



New and Changed Information

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Network Address Translation Support

Cisco Prime Collaboration Deployment supports Network Access Translation (NAT). You can use Cisco Prime Collaboration Deployment in the following scenarios:

- When Cisco Prime Collaboration Deployment is in a local network or private network and application nodes are behind the NAT.
- When Cisco Prime Collaboration Deployment is behind the NAT and application nodes are in a private network.

To support application nodes behind the NAT, Cisco Prime Collaboration Deployment tracks the private IP address and the NAT IP address. Use Cisco Prime Collaboration Deployment to specify the NAT IP address for deployment nodes and the application. Cisco Prime Collaboration Deployment uses the NAT IP address to communicate with the application node. However, when you configure a node using the `platformConfig.xml` file, the node uses its private address.

Configure Cisco Prime Collaboration Deployment Behind the NAT

When Cisco Prime Collaboration Deployment is behind the NAT and communicates with an application virtual machine or an ESXi host, the communication occurs using the NAT IP address.



Note

When Cisco Prime Collaboration Deployment is behind the NAT and application nodes are in a private network, the application nodes communicate with the NAT IP address.

Use the **NAT Settings** window in the **Administration** menu to set the NAT IP address for Cisco Prime Collaboration Deployment. The NAT IP address that you enter on this window does not appear on any window on the GUI.

Procedure

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- Step 1** From the Cisco Prime Collaboration Deployment application, select **Administration > NAT Settings**. The **NAT Settings** window appears and is prepopulated with the hostname and the private IP address.
- Step 2** Enter the NAT IP address in the **NAT IP** field.
- Step 3** Click **Save**.
The NAT IP address is saved as an entry in a configuration file on Cisco Prime Collaboration Deployment. This entry is used when the application nodes try to contact Cisco Prime Collaboration Deployment, then the application nodes read the configuration file to get the NAT IP address, and then try to communicate Cisco Prime Collaboration Deployment with that IP address.
- Step 4** (Optional) Click **Reset**.
The NAT IP address is reset to the earlier saved NAT IP address.
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Discover a Cluster

With the Discover Cluster feature, Cisco Prime Collaboration Deployment communicates with the servers that are already running Unified Communications applications and adds that cluster information into the Cisco Prime Collaboration Deployment inventory.

When you perform the Discover Cluster operation, the Cisco Prime Collaboration Deployment server communicates with the publisher of the cluster and retrieves the cluster information. Then, it communicates with each server, installs the `ciscocm.ucmap_platformconfig.cop` file on the server (to retrieve configuration information), and collects information about the hostname, IP, product type, and both active and inactive versions for that server.



Note When the publisher is behind the NAT, providing the private IP address of the publisher does not reach to the node. You must provide the proper IP address for successful node discovery.



Note To know which applications are supported, see [Supported Releases](#).



Note If a cluster includes Cisco Unified Communications Manager and Cisco Unified Presence (Cisco Unified Communications and IM and Presence Service servers), the Cluster Discovery discovers the Cisco Unified Presence or IM and Presence Service nodes as part of the Cisco Unified Communications Manager cluster.

Procedure

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- Step 1** From the Cisco Prime Collaboration Deployment application, select **Inventory > Clusters**. The **Clusters** window appears.
- Step 2** Click the **Discover Cluster** button to discover the existing clusters. The Discover Cluster wizard appears.
- Step 3** Enter details in the following fields:
- **Choose a Nickname for this Cluster**
 - **Hostname/IP Address of Cluster Publisher**
Note For a cluster that has both Unified Communications Manager and IM and Presence Service nodes, enter the hostname or IP address of the Cisco Unified Communications Manager publisher.
 - **OS Admin Username**
 - **OS Admin Password**
 - **Enable NAT**
- Step 4** (Optional) Check the **Enable NAT** check box, and then click **Next**.
- Important** During discovery, the `ciscocm.ucmap_platformconfig.cop` file is installed automatically on the active partition of all nodes in the cluster. This COP file is used for the cluster discovery process and does not affect Cisco Unified Communications Manager.
- Note** When a cluster is behind NAT, the application tries to establish communication with each node using its private address. So, the nodes are unreachable. A pop-up shows the unreachable nodes. Cisco Prime Collaboration Deployment generates a list of cluster nodes from the inventory of the publisher server. The list generation process may take several minutes to complete. After the list is generated, a confirmation message appears indicating the completion of the cluster discovery process.
- Step 5** Click **Edit** to add NAT IP address, and click **OK**. The Nat IP address is set for the hostname.
- Step 6** Click **Resume Discovery** to resume the discovery of unreachable nodes. Cisco Prime Collaboration Deployment retries to discover the cluster with the NAT IP address instead of the private IP address and to get the cluster details, such as version. The discovery is successful when the cluster details appear on the window.
- Step 7** Click **Next**.
- Step 8** (Optional) Click **Assign Functions** to assign functions to each of the cluster nodes.
Note The assignment of functions has no effect on the services that are to be activated. However, this information can be used to determine the default sequence of tasks. The **Assign Functions** dialog box appears.
- Step 9** Click **Finish**. The cluster appears in the **Clusters** window, showing the cluster name, the product and version, the cluster type as *Discovered*, and the discovery status.
Note It might take a few minutes to discover a cluster. After the discovery is complete, the information for each node in the cluster is listed in the **Cluster Inventory** window. If you cancel the discovery before it is complete, the data is lost and you will have to repeat the discovery procedure.

Note The following are the different statuses that appear for the **Discovery Status** field:

- **Contacting**—Indicates that Cisco Prime Collaboration Deployment is establishing communication with clusters.
 - **Discovering**—Indicates that the cluster discovery is in process.
 - **Successful**—Indicates that the cluster discovery is successful.
 - **Node Unreachable**—Indicates that the cluster node is inaccessible.
 - **Timeout**—Indicates that the duration that is configured for the cluster discovery is complete but no cluster was discovered.
 - **Internal Error**—Indicates that cluster discovery is failed because of an incorrect NAT IP address.
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Add a New Cluster for a Fresh Install

Procedure

- Step 1** Select **Inventory > Clusters** from the menu of the Cisco Prime Collaboration Deployment application.
- Step 2** Click **Define New UC Cluster**.
- Step 3** The Define Cluster wizard appears. Under Step 1 of the wizard, enter the Cluster name. Click **Next**.
- Step 4** Step 2 of the Add Cluster wizard allows you to add nodes to your cluster. Begin by clicking **Add Node** at the top of the Cluster Name table.
- Step 5** The Add Node dialog box appears. The dialog box contains a table that lists all available VMs, sorted by name and by host. At the top of the page, fill in the Network settings for this Node. In the middle of the page, choose the Functions for the node, and near the bottom, choose a VM for this node. Select the VM you wish to add and then enter the following information in the sections below the VM table:
- Under Network, select either **Use DHCP with reservations** or **Static IP Address**. If you select the DHCP with reservations option, you must enter the IP address you have a reservation for on your DHCP server (associated with the MAC address for that VM) in addition to the hostname. If you select Static IP Address, you must enter the IP Address and subnets.
If you are adding a UCCX server, do not use DHCP for network settings.
 - Under Functions, assign specific functions to your VM by checking the applicable check boxes. You must check the **Publisher** function for at least one node in the cluster being defined, for each application type. You can also add a note about the function or functions assigned in the Notes field below.
 - Under Virtual Machines, choose the VM for this node. VMs to be used for fresh install clusters should be new VMs that are in the powered off state. Do not install over an existing running Unified Communications

Manager node, this must be a fresh VM created with the appropriate OVA for the application you will be installing.

- Step 6** Click **OK**.
- Step 7** The VM you added is now listed in the Cluster Name table. (To add more nodes to the cluster, repeat steps 4 through 6 until all nodes are added.) After all nodes are added to the Cluster Node table, click **Next**.
- Step 8** The Configure Cluster Wide Settings page appears. Enter the OS Administration Credentials, Application Credentials, Security Password, SMTP Settings, and Certificate Information for this cluster. Click **Next**.
- Note** The certificate attributes consist of the following:
- Country
 - Organization
 - Organizational Unit
 - State/Province
 - Time Zone
- Step 9** The Configure DNS Settings screen appears. DNS settings are optional. If you wish to add a DNS setting for a node, select the node and click **Assign DNS Settings**.
The Cisco Unified Contact Center Express application must use DNS.
- Step 10** The Configure NTP Settings screen appears. You must enter at least one NTP server. If you are not using DNS, you must enter an IP address. If you are using DNS, you can enter an FQDN.
- Note** We recommend that you define at least two NTP servers.
Click **Next**.
- Step 11** The Configure NIC Settings page appears. This step is optional. To use the default value of 1500, click **Next** to continue. Or, if you wish to change the settings, choose the server, and enter an MTU size between 552 and 1500, and click **Apply to Selected**. Click **Next** after you configure the NIC settings.
- Step 12** Choose a time zone for each node in the cluster. To choose the time zone, select the node and choose the desired time zone settings in the boxes at the top, and click the **Apply to Selected**.
When you finish setting time zones for all the nodes, click **Finish**.
- Step 13** The new install cluster is listed on the Clusters screen, with a cluster type of "New Install." The cluster is defined but not yet created. When you are ready to install the cluster, create an install task. The install task uses the install cluster that you defined, and creates the cluster.
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Create a Migration Cluster

Before You Begin

To create a migration task, perform the following procedure:

- 1 Discover the existing cluster you wish to migrate. See the "Discover a Cluster" procedure at [Discover a Cluster, on page 2](#).
- 2 Define a migration cluster.



Note After you define the migration cluster, see "Migration Task" at [Migration Task](#) to define when and how to perform the migration.

Procedure

- Step 1** From the Cisco Prime Collaboration Deployment application, select **Inventory > Cluster**.
- Step 2** Click **Define Migration Destination Cluster**.
The **Define Migration Destination Cluster** wizard appears.
- Step 3** In the Specify Clusters section, specify the name of the cluster, select the source UC cluster from the drop-down list. Enter a name in the Destination Cluster Name field and select one of the following Destination Network Settings options:
- To retain the default network options, select the **Use the source node network settings for all destination nodes** option.
 - To modify the default network settings or enter new network options, select the **Enter new network settings for one or more destination nodes** option.
- Note** If you select the **Use the source node network settings for all destination nodes** option, same IP address appears for both the source node **NAT IP** and **Dest NAT IP** columns **Assign Destination Cluster Nodes**. If you select the **Enter new network settings for one or more destination nodes** option, only source hostname appears and not the destination hostname on the **Assign Destination Cluster Nodes** window.
- Step 4** Click **Next**.
The **Assign Destination Cluster Nodes** window appears.
- Step 5** Click the **Assign Destination Cluster Nodes** button to select the destination virtual machine for each source node.
- Note** If DHCP is in use on your source node, the destination node will also be configured to use DHCP, and you will not have the option of changing your network settings in this wizard.
- The **Configure Destination Cluster** window appears.
- Step 6** Select a virtual machine, click **Next Node** to go to the next node in the cluster, and select another virtual machine for the destination virtual machine, and click **Done**.
- Note** If there is more than one node in the cluster, repeat these steps - (assigning VM, and entering new IP/hostname settings, if needed) for each node in the source cluster.
- Step 7** Click **Next**.
The **Configure NTP/SMTP Settings** window appears.
- Step 8** Enter the Network Time Protocol (NTP) server settings to be applied to the migration nodes when the migration task runs, and optionally, enter the SMTP server settings.
- Important** In a proxy TFTP setup, if a network migration is performed "off-cluster", you need to manually configure the new hostname and IP address of that off-cluster in the proxy TFTP. Off-cluster refers to situations where TFTP functionality is being performed by a proxy that is not part of that specific Unified Communications Manager cluster. During a migration, that TFTP server (that is not part of the cluster) is not modified. If you want to change the hostname or IP address of that server, you must do it as a separate process and not with Cisco Prime Collaboration Deployment.
- Step 9** Click **Next**.

The **Define DNS Settings** window appears.

Step 10 To change the DNS setting for a node, select the node or nodes from the table and click **Assign DNS Settings**. Enter the primary and secondary DNS, then click **OK** to apply the changes.

Important You cannot change the domain name during a migration.

Step 11 Click **Finish**.

The changes are saved and a row is added to the clusters table to reflect the new migration cluster that you have created.

Upgrade and Migration

For information about supported releases for Cisco Prime Collaboration Deployment, see [Supported Releases](#).

For information about direct upgrade paths, see the *Cisco Unified Communications Manager Software Compatibility Matrix* at the following URL: <http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-device-support-tables-list.html>.

For upgrade and migration information that is not covered in the above references (for example, upgrading from Release 4.x), see the Drive to Collaboration site at the following URL: http://www.cisco.com/web/solutions/vnlanding/comm_manager_upgrade.html.

Updates to Supported Releases

Table 1: Supported Releases of Each Task in Cisco Prime Collaboration Deployment

Product and Functions	Cluster Discovery	Migration to 10.x Cluster	Upgrade Task (Upgrade Application Server or Install COP Files)	Restart Task	Switch Version Task	Fresh Install a New 10.x Cluster	Readdress Task (Change Hostname or IP Addresses for One or More Nodes in a Cluster)
Cisco Unified Communications Manager	6.1(5), 7.1(3), 7.1(5), 8.0(1), 8.0(2), 8.0(3), 8.5(1), 8.6(1), 8.6(2), 9.0(1), 9.1(1), 9.1(2), 10.0(1), 10.5(1), 10.5(2)	6.1(5), 7.1(3), 7.1(5), 8.0(1), 8.0(2), 8.0(3), 8.5(1), 8.6(1), 8.6(2), 9.0(1), 9.1(1), 9.1(2), 10.0(1)	8.6(1), 8.6(2), 9.0(1), 9.1(1), 9.1(2), 10.0(1), 10.5(1), 10.5(2)	8.6(1), 8.6(2), 9.0(1), 9.1(1), 9.1(2), 10.0(1)	8.6(1), 8.6(2), 9.0(1), 9.1(1), 9.1(2), 10.x	10.x, 10.5(1), 10.5(2)	10.x
Cisco Unified Presence	8.5, 8.6	8.5(4), 8.6(3), 8.6(4), 8.6(5)	8.6(3), 8.6(4), 8.6(5)	8.6(3), 8.6(4), 8.6(5)	8.6(3), 8.6(4), 8.6(5)	—	—
IM and Presence Service	9.0(1), 9.1(1), 10.x	9.0(1), 9.1(1), 10.x	9.0(1), 9.1(1), 10.x	9.0(1), 9.1(1), 10.x	9.0(1), 9.1(1), 10.x	10.x, 10.5(1), 10.5(2)	Not Supported
Cisco Unified Contact Center Express	8.5.1, 9.0, 9.0.2, and 10.x	Not Supported	9.0(2), 10.x	9.0(2), 10.x	9.0(2), 10.x	10.5(x)	10.5(x)

Product and Functions	Cluster Discovery	Migration to 10.x Cluster	Upgrade Task (Upgrade Application Server or Install COP Files)	Restart Task	Switch Version Task	Fresh Install a New 10.x Cluster	Readdress Task (Change Hostname or IP Addresses for One or More Nodes in a Cluster)
Cisco Unity Connection	8.6.1, 8.6.2, 9.x and 10.x	Not Supported	From 8.6(x) to 8.6(x) From 8.6(x) to 9.x From 9.x to 9.x From 10.0(1) to 10.x	8.6(1), 8.6(2), 9.x, 10.x	8.6(1), 8.6(2), 9.x, 10.x	10.5(x)	10.5(x)

**Note**

The supported releases table does not include the Engineering Special (ES)/ Service Update (SU) versions. To upgrade or migrate to ES/SU versions, see the release notes of the corresponding product, such as IM and Presence, Cisco Unified Communications Manager, and Unity.

The following table lists the supported paths of restricted and unrestricted versions in Cisco Prime Collaboration Deployment.

Table 2: Supported Paths

From	To	Task Types Supported
Export Restricted (K9)	Export Restricted (K9)	Supported for Upgrade paths Supported for Migration paths
Export Restricted (K9)	Export Unrestricted (XU)	Not supported for Upgrade paths Supported for Migration paths
Export Unrestricted (XU)	Export Restricted (K9)	Not supported for Upgrade paths Not supported for Migration paths
Export Unrestricted (XU)	Export Unrestricted (XU)	Supported for Upgrade paths Supported for Migration paths

DRS CLI Command

Following is the new CLI command that is available in Cisco Unified Communications Manager Release 10.5(2):

utils disaster_recovery show_registration SERVER—Shows the features that you need to back up. For example, if you want to back up PCD, choose PCD from the feature list. The **SERVER** field is mandatory.

For more information, see the DRS documentation for Cisco Unified Communications Manager, at http://www.cisco.com/en/us/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.