



## Upgrading the System

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## Preparing to Upgrade a Data Center

Your system can be upgraded by redeploying it with an upgraded OVA (Virtual Server Template) file. The upgrade procedure creates a parallel system and the data from the original system is transferred to the *upgraded* system as part of the upgrade process. If the upgraded system fails testing, you can restart the original system to restore service, fix any errors, and redeploy an upgraded system.

An *upgrade* is defined as a replacement of the system to deploy major modifications that we made to the system. For example replacing a system currently running version 1.5 to run version 2.0 that includes support for a new operating system. An *update* is defined as overwriting an existing (original) system to take advantage of modifications that we made to improve the system. An *expand* is defined as enlarging an existing system, but not changing the application version. For example, you might update a system from version 1.5 to 1.5MR, upgrade a system from 1.5 to 2.0, or expand a system from 800 users to 2000 users. In all cases, the processes include transferring all of the data from the original system to the updated, upgraded, or expanded system.

Use the following table to determine if you should perform a system upgrade or update on a data center to run a specific release of Cisco WebEx Meetings Server.

Installed Release	To Release...	Upgrade	Update
1.5MR3	1.5MR4 or higher		X
1.5MR3 or higher	2.0 or 2.5 <sup>1</sup>	X	
2.0MR3 or higher	2.5		X
2.5 Single-data Center (SDC)	Any 2.5MR		X
2.5 Multi-data Center (MDC)	Any 2.5MR		X

<sup>1</sup> We recommend that any version of 1.0, 1.1, or 1.5 be updated to the 1.5MR3 version of the OVA and ISO files before upgrading to version 2.5.

The system can be upgraded automatically or manually. **We recommend that you upgrade the system by using the automatic process.**

When upgrading:

- Do not attempt to *upgrade* a system to an incremental release; *upgrade* to the next full version of the application. For example, *upgrade* your system from 1.5 to 2.0. *Update* your system from 1.1 to 1.5.
- Verify that the time settings for all VMs match:
  - Ensure time is correct and that Network Time Protocol (NTP) is running. (See [Configuring an NTP Server](#).)
  - Confirm the NTP configuration on each ESXi host is configured to start and stop with the host.
  - If it is necessary to modify the configuration to correct any of these issues, verify that all VMs on the hosts are gracefully powered OFF.
- When you upgrade a Cisco WebEx Meeting Server, the log captures saved on the *original* system are not transferred to the *updated* Cisco WebEx Meeting Server system. Therefore, you should capture and download any logs and log captures that you need from the original system before you start the upgrade.
- The Update Admin VM must be on the same ESXi host as the Original Admin VM.
- When an original system is upgraded or expanded, a parallel system is created. If there is time left in the trial period of the original system, that time is transferred to the upgraded or expanded system. Valid Permanent Host licenses on the original system can be transferred to an upgraded or expanded system by *re-hosting* the licenses.
- For new installations of Cisco WebEx Meetings Server Release 2.0 and higher, the storage requirements are:
  - Disk space can be local (DAS) or external (SAN or NAS).
  - ESXi hosts (Cisco UCS server) with the Admin virtual machine require 1.5 TB of disk space.
  - ESXi hosts (Cisco UCS server) without an Admin virtual machine require 1 TB of disk space.
  - When upgrading Cisco WebEx Meetings Server by using Automatic Upgrade of existing Cisco UCS servers, the ESXi hosts requires 1118 GB of free disk space if the UCS server has only the Admin virtual machine (primary or HA system) or 990 GB of free disk space if the UCS server has one Admin and one Media virtual machine (primary or HA system). (New installs require 1.5 TB for the Administration virtual machines.)

For complete details, see the **Resources Consumed by Cisco WebEx Meetings Server and the ESXi Host** section in the <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>.



**Note**

We refer to the system in place before initiating the upgrade as the *original* system. The system in place following upgrade is referred to as the *upgraded* system.

### Before You Begin an Automatic or Manual Upgrade

Before upgrading a system automatically or manually, the following issues should be addressed:

- Obtain the OVA file required for the upgrade.



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**Note** Upgrading from an un-encrypted version to an encrypted version or upgrading from an encrypted version to an un-encrypted version is not supported. Obtain the OVA based upon your existing system deployment.

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- Remove all VMware snapshots of the original (existing) system. Do not take any snapshots during the upgrade process.
- Create a backup for each virtual machine in your original (existing) system. (See [Creating a Backup by using VMware vCenter](#).)
- Plan a maintenance outage. During the upgrade process the original system is placed into maintenance mode and requires exclusive access to the system; users cannot access the system for meetings during this time. Schedule this portion of the upgrade for a time that is the least disruptive to your users.
- Plan for the increased size of the data stores, as the original system and the upgraded system share data stores until testing of the upgraded system is complete and the original system is removed.
- Verify that the original system hostnames and IP addresses are reused in the upgraded system. Also that the internal virtual machines for both systems are on the same subnet. If you have added public access, the Internet Reverse Proxy virtual machines for the original system and the upgraded system should be on the same subnet.
- Verify that the vCenter hostname can be resolved by the DNS server. Test the link by pinging the hostname.



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**Note** **CWMS System** is the default name of the data center after an upgrade to version 2.5; it is not translated from English in any of the other languages.

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## Upgrading the System Automatically

This procedure lists the high-level tasks needed to complete an automatic upgrade. It includes links to sections of the *Cisco WebEx Meetings Server Administration Guide* (at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>) that provide the detailed steps necessary to complete each task.

### Before You Begin

Before upgrading a system by using the automatic upgrade process:

- In a Multi-data Center (MDC) environment, the data centers cannot be expanded, upgraded, or updated. Secondary data centers must be removed from the MDC, making it a Single-data Center (SDC) environment. The MDC environment can be restored after the data centers are modified and it is verified that the data center sizes and version match.

- Notify other system administrators that they should not access or make changes to the original system during the upgrade, as their changes might yield unpredictable results.
- Notify other system administrators that they should not access or make changes to the original system during the upgrade, as their changes might yield unpredictable results.
- Provide and configure one additional IP address and hostname that will be used temporarily for the administration virtual machine on the upgraded system. This can be any available IP address in the VLAN. The hostname can be anything you want, as this IP address and hostname will be released at the end of the upgrade process.

The original system and the upgraded system are both powered up during this process. The temporary IP address and hostname prevents IP conflicts during this part of the procedure. After the data is transferred from the original system to the modified system, the original system is powered down. At the end of the process, the modified system is taken out of maintenance mode and re-boots.

During the reboot, the temporary IP address and hostname are released and the modified system uses the original administration virtual machine IP address and hostname.

If there is a firewall between the administration virtual machines and the IRP virtual machines, the temporary IP address must be allowed through the firewall.

- Do not manually power on or shut down either system.
- Verify that vSwitch is not used on ESXi hosts as a distributed switch. Automatic processes do not support vSwitch Distributed Switch on CWMS ESXi hosts. Change to a standard switch or use a manual process. (See [Upgrading the System Manually](#), on page 6, [Updating Data Centers Version 2.5 and Higher With System Downtime](#), or [Expanding the System Size](#).)

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- Step 1** Clear your browser cache.  
Static resources are cached to enhance the performance of web pages; however, the data cached might be incorrect. Therefore, we recommend that you clear your browser cache.
- Step 2** Go to the license manager on the original system and generate a license request by selecting **System > View more > Manage Licenses**.  
License manager opens in a new tab.
- Step 3** Select **Generate License Request**.  
A pop-up appears with the license request text. Copy the text and save the license request in a convenient location as it might be necessary to use the manual re-host procedure to reclaim your licenses. This information can also help Cisco to find your licenses. (See [Fulfilling Licenses by using the License Manager](#).)
- Step 4** Using the vSphere client, deploy the Admin virtual machine (by using the temporary IP address) for the upgraded system by selecting the configuration with the **Auto-upgrade** suffix, for example `250 Users Admin Auto-upgrade`. Use the same host as the original system Admin virtual machine.
- Step 5** Verify that the Upgrade Administration virtual machine can reach the original system disks.  
The Administration virtual machines are on the same ESXi host and have access to the same data stores, therefore they should be able to view both sets of disks. The datastore used by the Administration virtual machine datastore (vmdk) files should be visible through the vCenter (by using the same vCenter credentials that the automatic upgrade process uses).

- Step 6** Power on the Administration virtual machine for the upgraded system and write down the deployment URL displayed on the virtual machine console.
- Step 7** Enter the deployment URL into a web browser URL field.
- Step 8** Enter the Administration and vCenter URLs and credentials, so we can deploy the virtual machines for you. (See [Providing VMware vCenter Credentials](#).)
- Step 9** To deploy any additional virtual machines, select **Continue**.  
Until you begin the setup of the upgraded system and the original system is placed in maintenance mode, users can hold meetings, but administrators should not modify the original system virtual machines.
- Step 10** Note the names of the automatically-created virtual machines listed in vCenter.  
The format for virtual machine names is `CWMS_hostname_MMDDH:mm` where `mm`=minute  
  
When the upgrade is complete, the virtual machines do not display. To find the virtual machines that were created as part of the CWMS upgrade, you can search based on this format.  
  
The progress of the upgrade is displayed on the deployment URL of the upgraded system and on the VMware console connected to the primary system Admin virtual machine. The VMware console provides the deployment URL to use in case the browser window inadvertently closes during the upgrade process.
- Step 11** To automatically put the system in maintenance mode and begin the setup of the upgraded system, select **Continue**. A message displays when Maintenance Mode is enabled, which might take up to 30 minutes.
- Step 12** To launch the upgraded Cisco WebEx Administration site, select **Sign In to Administration Site** and sign in.
- Step 13** Wait for the system to come to a good state, then turn off maintenance mode on the upgraded system and select **Continue**. It might take a few minutes for the meeting service to become available. Your system is ready for users to start meetings when all the virtual machines listed on the **System Properties** page display a status of Good (green). See [Turning Maintenance Mode On or Off for Version 2.0 and Before](#) for more information.  
  
The system reboots.
- Step 14** Test the upgraded system. (See [About System Testing](#).)  
When your upgraded system is running satisfactorily, you can delete your original system to free the original system resources. Keep the upgraded system running while deleting the original system to prevent the accidental removal of the Hard disk 4 base VMDK file that might be accessed by the upgraded system.  
  
If the upgrade is unsuccessful, power off the upgraded system, power on the original system, and contact Cisco TAC.
- Step 15** Re-host and update the license version as appropriate for the upgraded system. (See [About Host Licenses](#) and [Re-hosting Licenses after a Major System Modification](#)).  
If the previously deployed Cisco WebEx Meetings Application or Productivity Tools are different versions or build numbers from a newly deployed version of the application and the upgrade is not blocked, you are notified by an upgrade warning dialog box. It might be necessary to push the Cisco WebEx Meetings Application or Productivity Tools to the users. See the *Cisco WebEx Meetings Application and Productivity Tools Compatibility Matrix* section of the Cisco WebEx Meetings Server Planning Guide, found at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>.  
  
Within 180 days or less the license-free grace period shall expire. If the original system had valid licenses, those licenses must be re-hosted in 180 days or less. If the original system was operating in the license-free grace period, the remaining unexpired days are transferred to the upgraded system.

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### What to Do Next

If the previously deployed Cisco WebEx Meetings Application or Productivity Tools are different versions or build numbers from a newly deployed version of the application and the upgrade is not blocked, you are

notified by an upgrade warning dialog box. It might be necessary to push the Cisco WebEx Meetings Application or Productivity Tools to the users. See the *Cisco WebEx Meetings Application and Productivity Tools Compatibility Matrix* section of the Cisco WebEx Meetings Server Planning Guide and System Requirements, found at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>.

## Upgrading the System Manually

This procedure lists the high-level tasks needed to complete a manual upgrade. It includes links to sections of the *Cisco WebEx Meetings Server Administration Guide* (at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>) that provide the detailed steps necessary to complete each task.

### Before You Begin

In a Multi-data Center (MDC) environment, the data centers cannot be expanded, upgraded, or updated. Secondary data centers must be removed from the MDC, making it a Single-data Center (SDC) environment. The MDC environment can be restored after the data centers are modified and it is verified that the data center sizes and version match.

Verify that the upgraded system can access the disks for the original system Admin virtual machine. (Hard disk 4 will be copied from the original system to the upgraded system.)

Do not power on and run both systems at the same time, because the hostnames and IP addresses from the original virtual machines are used in the upgraded system.

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- Step 1** Clear your browser cache.  
Static resources are cached to enhance the performance of web pages; however, the data cached might be incorrect. Therefore, we recommend that you clear your browser cache.
- Step 2** Go to the license manager on the original system and generate a license request by selecting **System > View more > Manage Licenses**.  
License manager opens in a new tab.
- Step 3** Select **Generate License Request**.  
A pop-up appears with the license request text. Copy the text and save the license request in a convenient location as it might be necessary to use the manual re-host procedure to reclaim your licenses. This information can also help Cisco to find your licenses. (See [Fulfilling Licenses by using the License Manager](#).)
- Step 4** Login to the Administration site of the original system.
- Step 5** Go to the System tab and select **Upgrade**.
- Step 6** Select **Major Upgrade**.
- Step 7** Select **Continue** to archive the original system data and put the system into maintenance mode.
- Step 8** Using the VMware vSphere client, select **Power > Shut Down Guest** on the virtual machines for the original system.
- Step 9** Deploy all of the upgraded system virtual machines, including the high availability (HA) and Internet Reverse Proxy (IRP) virtual machines.  
If you are deploying a Multi-data Center (MDC), do not deploy a HA machine; MDC does not support HA.  
During deployment there is an option to **Power on VM after deployment**. Verify that this is *not* checked or that the VMs have been started manually before the next step is complete; otherwise, it will cause the VMs to deploy as a new

system and create a new deployment instead of migrating the data. If the VMs are powered on, they must be deleted and redeployed before proceeding.

- Step 10** Copy the data from your original system to the Admin virtual machine for the upgraded system. (See [Attaching an Existing VMDK File to a New Virtual Machine](#).)
- Step 11** Power on the upgraded Admin virtual machine and write down the deployment URL displayed on the virtual machine console. (See [Configuring a High Availability System](#).)  
If the system will include HA, do not setup the HA virtual machines from HA Admin Deployment; allow the upgrade script to discover the HA virtual machines.
- Step 12** Power on the other upgraded virtual machines.
- Step 13** Enter the deployment URL into a web browser.
- Step 14** Select **Continue** to launch the system setup.  
The progress of the upgrade is displayed on the deployment URL of the upgraded system and on the VMware console connected to the primary system Admin virtual machine.  
The VMware console provides the deployment URL to use in case the browser window inadvertently closes during the upgrade process.
- Step 15** Wait for the system to come to a good state, then turn off maintenance mode and select **Continue**.  
It might take a few minutes for the meeting service to become available. Your system is ready for users to start meetings when all the virtual machines listed on the **System Properties** page display a status of Good (green). See [Turning Maintenance Mode On or Off for Version 2.0 and Before](#) for more information.
- Step 16** Test the upgraded system. (See [About System Testing](#).)  
When your upgraded system is running satisfactorily, you can delete your original system to free the original system resources. Keep the upgraded system running while deleting the original system to prevent the accidental removal of the Hard disk 4 base VMDK file that might be accessed by the upgraded system.  
If the upgrade is unsuccessful, power off the upgraded system, power on the original system, and contact Cisco TAC.
- Step 17** Re-host and update the license version as appropriate for the upgraded system. (See [About Host Licenses](#) and [Re-hosting Licenses after a Major System Modification](#).)  
If the previously deployed Cisco WebEx Meetings Application or Productivity Tools are different versions or build numbers from a newly deployed version of the application and the upgrade is not blocked, you are notified by an upgrade warning dialog box. It might be necessary to push the Cisco WebEx Meetings Application or Productivity Tools to the users. See the *Cisco WebEx Meetings Application and Productivity Tools Compatibility Matrix* section of the Cisco WebEx Meetings Server Planning Guide, found at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>.  
Within 180 days or less the license-free grace period shall expire. If the original system had valid licenses, those licenses must be re-hosted in 180 days or less. If the original system was operating in the license-free grace period, the remaining unexpired days are transferred to the upgraded system.
- Step 18**

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### What to Do Next

If the previously deployed Cisco WebEx Meetings Application or Productivity Tools are different versions or build numbers from a newly deployed version of the application and the upgrade is not blocked, you are notified by an upgrade warning dialog box. It might be necessary to push the Cisco WebEx Meetings Application or Productivity Tools to the users. See the *Cisco WebEx Meetings Application and Productivity Tools Compatibility Matrix* section of the Cisco WebEx Meetings Server Planning Guide and System

Requirements, found at <http://www.cisco.com/c/en/us/support/conferencing/webex-meetings-server/products-installation-and-configuration-guides-list.html>.