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VMware Tools are specialized drivers for virtual hardware that is installed in the UC applications when they are running virtualized. *It is very important that the VMware tools version running in the UC application be in sync with the version of ESXi being used.*

If VMware tools status does not show "OK" from the viClient, the VMware Tools must be upgraded.

It is important to understand that the UC application is *not* tied to the version of ESXi it is running on. For example, initial deployment of the OVA and UC application may have been done on ESXi 4.0 update 1. Then at a later time, you may upgrade the ESXi software to version 4.1 or migrate the vm to a host running ESXi 4.1 - once running on the different ESXi version, you will need to upgrade the VMware Tools running in your UC application to match the host it is running on. Software upgrades of the UC application will preserve the version of VMware Tools currently running.

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Which method to use

Early versions of the Collaboration applications required a COP file in order to upgrade the VMware Tools. Later, a CLI command was created to make the upgrades easier. Finally once the applications ran on newer embedded OS versions, it became possible to support automatic tools upgrades.

For a given application/release, use **ONLY** the supported method(s) to upgrade the tools. The use of the wrong method almost certainly will fail and at worst may corrupt your virtual machine.

Application	Release	Method
Unified CM (includes standalone ELM or PAWS-M)	8.0(x)	1
	8.5	2
	8.6.1	3
	8.6.2 and later	3 and 4
Intercompany media Engine	8.6.2 and later	3 and 4
Cisco Emergency Responder	8.5	2
	8.6	2
	8.7	2,3, and 4

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	9.0	2,3, and 4
Cisco Unity Connection	8.0	1
	8.5	2
	8.6.2 and later	3 and 4
Cisco Unified Presence (referred to as IM and Presence Service from release 9.0 and on)	8.0	1
	8.5	2
	8.6	2
	9.x	2
	10.0(1) and later	3 and 4
Unified CCX	8.0(2) and later	1
	8.5(1) and later	2
Unified CCE	8.0(2) and later	3
	8.5(1) and later	3
Cisco Finesse	9.1(1) and later	2, 3, and 4
Cisco MediaSense	8.5(1) and later	2
	9.0(1) and later	3 and 4
Cisco Social Miner	8.5(1) and later	3
Cisco Unified Intelligence Center	8.5(2) to 8.5(4)	1
	9.0(1)	2

Method 1: Using a COP file.

Step 1 Download the VMware Tools Upgrade COP file located at the following location and copy it to your SFTP/FTP server:

<http://www.cisco.com/cisco/software/release.html?mdfid=282827095&flowid=5329&softwareid=282204704&release=C>

- COP file applicable for Cisco Unified Intelligence Center 8.5(2) to 8.5(4) builds:
<http://www.cisco.com/cisco/software/release.html?mdfid=282163829&flowid=5228&softwareid=282377062&rel>
- The COP file for Cisco Unified Communications Manager 8.0(2+) on ESXi 4.1 may also be used for CUCM 8.0 on ESXi 5.0.

Step 2 From the vSphere Client log in to vCenter, or your ESXi host, and go to the **Hosts and Clusters** view (**Ctrl+Shift+H**).

Step 3 To mount the correct version of the VMware Tools software in the Guest virtual CD/DVD drive, perform the following sub-steps.

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- a. Right-click the virtual machine that you are upgrading, and choose **Guest > Install/Upgrade VMware Tools**.
- b. In the popup window, choose **Interactive Tools Upgrade**

Step 4 Log in to the Unified CM Operating System Administration GUI, and choose **Software Installation/Upgrade**.

- a. To install the VMware Tools Upgrade COP file that you downloaded in Step 1, enter the required information in the first page of the install/upgrade wizard.
- b. To install the COP file, continue with the install/upgrade wizard. Installation of the COP file installs the VMware Tools software that you mounted in the virtual CD/DVD drive in Step 3 above.

Note: Cisco Unified Intelligence Center supports upgrading using the COP file, only through the Command Line Interface(CLI). For more details, refer to the CUIC release notes.

Step 5 To unmount the VMware Tools software from the virtual CD/DVD drive, after the COP file installation is complete, from the vSphere Client right-click the virtual machine that you upgraded, and choose **VM > Guest > End VMware Tools Install**.

Step 6 From the Unified CM CLI, enter the CLI command **utils system restart**, or choose **Settings > Version > Restart** from the Unified CM Operating System Administration GUI. The system restart completes the installation of the new version of VMware Tools. The virtual machine reboots twice. Monitor the virtual machine console from the vSphere Client to see the system status.

Step 7 When the system is back up, the tools status is updated to **OK** from the vCenter Summary tab for the virtual machine that you upgraded.

Method 2: CLI command

Step 1 From the vSphere Client log in to vCenter, or your ESXi host, and go to the **Hosts and Clusters** view (**Ctrl+Shift+H**).

Step 2 To mount the correct version of the VMware Tools software in the Guest virtual CD/DVD drive, perform the following sub-steps.

- a. Right-click the virtual machine that you are upgrading, and choose **Guest > Install/Upgrade VMware Tools**.
- b. In the popup window choose **Interactive Tools Upgrade**.

Step 3 From the Unified CM CLI, enter the CLI command **utils vmtools upgrade**.

The system reboots twice. Monitor the virtual machine console from the vSphere Client to see the system status.

Step 4 When the system is back up, the tools status is updated to **OK** from the vCenter Summary tab for the virtual machine that you upgraded.

Step 5 After installation of the new version of VMware Tools is complete, remove the VMware Tools tar file from the virtual CD/DVD drive. (Usually, the VMware Tools tar file is called linux.iso). To remove the VMware Tools tar file, perform the following substeps.

- a. Right-click the virtual machine that you are upgrading, and choose **VM > Edit Settings > CD/DVD drive**.
- b. Choose **Device Type** as **Client Device**.

Method 3: Upgrade from viClient

Use the following procedure to perform this upgrade.

Step 1 From the viClient, Initiate the tools upgrade by clicking on **VM > Guest > Install / Upgrade VMware Tools** (this can also be done by right-clicking on the VM).

Step 2 Choose the automatic tools update and press **OK**.

Step 3 The process will take a few minutes. The task should then be complete and the tools should be shown as "OK". No reboot is required.

Method 4: Automatically check and upgrade VMware Tools at boot time

If the software release you are running supports Method 3 above (Automatic Upgrade), then you can configure your virtual machine to automatically check the tools version during each VM power-on and automatically upgrade the tools if they are not up-to-date. Use the following procedure to perform this upgrade.

Step 1 Edit the VM settings by clicking on the Options tab, and select **VMware tools**. Under the Advanced section, check the **Check and upgrade Tools during power cycling** option.

A check will now be performed each time the VM powers on to determine if the tools need to be updated. Updates are performed automatically.



Note: Note, if the tools do need to be updated the VM may go through an additional boot cycle to update the tools (which will be done automatically).

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