Redes de Computadoras

Reporte Prácticas

Laboratorio / Packet Tracer

Student Name		Date	MM	DD	YYYY
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Practice Name

Point-to-Point Single-Area OSPFv2 Configuration

Competencies to develop

Part 1: Configure Router IDs.

Part 2: Configure Networks for OSPF Routing.

Part 3: Configure Passive Interfaces.

Part 4: Verify OSPF configuration.

The Most Important	The most complicated
Configure Networks for OSPF Routing	Configure Networks for OSPF Routing
Configure Router IDs.	Calculate wildcard

Errors	How they were resolved
1.-	
2.-	
3.-	

All Troubleshooting activities must be use this part to report the errors found and their solution. In the session how the problem was solved, put the commands that solve the problem

Conclusions

I did have a problem with the wildcard because I didn't know how to calculate, but I can resolve it.
It was a good practice to start learn how to configurate OSPFv2 in a point to pint single area.

Evidences

How many statements are required to configure OSPF to route all the networks attached to router R1?

R = 3

The LAN attached to router R1 has a /24 mask. What is the equivalent of this mask in dotted decimal representation?

R = 255.255.255.0

Subtract the dotted decimal subnet mask from 255.255.255.255. What is the result?

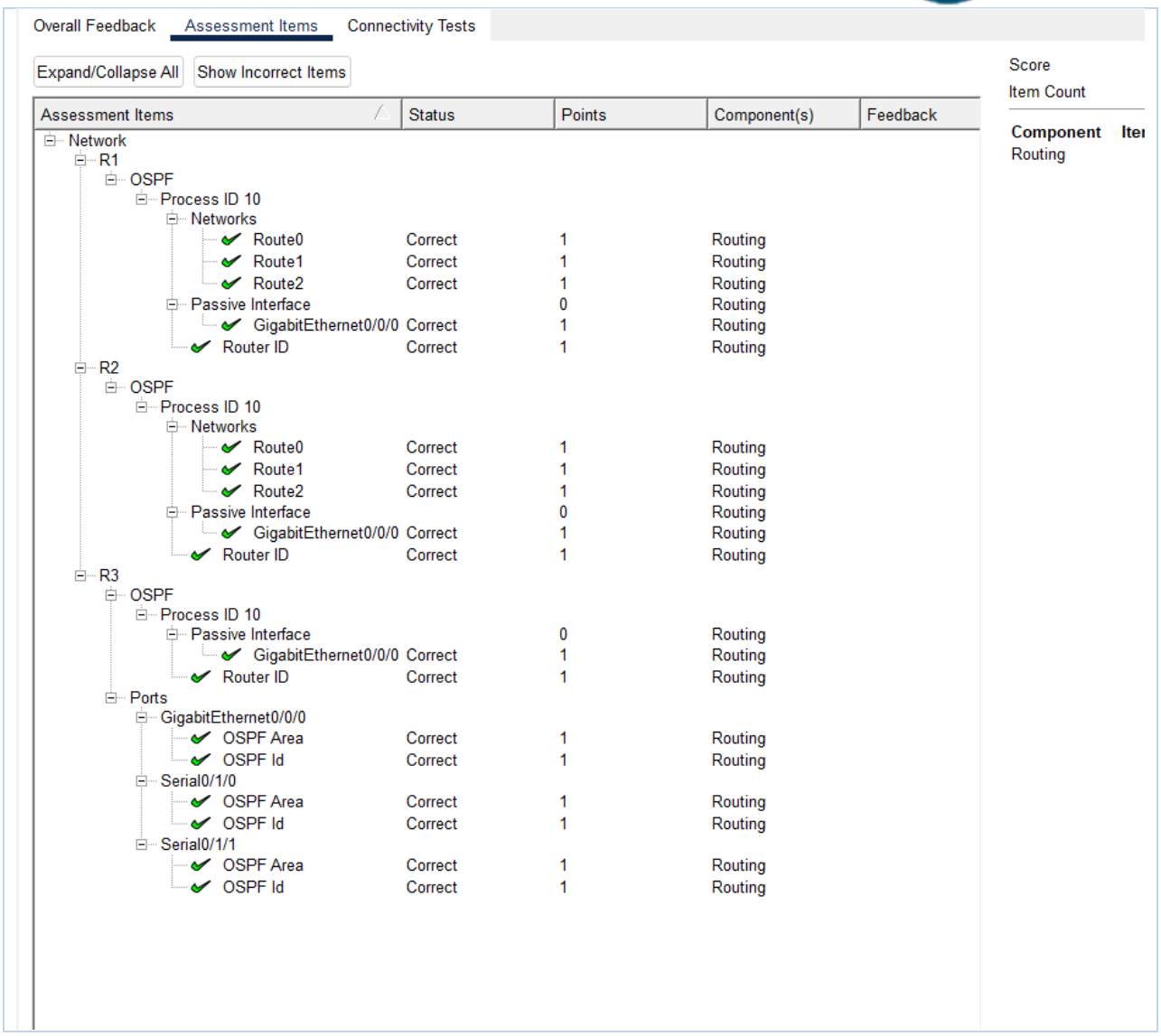
R = 0.0.0.255

What is the dotted decimal equivalent of the /30 subnet mask?

R = 255.255.255.252

Subtract the dotted decimal representation of the /30 mask from 255.255.255.255. What is the result?

R = 0.0.0.3



Overall Feedback | Assessment Items | Connectivity Tests

Expand/Collapse All | Show Incorrect Items

Score
Item Count

Assessment Items	Status	Points	Component(s)	Feedback
Network				
R1				
OSPF				
Process ID 10				
Networks				
Route0	Correct	1	Routing	
Route1	Correct	1	Routing	
Route2	Correct	1	Routing	
Passive Interface		0	Routing	
GigabitEthernet0/0/0	Correct	1	Routing	
Router ID	Correct	1	Routing	
R2				
OSPF				
Process ID 10				
Networks				
Route0	Correct	1	Routing	
Route1	Correct	1	Routing	
Route2	Correct	1	Routing	
Passive Interface		0	Routing	
GigabitEthernet0/0/0	Correct	1	Routing	
Router ID	Correct	1	Routing	
R3				
OSPF				
Process ID 10				
Passive Interface		0	Routing	
GigabitEthernet0/0/0	Correct	1	Routing	
Router ID	Correct	1	Routing	
Ports				
GigabitEthernet0/0/0				
OSPF Area	Correct	1	Routing	
OSPF Id	Correct	1	Routing	
Serial0/1/0				
OSPF Area	Correct	1	Routing	
OSPF Id	Correct	1	Routing	
Serial0/1/1				
OSPF Area	Correct	1	Routing	
OSPF Id	Correct	1	Routing	

Component	Ite
Routing	

	S0/1/1	10.1.1.6	/30
PC1	NIC	192.168.10.10	/24
PC2	NIC	192.168.20.10	/24
PC3	NIC	192.168.30.10	/24

Objectives

Part 1: Configure Router IDs.

Part 2: Configure Networks for OSPF Routing.

Part 3: Configure Passive Interfaces.

Part 4: Verify OSPF configuration.

Background

In this activity, you will activate OSPF routing using network statements and wildcard masks, configuring OSPF routing on interfaces, and by using network statements quad-zero masks. In addition, you will configure explicit router IDs and passive interfaces.

Instructions

Part 1: Configure router IDs.

a. Start the OSPF routing process on all three routers. Use process ID **10**.

```
Router(config)# router ospf process-id
```

b. Use the router-id command to set the OSPF IDs of the three routers as follows

- R1: **1.1.1.1**
- R2: **2.2.2.2**
- R3: **3.3.3.3**

Use the following command:

```
Router(config-router)# router-id rid
```

Part 2: Configure Networks for OSPF Routing

Step 1: Configure networks for OSPF routing using network commands and wildcard masks.

How many statements are required to configure OSPF to route all the networks attached to router R1?

The LAN attached to router R1 has a /24 mask. What is the equivalent of this mask in dotted decimal representation?

Subtract the dotted decimal subnet mask from 255.255.255.255. What is the result?

What is the dotted decimal equivalent of the /30 subnet mask?

Subtract the dotted decimal representation of the /30 mask from 255.255.255.255. What is the result?

a. Configure the routing process on R1 with the network statements and wildcard masks that are required to activate OSPF routing for all the attached networks. The network statement values should be the network or subnet addresses of the configured networks.

```
Router(config-router)# network network-address wildcard-mask area area-id
```

b. Verify that OSPF has been configured properly by the displaying the running configuration. If you find an error, delete the network statement using the **no** command and reconfigure it.

Step 2: Configure networks for OSPF routing using interface IP addresses and quad-zero masks.

On router R2, configure OSPF using network commands with the IP addresses of the interfaces and quad-zero masks. The syntax of the network command is the same as was used above.

ime Elapsed: 00:08:03 Completion: 100%

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