CHAPTER 1

Cisco 6200 Manager Overview

This chapter provides the following information about the Cisco 6200 Manager:

- Description
- Element Management
- Feature Summary

1.1 Description

The Cisco 6200 Manager is a Java-based element management application that is Y2K compliant. An element is a device on the network, such as a Cisco 6200 digital subscriber line access multiplexer (DSLAM).

There are two components to the Cisco 6200 Manager—a server process application and a graphical user interface (GUI) client application.

The server process application exchanges data between Cisco 6200 DSLAMs and the GUI client. It also displays log messages, which can help you troubleshoot the Cisco 6200 DSLAM. (See Figure 1-1.) Each manager server process supports up to 20 Cisco 6200 DSLAMs.

The GUI client application allows you to configure and monitor Cisco 6200 DSLAMs. From each client application, you can access multiple manager server process applications. Up to three clients can simultaneously access a server process application.

The Cisco 6200 DSLAM is a central office (CO)-grade multiplexer that supports up to 80 asymmetric digital subscriber line (ADSL) ports. The Cisco 6200 sends and receives subscriber data over subscribers' copper telephone lines, concentrating all traffic onto a single 155-Mbps OC-3c or STM-1 trunk for transport to the Internet or the enterprise intranet.

The Cisco 6200 DSLAM is part of the Cisco 6200 family—an integrated set of digital subscriber line (DSL) products that provide end-to-end service, carrying data between a subscriber's home or office, the telephone CO, and the networks beyond.

For more information about the Cisco 6200 DSLAM, see the Cisco 6200 User Guide.

Figure 1-1 Sample Server Process Screen

MS server	×
o 1 - 1/3	
*****ca6200.cisco.com/172.27.148.150 Slot Cnf type changed 1/4	
*****ca6200.cisco.com/172.27.148.150 Slot type changed 1/5	
*****ca6200.cisco.com/172.27.148.150 Slot Cnf type changed 1/5	
*****ca6200.cisco.com/172.27.148.150 slotAlarmLevelChngCounter changed from 0	t
o 233 - 1/5	
*****ca6200.cisco.com/172.27.148.150 SubscriberChngCounter changed 1/5	
*****ca6200.cisco.com/172.27.148.150 Slot type changed 1/6 *****ca6200.cisco.com/172.27.148.150 Slot Cnf type changed 1/6	
*****ca6200.cisco.com/172.27.148.150 Slot Cnf type changed 1/6	
*****ca6200.cisco.com/172.27.148.150 slotAlarmLevelChngCounter changed from 0	t
o 4 - 1/6	
*****172.27.32.165/172.27.32.165 Slot type changed 1/1	
*****172.27.32.165/172.27.32.165 Slot Coff type changed 1/1	
*****172.27.32.165/172.27.32.165 slotAlarmLevelChngČounter changed from 0 to 2	2
- 1/1	
*****172_27.32.165/172.27.32.165 SubscriberChngCounter changed 1/1	
*****ca6200.cisco.com/172.27.148.150 SubscriberChngCounter changed 1/6	
*****172.27.32.165/172.27.32.165 Slot type changed 1/2	
*****172.27.32.165/172.27.32.165 Slot Coff type changed 1/2	
*****172.27.32.165/172.27.32.165	
*****172.27.32.165/172.27.32.165 Slot Cnf type changed 1/5	
*****172.27.32.165/172.27.32.165 slotAlarmLevelChngCounter changed from 0 to 2	
- 1/5	_
*****172.27.32.165/172.27.32.165 SubscriberChngCounter changed 1/5	4998
	• 64

1.2 Element Management

The Cisco 6200 Manager client allows you to configure and monitor multiple Cisco 6200 DSLAMs. The client application can access server process applications running on multiple PCs. In this way, the Cisco 6200 Manager can be used to configure and monitor all the Cisco 6200 DSLAMs in your networks.

You can also configure Cisco 6200 DSLAMs by using the Cisco IOS command line interface (CLI). Tasks that are supported by the CLI, but not the Cisco 6200 Manager, include

- Batch configuring of multiple ports
- Changing the parameters for an ADSL modem (such as line rate and the transmit line build-out)

- Setting the Cisco 6200 IP address resolution
- Viewing or printing out the complete configuration settings for a DSLAM

For more information about the Cisco IOS CLI command descriptions, see the *Cisco 6200* User Guide.

Figure 1-2 shows the interconnections between the Cisco 6200 management processor and the Cisco 6200 Manager application.



GUI client Server process Cisco 6200 DSLAMS Service provider management network Each server can support up to 20 DSLAMS

C6200 manager applications

1.3 Feature Summary

You can use the Cisco 6200 Manager to configure cards and ports, provision subscribers, monitor performance, identify faults, and view alarm status.

The Cisco 6200 Manager allows you to conduct many configuration tasks, including

- Provision cards—You can configure or preconfigure each card in the Cisco 6200 chassis.
- Provision subscribers—You can add and delete subscribers. In addition, you can assign upstream and downstream line rates for each subscriber.

Note The term "upstream" means data travels from the customer premises equipment (CPE) to the Cisco 6200; "downstream" means data travels from the Cisco 6200 to the CPE.

The Cisco 6200 Manager allows you to monitor performance and faults as well as test DSLAMs. The software notifies you of a problem by means of an alarm status information display that appears in all key windows.

Among the monitoring and testing features are

- Performance statistics—The Cisco 6200 Manager collects ATM cell counts to help you evaluate traffic flow and DSLAM performance (as indicated by error count).
- Line and network trunk faults—You can monitor many types of faults, such as loss of signal (LOS) and loss of framing (LOF)
- Cisco 6200 DSLAM fault conditions—The system reports management processor card (MPC) power failure and system clock failures. It also reports situations involving multiple SONET faults and loss of synchronization SONET faults.
- Testing—You can test the line quality for each subscriber port. The software allows you to specify a time interval and a pass/fail bit error threshold for each test.