



# Nortel Meridian 1 PIMG Integration Guide for Cisco Unity Connection 1.1

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This document provides instructions for integrating the Nortel Meridian 1 phone system with Cisco Unity Connection by using the Intel NetStructure PBX-IP Media Gateway (PIMG).

## Integration Tasks

Before doing the following tasks to integrate Cisco Unity Connection with the Nortel Meridian 1 phone system, confirm that the Cisco Unity Connection server is ready for the integration by completing the applicable tasks in the *Cisco Unity Connection Installation Guide*.

The following task list describes the process for creating an integration.

## Task List to Create the Integration

Use the following task list to set up a new integration with the Nortel Meridian 1 phone system. If you are installing a new Cisco Unity Connection server by using the *Cisco Unity Connection Installation Guide*, you may have already completed some of the following tasks.

1. Review the system and equipment requirements to confirm that all phone system and Cisco Unity Connection server requirements have been met. See the [“Requirements” section on page 2](#).
2. Plan how the voice messaging ports will be used by Cisco Unity Connection. See the [“Planning How the Voice Messaging Ports Will Be Used by Cisco Unity Connection” section on page 4](#).
3. Program the Nortel Meridian 1 phone system and extensions. See the [“Programming the Nortel Meridian 1 Phone System” section on page 6](#).
4. Set up the PIMG units. See the [“Setting Up the PIMG Units” section on page 16](#).
5. Create the integration. See the [“Creating a New Integration with the Nortel Meridian 1 Phone System” section on page 23](#).
6. Test the integration. See the [“Testing the Integration” section on page 25](#).



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7. If this integration is a second or subsequent integration, add the applicable new user templates for the new phone system. See the [\(Multiple Integrations Only\) Adding New User Templates, page 29](#).

## Requirements

The Nortel Meridian 1 integration supports configurations of the following components:

### Phone System

- One of the following models:
  - Nortel Meridian 1 phone system (Option 11, 21, 51, 61, 71, or 81), software release 17 or later.
  - Nortel Succession (CS 1000) phone system, software release 3.0 or later.
  - The Nortel SL 1 phone system, when upgraded to Meridian 1 so that it is compatible with the M2616 digital phone.
- The following software option packages installed:
  - Package 19, Digit Display Software (DDSP)
  - Package 46, Message Waiting Center (MWC)
- One or more of the applicable PIMG units. For details, refer to the “Supported Circuit-Switched Phone System Integrations” section of *Cisco Unity Connection System Requirements, and Supported Hardware and Software* at [http://www.cisco.com/en/US/products/ps6509/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_installation_guides_list.html).
- The voice messaging ports in the phone system connected by digital lines to the ports on the PIMG units.

We recommend that you connect the voice messaging ports on the phone system to the ports on the PIMG units in a planned manner to simplify troubleshooting. For example, the first phone system voice messaging port connects to the first port on the first PIMG unit, the second phone system voice messaging port connects to the second port on the first PIMG unit, and so on.

- The PIMG units connected to the same LAN or WAN that Cisco Unity Connection is connected to.
- If the PIMG units connect to a WAN, the requirements for the WAN network connections are:
  - For G.729a codec formatting, a minimum of 32.76 Kbps guaranteed bandwidth for each voice messaging port.
  - For G.711 codec formatting, a minimum of 91.56 Kbps guaranteed bandwidth for each voice messaging port.
  - No network devices that implement network address translation (NAT).
  - A maximum 200 ms network latency.
- The phone system ready for the integration, as described in the documentation for the phone system.

### Cisco Unity Connection Server

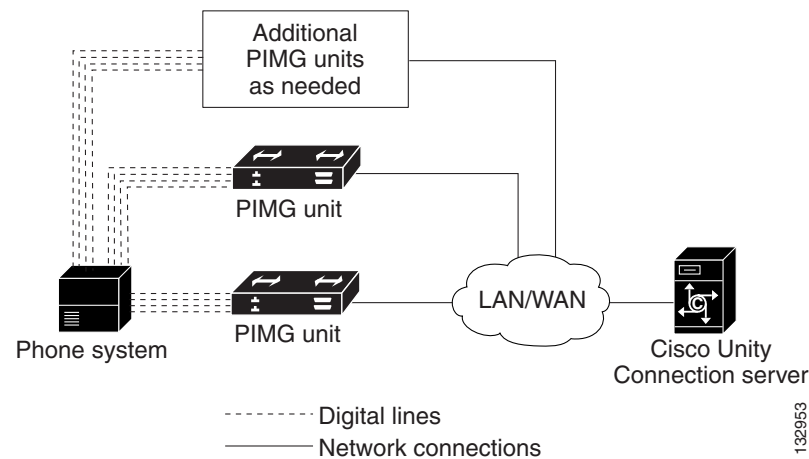
- Cisco Unity Connection installed and ready for the integration, as described in the *Cisco Unity Connection Installation Guide* at [http://www.cisco.com/en/US/products/ps6509/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_installation_guides_list.html).
- A license that enables the applicable number of voice messaging ports.

## Integration Description

The Nortel Meridian 1 PIMG integration sends call information and voice connections through the digital lines, which connect the phone system to the PIMG units. The PIMG units communicate with the Cisco Unity Connection server through the LAN or WAN by using Session Initiation Protocol (SIP).

Figure 1 shows the required connections.

**Figure 1** Connections Between the Phone System and Cisco Unity Connection



## Call Information

The phone system sends the following information with forwarded calls:

- The extension of the called party
- The extension of the calling party (for internal calls) or the phone number of the calling party (if it is an external call and the system uses caller ID)
- The reason for the forward (the extension is busy, does not answer, or is set to forward all calls)

Cisco Unity Connection uses this information to answer the call appropriately. For example, a call forwarded to Cisco Unity Connection is answered with the personal greeting of the user. If the phone system routes the call to Cisco Unity Connection without this information, Cisco Unity Connection answers with the opening greeting.

## Integration Functionality

The Nortel Meridian 1 integration with Cisco Unity Connection provides the following features:

- Call forward to personal greeting
- Call forward to busy greeting
- Caller ID
- Easy message access (a subscriber can retrieve messages without entering an ID because Cisco Unity Connection identifies the subscriber based on the extension from which the call originated; a password may be required)

- Identified subscriber messaging (Cisco Unity Connection identifies the subscriber who leaves a message during a forwarded internal call, based on the extension from which the call originated)
- Message waiting indication (MWI)

## Integrations with Multiple Phone Systems

Cisco Unity Connection can be integrated with multiple phone systems at one time. For information on and instructions for integrating Cisco Unity Connection with multiple phone systems, refer to the *Multiple Phone System Integration Guide* at [http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_installation_and_configuration_guides_list.html).

# Planning How the Voice Messaging Ports Will Be Used by Cisco Unity Connection

Before programming the phone system, you need to plan how the voice messaging ports will be used by Cisco Unity Connection. The following considerations will affect the programming for the phone system (for example, setting up the hunt group or call forwarding for the voice messaging ports):

- The number of voice messaging ports installed.
- The number of voice messaging ports that will answer calls.
- The number of voice messaging ports that will only dial out, for example, to send message notification, to set message waiting indicators (MWIs), and to make telephone record and playback (TRAP) connections.

The following table describes the voice messaging port settings in Cisco Unity Connection that can be set on Telephony Integrations > Port of Cisco Unity Connection Administration.

**Table 1**      **Settings for the Voice Messaging Ports**

Field	Considerations
Enabled	Check this check box to enable the port. The port is enabled during normal operation. Uncheck this check box to disable the port. When the port is disabled, calls to the port get a ringing tone but are not answered. Typically, the port is disabled only by the installer during testing.
Extension	Enter the extension for the port as assigned on the phone system.
Answer Calls	Check this check box to designate the port for answering calls. These calls can be incoming calls from unidentified callers or from users.
Perform Message Notification	Check this check box to designate the port for notifying users of messages. Assign Perform Message Notification to the least busy ports.
Send MWI Requests	Check this check box to designate the port for turning MWIs on and off. Assign Send MWI Requests to the least busy ports.

**Table 1**      **Settings for the Voice Messaging Ports (continued)**

Field	Considerations
Allow TRAP Connections	Check this check box so that users can use the port for recording and playback through the phone in Cisco Unity Connection web applications. Assign Allow TRAP Connections to the least busy ports.
Outgoing Hunt Order	Enter the priority order in which Cisco Unity Connection will use the ports when dialing out (for example, if the Perform Message Notification, Send MWI Requests, or Allow TRAP Connections check box is checked). The highest numbers are used first. However, when multiple ports have the same Outgoing Hunt Order number, Cisco Unity Connection will use the port that has been idle the longest.

### The Number of Voice Messaging Ports to Install

The number of voice messaging ports to install depends on numerous factors, including:

- The number of calls Cisco Unity Connection will answer when call traffic is at its peak.
- The expected length of each message that callers will record and that users will listen to.
- The number of users.
- The number of ports that will be set to dial out only.
- The number of calls made for message notification.
- The number of MWIs that will be activated when call traffic is at its peak.
- The number of TRAP connections needed when call traffic is at its peak. (TRAP connections are used by Cisco Unity Connection web applications to play back and record over the phone.)
- The number of calls that will use the automated attendant and call handlers when call traffic is at its peak.

It is best to install only the number of voice messaging ports that are needed so that system resources are not allocated to unused ports.

### The Number of Voice Messaging Ports That Will Answer Calls

The calls that the voice messaging ports answer can be incoming calls from unidentified callers or from users. Typically, the voice messaging ports that answer calls are the busiest.

You can set voice messaging ports to both answer calls and to dial out (for example, to send message notifications). However, when the voice messaging ports perform more than one function and are very active (for example, answering many calls), the other functions may be delayed until the voice messaging port is free (for example, message notifications cannot be sent until there are fewer calls to answer). For best performance, dedicate certain voice messaging ports for only answering incoming calls, and dedicate other ports for only dialing out. Separating these port functions eliminates the possibility of a collision, in which an incoming call arrives on a port at the same time that Cisco Unity Connection takes the port off-hook to dial out.

### The Number of Voice Messaging Ports That Will Only Dial Out, and Not Answer Calls

Ports that will only dial out and will not answer calls can do one or more of the following:

- Notify users by phone, pager, or e-mail of messages that have arrived.
- Turn MWIs on and off for user extensions.
- Make a TRAP connection so that users can use the phone as a recording and playback device in Cisco Unity Connection web applications.

Typically, these voice messaging ports are the least busy ports.



**Caution**

In programming the phone system, do not send calls to voice messaging ports in Cisco Unity Connection that cannot answer calls (voice messaging ports that are not set to Answer Calls). For example, if a voice messaging port is set only to Send MWI Requests, do not send calls to it.

**Preparing for Programming the Phone System**

Record your decisions about the voice messaging ports to guide you in programming the phone system.

## Programming the Nortel Meridian 1 Phone System

If you use programming options other than those supplied in the following procedure, the performance of the integration may be affected.



**Caution**

In programming the phone system, do not send calls to voice messaging ports in Cisco Unity Connection that cannot answer calls (voice messaging ports that are not set to Answer Calls). For example, if a voice messaging port is set only to Dialout MWI, do not send calls to it.

Do the following procedures as applicable.

**To Program the Nortel Meridian 1 Phone System**

- Step 1** Assign extensions for the voice messaging ports.
- Step 2** Confirm that the software on the phone system has the necessary following option packages by using overlay 22:
- DDSP (Package 19, Digit Display Software)
  - MWC (Package 46, Message Waiting Center)
- If either of these options is missing, contact your sales representative.
- Step 3** On overlay 11, set the following options to create the M2616 digital set emulation for the first port.

**Table 2** *Digital Set Emulation Options for the First Port*

Option	Setting
REQ	NEW
TYPE	2616
TN	0 0 6 2
CUST	0
CLS	ADD HFD CNDA HTA MWA
HUNT	<the extension of the second port on the PIMG unit>
KEY 00 SCR	<the primary number for PIMG unit; enter any valid unused number>
KEY 13 MIK	

**Table 2** *Digital Set Emulation Options for the First Port (continued)*

Option	Setting
KEY 14 MCK	
KEY 15 TRN	

**Step 4** Set the following options to create the digital set emulation for the second port.

**Table 3** *Digital Set Emulation Options for the Second Port*

Option	Setting
REQ	NEW
TYPE	2616
TN	0 0 6 3
CUST	0
CLS	ADD HFD CNDA HTA MWA
HUNT	<the extension of the next port on the PIMG unit>
KEY 00 SCR	<the extension for this PIMG unit port; enter any valid unused number>
KEY 13 MIK	
KEY 14 MCK	
KEY 15 TRN	

**Step 5** Repeat [Step 4](#) for all remaining ports on the PIMG units.

**Step 6** On overlay 95, set the following options to enable display of a four-letter code why the call was forwarded.

**Table 4** *Calling Party Display Options*

Option	Setting
REQ	CHG
TYPE	CPND
CUST	<customer number>
RESN	YES
CFWD	CFWD
CFNA	CFNA
HUNT	HUNT
XFER	T
AAA	A

**Step 7** On each user phone, program the phone to forward calls to the pilot number assigned to the voice messaging ports when calls are not answered or when the user phone is busy, based on one of the Cisco Unity Connection call transfer types shown in [Table 5](#).

**Table 5** Call Transfer Types

Transfer Type	Usage
Release transfer (blind transfer)	Program the user station to forward calls to the pilot number when: <ul style="list-style-type: none"> <li>The extension is busy.</li> <li>The call is not answered.</li> </ul>
Supervised transfer	Program the user station to forward calls to the pilot number only when the call is not answered (on the phone system, the number of rings before forwarding must be more than the number of rings to supervise the call). Confirm that call forwarding is disabled when the extension is busy.

Do one of the following procedures as applicable:

- “To Set Up a Hunt Group for Up to 30 Ports” section on page 8
- “To Set Up an ACD Hunt Group for More Than 30 Ports” section on page 9.
- “To Set Up the Group Hunt Feature” section on page 9

#### To Set Up a Hunt Group for Up to 30 Ports

- Step 1** Set up the first voice messaging port as the pilot number of the hunt group.
- Step 2** Set the first voice messaging port to hunt to the second voice messaging port.
- Step 3** Set the second voice messaging port to hunt to the third, then continue up to the 30th.
- Step 4** Set the 30th voice messaging port to hunt to the first voice messaging port.

**Table 6** Example of a 30-Port Hunt Group

Device	Setting	Destination
Port 1	HUNT	Port 2
Port 2	HUNT	Port 3
Port 3	HUNT	Port 4
.		<additional ports>
.		
.		
Port 29	HUNT	Port 30
Port 30	HUNT	Port 1

### To Set Up an ACD Hunt Group for More Than 30 Ports

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- Step 1** Set up ACD 1 as the pilot number of the hunt group.
  - Step 2** With the Night Call Forward Destination (NCFW) command, set ACD 1 to forward to the first voice messaging port.
  - Step 3** Set the first voice messaging port to hunt to the second, then continue up to the 30th.
  - Step 4** Set the 30th voice messaging port to hunt to ACD 2.
  - Step 5** With the NCFW command, set ACD 2 to forward to the 31st voice messaging port.
  - Step 6** Set the 31st voice messaging port to hunt to the 32nd, and so on.
  - Step 7** Continue creating 30-port hunt groups in this manner until the last voice messaging port.
  - Step 8** Set the last voice messaging port to hunt to ACD 1.

**Table 7** Example of a 72-Port ACD Hunt Group

Device	Setting	Destination
ACD 1 (pilot number)	NCFW	Port 1
Port 1	HUNT	Port 2
Port 2	HUNT	Port 3
<additional ports>		<additional ports>
Port 29	HUNT	Port 30
Port 30	HUNT	ACD 2
ACD 2	NCFW	Port 31
Port 31	HUNT	Port 32
<additional ports>		<additional ports>
Port 59	HUNT	Port 60
Port 60	HUNT	ACD 3
ACD 3	NCFW	Port 61
Port 61	HUNT	Port 62
<additional ports>		<additional ports>
Port 71	HUNT	Port 72
Port 72	HUNT	ACD 1

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### To Set Up the Group Hunt Feature

The group hunt feature will route calls to the next idle PIMG port in the group when a call encounters a busy port. Unlike the hunt feature, the group hunt will continue to hunt after encountering a port that is disabled or that has lost its connection to the PIMG unit.

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- Step 1** In LD 22, verify that software package 120 is equipped.

**Table 8**      **Entries for LD 22**

Prompt	Entry
REQ:	Enter <b>PRT</b> to start a print request.
TYPE:	Enter <b>PKG</b> to print the list of equipped packages.

**Step 2** In LD 17, enter the number of Group Hunt lists allowed in the system.

**Table 9**      **Entries for LD 17**

Prompt	Entry
REQ:	Enter <b>CHG</b> to start a change to the Configuration Record.
TYPE:	Enter <b>PARM</b> to specify the System Parameters.
...	...
MSCL:	Enter the number of group hunt lists that will be allowed in the phone system.

**Step 3** In LD 15, enter a Group Hunt PLDN.

**Table 10**      **Entries for LD 15**

Prompt	Entry
REQ:	Enter <b>NEW</b> to start the process for adding new data.
TYPE:	Enter <b>NIT</b> to indicate “Night Service Options.”
...	...
- NIT1:	Enter the First Night Service by time of day DN that can be defined as a PLDN.
- TIM1:	Enter the hour and minute for First Night Service DN.
- NIT2:	Enter the Second Night Service by time of day DN that can be defined as a PLDN.
- TIM2:	Enter the hour and minute for Second Night Service DN.
- NIT3:	Enter the Third Night Service by time of day DN that can be defined as a PLDN.
- TIM3:	Enter the hour and minute for Third Night Service DN.
- NIT4:	Enter the Fourth Night Service by time of day DN that can be defined as a PLDN.
- TIM4:	Enter the hour and minute for Fourth Night Service DN.

**Step 4** In LD 10, enter a Group Hunt PLDN.

**Table 11**      **Entries for LD 10**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• NEW</li> <li>• CHG</li> </ul>
...	...
IAPG:	Enter the Meridian Link Unsolicited Status Message (USM) group.

**Table 11** *Entries for LD 10 (continued)*

Prompt	Entry
HUNT:	Enter the Hunt DN of the next station in the hunt chain. The Hunt DN can be defined as a PLDN.
...	...
AACD:	Enter YES for Associate Set (AST) telephone.
FTR:	Enter <b>FTR</b> for the feature name and related data.
	Enter <b>EFD &lt;an extension&gt;</b> for the External Flexible Call Forward DN (a Group Hunt pilot can be entered). The External Call Forward No Answer DN can be defined as a PLDN.
	Enter <b>EHT &lt;an extension&gt;</b> for the External Hunt DN. The External Hunt DN can be defined as a PLDN.
	Enter <b>FDN &lt;an extension&gt;</b> for the Flexible Call Forward No Answer DN. Flexible Call Forward No Answer DN can be defined as a PLDN.

**Step 5** In LD 11, enter a Group Hunting Denied (GHD) key and enter a Group Hunt PLDN.

**Table 12** *Entries for LD 11*

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• NEW</li> <li>• CHG</li> </ul>
...	...
ACM:	Enter the number of Add-on Modules. AOM appears if TYPE = M2216 and M2616.
FDN:	Enter the Flexible CFNA DN. The Call Forward No Answer DN can be defined as a PLDN.
...	...
ICT:	Enter the Intercept Computer Terminal or printer number. The Number of Intercept Positions (NIPN) is defined in LD 15.
EFD:	Enter the Flexible CFNA DN for External calls. External Call Forward No Answer DN can be defined as a PLDN.
HUNT:	Enter the Hunt DN of the next station in the hunt chain. Hunt DN can be defined as a PLDN.
EHT:	Enter the External Hunt DN. The External Hunt DN can be defined as a PLDN.
...	...
LANG:	Enter the language choice for Automatic Wakeup (AWU) calls. This prompt appears with Multi-language Wakeup (MLWU) package 206.

**Table 12**      **Entries for LD 11 (continued)**

Prompt	Entry
KEY:	Enter the telephone key assignments.
	Enter the Call Forward key Key number (xx), Call Forward function (CFW), length (yy), Call Forward target DN (z...z) in the following format:  xx CFW yy z...z  This setting can be defined as a PLDN.
	Enter the Key number (xx), Group Hunting Denied function (GHD) in the following format:  xx GHD  The GHD key is added to allow a station user to toggle the Primary (key 0) Directory Number (PDN) in and out of all groups of which that PDN is a member.

**Step 6** In LD 12, enter a Group Hunt PLDN.

**Table 13**      **Entries for LD 12**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• NEW</li> <li>• CHG</li> </ul>
...	...
ICP:	Enter YES to indicate Intercept Computer is available.
AADN:	Enter the Attendant Alternate Answering DN. The Alternate Answering DN can be defined as a PLDN.

**Step 7** In LD 14, enter a Group Hunt PLDN.

**Table 14**      **Entries for LD 14**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• NEW</li> <li>• CHG</li> </ul>
...	...
NGRP:	Enter the Night Service Group number.
NITE:	Enter the Night Service directory number. The Night service DN can be defined as a PLDN.
ATDN:	Enter the Auto-terminate DN. The Auto-terminate DN can be defined as a PLDN.
MNDN:	Enter the Manual Directory Number. The Manual DN can be defined as a PLDN.

**Step 8** In LD 18, create or modify Group Hunt lists.

**Table 15**      **Entries for LD 18**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• CHG</li> <li>• MOV</li> <li>• NEW</li> <li>• OUT</li> </ul>
TYPE:	Enter <b>GHT</b> for Group Hunt data block.
LSNO:	If REQ = CHG, press <b>Enter</b> . Otherwise, enter the number of the Group Hunt list.
CUST:	Enter the Customer number, as defined in LD 15.
PLDN:	Enter the Pilot DN. <b>Note</b> This prompt appears only when REQ = NEW, or CHG and LSNO = Enter.
DNSZ:	Enter the maximum length of DN allowed for Group Hunt list. <b>Note</b> This prompt appears only when REQ = NEW, or CHG and LSNO = Enter.  After DNSZ is defined, it should not be changed. Print the list in LD 20, remove it with REQ = OUT, and rebuild the list with the new DNSZ.
SIZE:	Enter the maximum DNs in the Group Hunt list. <b>Note</b> The range is 1 to 96 entries.
STOR:	Enter the GHT entry (member) number and Group Hunt target DN in the following format:  <x...x> <y...y>  <b>Note</b> In Group Hunting, the member number must conform with the SIZE. The number of digits must conform with DNSZ.
WRT:	Enter <b>YES</b> to write the information to the data store.

**Step 9** In LD 20, enter a Group Hunt PLDN.

**Table 16**      **Entries for LD 20**

Prompt	Entry
REQ:	Enter <b>PRT</b> to print a data block.
TYPE:	Enter <b>GHT</b> .
LSNO:	Enter the number of the Group Hunt list that you want to print, or press <b>Enter</b> to print all lists.
SIZE:	If you entered the number of a Group Hunt list, the list size appears. If you pressed Enter at the LSNO: prompt, the list size does not appear.

**Step 10** In LD 57, define, change, or print data associated with FFC.

**Table 17**      **Entries for LD 57**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• CHG</li> <li>• NEW</li> </ul>
TYPE:	Enter <b>FFC</b> .
CUST:	Enter the customer number, as defined in LD 15.
FFCT:	Press <b>Enter</b> .
CODE:	Enter <b>PLDN</b> for the Pilot DN.
- PLDN:	Do one of the following: <ul style="list-style-type: none"> <li>• Press <b>Enter</b> to proceed to next prompt without entering a Pilot DN.</li> <li>• Enter the Pilot DN to be modified or created.</li> </ul>
-- USE:	Enter <b>GPHT</b> for Pilot DN Group Hunting.
-- LSNO:	Enter the Group Hunt list number. The Group Hunt list must exist in LD 18.
-- HTYP:	Do one of the following: <ul style="list-style-type: none"> <li>• If you want linear hunting, enter <b>LIN</b>.</li> <li>• If you want round robin hunting, enter <b>RRB</b>.</li> </ul>
-- CFWI:	Do one of the following: <ul style="list-style-type: none"> <li>• If you want Group Hunting to skip idle stations with Call Forward All Calls active, enter <b>NO</b>.</li> <li>• If you want Group Hunting to terminate on idle stations with Call Forward All Calls active, enter <b>YES</b>.</li> </ul>
MQUE:	Do one of the following to configure the maximum number of calls allowed in the Pilot DN queue: <ul style="list-style-type: none"> <li>• If you want to no calls in the queue, enter <b>0</b>.</li> <li>• If you want only one call in the queue at a time, enter <b>1</b>.</li> <li>• If you want no limit on the number of calls in the queue, enter <b>ALL</b>.</li> <li>• If you want the number of calls in the queue to be less than or equal to the number of active members of the Group Hunt list, enter <b>ACTM</b>.</li> </ul>

**Step 11** In LD 57, configure the Flexible Feature Codes data block for Group Hunt Termination.

**Table 18**      **Entries for LD 57**

Prompt	Entry
REQ:	Enter one of the following: <ul style="list-style-type: none"> <li>• CHG</li> <li>• NEW</li> </ul>
TYPE:	Enter <b>FFC</b> .
CUST:	Enter the customer number, as defined in LD 15.

**Table 18** *Entries for LD 57 (continued)*

Prompt	Entry
FFCT:	Press <b>Enter</b> .
CODE:	Enter <b>GHTA</b> for Group Hunt Termination Allowed.
- GHTA:	Enter the code to be dialed to allow Group Hunt termination on a set.
CODE:	Enter <b>GHTD</b> for Group Hunt Termination Denied.
- GHTD:	Enter the code to be dialed to deny Group Hunt termination on a set.

**Step 12** In LD 81, count or list all stations equipped with the GHD key.

**Table 19** *Entries for LD 81*

Prompt	Entry
REQ:	Do one of the following: <ul style="list-style-type: none"> <li>• If you want to change existing data, enter <b>CHG</b>.</li> <li>• If you want to add new data, enter <b>NEW</b>.</li> <li>• If you want to print a count of telephones equipped with the features specified in response to the FEAT prompt, enter <b>CNT</b>.</li> <li>• If you want to list telephones equipped with the features specified in response to the FEAT prompt, enter <b>LST</b>.</li> </ul>
...	...
FEAT:	Do one of the following: <ul style="list-style-type: none"> <li>• For the Group Hunt Deactivation key, enter <b>GHD</b>.</li> <li>• For the default, press <b>Enter</b>.</li> </ul>

**Step 13** In LD 81, count or list all stations equipped with the GHD key.

**Table 20** *Entries for LD 81*

Prompt	Entry
REQ:	Do one of the following: <ul style="list-style-type: none"> <li>• If you want to change existing data, enter <b>CHG</b>.</li> <li>• If you want to add new data, enter <b>NEW</b>.</li> <li>• If you want to print a count of telephones equipped with the features specified in response to the FEAT prompt, enter <b>CNT</b>.</li> <li>• If you want to list telephones equipped with the features specified in response to the FEAT prompt, enter <b>LST</b>.</li> </ul>
...	...
FEAT:	Do one of the following: <ul style="list-style-type: none"> <li>• For the Group Hunt Deactivation key, enter <b>GHD</b>.</li> <li>• For the default, press <b>Enter</b>.</li> </ul>

**Step 14** In LD 83, count or list all stations equipped with the GHD key.

**Table 21**      **Entries for LD 83**

Prompt	Entry
REQ:	Enter <b>TNB</b> to print the TN blocks in Designation order.
...	...
KEY xx GHD	The GHD key data appears each time it is configured on a set.

## Setting Up the PIMG Units

Do the following procedures to set up the PIMG units that are connected to the Nortel Meridian 1 phone system.

These procedures require that the following tasks have already been completed:

- The phone system is connected to the PIMG units by using digital lines.
- The PIMG units are ready to be connected to the LAN or WAN.
- The PIMG units are connected to a power source.

Fields that are not mentioned in the following procedures must keep their default values. For the default values of all fields, see the documentation for the PIMG units.

### To Download the PIMG Firmware Update Files for Digital PIMG Units

**Step 1** On a Windows workstation that will have access to the PIMG units, open a web browser and go to the **Cisco Unity PIMG Software Download** page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity-PIMG>.



**Note** To access the software download page, you must be logged on to Cisco.com as a registered user.

**Step 2** On the Cisco Unity PIMG Software Download page, click the most recent version of the firmware for digital (DNI) PIMG units.

**Step 3** On the Details page, click **Next**.

**Step 4** On the Document page, click **Accept**.

**Step 5** In the Enter Network Password dialog box, enter your user name and password, then click **OK**.

**Step 6** In the File Download dialog box, click **Save**.

**Step 7** In the Save As dialog box, browse to the Windows workstation that will have access the PIMG units, browse to a directory where you want to save the file, and click **Save**.

**Step 8** In the Download Complete dialog box, click **Open**. The window for extracting the PIMG firmware update files appears.

**Step 9** Click **Extract**.

**Step 10** In the Extract dialog box, browse to the directory where you want the extracted files, and click **Extract**.

**Step 11** Close the window for the extracting application.

---

### To Set Up the Digital PIMG Units

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**Step 1** On the Windows workstation, add a temporary route to enable access to the PIMG units.

- a. On the Windows Start menu, click **Run**.
- b. Enter **cmd**, and press **Enter**. The Command Prompt window appears.
- c. At the command prompt, enter **route add 10.12.13.74 <IP Address of Workstation>**, and press **Enter**.

For example, if the IP address of the workstation is 198.1.3.25, enter “route add 10.12.13.74<space>198.1.3.25” in the Command Prompt window.

- d. Close the Command Prompt window.

**Step 2** Connect a PIMG unit to the network.

**Step 3** In the web browser, go to **http://10.12.13.74**.

**Step 4** On the System Login page, enter the following case-sensitive settings.

**Table 22**      **System Login Page Settings**

Field	Setting
Username	admin
Password	IpodAdmin

**Step 5** Click **Log On**.

**Step 6** On the Configure menu, click **Upgrade**.

**Step 7** On the Upgrade page, click **Browse**.

**Step 8** In the Choose File dialog box, browse to the directory on the Windows workstation that has the extracted PIMG firmware update files.

**Step 9** Click **Ami<xx>.app** (where <xx> is multiple digits), and click **Open**.

**Step 10** On the Upgrade page, click **Install**.

**Step 11** After the file is installed, a message prompting you to restart the PIMG unit appears. Click **Cancel**.



**Caution** Do not restart the PIMG unit until you are instructed to do so later in this procedure, even if the file installation fails. Restarting the PIMG unit at this step may prevent the PIMG unit from functioning correctly.

**Step 12** Repeat [Step 6](#) through [Step 11](#) for each of the following files:

- Ami\_<xx>.fsh
- Run<xx>FskEcho.dsp
- iNim<xx>.ibt
- iNim<xx>.ilc
- iNim<xx>.iap

- Step 13** On the Configure menu, click **Upgrade**.
- Step 14** On the Upgrade page, click **Browse**.
- Step 15** In the Choose File dialog box, browse to the file DNI\_Cfg\_Generic.ini.
- Step 16** Click **DNI\_Cfg\_Generic.ini**, and click **Open**.
- Step 17** On the Upgrade page, click **Install**.
- Step 18** After the file is installed, a message prompting you to restart the PIMG unit appears. Click **OK**.
- Step 19** In the web browser, go to **http://10.12.13.74**.
- Step 20** On the System Login page, enter the following case-sensitive settings.

**Table 23** System Login Page Settings

Field	Setting
Username	<b>admin</b>
Password	<b>IpodAdmin</b>

- Step 21** Click **Log On**.
- Step 22** On the Configure menu, click **Password**.
- Step 23** On the Password page, enter the following settings.

**Table 24** Password Page Settings

Field	Setting
Old Password	<b>IpodAdmin</b> (This setting is case sensitive.)
New Password	<your new password> (This setting is case sensitive.)
Confirm Password	<your new password> (This setting is case sensitive.)

- Step 24** Click **Change**.
- Step 25** On the Configure menu, click **System**.
- Step 26** On the System page, enter the following settings.

**Table 25** System Page Settings

Field	Setting
Operating Mode	<b>SIP</b>
Telephony Switch Type	<b>M1</b>
PCM Coding	<b>uLaw</b>

- Step 27** Click **Apply Changes**.
- Step 28** On the Configure menu, click **Gateway**.

- Step 29** On the Gateway page, click the **Gateway Routing** tab.
- Step 30** On the Gateway Routing tab, enter the following settings.

**Table 26** *Gateway Routing Tab Settings*





Field	Setting
Fault Tolerance Enabled	No
Load Balancing Enabled	No
VoIP Endpoint ID: 1	<the IP address of the Cisco Unity Connection server>
VoIP Endpoint ID: 2	<blank>

- Step 31** Click **Apply Changes**.
- Step 32** Click the **Gateway Advanced** tab.
- Step 33** On the Gateway Advanced tab, enter the following settings.

**Table 27** *Gateway Advanced Tab Settings*

Field	Setting
Call Connect Mode	<b>OnAnswer</b>
Destination for Unroutable PBX Calls	<the extension of an attendant who will receive calls to Cisco Unity Connection that are unanswered>
Turn MWI On FAC	<blank>
Turn MWI Off FAC	<blank>
Wait for Ringback/Connect on Blind Transfer	<b>Yes</b>
Hunt Group Extension	<the pilot number for the Cisco Unity Connection voice messaging ports>
Audio Compression	Click the preferred codec for audio compression: <ul style="list-style-type: none"> <li>• <b>G.711 Only</b></li> <li>• <b>G.729 A Preferred</b></li> </ul>
Signaling Digit Relay Mode	<b>Off</b>
Voice Activity Detection	<b>Off</b>

**Table 27** Gateway Advanced Tab Settings (continued)

Field	Setting
Frame Size	<p>Click the applicable setting:</p> <ul style="list-style-type: none"> <li>G.711—<b>20</b></li> <li>G.729a—<b>10</b></li> </ul> <p> <b>Caution</b> Failure to use the correct setting will result in recorded messages containing nothing but silence.</p>
Frames Per Packet	<p>Click the applicable setting:</p> <ul style="list-style-type: none"> <li>G.711—<b>1</b></li> <li>G.729a—<b>2</b></li> </ul> <p> <b>Caution</b> Failure to use the correct setting will result in recorded messages containing nothing but silence.</p>
Call Control QOS Byte	<p>(PIMG units connect only to a LAN) <b>0</b></p> <p>(PIMG units connect to a WAN) <b>104</b></p> <p> <b>Note</b> For details on the setting for a LAN, see the caveat <a href="#">CSCsb96387</a>.</p>
RTP QOS Byte	<p>(PIMG units connect only to a LAN) <b>0</b></p> <p>(PIMG units connect to a WAN) <b>184</b></p> <p> <b>Note</b> For details on the setting for a LAN, see the caveat <a href="#">CSCsb96387</a>.</p>

**Step 34** Click **Apply Changes**.

**Step 35** Click the **Gateway Capabilities** tab.

**Step 36** Depending on how you have planned to use the voice messaging ports, click the applicable setting for each port in the Telephony Port Capability column.

**Table 28** Gateway Capabilities Tab Settings

Telephony Port Capability Settings	Voice Messaging Port Usage
Calls-Only	The port will answer incoming calls only and will not dial out (for example, to set MWIs or send message notifications).
MWIs-Only	The port will dial out only (for example, to set MWIs or send message notifications) and will not answer incoming calls.
Both	The port will answer incoming calls and will also dial out (for example, to set MWIs or send message notifications).



**Caution** In setting up the PIMG unit, do not send calls to ports in Cisco Unity that cannot answer calls (voice messaging ports that are not set to Answer Calls). For example, if a voice messaging port is set only to Dialout MWI, do not send calls to it. Otherwise the integration will not function correctly.

If a port in Cisco Unity Connection is disabled, click **No** in the Telephony Port Enabled column for the corresponding port on this tab. Note that changing a setting in the Telephony Port Enabled column requires restarting the PIMG unit.

- Step 37** Click **Apply Changes**.
- Step 38** On the Configure menu, click **SIP**.
- Step 39** On the SIP page, enter the following settings.

**Table 29** *SIP Page Settings*

Field	Setting
Host and Domain Name	<the domain name of the PIMG unit>
Server Port	<b>5060</b>
Primary Proxy Server Address	<the IP address of the Cisco Unity Connection server>
Primary Proxy Server Port	<b>5060</b>  (When you configure more than one PIMG unit, increase this setting by 1 for each successive unit. For example, unit 2 will be 5061, unit 3 will be 5062, and so on.)
Proxy Query Interval	<b>10</b>
T1 Time	<b>400</b>
T2 Time	<b>3000</b>

- Step 40** Click **Apply Changes**.
- Step 41** On the Configure menu, click **IP**.
- Step 42** On the IP page, enter the following settings.

**Table 30** *IP Page Settings*

Field	Setting
Client IP Address	<the new IP address you want to use for the PIMG unit>  (This is the IP address that you will enter in Cisco Unity Connection Administration when you create the integration.)
Client Subnet Mask	<the new subnet mask, if the subnet mask is different from the default IP address>
Default Network Gateway Address	<the IP address of the default network gateway router that the PIMG units will use>
BOOTP Enabled	<b>No</b>

- Step 43** Click **Apply Changes**.

**Step 44** On the Configure menu, click **Tones**.

**Step 45** On the Tones page, click the **Learn** tab.




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**Caution** Destination addresses cannot be duplicated in the same session. Otherwise, the process for learning tones will not succeed. If you do not have enough available phones to learn all the tones at one time, you can run multiple sessions to learn tones individually by checking or unchecking the applicable Acquire Tone check boxes.

---

**Step 46** On the Tones page, for the Dialtone event, confirm that the Acquire Tone check box is checked and leave the Destination Address field blank.

**Step 47** On the Tones page, for the Busy Tone event, confirm that the Acquire Tone check box is checked and do the following substeps to verify that the tone is correct.

- a. From a available phone, call a second phone.
- b. Answer the second phone when it rings, and leave both handsets off so that both phones are busy.
- c. From a third phone, dial one of the busy phones.
- d. Confirm that you hear a busy tone.
- e. Hang up the third phone but leave the handsets for the other two phones off.

**Step 48** On the Tones page, in the Destination Address field for Busy Tone, enter the extension that you dialed in [Step 47c](#). from the third phone.

**Step 49** On the Tones page, for the Error/Reorder Tone event, confirm that the Acquire Tone check box is checked and do the following substeps to verify that the tone is correct.

- a. From an available phone, dial an extension that does not exist.
- b. Confirm that you hear the reorder or error tone.
- c. Hang up the phone.

**Step 50** On the Tones page, in the Destination Address field for Error/Reorder Tone, enter the extension that you dialed in [Step 49a](#).

**Step 51** On the Tones page, for the Ringback Tone event, confirm that the Acquire Tone check box is checked and do the following substeps to verify that the tone is correct.

- a. From an available phone, dial an extension that does exist
- b. Confirm that you hear the ringback tone.
- c. Hang up the phone.

**Step 52** On the Tones page, in the Destination Address field for Ringback Tone, enter the extension that you dialed in [Step 51a](#).

**Step 53** Click **Learn**.




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**Note** When running learn tones, the PIMG unit will restart after learning the first tone. For details, see the caveat [CSCsh53791](#).

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**Step 54** When the process is complete, check the check box for each newly learned tone and click **Apply**.

**Step 55** Hang up the phones that you used in [Step 47](#).

**Step 56** On the Configure menu, click **Restart**.

**Step 57** On the Restart page, click **Restart Unit Now**.

- Step 58** When the PIMG unit has restarted, in the View menu, click **Refresh**.
- Step 59** Repeat [Step 2](#) through [Step 58](#) on all remaining PIMG units.


## Creating a New Integration with the Nortel Meridian 1 Phone System

After ensuring that the Nortel Meridian 1 phone system and Cisco Unity Connection are ready for the integration, do the following procedures to set up the integration and to enter the port settings.

### To Create an Integration

- Step 1** Log on to Cisco Unity Connection Administration.
- Step 2** In Cisco Unity Connection Administration, expand **Telephony Integrations**, then click **Phone System**.
- Step 3** On the Search Phone Systems page, on the Phone System menu, click **New Phone System**. The Phone System Integration Wizard appears.
- Step 4** On the Select Phone System Manufacturer page, in the Manufacturer field, click **Nortel** and click **Next**.
- Step 5** On the Select Phone System Model page, in the Model field, click **Nortel Meridian 1** and click **Next**.
- Step 6** On the Set Up Phone System page, in the Phone System Name field, accept the default name or enter the descriptive name that you want, and click **Next**.
- Step 7** On the Select Port Group Template page, in the Port Group Template field, click **Nortel Meridian 1 via PIMG** and click **Next**.
- Step 8** On the Set Up Port Group page, enter the following settings and click **Next**.

**Table 31** Settings for the Set Up Port Group Page

Field	Setting
Port Group Name	<a descriptive name for the port group; accept the default name or enter the name that you want>
Number of Ports	<b>8</b> (If you want to use fewer than eight voice messaging ports, enter the number of voice messaging ports that you want to use on this PIMG unit.)
IP Address or Host Name	<the IP address of the PIMG unit that you are integrating with Cisco Unity Connection>
Test Address	Click this button to test the IP address that you entered. The results of the test appear in the field to the right of the button.
Port	<the SIP port of the PIMG unit that Cisco Unity Connection will connect to; we recommend that you use the default setting>
	 <b>Caution</b> This setting must match the setting for the Server Port field of the PIMG unit. Otherwise the integration will not function correctly.

- Step 9** On the Confirm Phone System Settings page, confirm the settings that you have entered and click **Finish**.
- Step 10** On the Phone System Creation Summary page, click **Close**.
- Step 11** In Cisco Unity Connection Administration, expand **Telephony Integrations**, then click **Port**.
- Step 12** On the Search Ports page, click the display name of the first voice messaging port that you created for this phone system integration.



**Note** By default, the display names for the voice messaging ports are composed of the port group display name followed by incrementing numbers.

- Step 13** On the Port Basics page, set the voice messaging port settings as applicable. The fields in the following table are the ones that you can change.

**Table 32** *Settings for the Voice Messaging Ports*

Field	Considerations
Enabled	Check this check box to enable the port. The port is enabled during normal operation. Uncheck this check box to disable the port. When the port is disabled, calls to the port get a ringing tone but are not answered. Typically, the port is disabled only by the installer during testing.
Extension	Enter the extension for the port as assigned on the phone system.
Answer Calls	Check this check box to designate the port for answering calls. These calls can be incoming calls from unidentified callers or from users.
Perform Message Notification	Check this check box to designate the port for notifying users of messages. Assign Perform Message Notification to the least busy ports.
Send MWI Requests	Check this check box to designate the port for turning MWIs on and off. Assign Send MWI Requests to the least busy ports.
Allow TRAP Connections	Check this check box so that users can use the port for recording and playback through the phone in Cisco Unity Connection web applications. Assign Allow TRAP Connections to the least busy ports.
Outgoing Hunt Order	Enter the priority order in which Cisco Unity Connection will use the ports when dialing out (for example, if the Perform Message Notification, Send MWI Requests, or Allow TRAP Connections check box is checked). The highest numbers are used first. However, when multiple ports have the same Outgoing Hunt Order number, Cisco Unity Connection will use the port that has been idle the longest.

- Step 14** Click **Save**.
- Step 15** Click **Next**.
- Step 16** Repeat [Step 13](#) through [Step 15](#) for all remaining voice messaging ports for the phone system.
- Step 17** If another phone system integration exists, in Cisco Unity Connection Administration, expand **Telephony Integrations**, then click **Trunk**. Otherwise, skip to [Step 21](#).
- Step 18** On the Search Phone System Trunks page, on the Phone System Trunk menu, click **New Phone System Trunk**.
- Step 19** On the New Phone System Trunk page, enter the following settings for the phone system trunk and click **Save**.

**Table 33**      **Settings for the Phone System Trunk**

Field	Setting
From Phone System	<the display name of the phone system that you are creating a trunk for>
To Phone System	<the display name of the previously existing phone system that the trunk will connect to>
Trunk Access Code	<the extra digits that Cisco Unity Connection must dial to transfer calls through the gateway to extensions on the previously existing phone system>

- Step 20** Repeat [Step 18](#) and [Step 19](#) for all remaining phone system trunks that you want to create.
- Step 21** If prompted to restart Cisco Unity Connection, in the Windows task bar, right-click the **Cisco Unity Connection** icon and click **Restart > Voice Processing Server Role**.
- Step 22** When prompted to confirm stopping the Voice Processing server role, click **Yes**.
- Step 23** In Cisco Unity Connection Administration, in the Related Links drop-down list, click **Check Telephony Configuration** and click **Go** to confirm the phone system integration settings.
- If the test is not successful, the Task Execution Results displays one or more messages with troubleshooting steps. After correcting the problems, test the connection again.
- Step 24** In the Task Execution Results window, click **Close**.
- Step 25** Log off Cisco Unity Connection Administration.

## Testing the Integration

To test whether Cisco Unity Connection and the phone system are integrated correctly, do the following procedures in the order listed.

If any of the steps indicate a failure, refer to the following documentation as applicable:

- The installation guide for the phone system.
- The setup information earlier in this guide.

### To Set Up the Test Configuration

- Step 1** Set up two test extensions (Phone 1 and Phone 2) on the same phone system that Cisco Unity Connection is connected to.
- Step 2** Set Phone 1 to forward calls to the Cisco Unity Connection pilot number when calls are not answered.



**Caution** The phone system must forward calls to the Cisco Unity Connection pilot number in no fewer than four rings. Otherwise, the test may fail.

- Step 3** To create a test user for testing, in Cisco Unity Connection Administration, expand **Users**, then click **Users**.
- Step 4** On the Search Users page, on the User menu, click **New User**.
- Step 5** On the New User page, enter the following settings.

**Table 34** Settings for the New User Page

Field	Setting
User Type	User with Voice Mailbox
Based on Template	<the applicable user template>
Alias	testuser
First Name	Test
Last Name	User
Display Name	Test User
Extension	<the extension of Phone 1>

- Step 6** Click **Save**.
- Step 7** On the Edit User Basics page, in the Voice Name field, record a voice name for the test user.
- Step 8** In the Phone System field, confirm that the phone system selected is the phone system that Phone 1 is connected to.
- Step 9** Uncheck the **Set for Self-enrollment at Next Login** check box.
- Step 10** Click **Save**.
- Step 11** On the Edit menu, click **Message Waiting Indicators**.
- Step 12** On the Message Waiting Indicators page, click the message waiting indicator. If no message waiting indication is in the table, click **Add New**.
- Step 13** On the Edit Message Waiting Indicator page, enter the following settings.

**Table 35** Settings for the Edit MWI Page

Field	Setting
Enabled	Check this check box to enable MWIs for the test user.
Display Name	Accept the default or enter a different name.
Inherit User's Extension	Check this check box to enable MWIs on Phone 1.

- Step 14** Click **Save**.
- Step 15** On the Edit menu, click **Transfer Options**.
- Step 16** On the Transfer Options page, click the active option.
- Step 17** On the Edit Transfer Option page, under Transfer Action, click the **Extension** option and enter the extension of Phone 1.
- Step 18** In the Transfer Type field, click **Release to Switch**.
- Step 19** Click **Save**.
- Step 20** Minimize the Cisco Unity Connection Administration window.  
Do not close the Cisco Unity Connection Administration window because you will use it again in a later procedure.
- Step 21** On the Cisco Unity Connection desktop, double-click the **Tools Depot** icon.

- Step 22** In the left pane of the Tools Depot window, expand **Switch Integration Tools**, then double-click **Port Status Monitor**. The Port Status Monitor window appears.
- Step 23** On the Ports menu, click **Start All**, and arrange the port monitors so that you can notice which port will handle the calls that you will make.
- 

#### To Test an External Call with Release Transfer

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- Step 1** From Phone 2, enter the access code necessary to get an outside line, then enter the number outside callers use to dial directly to Cisco Unity Connection.
- Step 2** In the Port Status Monitor, note which port handles this call.
- Step 3** When you hear the opening greeting, enter the extension for Phone 1. Hearing the opening greeting means that the port is configured correctly.
- Step 4** Confirm that Phone 1 rings and that you hear a ringback tone on Phone 2. Hearing a ringback tone means that Cisco Unity Connection correctly released the call and transferred it to Phone 1.
- Step 5** Leaving Phone 1 unanswered, confirm that the state of the port handling the call changes to “Idle.” This state means that release transfer is successful.
- Step 6** Confirm that, after the number of rings that the phone system is set to wait, the call is forwarded to Cisco Unity Connection and that you hear the greeting for the test user. Hearing the greeting means that the phone system forwarded the unanswered call and the call-forward information to Cisco Unity Connection, which correctly interpreted the information.
- Step 7** On the Port Status Monitor, note which port handles this call.
- Step 8** Leave a message for the test user and hang up Phone 2.
- Step 9** In the Port Status Monitor, confirm that the state of the port handling the call changes to “Idle.” This state means that the port was successfully released when the call ended.
- Step 10** Confirm that the MWI on Phone 1 is activated. The activated MWI means that the phone system and Cisco Unity Connection are successfully integrated for turning on MWIs.
- 

#### To Test Listening to Messages

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- Step 1** From Phone 1, enter the internal pilot number for Cisco Unity Connection.
- Step 2** When asked for your password, enter the password for the test user. Hearing the request for your password means that the phone system sent the necessary call information to Cisco Unity Connection, which correctly interpreted the information.
- Step 3** Confirm that you hear the recorded voice name for the test user (if you did not record a voice name for the test user, you will hear the extension number for Phone 1). Hearing the voice name means that Cisco Unity Connection correctly identified the user by the extension.
- Step 4** Listen to the message.
- Step 5** After listening to the message, delete the message.
- Step 6** Confirm that the MWI on Phone 1 is deactivated. The deactivated MWI means that the phone system and Cisco Unity Connection are successfully integrated for turning off MWIs.
- Step 7** Hang up Phone 1.

- Step 8** On the Port Status Monitor, confirm that the state of the port handling the call changes to “Idle.” This state means that the port was successfully released when the call ended.
- 

### To Set Up Supervised Transfer on Cisco Unity Connection

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- Step 1** In Cisco Unity Connection Administration, on the Edit Transfer Option page for the test user, in the Transfer Type field, click **Supervise Transfer**.
- Step 2** In the Rings to Wait For field, enter **3**.
- Step 3** Click **Save**.
- Step 4** Minimize the Cisco Unity Connection Administration window.
- Do not close the Cisco Unity Connection Administration window because you will use it again in a later procedure.
- 

### To Test Supervised Transfer

---

- Step 1** From Phone 2, enter the access code necessary to get an outside line, then enter the number outside callers use to dial directly to Cisco Unity Connection.
- Step 2** On the Port Status Monitor, note which port handles this call.
- Step 3** When you hear the opening greeting, enter the extension for Phone 1. Hearing the opening greeting means that the port is configured correctly.
- Step 4** Confirm that Phone 1 rings and that you do not hear a ringback tone on Phone 2. Instead, you should hear the indication your phone system uses to mean that the call is on hold (for example, music).
- Step 5** Leaving Phone 1 unanswered, confirm that the state of the port handling the call remains “Busy.” This state and hearing an indication that you are on hold mean that Cisco Unity Connection is supervising the transfer.
- Step 6** Confirm that, after three rings, you hear the greeting for the test user. Hearing the greeting means that Cisco Unity Connection successfully recalled the supervised-transfer call.
- Step 7** During the greeting, hang up Phone 2.
- Step 8** On the Port Status Monitor, confirm that the state of the port handling the call changes to “Idle.” This state means that the port was successfully released when the call ended.
- Step 9** Exit the Port Status Monitor.
- 

### To Delete the Test User

---

- Step 1** In Cisco Unity Connection Administration, expand **Users**, then click **Users**.
- Step 2** On the Search Users page, check the check box to the left of the test user.
- Step 3** Click **Delete Selected**.
-

## (Multiple Integrations Only) Adding New User Templates

When you create the first phone system integration, this phone system is automatically selected in the default user template. The users that you add after creating this phone system integration will be assigned to this phone system by default.

However, for each additional phone system integration that you create, you must add the applicable new user templates that will assign users to the new phone system. You must add the new templates before you add new users who will be assigned to the new phone system.

For details on adding new user templates, refer to the “Adding, Changing, or Deleting an Account Template” chapter in the *Cisco Unity Connection User Moves, Adds, and Changes Guide* at [http://www.cisco.com/en/US/products/ps6509/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html).

For details on selecting a user template when adding a new user, refer to the applicable chapter for adding user accounts in the *Cisco Unity Connection User Moves, Adds, and Changes Guide* at [http://www.cisco.com/en/US/products/ps6509/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html).

## Appendix: Documentation and Technical Assistance

### Conventions

The *Nortel Meridian 1 PIMG Integration Guide for Cisco Unity Connection 1.1* uses the following conventions.

**Table 36** *Nortel Meridian 1 PIMG Integration Guide for Cisco Unity Connection 1.1 Conventions*

Convention	Description
boldfaced text	Boldfaced text is used for: <ul style="list-style-type: none"> <li>Key and button names. (Example: Click <b>OK</b>.)</li> <li>Information that you enter. (Example: Enter <b>Administrator</b> in the User Name box.)</li> </ul>
< > (angle brackets)	Angle brackets are used around parameters for which you supply a value. (Example: In the Command Prompt window, enter <b>ping &lt;IP address&gt;</b> .)
- (hyphen)	Hyphens separate keys that must be pressed simultaneously. (Example: Press <b>Ctrl-Alt-Delete</b> .)
> (right angle bracket)	A right angle bracket is used to separate selections that you make: <ul style="list-style-type: none"> <li>On menus. (Example: On the Windows Start menu, click <b>Programs &gt; Cisco Unified Serviceability &gt; Real-Time Monitoring Tool</b>.)</li> <li>In the navigation bar of Cisco Unity Connection Administration. (Example: In Cisco Unity Connection Administration, expand <b>System Settings &gt; Advanced</b>.)</li> </ul>

**Table 36** *Nortel Meridian 1 PIMG Integration Guide for Cisco Unity Connection 1.1 Conventions (continued)*

Convention	Description
[x] (square brackets)	Square brackets enclose an optional element (keyword or argument). (Example: [reg-e164])
[x   y] (vertical line)	Square brackets enclosing keywords or arguments separated by a vertical line indicate an optional choice. (Example: [transport tcp   transport udp])
{x   y} (braces)	Braces enclosing keywords or arguments separated by a vertical line indicate a required choice. (Example: {tcp   udp})

The *Nortel Meridian 1 PIMG Integration Guide for Cisco Unity Connection 1.1* also uses the following conventions:



**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the document.



**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

For descriptions and URLs of Cisco Unity Connection documentation on Cisco.com, see the *About Cisco Unity Connection Documentation*. The document is shipped with Cisco Unity Connection and is available at

[http://www.cisco.com/en/US/products/ps6509/products\\_documentation\\_roadmaps\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_documentation_roadmaps_list.html).

## Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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