

Lab:- 5

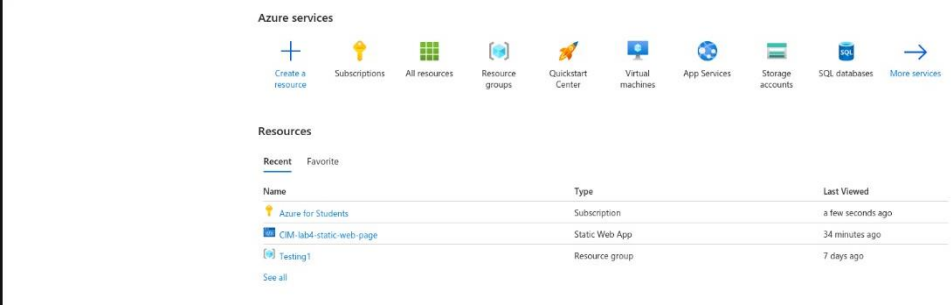
Name: Pasupuleti Rohithsaidatta

Reg no :230913003
16-02-2024

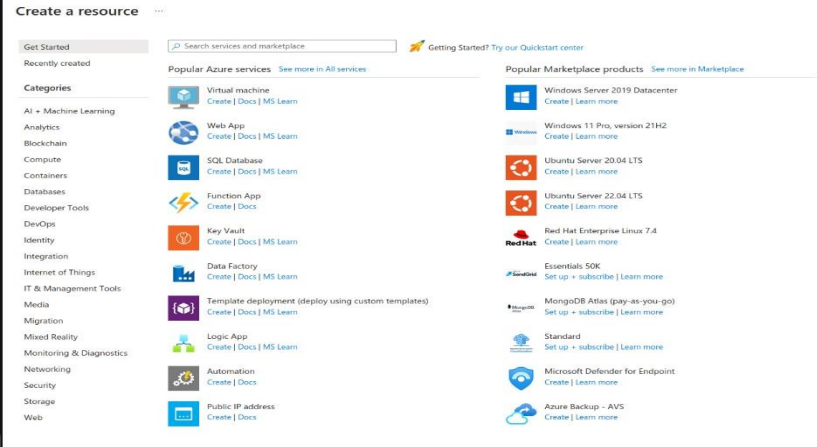
Cloud Infrastructure Management

Carry out experiment to create VM on Linux Platform and check its working in the Server.

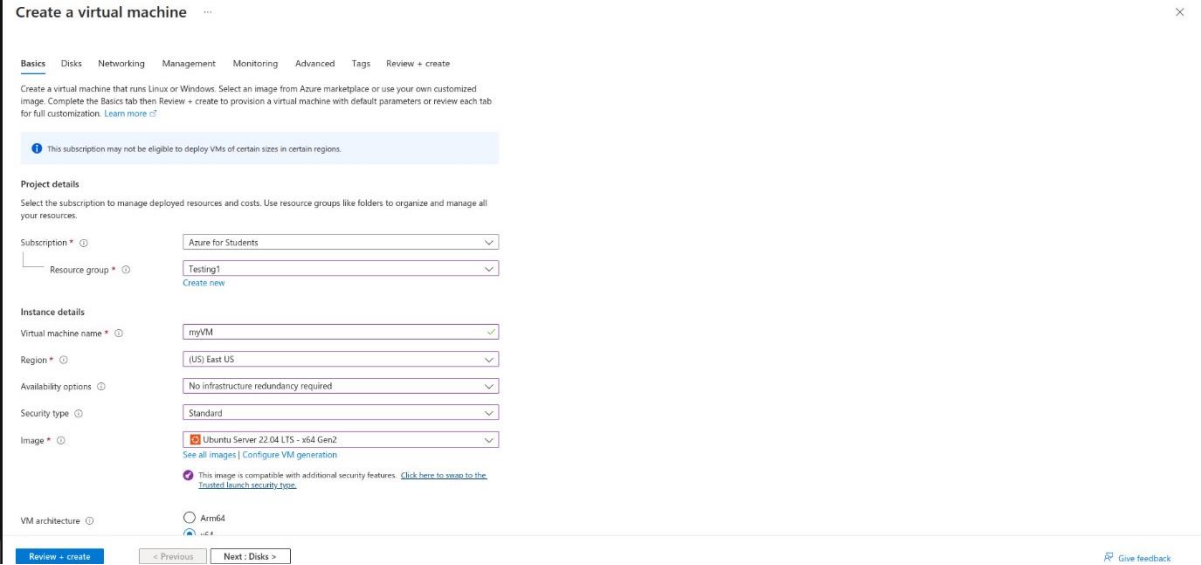
Login to the Azure account and click on to “Create a resource” button.



Search for the Virtual Machine and click on “create”



Give the suitable information for the virtual machine and choose and image file for the virtual machine



Click on “Create and Review” button.

Home > Create a resource >

Create a virtual machine

VM architecture ☐ Arm64 ☒ x64

Run with Azure Spot discount ☐

Size *

[See all sizes](#)

Enable Hibernation (preview) ☐

To enable hibernation, you must register your subscription. [Learn more](#)

Administrator account

Authentication type ☒ SSH public key ☐ Password

Azure now automatically generates an SSH key pair for you and allows you to store it for future use. It is a fast, simple, and secure way to connect to your virtual machine.

Username *

SSH public key source

Key pair name *

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 *

[Review + create](#) [< Previous](#) [Next: Disks >](#) [Give feedback](#)

After successful of validation, click on “create” button.

Home > Create a resource >

Create a virtual machine

Validation passed

Basics Disks Networking Management Monitoring Advanced Tags [Review + create](#)

Cost given below is an estimate and not the final price. Please use [pricing calculator](#) for all your pricing needs.

Price

1 X Standard B1s by Microsoft [Terms of use](#) | [Privacy policy](#)

Subscription credits apply

0.8836 INR/hr

[Pricing for other VM sizes](#)

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statements(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.

Name

Preferred e-mail address

Preferred phone number

You have set SSH 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](#) [Give feedback](#)

It will ask you for the Generation of new Key, click on “Download private key and create resource”

Home > Create a resource >

Create a virtual machine

Validation passed

Basics Disks Networking Management Monitoring Advanced Tags [Review + create](#)

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Name

Preferred e-mail address

Preferred phone number

An SSH key pair contains both a public key and a private key. **Azure doesn't store the private key.** After the SSH key resource is created, you won't be able to download the private key again. [Learn more](#)

[Download private key and create resource](#)

[Return to create a virtual machine](#)

Submitting deployment... Submitting the deployment template for resource group 'Testing1'.

After successful creation of virtual machine click on “Goto resource”

The screenshot shows the 'Overview' page for a deployment named 'CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240216101116'. The deployment is complete. Key details include: Deployment name, Subscription (Azure for Students), Resource group (Testing1), Start time (2/16/2024, 10:12:47 AM), and Correlation ID. A 'Go to resource' button is visible. On the right, there are sections for 'Cost Management' and 'Microsoft Defender for Cloud'.

The screenshot shows the 'myVM' page. The 'Essentials' section displays: Resource group (Testing1), Status (Running), Location (East US), Subscription (Azure for Students), and Subscription ID. The 'Properties' section lists: Computer name (myVM), Operating system (Linux (ubuntu 22.04)), Image publisher (canonical), Image offer (0001-com-ubuntu-server-jammy), Image plan (22_04-lts-gen2), VM generation (V2), VM architecture (x64), Agent status (Ready), Agent version (2.9.1.1), Hibernation (Disabled), Host group (-), Host (-), and Proximity placement group (-). The 'Networking' section shows: Public IP address (52.168.6.41), Private IP address (10.0.0.4), and Virtual network/subnet (myVM-vnet/default). The 'Size' section shows: Standard B1s, 1 vCPUs, and 1 GB RAM. The 'Disk' section shows: OS disk (myVM disk1).

Come back to Azure, click on connect button and it will pop up the window for authentication, Then it will open the terminal

The screenshot shows the 'myVM Connect' page. It displays the public IP address (52.168.6.41) and the admin username (azureuser). There are two main sections: 'Recommended' and 'Most common'. The 'Recommended' section shows 'SSH using Azure CLI' and 'Native SSH'. The 'Most common' section shows 'Native SSH'. A 'Connect from the Azure portal' window is open, showing the 'Configure prerequisites for SSH using Azure CLI' step. The 'Prerequisites configured' section lists: System assigned managed identity, Azure AD SSH Login Extension, Virtual machine user or administrator login, Port 22 access, and Public IP address. The 'Welcome to Azure Cloud Shell' window is also open, showing the 'Bash' and 'PowerShell' environment selectors.

Choose the subscription in the terminal shown below.

The screenshot shows the 'myVM | Connect' interface. On the left, a sidebar lists settings categories: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings (Network, Connect, Disks, Size, Microsoft Defender for Cloud, Advisor recommendations, Extensions + applications, Availability + scaling, Configuration), and Connect is selected. The main area shows connection details for a VM with Public IP address 52.168.6.41, Admin username azureuser, Port 22, and Just-in-time policy Unsupported by plan. Below this, two connection methods are recommended: 'SSH using Azure CLI' and 'Native SSH'. A modal dialog titled 'You have no storage mounted' is open, stating that Azure Cloud Shell requires an Azure file share and will create a new storage account. It asks for a subscription, with 'Azure for Students' selected, and a 'Show advanced settings' link. The dialog has 'Creating...' and 'Close' buttons.

It will start the terminal.

This screenshot shows the same 'myVM | Connect' interface, but with the terminal window open at the bottom. The terminal displays the following text: 'The programs included with the Ubuntu system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/*/copyright. Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law. To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.'

Enter the given command to update and install the certain packages.

The screenshot shows the Azure portal interface for a virtual machine named 'myVM'. The left sidebar contains navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Networking, Connect, Disks, and Size. The main area displays the 'Connect' section with a 'Public IP address' of 52.168.6.41. Below this, there are two tabs: 'Recommended' and 'Most common'. The 'Recommended' tab shows 'SSH using Azure CLI' as the preferred method. On the right, a modal window titled 'SSH using Azure CLI' is open, showing a list of prerequisites that have been configured, including 'System assigned managed identity', 'Azure AD SSH Login Extension', and 'Virtual machine user or administrator login'. At the bottom of the screenshot, a terminal window shows the output of the 'sudo apt update' command, displaying the progress of updating package lists from various sources.

After the successful execution of the commands copy up the public ip address which is provided in the overview section of the virtual machine.

This is the result which is opted when we run the ip address.

The screenshot shows a web browser window with the address bar displaying '52.168.6.41'. The page content includes a heading 'Welcome to nginx!', a paragraph stating 'If you see this page, the nginx web server is successfully installed and working. Further configuration is required.', and links to 'nginx.org' for documentation and support, and 'nginx.com' for commercial support. The page also includes a thank you message for using nginx.