NETVANTA 1235P ACTIVREACH ETHERNET SWITCH

P/N 1700595G10

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 of the ports 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 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, Telnet, or SSH 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

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

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

> **NOTE**
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> *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 1235P Hardware Installation Guide* at https://supportforums.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 or SSH 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 or SSH client, follow these steps:

1. Connect the unit to your PC, using an Ethernet cable connected to the GIG 0/1 Gigabit Ethernet port on the rear of the unit.
2. Open a Telnet or SSH client on your computer and enter **10.10.10.1**. If you have changed your unit's IP address, you will need to enter that address.
3. For SSH, log into the unit using the default login (**admin**) and password (**password**). For Telnet, only the default password (**password**) is required.
4. Enter **login** to require a password for Telnet or SSH access.
5. 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 interfaces** *<interface type> <interface number>*.
- To view the current configuration, enter **show running-config**.
- To view all the IP addresses currently configured, enter **show ip interfaces brief**.
- To view the AOS version, serial number, and other information, enter **show version**.
- To save the current configuration, enter **write**.

ACTIVREACH ETHERNET

The NetVanta 1235P has 24 10/100/1000Base-T Ethernet ports that support both standard and ActivReach Ethernet. When used in conjunction with the NetVanta ActivReach Media Converter (P/N 1702595G12) or the NetVanta ActivReach Wall Plate Media Converter (1702595F17), ActivReach Ethernet is converted to standard 10/100Base-T over 1-, 2-, and 4-pair infrastructure wiring over a variety of cables at distances beyond 100 meters. The NetVanta ActivReach Wall Plate Media Converter also supports 1-pair ActivReach with optional voice passthrough connections via separate front and back RJ-11 jacks.

For applications requiring connection into a single RJ-21, a hydra interconnect cable (P/N 1702595G14) can be used. This cable is suitable for 10 Mbps applications only. Refer to the *NetVanta 1235P Hardware Installation Guide* at https://supportforums.adtran.com or http://www.adtran.com/activreach-help for more information."

POWER OVER ETHERNET

The NetVanta 1235P is a Power over Ethernet (PoE) switch. PoE switches provide the ability to detect attached powered devices (PDs) and deliver power to the PD via existing Ethernet cabling. The NetVanta 1235P is fully compliant with the IEEE 802.3af PoE standard. By default, the PoE switches discover and provide power to IEEE-compliant PDs.

ActivReach Ethernet supports Power over Ethernet (PoE) over a single pair. When used in conjunction with the NetVanta ActivReach Media Converter (P/N 1702595G12), power can be either terminated at the Media Converter or supplied to a downstream device.

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

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 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 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 a service provider or local network administrator.
7. Enter **do write memory** to save the current configuration.

> NOTE
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> *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 online on ADTRAN's Support Community.

Configuring Layer 3 Switching in AOS	Configuring a Port Scheduler in AOS
Configuring Hardware ACLs in AOS	Configuring Port Mirroring in AOS
Configuring DoS Protection in AOS	Enabling Persistent Debug Logging in AOS
Configuring Ethernet Switch QoS and CoS in AOS	Understanding PoE and Power Management in AOS
Configuring DHCP Server in AOS	Configuring NetVanta Switches for a VoIP Network

NOTE

Important:
- *For additional details on product features, specifications, installation, and safety, refer to the NetVanta 1235P Hardware Installation Guide at https://supportforums.adtran.com.*
- *For more information and help installing your NetVanta ActivReach product, go to http://www.adtran.com/activreach-help.*

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

For more information on restoring factory defaults, refer to the guide *Restoring an AOS Device to Factory Default* available online at https://supportforums.adtran.com.