

# IntroductionToVM

## Unit 3

### Пункт перший

Мені потрібно налаштувати базові параметри своєї віртуальної машини. Якщо деякі з опцій на цьому етапі мені незнайомі, це нормально. Ми опишемо всі ці опції у майбутньому модулі. Я можу скопіювати значення, які використовуються тут.

На вкладці Основне вводжу наступні значення для кожного параметра.

Microsoft Azure

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Home > Virtual machines >

Create a virtual machine

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](#)

**Project details**

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

Subscription \*

Resource group \*   
[Create new](#)

**Instance details**

Virtual machine name \*

Region \*

Availability options

Security type

Image \*   
[See all images](#) | [Configure VM generation](#)

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

VM architecture ☐ Arm64 ☒ x64

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Create a virtual machine

Security type

Image \*   
[See all images](#) | [Configure VM generation](#)

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

VM architecture ☐ Arm64 ☒ x64

Run with Azure Spot discount ☐

Size \*   
[See all sizes](#)

☒ Item(s) availability based on policy assignment(s) for the selected scope.  
1ba1712b0-8089-7ba5-e106-1e759dfda658/Microsoft.Authorization/vm-assignment  
[\(Policy details\)](#)

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.

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Create a virtual machine

Item(s) availability based on policy assignment(s) for the selected scope.  
1ba712d0-8089-7ba5-e106-4e759dfda658/Microsoft.Authorization/vm-assignment  
(Policy details)

Enable Hibernation (preview) ☐

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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 \*

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 \*

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☒ Allow selected ports

Select inbound ports \*

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

Review & create

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## Пункт другий та третій

Є кілька інших вкладок, які я можу дослідити, щоб побачити налаштування, які я можу змінювати під час створення VM. Після завершення огляду вибираю Перегляд + створення, щоб перевірити та підтвердити налаштування.

Azure перевіряє налаштування конфігурації для ресурсу, перш ніж створити його. Можливо, мені доведеться надати додаткову інформацію згідно з вимогами творця образу, вбудованого в Azure. Це просто; просто відкриваю вкладку, на якій є помилка. Перевіряю, що всі налаштування встановлені так, як я хочу, а потім вибираю Створити, щоб розгорнути та створити VM.

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Create a virtual machine

Validation passed

BasicsDisksNetworkingManagementMonitoringAdvancedTagsReview + 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 D2s v3  
by Microsoft  
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply  
**0.1000 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

parchenko.serhiy@ill.kpi.ua

Preferred e-mail address

parchenko.serhiy@ill.kpi.ua

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.

Create

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Validation passed

Preferred e-mail address

parchenko.serhiy@ill.kpi.ua

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

Subscription

Concierge Subscription

Resource group

learn-e3b9d632-ecf3-44b5-9907-8b3fc5ee58a5

Virtual machine name

parchenko-serhiy

Region

North Central US

Availability options

No infrastructure redundancy required

Security type

Standard

Image

Ubuntu Server 20.04 LTS - Gen2

VM architecture

x64

Size

Standard D2s v3 (2 vcpus, 8 GiB memory)

Authentication type

SSH public key

Username

parchenko\_serhiy

Key pair name

parchenko-serhiy\_key

Public inbound ports

SSH

Azure Spot

No

Disks

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Validation passed

Size	Standard D2s v2 (2 vcpus, 8 GiB memory)
Authentication type	SSH public key
Username	panchenko_serhiy
Key pair name	panchenko-serhiy_key
Public inbound ports	SSH
Azure Spot	No

Disks

OS disk size	Image default
OS disk type	Premium SSD LRS
Use managed disks	Yes
Delete OS disk with VM	Enabled
Ephemeral OS disk	No

Networking

Virtual network	(new) panchenko-serhiy-vnet
Subnet	(new) default (10.0.0.0/24)
Public IP	None
Accelerated networking	On
Place this virtual machine behind an existing load balancing solution?	No
Delete NIC when VM is deleted	Disabled

Management

Microsoft Defender for Cloud	None
System assigned managed identity	Off

Create

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Validation passed

Accelerated networking	On
Place this virtual machine behind an existing load balancing solution?	No
Delete NIC when VM is deleted	Disabled

Management

Microsoft Defender for Cloud	None
System assigned managed identity	Off
Login with Azure AD	Off
Auto-shutdown	Off
Enable hotpatch	Off
Patch orchestration options	Image Default

Monitoring

Alerts	Off
Boot diagnostics	On
Enable OS guest diagnostics	Off
Enable application health monitoring	Off

Advanced

Extensions	None
VM applications	None
Cloud init	No
User data	No
Disk controller type	SCSI
Proximity placement group	None

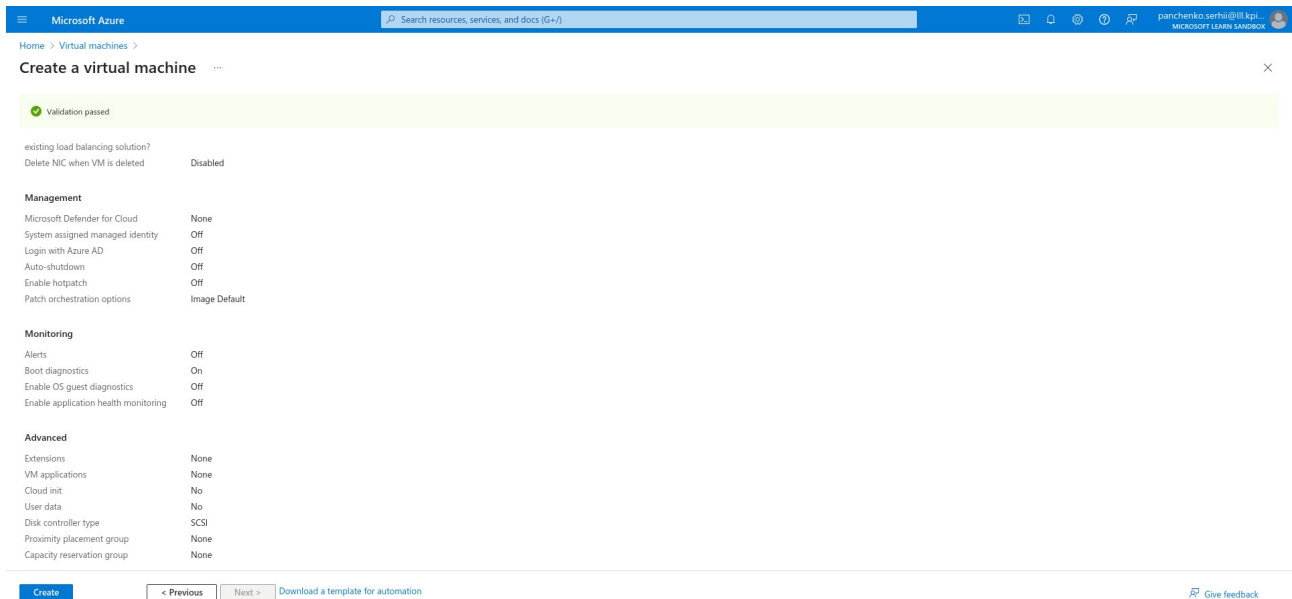
Create

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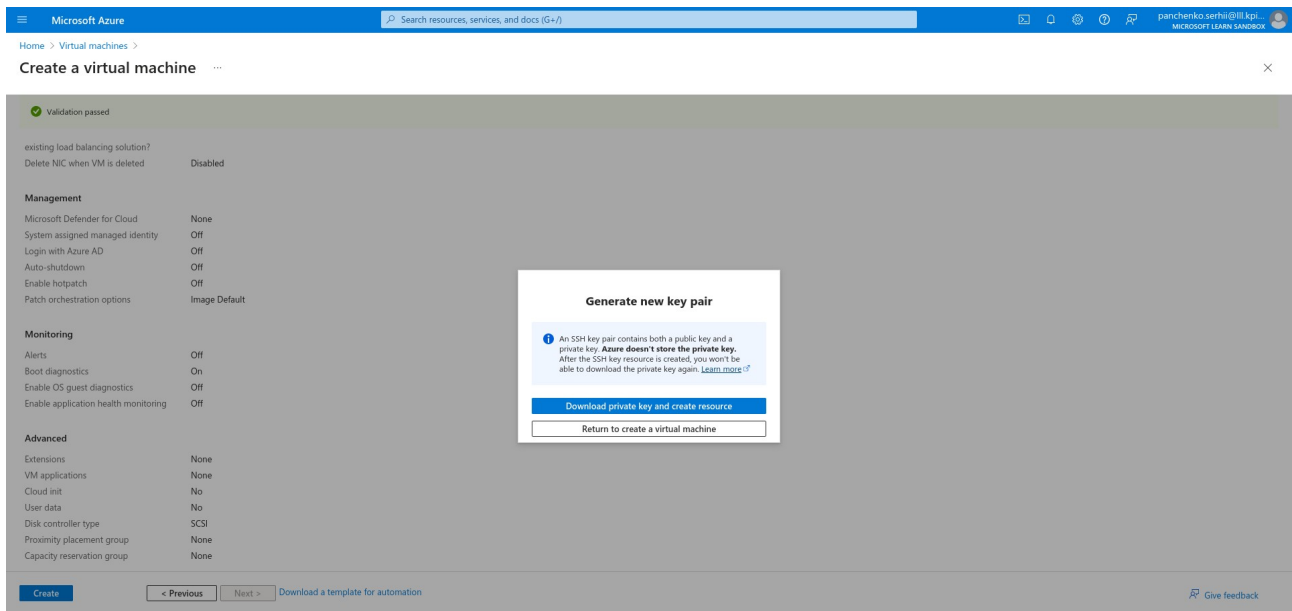
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## Пункт четвертий

Відкривається вікно Генерація нової пари ключів. Вибираю Завантажити приватний ключ і створити ресурс.



## Пункт п'ятий

Я можу стежити за розгортанням у деталях розгортання на панелі огляду або через панель сповіщень. Вибираю значок сповіщень у верхньому правому інструментальному рядку, щоб показати або приховати панель сповіщень.

Процес розгортання ВМ займає кілька хвилин. Я отримую сповіщення про те, що розгортання вдалося.

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CreateVm-canonical.0001-com-ubuntu-server-focal-2-20240218202811 | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

Deployment is in progress

Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f... Start time: 2/18/2024, 8:36:42 PM  
Subscription: Concierge Subscription Correlation ID: 8ff4c5c2-3829-4fc5-8ae2-345f9817de2e  
Resource group: learn-e3b9d632-ecf3-44b5-9907-8b3fc5ee58a5

Deployment details

Resource	Type	Status	Operation details
panchenko-serhiy	Microsoft.Compute/virtualMachines	Created	Operation details
panchenko-serhiy256	Microsoft.Network/networkInterfaces	Created	Operation details
panchenko-serhiy-vnet	Microsoft.Network/virtualNetworks	OK	Operation details
panchenko-serhiy-ip	Microsoft.Network/publicIPAddresses	OK	Operation details
panchenko-serhiy-nsg	Microsoft.Network/networkSecurityGroups	OK	Operation details

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Deployment

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Overview

Inputs

Outputs

Template

Your deployment is complete

Deployment name: CreateVm-canonical.0001-com-ubuntu-server-f... Start time: 2/18/2024, 8:36:42 PM  
Subscription: Concierge Subscription Correlation ID: 8ff4c5c2-3829-4fc5-8ae2-345f9817de2e  
Resource group: learn-e3b9d632-ecf3-44b5-9907-8b3fc5ee58a5

Deployment details

Next steps

Setup auto-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

Deployment succeeded

Deployment 'CreateVm-canonical.0001-com-ubuntu-server-focal-2-20240218202811' to resource group 'learn-e3b9d632-ecf3-44b5-9907-8b3fc5ee58a5' was successful.

Go to resource Pin to dashboard

Cost Management

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Go to Microsoft Defender for Cloud >

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## Пункт шостий

Вибираю Перейти до ресурсу. З'являється сторінка огляду моєї ВМ.

Тут я можу побачити всю інформацію та опції конфігурації для моєї новоствореної ВМ Ubuntu. Однією з частин інформації є публічна IP-адреса.

Коли я увімкнув аутентифікацію за допомогою публічного ключа SSH на попередньому етапі, інтерфейс користувача також надав опцію для увімкнення SSH. SSH дозволяє мені підключатися до моєї VM через публічну IP-адресу за допомогою будь-якого клієнта SSH.

Microsoft Azure

Search resources, services, and docs (G+)

panchenko-serhii

Virtual machine

Connect Start Restart Stop Hibernate (preview) Capture Delete Refresh Open in mobile Feedback CU / PS

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Locks

Availability + scale

Essentials

Resource group (move) : [learn-a3b9d632-ecf3-44b5-9907-8b3f5ee58a5](#)

Status : Running

Location : North Central US

Subscription (move) : [Concierge Subscription](#)

Subscription ID : 179dd20b-e2ea-45a0-8003-473940f3d4f1

Tags (edit) : [Add tags](#)

Operating system : Linux (ubuntu 20.04)

Size : Standard D2s v3 (2 vcpus, 8 GiB memory)

Public IP address : [20.221.206.38](#)

Virtual network/subnet : [panchenko-serhii-vnet/default](#)

DNS name : [Not configured](#)

Health state : -

JSON View

Properties

Monitoring

Capabilities (7)

Recommendations

Tutorials

Virtual machine

Computer name : panchenko-serhii

Operating system : Linux (ubuntu 20.04)

Image publisher : canonical

Image offer : 0001-com-ubuntu-server-focal

Image plan : 20\_04-lts-gen2

VM generation : V2

VM architecture : x64

Agent status : Ready

Agent version : 2.9.1.1

Hibernation : Disabled

Host group : -

Host : -

Proximity placement group : -

Networking

Public IP address : [20.221.206.38](#) (Network interface panchenko-serhii256)

Public IP address (IPv6) : -

Private IP address : 10.0.0.4

Private IP address (IPv6) : -

Virtual network/subnet : [panchenko-serhii-vnet/default](#)

DNS name : [Configure](#)

Size

Size : Standard D2s v3

vCPUs : 2

RAM : 8 GiB

Disk

OS disk : panchenko-serhii\_OsDisk\_1\_639da27467044bdbc552a3c82ea2429

Microsoft Azure

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panchenko-serhii

Virtual machine

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Image offer : 0001-com-ubuntu-server-focal

Image plan : 20\_04-lts-gen2

VM generation : V2

VM architecture : x64

Agent status : Ready

Agent version : 2.9.1.1

Hibernation : Disabled

Host group : -

Host : -

Proximity placement group : -

Colocation status : N/A

Capacity reservation group : -

Disk controller type : SCSI

Availability + scaling

Availability zone (edit) : -

Availability set : -

Scale Set : -

Security type

Security type : Standard

Health monitoring

Health monitoring : Not enabled

Extensions + applications

Extensions : -

Applications : -

Private IP address (IPv6) : -

Virtual network/subnet : [panchenko-serhii-vnet/default](#)

DNS name : [Configure](#)

Size

Size : Standard D2s v3

vCPUs : 2

RAM : 8 GiB

Disk

OS disk : panchenko-serhii\_OsDisk\_1\_639da27467044bdbc552a3c82ea2429

Encryption at host : Disabled

Azure disk encryption : Not enabled

Ephemeral OS disk : N/A

Data disks : 0

Auto-shutdown

Auto-shutdown : Not enabled

Scheduled shutdown : -

Azure Spot

Azure Spot : -

Azure Spot eviction policy : -

Microsoft Azure

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Virtual machine

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ADMS

Agent status  
Ready

Agent version  
2.9.1.1

Hibernation  
Disabled

Host group  
-

Host  
-

Proximity placement group  
-

Colocation status  
N/A

Capacity reservation group  
-

Disk controller type  
SCSI

Availability + scaling

Availability zone (edit)  
-

Availability set  
-

Scale Set  
-

Security type

Security type  
Standard

Health monitoring

Health monitoring  
Not enabled

Extensions + applications

Extensions  
-

Applications  
-

Size

Size  
Standard D2s v3

vCPUs  
2

RAM  
8 GiB

Disk

OS disk  
panchenko-serhii\_OsDisk\_1\_639da27467044bdbc552a3c82ea2429

Encryption at host  
Disabled

Azure disk encryption  
Not enabled

Ephemeral OS disk  
N/A

Data disks  
0

Auto-shutdown

Auto-shutdown  
Not enabled

Scheduled shutdown  
-

Azure Spot

Azure Spot  
-

Azure Spot eviction policy  
-