CCNP BSCI(642-901) Lab ? ISIS EIGRP Redistribution

 The Pass4sure company recently completed merging with Lynaic. The two companies have been using separate routing protocols on their corporate networks, and an immediate solution is required for the two companied to begin sharing data. A boundary router, Amadiya, has been established to perform mutual redistribution of route information between the two networks. Configure route redistribution from EIGRP into IS-IS and from IS-IS into EIGRP on the boundary route per the following requirements:

1. Seed metric for EIGRP must have the following characteristics:

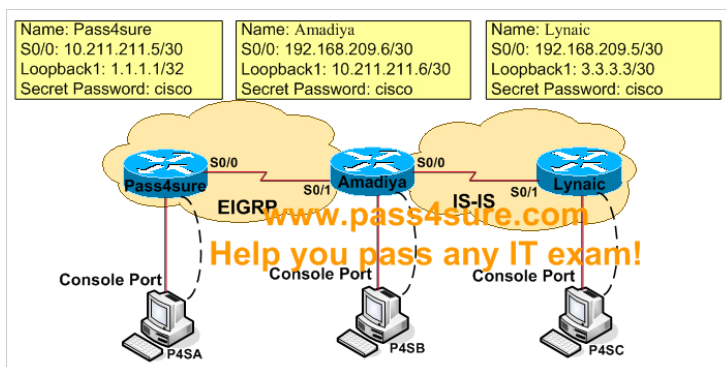**Bandwidth=512 Kbps**

2. Delay=1003. Reliability=255

4. Load=1

5. MTU=1500

Seed metric for IS-IS must be set to 50.

Only redistribute Level-1 IS-IS routes into EIGRP.

Redistribute EIGPR routes into IS-IS as Level-1 routes.

Answer and Explanation:

Before we start to configure anything, we have to learn the Autonomous System (AS) number of EIGRP by using the show running-config on Amadiya router (remember you have to type cisco as its password to enter privileged mode)

From the output, we know that the AS number of EIGRP is 100, which we will use in the next commands.

Redistribute Level-1 IS-IS routes into EIGRP:

Amadiya#configure terminal
Amadiya(config)#router eigrp 100
Amadiya(config-router)#redistribute isis level-1 metric 512 10 255 1 1500

Let's explain the last command redistribute isis level-1 metric 512 10 255 1 1500. To understand why we use these numbers, please see the structure of the above command:

redistribute isis {level-1 | level-1-2 | level-2} metric {bandwidth} {delay} {reliability} {load} {MTU}

{level-1 | level-1-2 | level-2}: because the question required we redistribute level-1 IS-IS into EIGRP so the easy decision here is **level-1**.

metric {bandwidth} {delay} {reliability} {load} {MTU}: From the question, we can identify:

Bandwidth = 512 kbps
Delay = 100
Reliability = 255
Load = 1
MTU = 1500

One thing you have to notice that if the delay is written without unit, we understand that its unit is **microsecond**. But in the "redistribution isis" command, the unit of delay is **tens of microsecond**. Therefore we have to divide the given number by 10, so the real delay we will use is: Delay (in redistribution command) = 100 (microseconds)/10 = 10 (tens of microseconds).

In the real exam, you might be given a delay parameter with unit, for example: **Delay = 3ms** then you have to change the unit to tens of microsecond. Delay = 3ms = 3000 microseconds = **300** tens of microseconds, therefore we have to use **300** for the delay parameter in the "redistribute isis ..." command.

Other parameters are normal and we can use them in the redistribution command without calculation.

ISIS, by default, does not advertise connected networks when redistributing into another routing protocol, so we have to use the redistribute connected command to advertise connected networks (of Amani router).

Amadiya(config-router)#redistribute connected

Redistribute EIGRP routes into IS-IS as Level-1 routes:

The question requires "the seed metric for IS-IS must be set to 50" so we just need to use a metric of 50 in the command

Amadiya(config-router)#exit
Amadiya(config)#router isis
Amadiya(config-router)#redistribute eigrp 100 level-1 metric 50

Finally, save the configuration:

Amadiya(config-router)#end
Amadiya#copy running-config startup-config

Then, you can validate the configuration:

Amadiya#show ip route (You should do a SHOW IP ROUTE and see if the eigrp routes are on the ISIS side etc?..Thanks,dmac:))

Don't forget to ping from Portland to Lynaic to make sure it works well!

That is all, hope to helpful for you. Best Luck for ur BSCI 642-901 Exam.

If you need the complete pass4sure test questions for 642-901 Exam, you can visit Latest Pass4sure 642-901,maye it helpful for ur exam!