

LOMBA KOMPETENSI SISWA

SEKOLAH MENENGAH KEJURUAN

TINGKAT NASIONAL XXVI 2018



MODUL D

PT - TROUBLESHOOTING

IT NETWORK SYSTEMS

ADMINISTRATION

[LKSN2018_ITNSA_MODUL_D](#)

Instructions

The competition has a fixed start and finish time. You must decide how to best divide your time.

Please **carefully** read the following instructions!

When the competition time ends, please save your file and add your ID in the end of the filename (change the XX), leave the Cisco Packet Tracer program and your workstation in a running state.

The Cisco Packet Tracer program may crash and you could lose marks so DO NOT FORGET TO SAVE YOUR PACKET TRACER FILE REGULARLY!

This document contains:

1. Problem

2. Note

Problem

Each problem on every cluster may relate each other so you need to investigate and trace the problem until solved to get as much as points. Use the Notes as your base information!

Solve the problem below:

1. TV1 in the home network is not showing the image*

* You can use any image in the drive C:\Windows\Web\Wallpaper

2. Laptop1 want to access the website <http://www.lks.id> but they have a problem when connecting to the Wifi and then make sure Laptop1 have access to the www.lks.id successfully.

3. IP Phone2 can't call the IP Phone3 and Analog Phone1.

4. There is a problem on printer also, it can't be accessed over the network.

5. All client on office can't access www.lks.id.

6. A user on PC 1 want to access FTP using username: competitor with password: p4ssw0rd, but it still has the problem. Make sure user can access FTP using that credential.

7. Cloud problem:

- Server internal in Cloud can't be accessed using this IP: 202.100.7.3 when accessing that IP, it should be redirected to SRV1 as a web server.

Notes:

CLUSTER OFFICE

Hostname: LKSRTTR1

Gig0/0 -> 202.62.17.1/25

Gig0/1 -> 10.20.31.1/24

-Default route to ISP

-NAT overload for internet access

IP Phone extension

Phone	Number
IP Phone1	1501
IP Phone2	1502
IP Phone3	1503
IP Phone4	1504
Analog Phone1	1505

DHCP Server on LKSDSW1 and CME Server on LKSCME1

LKSDSW1 & LKSASW1 VLAN notes:

VLAN:

ID 99 (Management)

ID 100(DATA)

ID 150(VOICE)

LKSSERVER1

IP: 192.168.100.19/24

Gateway: 192.168.100.1

Services:

- FTP (username: competitor, password: p4ssw0rd)

Printer1

IP: 192.168.100.20/24

PC1 and PC2

IP: DHCP

CLUSTER ISP

ISPSRV1

IP Address.....: 202.62.17.100

Subnet Mask.....: 255.255.255.128

Default Gateway.....: 202.62.17.126

Service:

- DNS

	Name	Type	Detail
	lks.id	A Record	202.62.17.100
	www.lks.id	A Record	202.62.17.100

- HTTP
- MAIL Server
 - SMTP
 - POP3
 - Account test:
juri1, juri2, juri3 with password is LKS

ISPRTR1

Notes:

- **Ip address**

```
interface GigabitEthernet0/0
ip address 202.62.17.254 255.255.255.128
```

```
interface GigabitEthernet0/1
ip address 202.100.7.1 255.255.255.248
```

```
interface GigabitEthernet0/2
ip address 202.62.17.126 255.255.255.128
```

- DHCP Server
 - o ip dhcp pool LKSN-MATARAM26
 - o network 202.62.17.128 255.255.255.128
 - o default-router 202.62.17.254
 - o dns-server 202.62.17.100

- **Cloud connection**

Cable

Coaxial7 <-> GigabitEthernet8

Port	Port
From Port	To Port
Coaxial7	GigabitEthernet8

CLUSTER CLOUD

Notes:

ASA Configuration:

hostname FW1

!

interface Ethernet0/0

switchport access vlan 2

!

interface Ethernet0/7

switchport access vlan 3

!

interface Vlan1

nameif inside

security-level 100

ip address 192.168.1.1 255.255.255.0

!

interface Vlan2

nameif outside

security-level 0

ip address 202.100.7.2 255.255.255.248

!

interface Vlan3

no forward interface Vlan1

nameif dmz

security-level 50

```

ip address 172.16.0.1 255.255.255.0
!
object network SRV1
  host 172.16.0.10
!
route outside 0.0.0.0 0.0.0.0 202.100.7.1 1
!
!
access-list HTTP-SRV1 extended permit icmp any any
access-list HTTP-SRV1 extended permit tcp any host 172.16.0.10 eq www
!
!
access-group HTTP-SRV1 in interface outside
object network SRV1
  nat (dmz,outside) static 202.100.7.3
!
!
telnet timeout 5
ssh timeout 5
!
dhcpd auto_config outside
!
dhcpd address 192.168.1.5-192.168.1.36 inside
dhcpd enable inside

```

SRV1

IP Address	172.16.0.10
Subnet Mask	255.255.255.0
Default Gateway	172.16.0.1

CLUSTER HOME NOTES:

Wireless Settings	
SSID	MyHome
2.4 GHz Channel	1
Authentication	
<input type="radio"/> Disabled	<input type="radio"/> WEP
<input type="radio"/> WPA-PSK	<input checked="" type="radio"/> WPA2-PSK
<input type="radio"/> WPA	<input type="radio"/> WPA2
WEP Key	
PSK Pass Phrase	
MyHomeP@ssw0rd	
RADIUS Server Settings	
IP Address	
Shared Secret	
Encryption Type	AES

Good Luck