

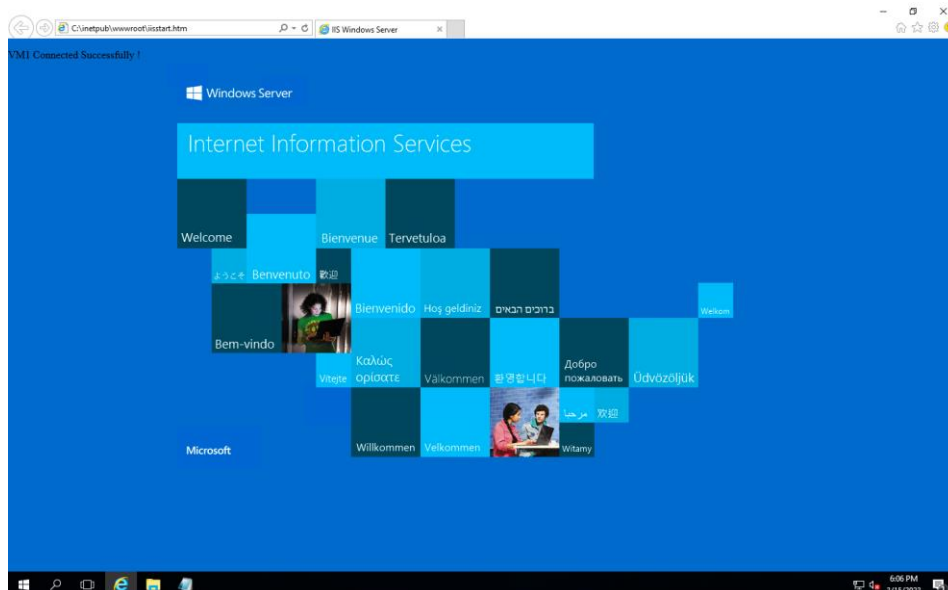
## AZURE LOAD BALANCER

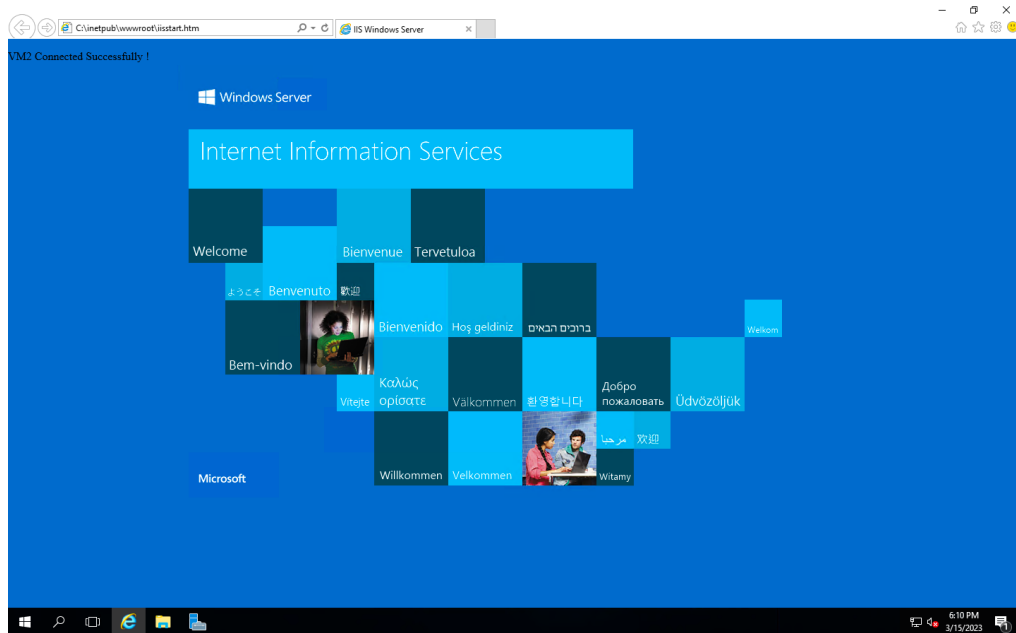
Load balancing refers to evenly distributing load (incoming network traffic) across a group of backend resources or servers.

Azure Load Balancer operates at layer 4 of the Open Systems Interconnection (OSI) model. It's the single point of contact for clients. Load balancer distributes inbound flows that arrive at the load balancer's front end to backend pool instances. These flows are configured according to load-balancing rules and health probes. The backend pool instances can be Azure Virtual Machines or instances in a Virtual Machine Scale Set.

### Steps

1. To create a public load balancer, we have to make two virtual machines and install windows IIS on it.
2. Download the **RDP** files of each VM (Virtual Machines) created & configure them.
3. Turn **Firewall Off** in each VM & install windows IIS on both.
4. Navigate to the **iisstart.html** file on both & add a custom message to be served.





- VM2 IIS file is served on the browser, and we can see its custom message above.

5. After making two Virtual machines, go to load balancer and create a load balancer.

Home > Load balancing > Load Balancer >

## Create load balancer

Network Address Translation (NAT) to route traffic between public and private IP addresses. [Learn more.](#)

**Project details**

Subscription \* Free Trial

Resource group \* neeraj-rg  
[Create new](#)

**Instance details**

Name \* nplb

Region \* Central India

SKU \* Standard  
Gateway  
Basic

Microsoft recommends Standard SKU load balancer for production workloads. [Learn more about pricing differences between Standard and Basic SKU](#)

Type \* Public  
Internal

Tier \* Regional  
Global

[Review + create](#) [< Previous](#) [Next: Frontend IP configuration >](#) [Download a template for automation](#) [Give feedback](#)

- Fill in the required details, then click on Frontend IP (Internet Protocol) configuration.

Home > Load balancing > Load Balancer >

## Create load balancer

**Basics** **Frontend IP configuration** Backend pools Inbound rules Outbound rules Tags Review + create

A frontend IP configuration is an IP address used for inbound and/or outbound communication as defined within load balancing, inbound NAT, and outbound rules.

[+ Add a frontend IP configuration](#)

Name ↑↓	IP address ↑↓
frontedlb	nplb (To be created)

[Review + create](#) [< Previous](#) [Next: Backend pools >](#) [Download a template for automation](#) [Give feedback](#)

- Add the frontend IP configuration and click on the Backend pools.

Home > Load balancing > Load Balancer > Create load balancer >

## Add backend pool

Name \*

Virtual network

Backend Pool Configuration

☒ NIC

☐ IP address

IP configurations

IP configurations associated to virtual machines and virtual machine scale sets must be in same location as the load balancer and be in the same virtual network.

[+ Add](#) | [X Remove](#)

<input type="checkbox"/>	Resource Na...	Resource gro...	Type	IP configurat...	IP Address	Availability ...	
<input type="checkbox"/>	npvm1	neeraj-rg	Virtual machine	ipconfig1	10.0.0.5	-	
<input type="checkbox"/>	npvm2	neeraj-rg	Virtual machine	ipconfig1	10.0.0.4	-	

[Save](#) [Cancel](#) [Give feedback](#)

- Add a backend pool using NIC or IP addresses.

Navigate to **Inbound Rules** to create a load balancing rule.

Home > Load balancing > Load Balancer >

## Create load balancer

Basics Frontend IP configuration Backend pools **Inbound rules** Outbound rules Tags Review + create

**Load balancing rule**

A load balancing rule distributes incoming traffic that is sent to a selected IP address and port combination across a group of backend pool instances. The load balancing rule is eligible to receive traffic.

[+ Add a load balancing rule](#)

Name ↑↓	Frontend IP configuration ↑↓	Backend pool ↑↓	Health probe ↑↓	Frontend IP configuration ↑↓
Add a rule to get started				

**Inbound NAT rule**

An inbound NAT rule forwards incoming traffic sent to a selected IP address and port combination to a specific virtual machine.

[+ Add an inbound nat rule](#)

Name ↑↓	Frontend IP configuration ↑↓	Service ↑↓	Target ↑↓
Add a rule to get started			

[Review + create](#) [< Previous](#) [Next : Outbound rule >](#) [Download a template for automation](#) [Give feedback](#)

### Add load balancing rule

Backend port \*

Health probe \*

Session persistence

Idle timeout (minutes) \*

TCP reset

☒ Disabled

☐ Enabled

Floating IP

☒ Disabled

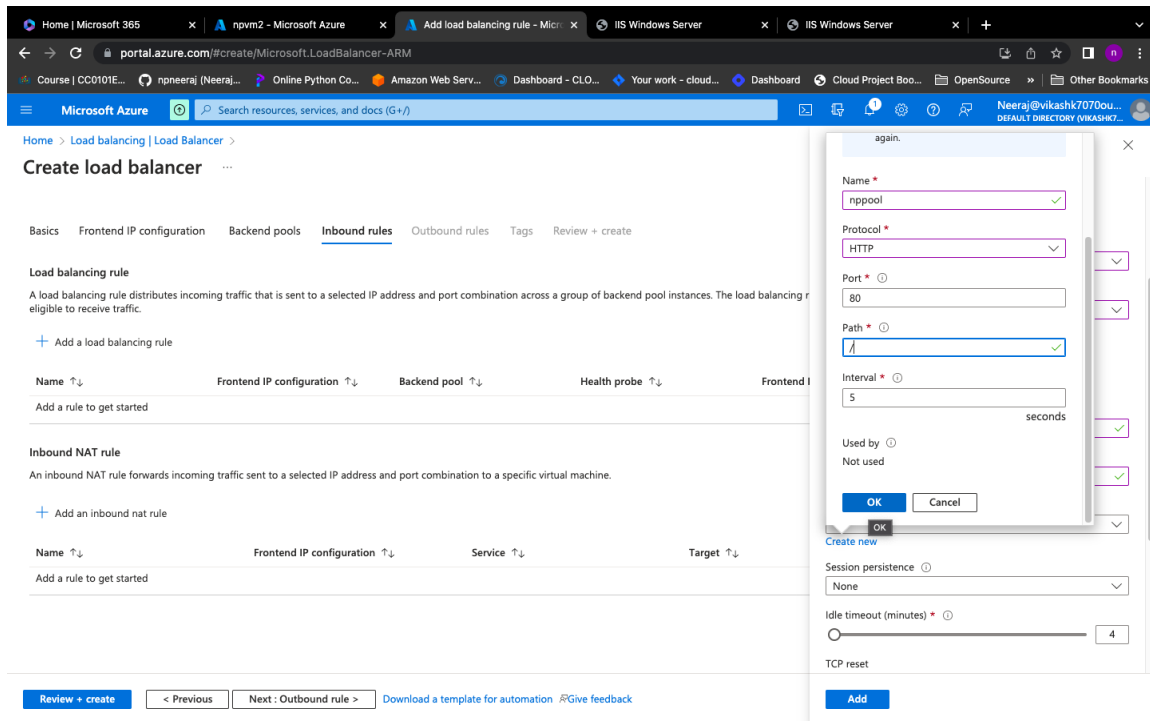
☐ Enabled

Outbound source network address translation (SNAT)

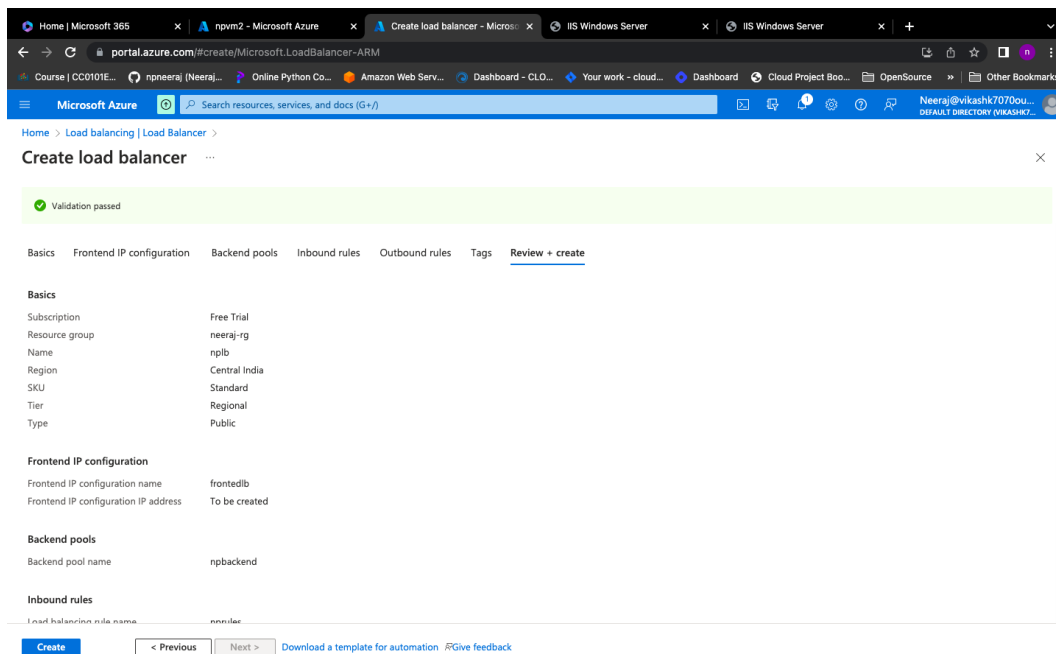
☒ (Recommended) Use outbound rules to provide backend pool members access to the internet. [Learn more](#)

☐ Use default outbound access. This is not recommended because it can cause SNAT port exhaustion. [Learn more](#)

[Add](#)



Click on **Create** to add Load Balancer.



## Load Balancer Created Successfully!

Home > Microsoft.LoadBalancer-20230315234216 | Overview

Search resources, services, and docs (G+)

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name: Microsoft.LoadBalancer-20230315234216 Start time: 3/15/2023, 11:51:45 PM  
Subscription: Free Trial Correlation ID: 67c812bf-4734-4b6b-b625-6d0ad1bf99b8  
Resource group: neeraj-rg

Deployment details

Resource	Type	Status	Operation details
NicUpdate-129c5459-fd7c-42fd	Microsoft.Resources/deployments	OK	<a href="#">Operation details</a>
NicUpdate-5b06c726-5b82-46d	Microsoft.Resources/deployments	OK	<a href="#">Operation details</a>
nplb	Microsoft.Network/loadBalancer	Created	<a href="#">Operation details</a>
nplp	Microsoft.Network/publicIPAddresses	OK	<a href="#">Operation details</a>

Next steps

[Go to resource](#)

Give feedback

[Tell us about your experience with deployment](#)

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Now, Copy the **frontend IP** address and paste on the browser.

Home > Microsoft.LoadBalancer-20230315234216 | Overview > nplb

nplb | Frontend IP configuration

Load balancer

Search resources, services, and docs (G+)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Frontend IP configuration

Backend pools

Health probes

Load balancing rules

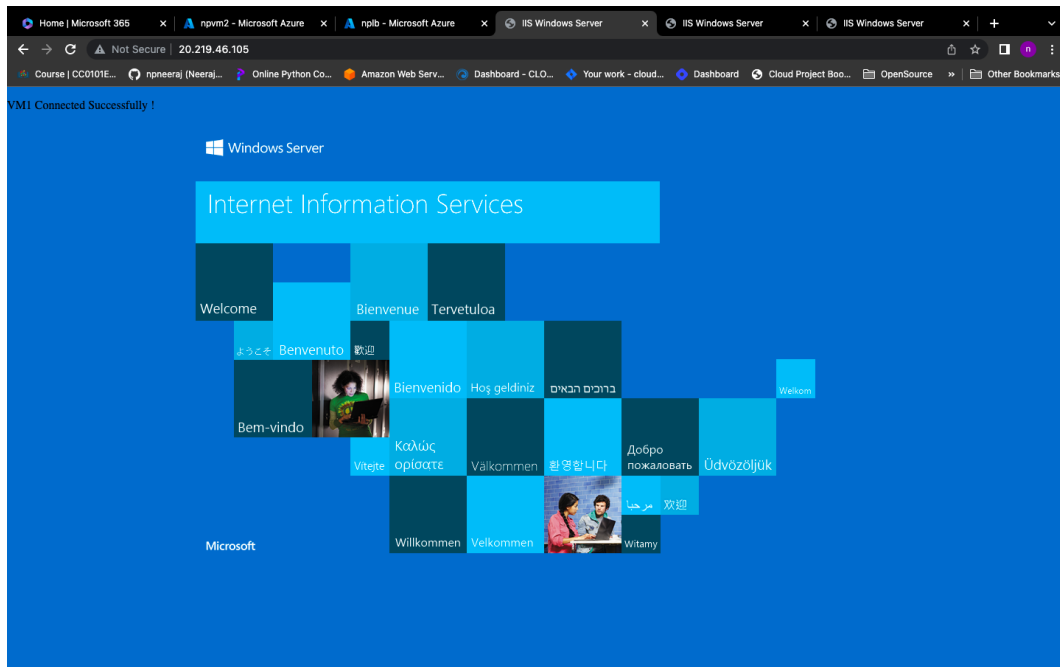
Inbound NAT rules

Outbound rules

Properties

Filter by name...

Name ↑↓	IP address ↑↓	Rules count ↑↓
frontendlb	20.219.46.105 (nplp)	1



- After 5 minutes, the page changes using the same IP address.

