

## VM Infrastructure:

The screenshot shows the Azure Compute Infrastructure Virtual Machines blade. On the left, there's a navigation menu with options like Overview, All resources, Infrastructure, and Virtual machines (which is selected). The main area displays a table of virtual machines with columns for Name, Subscription, Resource Group, Location, Status, Operating system, Size, Public IP address, and Disks. The table contains four entries: VM1-WebApp, VM2-API, VM3-Database, and VM4-AD.

Name	Subscription	Resource Group	Location	Status	Operating syst...	Size	Public IP addre...	Disks
VM1-WebApp	CSIS EA Subscr...	MIT572-Group03	East US	Stopped (deall...	Windows	Standard_B1ms	57.154.209.140	1
VM2-API	CSIS EA Subscr...	MIT572-Group03	East US	Stopped (deall...	Linux	Standard_B1ms	74.235.81.165	1
VM3-Database	CSIS EA Subscr...	MIT572-Group03	East US	Stopped (deall...	Windows	Standard_B1ms	20.83.178.92	1
VM4-AD	CSIS EA Subscr...	MIT572-Group03	East US	Stopped (deall...	Windows	Standard_B1ms	52.188.80.151	1

## VM1 – Web Server (Windows Server 2022)

Purpose: Hosts the frontend web application

The screenshot shows the Azure VM1-WebApp blade. The left sidebar has sections like Overview, Activity log, Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking (selected), Network settings, Load balancing, Application security groups, Network manager, Settings, Availability + scale, Security, Backup + disaster recovery, and Favorites. The main pane shows the VM's properties under the Essentials tab, including resource group, status, location, subscription, and tags. It also shows the Networking tab with details like public IP address and network interface.

Property	Value
Resource group	MIT572-Group03
Status	Stopped (deallocated)
Location	East US (Zone 1)
Subscription	CSIS EA Subscription
Subscription ID	2dcdb72ed-4c37-4cc8-a1ed-6c7d66057130
Availability zone	1

**Networking**

Setting	Value
Public IP address	57.154.209.140 (Network interface vm1-webapp832_z1)
Associated public IPs	1 associated public IPs
Public IP address (IPv6)	-

## VM2 – API Server (Ubuntu)

Purpose: Runs backend REST API

## VM2 – API SERVER – SSH Connection Successful

```
Prajw@PJMIG MINGW64 ~/ssh
$ ssh -i ~/ssh/VM2-API_key azureuser@74.235.81.165
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1012-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Mon Nov 10 22:49:35 UTC 2025

System load: 0.03           Processes:          118
Usage of /: 5.8% of 28.02GB  Users logged in: 0
Memory usage: 14%           IPv4 address for eth0: 172.19.0.4
Swap usage: 0%

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Sat Nov  8 01:17:39 2025 from 74.94.99.18
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@VM2-API:~$
```

## VM3 – Database Server (Windows Server 2022)

Purpose: Local SQL Server Express instance

The screenshot shows the Azure portal interface for the VM3-Database virtual machine. The main pane displays the VM's configuration, including its resource group (MITS72-Group03), status (Stopped), location (East US), and various subscription and network details. The left sidebar lists navigation options like Overview, Activity log, Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, Settings, Availability + scale, Security, and Backup + disaster recovery. At the bottom, there are tabs for Properties, Monitoring, Capabilities (8), Recommendations (4), and Tutorials.

## VM3 – Database Server – SSMS Connection

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface connected to the VM3-Database SQLExpress instance. The Object Explorer on the left shows the database structure, including the CareerCompassDB and its tables. The central pane displays the results of a T-SQL query:

```
SELECT TOP (1000) [Id]
    ,[FirstName]
    ,[LastName]
    ,[Email]
    ,[Role]
    ,[CreatedAt]
FROM [CareerCompassDB].[dbo].[Users]
```

The results grid shows one row of data:

	FirstName	LastName	Email	Role	CreatedAt
1	PJ	Magar	pmagar9936@365elmhurst.edu	Admin	2025-11-10 20:06:06.970

## VM4 – Active Directory Server (Windows Server 2022)

Purpose: Reserved for AD-authentication domain services

VM4-AD Virtual machine

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

Search

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Connect

Networking

- Network settings
- Load balancing
- Application security groups
- Network manager

Settings

Availability + scale

Security

Backup + disaster recovery

Help me copy this VM in any region

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

Adviser (1 of 4): Review and migrate virtual machine workloads →

Essentials

Resource group (move) : MIT572-Group03

Status : Stopped (deallocated)

Location : East US (Zone 1)

Subscription (move) : CSIS EA Subscription

Subscription ID : 2dcb72ed-4c37-4cc8-a1ed-6c7d66057130

Availability zone : 1

Tags (edit) : Add tags

Operating system : Windows

Size : Standard B1ms (1 vcpu, 2 GiB memory)

Primary NIC public IP : 52.188.80.151

Virtual network/subnet : vnet-eastus-3\subnet-eastus-1

DNS name : Not configured

Health state : -

Time created : 11/8/2025, 1:28 AM UTC

JSON View

Properties Monitoring Capabilities (8) Recommendations (4) Tutorials

Virtual machine

Computer name : VM4-AD

Operating system : Windows

Networking

Public IP address : 52.188.80.151 ( Network interface vm4-ad327\_z1 )

1 associated public IPs

## VM4 – Active Directory Server – Server Manager