



User's Guide

6AOSUG0002-1D
January 2014

Managing IP Phones with the NetVanta 7000 Series

This guide describes how to configure and manage IP phones with the NetVanta 7000 Series product. This guide provides instructions using the ADTRAN Operating System (AOS) web-based graphical user interface (GUI).

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- *Hardware and Software Requirements and Limitations on page 2*
- *Connecting to the GUI on page 3*
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Overview

The NetVanta 7000 Series product provides the following features that help create/modify IP phone configurations:

- NetVanta UC Installation Wizard
- **IP Phone Configs** Menu
- Installation Mode Auto Detection

Each of these features is discussed in this document. In general, use the NetVanta UC Installation Wizard when the initial install uses a simple configuration; the wizard provides a functional system in the least number of steps. Use the **IP Phone Configs** menu to make modifications after using the wizard or for more complex installs, for example, when using voice to email or direct inward dialing (DID). Configure from installation mode when user accounts have already been created during pre-staging and you are on site configuring phones for those users.

Hardware and Software Requirements and Limitations

The steps outlined in this guide are compatible with NetVanta 7000 Series voice products running AOS firmware version R10.7.0 or later.

To check the NetVanta 7000 Series firmware version:

1. Navigate on the unit to **System > System Summary**.
2. Verify the firmware version on the **General System Information** menu.

ADTRAN branded VVX phones (model names ADTRAN VVX 300, ADTRAN VVX 310, ADTRAN VVX 400, ADTRAN VVX 410, ADTRAN VVX 500, and ADTRAN VVX 600) function with NetVanta 7000 Series AOS release version R10.8.0 and later without requiring an additional license key purchase. The equivalent Polycom branded phones will not function with release R10.8.0. If you are currently using the equivalent Polycom branded phones with the NetVanta 7000 Series, you must either remain on a pre-R10.8 release or use the ADTRAN branded version of the VVX phones until a licensing mechanism can be added to allow the use of Polycom branded VVX models.

The rest of the Polycom family of supported IP end points continue to remain unaffected. Either ADTRAN branded models or the equivalent Polycom branded models of these IP phones can be used with R10.8 and later. See [Table 1](#) to determine AOS release R10.8 compatibility with ADTRAN and Polycom branded phone models.

Table 1. Release R10.8 Phone Compatibility

Model	Part #	Compatibility with AOS Release R10.8 and Later
ADTRAN VVX 300	1200853G1	Yes
ADTRAN VVX 310	1200853G1#GB	Yes
ADTRAN VVX 400	1200854G1	Yes
ADTRAN VVX 410	1200854G1#GB	Yes
ADTRAN VVX 500	1202856G1	Yes
ADTRAN VVX 600	1200856G1	Yes

Table 1. Release R10.8 Phone Compatibility

Model	Part #	Compatibility with AOS Release R10.8 and Later
Polycom branded VVX 300, 310, 400, 410, 500, and 600	Multiple	No. R10.7 is the last supported AOS version for these phones.
ADTRAN branded and equivalent Polycom branded SoundPoint IP 321, 331, 335, 450, 550, 560, and 670	Multiple	Yes. There are no restrictions when using these models.
ADTRAN branded and equivalent Polycom branded SoundStation IP 5000, 6000, and 7000.	Multiple	Yes. There are no restrictions when using these models.

Connecting to the GUI

1. Connect to the NetVanta 7000 Series GUI by opening a new 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:



2. At the prompt, enter your user name and password and select **OK**.

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

Adding New Phones

New phones can be added to the system using one of the following methods:

- [Configuring from the NetVanta UC Installation Wizard on page 4](#)
- [Configuring from the IP Phone Configs Menu on page 6](#)
- [Configuring from Installation Mode on page 10](#)

Unless the phone is used as a hot desk phone, you will also need to create a user account to associate with the phone. For more information about user accounts, refer to [Configuring User Accounts on the NetVanta 7000 Series](#). For more information about hot desking, refer to [Configuring Hot Desking in AOS](#). Both documents are available on ADTRAN’s Support Community at <https://supportforums.adtran.com>.

Configuring from the NetVanta UC Installation Wizard

The NetVanta Unified Communications (UC) Installation Wizard steps you through the initial configuration of the NetVanta 7000 Series product. In the phone and user configuration portion of the wizard, you will have the option to enter phone and user information either manually or by importing a comma separated value (CSV) file.



The installation wizard is optimized and recommended for use only in the United States and Canada. The dial plans generated by the wizard apply to the US and Canada only.

1. Connect to the GUI and navigate to **Wizard > Installation Wizard**.
2. Follow the steps in the wizard to reach the **Phone/User Configuration** menu.

3. Select the method of input (*CSV Import* or *Manual Input*) and follow the required steps.

CSV Import (Installation Wizard)

Creating phone configurations with a CSV template saves time by allowing you to upload phone configuration information for multiple users at once. Download the CSV template file to use as a template for your file. The following table describes the fields of the CSV file and the order in which they should appear.

Table 2. Installation Wizard CSV File Field Descriptions

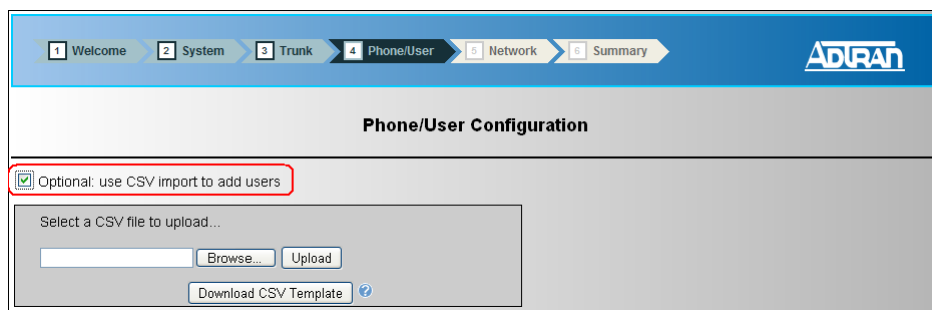
Field	Description	Function	Format
MAC Address <i>(Available on the phone or its packaging)</i>	A phone's unique MAC address	Allows the phone with this MAC address to register with the system	Hexadecimal digits only; should be 12 digits in length; must be uniquely assigned
Extension	A new, unique phone extension for this entry	Creates a new voice user with this value; allows a phone to register with the system using this value	Numeric digits NOTE: Extensions imported with the installation wizard cannot begin with 1. However, they can begin with 1 when imported using the IP Phone Configs menu.

Table 2. Installation Wizard CSV File Field Descriptions

Field	Description	Function	Format
Phone Model <i>(Available on the phone or its packaging)</i>	The type of phone associated with this entry	Tells the system how many line keys the phone has that are usable	Select Phone Model drop-down list in the table to see the available models. Models must be entered exactly as shown in the list.
First Name	First name of the person who will use this phone	Helps to label the phone and provides caller ID information	Only printable ASCII characters
Last Name	Last name of the person who will use this phone	Helps to label the phone and provides caller ID information	Only printable ASCII characters
SIP Authentication Password	Password used for the IP phone to register with the system	Provides the system with a way for validating the IP phone	Alphanumeric characters, from 1 to 16 characters in length

NOTE *The format requirements for a CSV template are different when importing with the installation wizard than when importing with the **IP Phone Configs** menu. The installation wizard ignores any fields in the CSV template not listed in Table 2. Refer to [CSV Import \(IP Phone Configs Menu\)](#) on page 6 for more information about importing a CSV file using the **IP Phone Configs** menu.*

1. Select the **Optional: use CSV import to add users** check box.



2. Select the **Browse** button and open the CSV file to use for input.

NOTE *To view an example CSV template, select the **Download CSV Template** button. For more information about formatting the CSV file, refer to [Table 2](#).*

3. Select the **Upload** button. After you upload the CSV file, the phone and user information displays in the table. Use the table to edit the information or add additional phones/users.
4. Select the **Next** button at the bottom of the menu to continue with the wizard.

Manual Input (Installation Wizard)

1. Select **Click to add new user**.

2. Select each field and enter the corresponding phone/user information. See [Table 2](#) for a description of the phone/user information.
3. Select the **Next** button at the bottom of the menu to continue with the wizard.

Configuring from the IP Phone Configs Menu

The **IP Phone Configs** menu enables you to enter phone and user information either manually or by importing a CSV file. In addition, this menu allows you to edit phone and user information previously entered with the installation wizard.

CSV Import (IP Phone Configs Menu)

Creating phone configurations with a CSV template saves time by allowing you to upload phone configuration information for multiple users at once. Download the CSV template file from the **CSV Import** menu to use as a template for your file. The following table describes the fields of the CSV file.

Table 3. IP Phone Configs CSV File Field Descriptions

Field	Description	Function	Format
MAC Address <i>(Available on the phone or its packaging)</i>	A phone's unique MAC address	Allows the phone with this MAC address to register with the system NOTE: A CSV file without the MAC Address and Phone Model columns will import only the user account information and will not display an entry in the IP Phone Config table.	Hexadecimal digits only; should be 12 digits in length; must be uniquely assigned NOTE: To import user information without specifying a MAC address, you must delete the MAC Address and Phone Model columns from the CSV file.
Extension	A new, unique phone extension for this entry	Creates a new voice user with this value; allows a phone to register with the system using this value	Numeric digits

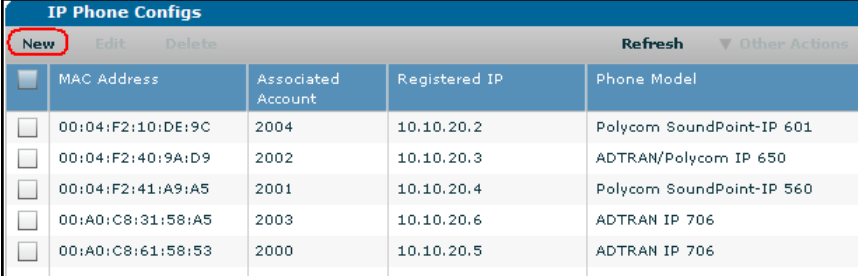
Table 3. IP Phone Configs CSV File Field Descriptions

Field	Description	Function	Format
Phone Model <i>(Available on the phone or its packaging)</i>	The type of phone associated with this entry	Tells the system how many line keys the phone has that are usable NOTE: A CSV file without the MAC Address and Phone Model columns will import only the user account information and will not display an entry in the IP Phone Config table.	Select View Phone Models on the CSV Import tab to see the available models. Models must be entered exactly as shown in the list.
First Name	First name of the person who will use this phone	Helps to label the phone and provides caller ID information	Only printable ASCII characters
Last Name	Last name of the person who will use this phone	Helps to label the phone and provides caller ID information	Only printable ASCII characters
SIP Authentication Password	Password used for the IP phone to register with the system	Provides the system with a way for validating the IP phone	Alphanumeric characters, from 1 to 16 characters in length
DID	Direct inward dial (DID) for the system to direct to this extension	Allows DIDs to be mapped to an extension	Numeric digits
Email Address	Email address to associate with this extension	Used for voice-to-email capabilities	A valid email address
Coverage	Call coverage to associate with this SIP end point	Directs what happens to a call after the set number of rings has been reached	String for a name defined on the Global Call Coverage Lists menu (for example, go_to_voicemail)
CoS	Class of service (CoS) to associate with this extension	Used to limit/restrict what services this SIP end point will be able to perform/use	String for configured voice CoS (for example, normal_users)
Voicemail CoS	Voicemail system CoS to associate with this extension	Used to limit/restrict what services the voicemail system will provide for this extension's voice mailbox	String for configured voice CoS (for example, normal_voicemail) that is defined on the Classes of Service menu
Alias	A SIP alias to associate with this extension	Allows a SIP alias to point to this extension	Numeric digits



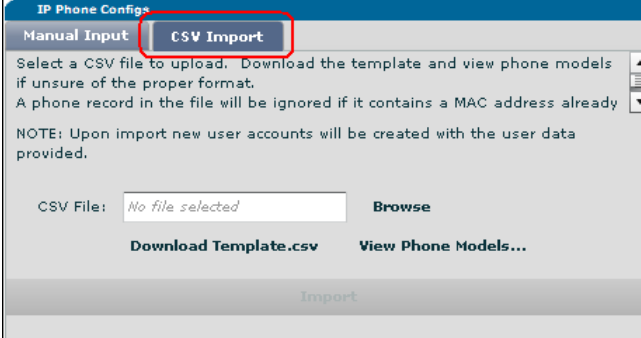
*The format requirements for a CSV template are different when importing with the installation wizard than when importing with the **IP Phone Configs** menu. Refer to [CSV Import \(Installation Wizard\)](#) on page 4 for more information about importing a CSV file using the installation wizard.*

1. Navigate to **Voice > Stations > IP Phone Configs**.
2. Select **New**.



IP Phone Configs				
	MAC Address	Associated Account	Registered IP	Phone Model
<input type="checkbox"/>	00:04:F2:10:DE:9C	2004	10.10.20.2	Polycom SoundPoint-IP 601
<input type="checkbox"/>	00:04:F2:40:9A:D9	2002	10.10.20.3	ADTRAN/Polycom IP 650
<input type="checkbox"/>	00:04:F2:41:A9:A5	2001	10.10.20.4	Polycom SoundPoint-IP 560
<input type="checkbox"/>	00:A0:C8:31:58:A5	2003	10.10.20.6	ADTRAN IP 706
<input type="checkbox"/>	00:A0:C8:61:58:53	2000	10.10.20.5	ADTRAN IP 706

3. Select the **CSV Import** tab. If you already have a valid CSV file, skip to [Step 7](#).



IP Phone Configs

Manual Input **CSV Import**

Select a CSV file to upload. Download the template and view phone models if unsure of the proper format.
A phone record in the file will be ignored if it contains a MAC address already

NOTE: Upon import new user accounts will be created with the user data provided.

CSV File: **Browse**

Download Template.csv **View Phone Models...**

Import

4. Select **Download Template.csv** and save a copy of the template to your computer. Make sure to save the file as a .csv file.
5. Edit the file and add the applicable information. Refer to [Table 3](#) for descriptions of the different fields.



*The phone model must be entered into the CSV file exactly as shown in the **View Phone Models** list on the **CSV Import** tab. For example, **Polycom Soundpoint-IP 670** is acceptable but **Polycom 670** is not.*

6. Save the file locally using a .csv extension.
7. Select **Browse** from the **CSV Import** tab and open the file you just saved.
8. Select **Import**.
9. Make any necessary corrections and select **Continue** at the bottom of the menu to proceed to the main **IP Phone Configs** menu where you can edit or save the configurations.

Manual Input (IP Phone Configs Menu)

1. Navigate to **Voice > Stations > IP Phone Configs**.
2. Select **New**.

IP Phone Configs				
<input type="checkbox"/>	MAC Address	Associated Account	Registered IP	Phone Model
<input type="checkbox"/>	00:04:F2:10:DE:9C	2004	10.10.20.2	Polycom SoundPoint-IP 601
<input type="checkbox"/>	00:04:F2:40:9A:D9	2002	10.10.20.3	ADTRAN/Polycom IP 650
<input type="checkbox"/>	00:04:F2:41:A9:A5	2001	10.10.20.4	Polycom SoundPoint-IP 560
<input type="checkbox"/>	00:A0:C8:31:58:A5	2003	10.10.20.6	ADTRAN IP 706
<input type="checkbox"/>	00:A0:C8:61:58:53	2000	10.10.20.5	ADTRAN IP 706

3. On the **Manual Input** tab, specify the phone model by selecting the **Phone Model** check box and then clicking in the field to display a list of phone models from which to select.

The screenshot shows the 'Manual Input' form for adding IP phones. The 'Phone Model' checkbox is checked, and the 'Starting Extension' checkbox is also checked. The 'New' radio button is selected, and the 'Existing' radio button is unselected. The 'MAC Address List' field is empty. The 'Add' button is visible.


NOTE *If you choose to type the phone model name in the field instead of selecting it from the list, make sure to enter the name exactly as shown in the list. For example, **Polycom Soundpoint-IP 670** is acceptable but **Polycom 670** is not.*

4. To assign an extension to the phone, select the **Starting Extension** check box.

5. Select the corresponding radio button to indicate whether the extension is a **New** extension or an **Existing** extension. If the extension is a new extension, enter the extension in the field. If the extension is an existing extension, select the extension from the drop-down list.
6. Enter the phone’s MAC address in the **MAC Address List** field. The colon separators in the MAC address are optional.
7. Select **Add** below the **MAC Address List** to add the new phone.
8. Select **Continue** at the bottom of the menu to proceed to the main **IP Phone Configs** menu where you can edit or save the configurations.

Configuring from Installation Mode

When a new ADTRAN-Polycom phone is plugged into the system, the phone enters installation mode, and the unit automatically detects the presence of the phone. Phones in installation mode appear in the **IP Phone Configs** menu with an associated account listed as **Installation** and are highlighted in orange.




NOTE

*For IP phones to display in the GUI in installation mode, the system requires a user account for extension 2000 with a SIP authentication password of **1234**. The system is configured with this user account by default. If you have deleted this account, you will need to create a new one using the **User Accounts** menu and set the SIP authentication password to **1234**.*

Installation mode does away with the need to pre-assign phones to specific users. A system can be set up with a CSV import minus the MAC address and phone model columns, and then an on-site installer can place each phone in its desired location. The MAC address and phone model columns can be omitted only when importing the CSV file using the **IP Phone Configs** menu. Refer to [CSV Import \(IP Phone Configs Menu\) on page 6](#) for more information about importing a CSV file using the **IP Phone Configs** menu.

After the phones boot up, the installer can log in the correct extension, and the phones will restart and be ready to use with a default phone configuration. The installer also has the option to simply place all of the phones and return to the **IP Phone Config** menu at which point all of the Polycom phones will be listed in installation mode.



NOTE

Phones in installation mode can be used to place emergency calls.

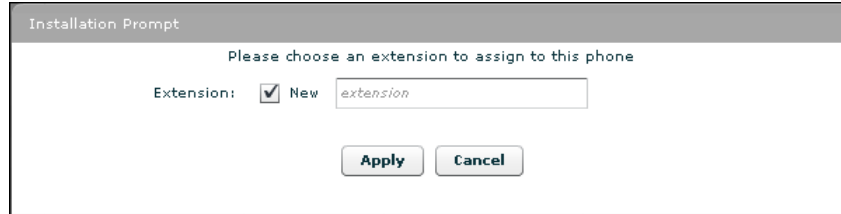
1. Navigate to **Voice > Stations > IP Phone Configs**.
2. Double click on the phone to configure.

IP Phone Configs				
New	Edit	Delete	Refresh	Other Actions
<input type="checkbox"/>	MAC Address	Associated Account	Registered IP	Phone Model
<input type="checkbox"/>	00:04:F2:10:DE:9C	Installation	<Not Registered>	Polycom SoundPoint-IP 601
<input type="checkbox"/>	00:04:F2:41:12:AF	Installation	<Not Registered>	Polycom SoundPoint-IP 670
<input type="checkbox"/>	00:04:F2:41:A9:A5	Installation	<Not Registered>	Polycom SoundPoint-IP 560
<input type="checkbox"/>				

- On the **Installation Prompt** menu that appears, you can either assign the phone to a new extension or assign the phone to a current extension.

Assign a New Extension

Select the **New** check box and enter the extension in the field that displays.

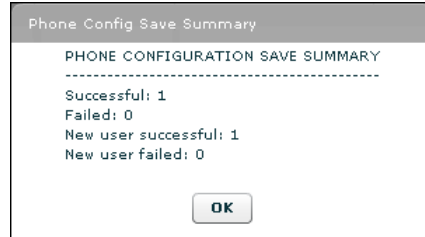


Assign an Existing Extension

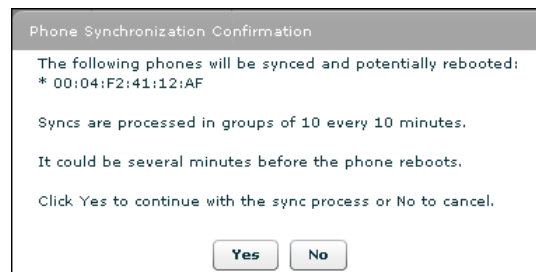
Select the extension from the drop-down list.



- Select **Apply**.
- On the **Phone Config Save Summary** menu that appears, select **OK**.



- On the **Phone Synchronization Confirmation** menu that appears, select **Yes** to synch the listed phones. If you select **No** to cancel the synch, you will need to synch the phones at a later time.



- Select **Save** at the top of the menu to save the configuration.

Replacing a Phone

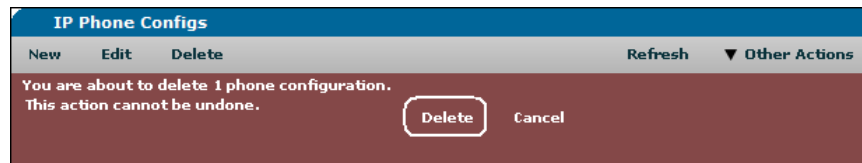
1. Delete the existing phone assigned to the phone. (Refer to *Deleting a Phone on page 12*).
2. Add the new phone and assign the extension. (Refer to *Adding New Phones on page 3*).

Deleting a Phone

1. Navigate to **Voice > Stations > IP Phone Configs**.

IP Phone Configs				
New	Edit	Delete	Refresh	▼ Other Actions
<input type="checkbox"/>	MAC Address	Associated Account	Registered IP	Phone Model
<input type="checkbox"/>	00:04:F2:10:DE:9C	2004	10.10.20.2	Polycom SoundPoint-IP 601
<input checked="" type="checkbox"/>	00:04:F2:40:9A:D9	2002	10.10.20.3	ADTRAN/Polycom IP 650
<input type="checkbox"/>	00:04:F2:41:A9:A5	2001	10.10.20.4	Polycom SoundPoint-IP 560
<input type="checkbox"/>	00:A0:C8:31:58:A5	2003	10.10.20.6	ADTRAN IP 706
<input type="checkbox"/>	00:A0:C8:61:58:53	2000	10.10.20.5	ADTRAN IP 706

2. Select the check box beside the phone to delete.
3. Select **Delete**.
4. Confirm the deletion by selecting **Delete** in the confirmation message that displays at the top of the menu.



5. Select **Save** at the top of the menu to save the configuration.

Changing the Name Assigned to an Existing Phone

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

User Accounts					
New	Edit	Delete	Refresh		
<input type="checkbox"/>	Last Name	First Name	Extension ▲	Port/Status	Station CoS
<input type="checkbox"/>			2000	SIP- ?	normal_users
<input checked="" type="checkbox"/>	Jones	Karen	2001	SIP- ?	normal_users
<input type="checkbox"/>	Smith	Joe	2002	SIP- ?	normal_users
<input type="checkbox"/>	SIP User	Default	2004	SIP- ?	normal_users

2. Select the check box beside the user account to modify.
3. Select **Edit**.

- Enter the new user name to associate with the phone in the **First Name** and **Last Name** fields.

- Select **Apply** at the bottom of the menu to apply the change and return to the list of user names and extensions.
- Select the check box beside the extension with the new name and select **Edit** again.
- Select the **Edit Config** button next to the phone MAC address.
- Verify that the **Phone Label** matches the new name and select **Apply** at the bottom of the menu.
- When prompted to reboot and synch the phone, select the **Yes** button.
- Navigate to **Voice > Stations > IP Phone Globals**.

Source	In File	First Name	Last Name	Contact
Sys Directory				2000
Sys Directory		Karen	Jones	2001
Sys Directory		Joe	Smith	2002
Sys Directory		Default	SIP User	2004
Sys Directory		Polycom	IP650	2565550012

- On the **Global Directory** tab, select **Add custom directory entry** and leave the new entry blank.
- Select the **Save Global Directory** button.

- If the phone is a Polycom or ADTRAN-Polycom phone, you must select any Polycom or ADTRAN-Polycom phone from the **IP Phone Configs** menu and then select **Update Directories** from the **Other Actions** drop-down list.

IP Phone Configs					
New	Edit	Delete	Refresh ▼ Other Actions		
<input type="checkbox"/>	MAC Address	Associated Account	Registered IP	Phone Model	Sync Phones Update Directories
<input type="checkbox"/>	00:04:F2:10:DE:9C	2004	<Not Registered>	Polycom SoundPoint-IP 601	
<input type="checkbox"/>	00:04:F2:40:9A:D9	2565550012	<Not Registered>	ADTRAN/Polycom IP 650	
<input type="checkbox"/>	00:04:F2:41:12:AF	NONE (H)	<Not Registered>	Polycom SoundPoint-IP 670	
<input checked="" type="checkbox"/>	00:04:F2:41:A9:A5	2001	<Not Registered>	Polycom SoundPoint-IP 560	

- Reboot all phones to cause the phones to download the updated name information.
- Select **Save** at the top of the menu to save the configuration.

Changing Button Maps


- Navigate to **Voice > Stations > IP Phone Configs**.

IP Phone Configs				
New	Edit	Delete	Refresh ▼ Other Actions	
<input type="checkbox"/>	MAC Address	Associated Account	Registered IP	Phone Model
<input checked="" type="checkbox"/>	00:04:F2:6B:01:FF	4450 5553333	10.10.20.2	ADTRAN/Polycom VVX 400
<input type="checkbox"/>	00:A0:C8:25:54:87	4430 5553333	10.10.20.5	ADTRAN IP 712
<input type="checkbox"/>	00:A0:C8:25:55:40	4410	10.10.20.3	ADTRAN IP 712
<input type="checkbox"/>	00:A0:C8:61:58:4F	4420	10.10.20.4	ADTRAN IP 706

- Select the check box beside the phone to edit.
- Select **Edit**.

IP Phone Configs				
MAC Address:	00	04	F2	6B 01 FF ?
Phone Model:	ADTRAN/Polycom VVX 400 ?			
Phone Label:	Phone Polycom			
Expansion Modules:	0 ?			
Expansion Module Display Type:	Paper ?			
Button Map Phone Settings Other Directory Entries				
Button	Action	Primary	Label	
1	Ext: 4450		4450	
2	Ext: 4450		4450	
3	Shared: 5553333		555333	
4	Click here to add button			
5				
6				
7				
8				
9				
10				
11				
12				

4. If the phone has expansion modules, enter the number of modules in the **Expansion Modules** field.
5. If the phone has Polycom VVX expansion modules, specify whether the **Expansion Module Display Type** is **Paper** or **LCD**.

 **NOTE** *The Polycom VVX Expansion Module Directory Card provides an editable template for VVX expansion modules with paper display. This file is available on ADTRAN's Support Community at <https://supportforums.adtran.com>.*

6. On the **Button Map** tab, click in the **Action** field and select an action for the button from the drop-down list that appears. See [Table 4](#) for a description of the different actions. The associated phone model and indicated expansion modules determines the number of buttons available.

Table 4. Button Map Actions

Action	Description
Extension	Assigns the selected user account to the designated number of line keys
Shared Line	Assigns the selected shared line account (SLA)/shared call appearance (SCA) to the line
Status Group	Assigns the selected status group to the line
Blank	Leaves the line key blank
Speed	Speed dials the entered number

7. Select **Apply** at the bottom of the menu to apply the changes.
8. Select **Save** at the top of the menu to save the configuration.