

Commands in MX-ONE Service Node

COMMAND DESCRIPTION



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INTRODUCTION

This is a survey of all the Operation and Maintenance commands in MX-ONE, both Linux/Unix- and MML-related.

The commands are entered in an mdsh shell, which is the shell and command interpreter for MX-ONE. Mdsh can be a login shell or started from another shell (for example, a standard Unix shell).

There are three fundamentally different types of commands in mdsh:

- **Built-in commands**

These commands are an integrated part of mdsh and executed by mdsh itself. An example of such a command is "cd". Help on these commands is available by typing "help <command>" in mdsh.

- **MML commands**

These commands are different in syntax from normal Linux commands. No help for these commands can be retrieved in mdsh. See the command description for respective command group. For more information on using MML commands, see chapter 4 Telephony Service Commands (MML) for mdsh on page 16.

- **Linux commands**

These commands are separate executable files in the Linux environment, outside of mdsh. The Linux commands can be divided in three groups

- Standard Linux commands and tools like "less". These commands and tools are not specific for the MX-ONE Service Node. They work just as they work on any Linux computer. Help on these commands is usually available by typing "man <command>".
- MX-ONE Service Node commands based on the MD_COM framework. Examples of commands based on the MD_COM framework are "alarm" and "extension". MD-shell interacts with the MD_COM framework, and tab-completion is available also for the command line switches. Help on these commands is available by typing "<command> -?" (or "<command> --help").
- Old MX-ONE Service Node commands (not based on the MD_COM framework). Examples of old commands are "trace" and "number_initiate". (These old commands will probably be rewritten into new commands based on the MD_COM framework in future releases.) Help on these commands is available by typing "<command> -help"

Command **help**, without parameters, can be used to list all command names.

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AUTHORITY LEVELS

Service, operation, and maintenance require different authorities for the commands. Each command belongs to an authority level (0-7 below). Seven is the highest authority level, and zero is the lowest.

A higher level has authority over all lower levels.

The default authority levels indicated in this document are set based on the personnel categories in the list below.

Level	Activity, examples	Personnel category
0	Prints in general, but some exceptions exist.	All.
1	Handling of Call Origin Groups for attendants. Change of active Personal Number list or individual call diversion data.	Chief attendant and ACD supervisor.
2	Handling of extension or group data.	Administrative personnel at a customer, handling extension or user data.
3	Handling of traffic matrix. Number analysis data handling. Creating common categories. Handling certain route data, such as <i>ROEQI</i> .	Administrative personnel at a customer, handling system data.
4	Handling of hardware or route data.	Service personnel.
5	Handling of system data, such as SY, AS, and extended alarms.	Senior service personnel.
6	Configuration of the system, both HW and SW.	Distributor.
7	Authority control. Log functions. <i>Super user</i> functions.	Experts.

3 UNIX-STYLE COMMANDS

A 'D' in the authority column means *Dangerous* = must be confirmed.

Root in the authority column means that the command can only be executed as a root user.

In addition to the commands listed below, there are some expert commands and standard Linux/Unix commands. Refer to the online help and Linux documentation, but note that it depends on your authority level which commands you will see. An asterisk, *, after the command name means the command is new in this release (6.3). R/A in the authority level column means the command is only allowed for users root or mxone_admin.

3.1 OPERATING SYSTEM COMMANDS

Command block	Command name	Brief command description	Default authority level
Alarm functions	<i>alarm</i>	Create, erase or print alarms. Create, Erase Print	4 0
	<i>alarm_action</i>	Define or cancel alarm actions, that is, mdsh commands to be executed as a result of a certain alarm. The command can only be performed as a root user.	7 Root
	<i>alarm_board</i>	List the alarm boards.	7
	<i>alarm_cfg</i>	Write the alarm log configuration to LDAP or print it. Read Change	0 7
	<i>alarm_input</i>	Define, erase, or list alarm input ports.	4
	<i>alarm_noticed</i>	The alarm has been noticed by a technician and correction is in progress.	3
	<i>alarm_output</i>	Define, erase, or list alarm output ports.	4
	<i>alarm_top</i>	Continuously view alarms from the log in a descending severity order.	0
Backup of data	<i>data_backup</i>	Create a backup of the system data.	3
	<i>data_info</i>	Show exchange data backup information	1
	<i>data_restore</i>	Restore system data from backup, and run the start phase after a data reload.	6
	<i>reload</i>	Load programs and restore data from backup into the system.	6 D
	<i>config_mirror</i>	Create mirrors (copies) of the backup data of all LIMs.	5
	<i>config_restore</i>	Restore mirrors (copies) of the backup data to all LIMs.	5

Command block	Command name	Brief command description	De-fault authority level
Blocking	<i>block</i>	Manually block a device to take it out of service.	4
	<i>block_flags</i>	List the message communication block flags.	0
	<i>block_list</i>	List the blocked or disturbance marked devices.	0
	<i>deblock</i>	Manually deblock a device to put it in service.	4
Board and phone configuration	<i>board_config</i>	Identify new boards or remove boards.	4
	<i>board_list</i>	List and print which boards are present in the node.	1
	<i>board_restart</i>	Reset and restart a board.	4
	<i>board_sw</i>	Load and update SW on a board or read the SW version and identity.	4
	<i>phone_sw</i>	Handle firmware status and upgrades on Digital Telephone Sets.	4
Call information logging	<i>callinfo_condcode_print</i>	Print the call logging string that will replace the condition code in the recorded data.	0
	<i>callinfo_condcode_set</i>	Set (or change) the custom string to be inserted in the call logging record when the condition is met.	3
	<i>callinfo_format_print</i>	Print a preconfigured format. Use the received string in subsequent commands.	0
	<i>callinfo_limit_print</i>	Print the call logging limit.	0
	<i>callinfo_limit_set</i>	Initiate the call logging limit for QoS supervision.	3
	<i>callinfo_mask_print</i>	Print the call logging mask.	0
	<i>callinfo_mask_set</i>	Initiate the call logging mask.	3
	<i>callinfo_output_change</i>	Change or append the call logging data format.	3
	<i>callinfo_output_info</i>	Print the possible call logging data alternatives.	0
	<i>callinfo_output_set</i>	Initiate an output channel for call information logging.	3
	<i>callinfo_qos_report_set</i>	Enable or disable forwarding or output of QoS data.	3
	<i>callinfo_status_print</i>	Print the destinations of the call logging forwarding.	0
	<i>callinfo_status_set</i>	Enable or disable forwarding of call logging data.	3
	<i>callinfo_sql_to_file</i>	Perform postprocessing of call logging data from an SQL database to a file.	2
	<i>callinfo_file_to_sql</i>	Perform postprocessing of call logging data from a file to an SQL database.	2
	<i>callinfo_file_to_file</i>	Perform postprocessing of call logging data from one file to another.	2
	<i>callinfo_tcp_print</i>	Initiate a test server to log TCP traffic on a host port.	0
Call tracing	<i>call_trace</i>	Display the connection status for calls or for a party.	1
Certificate handling	<i>mxone_certificate</i>	Server, root and CSR certificate handling. Not in mdsh.	7 Root

Command block	Command name	Brief command description	De-fault authority level
Core	<i>check_core_files</i>	Checks if there are any core files on the system (created by the core_report command). Not in mdsh.	7 R/A
Core	<i>core_report</i>	Analyzes the core file on the system that created the core file. Not in mdsh.	7 R/A
Diagnostic	<i>diagnostic_exception</i>	Used for advanced debugging.	6
	<i>diagnostic_job_time</i>	Measure execution time of jobs in Program Units.	4
	<i>diagnostic_ldap</i>	Check the status of LDAP on a specific host/LIM. Not in mdsh.	7 R/A
	<i>diagnostic_print</i>	Used for advanced debugging.	4
	<i>diagnostic_state</i>	Used for advanced debugging.	7
External Database	<i>external_database</i>	Manage access to external LDAP compatible database(s), e.g. for public subscriber name ("Alpha tagging"). Initiate Erase Change Print Test	7 7 D 7 0 7
External Directory	<i>external_directory</i>	Manage external directory database, for example for public subscriber Blacklisting functions. Initiate Erase Change Print Import Export	3 3 D 3 0 3 D 3
Trusted external hosts	<i>trusted_amp_hosts</i>	Used for running MX-ONE commands from an external host. Initiate, erase Print	7 0
LDAP database	<i>ldap_config_create</i>	Create LDAP configuration files.	7
	<i>ldap_db_diff</i>	Show difference of data in two LDAP servers.	1
	<i>ldap_dbovr_test</i>	Test DBOVR status and functions.	1
	<i>ldap_find_patchdata</i>	Find and list patch data in LDAP.	0
	<i>ldap_init</i>	Initialize the LDAP directory tree.	7
	<i>ldap_notify</i>	LDAP notify subscription.	7
	<i>ldap_notify_print</i>	Print LDAP notify subscriptions.	3
	<i>ldap_ping</i>	Check if local LDAP is alive.	1
	<i>ldap_wait_until_replicated</i>	Wait until LDAP is replicated.	3
License handling	<i>license_migration</i>	Perform and/or print a license migration	7
	<i>license_print</i>	Print the license file.	3
	<i>license_print_definition</i>	Print feature level definitions.	3
	<i>license_report</i>	Manage the license usage report function.	7
	<i>license_reread</i>	Reload and update the license data.	5
	<i>license_status</i>	Print the license data.	1

Command block	Command name	Brief command description	De-fault authority level
Maintenance and Market data	<i>mxone_maintenance</i>	Start the Configuration Utility (to upgrade, add or repair a LIM, to roll back to the previous MX-ONE Service Node software, to reconfigure HTTPS, and many other functions). Market data is also handled. Not in mdsh.	7 Root
mdsh command shell	<i>mdsh</i>	Start an MX-ONE Service Node shell and command interpreter.	0
Media encryption	<i>media_encryption_enable</i>	Enable SRTP media encryption on H.323.	3
	<i>media_encryption_disable</i>	Disable SRTP media encryption.	3
	<i>media_encryption_print</i>	Print the status of the H.323 media encryption.	3
Media Gateway	<i>media_gateway_config</i>	Configure media gateways in the system.	6
	<i>media_gateway_info</i>	Read or set media gateway information.	5
	<i>media_gateway_interface</i>	Print or set information about the MX-ONE Media Gateway interface.	6
	<i>media_gateway_start</i>	Manually order a reboot, restart, or reconfiguration of the MX-ONE Media Gateway, or those of a function in the MX-ONE Media Gateway.	5
Media Server	<i>media_server</i>	Configure media server SIP control interface (MSCML), for streaming functions Initiate, Change End Print	6 6 0
Media Server message conversion	<i>media_server_message</i>	Configure media server SIP control interface (MSCML) message conversion table, for streaming functions Initiate, Change End Print	6 6 0
Message or signal names and numbers	<i>hw_message_send</i>	Compose and send a message to the hardware.	7
	<i>message_list</i>	List messages or signals known to a program unit.	0
	<i>message_name</i>	Display the message name when the number is known.	0
	<i>message_number</i>	Display the message number when the name is known.	0
	<i>message_send</i>	Manually compose and send a message to a specified program unit.	7
Program unit information	<i>pu_name</i>	Display the program unit name when the number is known.	0
	<i>pu_number</i>	Display the program unit number when the name is known.	0
	<i>pu_ping</i>	Check messaging performance and message round trip delays on a running system.	1
	<i>pu_info</i>	Display information (version, identity, type, and so on) about a program unit.	1

Command block	Command name	Brief command description	De-fault authority level
Program unit and function add, remove and change	<i>data_change</i>	Protect a series of command initiated actions, for example, replacing a program unit with the program unit change feature.	6
	<i>pu_add</i>	Add a program unit in the MX-ONE Service Node.	6
	<i>pu_remove</i>	Remove a program unit in the MX-ONE Service Node.	6
PSTN fallback for VoIP media	<i>igw_route_change</i>	Modify inter gateway routes and destinations.	5
	<i>igw_route_end</i>	Remove inter gateway routes and destinations.	5 D
	<i>igw_route_initiate</i>	Initiate inter gateway (ISDN or CAS) routes and destinations.	5
	<i>igw_route_print</i>	Print inter gateway routes and destinations.	1
Recovery mode	<i>recoverymode</i>	Change and display the system fault recovery mode.	6
RTP resource handling	<i>rtp_resource</i>	Display information about RTP resources and codecs in the system.	3
Start/restart	<i>restart</i>	Restart the MX-ONE Service Node system or a program unit.	6
	<i>start</i>	Start the MX-ONE Service Node system. Coordination start, that is, start phases 1.3 and 1.5 are run.	6
Status	<i>status</i>	Display the current status and event history of the system, node, or program unit.	1
	<i>status_view</i>	Display the status changes of the system (start phases, and so on.)	1
Switch configuration	<i>ls_config_attenuation</i>	Change the attenuation value for the LSU (in legacy LIMs only).	6
	<i>ls_config_block</i>	Block the DSU in a specified LIM.	4
	<i>ls_config_deblock</i>	Deblock the DSU in a specified LIM.	4
	<i>ls_config_info</i>	Display the LSU/DSU configuration.	0
	<i>ls_config_test</i>	Perform a function test of an LSU, a DSU, or both.	5
Switch connection	<i>switch_connection_end</i>	Disconnect switch connections manually.	6
	<i>switch_connection_initiate</i>	Initiate switch connections manually.	6
	<i>switch_connection_list</i>	Display switch connections.	2
System and program information	<i>exchange_info</i>	Display the build date of the system or a program unit. Set the system identity.	1
MX-ONE system component versions	<i>ts_about</i>	Display the build version of the system and its main RPM packages.	1
Trace	<i>trace</i>	Initiate, stop, erase, or print a message trace on a unit, message, or directory number.	4
Time	<i>time_info</i>	Print information about time and time use.	0

Command block	Command name	Brief command description	De-fault authority level
Transport of media	<i>trsp_info</i>	Display the inter-LIM media connections.	1
	<i>trsp_synchronization</i>	Define rules, resynchronize, or display the rules for synchronization.	5
	<i>trsp_connection</i>	Configure inter-LIM transport media connection.	5
	<i>pcm_config</i>	Configure PCM resources.	5
	<i>pcm_order</i>	Manage connection traffic for the group switch.	5
	<i>pcm_status</i>	Print the status of the PCM resources.	1
	<i>pcm_synchronization</i>	Set or print the synchronization configuration for the group switch.	5

3.2

ACS TELEPHONY COMMANDS

Command block	Command name	Brief command description	De-fault authority level
Account code	<i>account_code_close</i>	Close a range of account codes.	3
	<i>account_code_erase</i>	Remove account codes.	3
	<i>account_code_init</i>	Set new account codes.	3
	<i>account_code_print</i>	Print the set account codes.	1
	<i>account_code_open</i>	Open a range of account codes.	3
Authorization code	<i>auth_code</i>	Set, print and remove authorization codes.	
		Initiate Erase Print Encrypt *	3 3 D 3 3
Call List	<i>call_list</i>	Initiate, change, or print data for a call list. Or set the active list. Initiate, Change, Set Erase Print	2 2 D 1
	<i>call_list_profile</i>	Change or print a call list profile. Change Print	2 0
Call list alerting delay	<i>delay_seizure_list</i>	Manage how a terminal type is to be alerted when it has Call list. Initiate, Change Erase Print	3 3 D 0
Common Public Directory Number	<i>route_data_common *</i>	Initiate, change, erase and print common public directory numbers, per system or per server/LIM. Initiate Erase Print	4 4 0
Computer Supported Telecommunications Applications Phase III	<i>csta</i>	Initiate, change, erase and print csta phase 3 servers or XML data format in the system. Initiate Erase Print	4 4 0
	<i>csta_authentication *</i>	Initiate, change, erase and print csta phase 3 application session authentication. Change Initiate Erase Print	4 4 4 0

Command block	Command name	Brief command description	Default authority level
Cordless Extension	<i>dect_cfp</i>	Manage common fixed part for dect system.	4
	<i>dect_extension</i>	Manage authentication data for a DECT extension.	3
	<i>dect_logging</i>	Manage mobility reporting for dect system	0
	<i>dect_rfp</i>	Manage radio fixed part for dect system. Erase Initiate/reset Change	4 D 4 2
	<i>dect_system_id</i>	Manage Secondary access rights identity for dect. Initiate Erase, change	4 4 D
Diversion	<i>diversion</i>	Manage individual diversion data for extensions. Initiate Erase Print (Static data).	1 1 0
	<i>diversion_common</i>	Manage common diversion data in the system. Initiate Erase Print	3 3 0
	<i>diversion_info</i>	Print information on diversion service status for extensions. (Dynamic data).	0
	<i>diversion_system</i>	Manage general diversion related system data. Initiate Erase Print	3 3 0
Extension	<i>extension</i>	Initiate or change data for a generic extension. Erase data for a generic extension Print data for a generic extension	2 2 D 0
	<i>extension_info</i>	Print more detailed extension information.	0
	<i>extension_key</i>	Initiate data for a dial-by-function key. Erase data for a dial-by-function key. Print data for a dial-by-function key.	2 2 D 0
	<i>extension_procedure</i>	Execute the stated procedure.	2
	<i>extension_profile</i>	Initiate or change common user data. Erase common user data. Print common user data.	3 3 D 0
	<i>extension_text</i>	Change stored text string for generic extension display. Print stored text string for generic extensions.	2 0
	<i>extension_unregistration</i>	Force unregistration of an IP terminal.	4
Function Test	<i>function_test</i>	Function test various TDM devices, like multi-party device, tone device, or trunk loop-back test Initiate	4

Command block	Command name	Brief command description	De-fault authority level
Global Traffic Data	<i>global_traffic_data</i>	Manage various global traffic data, such as conference and transfer disconnection options, Last Number Redial options, own exchange identity, paging time supervision options. Initiate Erase Print	5 5 0
IP Handling	<i>ip_domain</i>	Initiate, change, or erase an IP domain. Print data for an IP domain.	4 0
	<i>ip_extension</i>	Initiate an IP extension. Erase data for an IP extension. Print static data for an IP extension.	2 2 D 0
	<i>ip_extension_info</i>	Print dynamic (registration related) data for an IP extension	0
	<i>ip_gatekeeper</i>	Change data for an IP extension gatekeeper. Print data for an IP extension gatekeeper	4 0
Language strings	<i>language</i>	Change/print the default language of the system Change Print	5 0
	<i>language_strings_override</i>	Change/remove/print one of the languages (no. 5-9) currently active in the system.	5
	<i>language_strings_reread</i>	Re-initiate/reset the language string files valid for the used application system.	5
Name	<i>name</i>	Manage name information. Print names for users and groups.	2 0
Number analysis	<i>number_data_end</i>	End the number data	3 D
	<i>number_data_initiate</i>	Initiate the number data	3
	<i>number_end</i>	End the number or a number series for a particular type	3 D
	<i>number_initiate</i>	Initiate a number or a number series for a particular type	3
	<i>number_print</i>	Print the number series initiated	0
Number conversion and Bearer Capability substitution	<i>number_conversion_end</i>	End number conversion and BC substitution.	4 D
	<i>number_conversion_initiate</i>	Initiate number conversion and BC substitution.	4
	<i>number_conversion_print</i>	Print the number conversion and BC substitution.	0
Number vacant conversion (Smooth migration)	<i>number_vacant_conversion_end</i>	End the number data for vacant number type conversion	3
	<i>number_vacant_conversion_initiate</i>	Initiate the number data for vacant number type conversion	3
	<i>number_vacant_conversion_print</i>	Print the number data for vacant number type conversion	0

Command block	Command name	Brief command description	De-fault authority level
Operator Queue	<i>operator_common_queue</i>	Change or print data for the operator common queue LIM/server priorities. Change Print See Operator MML commands for the other operator related commands.	6 1
Parallel Ringing	<i>parallel_ringing</i>	Initiate, erase, or print data for a parallel ringing list. Initiate Erase Print	2 2 D 0
Power Failure Transfer	<i>power_failure</i>	Initiate, erase, or print data for the power failure transfer function. Initiate Erase Print	4 4 D 0
Remote Extension	<i>remote_extension</i>	Initiate, erase or print data for a remote extension. Initiate Erase Print	2 2 D 0
Recorded Voice Announcement	<i>recorded_announcement_prompt</i>	Handle recorded voice announcements on the MGU. Load, activate Erase Print	4 4 D 0
Ring cadence	<i>ring_cadence</i>	Modify or check ring cadences for analog extensions. (Change requires ELU board restart). Change Print	6 D 0
Ring signal	<i>ring_signal</i>	Set ring signal for internal or incoming external call. Initiate Erase Print	2 2 D 0
Security Policy	<i>sec_policy</i>	Set, print, or remove the IP security policy in the system. Initiate, Erase, Print	3
SIP	<i>sip_domain</i>	Manage SIP domain names. Initiate, erase Print	4 0
	<i>sipgrep</i>	Filter SIP messages from a trace in SIPLP. (Aid for the trace command). Initiate	3
	<i>sip_route</i>	Administer SIP trunk data. Initiate, Erase Print	4 3

Command block	Command name	Brief command description	De-fault authority level
Short Message Service	<i>sms_client_end</i>	Terminate the SMS service center client.	3 D
	<i>sms_client_initiate</i>	Initiate an SMS service center client.	3
	<i>sms_client_print</i>	Print data about an SMS service center client.	0
	<i>sms_server_end</i>	Terminate the SMS service center connection.	3 D
	<i>sms_server_initiate</i>	Initiate the server of an SMS service center.	3
	<i>sms_server_print</i>	Print data about the server of an SMS service center.	0
Streaming data	<i>streaming_data</i> *	Configure data for Streaming On Idle function on Mitel 6800/6900 SIP extension Initiate, Change End Print	3 3 0
System Resource Status Information	<i>resource_status</i> *	Print the resource status, i.e. data about devices in the MX-ONE system. Print	0
Traffic Connection Matrix	<i>traffic_matrix</i> *	Initiate, erase, or print traffic connection matrix data. (Connection permission information.) Initiate Erase Print	3 3 D 0
Transmission Matrix Data	<i>transmission_matrix_data</i>	Change or print transmission matrix settings, i.e. attenuation/amplification values for TDM devices. (For experts only, not included in CPI.)	7 D
Vacant Numbers	<i>vacant_number</i> *	Print data about vacant numbers, i.e. unused numbers of specific types, defined in number analysis, but not assigned to any device. Print	0

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TELEPHONY SERVICE COMMANDS (MML) FOR MDSH

D in the authority level column means *Dangerous* = must be confirmed with Yes.

4.1

ACS TELEPHONY MML COMMANDS

4.1.1

ABBREVIATED DIALING

Command name	Brief command explanation	Default authority level
<i>ADCDP</i>	Abbreviated dialing common data print	0
<i>ADCOE</i>	Abbreviated dialing common number end	2
<i>ADCOI</i>	Abbreviated dialing common number initiate	2
<i>ADIDP</i>	Abbreviated dialing individual data print	0
<i>ADINE</i>	Abbreviated dialing individual number end	2
<i>ADINI</i>	Abbreviated dialing individual number initiate	2
<i>ADIPP</i>	Abbreviated dialing individual possessors print	0

4.1.2

ACCOUNT CODES

See 3.2 ACS Telephony Commands on page 11.

4.1.3

ANALOG EXTENSION

Command name	Brief command explanation	Default authority level
<i>EXADC</i>	Analog extension additional data change	2
<i>EXADP</i>	Analog extension additional data print	0
<i>EXCAC</i>	Analog extension category change	2
<i>EXCAP</i>	Analog extension category print	0
<i>EXCCP</i>	Analog extension common category print	0
<i>EXCCS</i>	Analog extension common category initiate/set	3
<i>EXCUC</i>	Analog extension customer number change	2
<i>EXDDP</i>	Analog extension directory data print	0
<i>EXTEE</i>	Analog extension end	2 D
<i>EXTEI</i>	Analog extension initiate	2

4.1.4 APPLICATION SYSTEM DATA

Command name	Brief command explanation	Default authority level
<i>ASPAC</i>	Application system parameter change	5 D
<i>ASPAP</i>	Application system parameter print	0
<i>ASUVP</i>	Application system parameter unit validation print	0

4.1.5 AUTOMATIC CALL DISTRIBUTION (ACD)

Command name	Brief command explanation	Default authority level
<i>ACBGE</i>	backup group end	2
<i>ACBGI</i>	backup group initiate	2
<i>ACBGP</i>	backup group print	0
<i>ACCSP</i>	ACD current status print	0
<i>ACGCC</i>	ACD group category change	2
<i>ACGCP</i>	ACD group category print	0
<i>ACGMC</i>	group member change	1
<i>ACGME</i>	group member end	1
<i>ACGMI</i>	group member initiate	1
<i>ACGMP</i>	group member print	0
<i>ACGRE</i>	ACD group end	2
<i>ACGRI</i>	ACD group initiate	2
<i>ACPAC</i>	parameter change	2
<i>ACPAP</i>	parameter print	0
<i>ACTNE</i>	ACD translation number end	2
<i>ACTNI</i>	ACD translation number initiate	2
<i>ACTNP</i>	ACD translation number print	0

4.1.6 AUTOMATIC NETWORK CALL DISTRIBUTION

Command name	Brief command explanation	Default authority level
<i>NCCOE</i>	Network call distribution communication end	4
<i>NCCOI</i>	Network call distribution communication initiate	4
<i>NCCOP</i>	Network call distribution communication print	0
<i>NCCTI</i>	Network call distribution communication test initiate	0
<i>NCGMC</i>	Network call distribution group member change	2
<i>NCGME</i>	Network call distribution group member end	2
<i>NCGMI</i>	Network call distribution group member initiate	2
<i>NCGMP</i>	Network call distribution group member print	0

<i>NCGRC</i>	Network call distribution group change	2
<i>NCGRE</i>	Network call distribution group end	2
<i>NCGRI</i>	Network call distribution group initiate	2
<i>NCGRP</i>	Network call distribution group print	0
<i>NCGSP</i>	Network call distribution group status print	0
<i>NCGTE</i>	Network call distribution traffic end	2
<i>NCGTI</i>	Network call distribution group traffic	2
<i>NCICE</i>	Network call distribution information channel end	4
<i>NCICI</i>	Network call distribution information channel initiate	4
<i>NCICP</i>	Network call distribution information channel print	0
<i>NCNOE</i>	Network call distribution node end	4
<i>NCNOI</i>	Network call distribution node initiate	4
<i>NCNOP</i>	Network call distribution node print	0
<i>NCSGC</i>	Network call distribution satellite group change	2
<i>NCSGE</i>	Network call distribution satellite group end	2
<i>NCSGI</i>	Network call distribution satellite group initiate	2
<i>NCSGP</i>	Network call distribution satellite group print	0

4.1.7 AUTHORIZATION CODES

See 3.2 ACS Telephony Commands on page 11 on Authorization code.

4.1.8 CALL DIVERSION

See 3.2 ACS Telephony Commands on page 11 on Diversion

4.1.9 CHARGING AND METERING

Command name	Brief command explanation	Default authority level
<i>CHCME</i>	Charging cost model end	3
<i>CHCMI</i>	Charging cost model initiate	3
<i>CHCMP</i>	Charging cost model print	0
<i>CHGAP</i>	Charging group association print	0
<i>CHGCE</i>	Charging group counter end	3
<i>CHGCP</i>	Charging group counter print	0
<i>CHGME</i>	Charging group member end	3
<i>CHGMI</i>	Charging group member initiate	3
<i>CHGMP</i>	Charging group member print	0
<i>CHICE</i>	Charging individual counter end	3
<i>CHICP</i>	Charging individual counter print	3
<i>CHRCE</i>	Charging route counter end	3
<i>CHRCP</i>	Charging route counter print	0

4.1.10 COMMON BELL (GROUP)

Command name	Brief command explanation	Default authority level
<i>CBCAC</i>	Common Bell category change	2
<i>CBELI</i>	Common Bell equipment initiate	3
<i>CBGME</i>	Common Bell group member end	2
<i>CBGMI</i>	Common Bell group member initiate	2
<i>CBDAP</i>	Common Bell data print	0

4.1.11 COMMON PUBLIC DIRECTORY NUMBER

See 3.2 ACS Telephony Commands on page 11 on Common Public Directory Number.

4.1.12 COMPUTER-SUPPORTED TELECOMMUNICATIONS APPLICATIONS (PHASE 1)

Command name	Brief command explanation	Default authority level
<i>CSTLE</i>	Computer supported telephony applications link end	4
<i>CSTLI</i>	Computer supported telephony applications link initiate	4
<i>CSTLP</i>	Computer supported telephony applications link print	4
<i>CSTMP</i>	Computer supported telephony applications link monitored directory numbers print	0

For CSTA phase 3 commands, see 3.2 ACS Telephony Commands on page 11 on Computer Supported Telecommunications Applications Phase 3.

4.1.13 FUNCTION TEST

See 3.2 ACS Telephony Commands on page 11 on Function Test.

4.1.14 GENERIC EXTENSION

See 3.2 ACS Telephony Commands on page 11 on Extension.

4.1.15 GROUP CALL PICKUP

Command name	Brief command explanation	Default authority level
<i>GPAGE</i>	Group call pickup answer group end	2
<i>GPAGI</i>	Group call pickup answer group initiate	2
<i>GPDAP</i>	Group call pickup data print	0

<i>GPGME</i>	Group call pickup member end	2
<i>GPGMI</i>	Group call pickup member initiate	2
<i>GPGRE</i>	Group call pickup group end	3
<i>GPGRI</i>	Group call pickup group initiate	3

4.1.16 GROUP DO-NOT-DISTURB

Command name	Brief command explanation	Default authority level
<i>GDNDE</i>	Group do-not-disturb end	2
<i>GDNDI</i>	Group do-not-disturb initiate	2
<i>GDNDP</i>	Group do-not-disturb print	0

4.1.17 GROUP HUNTING

Command name	Brief command explanation	Default authority level
<i>GHCAC</i>	Group hunting category change	2
<i>GHDAP</i>	Group hunting data print§	0
<i>GHGME</i>	Group hunting group member end	2
<i>GHGMI</i>	Group hunting group member initiate	2
<i>GHGRE</i>	Group hunting group end	3
<i>GHGRI</i>	Group hunting group initiate	3

4.1.18 INTERCEPTION COMPUTER

Command name	Brief command explanation	Default authority level
<i>ICFUC</i>	Interception computer function change	4
<i>ICFUE</i>	Interception computer function end	4
<i>ICFUI</i>	Interception computer function initiate	4
<i>ICFUP</i>	Interception computer function print	0
<i>ICMWC</i>	Interception computer message waiting data change	4
<i>ICMWP</i>	Interception computer message waiting data print	0
<i>ICUPI</i>	Interception computer update initiate	4

4.1.19 ISDN TRUNK PROTOCOL DATA

Command name	Brief command explanation	Default authority level
<i>IRPDP</i>	ISDN trunk protocol data print	5

4.1.20 INTERCEPTION SERVICE

Command name	Brief command explanation	Default authority level
<i>ISEPE</i>	Interception service position end	4
<i>ISEPI</i>	Interception service position initiate	4
<i>ISEPP</i>	Interception service position print	0
<i>ISFUE</i>	Interception service function end	4
<i>ISFUI</i>	Interception service function initiate	4
<i>ISFUP</i>	Interception service function print	0

4.1.21 IP EXTENSION

See 3.2 ACS Telephony Commands on page 11 on IP Extension.

4.1.22 IP NETWORKING

Command name	Brief command explanation	Default authority level
<i>RIANC</i>	Route IP additional network information change	4
<i>RIANI</i>	Route IP additional network information initiate	4
<i>RIANP</i>	Route IP additional network information print	0

Note: The RINlx-commands have been replaced by media_gateway_interface.

4.1.23 ISDN S0 TERMINAL

Command name	Brief command explanation	Default authority level
<i>ITCAC</i>	ISDN terminal category change	2
<i>ITCUC</i>	ISDN terminal customer number change	2
<i>ITDAP</i>	ISDN terminal data print	0
<i>ITNUE</i>	ISDN terminal number end	2 D

<i>ITNUI</i>	ISDN terminal number initiate	2
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4.1.24

KEY SYSTEM TELEPHONES

Command name	Brief command explanation	Default authority level
<i>KSADC</i>	Key system telephone additional data change	2
<i>KSADP</i>	Key system telephone additional data print	0
<i>KSANC</i>	Key system telephone additional number change	2
<i>KSANE</i>	Key system telephone additional number end	2 D
<i>KSANI</i>	Key system telephone additional number initiate	2
<i>KSCAC</i>	Key system telephone category change	2
<i>KSCAP</i>	Key system telephone category print	0
<i>KSCHC</i>	Key system telephone character data change	2
<i>KSCHP</i>	Key system telephone character data print	0
<i>KSCUC</i>	Key system telephone customer number change	2
<i>KSDDP</i>	Key system telephone directory data print	0
<i>KSEXE</i>	Key system telephone extension equipment end	2 D
<i>KSEXI</i>	Key system telephone extension equipment initiate	2
<i>KSFKC</i>	Key system telephone function key change	2
<i>KSFKP</i>	Key system telephone function key print	0
<i>KSMDE</i>	Key system multiple directory number end	2
<i>KSMDI</i>	Key system multiple directory number initiate	2
<i>KSMDP</i>	Key system multiple directory number print	0

Note: KS telephones or DTS are only supported in MX-ONE Classic LIMs.

4.1.25

LEAST-COST ROUTING, LCR, INCLUDING TIME OF DAY AND ROUTING SERVER

Command name	Brief command explanation	Default authority level
<i>LCDDE</i>	Least cost routing destination data end	4 D
<i>LCDDI</i>	Least cost routing destination data initiate	4
<i>LCDDP</i>	Least cost routing destination data print	0
<i>LCIPE</i>	Least cost routing IP configuration end	4
<i>LCLDE</i>	Least cost routing LIM data end	4 D
<i>LCLDI</i>	Least cost routing LIM data initiate	4
<i>LCLDP</i>	Least cost routing LIM data print	0
<i>LCOPE</i>	Least cost routing office prefix data end	4 D
<i>LCOPI</i>	Least cost routing office prefix data	4
<i>LCOPP</i>	Least cost routing office prefix data	0
<i>LCTDI</i>	Least cost routing time zone date initiate	4
<i>LCTDP</i>	Least cost routing time zone date print	0
<i>LCTMP</i>	Least cost routing traffic measurement data print	0
<i>LCUDE</i>	Least cost routing update time supervision end	4
<i>LCUDI</i>	Least cost routing update time supervision initiate	4

4.1.26

MESSAGE TRANSFER PART DATA (SS7)

Command name	Brief command explanation	Default authority level
<i>MTLIE</i>	Message transfer part link inhibition end	4
<i>MTLII</i>	Message transfer part link inhibition initiate	4
<i>MTLIP</i>	Message transfer part link inhibition data print	4
<i>MTSDC</i>	Message transfer part signaling data link state change	4
<i>MTSLC</i>	Message transfer part signaling link data change	4
<i>MTSLE</i>	Message transfer part signaling link end	4
<i>MTSLI</i>	Message transfer part signaling link initiate	4
<i>MTSLP</i>	Message transfer part signaling link data print	0
<i>MTSRE</i>	Message transfer part signaling route end	4
<i>MTSRI</i>	Message transfer part signaling route initiate	4
<i>MTSRP</i>	Message transfer part signaling route data print	0
<i>MTSSC</i>	Message transfer part signaling link set data change	4
<i>MTSSE</i>	Message transfer part signaling link set end	4
<i>MTSSI</i>	Message transfer part signaling link set initiate	4
<i>MTSSP</i>	Message transfer part signaling link set data print	0
<i>MTSTE</i>	Message transfer part signaling route set end	4
<i>MTSTI</i>	Message transfer part signaling route set initiate	4
<i>MTSTP</i>	Message transfer part signaling route set end data print	0

4.1.27

NIGHT SERVICE

Command name	Brief command explanation	Default authority level
<i>NSCOE</i>	Night service common end	4
<i>NSCOI</i>	Night service common initiate	4
<i>NSDAP</i>	Night service data print	0

4.1.28

NUMBER CONVERSION AND BEARER CAPABILITY SUBSTITUTION

See 3.2 ACS Telephony Commands on page 11 on Number Conversion and BC substitution.

4.1.29

OPERATOR

Command name	Brief command explanation	Default authority level
<i>OPADC</i>	Operator traffic absent trunk traffic distribution change	3
<i>OPCAC</i>	Operator traffic category change	2
<i>OPCAP</i>	Operator traffic category print	0
<i>OPCEE</i>	Operator traffic central number end	3
<i>OPCEI</i>	Operator traffic central number initiate	3
<i>OPCEP</i>	Operator traffic central number print	0
<i>OPCGP</i>	Operator traffic call origin group print	0
<i>OPCGR</i>	Operator traffic call origin group remove	1
<i>OPCGS</i>	Operator traffic call origin group set	1
<i>OPCOE</i>	Operator traffic common access code end	3
<i>OPCOI</i>	Operator traffic common access code initiate	3
<i>OPCTP</i>	Operator traffic call type data print	0
<i>OPCTR</i>	Operator traffic call type data remove	2
<i>OPCTS</i>	Operator traffic call type data set	2
<i>OPCUC</i>	Operator traffic customer number change	2
<i>OPDDP</i>	Operator traffic directory data print	0
<i>OPDNC</i>	Operator traffic operator day and night time threshold change	3
<i>OPDNP</i>	Operator traffic operator day of week table information print	0
<i>OPERE</i>	Operator traffic operator end	2 D
<i>OPERI</i>	Operator traffic operator initiate	2
<i>OPIDP</i>	Operator IP data print	2
<i>OPISP</i>	Operator traffic instrument data print	0
<i>OPISS</i>	Operator traffic instrument data set	2
<i>OPNEE</i>	Operator traffic notified exchange end	3
<i>OPNEI</i>	Operator traffic notified exchange initiate	3
<i>OPNEP</i>	Operator traffic notified exchange print	0
<i>OPRSC</i>	Operator traffic route string change	2
<i>OPRSP</i>	Operator traffic route string print	0
<i>OPSAE</i>	Operator TCP server address end	2 D
<i>OPSAI</i>	Operator TCP server address initiate	2
<i>OPSAP</i>	Operator TCP server address print	0
<i>OPTSP</i>	Operator traffic status print	0
	See also 3.2 ACS Telephony Commands on page 11 on Operator Queue.	

4.1.30 PAGING

Command name	Brief command explanation	Default authority level
<i>PAALE</i>	Paging alarm group code end	2
<i>PAALI</i>	Paging alarm group code initiate	2
<i>PAALP</i>	Paging alarm group code print	0
<i>PACAC</i>	Paging category change	2
<i>PACHE</i>	Paging channel end	4
<i>PACHI</i>	Paging channel initiate	4
<i>PADAP</i>	Paging data print	0
<i>PAEDP</i>	Paging equipment data print	0
<i>PAGIE</i>	Paging end	4
<i>PAGII</i>	Paging initiate	4
<i>PASAE</i>	Paging search area end	2
<i>PASAI</i>	Paging search area initiate	2

4.1.31 PARALLEL RINGING

See 3.2 ACS Telephony Commands on page 11 on Parallel Ringing.

4.1.32 PERSONAL NUMBER

See 3.2 ACS Telephony Commands on page 11 on Call List.

4.1.33 POWER FAILURE TRANSFER

See 3.2 ACS Telephony Commands on page 11 on Power Failure Transfer.

4.1.34 RECORDED ANNOUNCEMENTS

Command name	Brief command explanation	Default authority level
<i>RACEC</i>	Recorded Voice Announcement Connection Change	4
<i>RACEE</i>	Recorded Voice Announcement Connection End	4
<i>RACEI</i>	Recorded Voice Announcement Connection Initiate	4
<i>RACEP</i>	Recorded Voice Announcement Connection Print	0
<i>RADNE</i>	Recorded Voice Announcement Directory Number End	4
<i>RADNI</i>	Recorded Voice Announcement Directory Number Initiate	4
<i>RADNP</i>	Recorded Voice Announcement Directory Number Print	0
<i>RADSE</i>	Recorded Voice Announcement Device Selection End	4
<i>RADSI</i>	Recorded Voice Announcement Device Selection Initiate	4

<i>RADSP</i>	Recorded Voice Announcement Device Selection Print	0
<i>RAEQE</i>	Recorded Voice Announcement Equipment End	4
<i>RAEQI</i>	Recorded Voice Announcement Equipment Initiate	4
<i>RAEQP</i>	Recorded Voice Announcement Equipment Print	0
<i>RAGAC</i>	Recorded announcement group announcement change	4
<i>RAGAE</i>	Recorded announcement group announcement end	4
<i>RAGAI</i>	Recorded announcement group announcement initiate	4
<i>RAGAP</i>	Recorded announcement group announcement print	0
<i>RAGME</i>	Recorded announcement group member end	2
<i>RAGMI</i>	Recorded announcement group member initiate	2
<i>RAGMP</i>	Recorded announcement group member print	0
<i>RAGPE</i>	Recorded announcement group end	4
<i>RAGPI</i>	Recorded announcement group initiate	4
<i>RAMDE</i>	Recorded announcement message data end	4
<i>RAMDI</i>	Recorded announcement message data initiate	4
<i>RAMDP</i>	Recorded announcement message data print	0

4.1.35 REMOTE EXTENSION

See 3.2 ACS Telephony Commands on page 11 on Remote Extension.

4.1.36 ROUTE AND TRUNK DATA

Command name	Brief command explanation	Default authority level
<i>ROAPE</i>	Route A-number prefix end	4
<i>ROAPI</i>	Route A-number prefix initiate	4
<i>ROAPP</i>	Route A-number prefix print	0
<i>ROCAC</i>	Route category change	4
<i>ROCAI</i>	Route category initiate	4
<i>ROCAP</i>	Route category print	0
<i>ROCDE</i>	Route customer diversion number end	4
<i>ROCDI</i>	Route customer diversion number initiate	4
<i>ROCDP</i>	Route customer diversion number print	0
<i>RODAI</i>	Route data initiate	4
<i>RODAP</i>	Route data print	0
<i>RODDE</i>	Route external destination data end	3
<i>RODDI</i>	Route external destination data initiate	3
<i>RODDP</i>	Route external destination data print	0
<i>RODIE</i>	Route direction end	3
<i>RODII</i>	Route direction initiate	3
<i>RODIP</i>	Route direction print	0

<i>RODNE</i>	Route day and night number end	4
<i>RODNI</i>	Route day and night number initiate	4
<i>RODNP</i>	Route day and night number print	0
<i>RODRP</i>	Route external destination route data print	0
<i>ROECE</i>	Route equipment connection end	0
<i>ROECI</i>	Route equipment connection initiate	4
<i>ROECP</i>	Route equipment connection print	4
<i>ROEDP</i>	Route equipment data print	0
<i>ROEQE</i>	Route equipment end	3 D
<i>ROEQI</i>	Route equipment initiate	3
<i>ROFCC</i>	Route fault counter change	4
<i>ROFCP</i>	Route fault counter print	0
<i>RONDE</i>	Route number data end	4
<i>RONDI</i>	Route number data initiate	4
<i>RONDP</i>	Route number data print	0
<i>RORIE</i>	Route rerouting isolated LIM end	4
<i>RORII</i>	Route rerouting isolated LIM initiate	4
<i>RORIP</i>	Route rerouting isolated LIM print	0
<i>RORNE</i>	Route rerouting number in network end	4
<i>RORNI</i>	Route rerouting number in network initiate	4
<i>RORNP</i>	Route rerouting number in network print	0
<i>ROUTE</i>	Route end	4
<i>ROVNE</i>	Route vacant number rerouting end	4
<i>ROVNI</i>	Route vacant number rerouting initiate	4
<i>ROVNP</i>	Route vacant number rerouting data print	0

4.1.37

SPECIAL-PURPOSE EXTENSION

Command name	Brief command explanation	Default authority level
<i>SPEXE</i>	Special purpose extension end	2
<i>SPEXI</i>	Special purpose extension initiate	2
<i>SPEXP</i>	Special purpose extension print	0

4.1.38

STATIC SEMIPERMANENT CONNECTION

Command name	Brief command explanation	Default authority level
<i>SEMIE</i>	Static semipermanent connection end	4
<i>SEMI</i>	Static semipermanent connection initiate	4

<i>SEMIP</i>	Static semipermanent connection print	0
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4.1.39 SYSTEM DATA

See 3.2 ACS Telephony Commands on page 11 for Global traffic data.

4.1.40 SYSTEM USER INFORMATION

See 3.2 ACS Telephony Commands on page 11 for Resource status.

4.1.41 TRAFFIC CONNECTION

See 3.2 ACS Telephony Commands on page 11 for Traffic Connection Matrix.

4.1.42 TRAFFIC RECORDING/MEASUREMENT

Command name	Brief command explanation	Default authority level
<i>TRCOI</i>	Traffic recording conference initiate	4
<i>TRCBI</i>	Traffic recording common bell initiate	4
<i>TRCFI</i>	Traffic recording DECT initiate	4
<i>TRCRI</i>	Traffic recording MFC receiver initiate	4
<i>TRCSI</i>	Traffic recording MFC sender initiate	4
<i>TRDDI</i>	Traffic recording dial tone delay initiate	4
<i>TRDIP</i>	Traffic recording directory print	0
<i>TRDPE</i>	Traffic recording data processing end	4
<i>TRDPI</i>	Traffic recording data processing initiate	4
<i>TRDPP</i>	Traffic recording data processing print	4
<i>TREXI</i>	Traffic recording extension initiate	4
<i>TRIPi</i>	Traffic recording IP extension initiate	4
<i>TRKRI</i>	Traffic recording keycode receiver initiate	4
<i>TRKSI</i>	Traffic recording keycode sender initiate	4
<i>TRMBI</i>	Traffic recording Mobility initiate	4
<i>TRMEE</i>	Traffic recording measurement end	4
<i>TRMHI</i>	Traffic recording measurement halt initiate	4
<i>TROMI</i>	Traffic recording operator manned time initiate	4
<i>TROPI</i>	Traffic recording operator initiate	4
<i>TRPBI</i>	Traffic recording PBX or hunt group initiate	4
<i>TRPGI</i>	Traffic recording paging initiate	4
<i>TRPEE</i>	Traffic recording print and erase end	4
<i>TRPEI</i>	Traffic recording print and erase initiate	4
<i>TRPGI</i>	Traffic recording on Paging initiate	4
<i>TRPLI</i>	Traffic recording on PCM line initiate	4

<i>TRREP</i>	Traffic recording result print	0
<i>TRROI</i>	Traffic recording route initiate	4
<i>TRRSI</i>	Traffic recording route supervision value initiate	4
<i>TRRSP</i>	Traffic recording route supervision value print	0
<i>TRTLI</i>	Traffic recording trunk line initiate	4
<i>TRTRI</i>	Traffic recording tone receiver initiate	4

Note: The TRDX, TRMS, and TRMG commands are not supported. The TRKR, TRKS, and TRTR commands are only supported in the MX-ONE Classic.

4.1.43

VOICE MAIL

Command name	Brief command explanation	Default authority level
<i>VMFUE</i>	Voice mail function end	4
<i>VMFUI</i>	Voice mail function initiate	4
<i>VMFUP</i>	Voice mail function data print	0
<i>VMGEE</i>	Voice mail generic extension end	4
<i>VMGEI</i>	Voice mail generic extension initiate	4
<i>VMGEP</i>	Voice mail generic extension print	0
<i>VMPOE</i>	Voice mail port end	4
<i>VMPOI</i>	Voice mail port initiate	4
<i>VMPOP</i>	Voice mail port print	0

4.1.44

SURVEILLANCE, OBSERVATION AND MONITORING

Command name	Brief command explanation	Default authority level
<i>ZODLE</i>	Surveillance, Observation and Monitoring (SOM) data link end	4
<i>ZODLI</i>	SOM data link initiate	4
<i>ZODLP</i>	SOM data link data print	0
<i>ZOPWC</i>	SOM I/O password change	6
<i>ZOTGE</i>	SOM trunk group end	4
<i>ZOTGI</i>	SOM trunk group initiate	4
<i>ZOTGP</i>	SOM trunk group print	0