TUGAS 1 PERANCANGAN SISTEM JARINGAN KOMPUTER KONFIGURASI DASAR SWITCH

Disusun Guna Memenuhi Tugas Perancangan Jaringan Komputer
Semester VI
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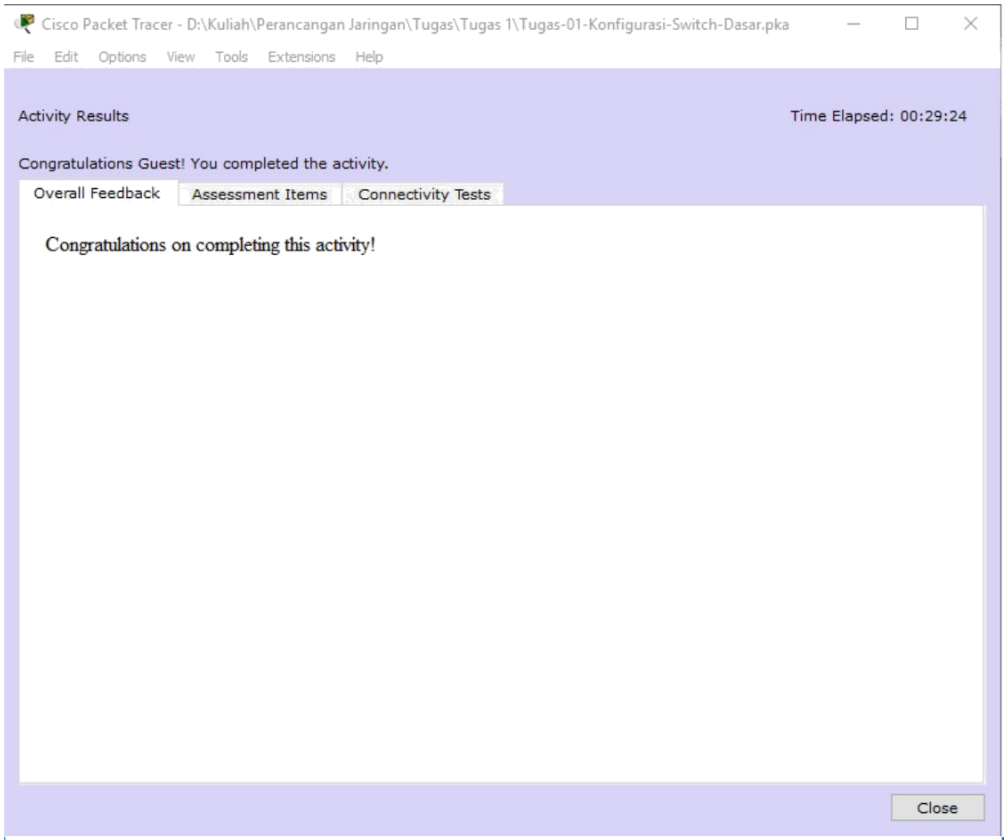
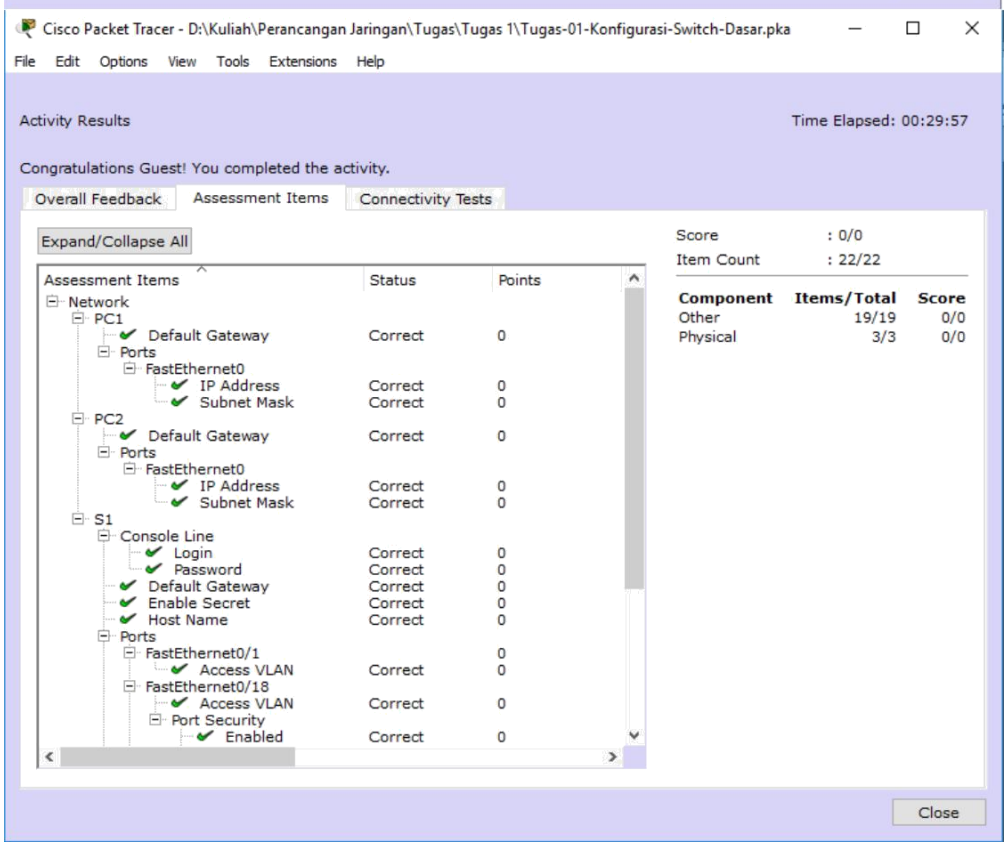
PROGRAM STUDI INFORMATIKA
FAKULTAS KOMUNIKASI DAN INFORMATIKA
UNIVERSITAS MUHAMMADIYAH SURAKARTA

2018

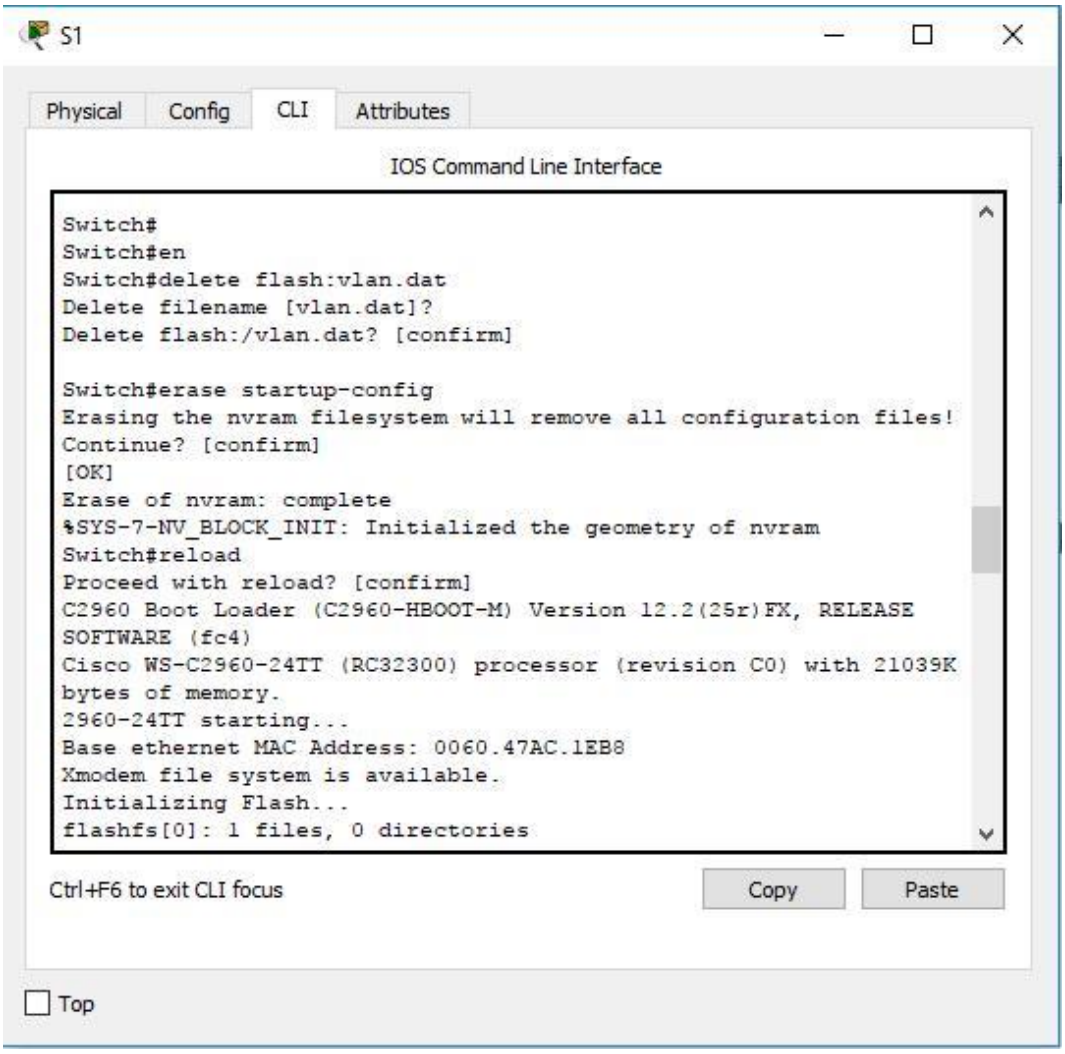

Cisco Packet Tracer - D:\Kuliah\Perancangan Jaringan\Tugas\Tugas 1\Tugas-01-Konfigurasi-Switch-Dasar.pka
File Edit Options View Tools Extensions Help
Activity Results
Time Elapsed: 00:29:24
Congratulations Guest! You completed the activity.
Overall Feedback
Assessment Items
Connectivity Tests
Congratulations on completing this activity!
Close


Cisco Packet Tracer - D:\Kuliah\Perancangan Jaringan\Tugas\Tugas 1\Tugas-01-Konfigurasi-Switch-Dasar.pka
File Edit Options View Tools Extensions Help
Activity Results
Time Elapsed: 00:29:57
Congratulations Guest! You completed the activity.
Overall Feedback
Assessment Items
Connectivity Tests
Expand/Collapse All
Assessment Items
Status
Points
Network
PC1
Default Gateway Correct 0
Ports
FastEthernet0
IP Address Correct 0
Subnet Mask Correct 0
PC2
Default Gateway Correct 0
Ports
FastEthernet0
IP Address Correct 0
Subnet Mask Correct 0
S1
Console Line
Login Correct 0
Password Correct 0
Default Gateway Correct 0
Enable Secret Correct 0
Host Name Correct 0
Ports
FastEthernet0/1 0
Access VLAN Correct 0
FastEthernet0/18
Access VLAN Correct 0
Port Security
Enabled Correct 0
Score : 0/0
Item Count : 22/22
Component Items/Total Score
Other 19/19 0/0
Physical 3/3 0/0
Close

Tugas 1 : Menghapus Konfigurasi yang sudah ada pada Switch

Langkah langkah :

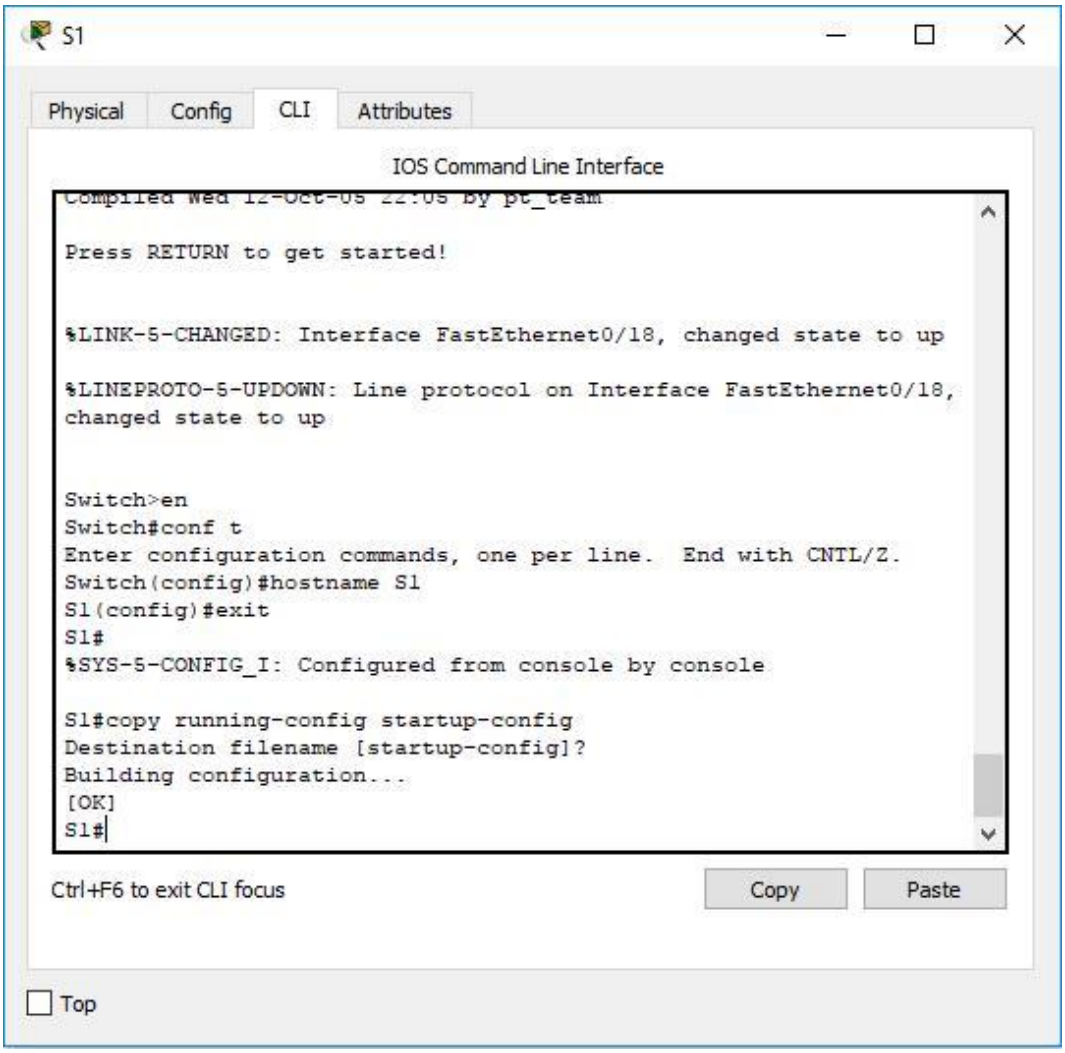
1. Masuk privileged EXEC mode dengan perintah enable
2. Menghapus Vlan database information file
3. Menghapus switch startup configuration file dari NVRAM
4. Memastikan informasi VLAN sudah dihapus
5. Reload switch



Tugas 2 : Memeriksa Default Switch Configuration

Langkah langkah :

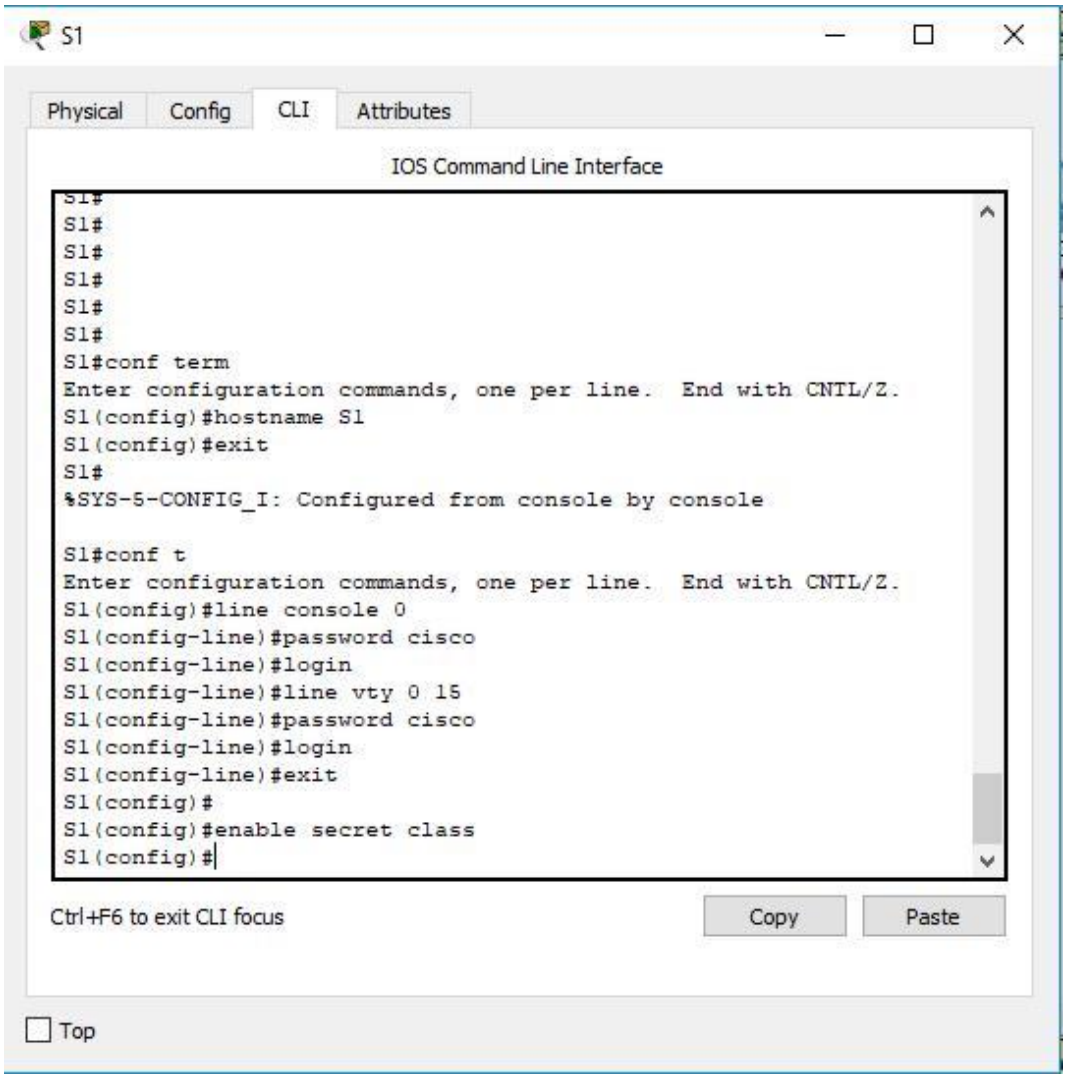
1. Masuk privileged
2. Mempelajari konfigurasi switch saat ini
3. Menampilkan Informasi Cisco IOS
4. Mempelajari fast ethernet interface
5. Mempelajari informasi VLAN
6. Mempelajari Flash memory
7. Mempelajari dan menyimpan file konfigurasi startup

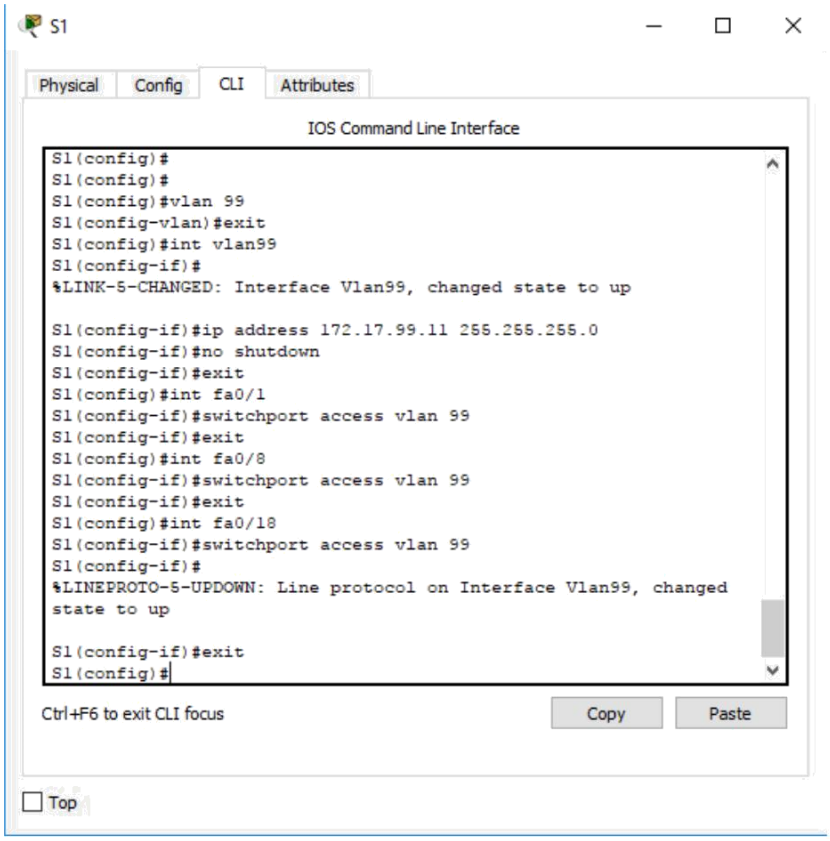


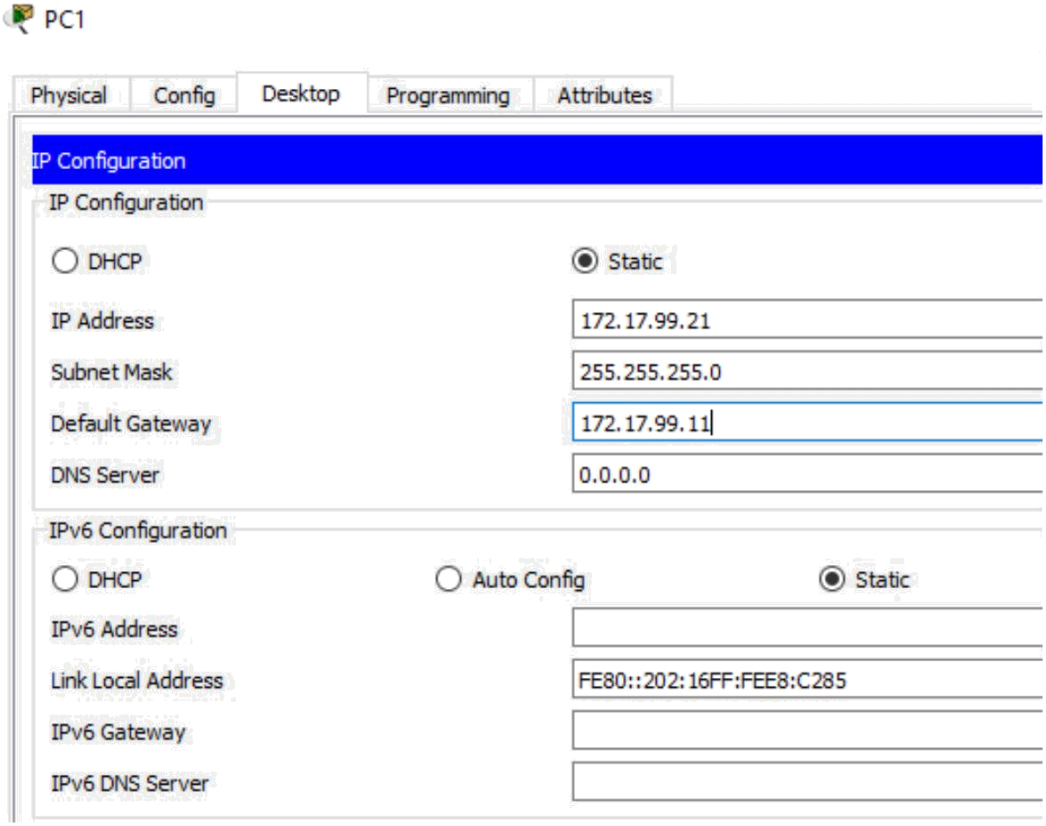
Tugas 3 : Membuat sebuah Basic Switch Configuration

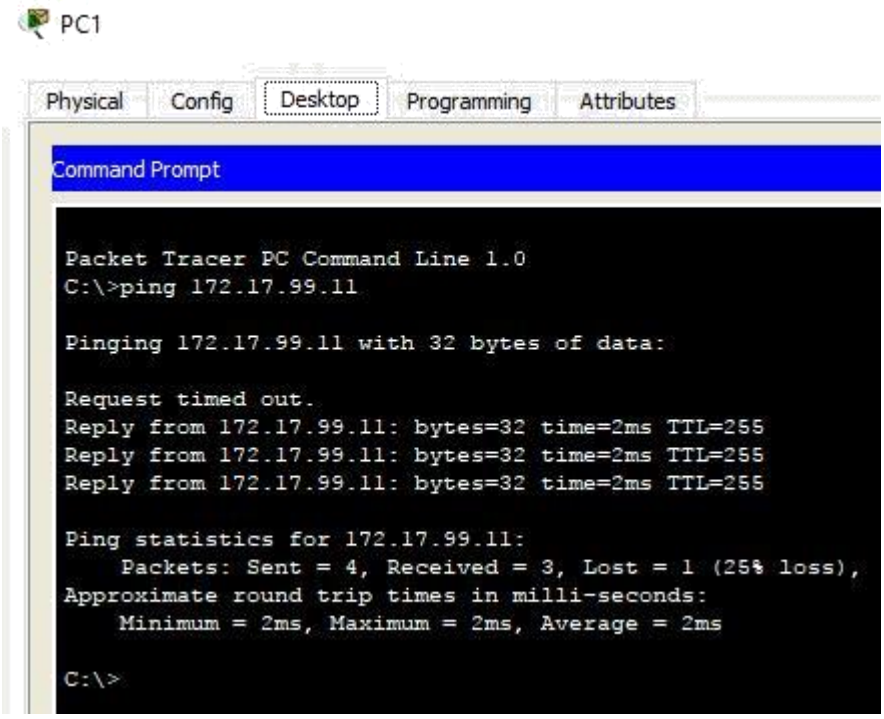
Langkah langkah :

1. Memberikan nama untuk switch
2. Mengatur Access Password
3. Mengatur command mode password
4. Mengconfigurasi layer 3address dari switch
5. Menempatkan port pada switch VLAN
6. Mengatur switch default gateway
7. Memastikan management LANs settings
8. Mengkonfigurasi IP address dan default gateway pada PC1
9. Memastikan Konektifitas
10. Mengatur pengaturan Port speed dan duplex setting untuk fast ethernet interface
11. Menyimpan file Startup configuration
12. Mempelajari file Startup configuration




S1
Physical
Config
CLI
Attributes
IOS Command Line Interface
S1(config)#
S1(config)#
S1(config)#vlan 99
S1(config-vlan)#exit
S1(config)#int vlan99
S1(config-if)#
%LINK-5-CHANGED: Interface Vlan99, changed state to up
S1(config-if)#ip address 172.17.99.11 255.255.255.0
S1(config-if)#no shutdown
S1(config-if)#exit
S1(config)#int fa0/1
S1(config-if)#switchport access vlan 99
S1(config-if)#exit
S1(config)#int fa0/8
S1(config-if)#switchport access vlan 99
S1(config-if)#exit
S1(config)#int fa0/18
S1(config-if)#switchport access vlan 99
S1(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan99, changed state to up
S1(config-if)#exit
S1(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

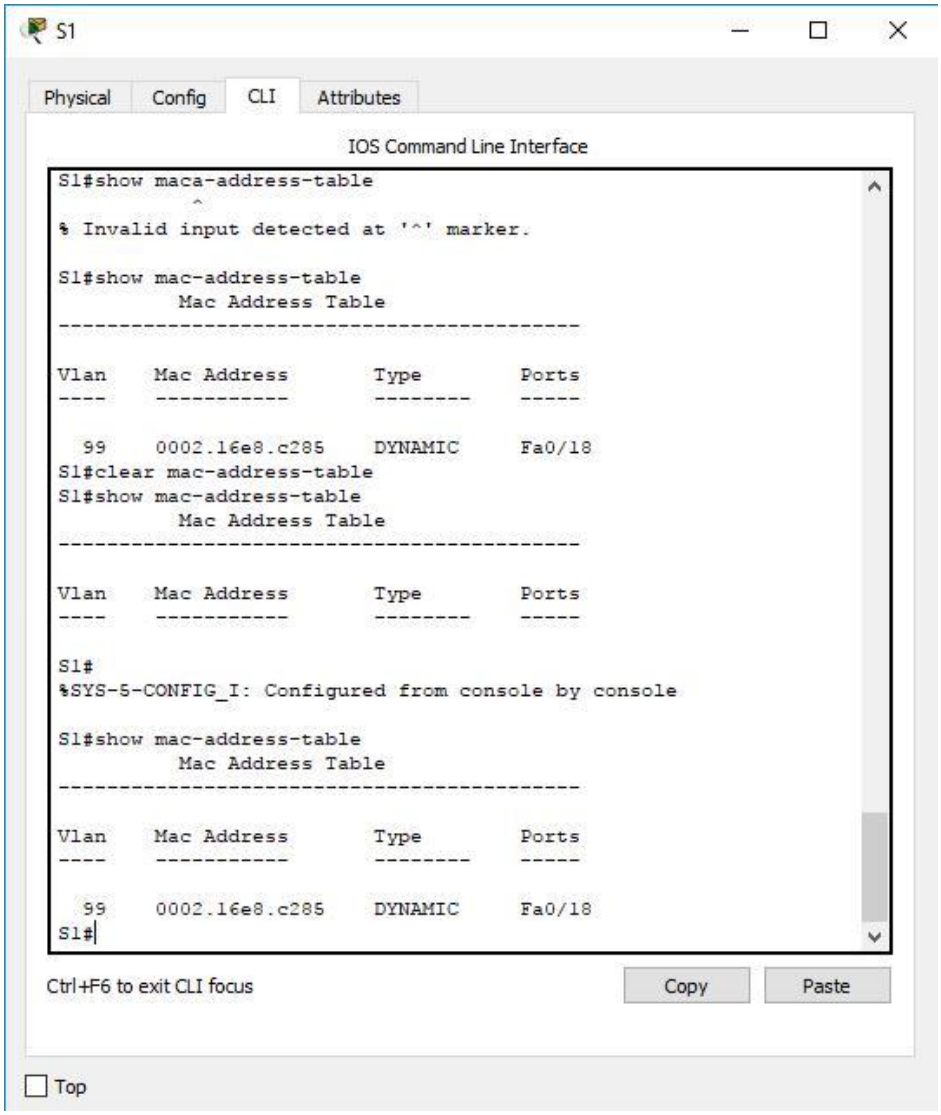

PC1
Physical
Config
Desktop
Programming
Attributes
IP Configuration
IP Configuration
DHCP
Static
IP Address
172.17.99.21
Subnet Mask
255.255.255.0
Default Gateway
172.17.99.11
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::202:16FF:FEE8:C285
IPv6 Gateway
IPv6 DNS Server

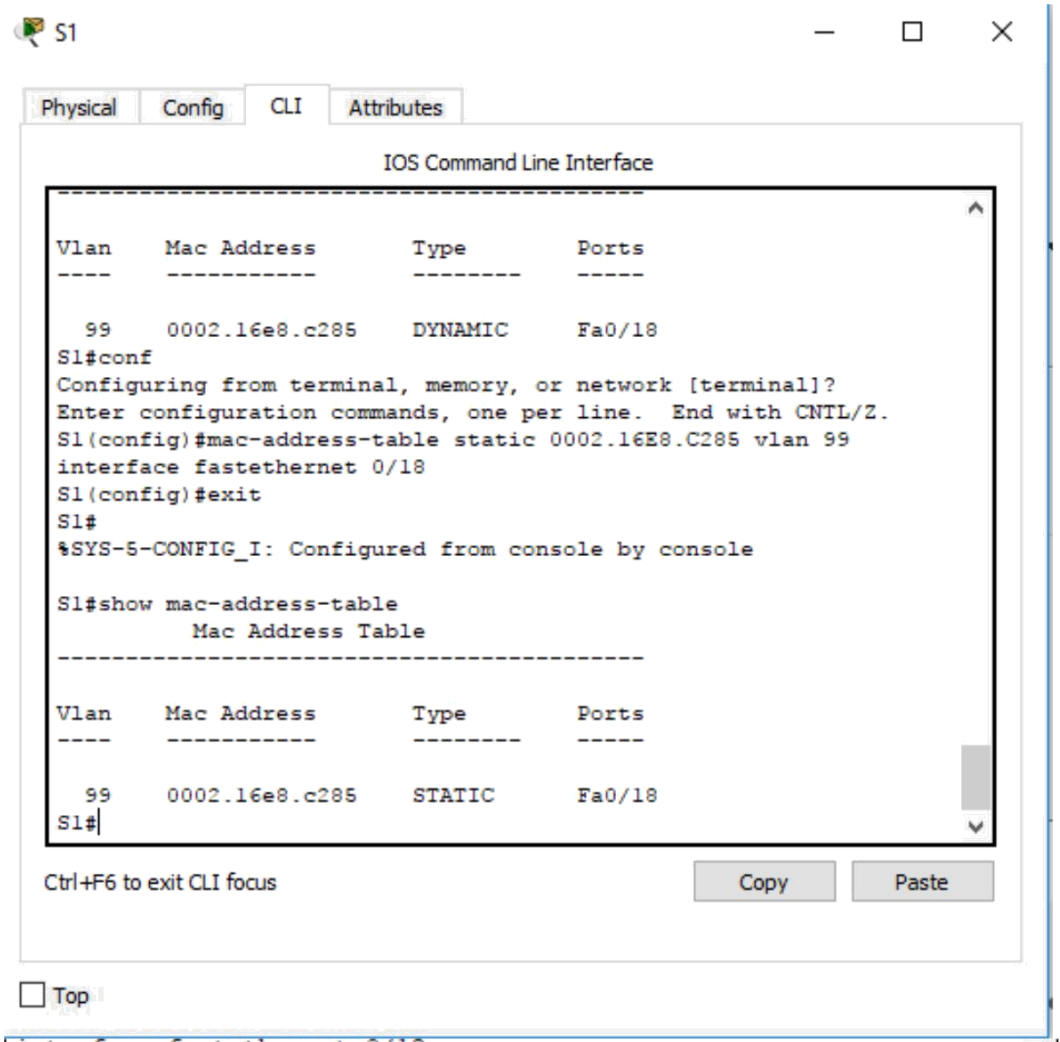

PC1
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 172.17.99.11
Pinging 172.17.99.11 with 32 bytes of data:
Request timed out.
Reply from 172.17.99.11: bytes=32 time=2ms TTL=255
Reply from 172.17.99.11: bytes=32 time=2ms TTL=255
Reply from 172.17.99.11: bytes=32 time=2ms TTL=255
Ping statistics for 172.17.99.11:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 2ms, Maximum = 2ms, Average = 2ms
C:\>

Tugas 4 : Mangatur MAC Address Table

Langkah langkah :

1. Mencatat MAC address dari host
2. Memastkan MAC address pada switch sudah dipelajari
3. Menghapus MAC address table
4. Memastikan Hasilnya
5. Mempelajari MAC table lagi
6. Mengatur static MAC address
7. Memastikan Hasilnya
8. Menghapus static MAC entry
9. Memastikan Hasilnya



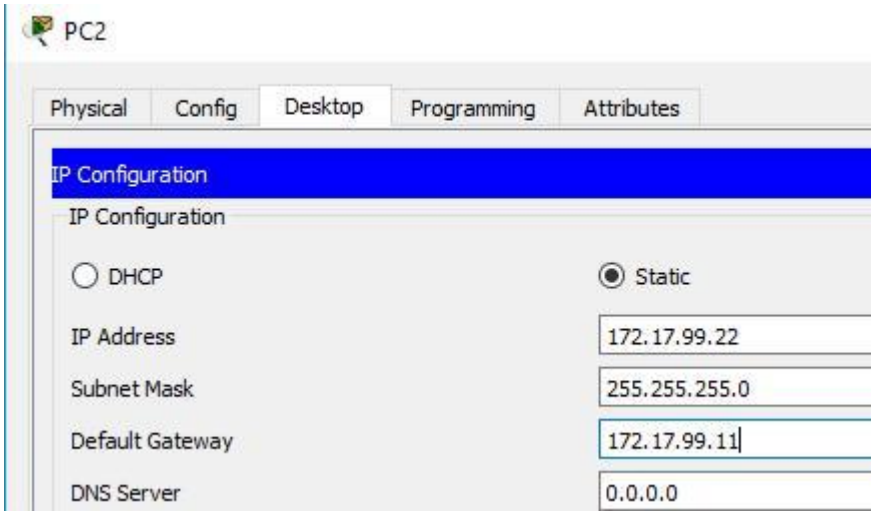


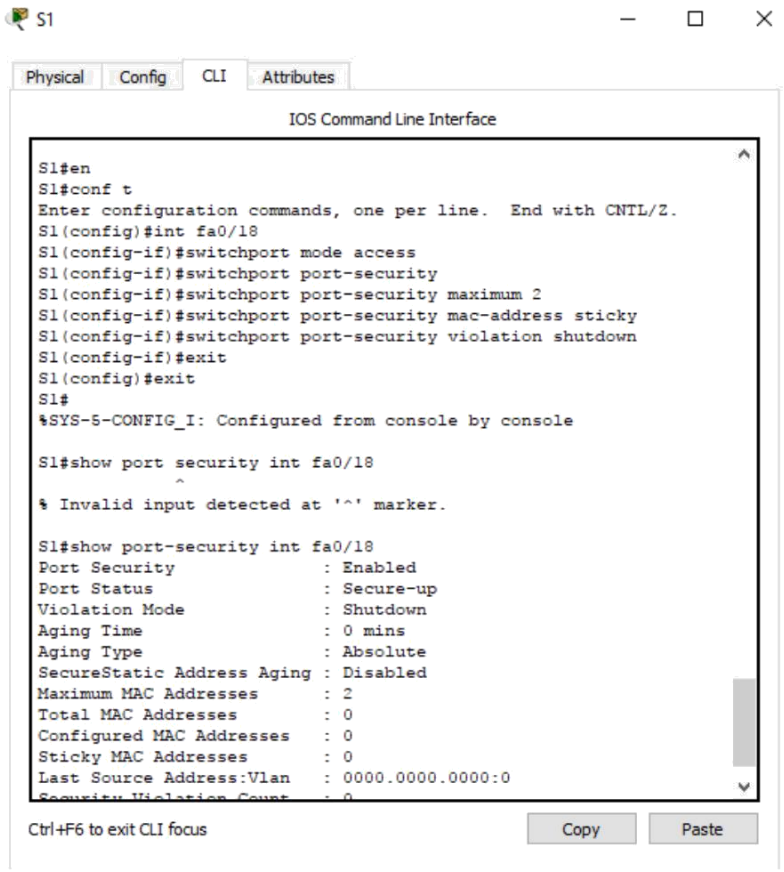

```
interface fastethernet 0/18
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console

S1#show mac-address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----

S1#
```

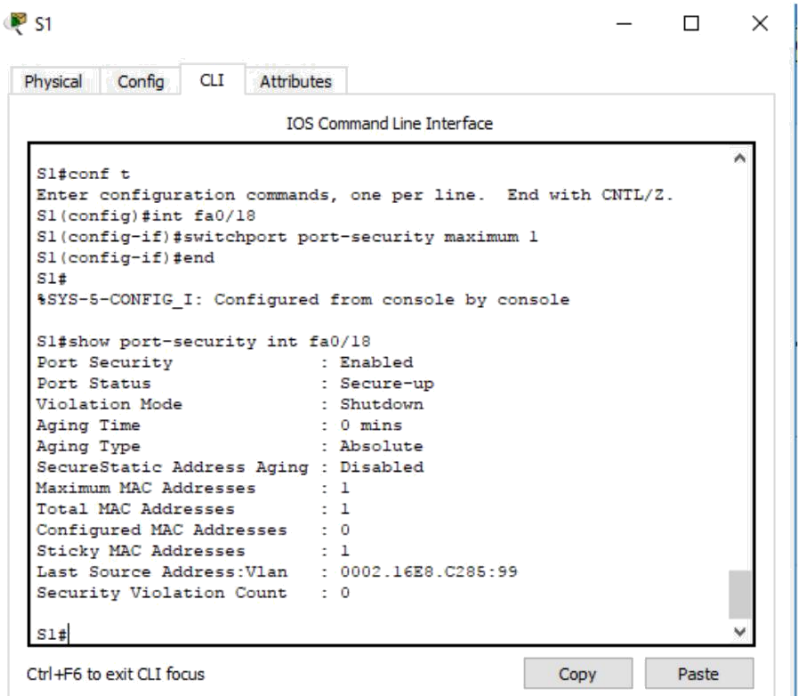
Tugas 5 : Konfigurasi Port Security

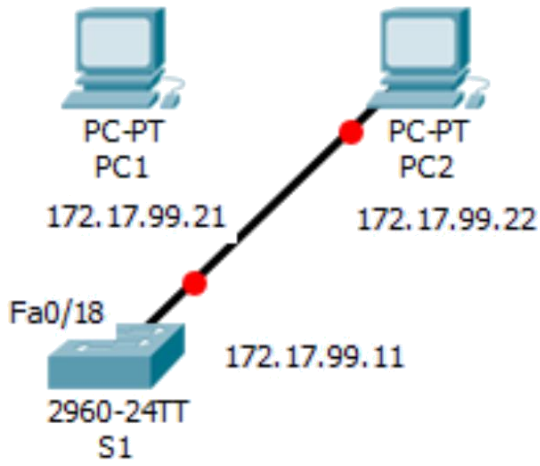
Langkah langkah :

1. Konfigurasi Second Host
2. Memastikan Konektifitas
3. Memastikan MAC address pada switch sudah di pelajari
4. Daftar port security options
5. Konfigurasi port security pada access port
6. Memastikan hasilnya
7. Mempelajari file konfigurasi yang berjalan
8. Merubah pengaturan port security pada sebuah port
9. Memastikan hasil
10. Memperkenalkan rouge host
11. Mengaktifkan kembali port
12. Memastikan konektifitas




S1
Physical
Config
CLI
Attributes
IOS Command Line Interface
S1#en
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#int fa0/18
S1(config-if)#switchport mode access
S1(config-if)#switchport port-security
S1(config-if)#switchport port-security maximum 2
S1(config-if)#switchport port-security mac-address sticky
S1(config-if)#switchport port-security violation shutdown
S1(config-if)#exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#show port security int fa0/18
^
% Invalid input detected at '^' marker.
S1#show port-security int fa0/18
Port Security : Enabled
Port Status : Secure-up
Violation Mode : Shutdown
Aging Time : 0 mins
Aging Type : Absolute
SecureStatic Address Aging : Disabled
Maximum MAC Addresses : 2
Total MAC Addresses : 0
Configured MAC Addresses : 0
Sticky MAC Addresses : 0
Last Source Address:Vlan : 0000.0000.0000:0
Ctrl+F6 to exit CLI focus
Copy
Paste


S1
Physical
Config
CLI
Attributes
IOS Command Line Interface
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#int fa0/18
S1(config-if)#switchport port-security maximum 1
S1(config-if)#end
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#show port-security int fa0/18
Port Security : Enabled
Port Status : Secure-up
Violation Mode : Shutdown
Aging Time : 0 mins
Aging Type : Absolute
SecureStatic Address Aging : Disabled
Maximum MAC Addresses : 1
Total MAC Addresses : 1
Configured MAC Addresses : 0
Sticky MAC Addresses : 1
Last Source Address:Vlan : 0002.16E8.C285:99
Security Violation Count : 0
S1#
Ctrl+F6 to exit CLI focus
Copy
Paste




```
S1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
S1(config)#int fa0/18
S1(config-if)#no shutdown

%LINK-5-CHANGED: Interface FastEthernet0/18, changed state to
down
S1(config-if)#
```