



NetVanta Unified Communications Technical Note

Importing Users to the UC Server

Introduction

A major part of any installation of the UC is the creation of users. The most effective way to create multiple users is to use the Server Configuration Wizard to import a previously created text file. There are three other ways to import users, from Active Directory, a Microsoft Exchange Server, or from a list created manually from within the Server Configuration Wizard. These methods will not be covered in this guide.

Methods of Importing Users	Advantages	Disadvantages
Import from Active Directory	<ul style="list-style-type: none">• Only requires an accessible Active Directory.• Can create Windows-enabled users.• Can bind users' mailboxes to Microsoft Exchange mailboxes.	<ul style="list-style-type: none">• Identities, MAC Addresses and Phone Types must be entered manually for each user.• Depending on the organization of Active Directory, non-user 'users' such as guest accounts and Administrator must be manually unselected.
Import from Microsoft Exchange Server	<ul style="list-style-type: none">• Only requires an accessible Microsoft Exchange Server configured in the UC server.• Can create Windows-enabled users.• Can bind users' mailboxes to Microsoft Exchange mailboxes.	<ul style="list-style-type: none">• Identities, MAC Addresses and Phone Types must be entered manually for each user.• Non-user Exchange accounts such as Administrator must be manually unselected.
Import user information from a text-based file	<ul style="list-style-type: none">• Does not need access to Active Directory or a Microsoft Exchange Server to create Windows-enabled users. Ideal for off-site configurations.	<ul style="list-style-type: none">• Requires a text file to be prepared beforehand.• Depending on how the text file is created, some manual editing of the text file may be required.

	<ul style="list-style-type: none"> • Can bind users' mailboxes to Microsoft Exchange mailboxes. • Can associate users with phones with generated information, e.g., barcode scanner reads MAC addresses • Can define users' answering mode. 	
Manual entry of new users	<ul style="list-style-type: none"> • Requires almost no preparation beyond what users to add and their Identities • Very fast for adding a small numbers of users 	<ul style="list-style-type: none"> • Cannot create Windows-enabled users. • All information must be entered manually.

Importing Users from a Text-Based File

Importing users from a text-based file is the most efficient method of importing users into the UC server. This is because it can:

- Be generated using data from Active Directory.
- Be modified using familiar programs like Microsoft Excel.
- Incorporate existing data such as internal extension lists or a numbering plan.
- Be generated, modified, and checked before the installation.
- Create both local and Windows-enabled users.
- Create Windows-enabled users without having access to Active Directory or a Microsoft Exchange Server. This is ideal for off-site installations.
- Define individual users' answering behavior, Personal Assistant or Personal Business Assistant.
- Associate users with phones easily by using phone MAC addresses from a list, or from the barcodes on the phones and their boxes and phone types from an Excel file.

There are two steps to importing users from a text-based file, creating the file and importing the users from the file.

Structuring the Text File

When using a text file to populate the UC server, the wizard takes all the data from a specially formatted text file containing tab separated values. These are the columns that can be included in the tab separated text file.

Column	Required	Description	Example
DisplayName	Yes	Name that appears in the Administration Users pane	John Smyth
GivenName	Yes ¹	First name of the user	John
Surname	Yes ¹	Last name of the user	Smyth
Extension	Yes	Identity that is associated with the user. It must be unique and cannot correspond to an existing identity.	101 1234 56789
UserFax	No	Identity associated with DID fax. It must be unique and cannot correspond to an existing identity.	487 6543 31337
UserMode	No	Determines whether the Personal Assistant or the Personal Business Assistant is used for this user. The default is PA.	PA – for Personal Assistant PBA – for Personal Business Assistant
CommunicationSystem	No	Determines which communications system a user is associated with. If left blank or omitted completely, the communication system will be selected when the file is imported.	UC Server Generic PBX (via SIP Gateway)
MailboxID	Yes ²	Identifying string for the user's Exchange Server, as defined in Active Directory	/o=First Organization/ou=First Administrative Group/cn=Recipients/cn=jsmyth
WindowsUserEnabled	Yes ²	Determines whether to create a Windows-User Enabled Account.	Yes No

Column	Required	Description	Example
ADUserGuid	Yes ²	GUID of the object in Active Directory	6c4981f6413de3479b0845ae1af24203
ADUserSid	Yes ²	SID of the user in Active Directory, in S-1-5... format	S-1-5-21-2138396756-507797660-930774684-1916
UserPrincipalName	Yes ²	The user e-mail address	jsmyth@domain.com
TelephoneMacAddress	No	MAC address of the user's phone. The MAC address can be entered with or without dashes or colons between octets.	00-04-F2-02-51-CA 12:34:56:78:90:AB CDEF12345678
TelephoneType	No	The user's phone type must appear <i>exactly</i> as it appears in the phone creation wizard.	Some possible values: Aastra-480i Aastra-480i cordless Aastra-9112i Aastra-9133i Polycom SoundPoint IP-301 Polycom SoundPoint IP-320 Polycom SoundPoint IP-330 Polycom SoundPoint IP-4000 Polycom SoundPoint IP-430 Polycom SoundPoint IP-501 Polycom SoundPoint IP-550 Polycom SoundPoint IP-601 Polycom SoundPoint IP-650 snom-300 snom-320 snom-360 snom-370 Grandstream BT101 Grandstream BT102 Grandstream BT200 Grandstream GXP2000 Grandstream GXP2020 Grandstream GXV3000 Unknown
UmEnabled	No	Determines whether to work with Exchange UM ExchangeUmDialPlan, UmPilotNumber and	FALSE TRUE

Column	Required	Description	Example
		ProxyAddresses are required if it is TRUE	
ExchangeUmDialPlan	No ³	This attribute specifies the UM dial plan that is associated with the UM mailbox policy.	
UmPilotNumber	No ³	The UM Pilot Number	
ProxyAddresses	No ³	This property specifies the extension for the user. A single extension or a list separated with exclamation marks (!) can be specified.	sip:jsmyth@domain.com!smtp:jsmyth@domain.com!SMTP:jsmyth@domain.com!X400:c=US;a=p=Domain;o=HULL;s=Smyth;g=James;
IncludeInDialByName	No	If set to no, user will be excluded from the dial by name feature. If set to yes, the user will be included. If left blank or omitted, assumed to be yes.	Yes No
UserPin	No	Specifies the PIN used for accessing voicemail for the user. If omitted or left blank, the PIN for the user will be the same as the extension. If the extension is less than four digits, it will be padded with prepended zeros to a length of four digits.	0101 1234 56789
UseADForMessaging	No	Is set to yes, the UC server will configure the users' messaging according to what is set in Active Directory.	Yes No
LoginName	No	If users are not using single sign on, they will log in using this login name.	Jsmyth James Smyth

¹ Required for Dial by Name

² Required for "Windows-enabled" users

³ Only required if **UmEnabled** is TRUE

Creating the Text File

Using the Excel File Provided

The **MailboxId**, **ADUserGuid**, and **ADUserSid** fields required for “Windows-enabled” users are generally complex, so it’s not feasible to enter this data manually. One method to generate the tab separated values is to use the Excel file provided to build it for you, pulling the data from Active Directory, generating identity numbers, and so on.

1. Extract **UserImportSheet.xlt** from *TN094 – Importing Users to UC Server.zip*.
2. Open **User Import Preparation Tool.xls** with Microsoft Excel.
3. If the **Communications Server** the users are being added to is not “UC Server” then enter it.
4. If **Generated Extension** is selected, set the **Starting Extension Number**.
5. Select **Import from Active Directory**.

Note: This will import every ‘user’ on your domain, including accounts that are not going to become UC server users, such as Administrator. It will not include disabled accounts.

6. Select the rows where accounts are not to become UC server users, right-click and select **delete**.
Tip: Looking for entries missing **GivenName**, **Surname**, or **MailboxId** can provide a good idea of which ‘user’ accounts are not actually users. However, this will not catch all of them.

Note: The default value for the **UserMode** column in the file is ‘**PA**’, so all imported users will be Personal Assistant users. If some or all users need to be Personal Business Assistant users, change ‘**PA**’ to ‘**PBA**’ to for each user that requires it.

7. Confirm that the extensions are correct, re-numbering them if necessary, or enter them now if they were not created.

Tip: Duplicate numbers will be highlighted red.

8. Add the **TelephoneMacAddress** and **TelephoneType** for all or some of the users. (Optional)
Note: The **TelephoneType** field values must be *exactly* the same as they appear in the Phone type drop-down menu in the new phone dialog. The **TelephoneType** field will be validated against the possible phone types. A drop-down menu is provided.

Tip: Phone MAC addresses can be read into the spreadsheet using a barcode scanner if the phones being used have MAC address barcodes. Depending on the scanner software being used, the MAC address is pasted to the current cursor location.

	A	B	C	D	E	F	G	H	I	J	K	L
1	displayname	givenName	sn	extension	phonemac	phonetype	pbx	userfax	legacyExchangedn	objectguid	objectSID	userprincipalname
2	Bill Connor	Bill	Connor	101	00-04-f2-00-00-09	Polycom SoundPoint IP-650	UC Server		/O=Organization/O 9b1bb2c3c6	S-1-5-21-21	bconnorr@Organiza	
3	Chris Alderson	Chris	Alderson	102	00-04-f2-00-00-0A	Polycom SoundPoint IP-430	UC Server		/o=Organization/o ac43125e162	S-1-5-21-21	aalderson@Organiza	
4	John Smyth	John	Smyth	103	00-04-f2-00-00-0B	Polycom SoundPoint IP-550	UC Server		/o=Organization/o 6f5f114c104	S-1-5-21-21	jsmyth@Organizatio	

An example of what the spreadsheet should look like after these steps.

9. Select the **Options** worksheet.
10. Select **Export Text Data**.
11. Navigate to where the file should be saved, type a name for the file and select **Save**.
12. Close Excel.
13. Select **No**.

Creating a Text File Using Microsoft Excel

This section only covers how to create local users because the **MailboxId**, **ADUserGuid**, **ADUserSid**, and **UserPrincipalName** fields required for “Windows-enabled” users are generally complex, so it is not feasible to enter this data manually and therefore it is omitted from this section.

1. Create a Microsoft Excel spreadsheet that has some or all of the following headings. At a minimum, the **DisplayName** and **Extension** must be specified.
 - **DisplayName**
 - **GivenName**
 - **Surname**
 - **CommunicationSystem**
 - **Extension**
 - **UserFax**
 - **TelephoneMacAddress**
 - **TelephoneType**
 - **UserMode**

Note: The order of the headings does not matter, nor are they case sensitive.

2. Enter the customer-provided user information into rows below the relevant headings, one row per user.

Tip: Phone MAC addresses can be read into the spreadsheet using a barcode scanner if the phones being used have MAC barcodes. Depending on the scanner software being used, the MAC address is pasted to the current cursor location.
3. In Excel 2003 select **File > Save As**. In Excel 2007, select the **Microsoft Office Button > Save As**.
4. In the **Save as type** list, select **Text (Tab delimited)(*.txt)**.
5. Type a name for the file.
6. Select **Save**.
7. Select **OK**, then **Yes**.
8. Close Excel.
9. Select **No**.

Importing Users From the Text File

1. Start the Server Configuration Wizard.
2. Select **Users**, **Next**, select “Import user Information from a text-based file” then select **Next**.
3. Select **Browse**, find the text file containing the users, select it, and select **Open**.

Note: If the text file contains the headers **MailboxId**, **ADUserGuid**, **ADUserSid**, and **UserPrincipalName**, the ‘Create Windows-enabled” Active Directory users’ and ‘Use Active directory for messaging configuration’ options will be automatically selected regardless of whether those fields are populated.

Note: If the options in steps 4 and 5 are selected but if any the values for these headers is not provided for some or all the users, those users will be created as local users instead of Windows-enabled users.

4. If your users need to use single sign-on and automatic synchronization with Active Directory, ensure the 'Create "Windows-enabled" Active Directory users' option is selected. This is a requirement to bind users' mailboxes with their Microsoft Exchange mailboxes.
Note: If you are creating local users, leave all options unchecked and proceed to step 7.
5. If you need to bind users' mailboxes with their Microsoft Exchange mailboxes, ensure the 'Use Active directory for messaging configuration' option is selected.
6. If the server cannot access the instance of Active Directory the users are from, such as an off-site installation, ensure 'Allow "disconnected" Active Directory user creation' is selected.
7. Select **Next**.
8. Select the communication system that the entries that have no CommunicationSystem value should be associated with from the drop down menu and select **Next**.
9. If the entire text file is to be imported, select **Select All** to select every entry in the text file, and select **Next**.
If only part of the file is to be imported, select the users to be imported and select **Next**.
10. Select **Submit** and wait for the task to complete.
11. Select **Next**, then **Finish**.