

Equipment Required

- Category 5 - UTP cable for connecting the system to the existing network.
- VT100 terminal or PC with VT100 emulation software.
- DB-9 (male) to DB-9 (female) straight-through serial cable for configuring the unit.



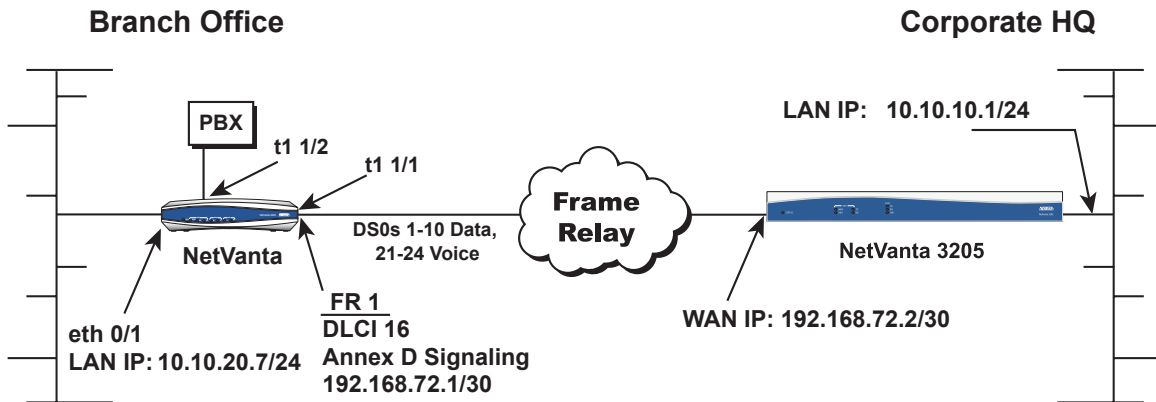
NOTE

This quick configuration guide provides step-by-step instructions for configuring your application. The configuration scripts are available on the ADTRAN OS Documentation CD.

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

Network Diagram

Connection Diagram



Configure the Unit

The NetVanta may be initially accessed and managed either via a console session or through a Telnet session. See *Initiate a Console Session* on page 2 for instructions. Initiating a Telnet session requires using a hub and two Ethernet cables (one for the PC and one for the unit). The default Ethernet IP address is 10.10.10.1. Refer to *Configure a Telnet Session* on page 4 to change Telnet session settings.

Initiate a Console Session

1. Connect a VT100 terminal (or PC with VT100 emulation software) to the NetVanta **CONSOLE** port using a DB-9 (male) to DB-9 (female) straight-through serial cable.
2. Configure the COM port with the following parameters:
 - Data Rate: 9600
 - Data Bits: 8
 - Parity Bits: None
 - Stop Bits: 1
 - Flow Control: None
3. Open a VT100 terminal session. (Please refer to the appropriate VT100 terminal software documentation for detailed instructions.)
4. Press the **<Enter>** key.
5. Enter **enable** at the **>** prompt.
6. Enter the password when prompted. The default password is **password**.
7. You are now at the **#** prompt. At the **#** prompt, enter **config terminal** to enter the Global Configuration mode.

Configure the Ethernet Port Parameters

Typically you will have a master unit at the campus location, and a slave unit at a remote location. The following sections describe how to set up and configure both the master and slave units.

1. At the **(config)#** prompt, enter **interface eth 0/1** to access the configuration parameters for the Ethernet port located on the rear panel of the unit.
2. Enter **ip address 10.10.20.7 255.255.255.0** to assign an IP address to the Ethernet port using a 24-bit subnet mask.



If you are accessing the NetVanta via Telnet, once you change this IP address, you will lose connection to the NetVanta. You must change the IP address of your PC before you can proceed.



ADTRAN recommends that you set the Ethernet speed and duplex to match the switch or hub into which it is plugged.

For example: `(config-eth 0/1)#speed 10`
 `(config-eth 0/1)#half-duplex`

3. Enter **no shutdown** to activate the interface to pass data.
4. Enter **exit** to exit the Ethernet interface commands and return to the Global Configuration mode.



*The NetVanta Network Interface Modules (NIMs) use a **slot/port** notation for interface identification. All non-modular interfaces built into the base unit (e.g., the Ethernet port) are identified using **0** as the slot number.*

Configure the SHDSL Network Interface

For the Master Unit:

1. At the **(config)#** prompt, enter **interface shdsl 1/1** to activate the interface configuration mode for the SHDSL network interface.
2. Enter **equipment-type co** to configure the unit to source timing into the SHDSL network connection. Use this option in a campus environment when operating two SHDSL network interface modules (NIMs) back-to-back.
3. Enter **linerate 2312** to define the line rate for the SHDSL interface for the CO side.
4. Enter **no shutdown** to activate the SHDSL interface.
5. Enter **exit** to return to the Global Configuration mode.

For the Slave Unit:

1. At the **(config)#** prompt, enter **interface shdsl 1/1** to activate the interface configuration mode for the SHDSL network interface.
2. Enter **equipment-type cpe**. Use this option when interfacing directly with your service provider or when acting as the slave NIM in a campus environment.
3. Enter **no shutdown** to activate the SHDSL interface.
4. Enter **exit** to return to the Global Configuration mode.

Configure the Virtual PPP Interface

The following steps show how to configure a PPP virtual interface to the corporate router for the master unit. Enter **interface fr 1** to create a Frame Relay virtual interface labeled 1.

1. At the **(config)#** prompt, enter **interface ppp 1** to create a PPP virtual interface labeled 1.
2. Assign an IP address to the PPP endpoint using a 30-bit mask.
 - Master: Enter **ip address 192.168.72.2 255.255.255.252**
 - Slave: Enter **ip address 192.168.72.1 255.255.255.252**
3. Enter **no shutdown** to activate the PPP interface.
4. Enter **exit** to return to the Global Configuration mode.

Create the Cross-Connect

For both the master and slave units, enter **cross-connect 1 shdsl 1/1 ppp 1** to connect the SHDSL network connection (shdsl 1/1) to the virtual PPP interface (ppp 1).

Configure the Routes

Depending on your network setup, configure your unit's static route to the far side/Internet access at the local site beginning at the **(config)#** prompt.

Set up the default route (i.e., address of internet router).

- Master: **ip route 10.10.20.0 255.255.255.0 192.168.72.1**
- Slave: **ip route 0.0.0.0 0.0.0.0 192.168.72.2**

Configure a Telnet Session

The following steps show how to access the Telnet configuration parameters and change the password. The default password for initializing a Telnet session is **password** (all lowercase). For security purposes, change the password to something unique. For this example, replace the underlined **word** with a password of your choosing. The NetVanta supports five Telnet sessions (0 through 4).

1. Verify that the prompt of your unit displays **(config)#**.
2. Enter **line telnet 0 4** to change the configuration parameters for the Telnet session.
3. Enter **password word** to change the login password for the Telnet session.
4. Enter **exit** to return to the Global Configuration mode.



*An enable security mode password must be defined before configured Telnet sessions are activated. See **Set the Enable Security Mode Password** for information on password configuration.*

Set the Enable Security Mode Password

1. Verify that the prompt of your unit displays **(config)#**.
 2. Enter **enable password word** to set the Enable Security mode password.
- or**
3. Enter **enable password md5 word** to encrypt the enable password using MD5 encryption.



The Enable Security mode passwords are case sensitive.

Save the Configuration

1. Verify that the prompt of your unit displays **(config)#**.
2. Enter **exit** to leave configuration mode.
3. Enter **copy running-config startup-config** to save the current configuration to memory. This command may be abbreviated as **copy run start**.
4. Enter **exit** to close the configuration session.

Complete the Installation

The NetVanta is now configured and operational. Complete the installation by connecting the appropriate cables to the networks. Please refer to the *NetVanta Hardware Installation Guide* for details on pinouts and cabling.