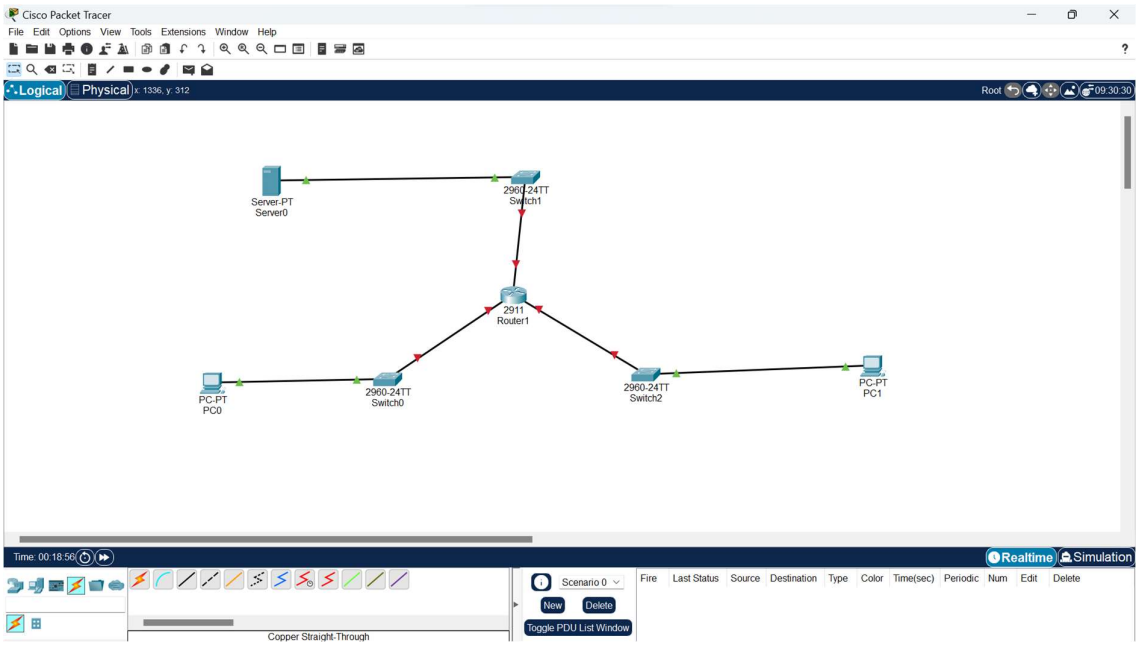
Date: 05/02/2024 **Security in Computing**

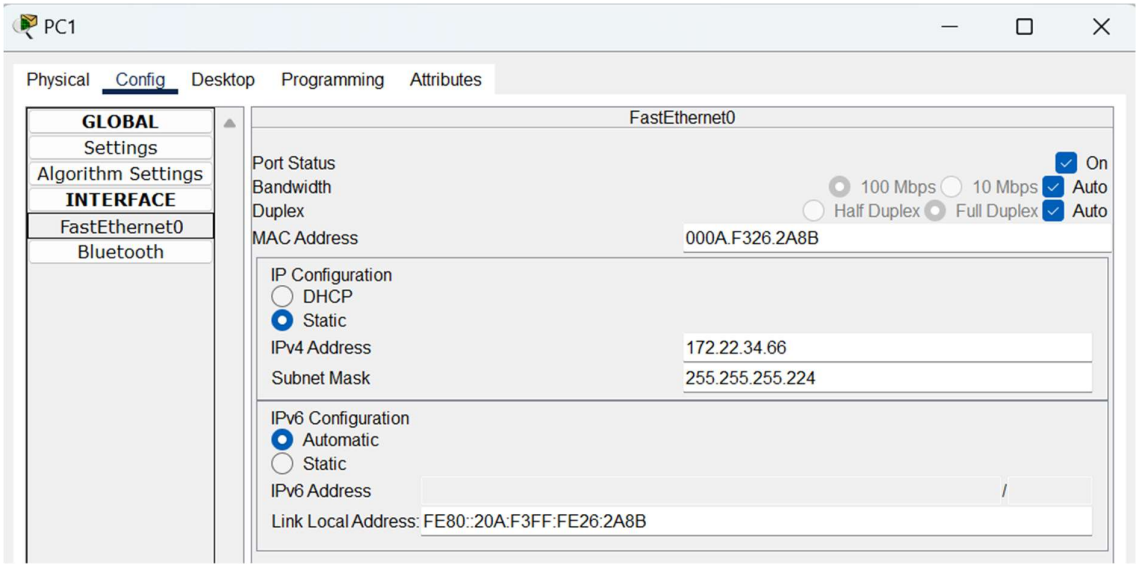
Practical 3A:

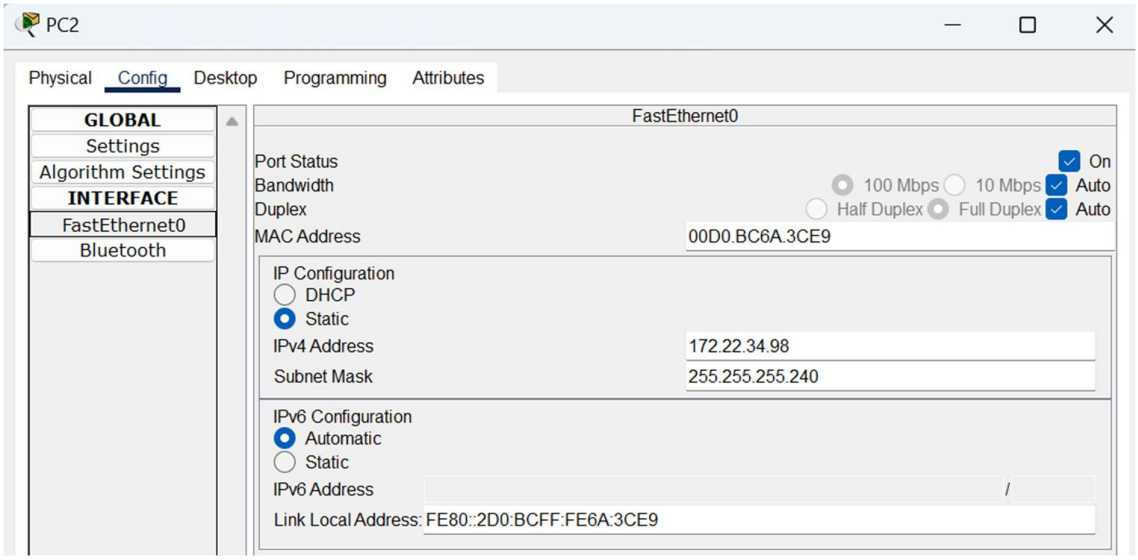
Aim: Configure Extended ACLs.

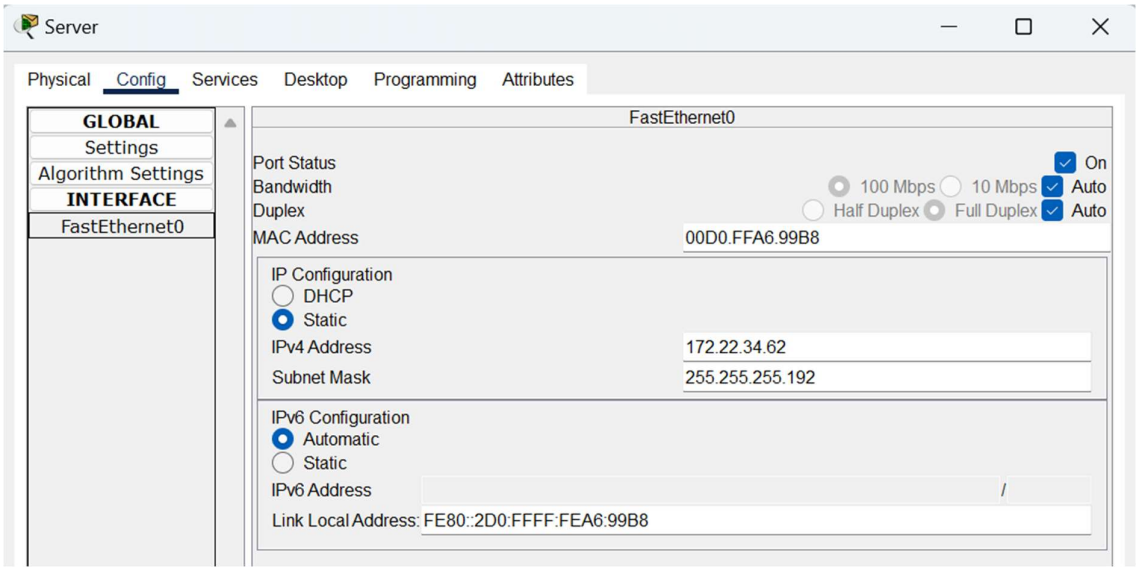
Topology:

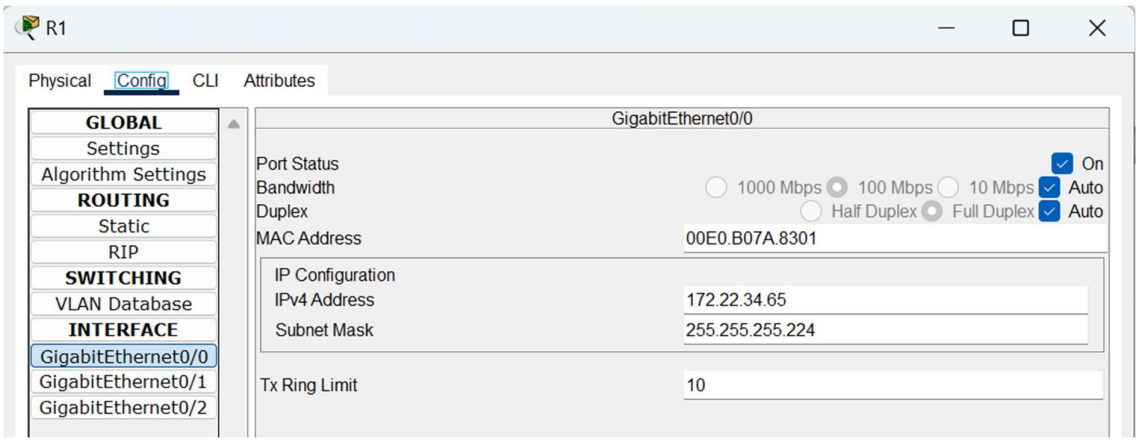


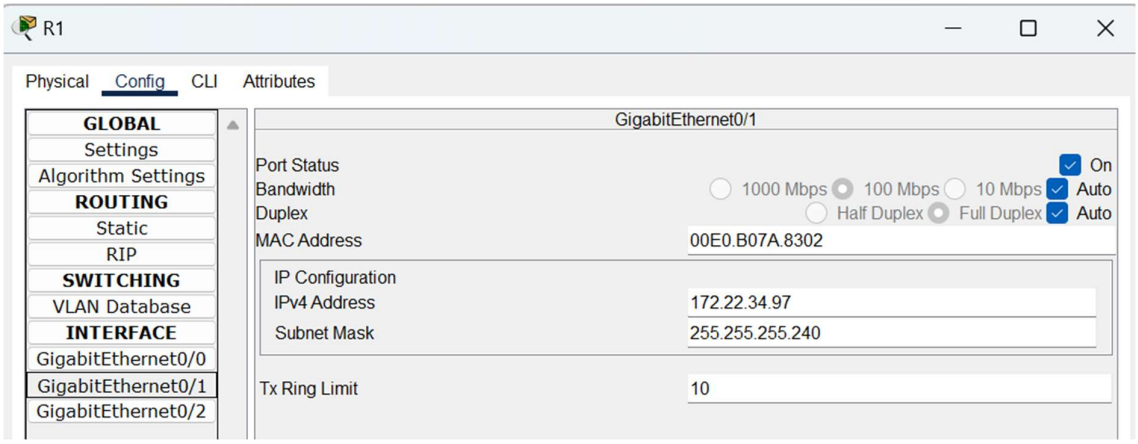
- Assign IP Addresses:

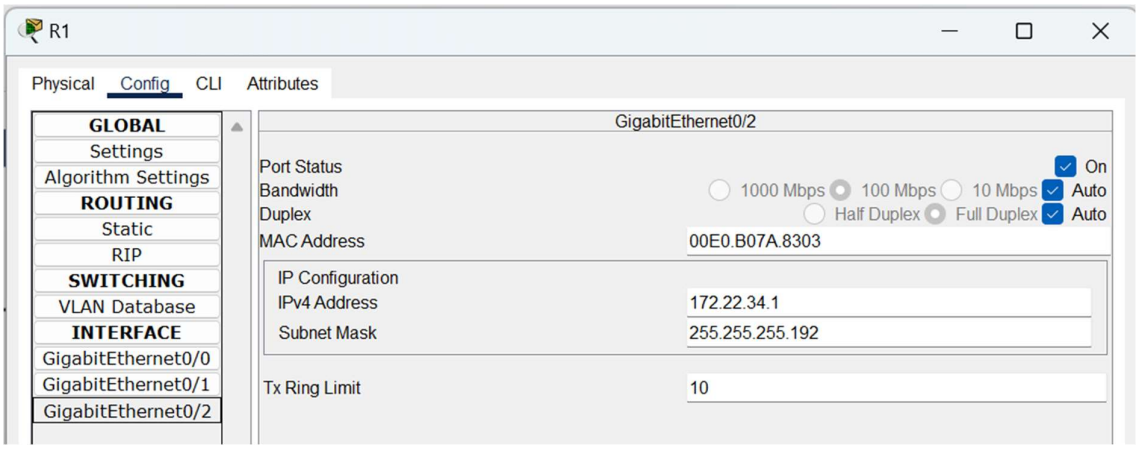



PC2
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.BC6A.3CE9
IP Configuration
DHCP
Static
IPv4 Address
172.22.34.98
Subnet Mask
255.255.255.240
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::2D0:BCFF:FE6A:3CE9

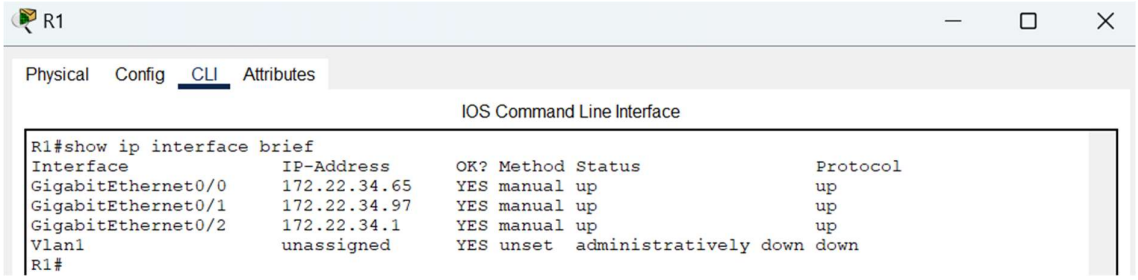

Server
Physical
Config
Services
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
FastEthernet0
Port Status
On
Bandwidth
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.FFA6.99B8
IP Configuration
DHCP
Static
IPv4 Address
172.22.34.62
Subnet Mask
255.255.255.192
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address:
FE80::2D0:FFFF:FEA6:99B8


R1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/2
GigabitEthernet0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00E0.B07A.8301
IP Configuration
IPv4 Address
172.22.34.65
Subnet Mask
255.255.255.224
Tx Ring Limit
10

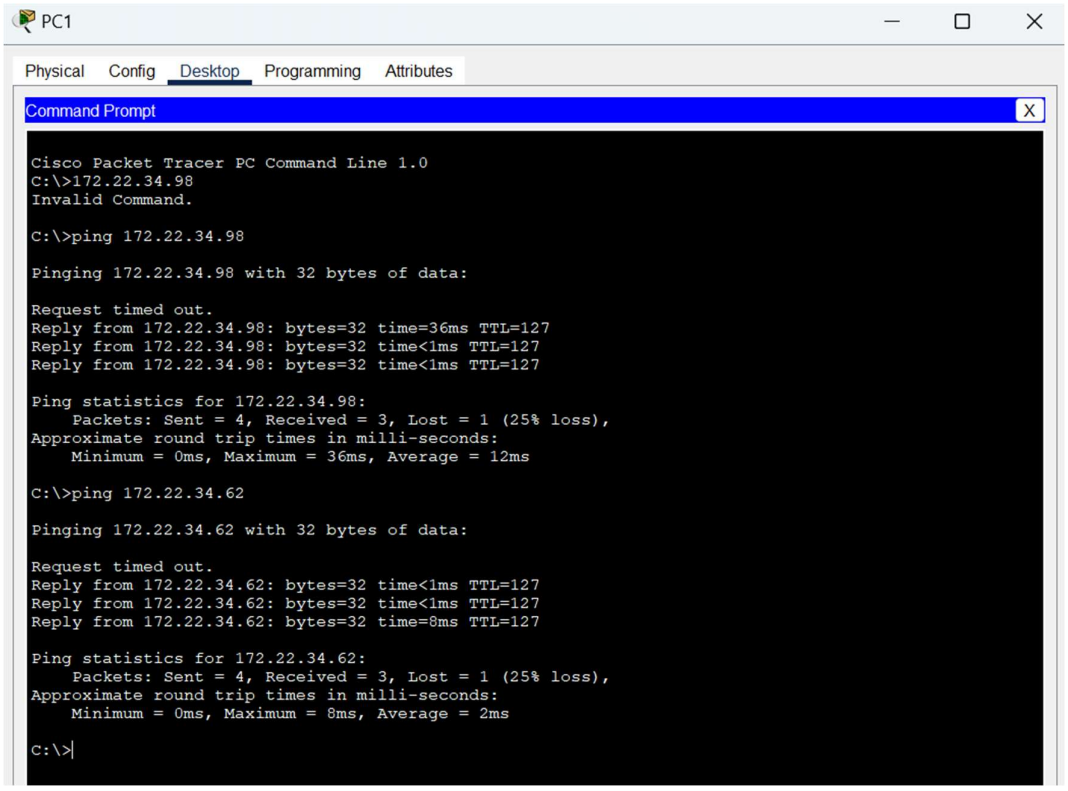




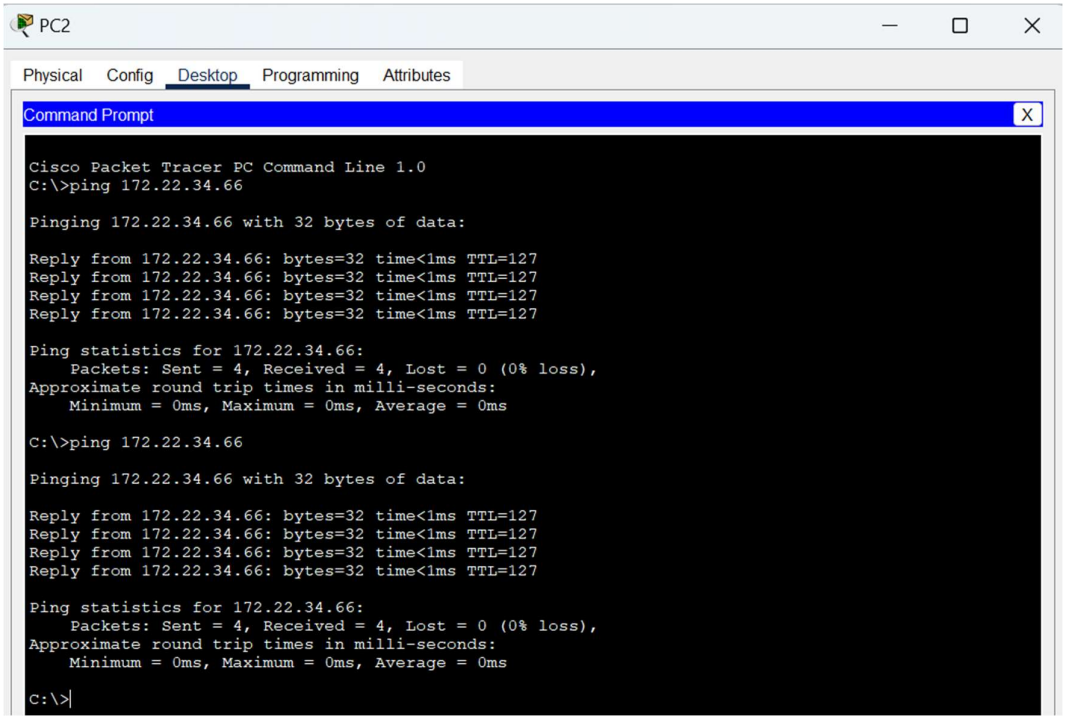
- Displaying IP Address Details of R1



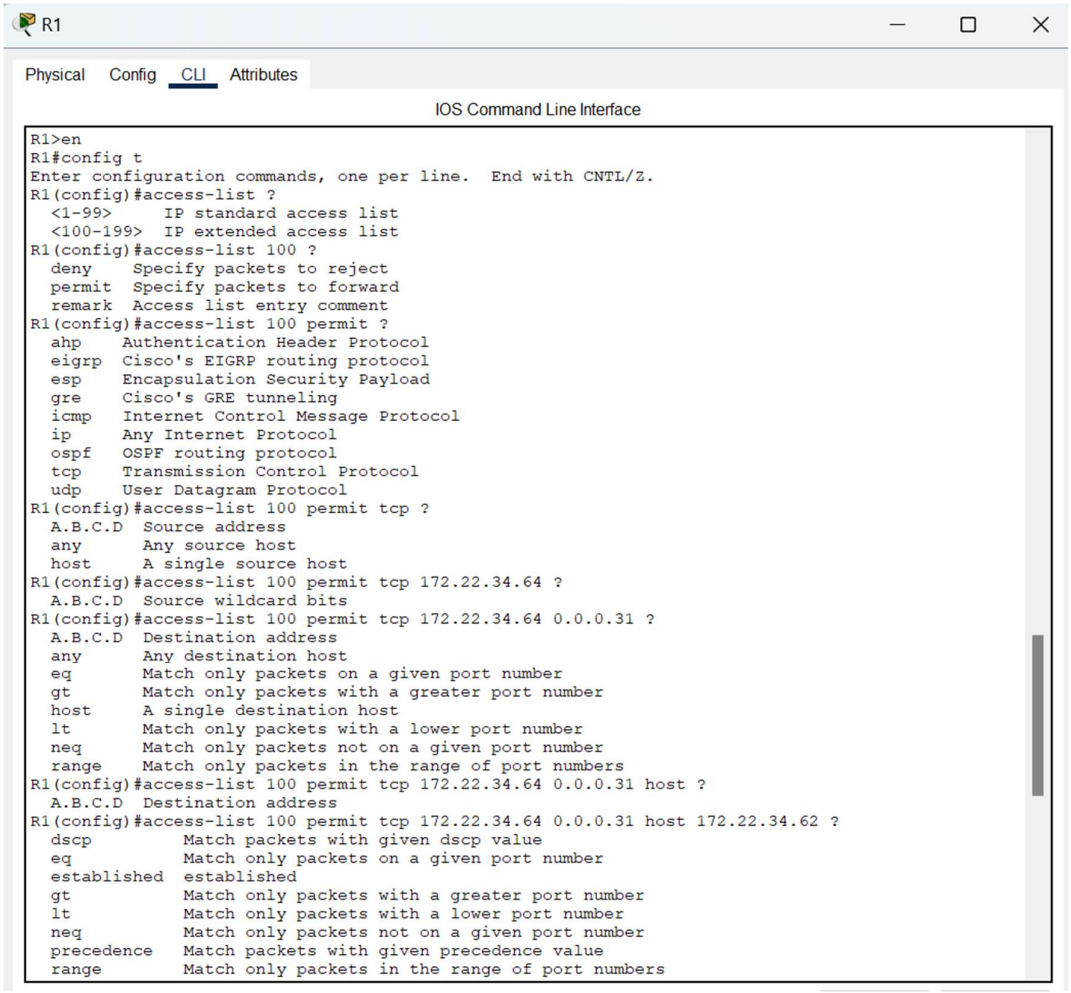
- Performing Ping from PC-A to Server and PC-B

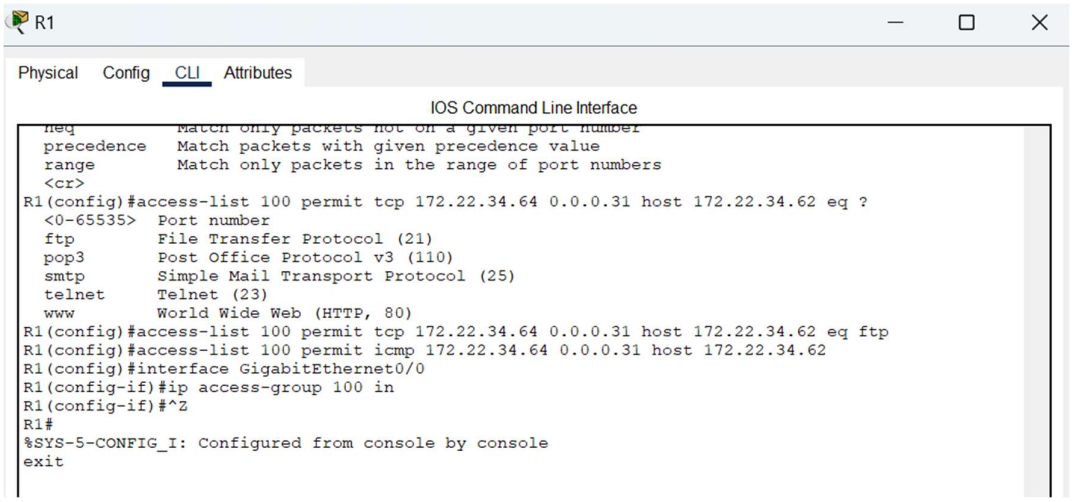


- Performing Ping from PC-B to Server and PC-A

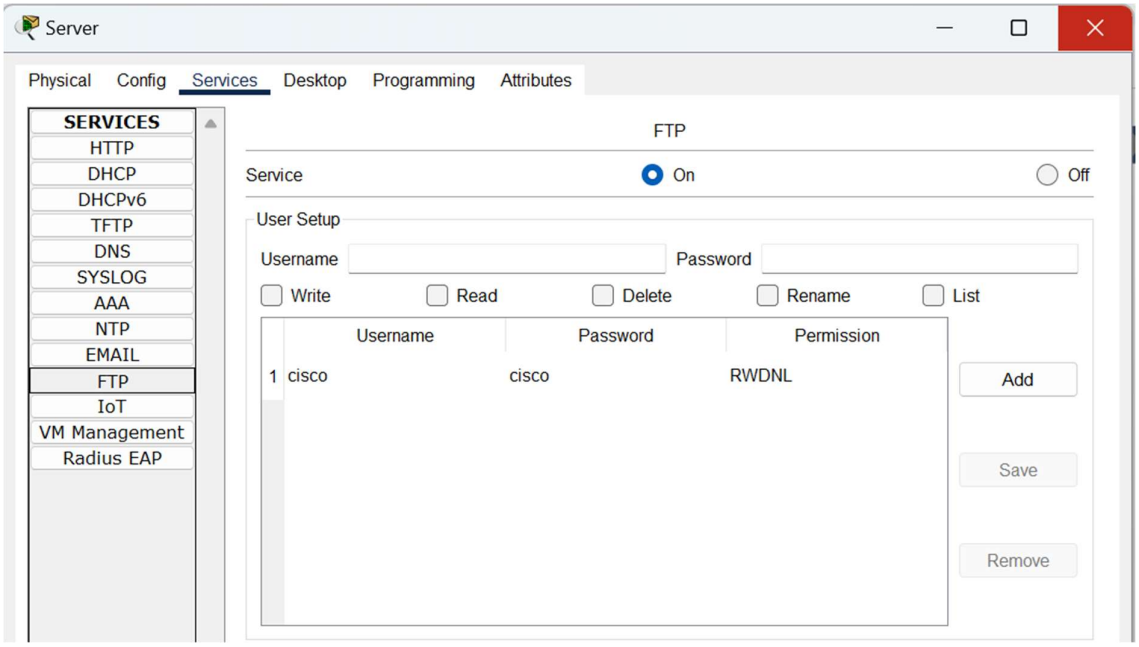


- Configure, Apply and Verify an Extended Numbered ACL
  (PC-A needs only FTP access and should be able to ping the server, but not PC-B)

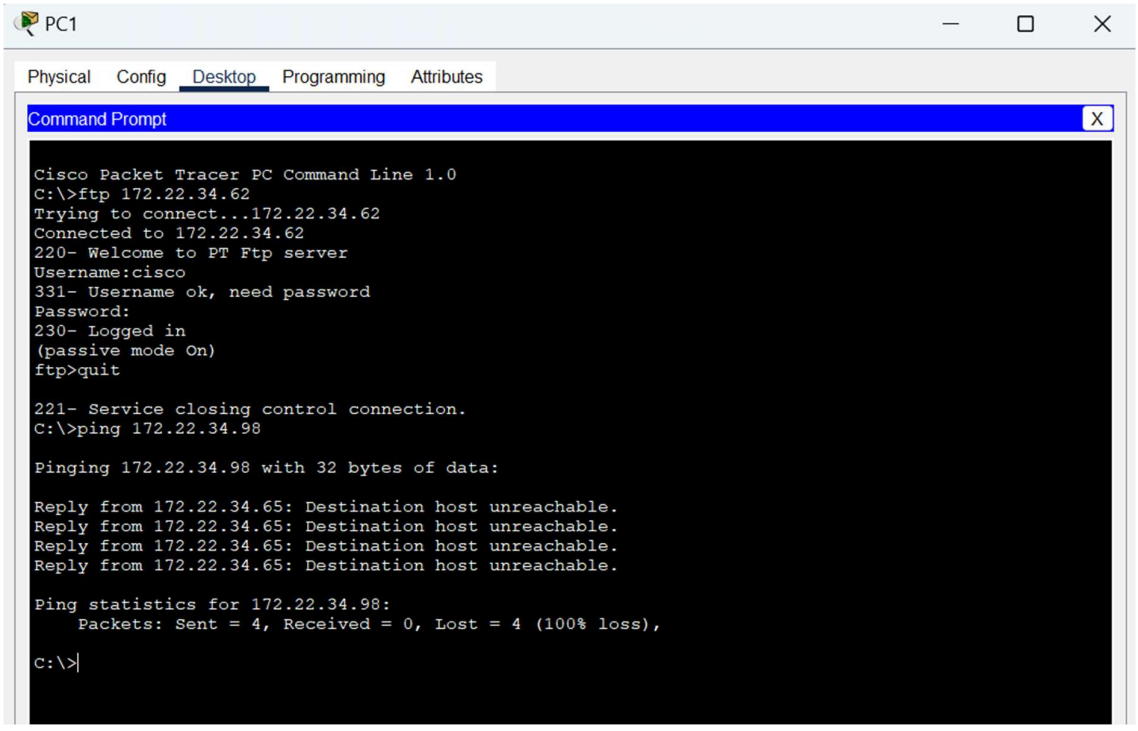




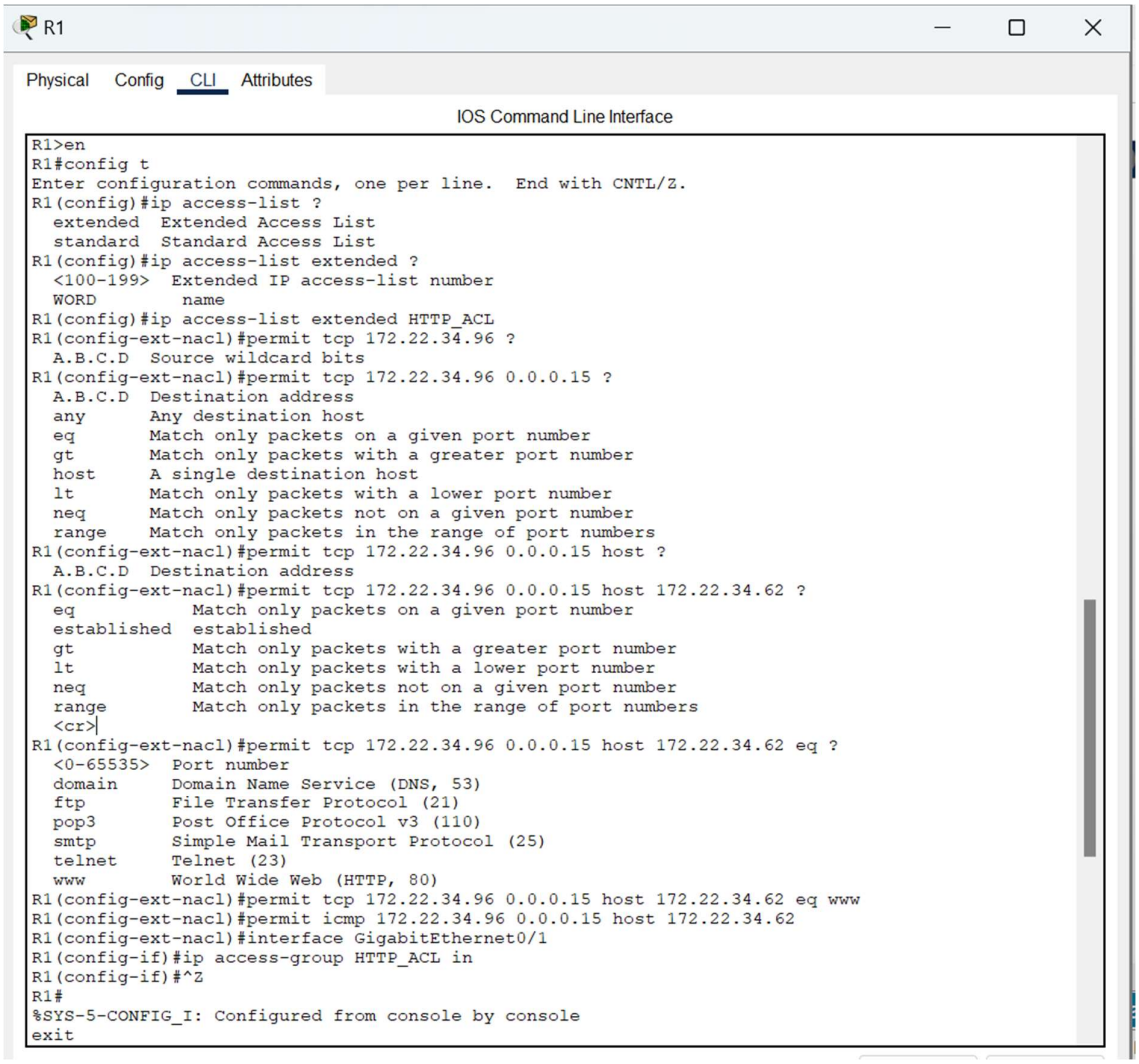
- Checking username and password from server



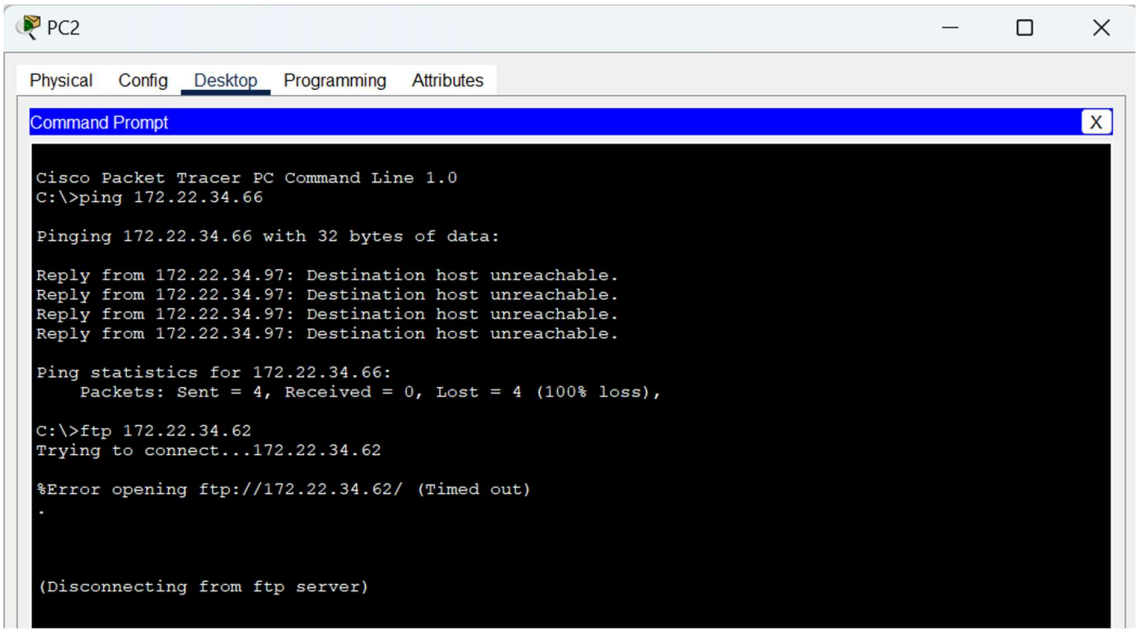
- Performing Ping from PC-A to Server and PC-B to check the working of ACL



- Configure, Apply and Verify an Extended Named ACL
  (PC-B needs only web access and should be able to ping the server, but not PC-A)



- Performing Ping from PC-B to Server and PC-A to check the working of ACL



- Checking http connection from PC-B