11	Title-Packet tracing using Router as the connection device.  Aim-Configuring default route, static route to the router
	connection device
az	Aim - Configuring default mute state mule to
	the router
11	Topology - 1 (8 Min Sand Market
	Router
gle III	10.0.0.10
(1-1-1-1) T	Copper cross wire
Carlin.	we read the think
	PCO PCI
	10.0.0.1) 6 20.0.0.2
,	Later & showing Hatast delante
3 45 6	Procedures south and bour stomerant
مرا	Select a generiosouter and two PC as end divices
	and connect them with copper cross-wire.
2	Set the IP addresses of the PCs with different
	network IDs.
3>	Set gateway in the settings for the two PCS
4>	Now we need to connect router networks with
	PC gateways
5>	To set network in CLI of router, follow the
	tollowing steps-
	No - Enable - Config t
	- interface fastethemeto/o
,	→ ip_addres_10.0.0.10_255.0.0.0
01	→ No_shut → Exit
7	Follow the same steps for other PC.
1/	To contime connection, give spahow-ip-route
-	command.

Á. 1.	
10	Now, in command prompt of PCO ping the
87	Now, in command prompt of res pring the
	second PC PCI
1	we state done thought property to be with the
	Result -
	ping 20.0.0.2
	pinging 20.0.0.2 with 32 bytes of data:
	Trighting about 2
	Request timed out
	De la med out
	Reply from 200.0.2: bytes=32 time=0 ms 7TL=12:
)	Reply from 20.002: byte=32 time=0ms TTL=12: Reply from 20.002: byte=32 time=0me TTL=12:
	Reply from 20.0.0.2: byte=32 time=0me TTL=12
1	
	Ping statistice for a0.0.0.2
	Packets: Sent=4, Received=3, Lost=1
	Approximate mund trip times in milli-seconds:
I defined by	Minimum = 0 ms, Maximum = 0 ms, Average = 0 m
	Men some remark offer and freques in
€€	
- V3	at the sold of the sold of the for the
	window ording Odoman of help out find
	The state of the s
7:45	would salma to III in deather the of the
·	- 20th ourselfel
-	t plant and alder I went
	alatementalist matrice
	0.00020 CIDOOL ambbo at 6-2
	Lian Indian Indian
	Conscionation at authority of the
	Julian pip



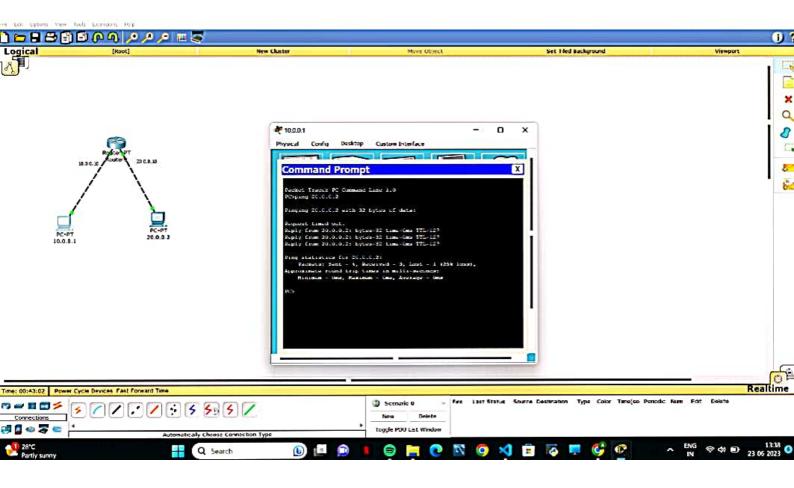
All and the second section is	
2	Aim: Configuring default mule, static mule to
Contract Charles and the Marie and Charles	a connection of muters.
and the state of t	
ni w 19 Maria Mari	Topology- Can's D. 100
Sandado Maria (1966)	Nodyerz Comments of the Commen
	Roulers 30.0.0.10 Roulers serial cable
	30.0.0.20
112 111	10.0.0.00
	no hand similar it o not made that
10 11	copper crou-
	[pc]
	[PC0] [0.0.0.]
	Let it a Set is and the ford individual to
Con	go steps in south and himm shormand in
ten u	Procedure - remarkable up 2 - minister
مرا	Select & generic muters and two pc's as and
	divices Connect the PC's to different routers
	with copper cross over and connect both routers
	to main muter with senal cables
(a)	Set the IP addresses of PC and gateways
3/2	Set the gateway addresses in all the roleters
	taking interface our fastethernet for the PCs
	and serial for routers
4}	Now, connect the interfaces from other routers
	with following steps:
	config t - ip route 30.0.0.0 255.0.00 20.0.0.20
-1	ip_route 40.0.0.0 250.0.0.0.20
5>	Similarly, connect the other PC to interfaces.
43	Check the network connections with show ip route
	command.
	width yes
1	

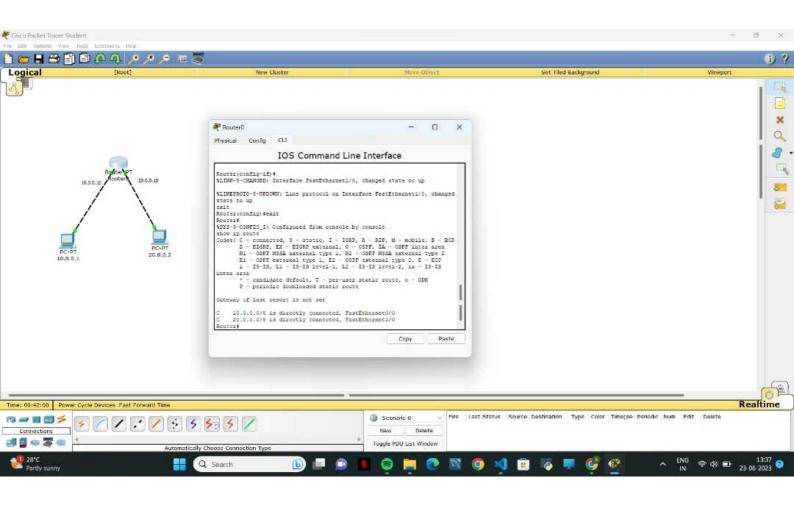
	Now ping 40:0.0.1 from 10.0.0.1
	The second secon
	Reull- from 10,0,0,1
	ping 40.0.0.1
Carried and comment of the comment	pinging 40.0.0.1 with 32 bytesi
E PO BONICE O SOMO AND MORE THE PROVINCE AND	Request timed out
	Repty from 40.0.0.1: bytes=32 time=0 me TIL=127
S many and contraction that the second artificial definition of the second seco	Reply from 40.001: by les=32 time=0 me TTL=12]
Harvasia w nastaliwa sa najaji nastaliku da dakenia w nasta najaji nastaliku sa najaji	Reply from 40.0.0.1: by tu=32 time=0 me TTL=127
the second secon	Ping statistics for 20.0.0.2:
· So	Packets: Sent = 4, Received = 3, Lost=1
	Approximate round hip time in milli-seconds:
10 518	Minimum - 0 ms, Maximum = 0 ms, Average = 0 ms
Short	1 2 79 mile has retire share & training of
(01)	Cincilla of 2'39 and transfer mainte
[0]	Config-steps = has my die de la
***	# configet 19 1= 1-10 th 12
	# interface Edutethemet 0/0
tink an american de seu american and and and an american and an american and an american and an american and a	# 1P address 1000 0 10 aas 000
	# no shut
1,104.32	# sexit and motivate with Insurance will be
and the second of the second o	# Interface serial 2/0
30 0.0	
30000	# no shut a no show is
110	# exit! 29 radio all desource alimined to
	Show IP route man shown it was to
	similarly for router!
	zenable

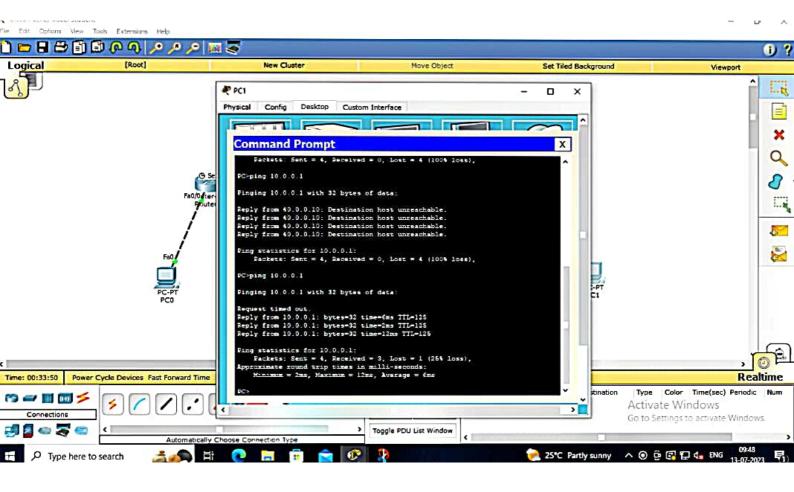
- -

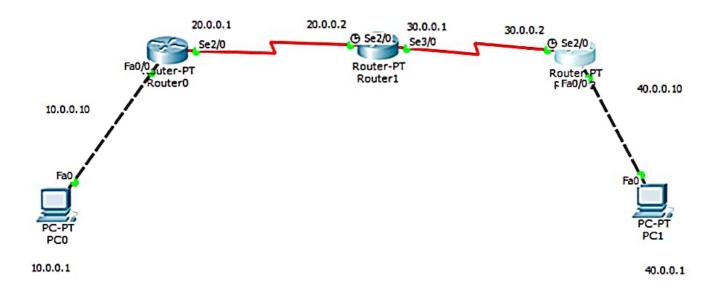
	#config t
	# interface serial 20
	# 1P address 20.0.0.20 255.000 914
	# no shut no re no ne shure 91 th
	# exit
	# Interface social 3/0
	#1P address 30.0.0.10 050.0.0
	# no shut
	thexit is now is a constraint of the
	similarly for router-2 - 2 de show 9
	> enable
	# config t
	# interface serial 2/0
	# 1P address 30.0.0.20 255.0.0.0
	# no shut
C	THE extense T silds 2 likewise in whom
	# Interface fastethemet 0/0 4 1 1000
100	#1P addres 40.0.0.10 2550.0.019
	# no sheet
11	# exit a (1 ) and I wanter (1) 11 3460-111
	show IP noute
-	now edect PCO end device har is and
	disktop - command proprint
	Pc>ping 40.0.0.1
$\parallel$	will be unable to ping to interfere configuration
	of -> CI International of Allendar Hallen and
4	# config t
	# 1P route 30.0.0.0 2550.0.0 20.0.0.20
	# 1P mute 40.0.0.0. 25k, 0.0.0. do 0.0.20
	# exit
$\parallel$	show IP route
- 11	

, ,	
2	
	similarly for Router-1
	# config t
	#1P route 10.000 arco.000 20.000
	# 1P route 40.0.00 255,000 30.0.0.20
	# exit
1	chow IP route de mine motorier de
	Similarly for Router-2008
	The Wing C
	# 19 route 10.000 857.000 30.0.0.10
1	# 1P noute 200.00 dra.000 30.00.10:
	# ex9+
6	12 Route de louis infinite
	for routes-One again set and all the
	show IP route
	codes: C-connected, S-static, I-ICARP, R-RIP
	M-Mobile, B-Bapa translateit modela 14.
	D-DIGRP, EX-EIGRT external, O-OSPF, A. OSPF
	Interarea dul on the
2	NI-OSPF NSSA external type 1, N2-OSPF NSIA
	external type2
	1-OSPF external type 2, E2-OSPF external type 2,
ž	E-EGP tragara basancas - griderio
-	?-IS-IS, LI-15-15 level-1, L2-75-15 bevel-2
realization	9a-18-18 Interarea is at slavery in the
V	*- candidate default, U-persuer static route
	O-DPR + stores to
3.0	P-Periodic downloaded static mute
	hateway of last resort is not set
2000 H 2 18 18 18 18 18 18 18 18 18 18 18 18 18	c-10000/8 is directly connected, that
The state of the s	ethinet distribute









Physical Config CLI

IOS Command Line Interface

Router>enable
Router\$config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)\$interface fastethernet0/0
Router(config-if)\$ip address 10.0.0.10 255.0.0.0
Router(config-if)\$no shut

Router(config-if): %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up \*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up Router (config-if) sexit Router (config) sinterface serial 2/0 Router(config-if) tip address 20.0.0.1 255.0.0.0 Router (config-if) \$no shut %LINK-5-CHANGED: Interface Serial2/0, changed state to down Router (config-if) sexit Router (config) #exit Routers +SYS-5-CONFIG I: Configured from console by console Enter configuration commands, one per line. End with CNTL/Z. Router(config) \$ ip route 0.0.0.0 0.0.0.0 20.0.0.2 Router(config) #exit Routers \*SYS-5-CONFIG I: Configured from console by console Router#show ip route Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP excernal, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area . - candidate default, U - per-user static route, o - ODR P - periodic downloaded static route Cateway of last resort is not set

10.0.0.0/8 is directly connected. FastEthernet0/0

С

Physical Config CLI

## IOS Command Line Interface

```
Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #interface serial 2/0
Router(config-if) #ip address 20.0.0.2 255.0.0.0
Router(config-if) #no shut
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
Router (config-if) #exit
Router (config) #i
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config) #interface serial 3/0
Router(config-if) #ip address 30.0.0.1 255.0.0.0
Router(config-if) #no shut
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if) #exit
Router (config) #exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #ip route 10.0.0.0 255.0.0.0 20.0.0.1
Router(config) #ip route 40.0.0.0 255.0.0.0 30.0.0.2
Router(config) #exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
```

**P** 

Router1

Physical Config

CLI

IOS Command Line Interface

```
Router(config-if) #ip address 20.0.0.2 255.0.0.0
Router(config-if) #no shut
Router (config-if) #
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
Router(config-if) #exit
Router (config) #i
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config) #interface serial 3/0
Router(config-if) #ip address 30.0.0.1 255.0.0.0
Router(config-if) #no shut
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if) #exit
Router(config) #exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #ip route 10.0.0.0 255.0.0.0 20.0.0.1
Router(config) #ip route 40.0.0.0 255.0.0.0 30.0.0.2
Router(config) #exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
    10.0.0.0/8 [1/0] via 20.0.0.1
    20.0.0.0/8 is directly connected, Serial2/0
C
Router#
```

## IOS Command Line Interface

```
Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z. Router(config) #interface serial 2/0 Router(config-if) #ip address 30.0.0.2 255.0.0.0
Router(config-if) #no shut
Router(config-if) #
%LINK-S-CHANGED: Interface Serial2/0, changed state to up
Router(config-if) #exit
Router(config) #
$LINEFROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config) #interface fastethernet0/0
 Router(config-if) tip address 40.0.0.10 255.0.0.0
 Router(config-if) #no shut
 Router(config-if) #
 %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
 $LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
 Router(config-if) #exit
 Router (config) #exit
 Router#
 4SYS-5-CONFIG_I: Configured from console by console
 Enter configuration commands, one per line. End with CNTL/2.
 Router(config) #ip route 0.0.0.0 0.0.0.0 30.0.0.1
 Router (config) texit
 Router#
 *SYS-5-CONFIG_I: Configured from console by console
 Router#show ip route
 Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
         D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
         N1 - OSFF NSSA external type 1, N2 - OSFF NSSA external type 2
         E1 - OSFF external type 1, E2 - OSFF external type 2, E - EGF i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
```

Physical Config CLI

## IOS Command Line Interface

Router2

```
Router(config-if)#exit
Router (config) #
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
Router(config) #interface fastethernet0/0
Router(config-if) #ip address 40.0.0.10 255.0.0.0
Router(config-if) #no shut
Router (config-if) #
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Router(config-if) #exit
Router (config) #exit
Router#
SYS-5-CONFIG_I: Configured from console by console
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #ip route 0.0.0.0 0.0.0.0 30.0.0.1
Router (config) #exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       \star - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is 30.0.0.1 to network 0.0.0.0
    30.0.0.0/8 is directly connected, Serial2/0
    40.0.0.0/8 is directly connected, FastEthernet0/0
C
S* 0.0.0.0/0 [1/0] via 30.0.0.1
Router#
```