

**Main page:** [Cisco Unified MeetingPlace, Release 8.0](#)

**Up one level:** [Installation, Upgrade and Migration](#)

Step 1: Install the Application Server (which includes the Software Media Server)	Step 2: Install the Hardware Media Server (optional)	Step 3: Configure the Hardware Media Server (optional)	Step 4: Install the Web Server (optional)	Step 5: Install the Cisco WebEx Node for MCS (optional)	Step 6: Install integrations (optional)
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This is step 1 of the installation and configuration process. See the [Quick Start for Installing and Configuring Cisco Unified MeetingPlace Release 8.0](#) module for information about the order in which to install and configure the Cisco Unified MeetingPlace Release 8.0 components.

This module describes how to install the Application Server, which is made up of the Application Server operating system and the Application Server software.

Installing the Application Server software also installs the Cisco Security Agent (CSA) and Media Server Administration on the same Cisco Media Convergence Server (MCS) on which the Application Server software is installed.

- [How to Prepare to Install the Cisco Unified MeetingPlace Application Server Software](#)
- [Installing the Cisco Unified MeetingPlace Application Server Software](#)
- [How to Test the Application Server Software Installation](#)
- [Troubleshooting the Application Server Software Installation](#)
- [About Reinstalling the Application Server Software](#)

**Note:** For information about installing the Application Server software in a failover deployment, see the [Configuring Application Server Failover for Cisco Unified MeetingPlace](#) module.

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## How to Prepare to Install the Cisco Unified MeetingPlace Application Server Software

Before you install the Application Server software, you must perform the tasks in this table.

Task	See this document or section
Ensure that you meet all the system requirements for installing the Application Server software.	<u>Cisco Unified MeetingPlace Release 8.0 -- System Requirements for Cisco Unified MeetingPlace Release 8.0</u>
Ensure that you have a server on which to install the Application Server software. The server on which you install the Application Server software will be reformatted during the installation and all existing data will be	Cisco MCS installation documentation at <a href="http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_installation_guides_list.html</a>

<p>lost. We suggest using an unformatted server.</p> <p>The Application Server software is installed on a Cisco MCS. (You may also install it on the exact equivalent server from a different manufacturer.)</p>	
<p>Connect an Ethernet cable from the Cisco MCS to your company network.</p>	
<p>Ensure that you understand the duplex settings that we support.</p>	<p><a href="#"><u>Reviewing Duplex Setting Requirements</u></a></p>
<p>Understand how the NTP server works and how it applies to the Application Server.</p>	<p><a href="#"><u>About Configuring a Network Time Protocol (NTP) Server</u></a></p>
<p>Have a valid DNS service configuration.</p>	<p>This is mandatory for correct operation of the Cisco Unified MeetingPlace system.</p> <p>You need to enter a valid IP address for a DNS service during the installation of the Application Server.</p> <p>You can test your DNS service by entering on the command-line interface, <b>ping &lt;DNS_IP_Address&gt;</b>. You should get a response in under 200 milliseconds.</p>
<p>Gather all the values that you will need to complete the Application Server installation.</p>	<p><a href="#"><u>Gathering Installation Values</u></a></p>

Enter the Application Server hostname and IP address in the DNS servers.	Starting with Release 8.0 MR1, the installation program checks the DNS servers to ensure the Cisco Unified MeetingPlace hostname and IP address have valid DNS entries.
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## Reviewing Duplex Setting Requirements

We recommend the following Ethernet port settings:

Application Server	Ethernet Switch Port	Result
Auto-negotiate	Auto-negotiate	1000 or 100/Full
1000	1000	1000
100/Full	100/Full	100/Full

We *do not* recommend the following:

- One device set to auto-negotiate and the other device set in a fixed configuration. This could potentially prevent the network interface from coming up because of negotiation failure.
- Setting the speed to 10 Mb Ethernet, because this artificially limits the bandwidth of the NIC to a smaller value than it is capable of.
- Using half-duplex Ethernet, because this serializes the traffic on the NIC instead of allowing traffic to pass through simultaneously.

## About Configuring a Network Time Protocol (NTP) Server

Configuring a Network Time Protocol (NTP) server is optional:

- We highly recommend configuring an NTP server if your deployment is audio only and you do not plan on using a Cisco WebEx Node for MCS.
- If your deployment includes a Cisco WebEx Node for MCS, you do not have to configure an NTP server. The Application Server software will automatically use the time from the Cisco WebEx Node for MCS after you install the Cisco WebEx Node for MCS. If you do configure an NTP server when installing the Application Server, the Cisco WebEx Node for MCS will override it.

Even if your deployment includes a Cisco WebEx Node for MCS, you may still want to configure an NTP server for a backup in case the Cisco WebEx Node for MCS becomes unavailable. You can also use an NTP server to initially set the time on the Application Server before you install the Cisco WebEx Node for MCS.

**Related Topics**

- [Configuring Time and Time Zones for Cisco Unified MeetingPlace module](#)
- [Troubleshooting Time and Time Zone Issues for Cisco Unified MeetingPlace module](#)

**Gathering Installation Values**

Gather and record the following information to prepare for your installation of the Application Server software. The values are listed here in the order in which you see them during the installation.

**Caution!** Be sure that these are the correct values for system. It is difficult to change most of these values after the initial installation.

**Table: Installation Values**

<b>Field</b>	<b>Format</b>
Primary Primary DNS address	ddd.ddd.ddd.ddd (1)
Secondary The secondary DNS address. This field is optional.	ddd.ddd.ddd.ddd (1)
Domain Name DNS search path	<company_name>.com Example: cisco.com
Host Name An arbitrary name for the Cisco Unified MeetingPlace host.	This must be a Fully Qualified Domain Name (FQDN).  Can include any letters in upper or lower case, any numbers, period, and the dash symbol (-). Must be 32 characters or less and must start with a letter.  Example: mpxSystem.cisco.com
IP Address IP address for Cisco Unified MeetingPlace.	ddd.ddd.ddd.ddd (1)
Subnet Mask	ddd.ddd.ddd.ddd (1)

For Cisco Unified MeetingPlace.	
Gateway  Default gateway address for Cisco Unified MeetingPlace.	ddd.ddd.ddd.ddd (1)
Auto Negotiation  Enables devices to communicate with each other using the highest link speed.  See <a href="#">Reviewing Duplex Setting Requirements</a> .	<ul style="list-style-type: none"> <li>• On</li> <li>• Off</li> </ul>
Speed (Full Duplex)  The speed setting for the Ethernet ports, in Mbps.  See <a href="#">Reviewing Duplex Setting Requirements</a> .	<ul style="list-style-type: none"> <li>• 100</li> <li>• 1000</li> </ul> <p><b>Note:</b> If you choose 1000 Mbps, you must set auto negotiation to On.</p>
Mail Server  Mail server hostname. Used when sending email from the Linux console using the <b>mail</b> command. This field is optional.  <b>Note:</b> This is not the same as the mail server that you set in the Administration Center.	<ul style="list-style-type: none"> <li>• ddd.ddd.ddd.ddd (1) or</li> <li>• Can include any letters in upper or lower case, any numbers, and the dash symbol (-). Must start with a letter.</li> </ul>
Duplex mode  How information moves.  <b>Note:</b> You cannot set the duplex mode during the <i>operating system</i> configuration. By default, it is set to full duplex. If you need to change the duplex mode to half duplex, change it during the <i>software</i> installation.  See <a href="#">Reviewing Duplex Setting Requirements</a> .	<ul style="list-style-type: none"> <li>• Full duplex</li> <li>• Half duplex</li> </ul> <p><b>Note:</b> When transmitting voice across a data network, half duplex can cause packet collisions, which can result in degraded voice quality. Therefore, full duplex is the recommended choice in all cases. Half duplex should only be used when no full duplex switch port is available, and then only at a speed of 1000 Mbps.</p>
Time zone	

Table: Installation Values

Where this Cisco Unified MeetingPlace system resides.	<ul style="list-style-type: none"> <li>• Choose from the drop-down menu.</li> <li>• The default is always GMT.</li> </ul>
<p>NTP Server</p> <p>IP address or hostname for an NTP server that you want to connect to Cisco Unified MeetingPlace.</p> <p>For more information about the NTP Server, see:</p> <ul style="list-style-type: none"> <li>• <a href="#">About Configuring a Network Time Protocol (NTP) Server</a></li> <li>• <a href="#">Installing the Cisco WebEx Node for MCS module</a></li> </ul>	<ul style="list-style-type: none"> <li>• ddd.ddd.ddd.ddd (1) or</li> <li>• Can include any letters in upper or lower case, any numbers, and the dash symbol (-). Must start with a letter.</li> </ul>
<p>Password</p> <p>For the root user.</p>	<p>Must be at least 8 characters. Can include any printable ASCII characters including A-Z, a-z, 0-9, ! " # \$ % &amp; ' ( ) * + , - . / : ; &lt; = &gt; ? @ [ \ ] ^ _ ` {   } ~</p> <p><b>Note:</b> This password is case-sensitive.</p>
<p>Password</p> <p>For the mpadmin user.</p>	<p>Must be at least 8 characters. Can include any printable ASCII characters including A-Z, a-z, 0-9, ! " # \$ % &amp; ' ( ) * + , - . / : ; &lt; = &gt; ? @ [ \ ] ^ _ ` {   } ~</p> <p><b>Note:</b> This password is case-sensitive.</p>
<p>Password</p> <p>For the administrator</p>	<p>Must be at least 8 characters. Can include any printable ASCII characters including A-Z, a-z, 0-9, ! " # \$ % &amp; ' ( ) * + , - . / : ; &lt; = &gt; ? @ [ \ ] ^ _ ` {   } ~</p> <p><b>Note:</b> This password is case-sensitive.</p>

Footnote 1: For all IP addresses, the values in each quartet must range between 0 and 255.

## Installing the Cisco Unified MeetingPlace Application Server Software

### Before You Begin

- Complete all the tasks in [How to Prepare to Install the Cisco Unified MeetingPlace Application Server Software](#).
- Note that we do not support installing the Cisco Unified MeetingPlace Application Server software remotely.

To install the Application Server, see the following sections:

- [Installing the Application Server Operating System](#)
- [Installing the Application Server Software](#)

## Installing the Application Server Operating System

### Procedure

1. Turn on the system.
2. Insert the Cisco Unified MeetingPlace Application Server software DVD into the DVD-ROM drive.  
The system boots from the DVD and displays an installation screen.
3. The installation program checks that your platform is valid.  
If your platform is invalid, the installation program displays an error message and the installation stops. Otherwise, the installation continues.
4. The installation program checks for an existing operating system.  
If you have an existing operating system, the installation program asks if you want to overwrite it. If you have an existing operating system and do not want to overwrite it, the installation stops. Otherwise, the installation continues.
5. The installation program checks the hard drive, the BIOS, and the RAID.
  - ◆ If the installation program does not need to reconfigure any part of the system, it displays a green check mark next to the component name and the installation continues.
  - ◆ If the installation program needs to reconfigure any part of the system, it displays two green circular arrows next to the component name and automatically reboots. After rebooting, the installation process restarts at **Step 3**.
  - ◆ Depending on your system configuration, it may reboot up to three times. This happens automatically.
6. The installation program continues to the media check. The media check can take up to 15 minutes.  
If the media check fails, you can stop the installation. Otherwise, the installation continues.
7. The installation program loads and installs the Cisco Unified MeetingPlace Linux operating system from the DVD. This takes approximately 10 to 15 minutes.  
When the Cisco Unified MeetingPlace Linux operating system installation is complete, the DVD-ROM drive ejects the DVD.
8. Keep the DVD in the drive but do not close it.  
The system reboots automatically.
9. Select **Next** from the Cisco Unified Communications Welcome page.
10. Enter values in the following fields on the Network Setup page. All fields are required except for the Secondary DNS field and the Mail Server field:
 

**Caution!** Be sure you enter the correct network setting information here. If you need to change any of this information after the installation is complete, you must use the **net** command.

  - ◆ DNS Information:
    - ◇ Primary
    - ◇ Secondary (optional)
    - ◇ Domain Name
  - ◆ Ethernet Port 1(device eth0):
    - ◇ Host Name
    - ◇ IP Address
    - ◇ Subnet Mask
    - ◇ Gateway
  - ◆ Auto Negotiation
  - ◆ Speed (Full Duplex)
  - ◆ Mail Server (optional)
11. Select **Next**.
12. Select the Time zone that best represents where the system resides.
13. Ensure that the checkbox next to **System clock uses UTC** is checked.



14. Select **Next**.
15. Select the current date in the Date box.
16. Set the hour, minute, and second to the current time in the Time box.
17. Select the Network Time Protocol tab. This will take you to a page where you can enable NTP (Network Time Protocol) to allow your system to synchronize its clock with a remote time server.
 

**Note:** Using NTP is optional. You do not need to enable NTP if you will be installing a Cisco WebEx Node for MCS. However, if you do not enable your system to use an NTP server, your system will depend on the internal clock of the Application Server. This internal clock can drift over time and can cause serious problems with your Cisco Unified MeetingPlace system.
18. Check **Enable Network Time Protocol**.
19. Enter the IP address or hostname of at least one NTP server.
20. Select **Add**.
 

**Tip:** If you add an NTP server, you must select **Add** before you select **Next**. If you do not select **Add** and only select **Next**, the system will not add the NTP server and you will see errors.
21. Select **Next**.
 

The system contacts the NTP server that you specified. (If the system fails to contact the NTP server, it displays a message asking if you want to continue. You can select **Yes** to continue or **No** to go back and enter another NTP server.)
22. Close the DVD-ROM drive when the system displays the Cisco Application DVD page.
23. Wait a few seconds and then select **Install...**

**Tip:** Wait a few seconds after you close the DVD drive before you select **Install**; otherwise the system does not have enough time to read the DVD and displays an error message. Wait a few minutes while the installer loads.

## Installing the Application Server Software

### Procedure

1. Select **Next** when the installation program displays an introductory message.
2. Select **I accept the terms of the License Agreement**.
3. Select **Next**.
 

The installation program displays the Review Current eth0 Network Settings page with the values that you entered in Step 10 in the "Installing the Application Server Operating System" procedure.
4. Review the values on the Review Current eth0 Network Settings page to ensure that they are correct.
5. Enter the correct values if there are any errors. Changing the values on this page overwrites the values you entered earlier.
6. Select **Next**.
 

The installation program displays the Review Current DNS Network Settings page with the DNS values you entered in Step 10 in the "Installing the Application Server Operating System" procedure.
7. Review the values on the Review Current DNS Network Settings page to ensure that they are correct.
8. Enter the correct values if there are any errors. Changing the values on this page overwrites the values you entered earlier.
9. Select **Next**.
 

The installation program displays the Review New Network Settings page with the network values you confirmed in Step 4 and Step 7.
10. Review the values on the Review New Network Settings page to ensure that they are correct. (If they are incorrect, select **Back** to go to previous screens to change the values.)
11. Select **Next**.
12. Perform one of the following when the Configure NIC Settings page appears:

- ◆ Select **On** if your system uses Auto Negotiation. Select **Next**. The installation program automatically takes you to Step 15.
  - ◆ Select **Off** if your system does not use Auto Negotiation. Select **Next**. Proceed to Step 13.  
**Note:** Changing the values on this page overwrites the values you entered earlier.
13. If your system does not use auto-negotiation, you must set the Speed (Full Duplex) and Duplex mode values. Select a speed and duplex mode for your system. Changing the values on this page overwrites the values you entered earlier.  
Review these network setting values carefully. If you need to change them after the installation is complete, you must use the **net** command.
  14. Select **Next**.
  15. Enter a Password for the console user called *root*. The password must be at least eight characters and can contain any printable ASCII characters. The password is case-sensitive.
  16. Confirm the password that you just entered.
  17. Select **Next**.
  18. Enter a Password for the console user called *mpxadmin*. The password must be at least eight characters and can contain any printable ASCII characters. The password is case-sensitive.
  19. Confirm the password that you just entered.
  20. Select **Next**.
  21. Enter a Password for the Administration Center user called *admin*. The password must be at least eight characters and can contain any printable ASCII characters. The password is case-sensitive.
  22. Confirm the password that you just entered.
  23. Select **Next**.
  24. Choose if you will be installing an Express Media Server (the default value) or a Hardware Media Server.
  25. Select **Next**.
  26. Select **Install**.  
The installation program installs the Cisco Unified MeetingPlace Application Server software. This can take between 15 and 25 minutes.  
When the installation is complete, the installation program displays the Install Complete page.
  27. Select **Done** to finish the installation.  
The DVD-ROM drive ejects the DVD.
  28. Remove the Cisco Unified MeetingPlace Application Server software DVD.
  29. Select **Next**.  
The installation program displays the Finish Setup page.
  30. Select **Reboot**.  
The system reboots and then displays the Cisco Unified MeetingPlace operating system sign-in page.

#### Related Topics

- [Using the Command-Line Interface \(CLI\) on the Cisco Unified MeetingPlace Application Server module](#)
- [Cisco Unified MeetingPlace, Release 8.0 -- Planning Your Deployment](#)

## How to Test the Application Server Software Installation

After installing the Application Server software, the system reboots and automatically displays the system sign-in page. Perform these tests to ensure that the installation was successful.

- [Checking the System Status](#)

- [Testing the Basic Installation](#)
- [Validating the Ethernet Connection](#)

## Checking the System Status

### Procedure

1. Go to the Application Server operating system sign-in page.
2. Sign in as the user called **root**.
3. Enter the password associated with this username.  
The system displays the operating system desktop.
4. Choose **Application > System Tools > Terminal**.  
The system displays the command line.
5. Enter **mpx\_version** and verify that the Application Server version on your system matches the version that you installed.
6. Enter **mpx\_mediaserver -l** to display the type of media server that you chose during the installation. (You can choose to install either an Express Media Server or a Hardware Media Server.)
7. Enter **mpx\_sys status** and ensure that most services are running:
  - ◆ The license service will not be running.
  - ◆ If you chose to install an Express Media Server, the Media Server Administration and SIP server services will not be running.
  - ◆ All other services should be running.

## Testing the Basic Installation

### Procedure

1. Go to the Application Server operating system sign-in page.
2. Sign in as the user called **mpxadmin**.
3. Enter the password associated with this username.  
The system displays the operating system desktop.
4. Choose **Application > Internet > Firefox Web Browser** to go to the Internet.
5. Enter the hostname for the Application Server.  
The system displays the Cisco Unified MeetingPlace Administration Center sign in page.

## Validating the Ethernet Connection

Follow this procedure to ensure that the Application Server is properly connected to the network.

### Restriction

- This procedure assumes that you have an Ethernet cable connected from the Cisco MCS to your company network.

#### Procedure

1. Go to the Application Server operating system sign-in page.
2. Sign in as the user called **root**.
3. Enter the password associated with this username.  
The system displays the operating system desktop.
4. Choose **Application > System Tools > Terminal**.  
The system displays the command line.
5. Enter **ethtool eth0** to see the Ethernet port status.  
The system displays a status of the network.
6. Ensure that the "link detected" parameter at the bottom says **yes**.  
**Note:** If it says no, the Application Server is not connected to the network. Contact your network administrator to determine why it is not connected to the network.

## Troubleshooting the Application Server Software Installation

**Error Message:** There is not enough disk space to install the Application Server software.

**Recommended Action:** Free up disk space on your system by using the Command-Line Interface (CLI). See the following process.

#### Procedure

1. Sign in to the CLI of the Application Server.
2. Enter **su -** at the CLI to switch to the root user.
3. Enter **IATEMPDIR=/partB**. You can replace "partB" with any directory that has sufficient space.
4. Enter **export IATEMPDIR**.

#### Related Topics

- [Using the Command-Line Interface \(CLI\) on the Cisco Unified MeetingPlace Application Server module](#)

**Problem:** After I initially insert the installation DVD, a command window opens and hangs. This is before the installation GUI even comes up.

**Possible Cause:** This is probably an X11 error and due to using an unsupported monitor.

**Solution:** Use a different monitor or do not use the KVM switch for the installation.

**Problem:** During the installation, a dialog box seems to disappear.

**Possible Cause:** The missing dialog box is probably in the background.

**Solution:** Press Alt-Escape to switch back to the dialog box.

**Problem:** During the installation, the system hangs.

**Possible Cause:** This may be because you skipped the media check.

**Solution:** If you skipped the media check, abort the installation and start over. Do not skip the media check this time. *We highly recommend that you always perform the media check.*

**Problem:** The installation is taking more than an hour.

**Solution:** The Application Server installation should not take more than an hour. Abort the installation and start over. Do not skip the media check this time. *We highly recommend that you always perform the media check.*

**Problem:** The installation program displays a message stating that there were errors during the installation.

**Solution:** Reboot the system and install everything again.

**Problem:** The installation program still gives errors after installing the operating system and application the second time.

**Solution:** Go to the log to see the error messages. The log is located at `/opt/cisco/meetingplace/MP_'version number'_InstallLog.log` where *version number* is the version number of the Cisco Unified MeetingPlace Application Server that you are installing.

**Problem:** I entered the address of an NTP server during the installation but it is not synchronizing.

**Solution:** Ensure that your Application Server is connected to the network.

**Problem:** I just finished installing the Application Server and the time is wrong.

**Solution:** If you have just completed the installation, we recommend that you uninstall and then re-install the Application Server.

**Tip:** Synchronize your system time using a reliable, external NTP server to avoid this problem.

#### Related Topics

- [Troubleshooting Time and Time Zone Issues for Cisco Unified MeetingPlace module](#)

## About Reinstalling the Application Server Software

If you need to reinstall the Application Server operating system or application, back up your data onto a remote system and then install the Application Server again.

### Related Topics

- [Backing Up, Archiving, and Restoring Data on the Cisco Unified MeetingPlace Application Server module](#)
- [Installing the Cisco Unified MeetingPlace Application Server Software](#)