



# MML User Interface

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## Introduction

This chapter provides information about Man-Machine Language (MML) command syntax and conventions, batch files, and procedures for starting and stopping MML sessions in the Cisco H.323 Signaling Interface (HSI) application. This chapter contains the following sections:

- [Configuring the Cisco HSI Environment for MML Sessions, page 3-1](#)
- [MML Commands, page 3-2](#)
- [Starting an MML Session, page 3-3](#)
- [Batch Files, page 3-3](#)
- [MML Responses, page 3-5](#)
- [MML Help, page 3-6](#)
- [Quitting an MML Session, page 3-6](#)

## Configuring the Cisco HSI Environment for MML Sessions

To configure the Cisco HSI to start an MML session when you are logged in as a Cisco user, complete the following steps:

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- Step 1** Log in as mgcusr.
  - Step 2** To start the software, become super-user and enter the following command:  
**/etc/init.d/CiscoGW start**
  - Step 3** Exit out of super-user.
  - Step 4** Type **mml** to start the MML command-line interpreter.



**Tip**

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Press the **Tab** key twice to see a list of MML commands.

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# MML Commands

To execute MML commands, use the **rlogin** command to log in as a Cisco user and perform one of the following tasks:

- Start the MML session (see the “Starting an MML Session” section on page 3-3) and enter a command.
- Type a batch file command to start an MML session (see the “Starting a Batch File” section on page 3-4).

## MML Command Syntax

MML commands use the following syntax:

```
command_name:target:[Parameter_List][;comments]
```

Parameter\_list consists of a parameter name, an equal sign, and a value for the parameter.

The keywords and the value strings need not be enclosed in quotation marks. Anything you enter after a semicolon (;) is treated as a comment. Use only one MML command on each line.

[Appendix A, “MML Commands”](#) contains detailed information about the individual MML commands.



Tip

- Use the **Up** arrow key to scroll through all previous MML commands in turn.
- Use the **Down** arrow key to move forward in the command buffer.
- Use the **Left** and **Right** arrow keys to move along the command line.
- Use the **Backspace**, **Delete**, and alphanumeric keys to edit an MML command.

## MML Command Conventions

The MML commands use the conventions shown in [Table 3-1](#).

*Table 3-1 MML Command Conventions*

Convention	Meaning	Comments and Examples
Square brackets ([ ])	Optional elements	<b>command</b> [abc] abc is optional (not required), but you can choose it.
Vertical bars ( )	Separated alternative elements	<b>command</b> [abc   def] You can choose either abc or def, or neither, but not both.
Braces ({   })	Required choice of alternative elements	<b>command</b> {abc   def} You must use either abc or def, but not both.
Angle brackets (< >)	Symbol specifier	—

The MML commands can be interpreted and monitored through a network Transaction Language 1 (TL1) interface. The TL1 symbols shown in [Table 3-2](#) are used in MML

*Table 3-2 TL1 Symbols Used in MML*

Symbol	Description
:	A parameter separator.
::	An empty parameter block.
&	Arguments are grouped together so that one parameter may convey several arguments.
;	End of command (optional). Anything on the same line after this symbol is treated as a comment.

## Case Sensitivity

Command names and parameter names are not case sensitive. You can enter commands and parameters in either upper- or lowercase. Filenames *are* case sensitive when used as arguments in MML commands.

## Starting an MML Session

To start an MML session, complete the following steps:

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- Step 1** Type **rlogin hostname -l username** to log in to the machine.
- Step 2** Type one of the following commands at the prompt:
- **mml**
  - **mml -b batchfile** (see the [“Starting a Batch File”](#) section on page 3-4)
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The following example shows the start of an MML session:

```
user@host> mml

Welcome to the Cisco H.323 Signaling Interface.

gw mml>
```

## Batch Files

The Cisco HSI application supports the use of batch files. You can create an ASCII file of MML provisioning commands for use as a batch file. You can also use a script file. When the commands are read, the Cisco HSI sequentially executes them.

The following is an example of an MML provisioning batch file:

```
prov-sta::srcver="new",dstver="first"
prov-add:name="sys_config",nodeid="H323-GW1"
prov-add:name="h323_sys",messages=30000,channels=5000
prov-add:name="ras",responsetimeout=10,allowcallswhennonreg=1
```

```
prov-add:name="ras",terminaltype="gateway",timetolive=900
prov-add:name="q931",reponsetimeout=20,connecttimeout=20,maxcalls=5000
prov-cpy
```

The **prov-sta** command establishes a provisioning session. The **prov-cpy** command copies configuration settings from the current provisioning session to the Cisco HSI and activates the configuration. If the command is successful, it also terminates the current provisioning session. If you are not ready to commit a session, use the **prov-stp** command to save and stop the provisioning session.

The application provides a log function (**diaglog** command) that records the MML commands and responses in a log file.

In the MML batch file, you can place a **diaglog** command at the beginning to start logging and a **diaglog** command at the end to stop logging. For more information about the **diaglog** command, see [Appendix A, "MML Commands."](#)

The application logs the user ID, the date and time, and the name of each command that has been executed in batch mode to the `mml_batch_log` file for commands executed in both the process manager and the application.



Note

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Batch files can be defined for complete systems or to modify parts of an existing system.

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## Creating a Batch File

To create a batch file, use an ASCII text editor program to create a new file. Each command should be on a separate line.

## Starting a Batch File

To start executing a batch file, type **mml -b *batchfilename*** at the UNIX prompt.

After you enter the batch file command, the application displays the result of each MML command as it is executed. Each command and its results are saved in the `mml.log` file. When the batch file is completed, the MML session is ready to accept user commands.

The following example shows the start of a batch file named `nolog.bat` with these contents:

```
prov-sta:srcver=active,dstver=nolog
prov-ed:name=logging,eisup=0x0000
prov-cpy
```

and this output:

```
gp-capetown-16-> mml -b nolog.bat
Starting in batch mode.
Connecting to port 10129 on host gp-capetown
```

```
Welcome to the Cisco H.323 Signaling Interface.
gw mml> gw mml> prov-sta:srcver=active,dstver=nolog
H323 Signaling Interface Tue Jan 22 05:57:12 2002
M SUCC
Successfully started provisioning session "nolog" from "active".Note: This provisioning
session has not been verified.
gw mml> prov-ed:name=logging,eisup=0x0000
H323 Signaling Interface Tue Jan 22 05:57:12 2002
M SUCC
```

```

Successfully edited provisioning element(s):
MML Name : logging.
Parameter: EISUP.
Value : 0x0000.
gw mml> prov-cpy
H323 Signalling Gateway Tue Jan 22 05:57:13 2002
M SUCC
Successfully activated provisioning session nolog.
gw mml>

```

## MML Responses

The following sections describe the two types of response messages that are displayed by the MML user interface:

- Status messages
- Error messages

## Status Messages

[Table 3-3](#) lists the MML status messages and their descriptions.

*Table 3-3 MML Status Messages and Descriptions*

Status	Definition	Description
RTRV	Retrieve	Retrieve and display the contents of the specified file
SUCC	Successful	Successful completion

## Error Messages

If an MML command does not perform, an error message is displayed. [Table 3-4](#) lists the MML error messages and their descriptions

*Table 3-4 MML Error Messages and Descriptions*

Error Message	Definition	Description
DENY	Command denied	The command is recognized, but the system does not allow the requested function to be performed.
ICNV	Input command not valid	The MML command is not recognized.
IDNV	Input data not valid	An unknown parameter has been entered.
IISP	Input syntax error	An incorrect syntax has been entered.
IITA	Invalid target	The requested operation cannot be performed on the specified component, or the component does not exist.
IPRM	Input parameter missing	An expected parameter has not been entered.

*Table 3-4 MML Error Messages and Descriptions (continued)*

Error Message	Definition	Description
SABT	Status abort	The requested operation did not complete within the allotted time.
SNVS	Component not in valid state	The requested operation failed because the component is either not configured to accept the operation or the component is already in the desired state.
SNSP	State not supported	The operation is not supported by the component.
SROF	Status requested operation failed	The requested operation failed.

## MML Help

MML has an online help feature. The MML **help** command displays a list of valid system commands and an explanation of their use. To display the online help, start an MML session and type **help** at the command line prompt. See [Appendix A, “MML Commands”](#) for an example of the **help** command.

## Quitting an MML Session

To quit an MML session, type **quit** at the prompt.