

**Computer networking lab**

SUBMITTED FROM:

MUHAMMAD JUNAID IQBA

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PROGRAM:

BS-SOFTWARE ENGINEERING

SECTION:

BSSE-5B

**Q1: Why are we using 2911 routers and not the others?**

The Cisco 2911 router is a popular choice for many organizations, and there are several reasons why it might be preferred over other options. Here are some possible reasons:

**Mid-range performance:** The 2911 router offers a good balance between performance and cost. It provides higher throughput compared to the 2811 router, making it suitable for small-to-medium-sized offices with growing network demands.

**Integrated services:** The 2911 router is an Integrated Services Router (ISR), which means it can support a wide range of services, including data, voice, video, security, and wireless services. This makes it an attractive option for organizations that need a single platform to manage multiple services.

**Modularity:** The 2911 router has a modular design, which allows for easy upgrades and customization. This makes it easier to adapt to changing network requirements and add new services as needed.

**Security features:** The 2911 router has robust security features, including support for VPN, firewall, and intrusion prevention. This makes it a good choice for organizations that need to ensure the security of their network.

**Cost-effectiveness:** Compared to higher-end models like the 4331 or 4321, the 2911 router might be a more cost-effective option for organizations that don't require extreme performance or scalability.

Of course, the specific reasons for choosing the 2911 router will depend on the organization's specific needs and requirements. If you have any more information about your organization's network infrastructure or requirements, I'd be happy to help you understand why the 2911 router might be the best fit.

**Q2: Why are we using the 2950T or 2960 switch and not the others?**

The Cisco 2950T and 2960 switches are popular choices for many organizations, and there are several reasons why they might be preferred over other options. Here are some possible reasons:

**Reliability and Performance:** The 2950T and 2960 switches are known for their reliability and performance. They offer high-speed connectivity, low latency, and robust security features, making them suitable for demanding network environments.

**Layer 2 and Layer 3 Capabilities:** Both switches offer Layer 2 and Layer 3 capabilities, which means they can perform switching and routing functions. This makes them versatile and able to adapt to different network architectures.

**PoE and PoE+ Support:** The 2950T and 2960 switches support Power over Ethernet (PoE) and PoE+, which allows them to power devices such as IP phones, cameras, and access points over the Ethernet cable. This simplifies network deployment and reduces the need for separate power supplies.

**Stacking and Clustering:** The 2950T and 2960 switches support stacking and clustering, which allows multiple switches to be connected together to form a single logical unit. This provides increased scalability, redundancy, and ease of management.

**Security Features:** Both switches have robust security features, including support for ACLs, VLANs, and IEEE 802.1X authentication. This helps to ensure the security and integrity of the network.

**Cost-Effectiveness:** Compared to higher-end models, the 2950T and 2960 switches might be more cost-effective options for organizations that don't require extreme performance or advanced features.

**Compatibility and Interoperability:** The 2950T and 2960 switches are compatible with a wide range of Cisco devices and platforms, making them easy to integrate into existing network infrastructures.

Of course, the specific reasons for choosing the 2950T or 2960 switch will depend on the organization's specific needs and requirements. If you have any more information about your organization's network infrastructure or requirements, I'd be happy to help you understand why these switches might be the best fit.