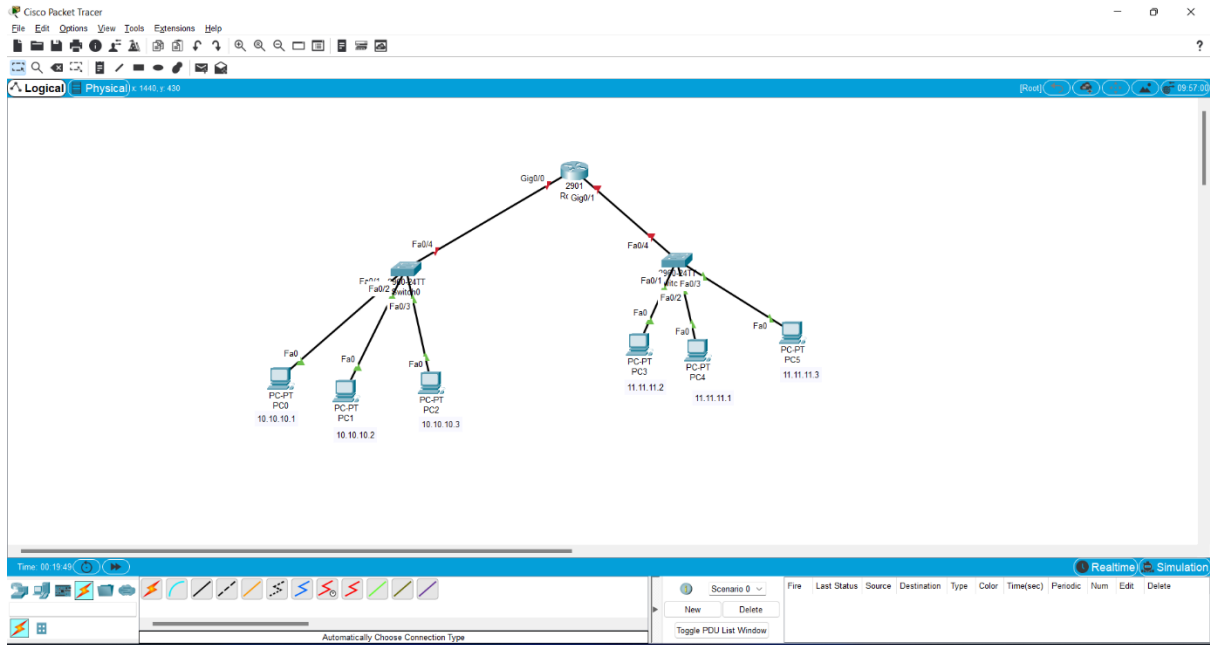
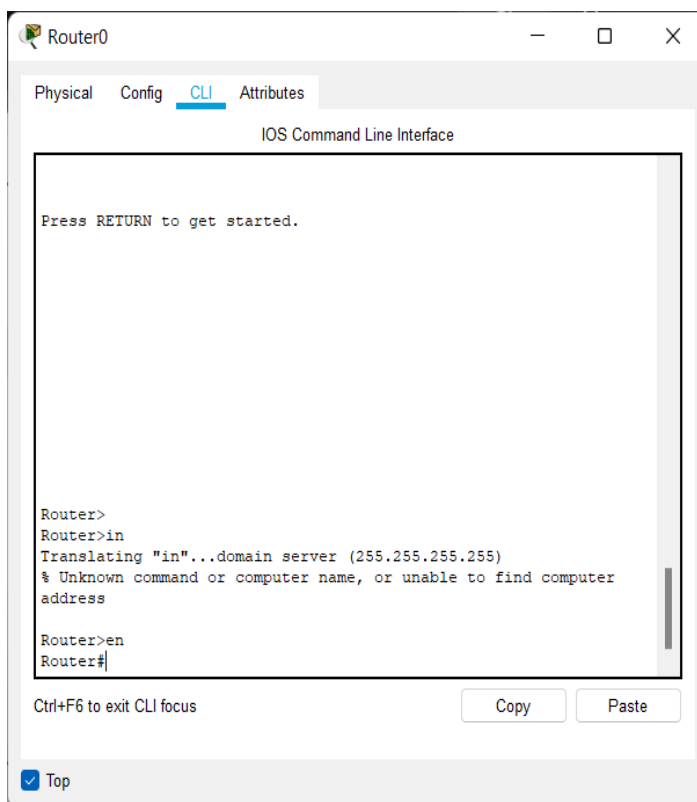


## Practical-2

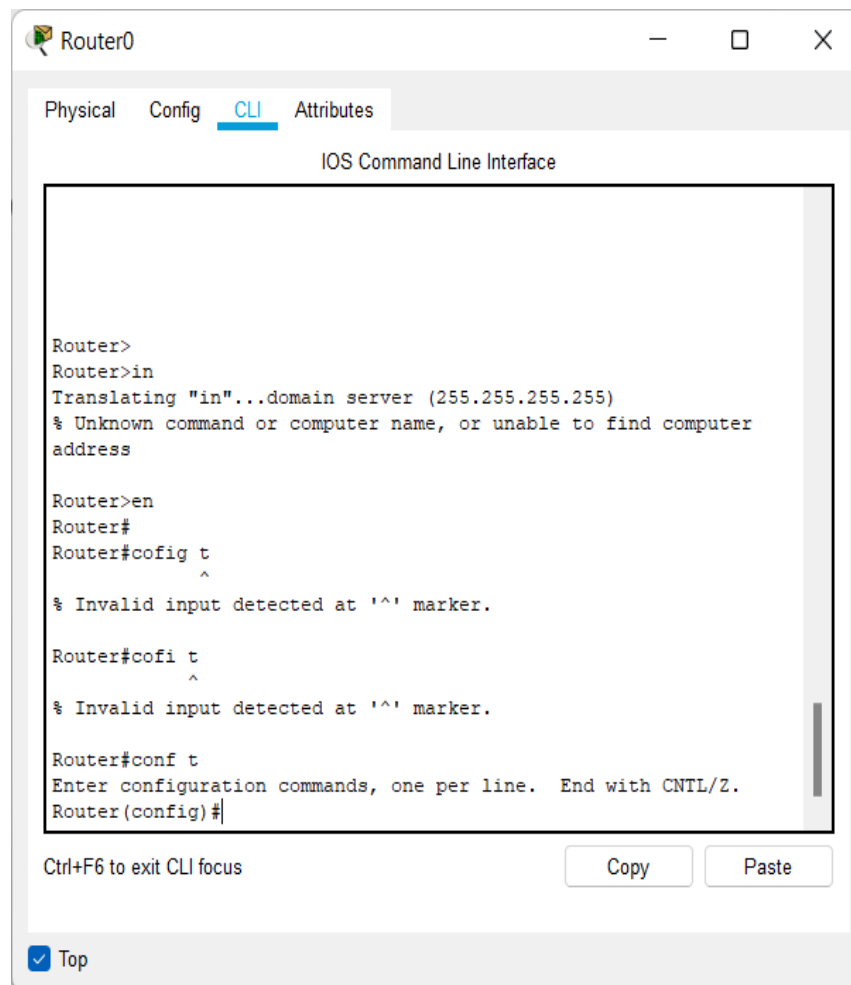
**AIM: Configure a router (Ethernet & serial interface) using router commands on any network simulator.**



**en:**for entering into CLI



**conf t:** for entering configuration terminal

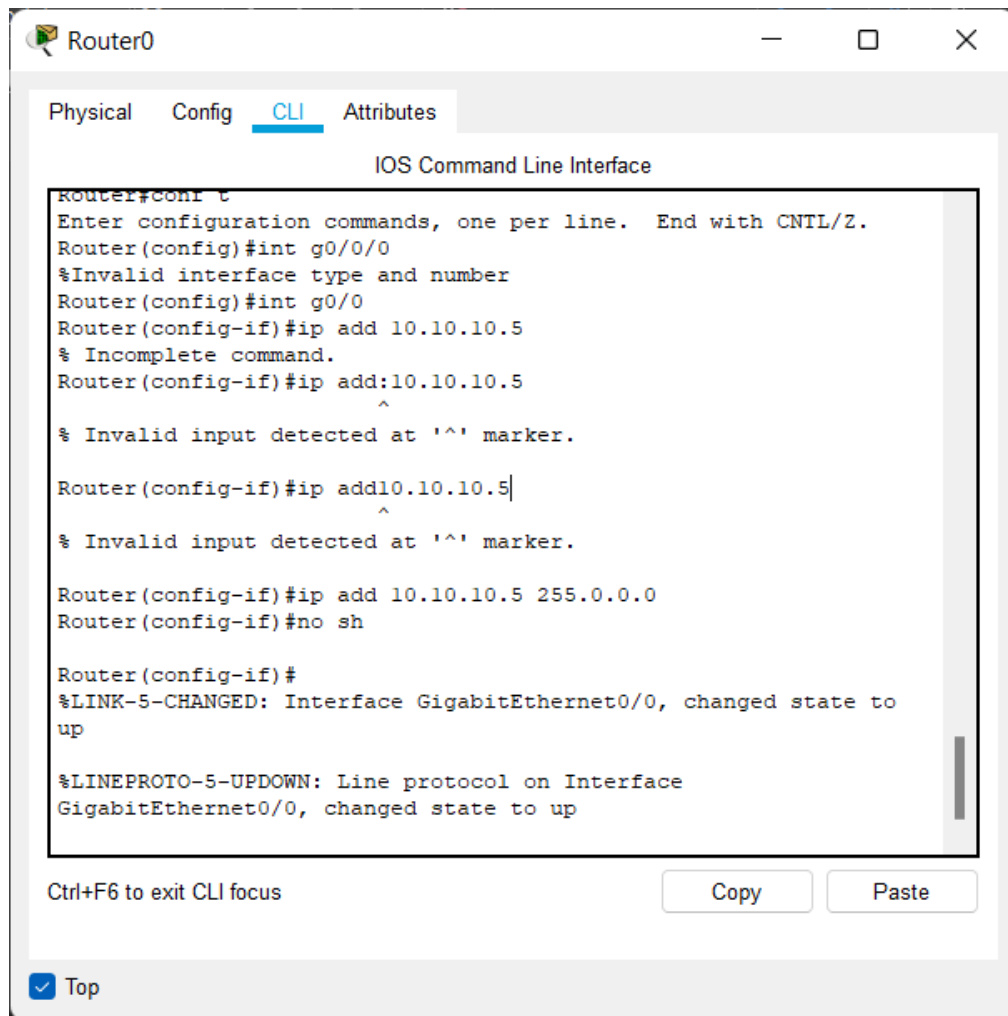


**int g0/0:** this will initiate the connection with g0/0 port.

**ip add 10.10.10.5 255.0.0.0 :** this gives ip 10.10.10.5 to port g0/0 with 255.0.0.0 sub net mask.

**no sh:**no shutdown

**end:** this will end that interface connection



The screenshot shows a window titled "Router0" with tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The terminal text is as follows:

```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int g0/0/0
%Invalid interface type and number
Router(config)#int g0/0
Router(config-if)#ip add 10.10.10.5
% Incomplete command.
Router(config-if)#ip add:10.10.10.5
      ^
% Invalid input detected at '^' marker.

Router(config-if)#ip add10.10.10.5|
      ^
% Invalid input detected at '^' marker.

Router(config-if)#ip add 10.10.10.5 255.0.0.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0, changed state to up
```

Below the terminal window, there is a status bar with "Ctrl+F6 to exit CLI focus" on the left, and "Copy" and "Paste" buttons on the right. At the bottom left, there is a checkbox labeled "Top" which is checked.

**conf t:** for entering configuration terminal

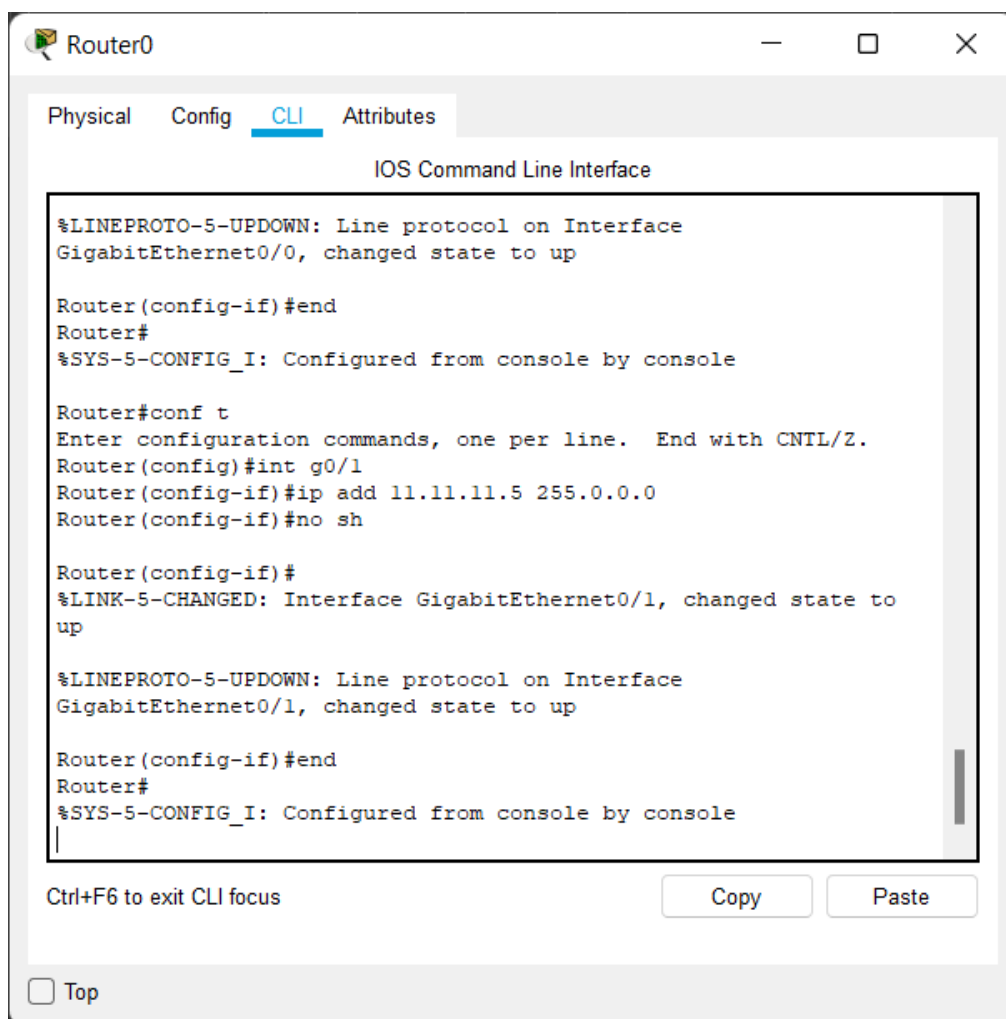
**int g0/1:** this will connect with g0/1 interface.

**ip add 11.11.11.5 255.0.0.0 :** this gives ip **1.11.11.5** to port g0/0 with 255.0.0.0 sub net mask.

**no sh:**no shutdown

**end:** this will end that interface connection

for configuring second port of router with another switch.



The screenshot shows a Cisco Packet Tracer console window titled "Router0". The window has tabs for "Physical", "Config", "CLI", and "Attributes", with "CLI" selected. The main area displays the "IOS Command Line Interface" with the following text:

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0, changed state to up

Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int g0/1
Router(config-if)#ip add 11.11.11.5 255.0.0.0
Router(config-if)#no sh

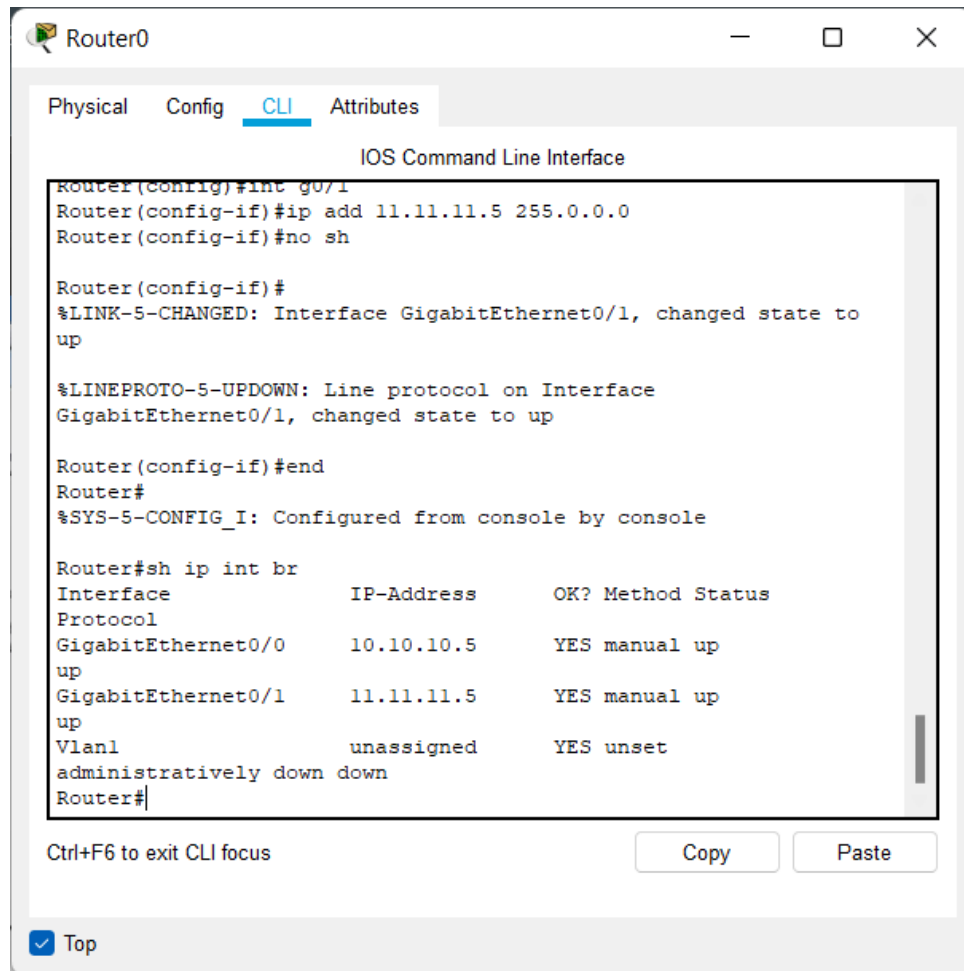
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/1, changed state to up

Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
|
```

At the bottom of the console window, there is a status bar with the text "Ctrl+F6 to exit CLI focus" and two buttons labeled "Copy" and "Paste". A "Top" button is also visible in the bottom left corner.

**sh ip int br:** this will show ip interface brief



The screenshot shows a Cisco Packet Tracer console window for Router0. The window has tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the following commands and output:

```
Router(config)#int g0/1
Router(config-if)#ip add 11.11.11.5 255.0.0.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/1, changed state to up

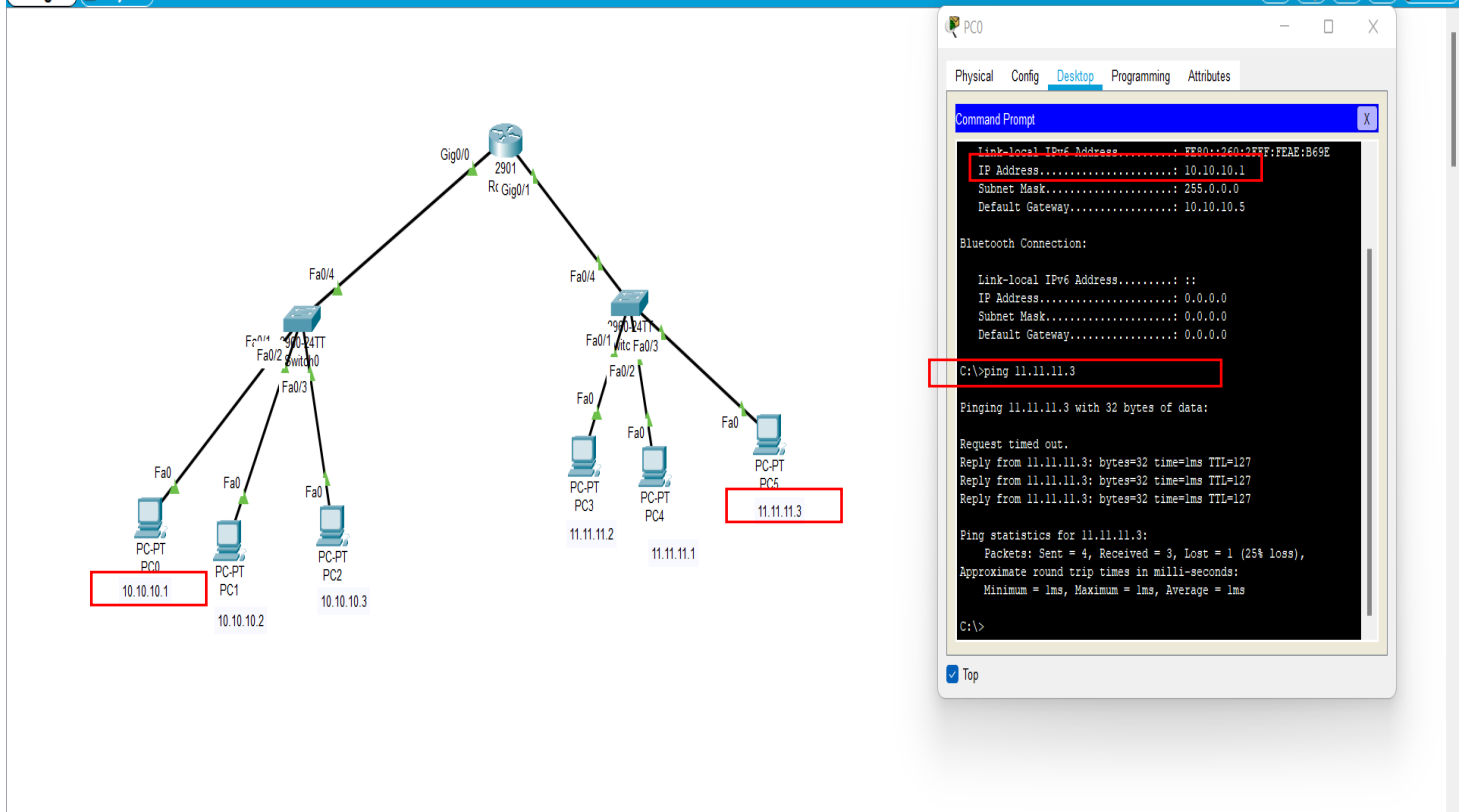
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#sh ip int br
```

Interface	IP-Address	OK?	Method	Status
GigabitEthernet0/0	10.10.10.5	YES	manual	up
GigabitEthernet0/1	11.11.11.5	YES	manual	up
Vlan1	unassigned	YES	unset	administratively down

Router#

Below the output, there is a status bar with "Ctrl+F6 to exit CLI focus" and buttons for "Copy" and "Paste". At the bottom left, there is a "Top" button with a checkmark.



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Link-local IPv6 Address.....: FE80::260:2EFF:FEAE:B69E
IP Address.....: 10.10.10.1
Subnet Mask.....: 255.0.0.0
Default Gateway.....: 10.10.10.5

Bluetooth Connection:

Link-local IPv6 Address.....: ::
IP Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: 0.0.0.0

C:\>ping 11.11.11.3

Pinging 11.11.11.3 with 32 bytes of data:

Request timed out.
Reply from 11.11.11.3: bytes=32 time=1ms TTL=127
Reply from 11.11.11.3: bytes=32 time=1ms TTL=127
Reply from 11.11.11.3: bytes=32 time=1ms TTL=127

Ping statistics for 11.11.11.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>
```

Top

Time: 00:48:24

Realtime Simulation



Automatically Choose Connection Type

Scenario 0

New Delete

Toggle PDU List Window

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