

CHAPTER 28 : Network Management: SNMP

Solutions to Selected Review Questions

Review Questions

1. *Performance management* monitors and controls the network to ensure that it is running as efficiently as possible.
2. The functions performed by a network management system can be divided into five broad categories: **configuration management**, **fault management**, **performance management**, *security management*, and **accounting management**.
3. *Security management* is responsible for controlling access to the network based on the predefined policy.
4. *Fault management* supervises the operation of the network, which depends on the proper operation of each individual component and its relation to other components.
5. The four measurable quantities in performance management are *capacity*, *traffic*, *throughput*, and *response time*.
6. Configuration management can be divided into two subsystems: *reconfiguration* and **documentation**.
7. The *configuration management* system updates information about the status of each entity and its relation to other entities.
8. *Network management* is defined as monitoring, testing, configuring, and troubleshooting network components to meet a set of requirements defined by an organization.
9. *Accounting management* is the control of users' access to network resources through charges. Under accounting management, individual users, departments, divisions, or even projects are charged for the services they receive from the network.
10. A fault management system has two subsystems: *reactive fault management* and *proactive fault management*.

Exercises

14.

30 15	sequence, length
43 04 00 00 2E E0	TIME TICK, length, value (1200)
02 04 00 00 38 E4	INTEGER, length, value (14564)
06 07 01 03 06 01 02 01 07	Object ID, length, value (1.3.6.2.1.7)

18.

30 43	sequence, length
30 41	sequence, length
02 04 00 00 09 29	INTEGER, length, value (2345)
04 08 43 4F 4D 50 55 54 45 52	OCTET STRING, length, value (COMPUTER)
41 04 00 00 01 59	counter, length, value (345)
30 29	sequence, length
02 04 00 00 04 63	INTEGER, length, value (1123)
04 04 44 49 53 4B	OCTET STRING, length, value (DISK)
41 04 00 00 05 96	counter, length, value (1430)
30 15	sequence, length
02 04 00 00 0D 80	INTEGER, length, value (3456)
04 07 4D 4F 4E 49 54 4F 52	OCTET STRING, length, value (MONITOR)
41 04 00 00 09 09	counter, length, value (2313)