

NETVANTA 6410 ROUTER

P/N 17006410F1

GETTING STARTED

Two configuration methods are available for your NetVanta router:

- Web-based graphical user interface (GUI)
- ADTRAN Operating System (AOS) command line interface (CLI)

The GUI lets you configure the main unit settings and provides online guidance and explanations for each setting, and configuration wizards to help you get started. However, using the AOS CLI may be necessary for more advanced configurations.

Access the GUI

You may access the GUI from any web browser on your network by following these steps:

- Connect the router to your PC using the GIG 0/1 port on the back of the unit and an Ethernet cross-over cable.
- Set your PC to a fixed IP address of 10.10.10.2. To change your PC IP address, navigate to Computer >
 Control Panel > Network Connections > Local Area Connection > Properties > IP (TCP/IP) and
 select Use this 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 server (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.)

- Open a web browser and enter the unit's IP address in your browser address line as follows: http://10.10.10.1. The default IP address is 10.10.10.1, but if you had to change the unit's IP address using the CLI, 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 Setup Wizard from the menu on the left.

ACCESS THE CLI

Access the AOS CLI via the **CONSOLE** port, a Telnet session, or from the GUI. To establish a connection to the NetVanta router **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
- DB-9 to RJ-45 adapter



There are many terminal emulation applications available on the web. PuTTY, SecureCRT, and HyperTerminal are a few examples.

- Connect the DB-9 (male) connector of your serial cable to the CONSOLE port on the rear panel of the unit using the DB-9 to RJ-45 adapter included in the shipment.
- 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.

- Provide power to the unit as appropriate. Refer to the <u>NetVanta 6410 Hardware Installation Guide</u> at https://supportforums.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, 1 stop bit, and no flow control. Press < Enter> to activate the AOS CLI.
- Enter enable at the > prompt and enter the Enable mode 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:

- Connect the AOS device's GIG 0/1 port to your computer's Ethernet interface using an Ethernet crossover cable.
- Using a Telnet client on your computer, Telnet to 10.10.10.1, the default unit IP address. If you have changed your unit's IP address, you will need to enter that address.
- 3. Log into the unit using the default login (admin) and password (password).
- 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 view the routing table, enter **show ip route**.
- 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. Please replace all underlined entries (example) with your specific parameters to configure your application.

The following steps create an IP address (10.10.10.1 255.255.255.0) for Ethernet port 0/1. If you are not sure what IP address to assign, please contact your network administrator.

- 1. At the # prompt, enter config terminal.
- At the (config)# prompt, enter interface gig 0/1 to access the configuration parameters for the GIG 0/1
 port located on the rear of the unit.

For more detailed information, visit www.adtran.com



- Enter ip address 10.10.10.1 255.255.255.0 to assign an IP address to the GIG 0/1 port using a 24-bit subnet mask.
- 4. Enter **no shutdown** to activate the interface to pass data.
- 5. Enter exit to exit the Ethernet interface commands and return to the Global Configuration mode.
- 6. Enter ip route 0.0.0.0 0.0.0.0 192.168.1.254 to add a default route to the route table. 0.0.0.0 is the default route and the default subnet mask, and 192.168.1.254 is the next-hop IP address to which the AOS router 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.
- 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 require a password 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 on <u>ADTRAN's Support Forum.</u>

Configuring Internet Access (Many to One NAT) with the Firewall Wizard in AOS (video article 2185)	Configuring DHCP Server in AOS (article 2149)
Configuring Port Forwarding in AOS (video article 2291)	



Important: For additional details on product features, specifications, installation, and safety, refer to NetVanta 6410 Hardware Installation Guide at https://supportforums.adtran.com..

NETVANTA 6410 SERIES DEFAULTS

Feature	Default Value
IP Address	10.10.10.1
Username	admin
Password	password
Enable 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> at https://supportforums.adtran.com.

THIRD-PARTY SOFTWARE

The software included in this product contains copyrighted software that is licensed under the GNU General Public License (GPL). For a list of third-party software and their licenses, go to http://www.adtran.com/software/
LULA. You can obtain the complete corresponding source code of such software components from ADTRAN for a period of three years after our last shipment of this product by sending a money order or check for \$5 to:

ADTRAN, Inc., P.O. Box 933638, Atlanta, GA 31193-3638

Please write GPL Source for product NetVanta 6410 in the memo line of your payment.

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