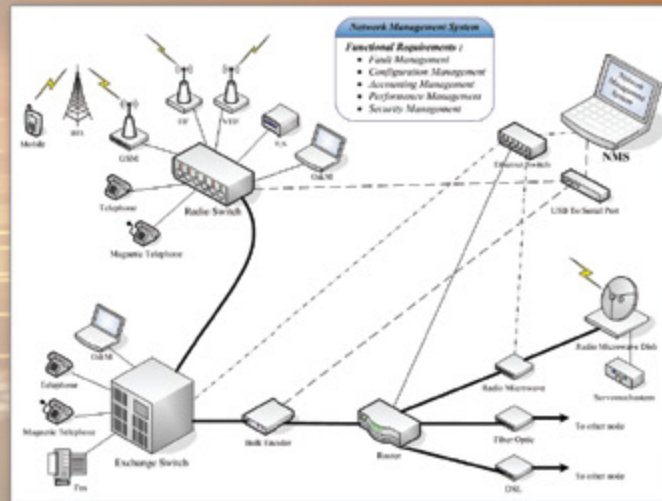


Functional Areas of Network Management System



Functional Areas of Network Management System

In practice, there is a variety of graphical tools for handling and analysing the alarm situation in the network. For example, graphical viewers can be used to view the alarms, and detailed information on each alarm can be found from an alarm manual. There are also applications for making searches of the alarms in the database, and for analysing the alarm offline.

3. Configuration Management

The goal of configuration management is to monitor network and system configuration information so that the effects on network operation of various versions of hardware and software elements can be tracked and managed.

Configuration management maintains an up-to-date information about the operation and configuration status of the network elements in the network. Also included is the management of the radio network, software and hardware management of the network elements and time synchronisation operations.

4. Security Management

Security management's purpose is to control access to network resources according to local guidelines so that the network cannot be sabotaged (intentionally or unintentionally) and sensitive

information cannot be accessed by those without appropriate authorisation. A security management subsystem, for example, can monitor users logging on to a network resource, refusing access to those who enter inappropriate access codes.

Security management subsystems work by partitioning network resources into authorised and unauthorised areas. For some users, access to any network resource is inappropriate, mostly because such users are usually company outsiders. For other (internal) network users, access to information originating from a particular department is inappropriate. Access to human resource files, for example, is inappropriate for most users outside the human resource department.

Security management subsystems perform several functions. They identify sensitive network resources (including systems, files, and other entities) and determine mappings between sensitive network resources and user sets. They also monitor access points to sensitive network resources and log inappropriate access to sensitive network resources.

5. Accounting Management

Accounting management's function is to measure network-utilisation parameters so that individual or group uses on the network can be regulated appropriately. Such regulation minimises network problems (because network resources can be apportioned based on resource capacities) and maximises the fairness of network access across all users.