



FACULTY OF COMPUTING

Cloud Computing- IT4090

4th Year – 1st Semester

Lab 01

Home >

Virtual machines


Sri Lanka Institute of Information Technology (SLIIT)

+ Create ▾ Switch to classic Reservations ▾ Manage view ▾ Refresh ▾ Export to CSV Open query | Assign tags ▶ Start ⌂ Restart □ Stop 🗑 Delete ☰ Services ▾ Maintenance ▾

Filter for any field... Subscription equals all Type equals all Resource group equals all Location equals all Add filter

Showing 0 to 0 of 0 records.

No grouping ▾ List view ▾

Name ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system ↑↓	Size ↑↓	Public IP address ↑↓	Disks ↑↓
<div><h4>No virtual machines to display</h4><p>Create a virtual machine that runs Linux or Windows. Select an image from the marketplace or use your own customized image.</p><p>+ Create ▾</p><p>Learn more about Windows virtual machines</p><p>Learn more about Linux virtual machines</p></div>								

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Create a virtual machine

Try out the Microsoft Copilot for Azure for additional recommendations when creating a virtual machine.

Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM size for my workload

Basics

Disks

Networking

Management

Monitoring

Advanced

Tags

Review + create

Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. [Learn more](#)

This subscription may not be eligible to deploy VMs of certain sizes in certain regions.

Project details

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

Subscription *

Azure for Students

Resource group *

(New) myResourceGroup

[Create new](#)

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Instance details

Virtual machine name *

myVM

Region *

(Europe) UK South

Availability options

No infrastructure redundancy required

Security type

Standard

Image *

Ubuntu Server 24.04 LTS - x64 Gen2

[See all images](#) [Configure VM generation](#)

This image is compatible with additional security features. [Click here to learn to the Trusted guest security type.](#)

VM architecture

ARM64

☒ x64

Run with Azure Spot discount

☐

Size *

Standard_DS2_V5 - 2 vCPUs, 8 GiB memory (\$84.08/month)

[See all sizes](#)

Enable Hyper-V

☐

Hyper-V is not supported by the size that you have selected. Choose a size that is compatible with Hyper-V to enable this feature. [Learn more](#)

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Review + create

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Dashboard > Virtual machines >

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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 * ⓘ

azureuser ✓

SSH public key source

Generate new key pair ✓

SSH Key Type

☒ RSA SSH Format

☐ Ed25519 SSH Format

ⓘ Ed25519 offers better performance and security with a smaller key size, while RSA is still widely used particularly for legacy systems and applications.

Key pair name *

myKey ✓

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) ✓

ⓘ All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.

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Validation passed

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BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + create

Price

1 X Standard D2s v3
by Microsoft
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply ⓘ
0.1160 USD/hr
[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.

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Create a virtual machine - Microsoft

Quickstart - Create a Linux VM

portal.azure.com/?Microsoft_Azure_Education_correlationId=0120ac65-7b29-4859-89bb-aaf7986b5701#create/Microsoft.VirtualMachine

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

my/VM_key.pem
2:49:18 • Done

Initializing deployment
Initializing template deployment to resource group 'myResourceGroup'.

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Create a virtual machine

Validation passed

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BasicsDisksNetworkingManagementMonitoringAdvancedTags

Price

1 X Standard D2s v3
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Subscription credits apply ⓘ
0.1160 USD/hr
[Pricing for other VM sizes](#)

Generate new key pair

As 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

TERMS

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Home > CreateVm-canonical.ubuntu-24_04-lts-server-20240810140451 | Overview

Deployment

Search X < Delete Cancel Reapply Download Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2... Start time: 8/10/2024, 2:13:11 PM
Subscription: Azure for Students Correlation ID: 7b1967ea-ef11-4b72-bc1a-43c12af54248

Resource group: myResourceGroup

Deployment details

Next steps

Setup azure shutdown Recommended

Monitor VM health, performance and network dependencies Recommended

Run a script inside the virtual machine Recommended

Go to resource Create another VM

Give feedback

Tell us about your experience with deployment:

Cost Management

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Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
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```
azuser@myVM:~$ sudo apt-get -y update
Hit:1 http://azure.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://azure.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://azure.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Hit:4 http://azure.archive.ubuntu.com/ubuntu noble-security InRelease
Get:5 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://azure.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:8 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:9 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:10 http://azure.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:11 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:12 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [3328 B]
Get:13 http://azure.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [344 kB]
Get:14 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [321 kB]
Get:15 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [135 kB]
Get:16 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [25.8 kB]
Get:17 http://azure.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [12.7 kB]
Get:18 http://azure.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [14.1 kB]
Get:19 http://azure.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3688 B]
Get:20 http://azure.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [212 B]
Get:21 http://azure.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [532 B]
Get:22 http://azure.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [288 B]
Get:23 http://azure.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
Get:24 http://azure.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [10.3 kB]
Get:25 http://azure.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [10.5 kB]
Get:26 http://azure.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [17.6 kB]
Get:27 http://azure.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [3016 B]
Get:28 http://azure.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:29 http://azure.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:30 http://azure.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:31 http://azure.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:32 http://azure.archive.ubuntu.com/ubuntu noble-security/universe amd64 Packages [249 kB]
Get:33 http://azure.archive.ubuntu.com/ubuntu noble-security/universe Translation-en [188 kB]
Get:34 http://azure.archive.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:35 http://azure.archive.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [9176 B]
Get:36 http://azure.archive.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [18.6 kB]
Get:37 http://azure.archive.ubuntu.com/ubuntu noble-security/multiverse Translation-en [2888 B]
Get:38 http://azure.archive.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [288 B]
Get:39 http://azure.archive.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [344 B]
Fetched 27.2 MB in 4s (6128 kB/s)
Reading package lists... Done
azuser@myVM:~$
```

```
azureuser@myVM:~$ sudo apt-get -y install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  nginx-common
Suggested packages:
  fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  nginx nginx-common
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 552 kB of archives.
After this operation, 1596 kB of additional disk space will be used.
Get:1 http://azure.archive.ubuntu.com/ubuntu noble/main amd64 nginx-common all 1.24.0-2ubuntu2 [31.2 kB]
Get:2 http://azure.archive.ubuntu.com/ubuntu noble/main amd64 nginx amd64 1.24.0-2ubuntu2 [521 kB]
Fetched 552 kB in 0s (21.1 MB/s)
Preconfiguring packages ...
Selecting previously unselected package nginx-common.
(Reading database ... 64525 files and directories currently installed.)
Preparing to unpack .../nginx-common_1.24.0-2ubuntu2_all.deb ...
Unpacking nginx-common (1.24.0-2ubuntu2) ...
Selecting previously unselected package nginx.
Preparing to unpack .../nginx_1.24.0-2ubuntu2_amd64.deb ...
Unpacking nginx (1.24.0-2ubuntu2) ...
Setting up nginx (1.24.0-2ubuntu2) ...
Setting up nginx-common (1.24.0-2ubuntu2) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
azureuser@myVM:~$
```

