

LAB-2

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LAB-2

Exp 3

Aim: Configure IP addresses to routers in packet tracer. Explore the following messages: ping responses, destination unreachable, request timed out, reply

Topology:

```
graph TD
    R1((Router R1))
    PC0[PC0]
    PC1[PC1]
    R1 --- PC0
    R1 --- PC1
```

Router R1
10.0.0.1 20.0.0.1

PC0
10.0.0.10
set gateway 10.0.0.1

PC1
20.0.0.10
set gateway 20.0.0.1

Procedure:

→ to configure PC

PC0	IP address	10.0.0.10
	gateway	10.0.0.1

PC1	IP address	20.0.0.10
	gateway	20.0.0.1

Command line interface:

```
enable
config terminal
interface FastEthernet0/0
ip address 10.0.0.10 255.0.0.0
no shutdown
exit
```

Interface FastEthernet0/1

```
ip address 20.0.0.1
no shutdown
exit
```

→ Connect the router to both the PC using copper cross over wire

Observation:

→ go to the command prompt

PC1

PC> ping 10.0.0.10

Pinging 10.0.0.10 with 32 bytes of data:

Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.10:

packet: sent=4, received=4, lost=0, 0% loss

Approximate round trip times in milliseconds

Minimum=0ms, Maximum=0ms, Average=0ms

router > show ip route
codes: C - connected, R - RIPv1, I - IGRP, R - RIP,
D - EIGRP, EX - EIGRP External, O - OSPF
IA - OSPF inter area, OI - OSPF NSSA
external type 1, E1 - OSPF external type
E2 - OSPF external type 2, F - EIGRP
F1 - IS-IS, L1 - IS-IS level 1, L2 -
IS-IS level 2, IA - IS-IS inter area
* - candidate default, U - per-user
S - static, P - periodic downloaded
static route

mainway 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

Lee
9/10/04

Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

10.0.0.1 20.0.0.1

Router

PC0 10.0.0.10

PC1 20.0.0.10

def gateway 10.0.0.1 def gateway 20.0.0.1

PC1

Physical Config Desktop Custom Interface

Command Prompt

```

C:\>ping 20.0.0.10 -n 4 -l 32 -w 1000
Pinging 20.0.0.10 with 32 bytes of data:
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 1ms

C:\>ping 10.0.0.10 -n 4 -l 32 -w 1000
Pinging 10.0.0.10 with 32 bytes of data:
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

Time: 20:47:44 Power Cycle Devices Fast Forward Time

Connections

Scenario 0

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

New Delete

Toggle PDU List Window

80% Party sunny

ENG IN 09:47:46 09-10-2024

Cisco Packet Tracer

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

10.0.0.1 20.0.0.1

Router

PC0 10.0.0.10

PC1 20.0.0.10

def gateway 10.0.0.1 def gateway 20.0.0.1

PC0

Physical Config Desktop Custom Interface

Command Prompt

```

C:\>ping 20.0.0.10 -n 4 -l 32 -w 1000
Pinging 20.0.0.10 with 32 bytes of data:
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128
Reply from 20.0.0.10: bytes=32 time=1ms TTL=128

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 1ms

C:\>ping 10.0.0.10 -n 4 -l 32 -w 1000
Pinging 10.0.0.10 with 32 bytes of data:
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127
Reply from 10.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

Time: 20:55:13 Power Cycle Devices Fast Forward Time

Connections

Scenario 0

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

New Delete

Toggle PDU List Window

80% Party sunny

ENG IN 09:55:16 09-10-2024