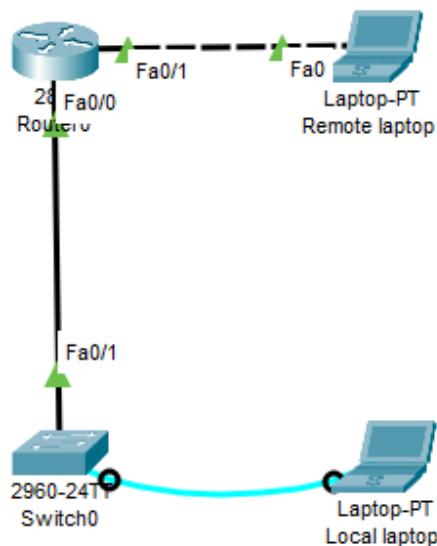


Cisco IOS Switch Basic Setup

Network Topology



Router0 Configuration Commands

```
Router0>enable
Router0#configure terminal
Router0(config)# interface fastEthernet 0/1
Router0(config-if)#ip address 172.16.1.1 255.255.255.0
Router0(config-if)#no shutdown
Router0(config-if)#interface fastEthernet 0/0
Router0(config-if)#ip address 192.168.10.1 255.255.255.0
Router0(config-if)#no shutdown
Router0(config-if)#exit
Router0(config)#exit
Router0#show ip interface brief
```

Interface	IP-Address	OK?	Method	Status	Protocol
FastEthernet0/0	192.168.10.1	YES	manual	up	up
FastEthernet0/1	172.16.1.1	YES	manual	up	up

Remote Laptop Configuration

Remote laptop

Physical Config Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Bluetooth

Global Settings

Display Name: Remote laptop

Interfaces: FastEthernet0

Gateway/DNS IPv4:

DHCP

Static

Default Gateway: 172.16.1.1

DNS Server:

Gateway/DNS IPv6:

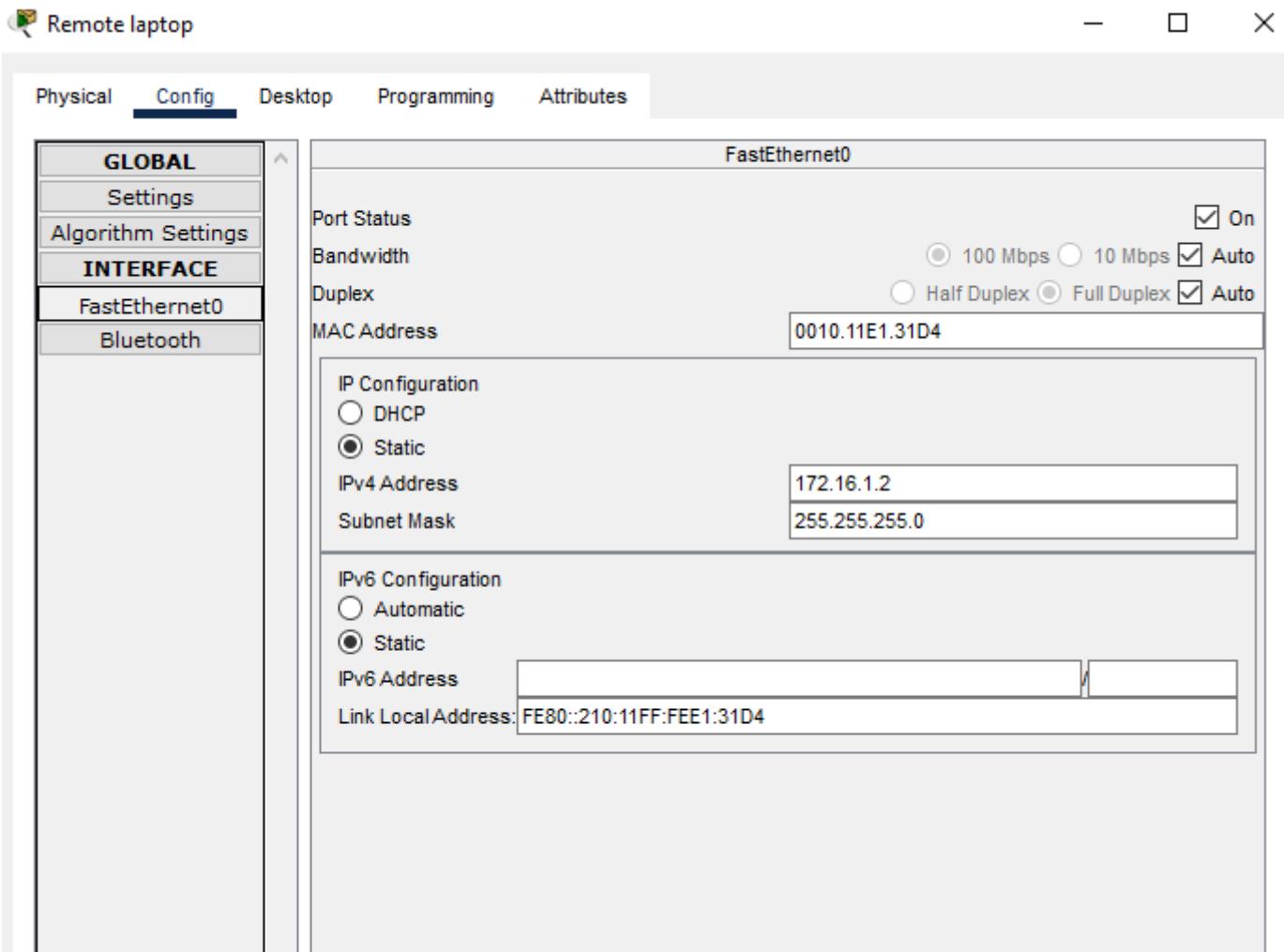
Automatic

Static

Default Gateway:

DNS Server:

This screenshot shows a software interface for managing a remote laptop's configuration. The main window has tabs for Physical, Config (which is selected), Desktop, Programming, and Attributes. On the left, there's a sidebar with sections for GLOBAL (Settings, Algorithm Settings), INTERFACE (FastEthernet0, Bluetooth), and other tabs like Desktop, Programming, and Attributes. The main panel displays 'Global Settings' for a device named 'Remote laptop' connected via 'FastEthernet0'. It includes fields for Default Gateway (set to 172.16.1.1) and DNS Server. Below that is a section for 'Gateway/DNS IPv6' with options for Automatic or Static configuration, and fields for Default Gateway and DNS Server.



The screenshot shows the Cisco Packet Tracer Command Prompt window. The title bar says 'Command Prompt'. The window displays the output of a ping command:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.16.1.1

Pinging 172.16.1.1 with 32 bytes of data:

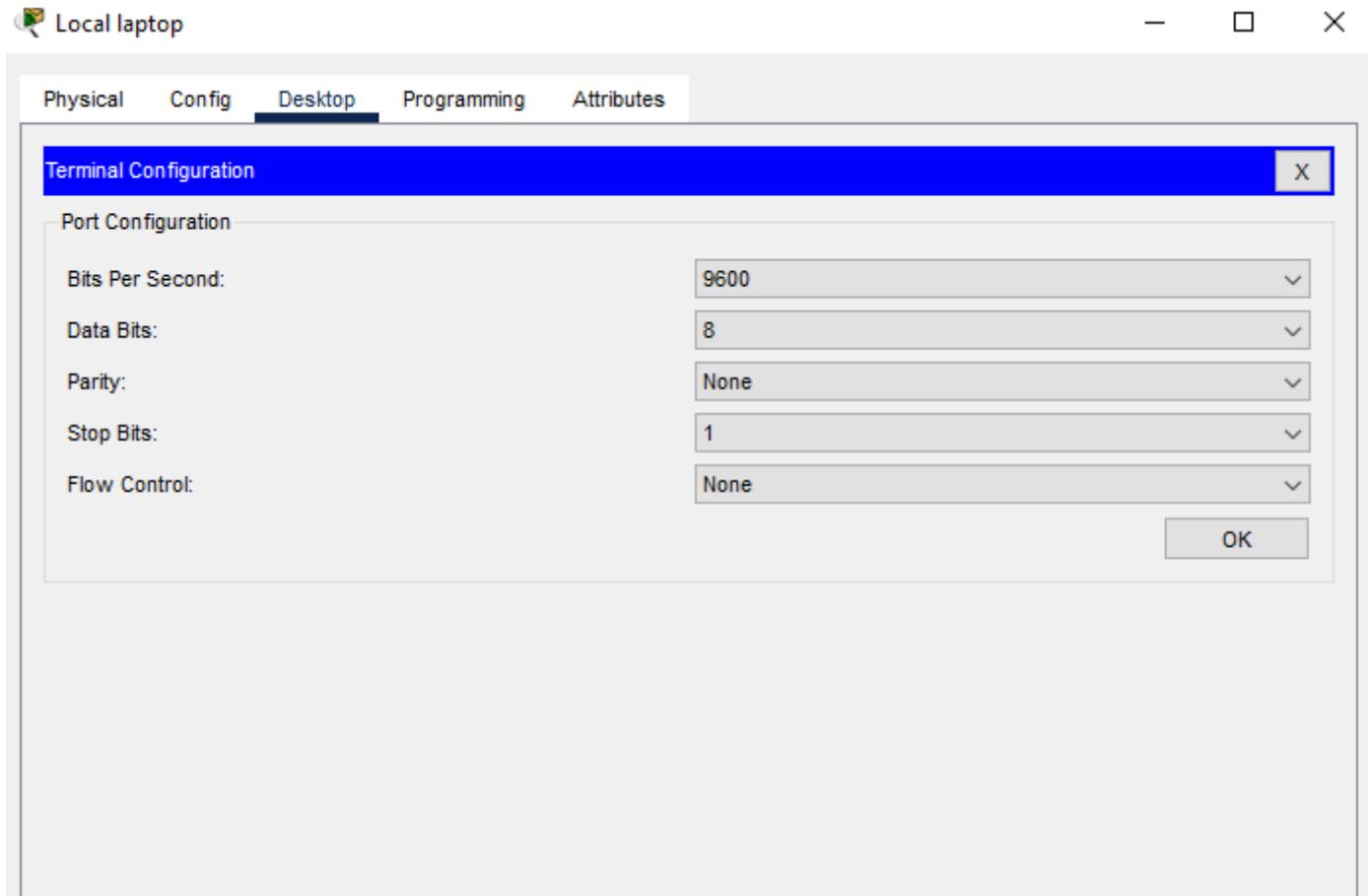
Reply from 172.16.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.16.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Switch0 Configuration Commands using Local Laptop and Console Cable

Connect to Switch0 using Terminal



Set hostname of the switch to Switch0

```
Switch>enable
Switch#configure terminal
Switch(config)#hostname Switch0
Switch0(config)#
```

Configure the message of the day as "Authorized access only. Unauthorized access is forbidden."

```
Switch0(config)#banner motd #
Enter TEXT message. End with the character '#'.
Authorized access only. Unauthorized access is forbidden.#
Switch0(config)#end
Switch0#exit
```

Terminal

```
Switch0#end
Translating "end"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address

Switch0#exit

Switch0 con0 is now available

Press RETURN to get started.

Authorized access only. Unauthorized access is forbidden.

Switch0>
```

Configure the password for privileged mode access as "cisco". The password must be md5 encrypted

```
Switch0>enable
Switch0#configure terminal
Switch0(config)#enable secret cisco
Switch0(config)#service password-encryption
```

Configure CONSOLE access with the following settings:

- Login enabled
- Password: ciscoconsole
- History size: 20 commands
- Timeout: 5m 30s'
- Synchronous logging

```
Switch0(config)#line con 0
Switch0(config-line)#password ciscoconsole
Switch0(config-line)#logging synchronous
```

```
Switch0(config-line)#login
Switch0(config-line)#history size 20
Switch0(config-line)#exec-timeout 5 30
Switch0(config-line)#exit
Switch0(config)#
```

Configure TELNET access with the following settings:

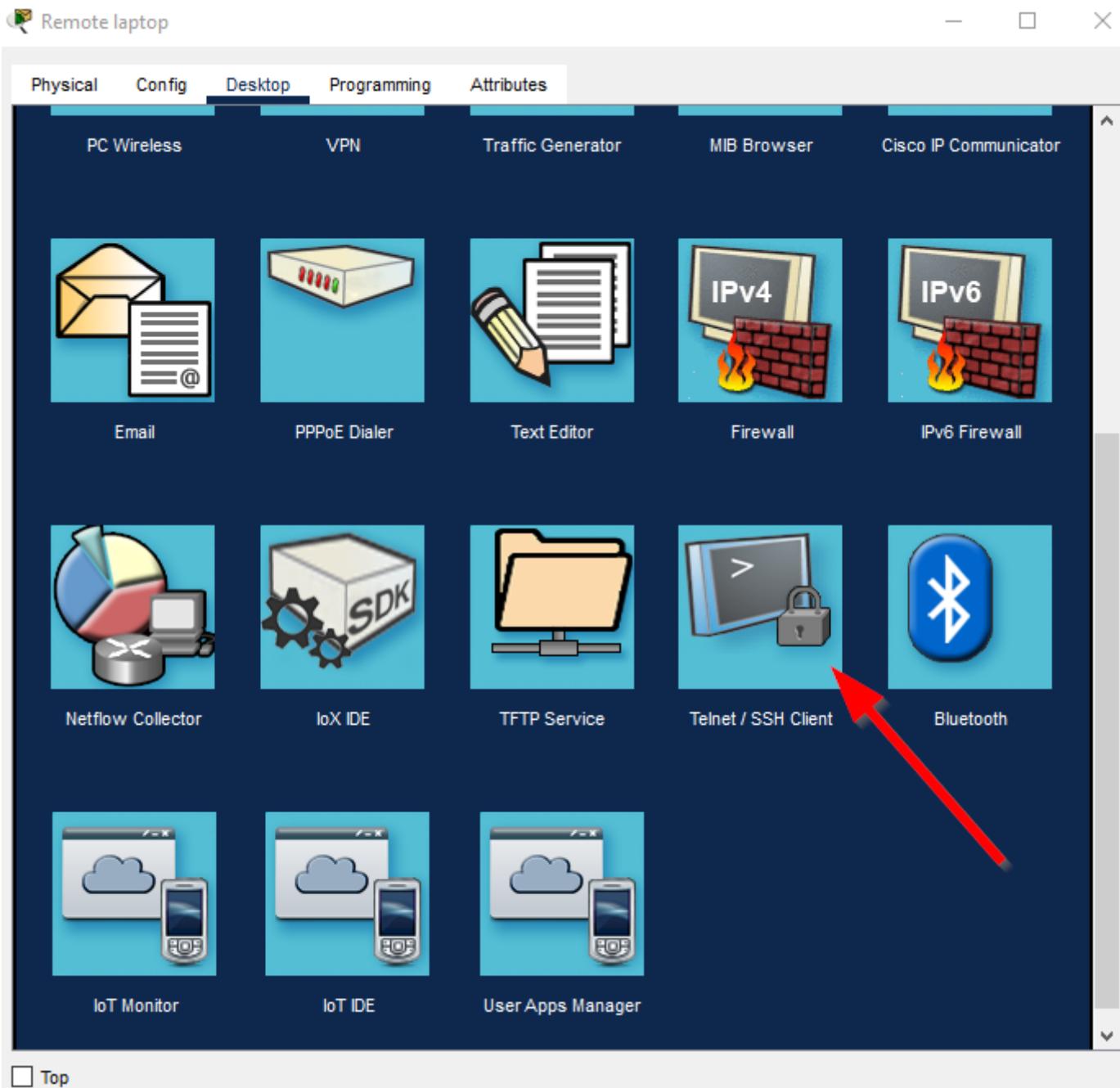
- Login enabled
- Password: ciscotelnet
- History size: 20 commands
- Timeout: 10m 45s
- Synchronous logging

```
Switch0(config)#line vty 0 15
Switch0(config-line)#password ciscotelnet
Switch0(config-line)#logging synchronous
Switch0(config-line)#login
Switch0(config-line)#history size 20
Switch0(config-line)#exec-timeout 10 45
Switch0(config-line)#exit
Switch0(config)#
```

Configure the IP address of Switch0 as 192.168.10.2/24 and its default gateway IP (192.168.10.1).

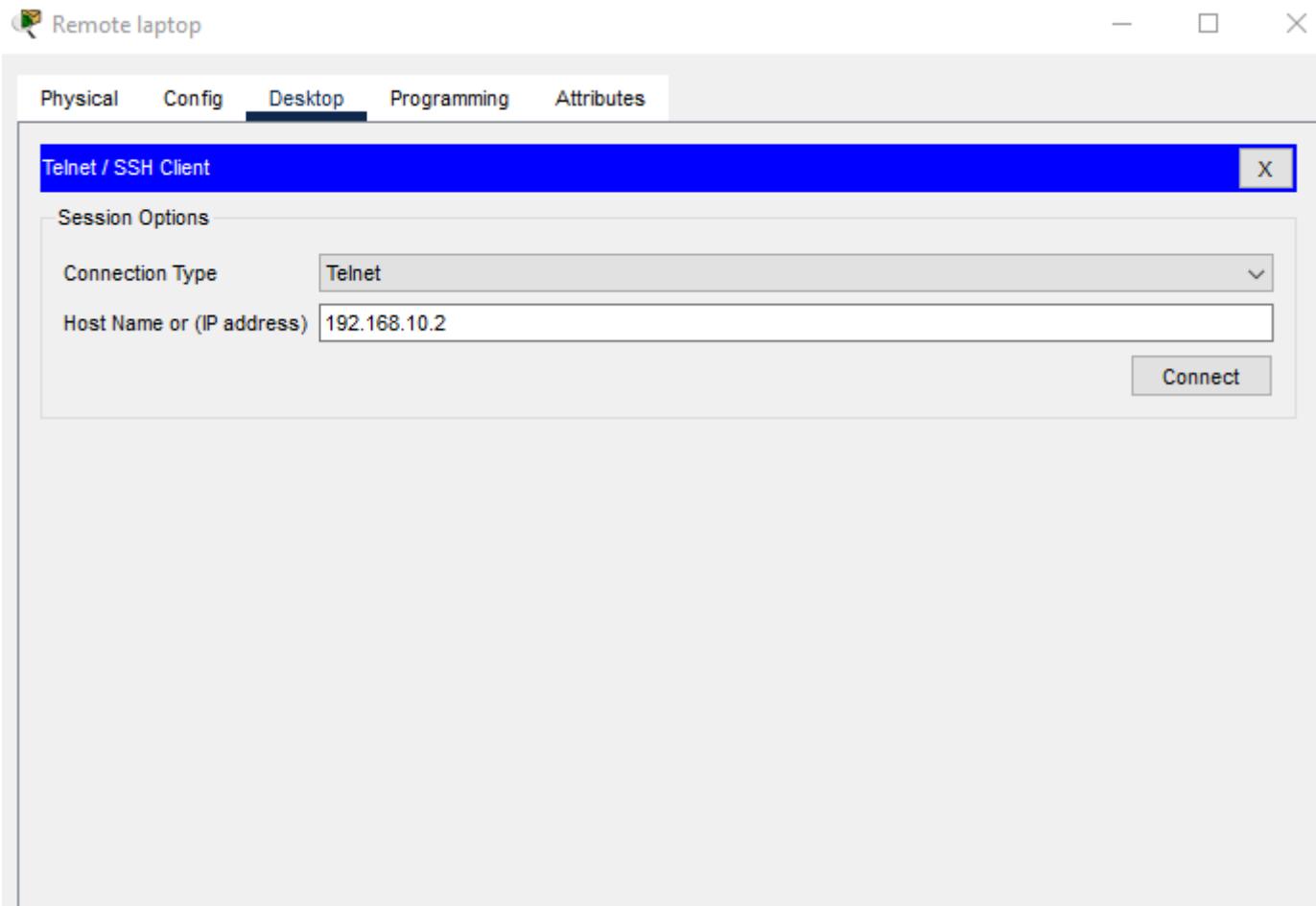
```
Switch0(config)#interface vlan1
Switch0(config-if)#ip address 192.168.10.2 255.255.255.0
Switch0(config-if)#ip default-gateway 192.168.10.1
Switch0(config-if)#end
Switch0(config)#exit
Switch0>
```

Test Telnet Connectivity from the Remote Laptop Using Telnet Client



Top

Change the Connection Type to Telnet and then put in Switch0's IP address. Then click Connect.



Notice the MOTD Banner and the prompt for the telnet password. Enter ciscotelnet.

Physical Config Desktop Programming Attributes

SSH Client

X

```
Trying 192.168.10.2 ...Open  
Authorized access only. Unauthorized access is forbidden.
```

User Access Verification

Password:

[]

We're in!

The screenshot shows a window titled "SSH Client" within a Cisco Packet Tracer interface. The window has a blue header bar with the title and a close button ("X"). Below the header is a black terminal window displaying the following text:

```
Trying 192.168.10.2 ...Open
Authorized access only. Unauthorized access is forbidden.

User Access Verification

Password:
Switch0>
```

Cisco Packet Tracer File

[net8 basic switch setup.pkt](#)

Revision #4

Created 22 December 2022 22:26:30 by Glen Taylor

Updated 24 January 2023 22:41:53 by Glen Taylor