

## **Small Go Through For the PDF**

1. All the commands marked as bold.
2. Router 1, 2 Setup has been separated into two different headlines.
3. Router 1,2 Testing And Verification separated into two different headlines.
4. TASK 7 Has been Related commands included below.

### **Router 1 Setup Commands**

Press RETURN to get started!

**Router>enable**

Router#

**Router#conf t**

Enter configuration commands, one per line. End with CNTL/Z.

**Router(config)#hostname R1**

**R1(config)#no ip domain-lookup**

**R1(config)#enable secret class**

**R1(config)#banner motd &**

**Enter TEXT message. End with the character '&'.**

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**!!!AUTHORIZED ACCESS ONLY!!!**

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**&**

**R1(config)#exit**

R1#

%SYS-5-CONFIG\_I: Configured from console by console

**R1#exit**

R1 con0 is now available

Press RETURN to get started.

\*\*\*\*\*

**!!!AUTHORIZED ACCESS ONLY!!!**

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**R1>enable**

**Password: cisco**

**R1#conf t**

Enter configuration commands, one per line. End with CNTL/Z.

```
R1(config)#line console 0
R1(config-line)#password cisco
R1(config-line)#login
R1(config-line)#exit
R1(config)#line vty 0 4
R1(config-line)#password cisco
R1(config-line)#login
R1(config-line)#exit
R1(config)#interface fastethernet 0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shut
```

```
R1(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
R1(config-if)#interface serial 0/0/0
R1(config-if)#ip address 192.168.2.1 255.255.255.0
R1(config-if)# clock rate 64000
R1(config-if)#no shut
```

```
R1(config-if)#
```

```
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
```

## **Router 2 Setup Commands**

Press RETURN to get started!

**Router>enable**

Router#

**Router#conf t**

Enter configuration commands, one per line. End with CNTL/Z.

**Router(config)#hostname R2**

**R2(config)#no ip domain-lookup**

**R2(config)#enable secret class**

**R2(config)#banner motd &**

**Enter TEXT message. End with the character '&'.**

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**!!!AUTHORIZED ACCESS ONLY!!!**

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**&**

**R2(config)#exit**

R2#

%SYS-5-CONFIG\_I: Configured from console by console

**R2#exit**

R2 con0 is now available

Press RETURN to get started.

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**!!!AUTHORIZED ACCESS ONLY!!!**

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**R2>enable**

**Password: cisco**

**R2#conf t**

Enter configuration commands, one per line. End with CNTL/Z.

**R2(config)#line console 0**

**R2(config-line)#password cisco**

**R2(config-line)#login**

**R2(config-line)#exit**

**R2(config)#line vty 0 4**

**R2(config-line)#password cisco**

**R2(config-line)#login**

**R2(config-line)#exit**

```
R2(config)#interface fastethernet 0/0
R2(config-if)#ip address 192.168.3.1 255.255.255.0
R2(config-if)#no shut
```

```
R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

```
R2(config-if)#interface serial 0/0/0
R2(config-if)#ip address 192.168.2.2 255.255.255.0
R2(config-if)#no shut
```

```
R2(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
```

### **Router 1 Testing & Verification**

```
R1>enable
```

```
Password: class
```

```
R1#show ip route
```

Codes: C - connected, S - static, I - IGRP, 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, E - EGP  
i - IS-IS, 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
```

```
C 192.168.1.0/24 is directly connected, FastEthernet0/0
```

```
C 192.168.2.0/24 is directly connected, Serial0/0/0
```

```
R1#show ip brief interface
```

```
^
```

```
% Invalid input detected at '^' marker.
```

```
R1#show ip interface brief
```

```
Interface IP-Address OK? Method Status Protocol
```

```
FastEthernet0/0 192.168.1.1 YES manual up up
```

```
FastEthernet0/1 unassigned YES NVRAM administratively down down
```

```
Serial0/0/0 192.168.2.1 YES manual up up
```

```
Serial0/0/1 unassigned YES NVRAM administratively down down
```

```
Vlan1 unassigned YES NVRAM administratively down down
```

**R1#ping 192.168.1.1**

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/5 ms

**R1# ping 192.168.2.2**

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.2.2, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 18/23/29 ms

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User Access Verification

**Password:cisco**

**R1>enable**

**Password: class**

R1# show running-config

Building configuration...

Current configuration : 949 bytes

!

version 12.3

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname R1

!

!

!

enable secret 5 \$1\$mERr\$9cTjUIEqNGurQiFU.ZeCi1

!

!

!

!

!

!

no ip cef

no ipv6 cef

### **R1#show running-config**

Building configuration...

Current configuration : 949 bytes

!

version 12.3

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname R1

!

!

!

enable secret 5 \$1\$mERr\$9cTjUIEqNGurQiFU.ZeCi1

!

!

!

!

!

!

no ip cef

no ipv6 cef

--More--

### **Router 2 Testing & Verification**

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User Access Verification

**Password:cisco**

**R2>enable**

**Password: class**

**R2#copy running-config startup-config**

Destination filename [startup-config]?

Building configuration...

[OK]

**R2#show ip route**

Codes: C - connected, S - static, I - IGRP, 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, E - EGP  
i - IS-IS, 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

C 192.168.2.0/24 is directly connected, Serial0/0/0  
C 192.168.3.0/24 is directly connected, FastEthernet0/0

R2#show ip interface brief

Interface IP-Address OK? Method Status Protocol

FastEthernet0/0 192.168.3.1 YES manual up up

FastEthernet0/1 unassigned YES NVRAM administratively down down

Serial0/0/0 192.168.2.2 YES manual up up

Serial0/0/1 unassigned YES NVRAM administratively down down

Vlan1 unassigned YES NVRAM administratively down down

**R2#ping 192.168.3.1**

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.3.1, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 0/2/4 ms

**R2#ping 192.168.2.1**

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.2.1, timeout is 2 seconds:

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/6/14 ms

R2#

Ping not worked

**R2#show running-config**

Building configuration...

Current configuration : 916 bytes

!

version 12.3

```
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname R2
!
!
!
enable secret 5 $1$mERr$9cTjUIEqNGurQiFU.ZeCi1
!
!
!
!
!
!
no ip cef
no ipv6 cef
--More--
```

**Step 1: Attempt to ping from the host connected to R1 to the host connected to R2.**

**C:\>ping 192.168.3.10**

Pinging 192.168.3.10 with 32 bytes of data:

```
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
```

Ping statistics for 192.168.3.10:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

**Step 2: Attempt to ping from the host connected to R1 to router R2.**

Cisco Packet Tracer PC Command Line 1.0

**C:\>ping 192.168.3.1**

Pinging 192.168.3.1 with 32 bytes of data:

```
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
```



Ping statistics for 192.168.3.1:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>

**Step 3: Attempt to ping from the host connected to R2 to router R1.**

**C:\>ping 192.168.1.1**

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.3.1: Destination host unreachable.

Reply from 192.168.3.1: Destination host unreachable.

Request timed out.

Reply from 192.168.3.1: Destination host unreachable.

Ping statistics for 192.168.1.1:

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),