

**LOMBA KOMPETENSI SISWA  
SEKOLAH MENENGAH KEJURUAN  
TINGKAT KAB. TASIKMALAYA  
TAHUN TAHUN 2022**



**NASKAH SOAL  
NETWORK SYSTEM (PACKET TRACER)**

**Bidang Lomba  
IT NETWORK SYSTEMS  
ADMINISTRATION**



**PEMERINTAH DAERAH KABUPATEN TASIKMALAYA  
DINAS PENDIDIKAN**

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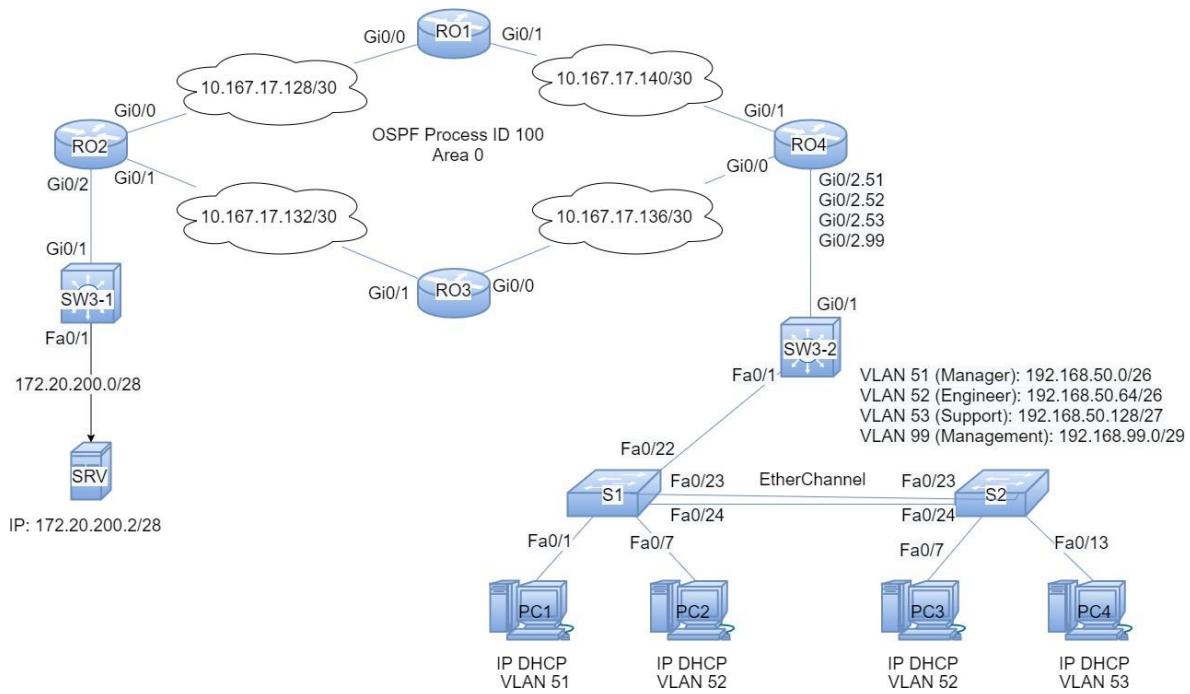
# Introduction to Test Project

## 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

<b>Device</b>	<b>Interface</b>	<b>IP Address / Prefix</b>	<b>Default Gateway</b>
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:
  - o Manager
  - o Engineer
  - o Support
- For pool manager and Engineer excluding First 10 IPs to be assigned in dhcp pool.
- Configure VLAN on SW3-2, S1 and S2

<b>VLAN</b>	<b>Name</b>	<b>Interfaces</b>
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.
  - o Process ID: 100
  - o Area 0
  - o 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