Networking Hardware

At the end of this episode, I will be able to:

1. Explain the purpose of common networking hardware.

Exam Objective: 2.2 - Compare and contrast common networking hardware

Description: In this episode, we discuss network hardware used to connect and send data across networks today. We will look at hubs, switches, access points, routers, firewalls, modems, Power over Ethernet, patch panels, optical network terminals(ONT) and software-defined network (SDN).

- **Network interface card (NIC)**

- **Hubs**

- **Switches**

  - Unmanaged

  - Managed

- **Power over Ethernet? (PoE)**

- Injectors

- Switch

- **PoE Standards**

    - PoE = 15.4W (802.3af)

    - PoE+ = 30 W (802.3at)

    - PoE++ = 60W (802.3bt, Type 3)

    - PoE++ = 100W (802.bt, Type 4)

- **Access points**

- **Routers**

- **Firewall**

- **Modem**

    - Dial-up

    - Digital Subscriber Line (DSL)

    - Cable

- **Patch panel**

- **Optical network terminal** (ONT)

- - Fios

- **Software-defined networking**(SDN)

  - - Programmatically configure the network

- Additional Reference Materials

ONT:
https://www.verizon.com/support/residential/homephone/service-equipment/ont