

## **Lab 4: Learning the Features of IIS in Azure Virtual Machine using Windows Server**

### **Objectives**

1. Deploy a Windows Server Virtual Machine in Microsoft Azure.
2. Access the Windows VM through Remote Desktop Protocol (RDP).
3. Install and configure Internet Information Services (IIS).
4. Understand IIS features for hosting static and dynamic web content.
5. Modify the default IIS web page and verify website functionality via the VM's public IP.

### **Tools and Technologies Used**

1. Microsoft Azure Portal
2. Windows Server (Azure VM)
3. RDP Client / Remote Desktop Connection (mstsc)
4. IIS (Internet Information Services)

### **Procedure**

#### **Step 1: Create Windows Server Virtual Machine**

- a. Log in to the Azure Portal.
- b. Navigate to: Home > Virtual Machines > Create > Virtual Machine.
- c. Select the following basic settings:
  - i. Virtual machine name: Windows-VM-ISS
  - ii. Region: (Asia Pacific) Central India
  - iii. Security Type: Trusted launch virtual machines
  - iv. Image: Windows Sever 2025 Datacenter: Azure Edition – x64 Gen2
  - v. VM architecture: x64
  - vi. Size: Standard\_B2as\_v2 -2 vcpus, 8Gib memory (\$42.63/month)
  - vii. Username: Sandesh\_Windows
  - viii. Password: (strong password)
  - ix. Select inbound ports: HTTP (80), SSH(22) ,RDP (3389)

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## Create a virtual machine

Help me create a VM optimized for high availability Help me create a low cost VM Help me choose the right VM size for my workload

**Project details**

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*  Resource group \*  Create new

**Instance details**

Virtual machine name \*  Region \*  Deploy to an Azure Extended Zone

Availability options

Zone options  Self-selected zone Choose up to 3 availability zones, one VM per zone  
 Azure-selected zone (Preview) Let Azure assign the best zone for your needs  
i Using an Azure-selected zone is not supported in region 'Central India'.

Availability zone \*  You can now select multiple zones. Selecting multiple zones will create one VM per zone. Learn more

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## Create a virtual machine

Help me create a VM optimized for high availability Help me create a low cost VM Help me choose the right VM size for my workload

Security type  Configure security features

Image \*  See all images | Configure VM generation

VM architecture  Arm64  x64  
i Arm64 is not supported with the selected image.

Run with Azure Spot discount

Size \*  See all sizes

Enable Hibernation

**Administrator account**

Username \*  Password \*  Confirm password \*

### Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports \*  None  Allow selected ports

Select inbound ports \*

HTTP (80), SSH (22), RDP (3389)

HTTP (80)

HTTPS (443)

SSH (22)

RDP (3389)

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**Review + create**

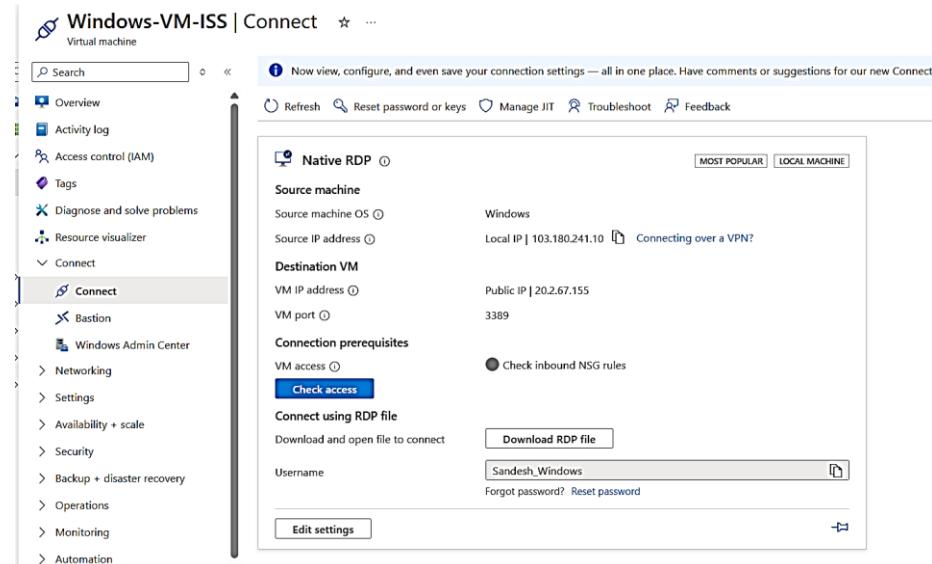
- x. Click Review + Create, then Create to deploy the VM.

## Step 2: Connect to the Windows VM

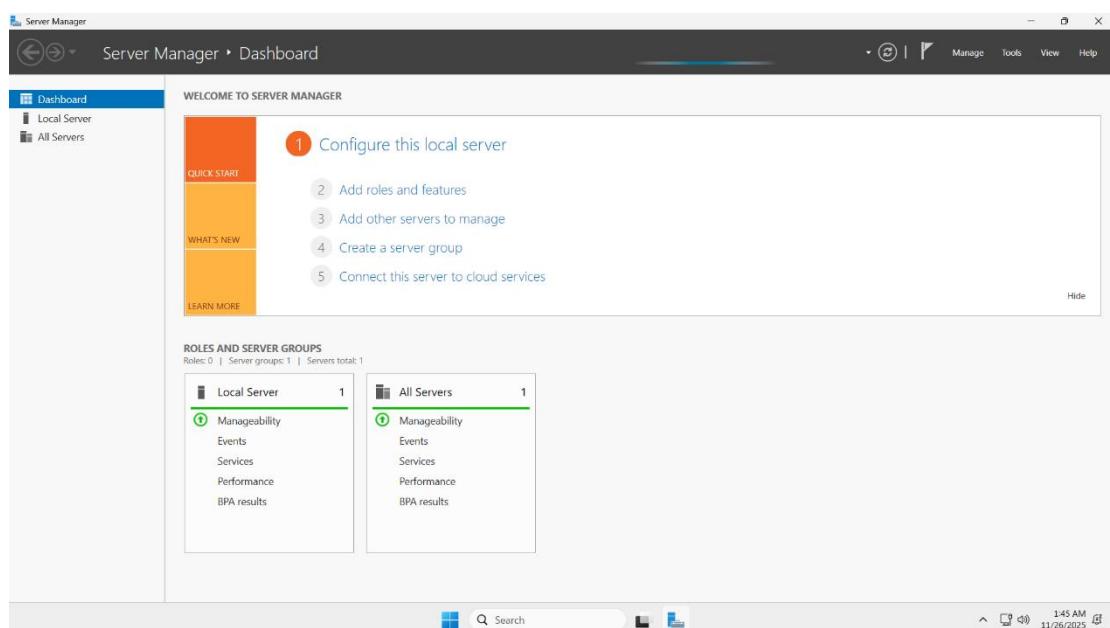
Azure provides two connection methods:

Method A: Using Azure Portal

- Go to Home > Virtual Machines > Connect > RDP.



- Download the RDP file.
- Open it and click Connect.
- Enter the VM username and password.



## Method B: Using Remote Desktop Connection (mstsc)

Press Windows + R → type mstsc → Enter.

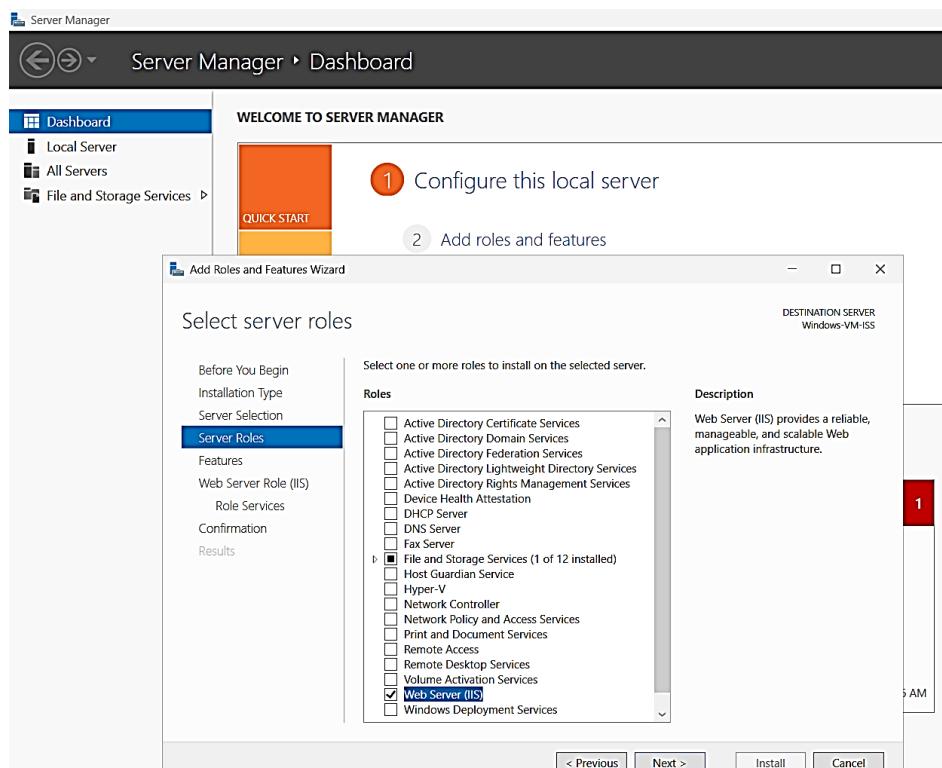
Enter your VM's Public IP.

Connect and enter credentials.

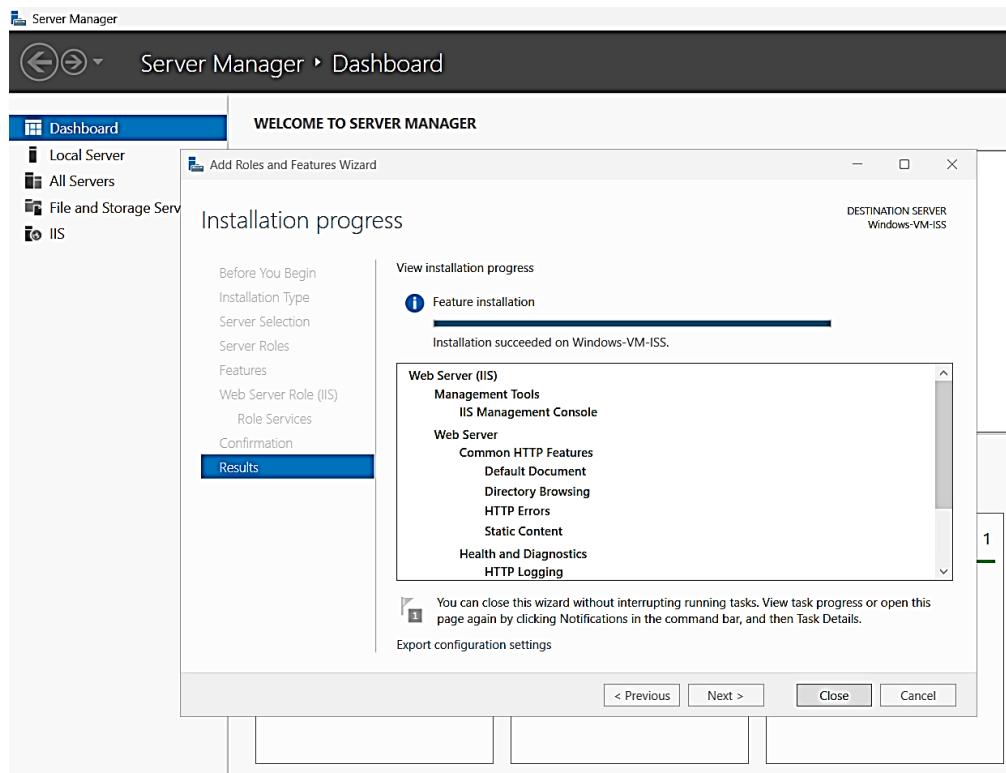


## Step 3: Install IIS Web Server

- a. Inside the Windows Server environment, open Server Manager.
- b. Select Add Roles and Features.
- c. In the Server Roles section, choose Web Server (IIS).



- d. Keep default features unless instructed otherwise.
- e. Click Install and wait for completion.

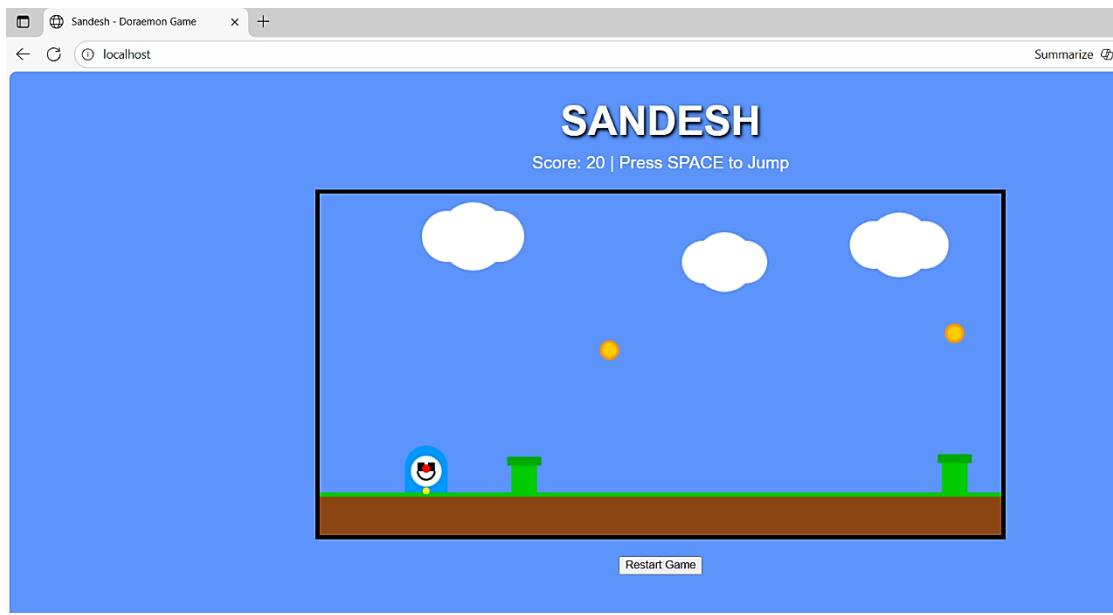


#### **Step 4: Verify IIS Default Website**

- a. Open a browser inside the VM and visit: <http://localhost>
- b. You should see the default IIS start page (iisstart.htm).

#### **Step 5: Hosting Static Web Content**

- a. Navigate to the IIS default web directory: C:\inetpub\wwwroot\
- b. Open the file iisstart.htm using Notepad.
- c. Modify the content.
- d. Save the file.
- e. Refresh the browser on: Localhost
- f. updated page should appear.



## Conclusion

In this lab, a Windows Server Virtual Machine was deployed on Azure and accessed using RDP. IIS Web Server was installed through Server Manager, enabling the hosting of static and dynamic websites. By modifying the default `iisstart.htm` file, students verified successful server setup through the VM's public IP. This exercise demonstrates essential cloud and Windows Server administration skills, including VM provisioning, RDP access, web server configuration, and basic website deployment.