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MODUL 9 DAN 10

Modul 9

Mengkonfigurasi Router

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router1
Router1(config)#enable secret class
Router1(config)#line console 0
Router1(config-line)#password cisco
Router1(config-line)#login
Router1(config-line)#line vty 0 4
Router1(config-line)#password cisco
Router1(config-line)#login
Router1(config-line)#exit
Router1(config)#int fa0/0
Router1(config-if)#ip address 192.168.7.126 255.255.255.128
Router1(config-if)#no shut
Router1(config-if)#description connection to 192.168.7.1
Router1(config-if)#int fa0/1
Router1(config-if)#description connection to switch0
Router1(config-if)#ip address 192.168.7.190 255.255.255.192
Router1(config-if)#no shut
Router1(config-if)#end
Router1#
```

Ping untuk verifikasi sambungan

```
C:\>ping 192.168.7.1

Pinging 192.168.7.1 with 32 bytes of data:

Reply from 192.168.7.1: bytes=32 time=4ms TTL=128
Reply from 192.168.7.1: bytes=32 time<1ms TTL=128
Reply from 192.168.7.1: bytes=32 time=2ms TTL=128
Reply from 192.168.7.1: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms

C:\>ping 192.168.7.126

Pinging 192.168.7.126 with 32 bytes of data:

Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.7.126:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
C:\>ping 192.168.7.190

Pinging 192.168.7.190 with 32 bytes of data:

Reply from 192.168.7.190: bytes=32 time=1ms TTL=255
Reply from 192.168.7.190: bytes=32 time<1ms TTL=255
Reply from 192.168.7.190: bytes=32 time<1ms TTL=255
Reply from 192.168.7.190: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.7.190:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

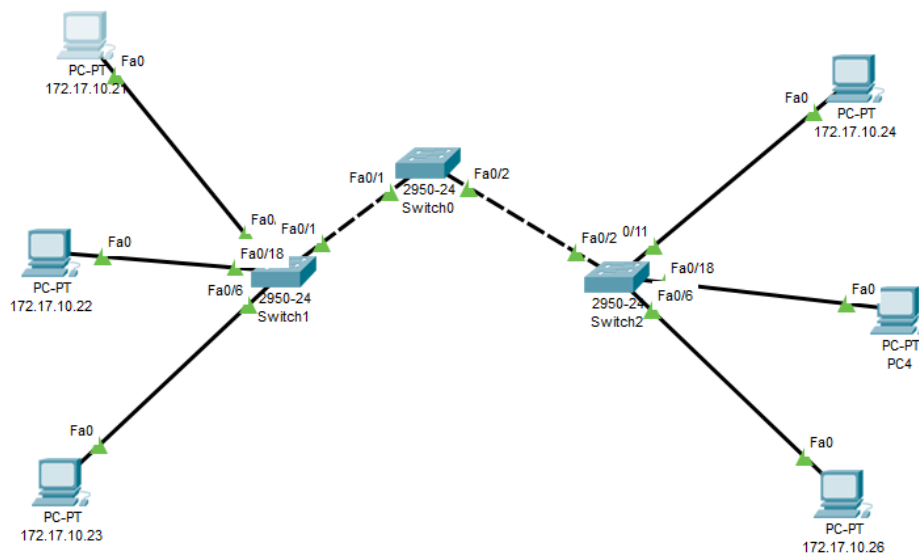
C:\>ping 192.168.7.126

Pinging 192.168.7.126 with 32 bytes of data:

Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255
Reply from 192.168.7.126: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.7.126:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Modul 10



Langkah 1 : Mematikan semua port pada Switch(S1, S2 dan S3)

```
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#int range fa0/1-24
S2(config-if-range)#shutdown
```

Langkah 2 : Menghidupkan port yang terpakai pada S2 dan S3

```
S2(config)#int fa0/6
S2(config-if)#no shut

S2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/6, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to up

S2(config-if)#int fa0/11
S2(config-if)#no shut

S2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/11, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/11,
changed state to up

S2(config-if)#int fa0/18
S2(config-if)#no shut

S2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/18, changed state to up
```

Langkah 3 : Mengkonfigurasi Switch (S1, S2 dan S3)

```
S1>en
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#enable secret class
S1(config)#no ip domain-lookup
S1(config)#line console 0
S1(config-line)#password cisco
S1(config-line)#login
S1(config-line)#line vty 0 15
S1(config-line)#password cisco
S1(config-line)#login
S1(config-line)#end
S1#
%SYS-5-CONFIG_I: Configured from console by console

S1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

Langkah 4 : Mengonfigurasi mode operasi, nama domain, dan password (S1, S2 dan S3)

```
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#vtp mode server
Device mode already VTP SERVER.
S1(config)#vtp domain Lab9
Changing VTP domain name from NULL to Lab9
S1(config)#vtp password cisco
Setting device VLAN database password to cisco
S1(config)#end

S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#vtp mode client
Setting device to VTP CLIENT mode.
S2(config)#vtp domain Lab9
Changing VTP domain name from NULL to Lab9
S2(config)#vtp password cisco
Setting device VLAN database password to cisco
S2(config)#end

S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#vtp mode transparent
Setting device to VTP TRANSPARENT mode.
S3(config)#vtp domain Lab9
Changing VTP domain name from NULL to Lab9
S3(config)#vtp passwrod cisco
      ^
% Invalid input detected at '^' marker.

S3(config)#vtp password cisco
Setting device VLAN database password to cisco
S3(config)#end
```

Langkah 5 : Mengkonfigurasi Trunking native VLAN (S1, S2 dan S3)

```
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#int range fa0/1-5
S1(config-if-range)#switchport mode trunk
S1(config-if-range)#switchport trunk native vlan 99
S1(config-if-range)#no shut
```

Langkah 6 : Mengkonfigurasi security port pada layer access Switch S2 dan S3

```
S2(config)#int fa0/6
S2(config-if)#switchport port-security
Command rejected: FastEthernet0/6 is a dynamic port.
S2(config-if)#int fa0/11
S2(config-if)#switchport port-security
Command rejected: FastEthernet0/11 is a dynamic port.
S2(config-if)#ex
S2(config)#int fa0/6
S2(config-if)#switchport mode access
S2(config-if)#switchport port-security
S2(config-if)#switchport port-security maximum 1
S2(config-if)#switchport port-security mac-address sticky
S2(config-if)#int fa0/11
S2(config-if)#switchport mode access
S2(config-if)#switchport port-security
S2(config-if)#switchport port-security maximum 1
S2(config-if)#switchport port-security mac-address sticky
S2(config-if)#int fa0/18
S2(config-if)#switchport mode access
S2(config-if)#switchport port-security maximum 1
S2(config-if)#switchport port-security mac-address sticky
S2(config-if)#end
```

Langkah 7 : Mengkonfigurasi VLAN pada Switch dengan mode VTP server

```
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#vlan 99
S1(config-vlan)#name management
S1(config-vlan)#exit
S1(config)#vlan 10
S1(config-vlan)#name faculty/staff
S1(config-vlan)#exit
S1(config)#vlan 20
S1(config-vlan)#name students
S1(config-vlan)#exit
S1(config)#vlan 30
S1(config-vlan)#name guest
S1(config-vlan)#exit
```

VLAN Name	Status	Ports
1 default	active	Fa0/2, Fa0/3, 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, Fa0/24
10 faculty/staff	active	
20 students	active	
30 guest	active	
99 management	active	
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

Langkah 8 : Mengkonfigurasi VLAN secara manual pada S3 karena S3 client

```
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#vlan 88
S3(config-vlan)#name test
S3(config-vlan)#ex
S3(config)#no vlan 88
S3(config)#vlan 99
S3(config-vlan)#name management
S3(config-vlan)#ex
S3(config)#vlan 10
S3(config-vlan)#name faculty/staff
S3(config-vlan)#ex
S3(config)#vlan 20
S3(config-vlan)#name students
S3(config-vlan)#ex
S3(config)#vlan 30
S3(config-vlan)#name guest
S3(config-vlan)#exit
```

Langkah 9 : Mengkonfigurasi IP Address interface manajemen (S1, S2 dan S3)

```
S1(config-if)#ip address 172.17.99.11 255.255.255.0
S1(config-if)#no shut
S1(config-if)#
```

Langkah 10 : Memasukkan port pada VLAN

```
S1(config)#int range fa0/6-10
S1(config-if-range)#switchport access vlan 30
S1(config-if-range)#int range fa0/11-17
S1(config-if-range)#switchport access vlan 10
S1(config-if-range)#int range fa0/18-24
S1(config-if-range)#switchport access vlan 20
S1(config-if-range)#end
```

Langkah 11 : Memeriksa VTP pruning

```
S1#sh vtp status
VTP Version                : 2
Configuration Revision      : 8
Maximum VLANs supported locally : 255
Number of existing VLANs    : 9
VTP Operating Mode          : Server
VTP Domain Name             : Lab9
VTP Pruning Mode            : Disabled
```