



## IPv6 Configuration

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### Configure IPv6 on Unified CVP Call Server

For IPv6-enabled deployments, you must add an IPv6 address to your Unified CVP Call Server's existing network interface.

#### Procedure

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- Step 1** On the Unified CVP Call Server, navigate to **Control Panel > Network and Sharing**.
  - Step 2** Click **Ethernet**.
  - Step 3** From the **Ethernet Status** window, select **Properties**.
  - Step 4** Check the **Internet Protocol Version 6 (TCP/IPv6)** check box, and choose **Properties**.
  - Step 5** Choose **Use the following IPv6 address** radio button.
  - Step 6** Enter values in the **IPv6 address**, **Subnet prefix length**, and **Default gateway** fields.
  - Step 7** Click **OK** and restart Windows when prompted.
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### Configure IPv6 on Unified Communications Manager

#### Enable IPv6 in Unified Communications Manager

Perform the following procedure to enable IPv6 on all the Unified Communications Manager in your cluster.

### Procedure

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- Step 1** From **Cisco Unified Operating System Administration**, navigate to **Settings > IP > Ethernet IPv6**.
  - Step 2** Check the **Enable IPv6** check box.
  - Step 3** Enter the values in the **IPv6 Address**, **Prefix Length**, and the **Default Gateway** fields.
  - Step 4** Click **Save**.
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## Cluster-Wide Configuration in Unified CM Administration

Perform the following procedure to set IPv6 as the addressing mode preference for media and signaling cluster-wide.

### Procedure

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- Step 1** From **Cisco Unified CM Administration**, choose **System > Enterprise Parameters > IPv6 Configuration Modes** to configure the cluster-wide IPv6 settings for each Unified Communications Manager server.
  - Step 2** From the **Enable IPv6** drop-down list, choose **True**.
  - Step 3** From the **IP Addressing Mode Preference for Media** drop-down list, choose **IPv6**.
  - Step 4** From the **IP Addressing Mode Preference for Signaling** drop-down list, choose **IPv6**.
  - Step 5** From the **Allow Auto-configuration for Phones** drop-down list, choose **Off**.
  - Step 6** Save your changes.
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## Add a Common Device Configuration Profile in Unified Communications Manager

In an IPv6-enabled environment, you may have both IPv4 and IPv6 devices.

Perform the following procedure to add an IPv4, IPv6, or dual stack common device configuration profile in Unified Communications Manager.

### Procedure

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- Step 1** From **Cisco Unified CM Administration**, choose **Device > Device Settings > Common Device Configuration**.
- Step 2** Click **Add New** and enter the name of the new common device configuration profile.
- Step 3** From the **IP Addressing Mode** drop-down list:
  - To add an IPv6 common device configuration profile in Unified Communications Manager, choose **IPv6 only**.

- To add an IPv4 common device configuration profile in Unified Communications Manager, choose **IPv4 only**.
- To add a dual stack common device configuration profile in Unified Communications Manager, choose **IPv4 and IPv6**. Then choose **IPv4** from the **IP Addressing Mode Preference for Signaling** drop-down list.

**Step 4** Save your changes.

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## Associate the Common Device Configuration Profile with Gateway Trunk

Perform the following procedure to associate the common device configuration profile with the Gateway trunk. This procedure applies to the Ingress Gateway.

### Procedure

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**Step 1** From **Cisco Unified CM Administration**, choose **Device > Trunk**.

**Step 2** Click **Find**.  
Choose the trunk profile that you want to view.

**Step 3** From the **Common Device Configuration** drop-down list:

- To associate the IPv6 common device configuration profile with the Gateway trunk, choose the IPv6 common device configuration profile.
- To associate the IPv4 common device configuration profile with the Gateway trunk, choose the IPv4 common device configuration profile.

**Note** Unified CM gateway trunk supports only an IPv4 or IPv6 trunk. You cannot associate a dual stack common device configuration profile to a Unified CM gateway trunk.

**Step 4** Enter the IPv6 address in the **Destination Address IPv6** field.

**Note** Unified CM to Gateway trunk supports only standard SIP Profile and does not support ANAT enabled dual-stack SIP trunk.

**Step 5** Save your changes.

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## Associate the Common Device Configuration Profile with an IPv4 or IPv6 Phone

### Procedure

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**Step 1** From **Cisco Unified CM Administration**, choose **Device > Phone**.

**Step 2** Click **Find**.  
Choose the trunk profile that you want to view.

**Step 3** From the **Common Device Configuration** drop-down list: choose the IPv6 common device configuration profile.

- To associate the IPv6 common device configuration profile to an IPv6 phone, choose the IPv6 common device configuration profile.
- To associate the IPv4 common device configuration profile to an IPv4 phone, choose the IPv4 common device configuration profile.

**Step 4** Save your changes.

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## Configure SIP trunk from Unified Communications Manager to Unified CVP

The following sections describe the steps to configure the SIP trunk from Unified Communications Manager to Unified CVP.

### Add a SIP Profile in Unified CM

This option allows a dual-stack SIP trunk to offer both IPv4 and IPv6 media. Perform this procedure for IPv6-enabled deployments only.

#### Procedure

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- Step 1** From **Cisco Unified CM Administration**, choose **Device > Device Settings > SIP Profile**.
- Step 2** Click **Add New** and enter the name of the SIP profile.
- Step 3** Check the **Enable ANAT** check box on the SIP Profile.
- Step 4** Save your changes.
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### Associate the Dual Stack Common Device Configuration Profile with SIP Trunk

You only need to perform this procedure if you have an IPv6 enabled deployment.

#### Procedure

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- Step 1** From **Cisco Unified CM Administration**, choose **Device > Trunk**.
- Step 2** Click **Find**. Choose the trunk profile that you want to view.
- Step 3** From the **Common Device Configuration** drop-down list, choose the Dual Stack Common Device Configuration Profile.
- Note** For more information on how to add a Dual Stack Common Device Configuration Profile, see [Add a Common Device Configuration Profile in Unified Communications Manager, on page 2](#).
- Step 4** Save your change.
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# Gateway Configuration

## Configure an Interface to Support IPv6 Protocol Stack

This procedure applies to both the Ingress and the VXML gateway.

### Procedure

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Configure the following on the Gateway:

```
>Enable
>configure terminal
>interface type number
>ipv6 address{ ipv6-address / prefix-length | prefix-name sub-bits / prefix-length}
>ipv6 enable
```

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## Enable ANAT in Ingress Gateway

### Procedure

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Configure the following on the Gateway:

```
>conf t
>voice service voip
>SIP
>ANAT
>bind control source-interface GigabitEthernet0/2
>bind media source-interface GigabitEthernet0/2
```

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## Enable Dual Stack in the Ingress Gateway

### Procedure

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Configure the following on the Gateway:

```
>conf t
>sip-ua
>protocol mode dual-stack preference ipv6
```

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## Transcoder Configuration in Unified CM and IOS Gateway

A transcoder is required in the following scenarios

- An agent logged in to an IPv6 endpoint needs to send or receive transfers from an agent logged in to an IPv4 endpoint.
- An agent logged in to an IPv6 endpoint needs to connect to a VXML Gateway for self service.
- A multicodec scenario to convert a stream from a G.711 codec to G.729 codec.

For more information about transcoder configuration in Unified Communications Manager and gateway, see the section "Configure Transcoders and Media Termination Points" in the *System Configuration Guide for Cisco Unified Communications Manager* at <https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-installation-and-configuration-guides-list.html>.

## Configure the CVP Call Server Dial Peers in Ingress Gateway

The Ingress Gateway to Unified CVP outbound dial peer configuration uses the IPv4 address of Unified CVP as the session target.