Nortel Communication Server 1000

Instant Messaging and Presence Application

Release: 6.0
Document Revision: 01.03

www.nortel.com

NN43001-141

Nortel Communication Server 1000
Release: 6.0
Publication: NN43001-141
Document release date: 16 November 2009

Copyright © 2009 Nortel Networks. All Rights Reserved.

While the information in this document is believed to be accurate and reliable, except as otherwise expressly agreed to in writing NORTEL PROVIDES THIS DOCUMENT "AS IS" WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED. The information and/or products described in this document are subject to change without notice.

Nortel, Nortel Networks, the Nortel logo, and the Globemark are trademarks of Nortel Networks.

All other trademarks are the property of their respective owners.

Contents

New in this release 7
Other changes 7

How to get help 9
Contents 9
Getting help from the Nortel Web site 9
Getting help over the telephone from a Nortel Solutions Center 9
Getting help from a specialist by using an Express Routing Code 10
Getting help through a Nortel distributor or reseller 10

Introduction 11
Subject 11
Technical Documentation 11

Fundamentals 13
Deployment model 13
System Component Description 13
Supported IM and Presence clients 14
Supported telephony Publishing Presence clients 14

Planning and Engineering 15
IM and Presence server capacity 15
Presence Publisher capacity 15
Converged Desktop ISM License 15

Installation and configuration work flow 17
Prerequisites for installing and configuring the CS 1000 IM and Presence Application 17
Subscriber Manager 17
IM and Presence Media kit 18
Installing and configuring CS 1000 IM and Presence Application tasks 18
Installing and configuring CS 1000 IM and Presence Application navigation 19

Installation and Configuration 21
Required software packages 21
Backup all components of the system 21
Upgrade Primary Security Server 21

Copyright © 2009 Nortel Networks. All Rights Reserved.

Upgrade the Linux base of all application servers 22
Upload the new software applications to the UCM Deployment Manager 22
Upgrade the Nortel applications (SS, EM, and SubM) 23
Apply Call Server patch containing Presence Publisher service 25
Prepare a new template in Element Manager for new accounts with IM and Presence service 25
Configure Call Server with Presence Publisher service 28
Configure VAS ID for AML link 29
Configure Signaling Server Presence Publisher 30
Activate the Presence Publisher in Element Manager for an existing node 31
Activate Presence Publisher service for a new node 34
Provision new COTS2 with Linux base 38
Deploy and configure IM and Presence Application on new COTS2 server 38
Configure the domain of the IM and Presence server 39
Configure SIP Presence Service 40
Configure existing subscriber accounts with IM and Presence capability 41
Preferred Name 43
Configure IM and Presence attributes for a subscriber 43
Add new telephony accounts using previously created template 47
Bulk import of accounts for IM and Presence Application 47

Maintenance 49
Call Server CLI commands 49
Presence Publisher Service CLI commands 50
Presence Publisher Service application status commands 50
Presence Publisher Service application trace commands 51
IM and Presence server commands 54
Start/Stop/Restart or check status of Presence server process 54
Unified Communication (Presence) server files location 54
Presence server traces 54
Call Server Trouble shooting 54
AML link is not up 54
Presence is not updated when a telephone makes a call 56

CS 1000 Instant Messaging and Presence Web Tool 57
Logon to the CS 1000 Instant Messaging and Presence Web Tool 60
Adding a contact 60
Search for a user 61
Add a contact to a group 64
Conference chat 65
Invite users to the conference room 68

IM and Presence user information 73
Configure the IPSP 3456 to use the IM and Presence Application 73
Configuring the IPSP 3456 client with IM and Presence contacts 76

Copyright © 2009 Nortel Networks. All Rights Reserved.

IPSP 3456 group chat 76
Presence Aggregation 79
User Experience 79
Personal Agent 82
Change your password for Presence and Instant Messaging 82

Appendix A **85**
Overlay commands 85

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

New in this release

The following sections detail what's new in *Communication Server 1000 Instant Messaging and Presence Server* (NN43001-141).

This document is new for Nortel Communication Server (CS) 1000, and describes, the installation, configuration, provisioning, maintenance, and operation information for the CS 1000 IM and Presence Application.

Other changes

This section describes the detailed history of past releases of this document.

Revision History

November 2009	Standard 01.03. This document is up-issued to address content changes to the CS 1000 IM and Presence Web Tool chapter, graphics, and to address adding profile information through Subscriber Manager.
October 2009	Standard 01.02. This document is up-issued to address content changes to the CS 1000 IM and Presence Web Tool chapter, graphics, and provide additional procedural information.
October 2009	Standard 01.01 This document is released to support the Instant Messaging and Presence Application for Communication Server 1000 Release 6.0.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

How to get help

Contents

This section contains information about the following topics:

- "Getting help from the Nortel Web site" (page 9)
- "Getting help over the telephone from a Nortel Solutions Center" (page 9)
- "Getting help from a specialist by using an Express Routing Code" (page 10)
- "Getting help through a Nortel distributor or reseller" (page 10)

Getting help from the Nortel Web site

The best way to get technical support for Nortel products is from the Nortel Technical Support Web site:

www.nortel.com/support

This site provides quick access to software, documentation, bulletins, and tools to address issues with Nortel products. From this site, you can:

- download software, documentation, and product bulletins
- search the Technical Support Web site and the Nortel Knowledge Base for answers to technical issues
- sign up for automatic notification of new software and documentation for Nortel equipment
- open and manage technical support cases

Getting help over the telephone from a Nortel Solutions Center

If you do not find the information you require on the Nortel Technical Support Web site, and you have a Nortel support contract, you can also get help over the telephone from a Nortel Solutions Center.

Copyright © 2009 Nortel Networks. All Rights Reserved.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following Web site to obtain the telephone number for your region:

www.nortel.com/callus

Getting help from a specialist by using an Express Routing Code

To access some Nortel Technical Solutions Centers, you can use an Express Routing Code (ERC) to quickly route your call to a specialist in your Nortel product or service. To locate the ERC for your product or service, go to:

www.nortel.com/erc

Getting help through a Nortel distributor or reseller

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Introduction

This document is a global document. Contact your system supplier or your Nortel representative to verify that the hardware and software described are supported in your area.

Subject

This document introduces the new Instant Messaging (IM) and Presence application to the CS 1000. The CS 1000 IM and Presence Application provides IM capability and phone presence information for all CS 1000 users. CS 1000 users can view presence information and exchange Instant Messaging using Nortel's IP Softphone 3456 (IPSP 3456), or CS 1000 IM and Presence Web Tool (browser-based IM and Presence client).

A new plug-in is added to an open source IM and Presence platform to enable "CS 1000 Telephony Presence". Its function is to accept SIP-Publish messages from the CS 1000 Presence Publisher component and then broadcast presence updates using the IM and Presence Application to all users.

A COTS2 server is added to the network to handle the IM and Presence functionality. This is a single server that does not provide redundancy at this time.

Technical Documentation

The following technical documents are referenced in this document:

- *Subscriber Manager Fundamentals* (NN43001-120)
- *Unified Communications Management* (NN43001-116)
- *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315)
- *Signaling Server IP Line Applications Fundamentals* (NN43001-125)
- *Element Manager System Reference - Administration* (NN43001-632)
- *SIP Line Fundamentals* (NN43001-508)

Copyright © 2009 Nortel Networks. All Rights Reserved.

- *Software Input Output Reference — Maintenance* (NN43001-711)
- *IP Softphone 3456 User Guide* (NN43080-100)

Copyright © 2009 Nortel Networks. All Rights Reserved.

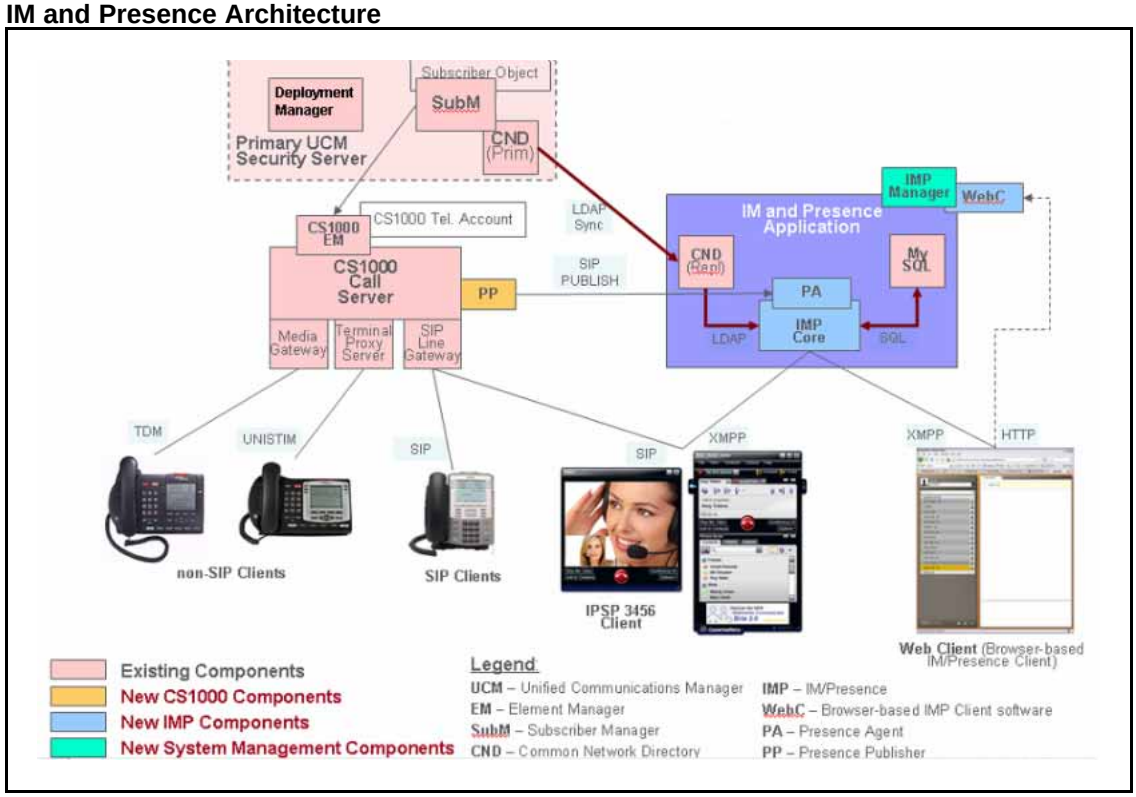
Fundamentals

This chapter explains the concepts that are necessary to understand for implementation of the IM and Presence Application.

Deployment model

The following diagram shows the system components and architecture used to support the IM and Presence Application.

Figure 1
IM and Presence Architecture



System Component Description

The following table provides an overview of the a description of the system components used to support the IM and Presence Application.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Table 1
Presence Component Overview

Component	Description
Primary UCM Security Server	Overall system management is coordinated by this management system. On this server the Deployment Manager, Subscriber Manager, and CND reside.
Deployment Manager	The Deployment Manager is used to deploy or upgrade application software.
Subscriber Manager Application	Provisioning of a user's service and accounts is managed by this application.
CS 1000 Element Manager	The Call Server provisioning and other telephony nodal functions are managed by this application.
IM and Presence Application	This new network wide application runs on the new COTS2 (Dell R300 or IBM x3350) and handles instant messaging, contact list and presence updates.
IM and Presence Manager	IM and Presence Manager is used to configure the IM and Presence Application
Nortel CS 1000 Call Server	The CS 1000 Call Server provides service for Nortel telephones.
Nortel CS 1000 Presence Publisher	A new software application running on the Signaling Server works with the CS 1000 Call Server to provide telephony presence updates to the IM Presence server.
Personal Agent	An end-user Web application to manage IM and Presence Application passwords.

Supported IM and Presence clients

The following clients are supported for telephony presence:

- IP Softphone (IPSP) 3456 - has dual accounts (one account for SIP, that can be used as SIPL client on CS 1000, and one account for IM and Presence activity)
- CS 1000 IM and Presence Web Tool - browser-based tool used for IM and Presence

Supported telephony Publishing Presence clients

Nortel telephones (Analog, Digital, VoIP-Unistim, SIP Line, MobileX, and MC 3100 and IP softphone) controlled by the CS 1000 Call Server - their phone activity triggers presence update.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Planning and Engineering

This chapter provides information about system planning and engineering.

IM and Presence server capacity

The IM and Presence server can support the following:

- A maximum of 20000 users
- A maximum of 15 Instant Messages (IM) for each user in a one hour period.
- A maximum of 12 presences status changes for each user in a one hour period.
- A maximum of 50 contacts in a user's contact list.

Presence Publisher capacity

A Presence Publisher is expected to handle more then 5000 users based on the IM and Presence server capacity described above. In the event that one Presence Publisher instance cannot handle all telephony presence from non IM and Presence clients (Analog, Digital, VoIP-Unistim, SIP Line, MobileX, and MC 3100 and IP Softphone) then additional Presence Publishers can be deployed on existing Signaling Servers available in the system.

Converged Desktop ISM License

For every subscriber you want to add the Class of Service Presence Allowed (PREA) to their Telephony Account (TN) you will require one Converged Desktop ISM License.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Installation and configuration work flow

This chapter contains information that guides you through the steps you must complete to install and configure the CS 1000 IM and Presence Application.

Follow “Installing and configuring CS 1000 IM and Presence Application tasks” (page 18) to learn what tasks you must perform, and in what order.

Prerequisites for installing and configuring the CS 1000 IM and Presence Application

The following are the prerequisites for the CS 1000 IM and Presence Application:

- An installed CS 1000 Release 6.0 system
- Upgrade of Linux base on any server required for IM & Presence (Presence Publisher)
- An additional COTS 2 server (NTDW41AAE6 Dell R300 or NTDW40AAE5 IBM x3350)
- An IM and Presence Media kit
- A deployed and configured Subscriber Manager
- Ensure you retain a copy of your Subscriber Manager license.
- Package 214 (CCR Basic Package)

Subscriber Manager

If Subscriber Manager (SubM) is not already deployed, it must be deployed, licensed and configured on the primary UCM security server prior to the upgrade of the Linux base. Subscriber Manager provides the administrator the ability configure the IM and Presence attributes for each subscriber.

Copyright © 2009 Nortel Networks. All Rights Reserved.

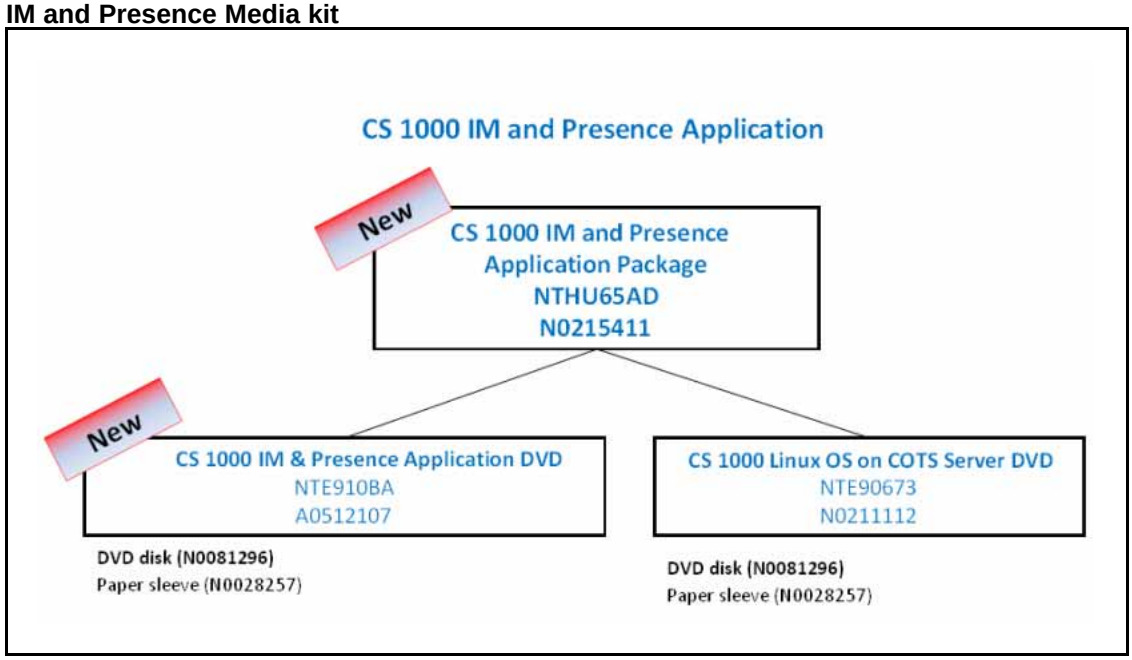
As part of the Subscriber Manager deployment, the Personal Agent (PA) application is also deployed. It is a standalone application which is installed on the same server with Subscriber Manager. The Personal Agent application is not subject to any of the Unified Communications Management (UCM) security. It allows subscribers to change their presence and instant messaging password.

Subscriber Manager is deployed using the Deployment Manager. For more information on deploying Subscriber Manager see, *Subscriber Manager Fundamentals* (NN43001-120), *Unified Communications Management* (NN43001-116), and *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

IM and Presence Media kit

The IM and Presence Media kit consists of two DVDs. One DVD is used to install Linux base and the second DVD installs the IM and Presence Application.

Figure 2
IM and Presence Media kit

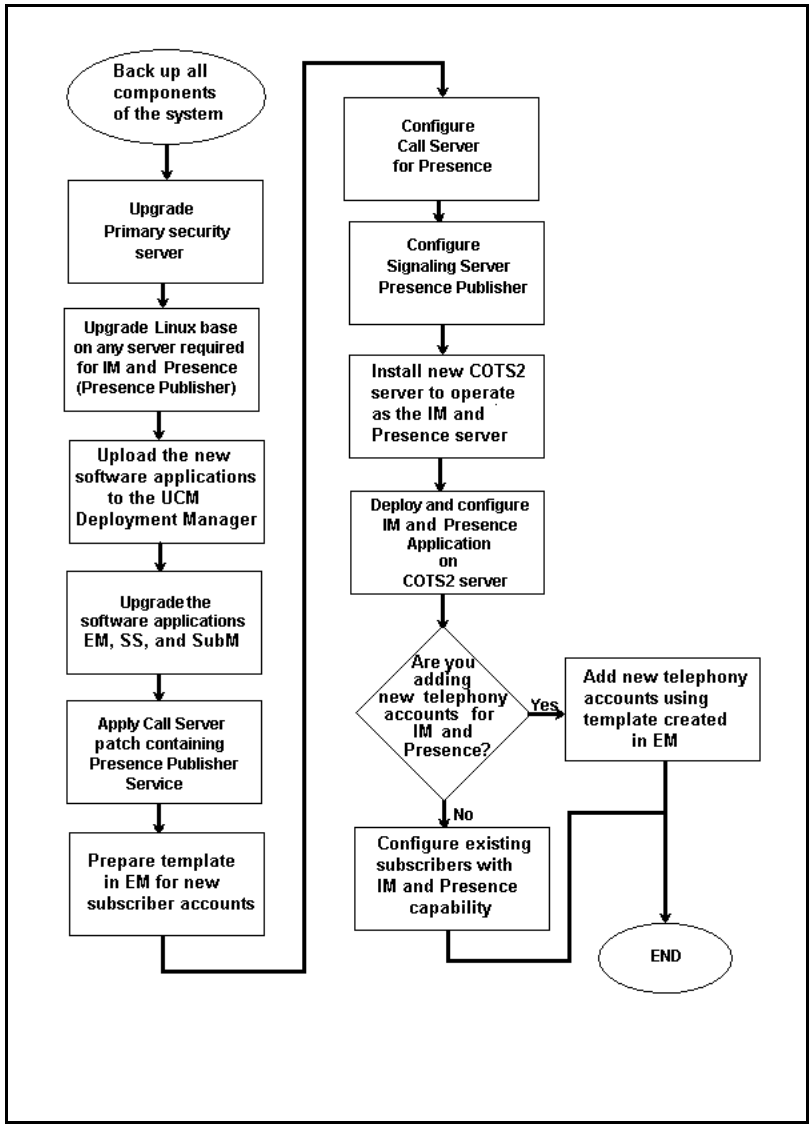


Installing and configuring CS 1000 IM and Presence Application tasks

This work flow shows you the sequence of tasks you perform to install CS 1000 IM and Presence Application to CS 1000 Release 6.0. To link to any tasks, click on "Installing and configuring CS 1000 IM and Presence Application navigation" (page 19).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 3
Installing and configuring IM and Presence Application tasks



Installing and configuring CS 1000 IM and Presence Application navigation

- "Backup all components of the system" (page 21)
- "Upgrade Primary Security Server" (page 21)
- "Upgrade the Linux base of all application servers" (page 22)
- "Upload the new software applications to the UCM Deployment Manager" (page 22)

Copyright © 2009 Nortel Networks. All Rights Reserved.

- “Apply Call Server patch containing Presence Publisher service” (page 25)
- “Prepare a new template in Element Manager for new accounts with IM and Presence service” (page 25)
- “Configure Call Server with Presence Publisher service” (page 28)
- “Configure Signaling Server Presence Publisher” (page 30)
- “Provision new COTS2 with Linux base” (page 38)
- “Deploy and configure IM and Presence Application on new COTS2 server” (page 38)
- “Configure existing subscriber accounts with IM and Presence capability ” (page 41)
- “Add new telephony accounts using previously created template” (page 47)

Copyright © 2009 Nortel Networks. All Rights Reserved.

Installation and Configuration

Use the information and procedures in this chapter to install/upgrade and configure the hardware and software that is required to support the IM and Presence application.

Required software packages

The system is developed as a collection of packages that each delivers some aspect of the overall system functionality. Each package generally represents a shared object library. The following table provides an overview of required packages to implement the CS 1000 IM and Presence Application.

Package	Description
Latest CS 1000 Release 6.0 Call Server deplist	This CS 1000 patch delivers the call server changes required to provide IM and Presence functionality.
Signaling Server Service Upgrade (SU) bundle (Signaling Server Release Version 6.0.18.5x)	This CS 1000 Signaling Server SU bundle delivers the Presence Publisher component which includes management upgrades, new IM and Presence server package (including plug-in), and the Presence Publisher application.

Backup all components of the system

Back up all components of your system, before installing and configuring the IM and Presence Application on your system.

For information on backing up the Linux base refer to *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

Upgrade Primary Security Server

Upgrade the Primary Security Server with the latest version. This upgrades the Linux Base and the applications of the Primary Security Server. Refer to *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Upgrade the Linux base of all application servers

Upgrade the Linux base of all application servers of the system, required for IM and Presence Application. Refer to *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

Upload the new software applications to the UCM Deployment Manager

To upgrade the software applications for IM and Presence Application, you must first upload the new software applications to the UCM Deployment Manager.

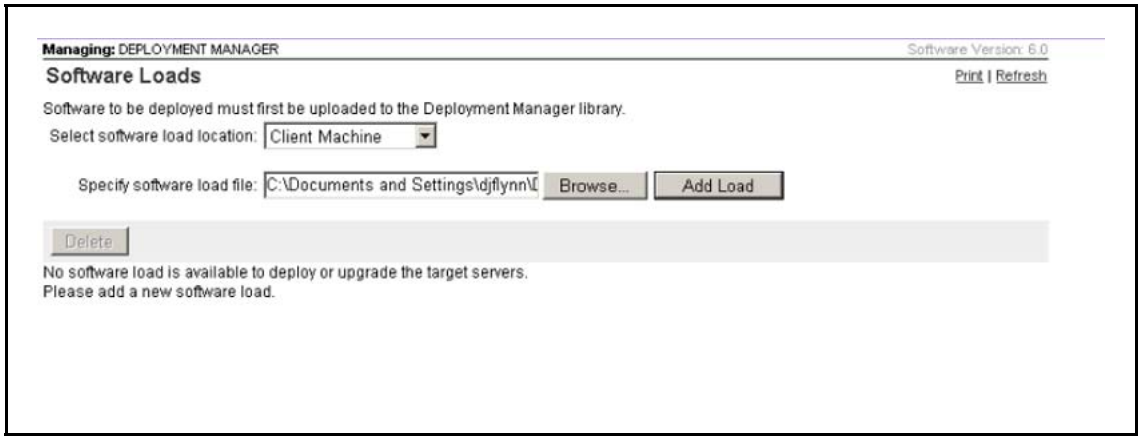
Procedure 1
Adding a new software load to the Deployment Manager

Step	Action
1	In the navigation pane of UCM, select **Network > CS 1000 Services > Software Deployment**. The Deployment Manager window appears.
2	In the navigation pane, click **Software Loads**. The Software Loads page appears, as shown in the following figure.

Figure 4
Software Loads page

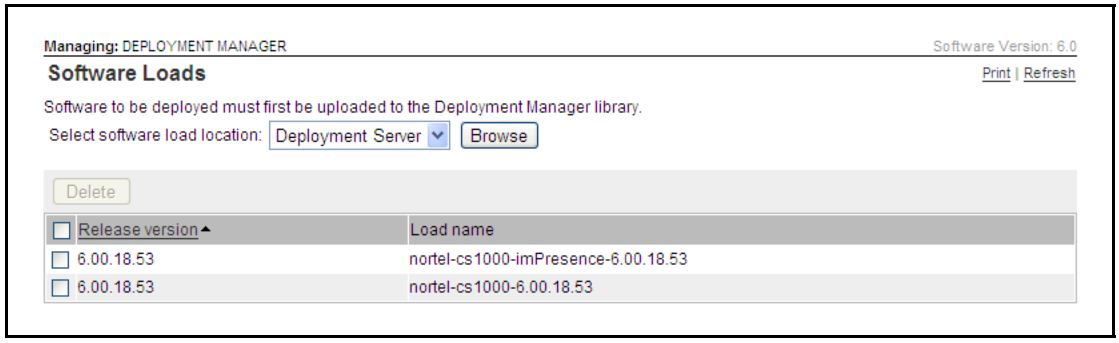
3	In the **Select software load location** list, select **Deployment Server** to upload the .nai file from the UCM or select **Client Machine** to upload the .nai file from a PC.
4	In the **Specify software load file** field, type the file path for the software load file. **OR** Click **Browse** to browse to the location of the software load file. The **Add Load** button activates, as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.



5 Click **Add Load**.

When the upload is complete the software load appears, as shown in the following figure.



--End--

Upgrade the Nortel applications (SS, EM, and SubM)

You must upgrade the Nortel applications Signaling Server (SS), Element Manager (EM), and Subscriber Manager (SubM) for the IM and Presence Application. You upgrade the Nortel applications through Unified Communications Management (UCM) Deployment Manager. The Element Manager and the Signalling Server can reside other than on the Primary Security Server. Ensure that they are upgraded on whatever server they reside.

Note: Deployment packages are platform dependant; the platform of the target server influences which deployment packages are available. For more information on deployment packages see *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

Copyright © 2009 Nortel Networks. All Rights Reserved.

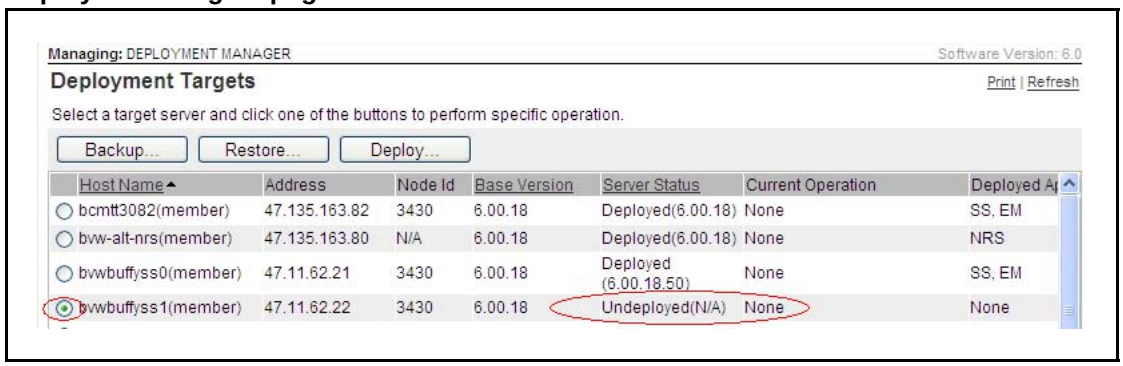
Procedure 2
Upgrading the Nortel applications

Step	Action
1	Log on to UCM with appropriate credentials.
2	In the navigation pane, click **Network > CS 1000 Servers > Software Deployment > Deployment Targets**.

Note: Ensure the target to be upgraded server status shows as **Undeployed(N/A)**. This may take up to 12 minutes after the Linux Base upgrade.

The **Deployment Target** page appears as shown in Figure 5 "Deployment Targets page" (page 24).

Figure 5
Deployment Targets page

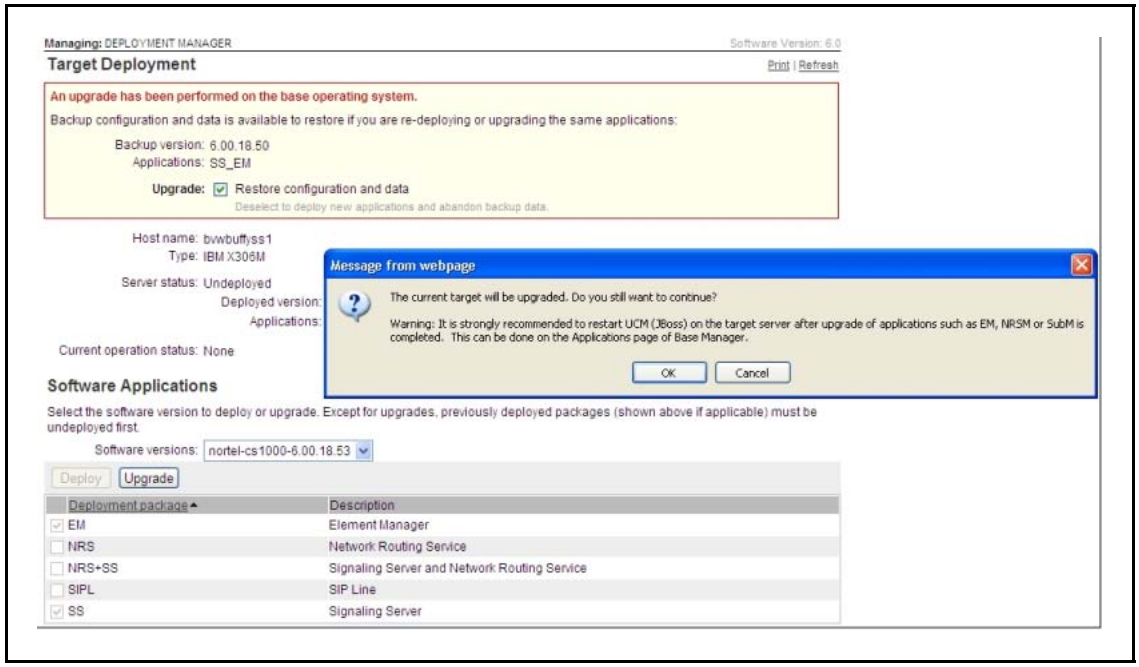


3	Select the target to upgrade and click **Deploy**.
4	Confirm the Deployment Target.

Note: Backup and configuration data is available to restore.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 6
Confirmation page



The Nortel applications are upgraded with software containing the IM and Presence Application.

--End--

Apply Call Server patch containing Presence Publisher service

Install the latest Call Server deplist containing Presence Publisher service through Element Manager. Refer to *Element Manager System Reference - Administration* (NN43001-632).

Prepare a new template in Element Manager for new accounts with IM and Presence service

The administrator can add a subscriber account with the Presence feature by selecting a Presence enabled phone template. The Presence can be enabled in a template by selecting Presence Allowed option in the PREA field of a template.

Procedure 3
Create a new template with the Presence feature

Step	Action
1	Log on to UCM with appropriate credentials.
2	From the Elements list, click **Element Manager**.

Copyright © 2009 Nortel Networks. All Rights Reserved.

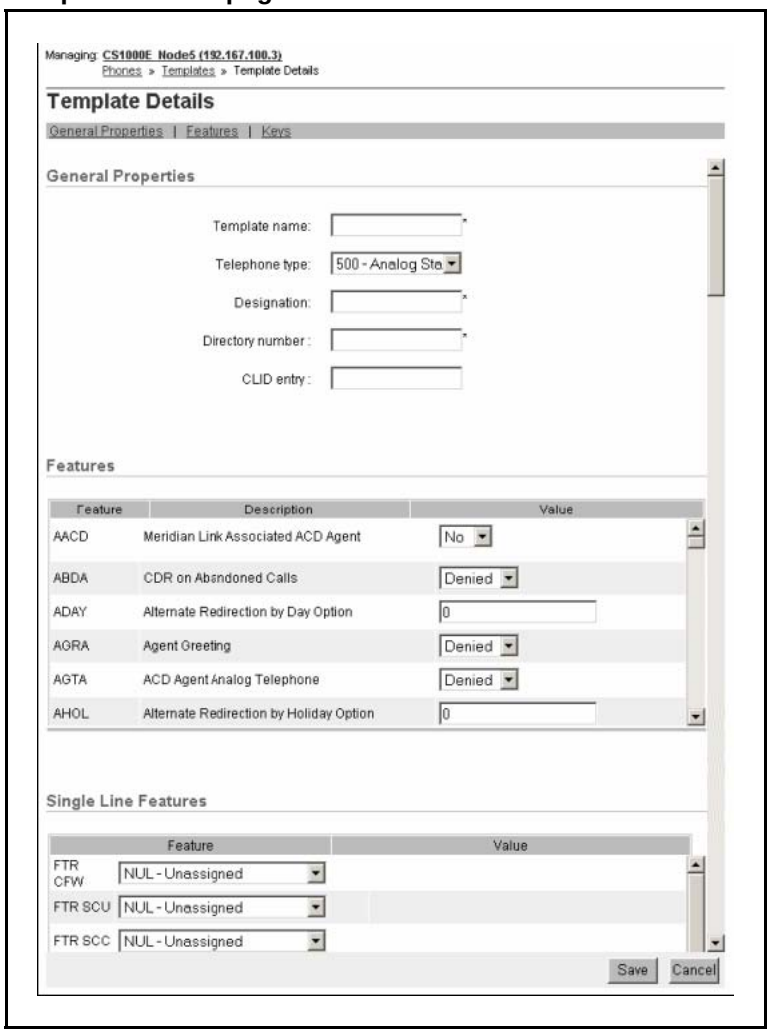
The Element Manager opens.

3 In the Navigation pane select **Templates** under the Phones section of Element Manager.

4 Click **Add** to add a new template.

The **Template Details** page opens.

Figure 7
Template Details page



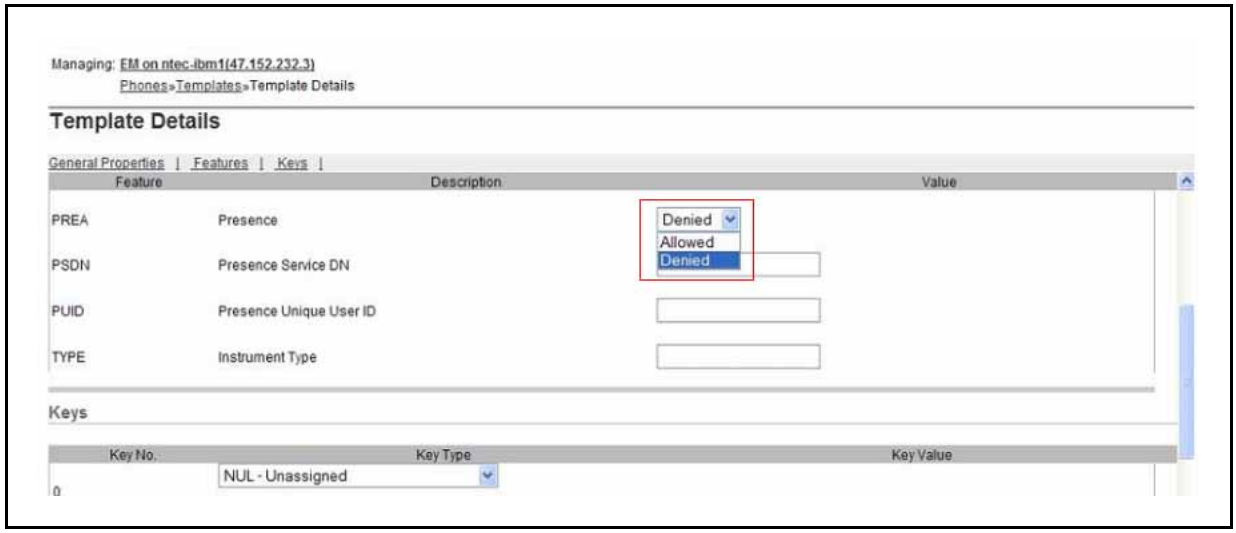
5 Enter a name for the template and the parameters required for the template.

6 To add IM and Presence feature to the template:

- Under the Features section scroll to **PREA** and select **Presence Allowed** from the drop down list, as shown in Figure 8 "Template Details Presence Allowed selected" (page 27).

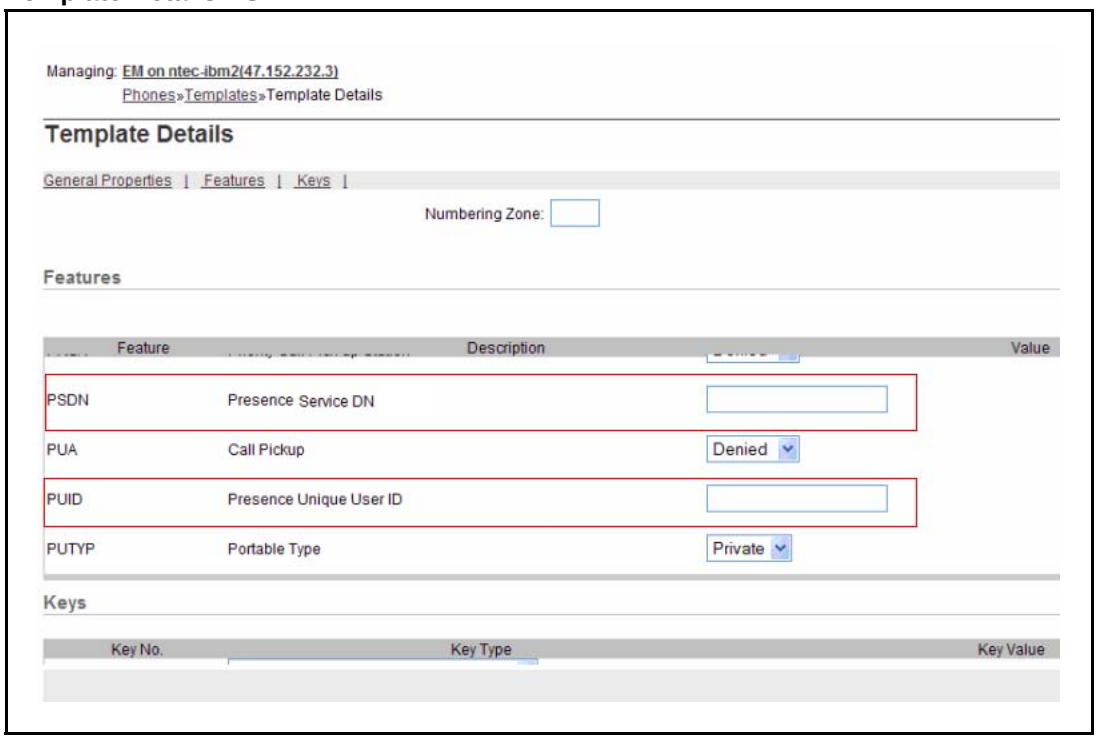
Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 8
Template Details Presence Allowed selected



- Scroll to PSDN (Presence Service DN) and enter the Presence Service DN, as shown in Figure 9 "Template Details PSDN" (page 27).
  The PUID field is the Read-only field & it reflects the user name of the subscriber when the account is added for a Subscriber.

Figure 9
Template Details PSDN



Copyright © 2009 Nortel Networks. All Rights Reserved.

7 Click **Save**.

--End--

Configure Call Server with Presence Publisher service

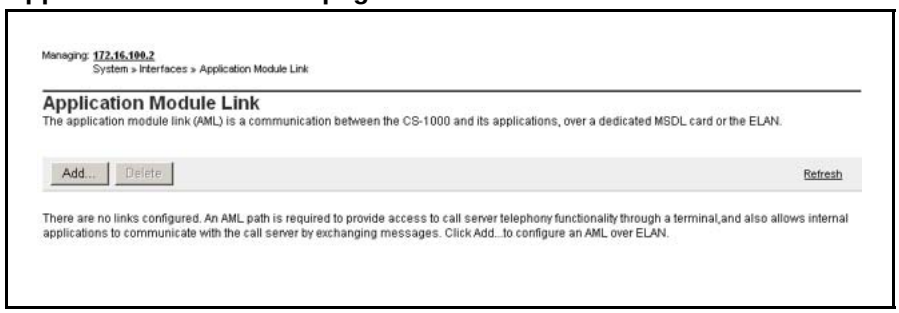
To enable IM and Presence service on the Call Server, you must configure ELAN AML link and VAS ID for AML link.

The Presence Publisher service uses the AML over ELAN link to establish a pbxlink (AML over ELAN) connection with the CS 1000 system.

Procedure 4
Configuring AML over ELAN

Step	Action
1	Log on to UCM with appropriate credentials.
2	From the Elements list, select **Element Manager**. The Element Manager opens.
3	In the navigation pane, select **System > Interfaces > Application Module Link**. The Application Module Link page appears.

Figure 10
Application Module Link page

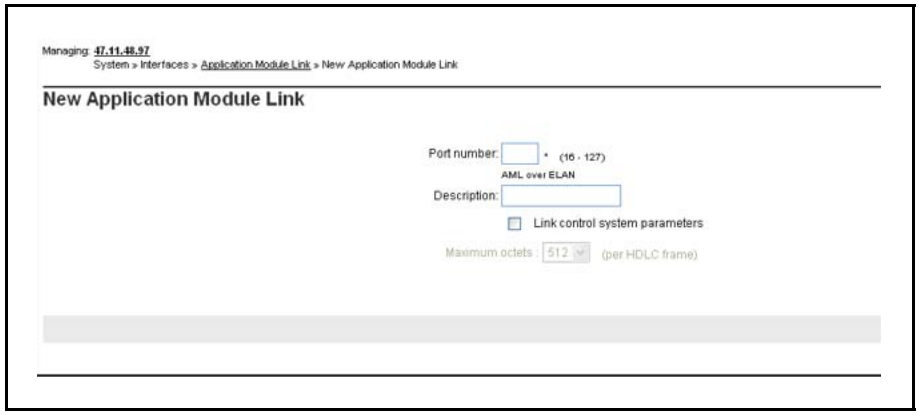


4 On the Application Module Link page, click **Add**.

The New Application Module Link page appears.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 11
New Application Module Link page



5 On the New Application Module Link page, in the Port number field, enter the port number. The Presence Publisher service uses ports 32 to 127.

6 In the Description field, enter a description for the AML.

7 Select the Link control system parameters check box to enable the Maximum octets list.

8 Click **Save**.

--End--

Configure VAS ID for AML link

Every AML over ELAN link configured on the CS 1000 system requires a Value Added Server (VAS) ID for the AML messages to be sent. Use the following overlay commands to associate a Value Added Server (VAS) with AML over ELAN.

Procedure 5
Configuring VAS ID association with AML over ELAN link

Step	Action
1	In the navigation pane, select **System > Interfaces > Value Added Server**.
2	On the Value Added Server page, click **Add**.
3	On the Add Value Added Server page, click Ethernet LAN Link.
4	On the Ethernet Link page, in the Value Added Server ID field, enter the ID of the VAS.
5	From the Ethernet LAN Link list, select the link number.
6	Ensure the Application Security check box is cleared.

Copyright © 2009 Nortel Networks. All Rights Reserved.

7 To enter a time interval for checking the link for overload (in 5 second increments), ensure that 1 is selected in the Interval list.

8 Ensure that the Message Count Threshold field is 9999 (the default value).

9 Click **Save**.

--End--

Configure ACD DN and CDN

The following CLI commands are used to configure ACD DN and CDN on the Call Server.

Table 2
LD 23 Configure ACD DN

Command/Prompt	Command/User Response(s)	Description
REQ	New	New ACD
TYPE	ACD	
CUST	custNum	Customer number
ACDN	Xxxx	An ACD DN to be used when configuring CDN
MAXP	10	Maximum position for ACD DN queue

Table 3
LD 23 Configure CDN

Command/Prompt	Command/User Response(s)	Description
REQ	New	New CDN
TYPE	CDN	
CUST	custNum	Customer number
CDN		CDN number to be used by Presence Publisher. ***Note:*** This CDN is used as the PSDN for each subscriber.
CDSQ	Yes	Needs to be yes, so the presence activity is sent to Presence Publisher
DFDN	Xxxx	ACD DN configured in the Configure ACD DN procedure above

Configure Signaling Server Presence Publisher

The attributes for the Presence Publisher service are configured using IP Node configuration workflow available under CS 1000 Element Manager in UCM.

Copyright © 2009 Nortel Networks. All Rights Reserved.

A new option known as Presence Publisher is available in the IP Node Add configuration page. It is possible to select any combination of service other than SIP Line with Presence Publisher.

Activate the Presence Publisher in Element Manager for an existing node

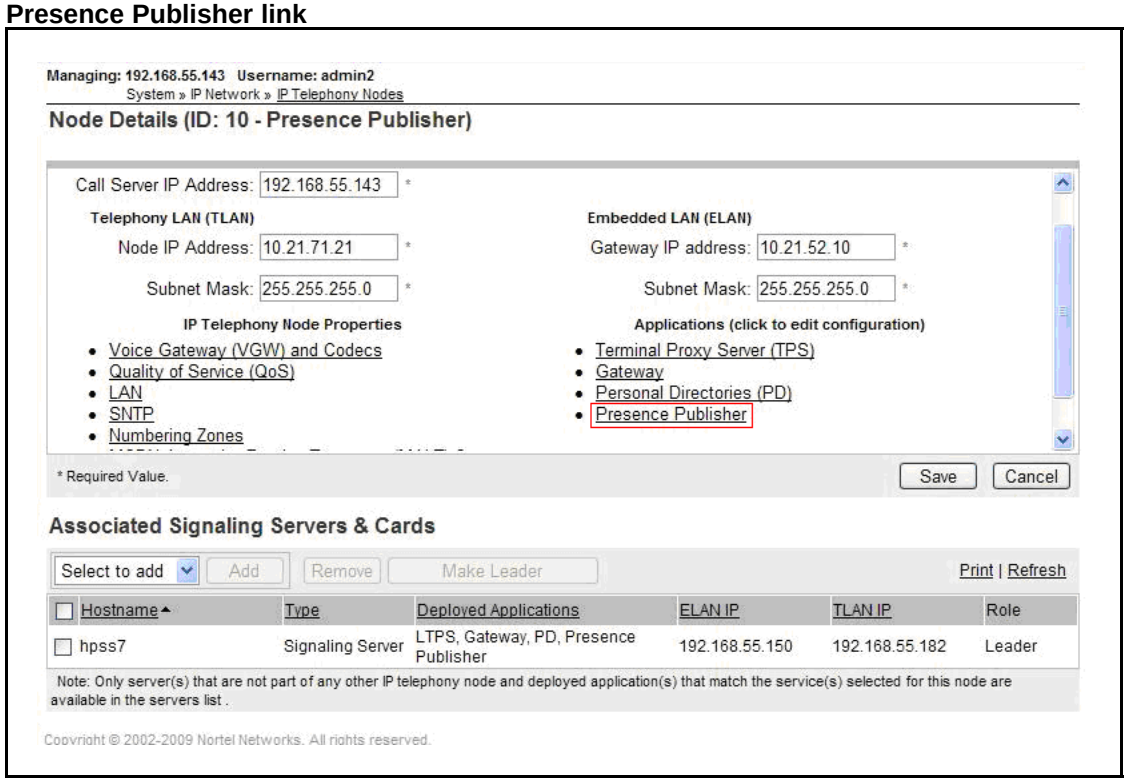
For an existing node, Presence Publisher service can be enabled by editing the node. The Presence Publisher link helps in turning on the Presence Publisher service on the servers that are part of this node.

Procedure 6
Activating the Presence Publisher in Element Manager for an existing node

Step	Action
1	Log on to UCM with appropriate credentials.
2	Select the Element Manager to configure from the list of elements.
3	In Element Manager, select **IP Network**, **Node: Servers, Media Cards** . The IP Telephony Nodes page appears.
4	Select the node to which you are adding Presence Publisher.
5	Click the Presence Publisher link as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 12
Presence Publisher link

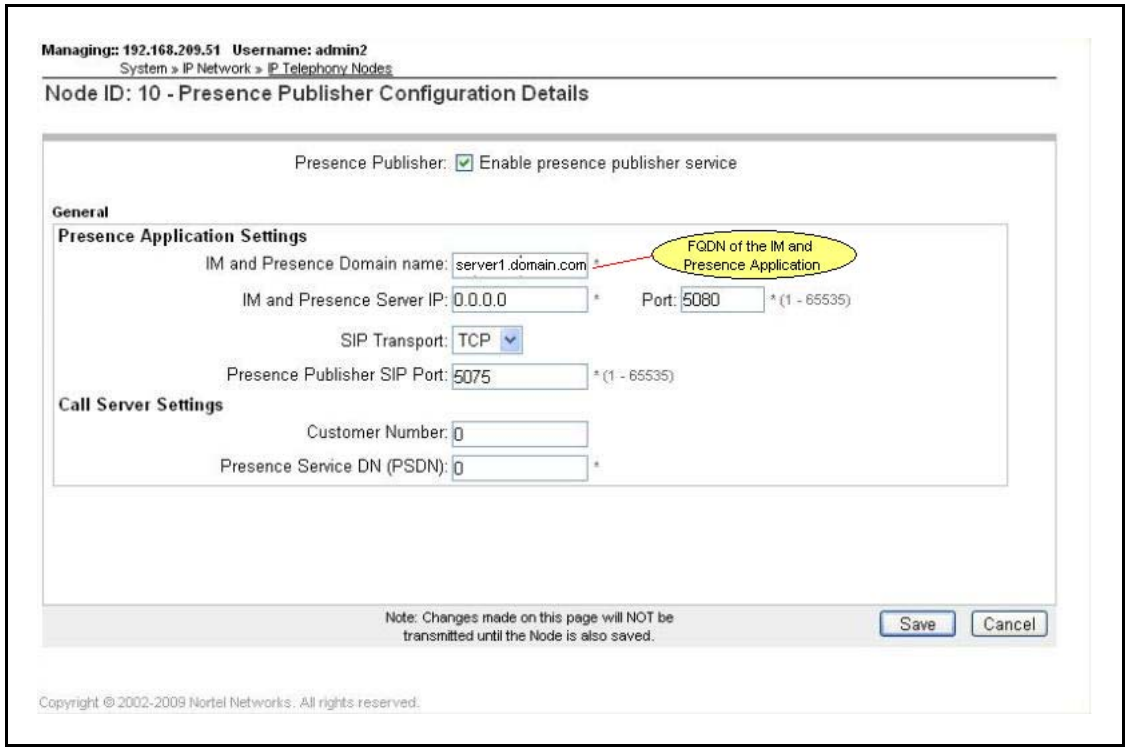


The Presence Publisher Configuration Details page appears.

6 Enter the attributes that are required for Presence Publisher in the appropriate fields as shown in, Figure 13 "Presence Publisher Configuration Details page " (page 33).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 13
Presence Publisher Configuration Details page



Note: The IM and Presence Domain name is the FQDN of the IM and Presence Application.

7 Click **Save**.

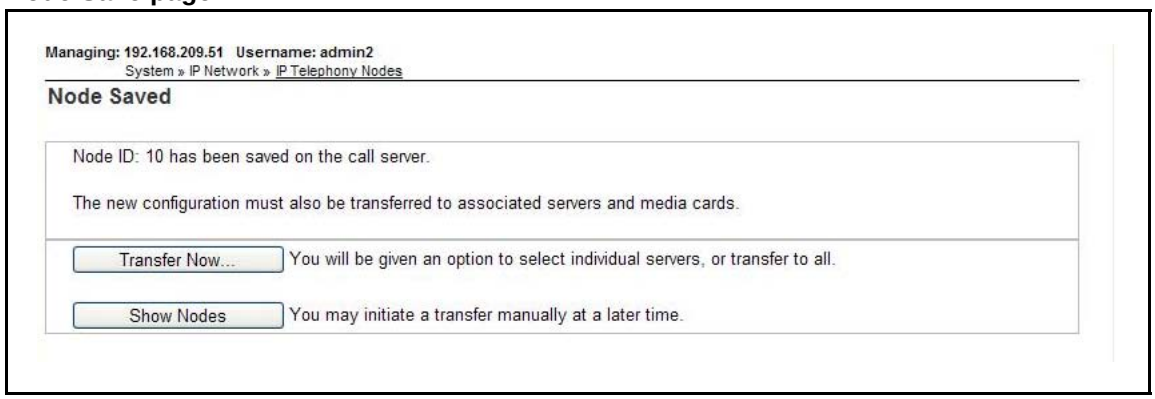
You are returned to the **Node Details** page.

Note: Changes made on this page will NOT be transmitted until the Node is also saved.

8 Click **Save** on the **Node Details** page.

The **Node Saved** page appears as shown in the following figure.

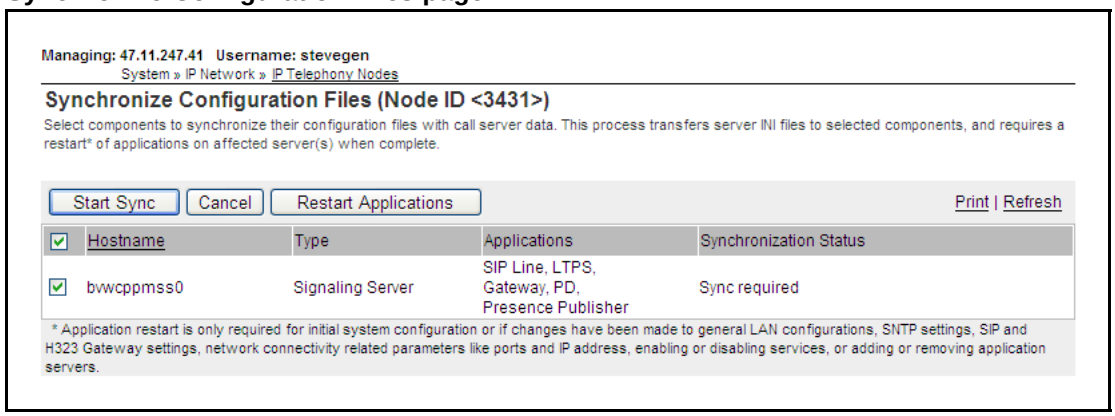
Figure 14
Node Save page



Copyright © 2009 Nortel Networks. All Rights Reserved.

9	Click **Transfer Now**. The **Synchronize Configuration File** page appears as shown in Figure 15 "Synchronize Configuration Files page" (page 34).
10	Click **Start Sync** to transfer the node to the signaling server. Synchronization Status changes to **Sync in Progress** and then to **Synchronized** when complete. Click **Restart Applications** to start the Presence Publisher service on the designated server.

Figure 15
Synchronize Configuration Files page



--End--

Activate Presence Publisher service for a new node

To activate the Presence Publisher service, complete Procedure 7 “Activating Presence Publisher service for a new node” (page 34).

Procedure 7
Activating Presence Publisher service for a new node

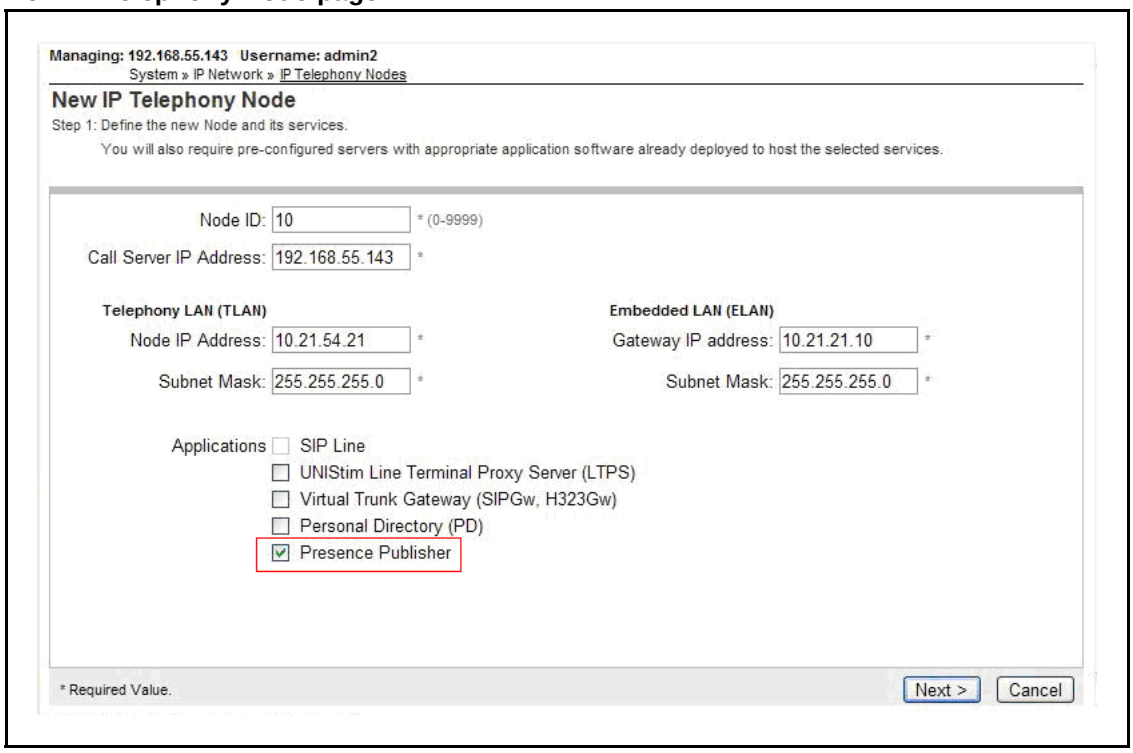
Step	Action
1	Log on to UCM with appropriate credentials.
2	Select the Element Manager to configure from the list of elements.
3	In Element Manager, select **IP Network**, **Node: Servers, Media Cards** . The IP Telephony Nodes page appears.
4	Click **Add.** The New IP Telephony Node page appears.

Copyright © 2009 Nortel Networks. All Rights Reserved.

5 Enter the mandatory parameters such as Node ID and IP addresses. Refer to *Signaling Server IP Line Applications Fundamentals* (NN43001-125).

6 Select **Presence Publisher** as shown in, Figure 16 "New IP Telephony Node page" (page 35).

Figure 16
New IP Telephony Node page



7 Click **Next**.

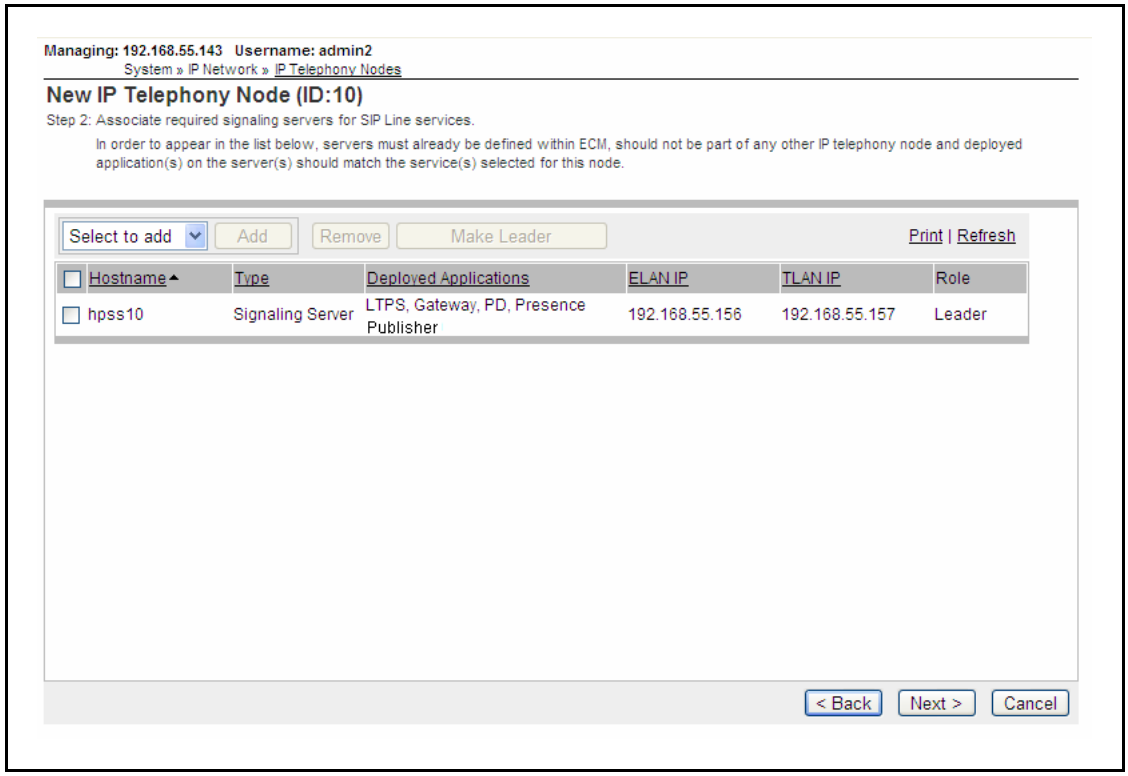
The New IP Telephony Node page - Step 2 appears as shown, Figure 17 "New IP Telephony Node page - Step 2" (page 36).

8 Configure the following parameters for the new node.

- a. From the **Select to add** list, select the Signaling Server.
- b. Select the check box next to the signaling server, and select **Make Leader**.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 17
New IP Telephony Node page - Step 2



9 Click **Next**.

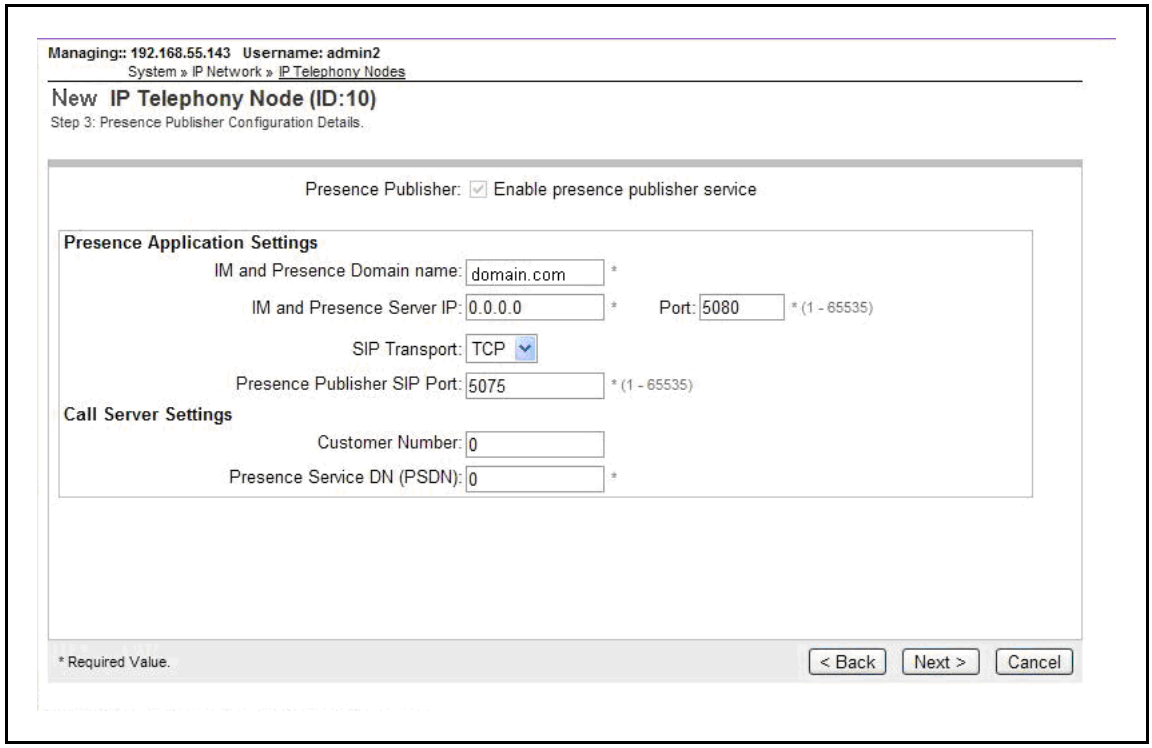
The New IP Telephony Node page - Step 3 appears.

10 Enter the attributes that are required for Presence Publisher in the appropriate fields as shown in, Figure 18 " New IP Telephony Node page - Step 3" (page 37).

Note: The IM and Presence Domain name is the FQDN of the IM and Presence Application.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 18
New IP Telephony Node page - Step 3

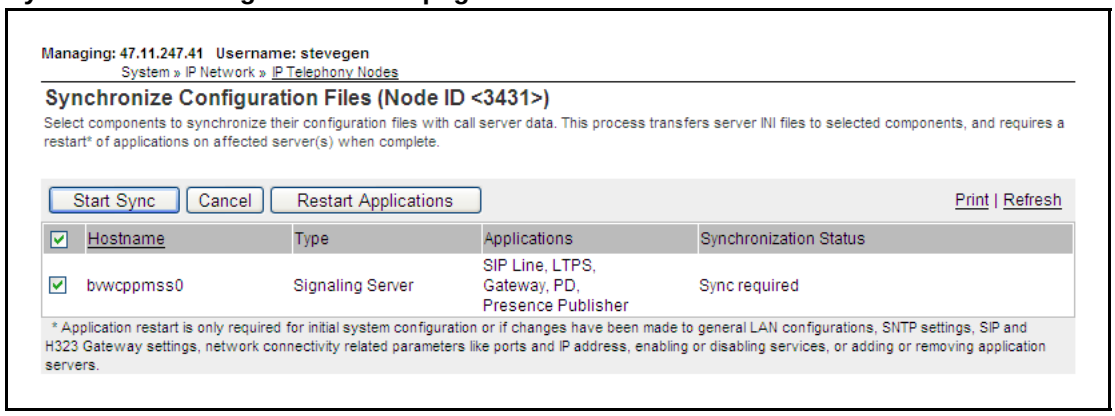


11 Click **Next**.

12 Click **Start Sync** to transfer the node to the signaling server.

Click **Restart Applications** to start the Presence Publisher service on the designated server.

Figure 19
Synchronize Configuration Files page



--End--

Copyright © 2009 Nortel Networks. All Rights Reserved.

Provision new COTS2 with Linux base

The minimum requirement for the CS 1000 IM and Presence Application server is a CS 1000 Release 6.0 COTS2, either a NTDW41AAE6 Dell R300 or NTDW40AAE5 IBM x3350.

Use the IM and Presence Media kit to provision a COTS2 with Linux base refer to *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

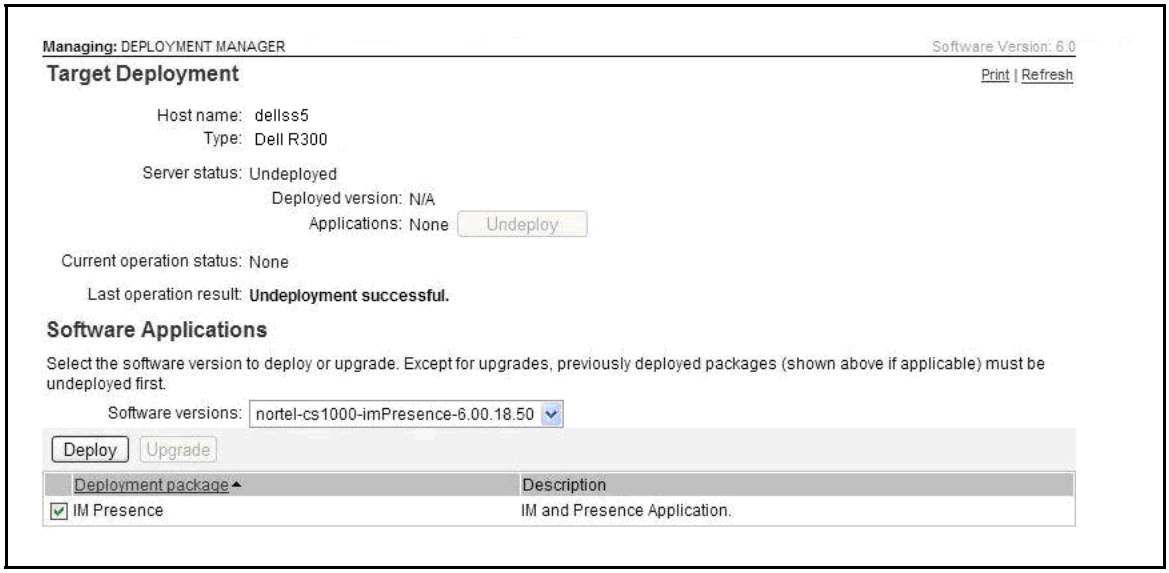
Deploy and configure IM and Presence Application on new COTS2 server

The IM and Presence package is available under the Unified Communications Management (UCM) Deployment Manager.

Procedure 8
Deploying the IM and Presence Application package

Step	Action
1	Log on to UCM with appropriate credentials.
2	In the navigation pane, click **Network**, **CS 1000 Servers**, **Software Deployment**. The Deployment Manager page appears as shown in Figure 20 "Deployment of IM and Presence Application package" (page 38).

Figure 20
Deployment of IM and Presence Application package



3	Select **IM Presence** to deploy the IM and Presence Application package.

Copyright © 2009 Nortel Networks. All Rights Reserved.

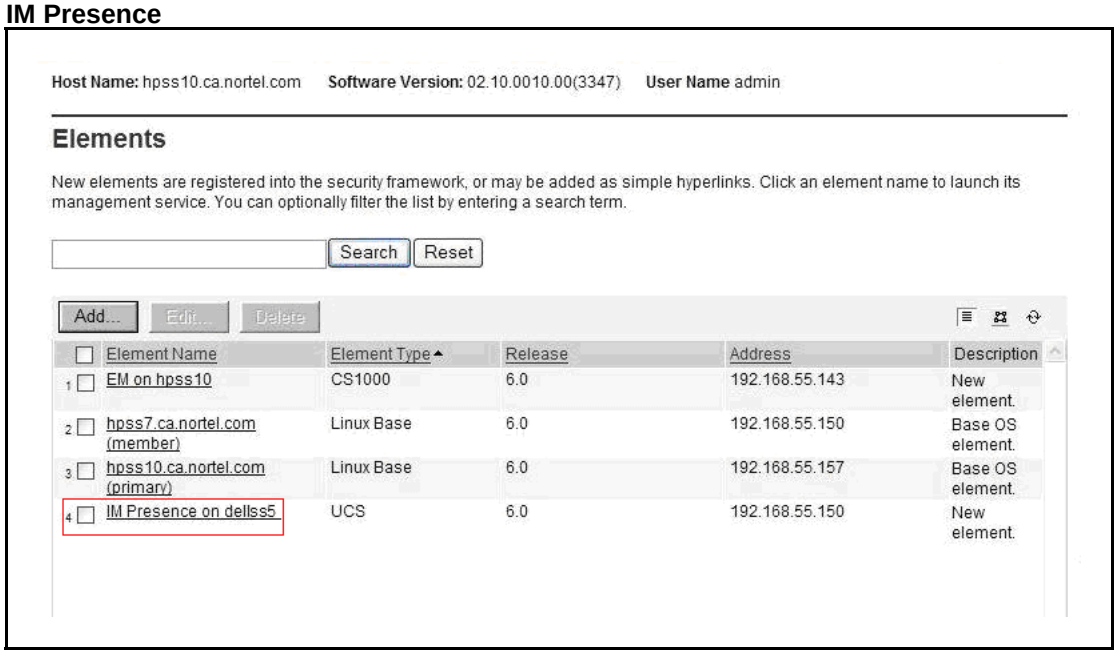
4 Select nortel-cs1000-linux-600XXXX-P100-M00.NAI from the **Software versions** list.

5 Click **Deploy**.

--End--

An IM Presence link is created in the UCM elements page, as shown in Figure 21 "IM Presence" (page 39). This link is used to configure the IM and Presence server.

Figure 21
IM Presence



For more information about UCM and Deployment Manager refer to *Unified Communications Management* (NN43001-116) and *Linux Platform Base and Applications Installation and Commissioning* (NN43001-315).

Configure the domain of the IM and Presence server

The Extensible Messaging and Presence Protocol (XMPP) domain is the domain serviced by the Instant Messaging and Presence Application.

The domain configured for the IM and Presence server is used when adding a new XMPP account for the IPSP 3456 client. See Procedure 18 “Configuring the IPSP 3456 to use the IM and Presence Application” (page 74).

To configure the XMPP Domain for the IM and Presence Application, connect to the IM & Presence Server CLI as Nortel and follow the following CLI commands:

Copyright © 2009 Nortel Networks. All Rights Reserved.

```
cd /opt/nortel/openfire/bin
./updateXmppDomain.sh <domain.com>
```

For example:

```
./updateXmppDomain presexample.com
```

A confirmation that the XMPP domain had been updated appears as follows:

```
Setting XMPP Domain to "domain.name"
The XMPP Domain was updated successfully
A restart of the openfire application is required in order for
this change to take effect.
```

To restart the application enter the following CLI command:

```
appstart openfire restart
```

Configure SIP Presence Service

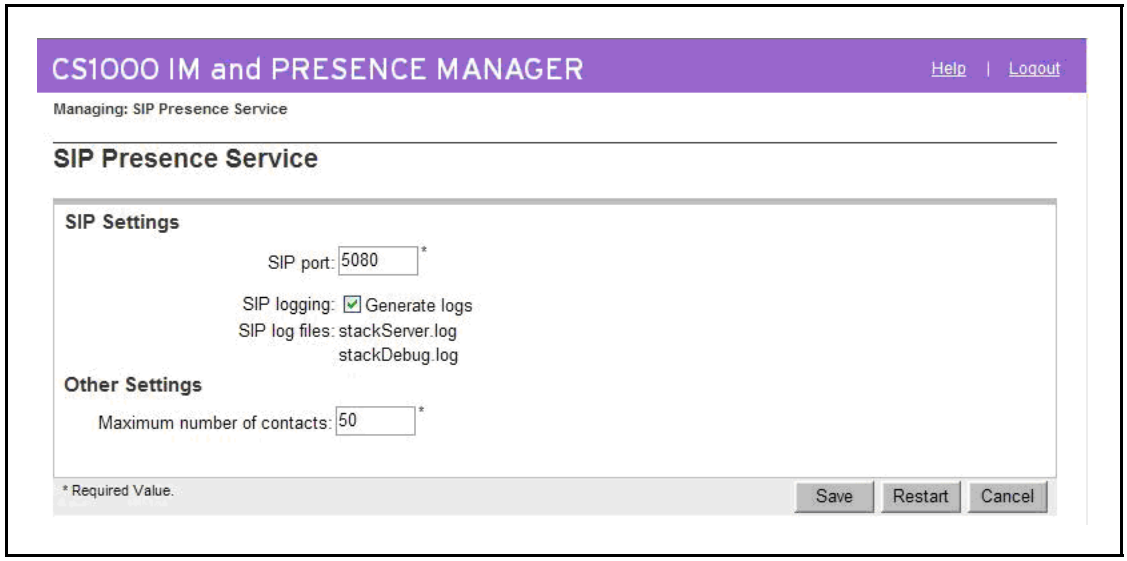
The SIP Presence Service configuration is done using the SIP Presence Service page.

Procedure 9
Configuring SIP Presence Service

Step	Action
1	Click the **IM Presence** link from UCM elements page to open the SIP Presence Service page, as shown in Figure 21 "IM Presence" (page 39). The IM and Presence Manager opens displaying the SIP Presence Service page, as shown in Figure 22 "CS1000 IM and Presence Manager" (page 41).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 22
CS1000 IM and Presence Manager



2 Enter the SIP port value.

The recommended and default value for the SIP port is 5080.

3 To generate log files enable the SIP logging.

4 Enter the maximum number of contacts for each user.

The default value is 50 for the number of contacts for each user.

5 Click **Save**.

6 The IM and Presence configuration is saved to nt1k_config.xml and read during the startup. Click **Restart** to restart IM and Presence server.

--End--

Configure existing subscriber accounts with IM and Presence capability

The administrator configures a subscriber's IM and Presence attributes using Subscriber Manager. The profile information added provides the user with information about the contact. The mapping between Subscriber Manager fields and CS 1000 IM and Presence Web Tool Profile fields can be found in the following table.

Copyright © 2009 Nortel Networks. All Rights Reserved.

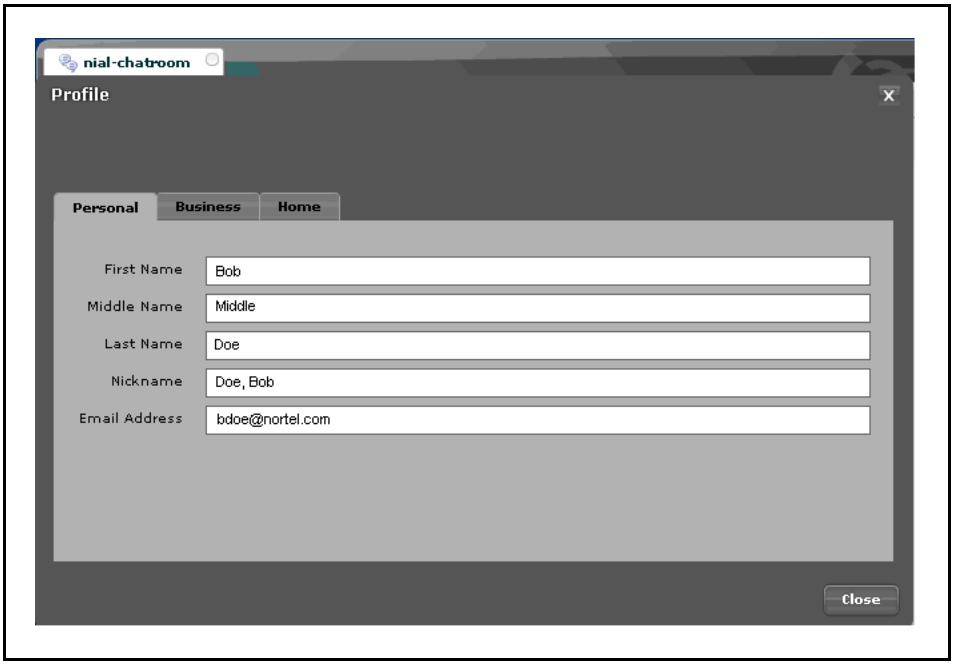
Table 4
User Profile information mapped from Subscriber Manager to CS 1000 IM and Presence Web Tool

Subscriber Manager		CS 1000 Instant Messaging and Presence Web Tool - Profile	
Section	**Field**	**Tab**	**Field**
Identification	First name	Personal	First Name
Identification	Middle name	Personal	Middle name
Identification	Last name	Personal	Last name
Identification	Preferred name	Personal	Nickname Name
Address	E-mail	Personal	Email address
Address	Street	Business	Street Address
Address	City	Business	City
Address	Province/State	Business	State/Province
Address	Postal/Zip code	Business	Postal Code
Address	Country	Business	Country
Organization	Company	Business	Company
Directory and Phone Numbers	ESN	Business	Phone
Directory and Phone Numbers	Fax	Business	Fax
Directory and Phone Numbers	Pager	Business	Pager
Directory and Phone Numbers	Cell	Business	Mobile
Directory and Phone Numbers	International	Home	Phone
Unified Communications	Username		JID: username@domain
Unified Communications	Domain		

The following figure shows where the profile information entered in Subscriber Manager maps to in the CS 1000 IM and Presence Tool.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 23
CS 1000 IM and Presence Web Tool profile



Preferred Name

In order for CS 1000 IM and Presence Web Tool searches to work correctly the **Preferred Name** needs to be populated in Subscriber Manager.

Either of two formats is acceptable and the selection of the correct option for your business will be guided by the existing order of the name display feature.

- Lastname, Firstname (Smith, John)
- Firstname LastName (John Smith)

For more information on CS 1000 IM and Presence Web Tool searches, see “Search for a user” (page 61).

To configure a subscriber’s IM and Presence attributes complete the following procedure.

Configure IM and Presence attributes for a subscriber

To configure a subscriber’s IM and Presence attributes complete the following procedure.

Note: This procedure is for an existing subscriber. If you need to add a new subscriber refer to *Subscriber Manager Fundamentals* (NN43001-120).

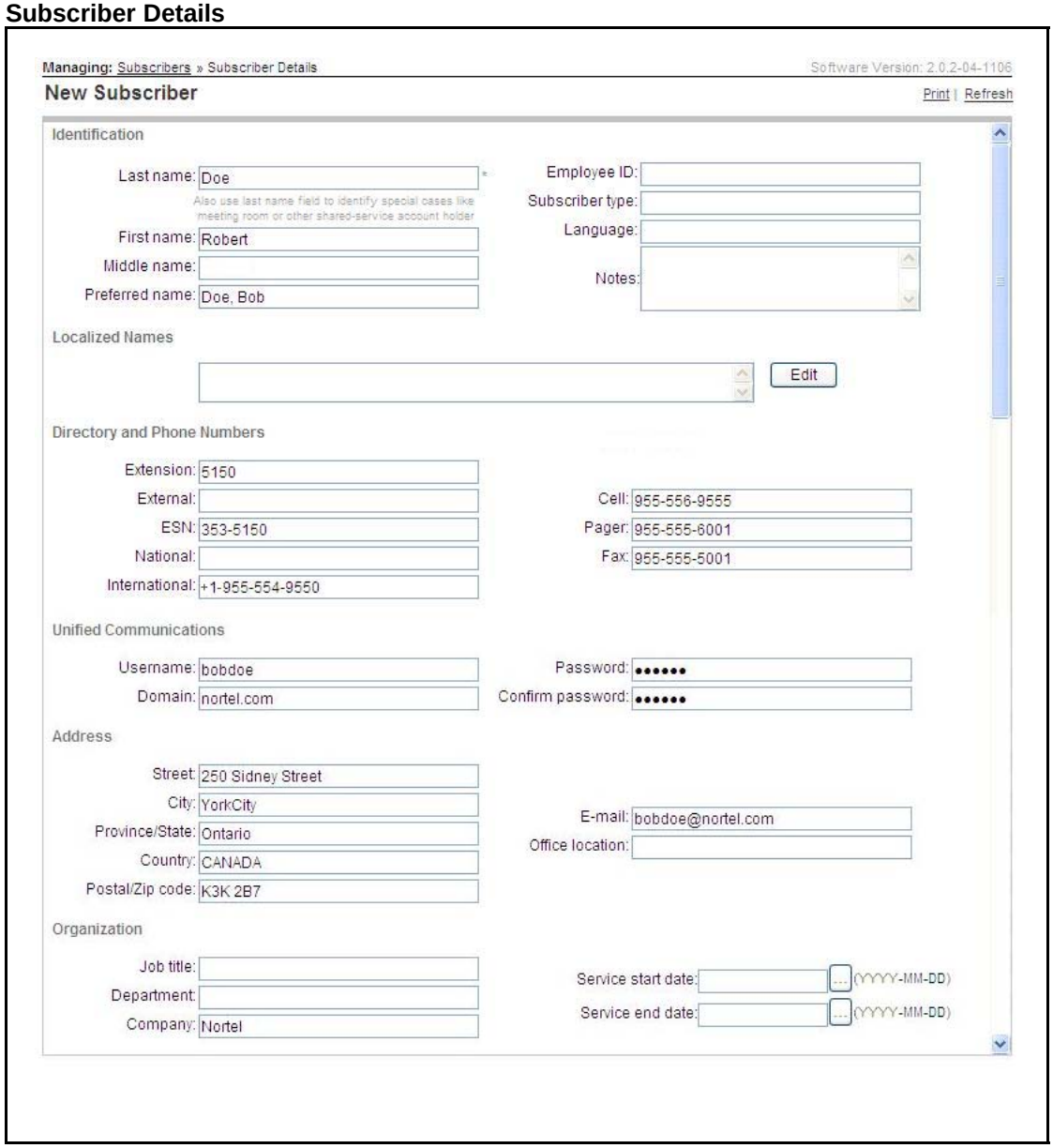
Copyright © 2009 Nortel Networks. All Rights Reserved.

Procedure 10
Configuring IM and Presence attributes for a subscriber

Step	Action
1	Log on to UCM with appropriate credentials.
2	From the UCM Navigator, click **Subscriber Manager**. The Managing Subscribers page opens.
3	Perform a search for the subscriber that you want to provide IM and Presence service.
4	From the **Subscribers found** section, click the subscriber's name. The Subscriber Detail page for the subscriber opens, as shown in Figure 24 "Subscriber Details" (page 45).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 24
Subscriber Details



5 Under the **Identification** section enter a **Preferred Name** to be used by the subscriber.

6 Under the **Unified Communications** section enter a **Username** to be used by the subscriber. The user name must contain alphanumeric characters with no spaces.

7 Enter the **Domain** of the subscriber's IM and Presence Application server (XMPP domain).

8 Enter a password for the subscriber in the **Password** field.

9 Enter the password again in the **Confirm Password** field.

Copyright © 2009 Nortel Networks. All Rights Reserved.

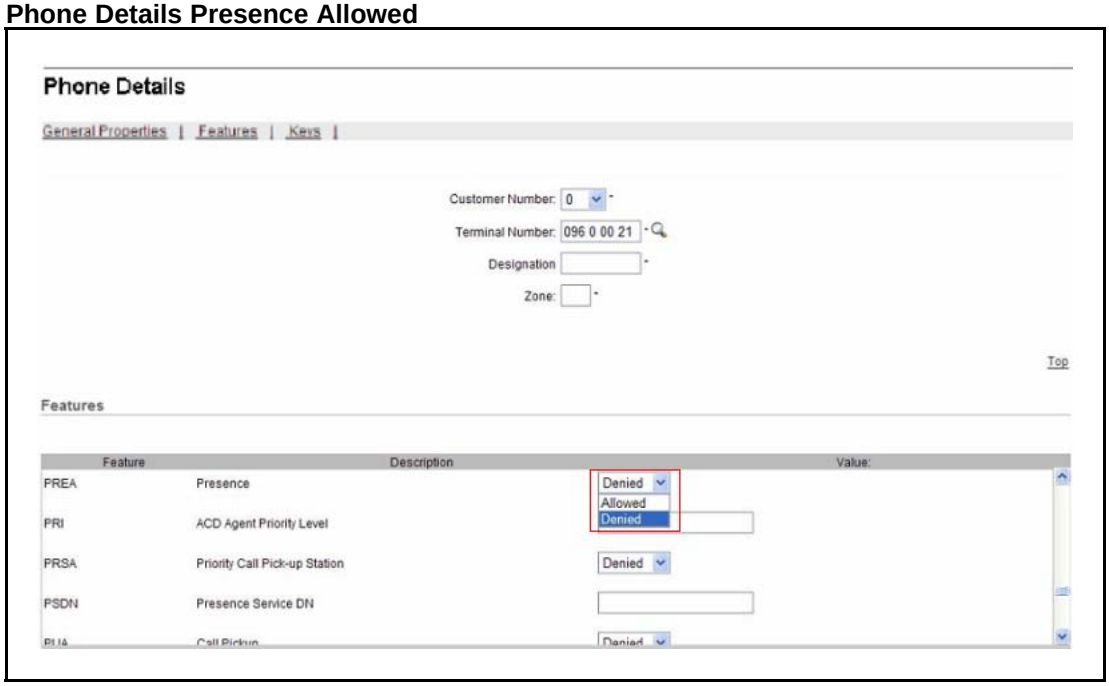
10 Continue to add the profile information for the subscriber. Refer to Table 4 "User Profile information mapped from Subscriber Manager to CS 1000 IM and Presence Web Tool" (page 42).

11 Click **Apply**.

12 To update a telephony account with IM and Presence for a user, click the account link.

Element Manager is launched and the Phone Details page appears, as shown in Figure 25 "Phone Details Presence Allowed" (page 46).

Figure 25
Phone Details Presence Allowed



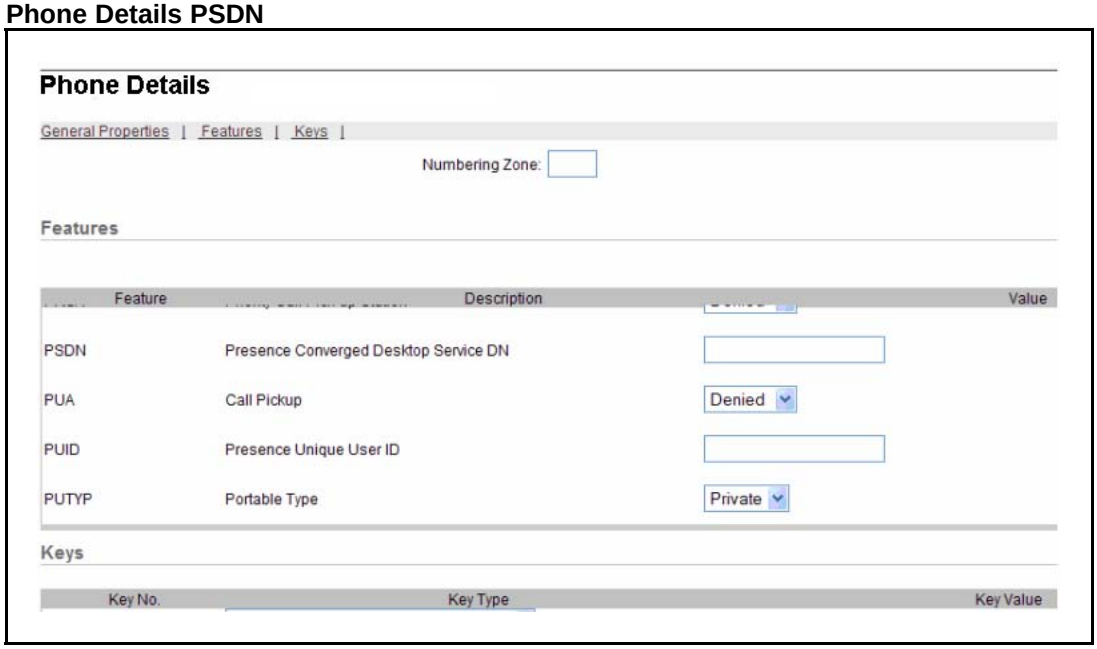
13 Under the Features section scroll to PREA and select **Allowed** from the drop down list, as shown in Figure 25 "Phone Details Presence Allowed" (page 46).

14 Scroll to PSDN (Presence Service DN) and enter the Presence Service DN, as shown in Figure 26 "Phone Details PSDN" (page 47).

The PUID field is the Read-only field and it reflects the user name of the subscriber when the account is added for a subscriber.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 26
Phone Details PSDN



15 Click **Save**.

--End--

For more information about Subscriber Manager, see *Subscriber Manager Fundamentals* (NN43001-120).

Add new telephony accounts using previously created template

If you need to create a new telephony account for a subscriber you can use the template created in "Prepare a new template in Element Manager for new accounts with IM and Presence service" (page 25). For information on adding an account for a subscriber, refer to *Subscriber Manager Fundamentals* (NN43001-120).

Bulk import of accounts for IM and Presence Application

You can use the bulk import option when you are required to add a large number of accounts with IM and Presence service. LDAP synchronization or CSV synchronization tools can be used to populate the user ID and domain fields for the subscriber. However, the password cannot be synchronization in this way. Password must be added manually. For information on bulk import, LDAP synchronization, and CSV synchronization refer to, *Subscriber Manager Fundamentals* (NN43001-120).

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Maintenance

Use the following CLI commands to run maintenance on the IM and Presence Application:

- "Call Server CLI commands" (page 49)
- "Presence Publisher Service CLI commands" (page 50)
- "IM and Presence server commands" (page 54)
- "Call Server Trouble shooting" (page 54)

Call Server CLI commands

It can be useful to turn on the AML trace using LD 48 and see if USM messages get printed for telephones with a PREA Class of Service and a valid PSDN.

The following is an example of an AML trace:

AML trace

--- Turn on AML trace

```
>48

LNK000

.enl msgo 32

.enl msgi 32

ELAN32 O MTYP=1A USM TN=248 0 00 00 TIME=22:28:03
ELAN32 IN 1950E5C9 OUT 00000000 QSIZE 00000000
ELAN32 IN 1950E5C9 OUT 00000000 QSIZE 00000000
ELAN32 00 26 0D 5F 07 1B 08 14 09 16 1C 03
ELAN32 O MTYP=25 POLL TN=0 TIME=22:28:07
ELAN32 IN 19510626 OUT 00000000 QSIZE 00000000
ELAN32 01 08 00 00 00 00 13 25 81
ELAN32 I MTYP=25 POLL TN=0 TIME=22:28:07
ELAN32 IN 19510634 OUT 19510634 QSIZE 00000000
ELAN32 01 08 00 00 00 00 13 25 81
```

--- Turn off AML trace

Copyright © 2009 Nortel Networks. All Rights Reserved.

```
>48
LNK000
.dis msgo 32
.dis msgi 32
```

Presence Publisher Service CLI commands

The following are some useful Presence Integration Service CLI commands.

Presence Publisher Service application status commands

puaAmlShow

Use puaAmlShow to display the status of the AML link.

```
vxShell vtrk puaAmlShow
```

hAppBlk	TaskName	Tid	LinkState	NumRetry	LinkNum	Trace
0x9c5ef8	PUA	0xf300	UP	0	32	0

AML Link Timer:

Not Active.

puaShow

The puaShow commands displays the summary of the Presence Integration Service application. It shows the state of the Presence Integration Service application and the status of the AML link.

puaShow

===== VTRK =====

======== General ========

PUA State = AppReady

===== AML Info =====

hAppBlk	TaskName	Tid	LinkState	NumRetry	LinkNum	Trace
0x9c5ef8	PUA	0xf300	UP	0	32	0

AML Link Timer:

Not Active.

puaConfigShow

Use the command puaonfigShow to display the configuration of the Presence Integration Service application.

puaConfigShow

===== VTRK =====

Copyright © 2009 Nortel Networks. All Rights Reserved.

Service Domain : testbed1.com

Primary Presence Server : 47.11.113.209:5080:UDP

Secondary Presence Server : 0.0.0.0:0:UDP

Local SIP Port : 5075

Local TLS Port : 5076

Customer Number : 0

CDN Number : 2060

Presence Publisher Service application trace commands

puaAmlTrace

Use puaAMLTrace to run a Presence Integration Service application trace. The most practical level to set the trace is 5. This enables message printing and full decoding. To turn off AML trace, use level 0.

The logs are captured in /var/log/nortel/ss_common.log file.

```
vxShell vtrk puaAmlTrace 5

Set PUA AML message trace level:  5
value = 0x23 (35)
```

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: Message Type: USM (0x1a)

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: Application : TPS (0x16)

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x37) = ThisPartyTN, Len 0x2, Data = [60 48]

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x36) = ThisPartyDN, Len 0x2, Data = 3124 [31 24]

[05]Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x3b) = ThisPartyDNType, Len 0x1, Data = Internal [08]

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x38) = ThisPartyStatus, Len 0x1, Data = Disconnect [05]

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x96) = CallID, Len 0x4, Data = [07 65 4e 02]

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0xf2) = UserId, Len 0xf, Data = 3124@NORTEL.COM [33 31 32 34 40 4e 4f 52 54 45 4c 2e 43 4f 4d]

Aug 28 14:20:38 mhou-cppm vtrk: (INFO) tPUA: IE (0x5f) = EnhancedTimeStamp, Len 0x7, Data = [1c 08 14 09 0e 14 2b]

sipNpmAppDebugSet

Set a global debug field for Presence Integration Service application. The “debugField” is a string name of the debug flag. This trace command is common to all SIPNPM based applications (SSG, SLG, PUA). For the Presence Integration Service application , the most useful one is sipMsgPrint.

Copyright © 2009 Nortel Networks. All Rights Reserved.

For a list of all sipNpmAppDebugSet commands refer to, *SIP Line Fundamentals* (NN43001-508).

```
vxshell> vtrk sipNpmAppDebugSet tPUA sipMsgPrint 1

sipMsgPrint changed from 0 to 1
value = 0x0 (0)
```

sipNpmAppDataShow

Use sipNpmAppDataShow to print details of an SIPNPM-based application data.

```
vxshell> vtrk sipNpmAppDataShow tPUA 5

Application = tPUA, tid = 0x8aa6a40, Category = 0xf300
MsgQId = 0xf3, MsgType = 0xf300, MsgQSize = 30000, MsgQFD=0x10
GlobalData Address=0xa0ba30, CallBackData Address=0xa116cc
tPUA -- StatusData Address = 0xa0639c
appInitialized = yes
appStop = no
stackInitialized = yes
proxyRegistered = no
tPUA -- DebugData Address = 0xa063ac
rvLogFile = 0
rvLogConsole = 0
sipMsgMonOut = 0
sipMsgMonIn = 0
sipMsgPrint = 1
sipCallTraceMsgDetailOn = 0
keepAliveMsgPrint = 0
keepAliveSupport = 1
prackSupport = 0
enable415 = 0
test415 = 0
gen415Allowed = 0
infoSupport = 0
mcdnUpdate = 0
mcdnDebug = 0
esn5Debug = 0
loopbackSupport = 0
maskLoopCode = 0
optionSupport = 0
renegotiationFlag = 0
sdptDebug = 0
sslConnectionDebug = 0
regTrace = 0
sniffPrint = 0
snifferFilter = ::0
tcpPersistency = 1
SDescLevel = 7
mediaTestLogLevel = 7
```


Copyright © 2009 Nortel Networks. All Rights Reserved.

```
eventLogLevel = 7
forkingLogLevel = 7
keepAliveLogLevel = 7
tlsLogLevel = 7
tlsRenegotiateLogLevel = 7
traceID = -1
acpDebug = 0
maltDebug = 7
mediaTestMode = 0
mediaTestNoCodecRetry = 0
tPUA -- ConfigData Address = 0xa06658
Domain = testbed1.com
Local Port = 5075
RvSipStackCfg = 0xa0b668
RvSdpStackCfg = 0xa0b9ac
RvSipMidCfg = 0xa0b9bc
tPUA -- StackData Address = 0xa0b9ec
RvSipStackHandle = 0x8acd674
RvSipMsgMgrHandle = 0x8acf4c4
RvSipCallLegMgrHandle = 0x8ccae5c
RvSipTransportMgrHandle = 0x8acf52c
RvSipTransmitterMgrHandle = 0x8cc0aa4
RvSipSubsMgrHandle = 0x8cf8974
RvSipMidMgrHandle = 0x8cfdccc
RvSipTranscMgrHandle = 0x8cc0d3c
HRPOOL = 0x8234044
RV_LOG_Handle = 0x8acd888
RV Log file = /var/log/nortel/RvSipPua.log
tPUA -- GlobalData Address = 0xa0ba30
tPUA -- CallBack Functions = 0xa116cc
appMsgHandler = 0x6fe39b
cardEventHandler = 0x6fe47f
configParaGet = 0x701281
tlsConfigGet = (nil)
appInit = 0x6fe34d
appShutdown = 0x6fe37a
stackCallbackSet = (nil)
sipUriCreate = (nil)
sipSessionDel = (nil)
callLegStateChgEv = (nil)
callLegMsgToSendEv = (nil)
transactionStateChangedEv = 0x6ffb88
NameToNumConvert = (nil)
IsReInviteSendAllowed = (nil)
callLegReferStateChgEv = (nil)
callLegModifyStateChgEv = (nil)
reInviteAnswerSent = (nil)
audioCapHandler = (nil)
sendAcsUiFwdSdp = (nil)
earlyMediaUpdateSend = (nil)
delayRetrieveHandler = (nil)
```


Copyright © 2009 Nortel Networks. All Rights Reserved.

```
value = 0x0 (0)
```

IM and Presence server commands

Start/Stop/Restart or check status of Presence server process

appstart openfire start | stop | restart | status

Unified Communication (Presence) server files location

The following is a list of the file location for IM and Presence Application server files:

- Log files location: /opt/nortel/openfire/logs
- Config file location: /opt/nortel/openfire/conf

Presence server traces

SIP message traces

There are 2 ways to get SIP message traces on the presence server:

- Use Wireshark
- Get the SIP log file on Unified Communication (Presence) server (for file location, check the server configuration page)

XMPP message traces

There are 2 ways to get XMPP message traces on the Unified Communication (Presence) server:

- Use Wireshark
- Enable the debug log on the Unified Communication (Presence) server, logs are available at /opt/nortel/openfire/logs.

Call Server Trouble shooting

The following are some suggested areas to investigate when trouble shooting.

AML link is not up

Is ELAN AML properly configured? : Print AML link configuration in LD 22.

Example output

```
>LD 22

PT2000
MARP NOT ACTIVATED
    REQ prt

    TYPE adan elan
```


Copyright © 2009 Nortel Networks. All Rights Reserved.

```
ADAN ELAN 32
CTYP ELAN
DES elan_slg
N1 512
ADAN ELAN 33
CTYP ELAN
DES SIPL
N1 512
ADAN ELAN 34
CTYP ELAN
DES AMLCD
N1 512
```

Is ELAN AML properly configured? : Print AML link configuration in LD 22.

Example output

LD 23

```
ACD000
MEM AVAIL: (U/P): 48592002 USED U P: 2864309 173766 TOT:
51630077
DISK SPACE NEEDED: 254 KBYTES
ACD DNS AVAIL: 23991 USED: 9 TOT: 24000
```

REQ **prt**

TYPE **cdn**

CUST **0**

CDN **<CR> Carriage Return**

```
TYPE CDN
CUST 0
CDN 2070
FRRT
SRRT
FROA NO
UUI NO
MURT
CDSQ NO
NAME NO
CMB NO
CEIL 2047
OVFL NO
TDNS NO
RPRT YES
AACQ YES
ASID 17
SFNB 16 17 18 19 21 22 23
USFB
```


Copyright © 2009 Nortel Networks. All Rights Reserved.

```
CALB 0 1 2 3 4 5 6 7 8 9 10 11 12
CNTL YES
VSID
HSID
CWTH 1
BYTH 0
OVTH 2047
STIO
TSFT 20
```

Does the CDN/PSDN configured on CS match the one in the Presence Publisher configuration? : Check Presence Publisher Configuration page on Element Manager.

Presence is not updated when a telephone makes a call

- Is CLS PREA configured for the set? : Print set configuration in LD 10 / LD 11, or in Element Manager.
- Is PSDN properly configured for the set? : Print set configuration in LD 10 / LD 11, or in Element Manager.
- Is PUID configured properly for the set? : Print set configuration in LD 10 / LD 11, or in Element Manager.
- Are USM messages sent from CS? : Enable AML traces in LD 48. See “Call Server CLI commands” (page 49).
- Are USM messages received on the Presence Publisher Server? : Run puaAmlTrace 5. See “Presence Publisher Service application trace commands” (page 51).
- Are PUBLISH messages sent from the Presence Publisher Server? : Run sipNpmAppDebugSet tPUA sipMsgPrint 1, or pcap start/stop, or wireshark on the Presence Publisher Server.
- Are PUBLISH messages received on the IM and Presence server? Run wireshark on the IM & Presence Application server.

Copyright © 2009 Nortel Networks. All Rights Reserved.

CS 1000 Instant Messaging and Presence Web Tool

The following is a guide to accessing and using the CS 1000 Instant Messaging (IM) and Presence Web Tool.

The CS 1000 IM and Presence Web Tool provides you with the ability to:

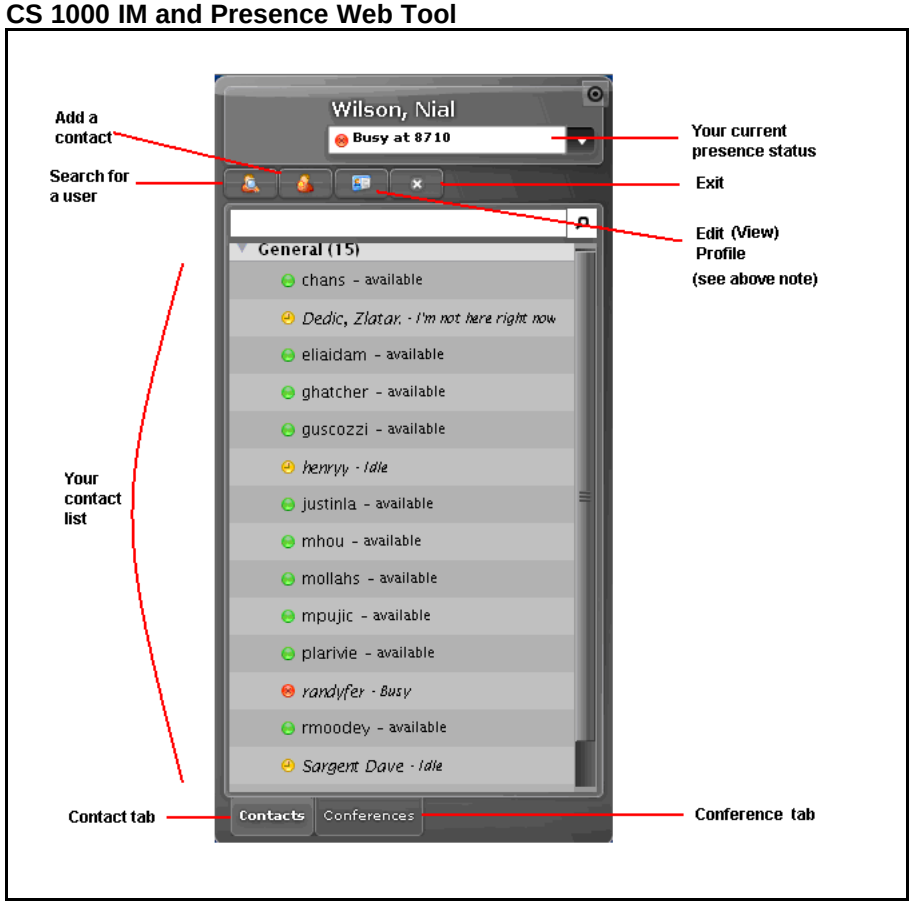
- see the presence status of contacts on your contact list
- set your own presence status
- search for a user on the server
- add a user to your contact list
- start an IM conversation
- create a group chat conference
- edit and organize your contact list

Note: Users can not edit Profiles using the CS 1000 IM and Presence Web Tool. Profiles are administered using Subscriber Manager.

The following figure shows the CS 1000 IM and Presence Web Tool.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 27
CS 1000 IM and Presence Web Tool

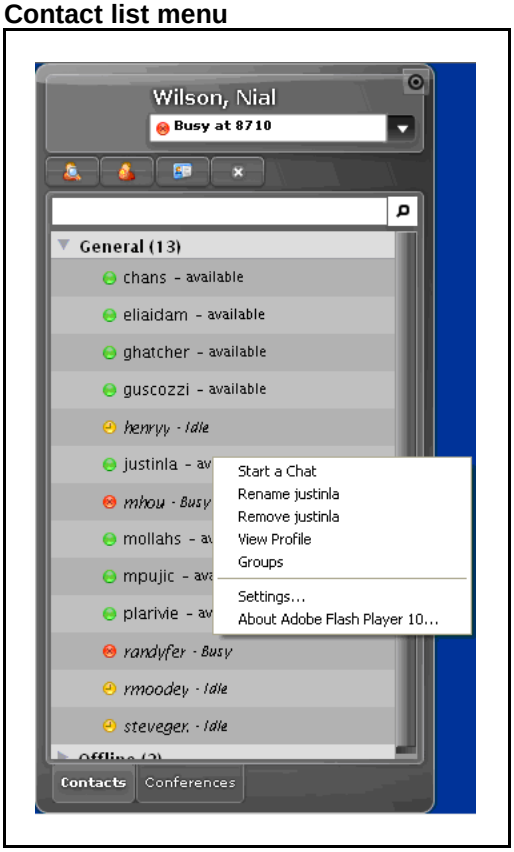


When you right click on a contact in your contact list a menu appears with the following choices:

- Start a chat: opens the chat window
- Rename <contact>: change the nickname of the contact
- Remove <contact>: unsubscribe to a user
- View Profile: view a contact's profile
- Groups: move selected contact into a group

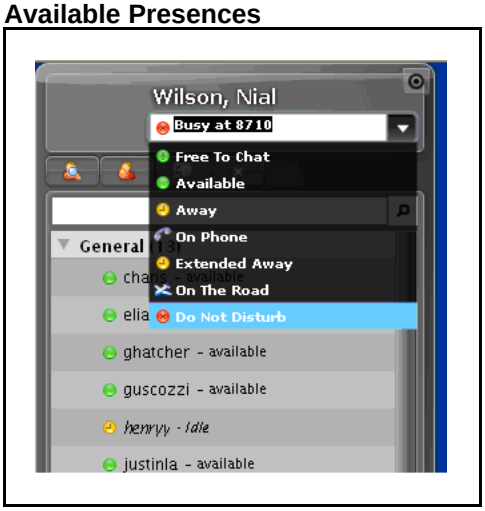
Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 28
Contact list menu



The CS 1000 IM and Presence Web Tool supports the following presences.

Figure 29
Available Presences



Copyright © 2009 Nortel Networks. All Rights Reserved.

Logon to the CS 1000 Instant Messaging and Presence Web Tool

Complete the following procedure to logon to the CS 1000 IM and Presence Web Tool.

Procedure 11
Logging on to the CS 1000 IM and Presence Web Tool

Step	Action
1	To logon to your CS 1000 IM and Presence Tool open your web browser and enter http://<IM/Presence Server FQDN>:9090/sparkweb. For example, http://imptrial.ca.nortel.com:9090/sparkweb/ The CS 1000 IM and Presence Web Tool logon screen appears.

Figure 30
Logon page

2	Enter your user name and password.
3	Click **Login**. The CS 1000 IM and Presence Web Tool appears. If this is the first time using the CS 1000 IM and Presence Web Tool your contact list is empty and your profile is not completed.

--End--

Adding a contact

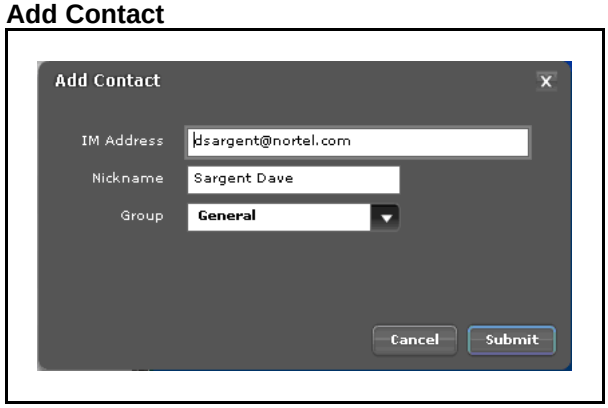
To add a user to your contact list complete the following procedure.

Procedure 12
Adding a contact

Step	Action
1	Click the **Add** button. The **Add Contact** page appears as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 31
Add Contact



2 Enter the user name in the IM address and press **tab**. You need only enter the user name since the IM/Presence server domain Name is automatically filled.

3 (Optional) You can change the current nickname of the contact to a new nickname.

4 To organize your new contact in a group, select a group from the **Group** drop down menu.

5 Click **Submit**.

--End--

Search for a user

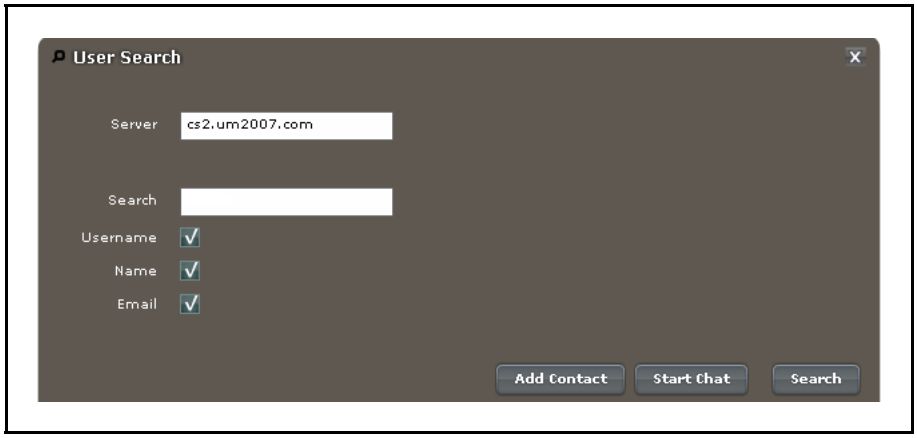
Your CS 1000 IM and Presence Web Tool provides the functionality to search for any user in the IM/Presence Server.

Procedure 13
Searching for a user

Step	Action
1	To search for a user click the search button of the CS 1000 IM and Presence Web Tool. Search page appears as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 32
User Search step 1



2 To search for a user, enter either a user name, name, or e-mail in the **Search** field.

OR

The CS 1000 IM and Presence Web Tool supports the use of wildcards in the search string. To search for a user who's username, name, or e-mail begins with a search string enter <searchstring>* (for example, Dave*), as shown in Figure 33 "User Search step 2" (page 63).

To search for a user who's username, name, or e-mail contains the search string enter *<searchstring>, as shown in Figure 34 "User Search using wildcard" (page 63).

3 Click **Search**.

4 A list of users matching the search criteria is provided as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 33
User Search step 2

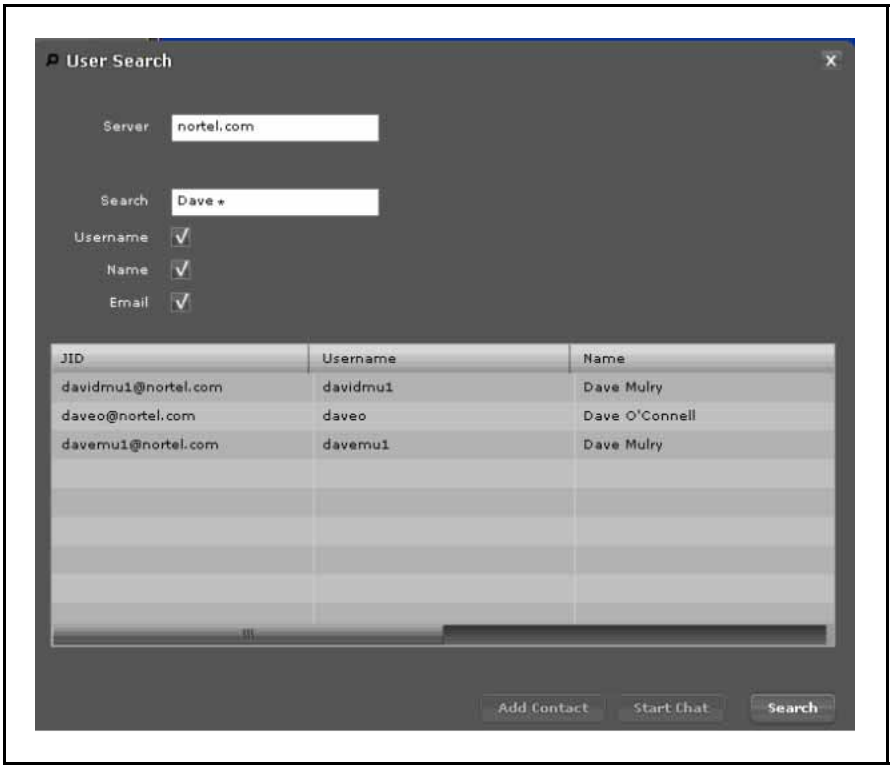
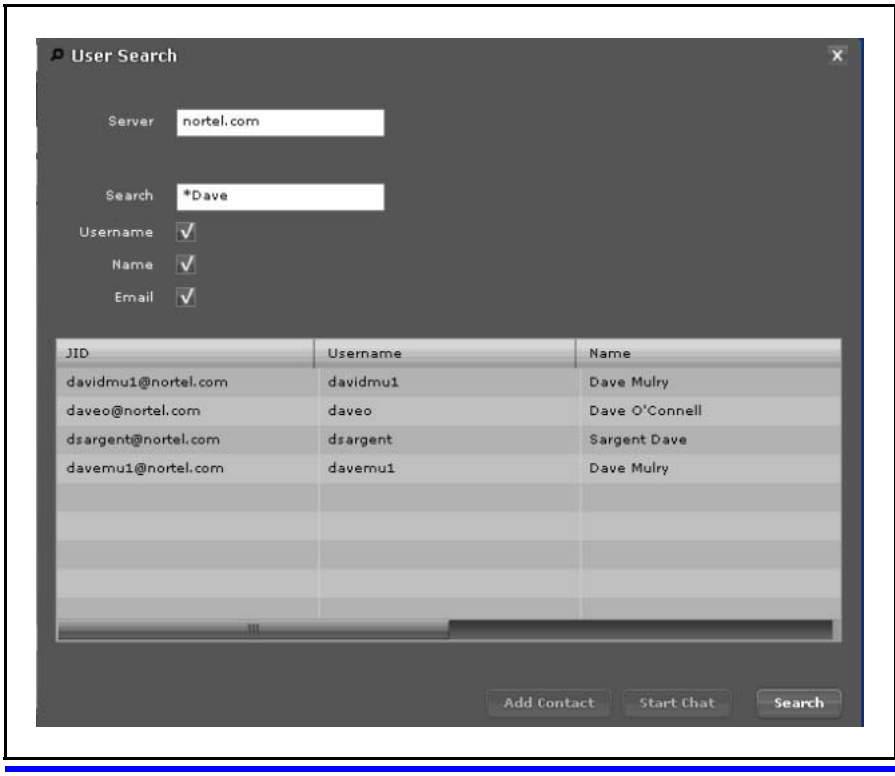


Figure 34
User Search using wildcard



Copyright © 2009 Nortel Networks. All Rights Reserved.

5 If you want to add the user to your contact list, select the user and click **Add Contact**.

6 If you want to start an IM conversation with the user, select the user and click **Start Chat**.

A chat window will open on the right side of the contact list.

--End--

The following table displays the mapping of the search parameters for the CS 1000 Instant Messaging and Presence Web Tool.

Table 5
Mapping of the CS 1000 Instant Messaging and Presence Web Tool search parameters

CS 1000 Instant Messaging and Presence Web Tool	Subscriber Manager	
Search Parameter	**Section**	**Field**
Username	Unified Communications	Username
Name	Personal	Name
E-mail	Personal	E-mail

Add a contact to a group

To organize your contact list into groups, complete the following procedure.

Procedure 14
Adding a contact to a group

Step	Action
1	Select a contact from your contact list and right click the name.
2	Select **Groups** from the menu. The Groups page opens.

Copyright © 2009 Nortel Networks. All Rights Reserved.

3	Select the group(s) to which you want the contact to belong or add a new group by filling in the text box **Enter New group** and click **Submit**.

--End--

Conference chat

You can use your CS 1000 IM and Presence Web Tool to establish a conference (group) chat.

Using the Conference feature you can:

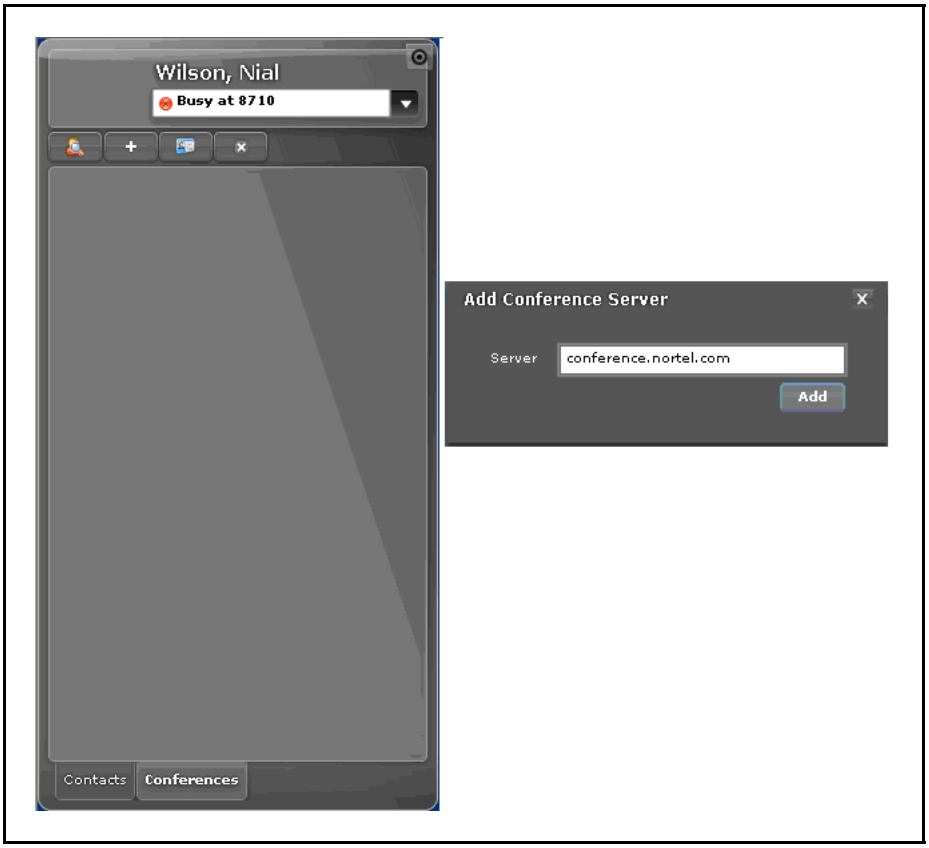
- add a conference server
- create a conference room
- add a bookmark for the conference
- send an invite to a user to join the conference room to chat

Procedure 15
Adding a conference server

Step	Action
1	To add a conference server click the **Conference** tab.
2	Click the **+** button of the conference page. The **Add Conference Server** window appears.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 35
Add Conference Server



3 Enter the name of the server.

For example, "conference.domain.com" (where domain is XMPP server domain).

4 Click **Add**.

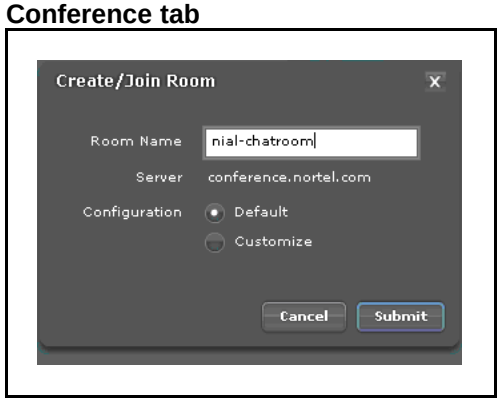
--End--

After adding the server you can perform the following:

- Add a conference room
- Search for a conference room
- Load a list of conference rooms

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 36
Conference tab

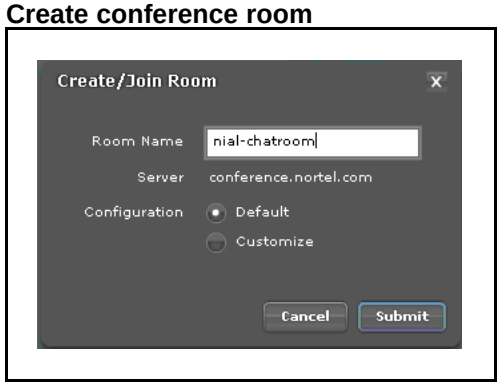


To add a conference room complete the following procedure.

Procedure 16
Adding a conference room

Step	Action
1	Click the Add Conference room (+) button, to add a Conference room. The Add Create/Join page appears.

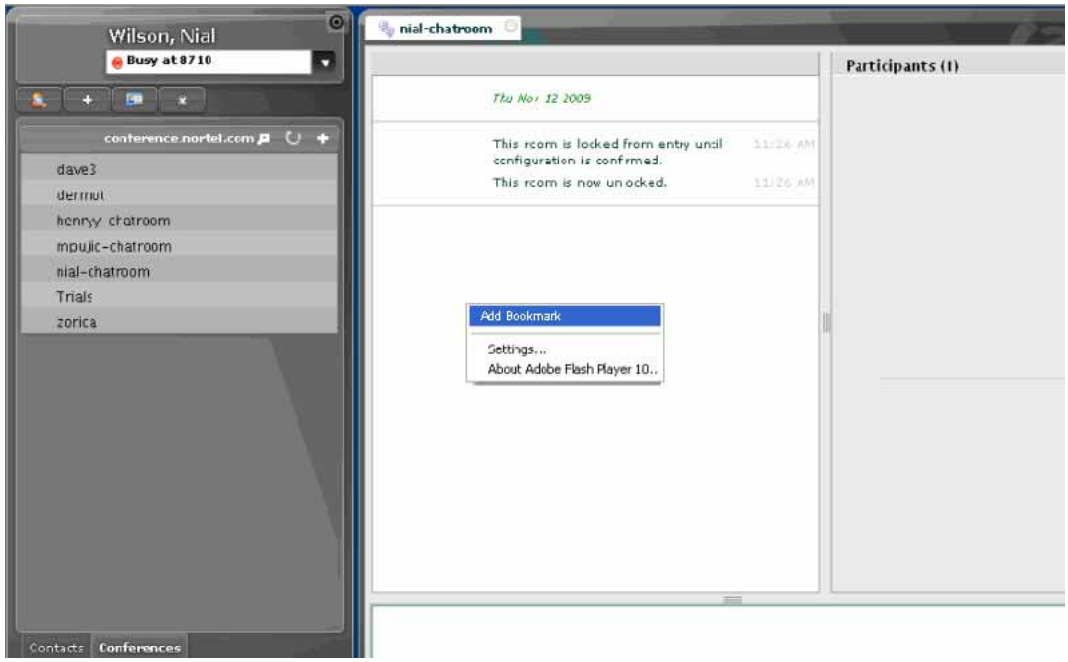
Figure 37
Create conference room



2	Enter a name for the **Room Name**.
3	Select **Default** as the configuration. ***Note:*** Only select **Default** as the configuration.
4	Click **Submit**.
5	The conference room is created as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 38
Conference room



6 (Optional) To create a bookmark of the conference room, right-click the conference room name and select Bookmark from the menu as shown in Figure 38 "Conference room" (page 68).

--End--

Invite users to the conference room

When you create a new conference room or select an existing conference room you can invite a maximum of 30 users.

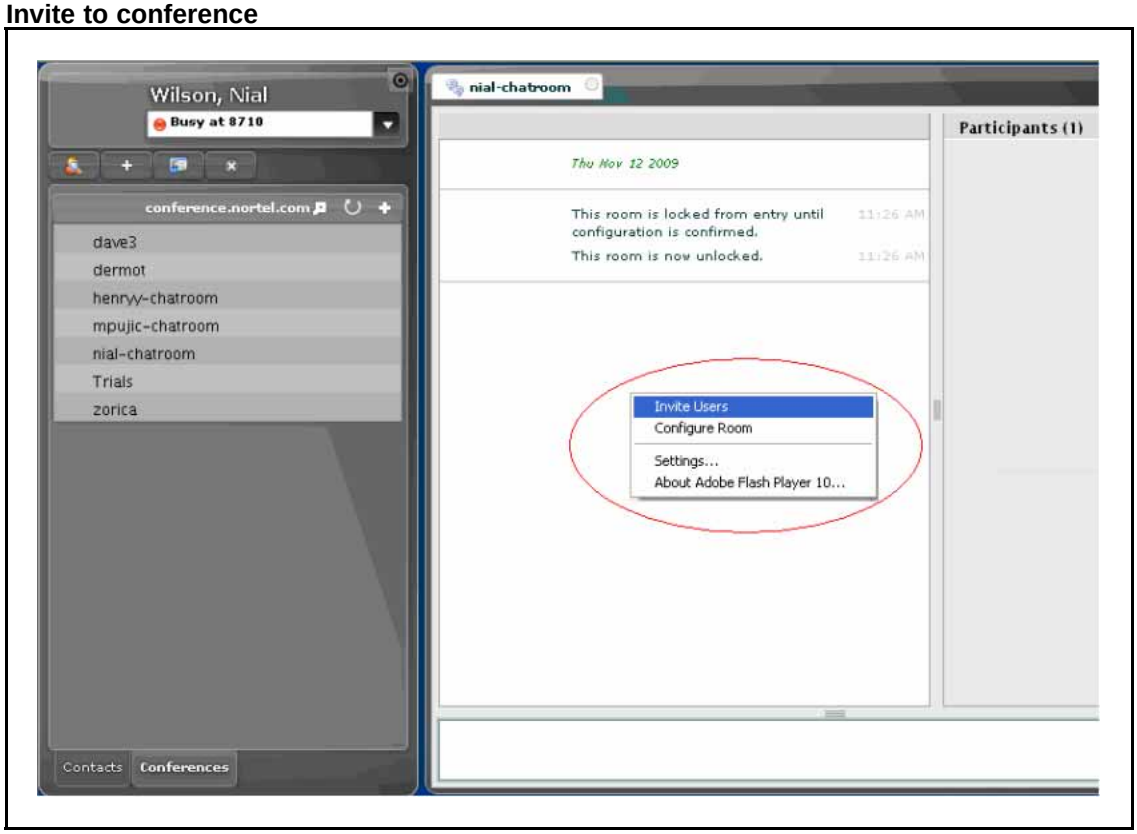
Complete the following procedure to invite users to the conference room.

Procedure 17
Inviting users to the conference room

Step	Action
1	Right-click anywhere on the conference room chat panel. The invite menu appears as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 39
Invite to conference

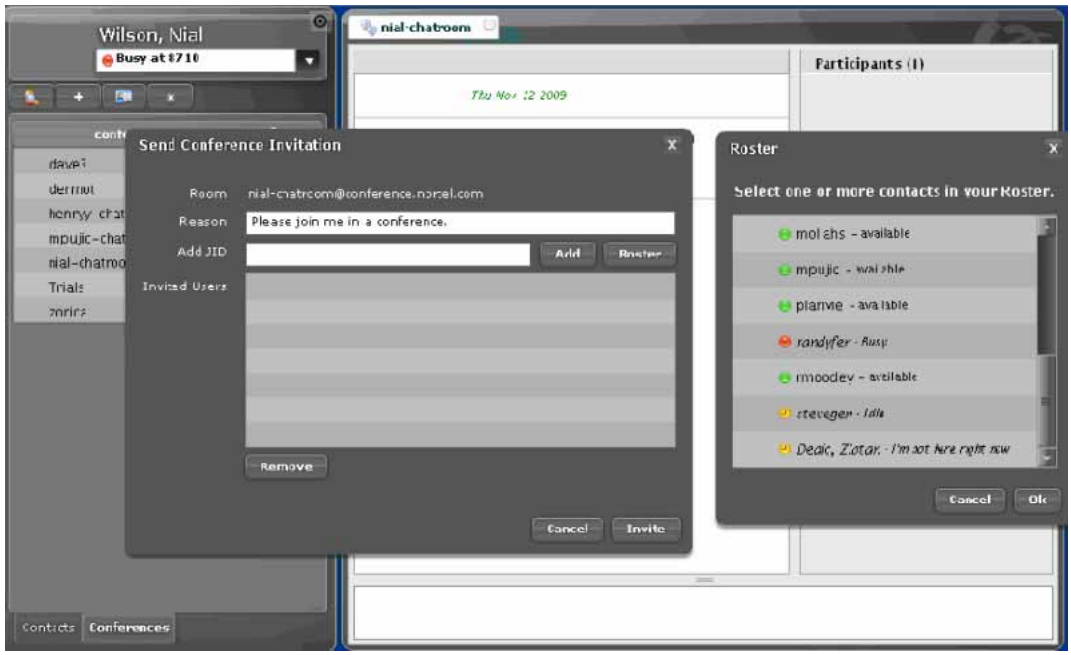


2 Select **Invite User** from the menu.

The **Send Conference Invitation** page appears as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 40
Send Conference Invitation



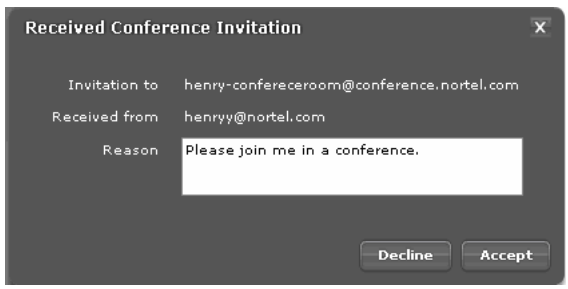
3 Enter a reason for the conference in the **Reason** field.

4 You can invite users by either selecting from your contact roster or entering the Jabber ID (JID) of the user in the **Add JID** field

5 Click **Invite**.

6 All invited users receive a notification of the invite and can accept or decline as shown in the following figure.

Figure 41
Received Conference Invitation page



Copyright © 2009 Nortel Networks. All Rights Reserved.

7 Begin the conference chat.

--End--

Note: You may receive two invitations for the same conference, you must accept or decline both invitations.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

IM and Presence user information

CS 1000 IM and Presence Application provides presence information and IM capability for all CS 1000 users. A CS 1000 user can view presence information and exchange Instant Messages using the Nortel IP Softphone 3456 (IPSP 3456) or the CS 1000 Instant Messaging (IM) and Presence Web Tool.

> ***Note:*** "For Microsoft Converged Office users in computer mode, there is no presence status update when OCS client is used to make/receive calls. The presence status of the user is changed only when the twinned set is used to make/receive calls. In RCC mode, the presence status of the user is always updated for outgoing and incoming calls."

IM offline messages are off by default. Please note that the having offline messages turned on can significantly reduce the capacity of the system.

Each user has dual accounts: one telephony account to get voice service; and one account to register to the IM and Presence Application.

> ***Note:*** The current limit to the number of contacts you can have available through the IM and Presence Application is fifty. Contact profile information is not populated for this release. File Transfer using the CS 1000 IM and Presence Web Tool or IPSP 3456 is not supported.

Configure the IPSP 3456 to use the IM and Presence Application

To use an IPSP 3456 for IM and Presence Application you must add a new Extensible Messaging and Presence Protocol (XMPP) account under the account settings of the IPSP 3456.

For a guide to using the IPSP 3456 refer to, *IP Softphone 3456 User Guide* (NN43080-100).

Copyright © 2009 Nortel Networks. All Rights Reserved.

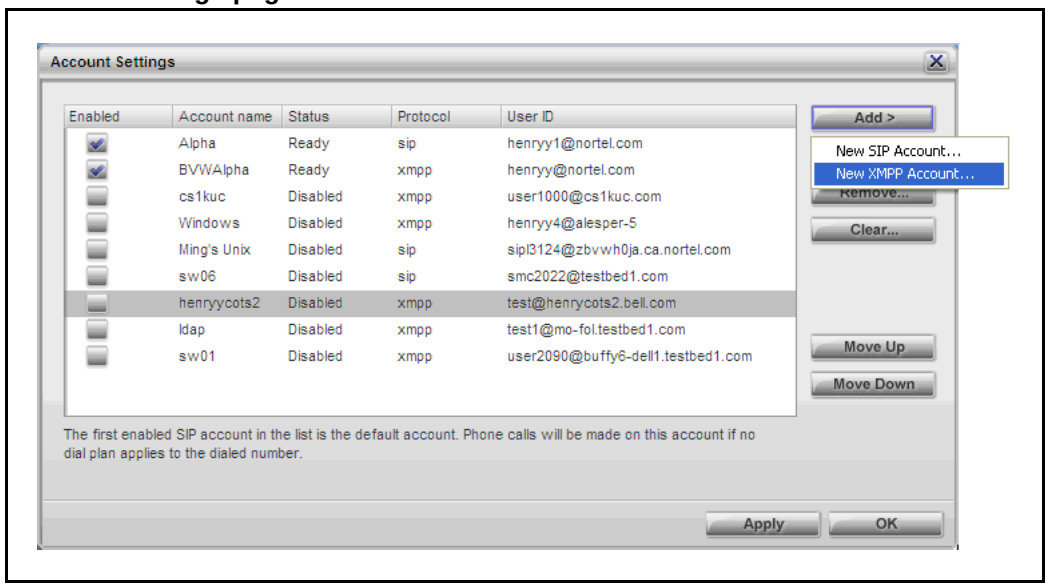
To configure the IPSP 3456 to use the IM and Presence Application complete the following procedure.

Note: Before you can configure your IPSP 3456 be sure to obtain the domain name and the FQDN or IP address of the IM and Presence Application from your system administrator.

Procedure 18
Configuring the IPSP 3456 to use the IM and Presence Application

Step	Action
1	To add a new XMPP account, select **Menu > File > Account Settings**. The Account Setting page appears as shown in the following figure.

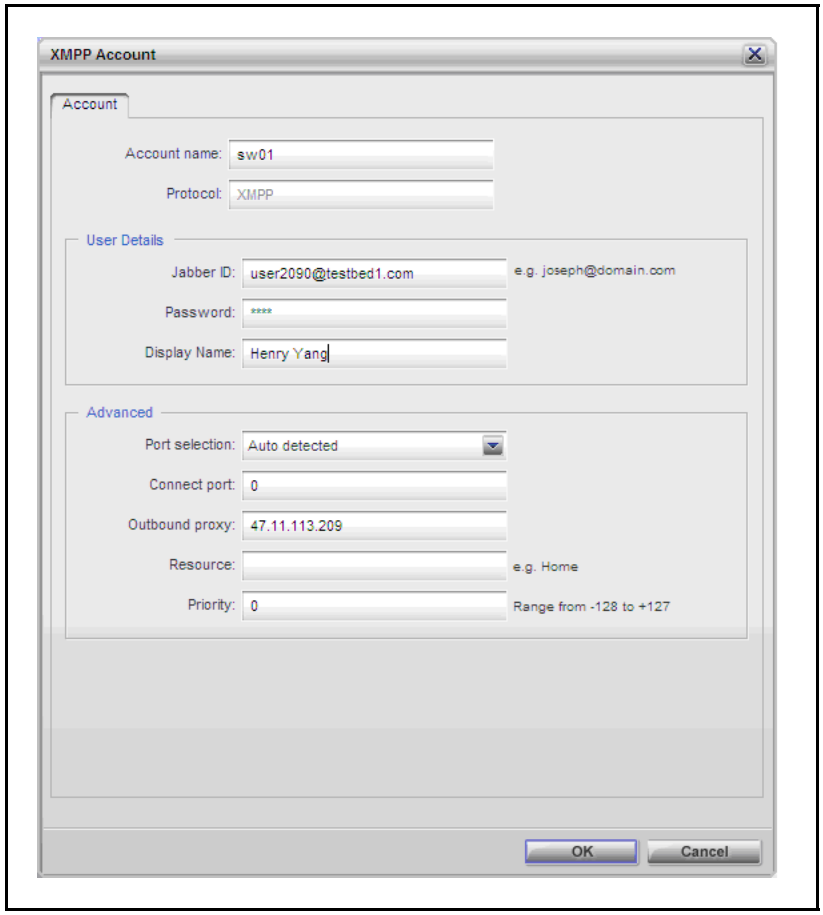
Figure 42
Account Settings page



2	Click **Add**.
3	Select **New XMPP Account** from the menu. The XMPP Account page appears as shown in the following figure.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 43
XMPP Account page



4 Enter a name for the account in the **Account name** field.

5 Protocol is XMPP.

6 Under the **User Details** section enter the jabber ID in the **Jabber ID** field. For example joseph@domain.com.

> ***Note:*** The domain for the Jabber ID must match the domain name that is configured in "Configure the domain of the IM and Presence server" (page 39)

7 Enter a password and display name in the appropriate fields.

8 Under the **Advanced** section you must enter the Presence and IM server FQDN or IP address in the **Outbound proxy** field.

9 Click **OK** to complete the procedure.

--End--

Copyright © 2009 Nortel Networks. All Rights Reserved.

Configuring the IPSP 3456 client with IM and Presence contacts

For the purposes of presence observation and IM exchange, there is no need to manage contacts within the IPSP 3456 client. IM and Presence contacts are best managed using the CS 1000 IM and Presence Web Tool. All contacts that you define in the web tool appear in the IPSP 3456 client.

Note 1: Not all information from the contact's profile (that is visible in the CS 1000 IM and Presence Web Tool) is accessible within the IPSP 3456 client. You may want to populate additional contact attributes in the IPSP 3456 client and/or add more contacts using the IPSP 3456 client management capabilities (including contact profile edit and contacts import). For more information refer to, *IP Softphone 3456 User Guide* (NN43080-100).

Note 2: The IPSP 3456 client must be in **Available** status to download contact list updates from the IM and Presence Application server.

Note 3: To ensure presence update for a contact, do not fill the Number/Address field of the Softphone entry while adding a contact or remove it, if the entry already exists.

IPSP 3456 group chat

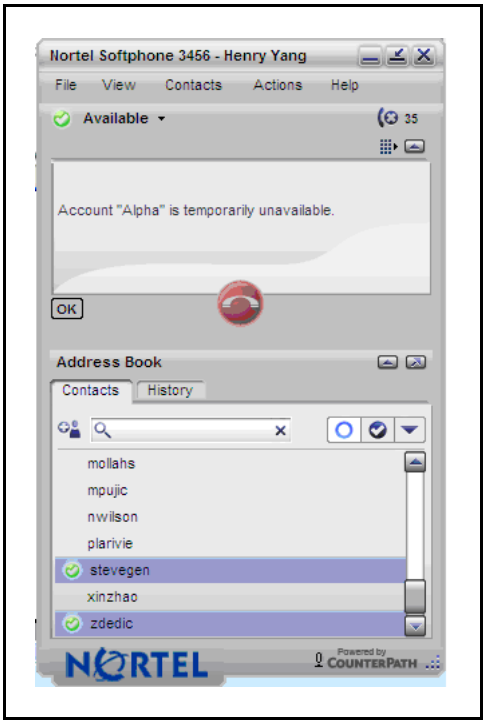
To start a group chat session using the IPSP 3456, complete the following procedure.

Procedure 19
Starting a group chat session using the IPSP 3456

Step	Action
1	While holding the **ctrl** key, click on users in your contact list that you want to invite to the group chat session, as shown in the following figure.

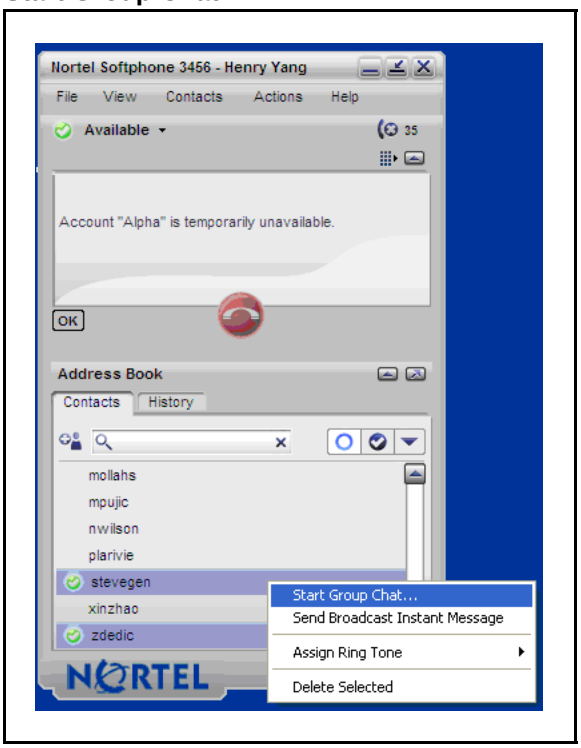
Copyright © 2009 Nortel Networks. All Rights Reserved.

Figure 44
Selecting contacts for group chat



2 Right-click on any of the contacts selected and choose **Start Group Chat** from the menu as shown in the following figure

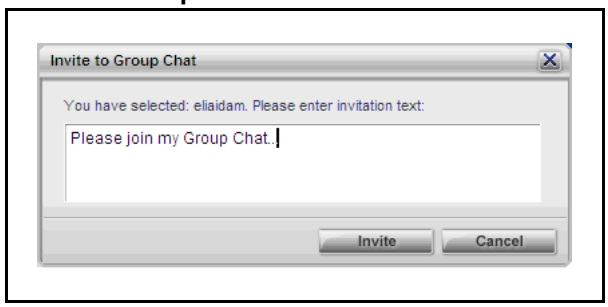
Figure 45
Start Group Chat



Copyright © 2009 Nortel Networks. All Rights Reserved.

The Invite to Group Chat window opens as shown in the following figure.

Figure 46
Invite to Group Chat window



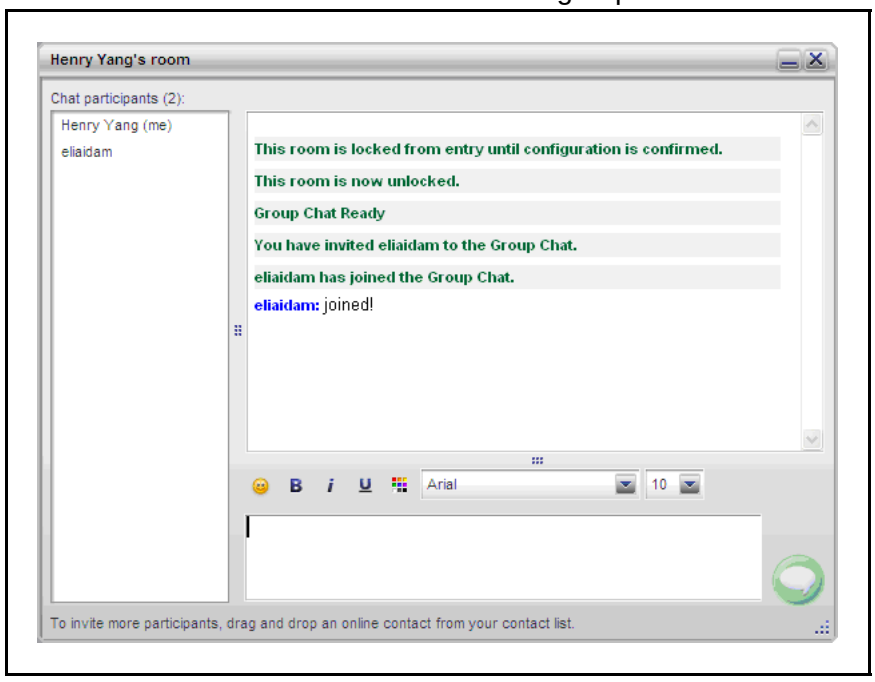
3 Enter the invitation text that you want to send with the invite to the contact.

4 Click **Invite**.

All of the invited contacts receive an invitation request with a Decline or Reject option.

The group chat room is created and you can begin to chat.

Note: The default maximum number of contacts that can be invited to a group chat is 30.



Copyright © 2009 Nortel Networks. All Rights Reserved.

5 To invite more contacts to the group chat, drag and drop the online contact from your contact list to add them to the group chat participant list.

--End--

Adding a contact

When you add a contact to your roster the contact doesn't need to grant the request. The following is the user experience for IPSP3456 and CS 1000 IM and Presence Web Tool user:

- When IPSP3456 users add a contact to their roster, it appears in the roster but doesn't display the contact's status right away. The status appears when the status of the contact changes.
- When CS 1000 IM and Presence Web Tool users add a contact to their roster, the contact and status appears in the roster after the status of the contact changes.

CS 1000 IM and Presence Web Tool and IPSP 3456 Contact List

When you use the CS 1000 IM and Presence Web Tool concurrently with the IPSP 3456, the contact list between the CS 1000 IM and Presence Web Tool and IPSP 3456 could be different. The IPSP 3456 contacts are locally stored and the CS 1000 IM and Presence Web Tool contacts are received from the server at login.

CS 1000 IM and Presence Web Tool and IPSP 3456 Presence

When you use the CS 1000 IM and Presence Web Tool concurrently with the IPSP 3456, and you make a call using the IPSP 3456, when that call ends, your presence is that of the IPSP 3456.

Emoticons and text edit

If you receive an IM using the IPSP 3456 and the message window emotion and text edit icons are disabled, it means the user's client that sent the IM doesn't support rich text format. Also if you are composing an an IM Your IM will be sent to that user using plain text format.

Presence Aggregation

The aim of Presence Aggregation is to achieve uniform presence regardless of the client being use, additional details are outlined below.

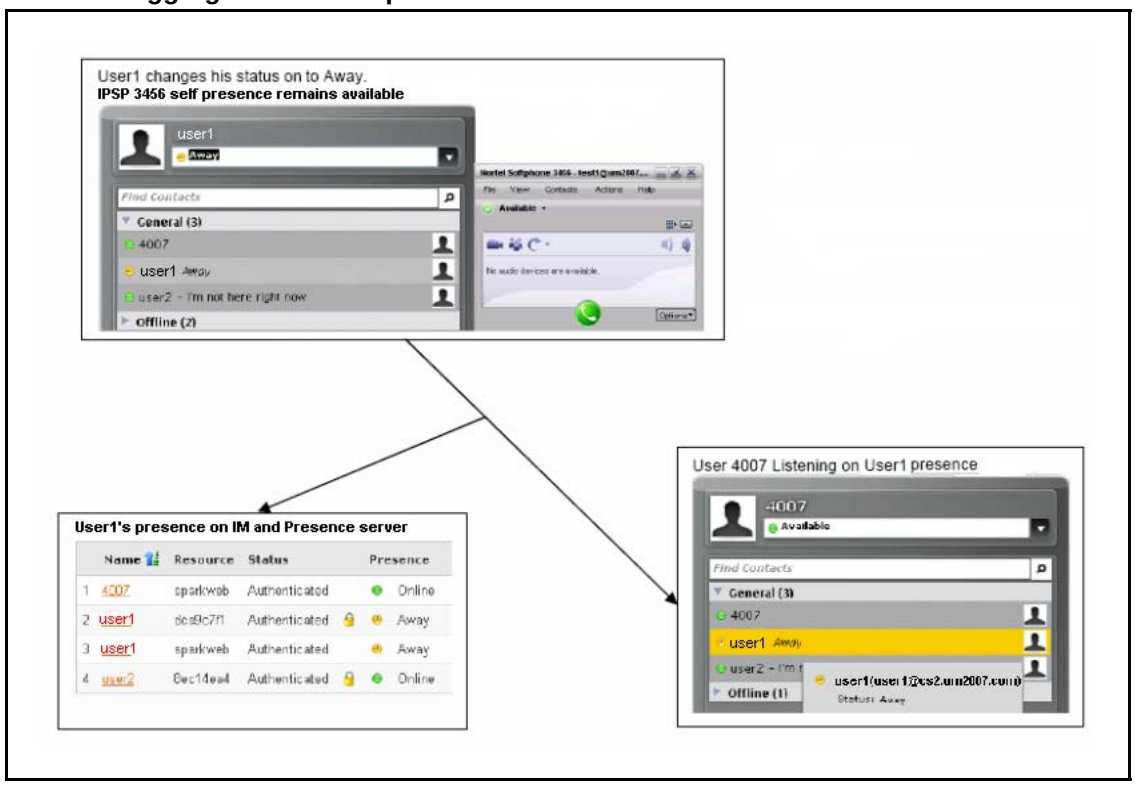
User Experience

The IM and Presence Application only aggregates presence information on the server side meaning a client (telephone, IPSP 3456, or CS 1000 IM and Presence Web Tool) Self Presence is not updated. The figure

Copyright © 2009 Nortel Networks. All Rights Reserved.

below is an example where a user name user1 changes his status to “Away” using CS 1000 IM and Presence Web Tool which also changes the presence of user1’s IPSP 3456 session status to “Away”. Any subscriber to user1 sees user1’s presence as “Away”.

Figure 47
Presence aggregation user experience



The following tables detail user experience when using the CS 1000 IM and Presence Web Tool.

Table 6
Hard phone client with CS 1000 IM and Presence Web Tool

Presence Before Call	Presence During Call	Action During Call	Presence After Action	Presence After Call disconnected
Available	Busy at <DN>	During a Call, Logs out of CS 1000 IM and Presence Web Tool	Busy at <DN>	Offline
Away	Busy at <DN>	None	Busy at <DN>	Away
Free to Chat	Busy at <DN>	None	Busy at <DN>	Free to Chat

Copyright © 2009 Nortel Networks. All Rights Reserved.

Offline	Busy at <DN>	Logs on to CS 1000 IM and Presence Web Tool	Busy at <DN>	Available
Offline	Busy at <DN>	None	Busy at <DN>	Offline
Available	Busy at <DN>	Change Status to Away	Away	Away

Table 7
Hard phone transfer scenarios with CS 1000 IM and Presence Web Tool

Presence Before Call	Presence During Call	Action During Call	Presence After Action	Presence After Call disconnected
Available	Busy at <DN>	Blind Transfer to user C	Available	Available
Available	Busy at <DN>	Consultative Transfer to user C	Available	Available
Available	Busy at <DN>	Consultative Transfer fails	Available - before 1st call is retrieved Busy at <DN> - after 1st call is retrieved	Available

Table 8
User with Multiple devices with CS 1000 IM and Presence Web Tool

Presence Before Call 1	Presence During Call 1	Presence Before Call 2	Presence During Call 2	Action 1 During Call	Presence After Action 1	Action 2 During Call	Presence After Action 2
Available	Busy at <DN#1>	Busy at <DN#1>	Busy at <DN#2>	Terminate Call 1	Busy at <DN#2>	Terminate Call 2	Available
Available	Busy at <DN#1>	Busy at <DN#1>	Busy at <DN#2>	Terminate Call 2	Busy at <DN#1>	Terminate Call 1	Available
Away	Busy at <DN#1>	Busy at <DN#1>	Busy at <DN#2>	Terminate Call 1	Busy at <DN#2>	Terminate Call 2	Away

Copyright © 2009 Nortel Networks. All Rights Reserved.

Free to chat	Busy at <DN#1>	Busy at <DN#1>	Busy at <DN#2>	Terminate Call 2	Busy at <DN#1>	Terminate Call 1	Free to Chat
Note: Presence is updated based on User ID and not DN number							

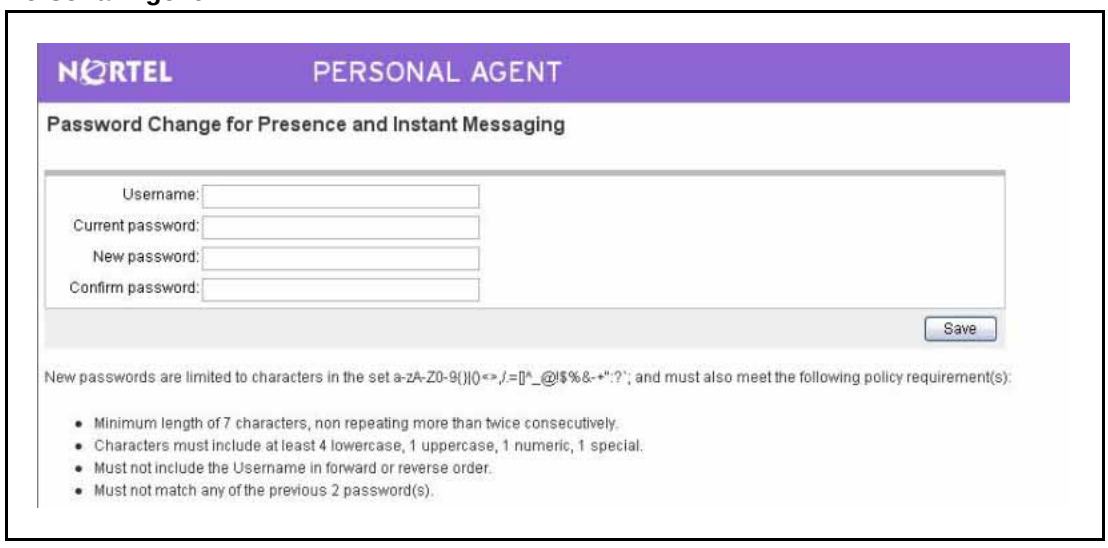
Note: There is no presence update for calls originating from the following feature keys: Hotline, Voice Call, Group Call, and Dial Intercom. The presence status of a SIP Line telephone does not update when it dials a busy telephone and it is receives a busy tone, unlike other telephones whose presence status is changed to "Busy at <DN>" for the same scenario.

Personal Agent

The Personal Agent (PA) application provides users the ability to change their own password for Presence and Instant Messaging.

The PA is a standalone application which is installed on the same server with Subscriber Manager (SubM) during the SubM deployment, however it is not subject to any of the UCM security. There is no login required to access the PA application, it is a single page which can be accessed using a Web browser as shown in the figure below.

Figure 48
Personal Agent



Change your password for Presence and Instant Messaging

The new password is subject to the restrictions as configured in Unified Communication Management (UCM) by the security administrator and these rules are displayed on the Personal Agent screen. The rules displayed and the details of the rules depend on the password configuration in UCM.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Procedure 20
Changing your password for Presence and Instant Messaging

Step	Action
1	In your Web browser enter the URL of the Personal Agent provided by your system administrator. (http://<FQDN of UCM primary server>/pa) The Presence and Instant Messaging page opens.
2	Enter your user name in the **Username** field.
3	Enter your current password in the **Current Password** field.
4	Enter the new password in the **New Password** field. ***Note:*** The new password must follow the rules displayed on the screen.
5	Enter the new password again in the **Confirm Password** field.
6	Click **Save**. Any messages relating to the success or failure of the password change are displayed just below the page title. If the password is not accepted recheck the password restrictions and try again.

--End--

Copyright © 2009 Nortel Networks. All Rights Reserved.

Copyright © 2009 Nortel Networks. All Rights Reserved.

Appendix A

Overlay commands

The following Overlay commands can be used to enable Presence service on the Call Server. To configure ELAN AML link and VAS ID for AML.

Table 9
LD 17 Configure ELAN AML link

Command/Prompt	Command/User Response(s)	Description
REQ	CHG	Change ADAN
TYPE	ADAN	
ADAN	New ELAN ELAN#	New AML ELAN link, link number should be bigger or equal to 32
CTYP	ELAN	

Every AML over ELAN link configured on the CS 1000 system requires a Value Added Server (VAS) ID for the AML messages to be sent. Use the following overlay commands to associate a Value Added Server (VAS) with AML over ELAN.

Table 10
LD 17 Configure VAS ID for AML link

Command/Prompt	Command/User Response(s)	Description
REQ	CHG	Change ADAN
TYPE	VAS	
VAS	New	New VAS
VSID	vasID	The VAS ID number
ELAN	ELAN#	ELAN number, should match the one configured in previous step

Copyright © 2009 Nortel Networks. All Rights Reserved.

Overlay commands

Table 11
LD 23 Configure ACD DN

Command/Prompt	Command/User Response(s)	Description
REQ	New	New ACD
TYPE	ACD	
CUST	custNum	Customer number
ACDN	Xxxx	An ACD DN to be used when configuring CDN
MAXP	10	Maximum position for ACD DN queue

Table 12
LD 23 Configure CDN

Command/Prompt	Command/User Response(s)	Description
REQ	New	New CDN
TYPE	CDN	
CUST	custNum	Customer number
ACDN	Xxxx	A CDN number to be used by Presence Publisher ***Note:*** This CDN is used as the PSDN for each subscriber.
CDSQ	Yes	Needs to be yes, so the presence activity is sent to Presence Publisher
DFDN	Xxxx	ACD DN configured in the Configure ACD DN procedure above

Copyright © 2009 Nortel Networks. All Rights Reserved.

Nortel Communication Server 1000

Instant Messaging and Presence Application

Release: 6.0
Publication: NN43001-141
Document revision: 01.03
Document release date: 16 November 2009

Copyright © 2009 Nortel Networks. All Rights Reserved.

While the information in this document is believed to be accurate and reliable, except as otherwise expressly agreed to in writing NORTEL PROVIDES THIS DOCUMENT "AS IS" WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED. The information and/or products described in this document are subject to change without notice.

Nortel, Nortel Networks, the Nortel logo, and the Globemark are trademarks of Nortel Networks.

All other trademarks are the property of their respective owners.

To provide feedback or to report a problem in this document, go to www.nortel.com/documentfeedback.

www.nortel.com