

NetVanta 7100 Administrator's Guide



Conventions



Notes provide additional useful information.



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



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

Frequently Asked Questions (FAQs)

How do I access the phone system administrative settings using my computer? *Connecting Using a Web Browser* on page 13

How do I add a new phone to the system? *Create a New User Account in the System* on page 20

How do I remove a user from the phone system? **Deleting a Phone User Account** on page 29

How do I change an existing phone user to a new phone user? *Editing an Existing Phone Account* on page 22

How do I change a phone's caller ID display name? *Email and Caller ID Settings* on page 24

How do I change or reset a voicemail password? **Resetting Voicemail PIN** on page 44

How do I enable automatic email notification of new voicemail messages? *Enabling Email Notification of Voicemail Messages* on page 47

How do I change the email address for notification of voicemail messages? *Enabling Email Notification of Voicemail Messages* on page 47

How do I increase the voicemail storage limit for a phone user? *Updating Voicemail Permission (Class of Service)* on page 52

How do I add speed dial numbers, line keys, and button maps to a phone? *Speed Dial* on page 34

How do I add a system speed dial (e.g., all employees dial 04 for the IT Helpdesk) to the telephone system?

Adding a System Speed Dial Number on page 74

How do I view the port status of analog stations, analog trunks, T1 and Ethernet ports? *Checking the Port Status* on page 79

How do I add an employee's name to the dial by name directory? *Dial By Name Directory* on page 65

Table of Contents

Fre	equently Asked Questions (FAQs)	. 3
1.	Accessing and Navigating the System Menus	11
	Accessing the System	12 13 13
	Navigating the Menus	16
2.	Managing Phone Accounts	19
	Adding a New Phone to the System	20
	Editing an Existing Phone Account Email and Caller ID Settings Current Settings Call Coverage Deleting a Phone User Account	24 26 27
	Setting and Changing Passwords	30
3.	Modifying Existing Phones	31
	Customizing Phones and User Preferences Call Lists. Contact Directory Speed Dial Line Keys Button Map. Display Status Group (Busy Lamp Field) Customizing the Expansion Module Buttons	32 34 35 37 38 38
	Replacing an Existing Phone	
4.	Configuring Voicemail	43
	Resetting Voicemail PIN	44
	Enabling Email Notification of Voicemail Messages	47
	Updating Voicemail Permission (Class of Service)	52
	Reviewing Voicemail Storage Limits	54
5.	Configuring the System	55
	Setting the System Time and Date	56

	Creating a New Auto Attendant	58
	Modifying Auto Attendant Greetings	62
	Dial By Name Directory	65
	Adding Users to Ring Groups	
	Adding Users to the Operator Group	
	Adding a System Speed Dial Number	74
	Setting Up Status Groups	75
6.	Maintaining and Troubleshooting	77
	Saving Configuration Changes	78
	Troubleshooting Voice Trunks	79
	Troubleshooting Classes of Service	82
	Troubleshooting Phones	84
Δr	ppendix A. Special PREfix (SPRE) Codes	85

List of Figures

Figure 1.	AOS GUI Application Diagram	
Figure 2.	Accessing the AOS GUI	. 14
Figure 3.	System Summary Menu	. 15
Figure 4.	Menu Structure	. 16
Figure 5.	Getting Started Menu	. 18
Figure 6.	User Accounts Menu	. 20
Figure 7.	Phone Idle Display	. 21
Figure 8.	Add/Modify/Delete Users Menu	. 22
Figure 9.	Edit User Menu	. 23
Figure 10.	User Config Tab Menu	. 24
Figure 11.	Current Settings Tab Menu	
Figure 12.	Call Coverage Tab Menu	. 27
Figure 13.	Call Coverage Example - Voicemail After Four Rings	. 28
Figure 14.	Call Coverage Example - Operator Coverage	. 29
Figure 15.	Deleting a User Account	
Figure 16.	Edit User Menu	. 30
Figure 17.	Phone Configurations Tab Menu	. 35
Figure 18.	Phone Lines Tab Menu	. 36
Figure 19.	Secondary Line Configuration	. 37
Figure 20.	Button Map Tab Menu	. 38
Figure 21.	ADTRAN/Polycom SoundPoint IP 601 Phone with One Expansion Module	. 39
Figure 22.	ADTRAN/Polycom SoundPoint IP 601 Phone with Three Expansion Modules .	. 39
Figure 23.	Status Groups (Busy Lamp Field/DSS) Phone Display	. 39
Figure 24.	Enter New MAC Address	. 40
Figure 25.	Change Phone MAC Address/Model Menu	
Figure 26.	User Accounts Menu	
Figure 27.	VM Settings Tab	
Figure 28.	Set a Voicemail PIN	
Figure 29.	Edit User Menu VM Settings Tab	
Figure 30.	Add Notification Schedule Range Menu	
Figure 31.	Set or Edit a Notification Email Address	
Figure 32.	User Config Tab Menu	
Figure 33.	Voicemail System Settings Menu	
Figure 34.	Modify Voicemail Class of Service Menu	
Figure 35.	Voicemail Status Menu	
Figure 36.	System Summary Menu	
Figure 37.	SNTP Configuration Menu	
Figure 38.	Auto Attendants Menu	
Figure 39.	Create Auto Attendant Menu Prompts	
Figure 40.	Add New Audio Prompt Menu	
Figure 41.	Digit Actions Tab Menu	
Figure 42.	Modify Auto Attendant Settings	
Figure 43.	Modify an Existing Menu Prompt	
Figure 44.	Modify an Existing Audio Prompt	
Figure 45.	Dial-By-Name Directories Menu	
Figure 46.	Directory Detail Menu	
Figure 47.	Add Directory Member Entry Menu	. 66

Figure 48.	Adding Member(s) Alias	66
Figure 49.	Add New Directory Alias Entry Menu	
Figure 50.	Auto Attendant Ring Group Example	68
Figure 51.	Ring Groups Menu	69
Figure 52.	Edit Ring Group Menu	70
Figure 53.	Add Members to Ring Group Menu	71
Figure 54.	Configure Operator Group Menu	72
Figure 55.	Add Members to Operator Group Menu	73
Figure 56.	System Speed Dial Menu	74
Figure 57.	Status Group Menu Add/Edit/Delete Tab	75
Figure 58.	Status Group Details Menu	75
Figure 59.	Utilities System Configuration Menu	78
Figure 60.	Physical Interfaces Menu	
Figure 61.	Trunk Groups Menu	
Figure 62.	Edit Trunk Group Menu	81
Figure 63.	Classes of Service Menu	82
Figure 64.	Modify Class of Service Menu	83
Figure 65.	ADTRAN/Polycom IP Phone	84

List of Tables

Table 1.	User Config Tab Options	25
Table 2.	Current Settings Tab Options	26
Table 3.	Call Coverage Tab Options	28
Table 4.	Secondary Line Information	37
Table 5.	Voicemail Class of Service Options	53
Table 6.	Voicemail Status Menu Options	54
Table 7.	SNTP Configuration Menu Options	57
Table 8.	Add New Audio Prompt Menu Options	60
Table 9.	Ring Group Type Options	69
Table 10.	Operator Group Type Options	72
Table 11.	System Speed Dial Menu Options	74
Table 12.	SPRE Codes List	85

1. ACCESSING AND NAVIGATING THE SYSTEM MENUS

Using a PC with an installed browser, the NetVanta 7100 can be configured via the ADTRAN Operating System (AOS) Web-based graphical user interface (GUI).

This section covers topics necessary for accessing and navigating system menus:

- Accessing the System on page 12
- Navigating the Menus on page 16



While navigating through the menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the AOS GUI, select the **Save** button at the top right of your current screen.

Accessing the System

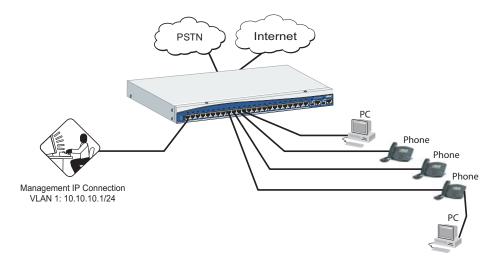


Figure 1. AOS GUI Application Diagram

Factory Defaults

From the factory, the AOS GUI is enabled and ready to be accessed. The NetVanta 7100 is shipped from the factory with a default configuration that includes the following:

Ethernet Interfaces (Port 1 to 24)

• Status: Enabled (activated with no shutdown)

Speed: AutoDuplex: AutoCable Type: Auto

• VLAN Membership: Trunk ports allowing all VLANs

VLAN 1 (Native VLAN for data)

• Status: Enabled (activated with no shutdown)

IP Address: 10.10.10.1 /24HTTP Server: Enabled

VLAN 2 (Native VLAN for voice)

• Status: Enabled (activated with no shutdown)

IP Address: 10.10.20.1 /24HTTP Server: Enabled

Minimum Configuration

If your NetVanta 7100 is not at factory default conditions, the minimum configurations listed below are needed to access the AOS GUI:



These configuration settings must be entered from the command line interface (CLI).

>enable

#configure terminal

(config)#username admin password password

(config)#ip http server

(config)#interface vlan 1

(config-vlan 1)#ip address 10.10.10.1 255.255.255.0

(config-vlan 1)#no shutdown

(config-vlan 1)#exit



Configure DHCP (optional): If DHCP is not enabled, the static IP address must be set on the PC.

(config)#ip dhcp-server pool LAN_pool (config-dhcp)#network 10.10.10.0 /24 (config-dhcp)#default-router 10.10.10.1 (config-dhcp)#dns-server 10.10.10.1

Physical Connection

The NetVanta 7100 can be accessed and managed through any of the 24 Ethernet interfaces via an Ethernet straight-through or crossover cable. Using a PC with an installed Web browser, the NetVanta 7100 can be configured through the AOS GUI.

Connecting Using a Web Browser

Once the physical connection is made and the minimum configuration settings are complete, follow these steps to access the GUI menus:

1. Configure your PC and NetVanta 7100 to be on the same network.



Refer to the example in **Minimum Configuration** on this page for configuring the NetVanta 7100 IP address. Refer to your PC documentation on how to configure the IP address of your PC.

- 2. Connect the NetVanta 7100 to your network using any of the 24 Ethernet ports on the unit's front panel.
- 3. From your PC, open the installed browser and enter http://10.10.10.1/admin (or configured NetVanta 7100 address) in the Address field. The NetVanta 7100 login window appears.

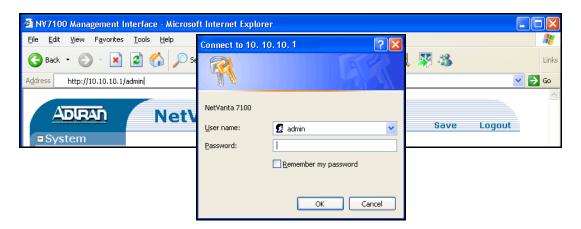


Figure 2. Accessing the AOS GUI

4. Enter **admin** as the user name, enter your password, and select **OK**. (The default password is **password**.)



For security purposes, it is important to set up an admin password immediately. Use the **Passwords** page of the AOS GUI to change this password.



If you do not know the admin password, contact your NetVanta 7100 installation technician.

5. After logging into the NetVanta 7100, the **System Summary** menu appears (see Figure 3 on page 15). Refer to *Getting Started* on page 18 for information on the setup process.

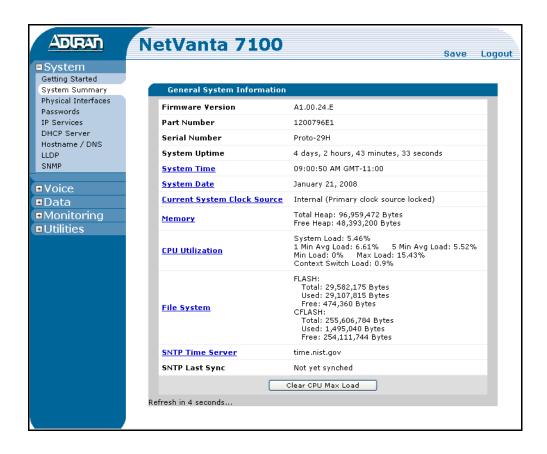


Figure 3. System Summary Menu

Navigating the Menus

The GUI menu structure allows you to easily configure the NetVanta 7100 system. This section provides a brief introduction to navigating through the menus. More detailed configuration examples can be found in the remainder of this document.

Options

There are multiple menus covering a variety of configuration items related to the NetVanta 7100. Figure 4 shows the menus and their submenus to give you a preview of the topics covered under each section.

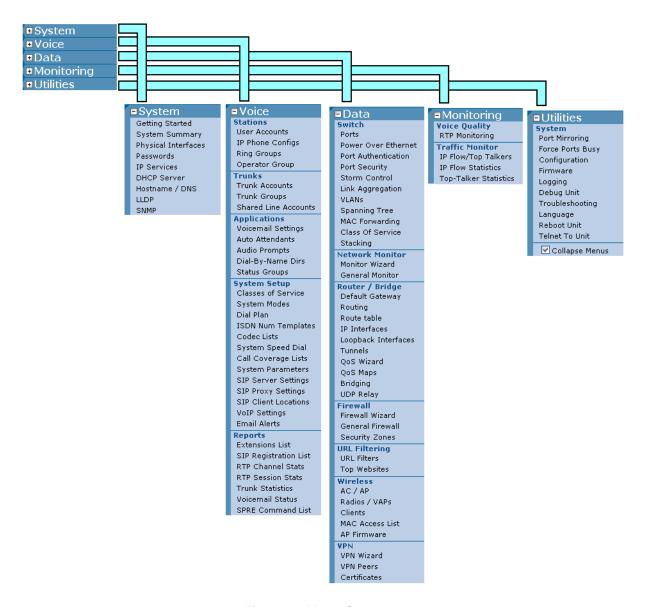


Figure 4. Menu Structure

The menus can be summarized as follows:

- **System Menu** contains several menus that aid in configuring the system settings.
- **Voice Menu** provides multiple menus for configuring voice settings, such as phone station accounts, trunk lines, system voice parameters, and statistic reports.
- **Data Menu** enables configuration of switch, router, and bridge functions, with specific menus related to firewall and VPN settings.
- **Monitoring** provides menus for configuring and viewing voice quality metrics and traffic monitoring.
- **Utilities Menu** includes various functions to aid in managing, troubleshooting, and accessing the unit.

Getting Started

The **Getting Started** menu is the recommended starting point for configuring your system. It contains links to options that need to be configured for the NetVanta 7100 to be operational. These options include such items as Basic Data Setup, Advanced Data Setup, Voice Trunks Setup, and Voice Stations Setup.

- Basic Data Setup Guide outlines the steps needed to set up basic data connectivity.
- Advanced Data Setup Guide outlines the steps needed to fully set up the integrated switch and router in the NetVanta 7100.
- Voice Trunks Setup Guide outlines the steps needed to connect the NetVanta 7100 to your carrier's trunk lines.
- **Voice Stations Setup Guide** outlines the steps needed to set up phone stations.

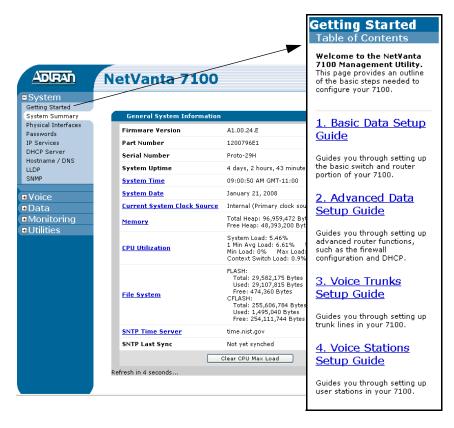


Figure 5. Getting Started Menu

2. MANAGING PHONE ACCOUNTS

This section covers topics necessary for managing new phone accounts:

- Adding a New Phone to the System on page 20
- Editing an Existing Phone Account on page 22
- Deleting a Phone User Account on page 29
- Setting and Changing Passwords on page 30



While navigating through the menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the AOS GUI, select the **Save** button at the top right of your current screen.

Adding a New Phone to the System

Setting up a new phone is a two part procedure. The first step requires creating a user account in the system. The second step requires physically connecting the phone hardware.

Create a New User Account in the System

The **User Accounts** configuration menu allows you to create a user account for every telephone user in the NetVanta 7100.

1. Navigate to the **Voice** > **Stations** > **User Accounts** menu.

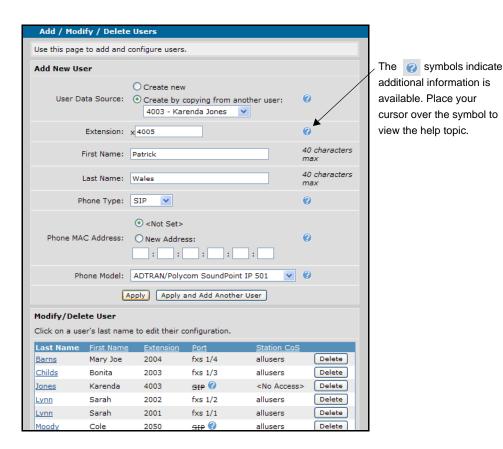


Figure 6. User Accounts Menu



If Analog Station does not display as a Phone Type, it is because there are no available FXS ports.

- 2. Select either **Create new** or **Create by copying from another user**. The last option allows you to copy an existing user's settings, streamlining this process.
- 3. Assign the user's extension and name.

4. Select the **Phone Type**. Based on the type of phone that will be used, some of the following steps may not be necessary. If configuring an **Analog Station**, skip to Step 7. If configuring a **Virtual User**, skip to Step 8.

The three different phone types that can be defined for voice users are listed below:

SIP user accounts are associated with a SIP port.

Analog Station users are associated with a physical FXS interface.

Virtual user accounts are not associated with a physical port.

- 5. Enter the phone **MAC Address** if setting up a specific phone model (such as SoundPoint IP 501 or 601) for a SIP account. If **Other** is chosen for the **Phone Model**, no **MAC Address** entry is necessary. Leave the selection as **<Not Set>**.
- 6. Select a model from the **Phone Model** drop-down list.
- 7. When creating an analog station user account, only select the **Phone Port** that is connected to the analog device.
- 8. Select **Apply** to add the user. Additional voice settings can be configured by selecting the user's last name in the **Modify/Delete User** section. This brings up the **Edit User** tabs. Also, refer to *Setting and Changing Passwords* on page 30.

Connect the Phones

ADTRAN/Polycom IP phones are configured automatically from the NetVanta 7100, which allows global and per-phone configuration to be managed centrally. Most configuration files are created automatically (and downloaded by the phones at boot up) by the NetVanta 7100 when a new voice user is created. Once you have created the new user, the final step is to connect the phone.

- 1. Connect the phone to a line from the NetVanta 7100 system.
- 2. Wait for the phone to load its configuration files from the NetVanta 7100 system.
- 3. The phone and user account should be fully functioning.

The boot process is complete when the idle display (see Figure 7) is shown on the phone. In case of problems, contact your system administrator to assist with troubleshooting.

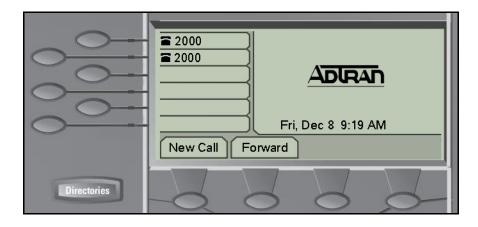


Figure 7. Phone Idle Display

Editing an Existing Phone Account

Once the user account is created, you can modify settings, such as user name, voicemail, call coverage, caller ID, and other user settings. This is done by selecting the user's last name in the **Modify/Delete User** section to bring up the **Edit User** menu.

If you copied an existing user account, most of these settings are already configured. This section also covers editing existing settings to alter a user's account preferences. Refer to *Configuring Voicemail* on page 43 to set up the voicemail parameters.

- 1. Navigate to the **Voice** > **Stations** > **User Accounts** menu.
- 2. Select the **Last Name** of the user (phone) account you would like to edit.

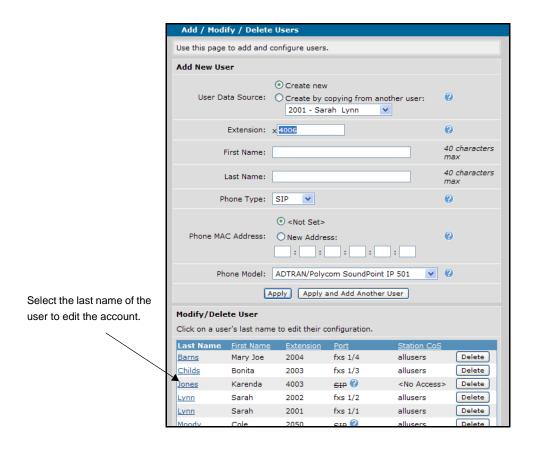


Figure 8. Add/Modify/Delete Users Menu

3. Enter the new settings and select **Apply** to save.

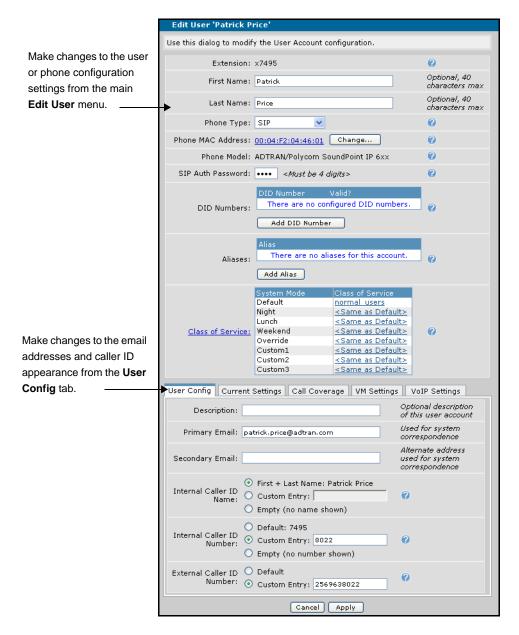


Figure 9. Edit User Menu

Email and Caller ID Settings

The **User Config** tab allows configuration of the user's email address and caller ID settings. See Figure 8 on page 22 for the complete **Edit User** menu.



The system has no control over the caller ID name display for calls originating externally.

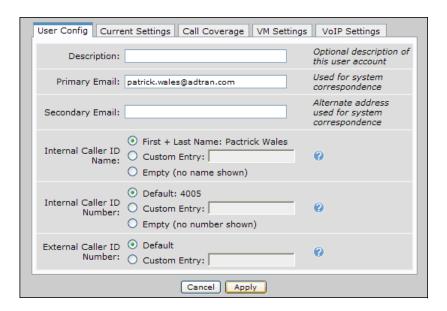


Figure 10. User Config Tab Menu

Table 1. User Config Tab Options

Settings	Descriptions and Options
Description	Optional description of the user account.
Primary Email	Used for system correspondence.
Secondary Email	Alternate address for system correspondence.
Internal Caller ID Name	Configures the name portion of the caller ID display for internal calls made by this user.
	First + Last Name: Displays first and last name of the internal caller.
	 Custom Entry: Displays the value entered in the adjacent text box. Empty: Displays nothing for caller ID name.
Internal Caller ID Number	Configures the number portion of the caller ID display for internal calls made by this user. • Default: Displays the extension of the internal caller. • Custom Entry: Displays the value entered in the adjacent text box. • Empty: Displays nothing for caller ID number.
External Caller ID Number	Configures the number portion of the caller ID display for external calls made by this user. External caller ID info is only sent if delivered out of particular T1 interfaces, such as Feature Group D or PRI. • Default: Automatically displays the external caller ID number as the first DID entry if one exists; otherwise, it displays nothing. • Custom Entry: Displays the external caller ID number as the value entered in the adjacent text box.
Forward Disconnect Delay	(For analog stations only.) Enables the removal or reversal of the battery for the specified amount of time. When the unit removes/ reverses the battery current, the connected equipment will acknowledge this condition by dropping the line.
Forward Disconnect Battery	(For analog stations only.) Specifies whether the connected equipment expects the battery removal or reversal.

Current Settings

The **Current Settings** tab of the **Edit User** menu allows you to change voice settings for a particular user.

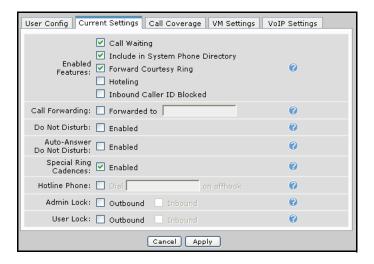


Figure 11. Current Settings Tab Menu

Table 2. Current Settings Tab Options

Settings	Descriptions and Options
Call Waiting	Enables call waiting on analog phones, or enables additional call appearances on an ADTRAN/Polycom SoundPoint IP phone.
Include in System Phone Directory	Includes the user in the dial-by-name directory.
Forward Courtesy Ring	Issues a short ring on the user's phone when a call comes in as a reminder that the phone is forwarded.
Hoteling	(For analog stations only.) Allows another user to log into this user's phone without logging this user out first. Useful for shared desk applications.
Inbound Caller ID Blocked	Blocks inbound caller ID information from being delivered to this user's phone.
Call Forwarding	Forwards this user's extension to the number displayed.
Do Not Disturb	Sends all calls directly to the user's call coverage list.
Special Ring Cadences	Allows the phone to ring with a different cadence depending on the call type (such as internal, external, or priority calls). If unchecked, the phone will always ring with the default cadence.
Hotline Phone	Places a call immediately to the configured number when this user goes offhook.
Admin Lock	Displays the current administrative lock (if any).
User Lock	Displays the current user lock (if any).

Call Coverage

The **Call Coverage** tab of the **Edit User** menu displays the call coverage settings for a particular user. If the user has been assigned to a call coverage list, you can view the settings on this page. You can also customize the selected call coverage list only for this user account. Use the question mark symbol to assist with the configuration settings.

When creating a custom list, multiple actions can be set to occur. For example, in Figure 12, station extension 2013 is set to ring four times before rolling to extension 2001. The active call will then ring extension 2001 twice before continuing to the next action (**Go to Auto Attendant**). Call coverage can also be set for each of the system modes in the same manner as shown in Figure 12. If system modes are defined, the extension will apply the call coverage during the times specified.

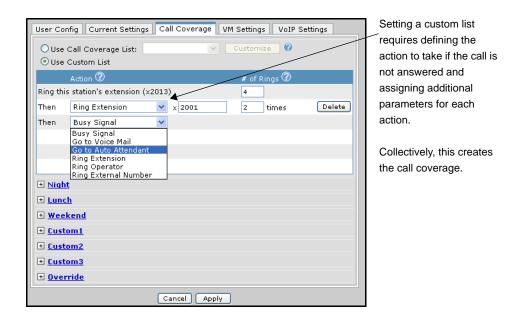


Figure 12. Call Coverage Tab Menu

Table 3. Call Coverage Tab Options

Settings	Descriptions and Options
Use Call Coverage List	Copies the selected global call coverage list for this specific extension. Customizations made to this copy (using the Customize button) do not affect the original global list.
Use Custom List	Allows a customized list of actions to be defined for incoming calls on the user's phone. Indicate the number of rings (to initially occur) under the # of Rings column. The phone will ring the specified number of times before continuing with the next entry in the call coverage list. By default, the first action is a Busy Signal. If the # of Rings is set to 0, the call coverage list will only be processed if the station is busy. Otherwise, the phone will ring indefinitely. Other available actions for the call coverage list include: Go to Voicemail Go to Auto Attendant Ring Extension Ring Operator Ring External Number Enter additional parameters as needed.
Night Lunch Weekend Custom1 Custom2 Custom3 Override	Allows a custom list of call coverage actions to be defined for each of the system modes. Define coverage the same as for custom lists above. System modes are configured through the Voice > System Setup > System Modes menu.



Figure 13. Call Coverage Example - Voicemail After Four Rings

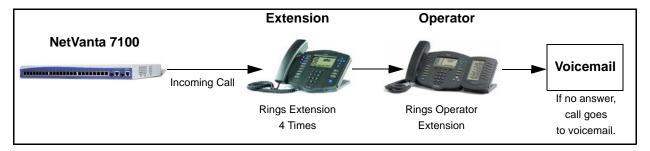


Figure 14. Call Coverage Example - Operator Coverage

Deleting a Phone User Account

Users accounts can be deleted quickly using the following procedure:

- 1. Navigate to the **Voice** > **Stations** > **User Accounts** menu shown in Figure 15. Scroll to the bottom of the menu to the **Modify/Delete User** section.
- Locate the user to remove; verify it is the correct user by Last Name and Extension fields. Select Delete to the right of the user listing.
- 3. Confirm the action when prompted by the system.

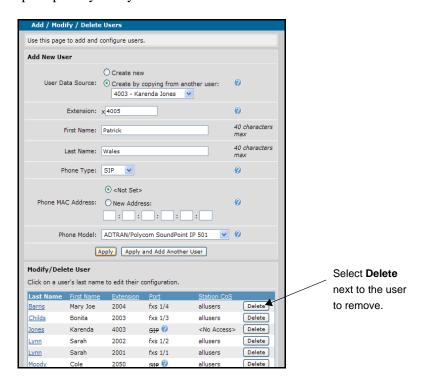


Figure 15. Deleting a User Account



Once a user account is deleted, there is no recovery to reinstate the user.

Setting and Changing Passwords

There are multiple passwords associated with the user accounts. This section describes how to set the SIP authorization password. This password authenticates a SIP station if SIP INVITE or registration authentication is enabled. For details on setting or changing the user voicemail passwords, refer to *Resetting Voicemail PIN* on page 44.

To set the **SIP Auth Password**, perform the following steps:

- 1. Navigate to the **Edit User** menu (shown in Figure 16) by selecting the user's last name in the **Modify/Delete User** section of the **User Accounts** menu.
- 2. Type the new password (must be four digits) in the SIP Auth Password field.

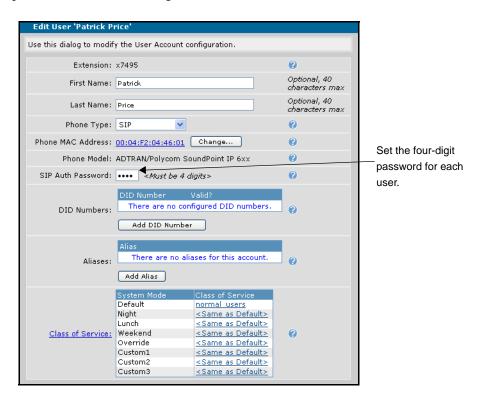


Figure 16. Edit User Menu

3. Select **Apply** to save the new password.

3. MODIFYING EXISTING PHONES

This section covers topics related to modifying existing phones:

- Customizing Phones and User Preferences on page 32
- Replacing an Existing Phone on page 40



While navigating through the menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the AOS GUI, select **Save** button at the top right of your current screen.

Customizing Phones and User Preferences

There are many settings available for customizing individual phones. This section covers these commonly used features:

- *Call Lists* on page 32
- Contact Directory on page 33
- Speed Dial on page 34
- Line Keys on page 35
- Button Map on page 37
- Display Status Group (Busy Lamp Field) on page 38
- Customizing the Expansion Module Buttons on page 38

Call Lists

Call lists are modified from the phone interface. The following instructions are provided for the ADTRAN/ Polycom phones. This information is also available for the ADTRAN IP 700 Series phones. Refer to the ADTRAN IP 700 Series Phone User Guide available on the AOS Documentation CD shipped with your unit or online at www.adtran.com.

The phone maintains a local list of outgoing and incoming calls on the system. The system stores up to 100 entries for each list of missed, received, or placed calls. On the left side on the phone, press the **Call Lists** key (or press the **Directories** key followed by **Call Lists**) and select **Missed Calls**, **Received Calls**, or **Placed Calls**, depending on the list you want to view. Call information is displayed.

From the specific call list:

- 1. Choose **Edit** to amend the dial string before dialing.
- 2. Choose **Dial** to return the call.
- 3. Choose **Exit** to return to the previous menu.

To quickly view respective call lists from the idle display:



Press ▶ *for placed calls.*

Press \triangleleft *for received calls.*

Press ∇ *for missed calls.*

For additional choices, press **More**, followed by:

- 4. **Info** to view information about the call.
- 5. **Save** to store the contact to the contact directory.
- 6. **Clear** to delete the call from the list.

Press **More** and **Exit** soft keys to return to the idle display.

Contact Directory

The contact directory is a local directory of contacts and is modified from the phone interface. Users can add, delete, edit, dial, or search for any contact in this list with just a few key strokes. The following instructions are provided for the ADTRAN/Polycom phones. This information is also available for the ADTRAN IP 700 Series phones. Refer to the ADTRAN IP 700 Series Phone User Guide available on the AOS Documentation CD shipped with your unit or online at www.adtran.com.



It is also possible for the administrator to modify the contact directory using the GUI menus from the NetVanta 7100. For instructions on making these changes through the GUI, refer to **Button Map** on page 37.

Adding or Editing a Contact

- 1. From the phone idle display, press the **Directories** key and select **Contact Directory**.
- 2. To enter another contact into the phone's database, select **Add**, or highlight an existing entry and select **Edit**.
- 3. Enter first and/or last name using the keypad. Press the **1/A/a** soft key to select from numeric, uppercase alphanumeric, or lowercase alphanumeric modes. Press the **Encoding** soft key to access special characters in other languages, if necessary.
- 4. Enter the contact number. This is a required field and it must be unique (not already in the directory). The speed dial index automatically assigns the next available index value.
- 5. **Ring Type** and **Divert Contact** can be left blank. **Ring Type** is used to assign a special ringtone for that user. Valid entries by default are 1 through 12. **Divert Contact** is used to identify the number to which to divert a caller when **Auto-Divert** is enabled for this directory entry. This would be used to selectively forward callers. More information on both of these features can be found in the *ADTRAN Polycom Administrator Guide SoundPoint/SoundStation IP SIP* available online at www.adtran.com.
- 6. Use the arrow buttons to switch between **Enabled** and **Disabled** settings for the last two fields.
- 7. Press **Save** to confirm, or press **Cancel** to abandon the changes. Then press **Directories** or the **Exit** soft key to return to the idle display.

Searching for a Particular Contact

- 1. From the **Contact Directory** menu, press **More** and then **Search**.
- 2. Using the dial pad, enter the first few characters for first or last names.
- 3. Press **Search** to search for contacts.
- 4. Successful matches can be dialed from the resulting screen.



A contact entry without a speed dial index assigned will not appear on a line key. The contact will only be available for selection from the contact directory. The contact will also not appear in the speed dial list accessed from the idle display by pressing \triangle .

Speed Dial

Pre-assigned phone numbers can be associated with line keys for rapid automated dialing. When a new entry is added to the contact directory, it is automatically assigned the next available line key. The speed dial number appears next to the line key in the phone display.

The following instructions are provided for creating speed dial entries from the phone interface of the ADTRAN/Polycom phones. This information is also available for the ADTRAN IP 700 Series phones. Refer to the *ADTRAN IP 700 Series Phone User Guide* available on the *AOS Documentation* CD shipped with your unit or online at www.adtran.com.



It is also possible for the administrator to modify speed dial entries using the GUI menus from the NetVanta 7100. For instructions on making these changes through the GUI, refer to **Button Map** on page 37.

Changing a Speed Dial Line Key Assignment

- 1. From the phone idle display, press the **Directories** key and select **Contact Directory**. Highlight an existing directory entry and press **Edit**. The same edit screen can be obtained by pressing and holding a line key that already has a speed dial number assigned to it. That contact in the directory is automatically displayed.
- 2. If a speed dial index already exists, delete it by pressing the following keys:





- 3. Enter a new speed dial index. For example, enter speed dial index as 1. This assigns the entry to the first available line key on the display. Alternatively, when editing the contact, press and hold an unassigned line key. This will automatically assign the speed dial index (which is required to assign that line key) as a speed dial for the contact. A confirmation beep is heard when this happens.
- 4. Press **Save** to confirm, or press **Cancel** to abandon the change. Then press **Exit** to return to the idle display.

By default, each ADTRAN/Polycom IP phone model has a specific number of line keys available for speed dial. The SoundPoint 501 has three line keys, and the SoundPoint 601 has six line keys. To dial a number assigned to a line key, press the line key directly opposite the number on the display.

Line Keys

Additional line keys can be added to the phones, and additional extensions can be added to a line key using the GUI menus from the NetVanta 7100. For instructions on accessing the GUI menus, refer to *Accessing and Navigating the System Menus* on page 11.

- 1. Navigate to the **Voice** > **Stations** > **IP Phone Configs** screen.
- 2. From the **Phone Configurations** tab, select the MAC address associated with the existing user.

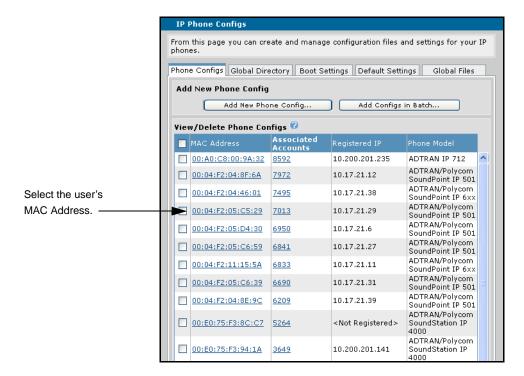


Figure 17. Phone Configurations Tab Menu

3. Choose the number of line keys you would like available on this line (primary extension). Select **Add Secondary Line** to configure the secondary line.

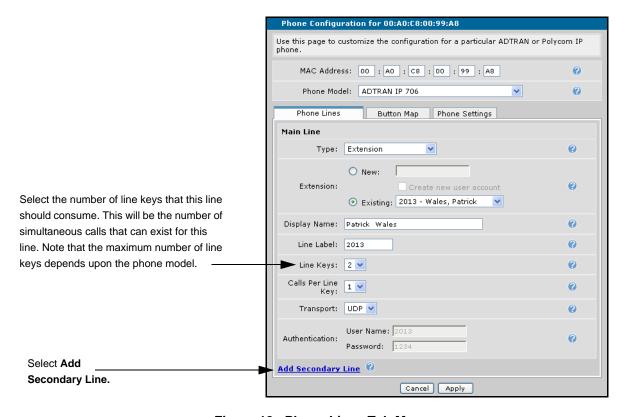


Figure 18. Phone Lines Tab Menu

Secondary Line 1 <u>Remove</u> Type: Extension New: Extension: Create new user account Existing: Display Name: Line Label: Line Keys: 2 💌 Calls Per Line Key: Transport: UDP 💌 Authentication: Password: Add Secondary Line 🔮 Cancel Apply

4. Enter secondary line information (see Figure 19).

Figure 19. Secondary Line Configuration

Settings **Descriptions and Options** New Enter new extension number. Create new user account Check the box to create a new user account. **Existing** Select an existing user account from the drop-down **Display Name** Enter the user's name. **Line Label** Enter new extension number. Select the number of line keys. Line Keys Calls Per Line Key Select the maximum number of calls which can be active or on hold per line key. Select either UDP or TCP for SIP signaling. **Transport Authentication User Name** Enter new extension number.

Table 4. Secondary Line Information

5. Select **Apply** to apply the changes, and select **OK** when prompted to synchronize and reboot the phone.

1234

Button Map

Authentication Password

The **Button Map** menu option is available to add speed dial entries or enter users in the phone directory. The **Main Phone Buttons** represent the selectable line key buttons on the phone. The number of line key buttons varies from model to model. If there are extra buttons available after all line keys have been

mapped, you can add other speed dial type entries below them by typing in the first available row's **Label** and **Contact** fields. Once you enter values, the next row will become available for data entry.

- 1. Navigate to the **Voice** > **Stations** > **IP Phone Configs** menu.
- 2. From the **Phone Configurations** tab, select the MAC address associated with the existing user.
- 3. Select the **Button Map** tab.

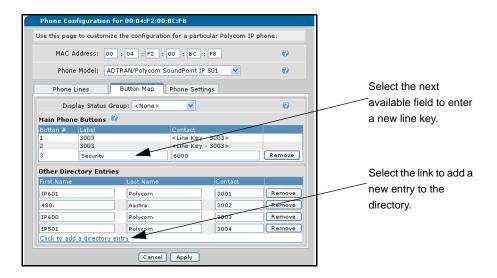


Figure 20. Button Map Tab Menu

- 4. The **Main Phone Buttons** section displays already configured line keys, as well as available slots for new line keys. Type a new label and the extension to add a line.
- 5. The **Other Directory Entries** section displays the current directory listings. Adding a new entry is accomplished by selecting the **Click to add a directory entry** link at the bottom of the menu and typing the new entry in the blank field provided. See Figure 23 on page 39 for an example of defined buttons as they appear on the phone.

Display Status Group (Busy Lamp Field)

Status groups are used to monitor the current status of users, park zones, system modes, or mailboxes. A common example of this functionality is a busy lamp field button indicating a user's busy extension. This feature is only available on phones with six buttons or more. Refer to *Setting Up Status Groups* on page 75 for more information.

Customizing the Expansion Module Buttons

The expansion module is only available with the ADTRAN/Polycom SoundPoint IP 601. You can create additional speed dial entries by installing multiple expansion modules (up to a maximum of three modules).



Figure 21. ADTRAN/Polycom SoundPoint IP 601 Phone with One Expansion Module



Figure 22. ADTRAN/Polycom SoundPoint IP 601 Phone with Three Expansion Modules

To add speed dial entries, refer to the sections *Contact Directory* on page 33 and *Speed Dial* on page 34 in this guide. To add busy lamp field status, refer to *Display Status Group (Busy Lamp Field)* on page 38. The expansion module assigns line designations to the first available line keys and then follows them with speed dial assignments. See Figure 23 for an example phone display.

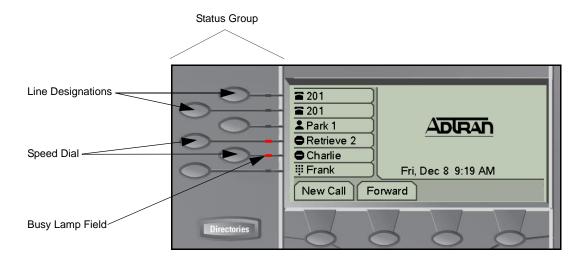


Figure 23. Status Groups (Busy Lamp Field/DSS) Phone Display

Replacing an Existing Phone

Occasionally a phone may fail and need to be replaced for an existing user in the NetVanta 7100 system. Use the following steps to associate a new phone's MAC address with an existing user:

- 1. Navigate to the **Voice** > **Stations** > **User Accounts** menu.
- 2. Select the **Last Name** of the user (phone) account you would like to edit (shown in Figure 8 on page 22).
- 3. From the Edit User menu, select Change beside the Phone MAC Address. This opens the Change Phone MAC Address/Model dialog box.

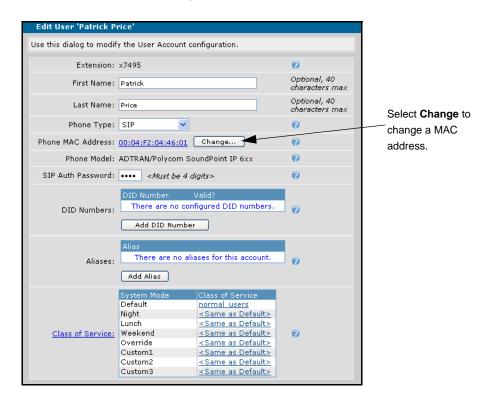


Figure 24. Enter New MAC Address

4. In the **Change Phone MAC Address/Model** menu (see Figure 25), enter the **New MAC Address** (or choose one from the **Known Address** drop-down list).



Figure 25. Change Phone MAC Address/Model Menu

- 5. Confirm that the phone model is correct.
- 6. Select **Apply** to apply changes and return to the **Edit User** menu.
- 7. Scroll to the bottom of the **Edit User** menu and select **Apply**.
- 8. Select **OK** to accept the prompt and reboot the new phone so it will download the configuration from the NetVanta 7100. (If the phone will be rebooted at a later time, refer to the steps provided in *Rebooting a Phone* on page 41.)

Rebooting a Phone

Periodically, a phone may require rebooting to accept a new configuration or software update. The quickest way to reboot a phone is to unplug the phone, wait a few seconds, and return the plug to its correct port. Each phone model has key sequences and menu options that also accomplish this task. Refer to the *ADTRAN IP 700 Series Administrator Guide* or the specific user guide for the ADTRAN/Polycom phone model, available from www.adtran.com.

The reboot process may take a few minutes. The phone will cycle through multiple information screens on the display until it completes by returning to the idle display. In case of problems, it may be possible to restore normal phone operation without rebooting. Contact your system administrator before attempting to reboot the phone.

4. CONFIGURING VOICEMAIL

This section covers important voicemail topics:

- Resetting Voicemail PIN on page 44
- Enabling Email Notification of Voicemail Messages on page 47
- Updating Voicemail Permission (Class of Service) on page 52
- Reviewing Voicemail Storage Limits on page 54



While navigating through the menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the AOS GUI, select the Save button at the top right of your current menu.

Resetting Voicemail PIN

The **Voicemail PIN** is the parameter used to set individual passwords that users must enter to access their voicemail. To recover a lost or forgotten password, the **Voicemail PIN** must be reset. Follow the instructions below to reset a voicemail password. The default password is **1234**.



The voicemail PIN allows the user to log into the Personal Account Manager website for personal user settings.

1. Navigate to the Voice > Stations > User Accounts menu.

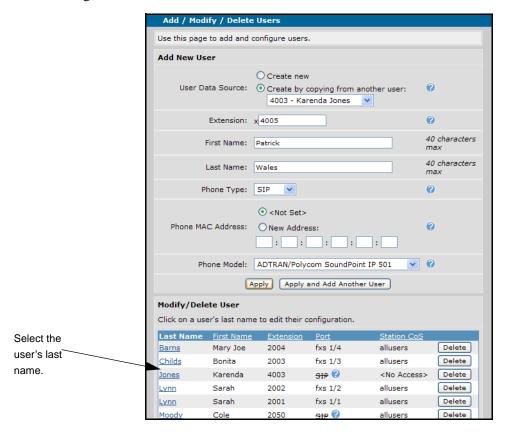


Figure 26. User Accounts Menu

2. Scroll to the bottom of the menu and select the last name of the user that needs the voicemail PIN reset. This step automatically takes you to the **Edit User** configuration menu.

3. Scroll down and select the **VM Settings** tab.

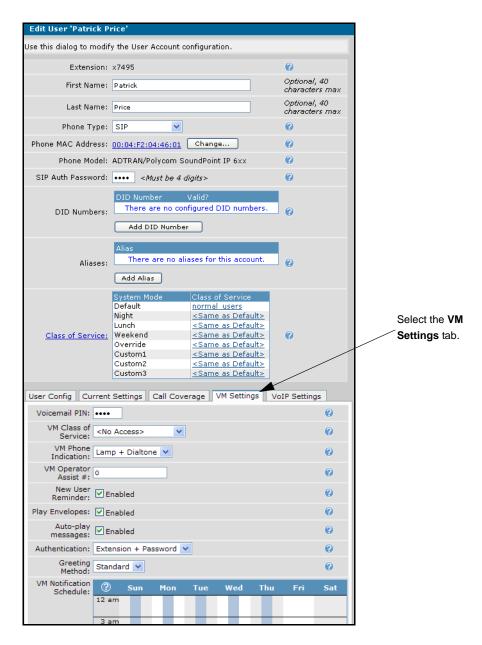


Figure 27. VM Settings Tab

User Config Current Settings Call Coverage VM Settings VoIP Settings Voicemail PIN: •••• 0 VM Class of <No Access> Replace the old 0 password with a new VM Phone Indication: Lamp + Dialtone 0 VM Operator Assist #: 0 New User Reminder: ✓ Enabled Play Envelopes: 🗸 Enabled 0 Auto-play Enabled 0 Authentication: Extension + Password 💌 0 Greeting Method: Standard V VM Notification Schedule: 3 am 6 am 9 am 12 pm 3 pm 6 pm 9 pm End Day/Time Fri 12:00 AM Sun 12:00 AM Primary Email Delete Add Range Reset Note: You must click the Apply button below to save changes to the notification schedule.

4. Select the password inside the **Voicemail PIN** field and replace it with a new password.

Figure 28. Set a Voicemail PIN

Cancel Apply



The PIN must consist of four numerical digits.

5. Select **Apply** to accept the new setting.

Enabling Email Notification of Voicemail Messages

Configuring voicemail notification consists of selecting the time of day and the method the system uses to notify users when they receive a new voicemail message. When this feature is configured, the system sends an email alert to the specified email address.



To allow email notification, the system administrator must first configure the outgoing mail server settings.

- 1. Navigate to the Voice > Stations > User Accounts menu.
- 2. Scroll to the bottom and select the user's last name to access the user's account settings. This step automatically takes you to the **Edit User** configuration menu.
- 3. On the **Edit User** menu, scroll down to the **User Config** tab and set (or edit) the email address(es) to use for voicemail notification.



Users can manage their voicemail notification email address(es) and notification schedule(s) using the Personal Phone Manager. Refer to the NetVanta 7000 Series Personal Phone Manager Quick Configuration Guide, available on the AOS Documentation CD shipped with your unit or online at www.adtran.com.

4. Scroll down near the bottom of the menu and select the **VM Settings** tab.

User Config Current Settings Call Coverage VM Settings VoIP Settings Voicemail PIN: •••• VM Class of Service: <No Access> ~ 0 VM Phone Indication: Lamp + Dialtone 0 VM Operator Assist #: New User Reminder: ✓ Enabled 0 Play Envelopes: 🗸 Enabled Auto-play messages: ✓ Enabled Authentication: Extension + Password V Greeting Method: VM Notification Schedule: 3 am 6 am 9 am 12 pm 3 pm 6 pm 9 pm Select to add a notification schedule Sun 12:00 AM Fri 12:00 AM **Primary Email** Delete range. Add Range Reset Note: You must click the Apply button below to save changes to the notification schedule.

5. From the VM Settings tab, scroll down to the bottom left and select the Add Range button.

Figure 29. Edit User Menu VM Settings Tab

Cancel Apply

6. The **Add Notification Schedule Range** menu appears. Enter the beginning and ending times for the voicemail notification range. A range is the period of time during the week that will have the same notification type. The schedule range added here will appear in the **VM Notification Schedule** graph (as shown in Figure 31).

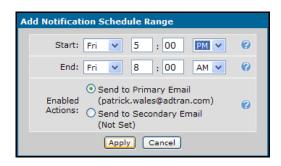


Figure 30. Add Notification Schedule Range Menu

7. Select either **Send to Primary Email** or **Send to Secondary Email** as the notification type. The primary and secondary email addresses appear in parentheses below each option. Select **Apply** to save the schedule. The new voicemail notification schedule will appear as a graph at the bottom of the **VM Settings** tab.



If the email address does not appear below the selected option, select **Apply** and continue to the next step.

8. To configure an email address that is not set, select the email type under **Notify Action** to be automatically routed to the email fields on the **User Config** tab.

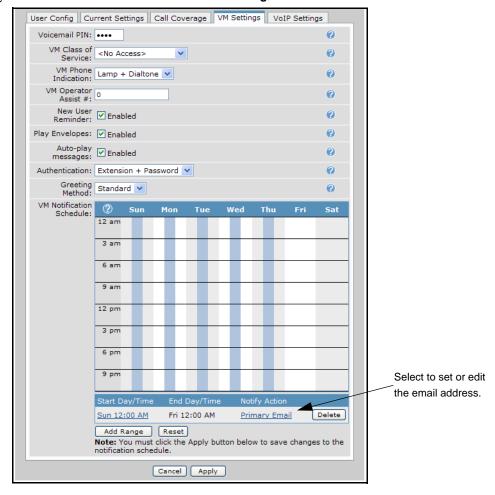


Figure 31. Set or Edit a Notification Email Address

9. On the **User Config** tab, set or edit the notification email addresses. Select **Apply** after making any changes.

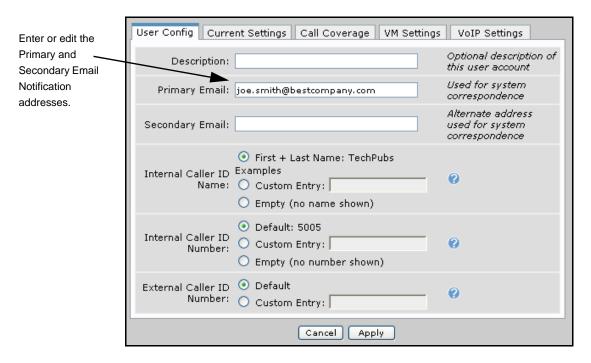


Figure 32. User Config Tab Menu

- 10. Select **Apply** to accept the new setting.
- 11. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Updating Voicemail Permission (Class of Service)

Voicemail storage limits for individual users are defined and modified within the assigned **Voicemail Classes of Service** menus. Follow the steps below to adjust user's voicemail permissions (such as the lengths of recorded greetings and messages, and the amount of time messages are allowed to remain in storage).

1. Navigate to Voice > Applications > Voicemail Settings to the Voicemail System Settings menu.

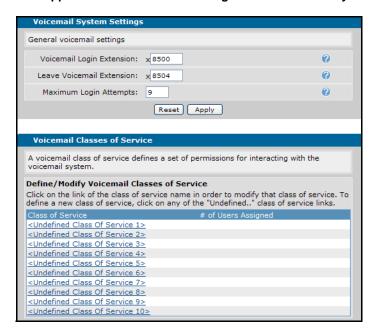


Figure 33. Voicemail System Settings Menu

2. Select either the name of the voicemail class of service (CoS) to modify or an undefined CoS to create. The **Define/Modify Voicemail Classes of Service** menu appears, allowing you to configure the voicemail system permissions (including voicemail storage limits).

3. Enter the new CoS settings. Review the right side of the menu for explanations of each setting. Changes made to the existing CoS only apply to users assigned to the selected voicemail CoS.

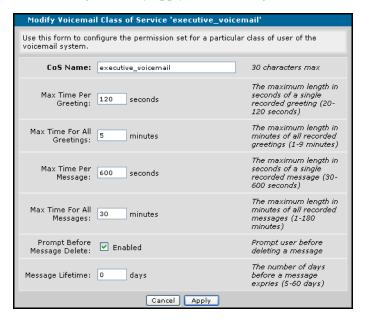


Figure 34. Modify Voicemail Class of Service Menu

Table 5. Voicemail Class of Service Options

Settings	Descriptions and Options
CoS Name	Assigns a name (30 characters maximum) to the voicemail CoS.
Max Time Per Greeting	Sets the allowed recording time (in seconds) for each greeting. The default is 60 seconds.
Max Time For All Greetings	Configures the total amount of time (in minutes) allowed for all user recorded greetings. The default is 3 minutes.
Max Time Per Message	Configures the allowed duration of recording time (in seconds) for each voicemail message. The default is 120 seconds.
Max Time For All Messages	Sets the total number of minutes for all recorded messages for each user. The default is 10 minutes.
Prompt Before Message Delete	Notifies users of expired voicemail and gives them the option to save or delete the old message. When disabled, the system automatically deletes expired voicemail.
Message Lifetime	Specifies the total number of days a message is stored on the system before it expires. The default is 14 days. Setting the parameter to 0 eliminates the expiration so that messages never expire.

- 4. Select **Apply** to accept the new setting.
- 5. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Reviewing Voicemail Storage Limits

Voicemail statistics and capacity settings can be displayed in real time. The **Voicemail Status** menu displays all extensions in the system and their status. To modify the voicemail storage capacity, select the underlined **VM COS** to access the menu settings. Refer to *Updating Voicemail Permission (Class of Service)* on page 52.

1. Navigate to the **Voice** > **Reports** > **Voicemail Status** menu to view voicemail statistics for each extension.

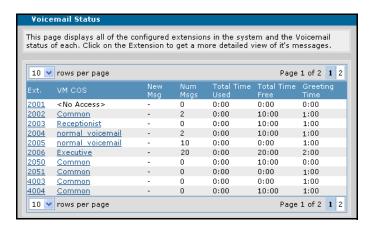


Figure 35. Voicemail Status Menu

Table 6. Voicemail Status Menu Options

Settings	Descriptions and Options
Ext.	Displays the user account settings for this extension. Refer to <i>Managing Phone Accounts</i> on page 19 for more information.
VM COS	Displays the voicemail CoS assigned to the user.
New Msg	Indicates the number of new messages for the user.
Num Msgs	Indicates the number of messages stored in the user's voicemail box.
Total Time Used	Displays the total minutes of voicemail storage used by this user.
Total Time Free	Displays the total minutes of voicemail storage available to this user.
Greeting Time	Displays the length of the recorded greeting for this user.

5. CONFIGURING THE SYSTEM

This section covers important system configuration topics:

- Setting the System Time and Date on page 56
- Creating a New Auto Attendant on page 58
- Modifying Auto Attendant Greetings on page 62
- Dial By Name Directory on page 65
- Adding Users to Ring Groups on page 68
- Adding Users to the Operator Group on page 72
- Adding a System Speed Dial Number on page 74
- Setting Up Status Groups on page 75



While navigating through the menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the GUI, select the **Save** button at the top right of your current menu.

Setting the System Time and Date

Configurable menu items such as **System Time** and **System Date** are indicated by <u>underlined text</u>. Select these items to make changes or updates to the system's configuration. The items in black text are read-only status fields and cannot be configured through this menu. You can also enter a time zone and the address of a server for network time synchronization on this menu.

- 1. Navigate to the **System > System Summary** menu (the system's main menu).
- 2. Select the **System Time** or **System Date** link to access the **Set Time and Date** configuration menu.

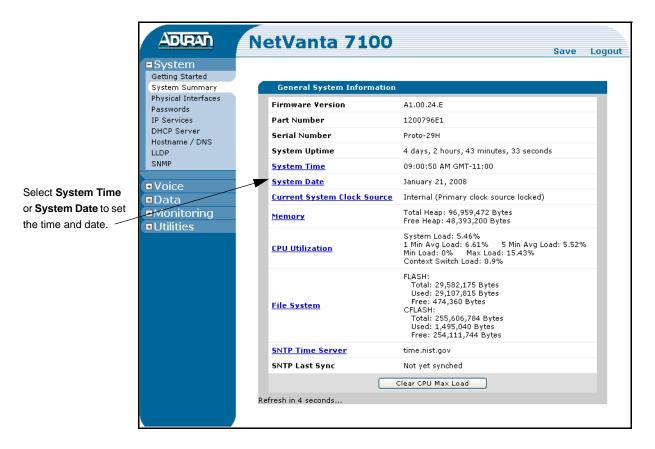


Figure 36. System Summary Menu

3. From the **SNTP Configuration** menu, set the current time and date.

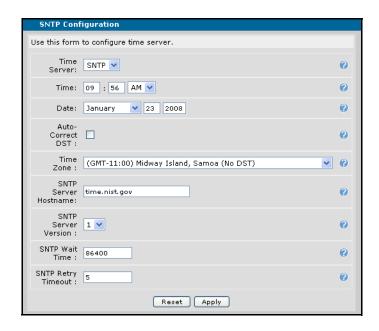


Figure 37. SNTP Configuration Menu

Table 7. SNTP Configuration Menu Options

Settings	Descriptions and Options
Time Server	Enables or disables the SNTP time server.
Time	Specifies the system time (hh:mm AM/PM).
Date	Specifies the system current date (month/day/year).
Auto-Correct DST	Enables or disables automatic daylight savings time adjustment.
Time Zone	Specifies the system's time zone.
SNTP Server Hostname	Enter an IP address or host name for the SNTP server. Spaces are not allowed in the host name or IP address.
SNTP Server Version	Specifies which SNTP server version is used (1 to 3).
SNTP Wait Time	Specifies the number of seconds to wait between SNTP updates (10 to 4,294,967,294).
SNTP Retry Timeout	Specifies the number of seconds to wait for SNTP response before retrying (3 to 4,294,967,294).

- 4. Select **Apply** to accept the new setting.
- 5. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Creating a New Auto Attendant

An auto attendant is an automated call handling menu structured with audio prompts to direct callers through the available menu options (or digit actions). The auto attendant must have an introductory greeting that describes the digit actions, such as "For Sales, press 2." It is best to map out the auto attendant digit actions prior to setup. See Figure 50 on page 68 for a diagram of auto attendant structure.

Creating a new auto attendant may require assistance from your system administrator. Refer to *Modifying Auto Attendant Greetings* on page 62 for instructions on perfecting an existing auto attendant greeting.

1. Navigate to the Voice > Applications > Auto Attendants menu and enter the Name and Extension of the new auto attendant. Select the Add New Auto Attendant button.

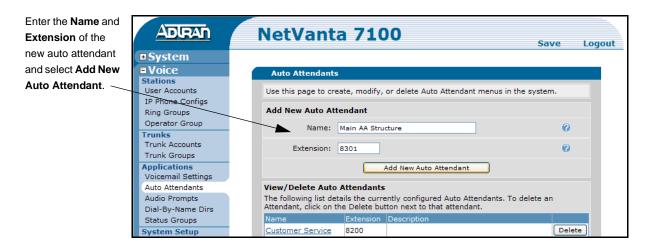


Figure 38. Auto Attendants Menu

2. Under **Menu Prompt Info**, select the **New** button to access the **Add New Audio Prompt** menu and create a new menu prompt greeting.

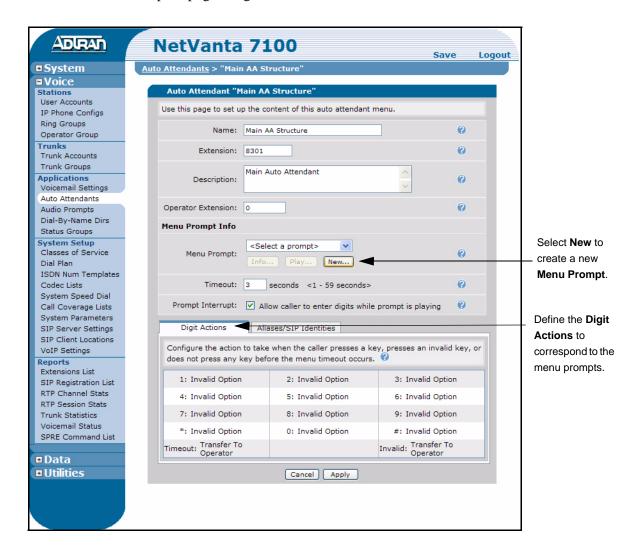


Figure 39. Create Auto Attendant Menu Prompts

- 3. From the **Add New Audio Prompt** menu, enter the script for recording a new menu prompt in the **Prompt Text** box.
- 4. Select the **Save and Record** button. The system calls the extension specified in the **Extension To Call** field. Record the audio prompt using the **Prompt Text** as a script.

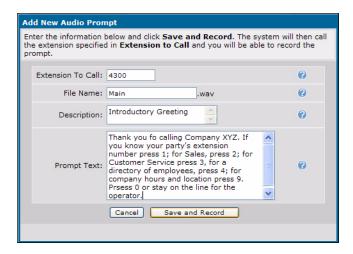


Figure 40. Add New Audio Prompt Menu

Table 8. Add New Audio Prompt Menu Options

Settings	Descriptions and Options
Extension To Call	Specifies the extension the system should dial in order to record the audio prompt.
File Name	Specifies the file name to use for the saved audio once the recording is complete. Try to use a descriptive name (35 characters maximum) to make it easier to recall the content of the recording.
Description	Optional. Displays descriptive information about this audio prompt.
Prompt Text	Optional. Displays recording prompts. Type the text of the prompt to read when recording in Step 5. Additionally, this text can serve as a good description of the prompt file itself.

5. After recording the new Menu Prompt, you must define the digit actions on the **Digit Actions** tab. Select the first digit to define. Define at least one **Digit Action**. In the example below, we will configure digit 1 to **Dial By Extension**:

Create a new **Intro Prompt**. The following sentence is an example prompt: Enter the four-digit extension of the person you wish to call, or stay on the line for operator assistance.

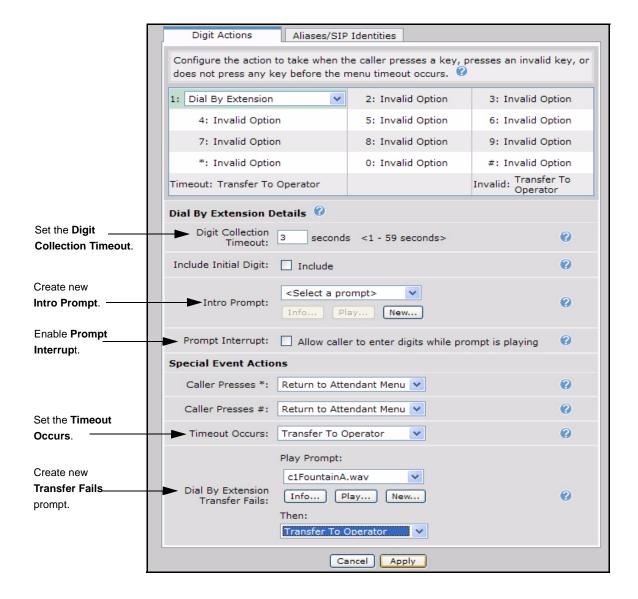


Figure 41. Digit Actions Tab Menu

- 6. After configuring digit action, select **Apply** to save the new settings.
- 7. To add a new digit action, repeat Steps 5 and 6 above. For example, configure digit **2** to **Transfer to a Phone Number** with the example prompt of "for Sales, press 2."

Modifying Auto Attendant Greetings

Auto attendant greetings are recorded voice greetings or prompts that direct users through the menus of the phone answering system. See Figure 50 on page 68 for an example diagram of the auto attendant structure.

Modifying an auto attendant may require assistance from your system administrator. Also refer to *Creating a New Auto Attendant* on page 58.

- 1. Navigate to the **Voice** > **Applications** > **Auto Attendants** menu.
- 2. Select the blue underlined name of the auto attendant you want to modify. A new menu appears, allowing you to access additional settings.

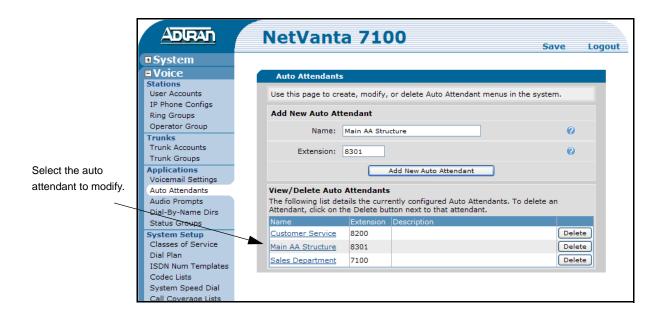


Figure 42. Modify Auto Attendant Settings

3. Select the **New** button under **Menu Prompt Info** to access the **Add New Audio Prompt** menu and modify a menu prompt greeting. (Check with the system administrator before re-recording the main system directory auto attendant greeting. It is a good idea to have a backup file or a written script of the original greeting.)

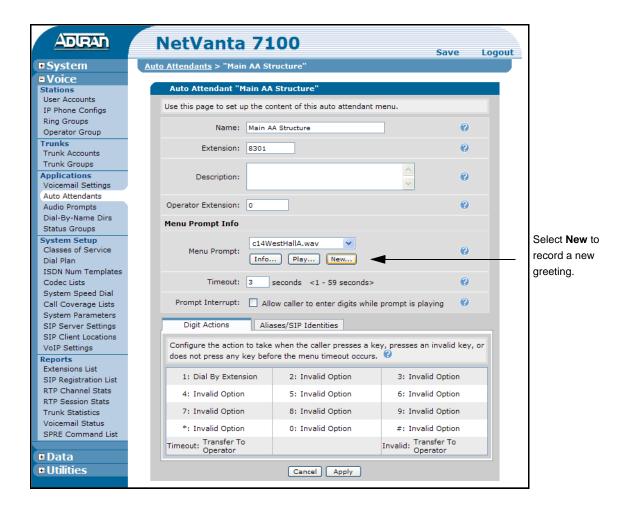


Figure 43. Modify an Existing Menu Prompt

4. From the **Add New Audio Prompt** menu, enter the new script for an existing menu prompt in the **Prompt Text** box. See Table 8 on page 60 for option descriptions.

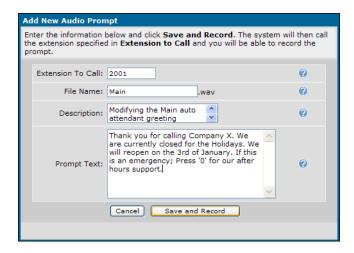


Figure 44. Modify an Existing Audio Prompt

- 5. Select the **Save and Record** button. The system calls the extension specified in the **Extension To Call** field. Record the audio prompt using the **Prompt Text** as a script.
- 6. Select **Apply** to accept the new setting.
- 7. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Dial By Name Directory

A directory entry is created and stored for every voice user on the system (system directory), based on the first and last name in the user configuration. These entries are available to the dial by name (DBN) directory. Adding new DBN directories allows creating aliases for members of the specific DBN directory.

1. Navigate to **Voice** > **Applications** > **Dial-By-Name Dirs**. Type the name of the DBN directory to create and select **Add New Directory**.

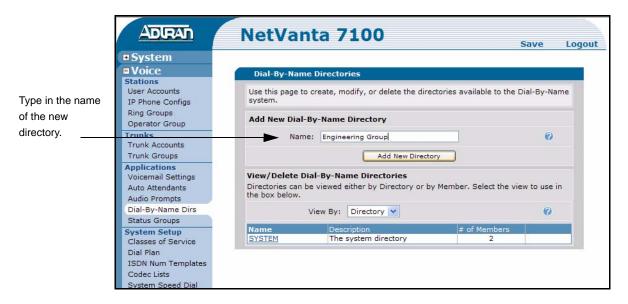


Figure 45. Dial-By-Name Directories Menu

2. From the **Directory Detail** menu, add a description (optional) of the new DBN directory and select the **Add Users** button to add directory members.

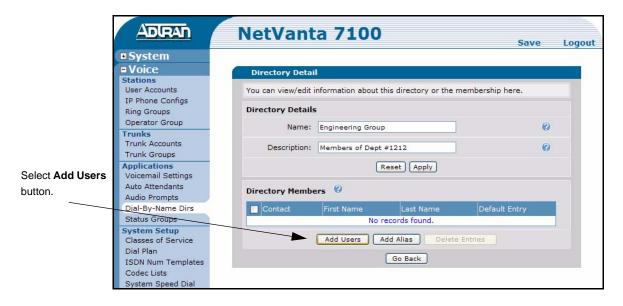


Figure 46. Directory Detail Menu

3. Select the members of the new DBN directory using the check boxes and select **Apply**. The shift key can be used to select a range of members.

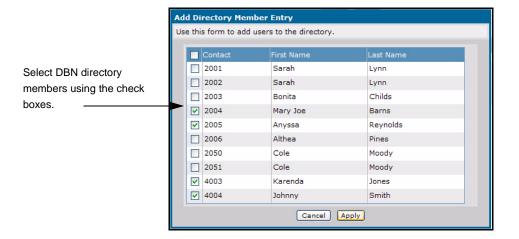


Figure 47. Add Directory Member Entry Menu

4. Optional. Add an alias for specified directory member(s) by selecting the member(s) and then **Add Aliases**. Aliases are helpful when a member is known by several names. For example, Mary Joe Barns may only be known as MJ to callers using the directory to reach her extension.

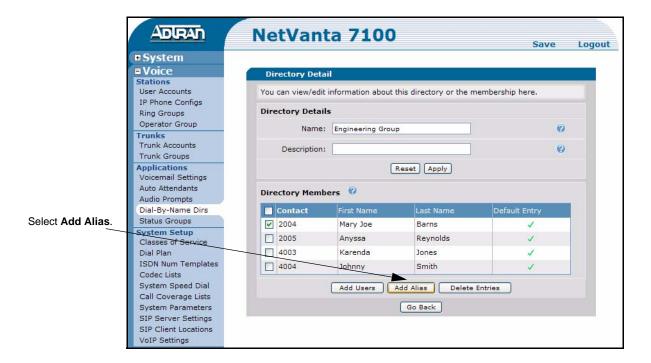


Figure 48. Adding Member(s) Alias

5. Enter the alias for the member and select **Apply**.

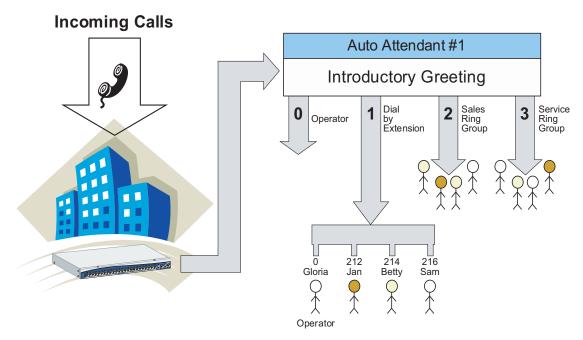


Figure 49. Add New Directory Alias Entry Menu

Adding Users to Ring Groups

A ring group defines a group of user accounts that can be called in a coordinated way with a single extension. The incoming caller ID from a group member denotes a group call using a GRP prefix. Members can log in when they want to receive calls to the group and log out when they do not want to receive group calls.

Ring group's extensions must be unique and cannot begin with a 0 or a 9. Extensions are defaulted to be one more than the highest number ring group extension currently configured, or 8001 if no ring groups are configured.



Example Introductory Greeting

"Thank you for calling Company X. If you know your party's extension, press 1; then enter their three-digit extension. For Sales press 2, for Customer Service press 3. Press 0 or stay on line for the operator."

Figure 50. Auto Attendant Ring Group Example

To add new users to a ring group, navigate to Voice > Stations > Ring Groups. In the Modify/
Delete Ring Group section, select the ring group Extension indicated by the blue underlined text
to access the Edit Ring Group menu.

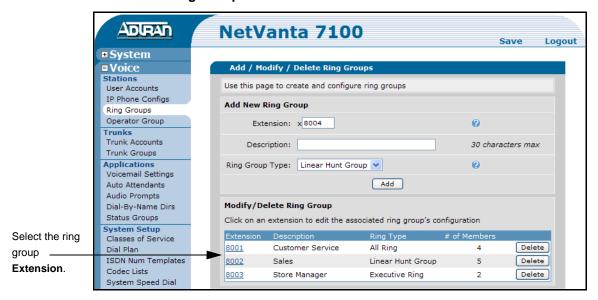


Figure 51. Ring Groups Menu

Table 9. Ring Group Type Options

Ring Group Types	Descriptions
Linear Hunt Group	Distributes calls to members in the order that they were added to the ring group.
All Ring	Rings all members. The first extension to answer receives the call.
UCD	Distributes calls to members in the order that they were added, but in a uniform, round-robin fashion.
Executive Ring	Distributes calls to the executive's and assistant's extensions, but only uses the executive's call coverage settings.

2. On the **Edit Ring Group** menu, scroll down to the bottom and select **Add Members** to access the list of available users to add to the ring group.

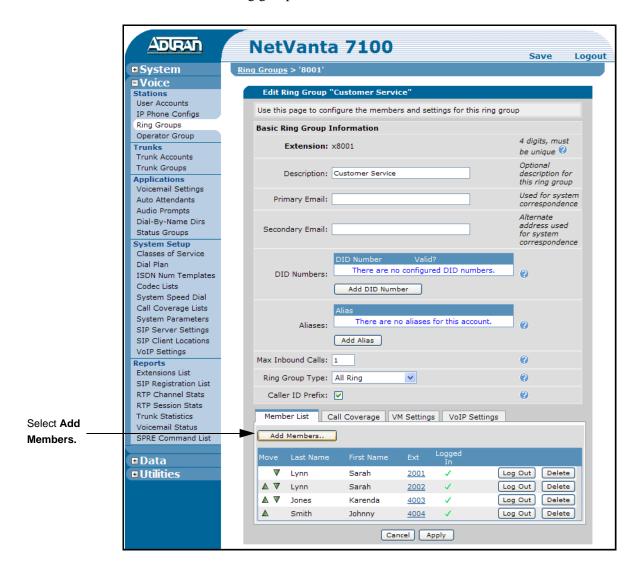


Figure 52. Edit Ring Group Menu

3. Select users to add to this ring group using the check box to the left of the user entry. Select **Add Selected Users** to update this ring group and return to the **Edit Ring Group** menu.



Figure 53. Add Members to Ring Group Menu

- 4. On the **Edit Ring Group** menu, select **Apply** to accept the new setting.
- 5. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Logging into and out of Ring Groups

Members can log into a ring group with a special PREfix (SPRE) code. SPRE codes are special digits dialed to access features of the system. Members of a ring group can enter SPRE codes on personal phones to receive or block calls from specific ring groups.

From the desired phone, enter the following SPRE codes to log into or log out of specific ring groups (thus receiving or blocking those calls, respectively).

- 1. To enter a ring group, log in with *LLxxxx* (*55xxxx*), where xxxx is the ring group's extension.
- 2. To exit a ring group, log out with *LOxxxx* (*56xxxx*), where xxxx is the ring group's extension.

Adding Users to the Operator Group

The operator group is a special ring group that rings its members when 0 is dialed. Members can log in when they want to receive operator calls and log out when they do not want to receive those calls. Internal extensions will receive a priority ring cadence when called from members of the operator group.

1. Navigate to the **Voice** > **Stations** > **Operator Group** menu. Select **Add Members** to access the list of available users to add to the operator group.

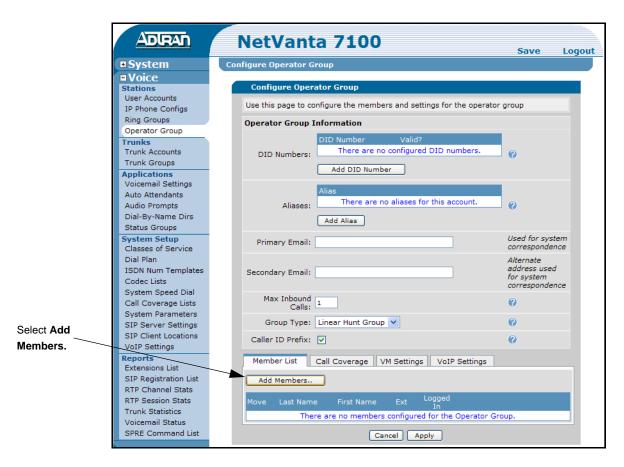


Figure 54. Configure Operator Group Menu

Table 10. Operator Group Type Options

Operator Group Types	Descriptions
Linear Hunt Group	Distributes calls to members in the order that they were added to the operator group.
All Ring	Rings all members. The first extension to answer receives the call.
UCD	Distributes calls to members in the order that they were added, but in a uniform, round-robin fashion.

Select users to add to this operator group by using the check box to the left of the user entry. Select
 Add Selected Users to update this operator group and return to the Configure Operator Group
 menu.



Figure 55. Add Members to Operator Group Menu

- 3. Select **Apply** to accept the new setting.
- 4. Select **Save** at the top right of the current menu. A dialog box appears if the save is successful. Select **OK** to close the box and return to the previous menu.

Logging into and out of the Operator Group

Members can log into the operator group with a SPRE code when they want to receive calls to the operator group and log out using a SPRE code when they do not want to receive operator group calls.

From the desired phone, enter the following SPRE codes to log in or log out:

- 1. To enter the operator group, log in with *LL0* (*550*), where 0 represents the operator group extension.
- 2. To exit the operator group, log out with *LOO* (*560*), where 0 represents the group extension.

Adding a System Speed Dial Number

System speed dial is a feature (typically managed by the system administrator) that allows all users on the system to use a **Speed Dial ID** number to quickly reach a specific extension. When a new entry is added to the **System Speed Dial Entries**, it is automatically assigned the next available **Speed Dial ID**. However, the **Speed Dial ID** can be customized. The example below adds the IT Helpdesk (extension 6111) to the system **Speed Dial ID** number 5. To access a **System Speed Dial ID** from a phone, the user enters the special prefix code (SPRE) *25nn, where nn is the **System Speed Dial ID**. In this example, all users can now access the IT Helpdesk by entering *2505.

Navigate to the **Voice** > **System Setup** > **System Speed Dial** menu. Enter the new system **Speed Dial ID** information and select **Add**.

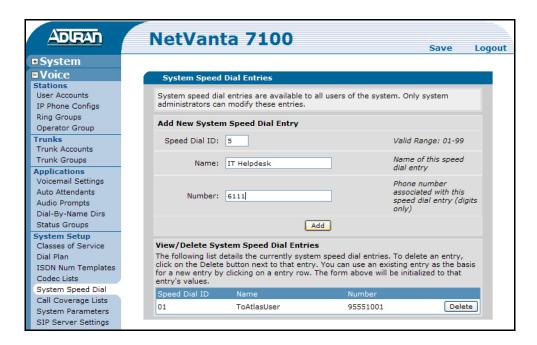


Figure 56. System Speed Dial Menu

Table 11. System Speed Dial Menu Options

Settings	Descriptions and Options	
Speed Dial ID	Enter a valid number (range is 01 to 99) for the speed dial identity.	
Name	Enter a name to describe the speed dial entry.	
Number	Enter the phone number (digits only; do not use dashes) associated with this speed dial entry.	

Setting Up Status Groups

Status groups are used to allow ADTRAN/Polycom IP phones to monitor the current status of other users, park zones, system modes, or mailboxes. Configuring status groups creates the busy lamp field (BLF) and direct station select (DSS) settings on user phones. Refer to *Display Status Group (Busy Lamp Field)* on page 38 to optionally select a status group to display on the phone. Note that this feature is only available for the ADTRAN/Polycom SoundPoint IP 601.

- 1. Navigate to the **Voice** > **Applications** > **Status Groups** menu.
- 2. Enter a name for the new status group and select **Add New Status Group**.

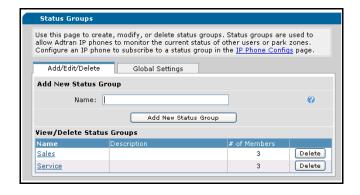


Figure 57. Status Group Menu Add/Edit/Delete Tab

3. From the Status Group Details Menu, add members to the status group by selecting Add User, Add Park Zone, Add System Mode, or Add Mailbox. Choose members from the Status Group Members list using the check boxes. For users, specify whether to identify the user in the status group by name or extension in the Display Name column. This setting can be modified later on.



Figure 58. Status Group Details Menu

4. Select **Apply** to accept the new settings. An example of the phone display is shown in Figure 23 on page 39.

6. MAINTAINING AND TROUBLESHOOTING

This section covers important maintenance and troubleshooting topics:

- Saving Configuration Changes on page 78
- Troubleshooting Voice Trunks on page 79
- Troubleshooting Classes of Service on page 82
- Troubleshooting Phones on page 84



While navigating the system menus you will notice (context-sensitive help question mark) symbols that indicate additional information is available. Place your cursor over the symbol to view the additional information.



Updated configuration must be saved to nonvolatile memory (NVRAM) to retain new changes after a loss of power or a reboot. To quickly save your configuration at any time while in the AOS GUI, select the **Save** button at the top right of your current menu.

Saving Configuration Changes

Saving the running configuration to startup configuration stores the updated configuration files to NVRAM. Configuration files can be downloaded from the NetVanta 7100, as well as reloaded into the NetVanta 7100. In addition to following the steps, you can quickly save your configuration at any time by selecting the **Save** button at the top right of your current menu.

1. Navigate to the **Utilities** > **System** > **Configuration** menu and select **Save**.

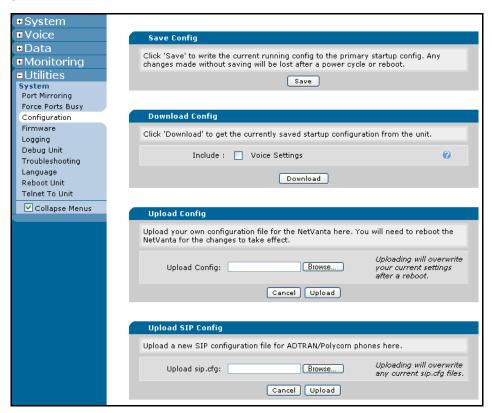


Figure 59. Utilities System Configuration Menu

2. A dialog box appears if the configuration has been successfully saved. Select **OK** to close the box and return to the previous menu.

Troubleshooting Voice Trunks

Voice trunks are the telephone lines delivered to the carrier in digital or analog format (e.g., T1 or trunk FXO lines). Trunk lines connect the NetVanta 7100 to the outside telephone network. The incoming lines are linked to physical interfaces on the system. These interfaces control which resources are used for outbound calls. This section covers the most common issues that prevent users from placing outbound calls.

Checking the Port Status

Check the status of the telephone lines under the **Physical Interfaces** menu. The voice trunk interfaces are FXO and T1. The physical interface names are formatted *<interface type> <slot/port>* (e.g., t1 0/1).

- 1. Navigate to **System > Physical Interfaces** and check for **green** text in the **Line Status** of the trunk and T1 interfaces. If the text under **Line Status** is **red**, stop here and contact your network administrator for assistance. Otherwise, continue to the next step.
- 2. If the **Line Status** is **OnHook** or **Up**, your trunk line service is working properly. If the **Line Status** is **Down**, check the physical connection to your unit. If you suspect configuration or network issues, contact your NetVanta 7100 system administrator.

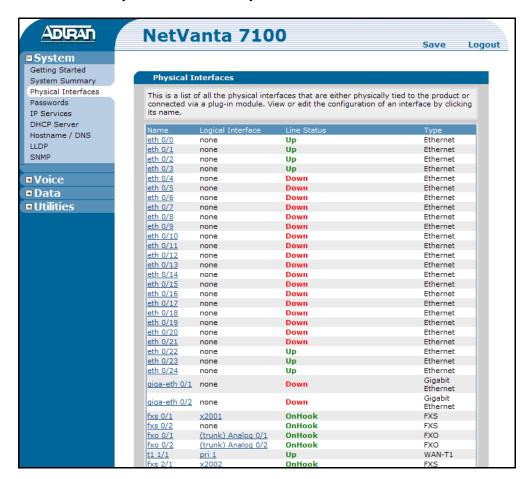


Figure 60. Physical Interfaces Menu

Review the Trunk Group Configuration

Trunk groups control resources used for outbound calls. Call templates must be assigned to the trunk group to tell the system what type of dialed external numbers to permit out the system. Call templates can also deny certain calls out of the system, such as international and 900 numbers.

 Navigate to Voice > Trunks > Trunk Groups and select the name of the trunk group you would like to review (FXO [analog] or T1/PRI [ISDN]). In this example, we will view the ANALOG_FXO_TRUNKS.

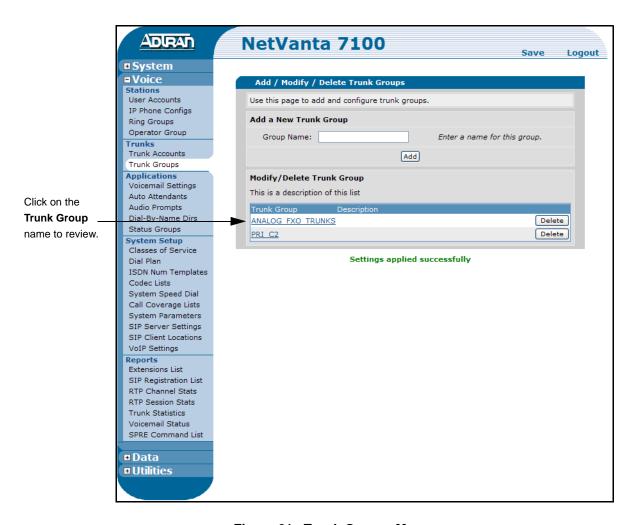


Figure 61. Trunk Groups Menu

Review the selected call templates under Outbound Call Templates. If you are not able to make a
certain type of call (external local, long distance, etc.), make sure that call type is selected. Select
Apply to apply the settings. If you are still unable to place calls, contact your NetVanta 7100
system administrator.

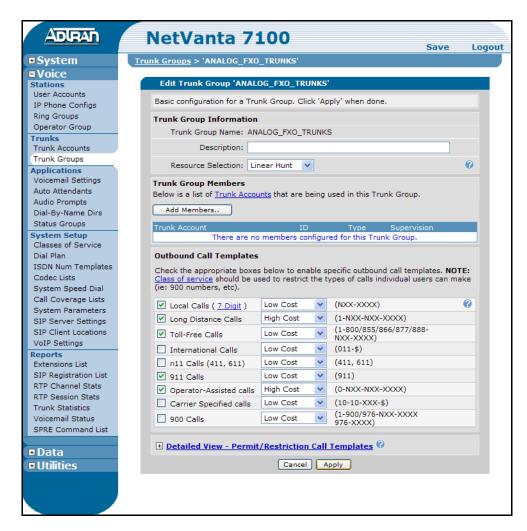


Figure 62. Edit Trunk Group Menu

Troubleshooting Classes of Service

A class of service (CoS) defines a set of user permissions. Each user is assigned to a defined CoS, which determines the call types and call actions (such as conferencing, overhead paging, etc.) they are allowed to perform from their phone. If a user or a group of users is not able to execute certain call types and/or call actions, examine the CoS setting.

 Navigate to the Voice > System Setup > Classes of Service menu and select the CoS assigned to the user(s). In this example, we will examine the normal users CoS by selecting the blue hyperlink.

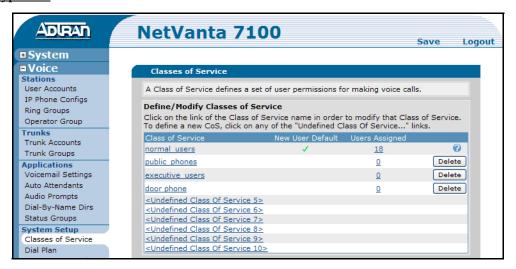


Figure 63. Classes of Service Menu

2. The **Modify Class of Service** menu appears. Verify that the desired call types and call actions have been selected. Select or deselect the options according to your needs. This is a global setting, and changes will affect all users assigned to the CoS.

Handsfree auto-answer is a call action feature available to SIP users. It is programmable within the **Classes of Service** menu and functions like an intercom by automatically answering calls. Auto-answer calls must match number patterns set in the **Auto-Answer Permit Templates**. Use the \$ wildcard to permit all extensions to receive handsfree calls. Users must dial ** plus the extension to place an auto-answer call.

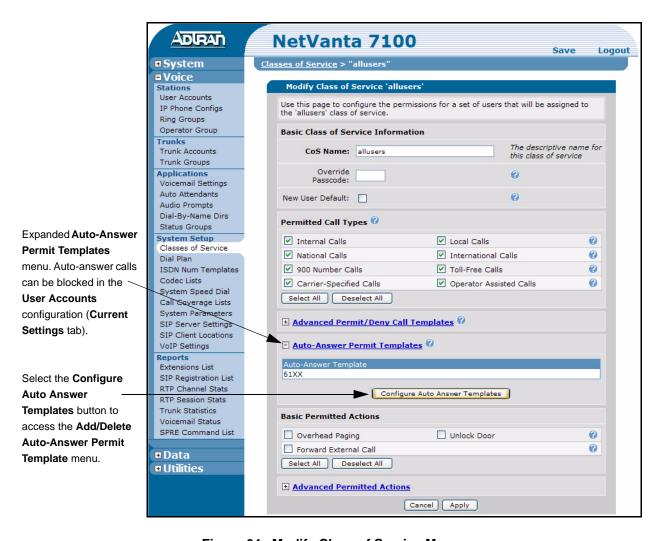


Figure 64. Modify Class of Service Menu

3. Select **Apply** to update the CoS and return to the **Classes of Service** menu.

Troubleshooting Phones

If a phone is not functioning properly, follow the steps below to check the status of the connection. Refer to *Modifying Existing Phones* on page 31 and *Customizing Phones and User Preferences* on page 32 for configuration assistance.

1. Check the line keys for the phone's extension to see if it is currently registered with the NetVanta 7100. If the extension does not appear on the line key, proceed to the next step.

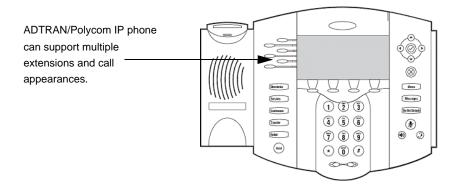


Figure 65. ADTRAN/Polycom IP Phone

- 2. Refer to *Rebooting a Phone* on page 41 to manually reboot your phone. The reboot process may take several minutes.
- 3. Place test calls once the phone has been rebooted to determine whether the reboot resolved the problem.
- 4. If rebooting the phone did not resolve the issue, contact your NetVanta 7100 system administrator.

APPENDIX A. SPECIAL PREFIX (SPRE) CODES

Special PREfix (SPRE) codes are dialed in order to access features of the system from either an analog phone or an ADTRAN/Polycom IP phones. Table 12 provides a list of the SPRE codes for reference. This list is also available through the GUI by navigating to **Voice** > **Reports** > **SPRE Command List**.

Table 12. SPRE Codes List

Description	SPRE Command
Auto-Answer Do Not Disturb - Enable	*970
Auto-Answer Do Not Disturb - Disable	*971
Billing Code xxxx = billing code	*21xxxx
Block Caller-ID	*67
Call Forward (*FF) xxxx = extension or external phone number	*33xxxx
Call Forward Remote (forward from a remote location) xxxx = extension pppp = password nxxxxxx = number to forward to (uses number complete templates)	*34xxxx*pppp*nxxxxxx*
Call Forward Cancel (*F5)	*35
Call Park (*PP) z = zone	*77z
Call Park Retrieve (*P8) z = zone	*78z
Call Return	*69
Call User Speed Dial (*MC)	*62nn
Call Waiting - Disable	*70
Camp On A Busy Extension	*66
Camp-On - Cancel	*65
Class of Service Override yyyy = class of service to use	*90уууу
Clear Message Waiting xxxx = extension	*86xxxx
Disable Call Waiting	*70
Door Phone (*DP)	*37
Door Unlock (*DU)	*38
Do Not Disturb - Enable	*390
Do Not Disturb - Disable	*391
Forward Notification Cancel	*32

Table 12. SPRE Codes List (Continued)

Description	SPRE Command
Group Login (*LL) xxxx = extension	*55xxxx*
Group Logout (*LO) xxxx = extension	*56xxxx*
Handsfree Auto-Answer (Intercom over phone) xxxx = extension	** or **xxxx
Hotel Login (*HO) xxxx = account number pppp = password	*46xxxx*pppp*
Hotel Logout (*HQ) pppp = password	*47pppp*
MACA Login (Analog Phones Only) (Move/Add/Change Agent) xxxx = account number pppp = password	*63xxxx*pppp*
MACA Logout pppp = password	*64pppp*
Page-Overhead	*30
Permanent Hold (*HH)	*44
Program User Speed Dial (*MO) nn = speed dial number xxxx = number to call (uses number complete templates)	*61nnxxxx
Redial Last Call (*RC)	*72
Remote Call Forward Cancel xxxx = extension pppp = password	*36xxxx*pppp*
Set Account Password pw-new = new password pw-old = old password	*79[pw-old]*[pw-new]*
Set Message Waiting xxxx = extension	*85xxxx
System Speed Dial nn = 01 to 99	*25nn
Transfer (*TT)	*88
User Station/Phone Lock (*LS) pppp = password	*57pppp*
User Station Unlock pppp = password	*58pppp*
Voicemail	*98