**Configure an ACL that will permit FTP and HTTP access on R1.**

***FTP***

**Step 1: Configure an ACL to permit FTP.**

R1(config)# **access-list ?**

R1(config)# **access-list 100 ?**

R1(config)# **access-list 100 permit ?**

R1(config)# **access-list 100 permit tcp ?**

R1(config)# **access-list 100 permit tcp 172.22.34.64 ?**

R1(config)# **access-list 100 permit tcp 172.22.34.64 0.0.0.31 ?**

R1(config)# **access-list 100 permit tcp 172.22.34.64 0.0.0.31 host 172.22.34.62 ?**

R1(config)# **access-list 100 permit tcp 172.22.34.64 0.0.0.31 host 172.22.34.62 eq ?**

R1(config)# **access-list 100 permit tcp 172.22.34.64 0.0.0.31 host 172.22.34.62 eq ftp**

R1(config)# **access-list 100 permit icmp 172.22.34.64 0.0.0.31 host 172.22.34.62**

**Step 2: Apply the ACL on the correct interface to filter traffic.**

R1(config)# **interface gigabitEthernet 0/0**

R1(config-if)# **ip access-group 100 in**

***HTTP***

**Step 1: Configure an ACL to permit HTTP.**

R1(config)# **ip** **access-list ?**

R1(config)# **ip access-list extended HTTP\_ONLY**

R1(config-ext-nacl)# **permit tcp 172.22.34.96 ?**

R1(config-ext-nacl)# **permit tcp 172.22.34.96 0.0.0.15 ?**

R1(config-ext-nacl)# **permit tcp 172.22.34.96 0.0.0.15 host 172.22.34.62 eq www**

R1(config-ext-nacl)# **permit icmp 172.22.34.96 0.0.0.15 host 172.22.34.62**

**Step 2: Apply the ACL on the correct interface to filter traffic.**

R1(config)# **interface gigabitEthernet 0/1**

R1(config-if)# **ip access-group HTTP\_ONLY in**

**Verify the ACL implementation. PC1 (Only FTP). PC2(Only HTTP).**

***FTP***

**Step 3 :-Verify the ACL implementation.**

a. Ping from **PC1** to **Server**.If the pings are unsuccessful, verify the IP addresses before continuing.

b. FTP from **PC1** to **Server**. PC> ftp 172.22.34.62 The username and password are both **cisco**.

c. Exit the FTP service of the Server. ftp**> quit**

d. Ping from **PC1** to **PC2**. The destination host should be unreachable, because the traffic was not explicitly permitted.

***HTTP***

**Step 3 :-Verify the ACL implementation.**

a. Ping from **PC2** to **Server**.The ping should be successful, if the pings are unsuccessful, verify the IP addresses before continuing.

b. FTP from **PC2** to **Server**. PC> ftp 172.22.34.62 The connection should fail.

c. Open the web browser on **PC2** and enter the IP address of **Server** as the URL. The connection should be successful.