

To operate the Netropy N90 Network Emulator through its browser-based GUI, the dedicated Ethernet management interface must first be configured with an appropriate IP address and subnet mask. For convenience, the management interface comes pre-configured with an IP address of 10.0.0.10, and is accessible from a directly-connected host on the 10.0.0.0/255.0.0.0 subnet. The IP address and subnet mask of the management interface can be changed either through the Netropy GUI or through the command-line interface accessed via the serial console.

Preparation

Management of the Netropy Network Emulator through the GUI requires a PC running a web browser with Flash version 10 or later installed.

Initial configuration of the management interface requires either:

- ▶ a PC running a supported web browser that can be configured and placed on the 10.0.0.0/255.0.0.0 network.
- ▶ a PC with an RS-232 serial port running terminal emulation software such as Hyper-Terminal or PuTTY.

Hardware Installation

The Netropy N90 is designed for installation in a standard 19" rack. See the *Netropy N90 Hardware Guide* for rack-mount installation instructions.

Plug a standard power cord (a U.S. power cord is supplied with the unit) into the Netropy N90 and turn on the power. The system will be available for use within 90 seconds.

IP Address Configuration via the Netropy GUI

- 1 Configure a PC running a supported web browser with an IP address on the 10.0.0.0/255.0.0.0 subnet.
- 2 Connect an Ethernet cable between the PC and the MGMT port on the front of the Netropy N90.
- 3 Open the browser on the PC and enter `http://10.0.0.10` in the address bar.
- 4 Review the License Agreement. The Netropy GUI will be displayed once the License Agreement is accepted.
- 5 Click on the Administration link at the top of the page and select the IP Address tab. Set the IP address, subnet mask, and optional default gateway for the management interface, then click the *Apply Changes* button.
- 6 After the management interface has been configured, use the Ethernet cable to connect the MGMT port of the Netropy N90 to the management network.

IP Address Configuration via the Serial Console

1 Using the provided RJ-45 to DB-9 cable, connect the serial port of a PC running terminal emulation software to the CONSOLE port of the Netropy N90. Set the serial port parameters to 9600 baud, 8 bits, no parity, 1 stop bit, and disable flow control. For more details on connecting to the serial console, see the *Netropy N90 Hardware Guide*.

2 Press [ENTER] to display a login prompt. At the prompt, log in as "admin". Initially, there is no password.

```
netropy login: admin
```

3 Use the following commands to set the IP address, netmask, and default gateway of the Netropy N90 management interface:

```
mgmt set addr <ip-address> netmask <mask>
mgmt set gw <default-gateway>
```

IP addresses and subnet masks are entered in dotted-decimal format. For example:

```
mgmt set addr 192.168.1.1 netmask 255.255.255.0
```

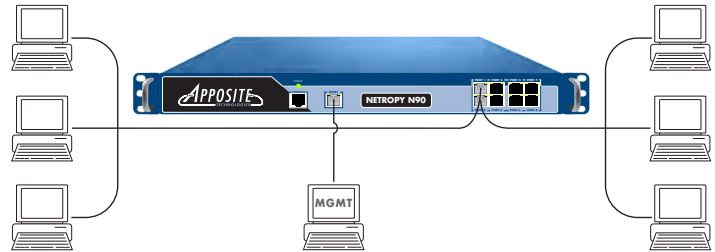
4 Once the management interface has been configured, use an Ethernet cable to connect the MGMT port of the Netropy N90 to the management network. Open a browser and enter the IP address of the MGMT interface in the address bar. The Netropy End User License Agreement will be displayed.

5 Review the License Agreement. The Netropy GUI will be displayed once the License Agreement is accepted.

Operation

The Netropy N90 includes four separate Emulation Engines, each of which acts as an independent emulation system. Engine 1 runs between Ports 1 and 2, Engine 2 runs between Ports 3 and 4, Engine 3 runs between Ports 5 and 6, and Engine 4 runs between Ports 7 and 8.

To use Engine 1, install the Netropy N90 between two LAN segments connected to Ports 1 and 2 as shown in the diagram.



On the GUI, select Engine 1. Click on the arrow labeled "Unnamed Path" to bring up the Path Configuration window. Change the name of the path if desired.

Click on the left-side WAN Access icon to configure the bandwidth, background utilization, queuing, and framing overhead for packets entering the WAN from Port 1, and optionally, for packets exiting the WAN to Port 1. Click on the right-side WAN Access icon to configure these parameters for packets entering and exiting the WAN from Port 2.

Click on the WAN icon to set the Delay and Jitter, Loss, and other parameters of the WAN cloud or line.

When complete, press the *Apply Changes* button and close the Path Configuration window to return to the main screen. Press the *Emulation On* button to start the Emulation Engine.

To emulate multiple paths, each with their own independent emulation parameters, click *Add Path* to create additional paths, configure each path as described above, then click *Packet Classifier* to direct traffic onto individual paths by IP address range, VLAN, or other packet field.

For additional details on installation or configuration, refer to the *Netropy User's Guide* or click the Help link at the top of the GUI.

REGISTRATION

For access to firmware upgrades, documentation, and other support materials, register your unit on-line at:

<http://www.apposite-tech.com/register.html>.