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### Previous Topic

- [Deployment of Cisco Unified Presence](#)

You can configure peer relationships to interconnect standalone Cisco Unified Presence clusters, known as intercluster peers. This intercluster functionality allows users in one Cisco Unified Presence cluster to communicate and subscribe to the availability information of users in a remote Cisco Unified Presence cluster within the same domain.

Cisco Unified Presence uses the AXL/SOAP interface to retrieve user information for home cluster association. Cisco Unified Presence uses this user information to detect if a user is a local user (user on the local cluster), or a user on a remote Cisco Unified Presence cluster within the same domain.

Cisco Unified Presence uses the SIP interface for the subscription and notification traffic. If the user is detected to be on a remote Cisco Unified Presence cluster within the same domain, Cisco Unified Presence rewrites the host portion of the SIP URI message, and reroutes the SIP messages to the remote Cisco Unified Presence cluster.

- [Prerequisites for Intercluster Deployment](#)
- [Configuring an Intercluster Peer](#)
- [Turning On the Intercluster Sync Agent](#)

- [Verifying the Intercluster Peer](#)

## Prerequisites for Intercluster Deployment

Before you configure any intercluster peers, make sure that the following configuration is complete:

- Complete the required multi-node configuration in both the local Cisco Unified Presence cluster, and in the remote Cisco Unified Presence cluster:
  - ◆ Configure the system topology and assign your users as required.
  - ◆ Activate the services on each Cisco Unified Presence node in the cluster.
- You configure an intercluster peer between the publisher nodes in standalone Cisco Unified Presence clusters. No configuration is required on the subscriber nodes in a cluster for intercluster peer connections. Therefore you must activate the AXL interface on the local Cisco Unified Presence publisher node, and on the remote Cisco Unified Presence publisher node.
- Cisco Unified Presence creates, by default, an intercluster application user with AXL permissions. To configure an intercluster peer, you will require the username and password for the intercluster application user on the remote Cisco Unified Presence server.

For sizing and performance recommendations for intercluster deployments, including information on determining a presence user profile, see the Cisco Unified Presence SRND.

### Related Topics

- [Performing a Fresh Multi-Node Installation](#)
- *Cisco Unified Communication SRND:*

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cucm/srnd/7x/uc7\\_0.html](http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/7x/uc7_0.html)

- [Getting More Information](#)

## Configuring an Intercluster Peer

Perform this procedure on the publisher node of the local Cisco Unified Presence cluster, and on the publisher node of the remote Cisco Unified Presence cluster (that you wish your home cluster to form a peer relationship with).

**Note:** The intercluster peer in the home cluster must have the same transport protocol as the intercluster peer in the remote cluster.

### Before You Begin

- Activate the AXL interface on the local Cisco Unified Presence node.
- Confirm that the AXL interface is activated on the remote Cisco Unified Presence publisher node.

- Acquire the username and password for the intercluster application user on the remote Cisco Unified Presence server.

### Restriction

We recommend that you use TCP as the intercluster trunk transport protocol for all Cisco Unified Presence clusters.

### Procedure

1. Select **Cisco Unified Presence Administration > Presence > Inter-Clustering**.
2. Enter the IP address of the publisher node of a remote Cisco Unified Presence cluster.
3. Enter the username of the application user on the remote Cisco Unified Presence server that has AXL permissions.
4. Enter the associated password of the application user on the remote Cisco Unified Presence server that has AXL permissions.
5. Enter the preferred protocol for SIP communication.
6. (Optional) Enter the External Phone Number Mask value. This is the E164 mask to apply to Directory Numbers retrieved from the remote cluster.
7. Select **Save**.

### Troubleshooting Tips

If DNS is available in your network, the address configured for the intercluster peer could be a DNS SRV FQDN that resolves to the remote Cisco Unified Presence cluster nodes.

### Related Topics

- [Verifying the Intercluster Peer](#)
- [Getting More Information](#)

### What To Do Next

[Turning On the Intercluster Sync Agent](#)

## Turning On the Intercluster Sync Agent

By default, Cisco Unified Presence turns on the Intercluster Sync Agent parameter. Use this procedure to either verify that Intercluster Sync Agent parameter is on, or to manually turn on this parameter.

The Intercluster Sync Agent uses the AXL/SOAP interface for the following:

- to retrieve user information for Cisco Unified Presence to determine if a user is a local user (on the local cluster), or a user on a remote Cisco Unified Presence cluster within the same domain

- to notify remote Cisco Unified Presence clusters of changes to users local to the cluster.

**Note:** You must turn on the Intercluster Sync Agent on all nodes in the Cisco Unified Presence cluster because in addition to synchronizing user information from the local publisher node to the remote publisher node, the Intercluster Sync Agent also handles security between all nodes in the clusters.

#### Procedure

1. Select **Cisco Unified Presence Serviceability > Tools > Control Center - Network Services**.
2. Select the Cisco Unified Presence server from the Server menu.
3. Select **Cisco UP Intercluster Sync Agent**.
4. Select **Start**.

#### Related Topics

- [Configuring an Intercluster Peer](#)
- [About the Multi-Node Scalability Feature](#)
- [Getting More Information](#)

#### What To Do Next

- [Verifying the Intercluster Peer](#)

## Verifying the Intercluster Peer

#### Procedure

1. Select **Cisco Unified Presence Administration > Presence > Inter-Clustering**.
2. Select peer address from the search criteria menu.
3. Select **Find**.
4. Select the peer address entry that you wish to view.
5. In the Intercluster Peer Status window:
  - ◆ Verify that there are check marks beside each of the result entries for the intercluster peer.
  - ◆ Make sure that the Associated Users value equals the number of users on the remote cluster.
6. Select **Cisco Unified Presence Administration > Diagnostics > System Troubleshooter**.
7. Verify that there are check marks beside the status of each of the intercluster peer connection entries in the InterClustering Troubleshooter section.

#### Related Topics

- [Configuring an Intercluster Peer](#)
- [Turning On the Intercluster Sync Agent](#)

- [Getting More Information](#)