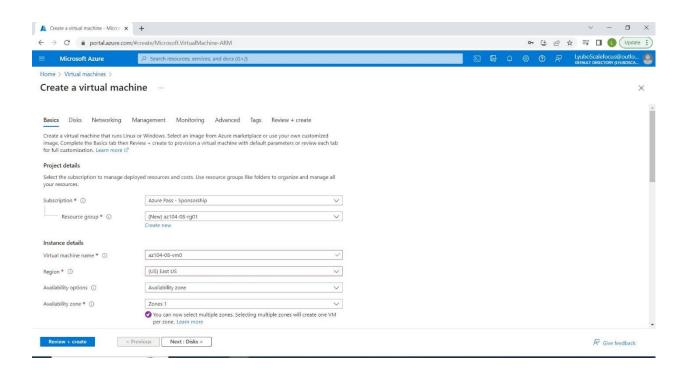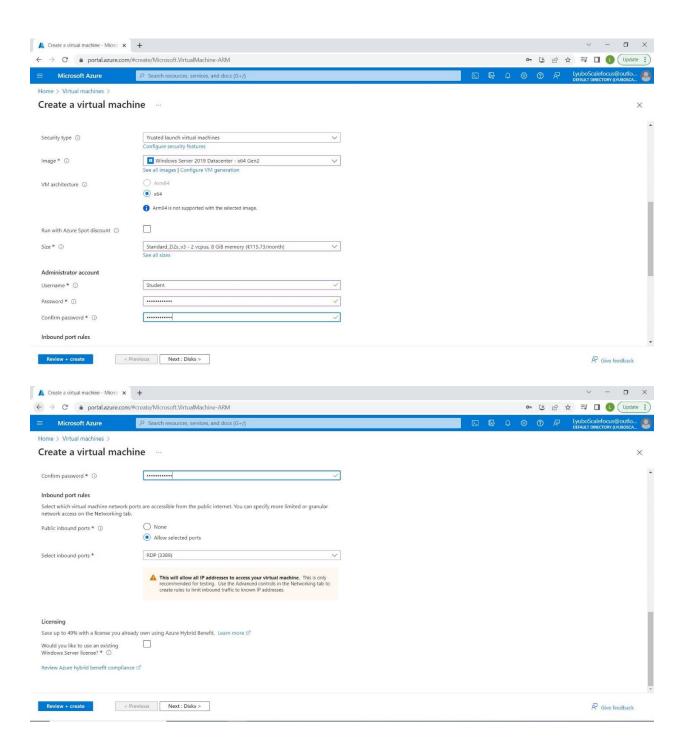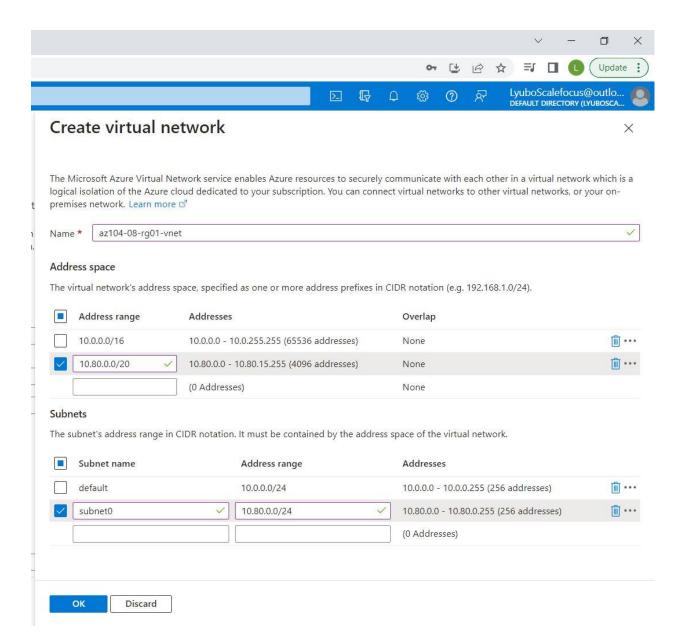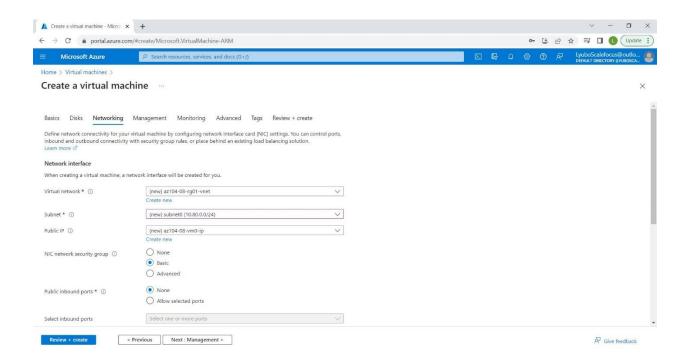# Lab 08 - Manage Virtual Machines

Student lab manual

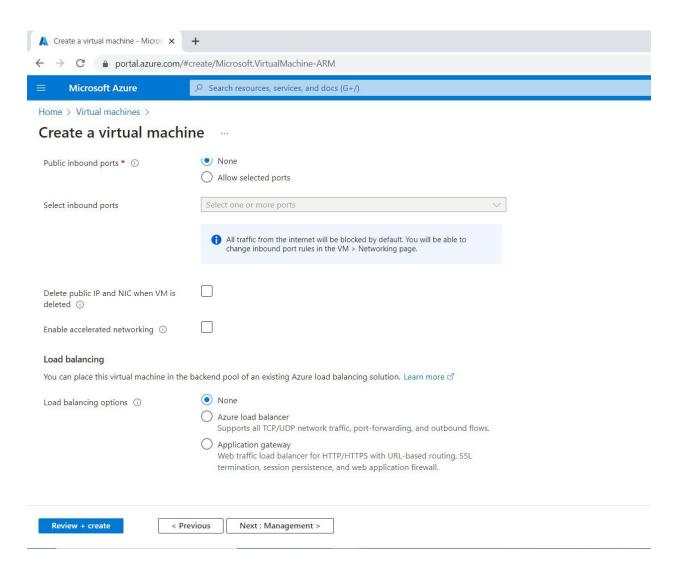## Task 1: Deploy zone-resilient Azure virtual machines by using the Azure portal and an Azure Resource Manager template

LyuboScalefocus@outlo...
DEFAULT DIRECTORY (LYUBOSCA...

Create virtual network

×

The Microsoft Azure Virtual Network service enables Azure resources to securely communicate with each other in a virtual network which is a logical isolation of the Azure cloud dedicated to your subscription. You can connect virtual networks to other virtual networks, or your on-premises network. Learn more ⧉

Name * | az104-08-rg01-vnet | ✓

Address space

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

	Address range	Addresses	Overlap		
☐	10.0.0.0/16	10.0.0.0 - 10.0.255.255 (65536 addresses)	None	🗑	•••
☑	10.80.0.0/20 ✓	10.80.0.0 - 10.80.15.255 (4096 addresses)	None	🗑	•••
		(0 Addresses)	None		

Subnets

The subnet's address range in CIDR notation. It must be contained by the address space of the virtual network.

	Subnet name	Address range	Addresses		
☐	default	10.0.0.0/24	10.0.0.0 - 10.0.0.255 (256 addresses)	🗑	•••
☑	subnet0 ✓	10.80.0.0/24 ✓	10.80.0.0 - 10.80.0.255 (256 addresses)	🗑	•••
			(0 Addresses)		

OK   Discard

☰ **Microsoft Azure** | 🔍 Search resources, services, and docs (G+/)

Home > Virtual machines >

Create a virtual machine   ...

Public inbound ports * ⓘ
- 🔘 None
- ⚪ Allow selected ports

Select inbound ports

Select one or more ports ⌄

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

Delete public IP and NIC when VM is deleted ⓘ   ☐

Enable accelerated networking ⓘ   ☐

Load balancing

You can place this virtual machine in the backend pool of an existing Azure load balancing solution. Learn more ⧉

Load balancing options ⓘ
- 🔘 None
- ⚪ Azure load balancer
  Supports all TCP/UDP network traffic, port-forwarding, and outbound flows.
- ⚪ Application gateway
  Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

Review + create		< Previous	Next : Management >

Configure management options for your VM.

Microsoft Defender for Cloud

Microsoft Defender for Cloud provides unified security management and advanced threat protection across hybrid cloud workloads. Learn more ⧉

Enable basic plan for free ⓘ   ☑

This will apply to every VM in the selected subscription

Identity

Enable system assigned managed identity ⓘ   ☐

Azure AD

Login with Azure AD ⓘ   ☐

ⓘ RBAC role assignment of Virtual Machine Administrator Login or Virtual Machine User Login is required when using Azure AD login. Learn more ⧉

Auto-shutdown

Enable auto-shutdown ⓘ   ☐

Ba...

Review + create   < Previous   Next : Monitoring >

Backup

Enable backup ⓘ   ☐

Site Recovery

Enable Disaster Recovery ⓘ   ☐

ⓘ To enable Disaster recovery, set the security type back to Standard in the Basics tab. Disaster recovery isn't supported for the Trusted launch or Confidential virtual machines security types.

Guest OS updates

Enable hotpatch ⓘ   ☐

ⓘ Hotpatch is not available for this image. Learn more ⧉

Patch orchestration options ⓘ | Manual updates   ⌄ |

ⓘ Some patch orchestration options are not available for this image. Learn more ⧉

Review + create   < Previous   Next : Monitoring >

Configure monitoring options for your VM.

Alerts

Enable recommended alert rules ⓘ ☐

Diagnostics

Boot diagnostics ⓘ

- ◯ Enable with managed storage account (recommended)
- ◉ Enable with custom storage account
- ◯ Disable

Enable OS guest diagnostics ⓘ ☐

Diagnostics storage account * ⓘ

| (new) az10408rg01diag | ⌄ |

Create new

Subscription * ⓘ

| Azure Pass - Sponsorship | ⌄ |

Resource group * ⓘ

| az104-08-rg01 | ⌄ |

Create new

Instance details

Region * ⓘ

| (US) East US | ✓ |

Location *

| eastus | ✓ |

Network Interface Name1 *

| az104-08-vm1-nic1 | ✓ |

Network Security Group Name *

| az104-08-vm0-nsg | ✓ |

Network Security Group Rules *

| [] | |

Subnet Name *

| subnet0 | ✓ |

Virtual Network Name *

| az104-08-rg01-vnet | ✓ |

Address Prefixes *

| ["10.0.0.0/16","10.80.0.0/20"] | |

Subnets *

| [{"name":"default","properties":{"addressPrefix":"10.0.0.0/24"}},{"name":"s... | |

Public Ip Address Name1 *

| az104-08-vm1-ip | ✓ |

Public Ip Address Type *

| Static | ✓ |

Public Ip Address Sku *	Standard ✓
Pip Delete Option *	Detach ✓
Virtual Machine Name *	az104-08-vm1 ✓
Virtual Machine Name1 *	az104-08-vm1 ✓
Virtual Machine Computer Name1 *	az104-08-vm1 ✓
Virtual Machine RG *	az104-08-vm1 ✓
Os Disk Type *	Premium_LRS ✓
Os Disk Delete Option *	Delete ✓
Virtual Machine Size *	**1x Standard D2s v3** 2 vcpus, 8 GB memory Change size
Nic Delete Option *	Detach ✓
Admin Username *	Student ✓
Admin Password *	•••••••••••• ✓
Patch Mode *	Manual ✓
Enable Hotpatching *	false ⌄
Security Type *	TrustedLaunch ✓
Secure Boot *	true ⌄
V TPM *	true ⌄
Diagnostics Storage Account Name *	storagelyubo ✓
Diagnostics Storage Account Id *	Microsoft.Storage/storageAccounts/storagelyubo ✓
Diagnostics Storage Account Type *	Standard_LRS ✓
Diagnostics Storage Account Kind *	Storage ✓
Zone *	2 ✓

Microsoft.Template-20230325014024 | Overview

Deployment

Search «

- 🟢 Overview
- 🖥 Inputs
- ⬇ Outputs
- 📄 Template

🗑 Delete   ⊘ Cancel   ⬆ Redeploy   ⬇ Download   ↻ Refresh

🟢 **Your deployment is complete**

Deployment name: Microsoft.Template-20230325014024
Subscription: Azure Pass - Sponsorship
Resource group: az104-08-rg01

Start time: 3/25/2023, 1:40:30 AM
Correlation ID: d522d6c8-71d4-4498-a4d6-1a5234ef04e8

∨ **Deployment details**

∧ **Next steps**

Go to resource group

Give feedback

🗨 Tell us about your experience with deployment