

Understanding the CLI and NSM

M-series and MX-series devices are routers that have the JUNOS software installed as the operating system. With the JUNOS software you use the command-line interface (CLI) to access an individual router (which is called a device in NSM)—whether from the console or through a network connection. The CLI is a JUNOS software-specific command shell that runs on top of a UNIX-based operating system kernel. The CLI is a straightforward command interface you can use to monitor and configure a router. You type commands on a single line, and the commands are executed when you press the Enter key. For more information on the CLI, see the *JUNOS CLI User Guide*.

Network and Security Manager (NSM) is a software application that centralizes control and management of your Juniper Networks devices. NSM is a three-tier management system made up of the following:

- A user interface (UI)
- Management system
- Managed devices

The devices process your network traffic and are the enforcement points that implement your policies. The UI and management system tiers are software-based so you can deploy them quickly and easily. Because the management system uses internal databases for storage and authentication, you do not need LDAP or an external database. For more information about NSM architecture, see the technical overview in the *Network Security Manager Administration Guide*.

With NSM you can manage most of the parameters that you can configure through the CLI. Although the configuration screens rendered in NSM look different, the top-level configuration elements essentially correspond to commands in the CLI.

Typically, M-series and MX-series devices are managed individually using the CLI. The advantage of using NSM is that you can centralize status monitoring and administration of the configurations of a network of M-series and MX-series devices.

Related Topics

- NSM and Device Management Overview
- Comparing the CLI To the NSM UI
- NSM Services Supported for M-series and MX-series Devices
- How NSM Works with the CLI and Distributed Data Collection
- Device Schemas
- Communication Between a Device and NSM

