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Article

Creating An Internal Load Balancer In Microsoft Azure

By [Kishore Chowdary](#) on Feb 12 2017

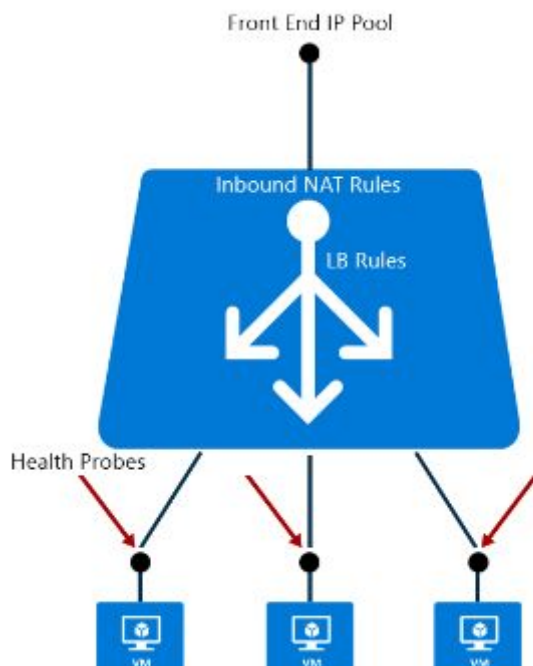
In the following article, we will be seeing the concept of creating an internal load balancer in between two virtual machines which are hosted in the same network. The reason behind the creation of load balancer in the virtual machines is to handle the huge number of requests which are given to a VM when it becomes difficult for the VM to handle these. To proceed with this article, I need you guys to create two virtual machines in the same virtual network. To know how to create these, see the following articles.

- [Creating Virtual Machine In Azure Portal In A Virtual Network](#)
- [Creating Virtual Network In Microsoft Azure](#)

Once you create two different virtual machines in the same virtual network, proceed to creating and configuring the load balancer with its set of rules.

Internal load balancer

An internal load balancer is used to manage and divert the requests from the clients to different VMs which are found in the same network. When a VM receives many requests from the client, there will be some conjunction occurring in the VM. To handle this conjunction, we can make use of the load balancer concept where the requests from the users will be mutually shared in between the two different VMs which are configured in the VNet. The request will be shared in between the VMs based on the configuration set by us when we design a load balancer.



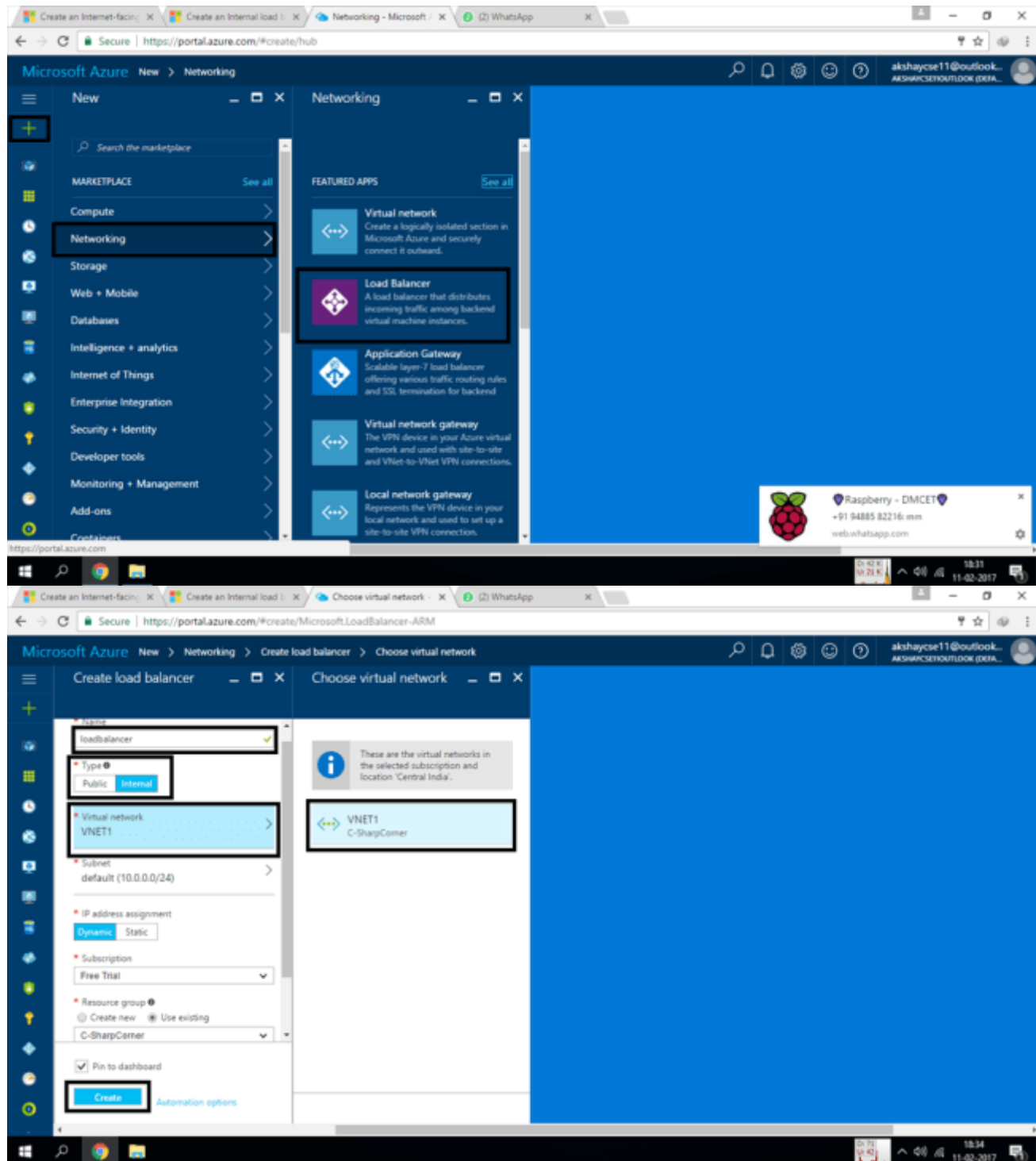
Creating the load balancer

The next step after creating two different VMs in the same VNET is creating a new load balancer.

For this, click on the New>>Networking>>Load Balancer.

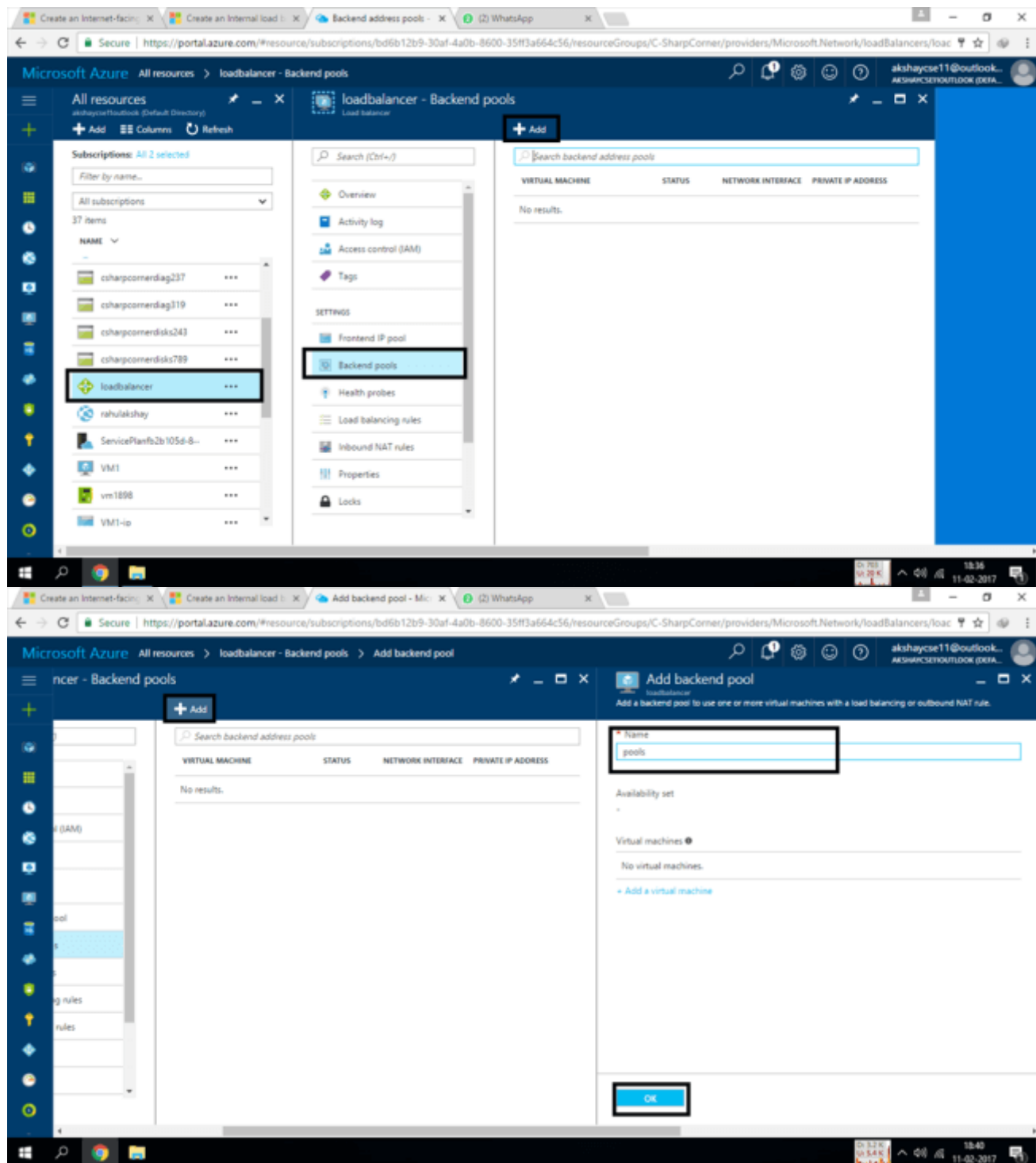
This will show you a new page in which you will be asked to enter the name of the Load balancer. Enter the name of the Load balancer and then choose the Internal balancer.

There is another concept called Public load balancer. We will see that in another article. Then, select the VNET in which you have created your VM. Choose some sort of subletting address range and then choose the rest of location and trail group and click on the create button. This will create a new load balancer for you.



Configuring the back-end pools

Go to all resources and then choose the load balancer which you have created. Once you click on it, you will be shown a set of configuration options. Then, choose the option called Backend pools. This will show you a new window. There, click on the +Add button. You will be asked to enter the name of the pool. Give some name for your pool and click on the OK button. This will create a new back-end pool.



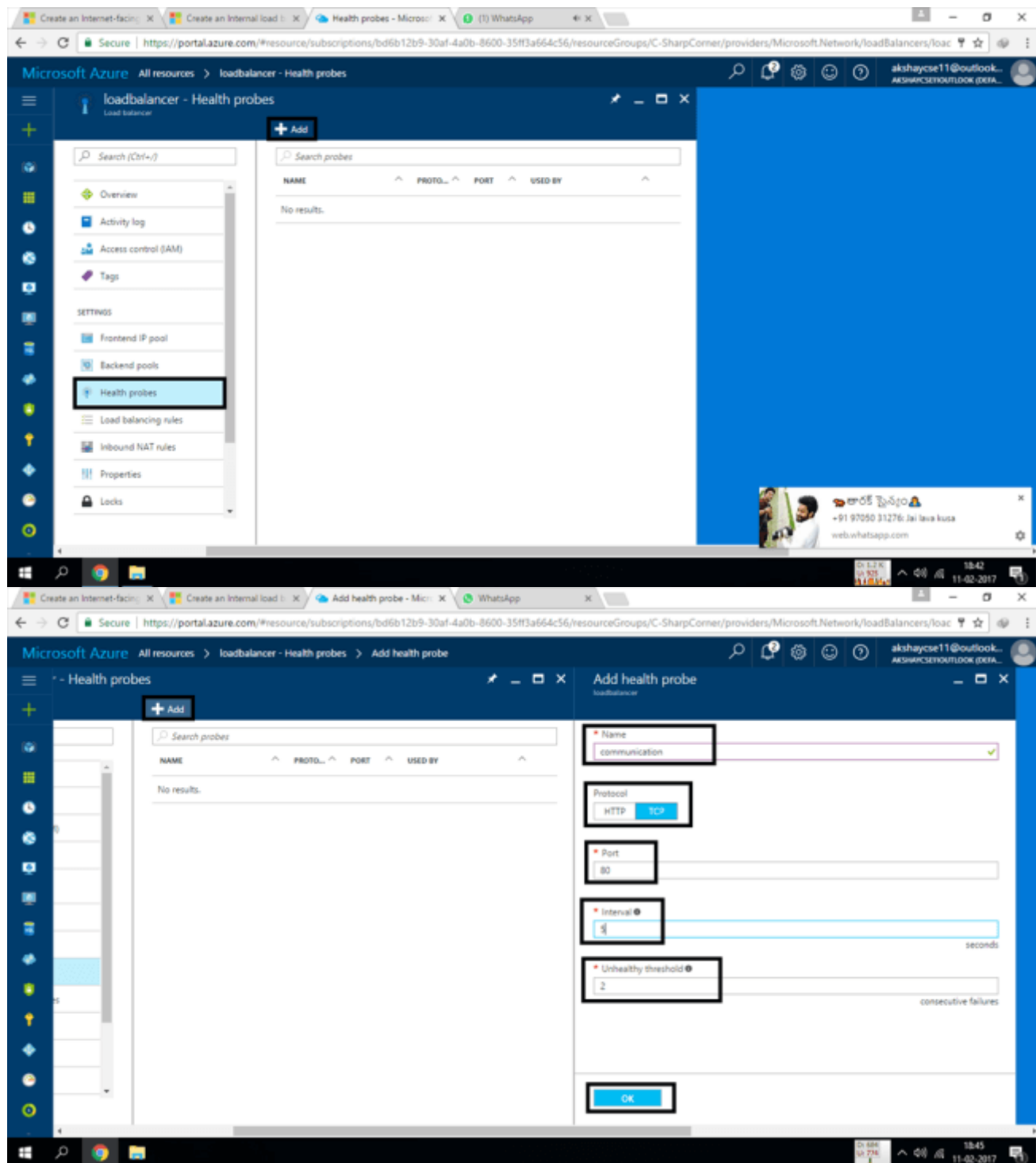
Creating health probes

Now, click on the health probes and click on the +Add button. There, you need to configure the details for your health probe. Give the name you need to have for your probe.

Then, you will be asked to choose the protocol. Choose TCP if you are using the load balancer for the application and if you use a website, then choose the HTTP for the load balancer.

Choose the port number. Then, choose the number of interval times you like to have in between the requests, and also the unhealthy threshold.

Now, click on OK. This will create the health probe for your load balancer.



Creating load balancing rules

In the same way, click on the Load balancing rules and click on the +Add button in the top. Again you will be asked to enter a name for your load balancer. Enter some name, select some IP range you need and then select the port and all other configurations.

Choose the probe and time out range for your load balancer which will perform the load balancing.

Finally, click on the OK button to set the rules.

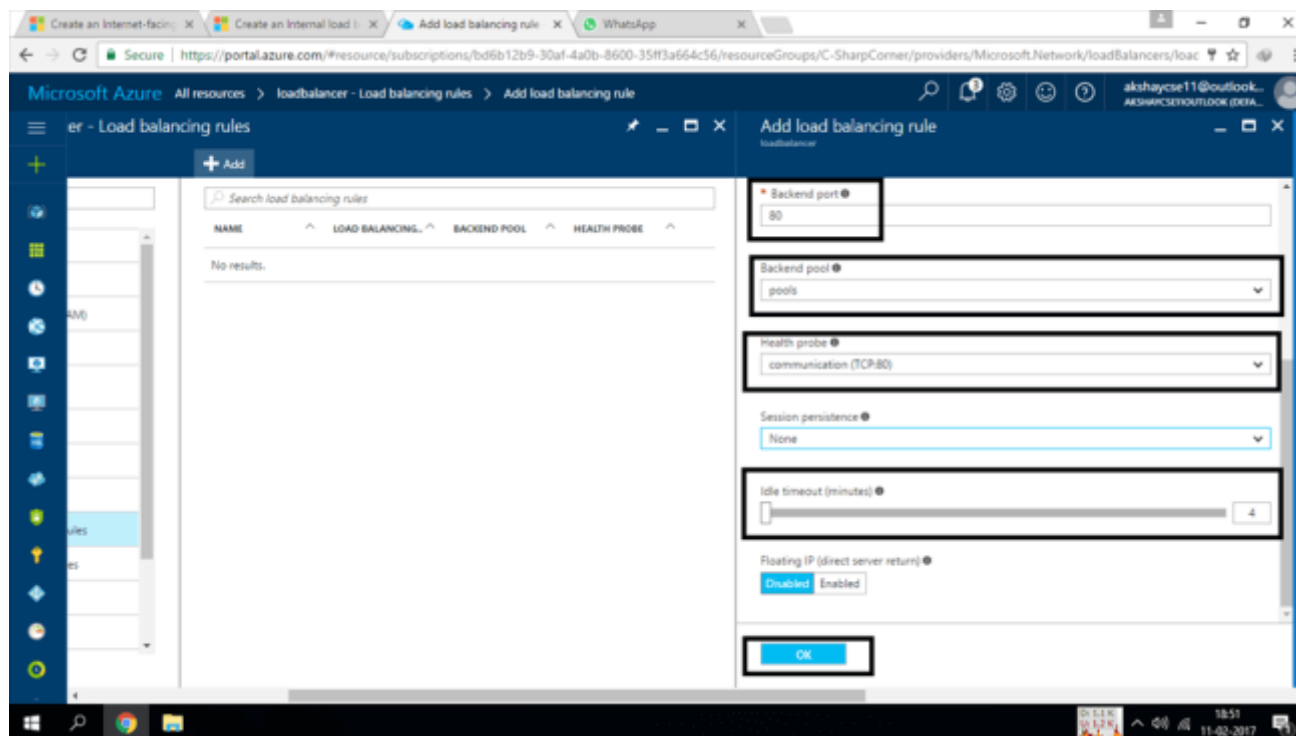
The image consists of two screenshots from the Microsoft Azure portal, illustrating the steps to add a load balancing rule.

Top Screenshot: The 'Load balancing rules' page is shown. The left-hand navigation pane has 'Load balancing rules' selected. An 'Add' button is highlighted in the top right corner of the main content area. The main area displays a table with columns 'NAME', 'LOAD BALANCING...', 'BACKEND POOL', and 'HEALTH PROBE', showing 'No results'.

Bottom Screenshot: The 'Add load balancing rule' form is displayed. The form fields are as follows:

- Name:** 'rules' (highlighted with a box)
- Frontend IP address:** '10.0.0.6 (LoadBalancerFrontEnd)' (highlighted with a box)
- Protocol:** 'TCP' (selected from a dropdown, highlighted with a box)
- Port:** '80' (highlighted with a box)
- Backend port:** '80' (highlighted with a box)
- Backend pool:** 'pools' (highlighted with a box)

The 'OK' button is visible at the bottom of the form.



Thus, you have successfully created an internal load balancer for the virtual machines in your virtual network. Whenever your machine gets a request from the client, the load balancer will mutually share the load in between the machines. Hope, this will help you to make an efficient application or website which can be accessed in a faster instance. Hope you learned something new in this article.

Thank you.

Thank you for using C# Corner