NetSim®
NETWORK SIMULATOR®

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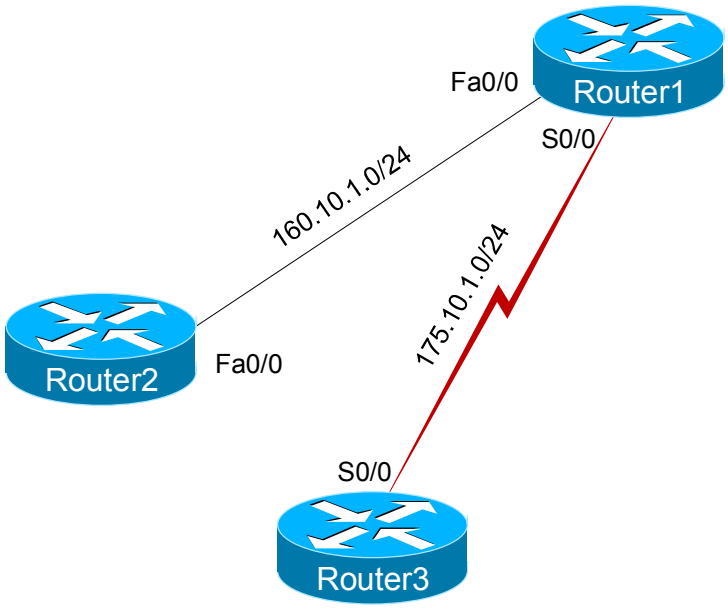
Sequential Lab: Telnet I

Objective

Practice connecting to one router from another by using Telnet. Use the Ctrl+Shift+6 then X key combination to suspend Telnet sessions, and use basic **show** commands to display active Telnet sessions.

Lab Topology

The topology diagram below represents the portion of the network you will configure in this lab.



Command Summary

Command	Description
configure terminal	enters global configuration mode from privileged EXEC mode
disconnect {*ip-address* | **console**}	closes an active console port or Telnet session
enable	enters privileged EXEC mode
end	ends and exits configuration mode
exit	exits one level in the menu structure
line vty 0 4	enters configuration mode for the selected virtual terminal (Telnet) lines
login	enables password checking
password *password*	specifies the password that is required for a user to log in
show sessions	displays information about local-area transport (LAT), Telnet, or rlogin connections
show users	displays users currently logged in to the router
telnet *ip-address*	starts the terminal emulation program from a PC, router, or switch that permits you to access devices remotely over the network

Lab Tasks

The passwords in this lab have been configured as **cisco**.

1. Enable Telnet access on Router3. Enable password checking, and configure a password of **cisco**.

2. From Router1, telnet to Router2 (160.10.1.2).

3. From the Telnet connection you have established to Router2, issue the **show users** command. What information is displayed by this command? _____
   _____

4. Suspend your Telnet session to Router2 by pressing Ctrl+Shift+6 then X. You should return to Router1 without breaking the active Telnet session.

5. Issue the **show sessions** command on Router1. What active sessions do you see? _____
   _____

6. Telnet from Router1 to Router3 (175.10.1.2).

7. Suspend the Telnet session to Router3, and return to Router1.

8. On Router1, issue the **show sessions** command. What active sessions do you see? _____
   _____

9. Disconnect the two suspended sessions on Router1. The number used in the **disconnect** command comes from the leftmost column in the **show sessions** output.

10. On Router1, issue the **show sessions** command again to verify that the suspended Telnet sessions have disappeared.

Lab Solutions

The passwords in this lab have been configured as **cisco**.

1. On Router3, issue the following commands to enable Telnet access:

```
Router3>enable
Password:cisco
Router3#configure terminal
Router3(config)#line vty 0 4
Router3(config-line)#login
Router3(config-line)#password cisco
```

2. On Router1, issue the following commands to telnet to Router2 (160.10.1.2):

```
Password:cisco
Router1>enable
Password:cisco
Router1#telnet 160.10.1.2
Password:cisco
Router2>
```

3. Once you have accessed Router2, issue the **show users** command. This command shows which remote users are connected to this local router. You should see Router1's IP address (160.10.1.1) as the user that has connected to Router2 using Telnet. The following is sample output:

```
Router2>show users
    Line       User     Host(s)              Idle       Location
   0 con 0              idle                 00:00:12
*  1 vty 1              idle                 00:00:00   160.10.1.1
```

4. Suspend your Telnet session to Router2 by pressing Ctrl+Shift+6 then X. You should return to Router1 without breaking the active Telnet session.

```
Router2>Press the Ctrl+Shift+6 X key combination
Router1#
```

5. On Router1, issue the **show sessions** command. Output from this command shows what active, but suspended, sessions exist with other routers. The following is sample output:

```
Router1#show sessions
Conn Host         Address          Byte  Idle Conn Name
*  1 160.10.1.2      160.10.1.2             0     9 160.10.1.2
```

6. On Router1, issue the following commands to telnet to Router3:

```
Router1#telnet 175.10.1.2
Password:cisco
Router3>
```

7. Suspend the Telnet session to Router3, and return to Router1:

```
Router3>Press Ctrl+Shift+6 X
Router1#
```

8. On Router1, issue the **show sessions** command. You should now see two suspended sessions: one to Router2 (160.10.1.2) and one to Router3 (175.10.1.2). The following is sample output:

```
Router1#show sessions
Conn Host         Address         Byte  Idle Conn Name
*  1 160.10.1.2      160.10.1.2           0     9 160.10.1.2
*  2 175.10.1.2      175.10.1.2           0     9 175.10.1.2
```

9. Disconnect the two suspended sessions on Router1. The number used in the **disconnect** command comes from the leftmost column in the **show sessions** output.

```
Router1#disconnect 2
Closing connection to 175.10.1.2
Router1#disconnect 1
Closing connection to 160.10.1.2
```

10. On Router1, issue the **show sessions** command again to verify that the suspended Telnet sessions have disappeared. The following is sample output:

```
Router1#show sessions
% No connections open
```

Sample Configuration Script

Router3

```
Router3#show running-config
Building configuration...
Current configuration : 763 bytes
!
Version 12.3
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Router3
enable secret 5 $sdf$6978yhg$jnb76sd
!
ip subnet-zero
!
ip cef
no ip domain-lookup
!
interface Serial0/0
 ip address 175.10.1.2 255.255.255.0
 no ip directed-broadcast
!
interface Serial0/1
 ip address 180.10.1.1 255.255.255.0
 no ip directed-broadcast
 clock rate 64000
!
interface FastEthernet0/0
 no ip address
 no ip directed-broadcast
!
interface FastEthernet0/1
 ip address 197.10.1.1 255.255.255.0
 no ip directed-broadcast
!
ip classless
no ip http server
!
line con 0
line aux 0
line vty 0 4
 login
 password cisco
!
no scheduler allocate
end
```