

Step 1: Set up virtual network -1 and add a virtual machine in West-US 2

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes tabs for 'Selvi-VM1-VNet1 - Microsoft Azure' and 'Create a virtual machine - Microsoft Azure'. The main title is 'Selvi-VM1-VNet1 | Overview'. The left sidebar has a 'Overview' section selected, along with other options like 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Resource visualizer', 'Connect', 'Networking', 'Settings', and 'Availability + scale'. The main content area displays the VM's details under the 'Essentials' tab. Key information includes:

Setting	Value
Resource group	Selvi-RG
Status	Running
Location	West US 2
Subscription	Simplilearn HOL 17
Subscription ID	7132032a-f179-42d9-8a37-3738035ff911
Operating system	Windows (Windows Server 2019 Datacenter)
Size	Standard DS2 v2 (2 vcpus, 7 GiB memory)
Public IP address	20.9.189.28
Virtual network/subnet	Selvi-VNet1/Core
DNS name	Not configured
Health state	-
Time created	8/28/2025, 9:01 PM UTC

At the bottom of the essentials section, there are 'Tags (edit)' and 'Add tags' buttons. A 'Search' bar is at the top of the sidebar.

Step 2: Set up virtual network -2 and add a virtual machine in West-US 2

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes tabs for 'Selvi-VM1-VNet1 - Microsoft Azure' and 'Create a virtual machine - Microsoft Azure'. The main title is 'CreateVm-MicrosoftWindowsServer.WindowsServer-201-20250828210845 | Overview'. The left sidebar has a 'Deployment' section selected, along with other options like 'Inputs', 'Outputs', and 'Template'. The main content area displays the deployment status. Key information includes:

Your deployment is complete

Deployment name	Start time
CreateVm-MicrosoftWindowsServer.WindowsServer-201-20250828210845	8/28/2025, 9:14:32 PM
Subscription	Correlation ID
Simplilearn HOL 17	7d4a72de-0128-4e91-81ab-58d021e6a1c5
Resource group	Selvi-RG

Deployment details

Next steps

- Setup auto-shutdown Recommended
- Monitor VM health, performance and network dependencies Recommended
- Run a script inside the virtual machine Recommended

At the bottom, there are 'Go to resource' and 'Create another VM' buttons.

Az104 PG Lab 05h : 04m : 14s

Selvi-VNet1 - Microsoft Azure Selvi-VM2-VNet2 - Microsoft Azure + https://portal.azure.com/#@simpilearnhol17.onmicrosoft.com/resource/subscriptions/7132032a-f179-42d9-8a37-3738035ff911/resourcegroups/Selvi-RG/providers/Microsoft.Compute/virtualMachines/Selvi-VM2-VNet2

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Home > CreateVm-MicrosoftWindowsServer:WindowsServer-201-20250828210845 | Overview

Selvi-VM2-VNet2 Virtual machine

Help me copy this VM in any region Manage this VM with Azure CLI

Search Connect Start Restart Stop Hibernate Capture Delete Refresh Open in mobile Feedback CLI / PS

Overview

Activity log Access control (IAM) Tags Diagnose and solve problems Resource visualizer Connect Networking Settings Availability + scale

Tags (edit) : Add tags

Essentials

Resource group (move) : Selvi-RG Status : Running Location : West US 2 Subscription (move) : Simplilearn HOL_17 Subscription ID : 7132032a-f179-42d9-8a37-3738035ff911

Operating system : Windows (Windows Server 2019 Datacenter) Size : Standard DS2 v2 (2 vcpus, 7 GiB memory) Public IP address : 4.246.122.159 Virtual network/subnet : Selvi-VNet2/default DNS name : Not configured Health state : - Time created : 8/28/2025, 9:14 PM UTC

JSON View

Az104 PG Lab 04h : 56m : 21s

Selvi-VNet1 - Microsoft Azure Selvi-VM2-VNet2 - Microsoft Azure NetworkWatcher_Selvi-VM1-VNet1-20250828212805-84 + https://portal.azure.com/#view/HubsExtension/DeploymentDetailsOverviewV2Blade/id/2Fsubscriptions%2F7132032a-f179-42d9-8a37-3738035ff911%2Fresourcegroups%2FSelvi-RG%2Fproviders/Microsoft.Network/networkWatchers/Selvi-VM1-VNet1/deployments/NetworkWatcher_Selvi-VM1-VNet1-20250828212805-84

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Home > NetworkWatcher_Selvi-VM1-VNet1-20250828212805-84 Deployment

More events in the activity log → Dismiss all

Deployment succeeded Deployment 'NetworkWatcher_Selvi-VM1-VNet1-20250828212805-84' to resource group 'Selvi-RG' for successful. a few seconds ago

Your deployment is complete

Deployment name: NetworkWatcher_Selvi-VM1-VNet1-20250828212805-84 Start time: 8/28/2025, 9:28:06 PM Subscription: Simplilearn HOL 17 Correlation ID: 0a6743dd-2cbd-439d-8856-369f9ae Resource group: Selvi-RG

Deployment details

Resource	Type	Status	Operation de
Selvi-VM1-VNet1/AzureNetwork	Microsoft.Compute/virtualMachines/...	OK	Operation de

Next steps

Cost Management Get notified to stay within your budget and prevent unexpected charges on your bill. Set up cost alerts >

Microsoft Defender for Cloud

Step 3: Configure VNet peering between the 2 virtual networks

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the URL <https://portal.azure.com/#@simpilearnhol17.onmicrosoft.com/resource/subscriptions/7132032a-f179-42d9-8a37-3738035ff911/resourceGroups/Selvi-RG/providers/Microsoft.Network/virtualNet...>, the Microsoft Azure logo, a search bar, and various navigation icons.

The main content area is titled "Selvi-VNet1 | Peerings" and shows a table of peerings:

Name	Peering sync status	Peering state	Remote VNet	Virtua...	Cross-tenant
VM-VNet2-To-VM-VNet1	Fully Synchronized	Connected	Selvi-VN...	Disabled	No

The left sidebar contains links for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Settings, Address space, and Connected devices.

Step 4: Test the connectivity between VMs

The screenshot shows the Microsoft Azure portal interface with a focus on the "Run Command Script" feature. The top navigation bar includes the URL <https://portal.azure.com/#@simpilearnhol17.onmicrosoft.com/resource/subscriptions/7132032a-f179-42d9-8a37-3738035ff911/resourceGroups/Selvi-RG/providers/Microsoft.Compute/virtualM...>, the Microsoft Azure logo, a search bar, and various navigation icons.

The main content area is titled "Run Command Script" and shows a PowerShell script window with the following content:

```
1 Test-NetConnection 10.0.1.4 -port 3389
```

The left sidebar contains links for Track, Practice Labs, Certificate, and a list of VMs and configurations under "Az104 PG Lab".

Selvi-VM2-VNet2 | Run command

Now it's possible to execute multiple scripts at the same time, manage the updated Run Command feature, now available through Azure CLI and PowerShell.

Run Command uses the VM agent to let you run a script inside this virtual machine. Select a command below to see details.

Name
RunPowerShellScript
DisableNLA
DisableWindowsUpdate
EnableAdminAccount
EnableEMS

Output

```
ComputerName : 10.0.1.4
RemoteAddress : 10.0.1.4
RemotePort : 3389
InterfaceAlias : Ethernet 2
SourceAddress : 10.1.0.4
TcpTestSucceeded : True
```

Step 5 : Create Custom RBAC Role and add permissions to access VM, Network, Storage

VMOperator

CustomRole

Permissions JSON Assignments

Description: VM Operator for both virtual networks

Type : All

Action required: 1 user assignments

Check access Role assignments

A role definition is a collection of permissions assigned to a user or group.

All Job function roles

vmappe

Showing 12 of 12 permissions

Type	Permissions	Description
Read	Get Virtual Machine	Get the properties of a virtual machine
Other	Start Virtual Machine	Starts the virtual machine

Type	Permissions	Description
Microsoft.Compute		
Read	Get Virtual Machine ⓘ	Get the properties of a virtual machine
Other	Start Virtual Machine ⓘ	Starts the virtual machine
Other	Restart Virtual Machine ⓘ	Restarts the virtual machine
Other	Deallocate Virtual Machine ⓘ	Powers off the virtual machine and releases the compute resources
Microsoft.Network		
Read	Get Network Interface ⓘ	Gets a network interface definition.
Read	Get Network Security Group ⓘ	Gets a network security group definition
Read	Get Public Ip Address ⓘ	Gets a public ip address definition.
Read	Get Virtual Network ⓘ	Get the virtual network definition
Microsoft.Storage		
Microsoft.Storage		
Read	Get blob container ⓘ	Returns a container
Read	List of blob containers ⓘ	Returns list of containers
Read	List File Services ⓘ	List file services
Read	Get file service properties ⓘ	Get file service properties

Step 6: User Creation: (User name - Test User)

The screenshot shows the Microsoft Azure portal interface for managing users. The top navigation bar includes tabs for 'TestUser - Microsoft Azure', 'Selvi-VM2-VNet2 - Microsoft', 'Simplilearn HOL 17 - Microsoft', 'Selvi-VM1-VNet1/AzureNetwork - Microsoft', 'Selvi-VNet1 - Microsoft Azure', and 'Selvi-VNet1 - Microsoft Azure'. The main search bar contains the URL 'https://portal.azure.com/#view/Microsoft_AAD_UsersAndTenants/UserProfileMenuBlade/~/overview/userId/6c75010-59b0-4e1a-96b2-733376f08ef6/hidePreviewBanner~true'. The user 'odl_user_1838911 SIMPLETEAM' is logged in. The page title is 'Microsoft Azure'.

The user profile for 'TestUser' is displayed. The profile picture is a pink circle with a white letter 'T'. The user's name is 'TestUser' and their email is 'TestUser@simplilearnhol17.onmicrosoft.com'. The user type is 'Member'. The 'Overview' tab is selected. Other tabs include 'Audit logs', 'Sign-in logs', 'Diagnose and solve problems', 'Custom security attributes', 'Assigned roles', 'Administrative units', 'Groups', 'Applications', and 'Licenses'. The 'Assigned roles' section shows 'Group memberships: 0', 'Applications: 0', 'Assigned roles: 0', and 'Assigned licenses: 0'. The 'Audit logs' section shows the user principal name 'TestUser@simplilearnhol17.onmicrosoft.com', object ID '6c75010-59b0-4e1a-96b2-733376f08ef6', created date/time 'Aug 28, 2025, 11:20 PM', user type 'Member', identities 'simplilearnhol17.onmicrosoft.com', and group membership '0'.

Role Assignment: [Role assignment name - VM Operator]

Selvi-RG | Access control (IAM)

Action required: 1 user has elevated access in your tenant. You should take immediate action and remove all role assignments with elevated access. [View role assignments](#)

ODL User 1838911 Assianments

Number of role assignments for this subscription: 34 / 4000

Privileged: 29

View assignments

Name	Type	Role	Scope	State	End time	Condition
TestUser	User	VMOperator	This resource	Eligible time-bound	8/28/2026, 11:25:50 PM	None

Step 7 - Logged in as TestUser and validate the TestUser has access to the Virtual Machines in the 2 virtual Networks

The screenshot shows the Microsoft Azure Compute infrastructure Virtual machines page. On the left, there's a navigation sidebar with options like Overview, All resources, Infrastructure, Virtual machines (which is selected), Virtual Machine Scale Set (VMSS), Compute Fleet, Disks + images, Capacity + placement, and Related services. The main area displays a table of virtual machines. The first row shows a header with columns: Name, Subscription, Resource Group, Location, Status, Operating system, Size, Public IP address, Disks, and Usage. Below this, two rows of data are shown:

Name	Subscription	Resource Group	Location	Status	Operating system	Size	Public IP address	Disks	Usage
Selvi-VM1-VNet1	Simplilearn HO...	Selvi-RG	West US 2	Running	Windows	Standard_DS2_v2	20.9.189.28	1	En
Selvi-VM2-VNet2	Simplilearn HO...	Selvi-RG	West US 2	Running	Windows	Standard_DS2_v2	4.246.122.159	1	En

A mouse cursor is hovering over the "Selvi-VM1-VNet1" row.

The TestUser is able to start/stop the virtual machine

The screenshot shows the Microsoft Azure Virtual machine details page for "Selvi-VM1-VNet1". The left sidebar includes options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, and Settings. The main area has tabs for Overview, Essentials, and JSON View. The Essentials tab displays basic information such as Resource group (Selvi-RG), Status (Stopped (deallocated)), Location (West US 2), Subscription (Simplilearn HO_17), and Subscription ID (7132032a-f179-42d9-8a37-3738035ff911). On the right, there's a "Notifications" panel with a green checkmark icon and the message "Successfully stopped virtual machine". Below it, a note says "Successfully stopped the virtual machine 'Selvi-VM1-VNet1'." and "a few seconds ago".