ACL Definition: An Access Control List (ACL) is a set of rules used on routers (and sometimes switches or firewalls) to control network traffic and enhance security. It acts like a filter - checking each packet that passes through the router, and deciding whether to permit or deny it based on criteria like source address, destination address, or protocol type.

Purpose of ACL:

Purpose	Description
1. Traffic Filtering	Control which packets are allowed or denied through a router.
2. Network Security	Restrict access to certain parts of a network. Example: block a department from accessing servers.
3. Bandwidth Optimization	Prevent unnecessary or harmful traffic (e.g., streaming, P2P) from using network resources.
4. Policy Implementation	Enforce organization policies (e.g., only specific users can access admin network).
5. Route Control (Advanced)	Used in redistribution and route filtering (in advanced routing protocols).

Working Principle:

When a packet reaches a router interface where an ACL is applied:

1. The router reads the ACL rules top to bottom.
2. Each rule (called an ACE – Access Control Entry) is checked in order.
3. As soon as a match is found, the router takes the specified action (permit or deny).
4. If no rule matches, the packet is implicitly denied by the “implicit deny all” at the end of every ACL.

ACL Types:

Type	Description	Filtering Based On
Standard ACL	Basic filtering based only on **source IP address**.	Source IP only

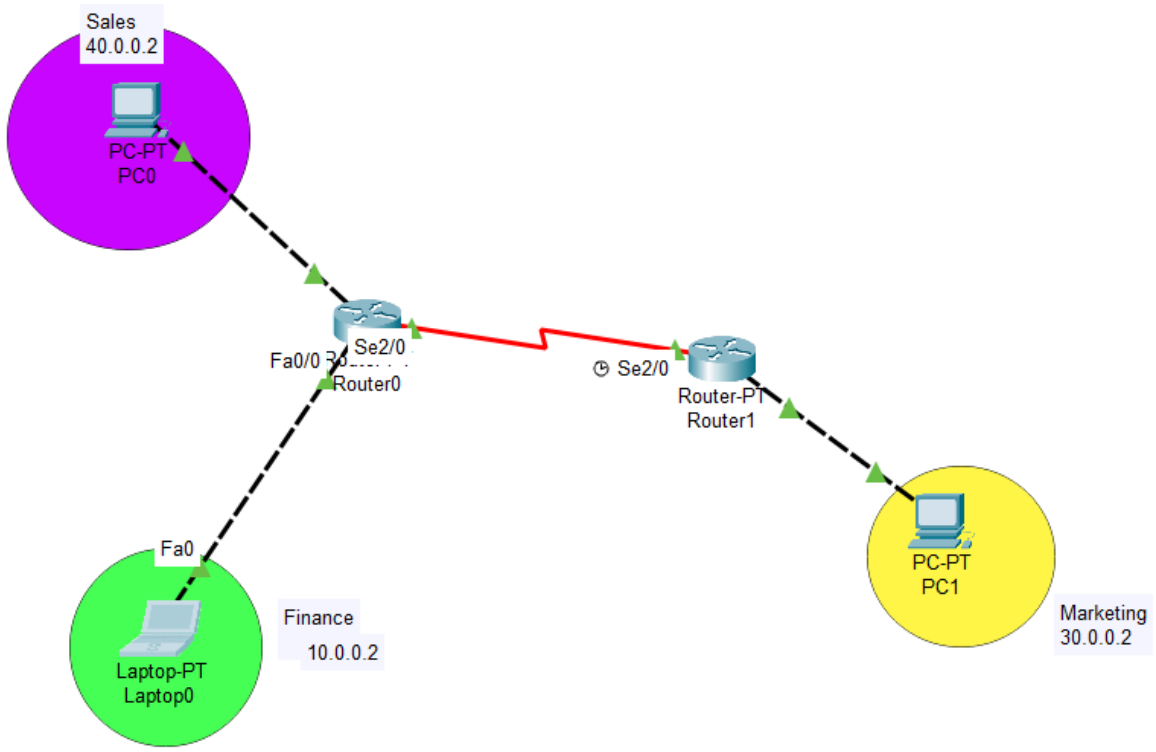
Extended ACL	Advanced filtering based on **source**, **destination**, **protocol**, and **port number**.	Source + Destination + Protocol + Port
Named ACL	ACLs with readable names instead of numeric IDs; can be standard or extended.	Depends on type

For standard ACL:

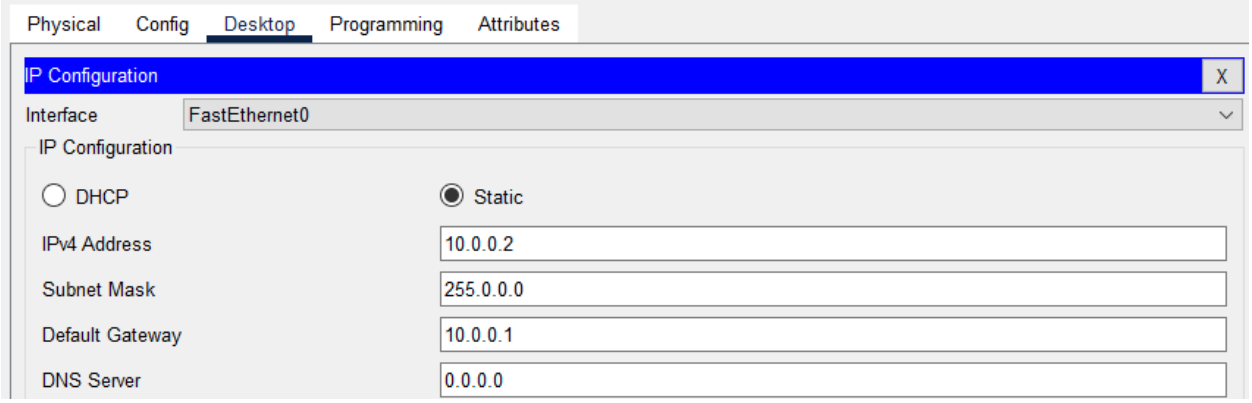
access-list [1-99] {permit | deny} source [wildcard]

For Extended ACL:

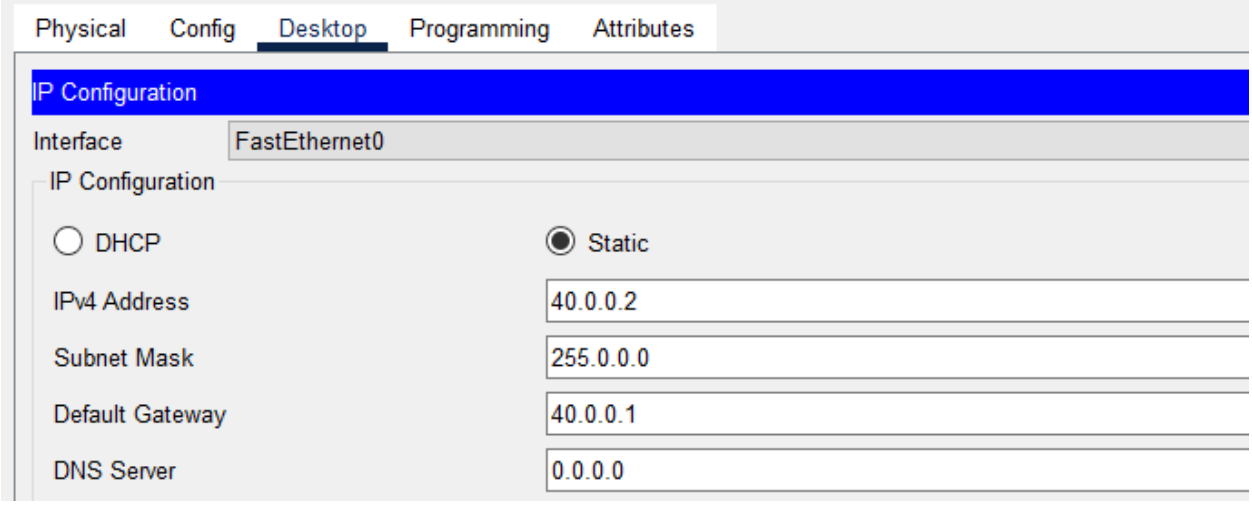
access-list [100-199] {permit | deny} protocol source source-wildcard destination destination-wildcard [eq port]



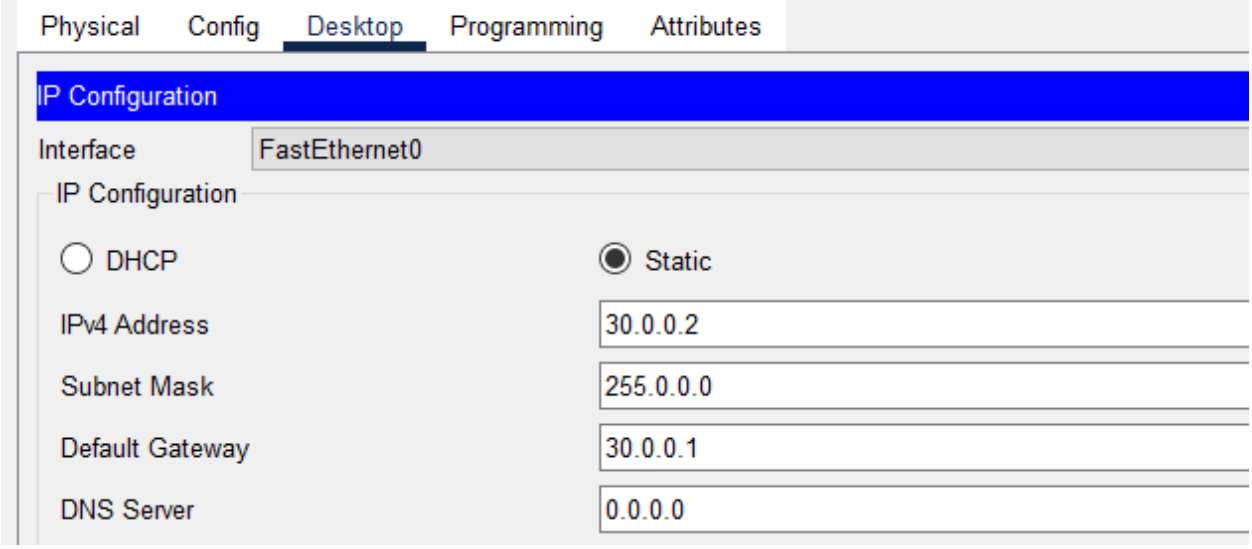
Laptop0

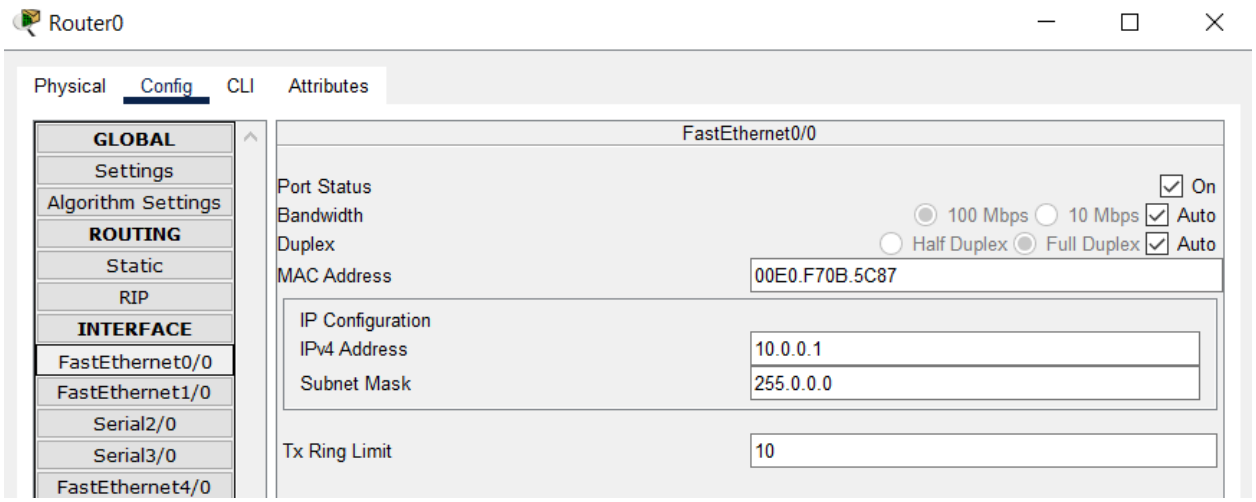


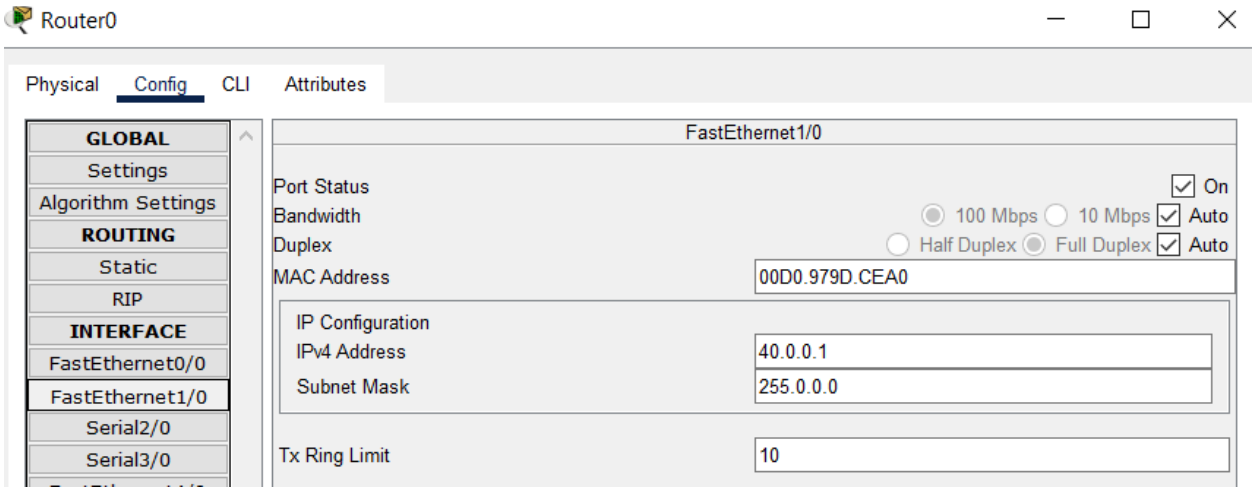
PC0

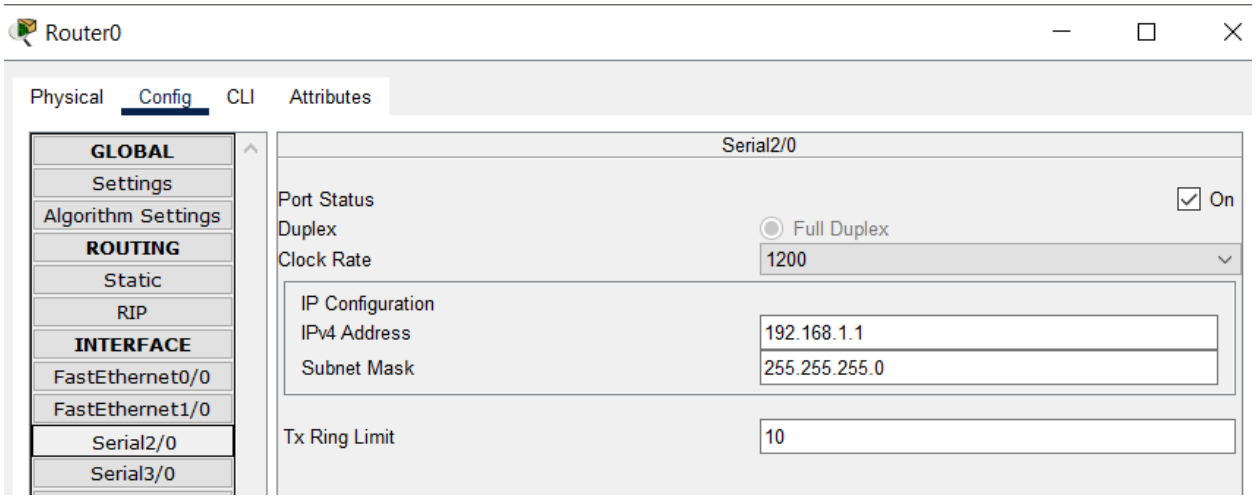


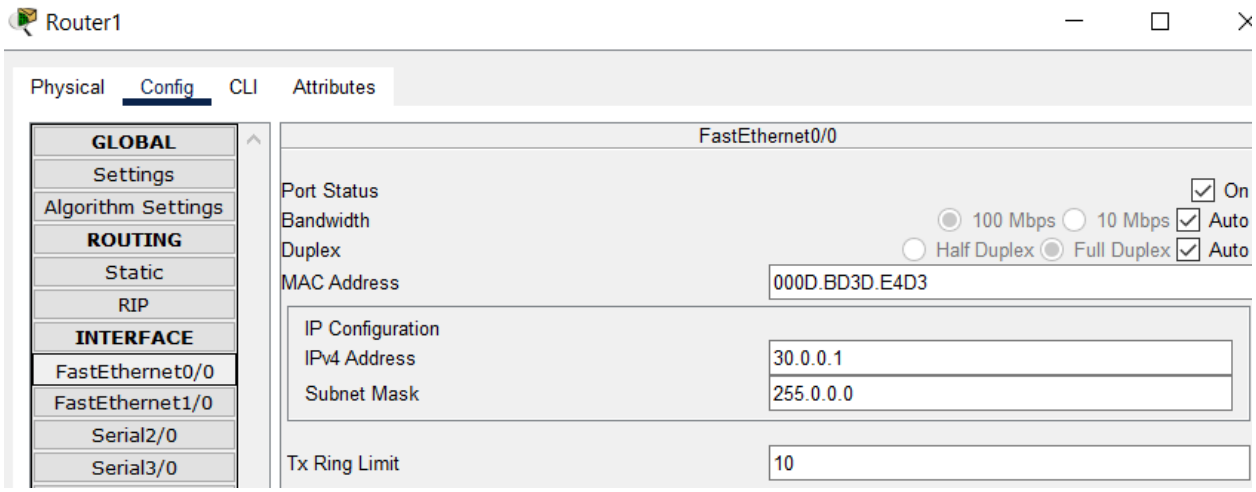
PC1

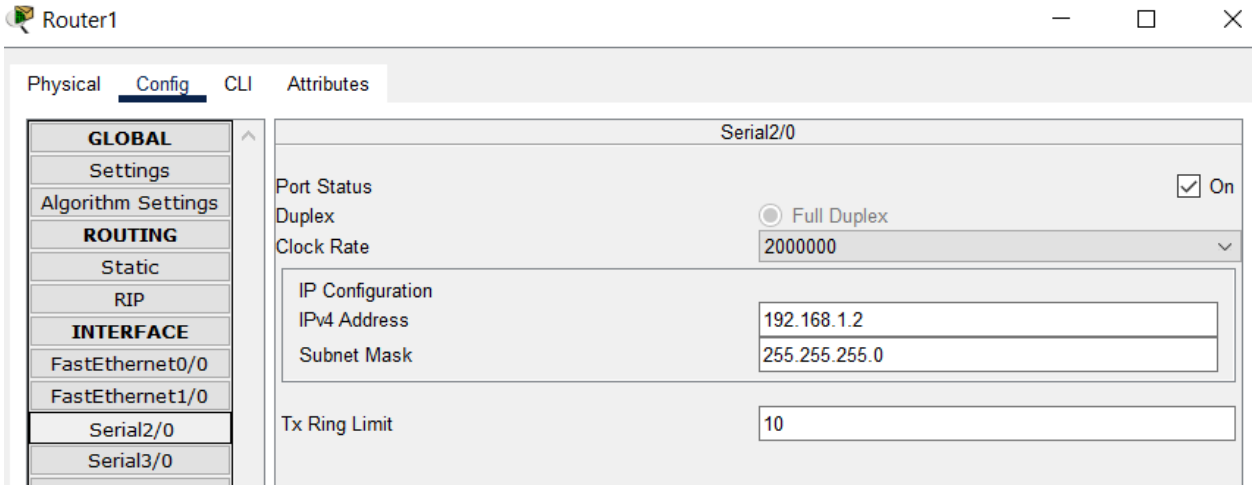


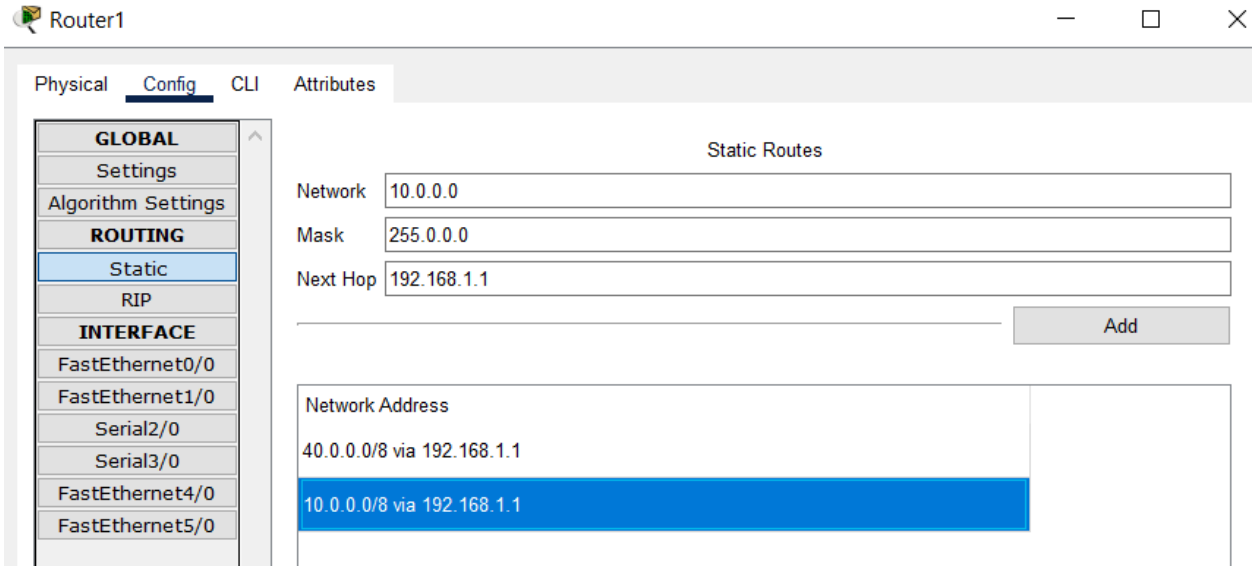

Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet0/0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00E0.F70B.5C87
IP Configuration
IPv4 Address
10.0.0.1
Subnet Mask
255.0.0.0
Tx Ring Limit
10

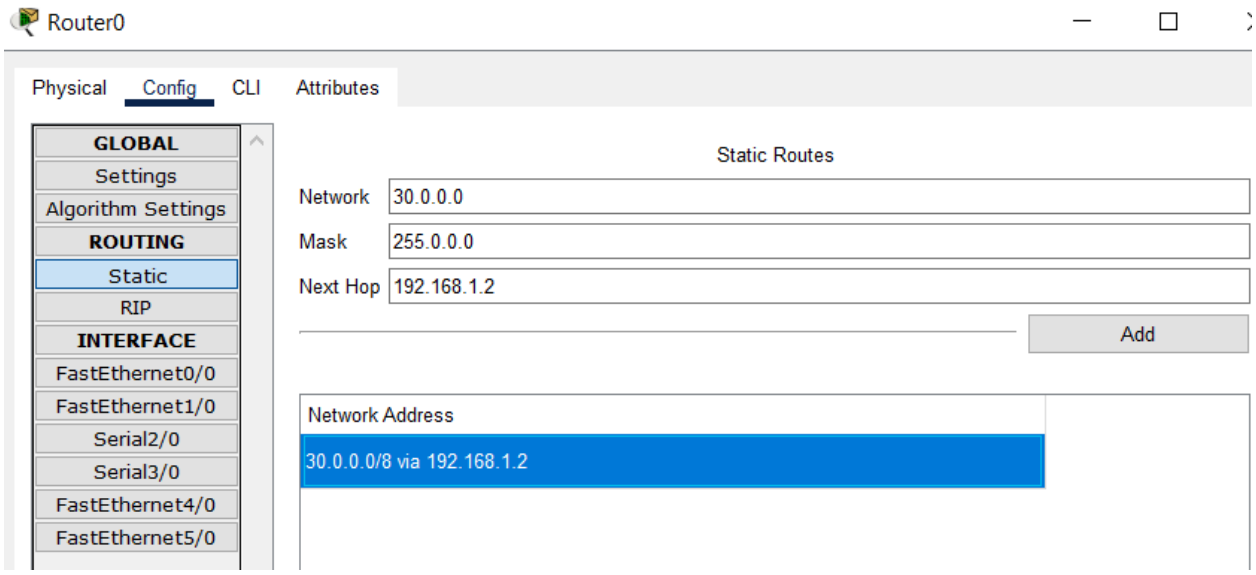

Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet1/0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.979D.CEA0
IP Configuration
IPv4 Address
40.0.0.1
Subnet Mask
255.0.0.0
Tx Ring Limit
10


Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
Serial2/0
Port Status
On
Duplex
Full Duplex
Clock Rate
1200
IP Configuration
IPv4 Address
192.168.1.1
Subnet Mask
255.255.255.0
Tx Ring Limit
10


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet0/0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
000D.BD3D.E4D3
IP Configuration
IPv4 Address
30.0.0.1
Subnet Mask
255.0.0.0
Tx Ring Limit
10

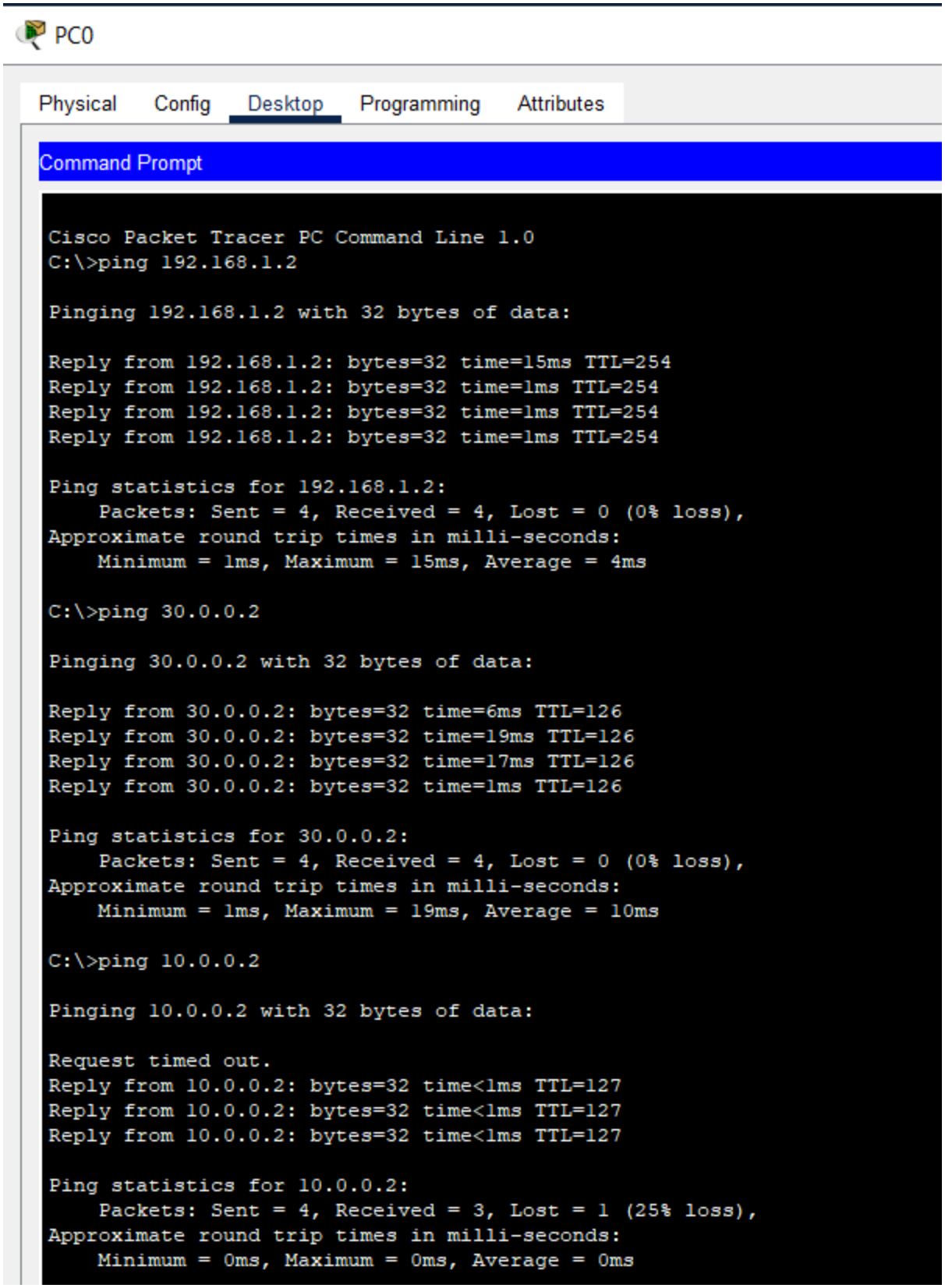

Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
Serial2/0
Port Status
On
Duplex
Full Duplex
Clock Rate
2000000
IP Configuration
IPv4 Address
192.168.1.2
Subnet Mask
255.255.255.0
Tx Ring Limit
10


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0
Static Routes
Network
10.0.0.0
Mask
255.0.0.0
Next Hop
192.168.1.1
Add
Network Address
40.0.0.0/8 via 192.168.1.1
10.0.0.0/8 via 192.168.1.1



Router0

```
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#no access-list 1
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show access-lists
Extended IP access list 110
    10 deny icmp host 40.0.0.2 any echo (1 match(es))
    20 permit icmp any host 40.0.0.2 echo-reply
    30 permit ip any any

Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#no access-lists 110
                               ^
% Invalid input detected at '^' marker.

Router(config)#no access-list 110
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#sh access-lists
Router#
```



Right now ping is successful. All can ping and receive/send messages to each other.

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	Router1	ICMP		0.000	N	0	(edit)	
	Successful	PC0	PC1	ICMP		0.000	N	1	(edit)	
	Successful	Laptop0	PC1	ICMP		0.000	N	2	(edit)	
	Successful	PC1	PC0	ICMP		0.000	N	3	(edit)	
	Successful	PC1	Laptop0	ICMP		0.000	N	4	(edit)	
	Successful	PC0	Laptop0	ICMP		0.000	N	5	(edit)	
	Successful	Laptop0	PC0	ICMP		0.000	N	6	(edit)	

1. Block All ICMP (PING & Other Messages):

Suppose we want to block SALES to ping any other PCs (MARKETING & FINANCE). But, all other PCs must be allowed to ping SALES:

Router 0:

```
Router(config)#access-list 1 permit host 10.0.0.2
Router(config)#access-list 1 deny host 40.0.0.2
Router(config)#interface se2/0
Router(config-if)#ip access-group 1 out
Router(config-if)#exit
```

PC0

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
Pinging 30.0.0.2 with 32 bytes of data:

Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.

Ping statistics for 30.0.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.
Reply from 40.0.0.1: Destination host unreachable.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

```
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<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 = 0ms, Average = 0ms

C:\>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes=32 time<1ms TTL=255
Reply from 40.0.0.1: bytes=32 time<1ms TTL=255
Reply from 40.0.0.1: bytes=32 time<1ms TTL=255
Reply from 40.0.0.1: bytes=32 time<1ms TTL=255
```

Verification of ACL working:

```
Router#show access-lists
Standard IP access list 1
    10 permit host 10.0.0.2
    20 deny host 40.0.0.2

Router#show access-lists
Standard IP access list 1
    10 permit host 10.0.0.2
    20 deny host 40.0.0.2 (4 match(es))

Router#show access-lists
Standard IP access list 1
    10 permit host 10.0.0.2 (4 match(es))
    20 deny host 40.0.0.2 (4 match(es))
```

Laptop0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco 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<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 = 0ms, Average = 0ms

C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 40.0.0.2

Pinging 40.0.0.2 with 32 bytes of data:

Reply from 40.0.0.2: bytes=32 time<1ms TTL=127
Reply from 40.0.0.2: bytes=32 time<1ms TTL=127
Reply from 40.0.0.2: bytes=32 time=1ms TTL=127
Reply from 40.0.0.2: bytes=32 time<1ms TTL=127

Ping statistics for 40.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

2. Block a Whole Network: Suppose we want to block the entire network of MARKETING (30.0.0.0/8) to be accessed from FINANCE:

Router1> enable
Router1# configure terminal
Router1(config)# access-list 120 deny ip 10.0.0.0 0.255.255.255 30.0.0.0 0.255.255.255
Router1(config)# access-list 120 permit ip any any
Router1(config)# interface fa0/0
Router1(config-if)# ip access-group 120 out
Router1(config-if)# exit
Router1(config)# end
Router1# show access-lists

Router1

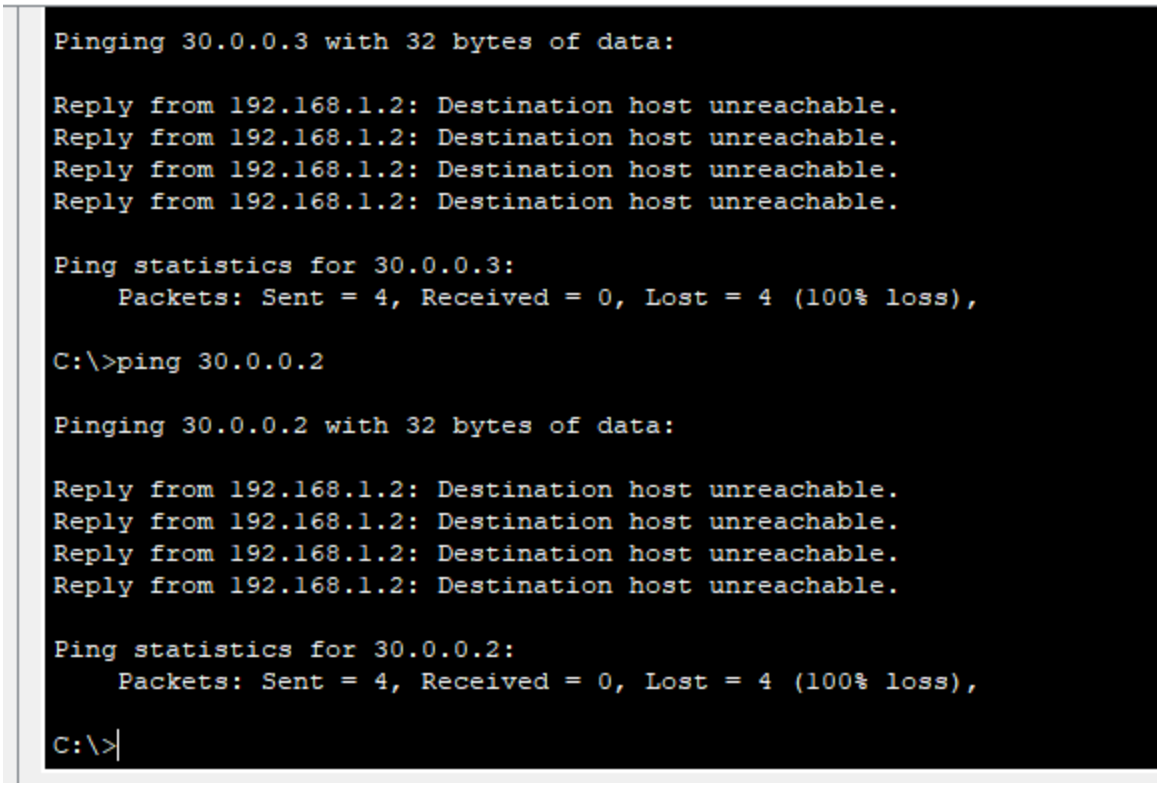
```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 120 deny ip 10.0.0.0 0.255.255.255 30.0.0.0 0.255.255.255
Router(config)#access-list 120 permit ip any any
Router(config)#int fa0/0
Router(config-if)#ip access-group 120 out
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show access-lists
Extended IP access list 120
    10 deny ip 10.0.0.0 0.255.255.255 30.0.0.0 0.255.255.255
    20 permit ip any any
```

PC1

```
C:\>ping 10.0.0.0

Pinging 10.0.0.0 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=16ms TTL=254
Reply from 192.168.1.1: bytes=32 time=1ms TTL=254
Reply from 192.168.1.1: bytes=32 time=17ms TTL=254
Reply from 192.168.1.1: bytes=32 time=7ms TTL=254

Ping statistics for 10.0.0.0:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 17ms, Average = 10ms

C:\>
```

Ping from MARKETING TO FINANCE is successful.

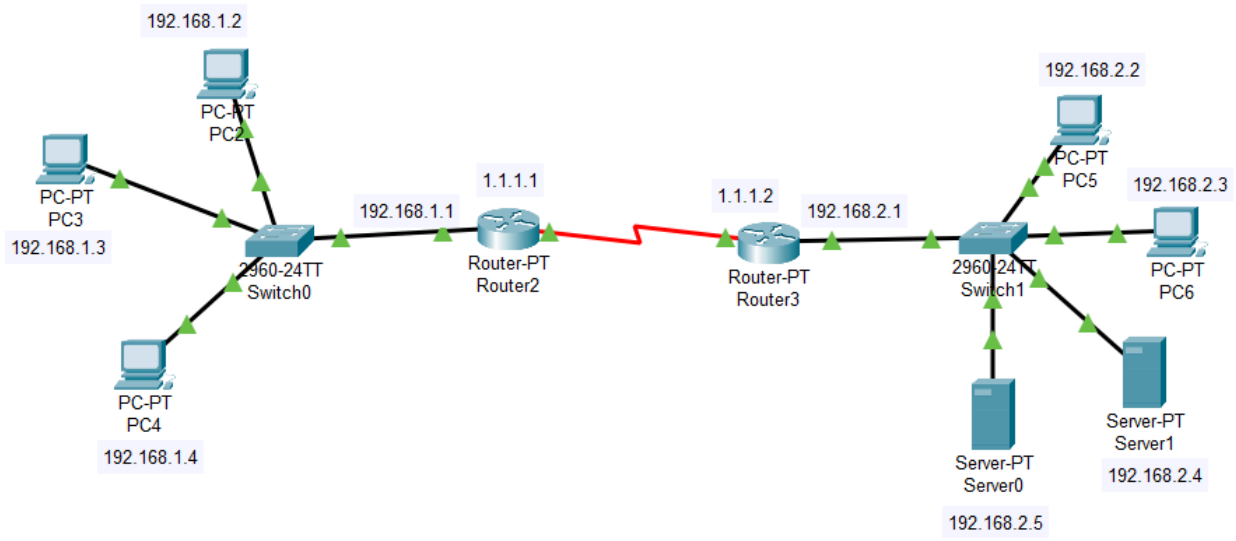
Laptop0

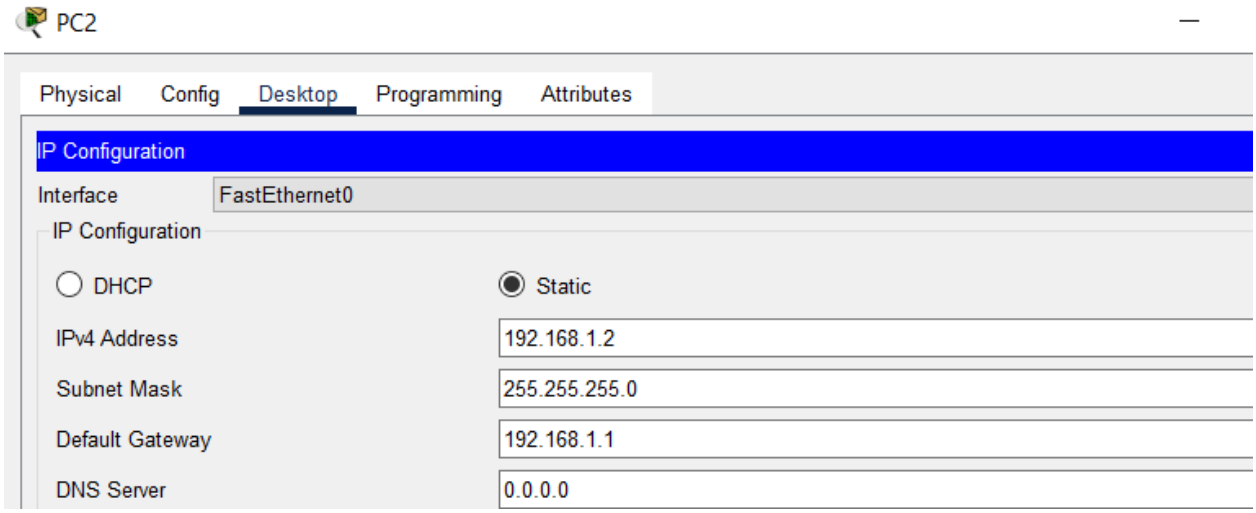


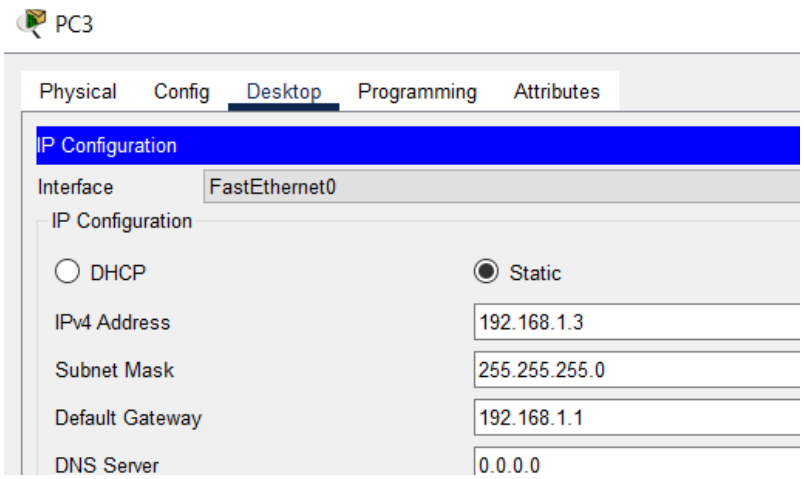
Ping from FINANCE TO MARKETING is not successful (FAILED).

ACL Type	Apply Close To	Direction	Example
Standard ACL	Destination	Usually outbound	Simpler (based on source only)
Extended ACL	Source	Usually inbound	Checks both source and destination

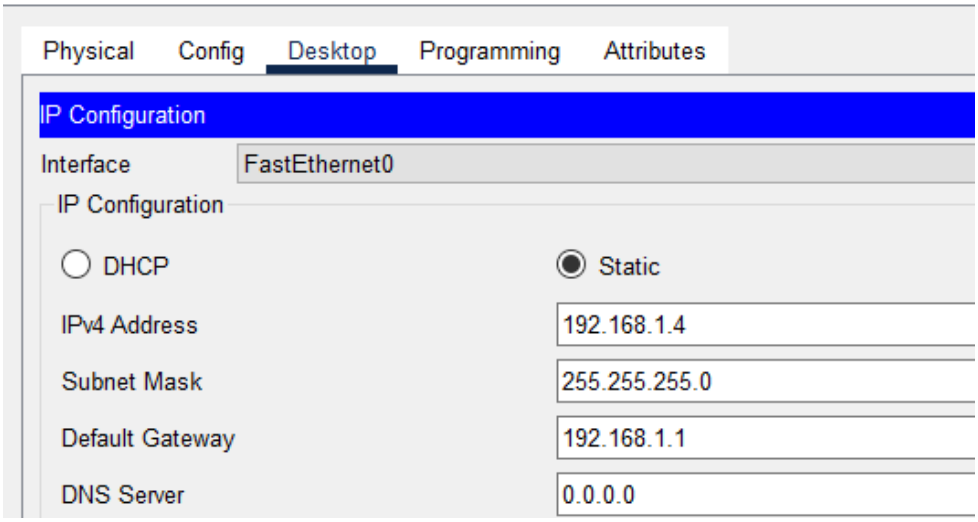
Ex:


192.168.1.2
PC-PT
PC2
PC-PT
PC3
192.168.1.3
2960-24TT
Switch0
192.168.1.1
1.1.1.1
Router-PT
Router2
1.1.1.2
Router-PT
Router3
192.168.2.1
192.168.2.2
PC-PT
PC5
192.168.2.3
2960-24TT
Switch1
PC-PT
PC6
PC-PT
PC4
192.168.1.4
Server-PT
Server0
192.168.2.5
Server-PT
Server1
192.168.2.4

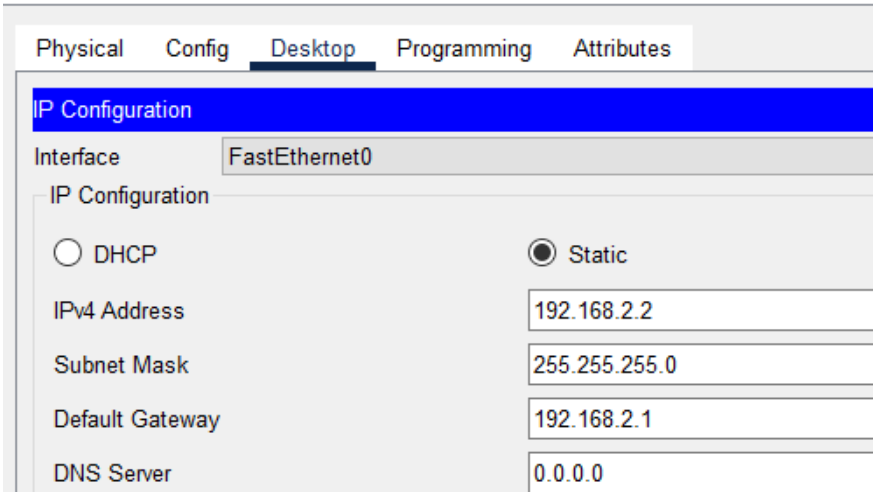

PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.2
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
0.0.0.0


PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.3
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
0.0.0.0

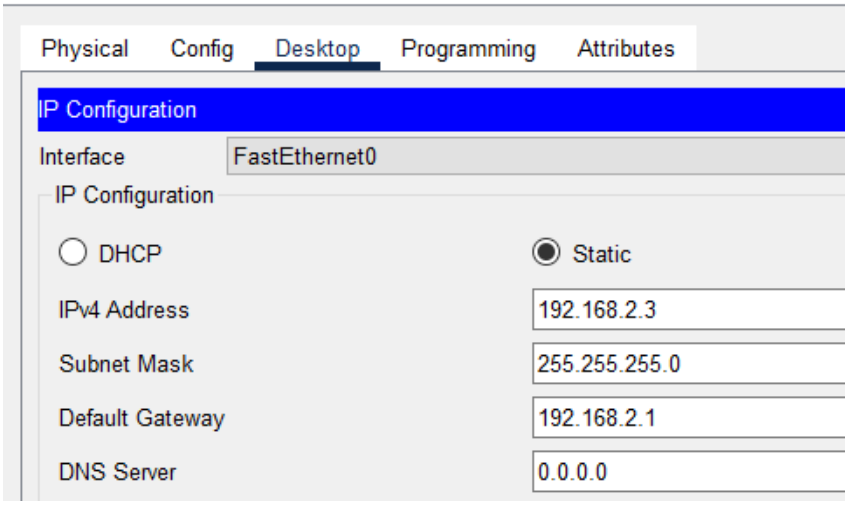
PC4


Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.4
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
0.0.0.0

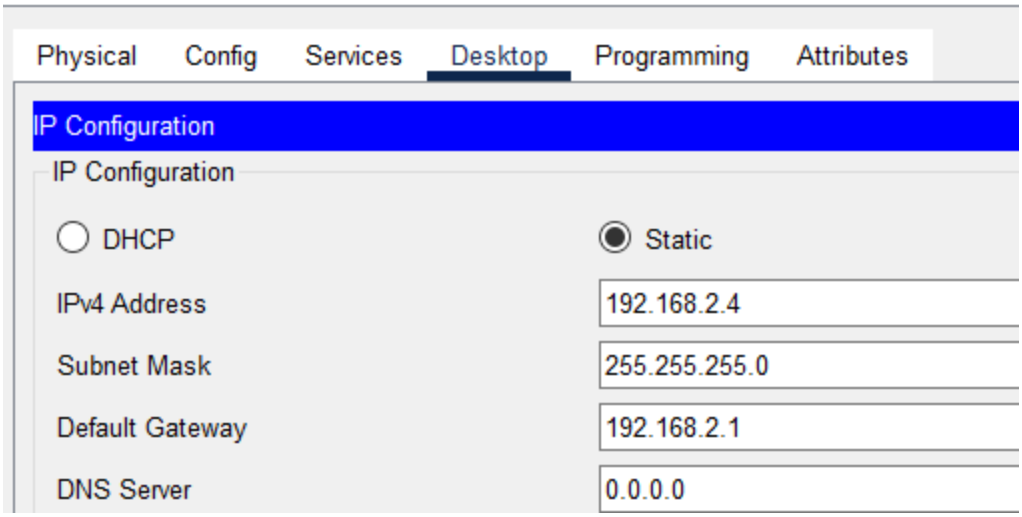
PC5


Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.2.2
Subnet Mask
255.255.255.0
Default Gateway
192.168.2.1
DNS Server
0.0.0.0

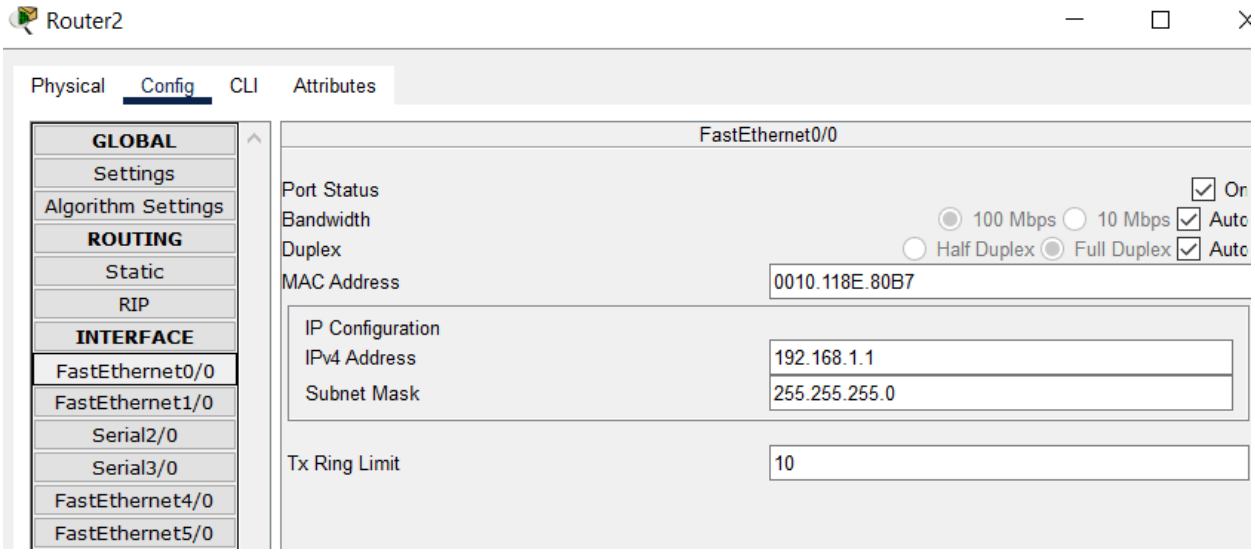
PC6


Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.2.3
Subnet Mask
255.255.255.0
Default Gateway
192.168.2.1
DNS Server
0.0.0.0

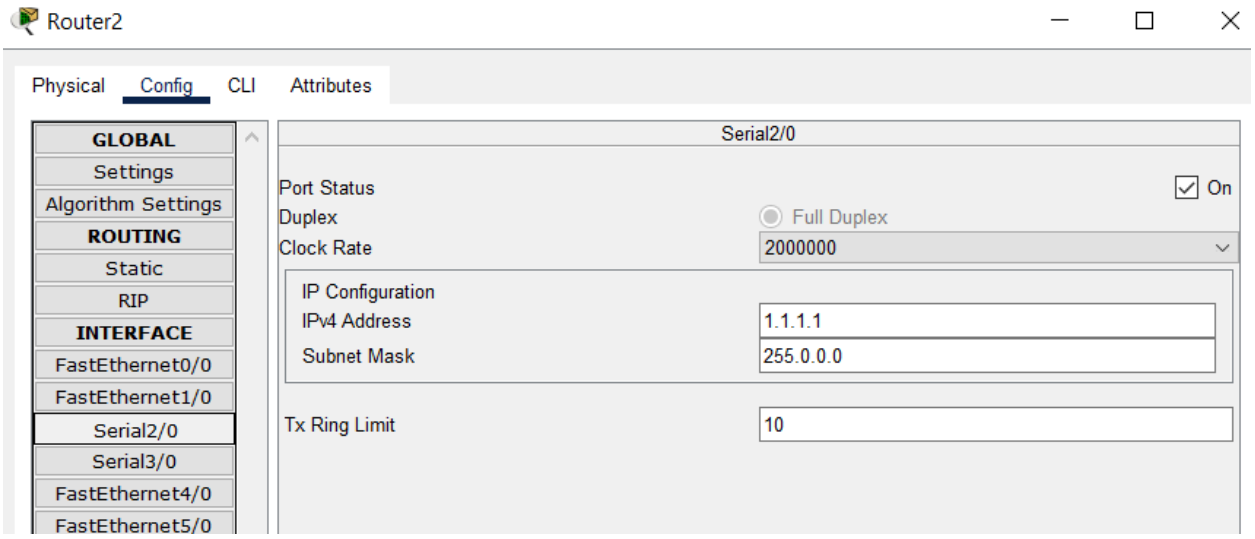
Server1

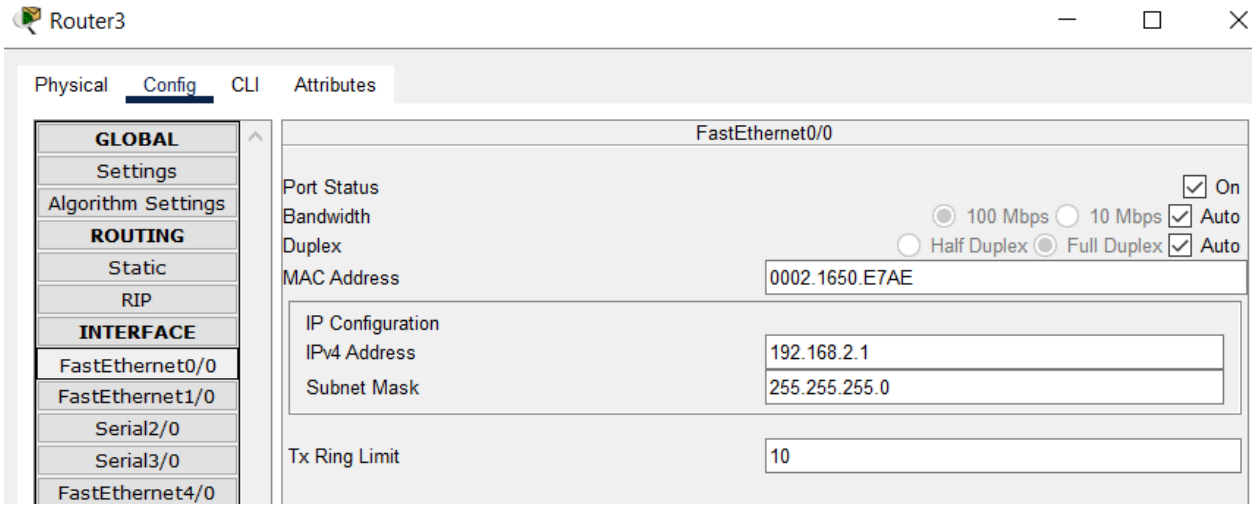


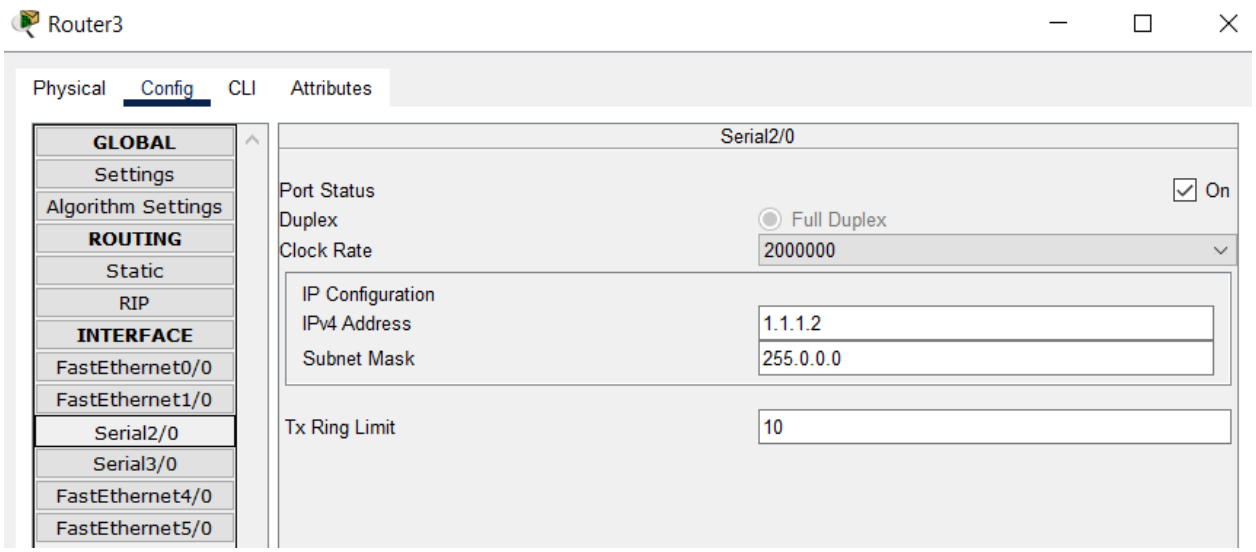
Router2



Router2





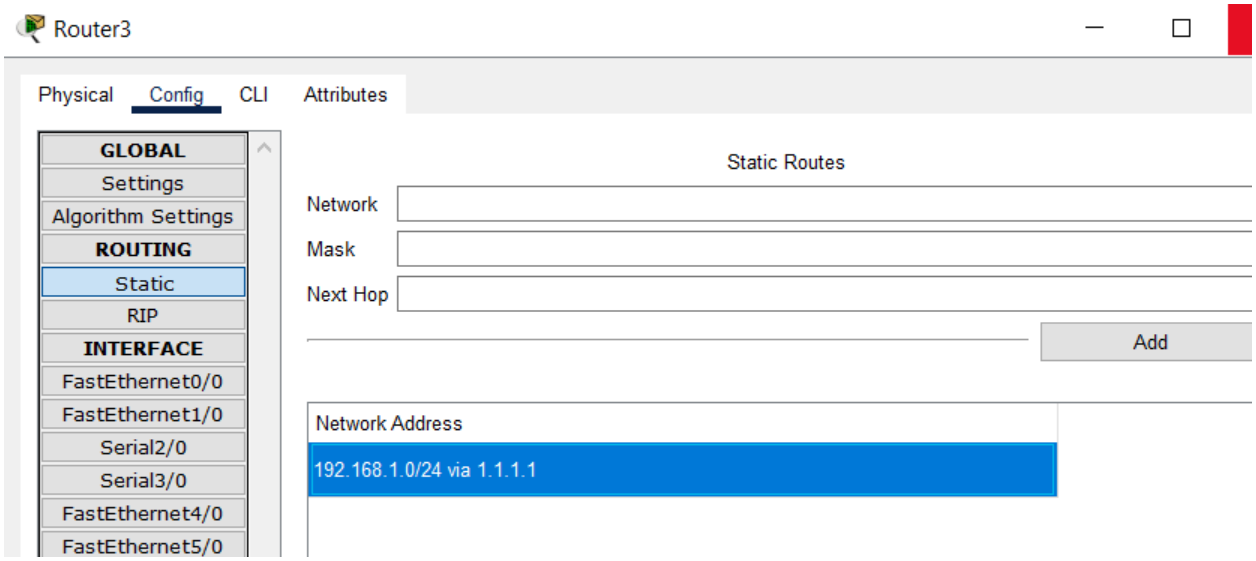


Router 3:

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip route 192.168.1.0 255.255.255.0 1.1.1.1
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
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
       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

C    1.0.0.0/8 is directly connected, Serial2/0
S    192.168.1.0/24 [1/0] via 1.1.1.1
C    192.168.2.0/24 is directly connected, FastEthernet0/0
```

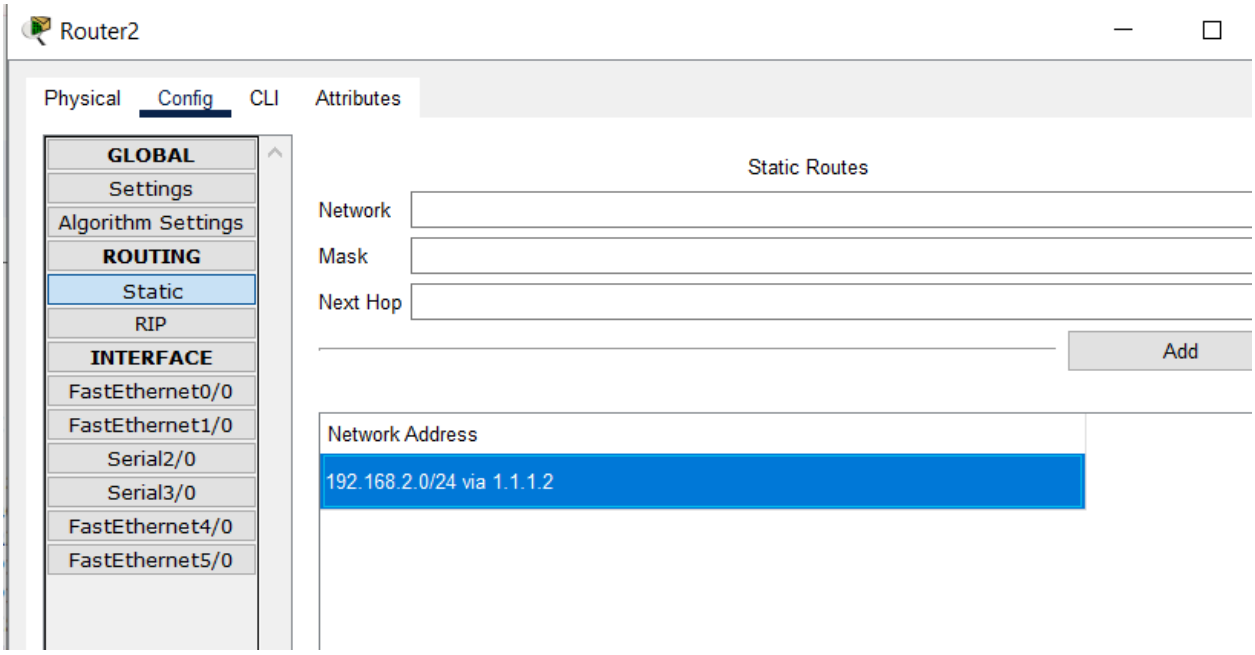
S



Router 2:

```
Router(config)#ip route 192.168.2.0 255.255.255.0 1.1.1.2
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

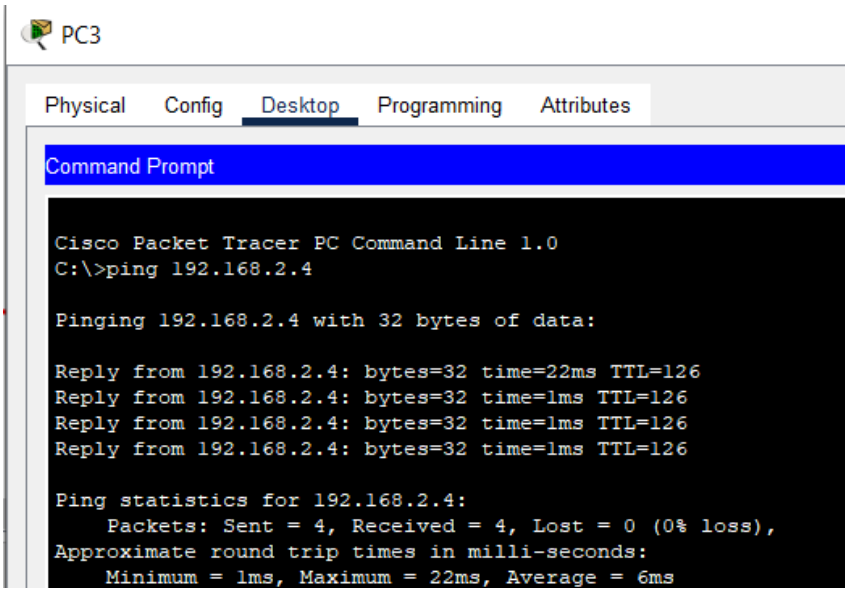
```
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - 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

C    1.0.0.0/8 is directly connected, Serial2/0
C    192.168.1.0/24 is directly connected, FastEthernet0/0
S    192.168.2.0/24 [1/0] via 1.1.1.2
```



Till here, No ACL is applied. All can ping and send/receive messages with each other.

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC2	PC5	ICMP		0.000	N	0	(edit)	
	Successful	PC3	PC6	ICMP		0.000	N	1	(edit)	
	Successful	PC4	Server0	ICMP		0.000	N	2	(edit)	
	Successful	PC3	PC5	ICMP		0.000	N	3	(edit)	
	Successful	PC3	Server1	ICMP		0.000	N	4	(edit)	
	Successful	PC2	PC6	ICMP		0.000	N	5	(edit)	
	Successful	PC4	PC6	ICMP		0.000	N	6	(edit)	
	Successful	PC4	Server1	ICMP		0.000	N	7	(edit)	



PC6

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=15ms TTL=126
Reply from 192.168.1.2: bytes=32 time=2ms TTL=126
Reply from 192.168.1.2: bytes=32 time=2ms TTL=126
Reply from 192.168.1.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 15ms, Average = 5ms

C:\>
```

Pinging successful.

Router2

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 5 deny host 192.168.1.2
Router(config)#access-list 5 permit any
Router(config)#
Router(config)#int Serial2/0
Router(config-if)#ip access-group 5 out
Router(config-if)#exit
Router(config)#
```

After applying and implementing ACL:

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC2	Router2	ICMP		0.000	N	0	(edit)	
	Failed	PC2	Router3	ICMP		0.000	N	1	(edit)	
	Failed	PC2	PC5	ICMP		0.000	N	2	(edit)	

PC2

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms

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<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 1.1.1.1

Pinging 1.1.1.1 with 32 bytes of data:

Reply from 1.1.1.1: bytes=32 time<1ms TTL=255
Reply from 1.1.1.1: bytes=32 time<1ms TTL=255
Reply from 1.1.1.1: bytes=32 time<1ms TTL=255
Reply from 1.1.1.1: bytes=32 time=1ms TTL=255

Ping statistics for 1.1.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 1.1.1.2

Pinging 1.1.1.2 with 32 bytes of data:

Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.

Ping statistics for 1.1.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Verifying ACL working:

Router2

```
Router(config)#access-list 5 deny host 192.168.1.2
Router(config)#access-list 5 permit any
Router(config)#
Router(config)#int Serial2/0
Router(config-if)#ip access-group 5 out
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show access-lists
Standard IP access list 5
    10 deny host 192.168.1.2 (6 match(es))
    20 permit any
```

Removing access-list 5 from the Router 2

```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#no access-list 5 deny host 192.168.1.2
Router(config)#show access-lists
                ^
% Invalid input detected at '^' marker.

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

Router#show access-lists
Router#
```

Show access-lists now shows no access list

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC2	Router2	ICMP		0.000	N	0	(edit)	
	Successful	PC2	Router3	ICMP		0.000	N	1	(edit)	
	Successful	PC2	PC5	ICMP		0.000	N	2	(edit)	
	Successful	PC2	PC6	ICMP		0.000	N	3	(edit)	

All can receive send messages from PC2 since now ACL has been removed

Lets apply the same concept now using name based ACL.

Router2

```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip access-list standard Kinz7
Router(config-std-nacl)#deny host 192.168.1.2
Router(config-std-nacl)#permit any
Router(config-std-nacl)#exit
Router(config)#
```

```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip access-list standard Kinz7
Router(config-std-nacl)#deny host 192.168.1.2
Router(config-std-nacl)#permit any
Router(config-std-nacl)#exit
Router(config)#int Serial2/0
Router(config-if)#ip access-group Kinz7 out
Router(config-if)#exit
Router(config)#
```

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC2	Router2	ICMP		0.000	N	0	(edit)	
	Failed	PC2	Router3	ICMP		0.000	N	1	(edit)	
	Failed	PC2	PC6	ICMP		0.000	N	2	(edit)	
	Failed	PC2	PC5	ICMP		0.000	N	3	(edit)	
	Failed	PC5	PC2	ICMP		0.000	N	4	(edit)	
	Failed	PC2	Server0	ICMP		0.000	N	5	(edit)	

Router2

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

Router#show access-lists
Standard IP access list Kinz7
    10 deny host 192.168.1.2 (5 match(es))
    20 permit any

Router#
```

Remove name based ACL:

Router2

```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#no ip access-list standard Kinz7
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show access-lists
Router#
```

PC5

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=11ms TTL=126
Reply from 192.168.1.2: bytes=32 time=11ms TTL=126
Reply from 192.168.1.2: bytes=32 time=1ms TTL=126
Reply from 192.168.1.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 11ms, Average = 6ms
```

```
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

PC2 is not allowed to ping PC5 now.