



CHAPTER 2

Modify IP Addresses for Servers Defined by IP Address

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- [Modify Publisher Server Defined by IP Address, page 2-1](#)
- [Modify Subscriber Servers Defined by IP Addresses, page 2-5](#)

This section describes how to change the IP addresses for servers that are defined by IP addresses.



Caution

Changing the IP address on any node in a Cisco Unified Presence cluster can interrupt presence services and other system functions. Also, changing the IP address can cause the system to generate certain alarms and alerts, such as ServerDown and SDLLinkOSS, and automatic failover to a backup server may not operate. Because of this potential impact to the system, you must perform IP address changes during a planned maintenance window.

Modify Publisher Server Defined by IP Address



Caution

Changing the IP address of a publisher node may invalidate the server's software license for virtual servers.

Use this procedure to change the IP address of a publisher server if your servers are defined by IP address.



Note

You cannot use this procedure to change a publisher server of the subscriber host to another publisher server.

Before You Begin

- See the [Readiness Checklist, page 1-1](#)
- Ensure that the IP addresses of subscriber nodes are changed (if required) prior to changing publisher IP address.

**Caution**

If you need to change the gateway address, you must do so *before* you change the IP address. If you first change the IP address, the Cisco Unified Presence server will restart immediately and you will not be able to change the gateway.

Procedure

- Step 1** From Cisco Unified Presence Administration, perform the following tasks on the publisher server:
- Navigate to **System > Cluster Topology**.
 - Select **Edit** under the publisher server in the Subcluster section.
 - Change the IP address of the Cisco Unified Presence server under Node Configuration.
- Step 2** From Cisco Unified Communications Manager Administration, perform the following tasks to reflect the new IP address on the publisher server:
- Navigate to **System > Application Server**.
 - Select **Find** from the Find and List Servers window to display the subscriber server.
 - Select the subscriber server.
 - Change the IP address of the Cisco Unified Presence server under Application Server Information.

**Note**

In Release 7.03 and later, Cisco Unified Presence attempts to change the IP address automatically. However, you must still verify the entry, and change it if the correct value is not automatically populated.

- Step 3** Ensure that the IP address change is replicated to all subscriber nodes in the cluster by checking the following on each subscriber node:

If you want to use:	Action
Cisco Unified Presence Administration	From Cisco Unified Presence Administration, perform the following tasks. <ol style="list-style-type: none"> Select System > Cluster Topology. Select Edit under the subscriber server. Check the IP address in the Node Configuration window.
CLI command	<ol style="list-style-type: none"> Enter the CLI command <code>run sql select name,nodeid from ProcessNode</code> The following output displays: <pre>admin: run sql select name,nodeid from ProcessNode name nodeid ===== EnterpriseWideData 1 10.3.90.21 4 10.3.90.5 2</pre>

- Step 4** Change the IP address of the publisher server on each subscriber server in the cluster, by performing the following tasks:

If you want to use:	Action
Cisco Unified Operating System Administration	<ol style="list-style-type: none"><li data-bbox="747 336 1510 409">a. Open each subscriber server using this URL:<ul style="list-style-type: none"><li data-bbox="803 378 1510 409">– <code>http://subscriber_ip_address/cmplatform</code><li data-bbox="747 420 1510 577">b. Perform the following tasks in Cisco Unified Operating System Administration:<ul style="list-style-type: none"><li data-bbox="803 493 1510 535">• Navigate to Settings > IP > Publisher.<li data-bbox="803 546 1510 577">• Change the IP address of the publisher server.
CLI command	<ol style="list-style-type: none"><li data-bbox="747 594 1510 661">a. Enter the following command: <code>set network cluster publisher ip. ip_address</code><li data-bbox="747 682 1510 714">b. Enter Yes and press Enter. The server restarts automatically.

- Step 5** Change the IP address of the publisher server, and if necessary the default gateway, to the new address by performing the following tasks:

If you want to use:	Action
Cisco Unified Operating System Administration	<p>From Cisco Unified Operating System Administration, perform the following tasks.</p> <ol style="list-style-type: none"> Select Settings > IP > Ethernet. Enter the new IP address. If you are moving the server to a different subnet that requires a new default gateway address, enter the new default gateway address. Select Save. The server restarts automatically.
CLI command	<ol style="list-style-type: none"> If you are moving the server to a different subnet that requires a new default gateway address, enter the CLI command set network gateway <p>The following output displays:</p> <pre>admin:set network gateway 10.3.90.2 *** W A R N I N G *** This will cause the system to temporarily lose network connectivity Do you want to continue ? Enter "yes" to continue or any other key to abort</pre> <ol style="list-style-type: none"> Enter yes and press Enter. To change the IP address of the publisher server, enter the CLI command set network ip eth0 ip_address netmask where <i>ip_address</i> specifies the new server IP address and <i>netmask</i> specifies the new server network mask. <p>The following output displays:</p> <pre>admin: set network ip eth0 10.3.90.21 255.255.254.0 *** W A R N I N G *** If there are IP addresses (not hostnames) configured in CallManager Administration under System -> Servers then you must change the IP address there BEFORE changing it here or call processing will fail. This will cause the system to restart ===== Note: To recognize the new IP address all nodes within the cluster will have to be manually rebooted. ===== Do you want to continue? Enter "yes" to continue and restart or any other key to abort</pre> <ol style="list-style-type: none"> Enter yes and press Enter.

- Step 6** After the publisher server restarts automatically, restart all subscriber servers to update the local name resolution files including database related configuration files.

Troubleshooting Tips

- If you changed switches in addition to changing the gateway and IP address for the Cisco Unified Presence server, complete these steps while the server is automatically restarting. Otherwise, some of the Cisco Unified Presence scripts may fail network connectivity checks upon startup.
 - watch the restart screen
 - enter a `ping -t` on the old IP address
 - when the pings are no longer successful, disconnect from the old switch and connect to the new switch
- The local name resolution files including database related configuration files, and services are only updated during system startup. You need to restart core network services, such as Cisco DB and Cisco Tomcat, after the files are updated. Restarting the servers ensures that the proper update and service-restart sequence for the IP address changes take effect.

Related Topics

- *Disaster Recovery System Guide*
- *Cisco Unified Communications Operating System Administration Guide*

What To Do Next

[Post-Change Task List, page 5-1](#)

Modify Subscriber Servers Defined by IP Addresses

Use this procedure to change the IP address of a subscriber server if your servers are defined by IP addresses. To successfully change the IP address, you must complete all steps in this procedure.

Before You Begin

[Post-Change Task List, page 5-1](#)



Caution

If you need to change the gateway address, you must do so *before* you change the IP address. If you change the IP address first, the Cisco Unified Presence server will restart immediately and you will not be able to change the gateway.

Procedure

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- Step 1** From Cisco Unified Presence Administration, perform the following tasks on the subscriber server:
- a. Navigate to **System > Cluster Topology**.
 - b. Select **Edit** under the subscriber server in the Subclusters section.
 - c. Change the IP address of the Cisco Unified Presence server in the Node Configuration section.
- Step 2** From Cisco Unified Communications Manager Administration, perform the following tasks to reflect the new IP address on the subscriber server:
- a. Navigate to **System > Application Server**.
 - b. Select **Find** from the Find and List Servers window to display the subscriber server.

- c. Select the subscriber server.
- d. Change the IP address of the Cisco Unified Presence server under Application Server Information.



Note In Release 7.03 and later, Cisco Unified Presence attempts to change the IP address automatically. However, you must still verify the entry, and change it if the correct value is not automatically populated.

Step 3 Ensure that the IP address change is replicated to all the nodes in the cluster as follows:

If you use:	Action
Cisco Unified Presence Administration	From Cisco Unified Presence Administration, perform the following tasks. <ul style="list-style-type: none"> a. Select System > Cluster Topology. b. Select Edit under the subscriber server. c. Check the IP address in the Node Configuration window.
CLI command	Enter the CLI command <code>run sql select name,nodeid from ProcessNode</code> The following example shows the command output: <pre>admin: run sql select name,nodeid from ProcessNode name nodeid ===== EnterpriseWideData 1 10.3.90.21 4 10.3.90.5 2</pre>

Step 4 Repeat Steps 1 to 3 on all subscriber nodes in the cluster, as required.

- Step 5** Change the IP address of the subscriber server, and if necessary the default gateway, to the new address by performing the following tasks:

If you use:	Action	Troubleshooting Tips
Cisco Unified Operating System Administration	<p>From Cisco Unified Operating System Administration, perform the following tasks.</p> <ol style="list-style-type: none"> Select Settings > IP > Ethernet. Enter the new IP address. If you are moving the server to a different subnet that requires a new default gateway address, enter the new default gateway address. Select Save. The server restarts automatically. 	<p>When changing the IP address of more than one subscriber server, we recommend that you:</p> <ol style="list-style-type: none"> Change the IP address for one server at a time. Restart all other servers in the cluster (including the publisher server) to update the local name resolution files including database related configuration files.
CLI command	<ol style="list-style-type: none"> If you are moving the server to a different subnet that requires a new default gateway address, enter the CLI command set network gateway <p>The following output displays:</p> <pre>admin:set network gateway 10.3.90.2 *** WARNING *** This will cause the system to temporarily lose network connectivity Do you want to continue ? Enter "yes" to continue or any other key to abort</pre> <ol style="list-style-type: none"> Enter yes and press Enter. To change the IP address of the subscriber server, enter the CLI command set network ip eth0 ip_address netmask <p>where <i>ip_address</i> specifies the new server IP address and <i>netmask</i> specifies the new server network mask.</p> <p>The following output displays:</p> <pre>admin: set network ip eth0 10.3.90.21 255.255.254.0 *** WARNING *** If there are IP addresses (not hostnames) configured in CallManager Administration under System -> Servers then you must change the IP address there BEFORE changing it here or call processing will fail. This will cause the system to restart ===== Note: To recognize the new IP address all nodes within the cluster will have to be manually rebooted. ===== Do you want to continue? Enter "yes" to continue and restart or any other key to abort</pre> <ol style="list-style-type: none"> Enter yes and press Enter. 	<p>Caution! Do not change the IP address of more than one server at the same time because it can cause local name resolution files to be out of sync in the cluster.</p>

Step 6 Verify the result of the database replication:

- If the changed IP address propagates correctly cluster-wide, return to [Step 5](#) and complete the procedure on the next subscriber server.
- If the changed IP address does not propagate to the other servers in the cluster, enter the following command on the publisher node:

```
user utils dbreplication runtimestate
```

Verify that the new IP address is listed and that the replication state = 2 for all nodes in the cluster.

Troubleshooting Tips

- If you changed switches in addition to changing the gateway and IP address for the Cisco Unified Presence server, complete these steps while the server is automatically restarting. Otherwise, some of the Cisco Unified Presence scripts may fail network connectivity checks upon startup.
 - watch the restart screen
 - enter a `ping -t` on the old IP address
 - when the pings are no longer successful, disconnect from the old switch and connect to the new switch
- The local name resolution files including database related configuration files are only updated during system startup. You need to restart core network services, such as Cisco DB and Cisco Tomcat, after the files are updated. Restarting the servers ensures that the proper update and service-restart sequence for the IP address changes take effect.

Related Topics

- *Disaster Recovery System Guide*
- *Cisco Unified Communications Operating System Administration Guide*

What To Do Next

[Post-Change Task List, page 5-1](#)