

# Configuring a Single Dialed Number to Route Calls to a Group of IP Phones

Document ID: 13932

## Contents

### Introduction

#### Prerequisites

- Requirements
- Components Used
- Conventions

#### Configuration Choices for Cisco CallManager 3.x

- Group Dialed Number
- Hunt Groups
- Attendant Console

#### Configuration Choices for Cisco CallManager 4.x

- Group Dialed Number
- Hunt Groups
- Attendant Console

#### Related Information

## Introduction

This document explains how to configure a single dialed number (DN#) that is associated with a group of IP phones.

## Prerequisites

### Requirements

Cisco recommends you have knowledge of Cisco CallManager 3.x and 4.x.

### Components Used

The information in this document is based on these software and hardware versions:

- Cisco CallManager version 3.3
- Cisco CallManager version 4.0

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

### Conventions

Refer to the Cisco Technical Tips Conventions for more information on document conventions.

# Configuration Choices for Cisco CallManager 3.x

This section explains how to associate a single DN# to a group of destinations using Cisco CallManager 3.3. There are three ways to accomplish this:

- Group Dialed Number
- Hunt Groups
- Attendant Console

## Group Dialed Number

In this procedure, assign a separate DN# (which is shared by the group) to a second line appearance on each group member's phone.

This solution works for the initial call. When a call to a group DN# is answered, the group line lamp is lit on all phones associated with the group DN#. If a different caller tries to dial the group DN# while the group call is in effect, the caller receives a busy signal, or is forwarded to voicemail.

Assume that you have three IP phones registered with the Cisco CallManager:

- Phone A with Primary Line appearance 2001
- Phone B with Primary Line appearance 2002
- Phone C with Primary Line appearance 2003

Assign the shared number 2000 to the secondary line of the IP phones A, B and C.

Complete these steps to add a shared directory number to a specific phone. Refer to Directory Number Configuration Settings for more information.

1. Choose **Device > Phone** from the main Cisco CallManager menu to display the Find and List Phones window.
2. Click **Find**.

A list of phones displays. Click the device name to which you want to add a shared directory number. For example, click on **Phone A (DN# 2001)**.

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## Find and List Phones

[Add a New Phone](#)

4 matching record(s) for Device Name begins with ""

Find phones where  begins with

and show  items per page

To list all items, click Find without entering any search text, or use "Device Name is not empty" as the search.

**Matching record(s) 1 to 4 of 4**  
Real-time Information Service returned information for 4 of 4 devices listed below.

| <input type="checkbox"/> | Device Name     | Description | Device Pool | Status       | IP Address    | Copy |
|--------------------------|-----------------|-------------|-------------|--------------|---------------|------|
| <input type="checkbox"/> | SEP0006537892EA | Auto 2010   | Default     | 10.77.208.26 | 10.77.241.144 |      |
| <input type="checkbox"/> | SEP000A8A34431A | Auto 2001   | Default     | 10.77.208.26 | 10.77.241.143 |      |
| <input type="checkbox"/> | SEP000A8A93E0A8 | Auto 2002   | Default     | 10.77.208.26 | 10.77.241.142 |      |
| <input type="checkbox"/> | SEP000A8A93E0F9 | Auto 2003   | Default     | 10.77.208.26 | 10.77.241.141 |      |

First Previous Next Last Page  of 1

3. In the Phone Configuration window, Directory Numbers list is displayed. Click on **Line 2 – Add new DN**.

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## Phone Configuration

[Add a new phone](#)  
[Add/Update Speed Dials](#)  
[Subscribe/Unsubscribe Services](#)  
[Back to Find/List Phones](#)

**Directory Numbers**

**Base Phone**

- vms Line 1 - 2001 (no Partition)
- vms Line 2 - Add new DN

**Phone:** SEP000A8A34431A (Auto 2001)  
**Registration:** Registered with Cisco CallManager 10.77.208.26  
**IP Address:** 10.77.241.143  
**Status:** Ready

**Phone Configuration (Model = Cisco 7960)**

**Device Information**

MAC Address\*

Description

Device Pool\*  [\(view details\)](#)

Calling Search Space

AAR Calling Search Space

Media Resource Group List

User Hold Audio Source

Network Hold Audio Source

Location

User Locale

Network Locale

**Phone Button and Expansion Module Template Information**

- When the Directory Number Configuration window displays, enter the Directory Number as **2000** (shared DN#).

If you set Ring Setting (Phone Active)\*\* as **Ring**, all phones ring when an incoming call is received. You can also set the option Forward Busy to **voicemail**. By doing so, if a caller tries to dial 2000 while the group call is in effect, the call is forwarded to voicemail. Refer to Directory Number Configuration Settings for more information.

- Click **Insert**.
- When the message displays stating that the directory number 2000 has been added to the database, click **OK**.
- Click **Back to Find/List Phones**.
- Click the next device name to which you want to add a directory number.

For example, click on **Phone B (DN# 2002)** and repeat steps 3 through 6 for Phone B. Once you are completed with Phone B, repeat these steps for Phone C (DN# 2003).

- For the changes to take effect, select all the phones and click **Reset Selected** from the Back to Find/List Phones page.

With these configurations, if a caller tries to dial the group DN# 2000, all the phones ring at the same time. When a call to group DN# 2000 is answered, the group line lamp is lit on all phones associated with the group DN# 2000. If the caller tries to dial the group DN# 2000 while the group call is in effect, the caller receives a busy signal, or is forwarded to voicemail, based on the configuration. In this case, the call is forwarded to the voicemail.

# Hunt Groups

Set up a series of phones that forward no answer or forward busy to the next phone in the group to create a Hunt Group.

In this situation, all phones do not ring at one time. A Hunt Group is a group of lines that are organized hierarchically, so that if the first number in the Hunt Group list is busy, the second number is dialed. If the second number is busy, the next number is dialed, and so on. This example illustrates the process.

Assume you have Pilot DN# with a number of 2000, and a Hunt Group defined with a list of phones similar to this:

- Phone A has extension 2000.
- Phone B has extension 2001.
- Phone C has extension 2002.

Configure the DN for 2000 on Phone A to forward on a busy or a no answer condition to Phone B's extension 2001.

Configure the DN for 2001 on Phone B to forward on a busy or a no answer condition to Phone C's extension 2002.

With the assumption that Phones A, B, and C are already registered with the Cisco CallManager and have the directory numbers 2000, 2001, and 2002 assigned respectively, complete these steps to create the Hunt Group.

Complete these steps to configure the DN for 2000 on Phone A to forward on a busy or a no answer condition to Phone B's extension 2001:

1. In the Find and List Phones window, click on **Phone A ( DN 2000)** and then click on **Line 1 – 2000 (no Partition)** in the Phone Configuration window.

The screenshot displays the Cisco CallManager Administration web interface. At the top, there is a navigation menu with options: System, Route Plan, Service, Feature, Device, User, Application, and Help. Below the menu is a header banner for 'Cisco CallManager Administration' with the tagline 'For Cisco IP Telephony Solutions' and the Cisco Systems logo. The main content area is titled 'Phone Configuration' and contains several sections:

- Directory Numbers:** A sidebar menu showing 'Base Phone' with two entries: 'Line 1 - 2000 (no. Partition)' and 'Line 2 - Add new DN'.
- Phone Information:** Displays 'Phone: SEP000A8A93E0F9 (Auto 2000)', 'Registration: Registered with Cisco CallManager 10.77.208.26', and 'IP Address: 10.77.241.141'. The status is 'Ready'. Below this are buttons for 'Copy', 'Update', 'Delete', and 'Reset Phone'.
- Phone Configuration (Model = Cisco 7960):** A section for configuring the phone's settings, including:
  - Device Information:** Fields for MAC Address\* (000A8A93E0F9), Description (Auto 2000), Device Pool\* (Default), Calling Search Space (< None >), AAR Calling Search Space (< None >), Media Resource Group List (< None >), User Hold Audio Source (< None >), and Network Hold Audio Source (< None >).

2. Configure the Forward Busy destination as **2001** in the Directory Number Configuration window and click on **Update**. Then click **OK** when the message for resetting the device appears.

Refer to Directory Number Configuration Settings for more information

**Directory Number Configuration** Configure Device (SEP000A8A93E0F9)

**Devices using this Directory Number**

SEP000A8A93E0F9 (Line 1)

Directory Number: 2000  
Status: Ready

Update Delete Reset Devices

**Directory Number**

Directory Number\* 2000  
Partition <None>

**Directory Number Settings**

Voice Mail Profile <None>  
Calling Search Space <None>  
AAR Group <None>  
User Hold Audio Source <None>  
Network Hold Audio Source <None>  
Call Waiting Default  
Auto Answer Auto Answer Off

**Call Forward and Pickup Settings**

|              | Voice Mail               | Destination | Calling Search Space |
|--------------|--------------------------|-------------|----------------------|
| Forward All  | <input type="checkbox"/> |             | <None>               |
| Forward Busy | <input type="checkbox"/> | 2001        | <None>               |

3. Click **Reset Devices** for the changes to take effect.

A message indicates that you are about to reset the devices with the directory number 2000. Click **OK** to reset the devices, or click **Cancel** to cancel the process.

4. Repeat the steps 1 through 3 for Phone B. In step 2, set the Call forward Busy Destination as **2002** instead of 2001.

With the information configured above, this process should occur in order to place a group call.

- Call #1: to DN# 2000** This call is routed to Cisco CallManager. Cisco CallManager rings Phone A, and Phone A is answered.
- Call #2: to DN# 2000** This call finds Phone A is busy. Cisco CallManager rings Phone B, and Phone B is answered.
- Call #3: to DN# 2000** This call finds both Phones A and B are busy. Cisco CallManager rings Phone C, and Phone C is answered.

This process describes three different outside callers calling DN# 2000. Cisco CallManager routes the call to the next available IP phone in the Hunt Group. The call routing is transparent to the caller. All phones do not ring in this scenario.

## Attendant Console

The third option, with Cisco CallManager 3.1(2c) and later, is to use Attendant Console to create a Hunt Group. Attendant Console allows you the flexibility to establish a Pilot Point for incoming calls and then distributes the incoming calls on a phone or line level amongst multiple attendants. For example, a caller places a direct call to a technical support group member, and if that member is not available, the call is forwarded to the pilot point number. You can choose to route the call to the first available Hunt Group

member or to distribute the incoming call load among the Hunt Group members. Cisco CallManager Attendant Console can accept inbound calls, query the caller for destination information, and rapidly dispatch the call without operator intervention. Attendant Console does not have the functionality of monitoring which members are logged in the call group.

**Note:** Make sure that you already have Attendant Console installed on your PC. Refer to Installing the Cisco CallManager Attendant Console on the User PC for information on this.

In this example, a pilot point named **Pilot** is associated with the directory number 4000. The Hunt Group for this pilot point contains these members:

- Phone A: 2005
- Phone B: 2006
- Phone C: 2007

1. Choose **Service > Cisco CallManager Attendant Console**.

**Note:** For Cisco CallManager versions before to 3.3, choose **Service > Cisco WebAttendant**.



2. Enter the appropriate settings in the Pilot Point Configuration window. In this example, the name given for the Pilot Point is **Pilot**. Pilot number **4000** Click **Insert**. (Refer to Pilot Point Configuration Settings) and click **Insert**.

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**Pilot Point Configuration**

[Hunt Group Configuration](#)  
[Cisco CallManager Attendant Console User Configuration](#)  
[Cisco CallManager Attendant Console Server Configuration](#)

**Pilot Points**  
<Add a New Pilot Point>  
There are no pilots

**Pilot Point: New**  
Pilot Number (DirN): Not Assigned

Status: Delete completed

Pilot Name\*

Device Pool\*

Partition

Calling Search Space

Pilot Number (DirN)\*

Route Calls to

\* indicates required item

3. Click **Hunt Group Configuration**.

The Hunt Group Configuration window displays, and the pilot points display in the pane on the left of the window.



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## Hunt Group Configuration

[Pilot Point Configuration](#)  
[Cisco CallManager Attendant Console User Configuration](#)  
[Cisco CallManager Attendant Console Server Configuration](#)

**Pilot Points**

|       |      |
|-------|------|
| Pilot | 4000 |
|-------|------|

Pilot Point: Select a Pilot Point  
Pilot Number (DirN): Not Assigned

Status: Ready

**Hunt Group Members**

▲  
▼

**Device Member Information**

Partition: < None >  
Directory Number:   
Always Route Member:

4. Click the pilot point for which you want to add Hunt Group members.

In this case, the pilot point is 4000. Click **Add Member**. The Hunt Group Members list initially displays the text <<Not Configured>>.

System Route Plan Service Feature Device User Application Help

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## Hunt Group Configuration

[Pilot Point Configuration](#)  
[Cisco CallManager Attendant Console User Configuration](#)  
[Cisco CallManager Attendant Console Server Configuration](#)

**Pilot Points**

|       |      |
|-------|------|
| Pilot | 4000 |
|-------|------|

Pilot Point: Pilot  
Pilot Number (DirN): 4000

Status: Ready

**Hunt Group Members**

▲  
▼

<< Not Configured >>

**Device Member Information**

Partition: < None >

5. Decide whether the Hunt Group member that you want to add will be a directory number (device member) or a user and line number (user member).

Enter the appropriate configuration settings for the new Hunt Group member. If the Hunt Group member is a directory number, fill in only the Partition and Directory Number fields in the Device Member Information section. The optional **Always Route Member** check box only applies to directory numbers. If the Hunt Group member is a user and line number, fill in only the User Name and Line Number fields in the User Member Information section. Refer to Hunt Group Configuration Settings for more information. Add the Hunt Group Members **2005**, **2006**, and **2007** one by one. As you make selections, the Hunt Group Members list box reflects the information that you choose.

**Hunt Group Configuration**

Pilot Point Configuration  
Cisco CallManager Attendant Console User Configuration  
Cisco CallManager Attendant Console Server Configuration

**Pilot Points**

Pilot 4000

Pilot Point: Pilot  
Pilot Number (DirN): 4000

Status: Ready

Add Member Update Delete Member

**Hunt Group Members**

- #1: Call directory number 2005
- #2: Call directory number 2006
- #3: Call directory number 2007

**Device Member Information**

Partition: < None >

Directory Number:

Always Route Member:

**User Member Information**

User Name: < None >

Line Number: < None >

6. Click **Update** to save the Hunt Group Member information

With this information configured, this process happens when the Attendant Console receives a call. When the call is received, the Attendant Console directs it to the Pilot Point (named Pilot) with the directory number 4000. Since 4000 is a pilot point and First Available Hunt Group Member is chosen as the call-routing option, the Cisco Telephony Call Dispatcher (TCD) that is associated with the pilot point checks the members of the Hunt Group in order, beginning with 2005. Now, Cisco TCD routes the call to the first available directory number.

Refer to the Cisco CallManager Attendant Console Administration Guide for more information on Pilot Points and Hunt Groups.

## Configuration Choices for Cisco CallManager 4.x

This section explains how to associate a single DN# to a group of destinations using Cisco CallManager 4.0. There are three ways to accomplish this:

- Group Dialed Number

- Hunt Groups
- Attendant Console

## Group Dialed Number

Assign a separate DN# (which is shared by the group) to a second line appearance on each group member's phone.

This solution works for the initial call. When a call to group DN# is answered, the group line lamp is lit on all phones associated with the group DN#. If a different caller tries to dial the group DN# while the group call is in effect, the caller receives a busy signal, or is forwarded to voicemail.

Assume that you have three IP phones registered with the Cisco CallManager:

- Phone A with Primary Line appearance 2001
- Phone B with Primary Line appearance 2002
- Phone C with Primary Line appearance 2003

Assign the shared number 2000 to the secondary line of the IP phones A, B and C. These are the steps to add a shared directory number to a specific phone. Refer to Directory Number Configuration Settings for more information.

1. Choose **Device > Phone** from the main Cisco CallManager menu.
2. Click **Find** when the Find and List Phones window displays.

When a list of phones displays, click the device name to which you want to add a shared directory number. For example, click on **Phone A (DN# 2001)**.

## Find and List Phones

[Add a New Phone](#)









4 matching record(s) for Device Name begins with ""

Find phones where  begins with  and show  items per page.  Allow wildcards. 

To list all items, click Find without entering any search text, or use "Device Name is not empty" as the search.

### Matching record(s) 1 to 4 of 4

Real-time Information Service returned information for 4 of 4 devices listed below.

| <input type="checkbox"/> | Device Name                                                                                       | Description | Device Pool | Status       | IP Address    | Copy                                                                                |
|--------------------------|---------------------------------------------------------------------------------------------------|-------------|-------------|--------------|---------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> |  SEP0006537B92EA | Auto 2009   | Default     | 10.77.208.13 | 10.77.241.144 |  |
| <input type="checkbox"/> |  SEP000A8A34431A | Auto 2003   | Default     | 10.77.208.13 | 10.77.241.143 |  |
| <input type="checkbox"/> |  SEP000A8A93E0AB | Auto 2001   | Default     | 10.77.208.13 | 10.77.241.142 |  |
| <input type="checkbox"/> |  SEP000A8A93E0F9 | Auto 2002   | Default     | 10.77.208.13 | 10.77.241.141 |  |

First Previous Next Last

Page  of 1

- In the Phone Configuration window, the Directory Numbers list is displayed. Click on **Line 2 – Add new DN**.

System Route Plan Service Feature Device User Application Help

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[Add a new phone](#)  
[Add/Update Speed Dials](#)  
[Subscribe/Unsubscribe Services](#)  
[Dependency Records](#)  
[Back to Find/List Phones](#)

## Phone Configuration

**Directory Numbers**

- Line 1 - 2001
- Line 2 - Add new DN

Phone: SEP000A8A93E0AB (Auto 2001)  
 Registration: Registered with Cisco CallManager 10.77.208.13  
 IP Address: [10.77.241.142](#)

Status: Ready

**Phone Configuration (Model = Cisco 7960)**

**Device Information**

|                           |                                           |
|---------------------------|-------------------------------------------|
| MAC Address*              | <input type="text" value="000A8A93E0AB"/> |
| Description               | <input type="text" value="Auto 2001"/>    |
| Owner User ID             | <input type="text"/> (Select User ID)     |
| Device Pool*              | Default (View details)                    |
| Calling Search Space      | < None >                                  |
| AAR Calling Search Space  | < None >                                  |
| Media Resource Group List | < None >                                  |
| User Hold Audio Source    | < None >                                  |
| Network Hold Audio Source | < None >                                  |
| Location                  | < None >                                  |
| User Locale               | < None >                                  |

4. When the Directory Number Configuration window displays, enter the Directory Number as **2000** (shared DN#).

If you set the Ring Setting (Phone Active)\*\* to **Ring**, all phones ring when an incoming call is received. You can also set the option Forward Busy to **voicemail**. By doing so, if a caller tries to dial 2000 while the group call is in effect, the call is forwarded to voicemail. Refer to Directory Number Configuration Settings for more information.

System Route Plan Service Feature Device User Application Help

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**Directory Number Configuration** [Configure Device \(SEP000A8A93E0A8\)](#)

**Associated With**

**Directory Number: New**  
 Status: Ready  
 Note: Any update to this Directory Number automatically reset the associated devices

**Directory Number**

Directory Number\*   
 Partition

**Directory Number Settings**

Voice Mail Profile  (Choose <None> to use default)  
 Calling Search Space   
 AAR Group   
 User Hold Audio Source   
 Network Hold Audio Source   
 Auto Answer

**Call Forward and Pickup Settings**

|                         | Voice Mail                          | Destination          | Calling Search Space                        |
|-------------------------|-------------------------------------|----------------------|---------------------------------------------|
| Forward All             | <input type="checkbox"/>            | <input type="text"/> | <input type="text" value=" &lt;None &gt;"/> |
| Forward Busy            | <input checked="" type="checkbox"/> | <input type="text"/> | <input type="text" value=" &lt;None &gt;"/> |
| Forward No Answer       | <input type="checkbox"/>            | <input type="text"/> | <input type="text" value=" &lt;None &gt;"/> |
| No Answer Ring Duration | <input type="text"/>                | (seconds)            |                                             |

5. Click **Add**.

A message displays which states that the directory number has been added to the database. Click **OK**.

6. Click on **Back to Find/List Phones** and click the next device name to which you want to add a directory number.

For example, click on **Phone B** (DN# 2002) and repeat steps 2 through 5 for Phone B. Once you are completed with Phone B, repeat these steps for Phone C (DN# 2003).

7. For the changes to take effect, select all the phones and click **Reset Selected** from the Back to Find/List Phones page.

With these configurations, if a caller tries to dial the group DN# 2000, all the phones ring at the same time. When a call to group DN# (2000) is answered, the group line lamp is lit on all phones associated with the group DN# 2000. If the caller tries to dial the group DN# 2000 while the group call is in effect, the caller receives a busy signal, or is forwarded to voicemail based on the configuration. In this case, the calls are forwarded to the voicemail.

## Hunt Groups

Set up a series of phones that forward no answer or forward busy to the next phone in the group to create a Hunt Group.

In this situation, all phones do not ring at one time. A Hunt Group is a group of lines that are organized hierarchically, so that if the first number in the Hunt Group list is busy, the second number is dialed. If the second number is busy, the next number is dialed, and so on. This example illustrates the process.

Assume you have Pilot DN# with a number of 2000, and a Hunt Group defined with a list of phones similar to this:

- Phone A has extension 2000.
- Phone B has extension 2001.
- Phone C has extension 2002.

Configure the DN for 2000 on Phone A to forward on a busy or a no answer condition to Phone B's extension 2001.

Configure the DN for 2001 on Phone B to forward on a busy or a no answer condition to Phone C's extension 2002.

With the assumption that the Phones A, B, and C are already registered with the Cisco CallManager and have the Directory Numbers 2000, 2001 and 2002 assigned respectively, complete these steps to create the Hunt Group.

Complete these steps to configure the DN for 2000 on Phone A to forward on a busy or a no answer condition to Phone B's extension 2001:

1. In the Find and List Phones window, click on **Phone A (DN# 2000)** and click on **Line 1 – 2000** in the Phone configuration window.

The screenshot shows the Cisco CallManager Administration interface. The top navigation bar includes: System, Route Plan, Service, Feature, Device, User, Application, Help. The main header is "Cisco CallManager Administration For Cisco IP Telephony Solutions" with the Cisco Systems logo. The page title is "Phone Configuration". On the right, there are links: "Add a new phone", "Add/Update Speed Dials", "Subscribe/Unsubscribe Services", "Dependency Records", and "Back to Find/List Phones".

**Directory Numbers**

- Line 1 - 2000
- Line 2 - Add new DN

**Phone: SEP000A8A34431A (Auto 2000)**  
**Registration: Registered with Cisco CallManager 10.77.208.13**  
**IP Address: 10.77.241.143**  
Status: Ready

Buttons: Copy, Update, Delete, Reset Phone

**Phone Configuration (Model = Cisco 7960)**

**Device Information**

|                           |                        |
|---------------------------|------------------------|
| MAC Address*              | 000A8A34431A           |
| Description               | Auto 2000              |
| Owner User ID             | (Select User ID)       |
| Device Pool*              | Default (View details) |
| Calling Search Space      | < None >               |
| AAR Calling Search Space  | < None >               |
| Media Resource Group List | < None >               |

2. Configure the Forward Busy destination to **2001** in the Directory Number Configuration window and click **Update**.

Refer to Directory Number Configuration Settings for more information.

|                                                                      |                                                              |
|----------------------------------------------------------------------|--------------------------------------------------------------|
| Calling Search Space                                                 | < None >                                                     |
| AAR Group                                                            | < None >                                                     |
| User Hold Audio Source                                               | < None >                                                     |
| Network Hold Audio Source                                            | < None >                                                     |
| Auto Answer                                                          | Auto Answer Off                                              |
| <b>Call Forward and Pickup Settings</b>                              |                                                              |
|                                                                      | <b>Voice Mail      Destination      Calling Search Space</b> |
| Forward All                                                          | <input type="checkbox"/> [      ]      < None >              |
| Forward Busy                                                         | <input type="checkbox"/> [2001]      < None >                |
| Forward No Answer                                                    | <input type="checkbox"/> [      ]      < None >              |
| No Answer Ring Duration                                              | [      ] (seconds)                                           |
| Call Pickup Group                                                    | < None >                                                     |
| <b>Multilevel Precedence and Preemption Alternate Party Settings</b> |                                                              |
| Target (Destination)                                                 | [      ]                                                     |
| Calling Search Space                                                 | < None >                                                     |
| No Answer Ring Duration                                              | [      ]                                                     |
| <b>Line Settings for this Device</b>                                 |                                                              |
|                                                                      | <b>Value</b>                                                 |
| Display (Internal Caller ID)                                         | [      ]                                                     |

3. Click **Reset Devices** for the changes to take effect.

A message indicates that you are about to reset the devices with directory number 2000. Click **OK** to reset the devices, or click **Cancel** to cancel the process.

4. Repeat steps 1 through 3 for Phone B.

In step 2, set the Call forward Busy Destination to **2002** instead of 2001.

With the information configured, this process should occur in order to place a group call.

- a. **Call #1: to DN# 2000** This call is routed to Cisco CallManager. Cisco CallManager rings Phone A, and Phone A is answered.
- b. **Call #2: to DN# 2000** This call finds Phone A is busy. Cisco CallManager rings Phone B, and Phone B is answered.
- c. **Call #3: to DN# 2000** This call finds both Phones A and B are busy. Cisco CallManager rings Phone C, and Phone C is answered.

This process describes three different outside callers that call DN# 2000. Cisco CallManager routes the call to the next available IP phone in the Hunt Group. The call routing is transparent to the caller. All phones do not ring in this scenario.

**Note:** If none of the above DN#s answers or an overflow condition happens, the call can be forwarded to a voice-messaging or auto-attendant number as the final member of the last linked hunt group in the chain. Make sure you check the **Always Route Member** check box in the Hunt Group Configuration window for only the final member of each hunt group.

## Attendant Console

The third option, with Cisco CallManager 3.1(2c) and later, is to use Attendant Console to create a Hunt Group. Attendant Console allows you the flexibility to establish a Pilot Point for incoming calls and then distribute the incoming calls on a phone or line level amongst multiple attendants. For example, a caller places



a direct call to a technical support group member, and if that member is not available, the calls is forward to the pilot point number. You can choose to route the call to the first available Hunt Group member or to distribute the incoming call load among the Hunt Group members. Cisco CallManager Attendant Console can accept inbound calls, query the caller for destination information, and rapidly dispatch the call without operator intervention. Attendant Console does not have the functionality of monitoring which members are logged in the call group.

**Note:** Make sure that you already have Attendant Console installed on your PC. Refer to Installing the Cisco CallManager Attendant Console on the User PC for more information on this.

In the following example, a pilot point named **Pilot** is associated with the directory number 4000. The Hunt Group for this pilot point contains these members:

- Phone A: 2005
- Phone B: 2006
- Phone C: 2007

1. Choose **Service > Cisco CM Attendant Console > Pilot Point**.



2. Click on **Add a New Pilot Point**.

Enter the appropriate settings, in the Pilot Point Configuration window. In this example, the name given for the Pilot Name is **Pilot**. Pilot number **4000** Click **Insert**.

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## Pilot Point Configuration

[Add a New Pilot Point](#)  
[Back to Find/List Pilot Points](#)

**Pilot Point: New**  
**Pilot Number: Not Assigned**

Status: Ready

Pilot Name\*

Device Pool\*

Partition

Calling Search Space

Pilot Number \*

Route Calls to

\* indicates required item

3. Choose **Service > Cisco CM Attendant Console > Hunt Group**.



4. The Hunt Group Configuration window displays, and the pilot points display in the pane on the left of the window. Click the pilot point for which you want to add Hunt Group members. In this case, the pilot point is 4000.

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

**Hunt Group Configuration**

**Pilot Points**

|       |      |
|-------|------|
| Pilot | 4000 |
|-------|------|

Pilot Point: Select a Pilot Point  
Pilot Number (DirN): Not Assigned

Status: Ready

Add Member Update Delete Member

**Hunt Group Members**

Device Member Information

Partition: < None >  
Directory Number:   
Always Route Member:

User Member Information

User Name: < None >

5. Click **Add Member**.

The Hunt Group Members list initially displays the text <<Not Configured>>.

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

**Hunt Group Configuration**

**Pilot Points**

|       |      |
|-------|------|
| Pilot | 4000 |
|-------|------|

Pilot Point: Pilot  
Pilot Number (DirN): 4000

Status: Ready

Add Member Update Delete Member

**Hunt Group Members**

<< Not Configured >>

Device Member Information

Partition: < None >  
Directory Number:

6. Decide whether the Hunt Group member that you want to add is a directory number (device member) or a user and line number (user member).

Enter the appropriate configuration settings for the new Hunt Group member. If the Hunt Group member is a directory number, fill in only the Partition and Directory Number fields in the Device Member Information section. The optional **Always Route Member** check box only applies to directory numbers. If the Hunt Group member is a user and line number, fill in only the User Name and Line Number fields in the User Member Information section. Refer to Hunt Group Configuration Settings for more information. Add the Hunt Group Members **2005**, **2006**, and **2007** one by one. As you make selections, the Hunt Group Members list box reflects the information that you choose.

**Note:** In order to handle overflow conditions, choose a voice-messaging or auto-attendant number as the final member of the last **linked hunt group** in the chain. Check the **Always Route Member** check box to ensure that the voice messaging system can handle multiple, simultaneous calls. In a **broadcast hunt group**, a call is routed to **Always Route Member** when the queue is full or if the queue hold time is exceeded. This can be used to avoid calls getting stuck in the queue.

7. Click **Update** to save the Hunt Group member information

With the information configured here, this process happens when the Attendant Console receives a call. When the call is received, the Attendant Console directs it to the Pilot Point (named Pilot) with the directory number 4000. Since 4000 is a Pilot Point and First Available Hunt Group Member is chosen as the call-routing option, the Cisco TCD that is associated with the pilot point checks the members of the Hunt Group in order, beginning with 2005. Now, Cisco TCD routes the call to the first available directory number.

**Note:** With this configuration, if Hunt Group member 2006 logs in first, followed by Hunt Group member 2005, the hunting might start with Hunt Group member 2006 before it starts with Hunt Group member 2005. Although in the Hunt Group, member 2005 is the first that needs to be checked, Cisco CallManager might follow the order in which the members log in. If you experience this problem with the order of calls received, restart the TCD and CTI services and reset the Pilot Point with all the members logged in.

Refer to the Cisco CallManager Attendant Console Administration Guide for more information on Pilot Points and Hunt Groups.

## Related Information

- **Cisco CallManager Documentation Guide for Release 4.0(1)**
  - **Cisco CallManager Documentation Guide for Release 3.3(1)**
  - **Cisco CallManager Attendant Console Documentation**
  - **Voice Technology Support**
  - **Voice and Unified Communications Product Support**
  - **Troubleshooting Cisco IP Telephony** [🔗](#)
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