

Connecting a Network

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Cabling Installation Tools & Accessories

Network cabling installation tools and accessories includes:

1. Cutters, Scissors, Pliers
2. Compression and Crimp Tools
3. Fiber Optic Tools
4. Insertion - Extraction Tools
5. Loopback Testers
6. Network Testers
7. Punch Down Tools
8. Strippers
9. Tool Sets



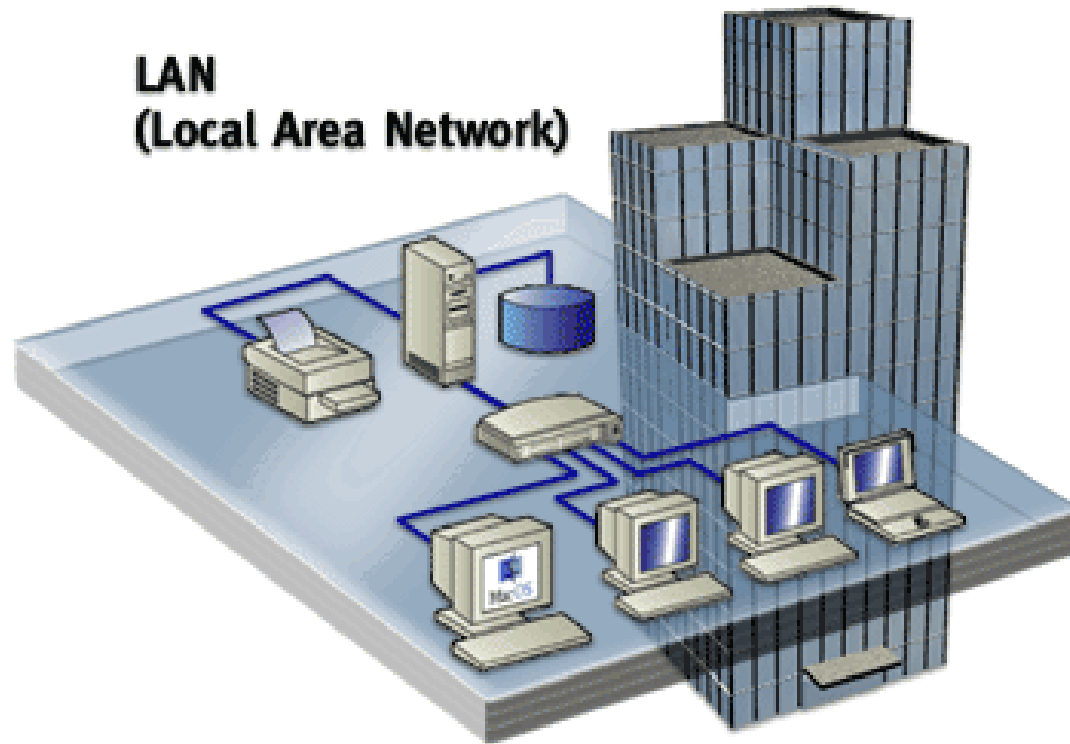
Networking Software

- Two types of networking software:
 1. Network operating system (NOS)
To allow computers to communicate with each other
 2. Shared network application
To allow users to access shared programs

Concept of LAN Installation

- In order to install LAN:
 1. Identify the number of devices to be connected
 2. Determine whether the internet access is needed
 3. Measure the distance of all devices
 4. Set up the router / switch
 5. Connect all devices using cables

Concept of LAN Installation



Concept of LAN Monitoring

- Monitoring of LAN in to ensure the network is always running at the greatest performance
- The monitoring can be done using software such as:
 1. Network Performance Monitor by SolarWinds
 2. PRTG Network Monitor by Paessler
 3. Nagios XI (Enterprise Server and Network Monitoring Software) by Nagios

Concept of LAN Troubleshooting

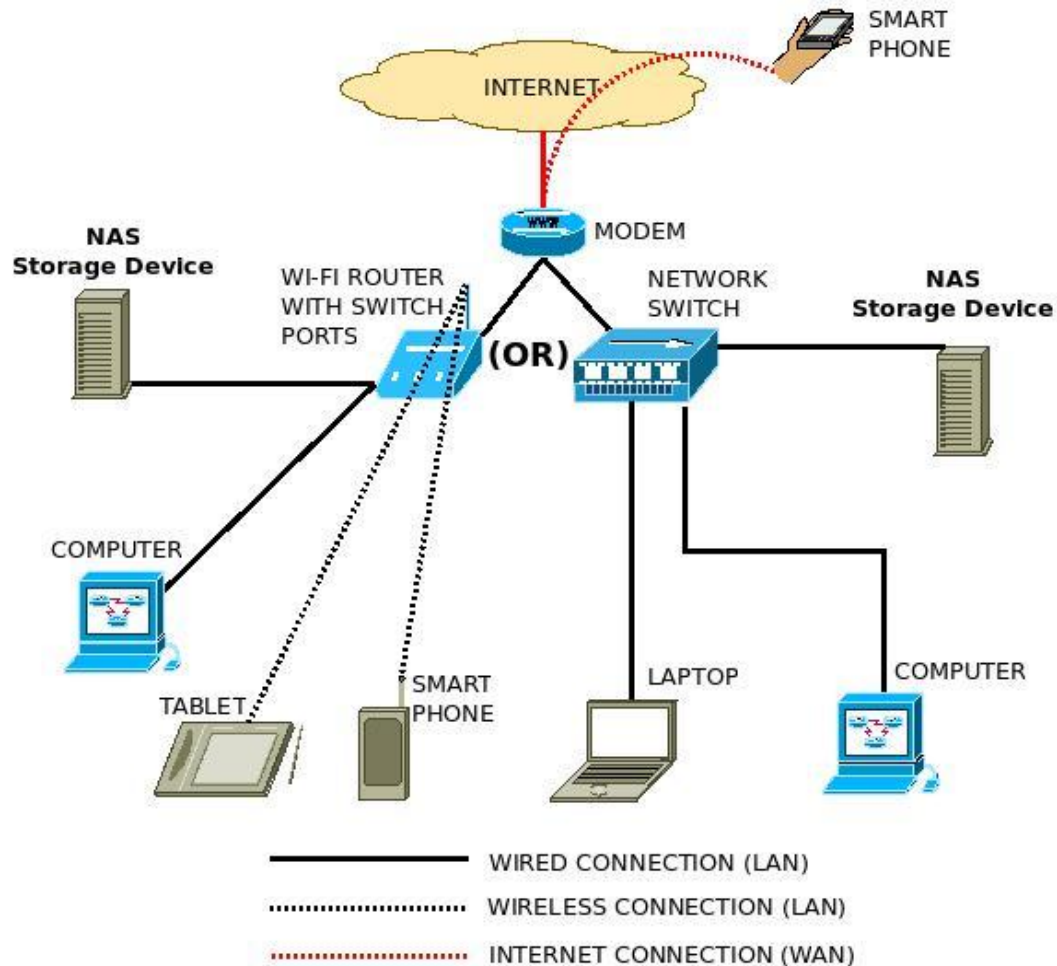
- Steps for LAN troubleshooting:
 1. Identify the exact problem or issue
 2. Isolate the cause
 3. Plan to solve the problem
 4. Implement the planned solution
 5. Test to verify the problem has been resolved

Wireless Networking

- The installation of LAN and wireless LAN is almost the same, however wireless LAN does not use cables
- Router is used in wireless LAN

Wired and Wireless LAN

CONNECTIVITY ARCHITECTURE OF ENTRY-LEVEL LAN SYSTEM



THANK YOU