



Network Management

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Network management

Network management is the procedure of administering, managing and working a data network using a network management system. Current network management systems use software and hardware to constantly collect and analyse data and push out configuration changes for increasing performance, reliability, and security.

It involves configuring monitoring and possibly reconfiguring components in a network with the goal of providing optimal performance, minimum downtime, proper security, accountability and flexibility.

Features

There are various features of network management

Network automation

One defining feature of a modern network management system is network automation. This is the procedure of automating the configuring, handling, testing, deploying, and operating of physical and virtual devices inside a network. Network service availability increases when everyday network tasks and functions are automated and repetitive processes are controlled and managed automatically.

Network administration

Network administration encompasses tracking network resources, including switches, routers, and servers. It also includes performance monitoring and software updates.

Network Operation

This contains smooth network functioning as created and intended, including close monitoring of activities to quickly and effectively address and fix problems as they occur and preferably even before users are aware of the problem.

Network assurance

Network assurance features are often included in modern network management systems. These features help improve network performance, customer experience, and security. Assurance systems help network analytics, application analytics, and policy analytics, as well as AI and ML, to achieve full network assurance.

Network provisioning

Network provisioning involves network resource configuration for the purposes of supporting any given service, like voice functions or accommodating additional users.

Network maintenance

Network maintenance covers upgrades and fixes to network resources. It also consists of proactive and remediation activities executed by working with network administrators, such as replacing network gear like routers and switches.

Network analytics

Network analytics is a software tool that compares incoming information against preprogrammed operational models and makes functional decisions for improving network performance.



