Lab 1: Configuring and Monitoring an Azure Virtual Machine

CST8912_011

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to:

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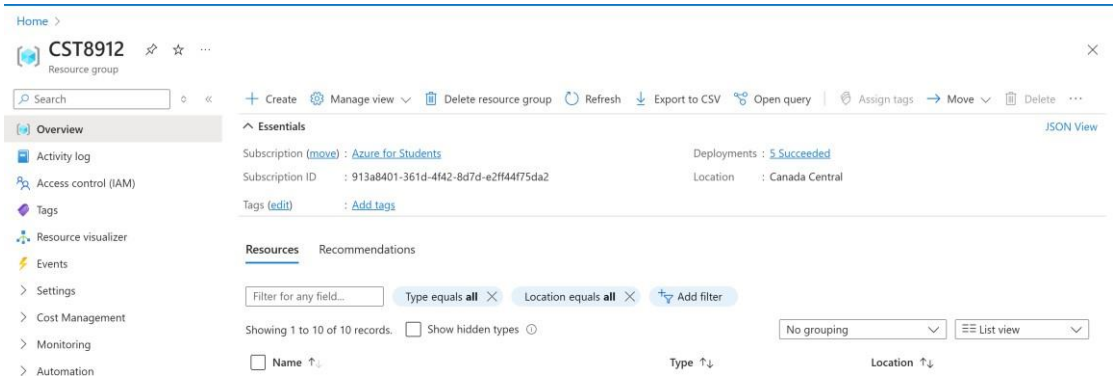
Introduction

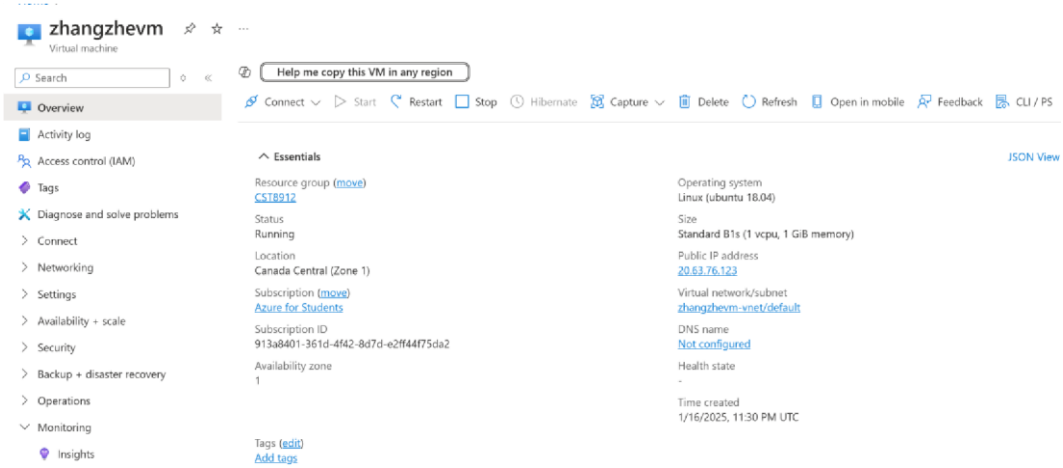
The purpose of this lab was to configure and launch an Azure Virtual Machine (VM) using the Ubuntu Server 18.04 LTS image. This included setting up networking, storage, and monitoring services to demonstrate basic VM management and health monitoring in Azure. The lab focused on understanding cloud service models, ensuring reliability, and managing operational requirements for cloud-based solutions.

Steps Covered in the Lab

1. **Resource Group Creation**
    - Created a resource group named **CST8912** to organize resources for future labs.

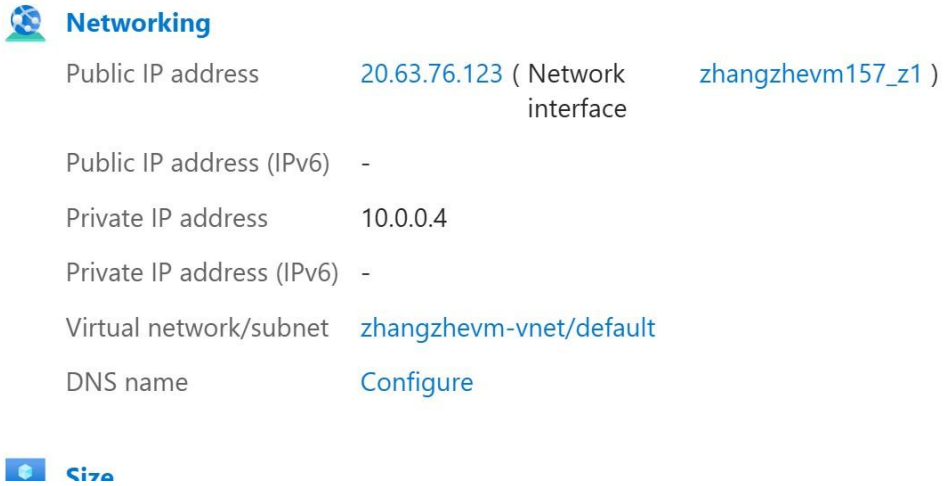


2. **Virtual Machine Deployment** ○ Deployed a VM with the following specifications:



- **Image**: Ubuntu Server 18.04 LTS
- **Region**: Canada Central
- **SKU**: Standard_B1s (1 vCPU, 1 GiB memory)
- **Authentication**: SSH Public Key
- **Disk Type**: Premium SSD

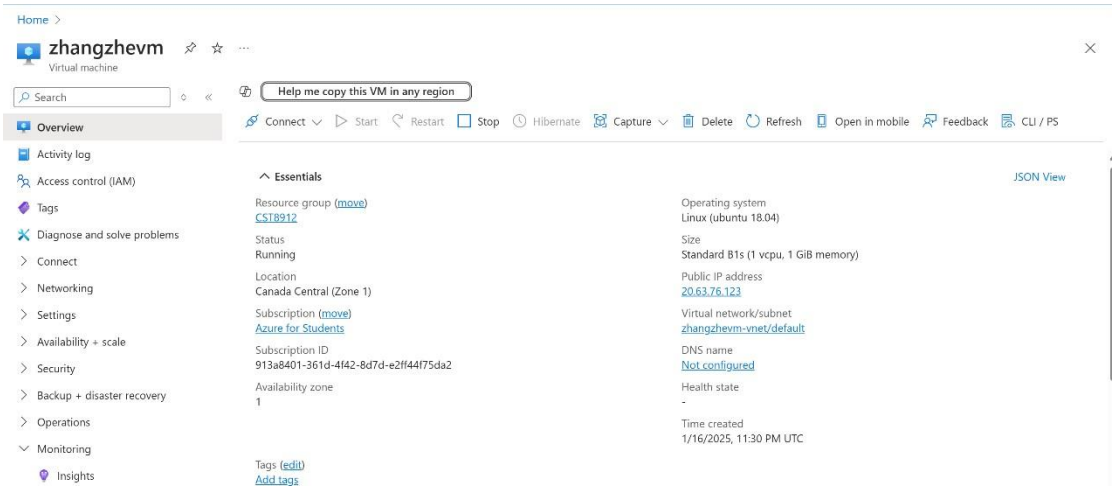
3. **Networking Configuration** ○ Created a virtual network with default settings to connect the VM.



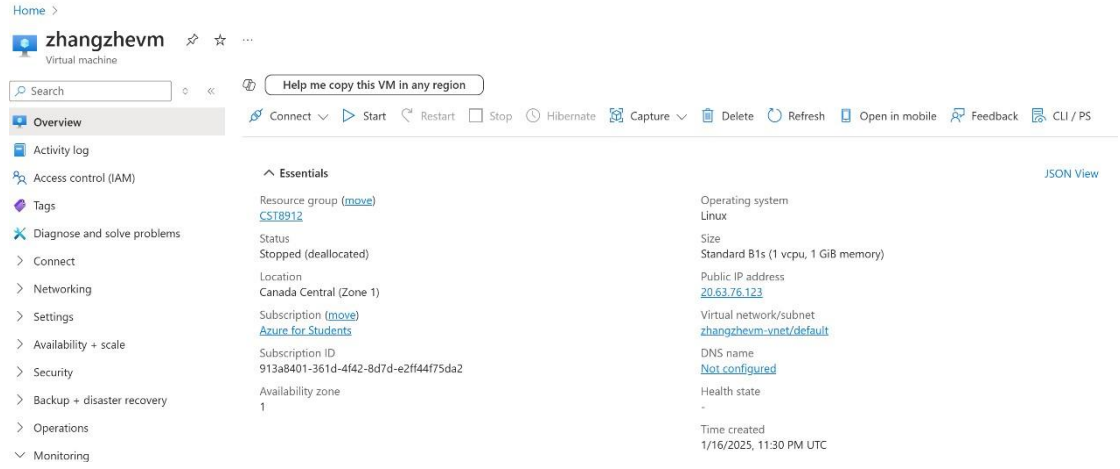
4. **Basic VM Controls**

   - Performed basic operations such as starting, stopping, and restarting the VM.

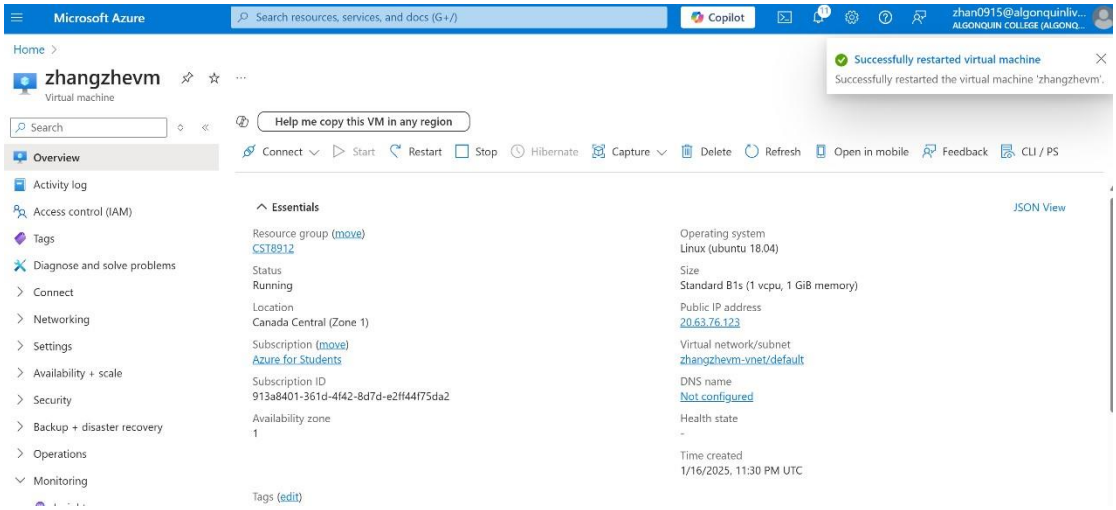
Start



Stop

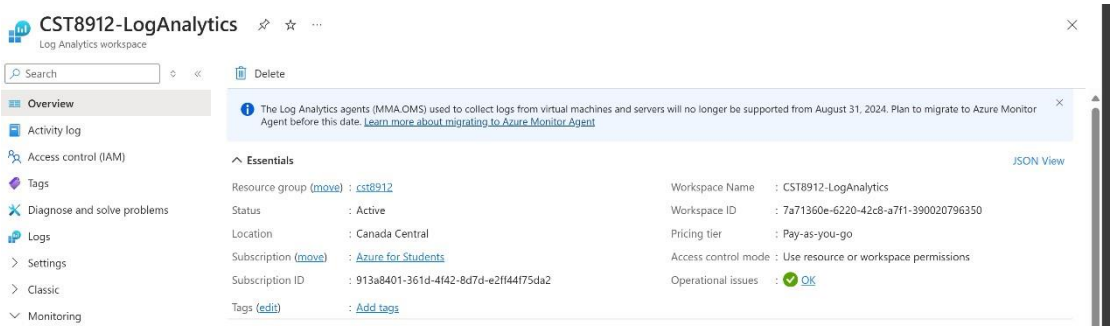


Restart



5. **Log Analytics Workspace Creation**

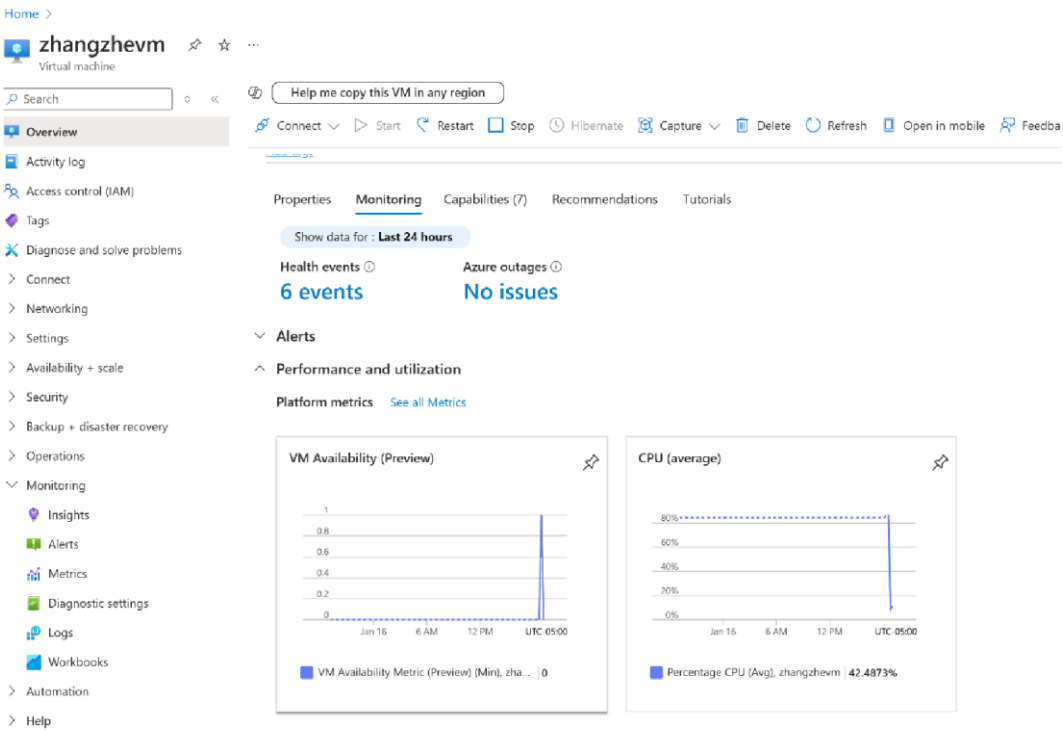
- Created a Log Analytics Workspace in the same region as the VM (Canada Central).



6. **Connecting VM to Log Analytics** ○ Configured the VM to send logs to the Log Analytics Workspace:

- Created a Data Collection Rule targeting the VM.
- Set **Linux syslog** as the data source with default log levels.

- Verified monitoring data under the **Insights** and **Health** tabs.



7. **Cleanup**

   - Deleted all created resources to minimize costs and ensure a clean environment.

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Results

The Azure Virtual Machine was successfully configured and monitored. Key findings include:

- Log Analytics provided real-time health and performance data for the VM.
- Data collection rules allowed customization of log levels and monitoring scope.
- Basic VM operations such as starting, stopping, and restarting were straightforward.

References

- Azure Documentation: Create a Linux Virtual Machine
- Lab Video Reference: YouTube Tutorial on Azure Linux VMs