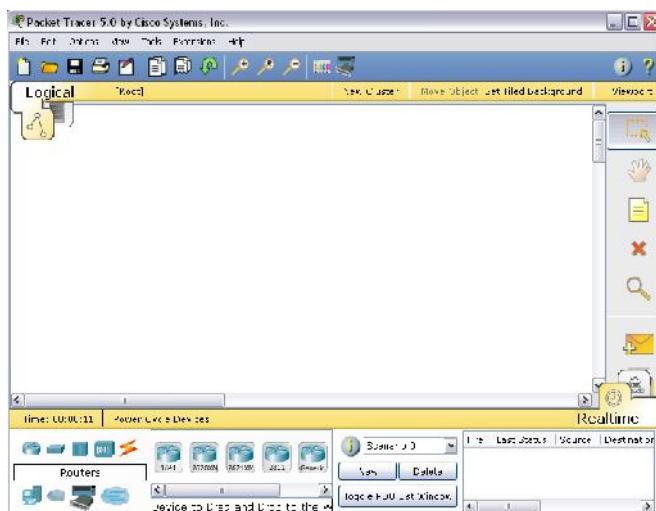
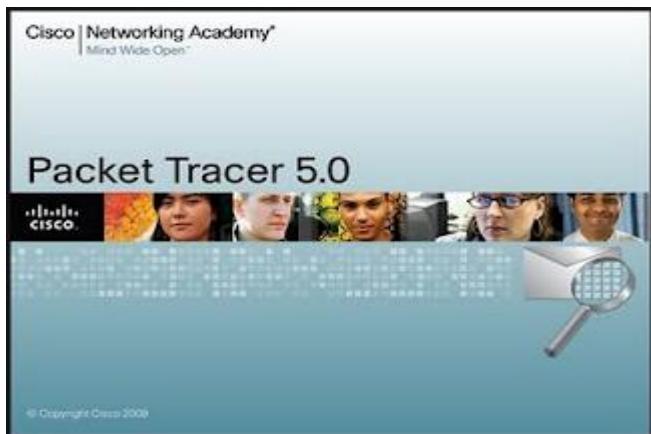


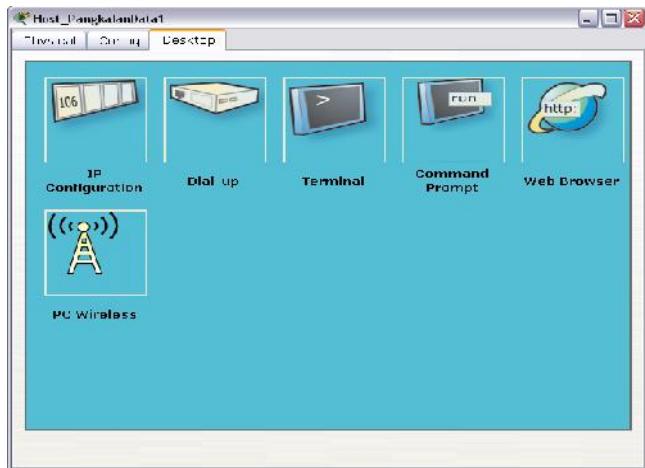
## LAMPIRAN 1

### Tampilan Layar Pada Packet Tracer 5.0

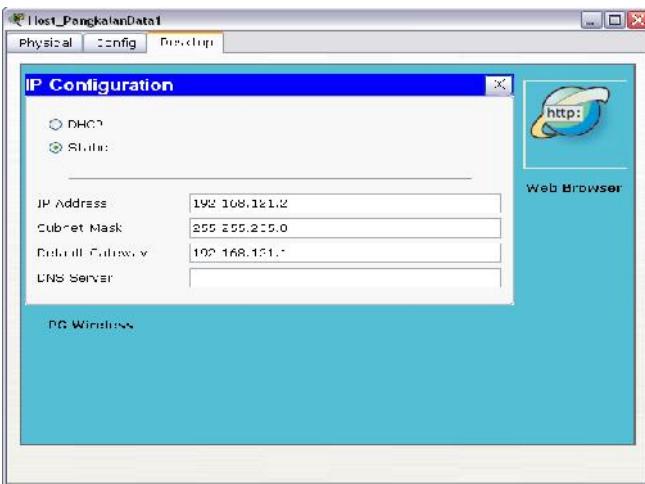


## Cara Konfigurasi PC

### 1) Klik PC

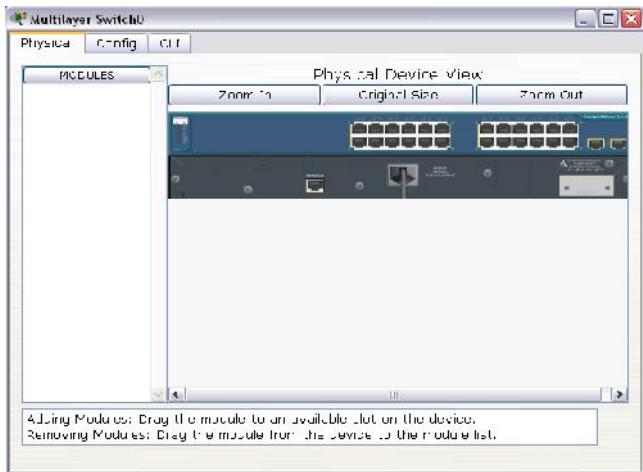


### 2) Klik IP Configuration



## Cara Konfigurasi Switch

### 1) Klik Switch



### 2) Klik CLI

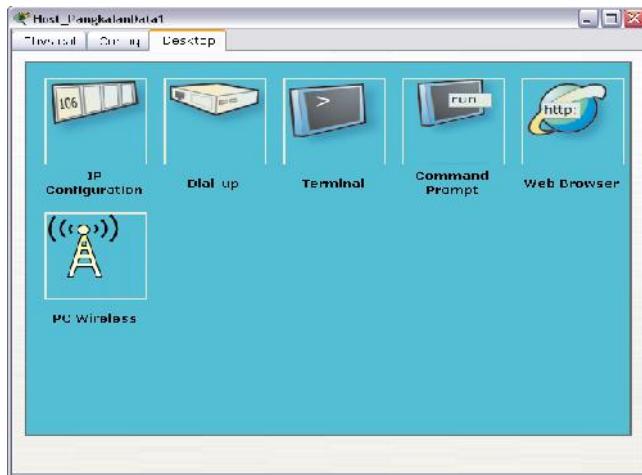
```
System:0> show interfaces status
*LINE-0-CHANGED: Interface Vlan1, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
*LINE-0-0-L-UP-NM: Line protocol on Interface FastEthernet0/1, changed state to up
*IP
*LINE-0-0-L-UP-NM: Line protocol on Interface Vlan2, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
*LINE-0-0-C-UP-CM: Line protocol on Interface FastEthernet0/2, changed state to up
*IP
*LINK-5-CHANGED: Interface FastEthernet0/8, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/9, changed state to up
*LINE-0-0-C-UP-CM: Line protocol on Interface FastEthernet0/9, changed state to up
*IP
*LINE-0-0-L-UP-NM: Line protocol on Interface Vlan3, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up
*LINE-0-0-L-UP-NM: Line protocol on Interface FastEthernet0/4, changed state to up
*IP
*LINE-0-0-L-UP-NM: Line protocol on Interface Vlan4, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
*LINE-0-0-C-UP-CM: Line protocol on Interface FastEthernet0/5, changed state to up
*IP
*LINE-0-0-C-UP-CM: Line protocol on Interface Vlan5, changed state to up
Next Access Vlan first...n

Password:
```

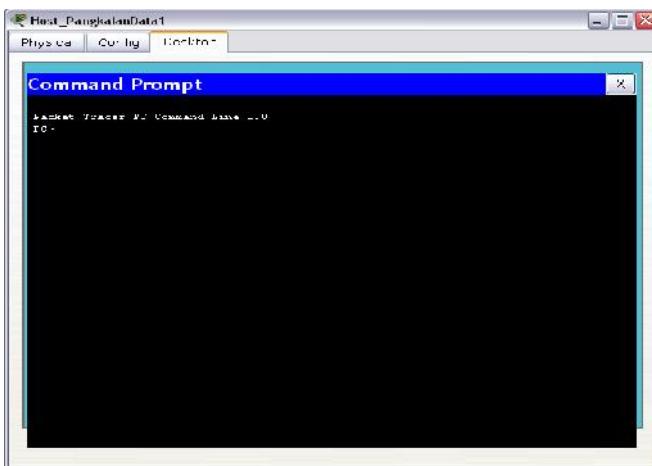
Copy      Paste

## Cara Testing Koneksi

- 1) Klik PC



- 2) Klik Command Prompt



## LAMPIRAN 2

### Konfigurasi Dan Hasilnya

#### Konfigurasi Password Console

The screenshot shows the Cisco Multilayer Switch CLI interface. The user has entered the command `password cisco` to set the console password to "cisco". The terminal window displays the configuration mode prompt `Switch>config#` and the configuration command `password cisco`.

```
*LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
*LINK-5-UPDOWN: Line protocol on interface FastEthernet0/2, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
*LINK-5-UPDOWN: Line protocol on interface FastEthernet0/3, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up
*LINK-5-UPDOWN: Line protocol on interface FastEthernet0/4, changed state to up
*LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
*LINK-5-UPDOWN: Line protocol on interface FastEthernet0/5, changed state to up
Switch>config#password cisco
Switch>config#end
Switch>config#login
* Login disabled on line 0, until 'password' is set
Switch(config-line)#password cisco
Switch(config-line)#exit
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#
```

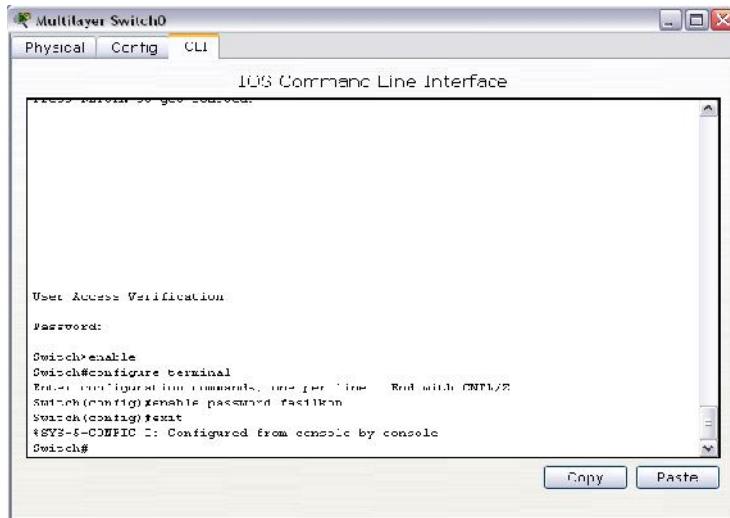
#### Hasilnya

The screenshot shows the Cisco Multilayer Switch CLI interface. The user has successfully set the console password to "cisco". The terminal window displays the message "Please RETURN to get started." followed by the "User Access Verification" prompt, asking for a password. The configuration mode prompt `Switch>config#` is visible at the bottom.

```
Please RETURN to get started.

User Access Verification
password:
Switch>config#
```

## Konfigurasi Password Enable

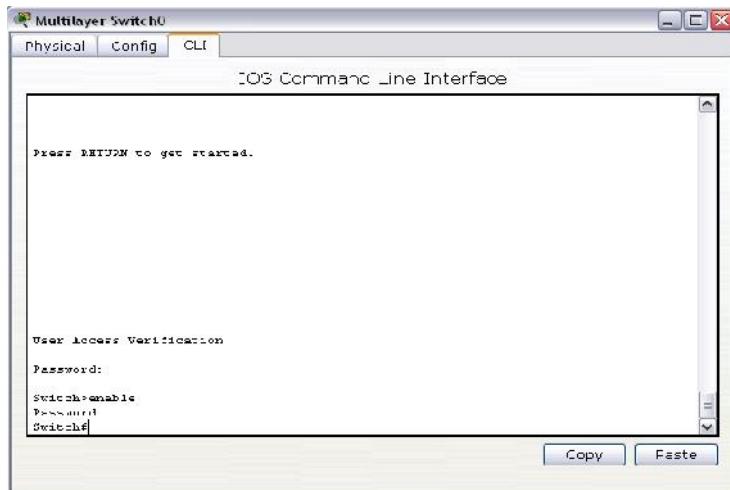


A screenshot of a Windows-style application window titled "Multilayer Switch0". The window has three tabs at the top: "Physical", "Config", and "CLI", with "CLI" being the active tab. The main area is labeled "TCL Command Line Interface". It displays the following command-line session:

```
User Access Verification
password:
switch>enable
switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z
switch(config)#enable password
switch(config)exit
switch#CFGIC : Configured from console by console
Switch#
```

At the bottom right of the window are two buttons: "Copy" and "Paste".

## Hasilnya



A screenshot of the same "Multilayer Switch0" application window, showing the result of the configuration. The "CLI" tab is still active. The main area shows:

```
Press RETURN to get started.
```

Below this, it shows the configuration command entered:

```
User Access Verification
password:
switch>enable
switch#
```

At the bottom right are the "Copy" and "Paste" buttons.

## Konfigurasi Password Virtual Terminal

The screenshot shows a terminal window titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the "IOS Command Line Interface". The interface shows the configuration of password authentication for virtual terminal lines (VTYs). The user enters "password fasilitas" for lines 0-4. A note at the bottom indicates the configuration was made from the console.

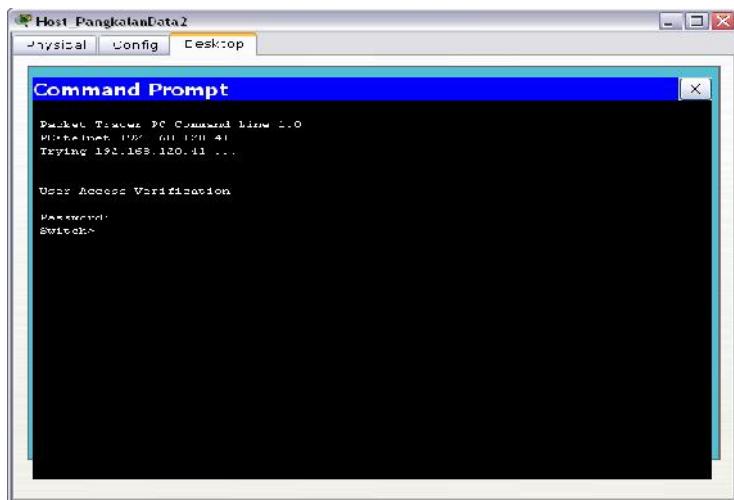
```
User Access Verification

Password:

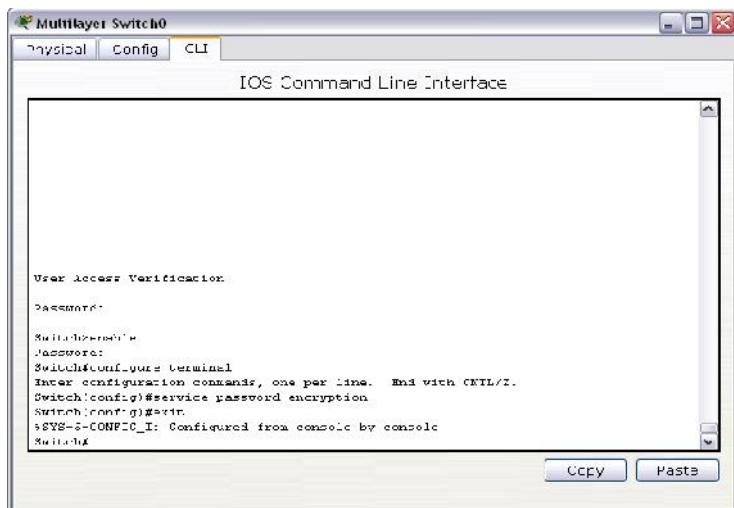
Switch>enable
Password:
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#line vty 0 4
Switch(config-line)#login
! Login disabled on line 66, until 'password' is set
! Login disabled on line 67, until 'password' is set
! Login disabled on line 68, until 'password' is set
! Login disabled on line 69, until 'password' is set
! Login disabled on line 70, until 'password' is set
Switch(config-line)#password fasilitas
Switch(config-line)#exit
Switch(config)#exit
:SYS-5-CONFIG_I: Configured from console by console
Switch#
```

Copy Paste

Hasilnya



Konfigurasi Password Enkripsi



## Sebelum Terenkripsi 1

The screenshot shows a Windows-style application window titled "Multilayer Switch0". The tab bar at the top has three tabs: "Physical", "Config", and "CLI", with "CLI" being the active tab. Below the tabs is a title bar "IOS Command Line Interface". The main area contains the following configuration text:

```
Switch#show runn
Building configuration...
Current configuration : 1056 bytes
!
version 12.2
no service password encryption
!
hostname Switch
!
(enable password farilkon)
!
!
ip ssh version 1
!
port-channel load-balance src-mac
!
interface FastEthernet0/1
```

At the bottom right of the window are two buttons: "Copy" and "Paste".

## Sebelum Terenkripsi 2

The screenshot shows a Windows-style application window titled "Multilayer Switch0". The tab bar at the top has three tabs: "Physical", "Config", and "CLI", with "CLI" being the active tab. Below the tabs is a title bar "IOS Command Line Interface". The main area contains the following configuration text, with the password "farilkon" highlighted in yellow:

```
Switch#show runn
Building configuration...
Current configuration : 1056 bytes
!
interface Vlan1
no ip address
shutdown
!
ip classless
!
!
!
line con 0
password farilkon
login
line vty 0 4
password farilkon
login
!
!
end
Switch#
```

At the bottom right of the window are two buttons: "Copy" and "Paste".

## Hasil Setelah Terenkripsi 1

Multilayer Switch0

Physical Contac ...

IOS Command Line Interface

```
password:
Password: svatchshow runa
Building configuration

Current configuration : 1089 bytes
version 12.2
service password-encryption
hostname Svitch

(enable password ? 03274D5D00150E181F)

ip ssh version 1
port-channel load-balance src-nat
interface FastEthernet0/1
```

Copy Paste

## Hasil Setelah Terenkripsi 2

Multilayer Switch0

Physical Contac ...

IOS Command Line Interface

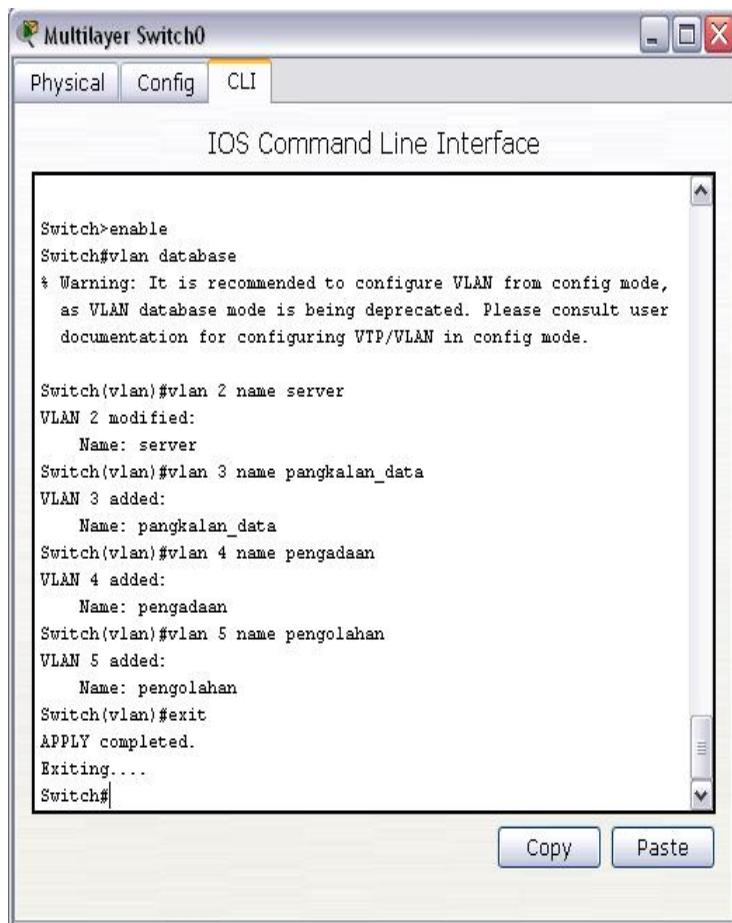
```
line vty 0 4
password ? 08174D5D00150E181F
login
line vty 0 4
password ? 08274D5D00150E181F
login

end

Svitch#
```

Copy Paste

## Konfigurasi VLAN Database



The screenshot shows a software interface titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the "IOS Command Line Interface". The terminal window contains the following configuration commands:

```
Switch>enable
Switch#vlan database
  Warning: It is recommended to configure VLAN from config mode,
  as VLAN database mode is being deprecated. Please consult user
  documentation for configuring VTP/VLAN in config mode.

Switch(vlan)#vlan 2 name server
VLAN 2 modified:
  Name: server
Switch(vlan)#vlan 3 name pangkalan_data
VLAN 3 added:
  Name: pangkalan_data
Switch(vlan)#vlan 4 name pengadaan
VLAN 4 added:
  Name: pengadaan
Switch(vlan)#vlan 5 name pengolahan
VLAN 5 added:
  Name: pengolahan
Switch(vlan)#exit
APPLY completed.
Exiting...
Switch#
```

At the bottom of the terminal window, there are "Copy" and "Paste" buttons.

Hasilnya

The screenshot shows a window titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the "IOS Command Line Interface". The output of the command "Switch#sh vlan brief" is shown, listing the following VLANs:

VLAN Name	Status	Ports
1 default	active	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 server	active	Fa0/1, Fa0/2
3 pangkalan_data	active	Fa0/3, Fa0/4, Fa0/5
4 pengadaan	active	Fa0/6, Fa0/7
5 pengolahan	active	Fa0/8, Fa0/9, Fa0/10
1002 fdd:-default	active	
1003 token-ring-default	active	
1004 fdd:net-default	active	
1005 trnet-default	active	

At the bottom of the CLI window, there are "Copy" and "Paste" buttons.

```
Switch>enable
Switch#sh vlan brief

VLAN Name          Status      Ports
----- 1   default        active      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   server         active      Fa0/1, Fa0/2
3   pangkalan_data active      Fa0/3, Fa0/4, Fa0/5
4   pengadaan       active      Fa0/6, Fa0/7
5   pengolahan       active      Fa0/8, Fa0/9, Fa0/10
1002 fdd:-default active
1003 token-ring-default active
1004 fdd:net-default active
1005 trnet-default active
Switch#
```

## Konfigurasi Mode Pada Port Dan Deskripsi 1

The screenshot shows a software interface titled "Multilayer Switch0". The window has three tabs at the top: "Physical", "Config", and "CLI". The "CLI" tab is selected, and the title bar displays "IOS Command Line Interface". The main area contains the following configuration commands:

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 2
Switch(config-if)#no shutdown
Switch(config-if)#description link to server windows_2003
Switch(config-if)#exit
Switch(config)#interface fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 2
Switch(config-if)#no shutdown
Switch(config-if)#description link to server opac
Switch(config-if)#exit
Switch(config)#interface fa0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 3
Switch(config-if)#no shutdown
Switch(config-if)#description link to pangkalan_data
Switch(config-if)#exit
Switch(config)#interface fa0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 3
Switch(config-if)#no shutdown
Switch(config-if)#description link to pangkalan_data
Switch(config-if)#exit
Switch(config)#interface fa0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 3
Switch(config-if)#no shutdown
Switch(config-if)#description link to pangkalan_data
Switch(config-if)#exit
```

At the bottom right of the CLI window, there are two buttons: "Copy" and "Paste".

## Konfigurasi Mode Pada Port Dan Deskripsi 2

The screenshot shows a window titled "Multilayer Switch0" with tabs for "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the "IOS Command Line Interface". The terminal window contains the following configuration commands:

```
Switch(config)#interface fa0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 4
Switch(config-if)#no shutdown
Switch(config-if)#description link to pengadaan
Switch(config-if)#exit
Switch(config)#interface fa0/7
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 4
Switch(config-if)#no shutdown
Switch(config-if)#description link to pengadaan
Switch(config-if)#exit
Switch(config)#interface fa0/8
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 5
Switch(config-if)#no shutdown
Switch(config-if)#description link to pengolahan
Switch(config-if)#exit
Switch(config)#interface fa0/9
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 5
Switch(config-if)#no shutdown
Switch(config-if)#description link to pengolahan
Switch(config-if)#exit
Switch(config)#interface fa0/10
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 5
Switch(config-if)#no shutdown
Switch(config-if)#description link to pengolahan
Switch(config-if)#exit
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#
```

At the bottom of the window are "Copy" and "Paste" buttons.

## Hasil Konfigurasi Mode Pada Port Dan Deskripsi 1

The screenshot shows a window titled "Multilayer Switch0" with three tabs: "Physical", "Config" (which is selected), and "CLI". Below the tabs is the title "IOS Command Line Interface". The main area contains the following configuration script:

```
interface FastEthernet0/1
description link to server windows_2003
switchport access vlan 2
switchport mode access
!
interface FastEthernet0/2
description link to server opac
switchport access vlan 2
switchport mode access
!
interface FastEthernet0/3
description link to pangkalan_data
switchport access vlan 3
switchport mode access
!
interface FastEthernet0/4
description link to pangkalan_data
switchport access vlan 3
switchport mode access
!
interface FastEthernet0/5
description link to pangkalan_data
switchport access vlan 3
switchport mode access
!
interface FastEthernet0/6
description link to pengadaan
switchport access vlan 4
switchport mode access
!
```

At the bottom of the window are two buttons: "Copy" and "Paste".

Hasil Konfigurasi Mode Pada Port Dan Deskripsi 2

The image shows a software interface titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the IOS Command Line Interface. The configuration commands listed are:

```
!
interface FastEthernet0/7
description link to pengadaan
switchport access vlan 4
switchport mode access
!
interface FastEthernet0/8
description link to pengolahan
switchport access vlan 5
switchport mode access
!
interface FastEthernet0/9
description link to pengolahan
switchport access vlan 5
switchport mode access
!
interface FastEthernet0/10
description link to pengolahan
switchport access vlan 5
switchport mode access
!
```

At the bottom of the interface are two buttons: "Copy" and "Paste".

## Konfigurasi IP Address

The screenshot shows a window titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the "IOS Command Line Interface". The terminal window contains the following configuration session:

```
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface vlan 2

*LINK-5-CHANGED: Interface Vlan2, changed state to up
*LINKPROTO-5-UPDOWN: Line protocol on Interface Vlan2, changed state to up&switch
(config-if)#ip address 192.168.120.41 255.255.255.0
Switch(config-if)jnc shutdown
Switch(config-if)jexit
Switch(config)#interface vlan 3

*LINK-5-CHANGED: Interface Vlan3, changed state to up
*LINKPROTO-5-UPDOWN: Line protocol on Interface Vlan3, changed state to up&switch
(config-if)#ip address 192.168.121.1 255.255.255.0
Switch(config-if)jnc shutdown
Switch(config-if)jexit
Switch(config)#interface vlan 4

*LINK-5-CHANGED: Interface Vlan4, changed state to up
*LINKPROTO-5-UPDOWN: Line protocol on Interface Vlan4, changed state to up&switch
(config-if)#ip address 192.168.122.1 255.255.255.0
Switch(config-if)jnc shutdown
Switch(config-if)jexit
Switch(config)#interface vlan 5

*LINK-5-CHANGED: Interface Vlan5, changed state to up
*LINKPROTO-5-UPDOWN: Line protocol on Interface Vlan5, changed state to up&switch
(config-if)#ip address 192.168.123.1 255.255.255.0
Switch(config-if)jnc shutdown
Switch(config-if)jexit
Switch(config)#exit
Switch#
```

At the bottom right of the terminal window are two buttons: "Copy" and "Paste".

Hasilnya

The screenshot shows a software application window titled "Multilayer Switch0". The window has three tabs at the top: "Physical", "Config", and "CLI". The "CLI" tab is selected, and the title bar of the main area says "IOS Command Line Interface". The main pane displays the following configuration script:

```
!
interface Vlan1
no ip address
shutdown
!
interface Vlan2
ip address 192.168.120.41 255.255.255.0
!
interface Vlan3
ip address 192.168.121.1 255.255.255.0
!
interface Vlan4
ip address 192.168.122.1 255.255.255.0
!
interface Vlan5
ip address 192.168.123.1 255.255.255.0
!
ip classless
!
!
!
!
!
line con 0
password 7 08274E5D00150E181F
login
line vty 0 4
password 7 08274E5D00150E181F
login
!
!
end
--More--
```

At the bottom right of the main pane, there are two buttons: "Copy" and "Paste".

## Konfigurasi Access Control List

The screenshot shows a Windows application window titled "Multilayer Switch0". The window has three tabs at the top: "Physical", "Config", and "CLI". The "CLI" tab is selected, and the title bar displays "IOS Command Line Interface". The main area of the window contains the following command-line session:

```
Switch>enable
Password:
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#access-list 10 deny 192.168.123.1 0.0.0.255
Switch(config)#access-list 10 deny 192.168.120.42
Switch(config)#access-list 10 permit any
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface vlan 3
Switch(config-if)#ip access-group 10 out
Switch(config-if)#exit
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#access-list 11 deny 192.168.121.1 0.0.0.255
Switch(config)#access-list 11 permit any
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface vlan 5
Switch(config-if)#ip access-group 11 out
Switch(config-if)#exit
Switch(config)#exit
*SYS-5-CONFIG_I: Configured from console by console
Switch#
```

At the bottom of the window, there are two buttons: "Copy" and "Paste".

Hasilnya

The screenshot shows a window titled "Multilayer Switch0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is selected, displaying the IOS Command Line Interface. The configuration text is as follows:

```
interface Vlan2
 ip address 192.168.120.41 255.255.255.0
!
interface Vlan3
 ip address 192.168.121.1 255.255.255.0
 ip access-group 10 out
!
interface Vlan4
 ip address 192.168.122.1 255.255.255.0
!
interface Vlan5
 ip address 192.168.123.1 255.255.255.0
 ip access-group 11 out
!
ip classless
!
!
access-list 10 deny 192.168.123.0 0.0.0.255
access-list 10 deny host 192.168.120.42
access-list 10 permit any
access-list 11 deny 192.168.121.0 0.0.0.255
access-list 11 permit any
!
--More--
```

At the bottom of the window, there are "Copy" and "Paste" buttons.