**Net 1061 Switching, Routing, and Wireless Essentials**

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**Lab: # 3**

**Follow the instructions down below for the lab itself. For this lab, all answers need to be in blue font. For the questions right below, answer in complete sentences. If this is a self-grading packet tracer. Ensure you paste the screen shot of your score page at the bottom of the document. You will upload both this document and the pkt file regardless if it is self-grading or not. Let the instructor know if you have any questions.**

***Lab Analysis Report***

1. Using complete sentences summarize work you completed during the lab.

I configured vlans and trunking on a network

2. Using complete sentences describe what you learned from the lab. Hint; look at the lab objectives listed at the top of the lab section.

I learned how to set up dynamic and native trunking on switches, as well as configuring vlans

***Problems Encountered***

1. Using complete sentences describe any problem(s) experienced during lab.

No problems

2. Using complete sentences describe how you solved your problem(s).

No problems

3. Using complete sentences explain if you needed any assistance with the lab; then list what you learned from that assistance. No problems

Packet Tracer - Implement VLANs and Trunking

# Addressing Table

| Device | Interface | IP Address | Subnet Mask | Switchport | VLAN |
| --- | --- | --- | --- | --- | --- |
| PC1 | NIC | 192.168.10.10 | 255.255.255.0 | SWB F0/1 | VLAN 10 |
| PC2 | NIC | 192.168.20.20 | 255.255.255.0 | SWB F0/2 | VLAN 20 |
| PC3 | NIC | 192.168.30.30 | 255.255.255.0 | SWB F0/3 | VLAN 30 |
| PC4 | NIC | 192.168.10.11 | 255.255.255.0 | SWC F0/1 | VLAN 10 |
| PC5 | NIC | 192.168.20.21 | 255.255.255.0 | SWC F0/2 | VLAN 20 |
| PC6 | NIC | 192.168.30.31 | 255.255.255.0 | SWC F0/3 | VLAN 30 |
| PC7 | NIC | 192.168.10.12 | 255.255.255.0 | SWC F0/4 | VLAN 10  VLAN 40 (Voice) |
| SWA | SVI | 192.168.99.252 | 255.255.255.0 | N/A | VLAN 99 |
| SWB | SVI | 192.168.99.253 | 255.255.255.0 | N/A | VLAN 99 |
| SWC | SVI | 192.168.99.254 | 255.255.255.0 | N/A | VLAN 99 |

# Objectives

Part 1: Configure VLANs

Part 2: Assign Ports to VLANs

Part 3: Configure Static Trunking

Part 4: Configure Dynamic Trunking

# Background

You are working in a company that is getting ready to deploy a set of new 2960 switches in a branch office. You are working in the lab to test out the VLAN and trunking configurations that are planned. Configure and test the VLANs and trunks.

# Instructions

## Configure VLANs

Configure VLANs on all three switches. Refer to the VLAN Table. Note that the VLAN names must match the values in the table exactly.

VLAN Table

| VLAN Number | VLAN Name |
| --- | --- |
| 10 | Admin |
| 20 | Accounts |
| 30 | HR |
| 40 | Voice |
| 99 | Management |
| 100 | Native |

## Assign Ports to VLANs

### Assign access ports to VLANs

On SWB and SWC, assign ports to the VLANs. Refer to the Addressing Table.

### Configure the Voice VLAN port

Configure the appropriate port on switch SWC for voice VLAN functionality.

### Configure the virtual management interfaces

* + - 1. Create the virtual management interfaces, on all three switches.
      2. Address the virtual management interfaces according to the Addressing Table.
      3. The switches should not be able to ping each other.

## Configure Static Trunking

* + - 1. Configure the link between SWA and SWB as a static trunk. Disable dynamic trunking on this port.
      2. Disable DTP on the switch port on both ends of the trunk link.
      3. Configure the trunk with the native VLAN and eliminate native VLAN conflicts if any.

## Configure Dynamic Trunking

* + - 1. Assume that the trunk port on SWC is set to the default DTP mode for 2960 switches. Configure G0/2 on SWA so that it successfully negotiates trunking with SWC.
      2. Configure the trunk with the native VLAN and eliminate native VLAN conflicts if any.

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Graphical user interface, application

Description automatically generated