**Network protocols:**  Is set of rules that determine how data formatted, and transmitted.

**Types of network protocols:**

* Communications/Application Protocol
* Routing Protocol
* Network Management Protocol

**Network Ports:** Is a logical point where network communication begins and ends.

*“Nessus Essential used to scan system ports”*

**Purpose of Ports:**

* They allow multiple services (e.g, web browsing, email) to run simultaneously on a device without confusion
* Each service or protocol communicates using specific port number
* Port help organize data streams and ensure that the correct application processes the right data.

**Note:** Avoid to use default port and close unused port

**Midterm hints 2025 Fall Semester:**

1. Configure DHCP + DHCP Relay + SSH (First disable telnet)
2. Configure VLAN (Inter VLAN) + VTP + STP/RSTP (Spanning Tree)
3. ACLs + Static Routing Proteq

**DHCP Relay:** is when one router is relaying on other router that configured DHCP so it can get share DHCP.

**Next course on Cisco**: Network Support & Troubleshooting

*All ports connected to a HUB are one collision domain while each port on SWITCH is collision domain and each port on router is broadcast domain.*

What is important of APIPA?