

## Configuration Guide

# Configuring User Accounts on the NetVanta 7000 Series

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This configuration guide explains how to configure user accounts on the NetVanta 7000 Series product using both the Web-based graphical user interface (GUI) and the command line interface (CLI). The configuration steps discussed in this guide include:

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- *Configuring User Account General Settings Using the GUI on page 6*
- *Configuring User Account User Configuration Settings Using the GUI on page 11*
- *Configuring User Account Current Settings Using the GUI on page 13*
- *Configuring User Account Call Coverage Settings Using the GUI on page 15*
- *Configuring User Account Voicemail Settings Using the GUI on page 18*
- *Configuring User Account VoIP Settings Using the GUI on page 23*
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## Defining the User Account Type Using the GUI

Voice user accounts are used to define phone users that are registered to an ADTRAN Operating System (AOS) NetVanta 7000 Series product. There are three different types of user accounts, all of which can be used for special applications, such as forwarding calls. Account types include:

- Session Initiation Protocol (SIP) Accounts: These accounts are associated with a SIP user agent.
- Analog Accounts: These accounts are associated with a physical foreign exchange station (FXS) interface.
- Virtual Accounts: These accounts are not associated with a physical port or a SIP user agent.

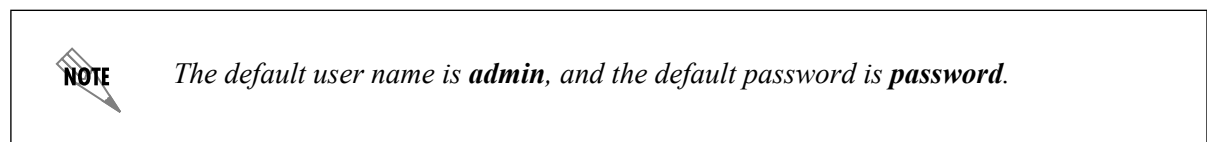
When defining the user account type, you will specify the account extension and user name, the type of user account you are creating, and the IP phone model and medium access control (MAC) address if you are using a SIP phone. To define the user account type information, follow these steps:

1. Connect to the NetVanta 7000 Series GUI by opening a new Web page in your Internet browser and entering the unit's IP address in the address field in the following form:

**http://<ip address>/admin.** For example:

**http://192.168.8.103/admin**

2. At the prompt, enter your **User name** and **Password** and select **Ok**.



3. Once connected, navigate to **Voice > Stations > User Accounts** using the menu on the left of the GUI.



4. From the main menu, select **New** to create a new user account.



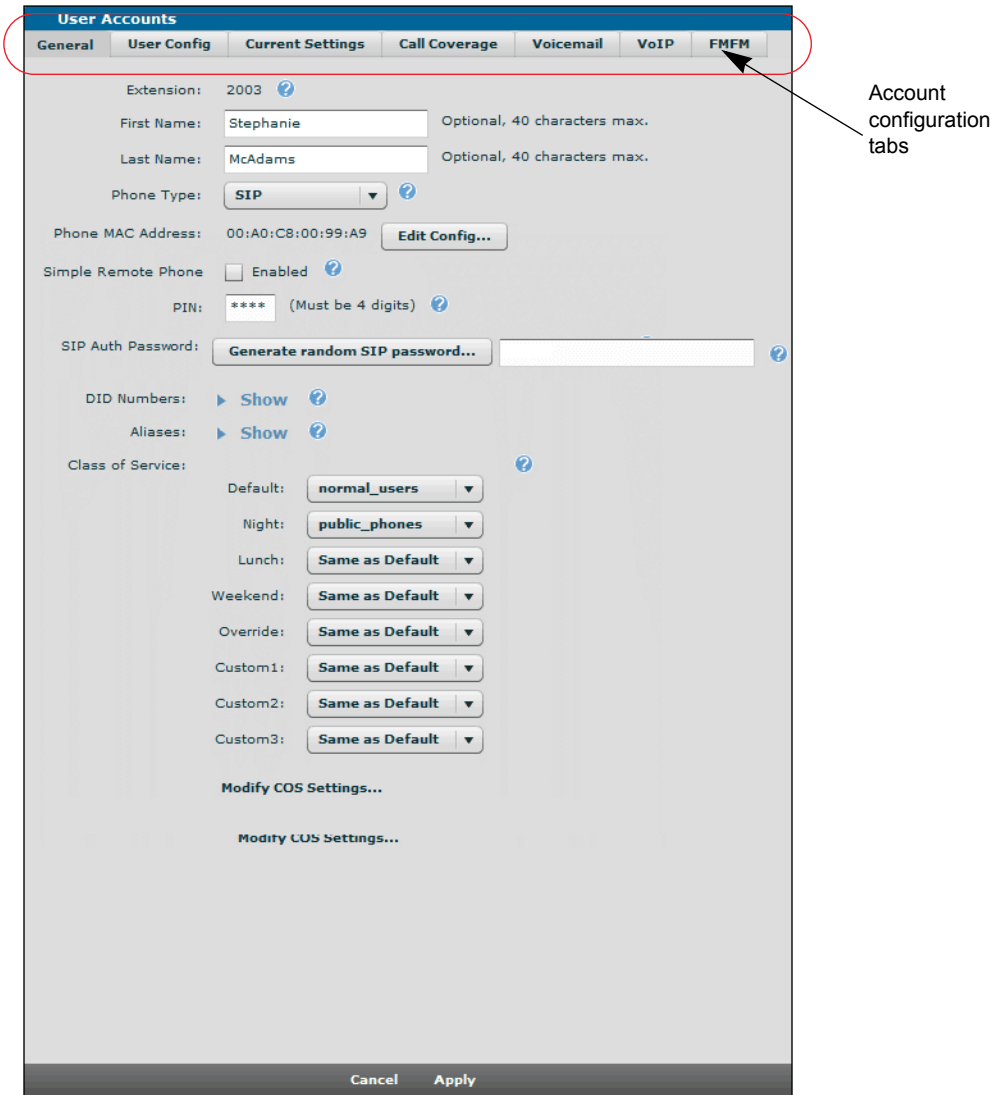
- In the **New User Accounts** menu, specify whether the user account is a new configuration, or one copied from a previously configured user by selecting the appropriate option. If you are copying information from a previously configured user, select the appropriate user from the drop-down menu.

The screenshot shows the 'User Accounts' window with the 'Create by copying from another user' radio button selected. A dropdown menu is open, showing a list of users with their extension and name. The 'Extension' field is set to 1000. Other fields include First Name, Last Name, Phone Type, Phone Mac Address, Phone Model, and Mac Address.

- Once you have specified whether this is a new user configuration or a copied configuration, specify the user's extension and name, the phone type from the drop-down menu, the phone model from the drop-down menu (if a SIP account), and the phone's MAC address (optional). When specifying the phone's MAC address, you have the option to not set the address, to enter a new address, or to select a known MAC address from the drop-down menu. Although specifying the MAC address is optional, SIP phones without a specified MAC address will not have their configuration files automatically created by the NetVanta 7000 Series. In the example below, the user account is a newly configured **SIP** account, with an extension of 2003, assigned to user **Stephanie McAdams** who is using an **ADTRAN IP 706** phone at MAC address **00:A0:C8:00:99:A9**. When the necessary information has been entered, select **Apply**.

The screenshot shows the 'User Accounts' window with the 'Create new' radio button selected. The 'Extension' field is 2003, 'First Name' is Stephanie, 'Last Name' is McAdams, 'Phone Type' is SIP, 'Phone Model' is ADTRAN IP 706, and 'Mac Address' is 00:A0:C8:00:99:A9. The 'Apply' button is highlighted.

- Once the new user is created, you will automatically be prompted to configure the user settings by selecting the appropriate configuration tab from the **User Accounts** menu.



## Configuring User Account General Settings Using the GUI

Once the new user account has been created, you can configure different parameters of the account settings by using different configuration tabs. The first of these tabs is the **General** settings tab, where you specify the user's PIN, SIP authentication password, direct inward dialing (DID) number, aliases, and the account's class of service (CoS). To modify any of these settings, follow these steps:

1. Verify the new user information (**First Name**, **Last Name**, **Phone Type**, **Phone MAC Address**, and **Phone Model**) is correct. In addition, if this is a SIP phone that requires remote phone configuration, enable the remote phone configuration option for this user by selecting the **Simple Remote Phone** check box (disabled by default). Make any changes, if necessary, by selecting the **Edit Config** button.

The screenshot shows the 'User Accounts' GUI with the 'General' tab selected. The 'Simple Remote Phone' checkbox is checked and highlighted with a red circle. Other visible fields include Extension (2003), First Name (Stephanie), Last Name (McAdams), Phone Type (SIP), and Phone MAC Address (00:A0:C8:00:99:A9). The 'Class of Service' section shows various dropdown menus for Default, Night, Lunch, Weekend, Override, Custom1, Custom2, and Custom3, all set to 'Same as Default'.

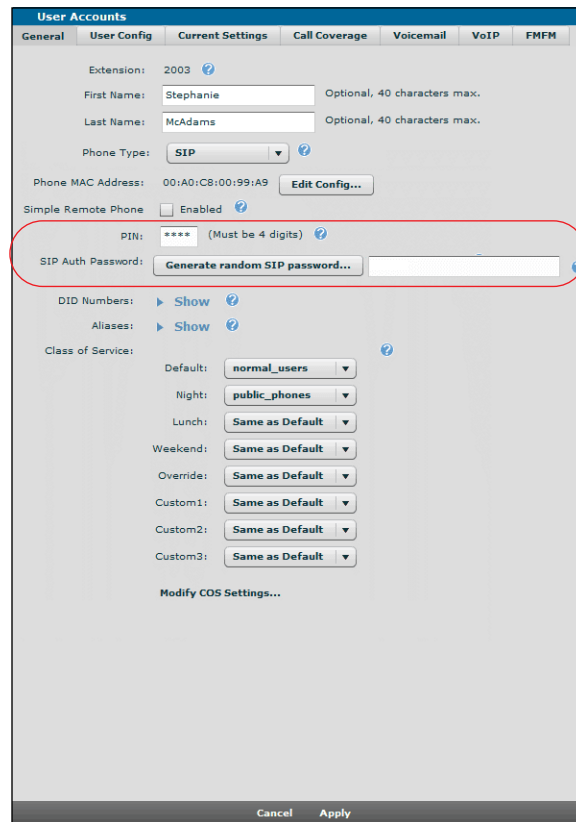


*Enabling simple remote phone configuration is very resource consuming. It is recommended only if the voice user is behind non-SIP aware devices and experiences a one-way talk path. For more information about remote phone configuration, refer to the configuration guide [Configuring Simple Remote Phones for the NetVanta 7000 Series](https://supportforums.adtran.com), available online at <https://supportforums.adtran.com>.*



*If the **First Name** and **Last Name** are changed here, they must also be changed in the associated phone configuration and in the global phone directory. For more information, refer to the guide [Updating the Global Phone Directory in the NetVanta 7000 Series Products](https://supportforums.adtran.com), available online at <https://supportforums.adtran.com>.*

- Next, specify the login **PIN** and **SIP Auth Password** for the user account by entering them in the appropriate fields. The **SIP Auth Password** is used to authenticate a SIP station if SIP INVITE or registration authentication is enabled. The **PIN** is used to enable and disable features using special prefix (SPRE) codes. By default, the **PIN** is set to **1234**, and the **SIP Auth Password** is set to a random sixteen character alphanumeric password. To generate a new random password, select **Generate random SIP password**. This option automatically creates a randomly generated password for the existing SIP user and allows the administrator to both view and copy the value. When a new SIP user is created and a phone model and MAC address are specified, selecting **Apply** automatically updates the associated phone configuration file with the random password that was generated for the user.

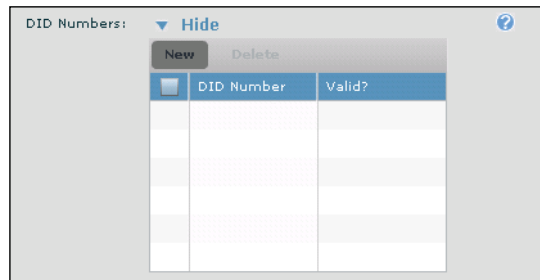
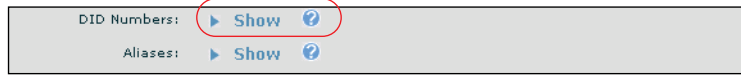


The screenshot displays the 'User Accounts' configuration page for a user named 'Stephanie McAdams'. The 'SIP Auth Password' field is highlighted with a red circle, showing a 'Generate random SIP password...' button and a text input field. Other fields include 'Extension: 2003', 'First Name: Stephanie', 'Last Name: McAdams', 'Phone Type: SIP', 'Phone MAC Address: 00:A0:C8:00:99:A9', and 'Simple Remote Phone' (checked). The 'Class of Service' section includes dropdown menus for 'Default', 'Night', 'Lunch', 'Weekend', 'Override', 'Custom1', 'Custom2', and 'Custom3', all set to 'Same as Default'.



*If the SIP authentication password is changed, a reminder is created to reboot the phone for the changes to take effect.*

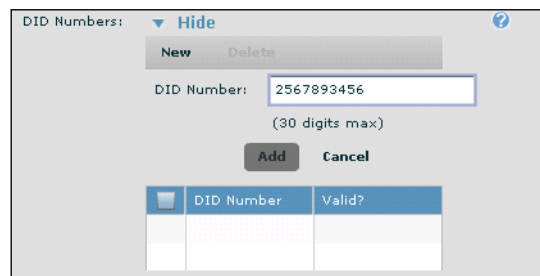
- You can optionally specify **DID Numbers** for this account. DID numbers are dialed phone numbers or subsets sent to the NetVanta 7000 Series on a trunk and are usually numbers on the public switched telephone network (PSTN). Incoming calls to the listed DID numbers will ring this user account. To specify the DID numbers, select **Show** next to **DID Numbers**.



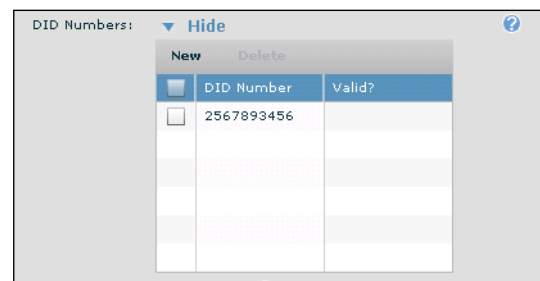
**NOTE** *DID should not be used with SIP trunks. SIP identities (detailed in [Configuring User Account VoIP Settings Using the GUI on page 23](#)) should be used with SIP trunks.*

Select **New** to create a new DID number. The DID list includes any existing numbers and whether those numbers are valid. Numbers are considered valid if they match any trunk’s DID prefix and digit count. If no DID information has been configured in the trunks, then all numbers are considered valid.

If you select **New**, enter the number in the **DID Number** field and select **Add**.

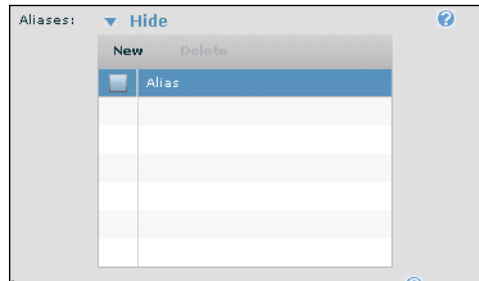


The new DID number appears in the list and is now associated with this user account.

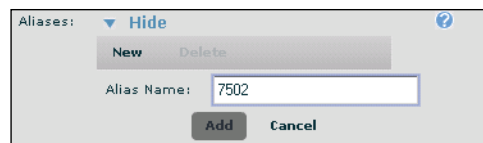




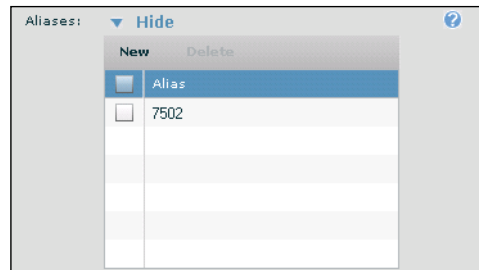
- You can also optionally specify the **Aliases** for this account. Aliases are alternate phone numbers or words (if on a SIP-to-SIP call) that will ring this user account. To specify the aliases, select **Show** next to **Aliases**.



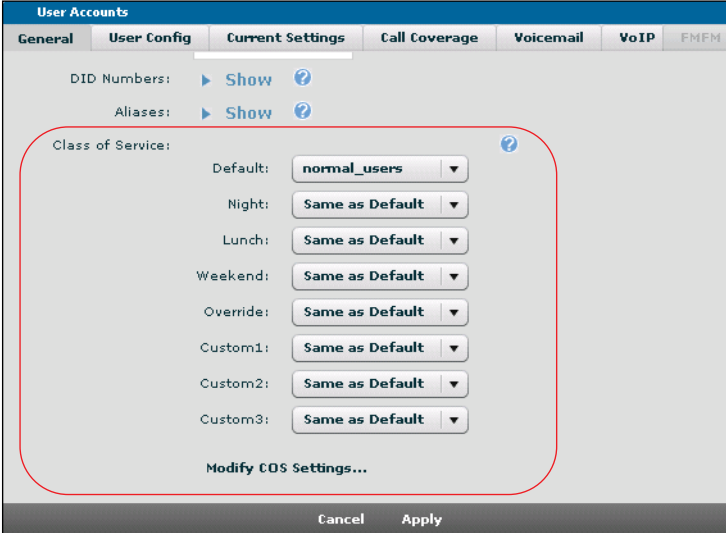
Select **New** to create a new alias. If you select **New**, enter the alias in the appropriate field and select **Add**.



The new alias appears in the list and is now associated with this user account.



- The last configuration task on the **General** settings tab is to configure the CoS associated with this account.



The screenshot shows the 'User Accounts' configuration window with the 'General' tab selected. The 'Class of Service' section is highlighted with a red rounded rectangle. It contains the following settings:

- Default: normal\_users
- Night: Same as Default
- Lunch: Same as Default
- Weekend: Same as Default
- Override: Same as Default
- Custom1: Same as Default
- Custom2: Same as Default
- Custom3: Same as Default

Below these settings is a button labeled 'Modify COS Settings...'. At the bottom of the window are 'Cancel' and 'Apply' buttons.

The different CoS parameters are specified by selecting the appropriate CoS mode from the drop-down menus. New CoS modes can be configured by selecting **Modify COS Settings**, which takes you to the CoS configuration menu. For more information about configuring CoS, refer to the quick configuration guide *Configuring NetVanta 7000 Series Class of Service* available online at <https://supportforums.adtran.com>.

- Once all general configuration settings have been specified, select the **User Config** tab to continue configuring the user account.



*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in *Editing User Accounts Using the GUI* on page 34.*

## Configuring User Account User Configuration Settings Using the GUI

The second part of configuring the user account is to configure the account's user settings. These settings include a description of the user account, the user's primary and secondary email addresses, and the caller ID settings. To configure the user settings for this account, follow these steps:

1. Select the **User Config** settings tab from the **User Accounts** menu.

The screenshot shows the 'User Accounts' GUI with the 'User Config' tab selected. The form contains the following fields and options:

- Description:** McAdams front desk (Optional description of this user account.)
- Primary Email:** smcadams@company.net (Used for system correspondence.)
- Secondary Email:** (Alternate address used for system correspondence.)
- Internal Caller ID Name:**
  - First + Last Name: Jessica Thomas
  - Custom Entry: [text box]
  - Empty (no name shown)
- Internal Caller ID Number:**
  - Default
  - Custom Entry: [text box]
  - Empty (no number shown)
- External Caller ID Name:**
  - First + Last Name: Jessica Thomas
  - Custom Entry: [text box]
  - Empty (no name shown)
- Emergency Caller ID Number:**
  - Default
  - Custom Entry: 5558770
- Emergency Response Location:** 4th floor SW corner office

Buttons for 'Cancel' and 'Apply' are at the bottom.

2. Specify the **Description**, **Primary Email**, and **Secondary Email** for this user by entering the information in the appropriate fields. The description parameter is optional, and both email addresses, also optional, are used for system communication.
3. Specify the caller ID parameters for this account. **Internal Caller ID Name**, **Internal Caller ID Number**, and **External Caller ID Name** can be set to show the default parameter (First + Last Name for caller ID name and extension number for caller ID number), a specific custom entry, or nothing (Empty). The **External Caller ID Number** can be set to the default value (the first DID number (if one exists) or nothing) or to a custom entry. External caller ID numbers are the numbers shown when the user of this account makes an external call. **Emergency Caller ID Number** can be used to configure the number portion of the caller ID display for emergency calls made by this user using either the default (First + Last Name for caller ID name and extension number for caller ID number) or a specific custom entry. The **Emergency Caller ID Number**, if a **Custom Entry**, is used to populate the **Emergency Locations** report. Refer to Step 4 for more details on emergency response location.



*Both DID and SIP identities take precedence over caller ID override on external calls. For more information, refer to the guide [Outbound Caller ID Priority in AOS Voice Products](https://supportforums.adtran.com), available online at <https://supportforums.adtran.com>.*

- Specify the location of this user in the **Emergency Response Location** field. This parameter helps emergency responders know the location of the user if an emergency call is placed from this user account. This field, along with the **Emergency Caller ID Number** field are used to generate an **Emergency Locations** report. You can view this report by navigating to **Voice > Reports > Emergency Location**. The following illustration is an example of the **Emergency Locations** report.

**Emergency Locations**

This page displays all of the configured extensions in the system and the Emergency Response Location associated with each user account.

Last Name	First Name	Ext.	Location	ER Override
-	-	1000	-	-
-	-	1220	-	-
-	-	1234	-	-
-	-	1256	-	-
-	-	20	-	-
-	-	4956	-	-
-	-	6002	-	-
-	-	8908	-	-
-	-	9856	-	-
Doe	John	9697	-	-
IP Phone	Default	2000	-	-
Jones	oliver	4545	-	-
Lever	Drew	2007	-	-
Port 0/1	Analog FXS	2001	-	-
Port 0/2	Analog FXS	2002	-	-
Redirect	AA	6003	-	-
Smith	Joe	1212	-	-
Spinkner	Victrola	0330	4th floor SW corner office	5558770
Starkalous	Marc	2003	-	-
Taylor	John	2004	-	-
Thomas	Jessica	1012	-	-
Wales	Patrick	2013	-	-
Williams	Sarah	2006	-	-
Wilson	Mark	2012	-	-

- Once all user configuration settings have been specified, select the **Current Settings** tab to continue configuring the user account.

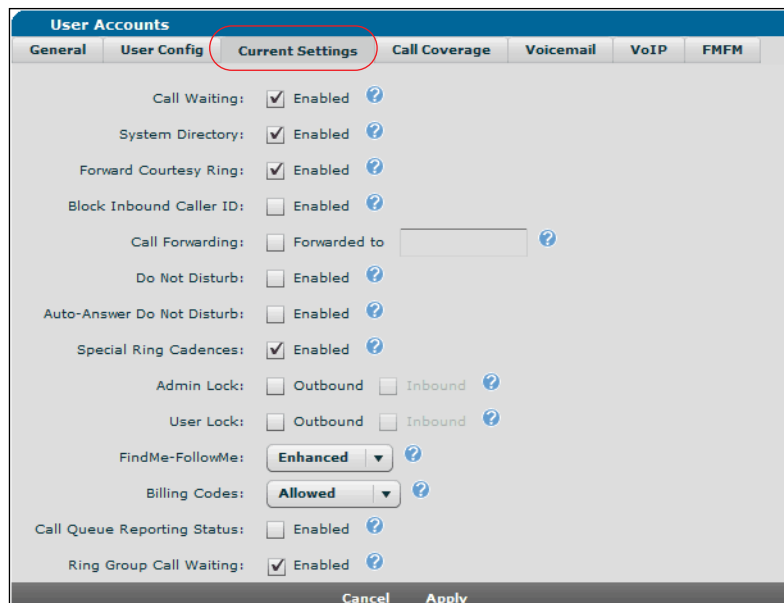


*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in [Editing User Accounts Using the GUI on page 34](#).*

## Configuring User Account Current Settings Using the GUI

The third part of configuring the user account is to configure the account's current settings. These settings include enabling or disabling specific call features, such as call waiting, system directory, call forwarding, do not disturb, station locks, FindMe-FollowMe, etc. To configure the current settings for this account, follow these steps:

1. Select the **Current Settings** tab from the **User Accounts** menu.



2. Enable or disable the specific features for this account. By default, **Call Waiting**, **System Directory**, **Forward Courtesy Ring**, and **Special Ring Cadences** are enabled. Descriptions of each feature are included below:

**Call Waiting:** If checked, call waiting is enabled on this user account.

**System Directory:** If checked, the user is included in the dial-by-name directory.

**Forward Courtesy Ring:** If checked, the user's phone issues a short blip ring when a call comes in as a reminder that the phone is forwarded.

**Block Inbound Caller ID:** If checked, no inbound caller ID information is delivered to the user's phone.

**Call Forwarding:** If checked, the user's extension is forwarded to the number entered in the field.

**Do Not Disturb:** If checked, do not disturb is enabled and all calls go directly to the user's call coverage.

**Auto-Answer Do Not Disturb:** If checked, any incoming auto-answer calls will ring normally instead of being automatically answered by the phone.

**Special Ring Cadences:** If checked, the phone rings with a different cadence depending on the call type, such as internal, external, or priority calls. If unchecked, the phone always rings with the default cadence.

**Admin Lock:** Displays and sets the current administrative outbound and inbound locks.

**User Lock:** Displays and sets the current user outbound and inbound locks.

**FindMe-FollowMe:** Enables the basic or enhanced FindMe-FollowMe feature by making the appropriate selection from the drop-down menu. Enhanced FindMe-FollowMe allows the AOS device to remain in the talk path for external calls and to accept dual tone multi-frequency (DTMF) tones for more user call control. Once FindMe-FollowMe is enabled, it can be configured from the **FMFM** user account configuration tab (refer to [Configuring User Accounts FindMe-FollowMe Settings Using the GUI on page 24](#) for more information) and applied from the **Call Coverage** user account configuration tab (refer to [Configuring User Account Call Coverage Settings Using the GUI on page 15](#) for more information).



*Enhanced FindMe-FollowMe requires more system resources and should only be used for select users.*



*FindMe-FollowMe can be enabled for up to 100 users on the AOS device. However, if more than 10 simultaneous FindMe-FollowMe sessions are active, a warning message is generated in the debug log because of resource consumption and will result in a normal transfer.*

**Billing Codes:** Specifies the type of billing code operation for the user. Select Allowed (allows users to enter billing codes when making a call), Disallowed (billing codes are disabled on this user account), and Forced (forces the user to enter a billing code before making an outgoing call).

**Call Queue Reporting Status:** If checked, the voice user can monitor call queue statistics on the personal phone manager.

**Ring Group Call Waiting:** If checked, the user will be able to receive multiple simultaneous ring group calls.

3. Once all current settings have been specified, select the **Call Coverage** tab to continue configuring the user account.



*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in [Editing User Accounts Using the GUI on page 34](#).*

## Configuring User Account Call Coverage Settings Using the GUI

The fourth part of configuring a user account is to configure the account's call coverage. Call coverage is a method of determining how a call is processed when a user does not answer. For example, call coverage allows versatility in that the NetVanta 7000 Series can be configured to ring the specified extension one or more times and then go to voicemail, go back to the auto attendant, ring the operator, or ring an external extension. Different combinations of these options can be used, although some are final; for example, once the call is routed to voicemail, auto attendant, or an external number, the remainder of the call coverage list is irrelevant and ignored. Call coverage also includes implementing FindMe-FollowMe, if the feature is enabled. To configure call coverage for a user account, follow these steps:

1. Select the **Call Coverage** settings tab from the **User Accounts** menu.

2. Decide if you will use the default global call coverage list (**go\_to\_voicemail**) or if you will create a custom call coverage list. The default **go\_to\_voicemail** list specifies that calls go to voicemail after 4 unanswered rings. If you want to use the default list, select **Use Call Coverage List**. You can also select a different coverage list from the drop-down menu if you have additional global call coverage lists configured.



**NOTE** If a global call coverage list is used, the list applies to all system modes.

3. If you are creating a custom call coverage list, select **Use Custom List**. You then have two options: you can select to use FindMe-FollowMe as the call coverage, or you can create a custom call coverage list. Select the appropriate list from the drop-down menu.

The screenshot shows the 'User Accounts' configuration window with the 'Call Coverage' tab selected. The 'Use Custom List' radio button is chosen. Under the 'Default' section, the 'Then' dropdown menu is set to 'Use FindMeFollowMe', which is circled in red. Other options include 'Busy Signal', 'Night', 'Lunch', 'Weekend', 'Custom1', 'Custom2', 'Custom3', and 'Override'. The 'Action' dropdown is set to 'Never'. The 'Ring this station's extension (0330)' field is empty. The 'Cancel' and 'Apply' buttons are at the bottom.



*If you want to use FindMe-FollowMe as the call coverage, you must select **Use Custom List** and not **Use Call Coverage List**. If you do not select **Use Custom List**, the FindMe-FollowMe feature will not operate correctly.*

If you choose **Use Custom List**, you can create your coverage list. You can create several different call lists, including **Default**, **Night**, **Lunch**, **Weekend**, **Custom1**, **Custom2**, **Custom3**, and **Override**. Each of these lists are configured by specifying an action (for example, **Busy Signal**), which are attempted in the order in which they are entered, and specifying the number of rings before the action takes place. Actions are specified from the drop-down menu, and the number of rings is specified by entering a value in the appropriate field. If a value of **0** is chosen for the number of rings, then the specified action will only take place if the dialed extension is busy.



*If the number of rings is set in a system mode, it will override the default mode setting. If the number of rings is not set in a system mode, the number of rings will be the value set in the default mode. If the number of rings is not set in the default mode, then the system value programmed in the **Voice > System Setup > System Parameters** menu is used.*



If you choose **Use FindMeFollowMe**, the number of rings is set to **Never** by default, which indicates that the extension will not ring, but the first coverage item is attempted. The first coverage item in this case is the FindMe-FollowMe feature, which attempts to call the user at different specified numbers sequentially or in parallel. Selecting **Use FindMeFollowMe** requires that FindMe-FollowMe is enabled on the user account (from the Current Settings menu) and that the feature is configured (from the **FMFM** menu). For more information about configuring FindMe-FollowMe, refer to [Configuring User Accounts FindMe-FollowMe Settings Using the GUI on page 24](#).



*If you enabled call forwarding for this user (from the **Current Settings** menu), then call forwarding takes precedence and FindMe-FollowMe is ignored.*

For example, in the following illustration a **Lunch** call coverage list is configured that specifies after 4 rings the call is sent back to the operator, after 2 rings at the operator, the call returns to ring extension 2001 twice, and then is sent to the voicemail extension for **2003** if there is still no answer.

Lunch			
Action	?		
Ring this station's extension (2003)	4	# of Rings	?
Then	Ring Operator	2	# of Rings ? Delete
Then	Ring Extension × 2001	2	# of Rings ? Delete
Then	Go to Voice Mail × 2003		Delete
Then	Busy Signal		

Repeat these steps for each additional call coverage list you want to create for this user account.

- Once all call coverage lists have been specified, select the **Voicemail** tab to continue configuring the user account.



*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in [Editing User Accounts Using the GUI on page 34](#).*

## Configuring User Account Voicemail Settings Using the GUI

Configuring the voicemail settings is essential for a user to be able to access and use voicemail. Configurable voicemail settings include a voicemail login PIN, a voicemail CoS, the phone indication type for voicemail messages, how messages are retrieved, and how and when users are notified of voicemail messages. To configure voicemail settings for the user account, follow these steps:

1. Select the **Voicemail** settings tab from the **User Accounts** menu.

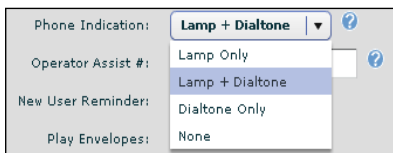
2. Specify the PIN used to log into the voicemail account. The PIN must be four digits.

3. Select the voicemail class of service (CoS) for this user account from the drop-down menu. Voicemail CoS types specify parameters, such as maximum time per greeting, message lifetimes, maximum time per message, and maximum time for all messages. By default, two voicemail CoS modes are offered: **executive\_voicemail** and **normal\_voicemail**.



For more information about configuring voicemail CoS, refer to the quick configuration guide *NetVanta 7000 Series Voicemail* available online at <https://supportforums.adtran.com>.

- Specify the **Phone Indication** method for indicating new voicemail messages. Select the appropriate option from the drop-down menu.



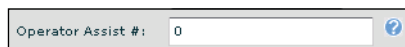
**Lamp Only** specifies that the message waiting lamp on the phone will indicate a new voicemail message.

**Lamp + Dialtone** specifies that both the message waiting lamp and a stutter dial tone will indicate a new voicemail message.

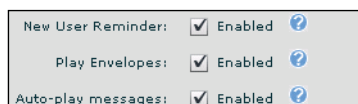
**Dialtone Only** specifies that the stutter dial tone will indicate a new voicemail message.

**None** specifies that there is no indication of new voicemail messages.

- Specify the **Operator Assist #**. This is the number to dial if a caller requests to speak to the operator while leaving a voicemail.



- Specify whether **New User Reminder**, **Play Envelopes**, and **Auto-Play Messages** are enabled or disabled. All three are enabled by default. New user reminder, when enabled, alerts the voicemail system to prompt users to record their name, set their PIN, etc. This recorded name is used for playback within the voicemail system. Play envelopes, when enabled, specifies that envelopes preceding voicemail messages are played. Envelopes include calling party and date/time information about the voicemail messages. Auto-play messages, when enabled, specifies that voice message playback begins automatically after the user has logged into voicemail. To change these settings, select or deselect the box next to each option.




*If the new user reminder is disabled, and the user does not have a recorded name, then the system treats the user as if the new user reminder is enabled.*

7. Specify the authentication method for voicemail login by selecting the appropriate authentication method from the drop-down menu.



*Specifying **None** allows anyone who knows the extension to hear the voicemail messages.*

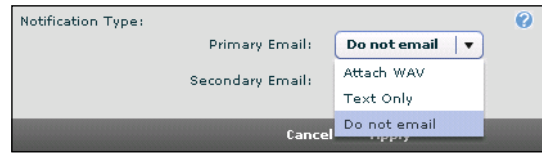
8. Specify the voicemail greeting method heard by callers by selecting the appropriate greeting from the drop-down menu. The **Default** greeting is the recorded user's name. **Standard** and **Alternate** greetings are recorded by users by logging into their voicemail account and following the steps to record these messages.

9. Specify the language of the voicemail playback by selecting the appropriate language from the drop-down menu. The **Default** language is the preset system language preference. You can specify that voicemail playback be set to **English**, **FrenchCanadian**, **LatinAm-Spanish**, or **Irish**.



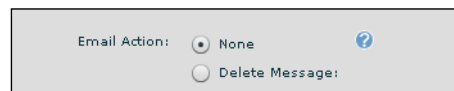
*The **Default** system language can be specified by navigating to **Voice > System Setup > System Parameters** and choosing the appropriate language from the drop-down menu. Select **Apply** to apply the changes.*

- Specify the notification type for new voicemail messages. Notification methods include emails to both primary and secondary email addresses. Email notifications can include WAV files or be text-only messages. Select the appropriate notification method from the drop-down menu.

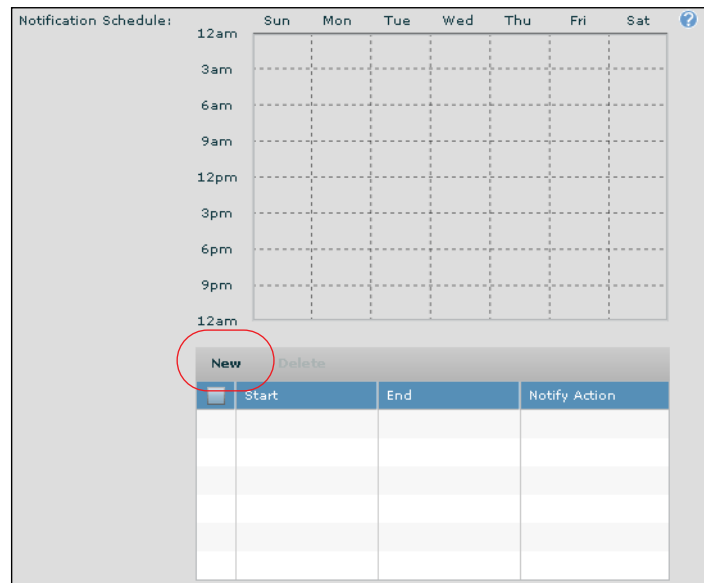


**NOTE** *If email notifications are configured to be WAV files attached to an email, but the system does not have enough memory to perform this operation, a replacement text-only email message is sent instead of a regular attachment message. If this scenario takes place, and **Delete Message** (Step 11) is configured, the system will not delete the message since it was not attached to the email.*

- Specify the action to take after sending a voicemail as an email by selecting the appropriate option in the **Email Action** field. Selecting **None** indicates no action is taken, and selecting **Delete Message** indicates the message is deleted after sent as an email.

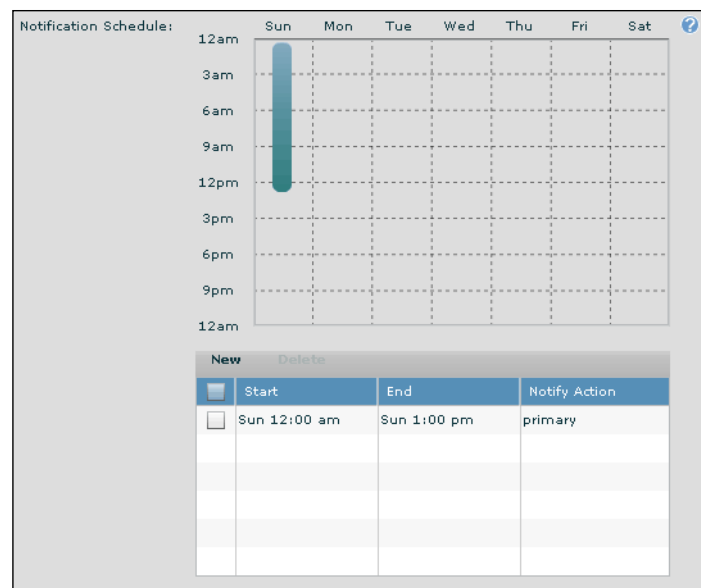


- The last action in configuring the user account voicemail settings is to configure the voicemail **Notification Schedule**. The voicemail notification schedule configures when the system will notify this user that they have received a voicemail message. To begin configuring the voicemail notification schedule, select **New** in the detailed display at the bottom of the **Voicemail** settings menu.



Next, specify the date and time to send the notification, as well as the email account to which to send the notification, using the drop-down menus. The **Send to Primary** and **Send to Secondary** emails options were configured on the **User Config** tab (refer to *Configuring User Account User Configuration Settings Using the GUI on page 11*). Once you have selected the notification times and type, select **Add Item** to add the parameters to the notification schedule.

The configured action appears in the notification schedule detailed list and the graphic representation.



Repeat these steps for each day or time you want to send voicemail notifications. To delete notification schedule entries, select the entry and then select **Delete**.



*To allow email notifications of voicemail, an email address must be configured in the voice user and a Simple Mail Transfer Protocol (SMTP) server must be configured on the NetVanta 7000 Series product. To configure the SMTP server, navigate to **Utilities > Logging > Email Forwarding** and enter an email server in the appropriate field.*

- Once all voicemail parameters have been specified, select the **VoIP** tab to continue configuring the user account.

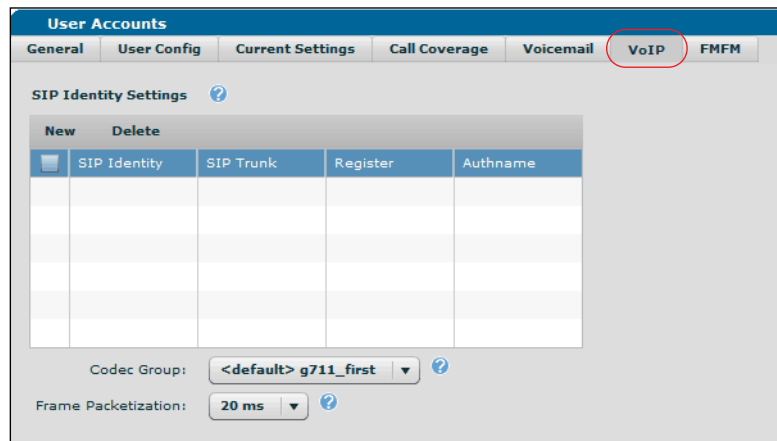


*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in *Editing User Accounts Using the GUI on page 34*.*

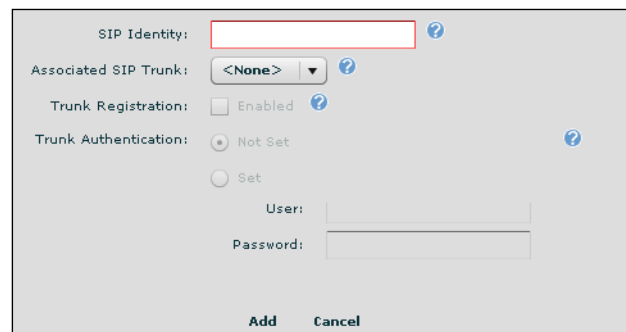
## Configuring User Account VoIP Settings Using the GUI

The next step in configuring the user account is to configure the VoIP settings. Configurable VoIP settings include adding SIP identities, coder-decoder (CODEC) groups, and frame packetization rates to the user account. To configure the VoIP settings for the user account, follow these steps:

1. Select the **VoIP** settings tab from the **User Accounts** menu.



2. Specify the SIP identities you want to add to the user account by selecting the identity from the list, or by creating a new one. SIP identities determine how the voice user will be displayed on the SIP trunk and will register (optional) the user on the SIP trunk to the far-end SIP server. SIP identities are also used to route inbound calls from the specified trunk to this voice user. To add a new SIP identity to the user account, select **New** and enter the SIP identity in the appropriate field. Next, specify the associated SIP trunk from the drop-down menu, and optionally enable trunk registration and specify the trunk authentication information, if required. When the SIP identity information has been entered correctly, select **Add**.



3. Select the CODEC group you want to apply to the user account using the drop-down menu at the bottom of the **VoIP** menu. The CODEC group (**g711\_first** is the default) assigns which CODECs the voice user prefers and in what order they are used. The CODEC group does not apply to calls from SIP phones out of a SIP trunk, or to calls between SIP phones. By default, only one CODEC group is created, **g711\_first**, which specifies a preference of G.711 u-Law as the highest priority followed by

G.729. Additional CODEC groups can be created by navigating to **Voice > System Setup > Codec Lists > Add New Codec List**.



*If G.729 is not in the CODEC group, the phone will not be able to call voicemail or auto attendants.*

- Specify the rate of frame packetization by selecting the appropriate number of samples from the drop-down menu. The frame packetization rate is the number of audio samples in ms (1 frame/sample is 10 ms) included in a single Realtime Transport Protocol (RTP) packet.



*ADTRAN recommends that you do not change the frame packetization rate from the default 20 ms. ADTRAN IP 700 Series phones only support 20 ms.*

- Once the VoIP settings have been configured, you can select **Apply** to apply all settings, or if FindMe-FollowMe is enabled, you can select the **FMFM** tab to continue configuring the user account.



*Selecting **Apply** will exit the specific account configuration. To continue editing other parameters of the user account after selecting **Apply**, you must select the account from the list and select **Edit** as described in [Editing User Accounts Using the GUI on page 34](#).*

## Configuring User Accounts FindMe-FollowMe Settings Using the GUI

FindMe-FollowMe is a feature supported by AOS that directs calls based on who is calling. When the FindMe-FollowMe feature is enabled and configured, an incoming call rings the called party's extension and then is directed based on the configuration of the FindMe-FollowMe feature. In a typical scenario, an incoming call is routed to FindMe-FollowMe. The call is first sent to the user's phone. If the user does not answer, the call is then sent to the user's cell phone. If configured, the caller is required to record their name. If the called party answers, they have the option to accept or reject the call. If the called party does



not answer, or rejects the call, the call is then sent to the user's voicemail. In AOS, up to four simultaneous calls can be generated for the caller to find the called party.



*FindMe-FollowMe can be enabled for up to 100 users on the AOS device. However, if more than 10 simultaneous FindMe-FollowMe sessions are active, a warning message is generated in the debug log because of resource consumption and will result in a normal transfer.*

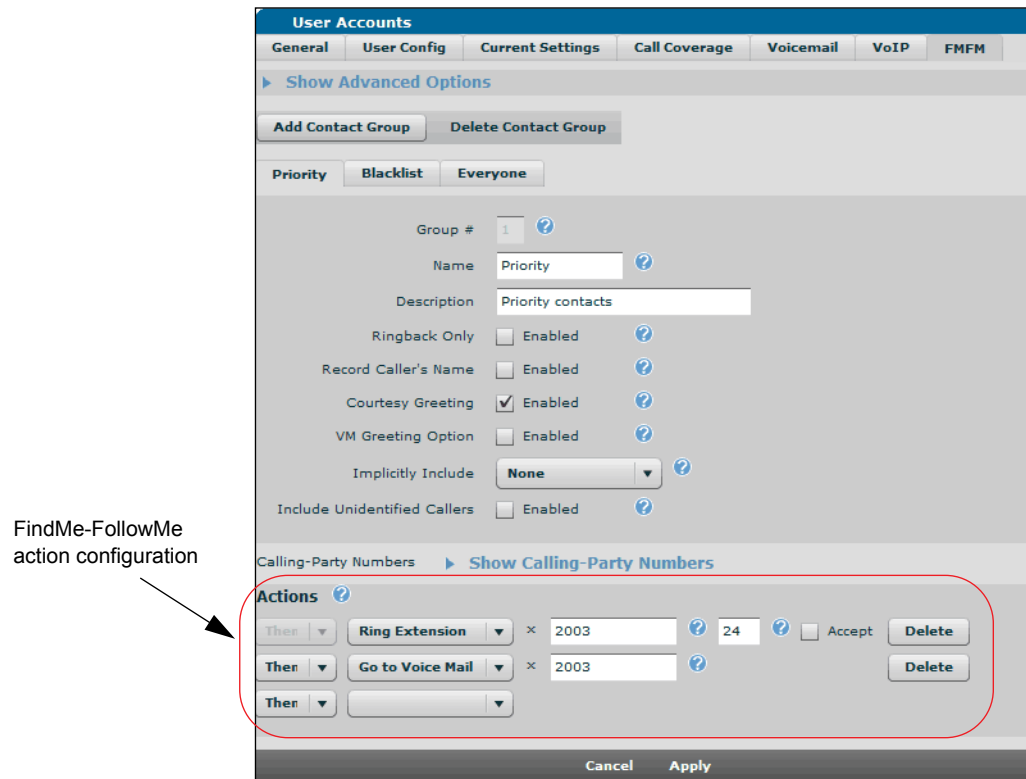
Configuring FindMe-FollowMe revolves around two main actions: configuring the user's contact groups, and configuring the scripts used to determine which numbers are dialed in the FindMe-FollowMe call sequence. Contact groups are the groups of callers from whom the user anticipates receiving calls. For example, a user might have a contact group for family and one for business partners. By default, AOS creates a **Priority** group, a **Blacklist** group, and an **Everyone** group. New groups can be added or groups can be removed at any time, and each user can have 5 contact groups. In addition, contact groups can be configured to play a courtesy greeting, prompt the caller for their name, and provide ringback or music on hold to the inbound caller.

Default contact groups

The screenshot shows the 'User Accounts' configuration page for a specific user. The 'User Config' tab is active, and the 'Show Advanced Options' section is expanded. Under 'Add Contact Group', three default groups are listed: 'Priority', 'Blacklist', and 'Everyone'. The 'Priority' group is selected and circled in red. An arrow points from the text 'Default contact groups' to this group. Below the group list, the configuration for the 'Priority' group is shown, including fields for Group # (1), Name (Priority), and Description (Priority contacts). There are several checkboxes for 'Ringback Only', 'Record Caller's Name', 'Courtesy Greeting' (checked), 'VM Greeting Option', and 'Include Unidentified Callers'. A dropdown menu for 'Implicitly Include' is set to 'None'. At the bottom, there is an 'Actions' section with three rows, each starting with 'Then' and followed by an action (Ring Extension, Go to Voice Mail, and an empty dropdown), a number (2003), and a timeout (24). 'Delete' buttons are provided for each action row. 'Cancel' and 'Apply' buttons are at the very bottom.

The second part of configuring FindMe-FollowMe is to specify the actions taken when an incoming call is received. The configurable actions include: calling an internal extension, calling an external number, referring the call to another number, forwarding the call to voicemail, or sending an email to the called party's primary or secondary email address. FindMe-FollowMe actions do not, however, include calling ring groups. Each of these actions that places a call can be configured for a timeout period in which to stop the call, as well as prompt the called party for DTMF digits to manage the call. Each contact group can

have up to **10** actions, and each action can place up to **4** simultaneous calls. In the GUI, the actions are specified at the bottom of the **FMFM** menu.



### FindMe-FollowMe Operation in AOS

In AOS, FindMe-FollowMe has a specific call process and certain functional behaviors. *Table 6* below outlines the behaviors specific to AOS’s FindMe-FollowMe feature, and *Table 7 on page 28* outlines the AOS FindMe-FollowMe call process.

**T.Table 6: FindMe-FollowMe Behavior in AOS**

Scenario	AOS Action
If Call Forwarding is enabled for a single number and FindMe-FollowMe is also enabled for that number, then...	The FindMe-FollowMe configuration is ignored and the Call Forwarding configuration takes precedence.
When a call is received by FindMe-FollowMe from a caller that is not explicitly or implicitly included in a contact group for the user, then...	The system rejects the call.
When a call is received by FindMe-FollowMe from a caller included in a configured contact group, and FindMe-FollowMe is currently executing the configured actions for another caller, then...	The system executes appropriate actions for the new caller, but skips all external calls in the action list.

**T.Table 6: FindMe-FollowMe Behavior in AOS (Continued)**

Scenario	AOS Action
When a call is received by FindMe-FollowMe from a caller included in a configured contact group, and the voice user has an active call appearance, then...	The system executes appropriate actions for the new caller, but skips all external calls in the action list.
When a call is received by an extension with FindMe-FollowMe as a result of another user's call coverage setting, then...	FindMe-FollowMe actions are not executed.
When FindMe-FollowMe calls another extension with FindMe-FollowMe enabled, then...	FindMe-FollowMe actions are not executed.
FindMe-FollowMe supports both G.711 and G.729 coder-decoders (CODECs). When FindMe-FollowMe receives a call specifying both G.711 and G.729 CODECs, then...	The system uses the G.711 CODEC.
When a call from FindMe-FollowMe to an internal extension fails to connect, then...	FindMe-FollowMe does not follow the call coverage of the internal extension.
FindMe-FollowMe uses various audio resources for recorded greetings and receiving external calls. It also uses the same internal port numbers as call queuing, handset paging, and music on hold. If these resources become overbooked, then...	FindMe-FollowMe might fail.
When FindMe-FollowMe places an external call out of a trunk, then...	The system attempts to specify the caller ID of the inbound caller.
When FindMe-FollowMe places a call that requires the called party to enter DTMF digits to manage the call, then...	The call is considered accepted when appropriate DTMF digits are entered. This option is not possible on analog trunks.
When FindMe-FollowMe places a call that does not require DTMF digits from the called party, then...	The call is considered accepted when the call connects.
When FindMe-FollowMe is executing a call, or is executing two or more calls in parallel, if a call is accepted, then...	All current calls are stopped and no further actions are executed.
When FindMe-FollowMe is executing a call that times out, then...	The system disconnects the call and continues to the next action if all parallel actions have also timed out.
When FindMe-FollowMe is enabled, and a call comes in to a user on a call in the local system, then...	FindMe-FollowMe ignores any ring external configurations because the user is on the local phone.

**T.Table 7: FindMe-FollowMe Call Process in AOS**

Call Process	AOS Action
When a call is received by FindMe-FollowMe from a caller in a configured contact group and caller name recording is enabled, then...	The system prompts the caller to record their name and records the caller's audio for 3 seconds.
After playing the name prompt, if the courtesy greeting is enabled, then...	The system connects and plays the greeting to the caller.
After playing or skipping the courtesy greeting, if the voicemail greeting option is enabled, then...	The system plays the greeting and accepts the DTMF digit pattern of 1 for skipping directly to voicemail. After playing the options greeting, the system waits 3 seconds for the caller to press the DTMF digit and then plays the hold music.
After playing (or skipping) the courtesy greeting, then...	The system executes actions based on the corresponding user action script. If the courtesy greeting is enabled, the actions begin at the time the greeting is played.
If FindMe-FollowMe receives the DTMF digit 1 during the voicemail greeting, then...	The call is transferred to the user's voicemail, disconnects all outbound calls, and stops executing further actions.
When a call that requires the called party to enter DTMF digits is answered, then...	The system continuously plays the outbound options greeting, which includes the caller's recorded name (if enabled) and lists options to manage the call. Options include entering the DTMF digit 1 to accept the call.
When the called party enters the DTMF digit 1 to accept the call, then...	FindMe-FollowMe transfers the inbound caller to the accepting called party, disconnects all other calls, and stops executing further actions.

When configuring FindMe-FollowMe, you will create the user's contact group, enable the group's parameters, and add the group members. You will also configure the FindMe-FollowMe actions executed when a member of the user's contact group calls. To configure FindMe-FollowMe in the GUI, follow these steps:

1. Verify that FindMe-FollowMe is enabled for the specific user (refer to [Configuring User Account Current Settings Using the GUI on page 13](#) for more information).



*FindMe-FollowMe can be enabled for up to **100** users on the AOS device. However, if more than **10** simultaneous FindMe-FollowMe sessions are active, a warning message is generated in the debug log because of resource consumption and will result in a normal transfer.*

2. Select the **FMFM** settings tab from the **User Accounts** menu.

The screenshot shows the 'User Accounts' GUI with the 'FMFM' tab selected. The 'Show Advanced Options' link is circled in red. Below it, the 'Add Contact Group' button is also circled in red. The 'Priority' contact group is selected, and its configuration options are visible, including Group #, Name, Description, and various checkboxes for Ringback Only, Record Caller's Name, Courtesy Greeting, VM Greeting Option, and Include Unidentified Callers.

3. Decide if you will use caller ID override for FindMe-FollowMe calls. This feature allows you to specify the inbound caller ID and name when external FindMe-FollowMe calls are received. Select **Show Advanced Options** and enter the external caller ID you want displayed when the user receives an external FindMe-FollowMe call (up to **16** digits).

The screenshot shows the 'User Accounts' GUI with the 'FMFM' tab selected. The 'Show Advanced Options' section is expanded, and the 'External CID' field is visible, with a note '(16 digits max)' and a help icon.

4. Decide if you are going to configure the default contact groups (**Priority1**, **Blacklist2**, and **Everyone3**) or if you will create a new contact group. If you are creating a new contact group, select **Add new contact group**. A new group tab will appear in the **FMFM** menu. You can also delete the current contact group by selecting **Delete current contact group**. Once you have created a new group or chosen to edit one of the default groups, you will perform the same steps for contact group configuration.
5. To configure the contact group, specify the name of the group in the **Name** field and enter a short description of the group in the **Description** field. For example, you might call the group **Business** and describe the group as **New business contacts**.

6. Next, you will specify whether ringback only, caller name recording, courtesy greeting, and voicemail greetings are enabled for this contact group by selecting the check box next to the appropriate feature.



*Using ringback decreases the resources and CPU needed for FindMe-FollowMe functionality. If ringback only is enabled, FindMe-FollowMe actions start immediately; therefore, inbound prompt settings (such as name recording) are ignored.*

7. Next, specify the types of callers you will implicitly include in the contact group by selecting the appropriate option from the **Implicitly Include** drop-down menu. If you select **None**, no callers are implicitly accepted by the contact group. If you select **Internal Callers** or **External Callers**, then either internal or external callers are implicitly included in the contact group. If you select **Everyone**, then all callers are accepted by the contact group.

The screenshot shows the 'User Accounts' configuration page. The 'User Config' tab is active. Under 'Show Advanced Options', there are buttons for 'Add Contact Group' and 'Delete Contact Group'. Below that are tabs for 'Priority', 'Blacklist', and 'Everyone'. The 'Priority' tab is selected. The configuration fields are: Group # (1), Name (Priority), Description (Priority contacts), Ringback Only (checkbox), Record Caller's Name (checkbox), Courtesy Greeting (checkbox checked), VM Greeting Option (checkbox), and Implicitly Include (dropdown menu). The dropdown menu is open, showing options: None, Internal Callers, External Callers, and All Callers. Below the dropdown is the 'Include Unidentified Callers' checkbox. At the bottom, there are 'Calling-Party Numbers' and 'Actions' sections.



*If a call goes to an auto attendant and is transferred to a user with FindMe-FollowMe as their call coverage, the call will be considered an internal call, regardless of the caller.*

8. Next, specify whether unidentified callers are included in the contact group by selecting the **Include Unidentified Callers** check box. If the box is checked, unknown, anonymous, and private callers are included in the contact group. By default, these callers are not included.

The screenshot shows the 'Include Unidentified Callers' checkbox, which is currently unchecked. The text 'Include Unidentified Callers' is followed by an unchecked checkbox and the word 'Enabled' with a help icon.

For example, in the following illustration, a new contact group, **Business**, is created with caller name recording and courtesy greeting enabled, and implicitly includes **External Callers** in the contact group, but blocks unknown callers.

The screenshot shows the 'User Accounts' configuration interface. The 'Business' contact group is selected. The settings are as follows:

- Group #: 1
- Name: Business
- Description: New business contacts
- Ringback Only:  Enabled
- Record Caller's Name:  Enabled
- Courtesy Greeting:  Enabled
- VM Greeting Option:  Enabled
- Implicitly Include: External Callers
- Include Unidentified Callers:  Enabled

- Once the parameters of the contact group are configured, you can then specify certain known numbers to be part of the contact group. These numbers are those individuals you want to include in the contact group that are not covered by the **Implicitly Include** parameter. To add members to the group, select **Show Calling-Party Numbers** and then select **New**.

The screenshot shows the 'Hide Calling-Party Numbers' section with a table for adding members:

Member Number	Member Description

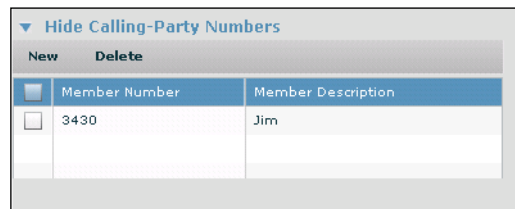
Next, enter the calling party number and a short description (optional) of the caller in the appropriate fields and select **Add**.

The screenshot shows the 'Hide Calling-Party Numbers' section with the following input fields:

- Member Number: 3430 (20 digits max)
- Member Description: Jim (40 characters max)

Buttons: Add, Cancel

The calling party is now a member of the contact group and appears in the calling party list.



Hide Calling-Party Numbers	
Member Number	Member Description
<input type="checkbox"/> 3430	Jim

Repeat this step for each known member you want to add to the contact group. To delete members from the group, select the check box next to the member and select **Delete**. Once you have added all the members to the group, you can select **Hide Calling-Party Numbers** to minimize the member list.

10. Once the contact group is configured, you must specify the actions to take when FindMe-FollowMe is executed. Actions are specified by using the drop-down menus at the bottom of the **FMFM** settings tab. Each action specified also includes a timeout period (in seconds) that specifies how long the action is attempted before the call is disconnected. The timeout period range is **1** to **60** seconds. By default, this timeout period is set to **24** seconds. When selecting an action, you can specify that the call go to voicemail, be referred to another number, initiate an email, call an external number, or call an extension. For the **Ring External** action, you should always select the **Accept** check box next to the action (this option will be selected by default). This requires the called party at the external number to press 1 to accept the call, which prevents the call from ending in an external number's voicemail.

You can configure up to **10** actions for a single FindMe-FollowMe contact group. For example, in the following illustration the FindMe-FollowMe actions are to:

- First, ring extension **8513** for 24 seconds.
- Second, if the call is not answered at extension 8513, the call will then ring external number **12565551234** for 24 seconds.



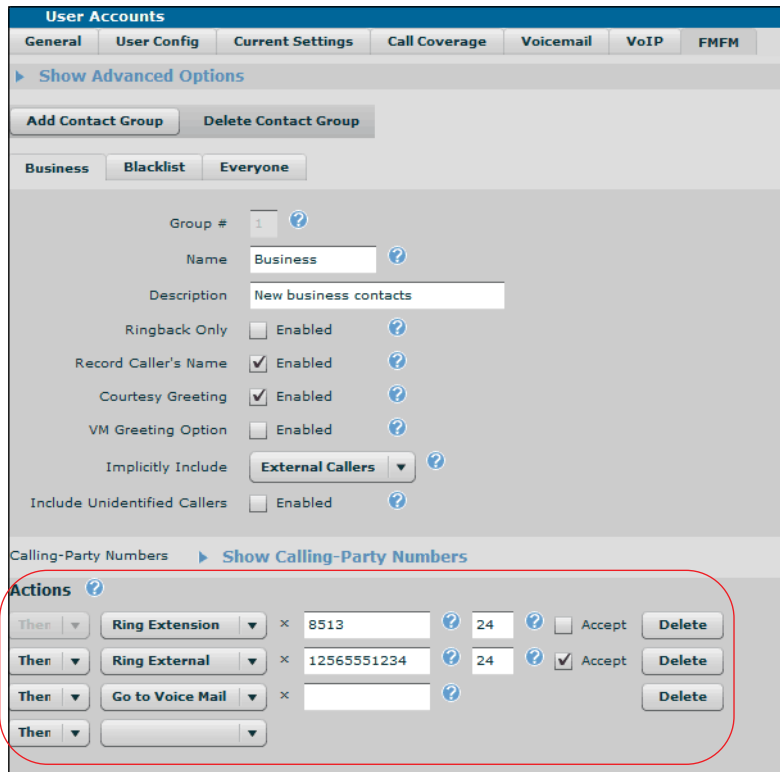
*FindMe-FollowMe does not strip the leading 9 for external calls, so do not include it for external calls.*

- Third, if the call is not answered at the external number, the call then goes to voicemail.

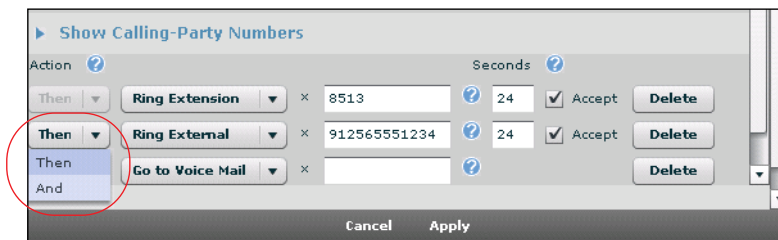


*If no voice mailbox number is specified, the voicemail will go to the voice user's mailbox.*





You can also specify these actions to occur in parallel rather than in sequence, meaning the actions are executed simultaneously. To specify actions are executed in parallel, select **And** rather than **Then** from the drop-down menu.



**NOTE** *If actions have different expiration times, the next action will not take place until the maximum time expires when actions are configured to be executed in parallel.*

- Once the FindMe-FollowMe actions are specified, select **Apply** to apply the configured FindMe-FollowMe contact group and actions. Repeat these configuration steps for each FindMe-FollowMe contact group per user (up to 4), and for each user account you are configuring.



*You should configure all contact groups and actions before selecting **Apply**; otherwise, you will be returned to the main **User Accounts** menu.*

## Using Enhanced FindMe-FollowMe

Enhanced FindMe-FollowMe can collect digits from the connected call which initiates a transfer. Calls connected using Enhanced FindMe-FollowMe can be transferred by two methods. First, you can select \*7 to quickly transfer the call to your desk extension, or second, select \*88<number> to transfer the call to any number. If a user dials \*7, their desk extension rings and the call only transfers if the desk extension is answered. An example scenario for quickly transferring a call to the desk extension using \*7 is to answer a FindMe-FollowMe call while returning from lunch, and then sending the call to your desk phone upon returning to the office.

When transferring a call to any number, using \*88<number>, the number dialed must be valid, or the call is disconnected. the number can be an internal extension or an external number, and it is routed based on existing dial plan entries. An example scenario for transferring a call to any number is when a call is received, but the caller needs to speak with someone else within the company.

## Editing User Accounts Using the GUI

Configured user accounts can be edited or deleted at any time by navigating to **Voice > Stations > User Accounts** and selecting the check box next to the account you want to edit or delete. Once the account is selected, select either **Edit** (to be taken to the user account configuration tabs) or **Delete** (to delete the account).

User Accounts						
New		Edit	Delete	Refresh		
<input type="checkbox"/>	Last Name	First Name	Extension	Port/Status	Station CoS	
<input type="checkbox"/>	Port 0/1	Analog FXS	2001	fxs 0/1	normal_users	
<input type="checkbox"/>	Port 0/2	Analog FXS	2002	fxs 0/2	public_phones	
<input checked="" type="checkbox"/>	McAdams	Stephanie	2003	ⓈIP ?	normal_users	
<input type="checkbox"/>	Taylor	John	2004	ⓈIP ?	normal_users	
<input type="checkbox"/>	Williams	Sarah	2006	ⓈIP ?	normal_users	
<input type="checkbox"/>	Lever	Drew	2007	ⓈIP ?	normal_users	
<input type="checkbox"/>	Wilson	Mark	2012	ⓈIP ?	normal_users	
<input type="checkbox"/>	Wales	Patrick	2013	ⓈIP ?	normal_users	
<input type="checkbox"/>	jones	oliver	4545	ⓈIP ?	executive_users	
<input type="checkbox"/>			4956	virtual	No Access	
<input type="checkbox"/>			6002	virtual	No Access	
<input type="checkbox"/>	Redirect	AA	6003	virtual	normal_users	
<input type="checkbox"/>			8908	virtual	No Access	
<input type="checkbox"/>			9856	virtual	No Access	

20 users Manage Columns

## Defining the User Account Type Using the CLI

Voice user accounts are used to define phone users that are registered to an AOS NetVanta 7000 Series product. There are three different types of user accounts, all of which can be used for special applications, such as forwarding calls. Account types include:

- **SIP Accounts:** These accounts are associated with a SIP user agent.
- **Analog Accounts:** These accounts are associated with a physical FXS interface.
- **Virtual Accounts:** These accounts are not associated with a physical port or a SIP user agent.

User accounts can also be configured using the CLI. CLI configuration of user accounts covers the same parameters as user account configuration using the GUI, beginning by creating a voice user account, and then configuring general settings, user settings, current settings, call coverage settings, voicemail parameters, VoIP settings, and FindMe-FollowMe settings for the account. To begin configuring user accounts using the CLI, connect to your unit and follow the steps described in the following sections.



*If user accounts are configured using the CLI, please note that phone configurations will not be built automatically.*

To access the CLI on your AOS unit, follow these steps:

1. Boot up the unit.
2. Telnet to the unit (**telnet** <ip address>).

For example, **telnet 208.61.209.1**



*If during the unit's setup process you have changed the default IP address (10.10.10.1), use the configured IP address.*

3. Enter your user name and password at the prompt.



*The AOS default user name is **admin** and the default password is **password**. If your product no longer has the default user name and password, contact your system administrator for the appropriate user name and password.*

4. Enable your unit by entering **enable** at the prompt as follows:

```
>enable
```

5. Enter your Enable mode password at the prompt.
6. Enter the unit's Global Configuration mode as follows:

```
#config terminal  
(config)#
```

To create a voice user account and define the account type information, enter the **voice user** *<extension>* command from the Global Configuration mode prompt. This command creates the user account and enters the account's configuration mode. This command can also be used to edit existing user accounts. Using the **no** form of this command deletes the user account. Enter the command as follows, specifying the extension associated with the account (for example, **2003**):

```
>enable
#config terminal
(config)#voice user 2003
Configuring New User "2003"
(config-2003)#
```

To begin configuring the user account, you must decide what type of user account you are creating. Use the **connect** [**fxs** *<slot/port>* | **sip**] command to specify whether the account is a SIP account or an account using an analog station port. If you do not use the connect command, the account is a virtual user account. To specify the account is a SIP account, enter the command from the user account configuration mode as follows:

```
(config-2003)#connect sip
```

Next, you will need to specify the first name and last name of the account user. The first name information is specified using the **first-name** *<name>* command and the last name information is specified using the **last-name** *<name>* command. For example, to specify the account user as **Stephanie McAdams**, enter the commands as follows:

```
(config-2003)#first-name Stephanie
(config-2003)#last-name McAdams
```



*This document focuses on a few basic configuration steps; to view all of the configurable options for the user account, enter ? at the command prompt or refer to the **Voice User Account Command Set** in the *AOS Command Reference Guide* available online at <https://supportforums.adtran.com>.*

## Configuring User Account General Settings Using the CLI

After you have created the user account, specified the account type and the user's name, you can configure the general account information. This information includes specifying the user's PIN, SIP authentication password, DID numbers, aliases, and the account's CoS. To set these parameters, follow the steps in this section.

1. Specify the user's PIN using the **password** *<password>* command. The PIN is used to enable and disable features via SPRE codes. This is one of three possible passwords that are configured for each user; the other two are the SIP authentication password and the voicemail password.

To specify the user's PIN, enter the **password** *<password>* command from the user account configuration mode as follows:

```
(config-2003)#password 0330
```

By default, the PIN is set to **1234**. Using the **no** form of this command returns the password to the default value.

2. If the user account is a SIP account, specify the user's SIP authentication password using the **sip-authentication password** *<password>* command. This password is used for SIP authentication of the user. This password can be up to 16 characters in length. By default, the password is a randomly generated password of 16 characters. Using the **no** form of this command generates a new random password.

To specify the SIP authentication password for a SIP user account, enter the command from the user account configuration mode as follows:

```
(config-2003)#sip-authentication password PASSWORD
```

OR

```
(config-2003)#no sip-authentication password
```

3. Optionally, specify DID numbers for the user account using the **did** *<number>* command. DID is used if a service provider is providing dialed number identification service (DNIS) digits to the unit on inbound calls. DID should be used if the trunk is a time division multiplexing (TDM) trunk, such as a PRI or E&M trunk, but not if it is a SIP trunk. Using the **no** form of this command removes the DID association from the user account.

To enable the DID feature on the user account, enter the command from the user account configuration mode as follows:

```
(config-2003)#did 2567893456
```

4. Optionally, specify aliases for the user account using the **alias** *<alias>* command. Aliases can be alphanumeric names or numbers that are alternate means for SIP user agents or telephones to route a call to the user account. If aliases are numbers, they can be used from any phone. Using the **no** form of this command removes the alias from the user account.

To specify an alias for the user account, enter the command from the user account configuration mode as follows:

```
(config-2003)#alias 7502
```

5. Specify the CoS for the user account using the **cos** commands. There are a number of options when configuring the CoS for a user account, including using a predefined CoS (**cos** *<name>* command), a CoS that blocks a user from placing calls (**cos no-access** command), and additional options that integrate the account CoS with a specific system mode. By default, a new user account, when created using the CLI, does not have a CoS assigned. Using the **no** form of the **cos** commands removes the specified CoS from the account. The following paragraphs illustrate the use of the available CoS commands.

CoS modes can be created using the **voice class-of-service** *<set name>* command from the Global Configuration mode. This command enters the voice CoS Configuration mode and creates a specific CoS that can then be applied to user accounts. To apply a new CoS to a user account, first create the CoS mode and then apply it to the user account using the **cos** *<name>* command from the user account configuration mode. The *<name>* parameter is the specific CoS set name created in the Global Configuration mode (using the **voice class-of-service** *<set name>* command). The following example applies a predefined CoS, **normal\_users**, to the **2003** user account:

```
(config-2003)#cos normal_users
```



*For more information about configuring CoS modes, refer to the quick configuration guide [Configuring NetVanta 7000 Series Classes of Services](https://supportforums.adtran.com) available online at <https://supportforums.adtran.com>.*

Users can be blocked from placing calls when the CoS is applied using the **cos no-access** command from the user account configuration mode. Using the **no** form of this command removes the block. Enter the command as follows to block users from placing calls when the CoS is applied:

```
(config-2003)#cos no-access
```

Each CoS mode applied to a user account can also work with a specific system mode configured on the NetVanta 7000 Series product. System modes specify the operating mode of the NetVanta 7000 Series at specific times, and can specify that CoS modes applied to user accounts change when the system modes change. System modes include three custom settings (**custom1**, **custom2**, **custom3**), **lunch**, **night**, **override**, and **weekend** settings. For example, a CoS applied to a user when the system mode is specified as **night** can be used to prevent outbound calls during evening hours. System modes are set from the Global Configuration mode using the **voice system-mode** command. System modes interact with user account CoS modes in that the application of a predefined CoS mode can depend on a specific system mode (**cos <system mode> <name>** command) and the **no-access** parameter of a CoS mode can depend on a specific system mode (**cos <system mode> no-access** command). To specify that a previously configured CoS, **limited\_calls**, is applied to the user account during lunch hours, enter the command from the user account configuration mode as follows:

```
(config-2003)#cos lunch limited_calls
```

To specify that the user account cannot make calls during the evening hours, enter the command as follows:

```
(config-2003)#cos night no-access
```



*For more information about configuring system modes for the NetVanta 7000 Series product, refer to the quick configuration guide [Configuring NetVanta 7000 Series System Modes](https://supportforums.adtran.com) available online at <https://supportforums.adtran.com>.*

## Configuring User Account User Configuration Settings Using the CLI

After the user account general information has been configured, you can configure the account's user settings. These settings include a description of the user account, the primary and secondary email addresses this account uses for system communication, and the caller ID parameters used for the account. To configure these parameters, follow the steps outlined in this section.

1. To specify a description for this user account, use the **description <text>** command from the user account configuration mode. The **<text>** parameter is the description, using up to 80 alphanumeric characters. Using the **no** form of this command removes the description from the user account. To give the user account **2003** a description of **Front Office**, enter the command as follows:

```
(config-2003)#description Front Office
```

2. To specify the email addresses associated with the user account that is used for system communication (such as voicemail notifications), use the **email** *<address>* and **email-secondary** *<address>* commands from the user account configuration mode. Use the **no** forms of these commands to remove the email addresses from the user account configuration. For example, to configure a primary email of **first.last@company.net** and a secondary email of **first.last@mail.com** for user account **2003**, enter the commands as follows:

```
(config-2003)#email first.last@company.net  
(config-2003)#email-secondary first.last@mail.com
```

3. To specify the caller ID parameters for the user account, use the **caller-id-override** [**emergency-number** *<number>* | **external-name** *<name>* | **external-name empty** | **external-number** *<number>* | **internal-name empty** | **internal-name** *<name>* | **internal-number empty** | **internal-number** *<number>*] commands. For example, to block the user account from sending caller ID name information to external numbers, enter the command as follows:

```
(config-2003)#caller-id-override external-name empty
```

To control caller ID information received on the user account, use the **block-caller-id** command to prevent the user from receiving caller ID information. Using the **no** form of this command removes the caller ID block. To block caller ID delivery to the user, enter the command from the user account configuration mode as follows:

```
(config-2003)#block-caller-id
```

To configure the caller ID information for the user to conceal the user's name and number or display different names and numbers for internal or external caller ID, use the **caller-id-override** command. Using the **no** form of this command resets the caller ID parameters. The **external-number** *<number>* parameter of the command replaces the caller ID number on external calls with the specified number. The **internal-name** *<name>* parameter specifies the displayed caller ID name on internal calls, and the **internal-name empty** parameter prevents the caller ID number from being displayed. The **internal-number** *<number>* parameter specifies the displayed caller ID number on internal calls, and the **internal-number empty** parameter prevents the caller ID number from being displayed. The external-name parameter specifies the caller ID displayed for external calls, and the **emergency-number** *<number>* parameter specifies the caller ID number for calls that match a dial plan entry that is always permitted. In addition, this parameter replaces the caller ID information on emergency calls and uses this information to populate the emergency location report for emergency responders. This report helps responders to know the location of the emergency call. For example, to specify that the caller ID number displayed for user account **2003** on external calls is **256-555-8000**, enter the command from the user account configuration mode as follows:

```
(config-2003)#caller-id-override external-number 2565558000
```



**NOTE** *DID and SIP identities take precedence over caller ID overrides on external calls.*

- Specify the emergency location of this user using the **location** *<text>* command. The *<text>* parameter is a short description of the physical location of the user or station; for example, **5th floor, room 582**. This location information is used to help emergency responders find the origin of an emergency call. For example, to specify that user **2003** is located on the fourth floor, enter the command from the user account configuration mode as follows:

```
(config-2003)#location 5th floor, room 582
```



*The emergency location of the user and the user's emergency caller ID settings can be viewed from the CLI using the **show voice users location** command from the Enable mode.*

## Configuring User Account Current Settings Using the CLI

Once the account's user settings are configured, the next step is to configure the current settings for the user account. These settings include enabling and disabling specific call features, such as call waiting, system directory, call forwarding, do not disturb, and station locks. The following examples illustrate some of the configurable settings for user accounts; for a full listing of available options, refer to the *Voice User Account Command Set* of the *AOS Command Reference Guide* available online at <https://supportforums.adtran.com>.

- To enable call waiting on the user account, enter the **call-waiting** command from the user account configuration mode as follows (this is enabled by default):

```
(config-2003)#call-waiting
```

- To specify that the user is included in the dial-by-name directory, enter the **directory-include** command from the user account configuration mode as follows (this is enabled by default):

```
(config-2003)#directory-include
```

You can also specify the first and last name of the user that will appear in the directory (using the **directory-include [first-name <name> | first-name <name> last-name <name>]** command) or you can specify in which directory this information will appear (using the **directory-include <directory name>**, **directory-include <directory name> first-name <name>**, or **directory-include <directory name> first-name <name> last-name <name>** commands).

- To specify that the user's extension is forwarded to a specific number, use the **forward <number>** command. Enter the command from the user configuration mode as follows:

```
(config-2003)#forward 3345558988
```

- To enable do not disturb on the user account, enter the **dnd** command from the user account configuration mode as follows:

```
(config-2003)#dnd
```



- To enable station locks, enter the **station-lock [admin | user] [inbound]** command from the user account configuration mode. You can specify that the administrator or the user can block inbound calls (**admin** or **user** parameter). For example, to specify that the administrator can block inbound calls for this user account, enter the command as follows:

```
(config-2003)#station-lock admin inbound
```



*Station locks are only available on analog phones.*

- To specify that billing codes are allowed or required on the user account, enter the **billing-codes [allowed | required]** command from the user account configuration mode. You can specify that billing codes are allowed on the account (**allowed**) or that they are required on the account (**required**). Using the no form of this command indicates billing codes are not allowed on the account. For example, to specify that the user must use billing codes for external calls, enter the command as follows:

```
(config-2003)#billing-codes required
```

- To enable call queue reporting for the personal phone manager on this user account, enter the **queue reporting** command from the user account configuration mode. By default, this feature is disabled. To enable call queue reporting for the user, enter the command as follows:

```
(config-2003)#queue reporting
```

- To allow the user to receive multiple simultaneous ring group calls, enter the **group-ring-call-waiting** command from the user account configuration mode. By default, as of AOS firmware release A5.03, this feature is enabled for new users. If an existing user has this feature disabled, it will remain disabled even after a system upgrade to A5.03. To enable group ring call waiting, enter the command as follows:

```
(config-2003)#group-ring-call-waiting
```

## Configuring User Account Call Coverage Settings Using the CLI

Call coverage is a method of determining how a call is processed after a user does not answer. For example, call coverage allows versatility in that the NetVanta 7000 Series can be configured to ring the specified extension one or more times and then go to voicemail, go back to the auto attendant, ring the operator, or ring an external extension. Different combinations of these options can be used, although some are final; for example, once the call is routed to voicemail, an auto attendant, or an external number, the remainder of the call coverage list is irrelevant and ignored.

Call coverage is configured in the CLI by using the **coverage** command, followed by the action (ring auto attendant, ring operator, etc.). The order of the coverage commands that are entered in the voice user account determines the order that they will be processed. Once the call coverage is configured, the **num-rings** command is used to specify how many times the phone will ring before call coverage is initiated. The following steps illustrate how to apply call coverage to a user account.

1. Specify the allowed number of unanswered rings to the user account before the call coverage settings take effect using the **num-rings** [*<value>* | **disabled**] command. The *<value>* parameter is the number of rings; valid number range is **0** to **9**. Specifying **0** indicates an unlimited number of rings. The **disabled** parameter is used when FindMe-FollowMe is the specified call coverage mode. Disabling the number of rings allows a call to go immediately to FindMe-FollowMe when an incoming call that matches the contact group is allowed. To specify a certain number of rings, enter the command from the user configuration mode as follows:

```
(config-2003)#num-rings 3
```

Using the no form of this command returns to the default setting of **4** rings.

2. Configure the call coverage parameters of a user account using the **coverage** command. The **coverage** commands include the following parameters, of which five can be applied to a single user account:



*Although multiple coverage parameters can be applied to a single user account, the parameters must be entered in the order of use; calls are processed in the order in which the coverage options are entered into the system.*

- **[aa | aa <number>]** This parameter specifies that when the call is unanswered, it is forwarded to an auto attendant. The *<number>* parameter allows you to forward the call to a specific extension programmed for the auto attendant. If no extension is specified, the phone is forwarded to the default auto attendant.
- **[external <number>]** This parameter specifies that when the call is unanswered, it is forwarded to an external number. The *<number>* parameter is the external number.
- **[findme-followme]** This parameter specifies that FindMe-FollowMe is the coverage type used by the user account and that when a call is unanswered, the actions in the FindMe-FollowMe configuration are executed.
- **[global <name>]** This parameter specifies that the global call coverage list (created with the voice coverage *<name>* command in the Global Configuration mode) is used.
- **[internal <number>]** This parameter specifies that the call is forwarded to a specified internal number.
- **[operator | operator num-rings <value>]** This parameter specifies the unanswered call is forwarded to the operator group. You can also specify that the call is forwarded to the operator for a specified number of rings (range is **1** to **9** rings).
- **[vm | vm <number>]** This parameter specifies that an unanswered call is forwarded to voicemail. The *<number>* parameter allows you to forward the call to a specific voice mailbox number.

The following example configures the call coverage for user account **2003** so that calls to the user's phone unanswered after **4** rings are forwarded to the operator. Then, after **1** unanswered ring to the operator, they are forwarded to voicemail.

```
(config-2003)#num-rings 4
(config-2003)#coverage operator num-rings 1
(config-2003)#coverage vm
```

Both the call coverage settings and number of rings applied to a user account can also work with a specific system mode configured on the NetVanta 7000 Series product using the **coverage** *<system mode>* command. System modes interact with user account call coverage modes and numbers of rings in that the call coverage mode can be configured to depend on a specific system mode. Coverage options are specified to work with system modes by entering a *<system mode>* parameter (**custom1**, **custom2**, **custom3**, **lunch**, **night**, **override**, or **weekend**) before the call coverage parameter. For example, to specify that calls are forwarded to the default auto attendant during lunch hours, enter the following:

```
(config-2003)#coverage lunch aa
```

Numbers of rings are specified to work with system modes by entering a *<system mode>* parameter (**custom1**, **custom2**, **custom3**, **lunch**, **night**, **override**, or **weekend**) before the ring number value. For example, to specify that call coverage settings take effect after 3 rings during lunch hours, enter the following:

```
(config-2003)#num-rings lunch 3
```

You can also disable the number of rings for FindMe-FollowMe with a system mode. For example, to specify that call coverage goes directly to FindMe-FollowMe during lunch, enter the **num-rings** *<system mode>* **disabled** and the **coverage** *<system mode>* **findme-followme** commands from the user account configuration mode as follows:

```
(config-2003)#num-rings lunch disabled  
(config-2003)#coverage lunch findme-followme
```

System mode parameters are configured globally using the **voice system-mode** command in the Global Configuration mode. When call coverage settings are applied to user accounts using a system mode, there can be up to five coverage options per system mode.



*For more information about configuring system modes for the NetVanta 7000 Series product, refer to the quick configuration guide [Configuring NetVanta 7000 Series System Modes](https://supportforums.adtran.com) available online at <https://supportforums.adtran.com>.*

## Configuring User Account Voicemail Settings Using the CLI

Configuring the voicemail settings is essential for a user to be able to access and use voicemail. Configurable voicemail settings include a voicemail login PIN, a voicemail CoS, operator assistance parameters, and how and when users are notified of voicemail messages. The following steps illustrate how to configure user account voicemail settings using the CLI.



*The following steps are some of the voicemail options available for configuration on a user account. For a complete listing of available voicemail options, refer to the quick configuration guide [Configuring the NetVanta 7000 Series Voicemail](https://supportforums.adtran.com) available online at <https://supportforums.adtran.com>.*

1. To specify the PIN used for the voicemail account, enter the **voicemail password** *<password>* command from the user account configuration mode. Voicemail passwords are four digits. Enter the command as follows:

```
(config-2003)#voicemail password 5678
```

- To specify the language used for voicemail message playback, enter the **voicemail language-preference [English | FrenchCanadian | Irish | LatinAmSpanish]** command from the user account configuration mode. You can specify the language as English, French-Canadian, Irish, or Latin American Spanish using the appropriate keywords. Enter the command as follows:

```
(config-2003)#voicemail language-preference English
```

- To specify the CoS associated with the voicemail services for this user account, enter the **voicemail cos <name>** command from the user account configuration mode. The **<name>** parameter specifies the voicemail CoS to apply to the user account. A voicemail CoS is created using the **voice mail class-of-service <name>** command from the Global Configuration mode. By default, two voicemail CoS modes exist: **executive\_voicemail** and **normal\_voicemail**. To apply a voicemail CoS, enter the command as follows:

```
(config-2003)#voicemail cos normal_voicemail
```



*For more information about configuring voicemail CoS, refer to the quick configuration guide *Configuring the NetVanta 7000 Series Voicemail* available online at <https://supportforums.adtran.com>.*

- To specify the operator number if the caller requests to speak to the operator while leaving a voicemail, enter the **voicemail oper-assist <number>** command from the user account configuration mode. The **<number>** parameter is the number to which all operator calls are forwarded. By default, the number is set to **0** (the operator group). Enter the command as follows:

```
(config-2003)#voicemail oper-assist 8500
```

- To enable voicemail notification by email for this user account, enter the **voicemail notify email** command from the user configuration mode. When enabled, email notifications of voicemail are sent to the primary email address associated with the user account. Enter the command as follows:

```
(config-2003)#voicemail notify email
```

In addition, email notifications can be sent to a secondary email address using the **voicemail notify email-secondary** command. When enabled, email notifications of voicemail are sent to the secondary email address associated with the user account. Enter the command as follows:

```
(config-2003)#voicemail notify email-secondary
```

With each type of email notification, you can also specify whether the email notifications include an attached voice message, or if the message is a text message. To specify an attached voice message is included in the email, enter the command as follows:

```
(config-2003)#voicemail notify email attach-message pcm
```

To specify a text message of the voicemail is emailed, enter the command as follows:

```
(config-2003)#voicemail notify email text-only
```

- To create a notification schedule for voicemail messages, enter the **voicemail notify schedule** command from the user account configuration mode. You can specify whether the notifications begin on **monday**, **tuesday**, **wednesday**, **thursday**, **friday**, **saturday**, or **sunday** and then specify the time (in HH:MM format and whether **am** or **pm**) that the notifications are sent. For example, to specify that email notifications of voice messages are sent Monday at 5 p.m., enter the command as follows:

```
(config-2003)#voicemail notify schedule monday 05:00 pm
(config-2003-mon-05:00pm)#
```

When you specify a notification schedule for email notifications, you enter the schedule configuration mode. From this mode, you can specify that email notifications are sent to the primary or secondary email addresses associated with this user account using the **notify email [primary | secondary]** command. For example, the following commands create the notification schedule and specify the notification type:

```
(config-2003)#voicemail notify schedule monday 05:00 pm
(config-2003-mon-05:00pm)#notify email primary
```



*Only one email address can be notified per voicemail notification schedule.*

## Configuring User Account VoIP Settings Using the CLI

Another part of configuring the voice user account is to configure the account's VoIP settings. The most important of these settings is assigning a CODEC group to the user account, and creating a SIP identity for the account (if there is a SIP trunk configured on the NetVanta 7000 Series product). To perform these tasks, follow these steps:

- Assign a CODEC group to the user account using the **codec-group <name>** command from the user account configuration mode. This command applies a previously configured CODEC list to the account. To assign a CODEC group, enter the command as follows:

```
(config-2003)#codec-group g711_first
```



*For more information about configuring CODEC lists, refer to the Voice CODEC List Command Set in the AOS Command Reference Guide available online at <https://supportforums.adtran.com>.*

- If a SIP trunk is configured on the NetVanta 7000 Series product, you can also configure a SIP identity on the voice user account. To configure the SIP identity, enter the **sip-identity <number> <Txx> [register | register auth-name <user name> password <password>]** command from the user account configuration mode. The **<number>** parameter specifies the number to be used on the SIP trunk, and the **<Txx>** parameter specifies the SIP trunk to which this SIP identity applies. The optional **register** keyword registers the user to the server, and the registration can optionally specify authentication parameters. To create a SIP identity on the user account that registers with authentication, enter the command as follows:

```
(config-2003)#sip-identity 2565551234 T03 register auth-name 2565551234 password pw
```



*For more information about VoIP settings for user accounts, refer to the Voice User Account Command Set in the *AOS Command Reference Guide* available online at <https://supportforums.adtran.com>.*

## Configuring User Account FindMe-FollowMe Settings Using the CLI

The last user account configurable feature is FindMe-FollowMe, a feature supported by AOS that directs calls based on who is calling. When the FindMe-FollowMe feature is enabled and configured, an incoming call rings the called party's extension and then is directed based on the configuration of the FindMe-FollowMe feature. In a typical scenario, an incoming call is routed to FindMe-FollowMe. The call is first sent to the user's phone. If the user does not answer, the call is then sent to the user's cell phone. If configured, the caller is required to record their name. If the called party answers, they have the option to accept or reject the call. If the called party does not answer, or rejects the call, the call is then sent to the user's voicemail. In AOS, up to four simultaneous calls can be generated for the caller to find the called party.

Configuring FindMe-FollowMe revolves around two main actions: configuring the user's contact groups, and configuring the scripts used to determine which numbers are dialed in the FindMe-FollowMe call sequence. Contact groups are the groups of callers from whom the user anticipates receiving calls. For example, a user might have a contact group for family and one for business partners. By default, AOS creates a **Priority1** group, a **Blacklist2** group, and an **Everyone3** group. New groups can be added or groups can be removed at any time, and each user can have **5** contact groups. In addition, contact groups can be configured to play a courtesy greeting, prompt the caller for their name, and provide ringback to the inbound caller.

The second part of configuring FindMe-FollowMe is to specify the actions taken when an incoming call is received. The configurable actions include: calling an internal extension, calling an external number, referring the call to another number, forwarding the call to voicemail, or sending an email to the called party's primary or secondary email address. FindMe-FollowMe actions do not, however, include calling ring groups. Each of these actions that places a call can be configured for a timeout period in which to stop the call, as well as prompt the called party for DTMF digits to manage the call. Each contact group can have up to **10** actions, and each action can place up to 4 simultaneous calls.

### FindMe-FollowMe Operation in AOS

In AOS, FindMe-FollowMe has a specific call process and certain functionality requirements. *Table 6 on page 26* outlines the requirements specific to AOS's FindMe-FollowMe feature, and *Table 7 on page 28* outlines the AOS FindMe-FollowMe call process.

### Configuring FindMe-FollowMe

When configuring FindMe-FollowMe, you will enable the feature, specify the number of rings before the feature is executed, create the user's contact group, set the group's enabled parameters, and add the group members. You will also configure the FindMe-FollowMe actions executed when a member of the user's contact group calls. To configure FindMe-FollowMe in the CLI, follow these steps:

1. Enable the FindMe-FollowMe feature by entering the **findme-followme [enhanced]** command from the user's configuration mode. By default, FindMe-FollowMe is disabled. Using the **no** form of this command disables the FindMe-FollowMe feature on the user account. The optional **enhanced** keyword specifies that enhanced FindMe-FollowMe is enabled rather than basic FindMe-FollowMe. Enhanced FindMe-FollowMe enables the AOS device to remain in the talk path for external calls and to accept DTMF tones for more user call control. To enable FindMe-FollowMe on a user account, enter the command as follows:

```
(config)#voice user 2003
(config-2003)#findme-followme
```



*Enhanced FindMe-FollowMe requires more system resources and should only be used for select users.*

2. Specify if caller ID override will be used for FindMe-FollowMe calls. This feature allows you to specify the inbound caller ID and name when external FindMe-FollowMe calls are received. Use the **findme-followme caller-id-override external-number <number>** command to configure the FindMe-FollowMe caller ID override. The **<number>** parameter is the number (up to **16** digits) to use in the caller ID. Using the **no** form of this command disables the caller ID override on the user's FindMe-FollowMe settings. To specify FindMe-FollowMe caller ID override, enter the command from the user's configuration mode as follows:

```
(config-2003)#findme-followme caller-id-override external number 2565551212
```

3. Specify the allowed number of unanswered rings to the user account before the call coverage settings take effect using the **num-rings** command as illustrated in [Configuring User Account Call Coverage Settings Using the CLI on page 41](#). If you are using FindMe-FollowMe as the call coverage, setting the number of rings to **disabled** enables the call to immediately go to FindMe-FollowMe, making a simultaneous ring to a desk and a cell phone possible. This command is also configured based on a system mode (for example, you can enter **num-rings lunch disabled** and incoming calls that match the contact group will go directly to FindMe-FollowMe during lunch). By default, system modes use the number of rings specified in the default system mode. To specify that the number of rings is disabled for use with FindMe-FollowMe in the call coverage, enter the **num-rings disabled** command from the user account configuration mode as follows:

```
(config-2003)#num-rings disabled
```

4. Create a FindMe-FollowMe contact group for the user and enter the group's configuration mode using the **contact-group <group number>** command from the user account configuration mode. Each contact group is numbered, and group numbers range from **1** to **5**. If FindMe-FollowMe coverage is activated, the contact group number specifies which contact group is searched first. For example, the calling party number will be matched with the permitted calling party number list in contact group 1 before contact group 2. If a match is found, the actions for contact group 1 are performed. Otherwise, the next contact group is searched for matches. Using the **no** form of this command removes the contact group. To create a FindMe-FollowMe contact group, enter the command as follows:

```
(config-2003)#contact-group 1
(config-2003-cg-1)#
```

You can use this command to configure up to **5** contact groups per user.

5. Next, you will configure the parameters of the contact group. The following are the contact group configuration parameters.

**Group name.** You can optionally enter a name for the contact group using the **name** *<group name>* command. Group names can be up to **10** characters in length. By default, no group name exists. Using the **no** form of this command removes the group name. Enter the command as follows:

```
(config-2003-cg-1)#name Business
```

**Group Description.** You can optionally enter a short description for the contact group using the **description** *<text>* command from the contact group configuration mode. By default, no description exists. Using the **no** form of this command removes the group description. Enter the command as follows:

```
(config-2003-cg-1)#description "New Business Contacts"
```

**Implicitly Included Callers.** You can specify the callers that are implicitly included in a contact group by entering the **implicitly-include** [**all** | **internal** | **external**] command. By default, no callers are implicitly included in the contact group. The **all** parameter specifies that all callers are implicitly included in the contact group, the **internal** parameter specifies that only internal callers are implicitly included in the contact group, and the **external** parameter specifies that only external callers are implicitly included in the contact group. Using the **no** form of this command removes implicit users from the contact group and returns to the default value. In the following example, the contact group 1 is configured to implicitly include external callers:

```
(config-2003-cg-1)#implicitly-include external
```

**Add Known Numbers.** You can add explicitly known numbers to the contact group, making them members of the group, using the **permit-caller-id number** *<number>* [*<description>*] command. The *<number>* parameter is the phone number of the known party. The optional *<description>* parameter allows you to include a short description of the known party. Using the **no** form of this command removes the member from the group. For example, to add the member **Jim** (who calls from extension **3430**) to contact group **1**, enter the command as follows:

```
(config-2003-cg-1)#permit-caller-id number 3430 "Jim"
```

Enter this command as many times as necessary to add all the members to the contact group that are not covered implicitly.

**Add Unknown Numbers.** You can also add unknown, restricted, blocked, or private numbers to the contact group, making them members of the group, using the **permit-caller-id number UNKNOWN** command. Using this command adds any number where the caller ID field is not a string of digits, or is unpopulated, to the contact group. To add unknown numbers to the contact group, enter the command as follows:

```
(config-2003-cg-1)#permit-caller-id number UNKNOWN
```



*Because UNKNOWN is not a keyword, it must be spelled correctly and with all capital letters when using this command.*



**Associate an Action Script with the Group.** FindMe-FollowMe works by executing actions to locate the called party. These actions are determined by configuring action scripts for each contact group. Each contact group can have **1** action script associated with it, and each action script can support up to **10** actions. Previously configured scripts are associated with the contact group by entering the **presence available script** `<script name>` command from the contact group's configuration mode. The `<script name>` parameter is the name of the previously configured action script that should be associated with the particular contact group. Using the **no** form of this command removes the script from the contact group. For example, to associate the action script **Business** with contact group **1**, enter the command as follows:

```
(config-2003-cg-1)#presence available script Business
```

**Enable Ringback.** Ringback is enabled using the **ringback** command. If ringback is enabled, then inbound calls are only answered when an outbound call is answered or if one of the actions require the call to be answered (for example, voicemail). If ringback is disabled, then the call is answered immediately, any configured greetings are played, and music on hold is eventually played while the called party is located. By default, ringback is disabled. Using the **no** form of this command disables ringback. This option is required to be disabled for any greetings to be played for incoming calls. To disable ringback for contact group **1**, enter the command as follows:

```
(config-2003-cg-1)#no ringback
```

**Recording the Caller's Name.** You can optionally set FindMe-FollowMe to record the incoming caller's name using the **record-calling-name** command. When the name recording option is enabled, the system prompts the caller to state their name and records **3** seconds of audio before moving on to other scripts or actions. Using the **no** form of this command disables the name recording feature. By default, callers are not prompted to record their name, and if ringback is enabled, this setting is ignored. To enable caller name recording, enter the command as follows:

```
(config-2003-cg-1)#record-calling-name
```

**Courtesy Greeting.** You can optionally set FindMe-FollowMe to provide a courtesy greeting for the inbound caller while the feature performs actions to locate the called party using the **courtesy-greeting** command. The courtesy greeting provided by AOS tells callers to "Please wait while I locate your party." By default, the courtesy greeting is enabled. Using the **no** form of this command disables the courtesy greeting. If ringback is enabled, the courtesy greeting is not played. To disable the courtesy greeting, enter the command as follows:

```
(config-2003-cg-1)#no courtesy-greeting
```

**DTMF Call Control.** You can optionally specify that FindMe-FollowMe allows inbound callers to control the call using DTMF digits. In AOS, entering the **digit-prompt** command allows inbound callers to hear the prompt "To leave a voicemail at any time, press 1" and enables them to press **1** to leave a voicemail message. By default, DTMF digit prompting is disabled in FindMe-FollowMe. Using the **no** form of this command disables DTMF digit prompting for the contact group. To enable DTMF digit prompting, enter the command as follows:

```
(config-2003-cg-1)#digit-prompt
```



*Enhanced FindMe-FollowMe must be enabled for this feature to function.*

You can repeat these configuration options for each contact group you create.

- In addition to configuring the contact group for the user, you can also configure an action script for the contact group. Configuring action scripts begins in the voice user configuration mode using the **script** *<script name>* command. This command creates the script and enters the script's configuration mode. The *<script name>* parameter specifies the name of the script using no more than **10** characters. Using the **no** form of this command deletes the action script. Only one script can be associated with a contact group. To create a FindMe-FollowMe action script for a user's contact group, enter the command from the user configuration mode as follows:

```
(config-2003)#script BUSINESS
(config-2003-sc-BUSINESS)#
```

- Once you are in the script's configuration mode, you can optionally enter a short description for the script using the **description** *<text>* command. Using the **no** form of this command removes the description. To add a description for the script, enter the command as follows:

```
(config-2003-sc-BUSINESS)#description "New business contacts"
```

- The next step in configuring the FindMe-FollowMe action script is to define the actions. The actions performed by FindMe-FollowMe are defined in the action script using the **action** *<number>* command. The *<number>* parameter specifies the order of the action. If more than one action is specified with the same number, then those actions are executed in parallel. The valid *<number>* range is **1** to **10**, because each action script can execute a maximum of ten actions. The configured actions do not have to start at **1**, and they do not have to be numbered sequentially. This command also includes a number of options for specific actions. These options are described below. Each action is specified with the **action** *<number>* prefix.

**Ringling an Internal Extension.** One of the actions you can specify for FindMe-FollowMe includes ringing an internal extension. To specify that an internal extension is called, enter the **action** *<number>* **internal** *<extension>* [**no-press-to-accept** | **press-to-accept**] [**ring-time** *<seconds>*] command from the script's configuration mode. Calls to internal extensions are placed within the AOS product. Refer to the table *FindMe-FollowMe Behavior in AOS on page 26* for specific information about how internal calls are handled in FindMe-FollowMe. The **press-to-accept** parameter specifies whether or not the called party is prompted to enter a digit to answer the call, generally selecting **1** to accept the call. You can also optionally specify the ring time for the action. The ring time determines how long the extension is rung before FindMe-FollowMe moves on to the next action. By default, ring time is set to **24** seconds, but the valid ring time range is **1** to **60** seconds.



*If you are working with parallel actions, configuring different ring times for different actions causes FindMe-FollowMe to wait to start the next action until the maximum ring time expires for the first action.*

The following example specifies that the first action, in a sequence of actions, for user 2003's FindMe-FollowMe **BUSINESS** script is to ring the internal extension of **8989**. For this action, the called party does not have to press a digit to answer the call, and the ring time is specified at **30** seconds.

```
(config-2003-sc-BUSINESS)#action 1 internal 8989 no-press-to-accept ring-time 30
```

**Ring an External Number.** You can specify that FindMe-FollowMe rings an external number to find the called party using the **action** *<number>* **external** *<phone number>* [**no-press-to-accept** | **press-to-accept**] [**ring-time** *<seconds>*] command. The *<phone number>* parameter is the external number you want FindMe-FollowMe to dial. The **press-to-accept** and **ring-time** parameters function exactly the same as when dialing an internal extension. **Press-to-accept** should always be used on external calls to provide positive verification that the call was answered, and therefore it is enabled by default. When enhanced FindMe-FollowMe is enabled, AOS will remain in the talk path only for external calls with **press-to-accept** enabled. Because external calls are primarily designed to call cell phones out of a trunk, **press-to-accept** should be enabled for these types of calls. Using the **no** form of this command removes this action from the action script.

The following example specifies that the second action, in a sequence of actions, for user 2003's FindMe-FollowMe **BUSINESS** script is to ring the external number of **12565550980**. For this action, the called party must press a digit to answer the call and the ring time is specified at **30** seconds.

```
(config-2003-sc-BUSINESS)#action 2 external 12565550980 press-to-accept ring-time 30
```

**Referring the Caller to Another Number.** You can specify that FindMe-FollowMe refers the caller to another number using the **action** *<number>* **refer** *<phone number>* command. The *<phone number>* parameter is the number to which you want to refer callers, such as the auto attendant. Using the **no** form of this command removes the action from the action script.

The following example specifies that the third action, in a sequence of actions, for user 2003's FindMe-FollowMe **BUSINESS** script is to refer the caller to the auto attendant's number, extension **8502**.

```
(config-2003-sc-BUSINESS)#action 3 refer 8502
```



*Refer is a final action. Any actions after a refer action will not be processed because a refer action ceases to follow the FindMe-FollowMe configuration once the call has been connected to the number to which the call was referred. Once the call is connected, it uses the coverage configured for the new number.*

**Sending the Caller to Voicemail.** You can specify that FindMe-FollowMe sends the caller to voicemail using the **action** *<number>* **vm** [*<mailbox>*] command. The optional *<mailbox>* parameter sends the caller to a specific voice mailbox. If no mailbox is specified, the caller is sent to the user's mailbox.

The following example specifies that the fourth action, in a sequence of actions, for user 2003's FindMe-FollowMe **BUSINESS** script is to send the caller to the user's voice mailbox.

```
(config-2003-sc-BUSINESS)#action 4 vm
```



*Voicemail is also a final action. Once the call is transferred to voicemail, the remaining FindMe-FollowMe actions are ignored.*

**Sending the User an Email.** You can specify that FindMe-FollowMe sends the user (called party) an email notifying them of the call. Emails can be sent to either the user's primary or secondary email address (configured in *Configuring User Account User Configuration Settings Using the CLI on page 38*). To specify the primary address is used, enter the **action <number> email primary** command. To specify the secondary address is used, enter the **action <number> secondary** command.

The following example specifies that the fifth action, in a sequence of actions, for user 2003's FindMe-FollowMe **BUSINESS** script is to send the user a notification email at their **primary** email address.

```
(config-2003-sc-BUSINESS)#action 5 email primary
```

Once the action script is defined, and is associated with a configured contact group, the FindMe-FollowMe feature is configured. You can repeat the contact group and action script configuration steps to configure additional groups and scripts.

## FindMe-FollowMe Sample Configuration

The following is a sample configuration for the FindMe-FollowMe portion of the configuration for user 2003 shown as output from the **show run voice user** command.

```
>enable
#show run voice user 2003 verbose
Building configuration...
!
Voice User 2003
  num-rings disabled
  findme-followme
  coverage findme-followme
  script BUSINESS
    script-description "New business contacts"
    action 1 internal 8989 no-press-to-accept ring-time 30
    action 2 external 12565550980 ring-time 30
    action 3 refer 8502
  contact-group 1
    name Business
    description "New Business Contacts"
    implicitly-include external
    no ringback
    record-calling-name
    courtesy-greeting
    no digit-prompt
    permit-caller-id number 3430 "Jim"
    presence available script BUSINESS
```

Once you have configured FindMe-FollowMe, the user account is configured. After all the user account parameters have been configured, save your configuration by entering **do write** from the Global Configuration mode prompt. Enter the command as follows:

```
(config)#do write
```

## Using Enhanced FindMe-FollowMe

Enhanced FindMe-FollowMe can collect digits from the connected call which initiates a transfer. Calls connected using Enhanced FindMe-FollowMe can be transferred by two methods. First, you can select \*7 to quickly transfer the call to your desk extension, or second, select \*88<number> to transfer the call to any number. If a user dials \*7, their desk extension rings and the call only transfers if the desk extension is answered. An example scenario for quickly transferring a call to the desk extension using \*7 is to answer a FindMe-FollowMe call while returning from lunch, and then sending the call to your desk phone upon returning to the office.

When transferring a call to any number, using \*88<number>, the number dialed must be valid, or the call is disconnected. the number can be an internal extension or an external number, and it is routed based on existing dial plan entries. An example scenario for transferring a call to any number is when a call is received, but the caller needs to speak with someone else within the company.

## Additional Resources

*Table 9* lists additional documents that can be beneficial when configuring the user accounts for your network. These documents are available on ADTRAN's Support Community at <https://supportforums.adtran.com>.

T. Table 9: Additional Documentation

Article Title
<i>Changing to 3-Digit Voice User Extensions</i>
<i>Custom Trunk Group Access Configuration Guide</i>