



# Azure VM - Criação e Gerenciamento

- Precisa ter uma subscrição e estar inserido dentro de um grupo de recursos
- nome, região e zonas de disponibilidade

## Create a virtual machine ...

[Help me create a low cost VM](#) [Help me create a VM optimized for high availability](#) [Help me choose the right VM size for my workload](#)

Subscription \* ⓘ

Azure subscription 1

Resource group \* ⓘ

lab1AZ104

[Create new](#)

**Instance details**

Virtual machine name \* ⓘ

lab01VM

Region \* ⓘ

(US) East US 2

Availability options ⓘ

Availability zone

Zone options ⓘ

☒ Self-selected zone

Choose up to 3 availability zones, one VM per zone

☐ Azure-selected zone (Preview)

Let Azure assign the best zone for your needs

Availability zone \* ⓘ

Zone 1

< Previous


Next : Disks >

Review + create

## Selecionar o Sistema Operacional e sua versão- Windows ou Linux


Security type ⓘ Standard ▼

Image \* ⓘ Ubuntu Server 24.04 LTS - x64 Gen2 (free services eligible) ▼  
[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 ⓘ ☐

 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\_D2s\_v3 - 2 vcpus, 8 GiB memory (US\$ 70,08/month) ⓘ ▼

## Definir a forma de acesso a VM: usuário e senha ou chave pública SSH

**Administrator account**

Authentication type ⓘ ☐ SSH public key ☒ Password

Username \* ⓘ dicabralpersonal ✓

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 Select one or more ports ▼

< Previous Next : Disks > Review + create

Selecionar qual tamanho e tipo do disco e uma dica importante, selecionar a opção para deletar o disco quando a VM foi deletada pra ele não fica "órfão".

**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 ⓘ ☐

Como consequência ao criar uma Virtual Machine, são criadas(a menos que já tenha uma existente que você deseja inserir):

- uma Vnet ou rede virtual
- uma Subnet
- IP Público

Virtual network \* ⓘ (new) lab01VM-1-vnet ▼  
[Create new](#)

Subnet \* ⓘ (new) default (10.0.0.0/24) ▼

Public IP ⓘ (new) lab01VM-ip ▼  
[Create new](#)

NIC network security group ⓘ ☐ None  
☒ Basic  
☐ Advanced

Public inbound ports \* ⓘ ☒ None  
☐ Allow selected ports

Select inbound ports Select one or more ports ▼

Dica importante, manter selecionada a opção para deletar a placa de rede, NIC e IP, ao deletar a VM

Como se trata apenas de um projeto para fins educacionais, não terá tráfego na VM por isso não precisamos de Load Balancer.

Delete public IP and NIC when VM is deleted ⓘ



Enable accelerated networking ⓘ



**i** The resource provider 'Microsoft.Network' should be registered in order to enable accelerated networking. [Learn more](#) ↗

### 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

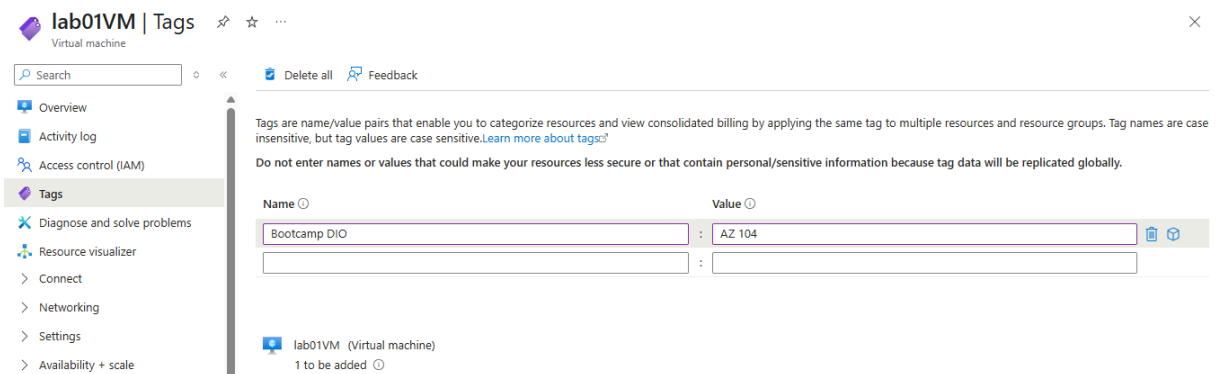
Web traffic load balancer for HTTP/HTTPS with URL-based routing, SSL termination, session persistence, and web application firewall.

Após o deploy da VM pode anexar discos existentes ou criar novos para anexar a VM - Escala Vertical

Dica importante: se for alterar o SKU a maquina precisa reiniciar, caso contrário não.

Adicionando uma TAG - **são pares chave-valor que você pode aplicar aos seus recursos e assinaturas para organização lógica e gerenciamento.** Elas

ajudam a categorizar recursos para controle de custos, automação e gerenciamento operacional.



Escala horizontal, criando um Scale Set para aumentar a disponibilidade da aplicação incrementando instâncias.

No caso 2 instâncias sendo criadas nesse scale set: vm1ScaleSet

## Create a Virtual Machine Scale Set (VMSS) ...

### Scale set details

Virtual machine scale set name *	<input type="text" value="vm1ScaleSet"/>
Region *	<input type="text" value="(US) East US"/>
Availability zone ⓘ	<input type="text" value="Zone 1"/>

Improve your availability by selecting multiple zones

### Orchestration

A scale set has a "scale set model" that defines the attributes of virtual machine instances (size, number of data disks, etc). As the number of instances in the scale set changes, new instances are added based on the scale set model.

[Learn more about the scale set model](#)

Orchestration mode * ⓘ	<div><input checked="" type="radio"/> <b>Flexible:</b> achieve high availability at scale with identical or multiple virtual machine types</div> <div><input type="radio"/> <b>Uniform:</b> optimized for large scale stateless workloads</div>
Security type ⓘ	<input type="text" value="Trusted launch virtual machines"/>

[Configure security features](#)

Scaling mode ⓘ

- ☒ **Manually update the capacity:** Maintain a fixed amount of instances.
- ☐ Autoscaling: Scaling based on a CPU metric, on any schedule.
- ☐ No scaling profile: manual attach virtual machines after deployment
- i** Subscription needs Microsoft.Insights registration to use autoscaling. [Learn more](#) ⓘ

Instance count \* ⓘ

2 ✓

[Configure scaling options](#)

**Instance details**

Image \* ⓘ

Ubuntu Server 24.04 LTS - x64 Gen2 (free services eligible) ✓

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

VM architecture ⓘ

- ☐ Arm64
- ☒ x64

Size \* ⓘ

**Selected sizes**

Standard D2s v3

[Select up to 5 sizes](#)

Para um melhor gerenciamento dos recursos, uma boa prática é criar alertas e tomar decisões baseadas nelas.

## Create an alert rule ...











Scope **Condition** Actions Details Tags Review + create

Configure when the alert rule should trigger by selecting a signal and defining its logic.

Signal name \* ⓘ

Select a signal ✓

**Popular**

-  Percentage CPU 
-  Available Memory Bytes (Preview) 
-  Data Disk IOPS Consumed Percentage 
-  OS Disk IOPS Consumed Percentage 
-  VM Availability Metric (Preview)
-  Custom log search

[See all signals](#)

Alerta caso a VM em questão seja deletada

Home > Compute infrastructure | All resources > lab01VM | Alerts >

## Create an alert rule ...

Scope **Condition** Actions Details Tags Review + create

Configure when the alert rule should trigger by selecting a signal and defining its logic

Signal name \* ⓘ

Percentage CPU

[See all signals](#)

Alert logic

## Select a signal

delete

Signal type : All

Signal s

Signal name

Activity log

Delete Virtual Machine (Virtual Machines)

Deletes PreservedOSDisk on the Virtual Machine. (Virtual Machines)

Criando um Lock para impedir que a VM seja deletada

**lab01VM | Locks** ☆ ...  
Virtual machine

lock

+ Add Refresh Feedback

Overview

Settings

Properties

**Locks**

### Add lock

Lock name \* noDeletion

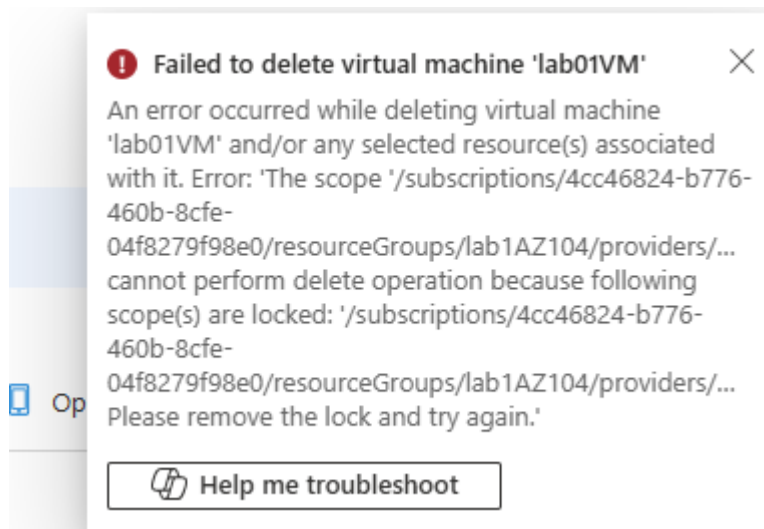
Lock type \* Delete

Notes

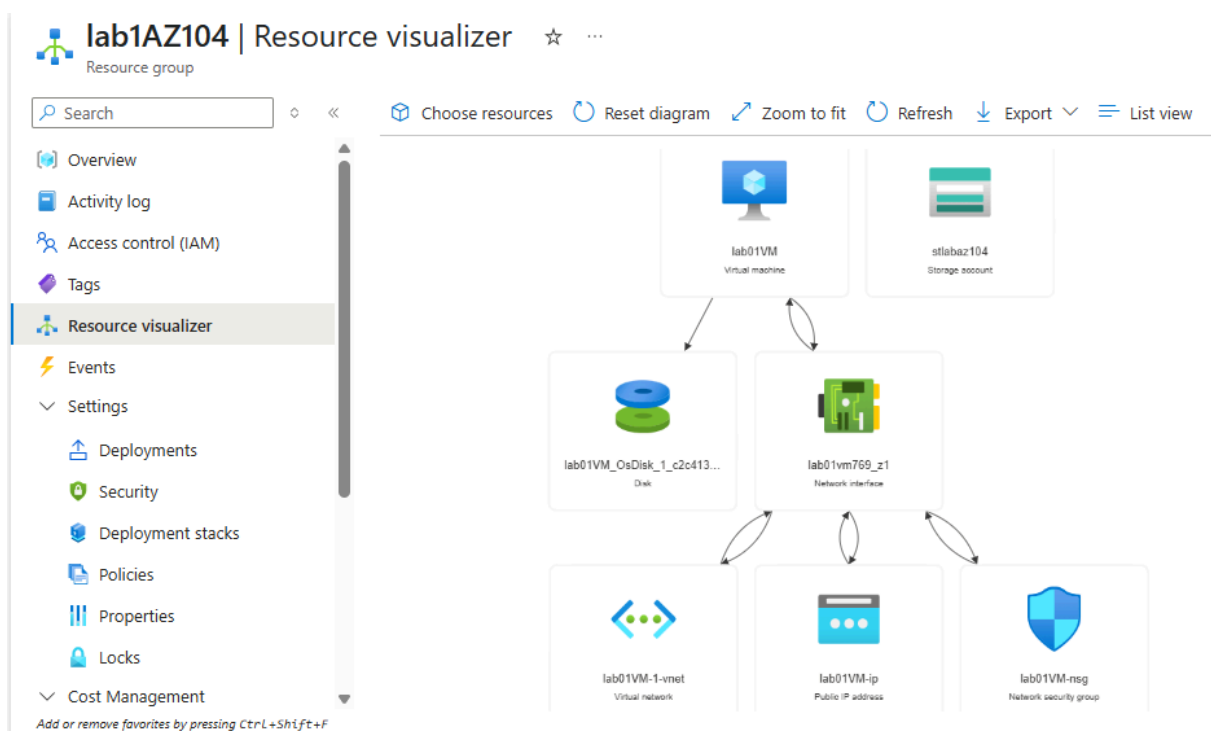
trava para impedir que a vm seja deletada

OK Cancel

Mensagem de erro ao tentar deletar a VM com Lock

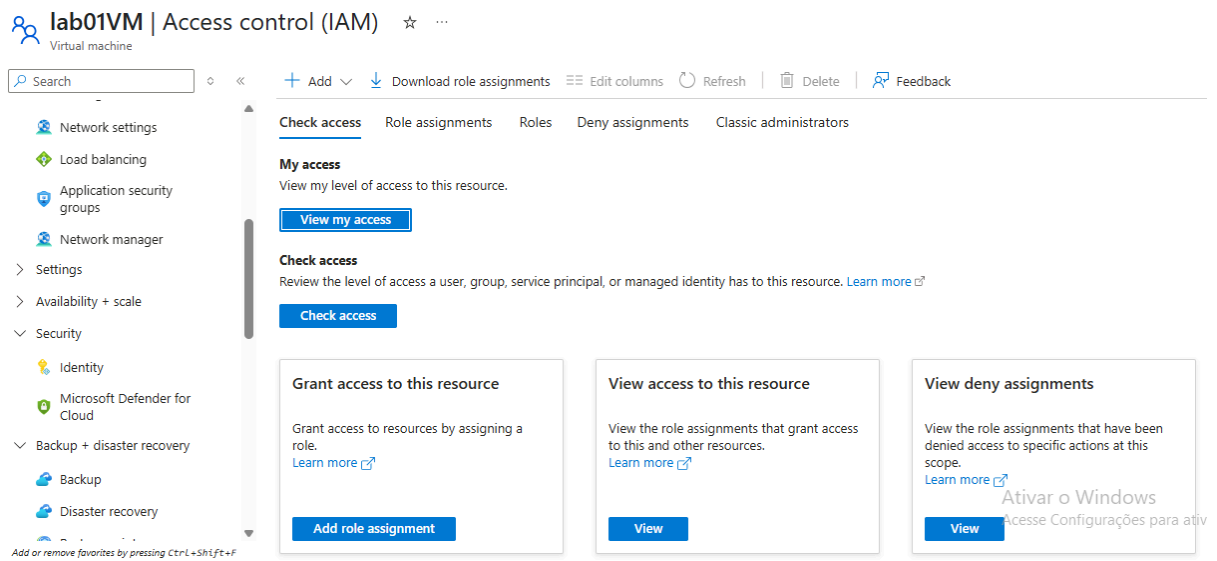


## Representação gráfica da interação entre os recursos - Resource Visualizer

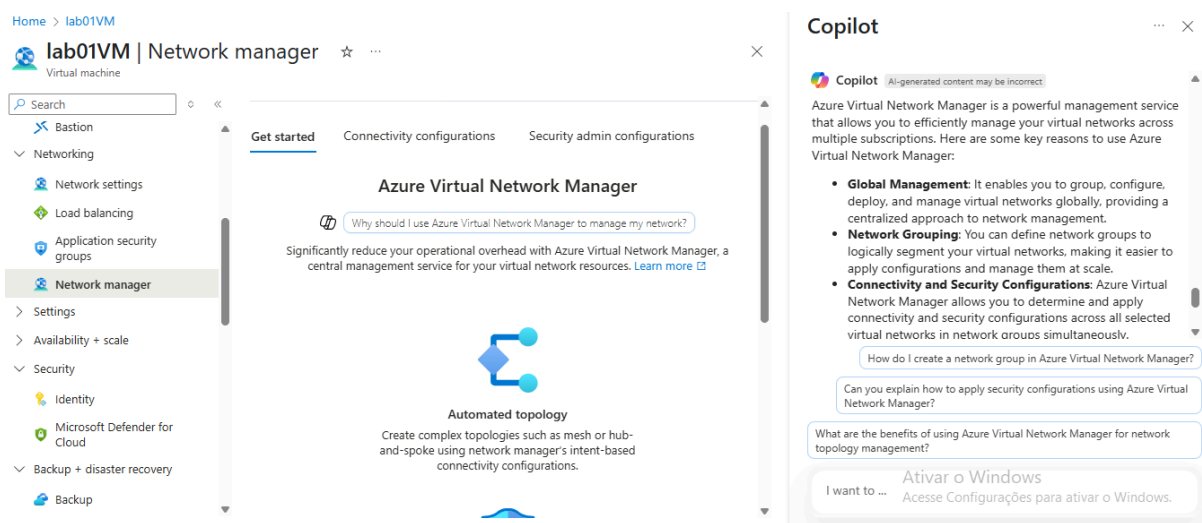


## Controle de acesso a VM, um usuario ou grupo especifico ou RBAC





Utilização da IA com o Copilot para entender melhor os recursos e se faz sentido para cada aplicação



Log de atividade para monitoramento da VM

## lab01VM | Activity log

Virtual machine

Search

Activity Edit columns Refresh Export Activity Logs Download as CSV Insights Feedback

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Favorites

Logs

Connect

Connect

Bastion

Looking for Log Analytics? In Log Analytics you can search for performance, diagnostics, health logs, and more. [Visit Log Analytics](#)

Search

Quick Insights

Management Group : None

Subscription : Azure subscription 1

Event severity : All

Timespan : Last 6 hours

Resource : lab01VM

Add Filter

3 items.

Operation name	Status	Time	Time stamp	Subscription
> Delete Virtual Machine	Failed	an hour ago	Mon Jun 30...	<a href="#">Azure subscription 1</a>
> Add management locks	Succeeded	an hour ago	Mon Jun 30...	<a href="#">Azure subscription 1</a>
> Create or Update Virtual Machine	Succeeded	2 hours ago	Mon Jun 30...	<a href="#">Azure subscription 1</a>