

This Access Control List (ACL) defines a set of rules to control traffic between different IP ranges.

ACL Break down as follows:

1. **access-list 100 permit ip 192.168.10.0 0.0.0.255 any**
 - Permits any IP traffic from the 192.168.10.0/24 network to any destination.
2. **access-list 100 permit ip 192.168.0.0 0.0.255.255 host 192.168.10.5**
 - Permits IP traffic from the 192.168.0.0/16 network to the specific host 192.168.10.5.
3. **access-list 100 permit ip 192.168.0.0 0.0.255.255 host 5.5.5.5**
 - Permits IP traffic from the 192.168.0.0/16 network to the external host 5.5.5.5.
4. **access-list 100 permit ip 192.168.30.0 0.0.0.255 192.168.20.0 0.0.0.255**
 - Permits IP traffic between the 192.168.30.0/24 and 192.168.20.0/24 networks.
5. **access-list 100 permit ip 192.168.20.0 0.0.0.255 host 8.8.8.8**
 - Permits IP traffic from 192.168.20.0/24 to the external host 8.8.8.8.
6. **access-list 100 permit icmp 192.168.20.0 0.0.0.255 host 8.8.8.8**
 - Specifically allows ICMP (ping) traffic from 192.168.20.0/24 to 8.8.8.8.
7. **access-list 100 permit ip 192.168.20.0 0.0.0.255 host 4.4.4.4**
 - Permits IP traffic from 192.168.20.0/24 to the external host 4.4.4.4.
8. **access-list 100 permit icmp 192.168.20.0 0.0.0.255 host 4.4.4.4**
 - Allows ICMP (ping) traffic from 192.168.20.0/24 to 4.4.4.4.
9. **access-list 100 deny ip 192.168.30.0 0.0.0.255 192.168.10.0 0.0.0.255**
 - Denies IP traffic from the 192.168.30.0/24 network to the 192.168.10.0/24 network.
10. **access-list 100 deny ip 192.168.20.0 0.0.0.255 192.168.10.0 0.0.0.255**
 - Denies IP traffic from the 192.168.20.0/24 network to the 192.168.10.0/24 network.
11. **access-list 100 deny ip 192.168.20.0 0.0.0.255 192.168.30.0 0.0.0.255**
 - Denies IP traffic from the 192.168.20.0/24 network to the 192.168.30.0/24 network.

Analysis:

- All traffic from IT Subnet (192.168.10.0/24) to any destination is Permitted.
- All traffic from the FAMAS Subnets (192.168.0.0/16) to DNS/DHCP server, and FAMAS website is Permitted.
- Traffic from HR (192.168.30.0/24) to Finance (192.168.20.0/24) is Permitted.
- Traffic from HR (192.168.30.0/24) and Finance (192.168.20.0/24) to IT (192.168.10.0/24) is Denied.

