ADTRAN ®

NetVanta Unified Communications Technical Note

Configuring Phantom Mailbox Users

1 Phantom User and Mailbox Deployment

The purpose of this document is to describe the programming of the NetVanta Unified Communications Server at the hosting server location and each of the surrounding remote UC servers. The following topics will be explored:

1. How to create virtual mailboxes on a hosting UC server

2. Dial plan modifications at the hosting UC server to accommodate calling a virtual number (adding vm-) on the host UC server

3. Dial plan modifications at remote UC servers (simple call routing) from each location to the hosting UC server

4. The Phantom Mailbox Pilot Service (Auto-Attendant Service), UC server configuration that allow virtual users to access their messages:

    a. On the host UC server

    b. From satellite locations – but internal

    c. From external locations – over the PRI gateway

5. How dial by name functions
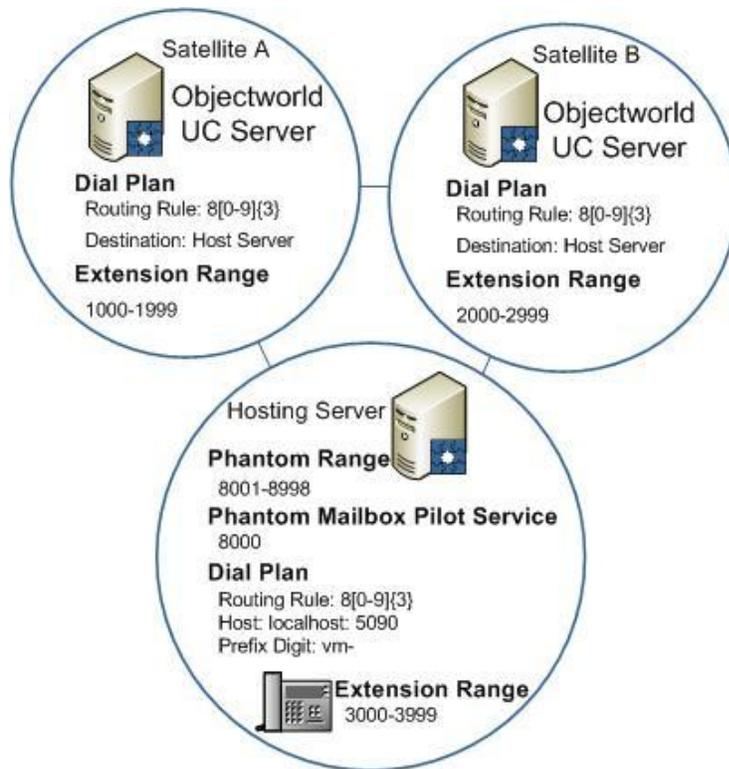
2 Phantom Users and Mailboxes

Key components of deployment:

Hosting UC server:

1. All Phantom Users Mailboxes are centrally located.

2. All Phantom Users Mailboxes have a common number range. For example 8001-8999.

3. A Dial Plan Entry allows callers to directly access the Phantom Users Mailbox.

4. An Auto-Attendant Identity with number, for example 8000, for the Phantom Mailbox Pilot Service, created for all the Phantom Users to access their Phantom Mailboxes.

Each satellite campus and Redundant Server:

1. A Dial Plan Entry is created to direct calls to the Phantom Users Mailboxes and Auto-Attendant Service.

Limitations:

1. No Dial by Name on Remote Office locations for Phantom Users.

2.1 Creating Virtual Mailboxes

For complete instructions on managing users, please refer to the *NetVanta Unified Communications Server Administrator Guide*, available online at *http://kb.adtran.com*, and for further details regarding the features outlined in this document.

Administrator Guide - Section 2.0 – Adding Users to the System

Accounts for all users on your system might have been imported from the Microsoft Exchange Server when the UC server was configured at your work site. If accounts were successfully imported using the Server Configuration wizard, you do not have to set up user accounts, or profiles, unless a user is new to the system. If user profiles were not imported, you need to set up a user profile for each user in your office.

The New User Wizard helps you set up each new user profile. You can create either an internal (or local) user or a user based on a Windows user.

To start the New User Wizard

1. In the Administration view, click Users.

2. Right-click anywhere in the Users content pane.

3. Click New.

4. Click Next to begin.

To create a Windows user

1. Follow all the steps in the To start the New User Wizard procedure.

2. On the User Type Selection screen, enable the Windows User button, and click Next.

3. On the User Information (Active Directory) screen, click Browse, and type or select the following new user name information:

   - First name

   - Last name

   - Display name

   Tip: You can also select a user by clicking the Browse... button to open the Active Directory Select User box.

4. Enable the Include in dial by name directory check box, if you want the user included in the dial by name directory.

5. Type an extension number in the Identity # box. This extension number is also known as an Identity.

6. From the server list, select a server for the identity.

7. To create a phantom mailbox, enable the corresponding Phantom check box.

   NOTE: Phantom extensions can also be created for extensions with no physical phones attached.

8. Type a fax number in the Fax # box, if the user requires a fax identity.

9. From the server list, select a server for the fax number, and click Next.

10. On the Authentication (Active Directory) screen, type a numerical telephone access PIN in the PIN box.

    NOTE: The PIN number is used to access a mailbox using the telephone user interface (TUI), either locally or remotely.

11. Retype the PIN in the Confirm box, and click Next.

12. Select Exchange, IMAP, or Local message store.

13. On the Phone Selection screen, enable one of the following:

    - Skip assigning a phone to this user

14. Click Next.

15. On the Call Answering screen, select one of the following call answering modes:

    - Personal Assistant—provides standard voice mail features and is the default call answering mode

    - Personal Business Assistant—provides more advanced features for the user who wants to create personalized services and announcements

16. Select the operator for the new user:

    - System—the general operator, typically a company receptionist, where calls are directed to when a caller presses "0" in a voice mail greeting

    - Personal operator—a specific operator, for example a personal receptionist or an individual user in a particular department or location, where calls are directed to when a caller presses "0" in a voice mail greeting

17. If you selected Personal operator, type the operator's extension number in the box.

18. Click Next.

19. Review the Summary of the information for the new user.

20. Click Next to create the new user profile.

2.2 Modifying the Dial Plan on the Host Server

Phantom mailboxes are not associated with an "active" identity, such as an extension number, or an assigned phone, or an auto attendant. Callers can leave messages in phantom mailboxes using Administrator Services, such as Auto Attendants, or through redirection in a dial plan entry. In a dial plan entry, calls in the phantom number range are redirected to a destination of "localhost:5090" and the dialed digits pre-pended by "vm-". For example, a business person who travels frequently can use a phantom mailbox to retrieve messages. A phantom mailbox does not have message waiting indication and does not have a telephone or any other "active" identity configured on the communications system.

To allow callers to dial directly into a phantom mailbox a Dial Plan entry is needed at the host UC server.

To create a Phantom Mailbox Call Routing dial plan entry

1. In the Administration view, click Communication Systems to open the communication system options.

2. Click the communication system to which you want to add a new dial plan.

3. Click Routing.

4. In the Dial Plan table, click the plus (+) button.

5. In the Dial Plan Entry dialog, type any of the following information that you want to include in the dial plan entry:

Dial Plan Entry

Routing rule

Original: 8[0-9]{3}
Description: Phantom Voicemail
Priority: 20

Destination

○ Gateway: Ingate_Name
◉ Host: localhost:5090
Call next member: 0 seconds

Digit

Digits to skip: 0

vm-
Prefix to add

Dialed number

Suffix to add

Options

Transport: udp
Source pattern: .*

OK   Cancel   Help

Routing Rule

Original Digits   Enter **8[0-9]{3}**. This corresponds to the digits used to dial the phantom mailbox. For this deployment, the range from 8001 to 8999.

Description   Type a description that identifies the Phantom Mailbox Delivery entry.

Priority	Enter a priority of 10. Priority determines the matching priority between different or conflicting dial plan entries. The priority must be set below 30.

Destination

Host	Enter **localhost:5090**
Call next member after X seconds	0

Digit Manipulation

Digits to Skip	Leave Blank
Prefix to Add	Enter **vm-** so the dial plan recognizes that the entry is routing calls to voicemail.
Suffix to Add	Leave blank.

Options

Transport	UDP
Source Pattern	.*

6. Click OK.

2.3 Modifying Dial Plans at Remote UC Servers

To allow callers from other Remote Offices to dial directly into a phantom mailbox or to allow users to access their mailboxes, a Dial Plan entry is needed at the remote UC servers. This Dial Plan entry will ensure the caller calls the hosting UC server. This Dial Plan entry assumes that the Phantom Mailbox Pilot Service is configured in the block of numbers that is specified.

To create a call routing dial plan entry at a remote UC server

1. In the Administration view, click Communication Systems to open the communication system options.

2. Click the communication system to which you want to add a new dial plan.

3. Click Routing.

4. In the Dial Plan table, click the plus (+) button.

5. In the Dial Plan Entry dialog, type any of the following information that you want to include in the dial plan entry:

Routing Rule

Original Digits   Enter **8[0-9]{3}**. This corresponds to the digits used to dial the phantom mailbox range, for this deployment the range from 8000 to 8999.

Description   Type a description that identifies the Phantom Mailbox Access entry.

Priority   Enter a priority of 10. Priority determines the matching priority between different or conflicting dial plan entries. The priority must be set below 30.

Destination

Host	Enter **Host Server address,** the location of the host UC server where all of the Phantom User Mailboxes reside.
Call next member after X seconds	0

Digit Manipulation

Digits to Skip	Leave blank
Prefix to Add	Leave blank.
Suffix to Add	Leave blank.

Options

Transport	UDP
Source Pattern	.*

6. Click OK.

2.4 Entering Auto-Attendant Identity for Phantom Users on the Host Server

An Auto-Attendant Identity on the UC server allows virtual users to access their messages on the host UC server, both from remote office locations and from external locations over the PRI gateway.

2.4.1 Services

For complete instructions on using Services, please refer to the *NetVanta Unified Communications Server Administrator Guide*, available online at *http://kb.adtran.com*.
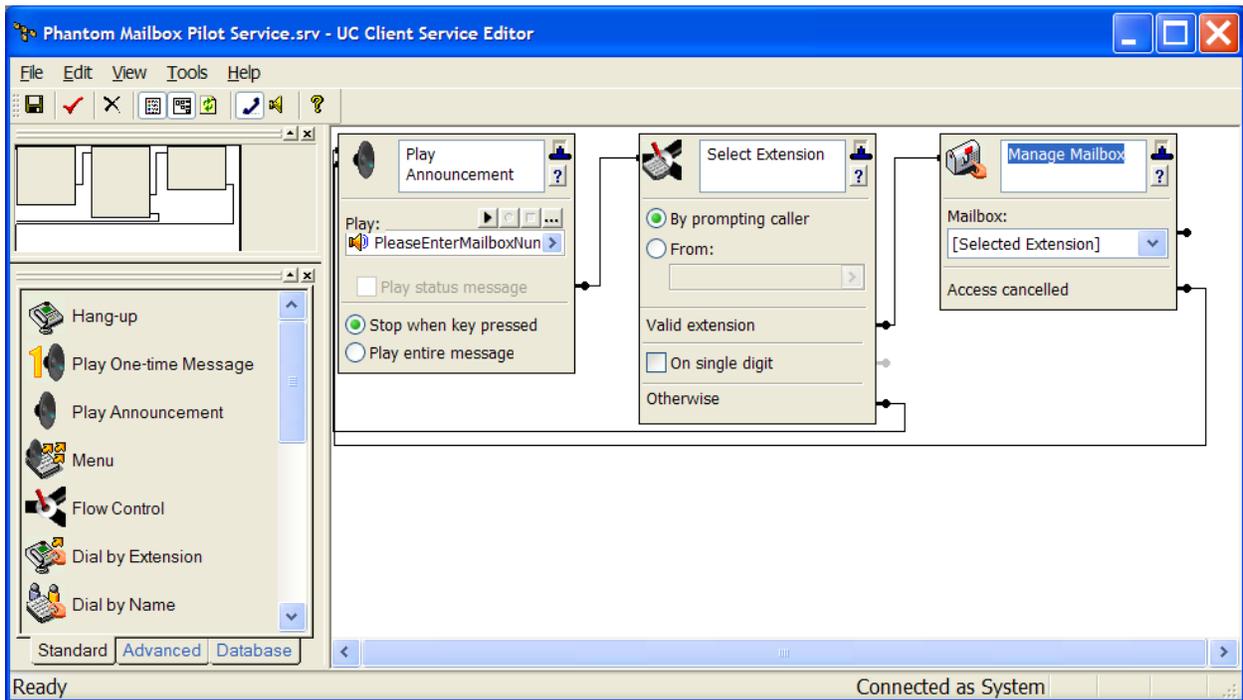
Administrator Guide - Section 6.0 Managing Services

A service is like a map that the UC server follows when it answers a call. You can build a service using the Service Editor and then assign it to an identity so that incoming calls follow the path that you specify. You can create a new service for the purposes of setting up a 1-800 line, a sales information line, or a line associated with a menu of options that callers can select to obtain specific information. Likewise, you can set up a fax-back service and activate it on an identity.

Create the following service

1. Select the Play Announcement element.

2. In the Play Announcement element, select the Announcement recording "PleaseEnterMailboxNumber.wav" from the prerecorded shared audio announcement selection.

3. Select the Select Extension element.

4. Connect the Play Announcement element to the Select Extension element.

5. Select the Manage Mailbox element.

6. Connect the Select Extension element to the Manage Mailbox element.

7. In the Manage Mailbox element, select "Selected Extension"

2.4.2 Auto-Attendant Identities

For complete instructions on managing Identities, please refer to the *NetVanta Unified Communications Server Administrator Guide*, available online at *http://kb.adtran.com*.

Administrator Guide - Section 3.7 Managing Identities

Use an attendant identity to connect a caller directly to a service (for example, Phantom Mailbox Access, Interactive Voice Response, pre-screening, and so on). When callers dial in to the system, they can access their phantom mailbox, a user extension, the auto-attendant, or a hunt group. "Active" identities are routed to before the dial plan entries are executed. Consequently the 8000 identity takes precedence over the dial plan entry in the host server that routes to "locahost:5090 (vm-).

To start the New Identity Wizard

1. Right-click anywhere in the Identities content pane.

2. Click Create Identity... to display the New Identity Wizard welcome screen.

3. Click Next to proceed.

To select a new identity type

1. Follow all the steps in the To start the New Identity Wizard procedure.

2. On the Select Identity Type screen, select a communication system from the Select a communications system list.

3. From the Select a user profile list, select the user profile to which you want to assign the new identity. The user profile that you select can manage the behavior of that identity.

4. Select the Attendant Service class of identity.

5. Click Next to proceed.

6. On the Configure Attendant Identity screen, type a name for the new attendant identity in the Name box.

7. In the Address box, type an address for the new attendant identity. An address is typically an extension number.

8. From the Run service list, choose the Manage Mailbox service that you want to assign to the new attendant identity.

9. Click Next to proceed.

10. Click Finish to create the new identity.
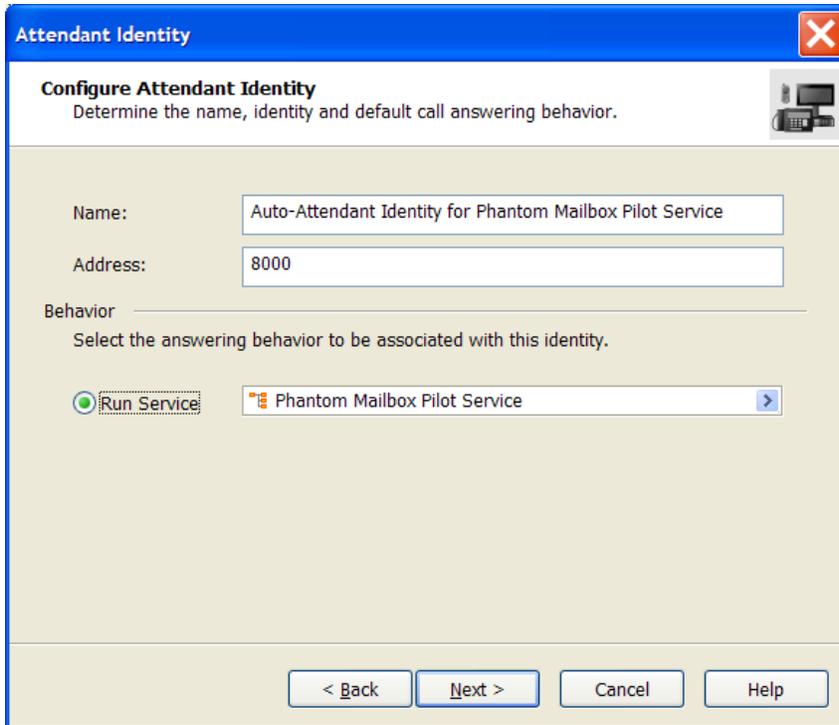
3 Dial by Name

Dial-by-Name for virtual extensions is accessible only from the host UC server location. The Dial-by-Name feature enables callers to dial and be transferred to a user's extension or phantom mailbox by entering the user's name. There is no Dial-by-Name service on any of the other campuses for the Phantom users because Dial-by-Name only operates only for users configured on the server that is providing the Dial-by-Name service. The host UC server, where the Phantom users and mailboxes are located, provides Dial-by-Name service for the Phantom users.

4 Add User Utility Import Tool

Add User Import Tool allows the creation of phantom identities for the UC server from a text based (.txt) file. The following command line tool is available in the C:\Program Files\ADTRAN\NetVanta UC Server\Bin>AddUser.exe folder. It allows for the batch creation of phantom users using a text file. It is highly recommended that the use of this application take place during a UC server maintenance window where normal system operations are not required to end users.

4.1 Services Requiring Attention

The following service processes should be stopped during the use of this application since prolonged CPU/memory processing may impact voice quality and general call routing behavior during the import.

Using the service control applet (services.msc), stop the UC server SIM and CSTABridge services. When the import has been completed, restart the both UC server SIM and NetVanta CSTABridge services followed by the restart the UC server Application Services.

4.2 Example File

Create a 'Tab' delimited Text file (.txt) called add_5_phantom_users.txt and place in the root of C:\ with the following information:

```
username    extension   firstname   lastname    userfax

Abe Herndon      7000        Abe         Herndon     70000

Aislin Agg 7001      Aislin          Agg         70001

Alanna Walker    7002        Alanna          Walker          70002

Alannis Lester 7003      Alannis     Lester          70003

Aldous Blunt     7004        Aldous          Blunt       70004
```

4.3 Running the Application

1. To run the application with parameters for this tab delimited file c:\add_5_phantom_users.txt

2. Run cmd at command line

3. Change directory to C:\Program Files\ADTRAN\NetVanta UC Server\Bin>

4. Run AddUser.exe -s localhost -u admin -p password -x "UC Server" -phantom –header C:\add_5_phantom_users.txt

5. Output to console should be presented when executed

4.4 Example Output to Shell

Adding user 'Abe Herndon' with extension '7000' first name 'Abe' last name 'Herndon'

Added trunk 'DID70000' with identifier '70000' dialed number '70000'

Adding user 'Aislin Agg' with extension '7001' first name 'Aislin' last name 'Agg'

Added trunk 'DID70001' with identifier '70001' dialed number '70001'

Adding user 'Alanna Walker' with extension '7002' first name 'Alanna' last name 'Walker'

Added trunk 'DID70002' with identifier '70002' dialed number '70002'

Adding user 'Alannis Lester' with extension '7003' first name 'Alannis' last name 'Lester'

Added trunk 'DID70003' with identifier '70003' dialed number '70003'

Adding user 'Aldous Blunt' with extension '7004' first name 'Aldous' last name 'Blunt'

Added trunk 'DID70004' with identifier '70004' dialed number '70004'

4.5 Verify the Addition of these Identities in the UC Server Admin Client

Login to UC Client Admin and verify the creation of phantom users both in Users and Identities content panes.

4.6 Limitations

Usage of this utility is strictly limited to the creation of phantom users only. The following type of user creation is not yet supported (regular, PA, PBA) through this application.

4.7 Other General Usage Instructions for the Add User Utility (Supported Functionality Only)

C:\Program Files\ADTRAN\NetVanta UC Server\Bin>AddUser.exe /?

Usage:

AddUser.exe [options] <user list file>

Purpose:

  It adds local message store users to the UC server from a tab-delimited text file.

Where:

[options] is one or more of the following, defaults are marked [default]

-s,-server <servername>   Specifies the server name to connect to

-u,-user <username>   Specifies the name or extension number of the user to log in as

-p,-password <password>   Specifies the user's password for login

-x,-pbx <PBX name>   Specifies the name of the associated PBX

                              If there is only one PBX, it is the [default]

-phantom   Adds users as phantom users

-header   The first record of the file is a header

<user list file> is the name of an ASCII text file containing the list of users to add

Each record is a tab-delimited, ordered list of field values:

[<field 1>]TAB[<field 2>]TAB...TAB[<field n>]END-OF-LINE

There must be a user name or both first and last names. There must be an extension number.

Trunk name and switch identifier supplement an optional user fax number.

The default is that all fields are present in the order

1. USERNAME
2. EXTENSION
3. FIRSTNAME
4. LASTNAME
5. USERFAX

While fields can be omitted only tabs at the end of a record can be omitted.

e.g.: Bob Jones   1234   Robert   Jones   2345

        4321   Jane   Doe

The header specifies the presence and order of fields in subsequent records using some or all of the case insensitive headings

USERNAME, EXTENSION, FIRSTNAME, LASTNAME USERFAX

e.g.:

EXTENSION   USERNAME

4321   Jane Doe

When first and last names are not specified, they are deduced from user name.

e.g.:

USERNAME   EXTENSION   USERFAX

Bob Jones   1234   2345

Doe, Jane   4321

  is equivalent to

USERNAME   EXTENSION   FIRSTNAME   LASTNAME   USERFAX

Bob Jones   1234   Bob   Jones   2345

Doe, Jane   4321   Jane   Doe

  Similarly, when user name is not specified, it is deduced from first and last names.

e.g.: EXTENSION   FIRSTNAME   LASTNAME

  1234   Bob   Jones

   is equivalent to

USERNAME   EXTENSION   FIRSTNAME   LASTNAME

Bob Jones   1234   Bob   Jones