



Intro to Devops

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Lab-6-Module-WorkLoad(Secure Network Traffic)

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Task 1: Creating 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 * ⓘ	<div>Azure subscription 1</div>
Resource group * ⓘ	<div>(New) lab6-rg</div> <div>Create new</div>

Instance details

Virtual machine name * ⓘ	<div>SimpleWinVM</div>
Region * ⓘ	<div>(US) East US</div>
Availability options ⓘ	<div>Availability zone</div>
Zone options ⓘ	<div><div><input checked="" type="radio"/> Self-selected zone</div><div>Choose up to 3 availability zones, one VM per zone</div><div><input type="radio"/> Azure-selected zone (Preview)</div><div>Let Azure assign the best zone for your needs</div><div><input type="radio"/> Using an Azure-selected zone is not supported in region 'East US'.</div></div>

Run with Azure Spot discount ⓘ



i 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 (\$137.24/month) ▼

[See all sizes](#)

Enable Hibernation ⓘ



i Hibernate is not supported by the size that you have selected. Choose a size that is compatible with Hibernation to enable this feature. [Learn more](#) ↗

Administrator account

Username * ⓘ

azureuser ✓

Password *

..... ✓

Confirm password *

..... ✓

Inbound port rules



Help me create a low cost VM

Help me create a VM optimized for high availability

Help me choose the right VM

Basics Disks **Networking** Management Monitoring Advanced Tags Review + create

Define network connectivity for your virtual machine by configuring network interface card (NIC) settings. You can control ports, 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 * ⓘ

(new) SimpleWinVM-vnet ▼

[Create new](#)

Subnet * ⓘ

(new) default (10.0.0.0/24) ▼

Public IP ⓘ

[Create new](#)

NIC network security group ⓘ

- ☒ None
☐ Basic
☐ Advanced



All ports on this virtual machine may be exposed to the public internet. This is a security risk. Use a network security group to limit public access to specific ports. You can also select a subnet that already has network security groups defined or remove the public IP address.

Configure monitoring options for your VM.

Alerts

Enable recommended alert rules ⓘ ☐

Diagnostics

Boot diagnostics ⓘ ☐ Enable with managed storage account (recommended)
☐ Enable with custom storage account
☒ Disable

Enable OS guest diagnostics ⓘ ☐

Health

Enable application health monitoring ⓘ ☐

[Home](#) >



CreateVm-MicrosoftWindowsServer.WindowsServer-201-20250408131540 | Overview ⚙️ ...

Deployment

🔍 Search x <<

🗑️ Delete ⏸️ Cancel 🔄 Redeploy ⬇️ Download 🔄 Refresh

🌿 Overview

📄 Inputs

☰ Outputs

📄 Template

✅ Your deployment is complete



Deployment name: CreateVm-MicrosoftWindowsServer.WindowsSe... Start time: 4/8/2025, 1:18:44 PM

Subscription: [Azure subscription 1](#)

Resource group: [lab6-rg](#)

Correlation ID: 46869c07-d708-47b5-b1d0-ebb437b1b252 📄

▼ 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

 Network interface / IP configuration
simplewinvm872_z2 (primary) / ipconfig1 (primary) 

^ Essentials

Network interface	: simplewinvm872_z2	Load balancers	: 0 (Configure)
Virtual network / subnet	: SimpleWinVM-vnet / default	Application security gro...	: 0 (Configure)
Public IP address	: 172.174.214.16	Network security group	: -
Private IP address	: 10.0.0.4	Accelerated networking	: Enabled
Admin security rules	: 0 (Configure)	Effective security rules	: 0

Task 2: Creating a network security group

Create network security group ...

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

Project details

Subscription *	<div>Azure subscription 1</div>
Resource group *	<div>lab6-rg</div> Create new

Instance details

Name *	<div>myNSGSecure</div>
Region *	<div>East US</div>



Microsoft.NetworkSecurityGroup-20250408132748 | Overview ...

Deployment

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete



Deployment name : Microsoft.NetworkSecurityGroup-20250408132748

Subscription : Azure subscription 1

Resource group : lab6-rg

Start time :

Correlation ID : d7b8720d-ecff-4feb-a09e-f5f5fad2cbfb

> Deployment details

✓ Next steps

Go to resource

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Home > Microsoft.NetworkSecurityGroup-20250408132748 | Overview > myNSGSecure



myNSGSecure | Network interfaces ☆ ...

Network security group

Associate Refresh Dissociate

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Settings

Inbound security rules

Outbound security rules

Network interfaces

Subnets

Properties

Locks

Monitoring

Automation

Name ↑↓	Public IP address ↑↓	Private
No results.		

Associate network interface

myNSGSecure

Network interface associations *

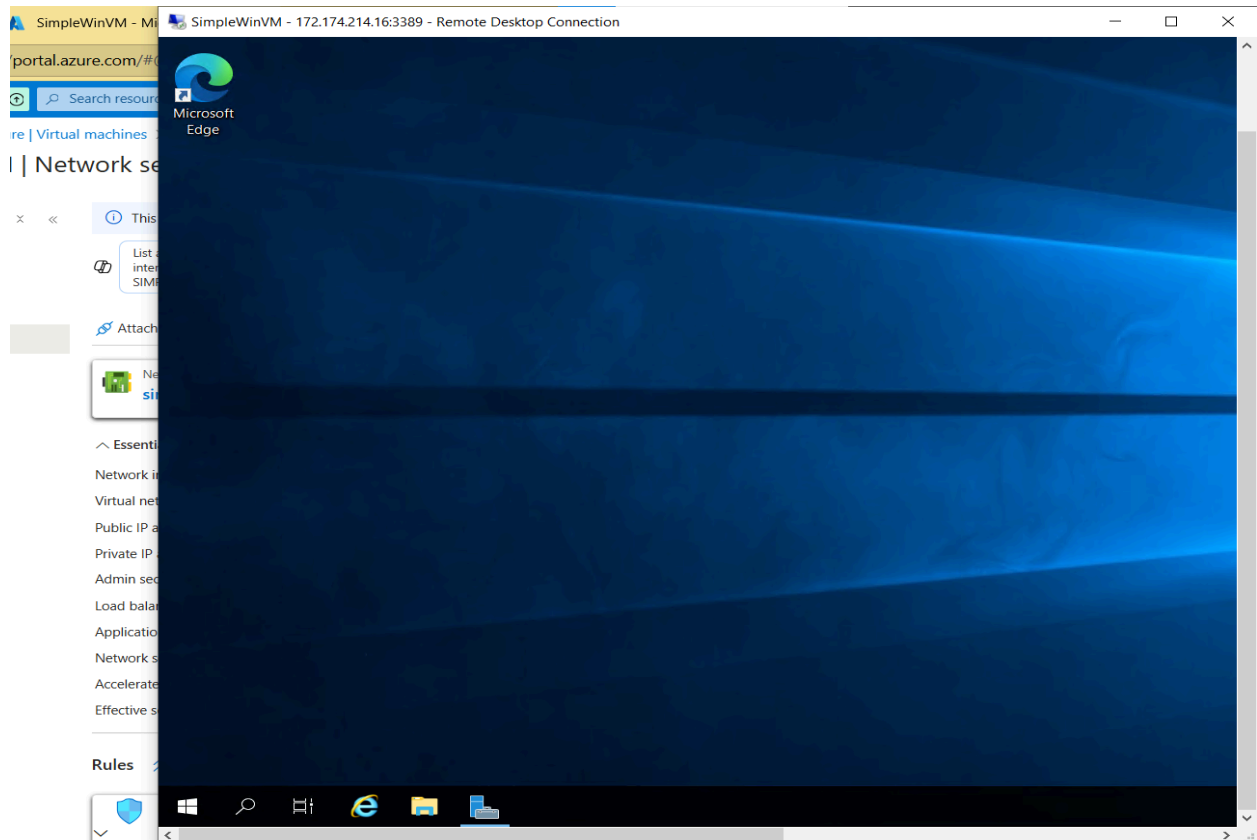
simplewinvm872_x2

Task 3: Configure an inbound security port rule to allow RDP

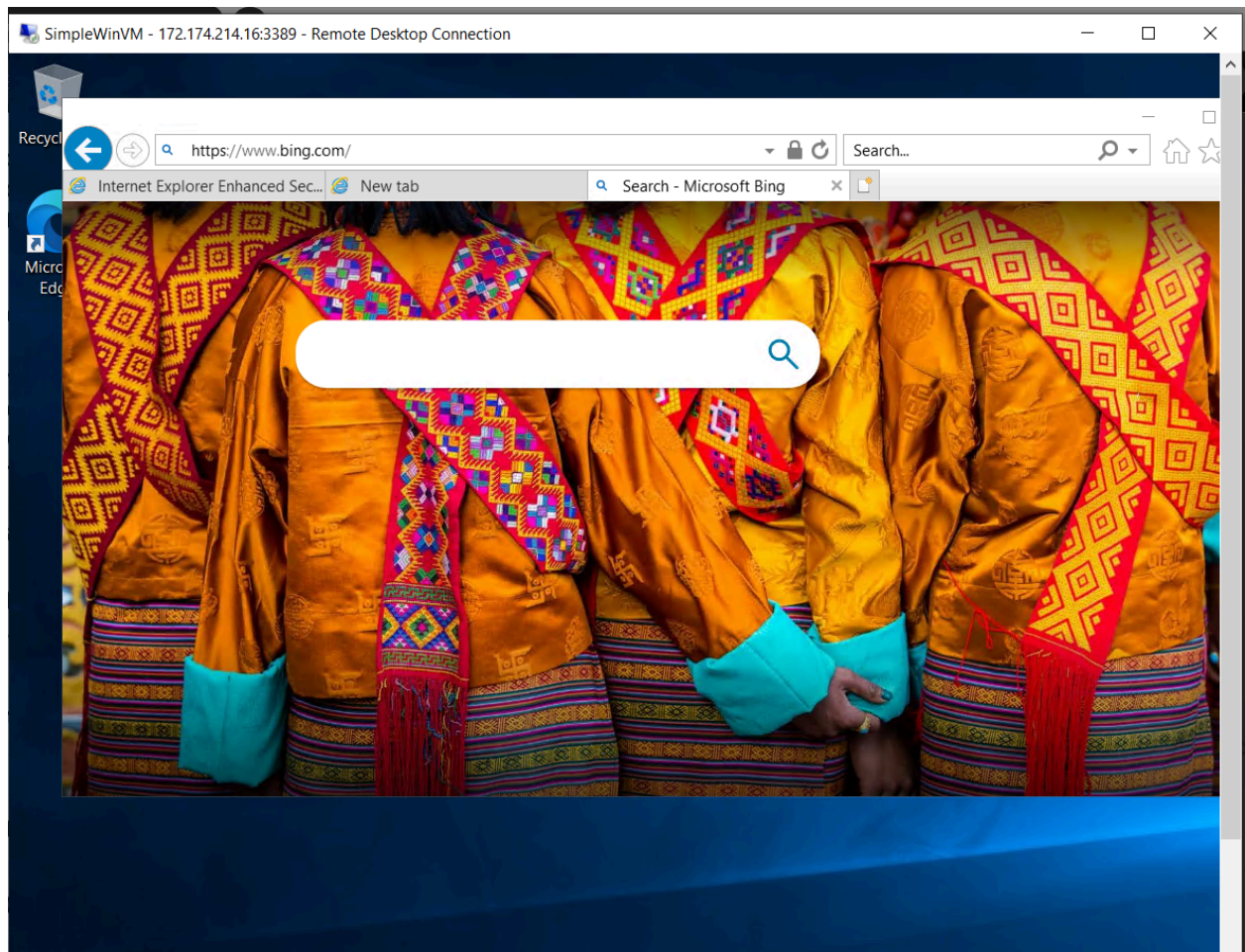
The screenshot shows the Azure portal interface for a virtual machine named 'SimpleWinVM'. On the left, the 'Virtual machines' blade is selected. A 'Remote Desktop Connection' error dialog is displayed in the foreground, stating: 'Remote Desktop can't connect to the remote computer for one of these reasons: 1) Remote access to the server is not enabled, 2) The remote computer is turned off, 3) The remote computer is not available on the network. Make sure the remote computer is turned on and connected to the network, and that remote access is enabled.' On the right, the 'SimpleWinVM | Connect' blade is visible, showing connection options like 'Public IP address | 172.174.214.16' and 'Native RDP'.

The screenshot shows the 'SimpleWinVM | Network settings' blade. The 'Network settings' tab is selected, showing the 'Admin security rules' section. A 'Creating security rule' dialog is open, showing the configuration for a new inbound security rule named 'AllowRDP'. The configuration includes: Source: Any, Source port ranges: *, Destination: Any, Service: Custom, Destination port ranges: 3389, Protocol: TCP, Action: Allow, Priority: 300, and Name: AllowRDP. The background shows the 'Network settings' blade with a list of rules under 'Inbound port rules (3)'.

Priority	Name
65000	AllowVr
65001	AllowAz
65500	DenyAll



Task 4: Configure an outbound security port rule to deny Internet access



Search resources, services, and docs (G+)

Copilot

...

ure | Virtu

4 | Ne

x

<<

myNSGSecure

Add outbound security rule

X

Source port ranges

...

?

*

Destination

?

Service Tag

▼

Destination service tag

?

Internet

▼

Service

?

Custom

▼

Destination port ranges *

?

*

✓

Protocol

Any

●

TCP

UDP

ICMPv4

Action

Allow

●

Deny

Priority *

?

4000

✓

Name *

DenyInternet

✓

Verifying Outbound Security Rule

