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# Create a Network Load Balancer

You are a DevOps Engineer at Globomantics. Your team has spun up two web servers with a simple website on them. You have been asked to create a Network Load Balancer that points to these two web servers.

1. From the top left **Services** menu, choose **EC2** under **Compute**.
2. On the left hand menu, scroll down to the **Load Balancing** menu heading, and click on **Load Balancers**.
3. Click the **Create Load Balancer** button.
4. In the **Network Load Balancer** box in the middle, click the **Create** button.
5. On the **Create Network Load Balancer** page, in the **Load balancer name** field, type web-server-lb to name your Load Balancer.
6. Under **Scheme**, ensure that **internet-facing** is selected.
7. In the **Network mapping** section, keep the default **VPC** selected, and check the boxes for just the **us-west-2a** and **us-west-2b** zones.
8. In the **Listeners and routing** section, ensure that **TCP** is the **Protocol** selected, and that the **Port** is 80, then click **Create target group**.
9. Enter the **Target group name** as nlb-target-group.
10. Select **TCP** for the **Protocol**.
11. In the **Health checks** section, expand the **Advanced health check settings** dropdown.
12. Change the **Healthy threshold** to 2, and set the **Interval** to 10seconds. This will allow the EC2 instances in the Target group to become healthy more quickly, so that you can complete the next Challenge without waiting as long.
13. Click **Next,** then select both of the instances in the **Available instances** table and click **Include as pending below** to register them as targets.
14. Click **Create target group,** then close that tab to return to the load balancer creation form.
15. Click the refresh button in the **Listeners and routing** section and you should see the new target group available in the dropdown – select it.
16. Click **Create load balancer**, and after after a short delay you should see a check mark and green text that says **Successfully created load balancer**.
17. Click the **View load balancers** button to return to the **Load Balancers** page.

Congratulations! You have successfully created a Network Load Balancer and configured it to forward port 80 HTTP requests to a set of 2 web servers. On the Load Balancers page, you should see your new Network Load Balancer listed, with the name web-server-lb.

# Verify the Web Page Through the Load Balancer

1. If you're not on the **Load Balancers** page, click the **Services** dropdown at the top left of the AWS Console, and then choose **EC2** under **Compute**. Scroll down on the left hand menu, and under **Load Balancing**, click on **Load Balancers**.
2. You should see a Network Load Balancer named **web-server-lb**, which you created in the previous Challenge. Ensure the box to the very left of the **web-server-lb** row is selected.
3. Take a look at the **State** of the load balancer, if it is showing the State as **provisioning**, you'll need to give AWS a few minutes to complete its creation. Near the top right of the screen, there is an icon with two arrows forming a circle. This is the refresh button. Click this button to refresh until the network load balancer has a status of **active**.
4. In that same **Description** tab, look for the **DNS name** attribute. Copy the Load Balancer's DNS name to your clipboard.
5. Open a new browser tab, paste in the **DNS name** that you copied from the previous step and hit enter.
6. A Web Page should load with the text **Globomantics Original Web Page**.

Note: This may take a few minutes to go live.

Congratulations! You have verified that your web page can be loaded through the Network Load Balancer that you have just created.