













EXERCISE 12

1. Test basic connectivity: ping from PC0 to PC2 before adding ACLs.

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)
	Successful	PC2	PC3	ICMP		0.000	N	1	(edit)
	Successful	PC0	PC2	ICMP		0.000	N	2	(edit)

2. Ping Tests (After ACLs)

	Failed	PC0	PC2	ICMP		0.000	N	0	(edit)
	Successful	PC0	PC1	ICMP		0.000	N	1	(edit)
	Successful	PC2	PC3	ICMP		0.000	N	2	(edit)

- a. Telnet & FTP

PC1(PC2) TO 192.168.20.5

```

Cisco Packet Tracer PC Command Line 1.0
C:\>telnet 192.168.20.10
Trying 192.168.20.10 ...
% Connection timed out; remote host not responding
C:\>ftp 192.168.20.5
Trying to connect...192.168.20.5

%Error opening ftp://192.168.20.5/ (Timed out)
.

(Disconnecting from ftp server)

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3. Show ip route

```

R1(config)#do 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

    10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.0.10.0/30 is directly connected, Serial0/1/0
L       10.0.10.1/32 is directly connected, Serial0/1/0
    172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
C       172.16.10.0/27 is directly connected, GigabitEthernet0/0
L       172.16.10.1/32 is directly connected, GigabitEthernet0/0
    192.168.20.0/28 is subnetted, 1 subnets
S       192.168.20.0/28 [1/0] via 10.0.10.2

```

```

R2(config)#do 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

    10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C       10.0.10.0/30 is directly connected, Serial0/1/0
L       10.0.10.2/32 is directly connected, Serial0/1/0
C       10.0.20.0/30 is directly connected, Serial0/1/1
L       10.0.20.1/32 is directly connected, Serial0/1/1
       172.16.0.0/27 is subnetted, 1 subnets
S       172.16.10.0/27 [1/0] via 10.0.10.1
       192.168.20.0/28 is subnetted, 1 subnets
S       192.168.20.0/28 [1/0] via 10.0.20.2

R3(config)#do 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

    10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.0.20.0/30 is directly connected, Serial0/1/0
L       10.0.20.2/32 is directly connected, Serial0/1/0
       172.16.0.0/27 is subnetted, 1 subnets
S       172.16.10.0/27 is directly connected, Serial0/1/0
           [1/0] via 10.0.20.1
       192.168.20.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.20.0/28 is directly connected, GigabitEthernet0/0
L       192.168.20.1/32 is directly connected, GigabitEthernet0/0

```

4. show access-lists

```

R1(config)#do show access-lists
Standard IP access list 15
 10 deny host 172.16.10.5
 20 permit any

R2(config)#do show access-lists
Extended IP access list 120
 10 deny tcp 172.16.10.0 0.0.0.31 host 192.168.20.10 eq telnet
 20 deny tcp 172.16.10.0 0.0.0.31 host 192.168.20.5 eq ftp
 30 permit tcp 172.16.10.0 0.0.0.31 any eq www
 40 deny ip any any

R3(config)#do show access-lists
Extended IP access list 130
 10 deny icmp host 172.16.10.10 192.168.20.0 0.0.0.15
 20 deny tcp 192.168.20.0 0.0.0.15 host 10.0.20.1 eq 22
 30 permit ip any any

```

PC1 TO PC3

```
C:\>telnet 192.168.20.10 23
Trying 192.168.20.10 ...
% Connection timed out; remote host not responding
C:\>
```

PC0 TO PC2

```
% Connection timed out; remote host not responding
C:\>ftp 192.168.20.5
Trying to connect...192.168.20.5

%Error opening ftp://192.168.20.5/ (Timed out)
.

(Disconnecting from ftp server)
```

```
C:\>ssh -l admin 10.0.20.1

% Connection timed out; remote host not responding
C:\>
```