

Subject: Computer Networks (01CT0503)

Aim: Perform basic CLI commands to configure switch and router.

Experiment No: 02

Date: 30-07-2025

Enrolment No: 92301733054

Aim: Perform basic CLI commands to configure switch and router.

Step – 1 :- Open Cisco Packet tracer and take one PC and Router.



Step – 2 :- Connect a Console Cable between the console port of router and the RS232 port.



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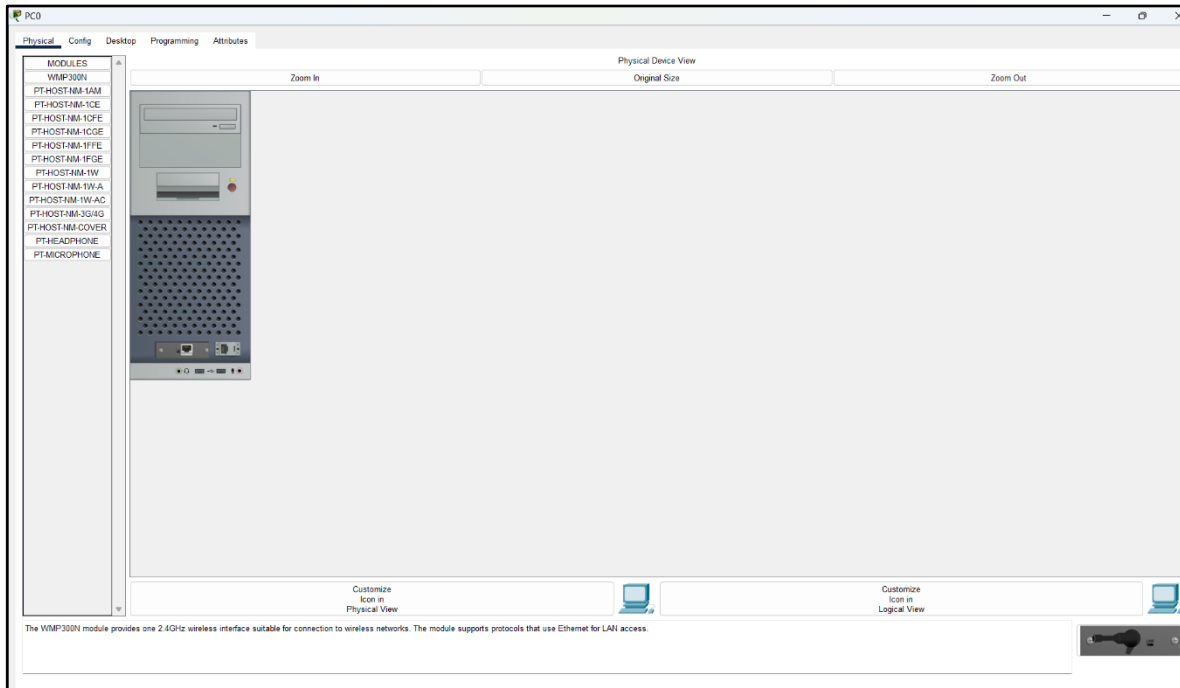
Aim: Perform basic CLI commands to configure switch and router.

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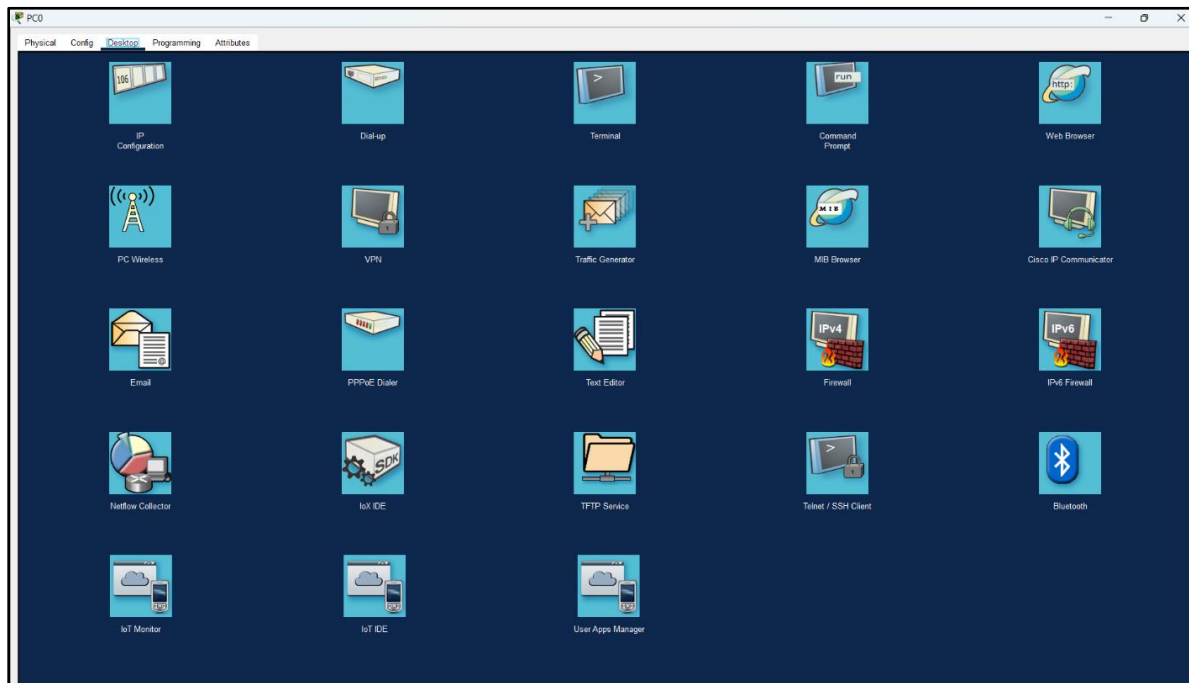
Date: 30-07-2025


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Step – 3 :- Now Click on the PC and you will get all the information about PC.

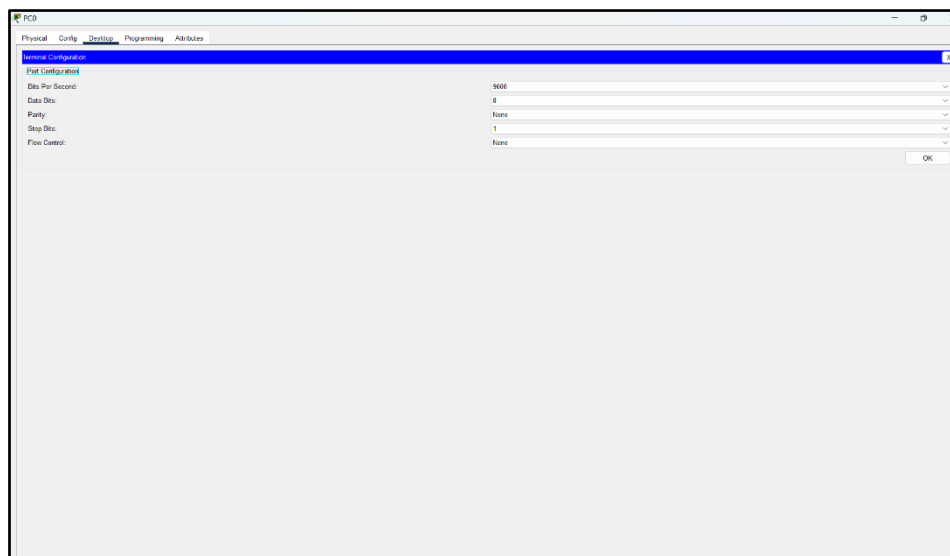


Step – 4 :- Now Click on the Desktop and you will get this kind of interface.

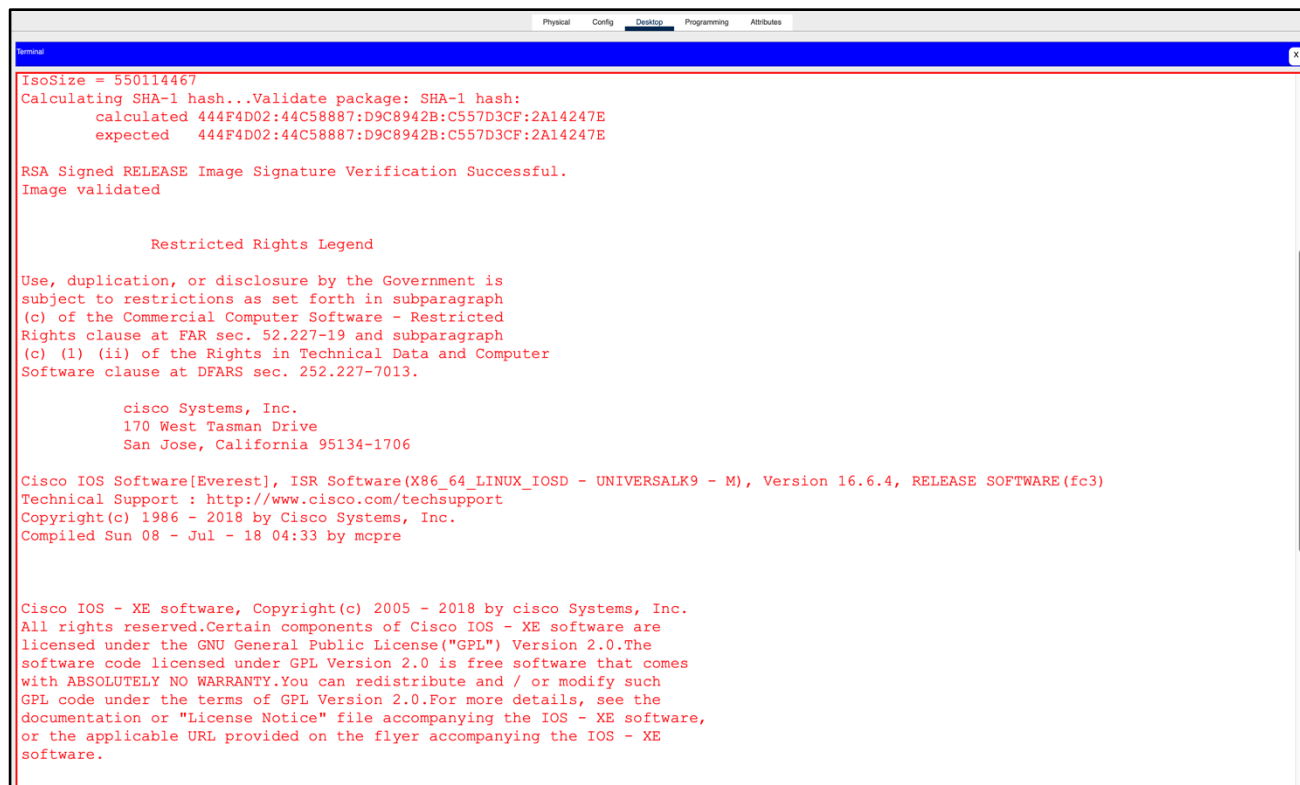



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Step – 5 :- Now Click on the terminal and you will get this kind of interface.

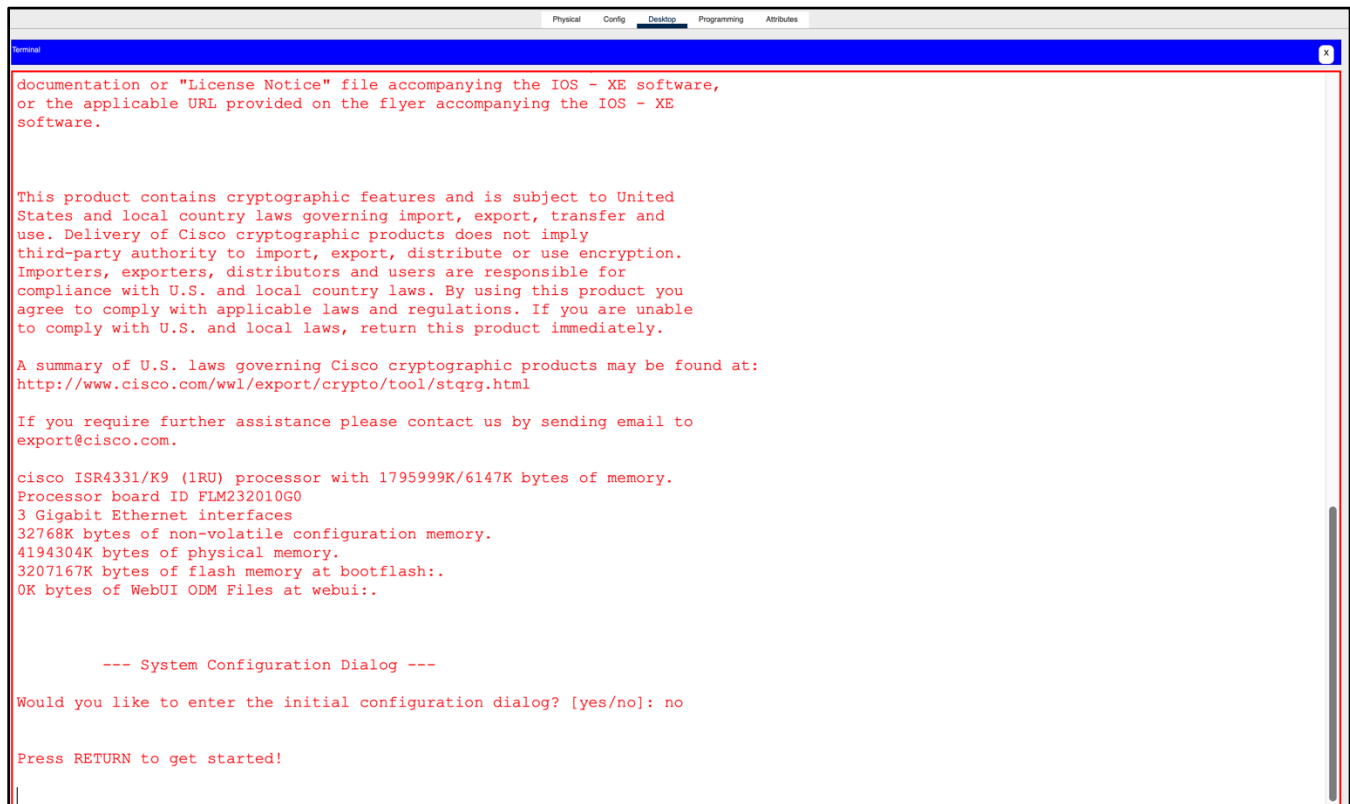


Step – 6 :- Now Hit OK and you will get this kind of interface.



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Step – 7 :- Now Hit OK and you will get this kind of interface.



```

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cisco ISR4331/K9 (1RU) processor with 1795999K/6147K bytes of memory.
Processor board ID FLM232010G0
3 Gigabit Ethernet interfaces
32768K bytes of non-volatile configuration memory.
4194304K bytes of physical memory.
3207167K bytes of flash memory at bootflash:.
0K bytes of WebUI ODM Files at webui:.

--- System Configuration Dialog ---


Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

```

Step – 8 :- Here we are getting CLI for configuring the router. Routers have 3 modes of operation:-

- **User EXEC Mode:**
 - It is shown by Router>
 - It has Basic access and limited commands.
 - It is used to view basic system information.
- **Privileged EXEC Mode:**
 - It is shown by Router#>
 - It has More advanced commands, including viewing configuration and system settings.
 - It is used to access to detailed commands, including system diagnostics and troubleshooting.
- **Global Configuration Mode:**
 - It is shown by Router(config)#>
 - It can change the router's configuration.
 - It can Modify system settings like interfaces, routing protocols, and more. Sub-modes are also available to configure specific features.

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Step – 12 :- Enter the command “show version” to get the version information.

```

Physical  Config  Desktop  Programming  Attributes
Terminal

nikhil_bhanderi(config)#
nikhil_bhanderi(config)#
nikhil_bhanderi(config)#
nikhil_bhanderi(config)#
nikhil_bhanderi(config)#exit
nikhil_bhanderi#
%SYS-5-CONFIG_I: Configured from console by console

nikhil_bhanderi#show version
Cisco IOS Software [Everest], ISR Software (X86_64_LINUX_IOSD-UNIVERSALK9-M), Version 16.6.4,RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2018 by Cisco Systems, Inc.
Compiled Sun 08-Jul-18 04:33 by mcpre

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software.

ROM: IOS-XE ROMMON

Router uptime is 12 minutes, 53 seconds
Uptime for this control processor is 12 minutes, 53 seconds
System returned to ROM by power-on
System image file is "bootflash:isr4300-universalk9.16.06.04.SPA.bin"
Last reload reason: PowerOn

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nikhil_bhanderi#

```

Step – 13 :- Enter the command “show running-config” to get the running configuration of the router.

```

Physical  Config  Desktop  Programming  Attributes
Terminal

ROM: IOS-XE ROMMON

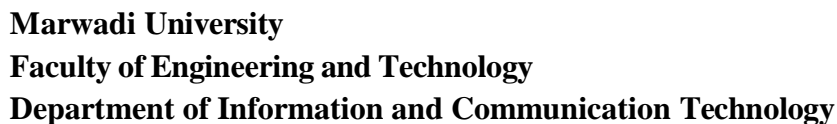
Router uptime is 12 minutes, 53 seconds
Uptime for this control processor is 12 minutes, 53 seconds
System returned to ROM by power-on
System image file is "bootflash:isr4300-universalk9.16.06.04.SPA.bin"
Last reload reason: PowerOn

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nikhil_bhanderi#show running-config
Building configuration...

Current configuration : 655 bytes
!
version 16.6.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname nikhil_bhanderi
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
nikhil_bhanderi#

```



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Step – 14 :- Enter the command “s hip int brief” to get the information about various port.

[illegible]

Conclusion :-

By Performing this experiment II came to know about the various modes of Cisco routers and various commands to configure it. we also learned about how to get the current configuration of the routers, various ports of the routes.