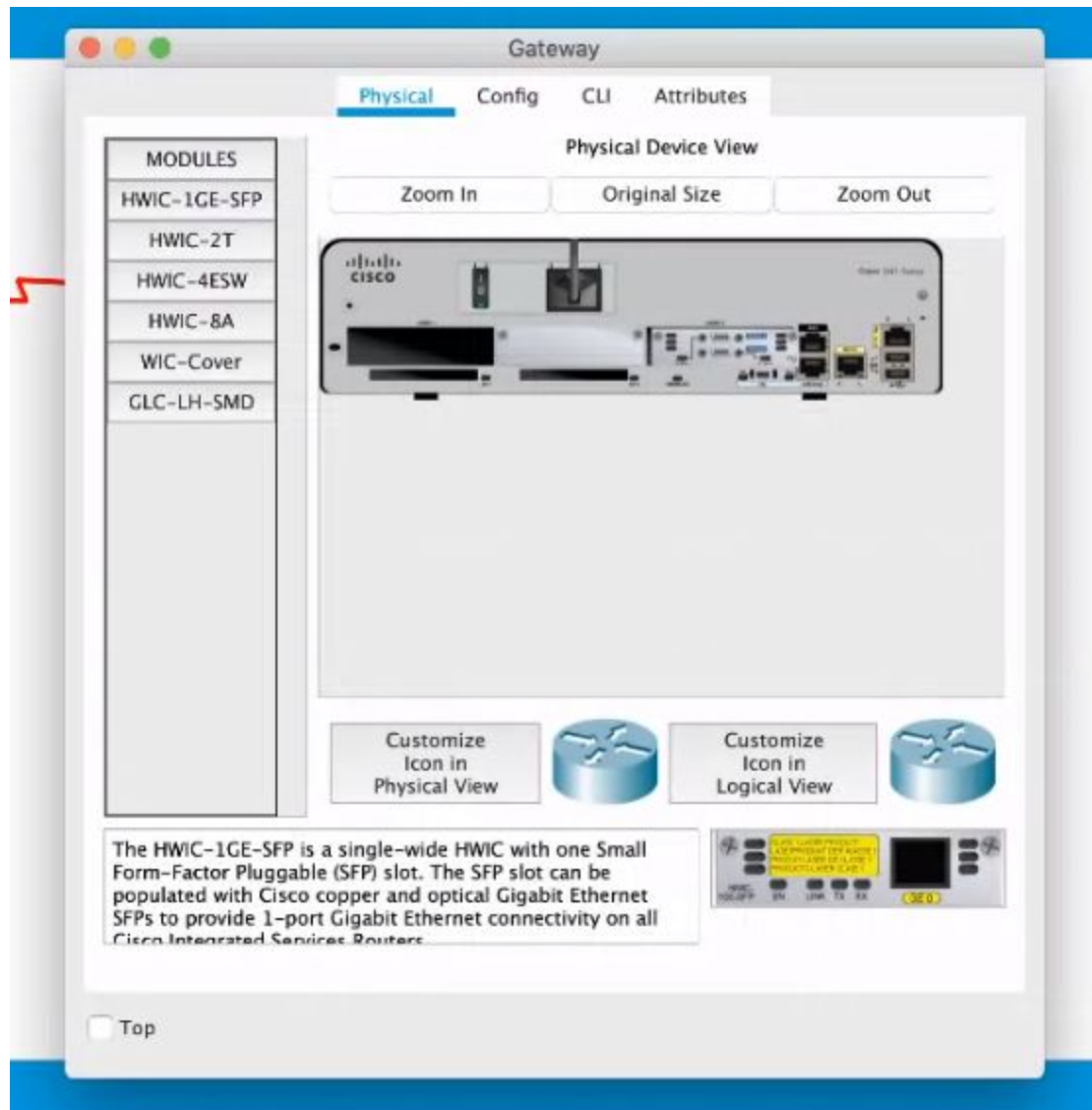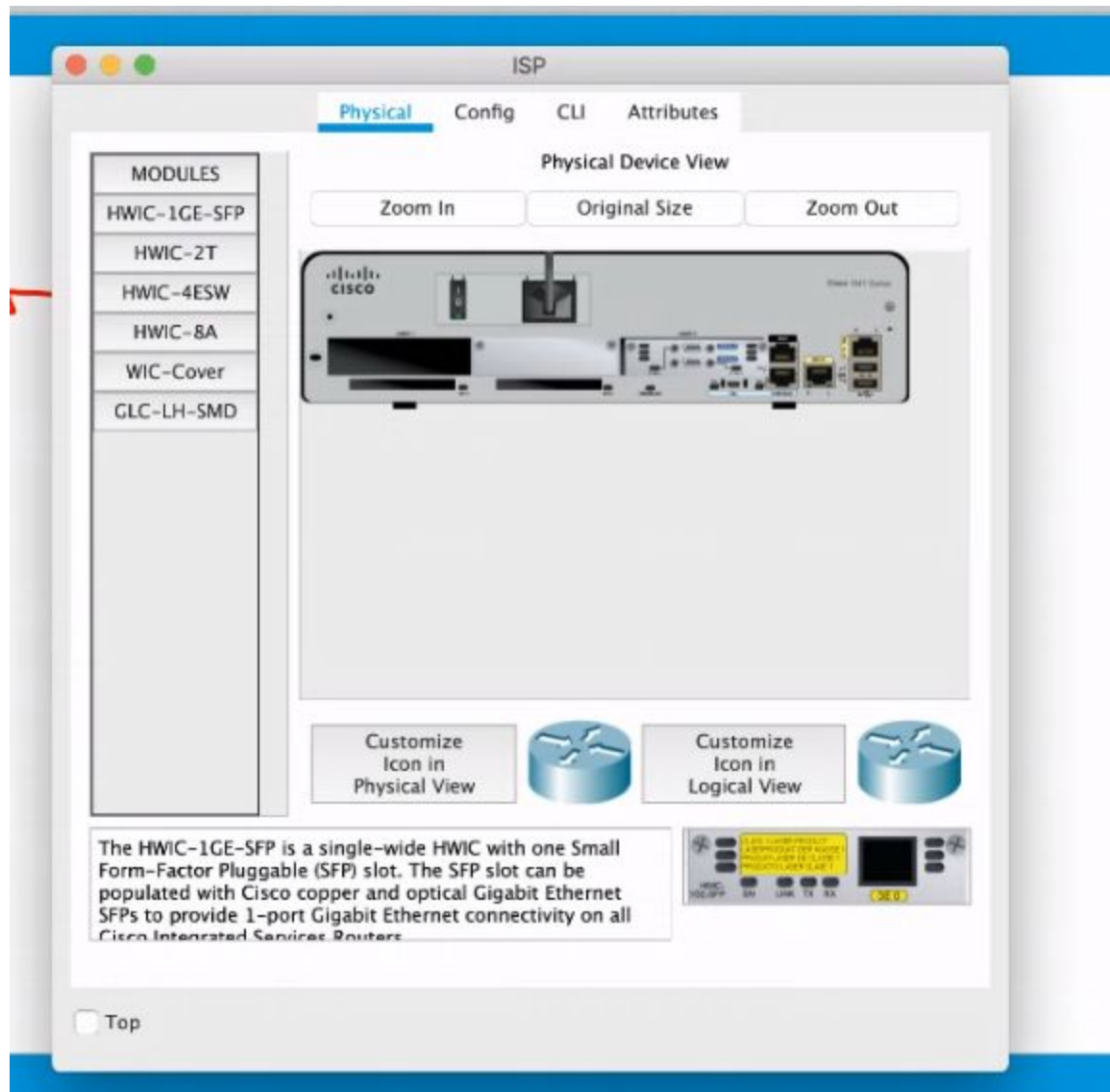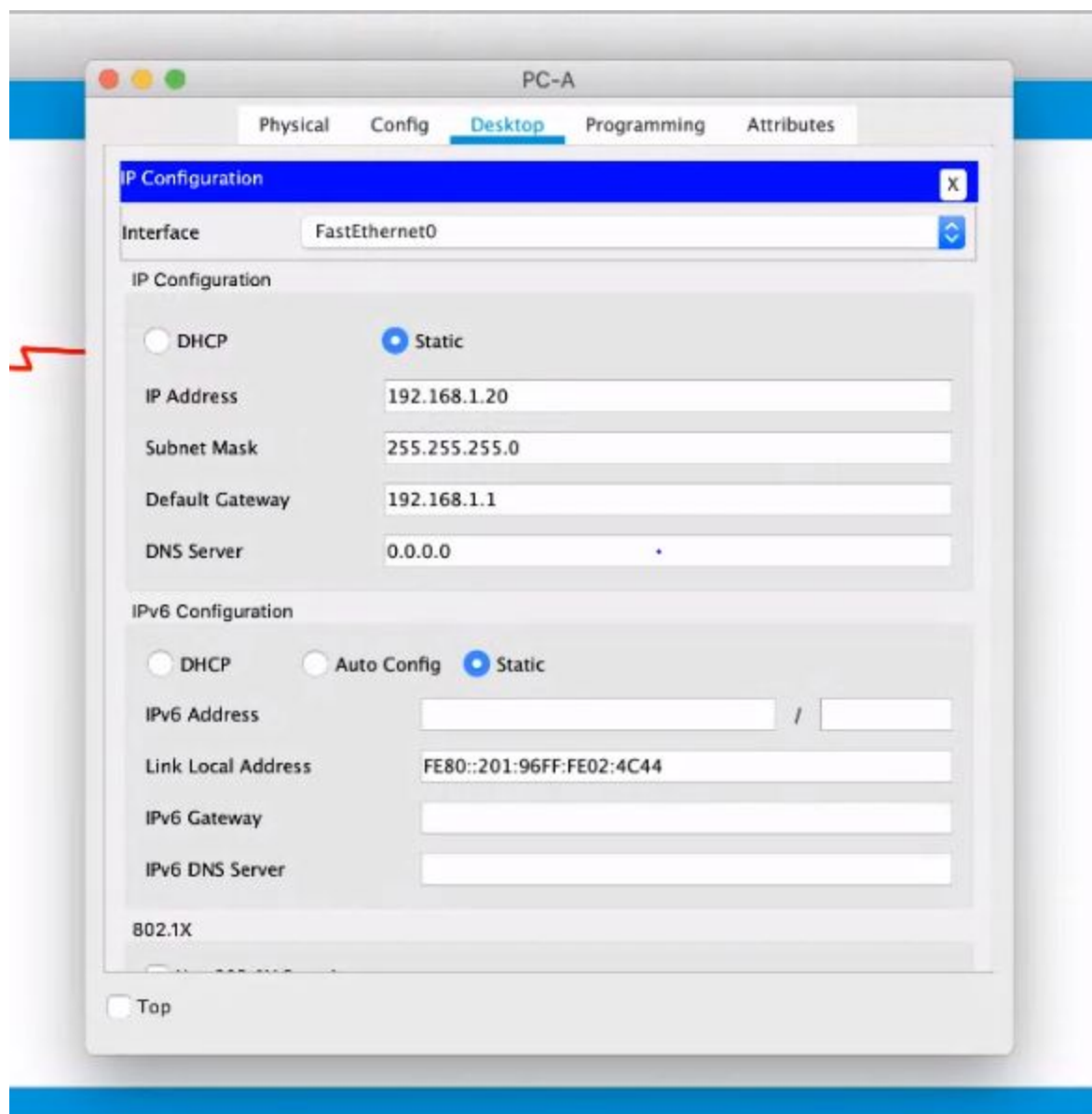Priyav Mehta - 2018130026
Khushi Jashnani - 2018130017
Rishi Kaul - 2018130019

DCCN ISE 2

Task 1

Gateway

Physical | Config | CLI | Attributes

Physical Device View

| Zoom In | Original Size | Zoom Out |

MODULES
- HWIC-1GE-SFP
- HWIC-2T
- HWIC-4ESW
- HWIC-8A
- WIC-Cover
- GLC-LH-SMD

Customize Icon in Physical View

Customize Icon in Logical View

The HWIC-1GE-SFP is a single-wide HWIC with one Small Form-Factor Pluggable (SFP) slot. The SFP slot can be populated with Cisco copper and optical Gigabit Ethernet SFPs to provide 1-port Gigabit Ethernet connectivity on all Cisco Integrated Services Routers.

☐ Top

ISP

Physical Device View

| Zoom In | Original Size | Zoom Out |

MODULES

HWIC-1GE-SFP
HWIC-2T
HWIC-4ESW
HWIC-8A
WIC-Cover
GLC-LH-SMD

CISCO

Customize
Icon in
Physical View

Customize
Icon in
Logical View

The HWIC-1GE-SFP is a single-wide HWIC with one Small
Form-Factor Pluggable (SFP) slot. The SFP slot can be
populated with Cisco copper and optical Gigabit Ethernet
SFPs to provide 1-port Gigabit Ethernet connectivity on all
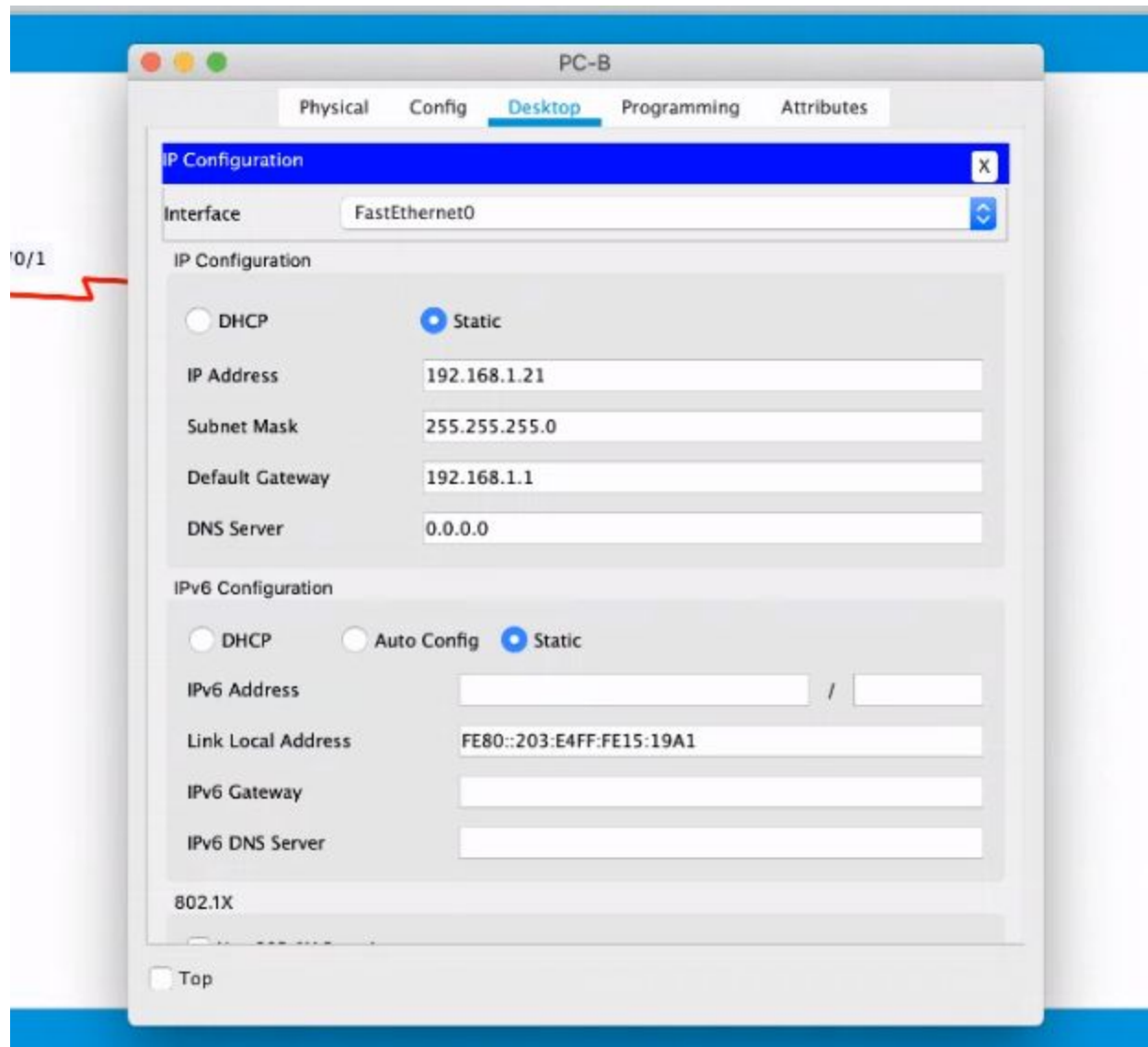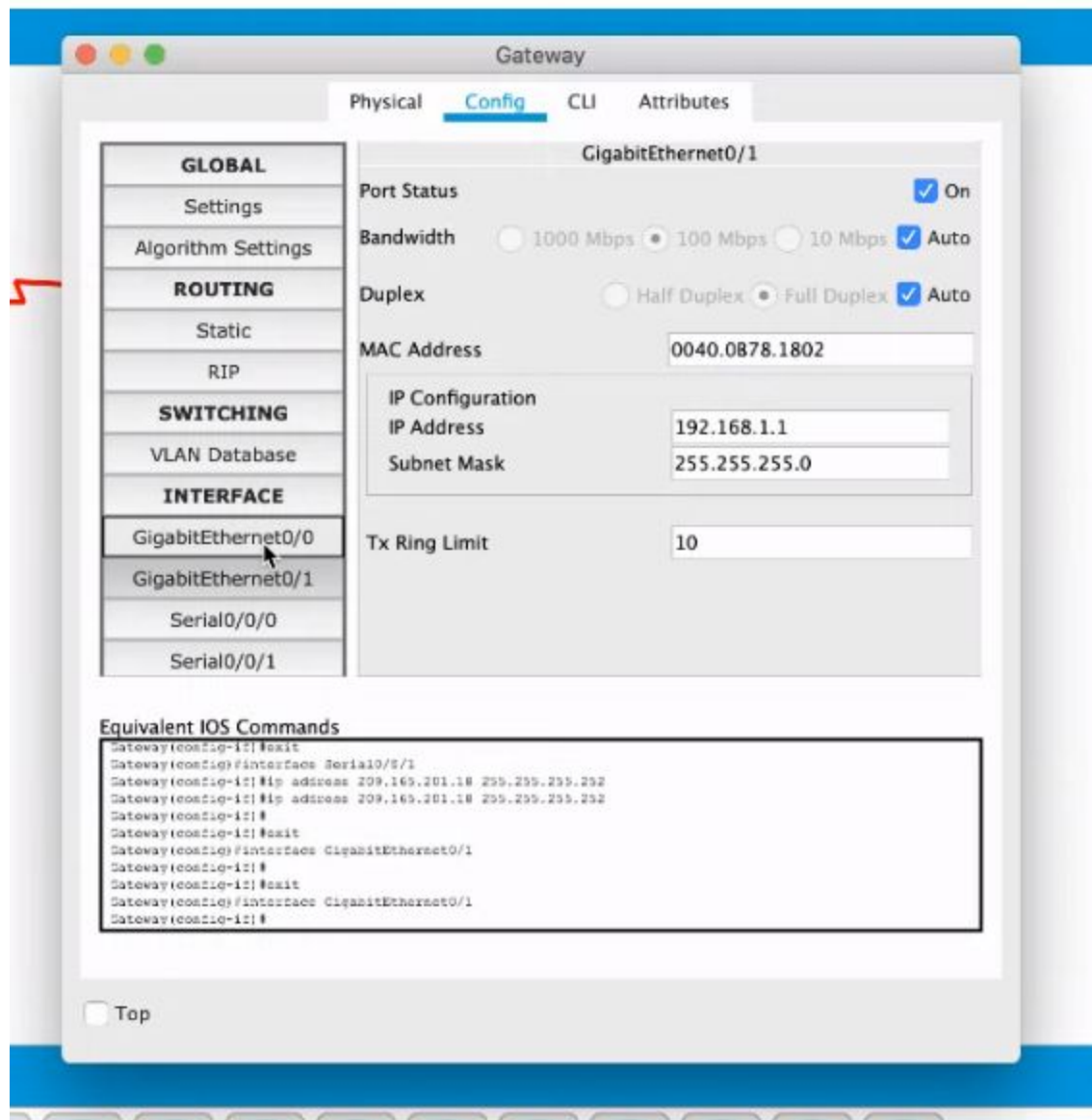Cisco Integrated Services Routers.

☐ Top

Gateway

Physical   Config   CLI   Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

Serial0/0/0

Serial0/0/1

GigabitEthernet0/1

Port Status   ☑ On

Bandwidth   ○ 1000 Mbps ● 100 Mbps ○ 10 Mbps ☑ Auto

Duplex   ○ Half Duplex ● Full Duplex ☑ Auto

MAC Address   0040.0878.1802

IP Configuration	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0

Tx Ring Limit   10

Equivalent IOS Commands

```
Gateway(config-if)#exit
Gateway(config)#interface Serial0/0/1
Gateway(config-if)#ip address 209.165.201.18 255.255.255.252
Gateway(config-if)#ip address 209.165.201.18 255.255.255.252
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#
```

☐ Top

Gateway

Physical   **Config**   CLI   Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

Serial0/0/0

Serial0/0/1

Serial0/0/1

Port Status   ☑ On

Duplex   ⦿ Full Duplex

Clock Rate   2000000 ⬍

IP Configuration
IP Address   209.165.201.18

Subnet Mask   255.255.255.252

Tx Ring Limit   10

Equivalent IOS Commands

```
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#ip address 182.168.1.1 255.255.255.0
Gateway(config-if)#ip address 192.168.1.1 255.255.255.0
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface Serial0/0/1
Gateway(config-if)#ip address 209.165.201.18 255.255.255.252
Gateway(config-if)#ip address 209.165.201.18 255.255.255.252
Gateway(config-if)#
```

☐ Top

ISP

Physical　Config　CLI　Attributes

GLOBAL	Serial0/0/0
Settings	
Algorithm Settings	
ROUTING	
Static	
RIP	
SWITCHING	
VLAN Database	
INTERFACE	
GigabitEthernet0/0	
GigabitEthernet0/1	
Serial0/0/0	
Serial0/0/1	

Port Status　☑ On

Duplex　● Full Duplex

Clock Rate　128000

IP Configuration
IP Address　209.165.201.17
Subnet Mask　255.255.255.252

Tx Ring Limit　10

Equivalent IOS Commands

```
ISP(config)#interface GigabitEthernet0/1
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface GigabitEthernet0/0
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface GigabitEthernet0/1
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface Serial0/0/0
ISP(config-if)#
```

☐ Top
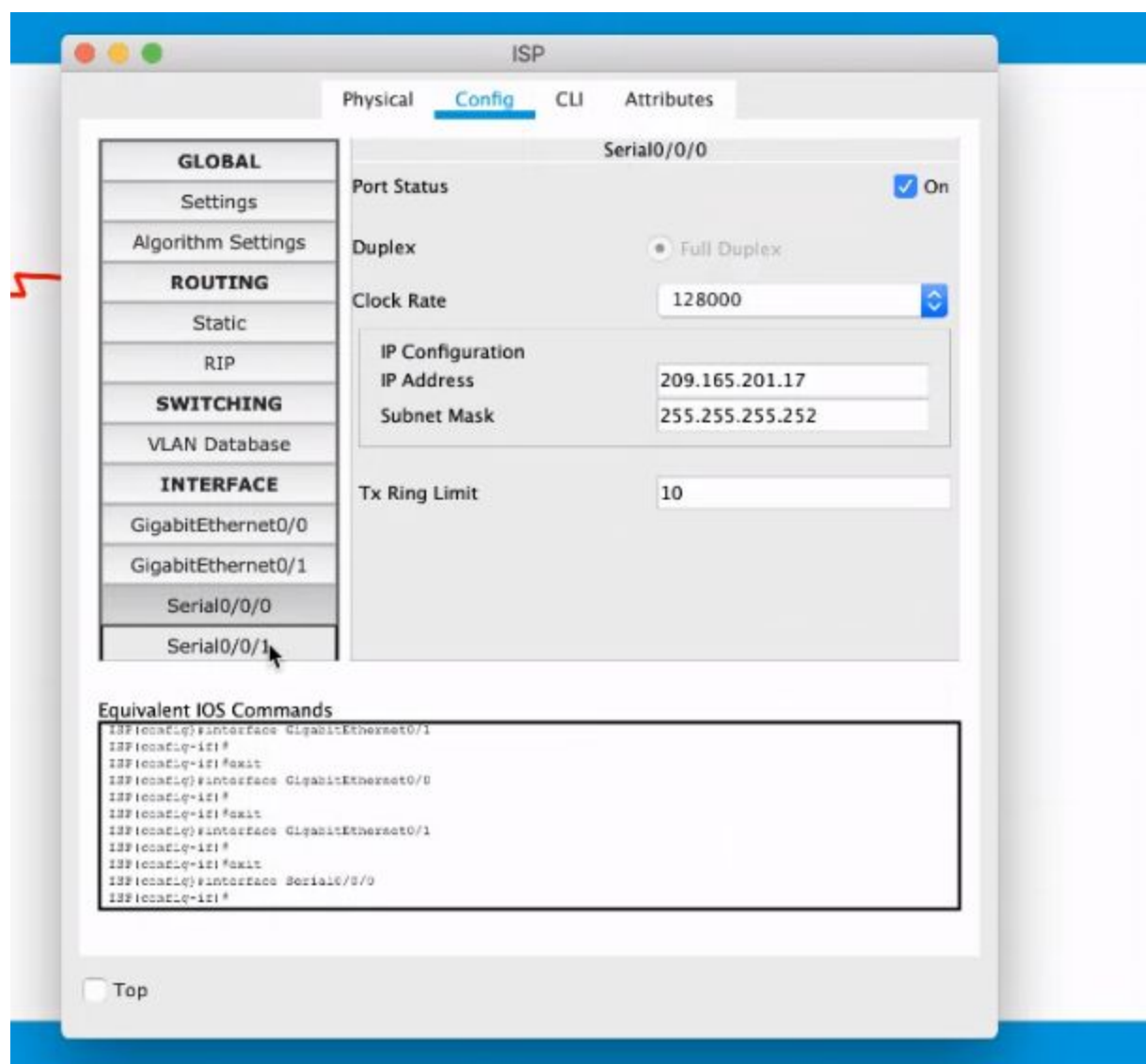
Gateway

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
% Invalid input detected at '^' marker.

Gateway>login
Translating "login"
% Unknown command or computer name, or unable to find computer address

Gateway>logging synchronous
                     ^
% Invalid input detected at '^' marker.

Gateway>line vty 0 4
              ^
% Invalid input detected at '^' marker.

Gateway>password cisco
                 ^
% Invalid input detected at '^' marker.

Gateway>enable
Password:
Gateway#confi
Gateway#configure te
Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#no ip domain-lookup
Gateway(config)#service password-encryption
Gateway(config)#enable secret class
Gateway(config)#banner motd #
Enter TEXT message.  End with the character '#'.
Unauthorized access is strictly prohibited. #

Gateway(config)#line con 0
Gateway(config-line)#password cisco
Gateway(config-line)#login
Gateway(config-line)#logging synchronous
Gateway(config-line)#line vty 0 4
Gateway(config-line)#password cisco
Gateway(config-line)#login
Gateway(config-line)#
```

Command+F6 to exit CLI focus

Copy   Paste

☐ Top

ISP

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface GigabitEthernet0/1
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface Serial0/0/0
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface Serial0/0/1
ISP(config-if)#
ISP(config-if)#exit
ISP(config)#interface Serial0/0/0
ISP(config-if)#exit
ISP(config)#exit
ISP#
%SYS-5-CONFIG_I: Configured from console by console

ISP#enbale
Translating "enbale"
% Unknown command or computer name, or unable to find computer address

ISP#enable
ISP#configure te
ISP#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ISP(config)#no ip domain-lookup
ISP(config)#service password-encryption
ISP(config)#enable secret class
ISP(config)#banner motd #
Enter TEXT message.  End with the character '#'.
Unauthorized access is strictly prohibited. #

ISP(config)#line con 0
ISP(config-line)#password cisco
ISP(config-line)#login
ISP(config-line)#logging synchronous
ISP(config-line)#line vty 0 4
ISP(config-line)#password cisco
ISP(config-line)#login
ISP(config-line)#
```

Command+F6 to exit CLI focus

Copy   Paste

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Gateway(config)#interface Serial0/0/0
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface Serial0/0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#exit
Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#
Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface Serial0/0/1
Gateway(config-if)#
Gateway(config-if)#exit
Gateway(config)#interface GigabitEthernet0/1
Gateway(config-if)#exit
Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy running
Gateway#copy running-config star
Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#
```
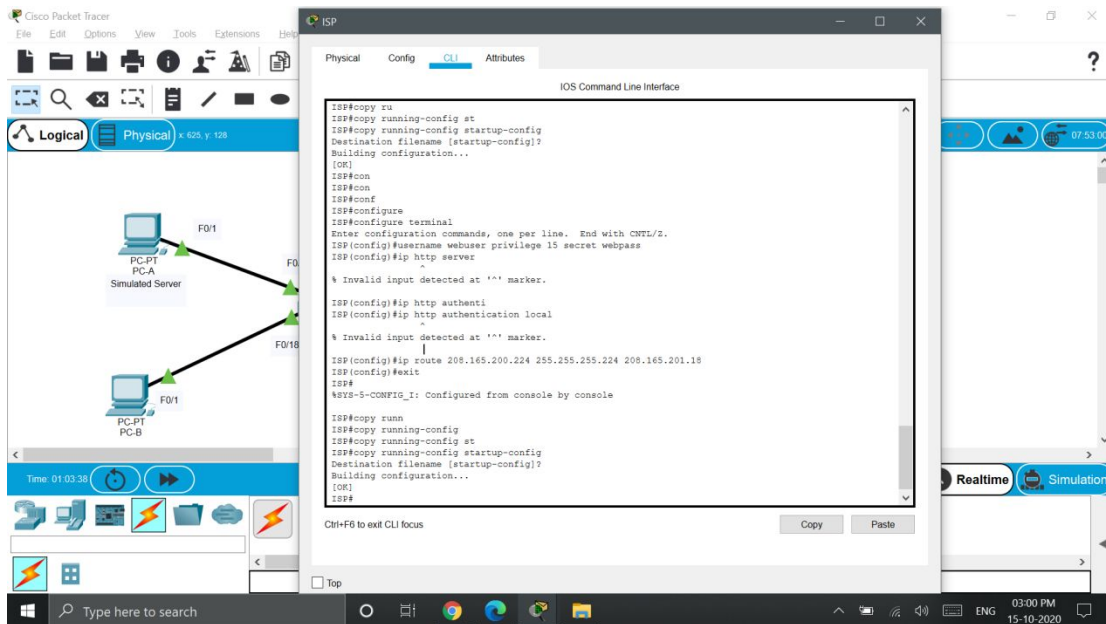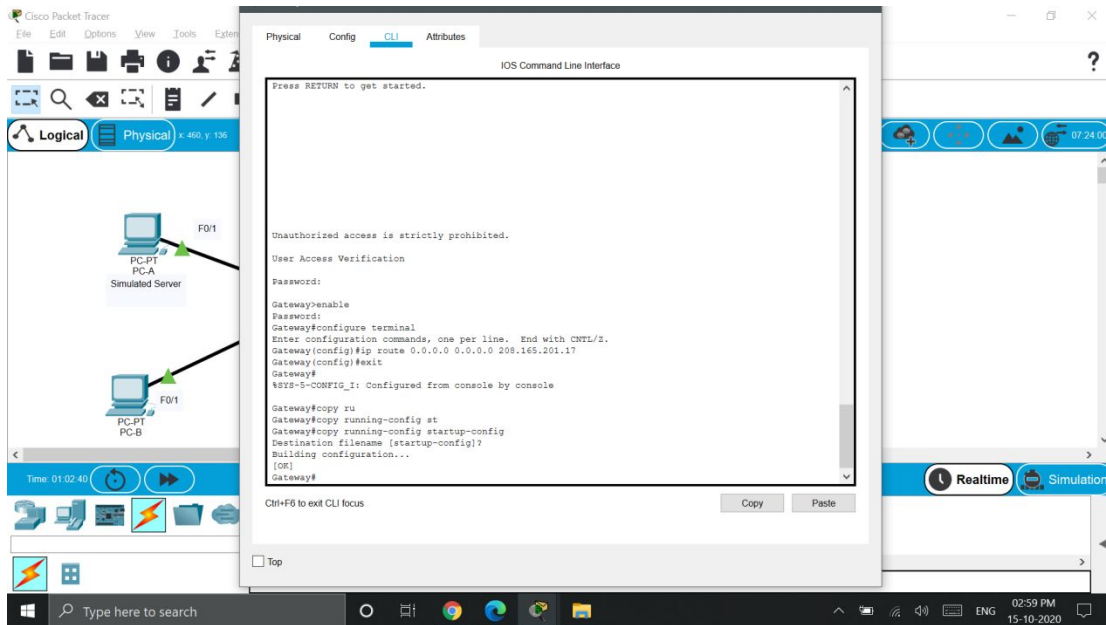
Command+F6 to exit CLI focus   Copy   Paste

☐ Top

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
Press RETURN to get started.




Unauthorized access is strictly prohibited.

User Access Verification

Password:

Gateway>enable
Password:
Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#ip route 0.0.0.0 0.0.0.0 208.165.201.17
Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy ru
Gateway#copy running-config st
Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#
```
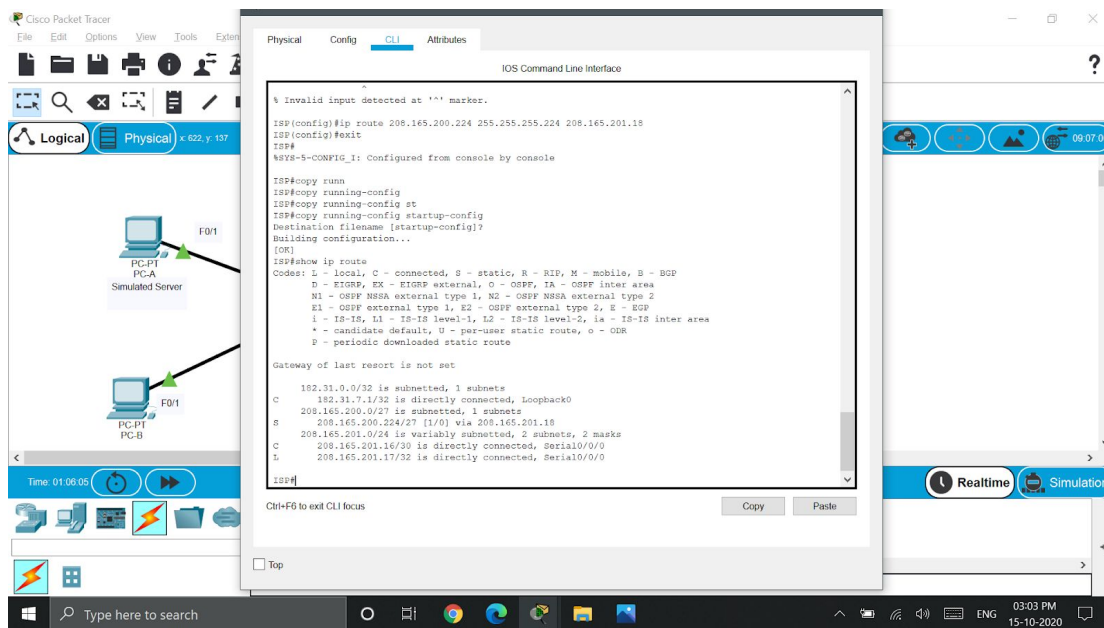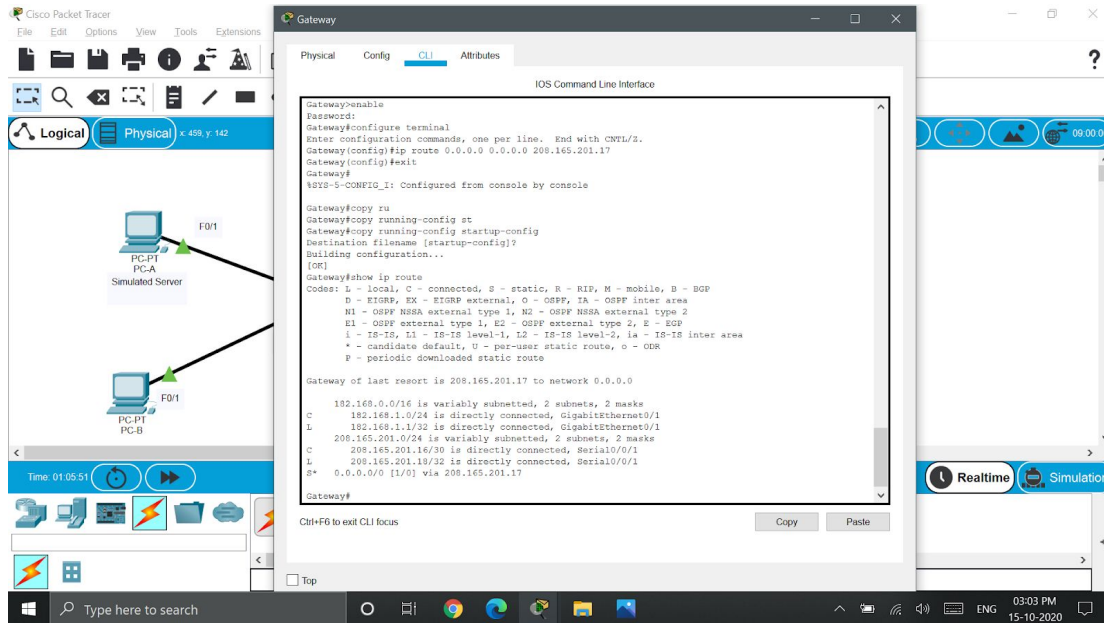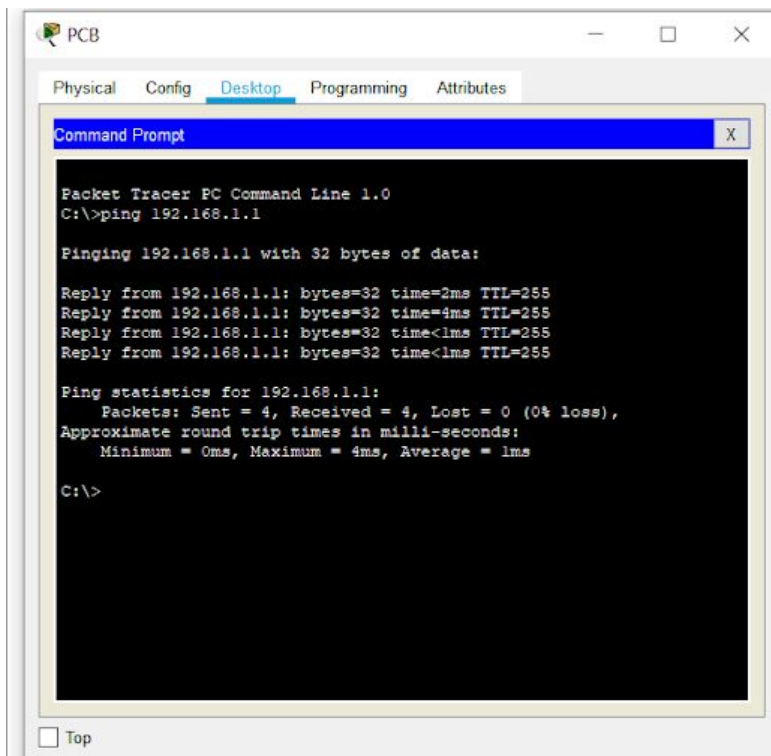
Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
ISP#copy ru
ISP#copy running-config st
ISP#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ISP#con
ISP#con
ISP#conf
ISP#configure
ISP#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ISP(config)#username webuser privilege 15 secret webpass
ISP(config)#ip http server
                 ^
% Invalid input detected at '^' marker.

ISP(config)#ip http authenti
ISP(config)#ip http authentication local
                 ^
% Invalid input detected at '^' marker.

ISP(config)#ip route 208.165.200.224 255.255.255.224 208.165.201.18
ISP(config)#exit
ISP#
%SYS-5-CONFIG_I: Configured from console by console

ISP#copy runn
ISP#copy running-config
ISP#copy running-config st
ISP#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ISP#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Gateway — CLI (IOS Command Line Interface)

```
Gateway>enable
Password:
Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#ip route 0.0.0.0 0.0.0.0 208.165.201.17
Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#copy ru
Gateway#copy running-config st
Gateway#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Gateway#show ip route
Codes: L - local, C - connected, S - static, 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 208.165.201.17 to network 0.0.0.0

     182.168.0.0/16 is variably subnetted, 2 subnets, 2 masks
C       182.168.1.0/24 is directly connected, GigabitEthernet0/1
L       182.168.1.1/32 is directly connected, GigabitEthernet0/1
     208.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       208.165.201.16/30 is directly connected, Serial0/0/1
L       208.165.201.18/32 is directly connected, Serial0/0/1
S*   0.0.0.0/0 [1/0] via 208.165.201.17

Gateway#
```
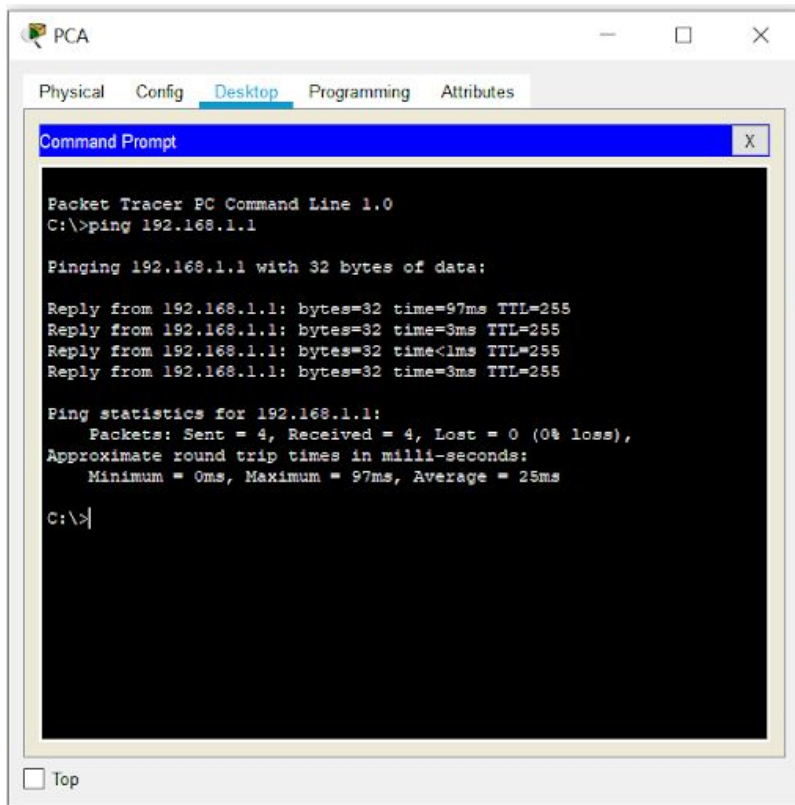
Ctrl+F6 to exit CLI focus

ISP — CLI (IOS Command Line Interface)

```
% Invalid input detected at '^' marker.

ISP(config)#ip route 208.165.200.224 255.255.255.224 208.165.201.18
ISP(config)#exit
ISP#
%SYS-5-CONFIG_I: Configured from console by console

ISP#copy runn
ISP#copy running-config
ISP#copy running-config st
ISP#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ISP#show ip route
Codes: L - local, C - connected, S - static, 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

     182.31.0.0/32 is subnetted, 1 subnets
C       182.31.7.1/32 is directly connected, Loopback0
     208.165.200.0/27 is subnetted, 1 subnets
S       208.165.200.224/27 [1/0] via 208.165.201.18
     208.165.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       208.165.201.16/30 is directly connected, Serial0/0/0
L       208.165.201.17/32 is directly connected, Serial0/0/0

ISP#
```

Ctrl+F6 to exit CLI focus

PCA — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=97ms TTL=255
Reply from 192.168.1.1: bytes=32 time=3ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=3ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 97ms, Average = 25ms

C:\>
```

☐ Top

PCB — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=2ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 4ms, Average = 1ms

C:\>
```

☐ Top

Task 2

Physical   Config   CLI   Attributes

```
2 Low-speed serial(sync/async) network interface(s)
DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)

Press RETURN to get started!


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

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up


%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up


Unauthorized access is strictly prohibited.

User Access Verification

Password:

Gateway>enable
Password:
Password:
Password:
Gateway#configure terminak
                        ^
% Invalid input detected at '^' marker.

Gateway#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)# ip nat inside source static 192.168.1.20 209.165.200.225
Gateway(config)#interface g0/1
Gateway(config-if)#ip nat inside
Gateway(config-if)#exit
Gateway(config)#interface s0/0/1
Gateway(config-if)#ip nat outside
Gateway(config-if)#exit
Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console
```

GATEWAY — □ ✕

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started!


Unauthorized access is strictly prohibited.

User Access Verification

Password:
Password:

Gateway>show ip nat translations
Pro  Inside global    Inside local      Outside local
Outside global
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

PC-A

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping (192.31.7.1
Ping request could not find host (192.31.7.1. Please check the name
and try again.
C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=5ms TTL=254
Reply from 192.31.7.1: bytes=32 time=3ms TTL=254
Reply from 192.31.7.1: bytes=32 time=3ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 3ms

C:\>
```

☐ Top

GATEWAY ☐ ☐ ✕

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Unauthorized access is strictly prohibited.

User Access Verification

Password:
Password:

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
icmp 209.165.200.225:5 192.168.1.20:5    192.31.7.1:5      192.31.7.1:5
icmp 209.165.200.225:6 192.168.1.20:6    192.31.7.1:6      192.31.7.1:6
icmp 209.165.200.225:7 192.168.1.20:7    192.31.7.1:7      192.31.7.1:7
icmp 209.165.200.225:8 192.168.1.20:8    192.31.7.1:8      192.31.7.1:8
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

PC-A

Physical   Config   Desktop   Programming   Attributes

SSH Client   X

```
Trying 192.31.7.1 ...Open
Unauthorized access is srtictly prohibited.


User Access Verification

Password:
ISP>
ISP>
```

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Password:
Password:

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
icmp 209.165.200.225:5 192.168.1.20:5    192.31.7.1:5      192.31.7.1:5
icmp 209.165.200.225:6 192.168.1.20:6    192.31.7.1:6      192.31.7.1:6
icmp 209.165.200.225:7 192.168.1.20:7    192.31.7.1:7      192.31.7.1:7
icmp 209.165.200.225:8 192.168.1.20:8    192.31.7.1:8      192.31.7.1:8
---  209.165.200.225   192.168.1.20      ---               ---

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20      ---               ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Password:

ISP>ping192.168.1.20
Translating "ping192.168.1.20"
% Unknown command or computer name, or unable to find computer
address

ISP>ping 192.168.1.20

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.20, timeout is 2
seconds:
.....
Success rate is 0 percent (0/5)

ISP>ping 209.165.200.225

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 209.165.200.225, timeout is 2
seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 2/5/7
ms

ISP>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
---  209.165.200.225   192.168.1.20        ---            ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20        ---            ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>
Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
---  209.165.200.225   192.168.1.20        ---            ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local     Outside global
icmp 209.165.200.225:11192.168.1.20:11   209.165.201.17:11  209.165.201.17:11
icmp 209.165.200.225:12192.168.1.20:12   209.165.201.17:12  209.165.201.17:12
icmp 209.165.200.225:13192.168.1.20:13   209.165.201.17:13  209.165.201.17:13
icmp 209.165.200.225:14192.168.1.20:14   209.165.201.17:14  209.165.201.17:14
icmp 209.165.200.225:15192.168.1.20:15   209.165.201.17:15  209.165.201.17:15
---  209.165.200.225   192.168.1.20        ---            ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23     192.31.7.1:23

Gateway>show ip nat translations
Pro  Inside global      Inside local      Outside local      Outside global
icmp 209.165.200.225:11192.168.1.20:11    209.165.201.17:11  209.165.201.17:11
icmp 209.165.200.225:12192.168.1.20:12    209.165.201.17:12  209.165.201.17:12
icmp 209.165.200.225:13192.168.1.20:13    209.165.201.17:13  209.165.201.17:13
icmp 209.165.200.225:14192.168.1.20:14    209.165.201.17:14  209.165.201.17:14
icmp 209.165.200.225:15192.168.1.20:15    209.165.201.17:15  209.165.201.17:15
---  209.165.200.225   192.168.1.20        ---                ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23      192.31.7.1:23

Gateway>show ip nat translations
Pro  Inside global      Inside local      Outside local      Outside global
---  209.165.200.225   192.168.1.20        ---                ---
tcp 209.165.200.225:1025192.168.1.20:1025  192.31.7.1:23      192.31.7.1:23

Gateway>show ip nat statistics
Total translations: 2 (1 static, 1 dynamic, 1 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 53  Misses: 21
Expired translations: 18
Dynamic mappings:
Gateway>
```
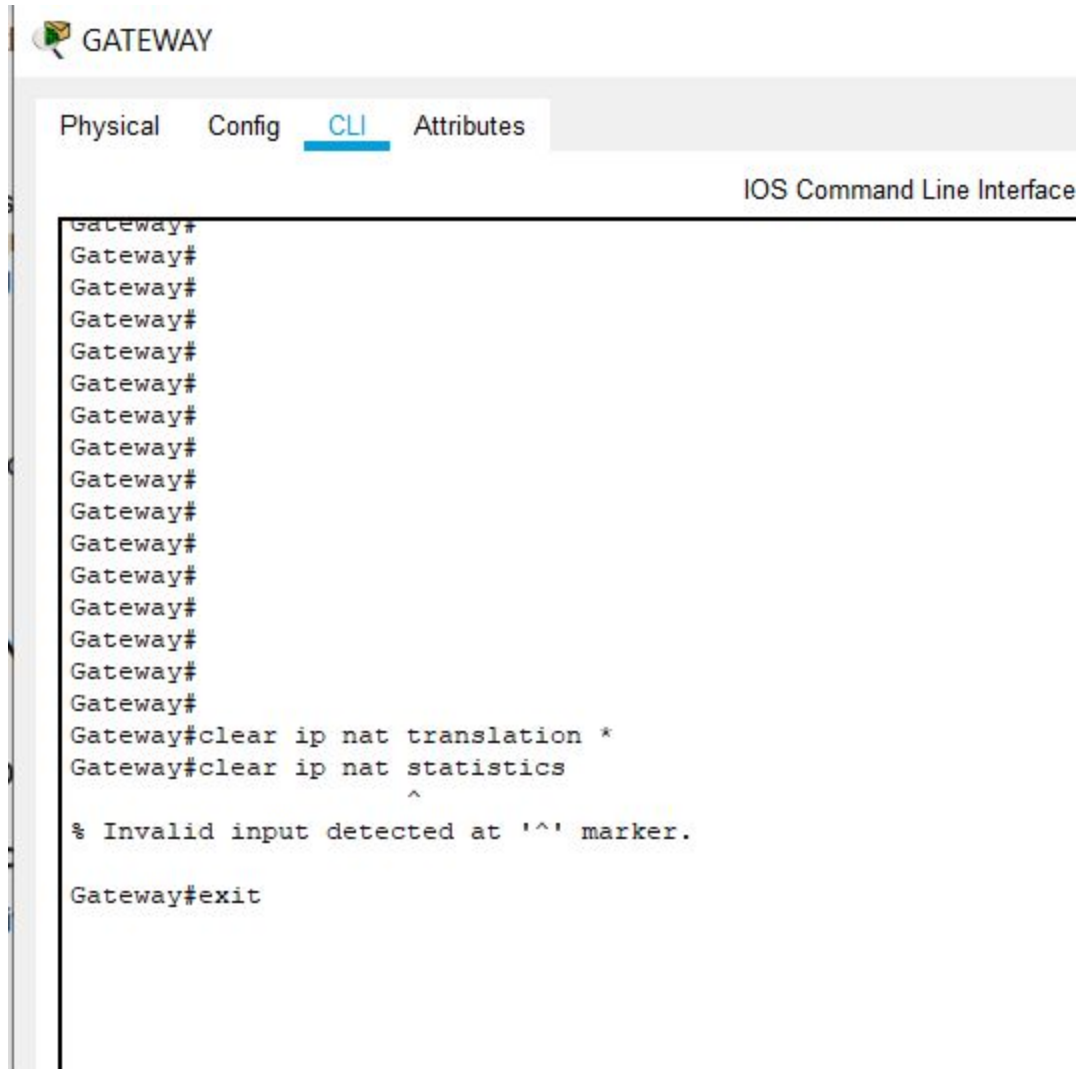
Ctrl+F6 to exit CLI focus   Copy

☐ Top

Task 3

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#
Gateway#clear ip nat translation *
Gateway#clear ip nat statistics
                       ^
% Invalid input detected at '^' marker.

Gateway#exit
```

GATEWAY

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Unauthorized access is strictly prohibited.

User Access Verification

Password:
Password:

Gateway>show ip nat translations
Pro  Inside global     Inside local        Outside local       Outside global
---  209.165.200.225   192.168.1.20        ---                 ---

Gateway>show ip nat statistics
Total translations: 1 (1 static, 0 dynamic, 0 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 53  Misses: 21
Expired translations: 18
Dynamic mappings:
Gateway>
```

Ctrl+F6 to exit CLI focus   Copy

☐ Top

GATEWAY   —   ☐   ✕

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Password:

Gateway>show ip nat statistics
Total translations: 1 (1 static, 0 dynamic, 0 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 53  Misses: 21
Expired translations: 18
Dynamic mappings:
Gateway>en
Password:
Gateway#configure t
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#access-list 1 permit 192.168.1.0 0.0.0.255
Gateway(config)#ip nat pool public_access 209.165.200.242 209.165.200.254
% Incomplete command.
Gateway(config)#ip nat pool public_access 209.165.200.242 209.165.200.254 netmask 255.255.255.224
Gateway(config)#ip nat inside source list 1 pool public_access
Gateway(config)#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

PC-B — ☐ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=7ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 7ms, Average = 2ms

C:\>
```

☐ Top

GATEWAY — □ ×

IOS Command Line Interface

```
Unauthorized access is strictly prohibited.

User Access Verification

Password:

Gateway>show ip nat translations
Pro  Inside global      Inside local      Outside local     Outside global
icmp 209.165.200.242:10192.168.1.21:10   192.31.7.1:10     192.31.7.1:10
icmp 209.165.200.242:7 192.168.1.21:7    192.31.7.1:7      192.31.7.1:7
icmp 209.165.200.242:8 192.168.1.21:8    192.31.7.1:8      192.31.7.1:8
icmp 209.165.200.242:9 192.168.1.21:9    192.31.7.1:9      192.31.7.1:9
---  209.165.200.225   192.168.1.20      ---               ---
```

Ctrl+F6 to exit CLI focus   Copy   Paste

GATEWAY — □

IOS Command Line Interface

```
Password:
Password:
Gateway#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Gateway(config)#no ip nat inside source static 192.168.1.20 209.165.200.225
Gateway(config)#show ip nat statistics
                      ^
% Invalid input detected at '^' marker.

Gateway(config)#exit
Gateway#
%SYS-5-CONFIG_I: Configured from console by console

Gateway#exit
```

Ctrl+F6 to exit CLI focus   Copy   Pa

GATEWAY

Physical | Config | CLI | Attributes

IOS Command Line Interface

Unauthorized access is strictly prohibited.

User Access Verification

Password:

Gateway>show ip nat statistics
Total translations: 0 (0 static, 0 dynamic, 0 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 61 Misses: 29
Expired translations: 26
Dynamic mappings:
-- Inside Source
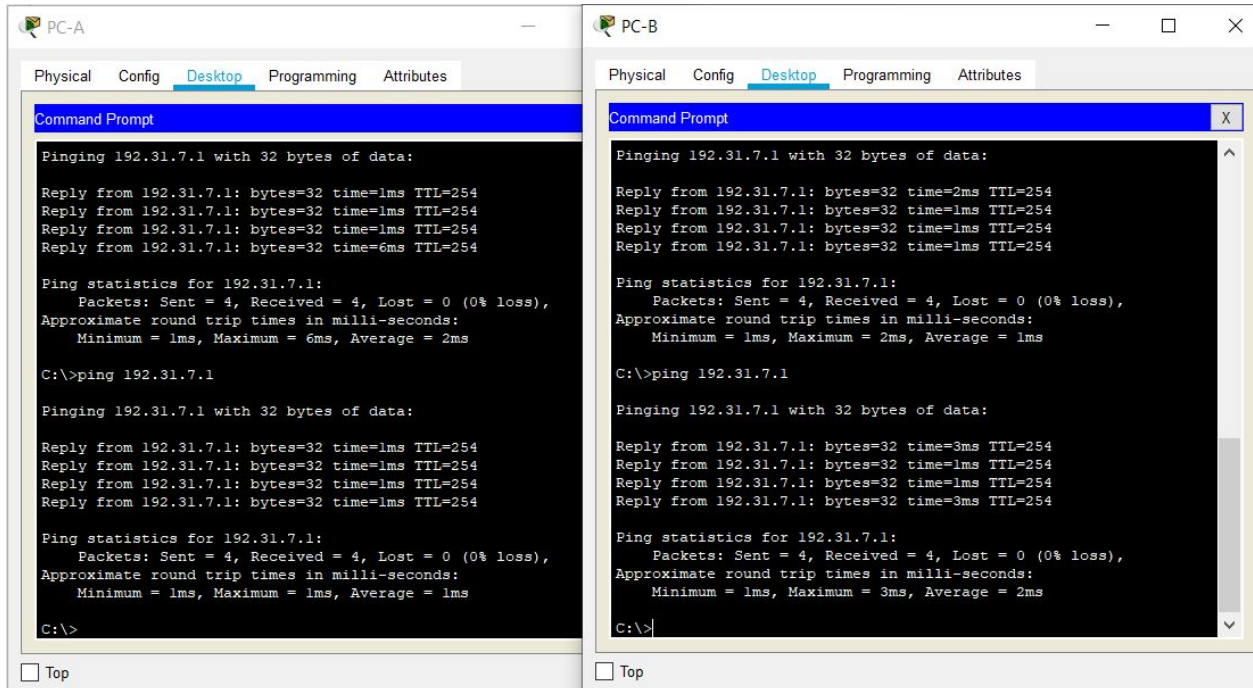access-list 1 pool public_access refCount 0
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 0 (0%), misses 0
Gateway>

Ctrl+F6 to exit CLI focus

☐ Top

PC-A

Physical   Config   Desktop   Programming   Attributes

Command Prompt

```
Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=6ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 6ms, Average = 2ms

C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>
```

☐ Top

PC-B

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=2ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>ping 192.31.7.1

Pinging 192.31.7.1 with 32 bytes of data:

Reply from 192.31.7.1: bytes=32 time=3ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=1ms TTL=254
Reply from 192.31.7.1: bytes=32 time=3ms TTL=254

Ping statistics for 192.31.7.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 3ms, Average = 2ms

C:\>
```

☐ Top

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
User Access Verification

Password:

Gateway>show ip nat statistics
Total translations: 0 (0 static, 0 dynamic, 0 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 61  Misses: 29
Expired translations: 26
Dynamic mappings:
-- Inside Source
access-list 1 pool public_access refCount 0
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 0 (0%), misses 0
Gateway>show ip nat statistics
Total translations: 8 (0 static, 8 dynamic, 8 extended)
Outside Interfaces: Serial0/0/1
Inside Interfaces: GigabitEthernet0/1
Hits: 69  Misses: 37
Expired translations: 26
Dynamic mappings:
-- Inside Source
access-list 1 pool public_access refCount 8
 pool public_access: netmask 255.255.255.224
        start 209.165.200.242 end 209.165.200.254
        type generic, total addresses 13 , allocated 2 (15%), misses 0
Gateway>show ip nat translations
Pro  Inside global     Inside local      Outside local      Outside global
icmp 209.165.200.242:10192.168.1.20:10   192.31.7.1:10      192.31.7.1:10
icmp 209.165.200.242:11192.168.1.20:11   192.31.7.1:11      192.31.7.1:11
icmp 209.165.200.242:12192.168.1.20:12   192.31.7.1:12      192.31.7.1:12
icmp 209.165.200.242:9 192.168.1.20:9    192.31.7.1:9       192.31.7.1:9
icmp 209.165.200.243:15192.168.1.21:15   192.31.7.1:15      192.31.7.1:15
icmp 209.165.200.243:16192.168.1.21:16   192.31.7.1:16      192.31.7.1:16
icmp 209.165.200.243:17192.168.1.21:17   192.31.7.1:17      192.31.7.1:17
icmp 209.165.200.243:18192.168.1.21:18   192.31.7.1:18      192.31.7.1:18

Gateway>
```

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