



Informe laboratorio 6

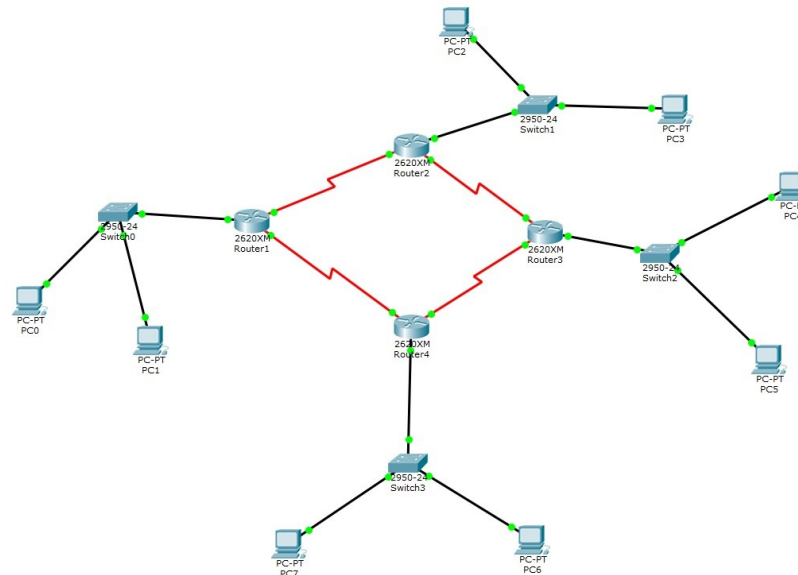
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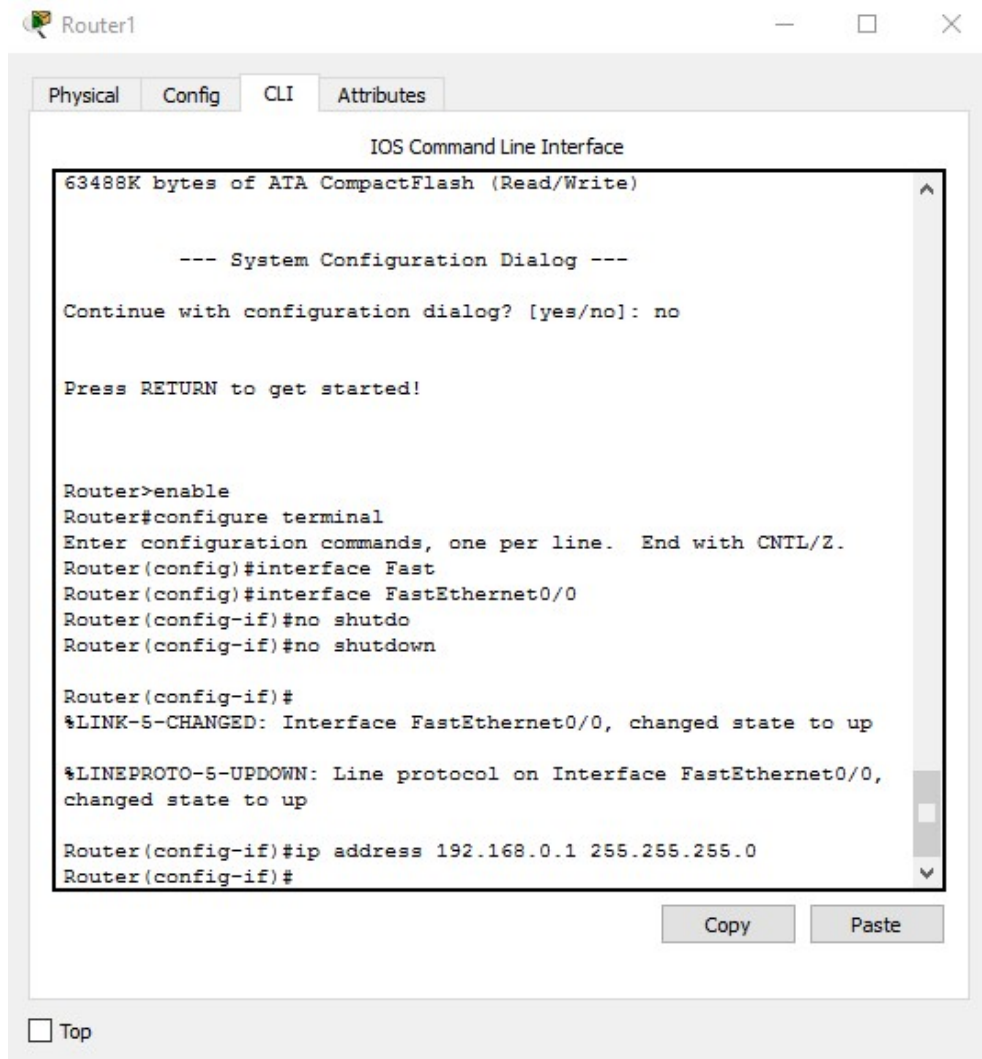
Parte I

ruteo estatico

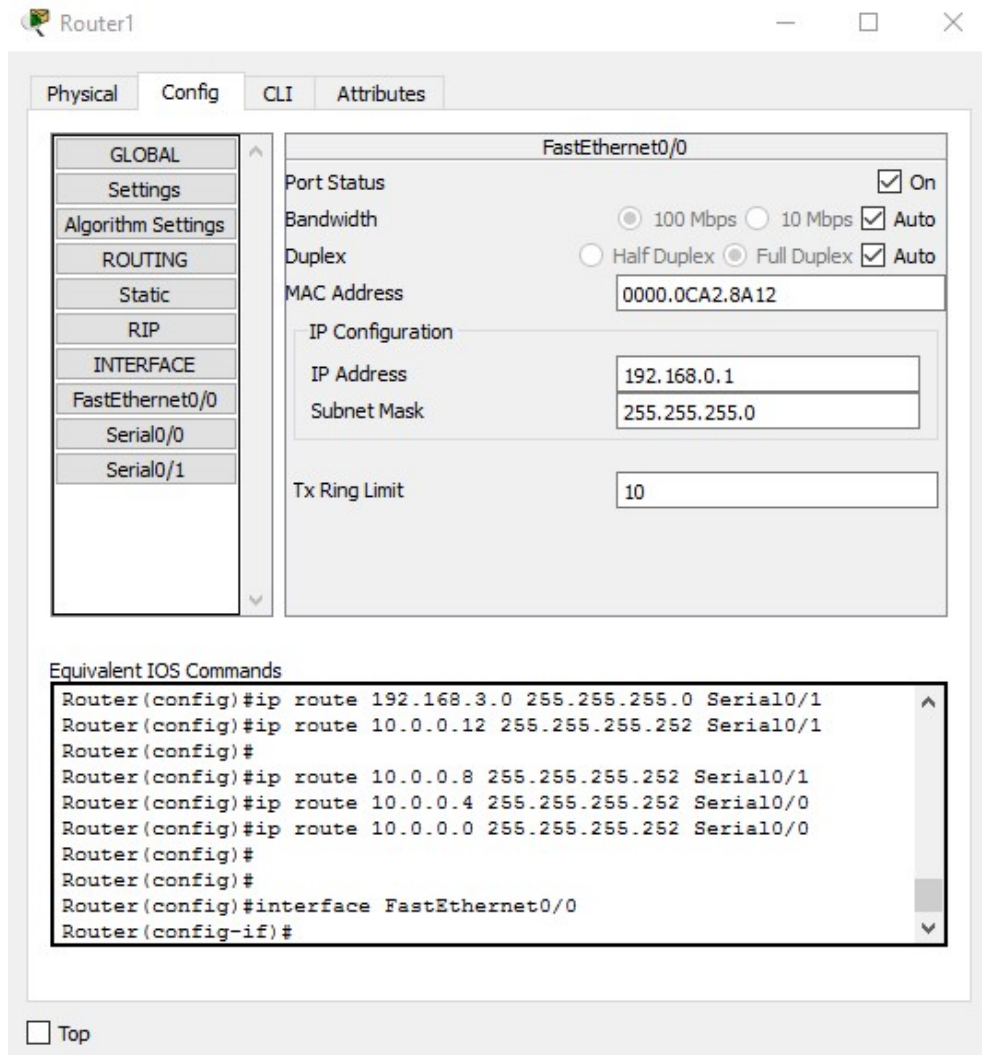
Para esta actividad se pide hacer un ruteo estatico con 4 routers, con la siguiente topologia



Primero se deben configurar las ip de las interfaces del router (FastEthernet y serial). Lo que podemos hacer por consola o gráficamente. Primero configuraremos el FastEthernet:



para ethernet elegimos



192.168.0.0 /24 como IP. Y para serial elegimos la IP 10.0.0.0 /30
Luego configuramos los puertos serial:

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

Serial0/0

Serial0/1

Serial0/0

Port Status

☐ On

Duplex

☒ Full Duplex

Clock Rate

Not Set

IP Configuration

IP Address

10.0.0.1

Subnet Mask

255.255.255.252

Tx Ring Limit

10

Equivalent IOS Commands

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/1

Router(config-if)#ip address 10.0.0.14 255.0.0.0

Router(config-if)#ip address 10.0.0.14 255.255.255.252

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/0

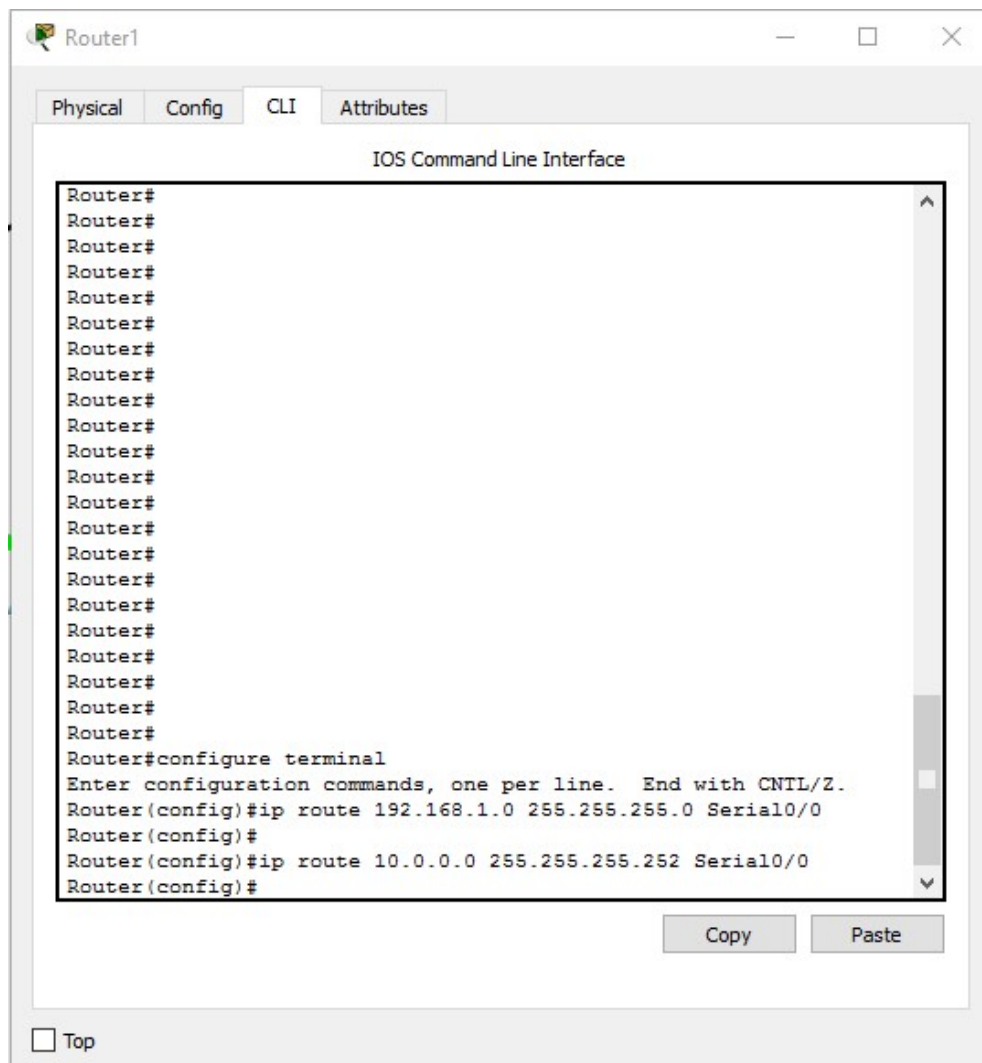
Router(config-if)#ip address 10.0.0.1 255.255.255.252

Router(config-if)#

☐ Top



Y para finalizar ruteamos la red con IP 10.0.0.0/24.



Al finalizar la configuración de IP's y Rutas, probamos la red mandando un mensaje del PC0 al PC4. Primero enviamos el mensaje sin hacer el ruteo y luego con el ruteo implementado.

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Failed	PC0	PC4	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC0	PC4	ICMP		0.000	N	1	(edit)	(delete)

Parte II

ruteo dinamico

Siguiendo las instrucciones del lab configuramos el sistema de ruteo dinámico

The image is a composite of three screenshots from a Windows desktop environment, illustrating the configuration of dynamic routing (RIP) in Cisco Packet Tracer.

Top Screenshot: Shows a PDF document titled "Laboratorio N6. Enrutamiento Estático y Dinámico.pdf". The document contains instructions for configuring dynamic routing using RIP. The text includes:

- Para ruteo Dinámico (usando RIPv2)**
- Router#enable
- Router#configure terminal
- Enter configuration commands, one per line. End with CNTL/Z.
- Router(config)#router rip
- Router(config-router)#version 2
- Router(config-router)#network 192.168.0.0
- Router(config-router)#exit
- Router#
- Router#copy running-config startup-config
- Destination filename [startup-config]:
- Building configuration...
- [OK]

 Below the commands, it states: "En este caso debe cambiar las ip en el comando 'network' por la del router (no necesariamente son 2)." and "Realice la topología presentada en la primera página con el PKT de Cisco Packet Tracer en cada caso y adjuntarlo con su informe".

Middle Screenshot: Shows the "Router5" CLI window in Cisco Packet Tracer. The terminal output displays the configuration commands entered and the status of the interfaces:

- Router5#enable
- Router5#configure terminal
- Router5(config)#router rip
- Router5(config-router)#version 2
- Router5(config-router)#network 192.176.0.0
- Router5(config-router)#exit
- Router5#
- Router5#copy running-config startup-config
- Destination filename [startup-config]:
- Building configuration...
- [OK]

 The status messages show: "LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up" and "LINK-5-CHANGED: Interface Serial0/2, changed state to up".

Bottom Screenshot: Shows the "Router6" CLI window in Cisco Packet Tracer. The terminal output displays the configuration commands entered and the status of the interfaces:

- Router6#enable
- Router6#configure terminal
- Router6(config)#router rip
- Router6(config-router)#version 2
- Router6(config-router)#network 192.168.0.0
- Router6(config-router)#exit
- Router6#
- Router6#copy running-config startup-config
- Destination filename [startup-config]:
- Building configuration...
- [OK]

 The status messages show: "LINEPROTO-6-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up" and "LINK-6-CHANGED: Interface Serial0/2, changed state to up".

Bottom Screenshot (Network Diagram): Shows the network topology in Cisco Packet Tracer. It includes a "Logical" view with a "Root" node and a "New Cluster" button. The diagram shows two routers, Router5 and Router6, connected via their Serial0/0 interfaces. Router5 is connected to PC-PT PC0 and PC-PT PC1. Router6 is connected to PC-PT PC2 and PC-PT PC3. The status bar at the bottom indicates "Time: 00:33:51" and "Power Cycle Devices Fast Forward Time".

