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Subject: CN Lab  
Task 2

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### **Task 1: Why Are We Using the 2911 Router?**

The **Cisco 2911 router** is commonly chosen because:

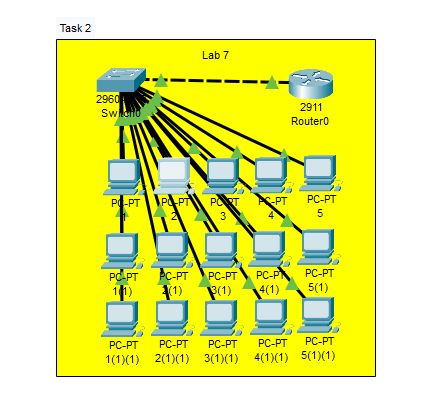
1. **Medium-Scale Network Compatibility**:
   * It is ideal for medium-sized networks, such as university labs or small office environments.
   * Supports more interfaces than smaller routers like 1841 or 1941.
2. **Multiple Connection Options**:
   * Offers multiple Fast Ethernet and Serial interfaces, suitable for diverse scenarios (LAN and WAN).
3. **Feature-Rich**:
   * Includes support for protocols like OSPF, EIGRP, and NAT.
   * Offers modularity for expansion, making it versatile for educational purposes.
4. **Ease of Use in Simulations**:
   * Provides a balance between performance and configuration complexity, making it suitable for lab environments.

### **Task 2: Why Are We Using 2950T or 2960 Switch?**

The **Cisco 2950T** and **2960** switches are popular choices due to:

1. **Layer 2 Switching**:
   * Both are Layer 2 switches, which are sufficient for LAN environments (like labs) that don't require advanced Layer 3 features.
2. **VLAN Support**:
   * They allow VLAN creation and management, a critical feature for learning network segmentation.
3. **Affordable and Simple**:
   * They are cost-effective and straightforward to configure, perfect for beginner and intermediate networking labs.
4. **Lab Suitability**:
   * With port densities of 24 or 48 Fast Ethernet interfaces, they are sufficient for connecting multiple devices in a lab.

### **Task 3: Network Design for "Lab-7" or "Lab-8"**

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