# Basic Azure Quick start for an Agoric Validator

### **Basics**

- 1. Login to the Azure portal <a href="https://portal.azure.com/#create/Microsoft.VirtualMachine">https://portal.azure.com/#create/Microsoft.VirtualMachine</a>
- 2. Select a name and region
- 3. Image: Ubuntu Server 18.04 LTS -Gen1
- 4. Size: Standard\_D2s\_v3 2 vcpus, 8GiB memory
- 5. **Authentication type:** SSH public key

#### Disks

6. OS disk type: Premium SSD

### Networking

- 7. Virtual network: Create new
- 8. Public IP: Create new -> SKU: Basic, Assignment: Dynamic
- 9. NIC network security group: Advanced

### Management

10. Auto-shutdown: Disable

#### After creation

- 11. Open the Virtual Machine -> Settings -> Networking -> Inbound port rules: 26656 (TCP), Outbound port rules: 26656 (TCP)
- 12. Open the Virtual Machine -> Settings -> Disks -> Select your disk -> Settings -> Size + performance: Increase size to accommodate a growth rate of 6-12GB/Month (pruning enabled/disabled)

# Head over to the "Installing an Agoric Validator" guide

https://github.com/Agoric/agoric-sdk/wiki/Validator-Guide

# Create a virtual machine

## Project details

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

Subscription * (i)	My subscription 1	~
Resource group * (i)	AgoricTestnet	~
	Create new	
Instance details		
Virtual machine name * (i)	Agoric-vm	~
Region * ①	(US) East US 2	~
Availability options ①	No infrastructure redundancy required	~
Image * ①	Ubuntu Server 18.04 LTS - Gen1	~
Azure Spot instance ①	See all images	
Azure spot instance (f)		
Size * (i)	Standard_D2s_v3 - 2 vcpus, 8 GiB memory (SEK 612.29/month) See all sizes	~
Administrator account		
	SSH public key	
Authentication type ①	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.	D
Username * ①	agoricnode	~
SSH public key source	Generate new key pair	~
Key pair name *	Agoric-vm_key	~
Inbound port rules		
Select which virtual machine network ports network access on the Networking tab.	are accessible from the public internet. You can specify more limited or granul.	ar
Public inbound ports * ①	○ None	
	Allow selected ports	
Select inbound ports *	SSH (22)	~
	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 inhound traffic to known IP addresses.	

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

## Disk options

OS disk type * ①		Premium SSD	Premium SSD		~
Encryption t	type *	(Default) Encry	(Default) Encryption at-rest with a platform-managed key		
Enable Ultra	Disk compatibility ①		Ultra disk is available only for Availability Zones in eastus2.		
Data disks					
You can add	_	nal data disks for your vir	tual machine or attach	existing disks. This VM also con	nes with a
LUN	Name	Size (GiB)	Disk type	Host caching	
Create and	attach a new disk	Attach an existing disk			
∨ Adva	nced				

### Network interface

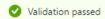
When creating a virtual machine, a network interface will be created for you.

Virtual network * 🕦	AgoricTestnet-vnet	/
	Create new	_
Subnet * ①	default (10.64.0.0/24)	/
	Manage subnet configuration	_
Public IP ①	(new) Agoric-vm-ip	/
	Create new	_
NIC network security group ①	○ None	
	Basic	
	Advanced	
Public inbound ports * (i)	○ None	
, -	Allow selected ports	
Select inbound ports *	SSH (22)	/
	⚠ 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.	
Accelerated networking ①	The selected VM size does not support accelerated networking	ng.
Load balancing		
You can place this virtual machine in the	backend pool of an existing Azure load balancing solution. Learn more 🗗	
Place this virtual machine behind an existing load balancing solution?		

### **Azure Security Center**

Azure Security Center provides unified security management and advanced threat protection across hybrid cloud workloads. Learn more ©

✓ Your subscription is protected by Azure Security Center basic plan.					
Monitoring					
Boot diagnostics ①	Enable with managed storage account (recommended)     Enable with custom storage account     Disable				
Enable OS guest diagnostics ①					
<b>Identity</b> System assigned managed identity ①					
Auto-shutdown  Enable auto-shutdown ①					
Backup Enable backup ①					
Guest OS updates					
Patch orchestration options (i)	Image default	~			
	① Some patch orchestration options are not available for this image. Learn more ☑				
1 Your subscription is not registered to u	use Azure-orchestrated patching. Learn more 🗗				



#### Basics

Subscription My Subscription 1
Resource group AgoricTestnet
Virtual machine name Agoric-vm
Region East US 2

Availability options No infrastructure redundancy required
Image Ubuntu Server 18.04 LTS - Gen1

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

Authentication type SSH public key
Username agoricnode
Key pair name Agoric-vm\_key

Public inbound ports SSH
Azure Spot No

#### Disks

OS disk type Premium SSD LRS

Use managed disks Yes
Use ephemeral OS disk No

#### Networking

 Virtual network
 AgoricTestnet-vnet

 Subnet
 default (10.64.0.0/24)

 Public IP
 (new) Agoric-vm-ip

Accelerated networking Off
Place this virtual machine behind an existing load balancing solution?

#### Management

Azure Security Center Basic (free)

Boot diagnostics On
Enable OS guest diagnostics Off
System assigned managed identity Off
Auto-shutdown Off
Backup Disabled
Enable hotpatch (Preview) Off

Patch orchestration options Image Default

#### Advanced

Extensions None
Cloud init No
Proximity placement group None

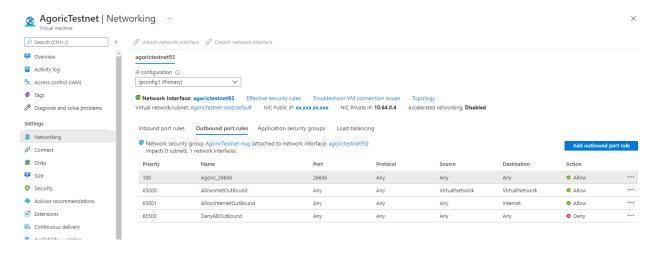
### **After Creation**

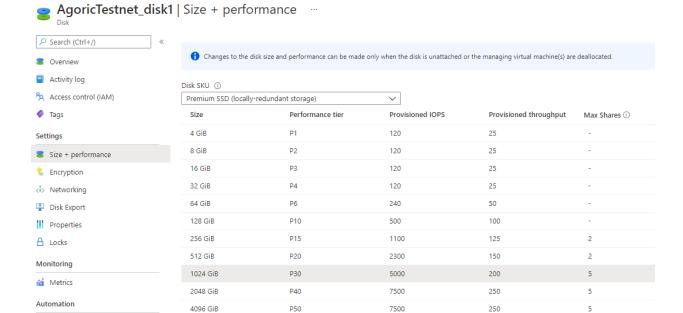
Tasks (preview)

Export template

Support + troubleshooting

New support request





16000

18000

500

750

10

10

32767 GiB P80 20000

Custom disk size (GiB) ★ ①

1024 

Performance tier ①

P30 - 5000 IOPS, 200 MBps (default)

P60

P70

8192 GiB

16384 GiB