

NETVANTA 640 SERIES

1700144G1

GETTING STARTED

Two configuration methods are available for your NetVanta 640 Series unit:

- Web-based graphical user interface (GUI)
- Command line interface (CLI)

The GUI lets you configure the main unit settings and provides online guidance and explanations for each setting. However, using the ADTRAN Operating System (AOS) CLI may be necessary for more advanced configurations.

Access the GUI

You can access the GUI from any Web browser on your network by following these steps:

- 1. Connect the unit to your PC, using an Ethernet cable connected to the ETH 1 port on the front of the unit.
- 2. Set your PC to obtain an IP address automatically using Dynamic Host Configuration Protocol (DHCP), or change your PC to a fixed IP address of 10.10.10.2. To change your PC's IP address, or to set the PC to use DHCP, navigate to Computer > Control Panel > Network Connections > Local Area Connection > Properties > IP (TCP/IP) and select either Use this IP address or Obtain an IP address automatically (this means you are using DHCP). If you are specifying an IP address, enter these parameters:

IP Address: 10.10.10.2 Subnet Mask: 255.255.255.0 Default Gateway: 10.10.10.1

You do not need to enter any domain naming system (DNS) server information. After the information is entered, select **Ok** twice, and close the Network Connections dialog box. If you cannot change the PC's IP address, you will need to change the unit's IP address using the CLI. (Refer to the next two sections for instructions.)

- 3. Enter the unit's IP address in your browser's address line. The default IP address is **10.10.10.1**, but if you changed the unit's IP address enter that address in the browser line.
- You will then be prompted for the user name and password (the default settings are admin and password).
- The initial GUI screen appears. You can access initial setup information by selecting Config Wizard from the menu on the left.



It is best to only use the Config Wizard for new installations because some existing settings can be lost or reset when using this wizard.

Access the CLI

Access the AOS CLI using the **CONSOLE** port or a Telnet session. To establish a connection to the unit's **CONSOLE** port, you need the following items:

- PC with VT100 terminal emulation software
- Straight-through serial cable with a DB-9 (male) connector on one end and the appropriate interface for your terminal or PC communication port on the other end



You can find VT100 terminal emulation software on most PCs by navigating to **Start** > **Programs** > **Accessories** > **HyperTerminal** > **HyperTerminal**. When you have opened a HyperTerminal session, enter the settings described in Step 4.

- Connect the DB-9 (male) connector of your serial cable to the CONSOLE port on the front panel of the unit.
- 2. Connect the other end of the serial cable to the terminal or PC.



Many PCs do not come with a standard serial port. A universal serial bus (USB) to serial adapter can be used instead. The drivers for the USB to serial adapter must be installed according to the manufacturer's instructions. If the USB to serial adapter is not properly installed on your PC, you will not be able to communicate with the AOS unit and you should seek support from the USB to serial adapter manufacturer.

- Insert the connector of the provided power cord into the power interface on the rear panel of the unit, and plug the cord into a standard electrical outlet. Refer to the NetVanta 640 Series Hardware Installation Guide (ADTRAN's Knowledge Base article 3436) available on ADTRAN's Knowledge Base at http://kb.adtran.com for more details.
- Once the unit is powered up, open a VT100 terminal session using the following settings: 9600 baud, 8 data bits, no parity bits, and 1 stop bit. Press < Enter> to activate the AOS CLI.
- Enter enable at the > prompt. Enter the enable password when prompted. The default password is password.

You can also access the CLI from a Telnet client. In order to do this, you must know the IP address of the AOS device. If you do not know the unit's IP address, you must use the **CONSOLE** port to access the CLI. To access the CLI using a Telnet client, follow these steps:

- 1. Connect the unit to your PC, using an Ethernet cable connected to the ETH 1 port on the front of the unit.
- 2. Open a Telnet client on your computer. You can access the Telnet client by navigating to Start > Run and entering telnet 10.10.10.1 (Windows® XP). If you are running Windows Vista, you will need to turn on the Telnet client before you access it. To do this, navigate to Start > Control Panel > Programs and Features > Turn Windows features on or off > Telnet Client Option and select OK. 10.10.10.1 is the default unit IP address. If you have changed your unit's IP address, you will need to enter that address.
- Enter enable at the > prompt and enter the enable password when prompted. The default password is password.

COMMON CLI COMMANDS

The following are common CLI commands and tips for getting started with the CLI.

- Entering a question mark (?) shows contextual help and options. For example, entering ? at the prompt
 will show all commands available from that prompt.
- To view interface statistics, enter show interface <interface type> <interface number>.
- To view the current configuration, enter show running-config.
- To view all the IP addresses currently configured, enter show ip interface brief.
- To view the AOS version, serial number, and other information, enter show version.
- To save the current configuration, enter write.

CONFIGURE THE UNIT'S IP ADDRESS



The configuration parameters used in the examples outlined in this document are for instructional purposes only. Replace all underlined entries (example) with your specific parameters to configure your application.

The following steps create an IP address and subnet mask for the ETH 1 port.

- At the # prompt, enter config terminal.
- At the (config)# prompt, enter interface gigabit-ethernet 0/1 to access the configuration parameters for the Gigabit Ethernet port located on the front of the unit.
- 3. Enter **ip address** 10.10.10.1 255.255.255.0 to assign an IP address to the Gigabit Ethernet port using a 24-bit subnet mask.
- 4. Enter no shutdown to activate the interface to pass data.

For more detailed information, visit www.adtran.com



- 5. Enter exit to exit the Gigabit Ethernet interface commands and return to the Global Configuration mode.
- 6. Enter ip route <u>0.0.0.0 0.0.0.0 192.168.1.254</u> to add a default route to the route table. <u>0.0.0.0</u> is the default route and the default subnet mask, and <u>192.168.1.254</u> is the next-hop IP address to which the AOS unit should send all of its traffic. You will need to enter the proper route, subnet mask, and gateway for your network. This information is typically provided by an Internet service provider (ISP) or local network administrator.
- 7. Enter **do write memory** to save the current configuration.

ENABLE TELNET USER LOGIN ACCESS

The following steps enable user login parameters for Telnet access by changing the password from the default (password) and enabling security login on Telnet lines.

- 1. Verify that the prompt of your unit displays (config)#.
- 2. Enter line telnet 0 4 to change the configuration parameters for the Telnet sessions.
- 3. Enter **login** to prompt users with a login prompt for Telnet access.
- 4. Enter password adtran to change the login password for the Telnet sessions.
- 5. Enter exit to return to the Global Configuration mode.
- 6. Verify that the prompt of your unit displays (config)#.
- 7. Enter do write memory to save the current configuration.

CONFIGURE YOUR APPLICATION

The applications you will need to configure vary by product and by network. Review the list of defaults for your unit before deciding what applications to configure. The following are some common applications that should be configured on startup. These are all available online at http://kb.adtran.com.

Configuring the Switchboard and Dial Plan in AOS (article 2130)	Configuring Voice Traffic over SIP Trunks in AOS (article 3395)
Configuring Enhanced ANI/DNIS Substitution in AOS (article 2509)	Configuring PRI Signaling for DSX-1 in AOS (article 3396)
Configuring Source and ANI Based Routing in AOS (article 2510)	



Important: For additional details on product features, specifications, installation, and safety, refer to the NetVanta 640 Series Hardware Installation Guide (ADTRAN's Knowledge Base article 3436) available on ADTRAN's Knowledge Base at http://kb.adtran.com.

NETVANTA 640 SERIES DEFAULTS

Feature	Default Value
IP Address	10.10.10.1
User Name	admin
Password	password
HTTP Server	Enabled
Event History	On
IP Routing	Enabled

RESTORING FACTORY DEFAULTS

On units that have a console port, you cannot restore the factory defaults, but must rather erase the device's configuration and then reconfigure the unit to operate correctly for your network. To erase the unit's current configuration, follow these steps:

- 1. Access the unit's CLI and enter **enable** at the > prompt.
- 2. Enter erase startup-config at the # prompt. The device will have a blank configuration upon reboot.
- Enter reload at the # prompt to begin restarting the device. When prompted to save configuration, enter no. When prompted to reboot, enter yes.
- Upon reboot, you will have to reconfigure the unit using the CONSOLE port. Follow the steps outlined here or in the technical note, <u>Accessing the Web Interface in AOS</u> (ADTRAN's Knowledge Base article 1788) available online at http://kb.adtran.com.