

Unit 3

Configure the VM settings

Azure представляє мені майстра як серію вкладок, щоб провести мене через усі деталі налаштування для створення віртуальної машини. Перша вкладка - "Basics". Я можу вибрати "Next" або "Previous", щоб перейти з однієї вкладки на іншу, або я можу вибрати будь-яку вкладку в горизонтальному меню, щоб перейти до секції налаштування за власним вибором.

The image displays two screenshots of the Microsoft Azure portal interface.

The top screenshot shows the "Create a resource" page. It features a sidebar with "Categories" such as AI + Machine Learning, Analytics, Blockchain, Compute, Containers, Databases, Developer Tools, DevOps, Identity, Integration, Internet of Things, IT & Management Tools, Media, Migration, Mixed Reality, Monitoring & Diagnostics, Networking, Security, Storage, and Web. The main content area is divided into "Popular Azure services" and "Popular Marketplace products". The "Popular Azure services" section lists items like Virtual machine, Web App, SQL Database, Function App, Key Vault, Data Factory, Template deployment, Logic App, Automation, and Public IP address. The "Popular Marketplace products" section lists items like Windows Server 2019 Datacenter, Windows 11 Pro, version 21H2, Ubuntu Server 20.04 LTS, Ubuntu Server 22.04 LTS, Red Hat Enterprise Linux 7.4, Essentials 50K, MongoDB Atlas, Standard, Microsoft Defender for Endpoint, and Azure Backup - AVS.

The bottom screenshot shows the "Marketplace" page. It includes a search bar with the text "windows server" and filters for Publisher name, Product Type, Publisher Type, Operating System, and Pricing. A notification banner at the top says "New! Get AI-generated suggestions for your search. Ask AI to suggest products, articles, and solutions for what you need." The main content area displays a grid of search results for "windows server", including items like Windows Server, SQL Server 2019 on Windows Server 2019, SQL Server 2019 on Windows Server 2022, SQL Server 2022 on Windows Server 2019, SQL Server 2017 on Windows Server 2019, SQL Server 2017 on Windows Server 2016, Windows Server 2022 Datacenter, Windows Server 2019 Core, Windows Server 2022 Core, SQL Server 2012 SP4 on Windows Server 2012 R2, Windows Server 2016 Core, Windows Server 2019, Windows Server 2022, and SQL Server 2016 SP2 on Windows Server 2016. Each result card includes a "Create" button and a heart icon for favorites.

Microsoft Azure


Search resources, services, and docs (G+)

panchenko.sergei@llt.lpi...
MICROSOFT LEARN SANDBOX E...

Home > Marketplace >

Windows Server

Microsoft



Windows Server

Microsoft | Virtual Machine

★ 4.8 (10 ratings)

Plan

[smalldisk] Windows Server 2019 Dat...

Create

Start with a pre-set configuration

Overview

Plans

Usage Information + Support

Ratings + Reviews

Windows Server is the operating system that bridges on-premises environments with Azure services enabling hybrid scenarios and maximizing existing investments, including:

- The latest is security innovation including Secured-core to minimize risk from firmware vulnerabilities and advanced malware.
- Unique hybrid capabilities with Azure to extend your datacenter and maximize investments.
- File server security and performance increased with SMB AES-256 encryption and SMB on-the-fly compression.
- Azure Edition images with additional functionality optimized to run in Azure.
- Improvements to Windows container runtime such as cross-version compatibility and containerization tools for .NET, ASP.NET and IIS applications.

Available Images

Windows Server 2022 is the latest Long-Term Servicing Channel (LTSC) release with five years of mainstream support + five years of extended support. Choose the image that is right for your application needs.

- Server with Desktop Experience includes all roles and a graphical user interface (GUI).
- **Server Core** omits the GUI for a smaller OS footprint.
- Azure Edition with Desktop Experience - includes additional new functionality such as Hotpatch, SMB over QUIC, extended network for Azure, and is optimized to run in Azure.
- Azure Edition Core - includes additional new functionality such as Hotpatch, SMB over QUIC, extended network for Azure, and is optimized to run in Azure.

Terms of use

Your use of the Windows Server images from Azure Marketplace Virtual Machine Gallery are provided to you for use with virtual machine instances under your Azure subscription which are governed by the [Online Services Terms](#). Windows Server Azure edition can only be used on Azure. All Server images may be used under the [Azure Hybrid Benefit for Windows Server](#).

Learn more

[Windows Server Virtual Machine Performance](#)

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.sergei@llt.lpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

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](#)

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 subscription 1

Resource group *

(New) Resource group

Create new

Instance details

Virtual machine name *

Region *

(Canada) Canada Central

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](#)

Review + create

< Previous

Next: Disks >

Give feedback

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.serhiy@llt.kpt...

DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕


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

 [smalldisk] Windows Server 2019 Datacenter - x64 Gen2

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

VM architecture

☐ Arm64

☒ x64

Arm64 is not supported with the selected image.

Run with Azure Spot discount

☐

You are in the free trial period. Costs associated with this VM can be covered by any remaining credits on your subscription. [Learn more](#)

Size

Standard_B1s - 1 vcpu, 1 GiB memory (\$11.39/month) (free services eligible)

[See all sizes](#)

Enable Hibernation (preview)

☐

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

Administrator account

Username

Serhiy Panchenko

Password

Review + create

< Previous

Next: Disks >

[Give feedback](#)

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.serhiy@llt.kpt...

DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

You are in the free trial period. Costs associated with this VM can be covered by any remaining credits on your subscription. [Learn more](#)

Size

Standard_B1s - 1 vcpu, 1 GiB memory (\$11.39/month) (free services eligible)

[See all sizes](#)

Enable Hibernation (preview)

☐

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

Administrator account

Username

Serhiy Panchenko

Password

Confirm password

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

RDP (3389)

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

< Previous

Next: Disks >

[Give feedback](#)

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.serhiy@llt.kpt...

DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

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](#) if for all your pricing needs.

Price

1 X Standard B1s by Microsoft

Subscription credits apply

0.0156 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.

You have set RDP 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

Azure subscription 1

Resource group

(new) panchenko-serhiy-vm_group

Create

< Previous

Next >

[Download a template for automation](#)

[Give feedback](#)

Microsoft Azure

Search resources, services, and docs (G+)

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

Validation passed

Subscription	Azure subscription 1
Resource group	(new) panchenko-serhii-vm_group
Virtual machine name	panchenko-serhii-vm
Region	Canada Central
Availability options	No infrastructure redundancy required
Security type	Standard
Image	[smalldisk] Windows Server 2019 Datacenter - Gen2
VM architecture	x64
Size	Standard B1s (1 vcpu, 1 GiB memory)
Username	Serhii Panchenko
Public inbound ports	RDP
Already have a Windows license?	No
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-serhii-vm-vnet
Subnet	(new) default (10.1.0.0/24)
Public IP	(new) panchenko-serhii-vm-ip

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

Search resources, services, and docs (G+)

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

Validation passed

Virtual network	(new) panchenko-serhii-vm-vnet
Subnet	(new) default (10.1.0.0/24)
Public IP	(new) panchenko-serhii-vm-ip
Accelerated networking	Off
Place this virtual machine behind an existing load balancing solution?	No
Delete public IP and 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	OS-orchestrated patching: patches will be installed by OS

Monitoring

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

Advanced

Extensions	None
VM applications	None

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.serhii@kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

Validation passed

Delete public IP and 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

OS-orchestrated patching: patches will be installed by OS

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

Capacity reservation group

None

Create

< Previous

Next >

Download a template for automation

Give feedback

Configure disks for the VM

Microsoft Azure

Search resources, services, and docs (G+)

panchenko.serhii@kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

VM disk encryption

Azure disk storage encryption automatically encrypts your data stored on Azure managed disks (OS and data disks) at rest by default when persisting it to the cloud.

Encryption at host

☐

Encryption at host is not registered for the selected subscription.
[Learn more about enabling this feature](#)

OS disk

OS disk size

Image default (30 GiB)

OS disk type *

Premium SSD (locally-redundant storage)

Delete with VM

☒

Key management

Platform-managed key

Enable Ultra Disk compatibility

☐

Ultra disk is supported in Availability Zone(s) 1,2,3 for the selected VM size Standard_B1s.

Data disks for panchenko-serhii-vm

You can add and configure additional data disks for your virtual machine or attach existing disks. This VM also comes with a temporary disk.

LUN	Name	Size (GiB)	Disk type	Host caching	Delete with VM
-----	------	------------	-----------	--------------	----------------

Create and attach a new disk Attach an existing disk

Advanced

Review + create

< Previous

Next : Networking >

Give feedback

Setting

Value

Disk options

Encryption at host

Accept the default (unchecked)

OS disk type

Accept the default **Premium SSD (locally redundant storage)**.

Delete with VM

Accept the default (checked)

Key management

Accept the default.

Enable Ultra Disk compatibility

Accept the default (unchecked)

Setting	Value
Data disks	
Select Create and attach a new disk link. The Create a new disk pane appears.	Accept all the default values for the following settings: <i>Name</i> ; <i>Source type</i> ; <i>Size</i> ; <i>Key management</i> ; and <i>Enable shared disk</i> . This is where you could use a snapshot, or Storage Blob, to create a VHD.

Configure the network

Я вибираю "Next": "Networking". В продакшн-системі, де вже використовуються інші компоненти, було б важливо використовувати існуючу віртуальну мережу, щоб моя віртуальна машина могла спілкуватися з іншими хмарними сервісами в продакшн-рішенні. Якщо в цьому місці не визначено віртуальну мережу, я створюю її тут і налаштовую: "Subnet":

Першу підмережу для поділу адресного простору; вона повинна вписуватися в визначений адресний простір. Після створення VNet, я можу додати більше підмереж. "Public IP": Загальний IPV4 простір, доступний цій мережі. На вкладці "Networking" я змінюю деякі налаштування. У полі вводу для "Virtual network" я вибираю "Create new".

З'являється панель "Create virtual network". На панелі "Create virtual network" я вводжу наступні значення для кожного параметра.

Finish configuring the VM and create the image

Для решти вкладок на панелі "Create a virtual machine" за замовчуванням встановлені оптимальні параметри, і я не бачу потреби їх змінювати. Мені доступний перегляд додаткових опцій, де кожен параметр супроводжується іконкою (i) для отримання детальної інформації про налаштування.

1. Обираю "Review + create" для перевірки введених даних і перегляду деталей майбутньої віртуальної машини.
2. Натискаю "Create", щоб ініціювати розгортання. Інформація про процес і деталі розгортання з'являються на інформаційній панелі Azure.

3. По завершенню, я переходжу за "Go to resource" для перегляду інформації про мою віртуальну машину. І ось я готовий досліджувати можливості, які відкриває переді мною ця віртуальна машина.

Microsoft Azure

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

panchenko-serhii@lil.kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

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 DS1 v2
by Microsoft
[Terms of use](#) | [Privacy policy](#)

Subscription credits apply
0.1290 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.

You have set RDP 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

Resource group

Virtual machine name

Azure subscription 1
(new) panchenko-serhii-vm_group
panchenko-serhii-vm

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

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

panchenko-serhii@lil.kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

×

Validation passed

You have set RDP 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

Resource group

Virtual machine name

Region

Availability options

Security type

Image

VM architecture

Size

Username

Public inbound ports

Already have a Windows license?

Azure Spot

Azure subscription 1
(new) panchenko-serhii-vm_group
panchenko-serhii-vm
Canada Central
No infrastructure redundancy required
Standard
[smalldisk] Windows Server 2019 Datacenter - Gen2
x64
Standard DS1 v2 (1 vcpu, 3.5 GiB memory)
Serhii Panchenko
RDP
No
No

Disks

OS disk size

Image default

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

Search resources, services, and docs (G+7)

panchenko.serhiy@lll.kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

Validation passed

Username

Serhiy Panchenko

Public inbound ports

RDP

Already have a Windows license?

No

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-vm-vnet

Subnet

(new) default (10.1.0.0/24)

Public IP

(new) panchenko-serhiy-vm-ip

Accelerated networking

On

Place this virtual machine behind an existing load balancing solution?

No

Delete public IP and NIC when VM is deleted

Disabled

Management

Microsoft Defender for Cloud

None

System assigned managed identity

Off

Login with Azure AD

Off

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

Search resources, services, and docs (G+7)

panchenko.serhiy@lll.kpi...
DEFAULT DIRECTORY

Home > Create a resource > Marketplace > Windows Server >

Create a virtual machine

✕

Validation passed

Delete public IP and 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

OS-orchestrated patching: patches will be installed by OS

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

Capacity reservation group

None

Create

< Previous

Next >

Download a template for automation

Give feedback

Microsoft Azure

Search resources, services, and docs (G+7)

panchenko.serhiy@lll.kpi...
DEFAULT DIRECTORY

Home >

CreateVm-MicrosoftWindowsServer.WindowsServer-201-20240218224458 | Overview

✕

Deployment

Search

«

Delete

Cancel

Redeploy

Download

Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsServer.WindowsS...

Start time: 2/18/2024, 10:58:21 PM

Subscription: Azure subscription 1

Correlation ID: 5b81d0e3-503f-46c7-be91-6b35e13187a3

Resource group: panchenko-serhiy-vm_group

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

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 >