## Lab Report

## **Your Performance**

Your Score: 6 of 8 (75%) Pass Status: Not Passed

Elapsed Time: 10 minutes 42 seconds Required Score: 100%

## **Task Summary**

- ✓ Create the NLB cluster Hide Details
  - Use CorpNLB.CorpNet.com for the cluster name
  - Use 192.168.10.25/24 for the cluster IP address
  - Use Unicast operation mode
- ✓ Add CorpNLB1 as a cluster host Hide Details
  - Add the server as a cluster host
  - Configure the server with priority 1
- Add CorpNLB2 as a cluster host Hide Details
  - Add the server as a cluster host
  - Configure the server with priority 2
- Create a port rule for ports 0 to 1023 **Hide Details** 
  - Create the port rule
  - Create the rule for both TCP and UDP
  - Use Multiple host for the filtering mode
  - Use None for the client affinity
  - Distribute the load equally between both servers
- X Create a port rule for port 6066 **Hide Details** 
  - Create the port rule
  - Create the rule for both TCP and UDP
  - Use Multiple host for the filtering mode
  - Use None for the client affinity
  - Configure CorpNLB2 with a load weight of 100
  - Configure CorpNLB1 with a load weight of 0
- Create a port rule for port 32187
  - Create the port rule
  - Create the rule for both TCP and UDP
  - Use Single host for the filtering mode
  - Configure CorpNLB1 with a handling priority of 1
  - Configure CorpNLB2 with a handling priority of 2
- ✓ Create a port rule for ports 49152 through 65535 **Hide Details** 
  - Create the port rule

- Create the rule for both TCP and UDP 🛅 Disable the port range
- Create a host record in DNS for the NLB cluster **Hide Details** 
  - Create the CorpNLB A record in the CorpNet.com zone
  - Configure 192.168.10.25 for the IP address

## **Explanation**

In this lab, you create an NLB cluster using the CorpNLB1 and CorpNLB2 servers and define port rules to customize how the servers respond by completing the following tasks.

- Create a new cluster using the following parameters:
  - Cluster host: CorpNLB1 • Interface name: Corp
  - Priority (host identifier): 1
  - Cluster IP address: 192.168.10.25/24 • Full Internet name: CorpNLB.CorpNet.com
  - Cluster operation mode: unicast
- Edit or create the following port rules:

| Ports          | Protocols   | Filtering mode          | Client affinity |
|----------------|-------------|-------------------------|-----------------|
| 0 to 1023      | TCP and UDP | Multiple host           | None            |
| 6066           | TCP and UDP | Multiple host           | None            |
| 32187          | TCP and UDP | Single host             | N/A             |
| 49152 to 65535 | TCP and UDP | Disable this port range | N/A             |

- Add CorpNLB2 as a cluster host using the following parameters:
  - Cluster host: CorpNLB2
  - Interface name: Corp
  - Priority (host identifier): 2
- Edit CorpNLB2 ports using the following parameters:
  - For port 6066, configure a load weight of **100**.
  - For port 32187, configure a handling priority of **2**.
- For CorpNLB1, edit the port rule for port 6066 with a load weight of **0**.
- On CorpDC3, use DNS console to create an A record using the following parameters:
  - Zone: CorpNet.com • Host name: CorpNLB IP address: 192.168.10.25

Following are steps that an expert might take to perform the tasks in this lab:

- 1. Create an NLB cluster as follows:
  - a. From Server Manager, select **Tools** > **Network Load Balancing Manager**.
  - b. Right-click Network Load Balancing Clusters and select New Cluster.
  - c. Type the *name* of a cluster host.
  - d. Select Connect.
  - e. Select the *interface* that the cluster will use; then click **Next**.
  - f. Make sure the Priority is set to 1.
  - g. Make sure the default state is set to **Started**; then click **Next**.
  - h. Click Add.
  - i. Make sure **Add IPv4 address** is selected.
  - j. Enter the *IP address*.
  - k. Press **Tab** to auto-populate the *subnet mask*; then click **OK**.

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- l. Click Next.
- m. Type the *full Internet name* for the NLB cluster.
- n. Select the *cluster operation mode*; then click **Next**.
- 2. Create and edit port rules as follows:
  - a. Select the existing *rule*.
  - b. Select **Edit** to modify an existing port rule.
  - c. Under Port range, modify the ports.
  - d. Under Protocols, select the appropriate *protocols*.
  - e. Under Filtering mode, select the *filtering mode*.
  - f. Select the *affinity*; then click **OK**.
  - g. Select **Add** to create a new rule.
  - h. Under Port range, modify the *ports*.
  - i. Under Protocols, select the appropriate *protocols*.
  - j. Under Filtering mode, select the *filtering mode*.
  - k. Select the *affinity*; then click **OK**.
  - l. Repeat steps 2g-2k to create additional port rules.
  - m. Click **Finish** to create the cluster.
- 3. Add CorpNLB2 as a cluster host as follows:
  - a. In Network Load Balancing Manager, right-click the *cluster* and select **Add Host To Cluster**.
  - b. Type the *name* of a cluster host.
  - c. Click Connect.
  - d. Select the *interface* that the cluster will use; then click **Next**.
  - e. Make sure the Priority is set to 2.
  - f. Make sure the default state is set to **Started**; then click **Next**.
- 4. Modify port rules on CorpNLB2 as follows:
  - a. Modify the load weight as follows:
    - 1. Select the *port rule* you wish to modify and click **Edit**.
    - 2. Under Load weight, deselect **Equal**.
    - 3. Enter the *load weight*; then click **OK**.
  - b. Modify the handling priority as follows:
    - 1. Select the *port rule* you wish to modify and click **Edit**.
    - 2. Enter the *handling priority*; then click **OK**.
  - c. Click **Finish** to add the host to the cluster.
- 5. Modify port rules on CorpNLB1 as follows:
  - a. In the Network Load Balancing Manager console, right-click CorpNLB1(Corp) and select Host Properties.
  - b. Select the **Port Rules** tab.
  - c. Select the port rule **6066**.
  - d. Click Edit.
  - e. Deselect **Equal** to modify the load weight.
  - f. Enter the new *load weight*; then click **OK**.
  - g. Click **OK** to close the properties dialog.
- 6. Create a host (A) record as follows:
  - a. From the top menu, select the **Inside** location tab.
  - b. Select **CorpDC3**.
  - c. From Server Manager, select **Tools** > **DNS**.
  - d. Expand CorpDC3 > Forward Lookup Zones.
  - e. Right-click CorpNet.com and select New Host (A or AAAA).
  - f. Enter the *host name*.
  - g. Enter the *IP address*.
  - h. Click Add Host.
  - i. Click **OK**.
  - j. Click **Done** to close the New Host dialog.