# **Network Management**

Prof Brijendra Singh Department of Computer Science, Lucknow University, Lucknow The objective of network management is to meet the requirements of a network which includes availability, real-time, operational performance, and Quality of Service at a reasonable cost.

Network Management can be defined as OAM and P (Operation, Administration, Maintenance and Provisioning) of Network and services.

#### **Network Management**

- \* Network management software,
- \* Clients, servers, managers and agents,
- \* Simple Network Management Protocol

Any complex systems requires monitoring and control.

Management involved the deployment, integration and coordination of devices to monitor, test, poll, configure, analyse, evaluate, and control the network and its components.

### **Performance Management**

The goal is to quantify, measure, report, analyse and control the utilisation or throughput of different network components.

Performance management of computer network comprises two broad functional categories - monitoring and controlling.

# Fault Management

To maintain proper operation of complex network, care must be taken that system as a whole, and each essential component individually, are in proper working order.

The goal is to log, detect, and respond to fault conditions in the network.

# **Configuration Management**

The goal is to allow network manager to track which devices are on the managed network and the hardware and software configurations of these devices.

Configuration management is concerned with initialising a network and gracefully down part or all of the networks.

#### Accounting Management

Accounting management allows the network manager to specify log and control uses and device access to network resources.

Usage quotas, usage-based changing, allocation of resources and privileges all fall under accounting.

#### Security Management

Security management is concerned with information protection and access control facilities.

The goal of security management is to control access to network resources according to well defined policy.

#### **REFERENCE**:

Book: Network Security and Management

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