

Install IIS webserver on a VM with Azure Cloud Shell

Use Case:

Students can just read through the tasks and get a feel for how it works or actually step through it like a lab task.

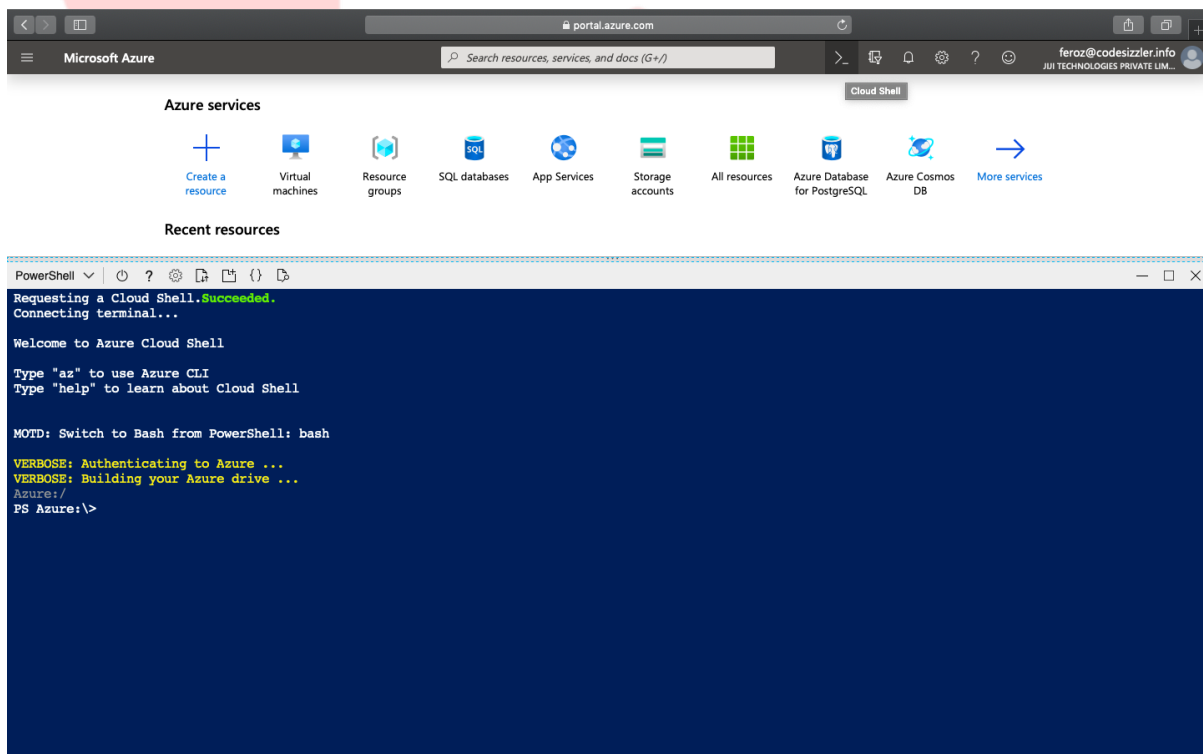
Another option could be to complete the walkthrough at the end of the module, and complete all or some of the walkthroughs in the module together at that stage, like an end of module or even end of course lab.

Prerequisites:

An active Azure subscription is required. If you do not have an Azure subscription, create a [free Azure account](#) before you begin.

Steps:

1. Access **Azure Cloud Shell** go to the location <https://shell.azure.com> and sign in with your Azure user login credentials. You can also run Azure Cloud Shell from within Azure Portal by using the Cloud Shell icon.
2. If prompted, choose a **Bash** or **PowerShell** environment. This walkthrough uses **PowerShell**.



3. First time Azure Cloud Shell users must create and configure Cloud Drive storage, to allow Azure Cloud Shell files to persist. To create and configure storage, select **Show advanced settings**. If you have created and configured storage already, go to Step 5.

```
PowerShell | [Power Icon] [Help Icon] [Settings Icon] [Refresh Icon] [Copy Icon] [Paste Icon] [Terminal Icon]
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

MOTD: Switch to Bash from PowerShell: bash

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
Azure:/
PS Azure:\> az group create --name az900-rg --location eastus
```

4. Provide the following details to create and configure storage.

- **Subscription:** Choose your subscription.
- **Cloud Shell region:** Select the location closest to you. For example, North Europe
- **Resource group:** Choose **Create new**, then provide a unique name for your new resource group.
- **Storage account:** Select **Create new**, and provide a unique name for your storage account.
- **File share:** Choose **Create new**, then enter a unique file share name.
- Select the **Create storage** button.

```
PS Azure:\> az group create --name az900-rg --location eastus
{
  "id": "/subscriptions/7bd726dd-0a34-4060-9168-b1e496983db8/resourceGroups/az900-rg",
  "location": "eastus",
  "managedBy": null,
  "name": "az900-rg",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
Azure:/
```

Wait for the storage setup to complete. When the storage setup is complete, the **Welcome to Azure Cloud Shell** message is shown in the terminal window.

5. At the Azure Cloud Shell prompt, set a VM administrator username and password with the Get-Credential command. The credentials are assigned to the variable \$cred. The variable is recalled when the new VM is created in the next Step 6.

\$cred = Get-Credential When prompted, enter a username and password for the VM administrator. For example,

- **User:** myVMAdmin
- **Password:** pa\$\$W0rd101

6. Create a VM with the New-AzVM command. The following example creates a VM named myVM in the North Europe location. If they do not exist, the resource group myResourceGroup and supporting network resources are created in Azure. To allow web traffic, the following command also opens port 80. Change these to more suitable settings, if you prefer.

```
PS Azure:> az vm create --resource-group az900-rg --name azvm --image win2016datacenter --admin-username demouser --admin-password demo@pass123
{
  "fqdns": "",
  "id": "/subscriptions/7bd726dd-0a34-4060-9168-b1e496983db8/resourceGroups/az900-rg/providers/Microsoft.Compute/virtualMachines/azvm",
  "location": "eastus",
  "macAddress": "00-0D-3A-19-3B-87",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "23.96.24.108",
  "resourceGroup": "az900-rg",
  "zones": ""
}
```

Note: Ensure you are signed into your Azure subscription. If you have multiple subscriptions, you can get a list of your subscriptions using the command Get-AzSubscription. Specify which subscription to use with the command Select-AzSubscription -Subscription "<Name of your subscription>". Substitute the actual name of the subscription you want to use for <Name of your subscription>.

New-AzVm `

-ResourceGroupName "myResourceGroup" `

-Name "myVM" `

-Location "North Europe" `

-VirtualNetworkName "myVnet" `

-SubnetName "mySubnet" `

-SecurityGroupName "myNetworkSecurityGroup" `

-PublicIpAddressName "myPublicIpAddress" `

-OpenPorts 80 `

-Credential \$cred

When the newly created resources and VM are ready, details about the resources and VM will be displayed in the Azure Cloud Shell window. Wait for the resources and VM to be created.

```
PS Azure:> az vm open-port --port 80 --resource-group az900-rg --name azvm
{
  "defaultSecurityRules": [
    {
      "access": "Allow",
      "description": "Allow inbound traffic from all VMs in VNET",
      "destinationAddressPrefix": "VirtualNetwork",
      "destinationAddressPrefixes": [],
      "destinationApplicationSecurityGroups": null,
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\"5a770e33-fa05-496b-9e9c-93f4d98d0c2a\"",
      "id": "/subscriptions/7bd726dd-0a34-4060-9168-ble496983db8/resourceGroups/az900-rg/providers/Microsoft.Network/networkSecurityGroups/azvmNSG/defaultSecurityRules/AllowVnetInBound",
      "name": "AllowVnetInBound",
      "priority": 65000,
      "protocol": "*",
      "provisioningState": "Succeeded",
      "resourceGroup": "az900-rg",
      "sourceAddressPrefix": "VirtualNetwork",
      "sourceAddressPrefixes": [],
      "sourceApplicationSecurityGroups": null,
      "sourcePortRange": "*",
      "sourcePortRanges": [],
      "type": "Microsoft.Network/networkSecurityGroups/defaultSecurityRules"
    },
    {
      "access": "Allow",
      "description": "Allow inbound traffic from azure load balancer",
      "destinationAddressPrefix": "*",
      "destinationAddressPrefixes": [],
      "destinationApplicationSecurityGroups": null,
      "destinationPortRange": "*",
      "destinationPortRanges": [],
      "direction": "Inbound",
      "etag": "W/\"5a770e33-fa05-496b-9e9c-93f4d98d0c2a\"",
      "id": "/subscriptions/7bd726dd-0a34-4060-9168-ble496983db8/resourceGroups/az900-rg/providers/Microsoft.Network/networkSecurityGroups/azvmNSG/defaultSecurityRules/AllowAzureLoadBalancerInBound",
      "name": "AllowAzureLoadBalancerInBound",
      "priority": 65001,

```

Connect to the Virtual Machines under Virtual Machine and go to powershell.

Home > Virtual machines

Virtual machines Documentation ✎ ✕

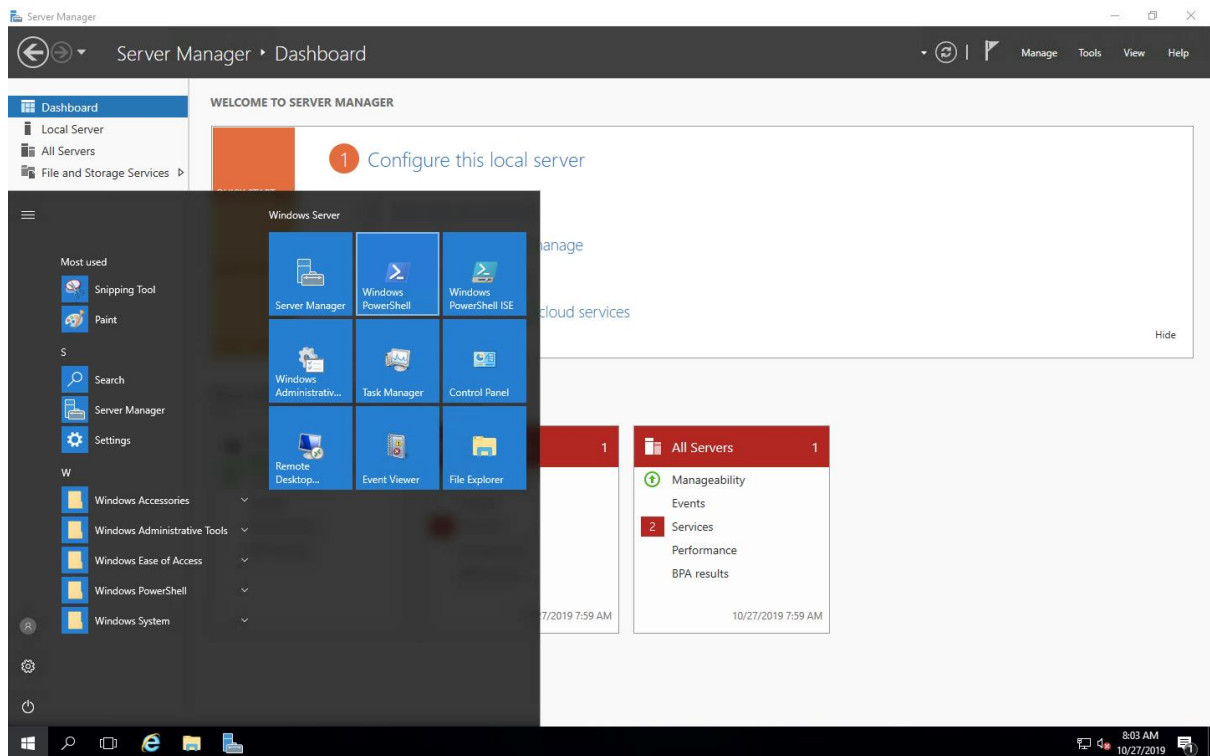
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2 items

<input type="checkbox"/>	Name ↑↓	Type ↑↓	Status	Resource group ↑↓	Location ↑↓	Source	Maintenance status	Subscription ↑↓
<input type="checkbox"/>	azvm	Virtual machine	Running	az900-rg	East US	Marketplace	-	Visual Studio Enterprise... ⋮

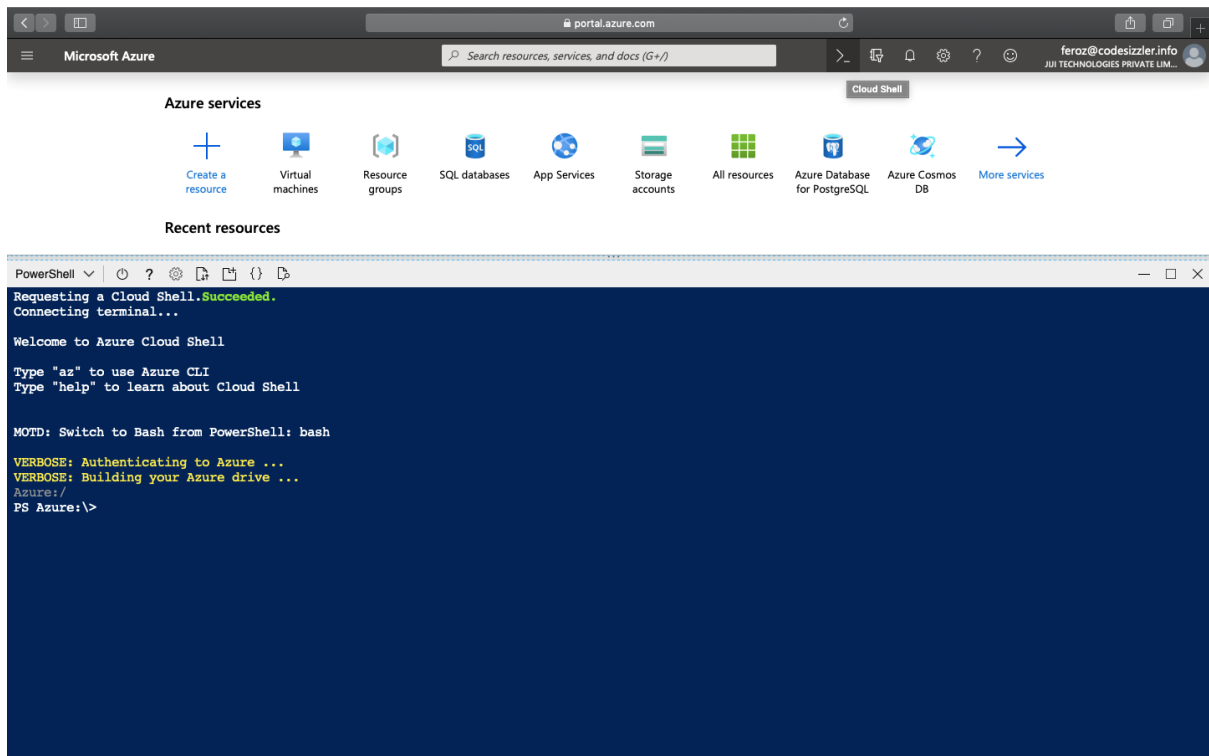


Give the below command to install IIS using Powershell

Add-WindowsFeature -Name "Web-Server"

```
PS C:\Users\demouser> Add-WindowsFeature -Name "Web-Server"

Success Restart Needed Exit Code      Feature Result
-----
True      No                Success      {Common HTTP Features, Default Document, D...
```



ode \$izzler