Contents

Introduction

This document describes how to upload an IP phone firmware on multiple nodes of Cisco Unified Communications Manager (CUCM) cluster through Prime Collaboration Deployment (PCD).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software versions:

- CUCM Release 10.5.2.11900-3
- PCD Release 11.0.1.20000-2
- IP Phone Firmware 78xx.11-5-1-18

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.
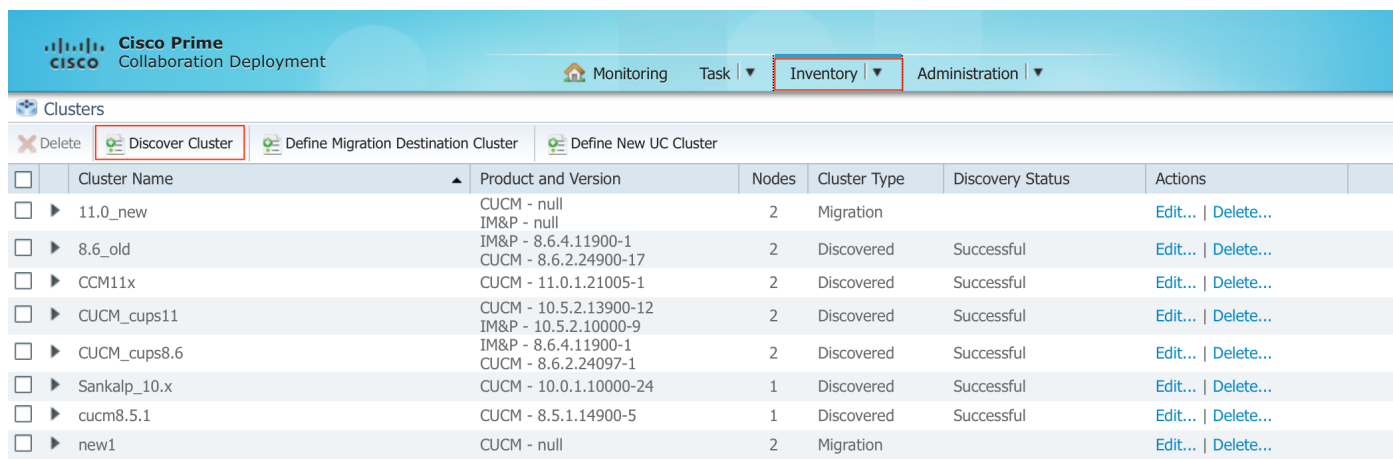
Background Information

Cisco PCD is a migration/upgrade application for Unified Communications applications. Through PCD you can upgrade the version of Unified Communications applications which exists or you can also migrate the complete cluster to a new cluster of same or different version. Apart from this, you can also install device pack, Cisco Options Package (COP) files, phone firmware file to the call manager.

Cisco PCD is quite useful if you upload IP phone Firmware on callmanager, especially in a multi-node cluster, as it reduces the number of steps required to be performed and also removes the dependencies on third party Simple Filw Transfer Protocol (SFTP) servers . It also allows the users to schedule the firmware file upload as per their maintenance window.

Configure

Discover Cluster

In order to discover the cluster to which the Phone Firmware File has to be uploaded, navigate to **Inventory > Clusters > Discover Cluster**, as shown in the image:

Specify the Hostname/IP address and OS admin credetials for the cluster to be discovered.

Nickname for this cluster need not be same as the hostname.

Once done, click on **Next**, as shown in the image:

Cluster discovery could take several minutes. It depends upon the size and the location of the cluster .

Once the Cluster is successfully discovered, click on **Next**, as shown in the image:

Discover Cluster

Step 2 of 3

| Cluster Access | ✔ |

Cluster Discovery Progress

During discovery, the list of cluster nodes will be retrieved, and each of the nodes contacted.

Cluster Name **Megacluster**

Contacting cluster nodes and updating cluster data The process could take several minutes to complete.

Cluster Nodes

Hostname ▲	Contact Status	Product	Active Version	Inactive Version	Hardware
labsetup	Contacting...				
labsetup10	Contacting...				
labsetup2	Contacting...				
labsetup3	Contacting...				
labsetup4	Contacting...				
labsetup5	Contacting...				
labsetup6	Contacting...				
labsetup7	Contacting...				
labsetup8	Contacting...				
labsetup9	Contacting...				

Previous | Next | Finish | Cancel

| Cluster Settings | ✔ |

Assign server roles here if required as you click on **Edit Settings.** Once done click on **Finish**, as shown in the image:

Discover Cluster

Step 3 of 3

| Cluster Access | ✔ |
| Cluster Discovery Progress | ✔ |

Cluster Settings

Optional - Assign the server role(s) to each cluster node to identify its functional role(s) in the cluster and to help determine the proper sequence of a task performed on the cluster.

Total 10

Edit Settings   Show [All ▼]

Hostname	Product	Functions	SFTP Server	Notes
labsetup4	CUCM		localhost	
labsetup2	CUCM		localhost	
labsetup3			localhost	
labsetup5	CUCM		localhost	
labsetup7	CUCM		localhost	
labsetup6			localhost	
labsetup10	CUCM		localhost	
labsetup9	CUCM		localhost	
labsetup8	CUCM		localhost	
labsetup	CUCM	Publisher	localhost	

Previous | Next | Finish | Cancel

Upload Firmware File to PCD

Before the upgrade file is specified, upload the Phone firmware file to the PCD.

The file should be a Cisco Options Package (COP) file .

In order to upload, SFTP to the IP address of the PCD server with username **adminsftp** and PCD login password. Change the directory to upgrade and upload the file there.

This is the sample file upload:

Add Upgrade Task

After the Cluster is discovered successfully and the Phone firmware file is uploaded to the upgrade directory of PCD, add the upgrade task.
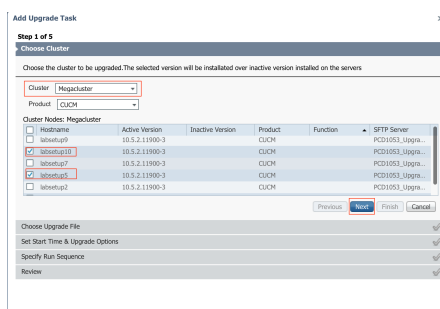
Navigate to **Task > Upgrade > Add Upgrade Task** as shown in the image:
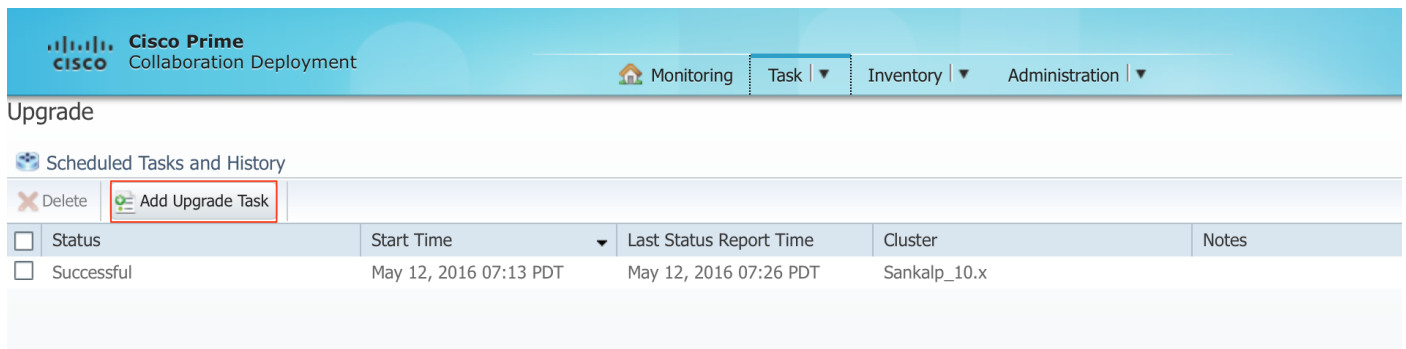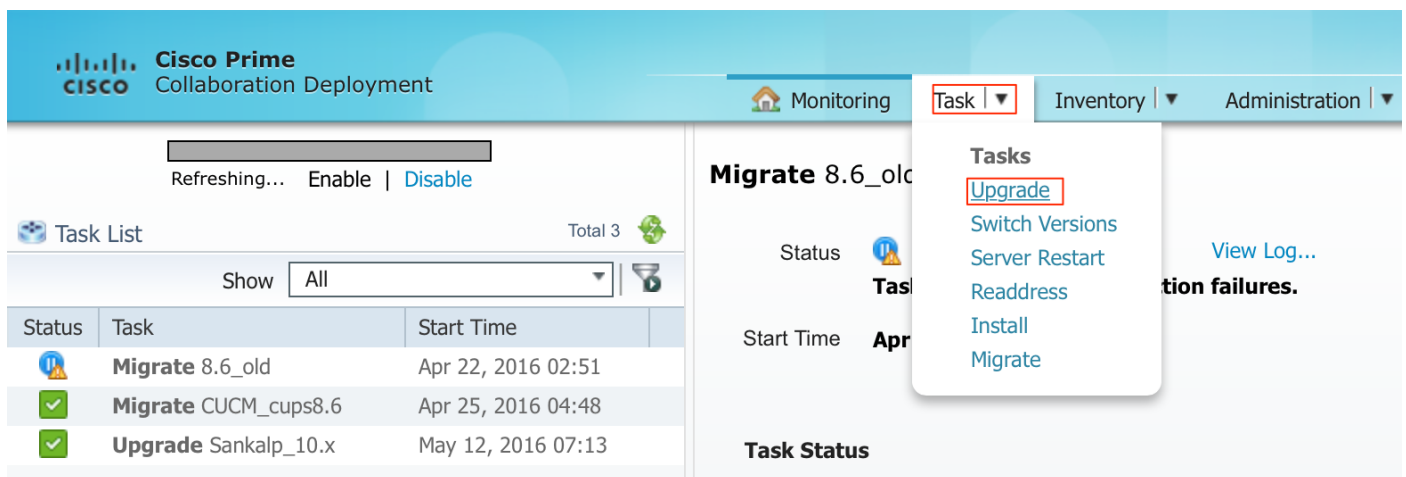
Choose the Destination cluster, where the Phone firmware file needs to be uploaded .

Then select the node in which you want to upload the phone firmware file.

After it is completed, click on **Next**, as shown in the image:

Click **Browse** to choose the Phone Firmware file, as shown in the image:

The required file should be present in the upgrade directory of PCD.

Add Upgrade Task   ✕

Step 2 of 5

Choose Cluster   ✔

Choose Upgrade File

Choose the upgrade file for each product being upgraded.

ⓘ The .iso and .cop images will need to be uploaded to the SFTP server(s) and related directory being used. To use the Cisco Prime Collaboration Deployment local SFTP server, upload the files to the /upgrade directory using the 'adminsftp' account.

Unified CM Upgrade file [   ] [Browse]

                          [Previous] [Next] [Finish] [Cancel]

Set Start Time & Upgrade Options   ✔

Specify Run Sequence   ✔

Review   ✔

The required file should be present in the upgrade directory of PCD.

Select your required file and click on **Choose File**, as shown in the image:

Choose Upgrade File   ✕

By default, only files that are valid for the selected nodes are displayed. To see the complete list of files, choose Show All from the menu.
File locations :

localhost: /upgrade/

Available Files

Files are retrieved from SFTP server

                                        Show [Valid Files Only   ▾]

	File Name	Kind	Validity	
⦿	cmterm-78xx.11-5-1-18.k3.cop.sgn	cop	true	
◯	po-locale-ar_AE-k3-11.5.1.1000-1.cop.sgn	cop	true	
◯	po-locale-es_ES-k3-11.5.1.1000-1.cop.sgn	cop	true	

                                        [Choose File] [Close]

Click **Next**, as shown in the image:

Specify the start time as per requirement. You can choose the start the task immidiately after completion of wizard or manually or schedule the file installation, for a later time.

Once the **Start Time** is specified, click **Next**, as shown in the image:

Specify the sequence in which the upgrade is processed by the server.

Review the upgrade task before it is initiated and after the process is completed click **Finish**, as shown in the image:

Review the upgrade task before it is initiated.and after the process is completed click **Finish**, as shown in the image:

These notifications appear at the right hand bottom of the screen .
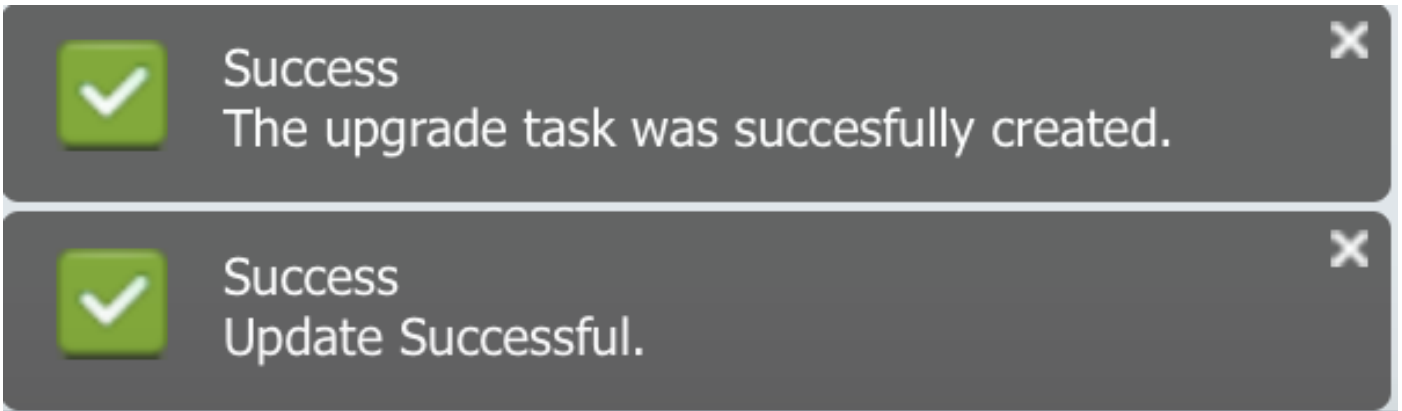
Verify

Use this section in order to confirm that your configuration works properly.

In order to Verify the status of the Firmware file Installation, navigate to **Task > Upgrade > Scheduled Tasks and History > View Details**.

In case it is requied to Edit the setting, click **Edit** to make the necessary changes, as shown in the image:
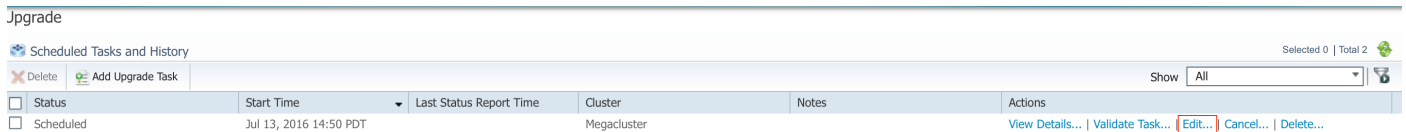
Based on above configuration the Firmware file installation begins as per the scheduled time .

When the firmware installation starts you can see it as below on the call manager .
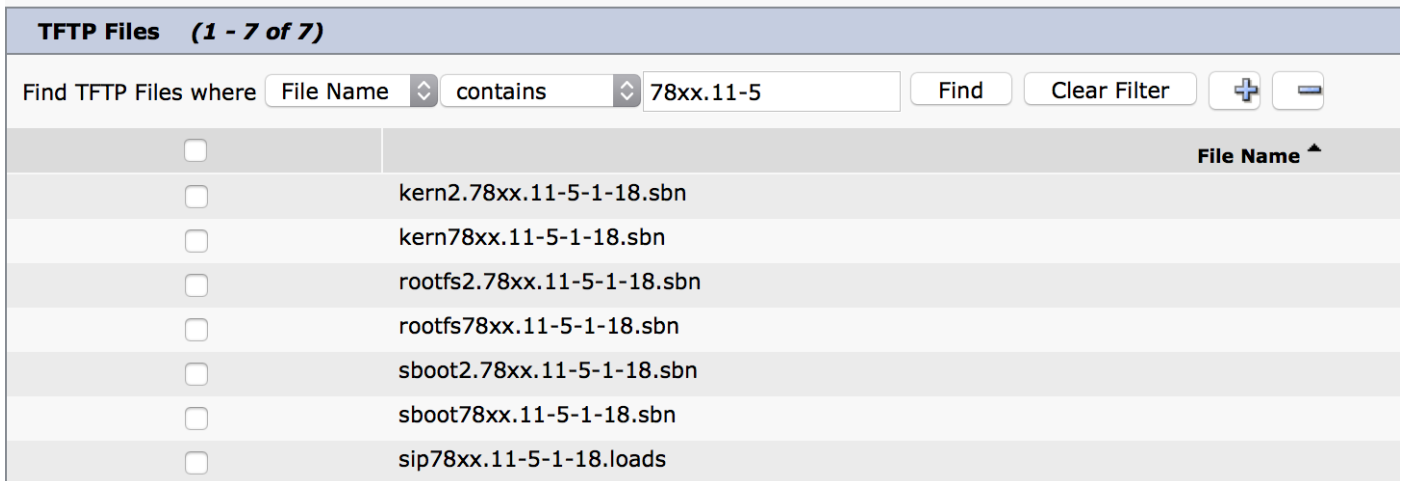
Navigate to **OS Administration > Software Upgrade > Software Installation / Upgrade > Assume Control**, as shown in the image:
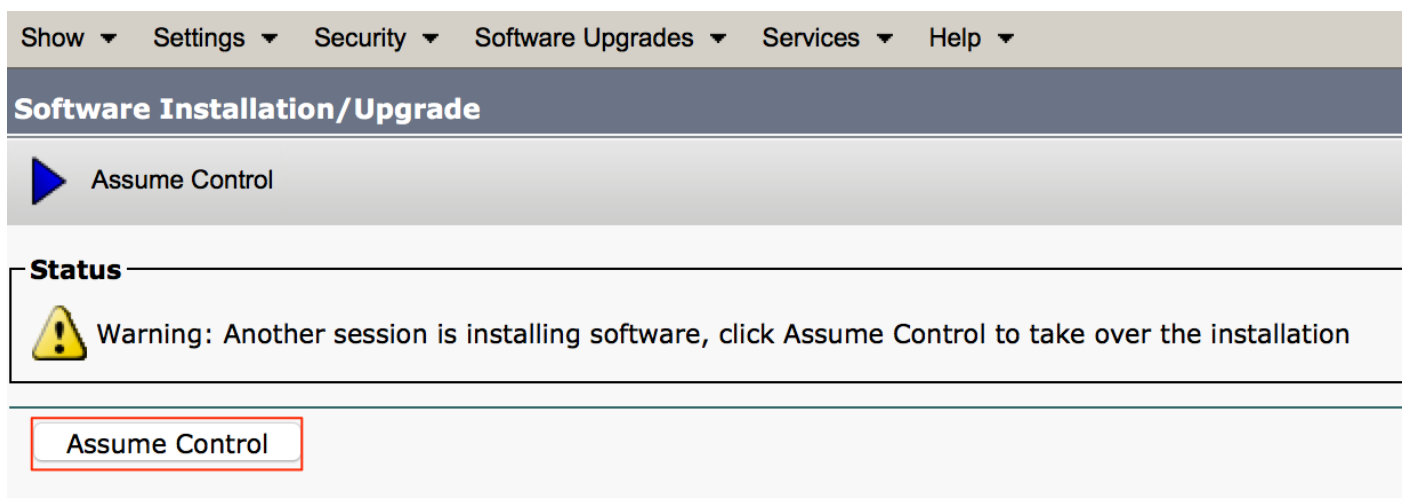
As shown in the image, the status is reflected as **Complete** on call manager, after the installation is complete.

Post installation, in order to find files, navigate to **OS Administration > Software Upgrade > TFTP File Management**.
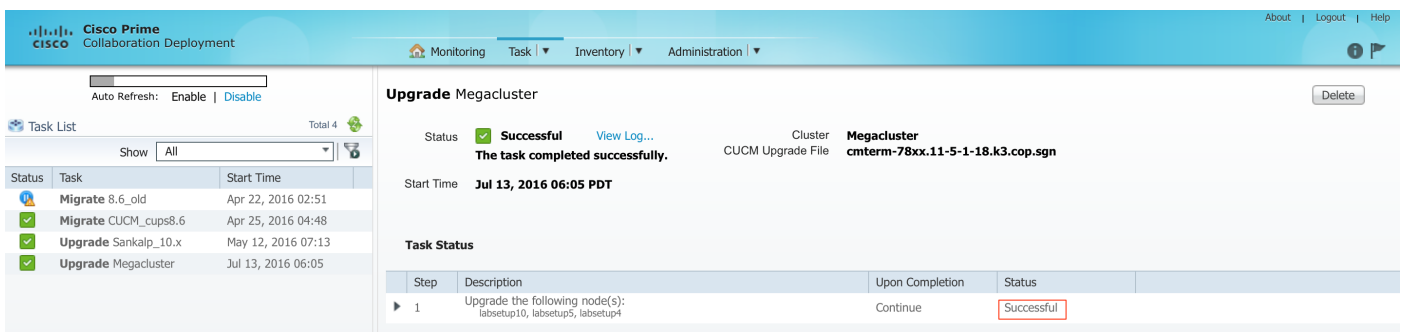

As shown in the image, on PCD after the installation is complete, the status is reflect as **Successful**, as shown in the image:

After the Firmware files are uploaded to call manager, the **TFTP service** should be restarted on the respective servers for the new firmware to reflect under **CM Administration > Device > Device Settings > Device Defaults** .

The phones need to be **Reset**, for them to download the firmware file.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.