

# Create a Virtual machine using Azure Portal

## Use Case:

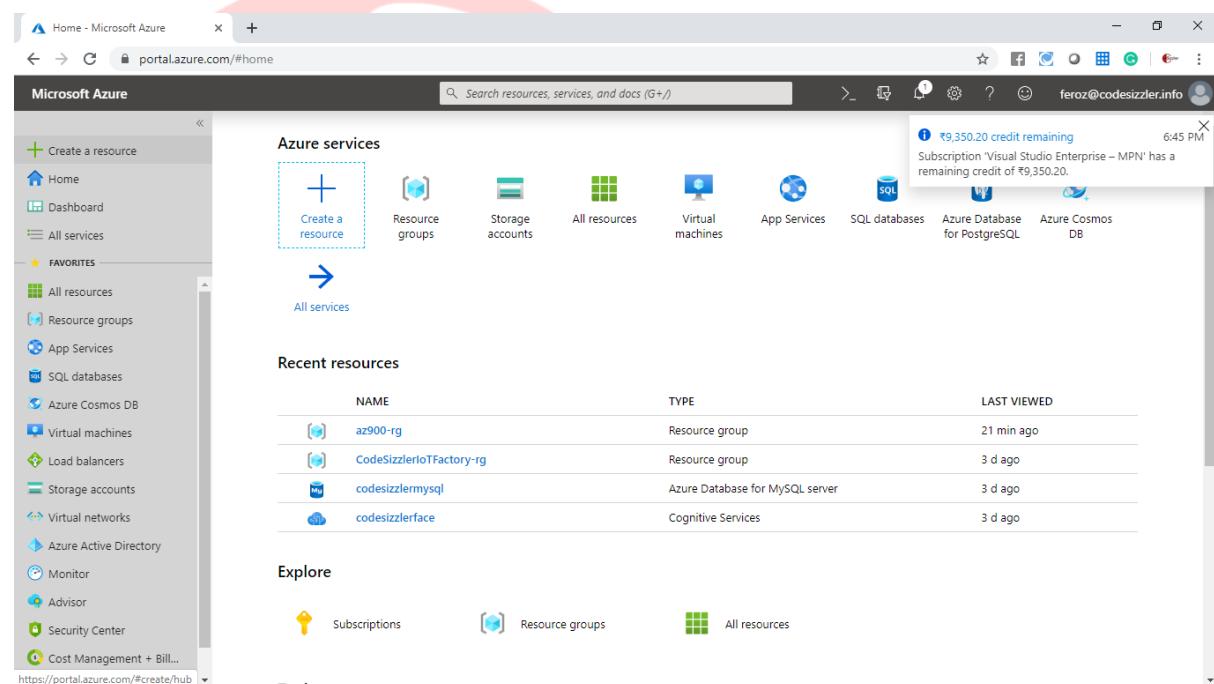
In this walkthrough task we will create a virtual machine in Azure via the Azure Portal, configure it as a web server and connect to the web server over the internet.

## Prerequisites:

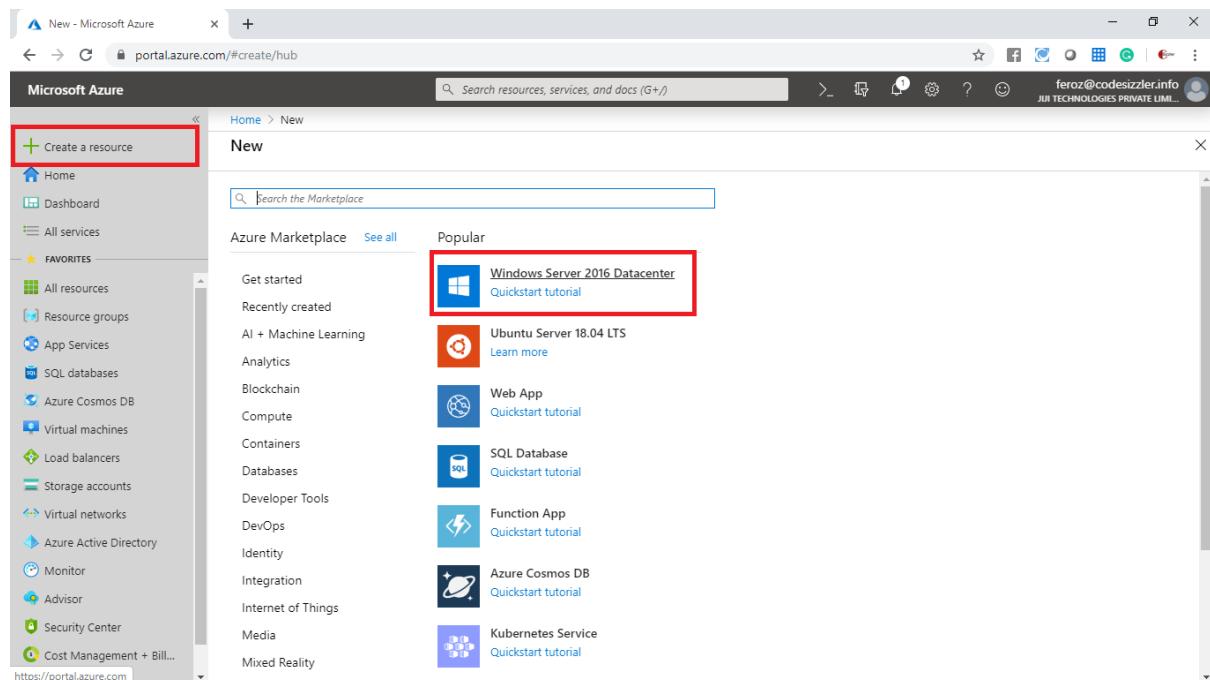
You need an Azure subscription to perform these steps. If you don't have one you can create one by following the steps outlined on the [Create your Azure free account today](#) webpage.

## Steps:

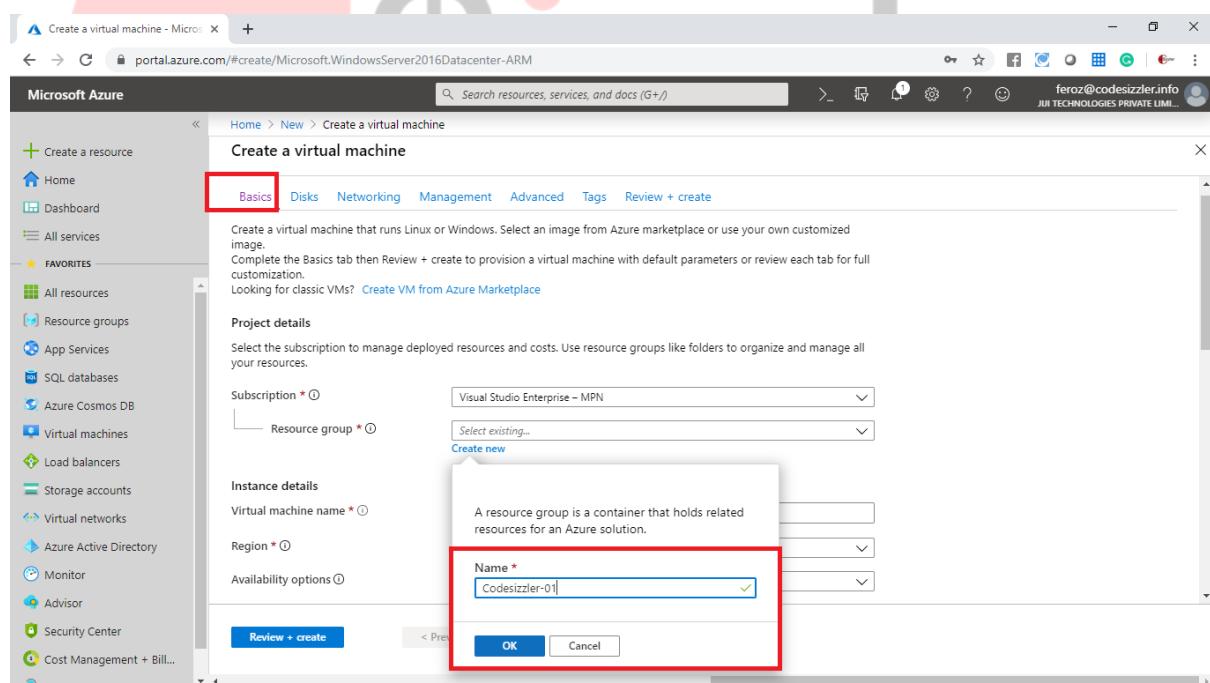
1. Sign in to the Azure portal at <https://portal.azure.com>.



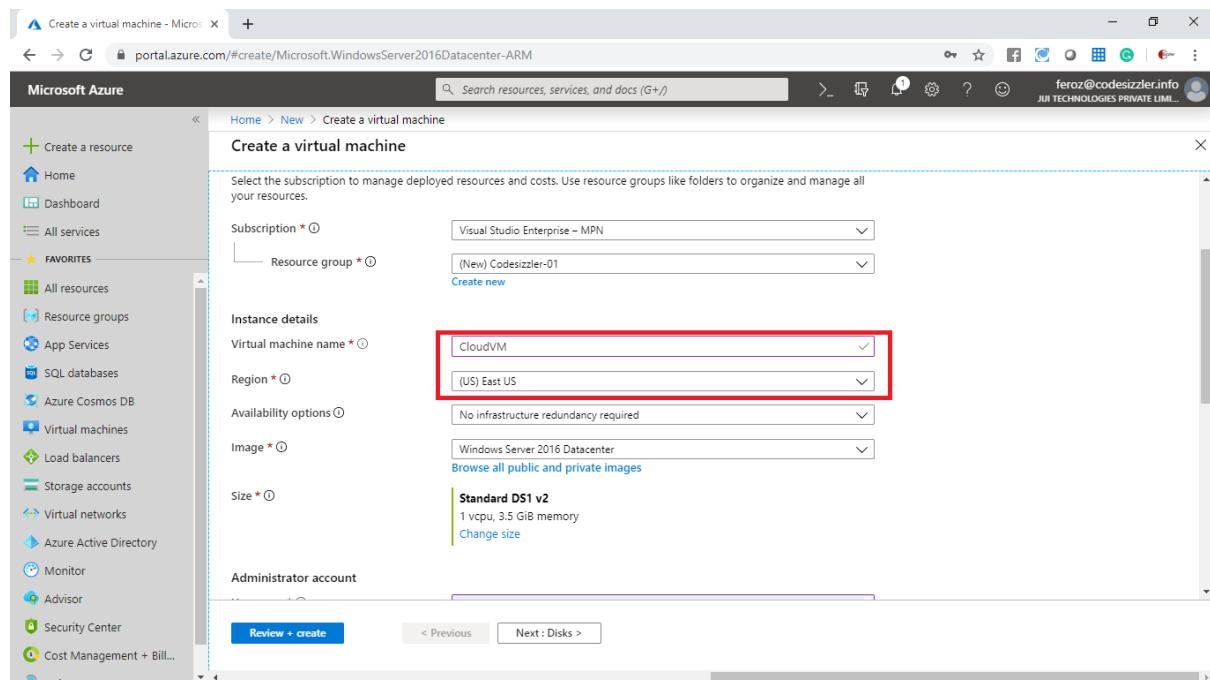
2. Choose Create a resource in the upper left-hand corner of the Azure portal. In the search box above the list of Azure Marketplace resources, search for and select Windows Server 2016 Datacenter, then choose Create.



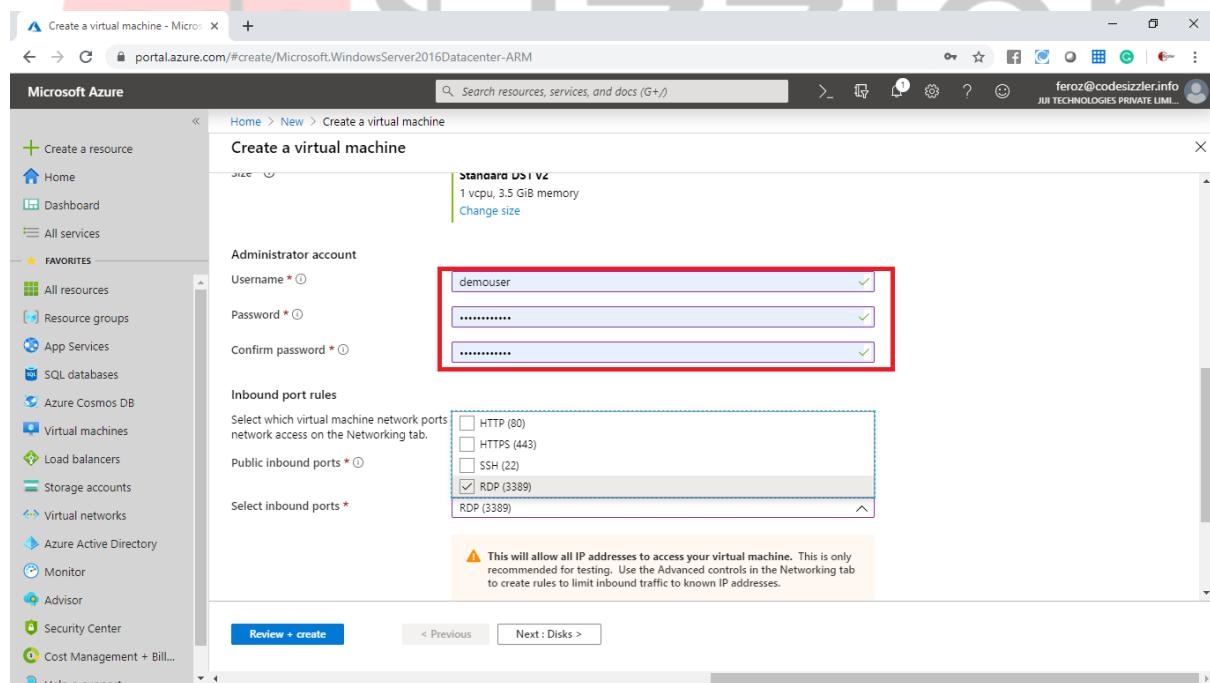
3. In the Basics tab, under Project details, make sure the correct subscription is selected and then choose to create new resource group. Type Codesizzler-01 for the name.



4. Under Instance details, type CloudVM for the Virtual machine name and choose East US for your Location. Leave the other defaults.



5. Under the Administrator account section, provide a username, such as demouser and a password. The password must be at least 12 characters long and meet the defined complexity requirements.



6. Under Inbound port rules, choose Allow selected ports and then select RDP (3389) and HTTP (80) from the drop-down. These are to allow us to connect to the virtual machine using RDP over port 3389 and then to see a web page display over HTTP on port 80.

**Create a virtual machine**

**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), RDP (3389)

HTTP (80)  
 HTTPS (443)  
 SSH (22)  
 RDP (3389)

**Save money**

Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#)

Already have a Windows Server license?  Yes  No

**Review + create**

7. Leave the remaining defaults and then select the Review + create button at the bottom of the page.

**Create a virtual machine**

**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), RDP (3389)

**⚠️ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.**

**Save money**

Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#)

Already have a Windows Server license?  Yes  No

**Review + create**

8. Once Validation is passed click the Create button. It can take approx three to five minutes to deploy the virtual machine.

Create a virtual machine - Microsoft Azure

portal.azure.com/#create/Microsoft.WindowsServer2016Datacenter-ARM

Microsoft Azure

Home > New > Create a virtual machine

Create a virtual machine

Validation passed

Basics Disks Networking Management Advanced Tags **Review + create**

PRODUCT DETAILS

Standard DS1 v2 by Microsoft

Subscription credits apply ⓘ 4.8250 INR/hr Terms of use | Privacy policy Pricing for other VM sizes

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.

⚠ You have set RDP port(s) open to the internet. This is only recommended for testing. If you want to change this setting, go back to Basics tab.

Basics

**Create** < Previous Next > Download a template for automation

9. Once the virtual machine is created, go to the resource group you placed the virtual machine in, and open up the virtual machine, then click the Connect button on the virtual machine properties page.

CloudVM - Microsoft Azure

portal.azure.com/#@jjitechologies.com/resource/subscriptions/7bd726dd-0a34-4060-9168-b1e496983db8/resourcegroups/Codesizzler-01/pr...

Microsoft Azure

Home > CreateVm-MicrosoftWindowsServer.WindowsServer-201-20191024184612 - Overview > CloudVM

CloudVM Virtual machine

Search (Ctrl+)

Connect Start Restart Stop Capture Delete Refresh

Resource group (change) Codesizzler-01

Status Running

Location East US

Subscription (change) Visual Studio Enterprise – MPN

Subscription ID 7bd726dd-0a34-4060-9168-b1e496983db8

Computer name (not available)

Operating system Windows

Size Standard DS1 v2 (1 vcpu, 3.5 GB memory)

Ephemeral OS disk N/A

Public IP address 23.96.93.202

Private IP address 10.0.1.4

Virtual network/subnet Codesizzler-01-vnet/default

DNS name Configure

Tags (change) Click here to add tags

Show data for last: 1 hour 6 hours 12 hours 1 day 7 days 30 days

CPU (average) Network (total)

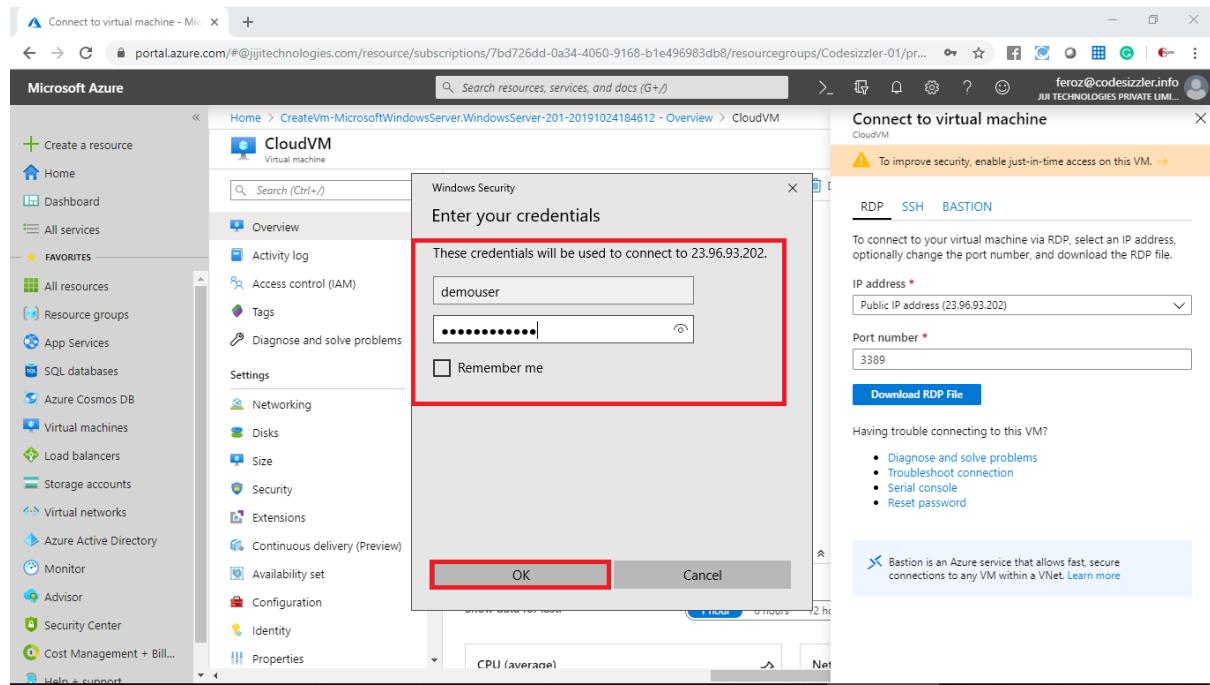
10. In the Connect to virtual machine page, keep the default options to connect by DNS name over port 3389 and click Download RDP File.

The screenshot shows the Microsoft Azure portal interface. On the left, the navigation menu includes 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES' with items like 'All resources', 'Resource groups', 'App Services', etc. The main content area is titled 'CloudVM' under 'Virtual machine'. It displays the 'Overview' tab with details such as Resource group (CodeSizzler-01), Status (Running), Location (East US), Subscription (Visual Studio Enterprise – MPN), and Subscription ID (7bd726dd-0a34-4060-9168-b1e496983db8). A search bar at the top says 'Search resources, services, and docs (G+/-)'. On the right, there's a 'Connect to virtual machine' section with tabs for 'RDP', 'SSH', and 'BASTION'. The 'RDP' tab is selected, showing fields for 'IP address' (Public IP address 23.96.93.202) and 'Port number' (3389). A red box highlights this section. Below it is a 'Download RDP File' button and a troubleshooting link. At the bottom, a note about Bastion is shown.

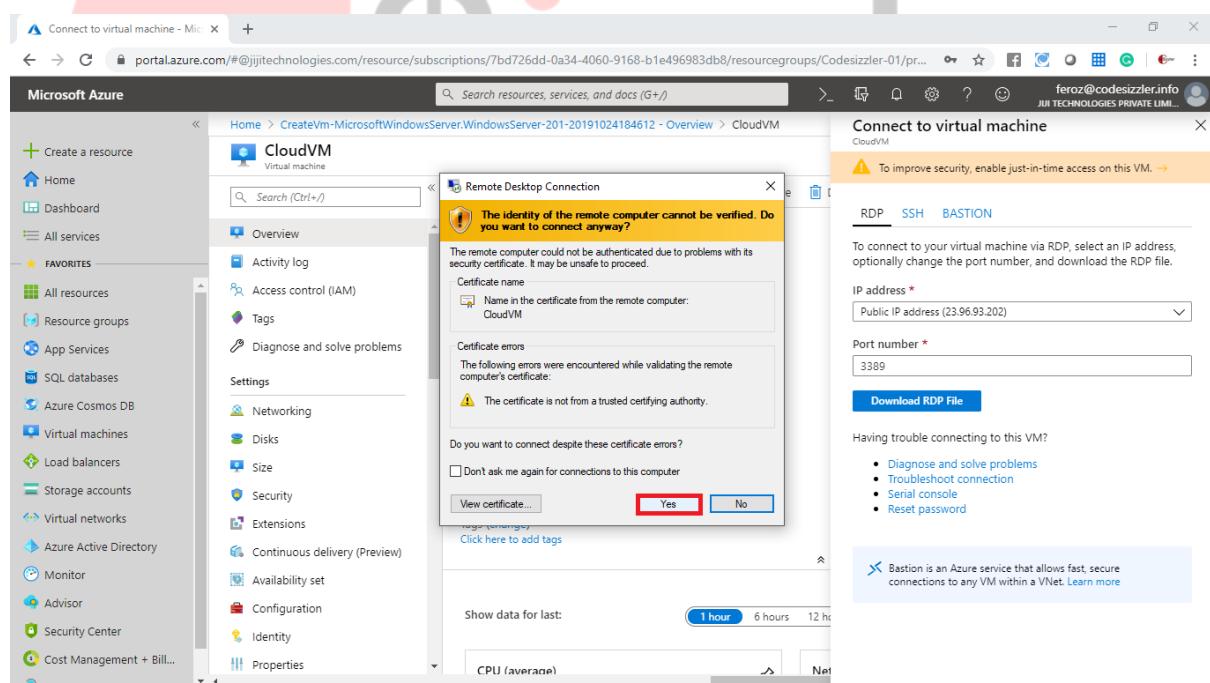
11. Open the downloaded RDP file and click Connect when prompted.

The screenshot shows a 'Remote Desktop Connection' dialog box from Windows. It asks, 'The publisher of this remote connection can't be identified. Do you want to connect anyway?'. Below the message, it says 'This remote connection could harm your local or remote computer. Do not connect unless you know where this connection came from or have used it before.' It lists the Publisher as 'Unknown publisher', Type as 'Remote Desktop Connection', and Remote computer as '23.96.93.202'. There is a checkbox for 'Don't ask me again for connections to this computer' and a 'Show Details' link. At the bottom are 'Connect' and 'Cancel' buttons. A red box highlights this dialog box.

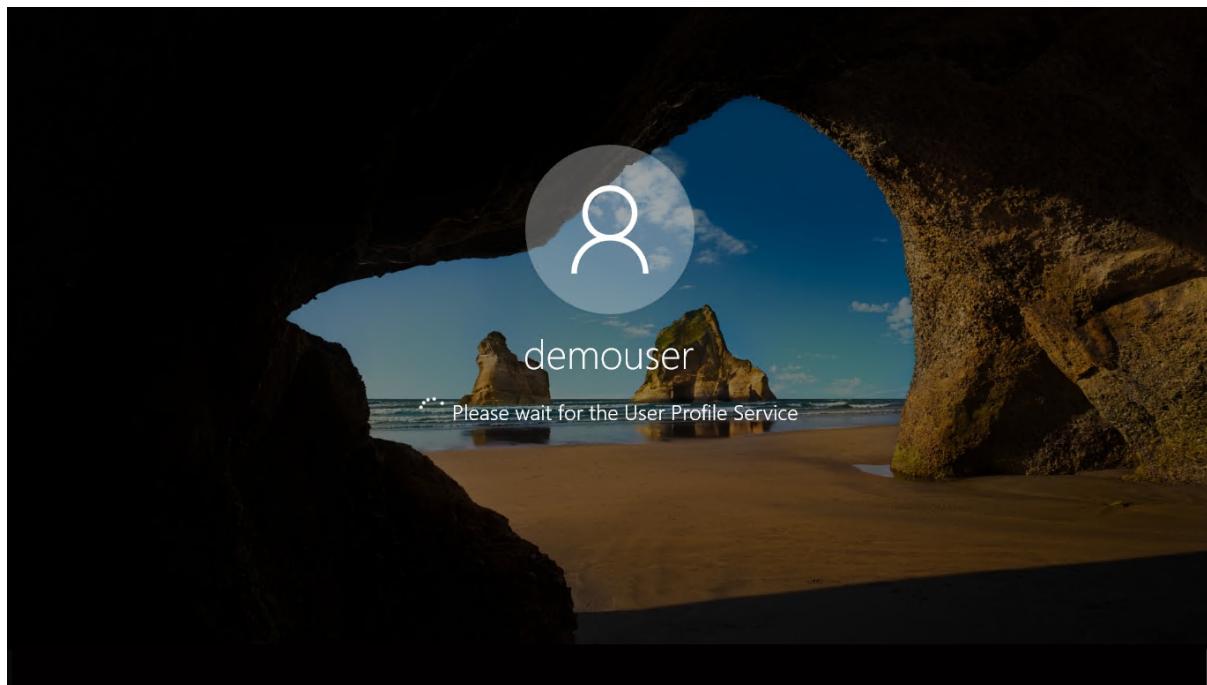
12. In the Windows Security window, select more choices and then Use a different account. Type the username as localhost\username, (you could also type demouser enter password you created for the virtual machine, and then click OK.



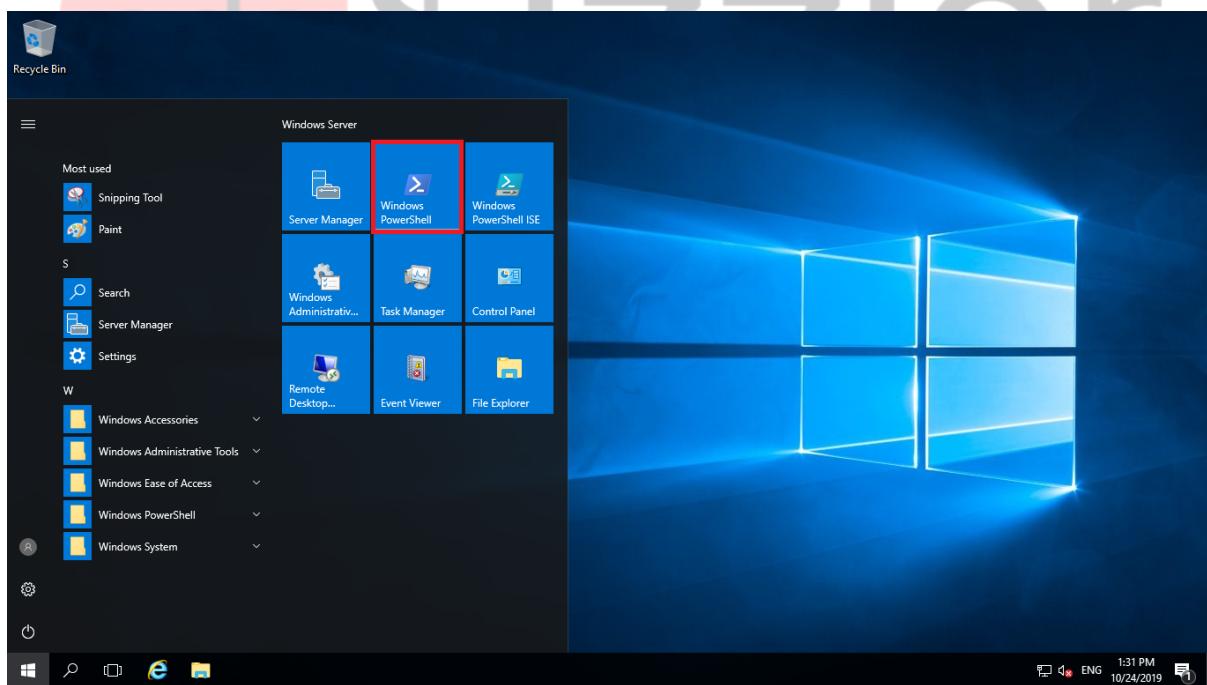
13. You may receive a certificate warning during the sign-in process. Click Yes or to create the connection and connect to your deployed VM. You should connect successfully.



Congratulations! You have deployed and connected to a Windows Server virtual machine in Azure.

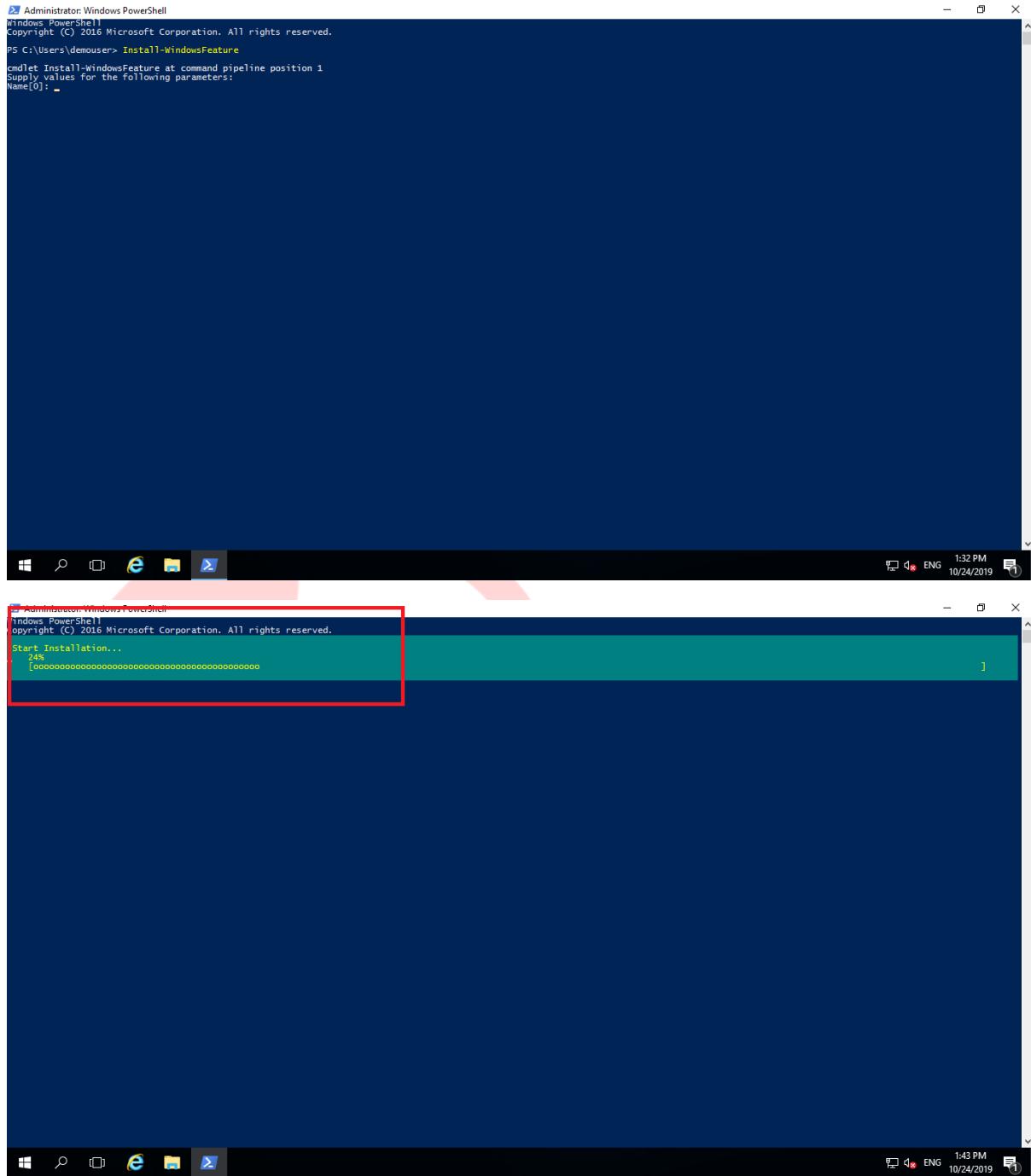


14. Open up a PowerShell command prompt on the virtual machine, by clicking the Start button, typing PowerShell right clicking Windows PowerShell in the menu and selecting Run as administrator.



15. Install the Web-Server feature in the virtual machine by running the following command in the PowerShell command prompt: PowerShell

```
Install-WindowsFeature -name Web-Server -IncludeManagementTools
```

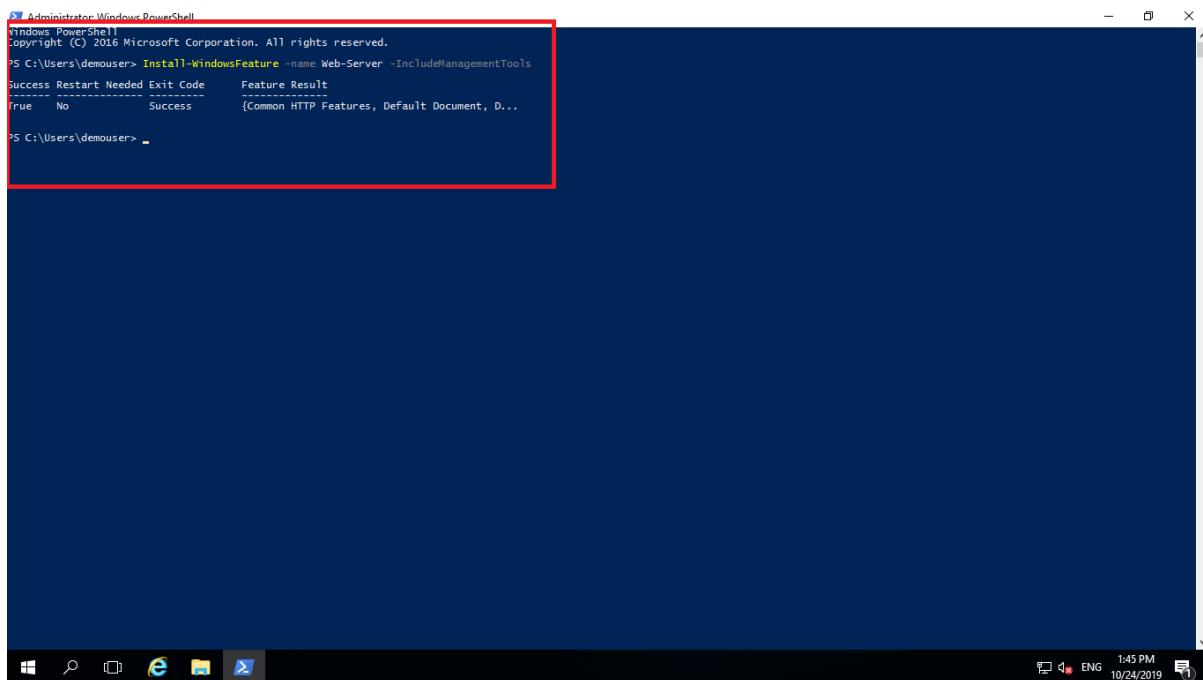


```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Users\demouser> Install-WindowsFeature
cmdlet Install-WindowsFeature at command pipeline position 1
Supply values for the following parameters:
Name[0]: -
```

Start Installation...  
24% [oooooooooooooooooooooooooooooooooooo]

16. When completed you should see a prompt stating Success with a value True, among other items in the output. You do not need to restart the virtual machine to complete the installation.

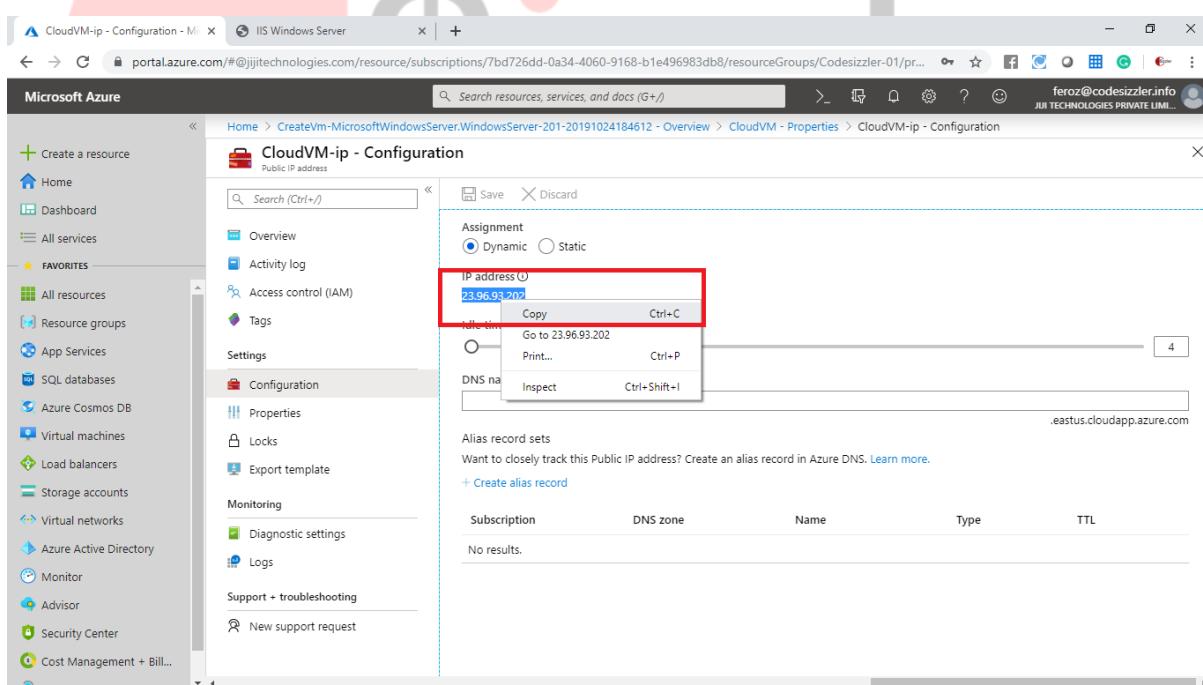


```
Administrator: Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Users\demouser> Install-WindowsFeature -name Web-Server -IncludeManagementTools
Success Restart Needed Exit Code Feature Result
----- ----- ----- -----
True No Success {Common HTTP Features, Default Document, D...

PS C:\Users\demouser>
```

17. Back in the portal, select the VM and in the overview pane of the VM, use the Click to copy button to the right of the IP address to copy it and paste it into a browser tab.



CloudVM-ip - Configuration - M IIS Windows Server

Search resources, services, and docs (G+/-)

feroz@codesizzler.info JJI TECHNOLOGIES PRIVATE LTD...

CloudVM - Configuration

CloudVM-ip - Configuration

Assignment

Dynamic (radio button selected) Static

IP address (23.96.93.202)

Copy (highlighted with a red box) Ctrl+C

Ctrl+L

Go to 23.96.93.202

Print... Ctrl+P

DNS name

Inspect Ctrl+Shift+I

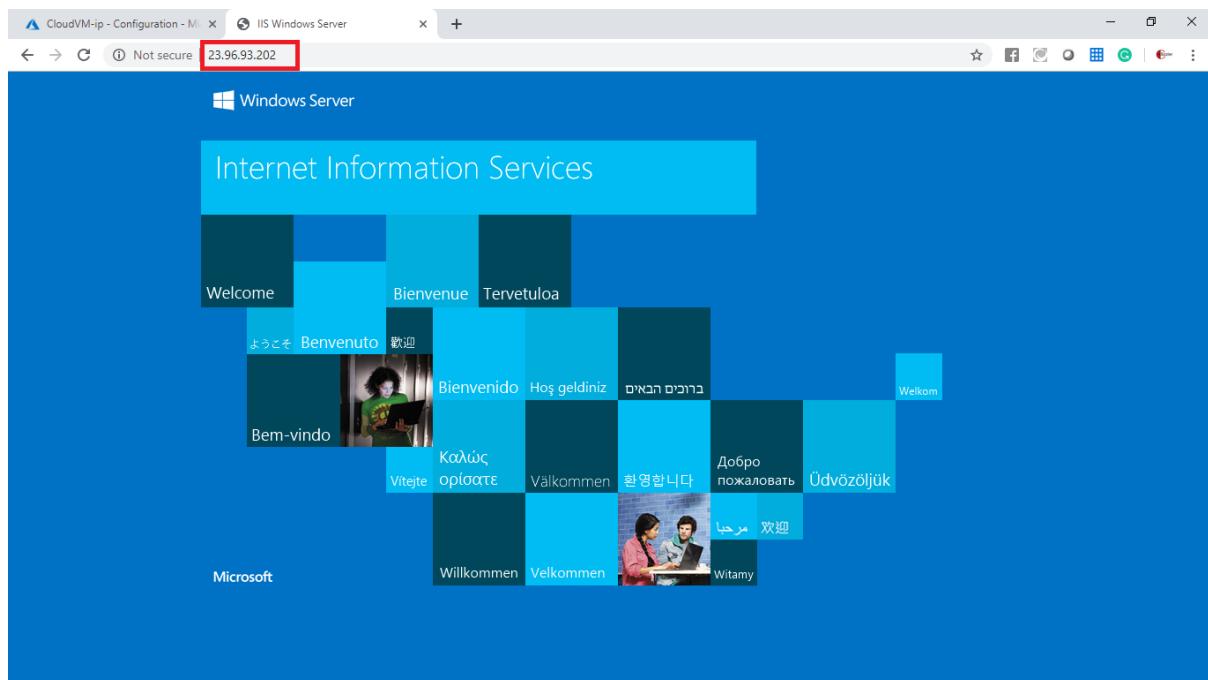
Aliases record sets

Create alias record

Subscription DNS zone Name Type TTL

No results.

18. The default IIS Web Server welcome page will open, and is available to connect to the publicly via this IP address, or via the fully qualified domain name.



Congratulations! You have created a web server that can be connected to publicly via this IP address, or via the fully qualified domain name. If you had a web page to host you could deploy those source files to the virtual machine and host them for public access on the deployed virtual machine.