (end)

Responses for the loadpm command (continued)

MAP output	Meaning and action
`LIM x UNIT y LoadPM is not accessible; LoadPm action not taken.`	**Meaning:** This indicates that software in the DMS-core cannot communicate with the unit because of link failures or other reasons. The unit cannot be loaded while it is isolated. **Action:** None

`The ROM test failed on the following cards;`
 	
`<card list...>`
	Meaning: Before loading, if the notest parameter is not entered, a destructive memory test is performed on the LIM unit. Failures are reported.
	
	Action: None

-end-

next

Function

Use the next command to place the next PM in the posted set in the control position.

next command parameters and variables

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

Qualifications

None

Examples

Not currently available

Responses

The following table provides explanations of the 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, or if only one PM number has been posted. The display returns to the next higher menu level. **Action:** None
`<MAP display for the next posted PM>`	**Meaning:** The next PM in the posted set is in the control position. **Action:** None

offl

Function

Use the offl command to put a LIM in the offline state.

offl command parameters and variables

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

Qualification

Both units of the LIM must be MBsy.

Example

The following table provides an example of the offl command.

Example of the offl command

Example	Task, response, and explanation
offl ↵	
	Task: Place the posted LIM in the offline state.
	Response: `LIM 9 is Offline passed.`
	Explanation: The posted LIM in offline.

Responses

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

Responses for the offl command

MAP output	Meaning and action
`LIM x has maintenance in progress; Offline action not taken.`	
	Meaning: The offline command cannot be performed if maintenance is underway on either unit.
	Action: None

-continued-

offl (end)

Responses for the offl command (continued)

MAP output	Meaning and action
`LIM x is already Offl.`	**Meaning:** The LIM is already offline. **Action:** None
`LIM x is <status>,; Offline action not taken.`	**Meaning:** The LIM is not manually busy which it must be to be placed offline. **Action:** None
`LIM x Offline has been aborted by force.`	**Meaning:** The bsy force parameter has been used to stop the offline action on the LIM. **Action:** None
`LIM x Offline initiated.`	**Meaning:** The offline process has begun on both units of the posted LIM. **Action:** None
`LIM x Offline passed`	**Meaning:** The posted LIM is offline. **Action:** None

-end-

pmreset

Function

Use the pmreset command to reset the posted LIM.

pmreset command parameters and variables

Command	Parameters and variables			
pmreset	pm		*run*	*wait*
	unit	*unit_no*	norun	nowait

Parameters and variables	Description
norun	This parameter resets the LIM without initializing or sending static data and execs.
nowait	This parameter allows additional commands to be entered at the MAP before the pmreset command is completed.
pm	This parameter reinitializes both units of the posted LIM
run	This default parameter, which is never entered, indicates that the LIM is entirely reset because the norun parameter is not entered.
unit	This parameter reinitializes a specified unit of the posted LIM.
unit_no	This variable specifies the unit to be reinitialized.
wait	This default parameter, which is never entered, indicates that additional commands cannot be entered at the MAP until the pmreset command is completed because the nowait parameter was not entered.

Qualifications

None

Examples

Not currently available

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
`LIM x UNIT y firmware is not responding; Reset failed.`	**Meaning:** The firmware in the unit is not acknowledging any messages after attempting to reset it. **Action:** None
`LIM x UNIT y has maintenance in progress; Reset action not taken.`	**Meaning:** An LIM cannot be reset while other maintenance is in progress. Bsy force may be used to override any maintenance actions in progress. **Action:** None
`LIM x UNIT y is not accessible; Reset action not taken.`	**Meaning:** Although an LIM need not be communicating with maintenance software in the core in order to be reset, the links to the unit must be physically usable in order to reset it. **Action:** None
`LIM x UNIT y is <status>; Reset action not taken.`	**Meaning:** The LIM may only be reset if it is MBsy. **Action:** None
`LIM x UNIT y reset initiated.`	**Meaning:** The reset sequence has successfully begun. **Action:** None

-continued-

pmreset (end)

Responses for the pmreset command (continued)

MAP output	Meaning and action
`LIM x UNIT y reset passed.`	**Meaning:** The reset sequence has completed successfully, including the software restart if the unit was running software. **Action:** None

-end-

post

Function

Use the post command to select a set of LIMs to perform maintenance commands on.

post command parameters and variables

Command	Parameters and variables
post	allpms all *pm_type* *pm_no* *pm_state*

Parameters and variables	Description
all	This parameter posts all LIMs
allpms	This parameter post all PMs including all LIMs
pm_no	This variable indicates the number of the specified PM type to be posted
pm_state	This variable specifies a PM state and causes all PMs of that state to be posted.
pm_type	This variable specifies the type of PM to be posted, which for a LIM is lim.

Qualifications

None

Examples

The following table provides an example of the post command.

Examples of the post command

Example	Task, response, and explanation
post lim 22 ↵ *where* 22 is the number of the LIM to be posted.	**Task:** Post lim 22. **Response:** `<MAP response for the posted LIM>` **Explanation:** LIM 22 is now posted.

post (end)

Response

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

Response for the post command

MAP output	Meaning and action
NO PM POSTED	**Meaning:** Indicates one of the following conditions: ▪ there are no PMs of the chosen type ▪ there are no PMs in the specified state ▪ there are no PMs in the system at all **Action:** None

querypm

Function

Use the querypm command to display information about a posted LIM.

querypm command parameters and variables

Command	Parameters and variables
querypm	*all* unit *unit_no* [*noflt* flt [*all* sa nsa]] ids

Parameters and variables	Description
all	This default parameter, which is never entered, indicates one of the following ▪ With no other parameter, indicates that information for the posted LIM will be displayed, and that no flt information will be displayed. ▪ With the flt parameter, indicates that both service affecting and non-service affecting faults are to be displayed, because neither the sa or nsa parameter are entered.
flt	The parameter causes fault information for the posted LIM to be displayed.
ids	This parameter should not be used. It causes identifiers of various software node numbers to be displayed which are not meant for general maintenance use,.
noflt	This default parameter, which is never entered, indicates that fault information for the selected LIM will not be displayed because the flt parameter is not entered.
nsa	This parameter causes only non-service affecting faults to be displayed.
sa	This parameter causes only service affecting faults to be displayed.
unit	This parameter indicates that a specific LIM unit is to be specified.
unit_no	This variable specifies the specific LIM and has a range of 0-17.

Qualifications

None

Examples

Not currently available

querypm (end)

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 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 LIM level to the previous menu level.
	Response:	The display changes to the display of a higher level menu.
	Explanation:	The LIM 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 LIM 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 LIM 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 LIM 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 LIM level with the display of the next higher MAP level.	**Meaning:** The system exited to the next higher MAP level. **Action:** None
-end-	

rex

Function

Use the rex command to schedule and perform routine exercise (REX) testing of posted LIMs.

rex command parameters and variables

Command	Parameters and variables
rex	on off pm query unit *unit_no*

Parameters and variables	Description
off	This parameter excludes both units of the posted LIM from the schedule.
on	This parameter includes both units of the posted LIM in the schedule.
pm	This parameter causes both units of the posted LIM beginning with unit 0, to be exercised immediately.
query	This parameter causes a display indicating whether or not the LIM is included in the REX schedule and whether the exercise was successful.
unit	This parameter indicates that one unit of the posted LIM is to be specified for REX.
unit_no	This variable indicates which unit of the posted LIM is specified and has a range of 0-1.

Qualifications

None

Examples

Not currently available

Responses

Not currently available

rts

Function

Use the rts command to return to service a posted LIM or one of its units.

rts command parameters and variables

Command	Parameters and variables
rts	pm unit [*unit_no*] link [*test* notest] [*wait* nowait]

Parameters and variables	Description
force	This parameter overrides all other commands that may be in effect on a unit. It forces one or both units of the posted LIM to the InSv state, even if a test is in effect on one unit. TST is overridden and the test aborted. It requires confirmation YES or NO before execution.
link	This parameter indicates that the links associated with the specified unit of the posted LIM are to be returned to service.
noforce	This default parameter, which is never entered, indicates the condition when no parameter is entered. The rts command will not be forced.
nowait	This parameter enables the MAP to be used for other entries while testing for a return to service occurs.
pm	This parameter causes both units of the posted LIM to be returned to service.
unit	This parameter indicates that only the specified unit of the posted LIM is to be returned to service.
unit_no	The variable specifies the unit of the posted LIM the rts command pertains to, and has a range of 0-1.
wait	This default parameter, which is never entered, indicates the default condition when no parameter is entered. The user must wait until the rts force command action is confirmed before additional commands can be entered at the MAP.

Qualifications

None

Examples

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
`LIM x UNIT y has maintenance in progress;  Return to Service action not taken.`	**Meaning:** The unit cannot be returned to service while other maintenance actions are being performed. You must either wait until the current maintenance action is complete, or use the bsy force command to override it. **Action:** None
`LIM x UNIT y is already InSv.`	**Meaning:** The specified LIM unit is already in service. **Action:** None
`LIM x UNIT y is already ISTb`	**Meaning:** If the Unit is in service it cannot be returned to service. **Action:** None
`LIM x UNIT y is not accessible;  Return to Service action not taken.`	**Meaning:** This indicates that software in the DMS core cannot communicate with the unit because of link failures or other reasons. The unit cannot be returned to service while it is isolated. **Action:** None
`LIM x UNIT y is Offl; Return to Service action not taken.`	**Meaning:** A LIM unit must be manually busy or system busy before it can be returned to service. **Action:** None

-continued-

rts (continued)

Responses for the rts command (continued)

MAP output	Meaning and action
`LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; RTS link action not taken.`	**Meaning:** Host links connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level. **Action:** None
`LIM x UNIT y Return to Service failed because no HOST links exist.`	**Meaning:** Although the LIM has been datafilled, no links connecting the LIM to the host message switch have been datafilled in table LIMPTINV. **Action:** None
`LIM x UNIT y Return to Service failed due to diagnostic failures.`	**Meaning:** When the RTS command is issued without the notest parameter, the diagnostics are performed on the unit before returning it to service. Diagnostic failures are reported and the faulty components are described using standard circuit displays. If the problems are service-affecting the unit will not be returned to service. **Action:** None
`LIM x UNIT y Return to Service has been aborted by FORCE.`	**Meaning:** The bsy force command was used to stop the return to service maintenance action. **Action:** None
`LIM x UNIT y Return to Service initiated`	**Meaning:** The return to service sequence has begun. **Action:** None

-continued-

rts (end)

Responses for the rts command (continued)

MAP output	Meaning and action
`LIM x UNIT y RTS link failed because LINK n is unequipped.`	**Meaning:** The link specified as a parameter to the RTS command is not datafilled in table LIMPTINV. **Action:** None

-end-

trnsl

Function

Use the trnsl command to provide information about specified links.

trnsl command parameters and variables

Command	Parameters and variables
trnsl	*unit_no* [*each* / *link_no*] [*brief* / full]

Parameters and variables	Description
brief	This default parameter, which is never entered, indicates that only a brief display of information is to be provided because the full parameter was not entered.
each	This default parameter, which is never entered, indicates that information for every link for the specified unit is do be displayed because no *link_no* variable is specified.
full	This parameter causes a full display of information about the link to be displayed.
link_no	This variable specifies the number of the link to be displayed.
unit_no	This variable indicates the number of the unit for which links are to be displayed and has a range of 0-1.

Qualifications

None

Examples

Not currently available

Response

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

Response for the trnsl command

MAP output	Meaning and action
`LINK x y is unequipped.`	**Meaning:** The specified link is not equipped. **Action:** None

tst

Function

Use the tst command to test all or part of a posted LIM and to report problems found.

tst command parameters and variables

Command	Parameters and variables			
tst	pm			[*wait*]
	unit	*unit_no*		[nowait]
	link	*unit_no*	*link_no*	[ ]

Parameters and variables	Description
pm	This parameter causes both units of the posted LIM to be tested.
unit	This parameter indicates that only a specified unit of the posted LIM is to be tested.
link	This parameter indicates that a specified link of the specified unit of the posted LIM is to be tested.
unit_no	This variable specifies the unit of the LIM to be affected the tst command.
link_no	This variable specifies the number of the link to be tested.
nowait	This parameter enables the MAP to be used for other entries while testing occurs.
wait	This default parameter, which is never entered, indicates the default condition when no parameter is entered. The user must wait until the tst command action is complete before additional commands can be entered at the MAP.

Qualifications

The LIM cannot be tested in the offline state.

tst (continued)

Example

The following table provides an example of the tst command.

Examples of the tst command

Example	Task, response, and explanation
tst unit 0 ↵ *where* o is the number of the LIM unit to be tested.	**Task:** Test unit 0 of the posted LIM. **Response:** `LIM 22 UNIT 0 Test passed.` **Explanation:** Unit 0 of the posted LIM has been tested and no problems found.

-end-

Responses

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

Responses for the tst command

MAP output	Meaning and action
`LIM x UNIT y Test initiated`	**Meaning:** The testing has begun n the specified unit. **Action:** None
`LIM x UNIT y Test passed.`	**Meaning:** The unit has been tested and no problems found. **Action:** None

-continued-

tst (continued)

Responses for the tst command (continued)

MAP output	Meaning and action
`LIM x UNIT y Test failed.`	**Meaning:** The unit has been tested a problems were found. Each problem which is found w2ill have been reported and the faulty components described using a standard circuit display. **Action:** None
`LIM x UNIT y  is OffL; Test action not taken.`	**Meaning:** Tests cannot be performed on an offline LIM unit. **Action:** None
`LIM x UNIT y has maintenance in progress; Test action not taken.`	**Meaning:** Other maintenance actions are being performed and not unit test can be initiated. **Action:** None
`LIM x UNIT y Test failed because no HOST links exist.`	**Meaning:** Though the LIM has been datafilled, no links connecting the LIM to the host message switch have datafilled in table LIMPTINV. **Action:** None
`LIM x UNIT y is not accessible; Test action not taken.`	**Meaning:** The state of the LIM unit is qualified as RU, which means that message cannot be sent to it, so no test can be performed. **Action:** None
`LIM x UNIT y is not responding; Test failed.`	**Meaning:** Although the LIM unit is accessible, it is not responding to the test request. It is possible that it is not loaded at all or that it is experiencing software or hardware problems of it own and is not communicating properly. **Action:** None

-continued-

tst (end)

Responses for the tst command (continued)

MAP output	Meaning and action
`LIM x UNIT y Test has been aborted by FORCE.`	**Meaning:** The test request on the LIM unit has been terminated by the bsy force command. **Action:** None
`LIM x UNIT y link Test failed because the LINK n is unequipped.`	**Meaning:** The link specified as a parameter to the test command is not equipped, because it is not datafilled in table LIMPTINV. **Action:** None
`LIM x UNIT y LINK n is a HOST link and may only be manipulated from the MS MAP level; link Test action not taken.`	**Meaning:** Host links are those which connect the LIM to its host node, the message switch. These links can only be busied, tested, and returned to service from the MS MAP level. **Action:** None

-end-

wait (end)

Function

Use the wait command to turn the LIM wait mode on and off.

wait command parameters and variables

Command	Parameters and variables
wait	on off

Parameters and variables	Description
off	This parameter causes the wait mode of the LIM to be turned off.
on	This parameter causes the wait mode of the LIM to be turned on.

Qualifications

Unlike other PM commands, responses from LIM commands are returned even after have exited (quit) the LIM level. The wait command enables this reporting to be shut off.

When the wait off command has been executed, it is unnecessary to wait before additional commands can be executed at the MAP and responses will not be reported. Any problems encountered are mere logged.

The wait on command puts the LIM in the wait on mode, which requires the user to wait before additional commands can be executed at the map, and will continue to report responses, even when the LIM level has be exited.

Examples

None

Responses

None

DMS-100 Family

Menu Commands

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