Cisco Unified Communications Manager
VMTools Updates COP File

Release Notes Version 1
July 27, 2016

Introduction:

These release notes contain important information about the installation procedures for the VMTools Update COP file for Cisco Unified Communications Manager 10.0(1), 10.5(2) and 11.0(1). This COP file, **ciscocm.VMwareTools2016c.cop.sgn**, is only designed for and has only been tested with CUCM 10.0(1), 10.5(2) and 11.0(1).

Note: Before you install this update, Cisco recommends that you review the *Important Notes* section for information about issues that may affect your system.

What this COP file provides:

VMware tools upgrade fails due to various Selinux denials and the VM summary tab shows VMware tools **Not Running / Not Installed**. The cop file will update the Selinux Policy files so that VMWare tools upgrade happens properly. This COP file also enables the CLI command "utils vmtools caf-logs delete" which can be used to delete CAF logs which takes up disk space.

The enhancements listed above are addressed by the following Bug ID:
CSCux90747: VMware Tools 10.0 update fails on CUCM 10.5/11.0 with selinux denials
CSCuz50894: VMware Tools 10.0 update fails on CUCM/CUC 10.5/11.0 part2

Resolution
You must follow steps below to install the VmTools update.

Related Documentation:

To view documentation that supports your version Cisco Unified Communications Manager release, go to:
http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-documentation-roadmaps-list.html

Determining the Software Versions:

Cisco Unified Communications Manager
You can determine the System Version of the Cisco Unified Communications Manager software that is running on your server by accessing Cisco Unified Operating System Administration Web page.

The following information displays:

- System version: xxxxx
- VMware Installation: xxxxx

Important Notes:

The fixes provided in this COP file may not be available in older 10.0(1), 10.5(2) and 11.0(1) ES's or SU's. If your ES or SU has a part of the fix, the cop file will take care of patching the remaining fix. If an ES or SU is installed after this update that does not contain all of the fixes listed above, the COP file will need to be reapplied. Consult the **Known Fixed Releases:** field in the Bug Search tool to determine which ES's and SU's include these fixes.

Applying the COP multiple times will not cause any issues; if installed more than once, the installation will exit without making any changes to the system.

If the VMware tools update has already been performed before installing the cop file and the status is indicated as Not Running (not installed), then follow the Interactive Upgrade steps below to update VMware tools after the COP file is installed.

Installation Instructions:

As with any installation or upgrade, it is recommended that you apply this Update during off peak hours.

Apply this COP to all nodes in the cluster.

Applying this update will require a reboot.

This package will install on the following System Versions:
- 10.0.1.10000-xx or any higher version starting with 10.0.1.xxxxx
- 10.5.2.10000-xx or any higher version starting with 10.5.2.xxxxx
- 11.0.1.10000-xx or any higher version starting with 11.0.1.xxxxx

Caution: **The updates applied with this COP cannot be uninstalled**. Be sure to back up your system data before starting the software upgrade process. For more information, see the Disaster Recovery System Administration Guide

From Remote Source:

Step 1: Download ***ciscocm.VMwareTools2016c.cop.sgn***

Step 2: Copy the upgrade to an ftp or sftp server.

Step 3: Open Cisco Unified Communications Operating System Administration directly by entering the following URL:

http://server-name/cmplatform

where server-name is the host name or IP address of the admin server.

Step 4: Enter your OS Administrator username and password.

Step 5: Choose Software Upgrades > Install/Upgrade.

Step 6: For the software location source, choose Remote File System.

Step 7: Enter the directory name for the software upgrade, if required.

If the upgrade file is located on a Linux or Unix server, you must enter a forward slash at the beginning of the directory path. For example, if the upgrade file is in the patches directory, you must enter /patches.

If the upgrade file is located on a Windows server, check with your system administrator for the correct directory path.

Step 8: Enter the required upgrade information as described in the following table:

Remote Server:	Host name or IP address of the remote server from which software will be downloaded.
Remote User:	Name of a user who is configured on the remote server.
Remote Password:	Password that is configured for this user on the remote server.
Download Protocol:	Choose sftp or ftp.

Step 9: To continue the upgrade process, click Next.

Step 10: Choose "***ciscocm.VMwareTools2016c.cop.sgn*** " and click Next.

Step 11: In the next window, monitor the progress of the download, which includes the filename and the number of megabytes that are getting transferred.

When the download completes, the Checksum window displays.

Step 12: Verify the checksum value:

MD5: 199d1169efae6aa8094c8810ba08d6a3
SHA1: 56ffefc5a5a9e81b340f355f5607b6847e3855ff

Step 13: After determining that the checksums match, click Next to proceed with the software upgrade.

A Warning window displays the selected option.

Step 14: Click Install.

The Install Status window displays and displays the install log.

Step 15: When the installation completes, click Finish.

Step 16: Verify the COP file version using this command from the CLI:
admin:show version active
Active Master Version: <CUCM_Version>
Active Version Installed Software Options:
ciscocm.VMwareTools2016c.cop

Step 17: When the COP has been installed to all nodes in the cluster, continue with the instructions in the Rebooting the Cluster section.

Step 18: Run *"utils vmtools caf-logs delete"* <If you want to delete the CAF logs>

Rebooting the Cluster:

Communications Manager

Clusterwide reboot guidelines are provided in the *Cisco Collaboration Systems 10.x SRND* guide in the **Call Processing** chapter**, Call Processing Redundancy** section:
http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/collab10/collab10/callpros.html#marker-1043722

The steps shown below have been extracted from the doc listed above. These steps are the suggested method to reboot the cluster. Please visit the guide listed above for additional details:

Step 1: Install the COP file on all nodes in the cluster. Do not reboot.

Step 2: Reboot the publisher.

Step 3: Reboot the TFTP subscriber node(s) one at a time.

Step 4: Reboot any dedicated media resource subscriber nodes one at a time.

Step 5: Reboot the backup call processing subscribers one at a time.

Step 6: Reboot the primary call processing subscribers one at a time. Device registrations will fail-over to the previously upgraded and rebooted backup call processing subscribers. After each primary call processing subscriber is rebooted, devices will begin to re-register to the primary call processing subscriber.

Updating VMTools:

Once the cop file is installed update the VMware tools by using either of the following three methods –

Note: Login to the VMware vSphere server and select the node for which VMware tools has to be updated.

1. **Power Cycling**

    Step 1:   Power off the node.

    Step 2:   Right click on the node and select Edit Settings → Options → VMware Tools

    Step 3:   Check the "Check and upgrade Tools during power cycling" check box and click OK.

    Step 4:   Power on the node.

    Step 5:   Check the VMware Tools status in the summary tab. It should indicate Running(current).

2. **Automatic**

    Step 1:   Right click on the node and select Guest → Install/Upgrade VMware Tools

    Step 2:   Choose Automatic Tools Upgrade.

    Step 3:   Check the VMware Tools status in the summary tab. It should indicate Running(current).

3. **Interactive**

    Step 1:   Right click on the node and select Guest → Install/Upgrade VMware Tools

    Step 2:   Choose Interactive Tools Upgrade.

    Step 3:   Login to the node through cli (users who have administrator privileges) and execute the following command – *utils vmtools refresh.*

    Step 4:   It will ask for reboot. Enter yes to continue.

    Step 5:   Check the VMware Tools status in the summary tab. It should indicate Running(current).

Caution: *It might take some time for the VMware Tools status to change from Not Running / Not Installed / Running (out-of-date) to Running (current). Also, in upgrade scenarios stick to the interactive method to update VMware Tools.*