



NetVanta Unified Communications

**NetVanta Enterprise Communications and
Business Application Servers**

Configuration Guide

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901 Explorer Boulevard
P.O. Box 140000
Huntsville, AL 35814-4000
Phone: (256) 963-8000

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Conventions

**NOTE**

Notes provide additional useful information.

**CAUTION**

Cautions signify information that could prevent service interruption or damage to equipment.

WARNING

Warnings provide information that could prevent injury or endangerment to human life.

Table of Contents

1 Server Configuration Guide	7
Introduction	7
Preparing to Start the Server Configuration Wizard	7
Setting up DHCP Records to Point to the File Server	8
Obtaining Network and Security Information	10
Verifying Requirements and Recommendations	11
Incorporating the Server into the Customer Domain	11
Gathering Server Configuration Wizard Information	12
Creating an Authorization Store to Enable Active Directory Roles	12
Polycom Phone Configuration Requirements	13
Configuring UC Server Presence and Control	14
Starting the Server Configuration Wizard	15
Login Requirements	15
Server Configuration Wizard Overview	15
Product Licensing Wizard	15
Windows Network Integration Wizard	15
Communication Systems Wizard	16
Phone Types	16
Gateways	18
Messaging Systems	20
Users	20
Final System Configuration	26
Configuring UC Server Presence and Control	26
Appendix A. Manually Configuring Accounts and Permissions	27
Configuring the UC Server User Account	27
Configuring the Exchange Server Account and Permissions	28
Appendix B. Manually Configuring Polycom SIP Phones	31
Creating Polycom SIP Telephone User Accounts for FTP Access	31
Providing Access for Polycom SIP Telephone User Accounts to the FTP Server	33
Enabling Support for Polycom Telephones	35

1 Server Configuration Guide

Introduction

This guide is written for installers to configure the NetVanta Enterprise Communications Server or NetVanta Business Application Server at the customer site. It assumes that you have experience installing and programming communication systems and voicemail systems. It assumes knowledge of computer networks.

Installing UC Server on a Windows operating system allows you to manage the business communication system within a Microsoft IT environment. Integration with Active Directory allows IT administrators to manage the communication system using the same user accounts and security policies that are used in the Windows environment. The automatic integration requires no extra programming or special integration.

Before you run the UC Server Configuration Wizard, make sure you follow all the instructions in the *NetVanta Enterprise Communications and Business Application Servers Installation Guide*, including running the Server Installation Wizard.

This guide covers the following main topics:

- *[Preparing to Start the Server Configuration Wizard on page 7](#)*
- *[Starting the Server Configuration Wizard on page 15](#)*



For ADTRAN documents, refer to the website at <http://kb.adtran.com>.

Preparing to Start the Server Configuration Wizard

Before you start the UC Server Configuration Wizard, you can further prepare your system by doing the following:

- *[Setting up DHCP Records to Point to the File Server on page 8](#)*
- *[Obtaining Network and Security Information on page 10](#)*
- *[Verifying Requirements and Recommendations on page 11](#)*
- *[Incorporating the Server into the Customer Domain on page 11](#)*
- *[Gathering Server Configuration Wizard Information on page 12](#)*
- *[Creating an Authorization Store to Enable Active Directory Roles on page 12](#)*
- *[Polycom Phone Configuration Requirements on page 13](#)*
- *[Configuring UC Server Presence and Control on page 14](#)*

Setting up DHCP Records to Point to the File Server

Using a DHCP server, SIP telephones can retrieve configuration information from the network and allow for automatic discovery and configuration. Using a DHCP server for automatic network configuration, network reconfigurations can be managed from a central location.



For simplified deployment of SIP telephones, we recommend the use of a DHCP server that extends the default scope options. Not following this recommendation requires manual configuration of SIP telephones.

Windows Server 2008 and Windows Server 2003 DHCP servers provide the required features and functionality to support automatic configuration of SIP telephones and gateways.

Manually configuring DHCP server for phones

You can manually set up the DHCP records to point to the provisioning server. The provisioning server can be either an FTP or TFTP server depending on the phone model. The DHCP server for the local network must have an extra record that points the telephones to the correct provisioning server to facilitate automatic detection and configuration of phones and gateways.



The procedures below are general guidelines only. The procedures may vary depending on the type of phones you are using. Refer to the Server Configuration Wizard for information on specific phone types.

DHCP Scope and Purpose

DHCP Scope Option Purpose

Option 66	UC Server IP address for FTP or TFTP Boot Server
Option 150	UC Server IP address for FTP or TFTP Boot Server
Option 2	Time Offset for time zone configuration
Option 4	Time Server IP address or resolve from host name



If customers are already using this option for configuring other devices, you might need to perform a more complex set-up process to make sure there are no conflicts. That process is beyond the scope of this document.

To set up DHCP records using Server 2008 or SBS 2008

1. Select **Windows Start > Control Panel**.
 - If the Control Panel view is in 2008 format, select **System and Maintenance**, select **Administrative Tools**, and select the **DHCP** shortcut in the right hand pane.
 - If the Control Panel is in Classic View, select **Administrative Tools**, and select the **DHCP** shortcut in the right hand pane.
2. In the left hand pane of the DHCP Manager select the server, and expand by selecting the + symbol.

3. In the expanded view, right-click on **Server options**, and select **Configure Options**.



*If you are using Windows Small Business Server (SBS) 2008, then select **IPv4**, select **Scope Options**, right-click and select **Configure Options**.*

The Server Options dialog opens.

4. On the general tab scroll down the list to **Option 66**, and enable it.
This enables the data entry for the option.
5. Enter the IP address of the Provisioning Server.

To add option 150 for Cisco phones using Server 2008 or SBS 2008

1. Select **Windows Start > Control Panel**.
 - If the Control Panel view is in 2008 format, select **System and Maintenance**, select **Administrative Tools**, and select the **DHCP** shortcut in the right hand pane.
 - If the Control Panel is in Classic View, select **Administrative Tools**, and select the **DHCP** shortcut in the right hand pane.
2. In the left hand pane of the DHCP Manager select the server, and expand by selecting the + symbol.
3. In the expanded view, right-click on **IPv4** and select **Predefined Options**.
This opens the Predefined Options and Values dialog.
4. Select **Add**.
5. On the Option Type dialog enter the following values:

Class:	Global
Name:	Boot Server Host Name
Data type:	String
Code:	150 (for Cisco phones)
Description:	FTP boot server name

6. After entering the information above, select **ok** to return to the Predefined Options and Values dialog.
7. Enter the IP address for the Cisco Phone boot server:

Value:	IP Address of the FTP server (for example, 192.168.1.100)
---------------	--

8. In the expanded view, right-click on **Server options** and select **Configure Options** to open the Server Options dialog.
9. On the general tab scroll down the list to **Option 150** and enable the check box.
This enables the data entry for the option and enters the IP address of the Provisioning Server.

To set up DHCP records using Windows 2003 Server

1. Select Windows **Start > Settings > Control Panel**.
2. Double-click the **Administrative Tools** icon.
3. Open the **DHCP** MMC snap-in.
4. Right-click the server object > **Set Predefined Options**.
The server object is located in the left-hand tree.
5. From the **Option name** list, select **066 Boot Server Host Name** (or option 150 for Cisco phones).
6. If that option does not appear in the list, select **Add**.
7. Make sure all the configurations are as follows:

Class:	Global
Name:	Boot Server Host Name
Data type:	String
Array:	Off
Code:	66 (or 150 for Cisco phones)
Description:	FTP boot server name
Value:	IP Address of the FTP server (for example, 192.168.1.100)

8. Select **OK**.



Alternatively, you can set up the DHCP option to apply only to specific scopes, or even specific addresses or reservations. The latter is more management effort, but might be required in certain sites, or to set up independent test environments for specific phones.

Obtaining Network and Security Information

Obtain network and server information from the customer prior to configuration, such as service accounts and administrative passwords.

For security reasons, some customers might be reluctant to provide passwords and network information in this manner. If that is the case, the customer should make sure that this information is readily available when you arrive on site to do the configuration.

Verifying Requirements and Recommendations

The UC Server application runs on the following operating systems:

- Microsoft Windows Server 2008 (x86, x64)
 - Deployment on Server Core or Hyper-V is not supported.
- Microsoft Windows Server 2003 R2 SP2
- Microsoft Windows Server 2003 SP1, SP2
- Microsoft Windows Small Business Server 2003 SP1 or later SP
- Microsoft Windows XP Professional SP2 or later SP

To ensure security, UC Server accounts are given minimal permissions on the computer. The Server must be installed onto an NTFS partition on this server computer to make sure that proper security is in place.

The Exchange Server and UC Server computer must be members of the same Windows domain.

Consult the UC Server support website for additional up-to-date application or configuration notes.



*It is **not** recommended that you run UC Server and the Exchange Server on the same system.*

Incorporating the Server into the Customer Domain

Incorporating the UC Server into the customer domain is required for Active Directory and Microsoft Exchange integration.

To incorporate the UC Server

1. On the desktop, right-click **My Computer**.
2. Select **Properties**.
3. Select the **Computer Name** tab.
4. Select the **Change...** button.
5. In the Member of section, select **Domain**, and enter the domain name.



You require a domain administrator user name and password to complete this procedure.

Gathering Server Configuration Wizard Information

The UC Server Configuration Wizard provides a step-by-step guide for configuring your server. The Server Configuration Wizard is customized to configure the server according to the needs of your particular network configuration.

It is recommended that you have the information ready that you might need before you start the wizard. You need to know the following:

Message store type	Local only or Local and Exchange or Lotus Notes/IMAP
Computer names	Includes Networking information and computer names
Server Account	The dedicated account for running the Server
Microsoft Exchange names	Microsoft Exchange Server computer name Mailbox name for Service Account
UC Server administrator password	The password that is used to configure the system. The default administrator login name is "admin."
Dialing rules	Used to specify the location from which you are dialing the dialing rules (for example, dial 9 for an outside line)
PBX type	Avaya Communication Manager or DEFINITY, Merlin Magix, Nortel Norstar, IP Office or generic analog
CTI link options (Merlin Magix)	Used to configure advanced PBX integration for calling line ID
Port Name and Identity	Used to configure all the ports that are connected to the PBX
User information	Used to create and configure all the user accounts
Email configuration	Used to configure the services when sending notification by email. If you do not have Exchange, you can configure an SMTP Server for email notification.

Creating an Authorization Store to Enable Active Directory Roles



Creating an authorization store is an optional step that applies to UC Server installations that are integrated with Active Directory. You can skip this step if you are configuring UC Server as stand-alone.

The authorization store is typically created *prior* to running the Server Configuration Wizard.

The following conditions must be satisfied in order to create an authorization store:

- The UC Server computer platform must be integrated with the customer's network.
- The UC Server Active Directory account must already be created on the customer's domain.
- The user creating the authorization must be authenticated with the domain.

If users were already created prior to creating an authorization, the administrator must assign a role to each configured Windows User. Users added after the authorization store is created have a default role Standard User assigned to their user profile.



*If you have already followed the instructions in the **NetVanta Enterprise Communications and Business Application Servers Planning and Deployment Guide** for creating an authorization store, then you do not need to repeat the same steps below.*

To create an authorization store

1. Log in to the UC Server computer as a domain administrator.
2. Select **Start > Run > CMD** to launch a CMD window.
3. Navigate to the UC Server installation directory:

```
\ADTRAN\NetVanta UC Server\bin
```

4. Type the following:

```
manageazman +createxmlstore +admin <DOMAIN>\<UC SERVER SERVICE  
ACCOUNT>
```

5. Stop and restart the UC Server application service by doing the following:
 - Open the service control panel application.
 - Restart the service named **NetVanta UC Server Application Services**.



*You can create the custom authorization store at any time, before, during or after installation. However, any Active Directory users and their associated authentications will have to be modified to include a role from the role list. Consult the **NetVanta Enterprise Communications Server Administrator Guide** for details on how to change the authentication role for individual user authentications.*

Polycom Phone Configuration Requirements

Some phone types such as Polycom require the use of a File Transfer Protocol (FTP) server for automatic phone configuration. SIP telephones that are configured by default to use FTP for provisioning will look for configuration files in the FTP server specified by option 66 in the DHCP server. The Phone Types Wizard automatically configures the FTP server (on the local machine) should a selected phone type require it.

In some cases, the Phone Types Wizard is unable to automatically configure the FTP server, such as when UC Server is installed on a domain controller. If this occurs, then the Wizard issues a warning and the FTP server must then be configured manually. Refer to Appendix A *The following sections describe the manual procedures for some tasks that are typically performed automatically by the UC Server Configuration Wizard. These procedures may be required to be performed manually, since there may be some information about your network and hardware that the wizard cannot determine automatically. The procedures are described below in case some manual configuration is required. on page 27* for details on how to manually configure the FTP server and enable support for a particular manufacturer's line of phones.

Polycom Phones and Windows Small Business Server or Domain Controllers

If you are using Polycom phones and running UC Server on Microsoft Windows Small Business Server (SBS) or a domain controller, then particular configuration issues arise. Polycom phones automatically retrieve configuration files from an FTP server with the user "PlcmSpIp". UC Server manages the Microsoft Windows FTP server on the installed machine to store and update the Polycom configuration files. Typically, UC Server creates a local Windows user named PlcmSpIp and assigns the appropriate permissions to the Windows FTP Server.

However, domain controllers including Windows SBS, do not permit local users. In this case, the Wizard may create a domain account. Polycom requires the user name and password "PlcmSpIp". Thus, UC Server installations on a Windows SBS must use a Microsoft Active Directory user named PlcmSpIp to enable access to the Windows FTP server. However, Polycom's PlcmSpIp password does not meet the default password complexity policy for domain controllers, including SBS. In order for Polycom phones to retrieve configuration files from an FTP server on a domain controller or Windows SBS, a domain account must be created. To create the domain account user "PlcmSpIp" the default password policy must be temporarily disabled. Solutions to this issue are:

- Let the Wizard automatically create and configure the domain account.
- Manually create and configure the domain account.

If you choose to manually create and configure the domain account, then the following requirements must be met:

- You must have the necessary privileges to create a domain account, for example, you must be logged in as Domain Administrator.
- You must modify the group password policy to allow the simpler password. Once the domain account is created, the password policy can be reverted to the original policy.

For instructions on manually configuring the system, refer to Appendix B, *Manually Configuring Polycom SIP Phones on page 31*. For further explanation of this issue refer to the *NetVanta Enterprise Communications and Business Application Servers Planning and Deployment Guide* regarding password requirements.

Configuring UC Server Presence and Control

If you installed the NetVanta Enterprise Communications Server, then you were prompted whether to install the UC Server Presence Components, which are required to run the optional ucCompanion - Live Attendant application. If you installed the UC Server Presence Components, then there are some configuration steps which must be performed prior to starting the Server Configuration Wizard. For instructions on configuring the UC Server Presence Components refer to the *NetVanta Unified Communications Server Presence and Control Components Guide*, available from the installation CD, or at <http://kb.adtran.com>.

Starting the Server Configuration Wizard

Login Requirements

Make sure that a computer account is created in the customer's network. If you are integrating with Microsoft Exchange, make sure that you are logged on as a domain user that has:

- Domain administrator privileges—must be able to add users to the domain
- Exchange Server administrator privileges—must be able to create mailboxes and set permissions on the Exchange server

Server Configuration Wizard Overview

The Server Configuration Wizard consists of several wizards that each become available after the successful completion of the previous wizard. The wizards are listed below:

1. *Product Licensing Wizard on page 15* — enter your product and license key information
2. *Windows Network Integration Wizard on page 15* — configure Windows Firewall, service account, and service connection point
3. *Communication Systems Wizard on page 16* — configure your communications systems
4. *Phone Types on page 16* — specify required phone types
5. *Gateways on page 18* — specify required gateway types
6. *Messaging Systems on page 20* — select message store type and configure account
7. *Users on page 20* — add new or import existing users
8. *Final System Configuration on page 26* — configure email notification system; create default user, operator and default mailbox; specify dialing rules and location

To start the Server Configuration Wizard

- Select Windows **Start > Programs > NetVanta UC Server > Server Configuration Wizard**.

The main wizard screen guides you through the rest of the configuration.

Product Licensing Wizard

Run this wizard to specify your product and license key information for UC Server. You can paste the product and license key, and the machine ID, into the appropriate wizard boxes. The product key is shipped with the product CD.

Windows Network Integration Wizard

You can configure your Windows account to work with UC Server. Create a service account: assign permissions to the directory, and assign the account to UC Server.

Create a service connection point. A service connection point is an advertised name that can be used to locate UC Server. When you start UC Client for the first time, the service connection point contains the name and IP address of the UC Server. The user does not have to type a name, the name automatically appears in the list.

Communication Systems Wizard

You can define and configure new communication systems. Select a communication system type from the list provided. The communication systems listed have the required hardware and a valid license. You cannot create a communication system that is invalid.

You can select a UC Server SIP PBX, or you can select an existing PBX, which you can connect to UC Server through a Dialogic Media Gateway. For a list of PBXs supported by Dialogic, and for gateway configuration information, refer to the Dialogic website at www.dialogic.com. For more information on configuring the gateway to connect UC Server to an existing PBX, refer to *Configuring the Dialogic Media Gateway* technical note, available from at <http://kb.adtran.com>.

The options that are available depend on the communications system type selected, but may include configuring message waiting, configuring the CTI link, selecting and configuring ports, and selecting a network adapter for the communication services.

The Port Configuration page allows you to choose a device ID, to enable and attach a name and an extension number to. This page also displays for legacy communication systems.

Phone Types

Running this wizard allows you to specify the telephone types for your system. Select the devices that you are planning to use in your environment. The Server Configuration Wizard prepares UC Server for automatic detection and configuration of those devices. For more information refer to the following sections:

- [Configuring FTP server on page 16](#)
- [Configuring TFTP service on page 18](#)

Configuring FTP server

Some phone types require the use of a File Transfer Protocol (FTP) server for automatic phone configuration. SIP telephones that are configured by default to use FTP for provisioning will look for configuration files in the FTP server specified by option 66 in the DHCP server. The Phone Types Wizard automatically configures the FTP server (on the local machine), should a selected phone type require it. If the Phone Types Wizard is unable to automatically configure the FTP server, such as when UC Server is installed on a domain controller, then the Wizard issues a warning and the FTP server must then be configured manually. Refer to Appendix B [“Manually configure the system for SIP telephones to retrieve their configuration information” on page 21](#) for details on how to manually configure the FTP server and enable support for a particular manufacturer’s line of phones.

There are specific configuration issues with regards to using Polycom phones with Microsoft Windows Small Business Server or a domain controller. If you have not already done so, refer to the [Server Configuration Wizard Overview on page 15](#) section for more information to avoid having to configure the

system manually, as outlined in Appendix B, *This appendix describes the steps to manually configure the system to allow for Polycom SIP telephones to retrieve their configuration information. You must only manually enable support for a line of telephones if the Server Configuration Wizard was unable to do so. You will receive a warning from the Phone Types Wizard if this is the case. Typically, the wizard would be unable to automatically enable support for a line of telephones if UC Server is installed on a domain controller. If this is the case, then you must manually enable support for SIP telephones following the instructions in each section listed below. For more information refer to Phone Types on page 16. on page 31.*

If a screen appears in the Configuration Wizard that tells you that the Microsoft Internet Information Services (IIS) subcomponent File Transfer Protocol (FTP) is not installed, you must install it.

To install the FTP sub-component to configure UC Server as an FTP server

1. On the Windows desktop, select **Start > Control Panel**.
2. Select **Add or Remove Programs**.
3. Select **Add/Remove Windows Components**.



*If you are installing UC Server with a Windows Server 2003 configuration, then enable the **Application Server** check box and select **Details**.*

4. In the Windows Components box, select **Internet Information Services**.
5. Select **Details**.
6. Select **File Transfer Protocol (FTP) Service**.
7. Select **OK**.

The FTP Publishing service must be set to Automatic. In the event of a restart, if the FTP Publishing service is off, then Polycom phones will not successfully reboot as a result.



When installing UC Server on Windows Small Business Server (SBS) 2008, the startup type for the FTP Publishing service is set to Manual by default. This must be changed to Automatic. If this was not changed during the UC Server installation process, then follow the steps below.

To set the FTP Publishing service to Automatic

1. Select **Start > Programs > Administrative Tools > Services**.
2. Select **FTP Publishing**, right-click and select **Properties**.
3. Under Startup type select **Automatic**.
4. Under Service status select **Start**.
5. Select **Apply**, and then select **OK**.

Configuring TFTP service

Some phone types require the use of a Trivial File Transfer Protocol (TFTP) service for automatic phone configuration. TFTP servers can also be used as a repository for configuration files for SIP Telephones. SIP telephones that are configured to use TFTP retrieve their configuration information using TFTP. UC Server includes a TFTP server.

Windows Firewall must be configured for the TFTP service, either automatically or manually. If you selected a phone type that requires a TFTP service, you can enable the system to automatically configure Windows Firewall for the TFTP service. Alternatively, you must manually configure Windows Firewall for the TFTP service.

Failure to configure the Windows Firewall correctly might impact the following features:

- Automatic detection and configuration of SIP devices (FTP, TFTP, HTTP)
- SIP telephone registration with NetVanta UC Server
- SIP PSTN gateways connecting to NetVanta UC Server
- SIP telephones cannot retrieve configuration information from UC Server's FTP or TFTP server
- SIP telephones cannot receive or place telephone calls

To manually configure Windows Firewall

1. Select **Start > Settings > Control Panel**.
2. Select **Windows Firewall**.
3. Select the **General** tab.
4. Enable the **On** button.
5. Make sure that the *Don't allow exceptions* box is disabled.
6. Select the **Exceptions** tab.
7. Enable the check box beside each program or service that you want to set as an exception in Windows Firewall, specifically, **NetVanta UC Server TFTP Service**.

Gateways

Running this wizard allows you to select the gateway type that you are planning to use in your environment, such as PSTN, or SIP Peer. The Gateway Wizard prepares UC Server for configuration of the gateway. More than one gateway type can be added, but each gateway is configured separately. If you have more than one gateway, the gateways can be organized into groups.



For ITSP gateways, select PSTN gateway.

PSTN gateways

UC Server can provide PSTN network access through SIP PSTN gateways. SIP PSTN gateways convert the SIP protocol (signaling and voice) to traditional PSTN (Time Division Multiplexing) technology. SIP PSTN gateways can use either analog or digital lines (T1 in North America).

To change PSTN gateway settings

- Enter the host name for the PSTN gateway.

SIP Peer Gateways

The SIP Peer allows for the networking of multiple UC Servers.

To change SIP Peer gateway settings

- Enter the host name for the SIP Peer Gateway.

Gateway groups

If you have more than one gateway, you can organize them into groups. Dial plan entries route calls to alternate trunking facilities if the facilities are busy or unavailable. For example, if two trunking facilities are available, PRI and analog, the analog facilities can be used as a second choice when the PRI lines are busy or unavailable. A flexible dialing plan routes incoming and outgoing calls to individual or groups of gateways. A gateway group provides the following capabilities:

- Fault tolerance/Disaster Recovery - This provides overflow capability in the event that a gateway device is busy or unavailable.
- Least Cost Routing (LCR) alternatives - A gateway group can contain gateways that are connected to different carriers, such as local and long distance providers, or can contain gateways in different geographic locations.
- Different technologies of trunking facilities can be combined seamlessly. Gateway groups can combine analog facilities, digital facilities, SIP trunking services, and SIP Peers.

To create a gateway group

1. From the Available gateways list, select a gateway and select **Add** to add the gateway to the gateway group.
2. Select **Next** when you have finished creating your gateway group.

Configuring the gateway

Enter the configuration details for the gateway.

To configure the gateway

1. Enter a unique name for the gateway.
This information is for display purposes only, on UC Server and in the database.

2. Select the communication system for which the gateway is associated.
The default is UC Server.
3. Enter a brief description of the gateway.
This information is for display purposes only.

Messaging Systems

Use the Messaging Systems Wizard to select a message store type, such as Exchange, IMAP, or SMTP, and to configure the message store account.

Users

Use this wizard to add new users and import existing users from Active Directory, Microsoft Exchange Server, or from text files. The wizard allows you to select a location to import users from, and automatically generate and assign extensions. You can also change user information before you create users. For more information refer to the following sections:

- [Importing users from Active Directory on page 20](#)
- [Importing users from Exchange Server on page 21](#)
- [Importing users from text files on page 22](#)

Importing users from Active Directory

You can select a group of users to import from Active Directory, and you can also automatically assign an extension number for each user.

User naming convention

If you import users with a display name only, without specifying the first and last name, then users are imported as follows:

- If a display name is delimited with spaces, then the last 'word' is the last name, for example, "Bob Jeff Thompson"
 lastname = Thompson
 firstname = Bob Jeff
- If a display name is delimited with commas, then everything after the comma is the first name, for example, "Thompson, Bob J."
 lastname = Thompson
 firstname = Bob J.

To import Active Directory users

1. From the drop-down list, select the Active Directory domain from which you want to import users.
2. Select **Browse** to search Containers on your system for the users that you want to import.

3. If you specify a name prefix, the wizard imports users with names that begin with that prefix (this feature is not case sensitive).
4. Enable the **Create "Windows-enabled" Active Directory users** check box if you want users to be able to use the single sign-on Active Directory feature.
5. Enable the **Use Active Directory for messaging configuration** check box to link users' mailboxes to their corresponding Exchange mailboxes.



If you are importing a large number of users, the process takes some time, and a progress page shows you how many users have been found so far.

To change users' specifications

- To return the wizard to the specification page, select **Stop search and refine criteria**.

To stop importing users

- To stop the import, select **Stop search and process users**.

The configuration page appears with only those users that were imported up to that point.

Importing users from Exchange Server

To import users from Exchange Server

1. From the list, select the location of the Microsoft Exchange Server from which you want to import users.
2. If you specify a name prefix, the wizard imports users with names that begin with that prefix (this feature is not case sensitive).

With the list of users, you can assign the Identities (typically extensions). The wizard extracts the first name and last name from the Exchange Server. The users are associated with the Personal Assistant (PA) user profile, and have the system operator as the default dial "0" location.

3. Select whether you want the users that you are importing to be linked to Active Directory.



If you are importing a large number of users, the process takes some time, and a progress page shows you how many users have been found so far.

To change users' specifications

- To return the wizard to the specification page, select **Stop search and refine criteria**.

To stop importing users

- To stop the import, select **Stop search and process users**.

The configuration page appears with only those users that were imported up to that point.

Importing users from text files

You can use Microsoft Excel to create a tab-separated text file to import Windows-enabled or local users. A Windows-enabled user is associated with an Active Directory user, while a local user is not. Local users are configured to use local message store (LMS), while Windows-enabled users are configured to use Microsoft Exchange Server if one exists. Some fields are required and others are optional, depending on whether you're importing local or Active Directory users.

For more information refer to the following sections:

- [Importing local users from text files on page 22](#)
- [Importing Windows-enabled users from text files on page 24](#)



For more information on importing users from text files, refer to **Importing Users to UC Server** technical note available at <http://kb.adtran.com>. A corresponding zip file also includes a Microsoft Excel file for importing users.

Importing local users from text files

To import users, enter the information for each user in a tab-separated text file. The format of the tab-separated file must be similar to the following example, which shows all possible headings for local users. The order of the headings does not matter, and the headers are not case sensitive. To import local users, provide the displayname at a minimum.

Table 1-1. Tab-separated file format

displayname	extension	givenname	sn	userfax	pbx	answeringmode	phonemac	phonetype
First1 Last1	3000	First1	Last1		UC Server	PA		
First2 Last2	3001	First2	Last2		UC Server	PBA		
First3 Last3	3002	First3	Last3		UC Server			



The PBX name in the above example, UC Server, is the PBX name assigned to a PBX when you created it. Substitute the PBX name (if different) with the name you created for your location.

To create a tab-separated file for importing local users using Microsoft Excel

1. Create a Microsoft Excel spreadsheet that has some or all of the following headings. At a minimum, the DisplayName must be specified.

displayname	Name that appears in the Administration Users pane
extension	Identity that is associated with the user. If this value is entered, it must be unique for each user, and cannot correspond to an existing identity.
givenname	First name of the user
sn	Last name of the user
userfax	Incoming identity associated with DID fax. This is the fax number that callers dial to send faxes to the user. The user receives incoming faxes in their Inbox.
pbx	Display name of the PBX that the user is associated with. By default, the name is "UC Server."
answeringmode	Call answering mode, either PA for Personal Assistant or PBA for Personal Business Assistant. If no value is specified, then the user becomes a PA user by default. PA and PBA are not case sensitive.
phonemac	MAC address of the user's phone. The MAC address can be entered with or without dashes between octets.
phonetype	The user's phone model name



The spelling of the phone types in the tab delimited file must match exactly the names used in the Server Configuration Wizard.

2. Enter the customer-provided information into the relevant headings.
3. In Microsoft Excel, select **File > Save As**.
4. Type a name for the file.
5. In the **Save as type** list, select **Text (Tab delimited)(*.txt)**.
6. Select **Save**.
7. Close **Excel**.

To import the user text file

1. When you run the User Import Wizard, choose to import user information from a text-based file.
2. Select **Browse** to select the location of the file.

3. The following options are valid only for importing Windows-enabled users, so for local users the check boxes are disabled:
- Create “Windows-enabled” Active Directory users
 - Use Active Directory for messaging configuration



If you are importing a large number of users, the process takes some time, and a progress page shows you how many users have been found so far.

To stop importing users from a text file

- To return the wizard to the specification page, select **Stop search and refine criteria**.
- To stop the import, select **Stop search and process users**. The configuration page appears with only those users that were imported up to that point.

Importing Windows-enabled users from text files

To import Windows-enabled users, enter the information for each user in a tab-separated text file. For Windows-enabled users, the format of the tab-separated file headings must be similar to the following examples. The order of the headings does not matter, and the headers are not case sensitive. Include all of the required fields, and any of the optional fields that you want, into one file.

Table 1-2. Required fields for Windows-enabled users

displayname	givenname	sn	legacyexchangedn	objectguid	objectsid	userprincipalname
First1 Last1	First1	Last1				
First2 Last2	First2	Last2				
First3 Last3	First3	Last3				



If you do not include all the required information for a Windows-enabled user, then a user will be imported as a local user instead.

Table 1-3. Optional fields for Windows-enabled users

extension	userfax	pbx	answeringmode	phonemac	phonetype
3000		UC Server	PA		
3001		UC Server	PBA		
3002		UC Server			



The PBX name in the above example, UC Server, is the PBX name assigned to a PBX when you created it. Substitute the PBX name (if different) with the name you created for your location.

To create a tab-separated file for importing Windows-enabled users using Microsoft Excel

1. Create a Microsoft Excel spreadsheet that has the following headings (some are optional as noted above):

displayname	Name that appears in the Administration Users pane
extension	Identity that is associated with the user. If this value is entered, it must be unique for each user, and cannot correspond to an existing identity.
givenname	First name of the user
sn	Last name of the user
userfax	Incoming identity associated with DID fax. This is the fax number that callers dial to send faxes to the user. The user receives incoming faxes in their Inbox.
pbx	Display name of the PBX that the user is associated with. By default, the name is "UC Server."
legacyexchangedn	Identifying string for the user's Exchange Server, as defined in Active Directory
objectguid	GUID of the object in Active Directory
objectsid	SID of the user in Active Directory, in S-1-5... format
userprincipalname	The user email address, for example, jmciverson@adtran.com.
answeringmode	Call answering mode, either PA for Personal Assistant or PBA for Personal Business Assistant. If no value is specified, then the user becomes a PA user by default. PA and PBA are not case sensitive.
phonemac	MAC address of the user's phone. The MAC address can be entered with or without dashes between octets.
phonetype	The user's phone model name



The spelling of the phone types in the tab delimited file must match exactly the names used in the Server Configuration Wizard.

2. Enter the customer-provided information into the relevant headings.
3. In Microsoft Excel, select **File > Save As**.
4. Type a name for the file.
5. In the **Save as type** list, select **Text (Tab delimited)(* .txt)**.
6. Select **Save**.
7. Close **Excel**.

To import the user text file

1. When you run the User Import Wizard, choose to import user information from a text-based file.
2. Select **Browse** to select the location of the file.
3. If you've included all the required field headings, then **Create "Windows-enabled" Active Directory users** is enabled for users to be able to use the single sign-on Active Directory feature.
4. Enable the **Use Active Directory for messaging configuration** check box to link users' mailboxes to their corresponding Exchange mailboxes.



If you misspell, or omit, any of the required headers in the tab-separated file, the check boxes noted above are unavailable and users can only be imported as local users.



If you are importing a large number of users, the process takes some time, and a progress page shows you how many users have been found so far.

To stop importing users from a text file

- To return the wizard to the specification page, select **Stop search and refine criteria**.
- To stop the import, select **Stop search and process users**. The configuration page appears with only those users that were imported up to that point.

Final System Configuration

The Final System Configuration Wizard allows you to configure the email notification system. You can use the wizard to create default users and operators, and default mailboxes. Run the wizard also to specify dialing rules and location.

Configuring UC Server Presence and Control

If you installed the UC Server SIP Edition, then you were prompted whether to install the UC Server Presence Components, which are required to run the optional ucCompanion - Live Attendant application. If you installed the UC Server Presence Components then there are some final configuration steps which must be performed once you have completed the Server Configuration Wizard, in order to run the ucCompanion - Live Attendant application. For instructions on configuring the UC Server Presence Components refer to the *NetVanta Unified Communications Server Presence and Control Components Guide*, available from the installation CD, or at <http://kb.adtran.com>.

Appendix A. Manually Configuring Accounts and Permissions

The information in this appendix is intended as reference material for the network administrator.

Before the installer arrives at your site, ensure that the required files for the configuration have already been installed on the UC Server computer.

The following sections describe the manual procedures for some tasks that are typically performed automatically by the UC Server Configuration Wizard. These procedures may be required to be performed manually, since there may be some information about your network and hardware that the wizard cannot determine automatically. The procedures are described below in case some manual configuration is required.

- [Configuring the UC Server User Account on page 27](#)
- [Configuring the Exchange Server Account and Permissions on page 28](#)



It is only necessary to follow the manual procedures below if the Server Configuration Wizard failed to do so automatically, or if you chose to do so manually in order to implement a custom configuration. For more information on some situations where manual configuration may be required, refer to [Polycom Phone Configuration Requirements on page 13](#).

Configuring the UC Server User Account

The Server Configuration Wizard typically creates a new user account on the computer network for UC Server. If this was not done automatically, then follow the steps below to create the account manually.

To manually create a user account for UC Server on the local machine (UC Server is not part of a domain)

1. Right-click **My Computer** on the desktop.
2. Select **Manage**.
3. Select **Local Users and Groups**.
4. Right-click **Users**.
5. Select **New User**.
6. In the New User dialog, enter the required user account information.
The User name can be “UC Server” or a name that you choose.
7. Select **Create**.

To manually create a user account for UC Server in Active Directory (UC Server is part of a domain)

1. Select **Start > Programs > Administrative Tools > Active Directory Users and Computers**.
2. In the left pane, select **Users > Action > New > User**.

3. In the New User dialog box, enter the required user account information.
The Logon Name can be “UC Server” or a name that you choose.
4. Select **Next**.
5. Enter the user password information, and select **Next**.
6. If you have Exchange on the computer, enable **Create an Exchange Mailbox**.
7. Select **Next**, and then select **Finish**.

Configuring the Exchange Server Account and Permissions

The UC Server user account provides a separate security context that does not require administrative permissions on the local computer or in the Domain Administrators Active Directory group.

The UC Server account’s administrative privileges are limited to Microsoft Exchange Server mailboxes. The account must access Exchange user mailboxes in an administrative capacity because it uses them to store and retrieve messages.

Follow the relevant instructions below for configuring Exchange Server 2007, or configuring Exchange Server 2003/2000.

- [Configuring Exchange Server 2007 on page 28](#)
- [Configuring Exchange Server 2003/2000 on page 29](#)

Configuring Exchange Server 2007

To create a mailbox logon to the Exchange Server 2007 console with a Windows account with Recipient Permissions

1. Select **Start > Program > Exchange Server 2007 > Exchange Management Console**.
2. Navigate to **Microsoft Exchange > Recipient Configuration**.
3. Right select on **Mailbox** and select **New Mailbox**.
4. Select **User Mailbox** and select **Next**.
5. Select **New user** and select **Next**.
6. Enter the information for the new user, *enable* the option **User must change password at next logon**, and select **Next**.
7. Select **Next** again, and select **New**.



To integrate with Exchange Server 2007, A Microsoft Exchange Server MAPI client be installed on the UC Server platform to permit connection. We recommend using Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2. Microsoft Outlook 2007 SP2 is not supported.



The Exchange Role of “Server Data Permissions” is required when running the Server Configuration Wizard, in order to grant permissions to the Exchange Server 2007 message store from UC Server. If you do not have access to a Windows account with “Server Data Permissions,” then an Exchange Server Administrator must run the following script on the Exchange Server.

To grant permissions to the Exchange Server 2007 message store from UC Server

- Type the following script replacing <SERVICE_ACCOUNT> with the Service Account name:
Get-MailboxServer | Add-ADPermission -User <SERVICE_ACCOUNT> -AccessRights GenericRead, GenericWrite -ExtendedRights Send-As, Receive-As, ms-Exch-Store-Admin

Configuring Exchange Server 2003/2000

To create an Exchange mailbox for an existing account on Exchange Server 2003/2000

1. Select **Start > Programs > Administrative Tools > Active Directory Users and Computers**.
2. In the left pane, select **Domain** and select the Users folder.
3. In the right pane, right-click the UC Server account.
4. Select **Exchange Tasks** to start the Exchange Tasks Wizard.
5. From the list of tasks, select **Create Mailbox**.
6. Select **Next**, and then select **Finish**.

To manually set rights and privileges on Exchange Server 2003/2000

1. Select **Start > Programs > Microsoft Exchange > System Manager**.
2. In the left pane of the Exchange System Manager window, select the Exchange Server that you want to integrate with.
3. Select **Action > Properties** to open the Exchange Server Properties dialog box.
4. Select the **Security** tab, and select **Add** to open the Select Users, Computer or Groups dialog box.
5. From the Look In list box, select each of the following:
 - the Domain name
 - the UC Server account name
6. Select **Add**, and then select **OK**.
7. From the Permissions: Allow Deny list box, select **Full control** for the account that was just added.
8. Make sure that **Allow inheritable permissions from parent to propagate to this object** is enabled.
9. Select **OK** and then close the Exchange System Manager window.

Appendix B. Manually Configuring Polycom SIP Phones

This appendix describes the steps to manually configure the system to allow for Polycom SIP telephones to retrieve their configuration information. You must only manually enable support for a line of telephones if the Server Configuration Wizard was unable to do so. You will receive a warning from the Phone Types Wizard if this is the case. Typically, the wizard would be unable to automatically enable support for a line of telephones if UC Server is installed on a domain controller. If this is the case, then you must manually enable support for SIP telephones following the instructions in each section listed below. For more information refer to *Phone Types* on page 16.

- *Creating Polycom SIP Telephone User Accounts for FTP Access* on page 31
- *Providing Access for Polycom SIP Telephone User Accounts to the FTP Server* on page 33
- *Enabling Support for Polycom Telephones* on page 35



The following steps are only required if the Server Configuration Wizard was unable to automatically enable support for SIP telephones using the Phone Types Wizard.

Creating Polycom SIP Telephone User Accounts for FTP Access

When Polycom SIP phones attempt to retrieve their configuration from the FTP server, they must first log in. Most SIP telephones have a default user name and password for this purpose, and so if the telephones are to be provisioned through an FTP server then it must be configured to allow access for these telephone user accounts.

The following procedures describe how to set up the telephone user account using Windows XP Pro SP2 and Windows 2003 Server. The procedures describe how to create a user account on a machine running UC Server, that is not part of an Active Directory domain, or that is part of an Active Directory domain. Follow the procedure that is applicable for your particular configuration.



*Typically, telephones have a default password. If this password does not meet the complexity requirements of the domain, such as the Polycom password "PlcmSpIp" then you must disable the requirements before the account is created. You can also manually program the password on each handset. Refer to the **NetVanta Enterprise Communications and Business Application Servers Planning and Deployment Guide**, for more information on disabling password complexity requirements.*

To disable the password complexity policy in SBS 2008

1. Select **Start > Administrative Tools > Group Policy Management**.
2. Select **Forest > Domains >** and select your domain.
3. Select **Default Domain Policy**.
4. In the right pane select the **Settings** tab.
5. Select **Security Settings**.

6. In the right pane, right-click and select **Edit**.
The *Group Policy Management Editor* dialog opens.
7. In the left pane select **Computer Configuration > Policies > Windows Settings > Security Settings > Accounts Policies > Password Policy**.
8. In the right pane double-click on **Password must meet complexity requirements**.
9. Select **Disabled**.
10. Select **Apply**, and then select **OK**.



It may take some time for policies on a domain controller to update. Generally this may take a few minutes, but the larger the domain, the longer it will take for the policies to update. Follow the steps below if you want the policies to update immediately.

To force the domain policies to update immediately

1. Open a command prompt.
2. Enter the following text.
GPUPDATE

To create a user account on the local machine (UC Server is not part of a domain)

1. Right-click **My Computer** on the desktop.
2. Select **Manage**.
3. Select **Local Users and Groups**.
4. Right-click **Users**.
5. Select **New User**.
6. Type the following information in the *New User* dialog:
 - User name—for example, PlcmSpIp, which is the Polycom user name
 - Full name—for example, Polycom Phone Account
 - Description—for example: This account is used by the Polycom phones.
 - Password—for example, PlcmSpIp
 - Confirm password—retype the password
 - User must change password at next logon—Off
 - User cannot change password—On
 - Password never expires—On
 - Account is disabled—Off
7. Select **Create**.

To create a user account in Active Directory (UC Server is part of a domain)

1. Select **Start > Programs > Administrative Tools > Active Directory Users and Computers**.
The instructions may differ slightly depending on the operating system you are running.

2. In the left plane, select the **Users** folder.
3. Right-click and select **New > User**.
If you do not have the required permissions, the New option will not be available.
4. Type the following information in the *New User* dialog:
 - First name—for example, Polycom
 - Full name—for example, Polycom Phone Account
 - User logon name—for example, PlcmSplp, which is the default Polycom user name.
 - Select **Next**.
 - Type in the password—for example, PlcmSplp
 - User must change password at next logon—Off
 - User cannot change password—On
 - Password never expires—On
 - Account is disabled—Off
 - Create an Exchange mailbox—OffIf you have an Exchange Server, it is not necessary to create an Exchange mailbox.
5. Select **Finish**.

Providing Access for Polycom SIP Telephone User Accounts to the FTP Server

Telephone accounts permissions to the FTP server are typically automatically configured by the Server Configuration Wizard. If you did not configure the accounts permissions when you ran the wizard, or were unable to do so due to restrictions, then you must do so manually by following the procedures in this section.

To allow permission for telephone accounts to read/write files on the FTP server, you must:

- Change the properties of the FTP server to allow read/write access.
- Give permissions to the Polycom SIP telephone user account to access the files in the FTP server.
- Give permissions to the UC Server Service account to access the files in the FTP server.

To configure read/write access to the FTP server

1. Select Windows **Start > Settings > Control Panel**.
2. Double-click the **Administrative Tools** icon.
3. Open the **Internet Information Services > expand computer > Default FTP site**.



*For Windows Small Business Server (SBS) 2008 and Windows Server 2008, select **IIS 6.0 Manager**.*

4. Right-click the site object associated with the **Default FTP Site**.



You can locate this file on the left of the screen, below the server, under FTP sites.

5. Select **Properties**.
6. Select the **Home Directory** tab.
7. Make sure that the **Read** and **Write** options are enabled.
8. Select **OK**.

To give permissions to the FTP server for the Polycom SIP telephone user account

1. Using Windows Explorer, navigate to the FTP root folder.
Typically, the FTP root folder location is: **C:\Inetpub\ftproot**.
2. Right-click the folder and select **Properties**.
3. Select the **Security** tab.
4. Select the **Add** button.
5. In the **Enter the object names to select** box, type the name of the SIP telephone user account, and select **OK**.
6. From the list of groups and users, select the telephone account.
7. In the Permissions settings list box, make sure that **Allow** is enabled for the following:
 - **Modify**
 - **Read & Execute**
 - **List Folder Contents**
 - **Read**
 - **Write**
8. Select **OK**.



If you are using SBS 2008 then you do not need to complete steps 9 and 10.

9. Select **Advanced**.
10. Enable the **Replace permission entries on all child objects with entries shown here that apply to child objects** box, and select **OK** to update the permissions.
11. Select **OK**.

To give permissions to the FTP server for the UC Server Service account

1. Using Windows Explorer, navigate to the FTP root folder.
Typically, the FTP root folder location is: **C:\inetpub\ftproot**.
2. Right-click the **ftproot** folder and select **Properties**.
3. Select the **Security** tab.



*If you are using SBS 2008 or Server 2008 then select the **Edit** button.*

4. Select the **Add** button.
5. In the **Enter the object names to select** box, type the name of the UC Server Service account, and select **OK**.
6. From the list of Group or user names, select the UC Server Service account.
7. In the Permissions list box, check **Full Control**, and select **Advanced**.
8. Enable **Replace permission entries on all child objects with entries shown here that apply to child objects**, and select **OK** to update the permissions.
9. Select **OK**.

Enabling Support for Polycom Telephones

Once the FTP server has been configured, it is necessary to enable support for Polycom telephones that use the FTP server for provisioning. This process allows UC Server to automatically detect, configure, and reload a particular line of Polycom SIP telephone configurations.

Step 1: Modify settings in attributes.xml

1. Using Windows Explorer, navigate to \ADTRAN\NetVanta UC Server\Data\System\PhoneTypes.
2. Open the folder for the line of telephones for which you would like to enable support, for example, Polycom.
3. Edit the file *attributes.xml*, and modify the following elements:
 - a** *enabled* - Change this value from 0 to 1, for example:
`<enabled>1</enabled>`
 - b** *serverLocation* - Add the fully qualified or UNC path to the FTP server folder, typically, C:\inetpub\ftproot. For example,
`<serverLocation>c:\inetpub\ftproot</serverLocation>`
4. Save and close the file.

Step 2: Restart the application services

Once the *attributes.xml* file has been updated as per the previous step, restart the UC Server Application Services.

1. Select **Start > Programs > Administrative Tools > Services**.
2. Right-click **NetVanta UC Server Application Services**, and select **Restart**.



Until this service finishes restarting, all UC Server application services are temporarily unavailable.



You can apply special site-specific configurations to the system and per-phone configuration files. Refer to the technical note TN046 - Customizing the SIP Telephone Configuration Files, available at <http://kb.adtran.com>. Refer to the Polycom telephone manufacturer's documentation for information about how to configure these files.