OSPF Single Area

Goal:

> **All IP addresses have been preconfigured for you.**
> The following loopback interfaces have been configured:
> > Chicago: 1.1.1.1 /24
> > NYC: 2.2.2.2 /24
> > Seattle: 3.3.3.3 /24

1. Chicago: Configure OSPF (process-id 1) and advertise all networks by using a single network statement. Use area0

2. NYC: Configure OSPF (process-id 1) and advertise all networks by using 2 network statements, area0.

3. Seattle: Configure OSPF (process-id 1) and advertise all networks by using 3 network statements, area0.
> Optional: the loopback interfaces appear as /32's in the routing table, make sure they appear as /24's just as they are configured.

4. NYC: change the router-id to 22.22.22.22, make sure you see this change from Seattle by using show commands.

5. Traffic from Seattle to Chicago should use the link between NYC-Seattle, use the cost command to achieve this.

6. Remove the previous change with the cost-command, achieve the same goal by using the bandwidth command.

7. Enable clear-text authentication between NYC and Chicago. Use "cisco" as a password.

8. Enable MD5 authentication between Seattle and Chicago. Use "secure" as a password.

9. Change the OSPF timers on the link between NYC and Seattle so hello packets are being sent every 5 seconds.

10. The Chicago router will have access to the Internet in the future, you need to advertise a default route in OSPF so NYC and Seattle will send traffic for unknown networks to Chicago.

Chicago
Lo0: 1.1.1.1/24

ge0/1   ge0/2
.1   .1

192.168.12.0/24   192.168.13.0/24

ge0/1 .2   .3 ge0/1

.2   .3
ge0/2   ge0/2

NYC   192.168.23.0/24   **Seattle**
Lo0: 2.2.2.2/24   Lo0: 3.3.3.3/24