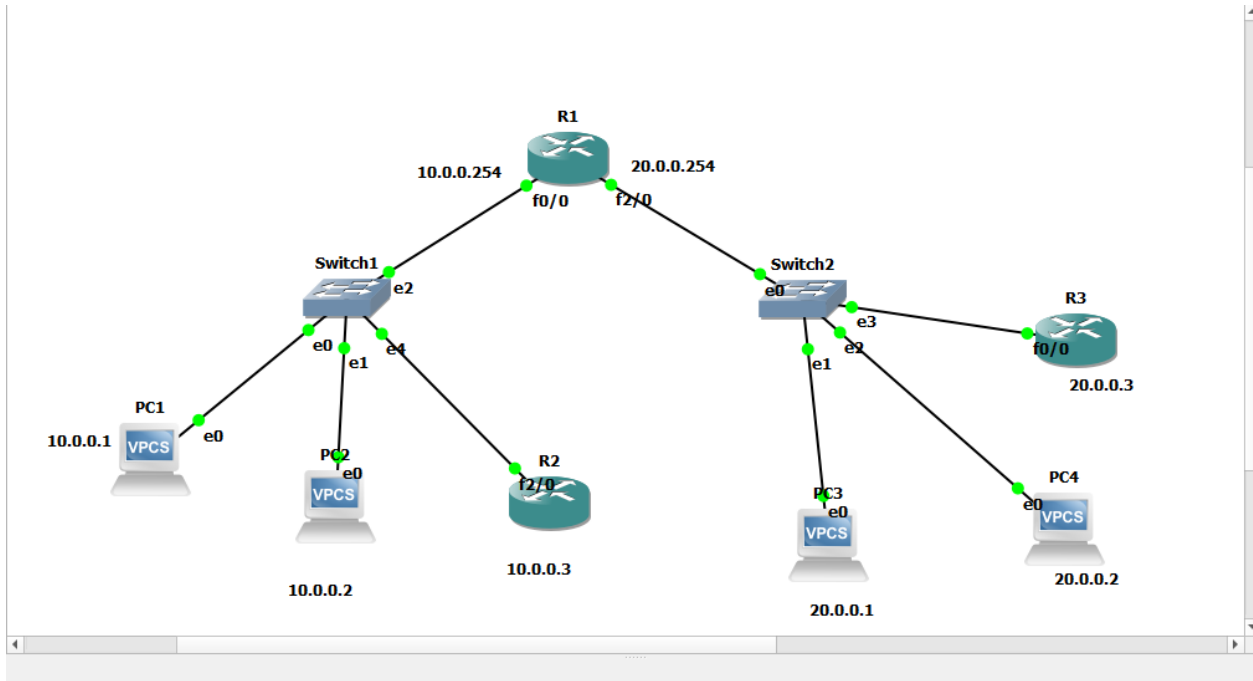


NDC - firewall access list



```
PC1 PC2
Welcome to Virtual PC Simulator, version 0.6.2
Dedicated to Daling.
Build time: Apr 10 2019 02:42:20
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Press '?' to get help.
Executing the startup file

PC1> ip 10.0.0.1/24 10.0.0.254
Checking for duplicate address...
PC1 : 10.0.0.1 255.255.255.0 gateway 10.0.0.254

PC1> 
```

```
PC2> ip 10.0.0.2/24 10.0.0.254
Checking for duplicate address...
PC1 : 10.0.0.2 255.255.255.0 gateway 10.0.0.254
```

```
PC2> show ip
```

```
NAME       : PC2[1]
IP/MASK     : 10.0.0.2/24
GATEWAY     : 10.0.0.254
DNS         :
MAC         : 00:50:79:66:68:01
LPORT      : 10024
RHOST:PORT  : 127.0.0.1:10025
MTU         : 1500
```

```
PC2> 
```

```
to administratively down
R2#
R2# conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)# interface f2/0
R2(config-if)# ip address 10.0.0.3 255.255.255.0
R2(config-if)# no shutdown
R2(config-if)# end
R2#
*Jan 6 03:24:15.539: %LINK-3-UPDOWN: Interface FastEthernet2/0, changed state to up
R2# sho
*Jan 6 03:24:16.087: %SYS-5-CONFIG_I: Configured from console by console
*Jan 6 03:24:16.539: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet2/0, changed state to up
R2# show ip int brief
Interface IP-Address OK? Method Status Protocol
FastEthernet0/0 unassigned YES unset administratively down down
Serial1/0 unassigned YES unset administratively down down
Serial1/1 unassigned YES unset administratively down down
Serial1/2 unassigned YES unset administratively down down
Serial1/3 unassigned YES unset administratively down down
Serial1/4 unassigned YES unset administratively down down
Serial1/5 unassigned YES unset administratively down down
Serial1/6 unassigned YES unset administratively down down
Serial1/7 unassigned YES unset administratively down down
FastEthernet2/0 10.0.0.3 YES manual up up
FastEthernet2/1 unassigned YES unset administratively down down
R2#
```

```

to administratively down
R1#
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface f0/0
R1(config-if)#ip address 10.0.0.254 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#end
R1#
*Jan 6 03:25:44.999: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
R1#
*Jan 6 03:25:45.139: %SYS-5-CONFIG_I: Configured from console by console
*Jan 6 03:25:45.999: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R1#
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface f2/0
R1(config-if)#ip address 20.0.0.254 255.255.255.0
R1(config-if)#no shutdown
^
% Invalid input detected at '^' marker.
R1(config-if)#no shutdown
R1(config-if)#end
*Jan 6 03:26:51.227: %LINK-3-UPDOWN: Interface FastEthernet2/0, changed state to up
*Jan 6 03:26:52.227: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet2/0, changed state to up
R1(config-if)#end
R1#
*Jan 6 03:26:52.547: %SYS-5-CONFIG_I: Configured from console by console
R1#

```

```

PC3> ip 20.0.0.1/24 20.0.0.254
Checking for duplicate address...
PC1 : 20.0.0.1 255.255.255.0 gateway 20.0.0.254

PC3> 

```

```

PC4> ip 20.0.0.2/24 20.0.0.254
Checking for duplicate address...
PC1 : 20.0.0.2 255.255.255.0 gateway 20.0.0.254

PC4> 

```

```

R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#interface f0/0
R3(config-if)#ip address 20.0.0.3 255.255.255.0
R3(config-if)#no shutdown
R3(config-if)#end
R3#
*Jan 6 03:30:12.899: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
R3#
*Jan 6 03:30:13.687: %SYS-5-CONFIG_I: Configured from console by console
*Jan 6 03:30:13.899: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R3#

```

```
PC1> ping 10.0.0.3
84 bytes from 10.0.0.3 icmp_seq=1 ttl=255 time=30.165 ms
84 bytes from 10.0.0.3 icmp_seq=2 ttl=255 time=15.287 ms
84 bytes from 10.0.0.3 icmp_seq=3 ttl=255 time=15.177 ms
84 bytes from 10.0.0.3 icmp_seq=4 ttl=255 time=15.283 ms
84 bytes from 10.0.0.3 icmp_seq=5 ttl=255 time=15.242 ms

PC1> ping 10.0.0.254
84 bytes from 10.0.0.254 icmp_seq=1 ttl=255 time=30.068 ms
84 bytes from 10.0.0.254 icmp_seq=2 ttl=255 time=15.381 ms
84 bytes from 10.0.0.254 icmp_seq=3 ttl=255 time=15.205 ms
84 bytes from 10.0.0.254 icmp_seq=4 ttl=255 time=15.212 ms
84 bytes from 10.0.0.254 icmp_seq=5 ttl=255 time=15.214 ms

PC1> ping 20.0.0.1
84 bytes from 20.0.0.1 icmp_seq=1 ttl=63 time=45.081 ms
84 bytes from 20.0.0.1 icmp_seq=2 ttl=63 time=30.304 ms
84 bytes from 20.0.0.1 icmp_seq=3 ttl=63 time=30.165 ms
84 bytes from 20.0.0.1 icmp_seq=4 ttl=63 time=30.150 ms
84 bytes from 20.0.0.1 icmp_seq=5 ttl=63 time=30.256 ms

PC1> ping 20.0.0.3
20.0.0.3 icmp_seq=1 timeout
20.0.0.3 icmp_seq=2 timeout
20.0.0.3 icmp_seq=3 timeout
20.0.0.3 icmp_seq=4 timeout
20.0.0.3 icmp_seq=5 timeout

PC1> 
```

```
R2#ping 10.0.0.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.0.0.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/13/20 ms
R2#ping 20.0.0.2
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 20.0.0.2, timeout is 2 seconds:
....
Success rate is 0 percent (0/5)
R2# 
```

```
R2#
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip route 0.0.0.0 0.0.0.0 10.0.0.254
R2(config)#exit
R2#
*Jan 6 03:34:13.835: %SYS-5-CONFIG_I: Configured from console by console
R2# 
```

```
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#ip route 0.0.0.0 0.0.0.0 20.0.0.254
R3(config)#exit
R3#
*Jan  6 03:35:04.111: %SYS-5-CONFIG_I: Configured from console by console
R3#
```

```
R3#
R3#ping 10.0.0.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.0.0.1, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 32/299/1072 ms
R3#ping 10.0.0.3
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.0.0.3, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 52/56/64 ms
R3#
```

```
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#access-list 150 deny host 10.0.0.1 20.0.0.0 0.0.0.255
      ^
% Invalid input detected at '^' marker.

R1(config)#access-list 150 deny icmp host 10.0.0.1 20.0.0.0 0.0.0.255
R1(config)#access-list 150 deny tcp host 10.0.0.3 host 20.0.0.3
R1(config)#access-list 150 permit ip any any
R1(config)#interface f0/0
R1(config-if)#ip access-group 150 in
R1(config-if)#exit
R1(config)#exit
R1#
*Jan  6 04:20:34.475: %SYS-5-CONFIG_I: Configured from console by console
R1#
```

```
PC1> ping 20.0.0.3
*10.0.0.254 icmp_seq=1 ttl=255 time=30.205 ms (ICMP type:3, code:13, Communication administratively prohibited)
*10.0.0.254 icmp_seq=2 ttl=255 time=15.087 ms (ICMP type:3, code:13, Communication administratively prohibited)
*10.0.0.254 icmp_seq=3 ttl=255 time=15.260 ms (ICMP type:3, code:13, Communication administratively prohibited)
*10.0.0.254 icmp_seq=4 ttl=255 time=15.173 ms (ICMP type:3, code:13, Communication administratively prohibited)
*10.0.0.254 icmp_seq=5 ttl=255 time=15.250 ms (ICMP type:3, code:13, Communication administratively prohibited)

PC1>
```

```
R2#
R2#telnet 20.0.0.3
Trying 20.0.0.3 ...
% Destination unreachable; gateway or host down

R2#
```

```
Success rate is 100 percent (5/5), round-trip min/avg/max = 52/56/64 ms
R3#
R3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)#line vty 0 4
R3(config-line)#password cdac
R3(config-line)#login
R3(config-line)#
```

```
R1(config)#interface f0/0
R1(config-if)#no ip access-group 150 in
R1(config-if)#exit
R1(config)#
```

Start the capture in wireshark then go to R2

```
% Unknown command or computer name, or unable to find
R2#telnet 20.0.0.3
Trying 20.0.0.3 ... Open

User Access Verification

Password:
R3>
```