

Configuring the NetVanta Business Communications System



Quick Configuration Guide

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This quick configuration guide explains how to configure the NetVanta Unified Communications Server (UC server) and the NetVanta 7000 Series for use as the NetVanta Business Communications System (BCS). The NetVanta BCS provides a private branch exchange (PBX) for small- to medium-sized businesses with an integrated 24-port Power over Ethernet (PoE) switch, IP telephone interoperability, and T1 (purchased separately) and foreign exchange office (FXO) trunk connections to public switched telephone network (PSTN) gateways.

The NetVanta BCS is created by a new installation of both the UC server and the NetVanta 7000 Series, or by adding a UC server or NetVanta 7000 Series product to an existing UC server or NetVanta 7000 Series installation. This guide works through the necessary configuration steps to integrate these two products into a communication system, and includes the following sections:

- [Hardware and Software Requirements and Limitations on page 1](#)
- [Before You Begin on page 2](#)
- [Configuring the NetVanta 7000 Series Communication System on the UC Server on page 4](#)
- [Configuring the NetVanta 7000 Series to Communicate with the UC Server on page 10](#)
- [Creating Identity Services in the NetVanta UC Server on page 17](#)
- [Creating the Necessary Identities in the NetVanta UC Server on page 19](#)
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Hardware and Software Requirements and Limitations

For the NetVanta BCS to function properly, all NetVanta 7000 Series products must be running ADTRAN Operating System (AOS) firmware release A2.07 or later. If you need to upgrade your firmware, the latest code version is available for download at <http://www.adtran.com>. If you need instructions on how to upgrade your firmware, refer to the *Upgrading AOS Firmware* configuration guide available online at <http://kb.adtran.com> (article number 1630).

In addition, the UC server must be installed on a system meeting the minimum requirements. For information about the minimum system requirements and limitations for the UC server, refer to the following guides available online at <http://kb.adtran.com>. Select the appropriate guide from the following list:

- *NetVanta Unified Communications Server Planning and Deployment Guide* (article number 3257).
- *NetVanta Unified Communications Server Installation Guide* (article number 3254).
- *NetVanta Unified Communications Server Configuration Guide* (article number 3253).

T.38 fax channels are required for connecting calls from a primary rate interface (PRI) or foreign exchange station (FXS) port on the NetVanta 7000 Series with the fax features of the UC server. The NetVanta 7000 Series supports a maximum of two simultaneous T.38 fax channels. T.38 fax is not supported by the FXO ports on the NetVanta 7000 Series.

Before You Begin

Before you begin configuring the UC server and the NetVanta 7000 Series as an integrated communication system, there are a couple of tasks you should complete. If this is a new installation of both the UC server and the NetVanta 7000 Series product, you should complete the initial installation and configuration of both products. Regardless of whether or not this is a new installation, you will need to make note of the user settings on the NetVanta 7000 Series to correctly migrate and map users between the UC server and the NetVanta 7000 Series product. Both tasks are addressed in the following section.

Installing the UC Server

If this is a new installation of the NetVanta UC server, you should complete the installation using the following documents (available online at <http://kb.adtran.com>).

- *NetVanta Unified Communications Server Installation Guide* (article number 3254). This guide will walk you through the initial installation process of the UC server.
- *NetVanta Unified Communications Server Configuration Guide* (article number 3253). This guide will walk you through the initial configuration of the UC server using the Server Configuration wizard. The Server Configuration wizard is a compilation of multiple wizards, including the Product Licensing, Windows Network Integration, Communication Systems, Phone Types, Gateways, Messaging Systems, Users, and Final Systems Configuration wizards. Two of these wizards, the Communication Systems and Users wizards, are relevant to the configuration of the BCS. If you are configuring the UC server for the first time as a BCS, you can use the information included in the [Using the Communication System Wizard on page 4](#) of this guide to complete the communication system configuration on the UC server while using the Server Configuration wizard. The Users wizard can also be used to migrate users from the NetVanta 7000 Series for use in the BCS. Using this portion of the wizard is covered in [Importing NetVanta 7000 Series Users into the NetVanta UC Server on page 22](#).

Installing the NetVanta 7000 Series

If this is a new installation of the NetVanta 7000 Series product, you should complete the installation and configuration based on the instructions provided in the *NetVanta 7000 Series* quick start guide that accompanied the unit. This document is also available online at <http://kb.adtran.com> (article number 2511). Additional configuration documents for your NetVanta 7000 Series product (for example, voicemail, dial plans, auto attendant, etc.) can also be found at <http://kb.adtran.com> by navigating the menus on the left of the ADTRAN Knowledge Base.

Collecting NetVanta 7000 Series User Information

For the BCS to function properly, the users present on the NetVanta 7000 Series unit must correspond to users (identities) configured in the NetVanta UC server. To properly map the users between the two products, you must gather information about each user on the NetVanta 7000 Series unit and import or enter that information in the UC server. This information is available in the NetVanta 7000 Series Web-based graphical user interface (GUI) on the **User Accounts** page. There are two methods for importing users into the UC server: you can input each user individually or you can create a tab separated value (TSV) file to import a batch of users. These options are covered in [Importing NetVanta 7000 Series Users into the NetVanta UC Server on page 22](#).

Depending upon your specific configuration needs (for example, if you are using Active Directory or not), different user information must be collected. Refer to the following documents for the types of user information you will need to gather (available online at <http://kb.adtran.com>):

- *NetVanta Unified Communications Server Configuration Guide* (article number 3253).
- Technical note *TN094 Importing Users to the UC Server* (article number 3335).

Once you have gathered this information, keep it to use to import users from the NetVanta 7000 Series to the UC server after the NetVanta 7000 Series communication system is created in the UC server.



If you are migrating to the NetVanta BCS, all users on the system should be configured in the NetVanta 7000 Series communication system created on the UC server (refer to [Configuring the NetVanta 7000 Series Communication System on the UC Server on page 4](#)).

Configuring the NetVanta 7000 Series Communication System on the UC Server

The first step in configuring the NetVanta BCS is to configure the UC server to facilitate connection with the supported NetVanta 7000 Series products. To properly configure the UC server, you will need to configure a NetVanta 7000 Series communication system on the UC server and determine an answering number and a communication port for each supported NetVanta 7000 Series product.



The following steps can be repeated for each NetVanta 7000 Series product that you add to the same UC server.

Using the Communication System Wizard

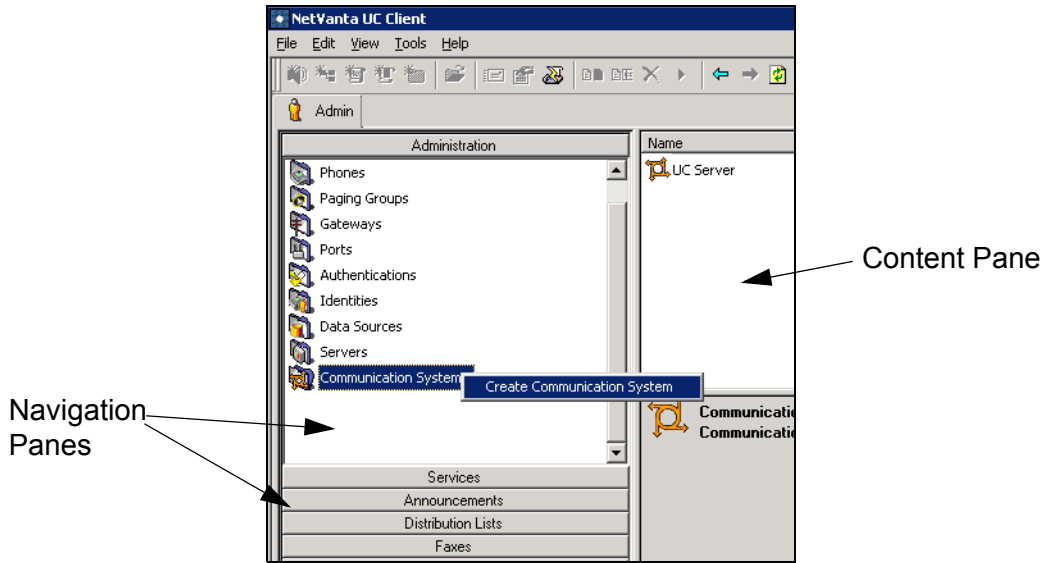
The Communication System wizard creates the connection between the UC server and the NetVanta 7000 Series product by creating a communication system on the UC server specifically for the NetVanta 7000 Series product, establishing a SIP trunk between the UC server and the NetVanta 7000 Series product. The wizard can be accessed one of two ways: during the initial installation of the UC server or from the UC server's **Administration** navigation pane. The following steps outline how to use the Communication System wizard within the UC server to configure the NetVanta 7000 Series communication system on the UC server.



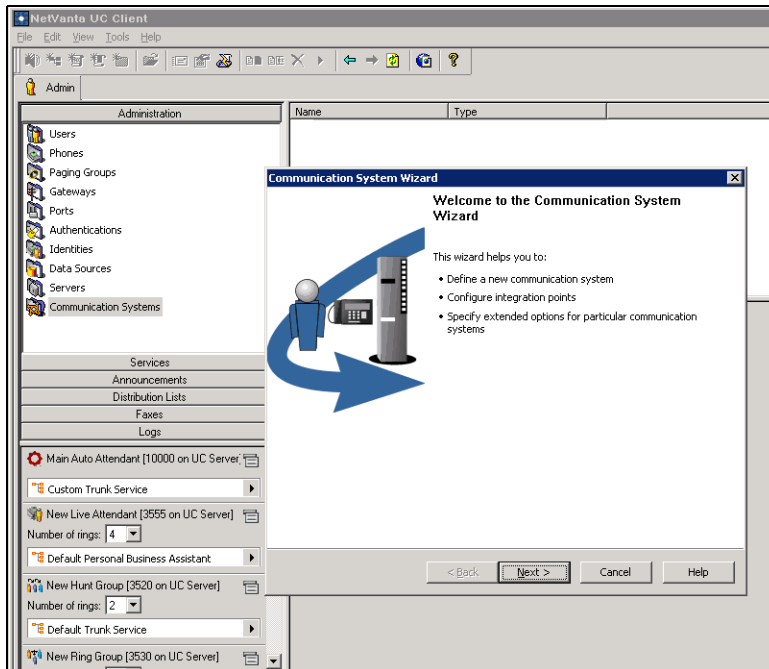
The information in this section can also be used to configure a communication system for the NetVanta 7000 Series product in an initial UC server installation (using the Server Configuration wizard).

To configure the communication system for each NetVanta 7000 Series product that you are connecting to the UC server, follow these steps:

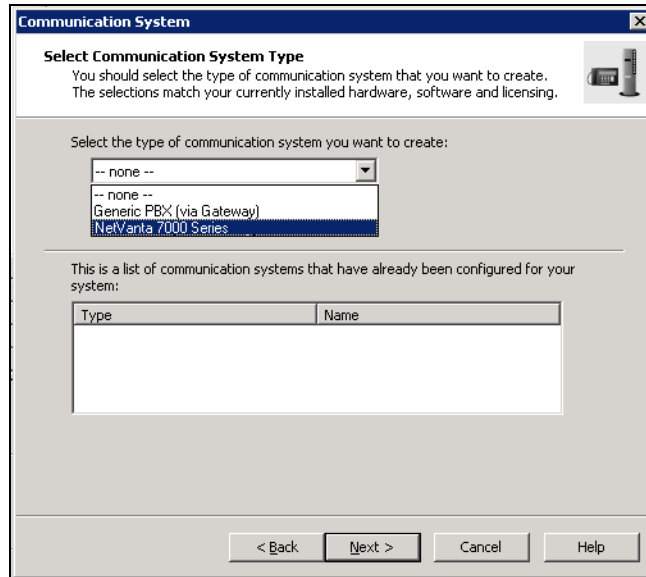
1. Connect to the UC server as an administrator. In the **Administration** navigation pane, select **Communication Systems**. If the NetVanta 7000 Series communication system was created during initial installation (using the Server Configuration wizard as described in **Step 2** ([Before You Begin on page 2](#)), you can skip to **Step 7** (on [page 8](#)) and enter the IP address of the unit. If no NetVanta 7000 Series product appears in the list of communication systems, you will create one. In the navigation pane, right-click on **Communication Systems** and select **Create Communication System**.



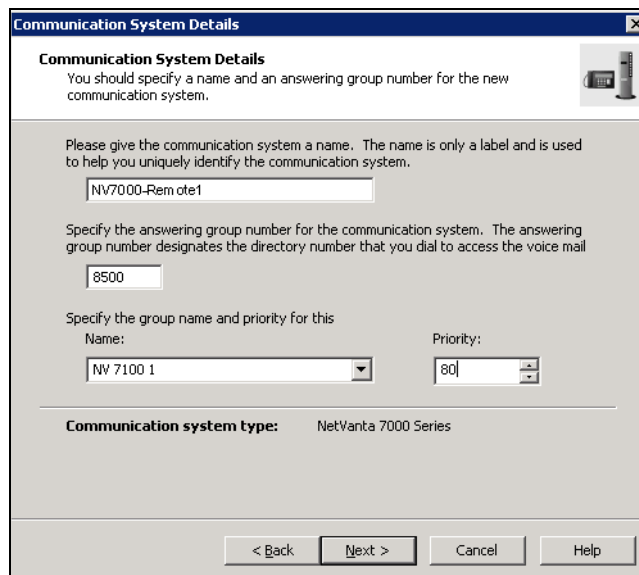
2. You will then be prompted to begin the **Communication System Wizard**. Select **Next**.



3. Select **NetVanta 7000 Series** from the drop-down menu and select **Next**.



4. Enter the communication system's label, answering group number, group name, and priority in the appropriate fields and select **Next**.



The communication system's label is an identifying name for the specific communication system. For example, if the communication system is for a NetVanta 7100 operating at a remote branch office, use the name **NV7100-Remote1**.

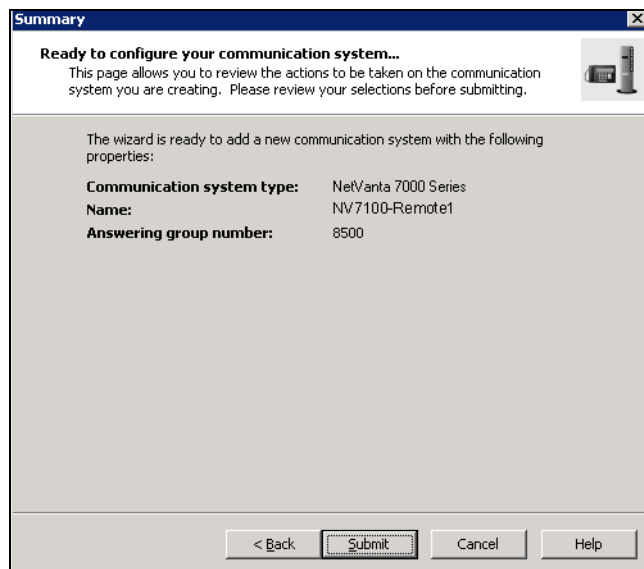
The answering group number is necessary for the NetVanta BCS to function properly. It refers to an identity on the UC server, and it is recommended that this number be **8500** to avoid changing the configuration of the NetVanta 7000 Series product. The answering group number will function as the voicemail extension on the UC server.

NOTE *The **8500** extension is the default extension for the NetVanta 7000 Series product. This number does not need to be changed for the first unit you add to the UC server; but if you are adding multiple NetVanta 7000 Series products to the server, each will need a unique group number. For example, **8501**, **8502**, and so on. The NetVanta BCS works so that an individual calling from a connected NetVanta 7000 Series product using the **8500** extension will reach the appropriate voice mailbox even when the answering group number is changed.*

The group name indicates the group of NetVanta 7000 Series products to which this communication system belongs. If the field is left blank, the NetVanta 7000 Series product is distinctly separate from other NetVanta 7000 Series products.

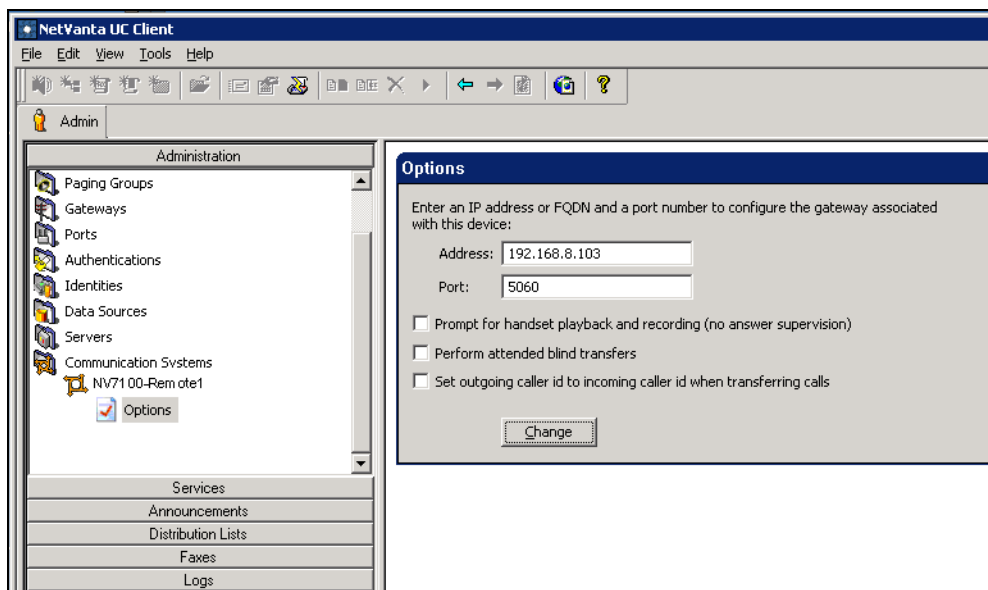
The priority value indicates the relative priority of this communication system when selecting outgoing ports for making calls within a group. Higher priorities are designated by higher numbers. By default, the priority value is set to **100**.

5. Verify that the information is correct, and select **Submit**.



6. After the wizard processes the creation of a new communication system, select **Finish** and the new connection appears in the list under **Administration > Communication Systems**.

- Next, specify the IP address of the NetVanta 7000 Series unit that will be communicating with the UC server. Navigate to **Administration > Communication Systems > NV7100-Remote1 > Options**. Enter the IP address of the NetVanta 7000 Series unit and its port number in the appropriate fields. This port is used for Session Initiation Protocol (SIP) and Realtime Transport Protocol (RTP) traffic and should always be **5060**. When you have entered the correct information, select **Change**.

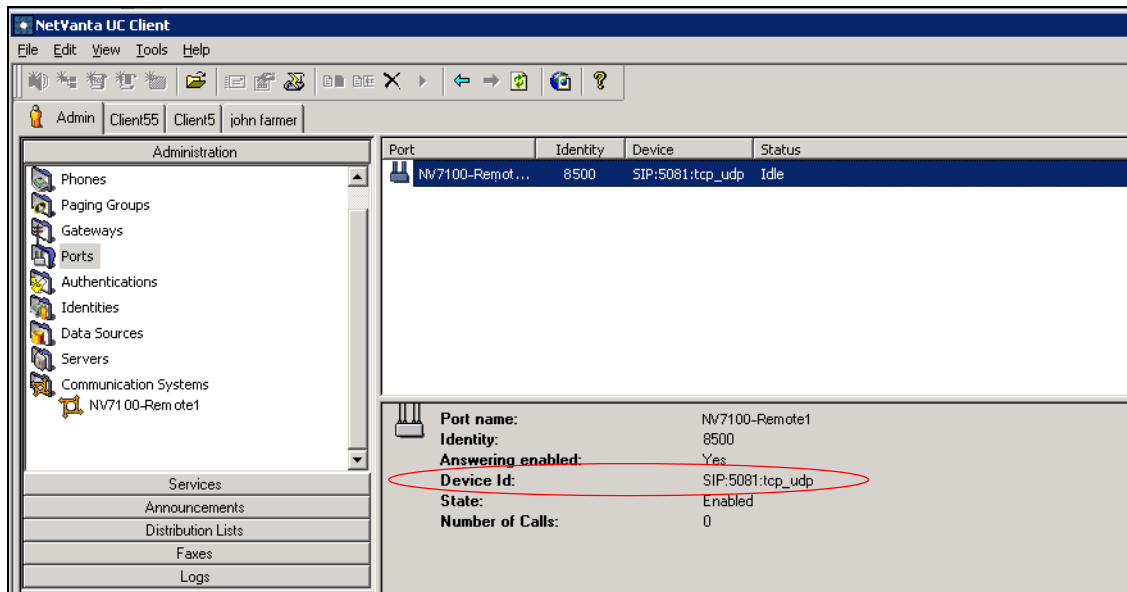


The NetVanta 7000 Series communication system is created. The next step is to verify that the port for the NetVanta 7000 Series connection to the UC server has also been created and is correct.

Verifying the NetVanta 7000 Series Connection Port

After the communication system has been created for the NetVanta 7000 Series product that is being connected to the UC server, you should verify the User Datagram Protocol (UDP) port for the NetVanta 7000 Series product on the UC server. This is the port used by the UC server for voicemail, etc. The port can be any UDP port, but typically starts at, and increments from, port **5080**.

1. Navigate to **Administration > Ports** and select **NV7100-Remote1** from the port list. Details of the NV7100-Remote1 communication system appear below the port list.



In the details below the port list, the **Device ID** displays which port is used by the communication system. This is the UC server port used by the NetVanta 7000 Series unit, not the port on the NetVanta 7000 Series product. In this example, the communication system is using port **5081**.

NOTE Each NetVanta 7000 Series product must communicate with the UC server on a separate port. A sufficient number of ports must be available for the number of NetVanta 7000 Series products you are connecting to the UC server.

NOTE You must make sure that the port to which you assign the NetVanta 7000 Series product is not being used by another application. The UC server will not automatically verify port availability.

2. After you have verified the port has been created and is available for use, you can repeat these steps for each NetVanta 7000 Series unit you want to add to the UC server.

Configuring the NetVanta 7000 Series to Communicate with the UC Server

There are a few configuration steps that are necessary for the NetVanta 7000 Series unit to function as part of the NetVanta BCS. Each NetVanta 7000 Series unit that you add to the UC server must be configured with a SIP trunk to communicate with the UC server. The SIP trunk for each unit should match the communication system that was created on the UC server.



*This guide assumes that you are familiar with configuring SIP trunks on NetVanta 7000 Series products and it only details the process necessary to connect a unit to the UC server. If you would like more information about SIP trunk configuration, refer to the **NetVanta 7000 Series SIP Trunking** configuration guide available online at <http://kb.adtran.com> (article number 2508).*

The SIP trunk is then added to a trunk group, and extensions for voicemail login (8500), leaving a voicemail (8504), and externally checking voicemail (8501) are added to the trunk group call templates. Next, you must verify the voicemail settings of the NetVanta 7000 Series unit. The last step in configuring the NetVanta 7000 Series for use with the BCS is to enable prefer trunk routing. These steps are included in the following sections.

Creating a SIP Trunk on the NetVanta 7000 Series

To create a SIP trunk on the NetVanta 7000 Series unit, follow these steps:

1. Connect to the NetVanta 7000 Series GUI by opening a new Web page in your Internet browser and entering the unit's IP address in the address field in the following form: **http://<ip address>/admin**. For example:
http://192.168.8.103/admin
2. At the prompt, enter your **User name** and **Password** and select **Ok**.



*The default user name is **admin**, and the default password is **password**.*

3. Once connected, navigate to **Data > Router/Bridge > IP Interfaces** from the menu on the left. Select the VLAN interface for administering the NetVanta 7000 Series unit (typically **vlan 1**).

IP Interfaces			
This is a list of all of the IP interfaces configured in this unit. View or edit the configuration of an interface by clicking its name. New VLAN interfaces can be created by selecting the VLANs item on the menu bar, and then selecting Add New VLAN.			
Name	IP Address	Netmask	Type
eth 0/0	0.0.0.0	255.255.255.255	Ethernet
VLAN 1	10.10.20.1	255.255.255.0	Interface VLAN
VLAN 2	10.200.1.138	255.255.0.0	Interface VLAN

- In the interface's configuration menu, scroll down to the **Media-Gateway** section and select the IP address type **Primary** from the drop-down menu. Then select **Apply**.

Secondary IP Settings

IP Address	Mask
Add a new Secondary IP Address	

Media-Gateway

IP Address Type: None ▼ *RTP traffic will flow over the selected IP address.*

Monitoring

RTP Monitoring: *Enables [RTP monitoring](#) on this interface.*



Repeat Steps 3 and 4 for additional VLAN interfaces.

- Next, navigate to **Voice > System Setup > Codec Lists** and select **Add New Codec List** to create a coder-decoder (CODEC) list. This list will use the G.711 CODEC to facilitate communication between the NetVanta 7000 Series and the UC server and to avoid any transfer problems. Name the CODEC list and select the CODEC type **G.711 ulaw** from the drop-down menu. Then select **Apply**.

Add New Codec List

A codec list defines an ordered set of preferred codecs to use when an endpoint engages in a voice call.

Codec List Name: ?

New User Default: ?

Codec #1: <none> ▼ ?

Codec #2: <none> ▼ ?

Codec #3: <none> ▼ ?

Codec #4: <none> ▼ ?

- Next, you will create the SIP trunk. Navigate to **Voice > Trunks > Trunk Accounts**. Specify the name for the trunk, and select **SIP** from the trunk type drop-down menu. Then select **Add**.

Add / Modify / Delete Trunk Accounts

Use this page to add and configure trunk accounts.

Add a New Trunk Account

Trunk Name: ?

Type: ?

- After selecting **Add**, you will automatically be prompted to configure the trunk. Scroll down the configuration menu to the **SIP Settings** tab. Specify the SIP server address as the IP address of the UC server. In the **SIP Server Port** field, enter the port number that corresponds to the port specified in the UC server for the NetVanta 7000 Series product (refer to [Verifying the NetVanta 7000 Series Connection Port on page 8](#)). Next, select **Internal** as the **Default Ring Cadence**, and enable **Music on Hold**, **Diversion Support**, and **Diversion for External Voicemail**. Finally, select the CODEC list created in Step 5 (on [page 11](#)) from the **CODEC Group** drop-down menu and select **Apply**.



*The **Music on Hold** parameter is optional, but if it is not enabled, inbound callers will hear nothing if the UC server puts the call on hold.*

SIP Settings ANI Substitution DNS Substitution DNS:ANI Replacement

SIP Server Address: Not Set IP Address: 10 . 10 . 8 . 236 Host Name:

SIP Server Port: 5081

SIP Proxy Address: Not Set IP Address: . . . Host Name:

SIP Proxy Port:

SIP Conferencing URI:

Force Host Resolve: Override Enable

FROM Header User Formatting: Override Domestic

FROM Header Host Type: Override SIP Server

TO Header Host Type: Override SIP Server

P-Asserted Identity Host Type: Override SIP Server

Request URI Header Host Type: Override SIP Server

Alert Info URL: Override Default Custom:

Supports 100rel: Override Enable

Require 100rel: Override Enable

Dial String Source: Request URI

Trust Domain: Enable

Require P-Assert Identity: Require

Verify Remote Supports Replaces: Enable

SIP Keepalive Type / Timeout: None 30 seconds <30-3600>

Default Ring Cadence: Internal

Music on Hold: Enable

Diversion Support: Enable

Diversion for External Voicemail: Enable

SIP Registrar Settings

SIP Registrar Address: Not Set IP Address: . . . Host Name:

SIP Registrar Port:

Requires Expires: Enable

Registration Expire Time: Server Default Request an Expire Time: 3600 seconds

Max Concurrent Registrations: 32 <0-32>

Registrar Threshold: Absolute: <30 secs - 7 days> 0 days 0 hours 5 min. 0 sec. Percentage: % <0 - 90%>

Default Authentication: Not Set Set User: Password:

Domain Address: Server Default Use this domain:

Codec Group: G711 ONLY (G.711 uLaw)

Registration Settings

Register value	End (if range)	Authname
There are no Register entries for this Trunk.		

Add Register Entry

Cancel Apply

SIP IP address and port settings

Default Ring Cadence and Diversion settings

CODEC Group

Adding the SIP Trunk to a Trunk Group

1. After you have configured the SIP trunk, you must add it to a trunk group. Navigate to **Voice > Trunk > Trunk Groups** to create the trunk group. Enter the name of the new trunk group in the appropriate field (for example, **NV Comm Sys 1**) and select **Add**.

Add / Modify / Delete Trunk Groups

Use this page to add and configure trunk groups.

Add a New Trunk Group

Group Name: *Enter a name for this group.*

Modify/Delete Trunk Group

This is a description of this list

Trunk Group	Description	
ANALOG FXO TRUNKS		<input type="button" value="Delete"/>
ANALOG TELCO		<input type="button" value="Delete"/>
TEST		<input type="button" value="Delete"/>
PAETEC SIP TRUNK		<input type="button" value="Delete"/>

2. You will automatically be prompted to configure the new trunk group. Select **Add Members** in the trunk group's configuration, and then, using the check box, select the SIP trunk you just created. Then select **Add Selected Trunks**.

Edit Trunk Group 'NV COMM SYS 1'

Basic configuration for a Trunk Group. Click 'Apply' when done.

Add Members to Trunk: Group

Click on one or more rows to select Trunk Accounts to add as members of this trunk group. **Hint: Use the Shift key to select ranges.**

<input type="checkbox"/>	T1 RBS Trunk	T05	RBS	Ground Start
<input type="checkbox"/>	<No Trunk Name Set>	T06	Analog	Loop Start
<input type="checkbox"/>	Service Provider	T07	SIP	SIP
<input type="checkbox"/>	<No Trunk Name Set>	T08	RBS	Wink
<input type="checkbox"/>	<No Trunk Name Set>	T09	ISDN	ISDN
<input type="checkbox"/>	Feature Grp D	T10	RBS	Feature Group D
<input type="checkbox"/>	NV 7100 PBX 1	T11	SIP	SIP
<input checked="" type="checkbox"/>	UC Server	T12	SIP	SIP

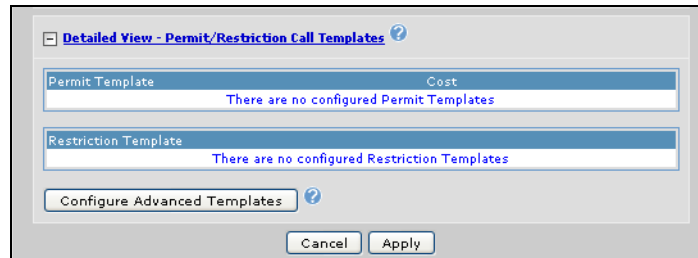
NOTE: [Class of](#) (ie: 900 numbers, etc).

Adding Voicemail Extensions to Trunk Group Call Templates

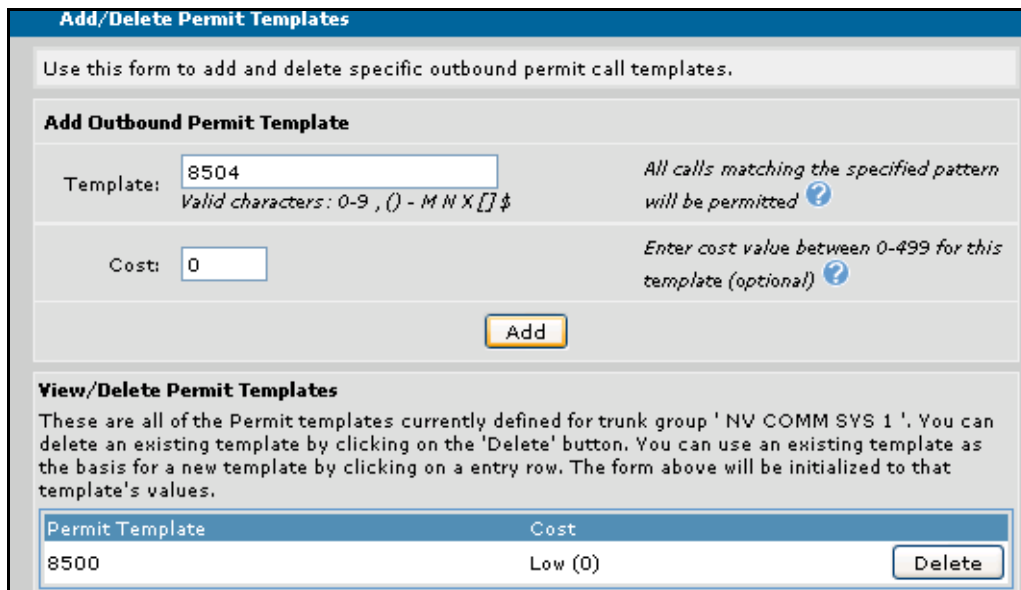
After the SIP trunk has been added to the trunk group, three extensions must be added to the call templates for the trunk group. These extensions are **8500** (for voicemail login), **8504** (for leaving voicemail), and **8501** (for checking voicemail externally). Eventually extensions 8504 and 8501 will be linked to identities in the UC server.

To add the voicemail extensions to the trunk group call templates, follow these steps:

1. Expand **Detailed View - Permit/Restriction Call Templates** on the trunk group's configuration menu and select **Configure Advanced Templates**.



2. Specify the outbound permit template by adding three new templates. To create the new templates, enter the template identifier in the **Template** field and enter the cost in the appropriate field. You should create a template **8500** with a cost of **0** (this template is for voicemail login), a template **8504** with a cost of **0** (for leaving voicemail), and template **8501** with a cost of **0** (for checking voicemail externally). Select **Add** after entering the information for each template.



Permit Template	Cost	
8500	Low (0)	Delete



Template 8504 and 8501 must have associated identities in the UC server. For information about configuring these identities in the UC server, refer to [Creating Identity Services in the NetVanta UC Server on page 17](#).

Verifying the NetVanta 7000 Series Voicemail Settings

After you have created the trunk, applied the trunk to a trunk group, and created outbound call templates for the group, you will need to verify the voicemail settings for the NetVanta 7000 Series unit. This includes disabling the internal voicemail on the NetVanta 7000 Series unit so that voicemail is handled by the UC server.



Although you can have both the internal voicemail in the NetVanta 7000 Series and the UC server voicemail enabled at the same time, it could adversely affect the operation of message waiting indicators. Therefore, ADTRAN recommends that in a BCS application, voicemail be handled by the UC server.

To verify the NetVanta 7000 Series voicemail settings, navigate to **Voice > Applications > Voicemail Settings**. Disable **Internal Voicemail** by removing the check beside **Internal Voicemail** and verify that the **Voicemail Login Extension** is set to **8500** and the **Leave Voicemail Extension** is set to **8504**. Then select **Apply**.

A screenshot of the "Voicemail System Settings" configuration page. The page has a blue header with the title "Voicemail System Settings". Below the header, there is a section titled "General voicemail settings". This section contains four rows of settings, each with a label, a value field, and a help icon (a question mark in a blue circle). The settings are: "Internal Voicemail" with an unchecked checkbox; "Voicemail Login Extension" with a text box containing "8500"; "Leave Voicemail Extension" with a text box containing "8504"; and "Maximum Login Attempts" with a text box containing "3". At the bottom of the settings section, there are two buttons: "Reset" and "Apply".

Enabling Prefer Trunk Routing on the NetVanta 7000 Series

The last step in configuring the NetVanta 7000 Series unit for use in the BCS is to enable prefer trunk routing. To enable prefer trunk routing, follow these steps:

1. Navigate to **Voice > System Setup > VoIP Settings**. In the **SIP Settings** tab, enable **Prefer Trunk Routing** by checking the appropriate check box. Then select **Apply**.

SIP Settings	RTP Settings	SDP Settings
SIP Configuration Parameters		
SIP Signaling DSCP:	<input type="text" value="26"/> <0 - 63>	?
Rollover Timer:	<input type="text" value="3"/> seconds <1 - 32>	?
Registration Failure Retry Timer:	<input type="text" value="60"/> seconds <10 - 604800>	?
SIP T1 Timer:	<input type="text" value="500"/> ms <50 - 1000>	?
SIP T2 Timer:	<input type="text" value="4000"/> ms <1000 - 32000>	?
Force Host Resolve:	<input type="checkbox"/>	?
FROM Header User Formatting:	<input type="text" value="Domestic"/>	?
FROM Header Host Type:	<input type="text" value="SIP Server"/>	?
TO Header Host Type:	<input type="text" value="SIP Server"/>	?
P-Asserted Identity Host Type:	<input type="text" value="SIP Server"/>	?
Request URI Header Host Type:	<input type="text" value="SIP Server"/>	?
Alert Info URL:	<input checked="" type="radio"/> Default <input type="radio"/> Custom: <input type="text"/>	?
Supports 100rel:	<input checked="" type="checkbox"/>	?
Require 100rel:	<input type="checkbox"/>	?
Prefer Trunk Routing	<input checked="" type="checkbox"/>	?
SIP Privacy Settings		
Privacy Enabled:	<input type="checkbox"/> Enabled	?
Proxy-Require Privacy:	<input type="checkbox"/> Enabled	?

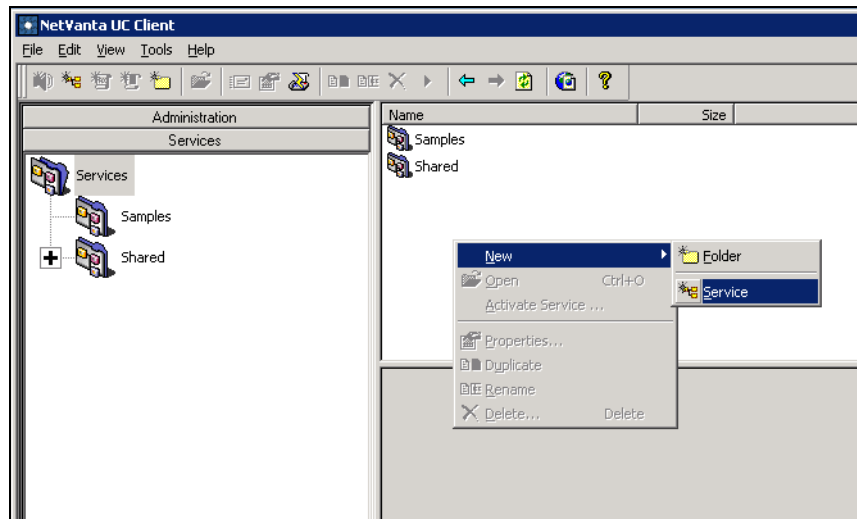
- The NetVanta 7000 Series unit now has a SIP trunk configured and is ready to communicate with the UC server. Save this configuration by selecting **Save** from the top right of the GUI, and prepare to return to the UC server for the final BCS configuration steps.

Creating Identity Services in the NetVanta UC Server

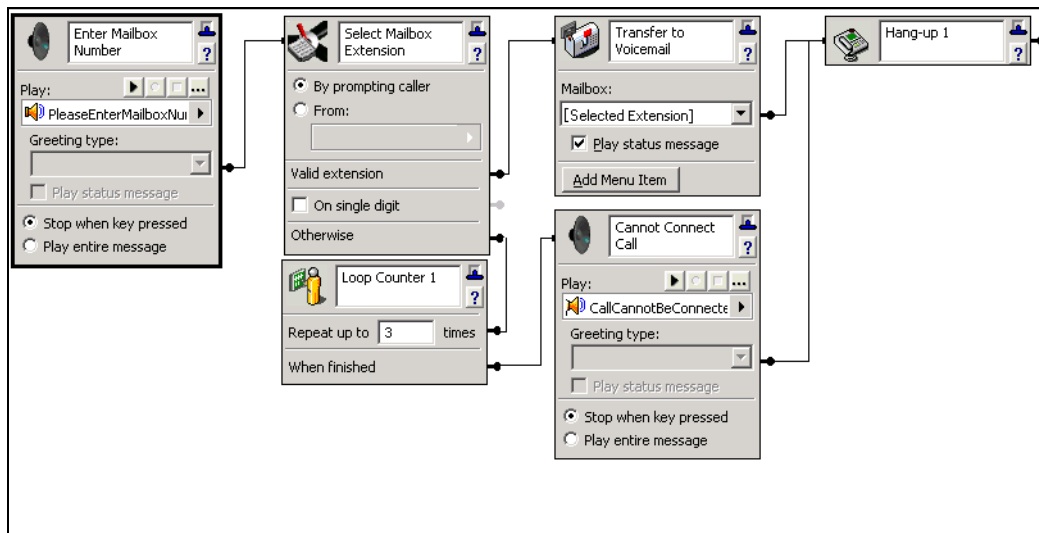
The NetVanta 7000 Series unit transfers calls to voicemail using extension 8504. Therefore, identities and identity services must be created for voicemail (8504) and external voicemail login (8501). Identity services handle the inbound calls from the NetVanta 7000 Series product for extensions 8504 and 8501. The UC server automatically transfers calls to voicemail when it receives a call for 8500, so there is no need to create a special service for it. The service created for extension 8504 needs to handle direct voicemail transfers from users on the NetVanta 7000 Series unit, and the service created for extension 8501 needs to allow external users to check their voicemail in the UC server. Once the services are created, identities for both services must be created and the appropriate services must be assigned to the proper identity to function correctly.

To create the two services, follow these steps:

1. Navigate to the **Services** navigation pane and right-click in the content pane to create a new service.

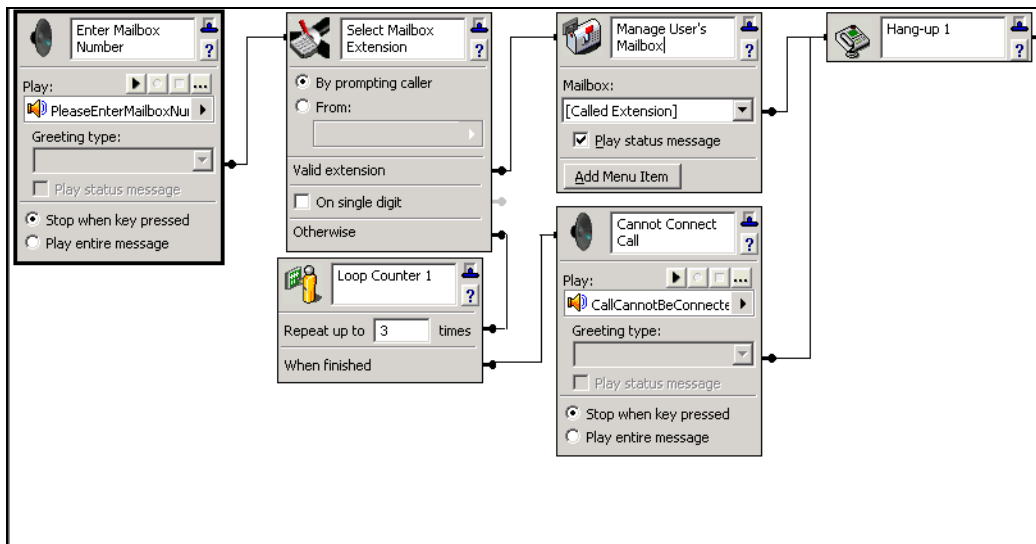


2. The first service you create will be for identity (extension) 8504. Name this service so that it reflects the service's function, for example, **Direct Voicemail Transfer**.
3. Double click the service to open the service editor. Configure the service so that it properly routes calls and includes the necessary announcements and other information, then save and close the service. The **Direct Voicemail Transfer** service should look like the following when complete:



If you need more specific directions for creating services, refer to the NetVanta Business Application Server Administrator Guide (article number 3234) available online at <http://kb.adtran.com>.

4. Return to the **Services** navigation pane and create another new service for identity (extension) 8501 so that remote users can check voicemail. Give the service a unique name, for example, **External Check Voicemail**.
5. Double click the service to open the service editor. Configure the service so that it properly routes calls and includes the necessary announcements and other information, then save and close the service. The **External Check Voicemail** service should look like the following when complete:



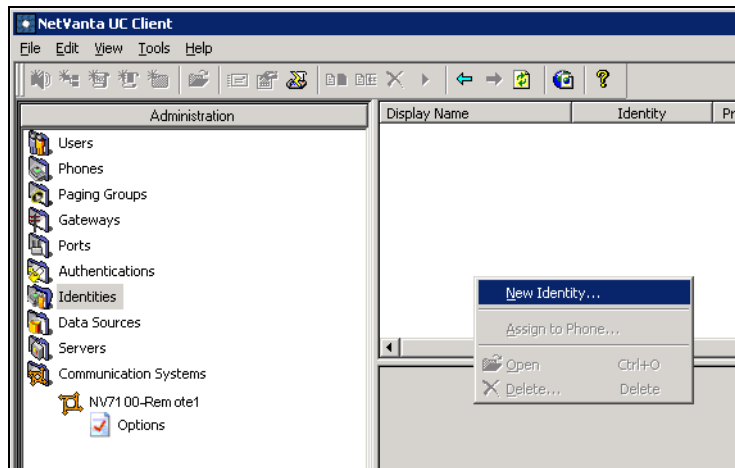
After both services are created, identities for each extension must be created and the services must be assigned to the proper identity.

Creating the Necessary Identities in the NetVanta UC Server

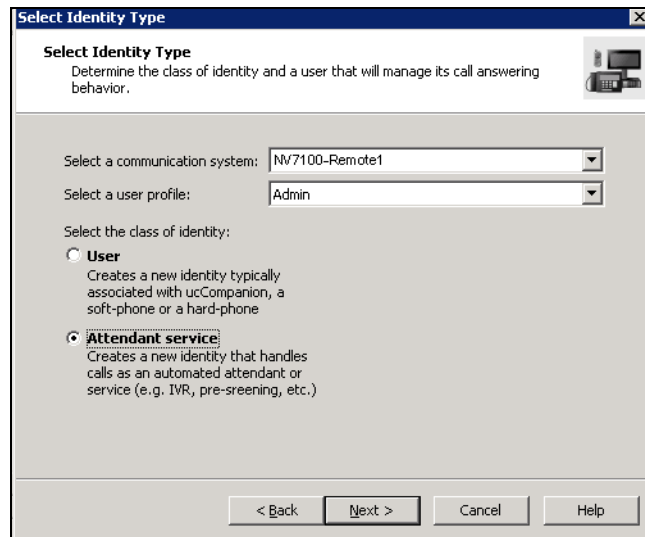
The NetVanta 7000 Series unit transfers calls to voicemail using extension 8504. Therefore, an identity matching extension 8504 must be created in the UC server. In addition, an identity matching 8501 must be created in the UC server to allow remote users to check their voicemail remotely. An identity does not need to be created in the UC server for the default voicemail extension of 8500 because that identity was created with the creation of the communication system.

To create the identities for the 8504 and 8501 extensions, follow these steps:

1. In the **Administration** navigation pane, select **Identities** and right-click in the **Identities** content pane to create a new identity.



2. The **New Identity Wizard** opens. Select **Next** to move to the next screen, and specify the identity's communication system, profile type, and class. Select the communication system **NV7100-Remote1**, the profile type **Admin**, and the identity class **Attendant Service**. Then select **Next**.



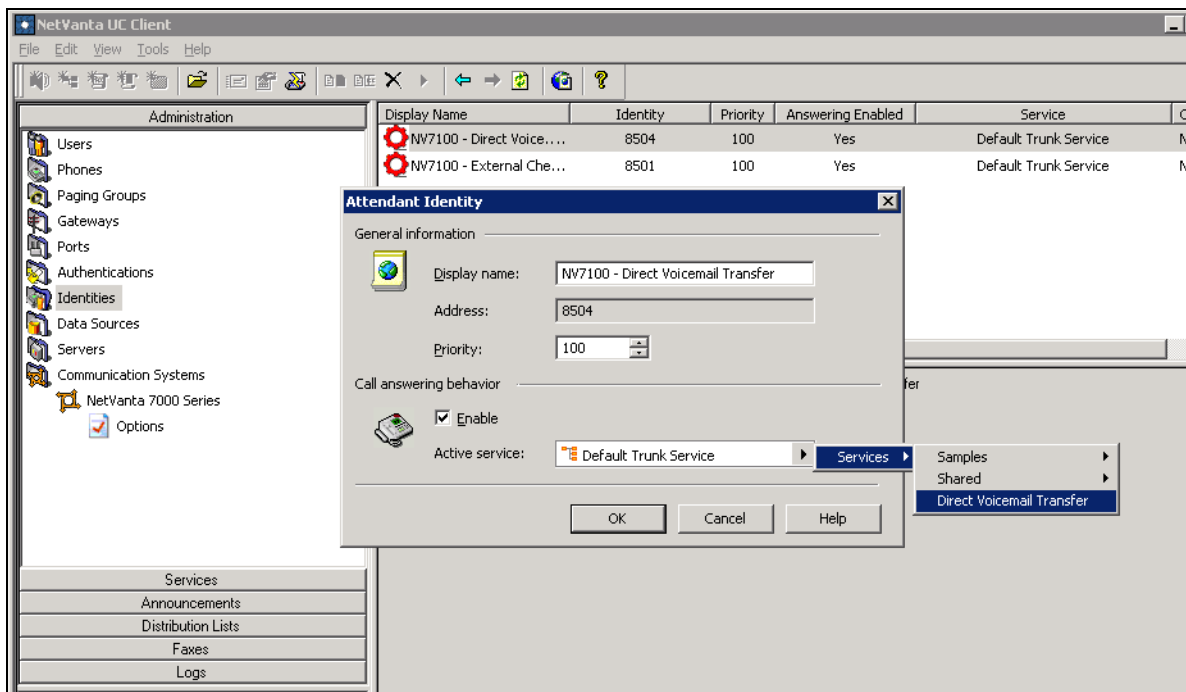
- On the next wizard screen, specify the name of the identity. This should be a unique name that will help you remember the purpose of the identity. For example, **NV7100 - Direct Voicemail Transfer**. Specify the address as **8504** (the address is the extension). Leave the remainder of the options at the default, and select **Next**.

- Select **Finish** to complete the wizard to create the identity.
- Repeat these steps to create the identity for extension 8501, making sure to name each identity uniquely (for example, **NV7100 - External Check Voicemail**) and to specify the address as the 8501 extension.

When both identities are created, they appear in the identities content pane.

Display Name	Identity	Priority	Answering Enabled	Service	Commu
NV7100 - Direct Voice, ...	8504	100	Yes	Default Trunk Service	NetVan
NV7100 - External Che...	8501	100	Yes	Default Trunk Service	NetVan

- To assign the appropriate services to each identity, double click on the identity and change the service from **Default Trunk Service** to the appropriate service. Identity **8504** should have the service **Direct Voicemail Transfer**, and identity **8501** should have the service **External Check Voicemail**.



The identity and service configuration is now complete.

Importing NetVanta 7000 Series Users into the NetVanta UC Server

Once the communication system is created, the NetVanta 7000 Series is configured, and the proper identities and services have been created in the UC server, you can import users from the NetVanta 7000 Series product to the UC server. There are a few ways to do this, and the method you choose depends upon the number and the types of users you are migrating. It is important to remember that for BCS applications, all users will be moved to the UC server. You should use the user information gathered in [Collecting NetVanta 7000 Series User Information on page 3](#) to complete the user migration.

Users can be migrated to the UC server in two main ways: Windows users can be added individually by creating a new Windows user from the UC server **Administration** pane, or multiple users can be added at once by using the Users wizard in the Server Configuration wizard. Both methods are described in this section. The steps to gather user information and to create the necessary text or TSV files, however, are not included in this guide.

You must, at a minimum, know the user's display name, first name, last name, extension, communication system type (in this case, **NetVanta 7000 Series**), the user's mailbox ID, whether the user is a Windows-enabled user, the user's email address, and the user's role (whether personal assistant (PA) or personal business assistant (PBA)). For more information about the specific information needed and the creation of text or TSV files for multiple user migration, refer to the *NetVanta Unified Communications Server Configuration Guide* (article number 3253) or

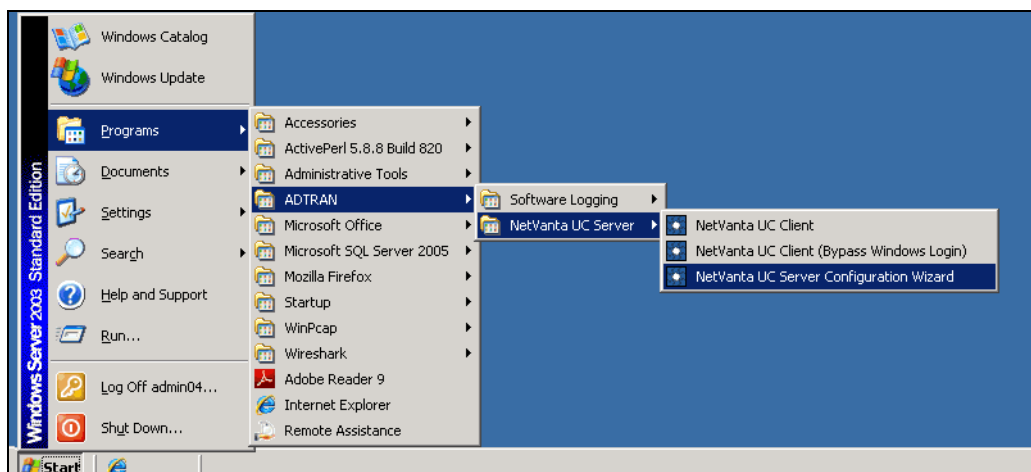
the technical note *TN094 Importing Users to the UC Server* (article number 3335) available online at <http://kb.adtran.com>.

Migrating Users Using the Users Wizard

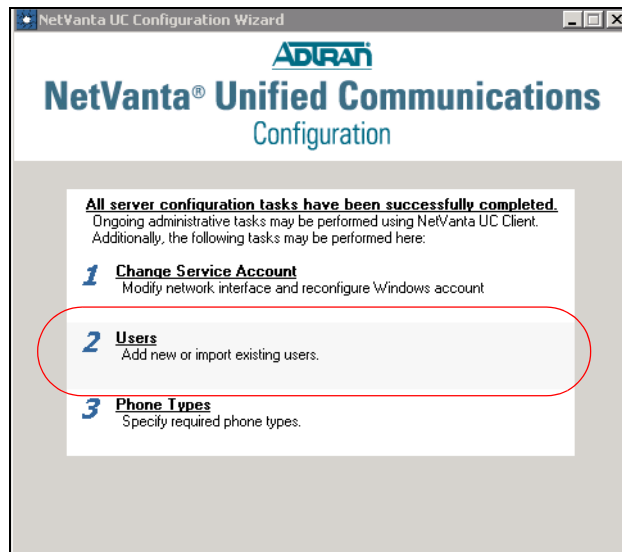
The most effective way to migrate multiple users is by using the Users wizard, which is part of the Server Configuration wizard. You have the opportunity to use this wizard during the initial installation of the UC server, but you cannot migrate users from the NetVanta 7000 Series until the NetVanta 7000 Series communication system is created. You can return to the Users wizard at any time after the communication system is created to import NetVanta 7000 Series users.

You can use the Users wizard to migrate multiple users, whether from Active Directory, a Microsoft Exchange Server, a text-based file, or by manual entry. Refer to the technical note *TN094 Importing Users to the UC Server* (article number 3335) available online at <http://kb.adtran.com> for more information on creating text-based, Active Directory, or Microsoft Exchange Server imports. Once you have the necessary user information and are ready to migrate users to the UC server, follow these steps:

1. Return to the Server Configuration wizard by navigating to **Start > Programs > ADTRAN > NetVanta UC Server > NetVanta UC Server Configuration Wizard**.



2. After logging in to the server, select **Users** from the Server Configuration wizard.

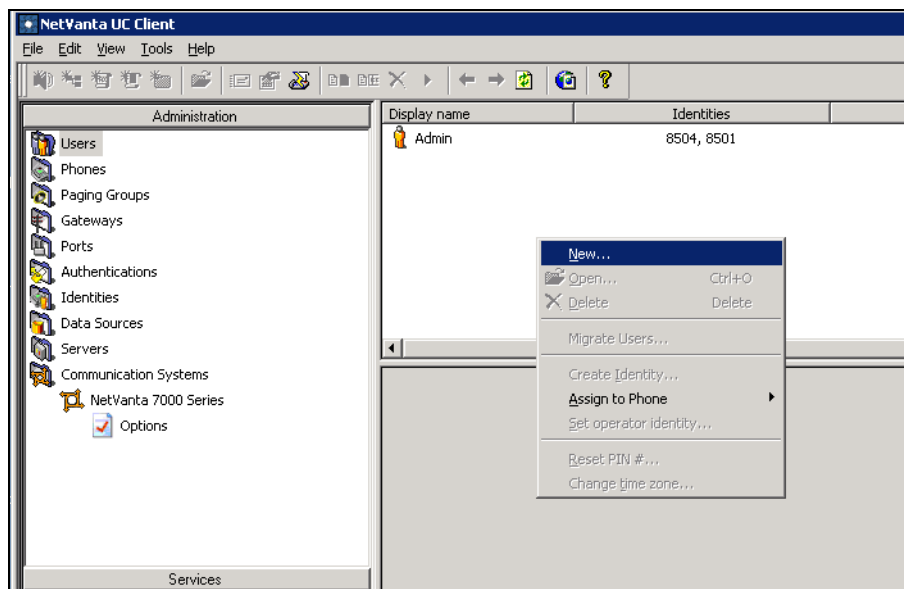


3. Follow the steps in the Users wizard. When you have completed the wizard, the users are automatically given identities and extensions in the UC server. If you are using an import method (rather than manual entry), each user is automatically matched with a phone.

Adding Individual Users

You can also add users individually to the NetVanta UC server by using the New User wizard. To use this wizard, follow these steps:

1. In the **Administration** navigation pane, and select **Users**. Right-click in the Users content pane and select **New** to open the New User wizard.



2. Follow the steps in the New User wizard, specifying the following user information:
 - Whether this is a Windows user (Active Directory) or a Local User.
 - The user's name, UC server identity, fax number, and communication system (**NetVanta 7000 Series**).
 - The user's password, PIN, and phone assignment.
 - The user's email storage location, mailbox, contact information server, and mailbox monitoring status.
 - The user's role (PA or PBA) and the user's operator type.
3. When all the correct user information is entered, select **Submit** to complete the wizard. The new user is created in the UC server. Repeat these steps for each additional user that must be created on the UC server.

Verifying the NetVanta BCS Configuration

Once you have configured a communication system on the UC server, configured the NetVanta 7000 Series for communication with the UC server, created the necessary identities and services on the UC server, and migrated the appropriate users to the UC server, you can verify the BCS configuration. There are two simple ways to verify that the NetVanta BCS has been properly configured. To verify the configuration, follow these steps:

1. Call extension **8500** from a phone connected to the NetVanta 7000 Series product you just configured. Verify that you hear a voicemail prompt from the UC server. The prompt should request a password for accessing the phone's voicemail.
2. Call from one phone connected to the NetVanta 7000 Series unit to another phone connected to the unit. Let the second phone ring and verify that the unanswered call is redirected to the UC server voicemail.

Additional NetVanta BCS Documentation

You can find documentation for all additional BCS features in ADTRAN's Knowledge Base, available online at <http://kb.adtran.com>.