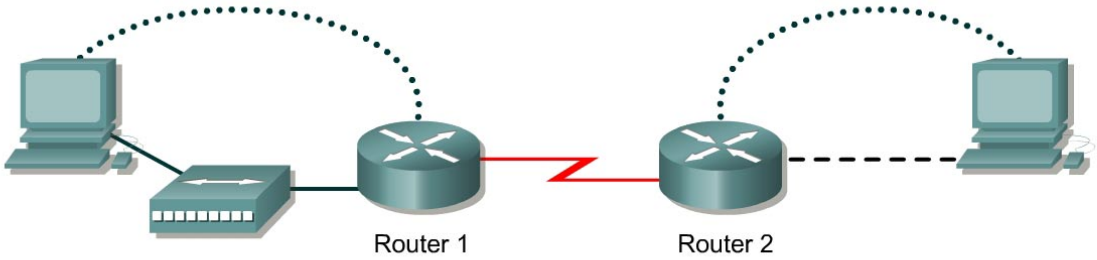
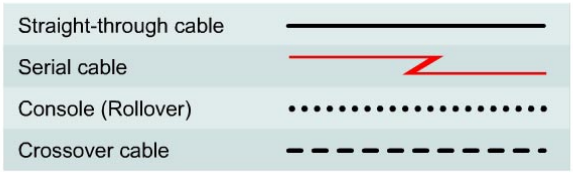
Lab 9.1.8 Last Route Update – Instructor Version 2500



Router Designation	Router Name	Fast Ethernet 0 Address	Interface type	Serial 0 Address	Subnet mask for both interfaces	Enable secret password	Enable, VTY and console password
Router 1	GAD	172.16.0.1	DCE	172.17.0.1	255.255.0.0	class	cisco
Router 2	BHM	172.18.0.1	DTE	172.17.0.2	255.255.0.0	class	cisco



Objective

- Gather information about routing updates and routing protocols.

Background/Preparation

Cable a network similar to the one in the diagram. Any router that meets the interface requirements displayed on the above diagram, such as. 800, 1600, 1700, 2500, 2600 routers, or a combination, may be used. Please refer to the chart at the end of the lab to correctly identify the interface identifiers to be used based on the equipment in the lab. The configuration output used in this lab is produced from 1721 series routers. Any other router used may produce a slightly different output. The following steps are intended to be executed on each router unless specifically instructed otherwise.

Start a HyperTerminal session as performed in the Establishing a HyperTerminal session lab.

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps on all routers in this lab assignment before continuing.

Step 1 Configure the routers

a. On the routers, enter the global configuration mode and configure the hostname as shown in the chart. Then configure the console, virtual terminal, and enable passwords. If there is a problem doing this, refer to the Configuring Router Passwords lab. Next configure the interfaces according to the chart. If there is a problem doing this, refer to the Configuring Host Tables lab.

Finally configure the RIP routing. This is covered in the Configuring RIP lab if help is needed. Do not forget to save the configurations to the startup configuration file.

Step 2 Configure the hosts with the proper IP address, subnet mask and default gateway

Step 3 Verify that the internetwork is functioning by pinging the ~~Fast~~Ethernet interface of the other router

a. From the host attached to GAD, is it possible to ping the BHM router ~~Fast~~Ethernet interface?

Yes

b. From the host attached to BHM, is it possible to ping the GAD router ~~Fast~~Ethernet interface?

Yes

c. If the answer is no for either question, troubleshoot the router configurations to find the error. Then do the pings again until the answer to both questions is yes.

Step 4 Make sure that routing updates are being sent

a. Type the command **debug ip rip** at the privileged EXEC mode prompt. Wait for at least 45 seconds.

Was there any output from the debug command? Yes

```
GAD#
00:06:39: RIP: sending v1 update to 255.255.255.255 via Ethernet0
(172.16.0.1)
00:06:39: RIP: build update entries
00:06:39:       network 172.17.0.0 metric 1
00:06:39:       network 172.18.0.0 metric 2
00:06:39: RIP: sending v1 update to 255.255.255.255 via Serial0
(172.17.0.1)
00:06:39: RIP: build update entries
00:06:39:       network 172.16.0.0 metric 1
00:06:45: RIP: received v1 update from 172.17.0.2 on Serial0
00:06:45:      172.18.0.0 in 1 hops
```

b. Type **undebug all** to turn off debugging.

Step 5 Show the routing tables for each router

a. Examine the routing table entries, using command **show ip route** command on each router.

```
GAD
C    172.17.0.0/16 is directly connected, Serial0
C    172.16.0.0/16 is directly connected, Ethernet0
R    172.18.0.0/16 [120/1] via 172.17.0.2, 00:00:17, Serial0
BHM
C    172.17.0.0/16 is directly connected, Serial0
C    172.18.0.0/16 is directly connected, Ethernet0
R    172.16.0.0/16 [120/1] via 172.17.0.1, 00:00:19, Serial0
```

Step 6 Check the routing table for a specific route (IOS version must be at least 12.x)

a. From BHM privileged EXEC mode prompt enter **show ip route 172.16.0.0**.

b. When was the last update?

Answer will vary.

```
BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
```



```
  Last update from 172.17.0.0 on Serial0, 00:00:24 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:04 ago, via Serial0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.0 on Serial0, 00:00:01 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:09 ago, via Serial0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.1 on Serial0, 00:00:05 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:14 ago, via Serial0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.1 on Serial0, 00:00:12 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:14 ago, via Serial0
      Route metric is 1, traffic share count is 1
```

c. When did BHM receive the last RIP update? Answer will vary.

Wait five seconds and enter **show ip route 172.16.0.0** a second time.

d. What has changed from first time? Time since the last update.

Wait five seconds and enter **show ip route 172.16.0.0** a third time.

e. What has changed from second time? Time since the last update.

f. What is the default update time for RIP? 30 seconds

Step 7 Check the ip rip database on the BHM router

a. Type **show ip rip database** from the privileged EXEC mode prompt.

b. When was the last update? Answer will vary.

Wait five second and enter **show ip rip database**.

```
BHM#show ip rip database
172.16.0.0/16    auto-summary
172.16.0.0/16    [1] via 172.17.0.1, 00:00:11, Serial0
172.17.0.0/16    auto-summary
172.17.0.0/16    directly connected, Serial0
172.18.0.0/16    auto-summary
172.18.0.0/16    directly connected, Ethernet0
```

c. What has changed from the first time? Time since the last update.

Wait five seconds and enter **show ip rip database**.


```
BHM#show ip rip database
172.16.0.0/16    auto-summary
172.16.0.0/16    [1] via 172.17.0.1, 00:00:14, Serial0
172.17.0.0/16    auto-summary
172.17.0.0/16    directly connected, Serial0
172.18.0.0/16    auto-summary
172.18.0.0/16    directly connected, Ethernet0

BHM#show ip rip database
172.16.0.0/16    auto-summary
172.16.0.0/16    [1] via 172.17.0.1, 00:00:20, Serial0
172.17.0.0/16    auto-summary
172.17.0.0/16    directly connected, Serial0
172.18.0.0/16    auto-summary
172.18.0.0/16    directly connected, Ethernet0
```

d. What has changed from the second time? Time since the last update.

Step 8 Configure IGRP using AS number 101 on all routers. Leave RIP on all routers

Step 9 From BHM enter show ip route

a. List the routes shown in the routing table.

```
I    172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:10, Serial0
C    172.17.0.0/16 is directly connected, Serial0
C    172.18.0.0/16 is directly connected, Ethernet0
```

b. When did BHM receive the last IGRP update? Answer will vary.

Wait five seconds and enter **show ip route**.

c. What has changed from the first time? Time since the last update.

Wait five seconds and enter **show ip route**.

```
BHM#show ip route
<output omitted>

I    172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:17, Serial0
C    172.17.0.0/16 is directly connected, Serial0
C    172.18.0.0/16 is directly connected, Ethernet0

BHM#show ip route
<output omitted>

I    172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:23, Serial0
C    172.17.0.0/16 is directly connected, Serial0
C    172.18.0.0/16 is directly connected, Ethernet0

BHM#show ip route
<output omitted>

I    172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:05, Serial0
C    172.17.0.0/16 is directly connected, Serial0
C    172.18.0.0/16 is directly connected, Ethernet0
```

d. What has changed from the second time? Time since the last update

e. What is the default update time for IGRP? 90 seconds

Step 10 Check the routing protocol on router BHM

a. From the BHM privileged EXEC mode, enter **show ip protocols**.

```
BHM#show ip protocols
Routing Protocol is "igrp 101"
  Sending updates every 90 seconds, next due in 33 seconds
  Invalid after 270 seconds, hold down 280, flushed after 630
  Outgoing update filter list for all interfaces is
  Incoming update filter list for all interfaces is
  Default networks flagged in outgoing updates
  Default networks accepted from incoming updates
  IGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0
  IGRP maximum hopcount 100
  IGRP maximum metric variance 1
  Redistributing: igrp 101
  Routing for Networks:
       172.17.0.0
       172.18.0.0
  Routing Information Sources:
        172.17.0.1          100      00:01:07

 Gateway         Distance      Last Update
  Distance: (default is 100)

Routing Protocol is "rip"
  Sending updates every 30 seconds, next due in 16 seconds
  Invalid after 180 seconds, hold down 180, flushed after 240
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Redistributing: rip
  Default version control: send version 1, receive any version
    Interface             Send  Recv  Triggered RIP  Key-chain
    Ethernet0         1     1 2
    Serial0               1     1 2
  Automatic network summarization is in effect
  Maximum path: 4
  Routing for Networks:
    172.17.0.0
    172.18.0.0
  Routing Information Sources:
    Gateway         Distance      Last Update
    172.17..01          120      00::09
  Distance: (default is 120)
```

b. What protocols are listed? RIP and IGRP

c. The next update is due in how many seconds for each protocol? Answer will vary.

Upon completion of the previous steps, log off by typing **exit** and turn the router off.

Erasing and reloading the router

Enter into the privileged EXEC mode by typing **enable**.

If prompted for a password, enter **class**. If “class” does not work, ask the instructor for assistance.

```
Router>enable
```

At the privileged EXEC mode, enter the command **erase startup-config**.

```
Router#erase startup-config
```

The responding line prompt will be:

```
Erasing the nvram filesystem will remove all files! Continue?
[confirm]
```

Press **Enter** to confirm.

The response should be:

```
Erase of nvram: complete
```

Now at the privileged EXEC mode, enter the command **reload**.

```
Router(config)#reloadRouter#reload
```

The responding line prompt will be:

```
System configuration has been modified. Save? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Proceed with reload? [confirm]
```

Press **Enter** to confirm.

In the first line of the response will be:

```
Reload requested by console.
```

After the router has reloaded the line prompt will be:

```
Would you like to enter the initial configuration dialog? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Press RETURN to get started!
```

Press **Enter**.

The router is ready for the assigned lab to be performed.

Router Interface Summary					
Router Model	Ethernet Interface #1	Ethernet Interface #2	Serial Interface #1	Serial Interface #2	Interface #5
800 (806)	Ethernet 0 (E0)	Ethernet 1 (E1)			
1600	Ethernet 0 (E0)	Ethernet 1 (E1)	Serial 0 (S0)	Serial 1 (S1)	
1700	FastEthernet 0 (FA0)	FastEthernet 1 (FA1)	Serial 0 (S0)	Serial 1 (S1)	
2500	Ethernet 0 (E0)	Ethernet 1 (E1)	Serial 0 (S0)	Serial 1 (S1)	
2600	FastEthernet 0/0 (FA0/0)	FastEthernet 0/1 (FA0/1)	Serial 0/0 (S0/0)	Serial 0/1 (S0/1)	
In order to find out exactly how the router is configured, look at the interfaces. This will identify the type of router as well as how many interfaces the router has. There is no way to effectively list all of the combinations of configurations for each router class. What is provided are the identifiers for the possible combinations of interfaces in the device. This interface chart does not include any other type of interface even though a specific router may contain one. An example of this might be an ISDN BRI interface. The string in parenthesis is the legal abbreviation that can be used in IOS command to represent the interface.					

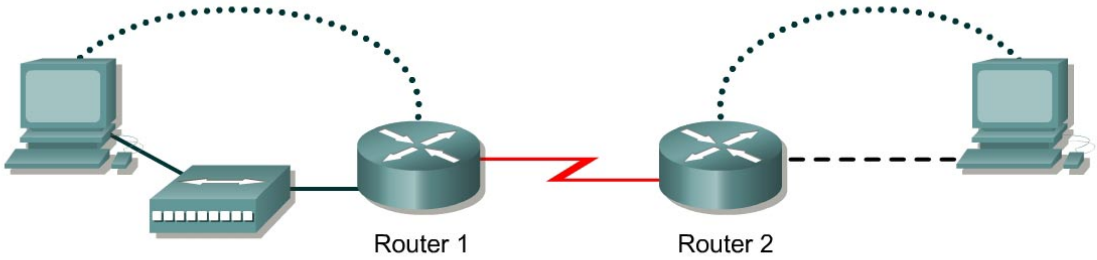
~~GAD Output~~

```
GAD#show running-config
hostname GAD
enable secret 5 $1$wBam$fmF.Vr/oYiNtcZRCGlCju.
interface Ethernet0
 ip address 172.16.0.1 255.255.0.0
interface Serial0
 ip address 172.17.0.1 255.255.0.0
 no fair-queue
 clockrate 56000
interface Serial1
 no ip address
router rip
 network 172.16.0.0
 network 172.17.0.0
router igrp 101
 network 172.16.0.0
 network 172.17.0.0
ip host GAD172.16.0.1 172.17.0.1
ip host BHM 172.18.0.1 172.17.0.2
ip classless
line con 0
 password cisco
 login
line aux 0
line vty 0 4
 password cisco
 login
end
GAD#
```

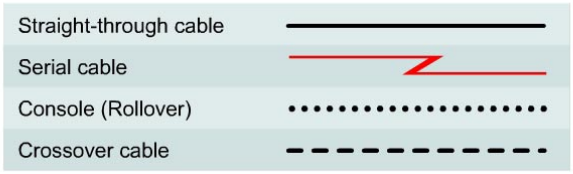
~~BHM Output~~

```
BHM#show running-config
hostname BHM
enable secret 5 $1$I5TX$qfgCU2fNc/iX7umjT.kcW/
interface Ethernet0
 ip address 172.18.0.1 255.255.0.0
interface Serial0
 ip address 172.17.0.2 255.255.0.0
 no fair-queue
interface Serial1
 no ip address
router rip
 network 172.17.0.0
 network 172.18.0.0
router igrp 101
 network 172.17.0.0
 network 172.18.0.0
ip host GAD172.16.0.1 172.17.0.1
ip host BHM 172.18.0.1 172.17.0.2
ip classless
line con 0
 password cisco
 login
line aux 0
line vty 0 4
 password cisco
 login
end
BHM#
```


Lab 9.1.8 Last Route Update – Instructor Version 2600



Router Designation	Router Name	Fast Ethernet 0 Address	Interface type	Serial 0 Address	Subnet mask for both interfaces	Enable secret password	Enable, VTY and console password
Router 1	GAD	172.16.0.1	DCE	172.17.0.1	255.255.0.0	class	cisco
Router 2	BHM	172.18.0.1	DTE	172.17.0.2	255.255.0.0	class	cisco



Objective

- Gather information about routing updates and routing protocols.

Background/Preparation

Cable a network similar to the one in the diagram. Any router that meets the interface requirements displayed on the above diagram, such as. 800, 1600, 1700, 2500, 2600 routers, or a combination, may be used. Please refer to the chart at the end of the lab to correctly identify the interface identifiers to be used based on the equipment in the lab. The configuration output used in this lab is produced from 1721 series routers. Any other router used may produce a slightly different output. The following steps are intended to be executed on each router unless specifically instructed otherwise.

Start a HyperTerminal session as performed in the Establishing a HyperTerminal session lab.

Note: Go to the erase and reload instructions at the end of this lab. Perform those steps on all routers in this lab assignment before continuing.

Step 1 Configure the routers

a. On the routers, enter the global configuration mode and configure the hostname as shown in the chart. Then configure the console, virtual terminal, and enable passwords. If there is a problem doing this, refer to the Configuring Router Passwords lab. Next configure the interfaces according to the chart. If there is a problem doing this, refer to the Configuring Host Tables lab.

Finally configure the RIP routing. This is covered in the Configuring RIP lab if help is needed. Do not forget to save the configurations to the startup configuration file.

Step 2 Configure the hosts with the proper IP address, subnet mask and default gateway

Step 3 Verify that the internetwork is functioning by pinging the FastEthernet interface of the other router

a. From the host attached to GAD, is it possible to ping the BHM router FastEthernet interface?

Yes

b. From the host attached to BHM, is it possible to ping the GAD router FastEthernet interface?

Yes

c. If the answer is no for either question, troubleshoot the router configurations to find the error. Then do the pings again until the answer to both questions is yes.

Step 4 Make sure that routing updates are being sent

a. Type the command **debug ip rip** at the privileged EXEC mode prompt. Wait for at least 45 seconds.

b. Was there any output from the debug command? Yes

```
GAD#
05:36:09: RIP: sending v1 update to 255.255.255.255 via Fastethernet0/0
(172.16.0.1)
05:36:09: RIP: build update entries
05:36:09:       network 172.17.0.0 metric 1
05:36:09:       network 172.18.0.0 metric 2
05:36:09: RIP: sending v1 update to 255.255.255.255 via Serial0/0
(172.17.0.1)
05:36:09: RIP: build update entries
05:36:09:       network 172.16.0.0 metric 1
05:36:09: RIP: received v1 update from 172.17.0.2 on Serial0/0
05:36:09:      172.18.0.0 in 1 hops
```

c. Type **undebug all** to turn off debugging.

Step 5 Show the routing tables for each router

a. Examine the routing table entries, using command **show ip route** command on each router.

```
GAD
C    172.17.0.0/16 is directly connected, Serial0/0
C    172.16.0.0/16 is directly connected, Fastethernet0/0
R    172.18.0.0/16 [120/1] via 172.17.0.2, 00:00:18 Serial0/0
BHM
C    172.17.0.0/16 is directly connected, Serial0/0
C    172.18.0.0/16 is directly connected, Fastethernet0/0
R    172.16.0.0/16 [120/1] via 172.17.0.1, 00:00:11 Serial0/0
```

Step 6 Check the routing table for a specific route (IOS version must be at least 12.x)

a. From BHM privileged EXEC mode prompt enter **show ip route 172.16.0.0**.

b. When was the last update? Answer will vary.

```
BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.0 on Serial0/0, 00:00:04 ago
```



```
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:04 ago, via Serial0/0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.0 on Serial0/0, 00:00:11 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:09 ago, via Serial0/0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.1 on Serial0/0, 00:00:16 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:14 ago, via Serial0/0
      Route metric is 1, traffic share count is 1

BHM#show ip route 172.16.0.0
Routing entry for 172.16.0.0/16
  Known via "rip", distance 120, metric 1
  Redistributing via rip
  Last update from 172.17.0.1 on Serial0/0, 00:00:22 ago
  Routing Descriptor Blocks:
  * 172.17.0.1, from 172.17.0.1, 00:00:14 ago, via Serial0/0
      Route metric is 1, traffic share count is 1
```

c. When did BHM receive the last RIP update? Answer will vary.

Wait five seconds and enter **show ip route 172.16.0.0** a second time.

d. What has changed from first time? Time since the last update

Wait five seconds and enter **show ip route 172.16.0.0** a third time.

e. What has changed from second time? Time since the last update

f. What is the default update time for RIP? 30 seconds

Step 7. Check the ip rip database on the BHM router

a. Type **show ip rip database** from the privileged EXEC mode prompt.

b. When was the last update? Answer will vary.

Wait five second and enter **show ip rip database**.

```
BHM#show ip rip database
172.16.0.0/16    auto-summary
172.16.0.0/16    [1] via 172.17.0.1, 00:00:21, Serial0/0
172.17.0.0/16    auto-summary
172.17.0.0/16    directly connected, Serial0/0
172.18.0.0/16    auto-summary
172.18.0.0/16    directly connected, Fastethernet0/0
```

c. What has changed from the first time? Time since the last update

Wait five seconds and enter **show ip rip database**.

```
BHM#show ip rip database
172.16.0.0/16    auto-summary
```



```
172.16.0.0/16     [1] via 172.17.0.1, 00:00:24, Serial0/0
172.17.0.0/16     auto-summary
172.17.0.0/16     directly connected, Serial0/0
172.18.0.0/16     auto-summary
172.18.0.0/16     directly connected, Fastethernet0/0

BHM#show ip rip database
172.16.0.0/16     auto-summary
172.16.0.0/16     [1] via 172.17.0.1, 00:00:02, Serial0/0
172.17.0.0/16     auto-summary
172.17.0.0/16     directly connected, Serial0/0
172.18.0.0/16     auto-summary
172.18.0.0/16     directly connected, Fastethernet0/0
```

d. What has changed from the second time? Time since the last update

Step 8 Configure IGRP using AS number 101 on all routers. Leave RIP on all routers

Step 9 From BHM enter show ip route

a. List the routes shown in the routing table.

```
I     172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:10, Serial0/0
C     172.17.0.0/16 is directly connected, Serial0/0
C     172.18.0.0/16 is directly connected, Fastethernet0/0
```

b. When did BHM receive the last IGRP update? Answer will vary.

Wait five seconds and enter **show ip route**.

c. What has changed from the first time? Time since the last update

```
BHM#show ip route
<output omitted>

I     172.16.0.0/16 [100/8576] via 172.17.0.1, 00:01:07, Serial0/0
C     172.17.0.0/16 is directly connected, Serial0/0
C     172.18.0.0/16 is directly connected, Fastethernet0/0

BHM#show ip route
<output omitted>

I     172.16.0.0/16 [100/8576] via 172.17.0.1, 00:01:25, Serial0/0
C     172.17.0.0/16 is directly connected, Serial0/0
C     172.18.0.0/16 is directly connected, Fastethernet0/0

BHM#show ip route
<output omitted>

I     172.16.0.0/16 [100/8576] via 172.17.0.1, 00:00:07, Serial0/0
C     172.17.0.0/16 is directly connected, Serial0/0
C     172.18.0.0/16 is directly connected, Fastethernet0/0
```

Wait five seconds and enter **show ip route**.

d. What has changed from the second time? Time since the last update

e. What is the default update time for IGRP? 90 seconds

Step 10 Check the routing protocol on router BHM

a. From the BHM privileged EXEC mode, enter **show ip protocols**.

```
BHM#show ip protocols
Routing Protocol is "igrp 101"
  Sending updates every 90 seconds, next due in 46 seconds
  Invalid after 270 seconds, hold down 280, flushed after 630
  Outgoing update filter list for all interfaces is
  Incoming update filter list for all interfaces is
  Default networks flagged in outgoing updates
  Default networks accepted from incoming updates
  IGRP metric weight K1=1, K2=0, K3=1, K4=0, K5=0
  IGRP maximum hopcount 100
  IGRP maximum metric variance 1
  Redistributing: igrp 101
  Routing for Networks:
       172.17.0.0
       172.18.0.0
  Routing Information Sources:
        172.17.0.1          100      00:00:44

 Gateway         Distance      Last Update
  Distance: (default is 100)

Routing Protocol is "rip"
  Sending updates every 30 seconds, next due in 16 seconds
  Invalid after 180 seconds, hold down 180, flushed after 240
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Redistributing: rip
  Default version control: send version 1, receive any version
    Interface              Send  Recv  Triggered RIP  Key-chain
    Fastethernet0/0          1     1 2
    Serial0/0                1     1 2
  Automatic network summarization is in effect
  Maximum path: 4
  Routing for Networks:
    172.17.0.0
    172.18.0.0
  Routing Information Sources:
    Gateway         Distance      Last Update
    172.17..01         120      00::013
  Distance: (default is 120)
```

b. What protocols are listed? RIP and IGRP

c. The next update is due in how many seconds for each protocol? Answer will vary.

Upon completion of the previous steps, log off by typing **exit** and turn the router off.

Erasing and reloading the router

Enter into the privileged EXEC mode by typing **enable**.

If prompted for a password, enter **class**. If “class” does not work, ask the instructor for assistance.

```
Router>enable
```

At the privileged EXEC mode, enter the command **erase startup-config**.

```
Router#erase startup-config
```

The responding line prompt will be:

```
Erasing the nvram filesystem will remove all files! Continue?
[confirm]
```

Press **Enter** to confirm.

The response should be:

```
Erase of nvram: complete
```

Now at the privileged EXEC mode, enter the command **reload**.

```
Router(config)#reloadRouter#reload
```

The responding line prompt will be:

```
System configuration has been modified. Save? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Proceed with reload? [confirm]
```

Press **Enter** to confirm.

In the first line of the response will be:

```
Reload requested by console.
```

After the router has reloaded the line prompt will be:

```
Would you like to enter the initial configuration dialog? [yes/no]:
```

Type **n** and then press **Enter**.

The responding line prompt will be:

```
Press RETURN to get started!
```

Press **Enter**.

The router is ready for the assigned lab to be performed.

Router Interface Summary					
Router Model	Ethernet Interface #1	Ethernet Interface #2	Serial Interface #1	Serial Interface #2	Interface #5
800 (806)	Ethernet 0 (E0)	Ethernet 1 (E1)			
1600	Ethernet 0 (E0)	Ethernet 1 (E1)	Serial 0 (S0)	Serial 1 (S1)	
1700	FastEthernet 0 (FA0)	FastEthernet 1 (FA1)	Serial 0 (S0)	Serial 1 (S1)	
2500	Ethernet 0 (E0)	Ethernet 1 (E1)	Serial 0 (S0)	Serial 1 (S1)	
2600	FastEthernet 0/0 (FA0/0)	FastEthernet 0/1 (FA0/1)	Serial 0/0 (S0/0)	Serial 0/1 (S0/1)	
In order to find out exactly how the router is configured, look at the interfaces. This will identify the type of router as well as how many interfaces the router has. There is no way to effectively list all of the combinations of configurations for each router class. What is provided are the identifiers for the possible combinations of interfaces in the device. This interface chart does not include any other type of interface even though a specific router may contain one. An example of this might be an ISDN BRI interface. The string in parenthesis is the legal abbreviation that can be used in IOS command to represent the interface.					

~~GAD Output~~

```
GAD#show running-config
hostname GAD
enable secret 5 $1$wBam$fmF.Vr/oYiNtcZRCGlCju.
interface Fastethernet0/0
 ip address 172.16.0.1 255.255.0.0
interface Serial0/0
 ip address 172.17.0.1 255.255.0.0
 no fair-queue
 clockrate 56000
interface Serial1
 no ip address
router rip
 network 172.16.0.0
 network 172.17.0.0
router igrp 101
 network 172.16.0.0
 network 172.17.0.0
ip host GAD172.16.0.1 172.17.0.1
ip host BHM 172.18.0.1 172.17.0.2
ip classless
line con 0
 password cisco
 login
line aux 0
line vty 0 4
 password cisco
 login
end
GAD#
```

~~BHM Output~~

```
BHM#show running-config
hostname BHM
enable secret 5 $1$I5TX$qfgCU2fNc/iX7umjT.kcW/
interface Fastethernet0/0
 ip address 172.18.0.1 255.255.0.0
interface Serial0/0
 ip address 172.17.0.2 255.255.0.0
 no fair-queue
interface Serial1
 no ip address
router rip
 network 172.17.0.0
 network 172.18.0.0
router igrp 101
 network 172.17.0.0
 network 172.18.0.0
ip host GAD172.16.0.1 172.17.0.1
ip host BHM 172.18.0.1 172.17.0.2
ip classless
line con 0
 password cisco
 login
line aux 0
line vty 0 4
 password cisco
 login
end
BHM#
```

