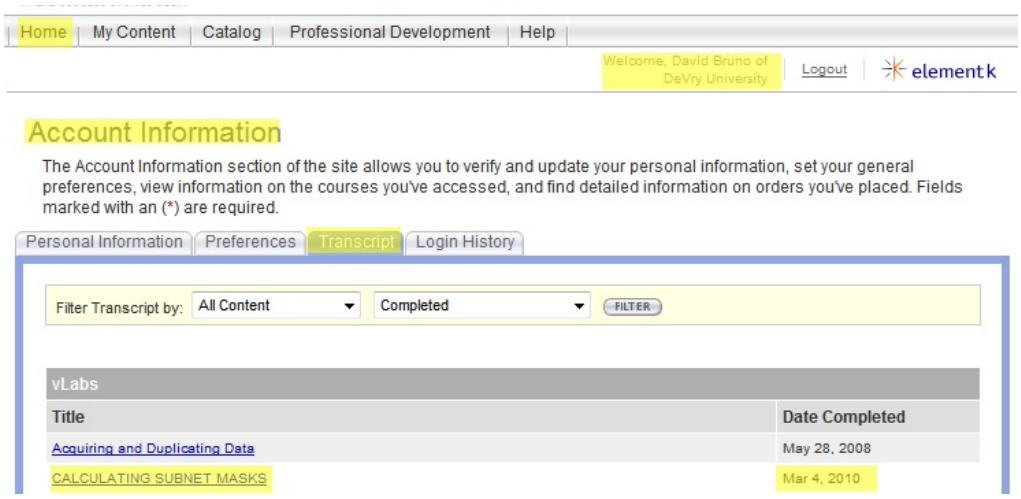
NETW204 Lab Report

Instructions for completing NETW204 Lab Reports:

1. Make sure that you understand the objective of the lab(s) and the requirements for successfully performing them.
2. Follow all procedures in the Element K lab instructions (Sample Solutions).
3. After successfully completing the lab(s), capture a screenshot of your Transcript that shows both the labs completed and your name. Paste this into the bottom of your lab report. Your transcript can be found by going to the ***Home/Account Information/Transcript*** page. An example transcript is shown below.



4. Submit the completed Lab Report to the appropriate weekly Dropbox.

Taking Screenshots

The instructions below provide basic guidance on taking screenshots of your labs

1. Complete the lab step that you would like to capture in a screenshot.
2. Click on the server's desktop that contains the window you want to capture.
3. Press the *Print Screen* key on your keyboard to copy it to your clipboard. On some keyboards, it is written as *Print Scrn* or *PrtSc*.
4. Click on your Lab Report (this document).
5. Scroll to the point in the Lab Report where you what the screenshot to appear.
6. Right click on your mouse and click paste, or press Ctrl + V
7. Once your screenshot appears in your Lab Report, click on your lab and continue to the next step.

Important Note: If you are using Windows 7 (any version), you can use the **Snipping Tool** to very easily create screenshots for your lab reports. If you've never used it, perform a search on (*how to use Snipping Tool*) for some quick tips and videos on its use.

NETW204 Lab Report

Create your lab report using this template starting on **page 2**. It is not necessary to include this page in your lab report.

NETW204 Lab Report

Name: Kevin O'Neal
Date: 6-10-2012
Professor: Hopkins

Lab Summary (20 points)

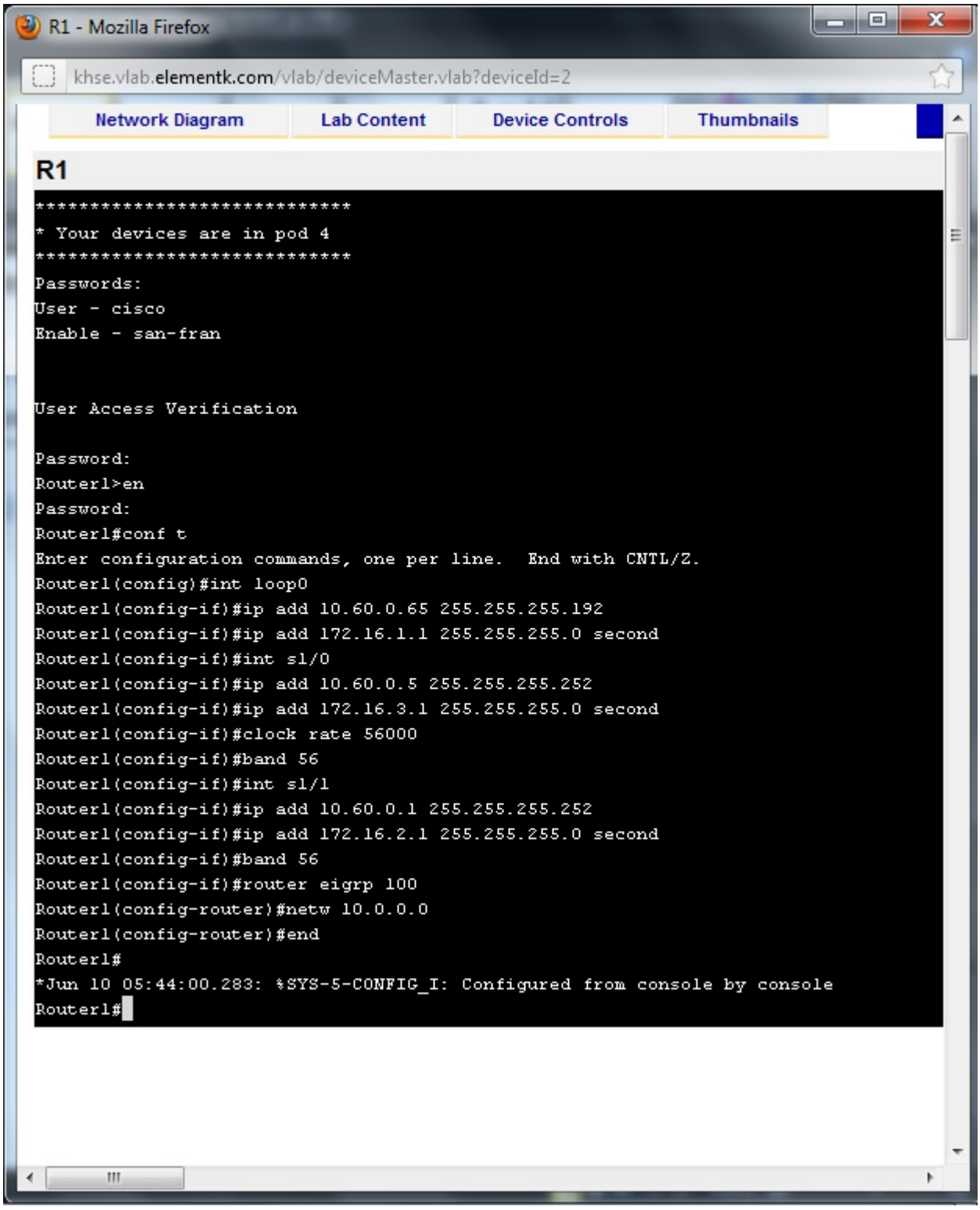
Write a short paragraph below (minimum 50 – 100 words) that summarizes what was accomplished in this week's lab(s), what you learned from performing it, and most importantly, how you feel it will benefit you in your career. (20 points)

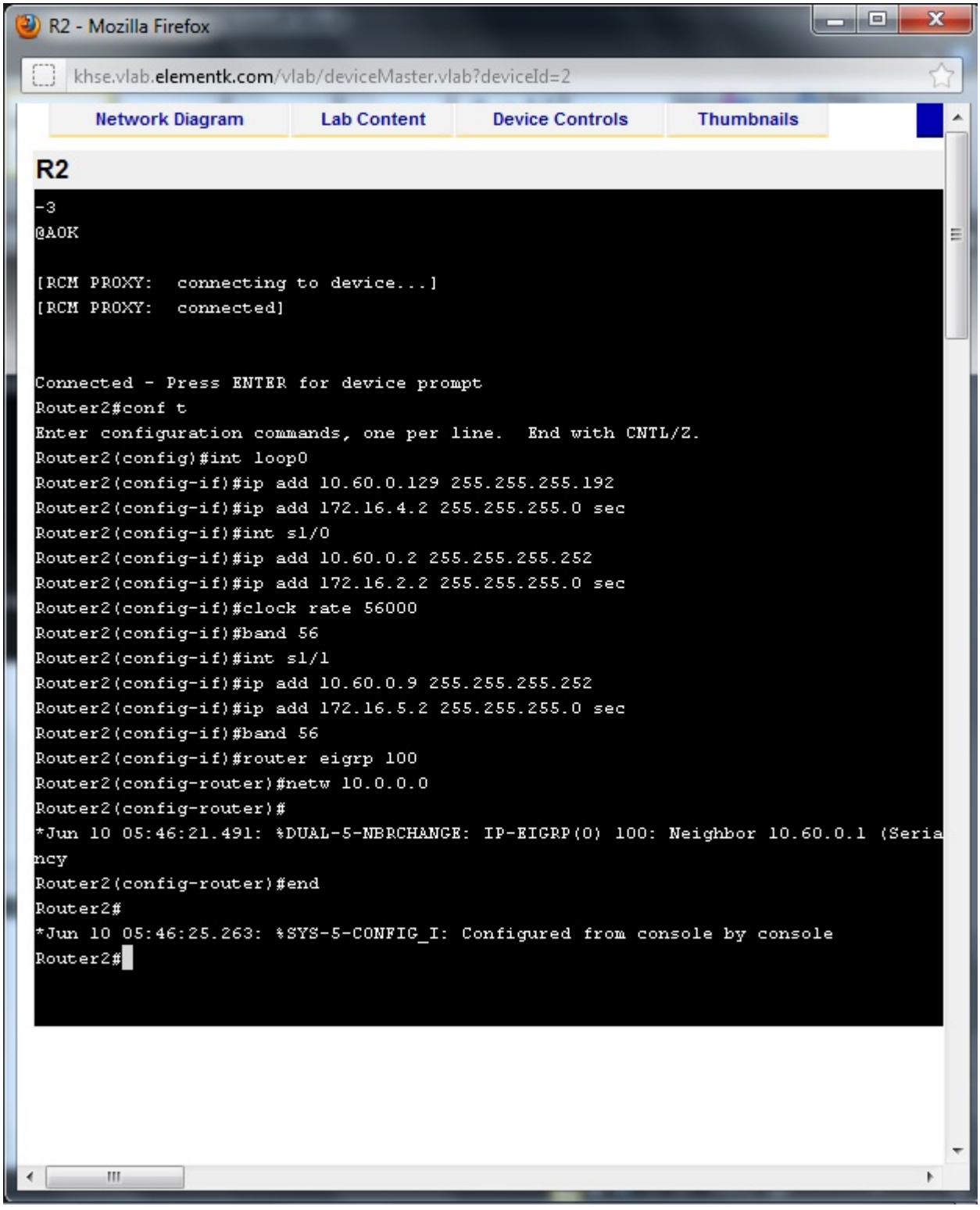
In this lab, changed our addressing scheme from RIP to EIGRP. To do that, we first started by adding the new ip's for each interface and made the original interface a secondary address. Then we enabled eigrp. But, to do that we had to add a bandwidth command for the metric. We then verified our input by using the show ip protocols, show ip route commands and then pinging addresses within the network. To end the endeavor, we used the no ip address command to delete the original RIP addresses and we turned off RIP in the routing table by using the no router rip command. We finished up by verifying that everything was up and up, by once again using the show ip protocols, show ip route and ping commands. This exercise would be extremely helpful if I get myself in a change-over situation. Thus, the title of the lab, "RIP to EIGRP Migration."

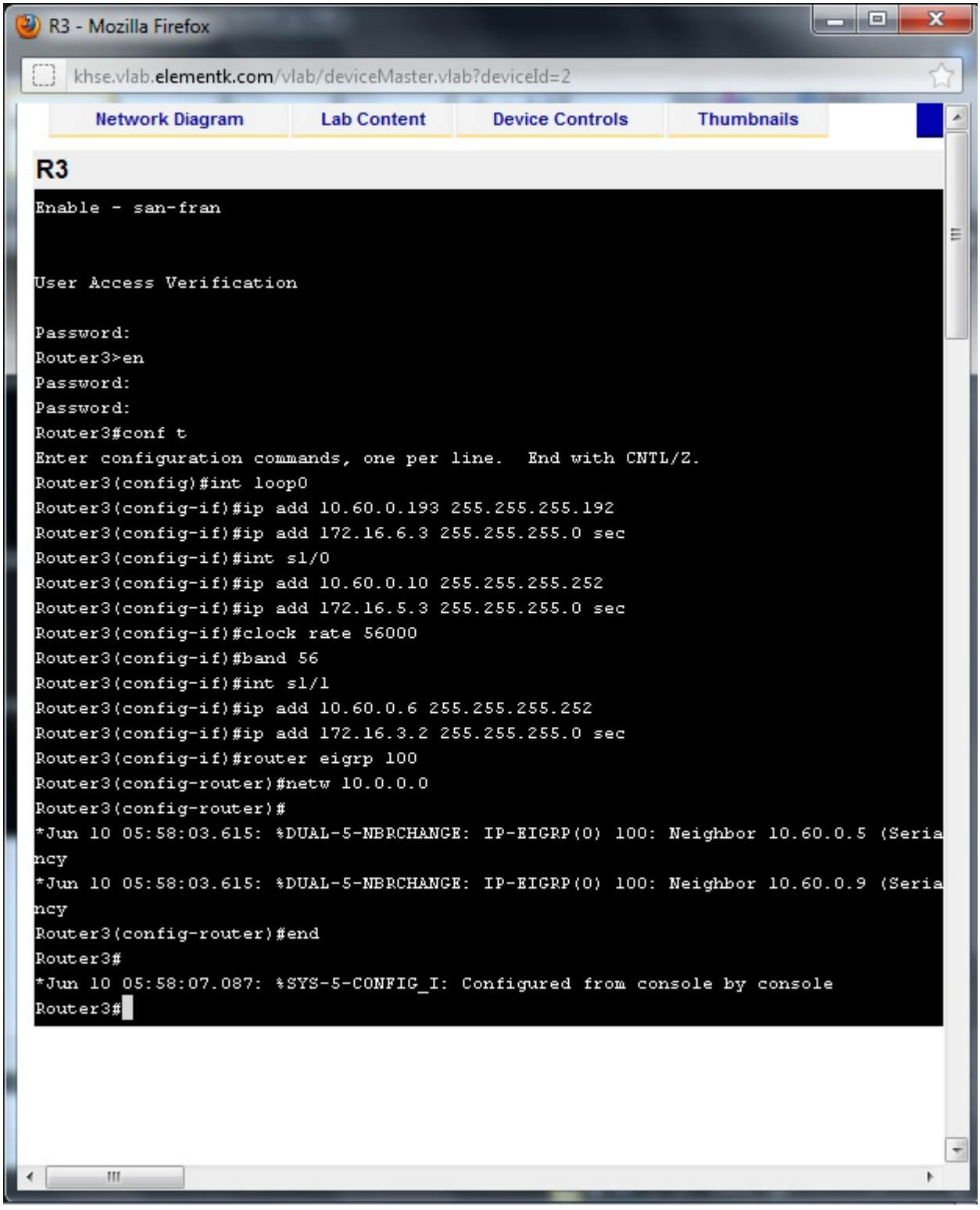
Element K Transcript (10 points)

Copy and Paste your Element K *Transcript* that shows your ***name*** and ***completion status*** of your Lab(s). *Note: If your transcript has many items, it may be necessary to capture your name in a separate screenshot.*

Element K Transcript screenshot goes here. (10 points)


R1 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R1
****
* Your devices are in pod 4
****
Passwords:
User - cisco
Enable - san-fran
User Access Verification
Password:
Router1>en
Password:
Router1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router1(config)#int loop0
Router1(config-if)#ip add 10.60.0.65 255.255.255.192
Router1(config-if)#ip add 172.16.1.1 255.255.255.0 second
Router1(config-if)#int s1/0
Router1(config-if)#ip add 10.60.0.5 255.255.255.252
Router1(config-if)#ip add 172.16.3.1 255.255.255.0 second
Router1(config-if)#clock rate 56000
Router1(config-if)#band 56
Router1(config-if)#int s1/1
Router1(config-if)#ip add 10.60.0.1 255.255.255.252
Router1(config-if)#ip add 172.16.2.1 255.255.255.0 second
Router1(config-if)#band 56
Router1(config-if)#router eigrp 100
Router1(config-router)#netw 10.0.0.0
Router1(config-router)#end
Router1#
*Jun 10 05:44:00.283: %SYS-5-CONFIG_I: Configured from console by console
Router1#


R2 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R2
-3
@AOK
[RCM PROXY: connecting to device...]
[RCM PROXY: connected]
Connected - Press ENTER for device prompt
Router2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router2(config)#int loop0
Router2(config-if)#ip add 10.60.0.129 255.255.255.192
Router2(config-if)#ip add 172.16.4.2 255.255.255.0 sec
Router2(config-if)#int s1/0
Router2(config-if)#ip add 10.60.0.2 255.255.255.252
Router2(config-if)#ip add 172.16.2.2 255.255.255.0 sec
Router2(config-if)#clock rate 56000
Router2(config-if)#band 56
Router2(config-if)#int s1/1
Router2(config-if)#ip add 10.60.0.9 255.255.255.252
Router2(config-if)#ip add 172.16.5.2 255.255.255.0 sec
Router2(config-if)#band 56
Router2(config-if)#router eigrp 100
Router2(config-router)#netw 10.0.0.0
Router2(config-router)#
*Jun 10 05:46:21.491: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 10.60.0.1 (Seria
ncy
Router2(config-router)#end
Router2#
*Jun 10 05:46:25.263: %SYS-5-CONFIG_I: Configured from console by console
Router2#


R3 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R3
Enable - san-fran
User Access Verification
Password:
Router3>en
Password:
Password:
Router3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router3(config)#int loop0
Router3(config-if)#ip add 10.60.0.193 255.255.255.192
Router3(config-if)#ip add 172.16.6.3 255.255.255.0 sec
Router3(config-if)#int s1/0
Router3(config-if)#ip add 10.60.0.10 255.255.255.252
Router3(config-if)#ip add 172.16.5.3 255.255.255.0 sec
Router3(config-if)#clock rate 56000
Router3(config-if)#band 56
Router3(config-if)#int s1/1
Router3(config-if)#ip add 10.60.0.6 255.255.255.252
Router3(config-if)#ip add 172.16.3.2 255.255.255.0 sec
Router3(config-if)#router eigrp 100
Router3(config-router)#netw 10.0.0.0
Router3(config-router)#
*Jun 10 05:58:03.615: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 10.60.0.5 (Seria
ncy
*Jun 10 05:58:03.615: %DUAL-5-NBRCHANGE: IP-EIGRP(0) 100: Neighbor 10.60.0.9 (Seria
ncy
Router3(config-router)#end
Router3#
*Jun 10 05:58:07.087: %SYS-5-CONFIG_I: Configured from console by console
Router3#


R3 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R3
Helper address is not set
Directed broadcast forwarding is disabled
Secondary address 172.16.6.3/24
Multicast reserved groups joined: 224.0.0.9 224.0.0.10
Outgoing access list is not set
Inbound access list is not set
Proxy ARP is enabled
Local Proxy ARP is disabled
Security level is default
Split horizon is enabled
ICMP redirects are always sent
ICMP unreachables are always sent
ICMP mask replies are never sent
IP fast switching is enabled
IP fast switching on the same interface is disabled
IP Flow switching is disabled
IP CEF switching is enabled
IP CEF Fast switching turbo vector
IP multicast fast switching is enabled
IP multicast distributed fast switching is disabled
IP route-cache flags are Fast, CEF
Router Discovery is disabled
IP output packet accounting is disabled
IP access violation accounting is disabled
TCP/IP header compression is disabled
RTP/IP header compression is disabled
Policy routing is disabled
Network address translation is disabled
BGP Policy Mapping is disabled
WCCP Redirect outbound is disabled
WCCP Redirect inbound is disabled
WCCP Redirect exclude is disabled
Router3#


R2 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R2
Helper address is not set
Directed broadcast forwarding is disabled
Secondary address 172.16.4.2/24
Multicast reserved groups joined: 224.0.0.9 224.0.0.10
Outgoing access list is not set
Inbound access list is not set
Proxy ARP is enabled
Local Proxy ARP is disabled
Security level is default
Split horizon is enabled
ICMP redirects are always sent
ICMP unreachables are always sent
ICMP mask replies are never sent
IP fast switching is enabled
IP fast switching on the same interface is disabled
IP Flow switching is disabled
IP CEF switching is enabled
IP CEF Fast switching turbo vector
IP multicast fast switching is enabled
IP multicast distributed fast switching is disabled
IP route-cache flags are Fast, CEF
Router Discovery is disabled
IP output packet accounting is disabled
IP access violation accounting is disabled
TCP/IP header compression is disabled
RTP/IP header compression is disabled
Policy routing is disabled
Network address translation is disabled
BGP Policy Mapping is disabled
WCCP Redirect outbound is disabled
WCCP Redirect inbound is disabled
WCCP Redirect exclude is disabled
Router2#


R1 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R1
Helper address is not set
Directed broadcast forwarding is disabled
Secondary address 172.16.1.1/24
Multicast reserved groups joined: 224.0.0.9 224.0.0.10
Outgoing access list is not set
Inbound access list is not set
Proxy ARP is enabled
Local Proxy ARP is disabled
Security level is default
Split horizon is enabled
ICMP redirects are always sent
ICMP unreachables are always sent
ICMP mask replies are never sent
IP fast switching is enabled
IP fast switching on the same interface is disabled
IP Flow switching is disabled
IP CEF switching is enabled
IP CEF Fast switching turbo vector
IP multicast fast switching is enabled
IP multicast distributed fast switching is disabled
IP route-cache flags are Fast, CEF
Router Discovery is disabled
IP output packet accounting is disabled
IP access violation accounting is disabled
TCP/IP header compression is disabled
RTP/IP header compression is disabled
Policy routing is disabled
Network address translation is disabled
BGP Policy Mapping is disabled
WCCP Redirect outbound is disabled
WCCP Redirect inbound is disabled
WCCP Redirect exclude is disabled
Router1#


R1 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R1
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route
Gateway of last resort is not set
172.16.0.0/24 is subnetted, 6 subnets
R 172.16.4.0 [120/1] via 172.16.2.2, 00:00:23, Serial1/1
R 172.16.5.0 [120/1] via 172.16.3.2, 00:00:11, Serial1/0
[120/1] via 172.16.2.2, 00:00:23, Serial1/1
R 172.16.6.0 [120/1] via 172.16.3.2, 00:00:11, Serial1/0
C 172.16.1.0 is directly connected, Loopback0
C 172.16.2.0 is directly connected, Serial1/1
C 172.16.3.0 is directly connected, Serial1/0
10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C 10.60.0.4/30 is directly connected, Serial1/0
C 10.60.0.0/30 is directly connected, Serial1/1
D 10.60.0.8/30 [90/46738176] via 10.60.0.6, 00:07:23, Serial1/0
[90/46738176] via 10.60.0.2, 00:07:23, Serial1/1
C 10.60.0.64/26 is directly connected, Loopback0
D 10.60.0.128/26 [90/46354176] via 10.60.0.2, 00:07:26, Serial1/1
D 10.60.0.192/26 [90/46354176] via 10.60.0.6, 00:07:26, Serial1/0
Router1#ping 10.60.0.129
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.60.0.129, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/33/36 ms
Router1#

NETW204 Lab Report


R3 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R3
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route
Gateway of last resort is not set
172.16.0.0/24 is subnetted, 6 subnets
R 172.16.4.0 [120/1] via 172.16.5.2, 00:00:25, Serial1/0
C 172.16.5.0 is directly connected, Serial1/0
C 172.16.6.0 is directly connected, Loopback0
R 172.16.1.0 [120/1] via 172.16.3.1, 00:00:21, Serial1/1
R 172.16.2.0 [120/1] via 172.16.5.2, 00:00:25, Serial1/0
[120/1] via 172.16.3.1, 00:00:21, Serial1/1
C 172.16.3.0 is directly connected, Serial1/1
10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C 10.60.0.4/30 is directly connected, Serial1/1
D 10.60.0.0/30 [90/46738176] via 10.60.0.9, 00:11:56, Serial1/0
[90/46738176] via 10.60.0.5, 00:11:56, Serial1/1
C 10.60.0.8/30 is directly connected, Serial1/0
D 10.60.0.64/26 [90/20640000] via 10.60.0.5, 00:11:59, Serial1/1
D 10.60.0.128/26 [90/46354176] via 10.60.0.9, 00:11:59, Serial1/0
C 10.60.0.192/26 is directly connected, Loopback0
Router3#ping 172.16.1.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/32/32 ms
Router3#


R1 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R1
10.0.0.0
Routing Information Sources:
Gateway Distance Last Update
10.60.0.6 90 00:06:04
10.60.0.2 90 00:06:04
Distance: internal 90 external 170
Router1#sh ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C 10.60.0.4/30 is directly connected, Serial1/0
C 10.60.0.0/30 is directly connected, Serial1/1
D 10.60.0.8/30 [90/46738176] via 10.60.0.6, 00:06:18, Serial1/0
[90/46738176] via 10.60.0.2, 00:06:18, Serial1/1
C 10.60.0.64/26 is directly connected, Loopback0
D 10.60.0.128/26 [90/46354176] via 10.60.0.2, 00:06:18, Serial1/1
D 10.60.0.192/26 [90/46354176] via 10.60.0.6, 00:06:18, Serial1/0
Router1#ping 10.60.0.129
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.60.0.129, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/32/36 ms
Router1#


R2 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R2
10.0.0.0
Routing Information Sources:
Gateway Distance Last Update
10.60.0.1 90 00:04:38
10.60.0.10 90 00:04:38
Distance: internal 90 external 170
Router2#sh ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
D 10.60.0.4/30 [90/46738176] via 10.60.0.10, 00:04:48, Serial1/1
[90/46738176] via 10.60.0.1, 00:04:48, Serial1/0
C 10.60.0.0/30 is directly connected, Serial1/0
C 10.60.0.8/30 is directly connected, Serial1/1
D 10.60.0.64/26 [90/46354176] via 10.60.0.1, 00:04:48, Serial1/0
C 10.60.0.128/26 is directly connected, Loopback0
D 10.60.0.192/26 [90/46354176] via 10.60.0.10, 00:04:48, Serial1/1
Router2#ping 10.60.0.6
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.60.0.6, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 48/49/52 ms
Router2#


R3 - Mozilla Firefox
khse.vlab.elementk.com/vlab/deviceMaster.vlab?deviceId=2
Network Diagram
Lab Content
Device Controls
Thumbnails
R3
Router3#sh ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C 10.60.0.4/30 is directly connected, Serial1/1
D 10.60.0.0/30 [90/46738176] via 10.60.0.9, 00:03:09, Serial1/0
[90/46738176] via 10.60.0.5, 00:03:09, Serial1/1
C 10.60.0.8/30 is directly connected, Serial1/0
D 10.60.0.64/26 [90/20640000] via 10.60.0.5, 00:03:09, Serial1/1
D 10.60.0.128/26 [90/46354176] via 10.60.0.9, 00:03:09, Serial1/0
C 10.60.0.192/26 is directly connected, Loopback0
Router3#ping 10.60.0.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.60.0.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/33/36 ms
Router3#ping 10.60.0.65
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.60.0.65, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 32/33/36 ms
Router3#

NETW204 Lab Report