

1. Create a virtual network.

## Create virtual network

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 about virtual networks](#)

Name \*

vnet-westus2-iland-001

Resource group \*

(New) rg-westus2-network-iland-001

[Create new](#)

### Address space

The virtual network's address space specified as one or more address prefixes in CIDR notation (e.g. 10.0.0.0/16).

<input type="checkbox"/>	Address range	Addresses	Overlap	
<input type="checkbox"/>	10.7.0.0/16	10.7.0.4 - 10.7.255.254 (65531 addresses)	None	
		(0 Addresses)	None	

### Subnets

The subnet's address range in CIDR notation (e.g. 10.0.0.0/24). It must be contained by the address space of the virtual network.

<input type="checkbox"/>	Subnet name	Address range	Addresses	
<input type="checkbox"/>	backend	10.7.0.0/24	10.7.0.4 - 10.7.0.254 (251 addresses)	
			(0 Addresses)	

OK

Discard

2. Create a Virtual network gateway.

Microsoft Azure

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

Home >

Virtual network gateways

AACN (aacn.org)

+ Create

Manage view

Refresh

Export to CSV

Open query

Assign tags

Filter for any field...

Subscription equals all

Resource group equals all

Location equals all

Add filter

Showing 1 to 3 of 3 records.

☐ Name

Virtual ...

Gatew...

Resource group

## Create virtual network gateway ...

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources. [?](#)

Subscription \*

Resource group ⓘ

### Instance details

Name \*

Region \*

Gateway type \* ⓘ ☒ VPN ☐ ExpressRoute

VPN type \* ⓘ ☒ Route-based ☐ Policy-based

SKU \* ⓘ

Generation ⓘ

Virtual network \* ⓘ

[Create virtual network](#)

**i** Only virtual networks in the currently selected subscription and region are listed.

Gateway subnet address range \* ⓘ   
10.7.1.0 - 10.7.1.255 (256 addresses)

### Public IP address

Public IP address \* ⓘ ☒ Create new ☐ Use existing

Public IP address name \*

Public IP address SKU

Assignment ☒ Dynamic ☐ Static

Enable active-active mode \* ⓘ ☐ Enabled ☒ Disabled

Configure BGP \* ⓘ ☐ Enabled ☒ Disabled

Azure recommends using a validated VPN device with your virtual network gateway. To view a list of validated devices and instructions for configuration, refer to Azure's [documentation](#) regarding validated VPN devices.

[Review + create](#)

[Previous](#)

[Next : Tags >](#)

[Download a template for automation](#)

## Create virtual network gateway ...

✓ Validation passed

[Basics](#) [Tags](#) [Review + create](#)

### Basics

Subscription	aacn-platform-hub-001
Resource group	(new) rg-westus2-network-iland-001
Name	vnet-gw-v-westus2-iland-001
Region	West US 2
SKU	Basic
Generation	Generation1
Virtual network	vnet-westus2-iland-001
Subnet	GatewaySubnet (10.7.1.0/24)
Gateway type	Vpn
VPN type	RouteBased
Enable active-active mode	Disabled
Configure BGP	Disabled
Public IP address	pip-gw-vnet-westus2-iland-001

### Tags

None

Create

Previous

Next

[Download a template for automation](#)

Home > Microsoft.VirtualNetworkGateway-20230503160304 | Overview

Deployment

Overview

Inputs

Outputs

Template

Deployment is in progress

Deployment name : Microsoft.VirtualNetworkGateway-20230503160304

Subscription : aacn-platform-hub-001

Resource group : rg-westus2-network-iland-001

Start time : 5/3/2023, 4:08:44 PM

Correlation ID : a57a87d8-87d2-488d-ac65-6af7d608e51a

Deployment details

Resource	Type	Status	Operation details
pip-gw-vnet-westus2-iland-001	Public IP address	OK	<a href="#">Operation details</a>
vnet-westus2-iland-001-20230503160304	Microsoft.Resources/deployments	OK	<a href="#">Operation details</a>

Give feedback

Tell us about your experience with deployment

Microsoft Defender for Cloud

Secure your apps and infrastructure

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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 >

Delete Cancel Redeploy Download Refresh

✓ Your deployment is complete

Deployment name : Microsoft.VirtualNetworkGateway-20230503160304

Subscription : aacn-platform-hub-001

Resource group : rg-westus2-network-iland-001

Start time : 5/3/2023, 4:08:44 PM

Correlation ID : a57a87d8-87d2-488d-ac65-6af7d608e51a

> Deployment details

Next steps

Go to resource

Give feedback

Tell us about your experience with deployment

## ➔ Virtual network gateway public ip.

vnet-gw-v-westus2-iland-001

Virtual network gateway

Search

Refresh Move Delete

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Essentials

Resource group (move) : rg-westus2-network-iland-001

Location : West US 2

Subscription (move) : aacn-platform-hub-001

Subscription ID : 7daa1d35-dc46-4683-9c8c-b175b57817a

Tags (edit) : CostCenter : 1911-51210

SKU : Basic

Gateway type : VPN

VPN type : Route-based

Virtual network : vnet-westus2-iland-001

Public IP address : 20.125.57.153 (pip-gw-vnet-westus2-iland-001)

Copy to clipboard

JSON View

### 3. Create a local network gateway.

Home >


## Local network gateways

AACN (aacn.org)

+ Create ⚙️ Manage view ↺ Refresh ⬇ Export to CSV 🔗 Open query 🏷 Assign tags

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

Showing 1 to 1 of 1 records.

<input type="checkbox"/> Name ↑↓	Resource group ↑↓
<input type="checkbox"/>  vnet-gw-l-westus2-prod-001	rg-westus2-network-pro

# Create local network gateway ...

**Basics**   Advanced   Review + create

A local network gateway is a specific object that represents an on-premises location (the site) for routing purposes. [Learn more](#) ↗

## Project details

Subscription \*

Resource group \*  [Create new](#)

## Instance details


Region \*



Name \*

Endpoint ⓘ

IP address \* ⓘ

Address Space(s) ⓘ





 ...

  ...


**Review + create**

Previous

Next : Advanced >

«  Delete  Cancel  Redeploy  Download  Refresh

## ✓ Your deployment is complete

 Deployment name : LocalNetworkGatewayCreate-20230503164931  
Subscription : [aacn-platform-hub-001](#)  
Resource group : [rg-westus2-network-iland-001](#)

Start time : 5/3/2023, 4:49:43 PM  
Correlation ID : 8b384298-a8e9-44c7-bff9-e1fe79b60265

> Deployment details

∨ Next steps

[Go to resource](#)

➔ Now go to virtual network gateway.

The screenshot shows the Azure portal interface. On the left, the 'Virtual network gateways' blade is open, and the 'Connections' tab is selected. The main pane shows the 'vnet-gw-v-westus2-iland-001' gateway. The 'Add' button is highlighted with a red box. Below the gateway name, there is a table with columns: Name, Status, Connection type, and Peer. The table is currently empty, showing 'No results'.

Home > Virtual network gateways > vnet-gw-v-westus2-iland-001 | Connections >

## Add connection

Name \*

cn-gw-l-westus2-iland-001-to-gw-v-westus2-iland-001

Connection type ⓘ

Site-to-site (IPsec)

\*Virtual network gateway ⓘ

vnet-gw-v-westus2-iland-001

\*Local network gateway ⓘ

vnet-gw-l-westus2-iland-001

Shared key (PSK) \* ⓘ

.....

☐ Use Azure Private IP Address ⓘ

☐ Enable BGP ⓘ

IKE Protocol ⓘ

☐ IKEv1 ☒ IKEv2

Subscription ⓘ

aacn-platform-hub-001

Resource group ⓘ

Location ⓘ

3.8.8.8-3.8.8.8

OK



vnet-gw-v-westus2-iland-001 | Connections

Virtual network gateway

+ Add Refresh

Overview

Activity log

Access control (IAM)

Tags

Name	Status	Connection type
cn-gw-l-westus2-iland-001-to-gw-v-westu...	Unknown	Site-to-site (IPSec)

More events in the activity log →

Create connection

Successfully created connection 'cn-gw-l-westus2-iland-001-to-gw-v-westus2-iland-001'

a few seconds ago

Deployment succeeded

Deployment 'l-resM...


4. Create a virtual machine.


[Home](#) >


## Virtual machines


AACN (aacn.org)

[+](#) Create [↔](#) Switch to classic [🕒](#) Reservations [⚙️](#) Manage view [🔄](#)

**Azure virtual machine**  
Create a virtual machine hosted by Azure

**Azure virtual machine with preset configuration**  
Create a virtual machine with presets based on your workloads

**Azure Arc virtual machine**  
Create a new Azure Arc virtual machine in one of your non-Azure environments

**Azure VMware Solution virtual machine**  
Create a VMware virtual machine hosted by Azure

Type equals **all** Res

Type ↑↓ Subscripti

# 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 \* ⓘ

aacn-platform-hub-001

Resource group \* ⓘ

rg-westus2-network-island-001

Create new

### Instance details

Virtual machine name \* ⓘ

vm-island-prod-001

Region \* ⓘ

(US) West US 2

Availability options ⓘ

No infrastructure redundancy required

Security type ⓘ

Standard

Image \* ⓘ

Windows 10 Pro, version 21H2 - 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 ⓘ

Size \* ⓘ 

Standard\_D2s\_v3 - 2 vcpus, 8 GiB memory (\$70.08/month) ▼

[See all sizes](#)

#### Administrator account

Username \* ⓘ 

aacn ✓

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) ▼

 **This will allow all IP addresses to access your virtual machine.** This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

#### Licensing

☒ I confirm I have an eligible Windows 10/11 license with multi-tenant hosting rights. \*

[Review multi-tenant hosting rights for Windows 10/11 compliance](#) ↗

**Review + create**

< Previous

Next : Disks >

Azure VMs have one operating system disk and a temporary disk for short-term storage. You can attach additional data disks. The size of the VM determines the type of storage you can use and the number of data disks allowed. [Learn more](#)

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 type

Standard SSD (locally-redundant storage)

The selected VM size supports premium disks. We recommend Premium SSD for high IOPS workloads. Virtual machines with Premium SSD disks qualify for the 99.9% connectivity SLA.

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\_D2s\_v3.

Data disks for vm-iland-prod-001

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 <div></div>	
0	vm-iland-prod-001_D...	256	Standard SSD LRS	Read-only	<input checked="" type="checkbox"/>	<div></div>

[Create and attach a new disk](#) [Attach an existing disk](#)

## CREATE A VIRTUAL MACHINE

inbound and outbound connectivity with security group rules, or place behind an existing load balancing solution.  
[Learn more](#)

### Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network *	<div>vnet-westus2-iland-001</div> <div>Create new</div>
Subnet *	<div>backend (10.7.0.0/24)</div> <div>Manage subnet configuration</div>
Public IP	<div>(new) vm-iland-prod-001-ip</div> <div>Create new</div>
NIC network security group	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Basic</div> <div><input type="radio"/> Advanced</div>
Public inbound ports *	<div><input type="radio"/> None</div> <div><input checked="" type="radio"/> Allow selected ports</div>
Select inbound ports *	<div>RDP (3389)</div>

**⚠ This will allow all IP addresses to access your virtual machine.** This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

Delete public IP and NIC when VM is deleted



Enable accelerated networking



### Load balancing

[Review + create](#)

[< Previous](#)

[Next : Management >](#)

✓ Validation passed

Basics Disks Networking Management Monitoring Advanced Tags Review + create

**i** 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 ⓘ

**0.0960 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	aacn-platform-hub-001
Resource group	rg-westus2-network-island-001
Virtual machine name	vm-island-prod-001
Region	West US 2

**Create**

< Previous

Next >

[Download a template for automation](#)

Create

Delete Cancel Redeploy Download Refresh

## Your deployment is complete

Deployment name: CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20230503165746 Start time: 5/3/2023, 5:04:23 PM  
Subscription: aacn-platform-hub-001 Correlation ID: 274baed9-d571-481c-acbf-abe3e6758358  
Resource group: rg-westus2-network-iland-001

### 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](#)

Home > CreateVm-MicrosoftWindowsDesktop.Windows-10-win10-20230503165746 | Overview > vm-iland-prod-001

## vm-iland-prod-001 | Networking

Virtual machine

Feedback Attach network interface Detach network interface

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Connect

Disks

Size

Microsoft Defender for Cloud

Advisor recommendations

Extensions + applications

Availability + scaling

Configuration

vm-iland-prod-001753

IP configuration

ipconfig1 (Primary)

Network interface: vm-iland-prod-001753 Effective security rules Troubleshoot VM connection issues Topology  
Virtual network/subnet: vnet-westus2-iland-001/backend NIC Public IP: 20.3.175.98 NIC Private IP: 10.7.0.4 Accelerated networking: Enabled

Inbound port rules Outbound port rules Application security groups Load balancing

Network security group vm-iland-prod-001-rsg (attached to network interface: vm-iland-prod-001753)  
Impacts 0 subnets, 1 network interfaces

Priority	Name	Port	Protocol	Source	Destination	Action
300	RDP	3389	TCP	Any	Any	Allow
65000	AllowVnetInbound	Any	Any	VirtualNetwork	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInbound	Any	Any	AzureLoadBalancer	Any	Allow
65500	DenyAllInbound	Any	Any	Any	Any	Deny

Add inbound port rule





## Add inbound security rule

vm-iland-prod-001-nsg



Source ⓘ

Any



Source port ranges \* ⓘ

\*

Destination ⓘ

Any



Service ⓘ

Custom



Destination port ranges \* ⓘ

\*



Protocol



Any



TCP



UDP



ICMP

Action



Allow



Deny

Priority \* ⓘ

310

Name \*

AllowAnyCustomAnyInbound



Description

Add

Cancel



Give feedback