

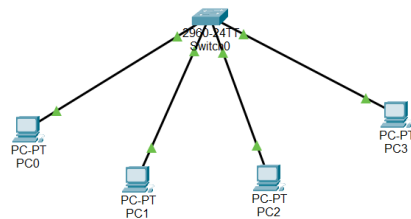
Nama : M Rayhan Naufal Putra

NIM : 09010282327037

Kelas : MI 3A

LAPORAN PRAKTIKUM JARKOM

- Switch



Hasil:

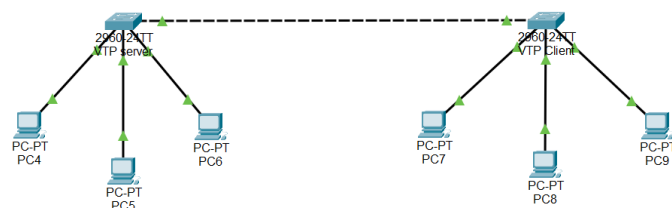
```
SWITCH#show vlan
```

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 VTP client



- Server

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname "VTP Server"
% Spaces are not allowed in hostname
Switch(config)#
Switch(config)#hostname Switchc_VTP_Server
Switchc_VTP_Server(config)#hostname 09010282327037-VTP_Server
09010282327037-VTP_Server(config)#banner motd #S-VTP-SERVER#
09010282327037-VTP_Server(config)#line console 0
09010282327037-VTP_Server(config-line)#password cisco
09010282327037-VTP_Server(config-line)#login
09010282327037-VTP_Server(config-line)#exit
09010282327037-VTP_Server(config)#line vty 0 4
09010282327037-VTP_Server(config-line)#password cisco
09010282327037-VTP_Server(config-line)#login
09010282327037-VTP_Server(config-line)#exit
09010282327037-VTP_Server(config)#enable password cisco
09010282327037-VTP_Server(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.
09010282327037-VTP_Server(config)#vlan 2
09010282327037-VTP_Server(config-vlan)#name Humas
09010282327037-VTP_Server(config-vlan)#exit
09010282327037-VTP_Server(config)#vlan 3
09010282327037-VTP_Server(config-vlan)#name Keuangan
09010282327037-VTP_Server(config-vlan)#exit
09010282327037-VTP_Server(config)#vlan 4
09010282327037-VTP_Server(config-vlan)#name IT
09010282327037-VTP_Server(config-vlan)#exit
09010282327037-VTP_Server(config)#interface fastEthernet 0/1
09010282327037-VTP_Server(config-if)#switchport mode access
09010282327037-VTP_Server(config-if)#switchport access vlan 2
09010282327037-VTP_Server(config-if)#exit
09010282327037-VTP_Server(config)#interface fastEthernet 0/2
09010282327037-VTP_Server(config-if)#switchport mode access
09010282327037-VTP_Server(config-if)#switchport access vlan 3
09010282327037-VTP_Server(config-if)#exit
09010282327037-VTP_Server(config)#interface fastEthernet 0/3
09010282327037-VTP_Server(config-if)#switchport mode access
09010282327037-VTP_Server(config-if)#switchport access vlan 4
09010282327037-VTP_Server(config-if)#exit
09010282327037-VTP_Server(config)#vtp version 2
09010282327037-VTP_Server(config)#vtp mode server
Device mode already VTP SERVER.
09010282327037-VTP_Server(config)#vtp domain jarkom.ilkom.unsri.ac.id
Changing VTP domain name from NULL to jarkom.ilkom.unsri.ac.id
09010282327037-VTP_Server(config)#vtp password jarkom
Setting device VLAN database password to jarkom
09010282327037-VTP_Server(config)#interface fastEthernet 0/24
09010282327037-VTP_Server(config-if)#switchport mode trunk

09010282327037-VTP_Server(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

09010282327037-VTP_Server(config-if)#exit
09010282327037-VTP_Server(config)#exit
09010282327037-VTP_Server#
%SYS-5-CONFIG_I: Configured from console by console

09010282327037-VTP_Server#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
09010282327037-VTP_Server#
```

Hasil:

```

09010282327037-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                : 0010.1178.9100
Configuration last modified by 0.0.0.0 at 3-1-93 00:05:07
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   : 0
MD5 digest               : 0x71 0xEC 0x8A 0x5F 0x63 0x0B 0xAB 0x5B
                        : 0x16 0x61 0x0A 0xAE 0x20 0xF5 0x2C 0xEE

```

- Client

```

Switch_VTP_Client>enable
Switch_VTP_Client#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch_VTP_Client(config)#Hostname 09010282327037-VTP_Client
09010282327037-VTP_Client(config)#banner motd #S-VTP-CLIENT#
09010282327037-VTP_Client(config)#line console 0
09010282327037-VTP_Client(config-line)#password cisco
09010282327037-VTP_Client(config-line)#login
09010282327037-VTP_Client(config-line)#exit
09010282327037-VTP_Client(config)#line vty 0 4
09010282327037-VTP_Client(config-line)#password cisco
09010282327037-VTP_Client(config-line)#login
09010282327037-VTP_Client(config-line)#exit
09010282327037-VTP_Client(config)#enable password cisco
09010282327037-VTP_Client(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.
09010282327037-VTP_Client(config)#vlan 2
09010282327037-VTP_Client(config-vlan)#name Humas
09010282327037-VTP_Client(config-vlan)#exit
09010282327037-VTP_Client(config)#vlan 3
09010282327037-VTP_Client(config-vlan)#name Keuangan
09010282327037-VTP_Client(config-vlan)#exit
09010282327037-VTP_Client(config)#vlan 4
09010282327037-VTP_Client(config-vlan)#name IT
09010282327037-VTP_Client(config-vlan)#exit
09010282327037-VTP_Client(config)#interface fastEthernet 0/1
09010282327037-VTP_Client(config-if)#switchport mode access

09010282327037-VTP_Client(config-if)#switchport mode access
09010282327037-VTP_Client(config-if)#switchport access vlan 2
09010282327037-VTP_Client(config-if)#exit
09010282327037-VTP_Client(config)#interface fastEthernet 0/2
09010282327037-VTP_Client(config-if)#switchport mode access
09010282327037-VTP_Client(config-if)#switchport access vlan 3
09010282327037-VTP_Client(config-if)#exit
09010282327037-VTP_Client(config)#interface fastEthernet 0/3
09010282327037-VTP_Client(config-if)#switchport mode access
09010282327037-VTP_Client(config-if)#switchport access vlan 4
09010282327037-VTP_Client(config-if)#exit
09010282327037-VTP_Client(config)#vtp version 2
09010282327037-VTP_Client(config)#vtp mode client
Setting device to VTP CLIENT mode.
09010282327037-VTP_Client(config)#vtp domain jarkom.ilkom.unsri.ac.id
Domain name already set to jarkom.ilkom.unsri.ac.id.
09010282327037-VTP_Client(config)#vtp password jarkom
Setting device VLAN database password to jarkom
09010282327037-VTP_Client(config)#interface fastEthernet 0/24
09010282327037-VTP_Client(config-if)#switchport mode trunk
09010282327037-VTP_Client(config-if)#exit
09010282327037-VTP_Client(config)#exit
09010282327037-VTP_Client#
%SYS-5-CONFIG_I: Configured from console by console

09010282327037-VTP_Client#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]

```

Hasil:

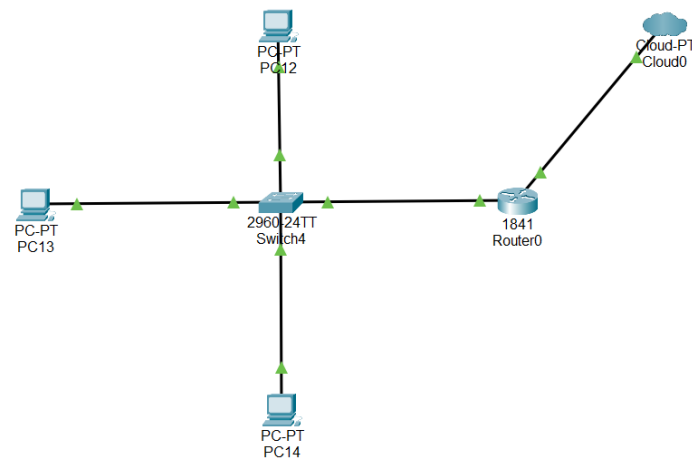
```

09010282327037-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.C90B.E700
Configuration last modified by 0.0.0.0 at 3-1-93 00:35:15

Feature VLAN :
-----
VTP Operating Mode       : Client
Maximum VLANs supported locally : 255
Number of existing VLANs : 8
Configuration Revision    : 7
MD5 digest               : 0x3F 0xA6 0x1B 0x66 0x9B 0x09 0x69 0x9F
                        : 0xB4 0x46 0x67 0x4B 0xCC 0x46 0x27 0x83

```

- **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)#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

Switch_Distribusi#copy run start

```

Hasil:

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 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)#
%LINK-5-CHANGED: Interface FastEthernet0/1.1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.1, changed state to up

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)#
%LINK-5-CHANGED: Interface FastEthernet0/1.2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.2, changed state to up

Router_I(config-subif)#encapsulation dot1Q 3
Router_I(config-subif)#encapsulation dot1Q 3
Router_I(config-subif)#ip address 192.168.100.1 255.255.255.0
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)#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 192.168.200.0/24
Router_I(dhcp-config)#network 192.168.200.0 255.255.255.0
Router_I(dhcp-config)#default-router 192.168.200.1
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 192.168.100.2 192.168.100.20
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 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)#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 Route 0.0.0.0 0.0.0.0 10.100.121.1
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]

```

Hasil:

```

Router_I#sh ip dhcp binding
IP address      Client-ID/      Lease expiration        Type
                Hardware address

```