





## Module 3 - Lab 6: Create a Private Link service by using the Azure portal

-  An Azure Private Link service refers to your own service that is managed by Private Link. You can give Private Link access to the service or resource that operates behind Azure Standard Load Balancer. Consumers of your service can access it privately from their own virtual networks. In this lab, you learn how to create a Private Link service by using the Azure portal.


### Task 1: Sign in to the Azure portal

- ☐ 1. Sign in to the Azure portal  <https://portal.azure.com> using the username  [sheikhnasir8E0UI@gdcs4.com](mailto:sheikhnasir8E0UI@gdcs4.com) and password  [RO1vRC28T7k9UAcg](#)


### Task 2: Create the virtual network

-  In this section, you'll create a virtual network and subnet.


- ☐ 1. On the upper-left side of the screen, select **Create a resource > Networking > Virtual network** or search for **Virtual network** in the search box.
- ☐ 2. Select **+ Create**. In **Create virtual network**, enter or select this information in the **Basics** tab:

Setting	Value
<b>Project Details</b>	
Subscription	CloudShare4
Resource Group	unrecognised token (\$gd.com(azure).resourceGroups(myResourceGroupLB))
<b>Instance details</b>	
Name	 <a href="#">myVNet</a>
Region	East US

- ☐ 3. Select the **IP Addresses** tab or select the **Next: IP Addresses** button at the bottom of the page.
- ☐ 4. In the **IP Addresses** tab, enter this information:


Setting	Value
IPv4 address space	 <a href="#">10.3.0.0/16</a>

- ☐ 5. Under **Subnet name**, select **+Add Subnet**.
- ☐ 6. In **Edit subnet**, enter this information:


Setting	Value
Subnet name	myBackendSubnet
Subnet address range	 <a href="#">10.3.0.0/24</a>

- ☐ 7. Select **Add**.
- ☐ 8. Select the **Review + create** tab or select the **Review + create** button.
- ☐ 9. Select **Create**.

### Task 3: Create a standard load balancer

-  Use the portal to create a standard internal load balancer. The name and IP address you specify are automatically configured as the load balancer's front end.


- ☐ 1. On the upper-left side of the portal, select **Create a resource > Networking > Load Balancer**.
- ☐ 2. Select **+Create** and on the **Basics** tab of the **Create load balancer** page, enter or select the following information:

Setting	Value
Subscription	CloudShare4
Resource group	unrecognised token (\$gd.com(azure).resourceGroups(myResourceGroupLB)) from the box.
Name	 <a href="#">myLoadBalancer</a>
Region	East US.
Type	Internal.

Setting	Value
SKU	Standard.
Virtual network	myVNet.
IP address assignment	Static.
Private IP address	Enter an address that's in the address space of your virtual network and subnet. An example is 10.3.0.7.

- ☐ 3. Select the **Next: Frontend IP Configuration** button at the bottom of the page.


- ☐ 4. Select **+Add a frontend IP** and enter the following information

Setting	Value
Name	 <a href="#">LoadBalancerFrontEnd</a>
Virtual network	myVNet.
IP address assignment	Static.
Private IP address	Enter an address that's in the address space of your virtual network and subnet. An example is 10.3.0.7.


- ☐ 5. Accept the defaults for the remaining settings, and then select **Review + create**

- ☐ 6. On the **Review + create** tab, select **Create**.


#### Task 4: Create standard load balancer resources

-  In this task, you configure load balancer settings for a back-end address pool and a health probe. You also specify load balancer rules.


A back-end address pool contains the IP addresses of the virtual NICs connected to the load balancer. This pool lets you distribute traffic to your resources. Create the back-end address pool named **myBackendPool** to include resources that load balance traffic.

- ☐ 1. Select **All Services** from the leftmost menu.
- ☐ 2. Select **All resources**, and then select **myLoadBalancer** from the resources list.
- ☐ 3. Under **Settings**, select **Backend pools**, and then select **+Add**.
- ☐ 4. On the **Add a backend pool** page, enter  [myBackendPool](#) as the name for your back-end pool, and then select **Add**.

#### Task 5: Create a health probe

-  Use a health probe to let the load balancer monitor resource status. Based on resource response to health checks, the health probe dynamically adds or removes resources from the load balancer rotation.

To create a health probe to monitor the health of the resources:

- ☐ 1. Select **All resources** on the leftmost menu, and then select **myLoadBalancer** from the resource list.
- ☐ 2. Under **Settings**, select **Health probes**, and then select **Add**.
- ☐ 3. On the **Add a health probe** page, enter or select the following values:
- **Name:** Enter  [myHealthProbe](#).
  - **Protocol:** Select **TCP**.
  - **Port:** Enter **80**.
  - **Interval:** Enter **15**. This value is the number of seconds between probe attempts.
  - **Unhealthy threshold:** Enter **2**. This value is the number of consecutive probe failures that occur before a virtual machine is considered unhealthy.
- ☐ 4. Select **Add**.


#### Task 6: Create a load balancer rule

-  A load balancer rule defines how traffic is distributed to resources. The rule defines:


- The front-end IP configuration for incoming traffic.
- The back-end IP pool to receive the traffic.
- The required source and destination ports.

The load balancer rule named **myLoadBalancerRule** listens to port 80 in the **LoadBalancerFrontEnd** front end. The rule sends network traffic to the **myBackendPool** back-end address pool on the same port 80.


To create a load balancer rule:

- ☐ 1. Select **All resources** on the leftmost menu, and then select **myLoadBalancer** from the resource list.
- ☐ 2. Under **Settings**, select **Load-balancing rules**, and then select **+Add**.
- ☐ 3. On the **Add load-balancing rule** page, enter or select the following values if they aren't already present:
  - **Name**: Enter  [myLoadBalancerRule](#).
  - **Frontend IP address**: Enter **LoadBalancerFrontEnd**.
  - **Protocol**: Select **TCP**.
  - **Port**: Enter **80**.
  - **Backend port**: Enter **80**.
  - **Backend pool**: Select **myBackendPool**.
  - **Health probe**: Select **myHealthProbe**.
- ☐ 4. Select **Add**.

### Task 7: Create a Private Link service

 In this task, you create a Private Link service behind a standard load balancer.

- ☐ 1. On the upper-left part of the page in the Azure portal, select **Create a resource** > **Networking** > **Private Link Center (Preview)**. You can also use the portal's search box to search for Private Link.
- ☐ 2. In **Private Link Center - Overview** > **Expose your own service so others can connect**, select **Start**.
- ☐ 3. Under **Create a private link service - Basics**, enter or select this information:

Setting	Value
Project details:	
<b>Subscription</b>	<b>Select your subscription.</b>
<b>Resource Group</b>	unrecognised token (\$gd.com(azure).resourceGroups(myResourceGroupLB))
Instance details:	
<b>Name</b>	 <a href="#">myPrivateLinkService</a>
<b>Region</b>	<b>East US</b>

- ☐ 4. Select **Next: Outbound settings**.
- ☐ 5. Under **Create a private link service - Outbound settings**, enter or select this information:

Setting	Value
<b>Load Balancer</b>	<b>myLoadBalancer</b> .
<b>Load Balancer frontend IP address</b>	the front-end IP address of <b>myLoadBalancer</b> .
<b>Source NAT Virtual network</b>	<b>myVNet</b> .
<b>Source NAT subnet</b>	<b>myBackendSubnet</b> .
<b>Enable TCP proxy v2</b>	Select <b>YES</b> or <b>NO</b> depending on whether your application expects a TCP proxy v2 header.
<b>Private IP address settings</b>	Configure the allocation method and IP address for each NAT IP.

- ☐ 6. Select **Next: Access security**.
- ☐ 7. Under **Create a private link service - Access security**, select **Visibility**, and then choose **Role-Based access control only**.
- ☐ 8. Either select **Next: Tags** > **Review + create** or choose the **Review + create** tab at the top of the page.
- ☐ 9. Review your information, and select **Create**.

✓ In this lab, you created an internal Azure load balancer and a Private Link service.