

ACL Practice Problems

1. Design an access list that permits IP traffic from hosts 1.2.3.98 and 1.2.3.99, and denies all other IP traffic. Invoke your access list outbound on interface Token Ring 3/1.

2. Design an IP access list that permits TFTP traffic to TFTP servers that have host addresses ending in even numbers, denies TELNET traffic to TELNET servers that have host addresses ending in odd numbers, permits traffic to other TELNET servers, and denies all other IP traffic. Activate your list inbound on interface E1.

3. Given the statements:

```
interface fddi 3/2
 ip access-group 66
 access-list 66 permit 100.200.0.0 0.0.255.63
```

4. Design an access list that permits all IP traffic from the hosts on networks 222.111.3.0/24 through 222.111.7.0/24, and denies all other IP traffic

5. Design an access list that denies all FTP traffic from the hosts on subnets 101.202.8.0/24 through 101.202.13.0/24 that is destined for FTP servers, but permits all other IP traffic.

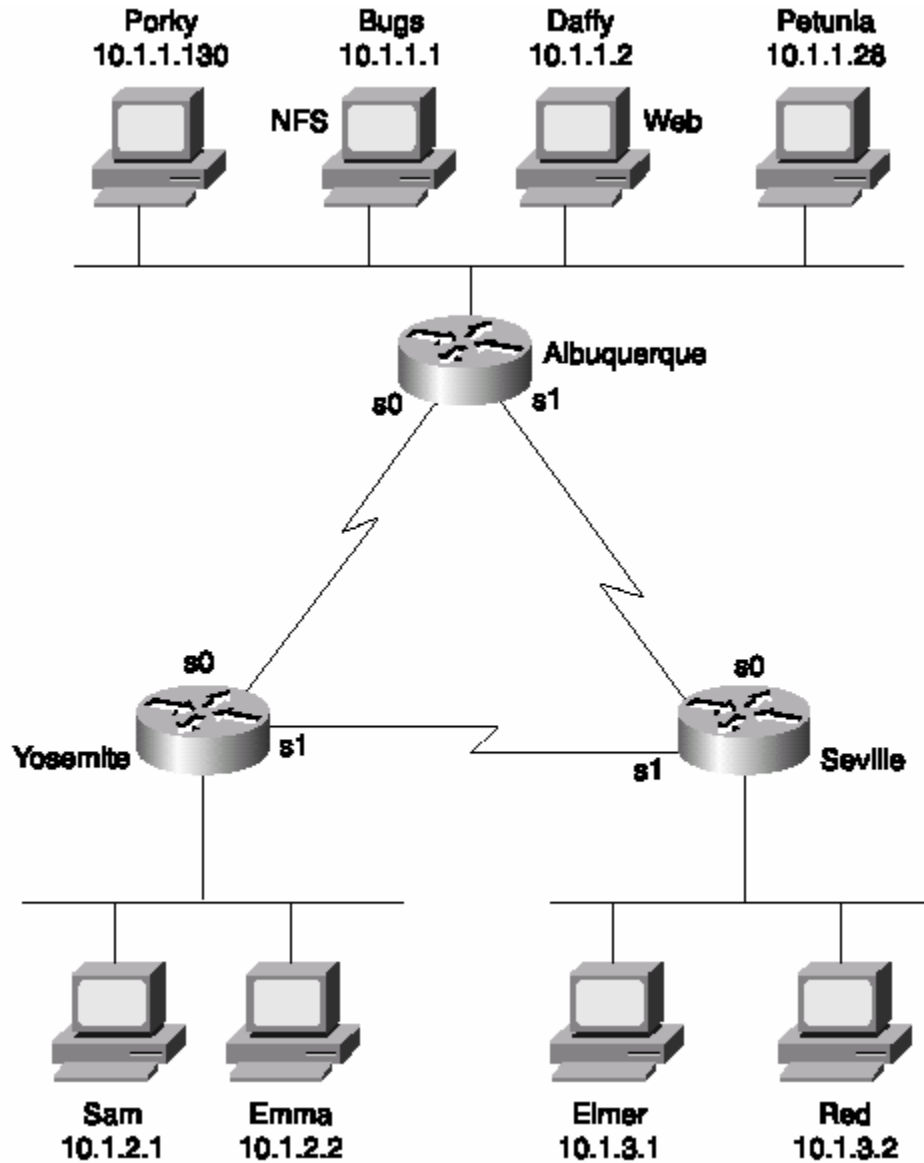
6. Design an access list that permits all IP traffic from the hosts on subnets 10.0.0.0/16 through 10.7.0.0/16, permits IP traffic from the hosts on subnets 10.9.0.0/16 through 10.15.0.0/16, and denies all other IP traffic. Place it outbound on E0 and inbound on Token Ring 2.

7. Design an access list that permits bi-directional ICMP traffic between subnets 1.0.96.0/20 and 2.0.1.64/27, permits bi-directional IP traffic between the hosts on subnets 131.5.0.0/16 through 131.8.0.0/16 and the hosts on network 239.5.6.0/24, and denies all other IP traffic except IGRP, which must be permitted everywhere.

23. Given the statements:

```
interface ethernet 1
 ip access-group 60 in
 ip access-group 161 in
 access-list 60 deny host 1.3.5.7 0.0.0.0
 access-list 60 deny 10.0.0.0 0.0.0.0
 access-list 60 deny 54.78.43.2 255.255.255.255
 access-list 60 deny ip host 101.2.5.7 eq telnet
 access-list 161 permit ip 205.6.23.6 34.67.22.3
 access-list 161 permit ipx a0b1c2 -1
 access-list 161 deny telnet
 access-list 161 permit ip host 225.0.0.5 any
 access-list 161 deny ip any any
```

How many errors can you find?

Extended ACL Case

1. The Web server (Daffy) is available to all users.
2. UDP-based clients and servers on Bugs are unavailable to hosts whose IP addresses are in the upper half of the valid IP addresses in each subnet. (The subnet mask used is (255.255.255.0.)
3. Packets between hosts on the Yosemite Ethernet and the Seville Ethernet are allowed only if packets are routed across the direct serial link.
4. Clients Porky and Petunia can connect to all hosts except Red.
5. Any other connections are permitted.