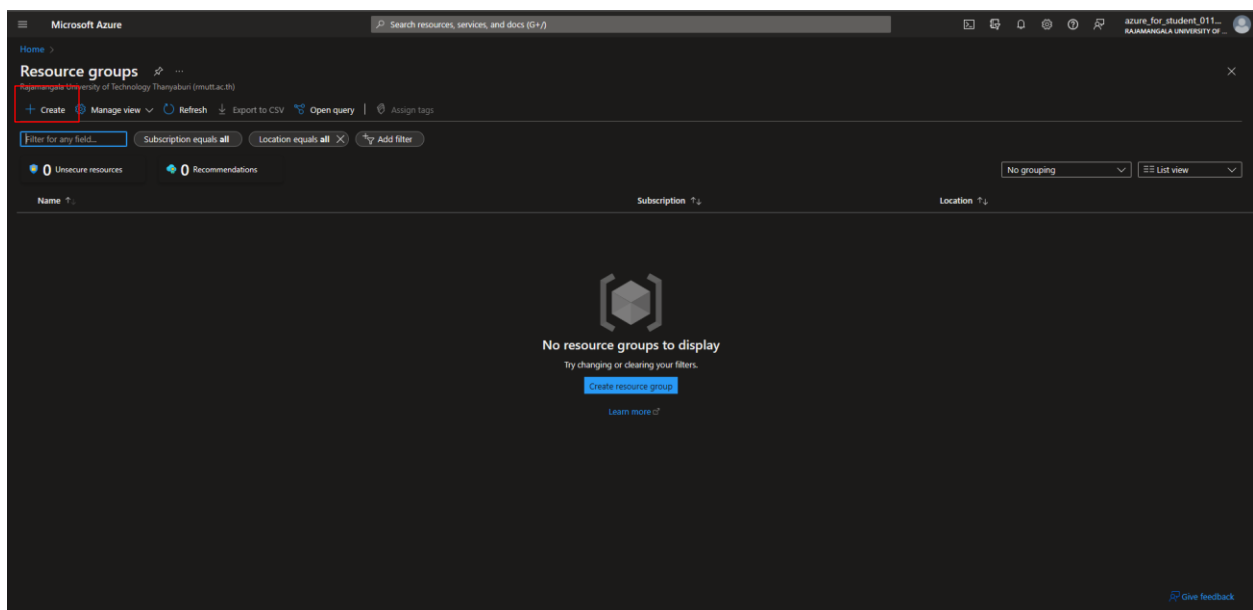
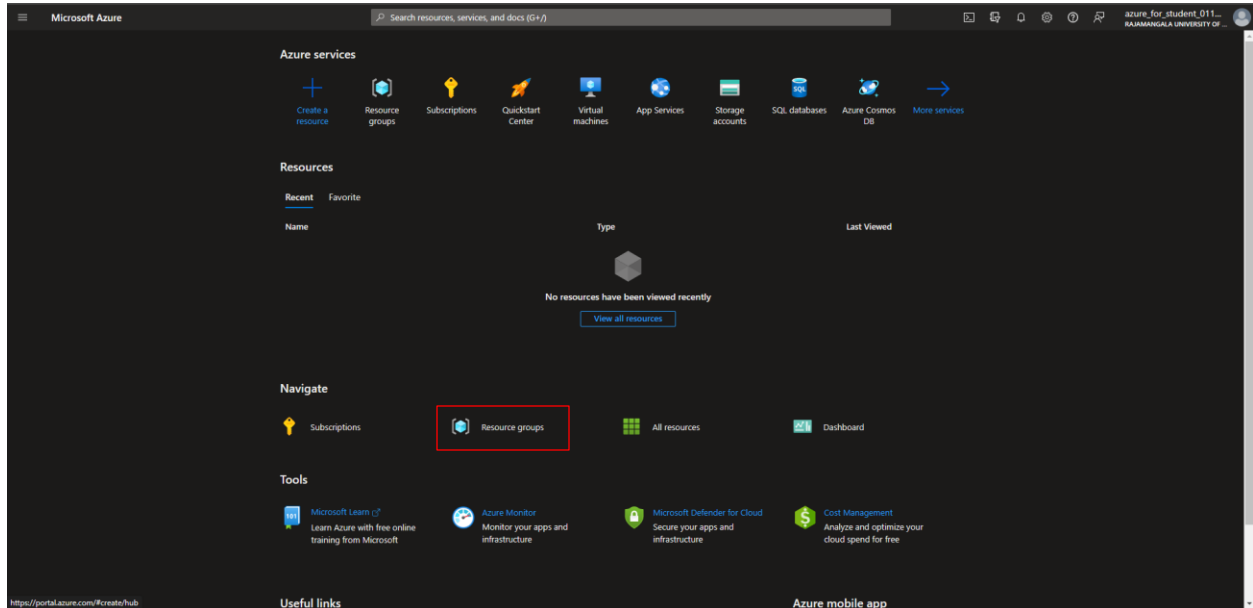


LAB 4 Virtual Network

สร้าง Resource group



Microsoft Azure

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

azure_for_student_011...
BAJANGMANGALA UNIVERSITY OF ...

Home > Resource groups >

Create a resource group ...


Basics


Tags


Review + create


Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more \(T\)](#)

Project details


Subscription * 


Azure for Students 

Resource group * 

VM-weena 

Resource details

Region * 

(Asia Pacific) Southeast Asia 

Review + create

< Previous

Next : Tags >

Microsoft Azure

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

azure_for_student_011...
BAJANGMANGALA UNIVERSITY OF ...

Home > Resource groups >

Create a resource group ...

Basics

Tags

Review + create

Validation passed.

Basics

Subscription

Azure for Students

Resource group

VM-weena

Region

Southeast Asia

Tags

None

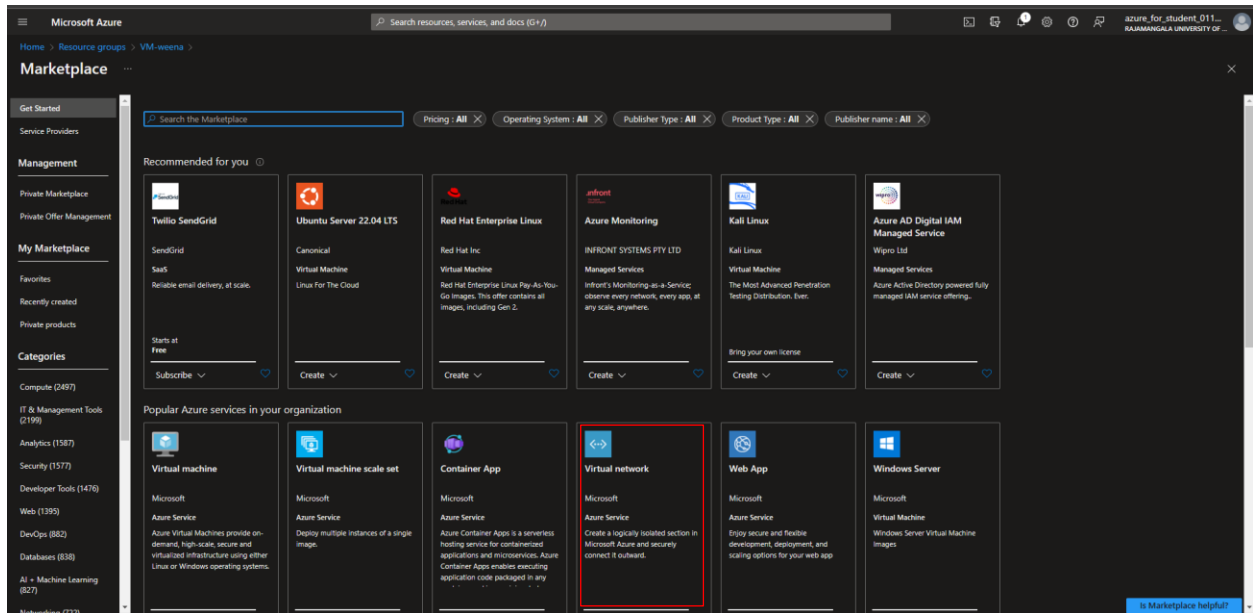
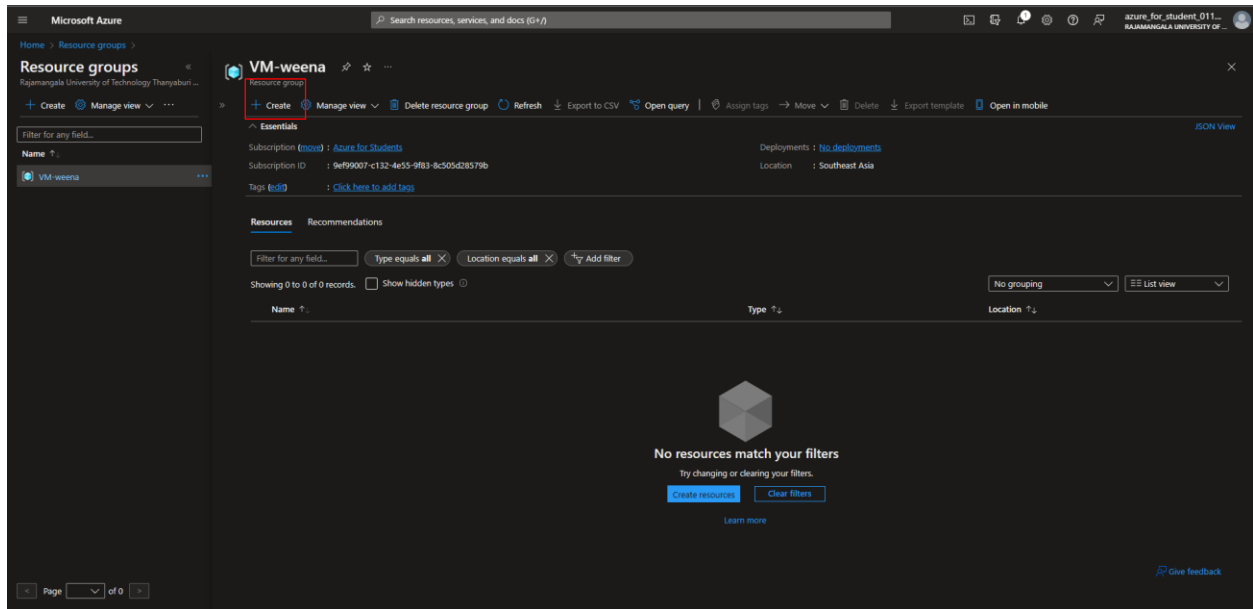
Create

< Previous

Next >

Download a template for automation

สร้าง Virtual Network



Add subnet และ Security

The screenshot shows the 'Create virtual network' page in the Microsoft Azure portal, specifically the 'IP Addresses' tab. The page is for creating a virtual network named 'myVNet'. The 'IPv4 address space' is set to '10.0.0.0/16' (10.0.0.0 - 10.0.255.255 (65536 addresses)). There is a table for subnets with one entry: 'mySubnet' with address range '10.0.0.0/24' and no NAT gateway. A sidebar on the right shows the 'Edit subnet' details for 'mySubnet', including its name, address range, and options for NAT gateway and service endpoints. The bottom navigation bar includes 'Review + create', '< Previous', 'Next: Security >', and 'Download a template for automation'.

Microsoft Azure

Home > Virtual network >

Create virtual network

Basics IP Addresses Security Tags Review + create

The virtual network's address space, specified as one or more address prefixes in CIDR notation (e.g. 192.168.1.0/24).

IPv4 address space

10.0.0.0/16 10.0.0.0 - 10.0.255.255 (65536 addresses)

☐ Add IPv6 address space

The subnet's address range in CIDR notation (e.g. 192.168.1.0/24). It must be contained by the address space of the virtual network.

+ Add subnet Remove subnet

Subnet name	Subnet address range	NAT gateway
mySubnet	10.0.0.0/24	-

A NAT gateway is recommended for outbound internet access from subnets. Edit the subnet to add a NAT gateway. [Learn more](#)

Review + create < Previous Next: Security > Download a template for automation

Edit subnet

Subnet name * mySubnet

Subnet address range * 10.0.0.0/24

10.0.0.0 - 10.0.255 (251 + 5 Azure reserved addresses)

NAT GATEWAY

Simplify connectivity to the internet using a network address translation gateway. Outbound connectivity is possible without a load balancer or public IP addresses attached to your virtual machines. [Learn more](#)

NAT gateway None

SERVICE ENDPOINTS

Create service endpoint policies to allow traffic to specific Azure resources from your virtual network over service endpoints. [Learn more](#)

Services 0 selected

Save Cancel

The screenshot shows the 'Create virtual network' page in the Microsoft Azure portal, specifically the 'Security' tab. The 'BastionHost' is enabled with name 'myBastionHost' and address space '10.1.1.0/24'. The 'Public IP address' is set to '[New] myBastionIP'. 'DDoS Network Protection' is disabled, and the 'Firewall' is also disabled. The bottom navigation bar includes 'Review + create', '< Previous', 'Next: Tags >', and 'Download a template for automation'.

Microsoft Azure

Home > Virtual network >

Create virtual network

Basics IP Addresses Security Tags Review + create

BastionHost

☐ Disable ☒ Enable

Bastion name * myBastionHost

AzureBastionSubnet address space * 10.1.1.0/24

10.1.1.0 - 10.1.1.255 (256 addresses)

Public IP address * [New] myBastionIP

Create new

DDoS Network Protection

☒ Disable ☐ Enable

Firewall

☒ Disable ☐ Enable

Review + create < Previous Next: Tags > Download a template for automation

Microsoft Azure

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

Home > Virtual network >

Create virtual network

Validation passed

BasicsIP AddressesSecurityTagsReview + create

Basics

Subscription: Azure for Students

Resource group: VM-weena

Name: vmnet

Region: Southeast Asia

IP addresses

Address space: 10.1.0.0/16

Subnet: mySubnet (10.1.0.0/24), AzureBastionSubnet (10.1.1.0/24)

Tags

None

Security

BastionHost: Enabled

DDoS protection plan: Basic

Firewall: Disabled

CreatePreviousNext >Download a template for automation

Microsoft Azure

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

Home >

Microsoft.VirtualNetwork-20230321203555 | Overview

Deployment

Search

DeleteCancelRedeployDownloadRefresh

Overview

Inputs

Outputs

Template

Your deployment is complete

Deployment name: Microsoft.VirtualNetwork-20230321203555

Subscription: Azure for Students

Resource group: VM-weena

Start time: 3/21/2023, 8:41:33 PM

Correlation ID: 3b47d5da-89cf-48aa-95a2-2031b751444f

Deployment details

Next steps

Go to resource

Give feedback

Tell us about your experience with deployment

Cost Management

Get notified to stay within your budget and prevent unexpected charges on your bill.

Set up cost alerts >

Microsoft Defender for Cloud

Secure your apps and infrastructure

Go to Microsoft Defender for Cloud >

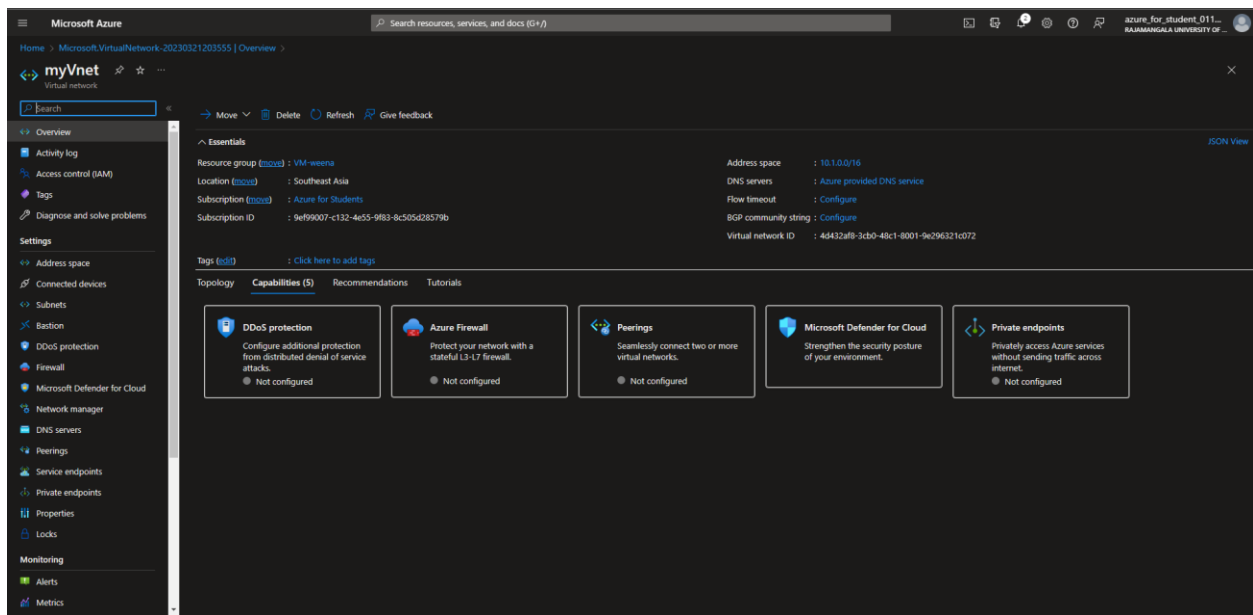
Free Microsoft tutorials

Start learning today >

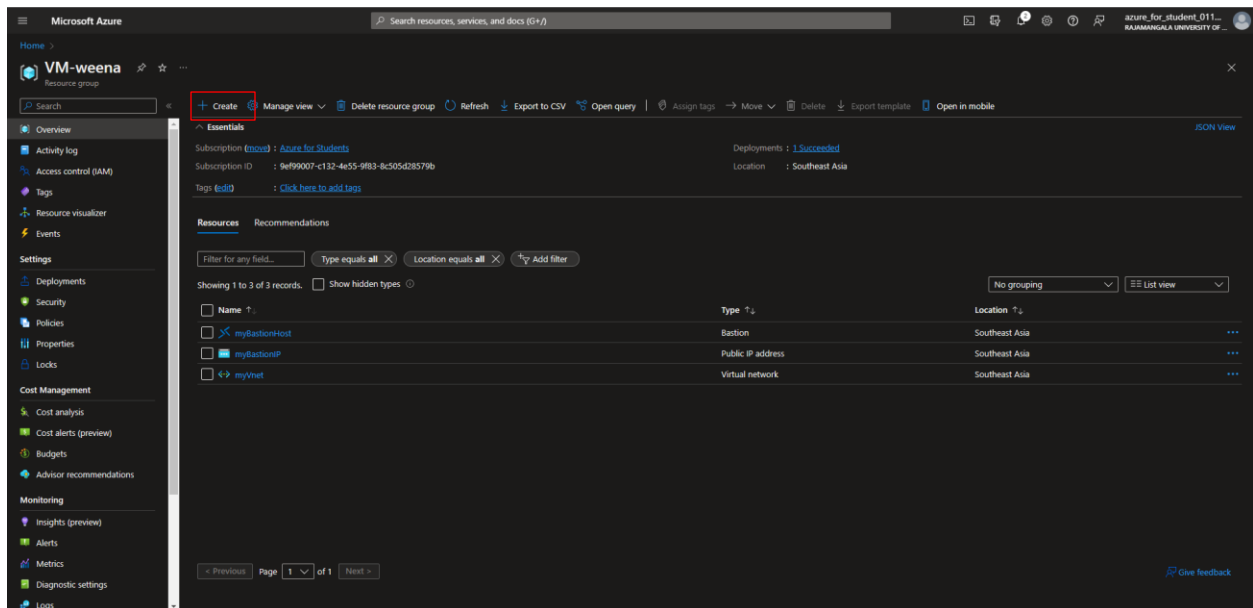
Work with an expert

Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.

Find an Azure expert >



สร้าง Virtual network ตัวที่ 2



Microsoft Azure

Search resources, services, and docs (6+)

Home > VM-weena > Marketplace

Get Started

Service Providers

Management

Private Marketplace

Private Offer Management

My Marketplace

Favorites

Recently created

Private products

Categories

Compute (2488)

IT & Management Tools (2191)

Analytics (1598)

Security (1577)

Developer Tools (1473)

Web (1362)

DevOps (882)

AI + Machine Learning (830)

Databases (803)

Search the Marketplace

Pricing: All

Operating System: All

Publisher Type: All

Product Type: All

Publisher name: All

Recommended for you

Twilio SendGrid

SendGrid

SaaS

Reliable email delivery, at scale.

Starts at Free

Subscribe

Ubuntu Server 22.04 LTS

Canonical

Virtual Machine

Linux For The Cloud

Create

Red Hat Enterprise Linux

Red Hat Inc.

Virtual Machine

Red Hat Enterprise Linux Pay-As-You-Go images. This offer contains all images, including Gen 2.

Create

Azure Monitoring

INFRONT SYSTEMS PTY LTD

Managed Services

Infra's Monitoring-as-a-Service: observe every network, every app, at any scale, anywhere.

Create

Kali Linux

Kali Linux

Virtual Machine

The Most Advanced Penetration Testing Distribution. Ever.

Bring your own license

Create

Azure AD Digital IAM Managed Service

Wipro Ltd

Managed Services

Azure Active Directory powered fully managed IAM service offering.

Create

Popular Azure services in your organization

Virtual machine

Microsoft

Azure Service

Azure Virtual Machines provide on-demand, high-scale, secure and virtualized infrastructure using either Linux or Windows operating systems.

Virtual machine scale set

Microsoft

Azure Service

Deploy multiple instances of a single image.

Container App

Microsoft

Azure Service

Azure Container Apps is a serverless hosting service for containerized applications and microservices. Azure Container Apps enables executing application code packaged in any

Virtual network

Microsoft

Azure Service

Create a logically isolated section in Microsoft Azure and securely connect it outward.

Web App

Microsoft

Azure Service

Enjoy secure and flexible development, deployment, and scaling options for your web app

Windows Server

Microsoft

Virtual Machine

Windows Server Virtual Machine Images

Marketplace help

Microsoft Azure

Search resources, services, and docs (6+)

Home > VM-weena > Marketplace > Virtual machine

Microsoft

Virtual machine

Microsoft | Azure Service

★ 4.7 (76 ratings)

Plan

Virtual machine

Create

Overview Plans Usage Information + Support Ratings + Reviews

With support for Linux, Windows Server, SQL Server, Oracle, IBM, and SAP, Azure Virtual Machines give you the flexibility of virtualization for a wide range of computing solutions—development and testing, running applications, and extending your datacenter. It's the freedom of open-source software configured the way you need it. It's as if it was another rack in your datacenter, giving you the power to deploy an application in seconds instead of weeks.

Azure Virtual Machines support IBM, Oracle, Red Hat, SAP, SQL Server, Linux, and Windows Server

More products from Microsoft [See All](#)

Active Directory Health Check

Microsoft

Azure Service

Assess the risk and health of Active Directory environments.

Create

AD Replication Status

Microsoft

Azure Service

Identify Active Directory replication issues in your environment.

Create

Device Update for IoT Hub

Microsoft

Azure Service

Securely and Reliably update your devices with Device Update for IoT Hub.

Create

Front Door and CDN profiles

Microsoft

Azure Service

Azure Front Door and CDN profiles is security test, modern cloud CDN that provides static and dynamic content acceleration, global load balancing and enhanced security for your apps.

Create

<https://portal.azure.com/#>

Microsoft Azure

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

Home > VM-weena > Marketplace > Virtual machine >

Create a virtual machine

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + 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 VM-weena

Create new

Instance details

Virtual machine name myVM1

Region (Asia Pacific) East Asia

Availability options Availability zone

Availability zone Zones 1

You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)

Security type Trusted launch virtual machines

Configure security features

Image Ubuntu Server 20.04 LTS - x64 Gen2

Review + createPreviousNext : Disks >

Give feedback

Microsoft Azure

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

Home > VM-weena > Marketplace > Virtual machine >

Create a virtual machine

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + create

Validation passed

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

Price

1 X Standard D2s v3

by Microsoft

Terms of usePrivacy policy

Subscription credits apply

0.1320 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.

Name Azure-SC011

Preferred e-mail address azure_for_student_011@mail.mnutt.ac.th

Preferred phone number 025494168

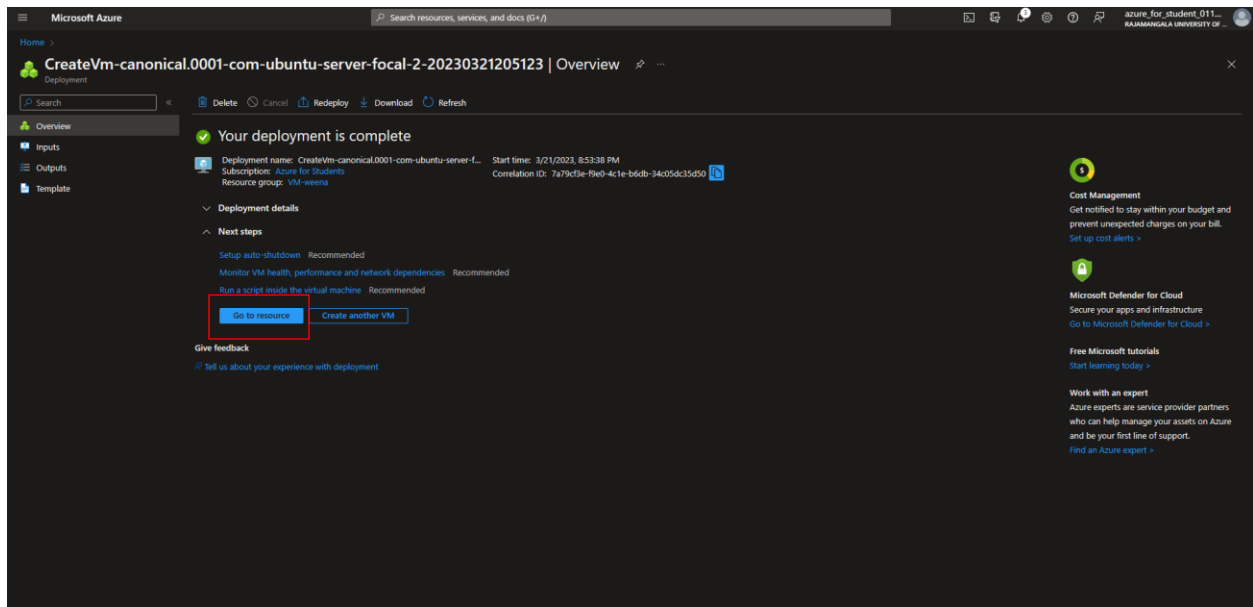
Basics

Subscription Azure for Students

Resource group VM-weena

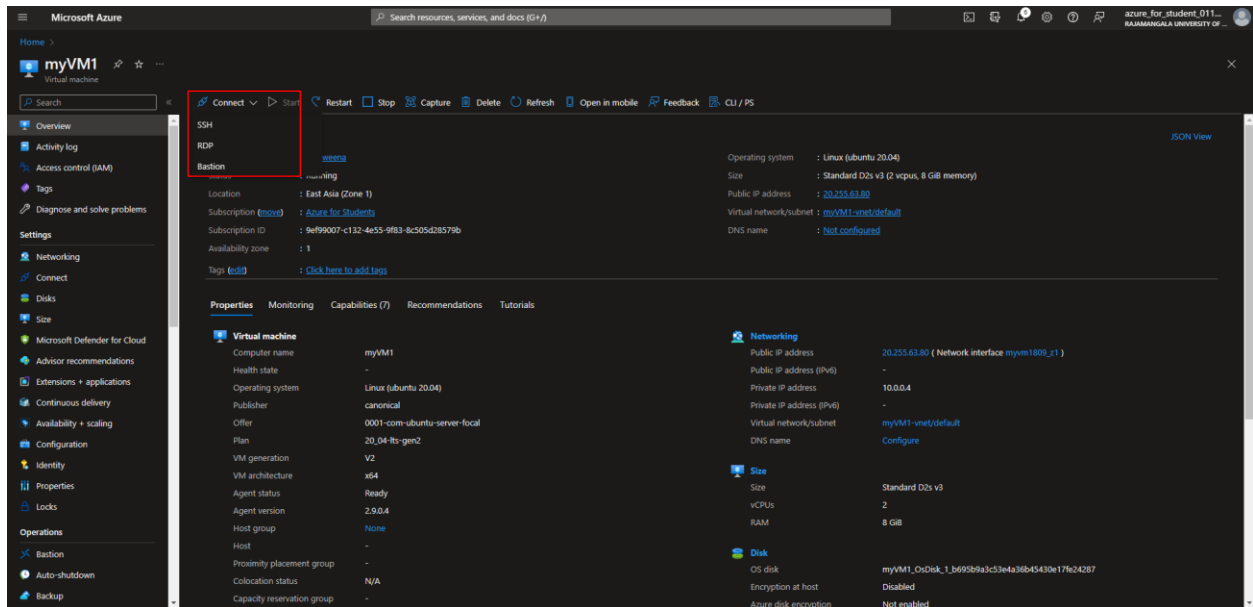
CreatePreviousNext >Download a template for automation

Give feedback

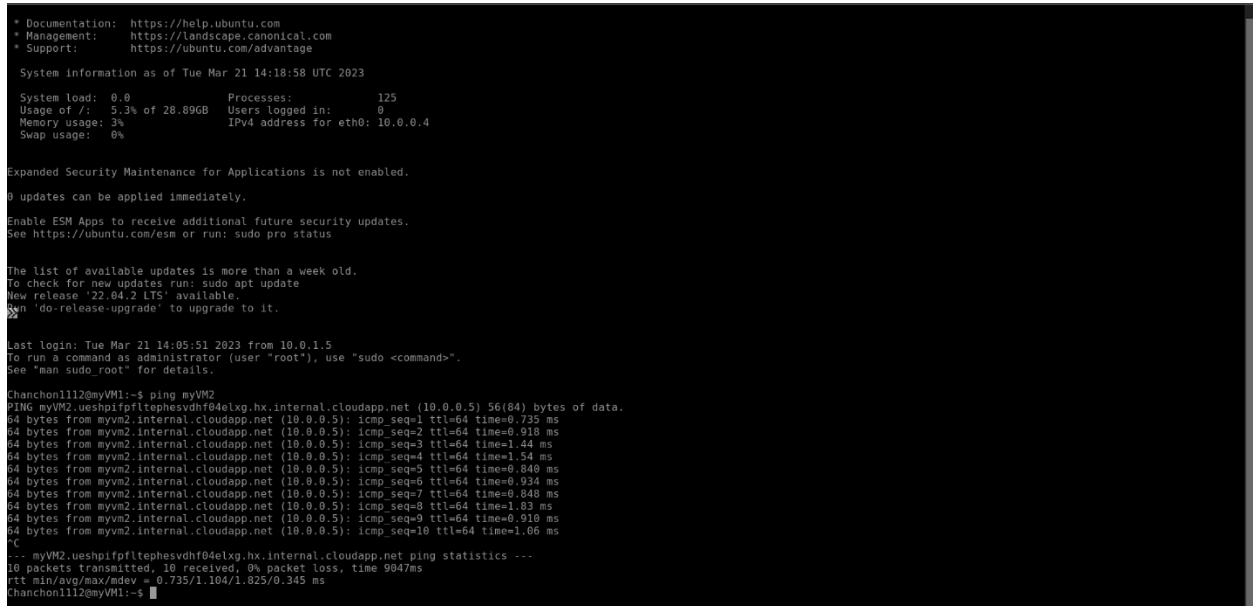
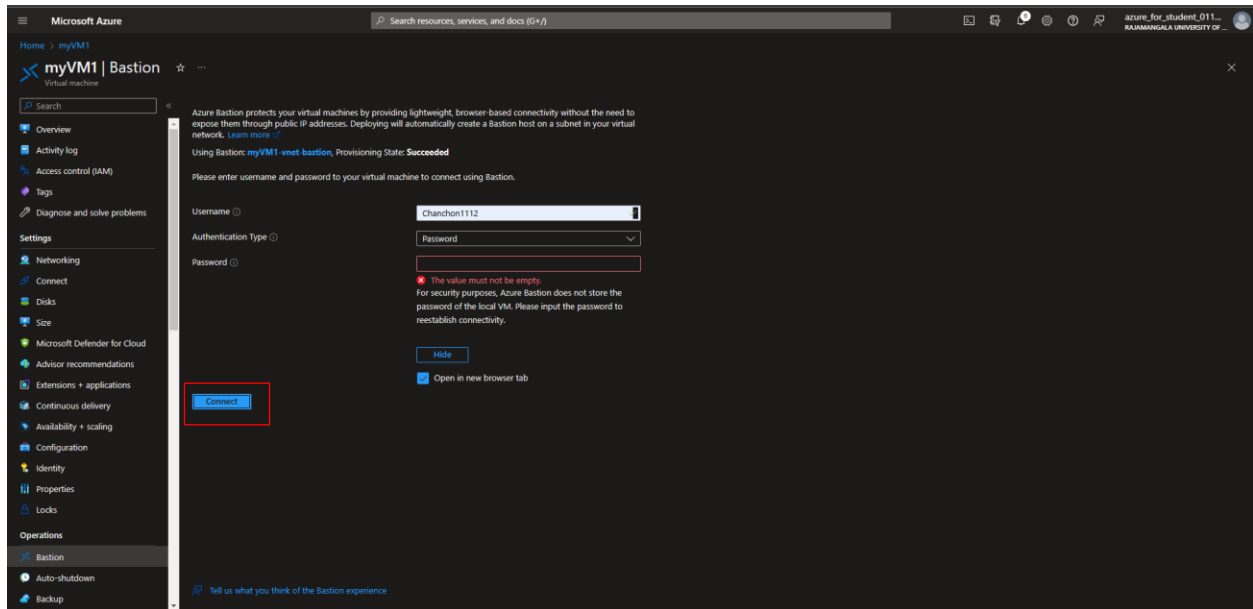


และทำการสร้าง VM2 ขึ้นมาด้วยวิธีการเดียวกันอีกครั้ง

หลังจากนั้นทำการ Ping VM1 ไปหา VM 2 โดยทำการ connect โดยเลือก bastion



หลังจากนั้นใส่ Username และ password หลังจากนั้นกด connect



หลังจากนั้นไปที่ VM2 เพื่อทำการ ping ไปหา VM1 โดยทำแบบเดิม

The screenshot shows the Microsoft Azure portal interface for a virtual machine named 'myVM2'. The left sidebar contains navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Networking, Connect, Disks, Size, Microsoft Defender for Cloud, Advisor recommendations, Extensions + applications, Continuous delivery, Availability + scaling, Configuration, Identity, Properties, Locks, Operations, Bastion, Auto-shutdown, and Backup. The main content area displays the 'Connect' dropdown menu with options for SSH, RDP, and Bastion. Below this, the 'Properties' tab is selected, showing details for the virtual machine 'myVM2'. The details include: Computer name: myVM2, Health state: -, Operating system: Linux (ubuntu 20.04), Publisher: canonical, Offer: 0001-com-ubuntu-server-focal, Plan: 20_04-fs-gen2, VM generation: V2, VM architecture: x64, Agent status: Ready, Agent version: 2.9.0.4, Host group: None, Host: -, Proximity placement group: -, Colocation status: N/A, Capacity reservation group: -. The 'Networking' section shows the public IP address 20.255.61.29 and the virtual network/subnet myVM1-vnet/default. The 'Size' section shows the size Standard D2s v3 with 2 vCPUs and 8 GiB of RAM. The 'Disk' section shows the OS disk myVM2_disk1 with encryption at host disabled.

The screenshot shows the Microsoft Azure portal interface for the Bastion connection of 'myVM2'. The left sidebar is the same as the previous screenshot. The main content area displays the 'Bastion' section with the title 'myVM2 | Bastion'. Below the title, there is a description of Azure Bastion and a status message: 'Using Bastion: myVM1-vnet-bastion, Provisioning State: Succeeded'. A form for connecting to the virtual machine is shown, with fields for Username (chanchon1112), Authentication Type (Password), and Password (masked with asterisks). There is a 'Show' button for the password field and a checkbox for 'Open in new browser tab'. A red box highlights the 'Connect' button at the bottom left of the form.

```
System load: 0.38      Processes:      130
Usage of /:  5.2% of 28.89GB   Users logged in: 0
Memory usage: 3%      IPv4 address for eth0: 10.0.0.5
Swap usage: 0%

* Introducing Expanded Security Maintenance for Applications.
  Receive updates to over 25,000 software packages with your
  Ubuntu Pro subscription. Free for personal use.

  https://ubuntu.com/azure/pro

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

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.

chanchon1112@myVM2:~$ ping myVM1
PING myVM1.ueshpipfltephesvdhf04elxg.hx.internal.cloudapp.net (10.0.0.4) 56(84) bytes of data:
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=1 ttl=64 time=7.61 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=2 ttl=64 time=0.994 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=3 ttl=64 time=1.32 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=4 ttl=64 time=1.04 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=5 ttl=64 time=0.957 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=6 ttl=64 time=0.749 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=7 ttl=64 time=0.922 ms
64 bytes from myvm1.internal.cloudapp.net (10.0.0.4): icmp_seq=8 ttl=64 time=1.15 ms
^C
--- myVM1.ueshpipfltephesvdhf04elxg.hx.internal.cloudapp.net ping statistics ---
8 packets transmitted, 8 received, 0% packet loss, time 7053ms
rtt min/avg/max/mdev = 0.749/1.043/7.613/2.106 ms
chanchon1112@myVM2:~$
```

