

# Configuring the NetVanta 7000 Series for the IP 700 Series Phones



Quick Configuration Guide

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This quick configuration guide provides assistance in configuring the NetVanta 7000 Series product to operate with IP 700 Series phones. These instructions are only applicable to NetVanta 7000 Series products running AOS 14 firmware or newer. It is assumed that the NetVanta 7000 Series product has been configured as instructed in the quick start guide provided with your unit and hardware installation guide provided on the *AOS Documentation CD*. It also assumes that the IP 700 Series phones have been assembled per the instructions in the quick start guide provided with them.

The following sections provide step-by-step instructions for:

- Configuring the DHCP server settings
- Creating SIP accounts
- Uploading configuration files
- Phone setup

## Configuring the DHCP Server Settings

Enabling the Dynamic Host Configuration Protocol (DHCP) server on the NetVanta can be accomplished using either the command line interface (CLI) or the Web-based graphical user interface (GUI). Both sets of instructions are provided below. Choose the method that best suits your situation.



*Option 157 must be set on both the **LAN\_pool** and the **VoIP\_pool** to direct the phones to the correct boot server.*

The IP 700 Series phone uses site-specific Option 157 to provide the following information to the phones:

```
TftpServers=0.0.0.0
FtpServers=10.10.20.1:/ADTRAN
FtpLogin=polycomftp
FtpPassword=password
Layer2Tagging=True
VlanID=2
```



*If the voice virtual local area network (VLAN) address has been changed to something other than **10.10.20.1** for a particular NetVanta server, you will need to adjust the *FtpServers* address in the commands above.*



If the default FTP Login (**polycomftp**) and FTP Password (**password**) have been changed to something other than the system defaults, you will need to adjust the *FtpLogin* and *FtpPassword* settings in the commands above.

## Using the CLI to Configure the DHCP Server

1. Access the CLI for your server. If you are not familiar with using the CLI, review the *AOS Command Reference Guide* available on the *AOS Documentation* CD shipped with your NetVanta unit or from [www.adtran.com](http://www.adtran.com).
2. Issue the following commands to configure the DHCP settings. It is necessary to execute an **ip ftp server default-filesystem cflash** command to ensure that the FTP server is accessing the CompactFlash®. This is included in the following commands:

```
>enable
```

```
#configure terminal
```

```
(config)#ip ftp server default-filesystem cflash
```

```
(config)#ip dhcp-server pool LAN_pool
```

```
(config)#option 157 ascii TftpServers=0.0.0.0, FtpServers=10.10.20.1:/ADTRAN,  
FtpLogin=polycomftp, FtpPassword=password, Layer2Tagging=True, VlanID=2
```

```
(config)#ip dhcp-server pool VoIP_pool
```

```
(config-dhcp)#option 157 ascii TftpServers=0.0.0.0, FtpServers=10.10.20.1:/ADTRAN,  
FtpLogin=polycomftp, FtpPassword=password, Layer2Tagging=True, VlanID=2
```

```
(config-dhcp)#exit
```

3. Enter the **copy running-config startup-config** command to save the changes made to the configuration. This copies your changes to the unit's nonvolatile random access memory (NVRAM). Once the save is complete, the changes are retained even if the unit is shut down, or suffers a power outage.

## Using the GUI to Configure the DHCP Server

The GUI is an online configuration tool that allows you to easily configure and view the main settings, as well as the status of your system.

1. Connect the NetVanta 7000 Series unit to your network using the first Ethernet port (**eth 0/1**) on the front panel of the unit. The NetVanta 7000 Series supports auto MDI-MDIX crossover; therefore, a straight-through cable can be used for this connection.
2. Configure your PC to obtain an IP address automatically via DHCP, or change the IP address of your PC to **10.10.10.2**. The default address for the NetVanta 7000 Series is **10.10.10.1**.



Contact your network administrator if you need assistance changing your computer's IP settings.

If you cannot change the PC's IP address, you must change the NetVanta server's IP address.

3. In your Internet browser **Address** field, enter the IP address **http://10.10.10.1/admin** (default).
4. Once you are connected, you will be prompted to enter the user name and password. Enter your user name (default is **admin**) and password (default is **password**) and select **OK**.
5. From the initial menu, select **DHCP Server** from the **System** options on the left side of the menu. The **DHCP Server Settings** menu will display. Under **Modify/Delete a DHCP Server Pool**, select either the **LAN\_pool** or **VoIP\_pool**.

**ADTRAN** NetVanta 7100 Save Logout

**System**  
Getting Started  
System Summary  
Physical Interfaces  
Passwords  
IP Services  
DHCP Server  
Hostname / DNS  
LLDP  
SNMP

**Voice**  
**Data**  
**Utilities**

**DHCP Server Settings**

DHCP Pools Excluded Ranges

Create a pool for each subnet containing DHCP clients. A pool must also be created for each host requiring a reserved (fixed) IP address.

**Add New DHCP Server pool**

Pool Name:

**Modify/Delete a DHCP Server Pool**

To view or modify an existing DHCP server pool, click the link in the desired row.

Name	Subnet/Host	IP Address	
<a href="#">LAN_pool</a>	subnet	10.10.10.0/24	<input type="button" value="Delete"/>
<a href="#">VoIP_pool</a>	subnet	10.10.20.0/24	<input type="button" value="Delete"/>

Select **LAN\_pool** or **VoIP\_pool** from the list of DHCP server pools.

6. Select the **Numbered Options** tab to enter the Option 157 information.
7. Add a new numbered option by entering **157** in the **Number** field, and the following text string in the **ASCII Text** field:

**TftpServers=0.0.0.0, FtpServers=10.10.20.1:/ADTRAN, FtpLogin=polycomftp, FtpPassword=password, Layer2Tagging=True, VlanID=2**

Complete this step by selecting **Add Numbered Option**. The new option and text will appear in the **View/Delete a Numbered Option** portion of the menu.

The screenshot shows the DHCP Server Pool configuration for "LAN\_pool". The "Numbered Options" tab is active. In the "Add New Numbered Option" section, the "Number" field is 157, the "Type" is ASCII Text, and the "ASCII Text" field contains the configuration string. The "View/Delete a Numbered Option" table shows the following data:

Option Number	Type	Value	Action
157	ASCII	TftpServers=0.0.0.0, FtpServers=10.10.20.1:/ADTRAN, FtpLogin=polycomftp, FtpPassword=password, Layer2Tagging=True, VlanID=2	Delete

Annotations on the right side of the image:

1. Select the **Numbered Options** tab.
2. Enter **157** in the **Number** field.
3. Enter the ASCII text string.
4. Select **Add Numbered Option**.
5. Select **Apply**.

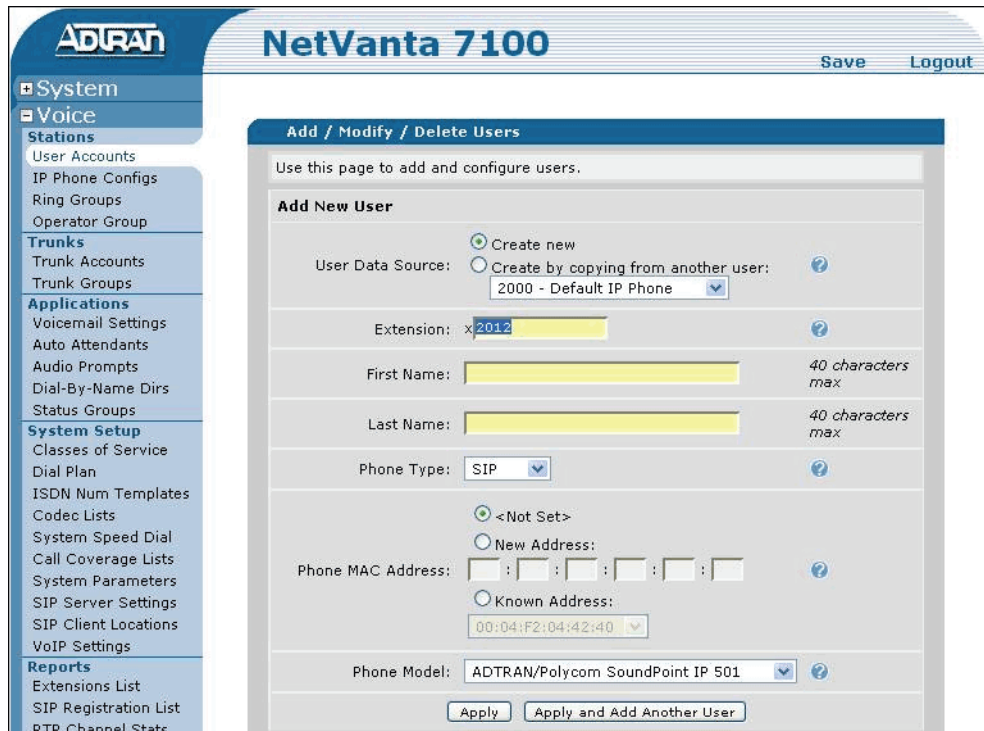
The new numbered option and its details appear in the **View/Delete** area.

8. Select **Apply** to complete this task.
9. Repeat Steps 2 through 5 for the remaining DHCP server pool.
10. Select **Save** at the top right of the current menu. A confirmation message appears if the save is successful. Select **OK** to close the window and return to the previous menu.

## Creating SIP Accounts

Create a Session Initiation Protocol (SIP) account for each phone to be installed. SIP accounts are created using the GUI.

1. Open a GUI session. If you need assistance, follow the steps in *Configuring the DHCP Server Settings* on page 1.
2. Select **User Accounts** from the **Voice** options on the left side of the menu to display the **Add/Modify/Delete Users** menu.



3. Enter the **Extension**, **First Name**, and **Last Name**. Leave the **Phone Type** as **SIP** and the **Phone MAC Address** as **<Not Set>**. This prevents the NetVanta server from attempting to generate a Polycom configuration file for this account.
4. Select **Apply** to complete this task.
5. Select **Save** at the top right of the current menu. A confirmation message appears if the save is successful. Select **OK** to close the window and return to the previous menu.

## Uploading Configuration Files

Included in the zipped installation file you received were several configuration files (refer to *Step 5* on page 6 for the list of configuration files). These files must be loaded into the ADTRAN directory on the NetVanta server. This can be accomplished using any FTP program.

1. If you haven't already done so, unzip the installation file provided by ADTRAN and save the files locally.
2. Make a copy of the *adtran\_000000000000.txt* file for each phone you are installing. Replace the zeros portion of the file name with the MAC address of the phone. The MAC address can be found on the label on the back of the phone, as well as on the phone's box.
3. Open the newly created file and edit it by following the instructions provided in the file.
4. If an **ADTRAN** directory does not already exist on your NetVanta server, create a directory titled **ADTRAN** using your FTP program.

5. Move the files created for each phone in *Step 2* on page 5, as well as the following list to the ADTRAN directory:

- adtran\_000000000000.txt
- iconpixmap.bmp
- language\_english.xml
- apadt12r1303.ebin
- btadt12r0204.ebin
- apadt6r1303.ebin
- btadt6r0204.ebin
- adtran\_phonebook.csv



*The file **adtran\_phonebook.csv** is a comma separated file that can be edited to hold information for up to 300 contacts. You can edit this file (using a spreadsheet application or text editor) prior to placing it on your NetVanta server. This allows the phone users to access the phone book via the **Directories** key on the phone.*



## Phone Setup

The final step in successfully installing an IP 700 Series phone on your network is to load the new configuration files on the phone. This is accomplished by connecting the phone to the NetVanta server and setting it to Factory Default. Once the phone reboots, it will load the new configuration files and be ready to use.

1. Connect the IP phone to one of the NetVanta switch ports. The phone buttons will illuminate, and after a moment the LCD will display the ADTRAN logo. At this point, the IP phone will begin running its self-test and the left-most soft key will display **Setup**.
2. Press the **Setup** soft key to enter setup mode.
3. At the password prompt, enter the default password **1234**.
4. Press **2** for **Phone Settings**.
5. Press **9** for **Reset**.
6. Select the **Factory** soft key.
7. Select the **Ok** soft key to reboot the phone.

As the phone reboots, the phone buttons will illuminate, and after a moment the LCD will display the ADTRAN logo. The IP phone will begin running its self-test. If the phone appears to reboot a second time, it may be due to an older version of firmware loaded on the phone. If the phone has an older version of firmware than what is detected on the server, it will download the new version and reboot.

Once the reboot is complete, the phone will register to the NetVanta server and be ready to use. You can differentiate a registered phone from an unregistered phone by the icon (see below) that appears on the idle screen.

	<i>Registered phone</i>
	<i>Unregistered phone</i>