Main page: Cisco Unified MeetingPlace, Release 8.0

**Up one level:** <u>Reference Information</u>

You can use the command-line interface (CLI) on the Application Server to perform functions that cannot be performed in the Administration Center.

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Contents 1

CAUTION: The CLI is a diagnostic interface designed to perform diagnostic and operational tasks and functions, and is not designed for use as a persistent operating environment monitoring tool. If you need to perform persistent continuous monitoring please consult Cisco TAC or your Cisco Professional Services partners for further guidance.

**Note:** The CLI on the Application Server is not the same as the CLI on the Cisco WebEx Node for MCS. For information about the latter, see the <u>Using the Command-Line Interface (CLI) on the Cisco WebEx Node for MCS</u> module.

- CLI User Level Options on the Application Server
- Restrictions for the CLI on the Application Server
- How to Sign in to the CLI on the Application Server
- Application Server Command Reference

## **CLI User Level Options on the Application Server**

CLI User Level	Description
mpxadmin	We recommend that you use this user level whenever possible.
	Highest authority, enabling you to do the following:
	<ul> <li>Enter Operating System Commands for the Application Server, though pseudo (sudo) root access can also be used.</li> <li>Enter Database Replication Commands for the Application Server or Failover Commands for the Application Server.</li> <li>Reset the root or mpxadmin user passwords.</li> <li>Uninstall the system.</li> </ul>
root	
	To get to the root user level, do one of the following:
	<ul> <li>Sign in as the mpxadmin user, and enter su at the command line.</li> <li>Sign in directly as the root user-this is possibly only by <u>Signing in to the CLI on the Application Server By Using the Console</u>.</li> </ul>
	<b>Caution!</b> For security reasons, we do not recommend signing in directly as the root user, unless you need to reset the root user or mpxadmin user passwords or uninstall the system.

CAUTION: The CLI is a diagnostic interface designed to perform diagnostic and operational tasksand function

- Signing in to the CLI on the Application Server By Using the Console
- Signing in to the CLI on the Application Server By Using SSH
- Password Recovery for the Cisco Unified MeetingPlace Application Server module

## **Restrictions for the CLI on the Application Server**

- The CLI and its commands are available only in English.
- The CLI accepts only the standard 128 ASCII characters.
- Many commands you enter might prompt you for information. If the Backspace key does not delete characters in this interactive mode, use one of the following options:
  - Press the **Delete** key to delete the previous character.
  - ◆ Press **Ctrl-W** to delete the previous word.
  - ◆ Press **Ctrl-U** to delete the entire line.

## How to Sign in to the CLI on the Application Server

- Signing in to the CLI on the Application Server By Using the Console
- Signing in to the CLI on the Application Server By Using SSH

## Signing in to the CLI on the Application Server By Using the Console

You can sign in to the CLI from the console by using either the <u>mpxadmin</u> or <u>root</u> usernames. *This is the only way you can sign in directly as the root user.* You can enter operating system commands here.

#### Procedure

- 1. Connect the monitor, keyboard, and mouse to the Application Server.
  - The Cisco Unified MeetingPlace operating system sign-in page is displayed.
- 2. For the username, enter **mpxadmin**.
- 3. Enter the password for the mpxadmin user.

This was established during installation.

4. Right-click the desktop and select **Open Terminal**.

A command window appears. You can start entering commands. This is a Linux operating system so all commands should be either Linux commands or Cisco Unified MeetingPlace operating system commands. See the <u>Operating System Commands for the Application Server</u> for information about the operating system commands.

5. When you are finished with the command window, either enter **exit** or select the **X** in the top right corner.

**Note:** Always sign out of the Cisco Unified MeetingPlace operating system when you are finished.

#### **Related Topics**

- Signing in to the CLI on the Application Server By Using SSH
- Application Server Command Reference

### Signing in to the CLI on the Application Server By Using SSH

This section provides one method of signing in to the CLI by using SSH. Other methods might be available for you.

#### Restriction

Only the <u>mpxadmin</u> user can sign in to the CLI remotely using SSH. If needed, you can later switch to the <u>root</u> user by entering **su**.

#### **Before You Begin**

You need a remote connection with a non-configurable terminal emulation program, such as the Windows SSH client, to sign in to the CLI remotely using SSH.

#### Procedure

- 1. From your computer, go to Start > Programs > SSH Secure Shell > Secure Shell Client.
- 2. Select **Quick Connect**.
- 3. In the Connect to Remote Host window, enter these values:

Field	Value
Host Name	IP address of your Cisco Unified MeetingPlace system
User Name	mpxadmin
Port Number	22
Authentication Method	leave as <profile settings=""></profile>

- 4. Select Connect.
- 5. In the Enter Password window, enter the password for the mpxadmin user.

This was established during installation.

6. Select **OK**.

The system displays the command line, and you can now enter commands.

- Signing in to the CLI on the Application Server By Using the Console
- Application Server Command Reference

## **Application Server Command Reference**

- Command Syntax Conventions
- Application Commands for the Application Server
- Operating System Commands for the Application Server
- <u>Database Replication Commands for the Application Server</u>
- Failover Commands for the Application Server

## **Command Syntax Conventions**

This document uses these command syntax conventions.

Convention	Description
bold	Bold text indicates commands and parameters that you enter as shown.
italic	Italic text indicates parameters for which you supply values.
<x></x>	Angle brackets enclose a parameter for which you supply values. This is typically used instead of italic text when there is no space between adjacent parameters.
[x]	Square brackets enclose an optional parameter.
I	A vertical line, called a pipe, indicates a choice within a set of parameters.
[x   y]	Square brackets enclosing parameters separated by a pipe indicate an optional choice.
$\{x \mid y\}$	Braces enclosing parameters separated by a pipe indicate a required choice.
$[x \{y \mid z\}]$	Braces and a pipe within square brackets indicate a required choice within an optional element.

## **Application Commands for the Application Server**

Table: Command Reference: Application Commands for the Application Server

Command	Description
activity	Displays a quick, verbose, or complete status of all ports or a range of ports. Allows you to make a test call and show all meetings.
	Syntax: activity
alarm	Displays the Alarm Table:
	<ul> <li>REFNO-Reference number used with the <u>clearalarm</u> command to clear a specific alarm table entry.</li> <li>SEV-Severity, either major (MAJ) or minor (MIN). See <u>Alarm Severity Levels</u> in the <u>Using Alarms and Logs on Cisco Unified MeetingPlace</u> module.</li> <li>CODE-See Code.</li> <li>COUNT -See Count.</li> <li>FIRST-See First Time.</li> </ul>

- LAST-See Last Time.
- UNIT-See Unit.
- SW MODULE-See Software Module.

**Note:** The brief description in the alarm table entry might contain values that are specific to one alarm occurrence, such as an IP address. These values might differ in all alarms that are combined into one table entry, but only the values for the *most recent* alarm are displayed. To see the individual alarms, use the errorlog command or the viewexlog command.

#### Syntax: alarm

## ccamon

Monitors the Call Control Agent. Allows you to view the call statistics and set the log tracing level.

### Syntax: ccamon

Shows the type and number of licenses installed.

## checklic

**Note:** The system can take up to 15 seconds to process this information.

#### Syntax: checklic

Clears either all the alarms in the alarm table or just the alarm specified.

## clearalarm

If there are any major alarms in the alarm table, the system can be configured to call the system administrator after every restart until all major alarms are deleted from the alarm table. See Configuring the System to Call You If There is a Major Alarm in the Using Alarms and Logs on Cisco Unified MeetingPlace module.

Running this command stops the system from calling the system administrator (if it has been configured to do so).

Syntax: **clearalarm** { reference-number | **all** }

#### cleardb

Clears the following Application Server data:

- All user profiles except the admin and guest user profiles
- All user groups except the System group
- All user recordings
- All conference recordings

You must be signed in to the Application Server CLI as the root user to enter this command.

Use this command for specific situations; as instructed in the documentation or as recommended by Cisco TAC. It first clears the database, then restarts all Cisco Unified MeetingPlace services. Upon restarting, ConfSchd service executes a ConfSchd db table rebuild to clean up other dependent tables. When the ConfSchd db table rebuild is completed and all other MeetingPlace services are up, then the prompt returns.

	<b>Note:</b> If the Application Server is in a failover or in a RSNA deployment, then turn off replication before running this command. Be sure that the Application Server is in active mode before running this command.
	Syntax: cleardb
cpstatus	Displays information about each active call, including the associated meeting ID, whether the system dialed out to the endpoint, and whether the call uses video.
	Syntax: cpstatus
	Lists selected portions of the call processing trace log.
cptrace	
	Syntax: cptrace
	Displays the time and date for the Application Server.
	If you are signed in as a root user, you can also set the date and time based on the local time zone.
dota	Syntax: date [MMDDhhmm[YYYY][.ss]]
date	Parameters (available only to root users):
	<ul> <li><i>MM</i>-month, specified by two digits</li> <li><i>DD</i>-day, specified by two digits</li> <li><i>hh</i>-hour, specified by two digits in 24-hour format</li> <li><i>mm</i>-minute, specified by two digits</li> <li><i>YYYY</i>-calendar year, specified by four digits</li> <li><i>sss</i>-second, specified by two digits and a preceding period (.)</li> </ul>
dbupdate	Deletes all entries in the Cisco Unified MeetingPlace database, so that the database is the equivalent of that in a newly installed Cisco Unified MeetingPlace system. This means that all user groups, user profiles, video terminal profiles, remote servers, meeting categories, and all meeting records are deleted from the system except the standard, preconfigured items, such as the System user group.
	Caution! Deleting all database entries is an irreversible operation. Before you run the <u>dbupdate</u> command, consider backing up and archiving the database. See <u>Backing Up</u> , <u>Archiving</u> , <u>and Restoring Data on the Cisco Unified MeetingPlace Application Server module</u> .
	<ul> <li>Use this command only in these situations:</li> <li>Cisco TAC instructs you to do so.</li> <li>You configured Directory Service on your system, and you need to change the LDAP directory with which Cisco Unified Communications Manager is integrated. If you do not clear the database before switching from one LDAP directory to another, all user profiles from the first LDAP directory will remain in the Cisco Unified MeetingPlace database until you manually delete them.</li> </ul>

	The automatic Directory Service deletion of user profiles does not apply when you change the LDAP directory. For details about when and how the system automatically deletes Directory Service user profiles, see <u>Directory Service User Profile Deletion</u> in the <u>Configuring Cisco Unified MeetingPlace Directory Service</u> module.
errorlog	Displays the Exception Log output one screen at a time:  • Date of the event • Time of the event • Severity (major, minor, informational, or warning) • Exception code • Brief description
	In contrast, the <u>viewexlog</u> command provides the entire <u>Exception Log</u> output all at once.  Syntax: <b>errorlog</b>
	Displays the system event log.
	Note: This command has many parameter options; only the most commonly used parameters are listed below.
	Syntax: <b>eventlog</b> [- <b>b</b> [YY][MMDD]hhmm] [- <b>e</b> [YY][MMDD]hhmm] [- <b>G</b>   - <b>C</b> ] [- <b>t</b> ] [  <b>more</b> ]
	Parameters:
	<ul> <li>-b-Specifies a start time for the log events to include in the output.</li> <li>-e-Specifies an end time for the log events to include in the output.</li> </ul>
eventlog	<b>Note:</b> To show events for the current day, you can omit the <i>YY</i> , <i>MM</i> , and <i>DD</i> parameters from the start and end times.
	<ul> <li>YY-Calendar year, specified by two digits. Typically, this parameter is included only when troubleshooting issues around the start of a new calendar year.</li> <li>MM-month, specified by two digits</li> <li>DD-day, specified by two digits</li> </ul>
	<ul> <li>hh-hour, specified by two digits in 24-hour format</li> <li>mm-minute, specified by two digits</li> <li>-G-Shows the telephony and conference events and control messages from the Call Processing-Media Control Protocol (CPMCP) component, which is a proxy for the Media Server.</li> </ul>
	<ul> <li>-C-Limits log output to events for the conference scheduler (ConfSchd) component.</li> <li>-t-Displays the log output in real time. This option is useful for troubleshooting issues in real time. For example, you can enter eventlog -G -t and then place a test call to the system to see how the system responds to the incoming call and to any subsequent user input.</li> </ul>
exc	• I more-Displays the log output one screen at a time.  Displays the meaning of an exception code that was listed in the errorlog or viewexlog command output.

	Syntax: exc [-v] exception-code
	Displays the hostname of the Application Server.
hostname	
	Syntax: hostname
	Captures configuration details and logs from the system for a particular time period. The output file is a zip file that is stored in the /tmp directory. The system gives the exact location after compiling the information.
	Restrictions:
infocap	<ul> <li>You must be signed in as the root user to run this command.</li> <li>You can also get this information by completing <u>Obtaining and Viewing the System Information Capture (Infocap) Log</u> in the <u>Using Alarms and Logs on Cisco Unified MeetingPlace</u> module. Use this command only if you are unable to get the information from the Cisco Unified MeetingPlace Administration Center.</li> <li>The begin and end dates and times must be in the format [YY]MMDDhhmm. The YY is optional and if not specified, the system uses the current year. For format details, see the parameters for the <u>date</u> command.</li> </ul>
	Syntax: <b>infocap -b</b> <i>begin-date-and-time</i> <b>-e</b> <i>end-date-and-time</i>
infocapmtg	Gathers a system information capture file around the time of a meeting.
	Syntax: <b>infocapmtg</b> [meetingID] [-S   -P   -Bminutes] [-n username   -p profilename] [-b beginning-time -e ending-time]
	Parameters:
	<ul> <li>meetingID-Captures information about a specific meeting ID.</li> <li>-S-Captures information about the specified meeting ID when it was scheduled.</li> <li>-P-Stops the capture when the meeting was purged.</li> <li>-B minutes-Adds a buffer of minutes before or after the start or stop of the capture.</li> <li>-n username-Captures information about the first meeting where the specified user was a participant.</li> <li>-p profilename-Captures information about the first meeting where the specified user profile was a participant.</li> <li>-b beginning-time -e ending-time-Captures information about the meeting between the beginning and ending time.</li> </ul>
	Examples:
	<b>infocapmtg 1212</b> Gathers a system information capture file starting at the time meeting 1212 began and ending when meeting 1212 ended.

**infocapmtg 1212 -S** Gathers a system information capture file starting at the time someone scheduled meeting 1212 and ending when meeting 1212 ended.

**infocapmtg 1212 -B 5** Gathers a system information capture file starting 5 minutes before meeting 1212 began and ending 5 minutes after meeting 1212 ended.

**infocapmtg -n** *username* **-b 0950 -e 1400** Gathers a system information capture file starting for a meeting scheduled by or attended by *username* where the meeting started between 9:50 a.m. and 2:00 p.m. today.

Displays information about all installed locales including the following:

## langinfo

- Locale ID
- Language code
- Locale order
- Locale name
- Country code
- Locale version number

#### Syntax: langinfo

### mtginfo

Displays information about a specific meeting. Searches for a meeting based on any of these:

- Unique conference ID (such as 125). (This number is output by certain commands such as **cptrace -C** and **errorlog**. It uniquely identifies a meeting.)
- Meeting ID (such as 1278). Can optionally use any of the time arguments.
- Unique user ID (such as 0x65). (This number is output by certain commands such as <u>userinfo</u>. It uniquely identifies a user.) Searches for all meetings that a user has attended or been invited to.
- Activity. Searches only for active meetings.
- Time. Searches for all meetings valid at a certain time with the -t argument or between two times when the -s and -e arguments are used together.

Syntax: **mtginfo -a** time **-c** unique-conf-id **-e** end-time **-m** meeting-id **-s** start-time **-t** time **-u** unique-user-id

**Note:** The start and end times must be in the format YYMMDDhhmm. All parameters are optional. If they are not all present, the system starts processing from the right. For format details, see the parameters for the <u>date</u> command.

**Note:** Start and end times in the command output are adjusted for the Meeting ID start guard time (minutes) and Meeting ID end guard time (minutes) fields on the <u>Meeting Configuration Page</u>.

Examples:

mtginfo -m 1234 Looks for the meeting with the ID of 1234 at the current time

mtginfo -m 1234 -t 11 Looks for meeting with the ID of 1234 at 11 minutes after the current hour

**mtginfo -m 1234 -t 1111111111** Looks for meeting with the ID of 1234 at 11:11am on Nov 11, 2011

mtginfo -a 1430 Looks for meetings that are active at 2:30pm today

mtginfo -s 1430 -e 1530 Looks for meetings that started or ended between 2:30 and 3:30pm today

mtginfo -c 123 Looks for meeting with the unique conference ID of 123

**mtginfo -u 123 -t 1111 -e 1211** Looks for meetings that the user with the unique user ID of 123 is invited to between 11:11 and 12:11 today

Lists the current network configuration settings and allows you to change them after the system has been installed. Most changes take affect after restarting the system.

You must be signed in as root before running this command.

**Caution!** A system restart terminates all existing call connections. Proceed only during a scheduled maintenance period or during a period of extremely low usage.

Use the **net** command to set the following:

- Port configuration parameters, including:
  - ◆ Application Server (eth0) hostname, IP address, subnet mask, and default gateway
  - ♦ Virtual (eth0:0) hostname, IP address, subnet mask, and default gateway-the eth0:0 virtual interface is used in Application Server Failover deployments
  - ♦ MTU and link parameters (auto-negotiation, speed, duplex).
- Domain name
- DNS servers
- NTP servers

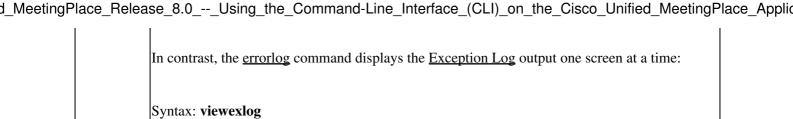
**Note:** If you change the Application Server hostname (for eth0), then you must also perform these actions:

- Configure the DNS (1) server to point the old hostname to the new hostname.
  - ◆ Restart the application by entering either the [[Cisco Unified MeetingPlace Release 8.0 -- Using the Command-Line Interface (CLI) on the Cisco Unified MeetingPlace Application Server#'mpx\_sys|mpx\_sys]]'restart operating system command or the reboot Linux command.
  - ◆ If you enabled SSL for the Application Server, complete the <u>Generating a</u>
    <u>Certificate Signing Request and Obtaining the Certificate</u> and <u>Uploading the</u>

• Shows the current date and time

	• Starts and stops channel RTP recording
	Syntax: taccli
	Displays statistics for the Media Server, ports, and conferences.
techui	This technician user interface helps to diagnose and troubleshoot media and voice quality issues of active calls.
	Syntax: <b>techui</b>
	Displays information about a specific user. Searches for a user based on any of these:
userinfo	<ul> <li>User ID</li> <li>Profile number</li> <li>Unique user ID (such as 0x65). The unique user ID is output by certain commands. It uniquely identifies a user but does not display the name of the user.</li> </ul>
	Syntax: <b>userinfo</b> { <i>user-id</i>   <i>profile-number</i>   <i>unique-user-id</i> }
	Performs administrative functions for any user profile.
	Restriction: You cannot set the admin user to inactive, locked, or the group default.
	Syntax: <b>userutil</b> {- <b>q</b>   [- <b>p</b>   - <b>P</b> ] [- <b>n</b>   - <b>N</b> ] [- <b>a</b>   - <b>i</b>   - <b>l</b>   - <b>g</b> ]} userid [password]
	Parameters:
userutil	<ul> <li>-q-Displays user profile information and status.</li> <li>-p-Reset the User password. Requires a password entry.</li> <li>-P-Reset the User password and force it to expire. This forces the user to change the password at the next sign-in attempt. Requires a password entry.</li> <li>-n-Reset the Profile PIN (PIN for authentication over the phone). Requires a password entry.</li> <li>-N-Reset the Profile PIN and force it to expire. Requires a password entry.</li> <li>-a-Set User status to active.</li> <li>-i-Set User status to inactive.</li> <li>-i-Set User status to locked.</li> <li>-g-Set User status to group default setting.</li> <li>userid-User ID.</li> <li>pasword-New User password or Profile PIN. Required if you enter -p, -P, -n, or -N.</li> </ul>
viewexlog	Provides the entire Exception Log output all at once:
	<ul> <li>Date of the event</li> <li>Time of the event</li> <li>Severity (major, minor, informational, or warning)</li> <li>Exception code</li> <li>Brief description</li> </ul>

Table: Command Reference: Application Commands for the Application Server



Footnote 1: DNS = Domain Name System

Footnote 2: NTP = Network Time Protocol

#### **Related Topics**

• Using Alarms and Logs on Cisco Unified MeetingPlace module

### **Operating System Commands for the Application Server**

In addition to the commands listed in <u>Table: Command Reference: Operating System Commands for the Application Server</u>, the CLI supports the standard Linux operating system commands. You can use the **vim** command to view or modify text files if necessary.

These are the requirements and restrictions for operating system commands:

- With the exception of the **mpx\_sys** command, use the operating system commands to start or stop services only when you have been explicitly told to do so by Cisco TAC. Use of these commands might cause unpredictable results.
- If you are not signed in as the <u>root</u> user, you must enter **sudo** before you can run any of these commands. For example, to stop all application services, go to the command line and enter this command:

### sudo ./mpx\_app stop

The preceding example assumes that you are already in the /etc/init.d directory. If you are not in that directory, instead enter this command:

sudo /etc/init.d/mpx app stop

- Existing call connections will not be terminated by stopping services on the Application Server. However, starting or restarting services will terminate those calls. This behavior applies:
  - ♦ To the mpx\_app, mpx\_sys, and mpx\_va commands.
  - ♦ If the Application Server crashes and is reloaded.
  - ♦ If you enter the **shutdown** or **reboot** Linux command on the Application Server.

Table: Command Reference: Operating System Commands for the Application Server

Command	Description
mpx_app	Starts, stops, or restarts all Cisco Unified MeetingPlace application services.

	Syntax: mpx_app {start   stop   restart   status} [-v]
	Starts, stops, or restarts Directory Service and external AXL authentication through Cisco
	Unified Communications Manager.
mpx_axlds	
	Syntax: mpx_axlds {start   stop   restart   status} [-v]
	Starts, stops, or restarts Cisco Unified MeetingPlace database services.
mpx_db	
mpx_do	Court on the (atom) and atom be atom by the standard of the st
	Syntax: mpx_db {start   stop   restart   status} [-v]
	Starts, stops, or restarts Cisco Unified MeetingPlace license manager services.
mpx_lm	
	Syntax: mpx_lm {start   stop   restart   status} [-v]
	Starts, stops, or restarts messaging integration services for Cisco Unified MeetingPlace
	Click-to-Conference for IBM Lotus Sametime Instant Messaging.
mpx_rmi	
	Syntax: mpx_rmi {start   stop   restart   status} [-v]
	Starts, stops, or restarts the Cisco Unified MeetingPlace recording and streaming service.
mpx_rssctrl	
	Symtoxy many regertal (start   start   start   status   [ vi]
	Syntax: mpx_rssctrl {start   stop   restart   status} [-v] Starts, stops, or restarts SNMP services.
	Starts, stops, or restarts sinvir services.
mpx_snmp	
	Syntax: mpx_snmp {start   stop   restart   status} [-v]
	Starts, stops, or restarts all Cisco Unified MeetingPlace services.
	<b>Caution!</b> A system restart terminates all existing call connections. Proceed only during a
	scheduled maintenance period or during a period of extremely low usage.
mpx_sys	Note: If the restart process is interrupted, you will have to reenter the mpx_sys restart
1 - 2	command. For example, the restart process might be interrupted by a power outage, by closing the SSH connection, or by another restart process that is initiated from a different
	terminal.
	Syntax: mpx_sys {stop   restart   status} [-v]
	Starts, stops, or restarts Apache Tomcat services.
mpx_tomcat	
	Syntax: mpx_tomcat {start   stop   restart   status} [-v]
	Starts, stops, or restarts Apache Tomcat monitoring services.
mpx_tomcatmon	
	Syntax: mpx_tomcatmon {start   stop   restart   status} [-v]
mpx_va	Starts, stops, or restarts Media Server services on the Application Server.
px_ v a	Starts, stops, or restarts intenta server services on the rapplication server.
	If all other Cisco Unified MeetingPlace services continue running, then entering this

	command does <i>not</i> interrupt meetings that are active.
	Syntax: mpx_va {start   stop   restart   status} [-v]
	Lists all installed versions of Cisco Unified MeetingPlace.
mpx_version	
	Syntax: mpx_version
	Starts, stops, or restarts all Cisco WebEx integration services on the Application Server.
mpx_webx	
	Syntax: mpx_webx {start   stop   restart   status} [-v]
	Resets the Hardware Media Server Administration password to "cisco".
resetmsapassword	
	Syntax: resetmsapassword
	Shuts down the Application Server.
	For a graceful shutdown, we recommend that you enter the command using the syntax
shutdown	below. You can see which other options are available by entering <b>shutdown</b> without any
	parameters.
	Syntax: shutdown -h now

#### **Related Topics**

- Configuring Application Server Failover for Cisco Unified MeetingPlace module
- <u>Changing the Media Server Administration Password for the Hardware Media Server</u> in the <u>Changing Values for the Hardware Media Server</u> module

## **Database Replication Commands for the Application Server**

**Note:** To enter the database replication commands in <u>Table: Command Reference: Database Replication Commands for the Application Server</u>:

- The MeetingPlace Database services must be running on the Application Server.
- You must be signed in to the Application Server CLI as the <u>root</u> user.

The output messages from each command execution are displayed on the screen and stored in a log file under the directory \$MP\_LOGDIR/database/replication/logs. The log file names have the format mp\_replication\_log.<YYYY-MM-DD\_hh-mm-ss>.

Table: Command Reference: Database Replication Commands for the Application Server

Command	Description
mp_replication init	Makes necessary changes in configuration files and database to enable the Application
	Server to use database replication. Run this command on each node involved in
	replication.

Syntax: **mp\_replication init -s** site **-n** node [**-l** local-server] **-r** remote-server {**-h** | **-m**} [**-v**]

#### Parameters:

- -s *site*-Specifies the site of the node on which you run this command. Valid values for *site* are 1 and 2.
- -n *node*-Specifies the node (within the specified site) on which you run the command. Valid values for *node* are 1 and 2.
- -l *local-server*-(Optional) Specifies the hostname or IP address of the Application Server on which you run this command.

For intra-site replication, which is used for <u>Application Server Failover</u>, specify the hostname or IP address of the virtual network interface eth0:0. By default, the (eth0 hostname) value returned by the <u>hostname</u> command is used.

- -r remote-server-Specifies the hostname or IP address of the other Application Server with which to establish replication.
- -h -- Specifies intra-site replication, which is used for replication between the active and standby Application Server in a single-site active/standby failover deployment.
- -m -- Specifies inter-site replication, which is used for replication between two singleServer mode Application Servers (i.e, site 1 and site 2) in Reservationless Single Number Access (RSNA) deployment.
- -v-Specifies verbose output.

# mp\_replication switchON

Starts replication between two Application Servers.

- Run this command on node 1 only.
- Run this command only after running the <u>mp\_replication init</u> command on each node involved in replication.

Syntax: mp\_replication switchON -r remote-server [-S -F data-source-server] [-v]

### Parameters:

• -r *remote-server*-Specifies the hostname or IP address of the other Application Server with which to establish replication.

For intra-site replication, which is used for Application Server failover, specify the hostname or IP address of the virtual network interface eth0:0.

• -S -F *data-source-server*-Indicates data synchronization between the two Application Servers.

**NOTE:** Both Application Servers must be in standby mode when the **-S -F** options are used.

For intra-site replication, which is used for <u>Application Server Failover</u>, specify the hostname or IP address of the virtual network interface eth0:0.

	• -v-Specifies verbose output.
	Displays the status of replication between the specified servers.
mp_replication	Syntax: mp_replication status [-v]  Parameter: -v-Specifies verbose output.
status	
	In the output, if the replication is not working, the queue size will be either a fixed value or keep increasing with database changes in any server.
	The State shows the connection status, for example, dropped, disconnected, and so forth.
	Stops replication, but does not restore configuration changes.
	<ul> <li>Run this command on node 1 only.</li> <li>To restart replication, use the mp replication switchON command.</li> <li>To restore the configuration changes done by the mp replication init command, use the mp replication teardown command.</li> </ul>
mp_replication switchOFF	Syntax: mp_replication switchOFF [-l local-server] -r remote-server [-v] [-f]
	Parameters: See the <u>mp_replication init</u> command. Exception:
	<ul> <li>-f-Specifies to remove the local server from replication even in the following cases:</li> <li>Specified remote server is not part of replication.</li> <li>Local server is not in replication with any other servers.</li> </ul>
mp_replication teardown	Removes configuration changes made on the local server for replication with the specified remote server. Run this command on each node involved in replication to undo the configuration changes.
	Syntax: mp_replication teardown [-l local-server] -r remote-server [-v] [-f]
	Parameters: See the mp_replication init command.
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- Configuring Cisco Unified MeetingPlace Directory Service module
- Configuring Application Server Failover for Cisco Unified MeetingPlace module

## **Failover Commands for the Application Server**

**Note:** You must be signed in to the Application Server CLI as the <u>root</u> user to enter the failover commands in Table: Command Reference: Failover Commands for the Application Server.

Table: Command Reference: Failover Commands for the Application Server

Command	Description
failoverUtil copyConfigFiles	Transfers configuration files from one Application Server to the other, specifically:
	<ol> <li>Compresses the configuration files and user prompts on the local server.</li> <li>Transfers the compressed files to the remote server.</li> </ol>
	After you enter this command on the local server, you need to enter the <u>failoverUtil</u> <u>restoreConfigFiles</u> on the remote server.
	The following files and directories are transferred by this command:
	<ul> <li>Directory Service:         <ul> <li>/opt/cisco/meetingplace/axlds/current/etc/config.properties</li> </ul> </li> <li>Recorded user names and custom voice prompts:         <ul> <li>Everything under /opt/cisco/meetingplace/afs/custom</li> </ul> </li> <li>Microsoft Outlook integration files:         <ul> <li>Everything under /opt/cisco/meetingplace/var/outlook</li> <li>/opt/cisco/meetingplace/var/admin/outlook.config</li> <li>Everything under /opt/cisco/meetingplace/var/mail</li> </ul> </li> <li>Cisco WebEx integration files:         <ul> <li>/usr/local/enrollment</li> <li>/opt/cisco/meetingplace/web/current/etc/conf/keysinfo.properties</li> <li>/opt/cisco/meetingplace/web/current/etc/conf/keystore.jks</li> <li>/opt/cisco/meetingplace/web/current/etc/conf/cert.cer</li> <li>/opt/cisco/meetingplace/web/current/bases/main/conf/server.xml</li> </ul> </li> </ul>
	Syntax: failoverUtil copyConfigFiles
failoverUtil restoreConfigFiles	Completes the transfer of configuration files from one Application Server to the other, specifically:
	<ol> <li>Decompresses the configuration files and user prompts that were transferred from the remote server.</li> <li>Places the transferred files into the correct directories, overwriting any existing local files with those from the remote server.</li> </ol>
	<b>Note:</b> The failoverUtil copyConfigFiles and failoverUtil restoreConfigFiles commands are entered on separate Application Servers.
	Syntax: failoverUtil restoreConfigFiles
failoverUtil setDeployment failover	Sets up an Application Server for failover deployment, including the configuration of the virtual network interface (eth0:0) hostname, IP address, subnet mask, and default gateway.

Table: Command Reference: Failover Commands for the Application Server

	Syntax: failoverUtil setDeployment failover
failoverUtil setDeployment singleServer	Restores a failover-deployed Application Server to a single-server deployment.
	Syntax: failoverUtil setDeployment singleServer
failoverUtil setServer	Sets a failover-deployed Application Server to either active or standby mode.
	Enter this command only after running the <u>failoverUtil setDeployment failover</u> command on the server.
	<b>Note:</b> The mode setting might not be successful if this process is interrupted, for example, by a power outage, by closing the SSH connection, or by a system restart. To view the failover mode, sign in to the Administration Center. If the wrong failover deployment mode appears at the top of the page, enter the <b>mpx_sys restart</b> command, followed by the <b>failoverUtil setServer</b> command.
	Syntax: failoverUtil setServer {active   standby}
failoverUtil status	Displays the current modes of the Application Server, specifically:
	• Whether the server is deployed for failover or as a single server.
	• If deployed for failover, then whether the server is in active or standby mode.
	Syntax: failoverUtil status

• Configuring Application Server Failover for Cisco Unified MeetingPlace module