



# Creating a Virtual Machine

In this lab, we are creating a network infrastructure and deploying a Windows virtual machine (VM) in Microsoft Azure. Here's a structured breakdown of what we're creating:

## Virtual Network (demo-network):

- Creates a virtual network named "demo-network" in the specified location (Central India).
- Defines an address space of 10.0.0.0/16.
- Includes two subnets: "SubnetA" (10.0.0.0/24) and "SubnetB" (10.0.1.0/24).
- Public IP Address (demo-ip):
- Creates a public IP address named "demo-ip" with Basic SKU and dynamic allocation method.

## Network Security Group (demo-nsg):

- Creates a network security group named "demo-nsg".
- Configures an inbound security rule allowing Remote Desktop Protocol (RDP) traffic on port 3389.
- Network Interface (demo-interface):
- Creates a network interface named "demo-interface" associated with the virtual network and public IP address.
- Depends on the existence of the virtual network, public IP address, and network security group.

## Storage Account (demo-store102410):

- Creates a storage account named "demo-store102410" with Standard\_LRS redundancy.

## Windows Virtual Machine (demo-windows-vm):

- Creates a Windows virtual machine named "demo-windows-vm" in the specified location.
- Specifies the VM size, OS profile (username, password), and storage profile.
- Configures the network profile to use the network interface.
- Enables boot diagnostics with the storage account for diagnostics data storage.
- Depends on the existence of the storage account and network interface.



## To begin with the Lab:

1. In this lab we are going to create a virtual machine using template deployment.
2. First you need to create a new file in VS Code.
3. Then we need to write the code to create the virtual machine.
4. Now open your Azure portal and paste your code there.


- Below you can see that it will create everything, whatever we have mentioned in the code.


## Edit template ...


Edit your Azure Resource Manager template


[+ Add resource](#) [↑ Quickstart template](#) [↑ Load file](#)

<<


 Parameters (0)


>  Variables (1)


✓  Resources (6)


 demo-network (Microsoft.Network/virtualNetworks)

 demo-ip (Microsoft.Network/publicIPAddresses)

 demo-interface  
(Microsoft.Network/networkInterfaces)

 demo-store102410  
(Microsoft.Storage/storageAccounts)

 demo-nsg  
(Microsoft.Network/networkSecurityGroups)

 demo-windows-vm  
(Microsoft.Compute/virtualMachines)

- Below you can see that I got an error message saying that the name of my storage account is not unique.
- Now I have to change its name.

# Errors



## Summary

## Raw Error

### ERROR DETAILS



✓ Preflight validation failed. Please refer to the details for the specific errors. (Code: PreflightValidationCheckFailed)

```
- demo-store102410 is not a valid storage account name. Storage account name must be between 3 and 24 characters in length and use numbers and lower-case letters only. (Code: AccountNameInvalid, Target: demo-store102410)
```

WAS THIS HELPFUL?

- Now after changing the name again try to deploy your template.
- Once your deployment is completed it will show you that every resource has been created.

### ✓ Your deployment is complete



Deployment name : Microsoft.Template-20240406140832

Start time : 4/6/2024, 2:08:35 PM

Subscription : Azure Pass - Sponsorship (9e3f0cae-8274-4931-b16b-95242092e301)

Correlation ID : aac1bde7-bf57-43fb-944f-3a8b69a21d32

Resource group : demo-template-group

#### ✓ Deployment details

Resource	Type	Status	Operation details
✓ demo-windows-vm	Virtual machine	OK	<a href="#">Operation details</a>
✓ demotemp010101201	Storage account	OK	<a href="#">Operation details</a>
✓ demo-interface	Network interface	Created	<a href="#">Operation details</a>
✓ demo-network	Virtual network	OK	<a href="#">Operation details</a>
✓ demo-ip	Public IP address	OK	<a href="#">Operation details</a>
✓ demo-nsg	Network security group	OK	<a href="#">Operation details</a>

- Now you can go to your resource group and see visit every resource to cross verify.
- Or you just login to your VM and you will see that it is working properly.

demo-windows-vm - 13.71.33.55:3389 - Remote Desktop Connection

Server Manager

Server Manager ▸ Dashboard

Dashboard

Local Server

All Servers

WELCOME TO SERVER MANAGER

QUICK START

WHAT'S NEW

LEARN MORE

1

Configure this local server

2

Add roles and features

3

Add other servers to manage

4

Create a server group

5

Connect this server to cloud services

ROLES AND SERVER GROUPS

Roles: 0 | Server groups: 1 | Servers total: 1

Local Server

1

All Servers

1