

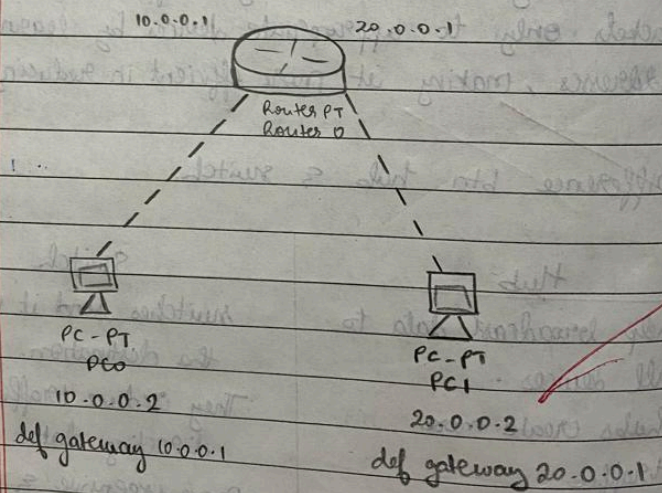
## Lab 2 - 9/10/24

### LAB 2

#### Aim

Configure IP address to routers in packet traces. Explore the messages: ping responses, destination unreachable, request timed out, reply.

#### Topology



#### Procedure

→ to configure PC

PC0	IP address	10.0.0.2
	Gateway	10.0.0.1
PC1	IP address	20.0.0.2
	Gateway	20.0.0.1



→ to configure router.  
command line interface (CLI)  
enable  
config terminal  
interface fastethernet 0/0  
ip address 10.0.0.2 255.0.0.0  
no shutdown  
exit

interface fastethernet 0/1  
ip address 20.0.0.2 255.0.0.0  
no shutdown  
exit

→ connect the router to each PC using  
copper cross over wire

### Observation

PC > Ping 20.0.0.2

pinging 20.0.0.2 with 32 bytes of data:

Reply from 20.0.0.2 : bytes = 32 time = 3ms TTL = 128

Reply from 20.0.0.2 : bytes = 32 time = 2ms TTL = 128

Reply from 20.0.0.2 : bytes = 32 time = 0ms TTL = 128

Reply from 20.0.0.2 : bytes = 32 time = 6ms TTL = 128

Ping statistics for 20.0.0.2 :

Packets : Sent = 4 , Received = 4 , lost = 0 (0 % loss),

Approximate round trip times in milli-seconds :

Minimum = 0ms , Maximum = 6ms , Average = 2ms

pc>



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, NR - OSPF NSSA 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, r - periodic downloaded static

route.

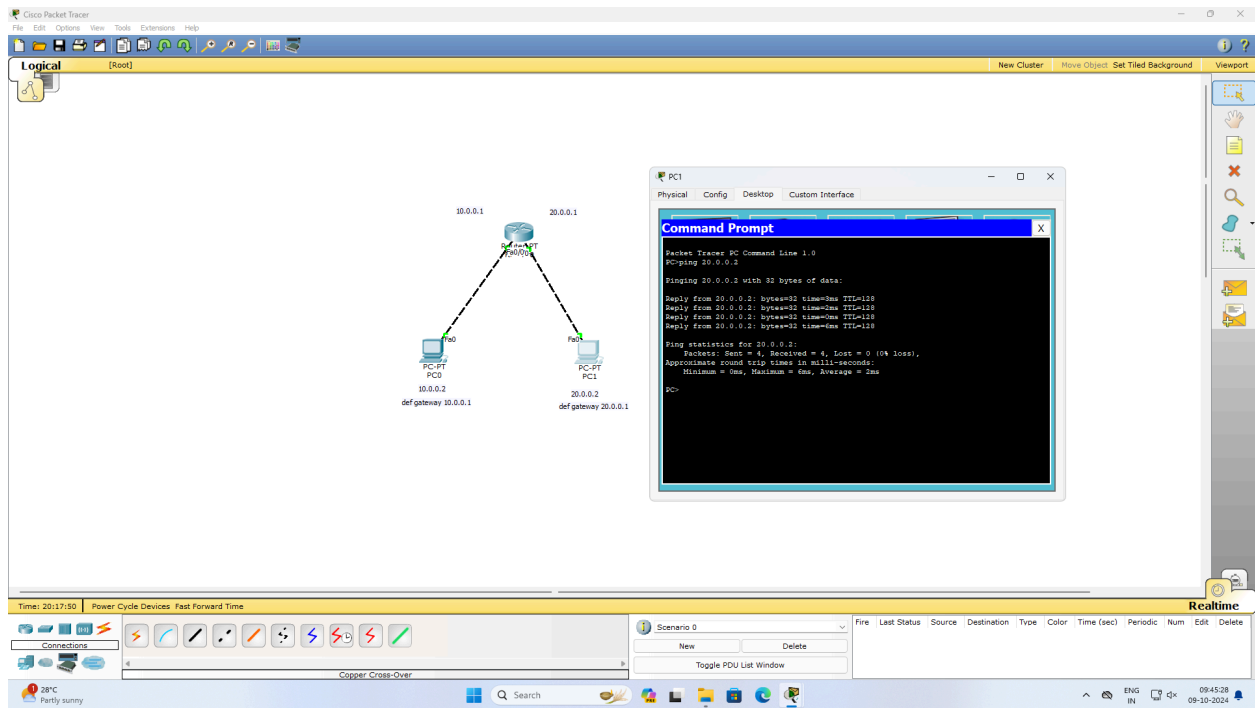
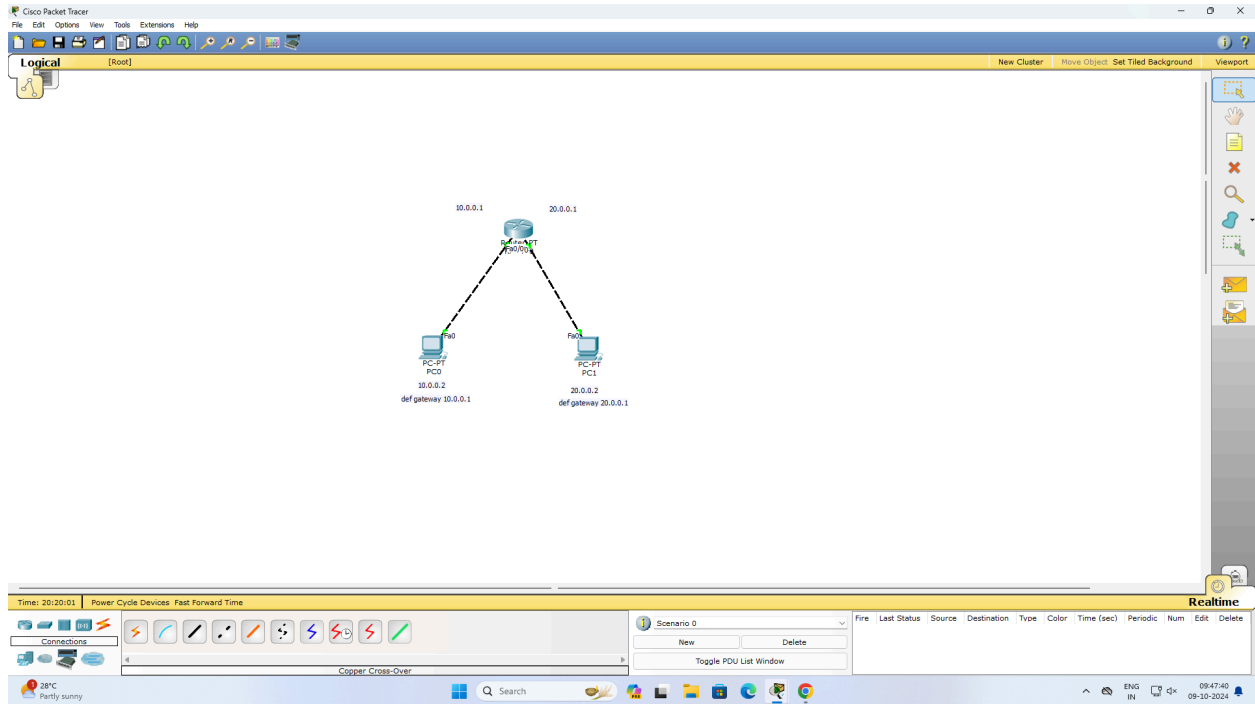
Gateway of last resort is not set

C 10.0.0.0/8 is directly connected, FastEthernet 0/0

C 20.0.0.0/8 is directly connected, FastEthernet 1/0

Router >

llll  
9/10/24



Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical [Reset] New Cluster Move Object Set Tied Background Viewport

PC-PT PC-PT

10.0.0.1 20.0.0.1

10.0.0.2 20.0.0.2

def gateway 10.0.0.1 def gateway 20.0.0.1

PC-PT

Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:
Reply from 10.0.0.2: bytes=32 time=1ms TTL=128
Reply from 10.0.0.2: bytes=32 time=1ms TTL=128
Reply from 10.0.0.2: bytes=32 time=1ms TTL=128
Reply from 10.0.0.2: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

PC>
```

Time: 20:20:28 Power Cycle Devices Fast Forward Time

Connections

Copper Cross-Over

Scenario 3

New Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time (sec) Periodic Num Edit Delete

28°C Partly sunny

ENG IN 09:48:07 09-10-2024