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### NAT

#### Nat ESTATICO

-Lo primero que tendremos que tener activado será un enrutamiento para que nat funcione. Ahora procederemos a relizar el enrutamiento. También pondremos las ip a cada interfaz.

R0:

```
Router>enable
Router#conf t
Router(config)#interface fa 0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#end
```

R1:

```
Router>enable
Router#conf t
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.50 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#interface fa0/0
Router(config-if)#ip address 90.10.0.1 255.0.0.0
Router(config-if)#end
Router#copy run sta
```

Enrutamiento:

R0:

Router#enable

Router#conf t

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 192.168.2.0

Router(config-router)#network 80.0.0.1

Router(config-router)#end

Router#copy run sta

R1:

Router#enable

Router#conf t

Router(config)#router rip

Router(config-router)#version 2

Router(config-router)#network 80.0.0.50

Router(config-router)#network 90.10.0.1

Router(config-router)#end

Router#copy run startup

Configuración de nat estatico

R0:

Router(config)#ip nat inside source static 192.168.2.10 80.0.0.1

Router(config)#int s0/0/0

Router(config-if)#ip nat outside

Router(config-if)#interface fa0/0

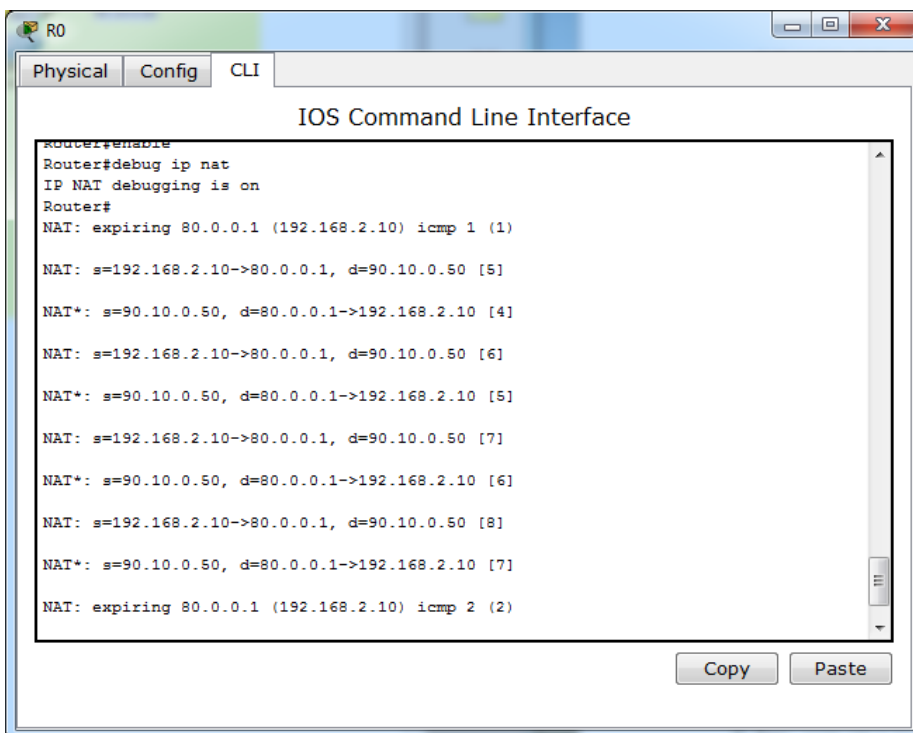
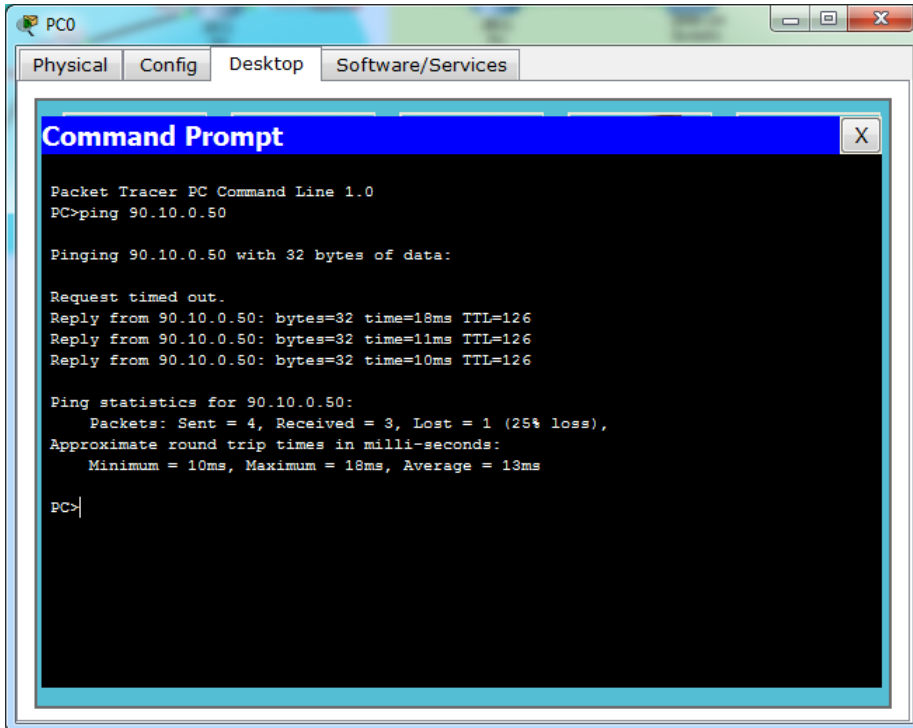
Router(config-if)#ip nat inside

Router(config-if)#exit

Router(config)#exit

Router#copy run sta

Para la comprobación realizaremos un ping y una traducción de direcciones



## NAT DINAMICO

Lo primero que tenemos que realizar será asignar unas ip a las interfaces y realizar un enrutamiento.

R0:

```
Router>enable
Router#conf t
Router(config)#interface fa 0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#end
```

R1:

```
Router>enable
Router#conf t
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.50 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#interface fa0/0
Router(config-if)#ip address 90.10.0.1 255.0.0.0
Router(config-if)#end
Router#copy run sta
Enrutamiento:
```

R0:

```
Router#enable
Router#conf t
```

```
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.2.0
Router(config-router)#network 80.0.0.1
Router(config-router)#end
Router#copy run sta
```

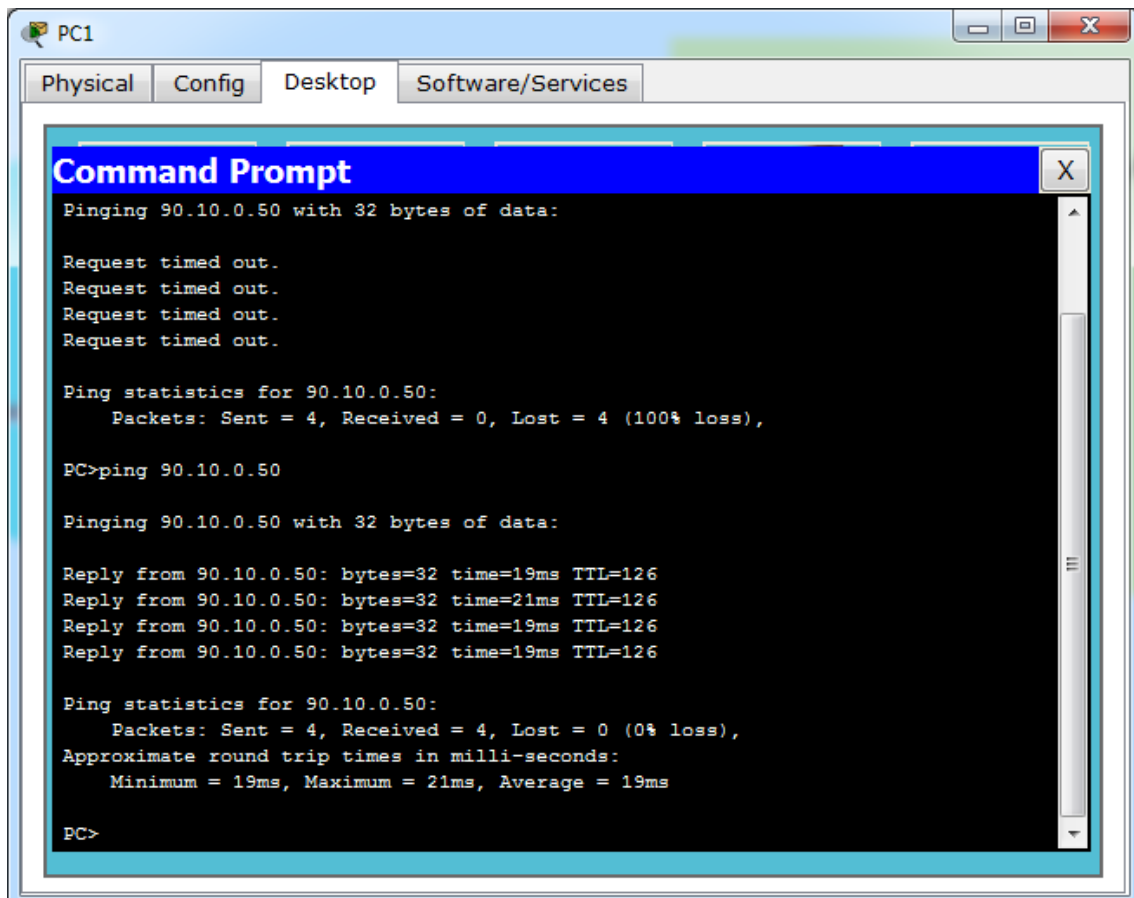
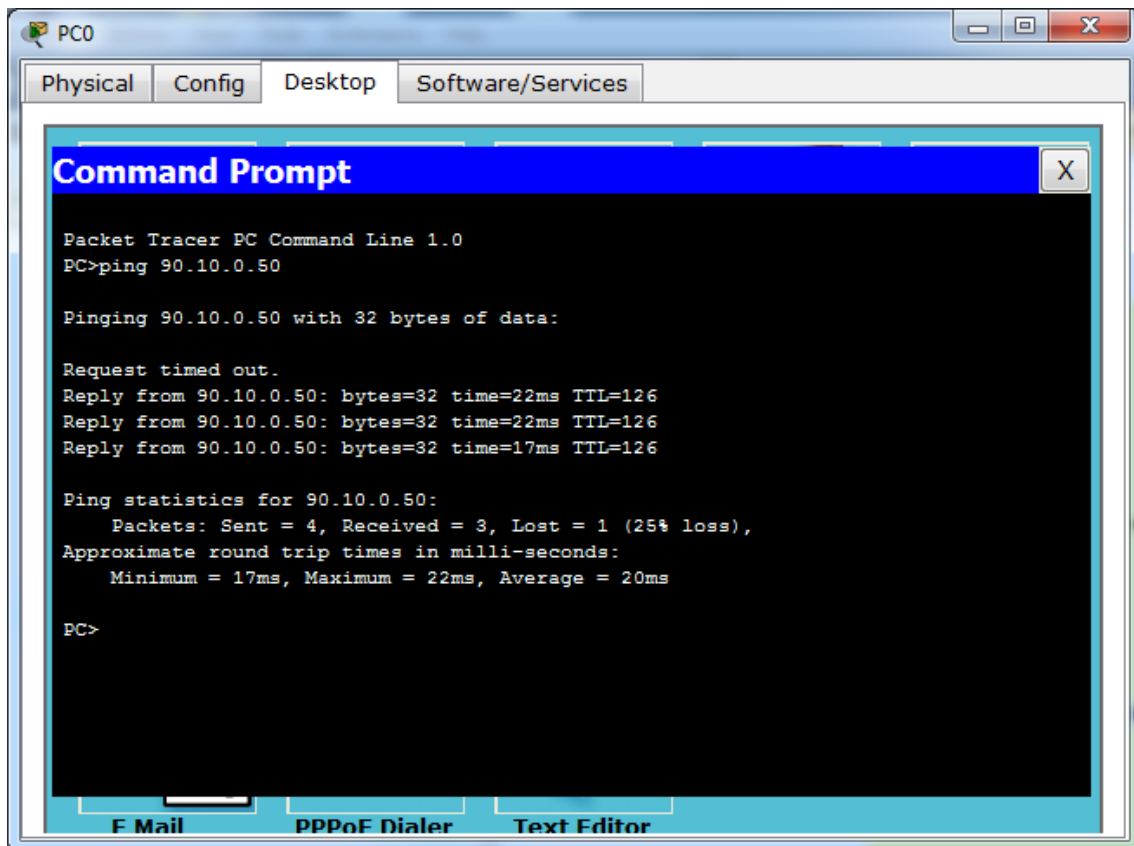
#### R1:

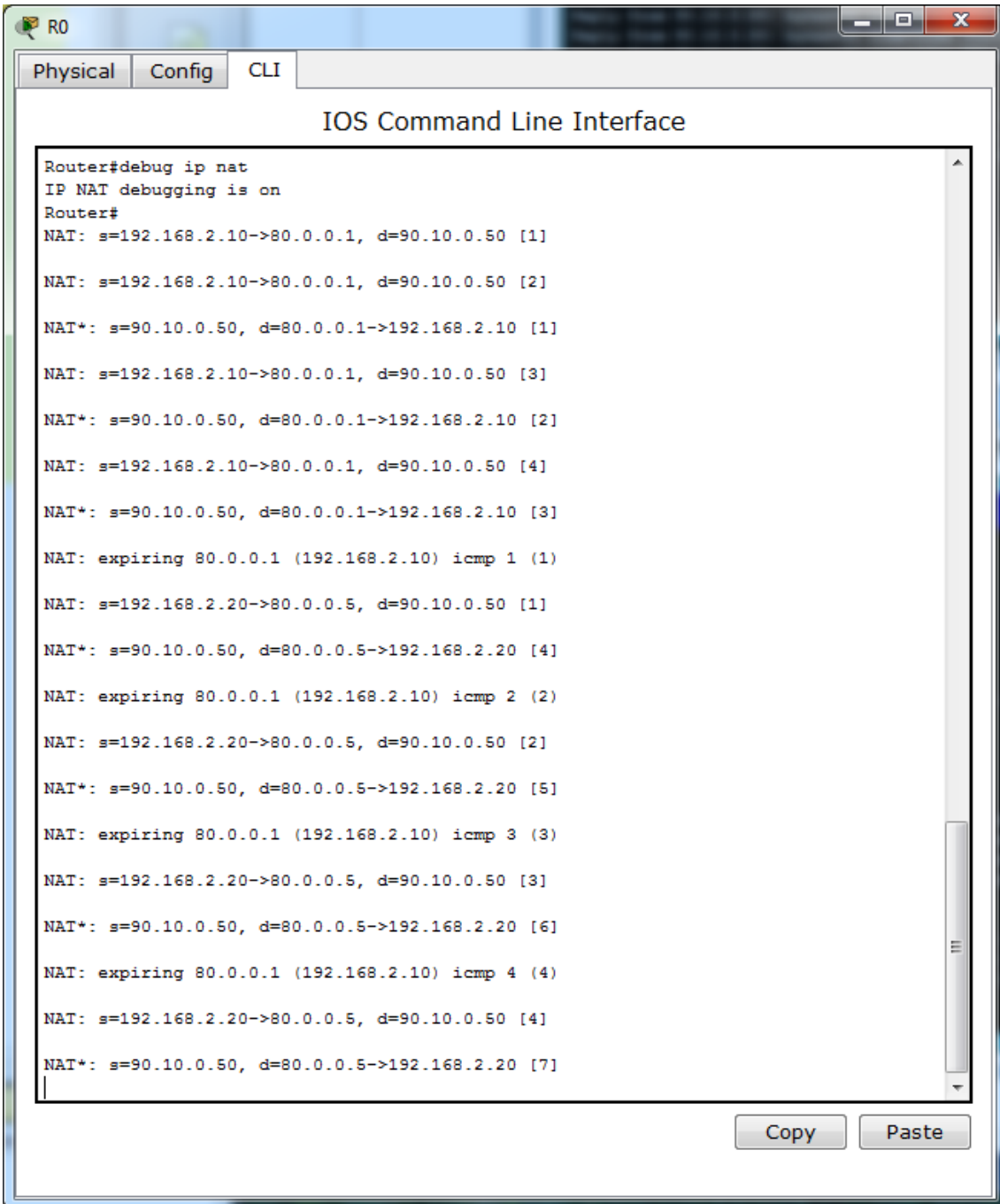
```
Router#enable
Router#conf t
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 80.0.0.50
Router(config-router)#network 90.10.0.1
Router(config-router)#end
Router#copy run startup
```

#### Configuración Nat dinamica en R0:

```
Router>enable
Router#conf t
Router(config)#ip nat pool NAT_DINAMICa 80.0.0.5 80.0.0.7 netmask 255.0.0.0
Router(config)#access-list 10 permit 192.168.2.0 0.0.0.255
Router(config)#ip nat inside source list 10 pool NAT_DINAMICa
Router(config)#int s0/0/0
Router(config-if)#ip nat outside
Router(config-if)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#end
Router#copy run sta
```

Ahora aremos un ping y veremos la traducción de nombres





## NAT / PAT

Lo primero de todo que tendremos que hacer será asignar una dirección ip y enrutar

R0:

```
Router>enable
Router#conf t
Router(config)#interface fa 0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#end
```

R1:

```
Router>enable
Router#conf t
Router(config)#interface se0/0/0
Router(config-if)#ip address 80.0.0.50 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#interface fa0/0
Router(config-if)#ip address 90.10.0.1 255.0.0.0
Router(config-if)#end
Router#copy run sta
Enrutamiento:
```

R0:

```
Router#enable
Router#conf t
```



```
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 192.168.2.0
Router(config-router)#network 80.0.0.1
Router(config-router)#end
Router#copy run sta
```

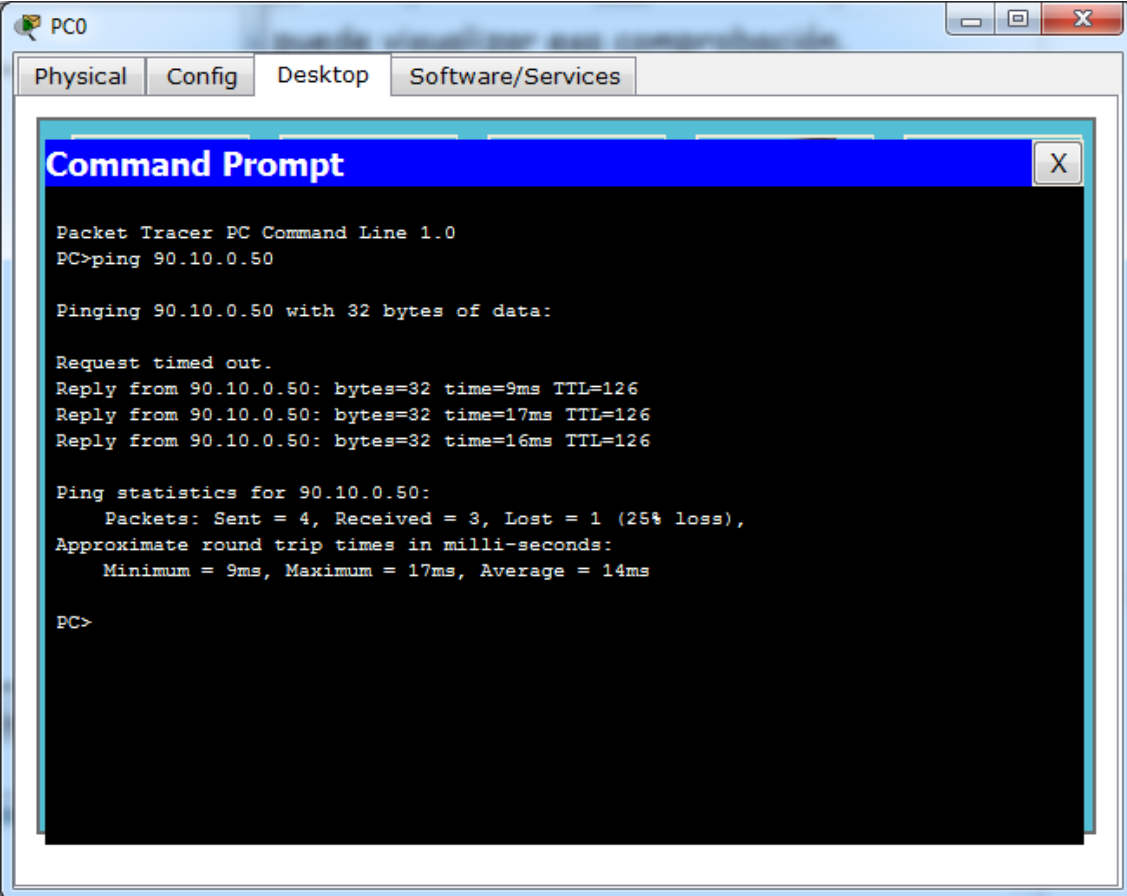
#### R1:

```
Router#enable
Router#conf t
Router(config)#router rip
Router(config-router)#version 2
Router(config-router)#network 80.0.0.50
Router(config-router)#network 90.10.0.1
Router(config-router)#end
Router#copy run startup
```

#### Configuración NAT/PAT en router R0:

```
Router>enable
Router#conf t
Router(config)#access-list 10 permit 192.168.2.0 0.0.0.255
Router(config)#access-list 10 permit 192.168.2.0 0.0.0.255
Router(config)#ip nat inside source list 10 int s0/0/0
Router(config)#ip nat outside
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#end
Router#copy run sta
Destination filename [startup-config]?
Router#
```

## Verificación desde pc 0 y pc 1



The image shows a Packet Tracer PC Command Prompt window for PC0. The window has tabs for Physical, Config, Desktop, and Software/Services. The Command Prompt displays the following output:

```
Packet Tracer PC Command Line 1.0
PC>ping 90.10.0.50

Pinging 90.10.0.50 with 32 bytes of data:

Request timed out.
Reply from 90.10.0.50: bytes=32 time=9ms TTL=126
Reply from 90.10.0.50: bytes=32 time=17ms TTL=126
Reply from 90.10.0.50: bytes=32 time=16ms TTL=126

Ping statistics for 90.10.0.50:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 9ms, Maximum = 17ms, Average = 14ms

PC>
```

