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SOHO Network Documentation

Brief Summary

Designed a Small Office/Home Office (SOHO) network using Cisco Packet Tracer. The network supports two segmented VLANS for users and printers, provides inter-VLAN routing, and basic security configurations. This project demonstrates foundational networking concepts such as IP addressing, VLANS, routing, and device configuration.

IP Addressing Table for End Devices

VLAN	Purpose	Subnet	Gateway
10	User PC	192.168.10.8/24	192.168.10.1
10	User PC	192.168.10.9/24	192.168.10.1
10	Printer	192.168.10.10/24	192.168.10.1
20	User PC	192.168.20.11/24	192.168.20.1
20	User PC	192.168.20.12/24	192.168.20.1
20	Printer	192.168.20.13/24	192.168.20.1

IP Addressing Table for Router Interfaces

Router Interface	VLAN	IP Address	Subnet
Fa0/0	10	192.168.10.1	255.255.255.0
Fa0/1	20	192.168.20.1	255.255.255.0

Device Configuration Summary

Router2

- Default gateways configured on ports Fa0/0 and Fa0/1
- Allows for inter-VLAN connection
- Console and VTY passwords configured

- Enable secret used for privileged access
- Unused switchports administratively shut down
- Banner MOTD configured

Switch0

- Facilitates communication for VLAN 10
- Access port assigned to port Fa0/24
- Console and VTY passwords configured
- Enable secret used for privileged access
- Unused switchports administratively shut down
- Banner MOTD configured

Switch1

- Facilitates communication for VLAN 20
- Access port assigned to port Fa0/24
- Console and VTY passwords configured
- Enable secret used for privileged access
- Unused switchports administratively shut down
- Banner MOTD configured

<u>Reflection</u>

The completion of this project reinforced my understanding of VLAN segmentation, default-gateways and inter-VLAN routing. I gained hands-on experience troubleshooting connectivity issues related to missing gateway configurations and learned how proper network documentation improved maintainability.