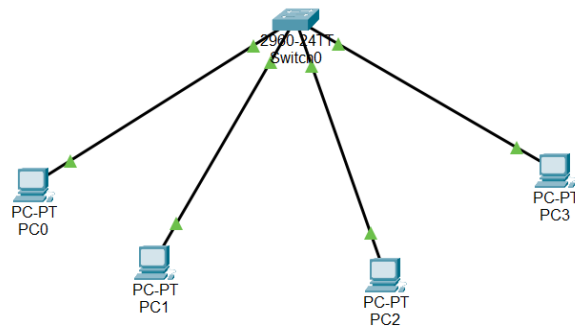


Nama : Fahdel Shaibari
 NIM : 09010182327008
 Kelas : MI3A

LAPORAN PRAKTIKUM JARKOM

- Switch



Hasil :

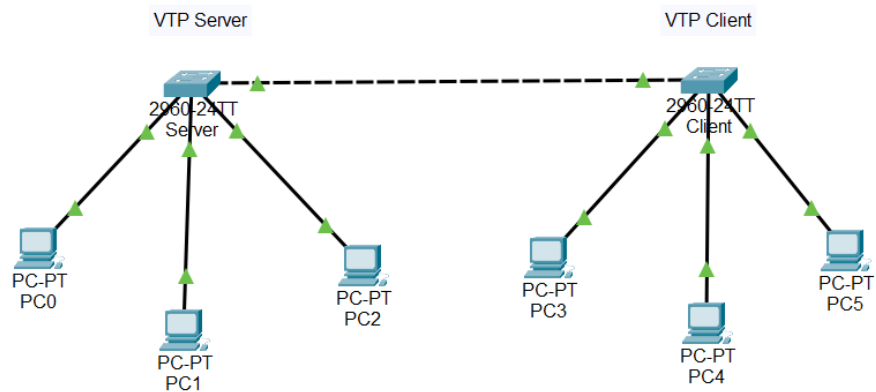
09010182327008>show vlan

VLAN	Name	Status	Ports
1	default	active	Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24 Gig0/1, Gig0/2
2	humas	active	Fa0/1
3	keuangan	active	Fa0/2
4	IT	active	Fa0/3
5	pimpinan	active	Fa0/4
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
2	enet	100002	1500	-	-	-	-	-	0	0

--More--

- VTP Server dan VT



Hasil server :

```

09010182327008-VTP_SERVER#show vtp status
VTP Version capable       : 1 to 2
VTP version running       : 2
VTP Domain Name           : jarkom.ilkom.unsri.ac.id
VTP Pruning Mode          : Disabled
VTP Traps Generation      : Disabled
Device ID                 : 000C.85B9.3A00
Configuration last modified by 0.0.0.0 at 3-1-93 00:30:41
Local updater ID is 0.0.0.0 (no valid interface found)

Feature VLAN :
-----
VTP Operating Mode        : Server
Maximum VLANs supported locally : 255
Number of existing VLANs   : 8
Configuration Revision     : 7
MD5 digest                : 0xEA 0xA6 0x77 0xCE 0x54 0x1E 0xF8 0xB0
                           : 0xA8 0x9A 0x38 0x7F 0x50 0xFF 0x1F 0xD1

09010182327008-VTP_SERVER#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/24    on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/24    1-1005

Port      Vlans allowed and active in management domain
Fa0/24    1,2,3,4

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/24    1,2,3,4

09010182327008-VTP_SERVER#
  
```

- Hasil Client

```

09010182327008-VTP_CLIENT#show vtp status
VTP Version capable      : 1 to 2
VTP version running      : 2
VTP Domain Name          : jarkom.ilkom.unsri.ac.id
VTP Pruning Mode         : Disabled
VTP Traps Generation     : Disabled
Device ID                 : 0001.634E.9900
Configuration last modified by 0.0.0.0 at 3-1-93 00:30:41

Feature VLAN :
-----
VTP Operating Mode        : Client
Maximum VLANs supported locally : 255
Number of existing VLANs  : 8
Configuration Revision    : 7
MD5 digest                : 0xEA 0xA6 0x77 0xCE 0x54 0x1E 0xF8 0xB0
                           0xA8 0x9A 0x38 0x7F 0x50 0xFF 0x1F 0xD1

09010182327008-VTP_CLIENT#show interface trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/24    on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/24    1-1005

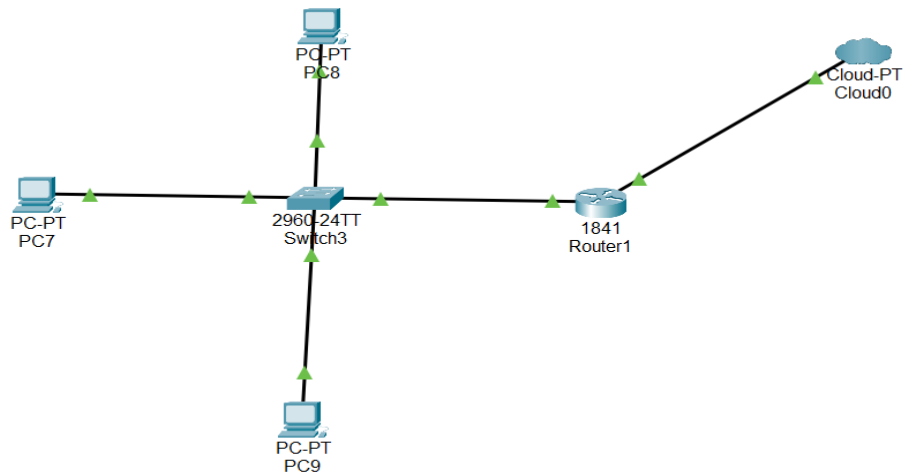
Port      Vlans allowed and active in management domain
Fa0/24    1,2,3,4

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/24    1,2,3,4

09010182327008-VTP_CLIENT#0|

```

- NAT



- Switch Configuration

```

SWITCH>enable
SWITCH#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
SWITCH(config)#Hostname Switch_Distribusi
Switch_Distribusi(config)#banner motd #Selamat Datang di Switch Distribusi#
Switch_Distribusi(config)#line console 0
Switch_Distribusi(config-line)#password cisco
Switch_Distribusi(config-line)#login
Switch_Distribusi(config-line)#exit
Switch_Distribusi(config)#line vty 0 4
Switch_Distribusi(config-line)#password cisco
Switch_Distribusi(config-line)#login
Switch_Distribusi(config-line)#exit
Switch_Distribusi(config)#enable password cisco
Switch_Distribusi(config)#enable secret cisco
The enable secret you have chosen is the same as your enable password.
This is not recommended. Re-enter the enable secret.
Switch_Distribusi(config)#vlan 2
Switch_Distribusi(config-vlan)#Name Humas
Switch_Distribusi(config-vlan)#exit
Switch_Distribusi(config)#vlan 3
Switch_Distribusi(config-vlan)#name keuangan
Switch_Distribusi(config-vlan)#exitr
^
% Invalid input detected at '^' marker.

Switch_Distribusi(config-vlan)#exit
Switch_Distribusi(config)#vlan 4
Switch_Distribusi(config-vlan)#name it
Switch_Distribusi(config-vlan)#exit
Switch_Distribusi(config)#interface fastEthernet 0/1
Switch_Distribusi(config-if)#switchport mode access
Switch_Distribusi(config-if)#switchport access vlan 2
Switch_Distribusi(config-if)#exit
Switch_Distribusi(config)#interface fastEthernet 0/2
Switch_Distribusi(config-if)#switchport mode access
Switch_Distribusi(config-if)#switchport access vlan 3
Switch_Distribusi(config-if)#exit
Switch_Distribusi(config)#interface fastEthernet 0/3
Switch_Distribusi(config-if)#switchport mode access
Switch_Distribusi(config-if)#switchport access vlan 4
Switch_Distribusi(config-if)#exit
Switch_Distribusi(config)#interface fastEthernet 0/24
Switch_Distribusi(config-if)#switchport mode trunk

Switch_Distribusi(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/24, changed state to up

Switch_Distribusi(config-if)#exit
Switch_Distribusi(config)#exit
Switch_Distribusi#
%SYS-5-CONFIG_I: Configured from console by console

```

Hasil :

```
Switch_Distribusi#copy run start
Destination filename [startup-config]? show vlan
%Error copying nvram:show vlan (Invalid argument)
Switch_Distribusi#show vlan
```

VLAN	Name	Status	Ports
1	default	active	Fa0/4, Fa0/5, Fa0/6, Fa0/7 Fa0/8, Fa0/9, Fa0/10, Fa0/11 Fa0/12, Fa0/13, Fa0/14, Fa0/15 Fa0/16, Fa0/17, Fa0/18, Fa0/19 Fa0/20, Fa0/21, Fa0/22, Fa0/23 Gig0/1, Gig0/2
2	Humas	active	Fa0/1
3	keuangan	active	Fa0/2
4	it	active	Fa0/3
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
2	enet	100002	1500	-	-	-	-	-	0	0
3	enet	100003	1500	-	-	-	-	-	0	0

--More-- |

VLAN	Nama	Status	Port
Vlan 1	Default	Active	Fa0/4 - Fa0/23, Gig0/1, Gig0/2
Vlan 2	Humas	Active	Fa0/1
Vlan 3	Keuangan	Active	Fa0/2
Vlan 4	IT	Active	Fa0/3

- Router Configuration

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router_I
Router_I(config)#banner motd #Selamat Datang di Router I#
Router_I(config)#line console 0
Router_I(config-line)#password cisco
Router_I(config-line)#login
Router_I(config-line)#exit
Router_I(config)#enable password cisco
Router_I(config)#enable secret cisco
The enable secret you have chosen is the same as your enable password.
This is not recommended. Re-enter the enable secret.
Router_I(config)#line vty 0 4
Router_I(config-line)#password cisco
Router_I(config-line)#login
Router_I(config-line)#exit
Router_I(config)#interface fastEthernet 0/0
Router_I(config-if)#ip address 10.100.112.10 255.255.255.0
Router_I(config-if)#ip nat inside
Router_I(config-if)#no shutdown
Router_I(config-if)#exit
Router_I(config)#interface fastEthernet 0/1
Router_I(config-if)#no ip address
Router_I(config-if)#no shutdown
Router_I(config-if)#exit
Router_I(config)#interface fastEthernet 0/1.1
Router_I(config-subif)#encapsulation dot1Q 2
Router_I(config-subif)#ip address 192.168.200.1 255.255.255.0
Router_I(config-subif)#ip nat outside
Router_I(config-subif)#exit
Router_I(config)#interface fastEthernet 0/1.2
Router_I(config-subif)#ip address 192.168.100.1 255.255.255.0

% Configuring IP routing on a LAN subinterface is only allowed if that
subinterface is already configured as part of an IEEE 802.10, IEEE 802.1Q,
or ISL vLAN.

Router_I(config-subif)#encapsulation dot1Q 3
Router_I(config-subif)#ip nat outside
Router_I(config-subif)#exit
Router_I(config)#interface fastEthernet 0/1.3
Router_I(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/1.3, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.3, changed state to up

Router_I(config-subif)#
Router_I(config-subif)#encapsulation dot1Q 4
Router_I(config-subif)#ip address 192.168.150.1 255.255.255.0
Router_I(config-subif)#ip nat outside
Router_I(config-subif)#exit
```

```

Router_I(config)#ip dhcp excluded 192.168.200.2 192.168.200.20
Router_I(config)#ip dhcp pool 192.168.100.0/24
Router_I(dhcp-config)#network 192.168.100.0 255.255.255.0
Router_I(dhcp-config)#default-router 192.168.100.1
Router_I(dhcp-config)#dns-server 222.124.194.11
Router_I(dhcp-config)#end
Router_I#
%SYS-5-CONFIG_I: Configured from console by console

Router_I#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router_I(config)#ip dhcp excluded 192.168.150.2 192.168.150.20
Router_I(config)#ip dhcp 192.168.150.0/24
^
% Invalid input detected at '^' marker.

Router_I(config)#ip dhcp pool 192.168.150.0/24
Router_I(dhcp-config)#network 192.168.150.0 255.255.255.0
Router_I(dhcp-config)#default-router 192.168.150.1
Router_I(dhcp-config)#dns-server 222.124.194.11
Router_I(dhcp-config)#exit
Router_I(config)#exit
Router_I#
Router_I#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router_I(config)# nat pool konek 10.100.121.10 10.100.121.10 netmask 255.255.255.0
^
% Invalid input detected at '^' marker.

Router_I(config)#nat pool konek 10.100.121.10 10.100.121.10 netmask 255.255.255.0
^
% Invalid input detected at '^' marker.

Router_I(config)#ip nat pool konek 10.100.121.10 10.100.121.10 netmask 255.255.255.0
Router_I(config)#access-list 99 permit 192.168.200.0 0.0.0.255
Router_I(config)#access-list 99 permit 192.168.100.0 0.0.0.255
Router_I(config)#access-list 99 permit 192.168.150.0 0.0.0.255
Router_I(config)#ip nat inside source list 99 pool konek overload
Router_I(config)#ip router 0.0.0.0 0.0.0.0 10.100.121.1
^
% Invalid input detected at '^' marker.

Router_I(config)#IP router 0.0.0.0 0.0.0.0 10.100.121.1
^
% Invalid input detected at '^' marker.

Router_I(config)#IP route 0.0.0.0 0.0.0.0 10.100.121.1
Router_I(config)#name-server 222.124.194.11
^
% Invalid input detected at '^' marker.

Router_I(config)#ip name-server 222.124.194.11
Router_I(config)#ip name-server 222.124.194.18
Router_I(config)#ip domain-name unsri.ac.id
Router_I(config)#exit
Router_I#
%SYS-5-CONFIG I: Configured from console by console
Router_I#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
Router_I#

```

Hasil

```
Router_I>sh ip dhcp binding
```

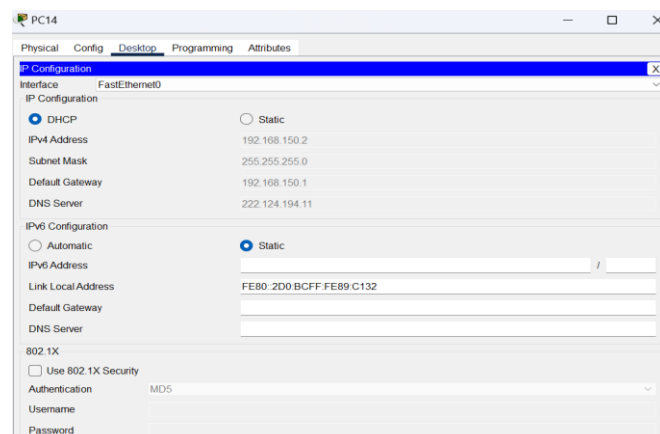
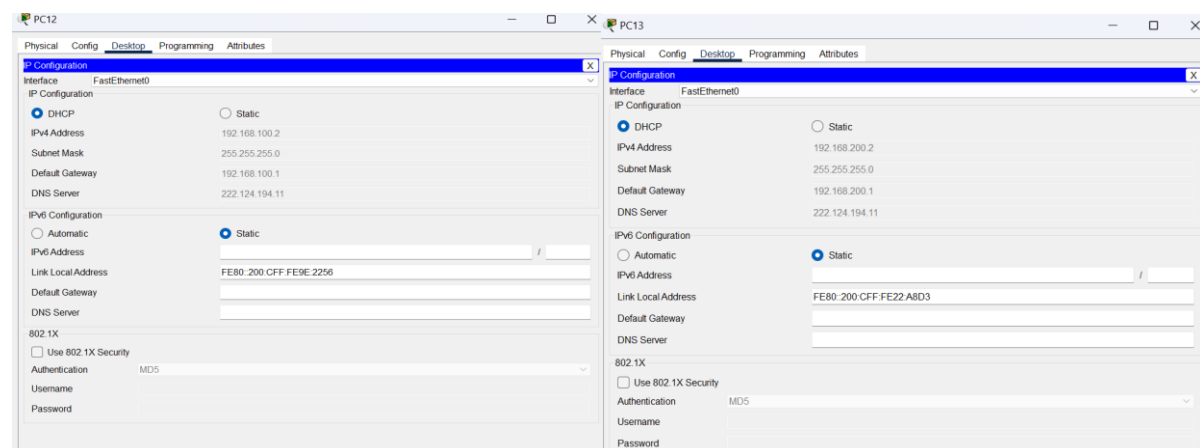
IP address	Client-ID/ Hardware address	Lease expiration	Type
192.168.200.2	0000.0C22.A8D3	--	Automatic
192.168.100.2	0000.0C9E.2256	--	Automatic
192.168.150.2	00D0.BC89.C132	--	Automatic

Router T>

No	Ip Address	MAC Address	Lease Expiration	Type
1	192.168.200.2	0000.0C22.A8D3	-	Automatic
2	192.168.100.2	0000.0C9E.2256	-	Automatic
3	192.168.150.2	00D0.BC89.C132	-	Automatic

Daftar IP Client

No	Client	Ip address	Netmask	Gateway	DNS
1	PC12	192.168.100.2	255.255.255.0	192.168.100.1	222.124.194.11
2	PC13	192.168.200.2	255.255.255.0	192.168.200.1	222.124.194.11
3	PC14	192.168.150.2	255.255.255.0	198.168.150.1	222.124.194.11



Tes Koneksi Ke sebuah website (catat hasil yang anda dapat)

No	Sumber	Ip address	Hasil Ya/Tidak	Website	Hasil Ya/Tidak
1	PC12	192.168.100.2	Ya	www.google.com	Tidak
2	PC13	192.168.200.2	Ya	www.google.com	Tidak
3	PC14	192.168.150.2	Ya	www.google.com	Tidak