# 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

## Part 1: 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

## Part 2: Assign Ports to VLANs

### Step 1: Assign access ports to VLANs

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

## Step 2: Configure the Voice VLAN port

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

# Step 3: Configure the virtual management interfaces

- a. Create the virtual management interfaces, on all three switches.
- b. Address the virtual management interfaces according to the Addressing Table.
- c. The switches should not be able to ping each other.

# Part 3: Configure Static Trunking

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

# Part 4: Configure Dynamic Trunking

- a. 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.
- b. Configure the trunk with the native VLAN and eliminate native VLAN conflicts if any.