



## Configuring Cisco uOne Voice Messaging

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The optional Cisco Unified Open Network Exchange (uOne) software, available as part of Cisco IP Telephony Solutions, provides voice messaging capability for users when they are unavailable to answer calls. This section describes the procedures required for adding and configuring Cisco uOne ports in Cisco CallManager.

To connect Cisco uOne to Cisco CallManager, you need to:

- Add Cisco uOne ports to Cisco CallManager. All users and their directory numbers must be entered in Cisco CallManager Administration to retrieve messages from a Cisco uOne voice mail device.
- Configure a message waiting indicator (MWI) device.
- Configure values for Cisco CallManager service parameters associated with Cisco uOne.
- Set Forward Busy and Forward No Answer for Cisco IP Phones that will be accessing voice mail.

The following table provides an overview of the steps required to configure Cisco CallManager with Cisco uOne voice messaging:

	<b>Procedure</b>	<b>Reference</b>
<b>Step 1</b>	Add a Cisco uOne server and ports to the Cisco CallManager database.	“Cisco uOne Port Wizard” section on page 43-3.
<b>Step 2</b>	Configure CallManager service parameter values.	“Configuring Cisco CallManager Service Parameters for Cisco uOne” section on page 43-8 Installation and configuration documentation supplied with Cisco uOne.
<b>Step 3</b>	Configure the MWI device.	“Setting up the MWI Device” section on page 43-11 Installation and configuration documentation supplied with Cisco uOne.
<b>Step 4</b>	Set up Call Forward No Answer and Call Forward Busy on all Cisco IP Phones that will be used with Cisco uOne.	“Configuring Call Forward” section on page 46-17 Installation and configuration documentation supplied with Cisco uOne.

For more information about configuring Cisco CallManager with Cisco uOne, refer to the installation and configuration documentation that shipped with the software.

#### **Related Topics**

- Cisco uOne Port Wizard, page 43-3
- Adding Cisco uOne Ports, page 43-12
- Deleting a Cisco uOne Port, page 43-16
- Resetting a Cisco uOne Port, page 43-17
- Updating a Cisco uOne Port, page 43-18
- Copying an Existing Cisco uOne Port, page 43-19

# Cisco uOne Port Wizard

The Cisco uOne Port wizard is a tool that allows Cisco CallManager administrators to quickly add and delete ports associated with a Cisco uOne server to the Cisco CallManager database. The following procedures are described in this section:

- Adding a New Cisco uOne Server and Ports, page 43-3
- Adding Ports to an Existing Cisco uOne Server, page 43-6
- Deleting Ports from an Existing Cisco uOne Server, page 43-7

## Adding a New Cisco uOne Server and Ports

Perform the following steps to use the Cisco uOne Port wizard to add a new Cisco uOne server and ports to the Cisco CallManager database.

### Before You Begin

The uOne wizard requires a range of consecutive directory numbers for the uOne ports. Make sure the voice mail pilot number and subsequent numbers are available.

### Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Device > Cisco uOne Port**.
- Step 3** Click on the Use the Cisco uOne Wizard link in upper right corner of the page. If there are no existing Cisco uOne ports, the uOne wizard prompts you enter the name of the Cisco uOne Server to add (see Step 6). Otherwise, the Cisco uOne Server page displays.
- Step 4** Select **Create a new Cisco uOne server and add ports to it**.
- Step 5** Click **Next**. The Cisco uOne Server page displays.
- Step 6** Enter the name of the Cisco uOne device. This name must match the CMDeviceName value in the SS.ini uOne configuration file (the default is CiscoUM).

You do not need to add the "-VI<port\_number>" suffix, because the wizard automatically appends this when adding the ports.

- Step 7** Click **Next**. The Cisco uOne Ports page is displayed.
- Step 8** Select the number of ports to add from the list.
- Step 9** Click **Next**. The Cisco uOne Device Information page is displayed.
- Step 10** Enter the appropriate configuration settings, as described in Table 43-1. The wizard will apply these configuration settings to all of the new ports.

**Table 43-1 uOne Port Wizard Device Information Settings**

Field	Description	Usage Notes
<b>Device Information</b>		
Description	Clarifies the purpose of device.	
Device Pool	Select the default value of <b>Default Pool</b> .	
Calling Search Space	Collection of partitions that are searched for numbers called from this directory number.	
Location	Select the default value of <b>None</b> .	Remote location accessed using restricted bandwidth connections.

- Step 11** Click **Next**. The Cisco uOne Pilot Number page displays.
- Step 12** Enter the pilot number configuration settings as described in Table 43-2.

**Table 43-2 uOne Port Wizard Pilot Number Configuration Settings**

Field	Description	Usage Notes
Pilot Number	The number people call to access the Cisco uOne server.	<p>A pilot number is required.</p> <p>This number must be the same as the Cisco Voice Mail pilot directory number configured in the Cisco uOne DialMap.ini file.</p> <p>Each new port receives the next available directory number.</p>
Route Partition	Route partition to which this set of directory numbers belong.	<p>Select a partition from the drop-down list.</p> <p>Select None if partitions are not used.</p> <p>If a Route Partition is selected, you must select a Calling Search Space that includes the selected Route Partition.</p>
Calling Search Space	Collection of partitions that are searched for numbers called from this directory number.	If a Route Partition is selected, you must select a Calling Search Space that includes the selected Route Partition.

**Step 13** Click Next. The Cisco uOne Operator Number page is displayed.

**Step 14** Enter an operator number (optional).

The operator number is the number to which the last port is forwarded. A caller is directed to this number if all ports on the Cisco uOne Server are busy. Supplying an attendant's number here gives the caller another chance to reach the party they were calling, instead of getting a busy signal if all ports are in use.

**Step 15** Click **Next**. A summary screen that lists the settings you configured in the previous screens displays. The Cisco uOne wizard automatically assigns the correct values for the Forward Busy and Forward No Answer fields for each port.

- Step 16** If this information is correct, click **Finish** to add the new ports.  
If the information shown is not correct, click the **Back** button to edit the information, or **Cancel** to quit without adding any ports.
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#### Related Topics

- Adding Ports to an Existing Cisco uOne Server, page 43-6
- Deleting Ports from an Existing Cisco uOne Server, page 43-7

## Adding Ports to an Existing Cisco uOne Server

Perform the following steps to use the Cisco uOne Port wizard to add ports to an existing Cisco uOne server.

#### Before You Begin

The uOne wizard requires a range of consecutive directory numbers for the uOne ports. Make sure the voice mail pilot number and subsequent numbers are available.

The voice mail pilot number is the number people call to access the Cisco uOne server. This number is the Cisco Voice mail pilot directory number configured in the Cisco uOne DialMap.ini file. Refer to the Cisco uOne documentation for information about the Cisco uOne .ini files.

#### Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Device > Cisco uOne Port**.
- Step 3** Click on the **Use the Cisco uOne Wizard** link in the upper right corner of the page. The Cisco uOne Server page displays.
- Step 4** Select **Add Ports to an Existing Cisco uOne Server**.
- Step 5** Click **Next**. The Cisco uOne Server page displays.
- Step 6** Select the name of an existing Cisco uOne server (pilot number) from the list and click **Next**. The Cisco uOne Ports page is displayed, which lists the number of ports that are currently configured.

- Step 7** Select the number of ports to add from the list and click **Next**.
- A summary page is displayed that shows the configuration information for the Cisco uOne server to which you added the ports. The Cisco uOne wizard automatically assigns consecutive directory numbers following the last port, and uses the same Route Partition and Calling Search Space settings as the Cisco uOne voice mail pilot directory number.
- Step 8** Click **Next**.
- Step 9** If needed, add, change, or remove the Operator Number for this Cisco uOne server and ports, then click **Next**. The Ready to Add Ports summary screen displays the new settings.
- Step 10** If this information is correct, click **Finish** to add the new ports.
- If the information shown is not correct, click the **Back** button to edit the information or click **Cancel** to quit without adding any ports.
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#### Related Topics

- Adding a New Cisco uOne Server and Ports, page 43-3
- Deleting Ports from an Existing Cisco uOne Server, page 43-7

## Deleting Ports from an Existing Cisco uOne Server

Perform the following steps to use the Cisco uOne Port wizard to delete ports from an existing Cisco uOne server.

#### Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Device > uOne Port**.
- Step 3** Select the Use the Cisco uOne Wizard link in the upper right corner of the page. The Cisco uOne Server page displays.
- Step 4** Select **Delete ports from an existing Cisco uOne server** and click **Next**. The Cisco uOne Server page displays.

**Step 5** Select the name of an existing Cisco uOne server (pilot number) from the list and click **Next**.

The Cisco uOne Ports page is displayed, which lists the number of ports that are currently configured.

**Step 6** Select the number of ports to delete from the list and click **Next**.

A summary page is displayed that shows the updated settings for the Cisco uOne server from which you deleted the ports. The Cisco uOne wizard automatically updates the port numbers, directory numbers, Forward Busy, and Forward No Answer numbers so that they are consecutive.

**Step 7** If this information is correct, click **Finish** to delete the selected ports.

If the information shown is not correct, click the **Back** button to edit the information, or **Cancel** to quit without deleting any ports.

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#### Related Topics

- Adding a New Cisco uOne Server and Ports, page 43-3
- Adding Ports to an Existing Cisco uOne Server, page 43-6

## Configuring Cisco CallManager Service Parameters for Cisco uOne

The following Cisco CallManager service parameters must be set up when configuring Cisco CallManager to work with Cisco uOne:

- MessageWaitingOnDN and MessageWaitingOffDN—Cisco uOne uses the MWI On and MWI Off directory numbers specified by these two service parameters to turn the Message Waiting Indicator (MWI) on a user's phone on or off.



#### Note

For Cisco IP Phone 12 SP+ and 30 VIP models, the phone button template for the user's phone must have a button configured for Message Waiting for this feature to be available.

- **VoiceMail**—Voice mail pilot number (the number users dial to call in to the voice mail system). Setting this parameter enables you to configure a single button on users' phones for automatically dialing the voice mail pilot number.
- **ForwardNoAnswerTimeout**—Specifies the number of seconds to wait before forwarding on a No Answer condition.
- **ForwardMaximumHopCount**—Specifies the maximum number of attempts to extend a forwarded call.

Use the following procedure to configure the MWI On/Off directory numbers.

### Before You Begin

Before changing the values of the MWI On/Off service parameters, you must first stop the Cisco uLite process in Cisco uOne. Refer to the installation and configuration documentation shipped with Cisco uOne for more information.



#### Note

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You must set the MWI On/Off service parameters for each Cisco CallManager in the cluster.

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### Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Service > Service Parameters**.
- Step 3** Select the appropriate IP address or name of the Cisco CallManager server from the list on the left side of the page.
- Step 4** Select **Cisco CallManager** from the Configured Services list.
- Step 5** Select **MessageWaitingOffDN** from the Configured Service Parameters list.
- Step 6** In the Value field, enter the device number from the CMMWIOffNumber value as shown in the Cisco uOne SSMWI.ini file. This value is the number to be dialed to turn off the message waiting indicator as configured in Cisco CallManager.



#### Note

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For more information about Cisco uOne .ini files, refer to the installation and configuration documentation supplied with Cisco uOne.

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- Step 7** Click **Update**.

- Step 8** Select **MessageWaitingOnDN** from the Configured Service Parameters list.
- Step 9** In the Value field, enter the device number from the CMMWIONumber value as shown in the Cisco uOne SSMWI.ini file. This value is the number to be dialed to turn on the message waiting indicator device as configured in Cisco CallManager.
- Step 10** Click **Update**.
- Step 11** Select **VoiceMail** from the Configured Service Parameters list.
- In the Value field, enter the Cisco uOne Voice Mail pilot number. This is the directory number that users call to access voice mail.
- This number must be the same as the Cisco uOne voice mail pilot directory number configured in the Cisco uOne DialMap.ini file. Setting this parameter enables you to configure a single button (for example, the messages button on a Cisco IP Phone 79xx) on users' phones for automatically dialing the voice mail pilot number.
- Step 12** Click **Update**.
- Step 13** Select **ForwardMaximumHopCount** from the Configured Service Parameters list. The ForwardMaximumHopCount parameter specifies the number of attempts to extended a forwarded call.
- Step 14** Enter a numeric value. The recommended value is 15.
- Step 15** Click **Update**.
- Step 16** Select **ForwardNoAnswerTimeout** from the Configured Service Parameters list box. The ForwardNoAnswerTimeout parameter specifies the number of seconds to wait before forwarding on a No Answer condition.
- Step 17** Enter a numeric value in the Value field. The recommended value is 24.
- Step 18** Click **Update**.
- Step 19** Repeat this procedure for each Cisco CallManager server in the cluster.
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**Related Topics:**

- Setting up the MWI Device, page 43-11

# Setting up the MWI Device

Use the following procedure to create and configure the MWI device for use with Cisco uOne.

## Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Device > Cisco uOne Port**.
- Step 3** In the Cisco uOne Port Name field, enter the name of the Cisco MWI uOne port device. This name must match the CMDeviceName value in the SSMWI.ini file (for example, CiscoMWI-VI1).



**Note** For more information about Cisco uOne .ini files, refer to the Installation and Configuration documentation supplied with Cisco uOne.

- Step 4** Enter the device configuration settings as follows:

Field Name	Value
Description	Optional descriptive text about the device.
Device Pool	Select the default value of Default Pool.
Location	Select the default value of None.
Partition	If partitions are being used, they must be defined here also.
Calling Search Space	If partitions and calling search spaces are used, the calling search space specified here must include the partitions of the DN's on all phones whose lamps you wish to light (the partition defined for a phone's DN must be in a calling search space that the MWI device uses).

Field Name	Value
Directory Number	Enter the Cisco MWI device directory number. This should be a number that is not used within the Cisco uOne messaging system or within the Cisco CallManager auto-registration range.
Forward All	Leave blank.
Forward Busy	Leave blank.
Forward No Answer	Leave blank.



**Note** The directory number for the MWI device is used for turning on the message indicator only. Since it is not used by the uOne Messaging System or Cisco CallManager for receiving calls, the Forward Busy and Forward No Answer fields are not used.

**Step 5** Click **Insert** to add this device to the system.

#### Related Topics:

- Configuring Cisco CallManager Service Parameters for Cisco uOne, page 43-8

## Adding Cisco uOne Ports

To connect Cisco uOne to Cisco CallManager, you must add Cisco uOne ports to Cisco CallManager. All users and their directory numbers must be entered in Cisco CallManager Administration to retrieve messages from a Cisco uOne voice mail device.

**Tips**

You can also use the Cisco uOne wizard to add a new Cisco uOne server and ports or to add multiple ports to an existing server rather than the procedure described here. Refer to the “Cisco uOne Port Wizard” section on page 43-3 for more information.

Follow these instructions to add individual Cisco uOne ports to the Cisco CallManager database.

**Note**

If you are adding multiple ports, use the Cisco uOne wizard. Use this procedure add individual Cisco uOne ports (for example, to update the Operator Number). The naming convention for the ports should be CiscoUM-VI<*consecutive number for each port*>. An Operator Number can be specified for the Forward Busy and Forward No Answer values for the last uOne port.

**Procedure**

- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Device > Cisco uOne Port**.  
The Cisco uOne Port Configuration page displays.
- Step 3** Enter the appropriate settings as described in Table 43-3.

**Table 43-3 uOne Configuration Settings**

Field	Description	Usage Notes
<b>Device Information</b>		
Cisco uOne Port Name	Identifies the Cisco uOne port.	<ul style="list-style-type: none"> <li>• Must match the information in the uOne .ini files, such as CiscoUM-VI1 or CiscoUM-VI2.</li> <li>• Must add a device for each port on Cisco uOne. If there are 24 ports, you must define 24 devices.</li> </ul>

**Table 43-3 uOne Configuration Settings (continued)**

Field	Description	Usage Notes
Description	Clarifies the purpose of the device.	
Device Pool	Select the default value of <b>Default Pool</b> from the list.	
Calling Search Space	Collection of partitions that are searched for numbers called from this device.	
Location	Select the default value of <b>None</b> from the list.	
<b>Directory Number Information</b>		
Directory Number	Indicates a phone number that can be dialed.	<ul style="list-style-type: none"> <li>Indicates the number associated with this uOne port</li> <li>Values can include a maximum of 50 numeric characters</li> <li>Unique in combination with the Partition field.</li> </ul>
Partition	Indicates the route partition to which the directory number belongs.	<p>Select a partition from the drop-down list.</p> <p>Select None if partitions are not used.</p> <p>If a Route Partition is selected, you must select a Calling Search Space that includes the selected Route Partition.</p>
Calling Search Space	Collection of partitions that are searched for numbers called from this directory number.	If a Route Partition is selected, you must select a Calling Search Space that includes the selected Route Partition.
<b>Call Forwarding Information</b>		
Forward All	This field should be left blank.	

**Table 43-3** uOne Configuration Settings (continued)

Field	Description	Usage Notes
Forward Busy	Voice mail directory number where calls are forwarded if this port is busy (for example, the next sequential uOne port number).  The Forward Busy and Forward No Answer fields should have the same value.	This should be the next sequential Cisco uOne port or, if it is the last port, an operator number.
Forward No Answer	Voice mail directory number where calls are forwarded if this port does not answer the call (for example, the next sequential port).  The Forward Busy and Forward No Answer fields should have the same value.	This should be the next sequential Cisco uOne port or, if it is the last port, an operator number.

**Step 4** Click **Insert** to add the new Cisco uOne port device.

#### Related Topics

- Cisco uOne Port Wizard, page 43-3
- Deleting a Cisco uOne Port, page 43-16
- Resetting a Cisco uOne Port, page 43-17
- Updating a Cisco uOne Port, page 43-18
- Copying an Existing Cisco uOne Port, page 43-19

# Deleting a Cisco uOne Port

Follow these procedures to delete a single Cisco uOne port from Cisco CallManager.



## Tips

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You can also use the Cisco uOne wizard to delete ports from an existing server instead of using the procedure described here. Refer to the “Cisco uOne Port Wizard” section on page 43-3 for more information.

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## Procedure

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**Step 1** Open Cisco CallManager Administration.

**Step 2** Select **Devices > Cisco uOne Port**.

The Cisco uOne port configuration page displays with a list of the defined Cisco uOne ports.

**Step 3** Select the Cisco uOne port you want to delete.



## Note

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When you delete a uOne port (and its associated directory number), you must make sure that no Cisco uOne ports refer to the deleted directory number in their Forward Busy and Forward No Answer fields.

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**Step 4** Click **Delete**. The Cisco uOne port is deleted, and the Cisco uOne Ports page updates to display the changes.

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## Related Topics

- Cisco uOne Port Wizard, page 43-3
- Adding Cisco uOne Ports, page 43-12
- Resetting a Cisco uOne Port, page 43-17
- Updating a Cisco uOne Port, page 43-18
- Copying an Existing Cisco uOne Port, page 43-19

# Resetting a Cisco uOne Port

Follow these procedures to reset a Cisco uOne port from Cisco CallManager.

## Procedure

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**Step 1** Open Cisco CallManager Administration.

**Step 2** Select **Devices > Cisco uOne Port**.

The Cisco uOne port configuration page displays with a list of the defined Cisco uOne ports.

**Step 3** Select the Cisco uOne port you want to reset.

**Step 4** Click **Reset**.

**Step 5** Click **OK**.

The Reset Device dialog box displays.

**Step 6** Select one of the following:

- **Restart Device**—Restart a device without shutting it down
  - **Reset Device**—Shut down a device and bring it back up.
  - **Close**—Close the Reset Device dialog without making any changes.
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## Related Topics

- Cisco uOne Port Wizard, page 43-3
- Adding Cisco uOne Ports, page 43-12
- Deleting a Cisco uOne Port, page 43-16
- Updating a Cisco uOne Port, page 43-18
- Copying an Existing Cisco uOne Port, page 43-19

# Updating a Cisco uOne Port

Follow these procedures to update a Cisco uOne port (for example, to make minor changes such as updating the Operator Number).

## Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Devices > Cisco uOne Port**.
- The Cisco uOne port configuration page displays with a list of the defined Cisco uOne ports.
- Step 3** Select the Cisco uOne port you want to update.
- Step 4** Enter the desired changes. Refer to Table 43-3 on page 43-13 for a detailed description of the configuration settings for Cisco uOne ports.
- Step 5** Click **Update**.
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## Related Topics

- Cisco uOne Port Wizard, page 43-3
- Adding Cisco uOne Ports, page 43-12
- Deleting a Cisco uOne Port, page 43-16
- Copying an Existing Cisco uOne Port, page 43-19

# Copying an Existing Cisco uOne Port

If you want to add several similar Cisco uOne ports to the Cisco CallManager database, you can add one and then copy its basic settings to apply to another Cisco uOne port.



## Tips

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It is much easier to use the Cisco uOne wizard to add a new Cisco uOne server and ports or to add multiple ports to an existing server instead of the procedure described here. Refer to the “Cisco uOne Port Wizard” section on page 43-3 for more information.

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Follow these steps to copy a Cisco uOne port’s settings.

## Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Select **Devices > Cisco uOne Port**.
- The Cisco uOne port configuration page displays with a list of the defined Cisco uOne ports.
- Step 3** Select the Cisco uOne port you want to copy.
- Step 4** Click **Copy**.
- Step 5** Make the required changes. You must change the Cisco uOne Port Name and Directory Number fields. You should also update the Forward Busy and Forward No Answer fields.
- Refer to Table 43-3 on page 43-13 for a detailed description of the configuration settings for Cisco uOne ports.
- Step 6** Click **Insert**.
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## Related Topics

- Cisco uOne Port Wizard, page 43-3
- Adding Cisco uOne Ports, page 43-12
- Deleting a Cisco uOne Port, page 43-16

**■ Copying an Existing Cisco uOne Port**

- Resetting a Cisco uOne Port, page 43-17
- Updating a Cisco uOne Port, page 43-18