Main page: Cisco Unified MeetingPlace Express, Release 2.x

The tasks you need to complete depend on the type of call-control device you are using. See Table: Task Roadmap for a task roadmap.

Contents

Table: Task Roadmap

Task	Reference
(Optional) If your gatekeeper is not yet configured or defined in your call-control device, then configure your gatekeeper.	See the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.
Configure your particular call-control device.	• If you are integrating with Cisco Unified Communications Manager, see the Configuring Cisco Unified Communications Manager: Adding the Gatekeeper, Trunk, and Route Pattern. • If you are integrating with Cisco Unified Communications Manager Express or a Cisco IOS software voice-enabled router, see the Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices.
Configure Cisco Unified MeetingPlace Express to integrate with your chosen call-control device.	See the Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper.

Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix

If your gatekeeper is already configured with a hostname, zone, and technology prefix, do not perform this task.

Before You Begin

- Read Integrating With a Call-Control Device Through a Gatekeeper.

Restrictions

- This task is performed in the Cisco IOS command-line interface (CLI) of the gatekeeper.

Procedure

1. On the Cisco router, enter privileged EXEC mode or any other security level set by a system administrator. Enter your password if prompted.
   ```
   Router# enable
   ```
2. Enter global configuration mode.
   ```
   Router# configure terminal
   ```
3. Enter interface configuration mode.
   ```
   Router(config)# interface type number
   ```
4. Configure the IP address and subnet mask used by this gateway.

```
Router(config-if)# ip address [ip-address] [subnet-mask]
```

5. (Optional) If you configured a Fast Ethernet interface, configure duplex operation as auto, which specifies the autonegotiation capability. The gateway automatically operates at half or full duplex depending on environmental factors, such as the type of media and transmission speeds for the peer routers, hubs, and switches used in the network configuration.
   ```
   Router(config-if)# duplex auto
   ```
6. (Optional) If you configured a Fast Ethernet interface, configure the speed for this gateway.
   ```
   Router(config-if)# speed auto
   ```
7. Configure this interface as an H.323 gateway interface.
   ```
   Router(config-if)# h323-gateway voip interface
   ```
8. Define the name and location of the gatekeeper for this gateway.
   ```
   Router(config-if)# h323-gateway voip id [hostname] ipaddr
   [ip-address]
   ```
9. Configure the H.323 name of the gateway identifying this gateway to its associated gatekeeper.
   ```
   Router(config-if)# h323-gateway voip h323-id hostname
   ```
10. Define the technology prefix that the gateway will register with the gatekeeper.
    ```
    Router(config-if)# h323-gateway voip tech-prefix prefix
    ```
    - *prefix*-Defines the numbers used as the technology prefixes. Each technology prefix can contain up to 11 characters. Although not strictly necessary, a pound (#) symbol is frequently used as the last digit in a technology prefix. Valid characters are 0 though 9, the pound (#) symbol, and the asterisk (*).
11. Exit the current mode.
    ```
    Router(config-if)# exit
    ```
12. Enter gatekeeper configuration mode.
    ```
    Router(config)# gatekeeper
    ```
13. Configure the zone name and the name of the domain served by this gatekeeper.
    ```
    Router(config-gk)# zone local zone-name domain-name
    [ip-address] [port]
    ```
    - Optionally, you may specify the IP address of one of the interfaces on the gatekeeper. When the gatekeeper responds to gatekeeper discovery messages, it signals the endpoint or gateway to use this address in future communications.
    - Set the gatekeeper port for Registration, Admission, and Status (RAS) signaling to 1719. This is the default.
14. Configure the technology prefix, also called the gateway-type prefix.
    ```
    Router(config-gk)# gw-type-prefix type-prefix
    ```
15. End your configuration session by exiting to privileged EXEC mode.
    ```
    Router(config-gk)# end
    ```

Example

In the following Cisco IOS configuration example, the gatekeeper router hostname gk-1.example.com is also used as the zone name. Matching these names is not necessary but simplifies administration.

```
 !

interface FastEthernet0/0 ip address 1.1.100.200 255.255.0.0 duplex auto
speed auto h323-gateway voip interface h323-gateway voip id gk-1 ipaddr
10.1.100.200 1719 h323-gateway voip h323-id ipipgw_core h323-gateway voip
tech-prefix 1# ! gatekeeper zone local gk-1.example.com 1.1.100.200

gw-type-prefix 1#* default-technology
```

!

Tips

- For more information about the Cisco IOS commands used in this procedure, see the *Cisco IOS Commands Master List* for your Cisco IOS software major release.
- For conceptual information about gatekeepers, zones, and technology prefixes, see the *Cisco IOS H.323 Configuration Guide* for your Cisco IOS software major release.

Configuring Cisco Unified Communications Manager: Adding the Gatekeeper, Trunk, and Route Pattern

This topic describes how to configure Cisco Unified Communications Manager in an H.323 environment to integrate with Cisco Unified MeetingPlace Express through a gatekeeper.

If the gatekeeper is already defined in Cisco Unified Communications Manager, do not perform this task. Proceed to the Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper.

Before You Begin

- Complete the task described in the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.

Restrictions

- This task is performed in the Cisco Unified Communications Manager Administration pages. Because the pages and menus vary by Cisco Unified Communications Manager release, you may need to see the Cisco Unified Communications Manager online help for more accurate step-by-step instructions than those provided in this procedure. The following procedure refers to Cisco Unified CallManager Release 4.1.

Note: The names for Cisco Unified CallManager Release 4.3, Release 5.1, and Release 6.0 have been changed to Cisco Unified Communications Manager Release 4.3, Release 5.1, and Release 6.0. The names of Cisco Unified CallManager Release 4.0, Release 4.1, Release 4.2, and Release 5.0 have *not* changed and remain the same.

In this procedure, the term Cisco Unified CallManager refers to both Cisco Unified CallManager and Cisco Unified Communications Manager.

Procedure

1. Go to http://*ccm-server*/ccmadmin/main.asp, where *ccm-server* is the fully qualified domain name or IP address of the Cisco Unified CallManager server.
2. Log in with your Cisco Unified CallManager administrator username and password.
3. Add the gatekeeper to the Cisco Unified CallManager database by completing the following actions:

a. Click **Device > Gatekeeper**.

b. In the top right corner, click **Add a New Gatekeeper**.

c. Configure the fields described in Table: Fields for Adding A New Gatekeeper to Cisco Unified CallManager.

Table: Fields for Adding A New Gatekeeper to Cisco Unified CallManager

Gatekeeper Configuration Field	Action
Host Name/IP Address (IP address or hostname of the gatekeeper.)	Enter one of the following values: • Hostname of the gatekeeper • IP address of the gatekeeper, as entered in Step 13 in the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.
Enable Device (Enables the registration of this gatekeeper with Cisco Unified CallManager.)	Make sure that this check box is checked.

d. Click **Insert**.

e. Click **Reset Gatekeeper** to have the changes take effect.

4. Add a new trunk to the gatekeeper by completing the following actions:

a. Click **Device > Trunk**.

b. In the top right corner, click **Add a New Trunk**.

c. In the Trunk type field, select **H.225 Trunk (Gatekeeper Controlled)**.

d. In the Device Protocol field, select **H.225**.

e. Click **Next**.

f. Configure the fields described in [[Cisco Unified MeetingPlace Express, Release 2.x -- How to Integrate With a Call-Control Device Through a Gatekeeper#Table: Fields for Adding A New Trunk to Cisco Unified CallManager|Table: Fields for Adding A New Trunk to Cisco Unified CallManager]].

Table: Fields for Adding A New Trunk to Cisco Unified CallManager

Trunk Configuration Field	Action
Device Name	Enter a unique identifier for this trunk, such as the name or IP address of the Cisco Unified MeetingPlace Express server.
Gatekeeper Name	Select the name or IP address you entered in the Host Name/IP Address field in Step 3c.
Terminal Type	Select **Gateway**.
Technology Prefix	Enter the same value you entered for the *type-prefix* argument in Step 14 of the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.
Zone	Enter the same value you entered for the *zone-name* argument in Step 13 of the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.

g. For all other required fields on the Trunk Configuration page, configure the fields appropriately for the current Cisco Unified CallManager deployment. For information about each field, see the Cisco Unified CallManager online help or see the administration guide for your specific Cisco Unified CallManager release.

h. Click **Insert**.

i. Click **Reset Trunk** to have the changes take effect.

5. Add a new route pattern to Cisco Unified MeetingPlace Express through the gatekeeper by completing the following actions:

a. Click **Route Plan > Route/Hunt > Route Pattern**.

b. In the top right corner, click **Add a New Route Pattern**.

c. Configure the fields described in Table: Fields for Adding a New Route Pattern to Cisco Unified CallManager.

Table: Fields for Adding a New Route Pattern to Cisco Unified CallManager

Route Pattern Configuration Field	Action
Route Pattern	Enter the phone number that users will use to call in to Cisco Unified MeetingPlace Express. Do not enter any spaces in this field.
Gateway or Route List	Select the value that matches the Device Name you entered for the trunk in Step 4f.

d. Click **Insert**.

6. Configure the gatekeeper by completing the following actions:

a. Click **System > Service Parameters > Server: Select Publisher IP > Service: Cisco Unified CallManager.**

b. Set the **Send Product ID and Version ID** field to **True**.

c. Click **Save**.

7. (Optional) If you have multiple Cisco Unified MeetingPlace Express access numbers, repeat Step 5 for each access number. This includes phone numbers entered on the Usage Configuration page as well as direct meeting dial-in numbers.

8. Proceed to the Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper.

Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices

This topic describes how to configure Cisco Unified Communications Manager Express and other Cisco IOS software voice-enabled routers to integrate with Cisco Unified MeetingPlace Express through a gatekeeper.

This topic is divided into two tasks:

- Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Adding the Gatekeeper
- Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Configuring the Dial Peer

Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Adding the Gatekeeper

Before You Begin

- If the gatekeeper is already defined in your Cisco IOS router, do not perform this task. Proceed to the Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper.
- See the Prerequisites for Integrating With a Call-Control Device Through a Gatekeeper.
- Complete the task described in the Configuring the Gatekeeper: Identifying the Hostname, Zone, and Technology Prefix.

Restrictions

- This task is performed in the Cisco IOS command-line interface (CLI) of the router. For more information about the Cisco IOS commands used in this procedure, see the *Cisco IOS Commands Master List* for your Cisco IOS software major release.

Procedure

1. On the Cisco router, enter privileged EXEC mode or any other security level set by a system administrator. Enter your password if prompted.
   ```
   Router# enable
   ```
2. Enter global configuration mode.
   ```
   Router# configure terminal
   ```
3. Enter interface configuration mode.
   ```
   Router(config)# interface type number
   ```
4. Configure the IP address and subnet mask used by this gateway.
   ```
   Router(config-if)# ip address [ip-address] [subnet-mask]
   ```
5. (Optional) If you configured a Fast Ethernet interface, configure duplex operation as auto, which specifies the autonegotiation capability. The gateway automatically operates at half or full duplex depending on environmental factors, such as the type of media and transmission speeds for the peer routers, hubs, and switches used in the network configuration.
   ```
   Router(config-if)# duplex auto
   ```
6. (Optional) If you configured a Fast Ethernet interface, configure the speed for this gateway.
   ```
   Router(config-if)# speed auto
   ```
7. Configure this interface as an H.323 gateway interface.
   ```
   Router(config-if)# h323-gateway voip interface
   ```
8. Define the name and location of the gatekeeper for this gateway.
   ```
   Router(config-if)# h323-gateway voip id [hostname] ipaddr
   [ip-address]
   ```
9. Configure the H.323 name of the gateway identifying this gateway to its associated gatekeeper.
   ```
   Router(config-if)# h323-gateway voip h323-id hostname
   ```
10. Define the technology prefix that the gateway will register with the gatekeeper.
    ```
    Router(config-if)# h323-gateway voip tech-prefix prefix
    ```
    - *prefix*-Defines the numbers used as the technology prefixes. Each technology prefix can contain up to 11 characters. Although not strictly necessary, a pound (#) symbol is frequently used as the last digit in a technology prefix. Valid characters are 0 though 9, the pound (#) symbol, and the asterisk (*).
11. Set the source IP address to be used for this gateway. This command binds all H.323 messages from the gateway to this IP address.
    ```
    Router(config-if)# h323-gateway voip bind srcaddr [ip-address]
    ```
12. Exit the current mode.
    ```
    Router(config-if)# exit
    ```
13. Proceed to the Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Configuring the Dial Peer.

Example

The following example displays integration between a Cisco IOS voice gateway with an IP address of 1.1.100.1 and a gatekeeper named gk-1 that has an IP address of 1.1.100.200.

```
interface FastEthernet0/0 ip address 1.1.100.1 255.255.255.0 duplex auto
speed auto h323-gateway voip interface h323-gateway voip id gk-1 ipaddr
1.1.100.200 1719 h323-gateway voip h323-id cme1 h323-gateway voip
tech-prefix 1# h323-gateway voip bind srcaddr 1.1.100.1
```

Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Configuring the Dial Peer

This topic describes how to enable your call-control device to route calls to Cisco Unified MeetingPlace Express by configuring a dial peer. Configuring dial peers is the key to implementing dial plans and providing voice services over an IP packet network. Dial peers are used to identify call source and destination endpoints and to define the characteristics applied to each call leg in the call connection.

Before You Begin

- See the Prerequisites for Integrating with Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call Control Devices.
- Complete the task described in the Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices: Adding the Gatekeeper.

Restrictions

- This task is performed in the Cisco IOS command-line interface (CLI) of the router. For more information about the Cisco IOS commands used in this procedure, see the *Cisco IOS Commands Master List* for your Cisco IOS software major release.

Procedure

1. On the Cisco router, enter privileged EXEC mode or any other security level set by a system administrator. Enter your password if prompted.
   ```
   Router# enable
   ```
2. Enter global configuration mode.
   ```
   Router# configure terminal
   ```
3. Enter dial peer voice configuration mode and define a remote voice over IP (VoIP) dial peer.
   ```
   Router(config)# dial-peer voice number voip
   ```
   - *number*-is one or more digits that identify the dial peer. Valid entries are from 1 to 2147483647.
   - **voip**-indicates a VoIP peer that uses voice encapsulation on the IP network.
4. Route calls to the Cisco Unified MeetingPlace Express server.
   ```
   Router(config-dialpeer)# destination-pattern digits
   ```
   - *digits*-indicates the numbers that match the destination pattern.
5. (Optional) Provide a comment or a description to help you remember what is attached to this interface.
   ```
   Router(config-dialpeer)# description string
   ```
6. Specify the network specific address for this dial peer to use Registration, Admission, and Status (RAS) signaling
   ```
   Router(config-dialpeer)# session target ras
   ```
7. Configure the router to use dual tone multifrequency (DTMF) relay to transport DTMF digits.
   ```
   Router(config-dialpeer)# dtmf-relay h245-alphanumeric
   ```
8. Configure the router to use a particular codec.
   ```
   Router(config-dialpeer)# codec [g711ulaw | g711alaw | g729 ]
   ```
9. Disable voice activity detection (VAD) for the calls using this dial peer.

```
Router(config-dialpeer)# [no] vad
```

10. Exit the current mode.

```
Router(config-dialpeer)# exit
```

11. Proceed to the Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper.

Example

The following example displays dial peers that were configured to direct calls to a primary Cisco Unified MeetingPlace Express number and an alternate Cisco Unified MeetingPlace Express number using RAS.

```
 !
dial-peer voice 1 voip
destination-pattern 7777
description MP express main number
session target ras
dtmf-relay h245-alphanumeric
codec g711ulaw
no vad
 ! dial-peer voice 2
voip destination-pattern 7000
description MP express alternate number
session target ras
dtmf-relay h245-alphanumeric
codec g711ulaw
no vad
```

Configuring Cisco Unified MeetingPlace Express: Adding the Gatekeeper

Before You Begin

- Read the Integrating With a Call-Control Device Through a Gatekeeper
- Configure your call-control device by completing one of the following tasks:
  - ♦ If you are integrating with Cisco Unified Communications Manager, see the Configuring

Cisco Unified Communications Manager: Adding the Gatekeeper, Trunk, and Route Pattern.

- If you are integrating with Cisco Unified Communications Manager Express or a Cisco IOS software voice-enabled router, see the Configuring Cisco Unified Communications Manager Express and Other Standards-Based H.323 Call-Control Devices.

- When you modify the parameters on the H.323 Configuration page, Cisco Unified MeetingPlace Express reinitializes H.323 signaling with the call-control device. During the reinitialization process, which can take up to 2 minutes, calls and voice meetings may be affected.

Procedure

1. Log in to Cisco Unified MeetingPlace Express and click **Administration**.
2. Click **System Configuration > Call Configuration > H.323 Configuration**.
3. Configure the fields in Table: Required H.323 Configuration on Cisco Unified MeetingPlace Express for Integration With a Gatekeeper.

Table: Required H.323 Configuration on Cisco Unified MeetingPlace Express for Integration With a Gatekeeper

H.323 Configuration Page Field	Required Value
H.323 enabled	Yes
Local H.323 port	1720
Use gatekeeper	Yes
Gatekeeper	Gatekeeper IP address

4. Click **Save**.

5. Click **System Configuration > Call Configuration > Dial Configuration**.

6. Set the Outdials field to **H.323**.

7. Click **Save**.

8. Test this integration by placing a call from any phone to the phone number that is used to access the Cisco Unified MeetingPlace Express system. You should hear the "Welcome to Cisco Unified MeetingPlace Express" greeting.

Related Topics

- Field Reference: H.323 Configuration
- Field Reference: Dial Configuration