

NETVANTA 1230 SERIES FAST ETHERNET SWITCH

P/N 1700594G1, 1700595G1, 1700598G1, 1700599G1, 1700599G2

GETTING STARTED

Two configuration methods are available for your NetVanta unit:

- 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. However, using the 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 any Ethernet switchport on the front of the unit and an Ethernet cable.
2. Set your PC to a fixed IP address of **10.10.10.2**. To change your PC's 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 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. 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.
4. You will then be prompted for the user name and password (the default settings are **admin** and **password**).
5. 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 or a Telnet session. To establish a connection to the NetVanta unit **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 > Communications > HyperTerminal > HyperTerminal**. When you have opened a HyperTerminal session, enter the settings described in Step 4.*

1. Connect the DB-9 (male) connector of your serial cable to the **CONSOLE** port located on the either the front or rear panel of the unit.
2. Connect the other end of the serial cable to the 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.

3. Provide power to the unit as appropriate. Refer to the [NetVanta 1230 Series Fast Ethernet Switch Hardware Installation Guide](http://kb.adtran.com) (ADTRAN's Knowledge Base article 2517) online at <http://kb.adtran.com> for more details.
4. 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.
5. 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:

1. Connect the unit to your PC using any Ethernet switchport on the front of the unit and an Ethernet cable.
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.
3. 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**.

REDUNDANT POWER SUPPLY

The NetVanta 1238 PoE Redundant Power Supply (RPS) (P/N 1700599G2) switch provides a redundant power supply receptacle on the rear panel of the unit. The NetVanta 1110 RPS (P/N 1700531G1) is housed in a 1U high rack mountable metal enclosure and includes a universal AC power supply. The NetVanta 1110 RPS provides a redundant +12 VDC for powering the switch processor and hardware and -48 VDC for PoE backup.

POWER OVER ETHERNET

The NetVanta 1230 PoE Series (P/Ns 1700595G1, 1700599G1, 1700599G2) are Power over Ethernet (PoE) switches. PoE switches provide the ability to detect attached powered devices (PDs) and deliver 48 VDC to the PD via existing Ethernet cabling. The NetVanta 1230 PoE Series is fully compliant with the IEEE 802.3af PoE standards. By default, the PoE switches discover and provide power to IEEE-compliant PDs.

To disable power detection and supply, use the **power inline never** command in the CLI. To disable power detection and supply from the GUI, select the **Ports** page. Then select a single port from the list (e.g., **switchport 0/1**). This will bring up the port detail page for **switchport 0/1**. On this page, there is a check box to disable power detection.

CONFIGURE THE UNIT'S IP ADDRESS

The following steps create an IP address and subnet mask for the virtual local area network (VLAN) interface **vlan 1**. If you are not sure what IP address to assign, please contact your network administrator.

1. At the **#** prompt, enter **config terminal**.
2. At the **(config)#** prompt, enter **interface vlan 1** to access the configuration parameters for the VLAN interface.
3. Enter **ip address 10.26.12.12 255.255.255.0** to assign an IP address to the VLAN interface using a 24-bit subnet mask.
4. Enter **no shutdown** to activate the VLAN interface to pass data.
5. Enter **exit** to return to the Global Configuration mode.
6. Enter **ip default-gateway 192.168.1.254** to add a default gateway. **192.168.1.254** is the next-hop IP address to which the AOS unit should send traffic not destined for the local network. You will need to enter the proper 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.



*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.*

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 on ADTRAN's Knowledge Base at <http://kb.adtran.com>.

Configuring Layer 3 Switching in AOS (article 3070)	Configuring a Port Scheduler in AOS (article 3054)
Configuring Hardware ACLs in AOS (article 3088)	Configuring Port Mirroring in AOS (article 2180)
Configuring DoS Protection in AOS (article 3113)	Enabling Persistent Debug Logging in AOS (article 2623)
Configuring Ethernet Switch QoS and CoS in AOS (article 1489)	Understanding PoE and Power Management in AOS (article 2522)
Configuring DHCP Server in AOS (article 2149)	



Important: For additional details on product features, specifications, installation, and safety, refer to [NetVanta 1230 Series Fast Ethernet Switch Hardware Installation Guide](#) (ADTRAN's Knowledge Base article 2517) online at <http://kb.adtran.com>.

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.
3. Enter **reload** at the # prompt to begin restarting the device. When prompted to save configuration, enter **no**. When prompted to reboot, enter **yes**.
4. Upon reboot, you will have to reconfigure the unit using the **CONSOLE** port. Follow the steps outlined here or in the technical note, [Accessing the Web Interface in AOS](#) (ADTRAN's Knowledge Base article 1788).