LOMBA KOMPETENSI SISWA
SEKOLAH MENENGAH KEJURUAN
TINGKAT PROVINSI JAWA BARAT
TAHUN TAHUN 2021

NASKAH SOAL
MODUL A NETWORK SYSTEMS (PACKET TRACER)

Bidang Lomba
IT NETWORK SYSTEMS
ADMINISTRATION

PEMERINTAH DAERAH PROVINSI JAWA BARAT
DINAS PENDIDIKAN

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Introduction to Test Project

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This Test Project proposal consists of the following documentation/files:
1. LKSJB2021_ModulA_Network Systems
2. LKSJB2021_ModulA_Network Systems-PT.pka

Introduction

You work for an ISP company that is just starting its business. You are asked to configure the network system. Like the job vacancy you are applying for, the scope of work you must do falls within the scope of CCNA Routing & Switching Essential.

Modul A – Network Systems (Cisco Packet Tracer)

Topology
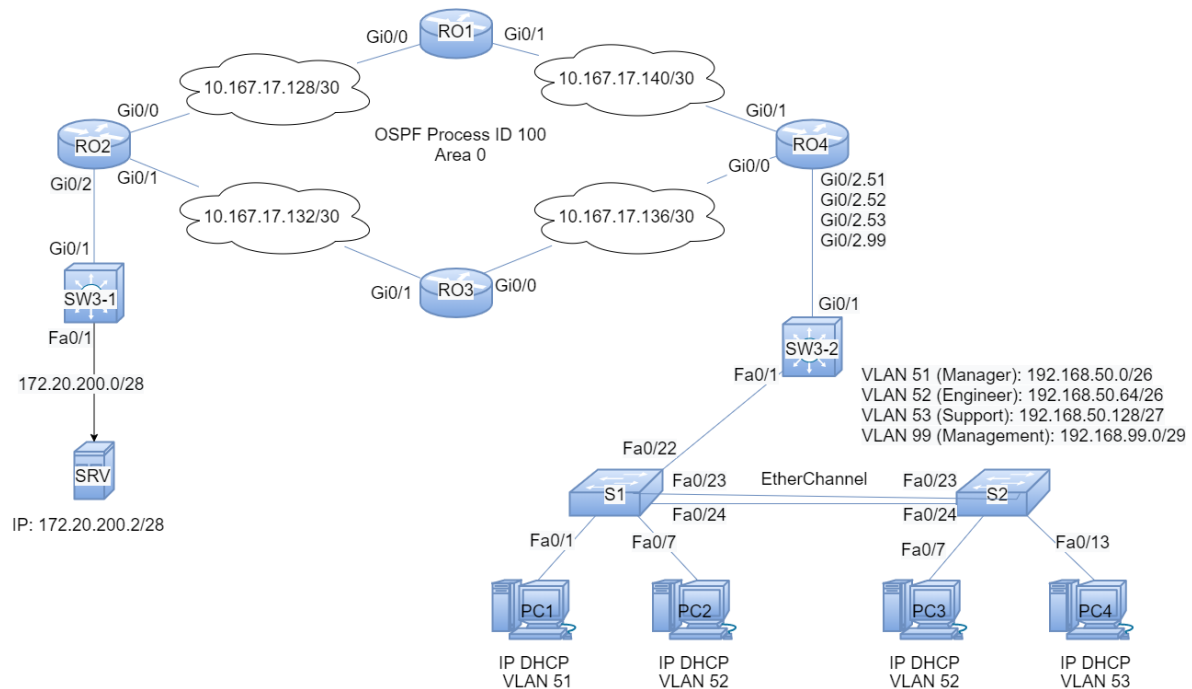
Addressing Table

Device	Interface	IP Address / Prefix	Default Gateway
RO1	GI0/0	10.167.17.130/30	-
	GI0/1	10.167.17.142/30	-
RO2	GI0/0	10.167.17.129/30	-
	GI0/1	10.167.17.133/30	-
	GI0/2	172.20.200.1/28	-
RO3	GI0/0	10.167.17.137/30	-
	GI0/1	10.167.17.134/30	-
RO4	GI0/0	10.167.17.138/30	-
	GI0/1	10.167.17.141/30	-
	GI0/2.51	192.168.50.1/26	-
	GI0/2.52	192.168.50.65/26	-
	GI0/2.53	192.168.50.129/27	-
	GI0/2.99	192.168.99.1/29	-
SW3-2	VLAN 99	192.168.99.2/29	192.168.99.1
S1	VLAN 99	192.168.99.3/29	192.168.99.1

Device	Interface	IP Address / Prefix	Default Gateway
S2	VLAN 99	192.168.99.4/29	192.168.99.1
PC1	Fa0	DHCP	DHCP
PC2	Fa0	DHCP	DHCP
PC3	Fa0	DHCP	DHCP
PC4	Fa0	DHCP	DHCP

Instructions
- Configure device using console cable
- Configure IP Address according to topology and addressing table
- Create DHCP pool including network, default gateway and dns server (172.20.200.2) with name:
    - Manager
    - Engineer
    - Support
- For pool manager and Engineer excluding First 10 IPs to be assigned in dhcp pool.
- Configure VLAN on SW3-2, S1 and S2

VLAN	Name	Interfaces
51	Manager	S1 & S2: Fa0/1-6
52	Engineer	S1 & S2: Fa0/7-12
53	Support	S1 & S2: Fa0/13-18
99	Management	-

- On S1 and S2, add ports Fa0/23 and Fa0/24 to port channel 3 with LACP mode Active.
- Configure OSPF on RO1, RO2, RO3 and RO4.
    - Process ID: 100
    - Area 0
    - Routing updates are not sent into networks where they are not required.
- Configure the active access ports to allow a maximum of 3 MAC addresses to be learned on the ports and violation restrict for S1 and S2