Day 2 – Create an Azure Virtual Machine (Azure)

Challenge

100 Days of Cloud – Azure Track
Day 2 – Compute Fundamentals

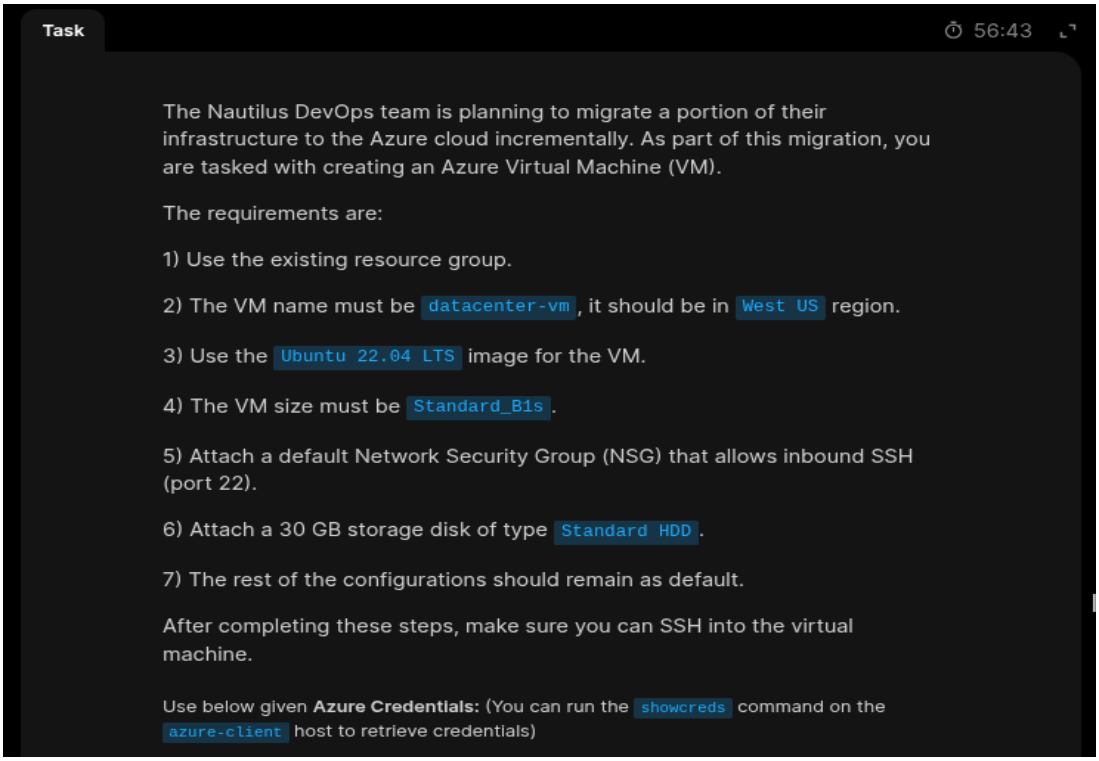
Objective

Create an **Azure Virtual Machine (VM)** using the Azure Portal.

This task demonstrates understanding of core Azure compute concepts, resource organization, and basic VM configuration required to run workloads in the cloud.

Task Overview

An Azure Virtual Machine provides scalable computing resources in the cloud. In this task, a Linux-based VM is created using the Azure Portal with secure authentication and default networking components.



Concept Overview

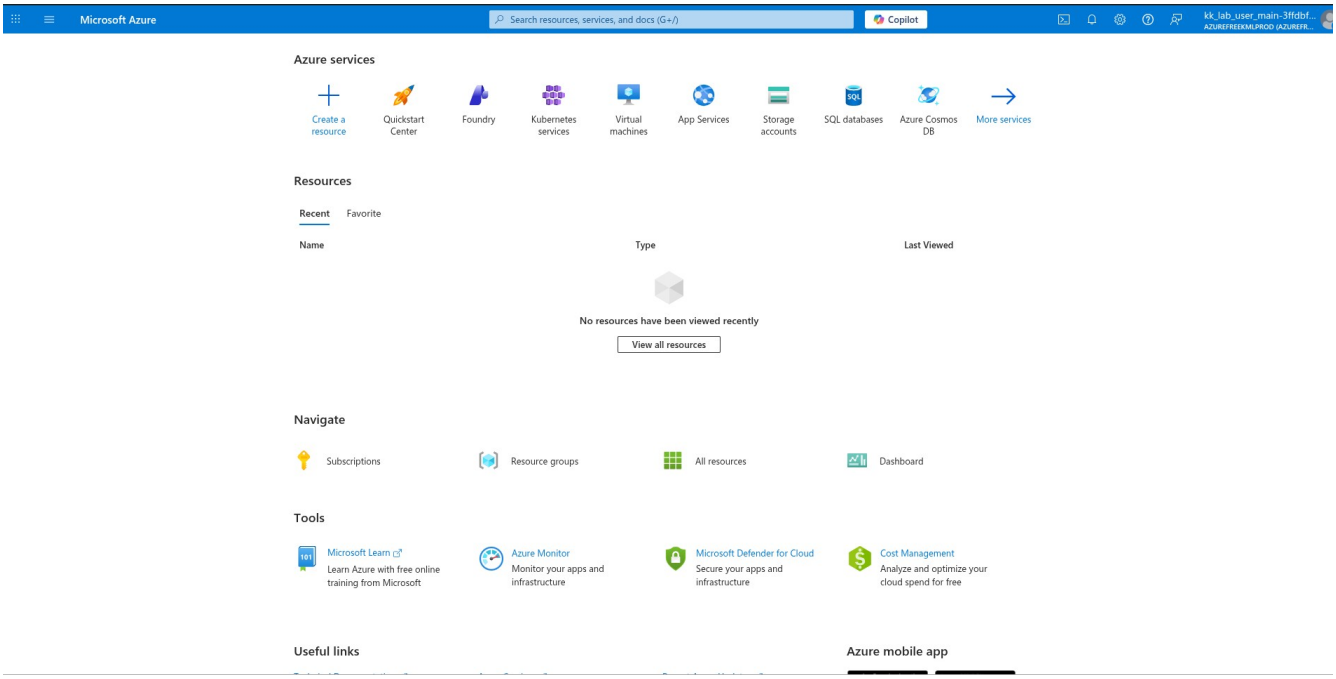
An **Azure Virtual Machine** allows you to: - Run applications and services in the cloud - Choose operating system, size, and region - Control access using SSH keys - Integrate with Azure networking and storage services

Virtual Machines are a foundational building block for cloud infrastructure.

Implementation (Azure Portal)

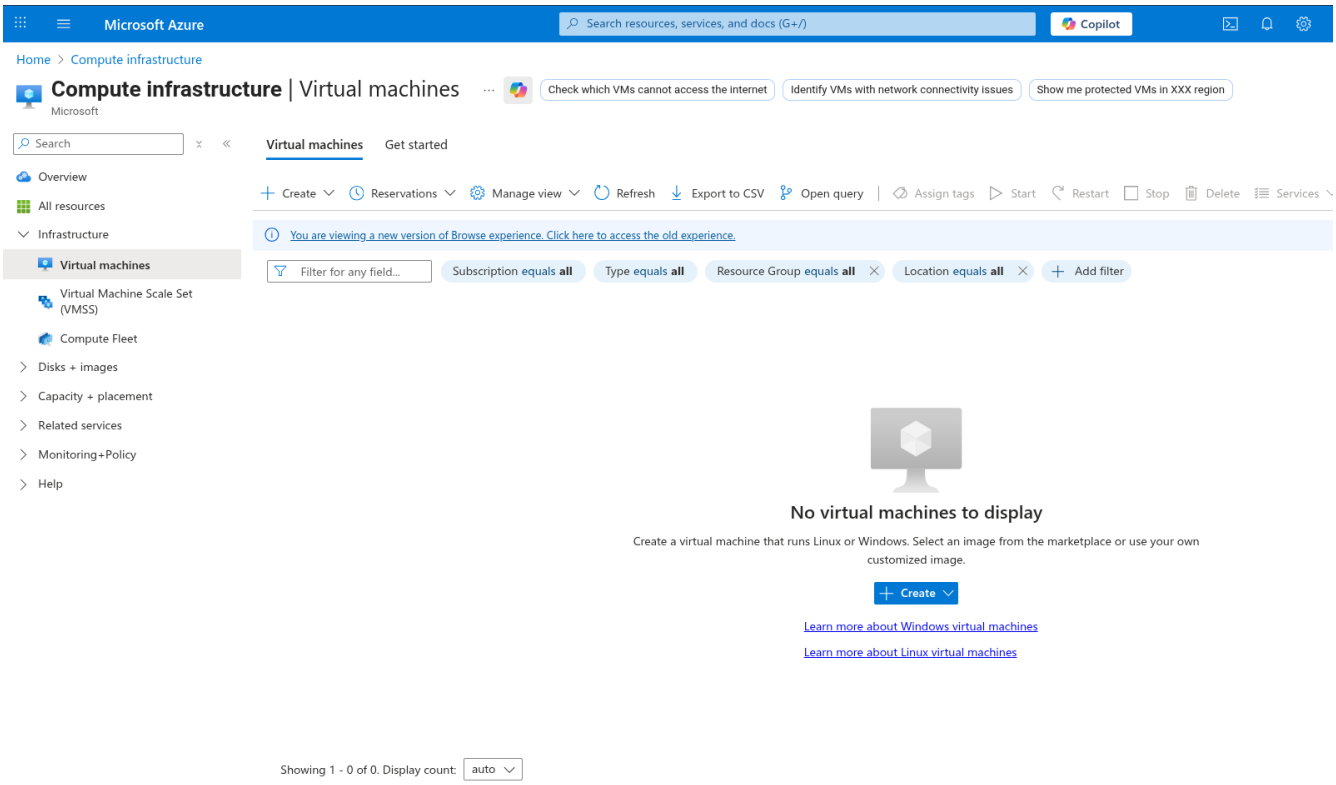
Step 1: Log in to Azure Portal

- Logged in to the **Azure Portal** using the provided credentials
- Confirmed access to the active subscription



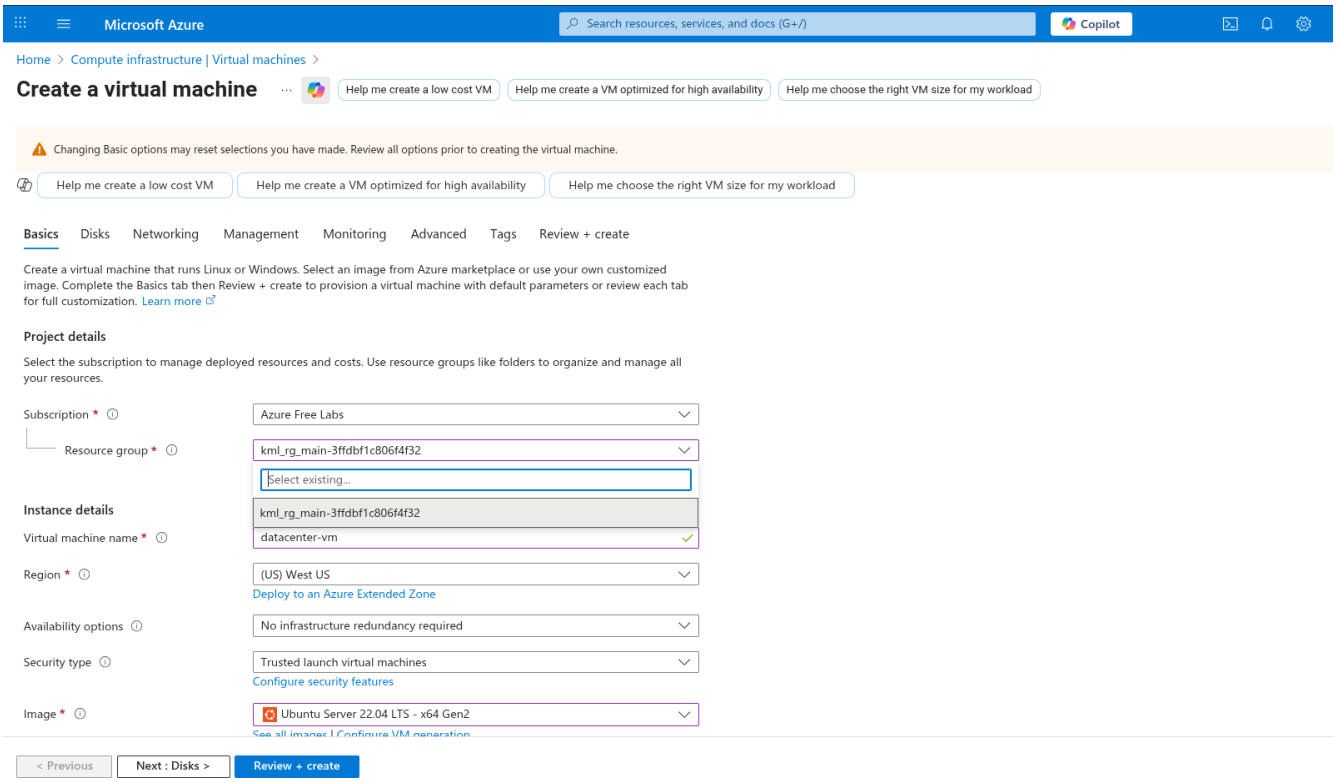
Step 2: Navigate to Virtual Machines Service

- Used the Azure search bar
- Searched for **Virtual Machines**
- Clicked on **Virtual Machines** under Services



Step 3: Start Virtual Machine Creation

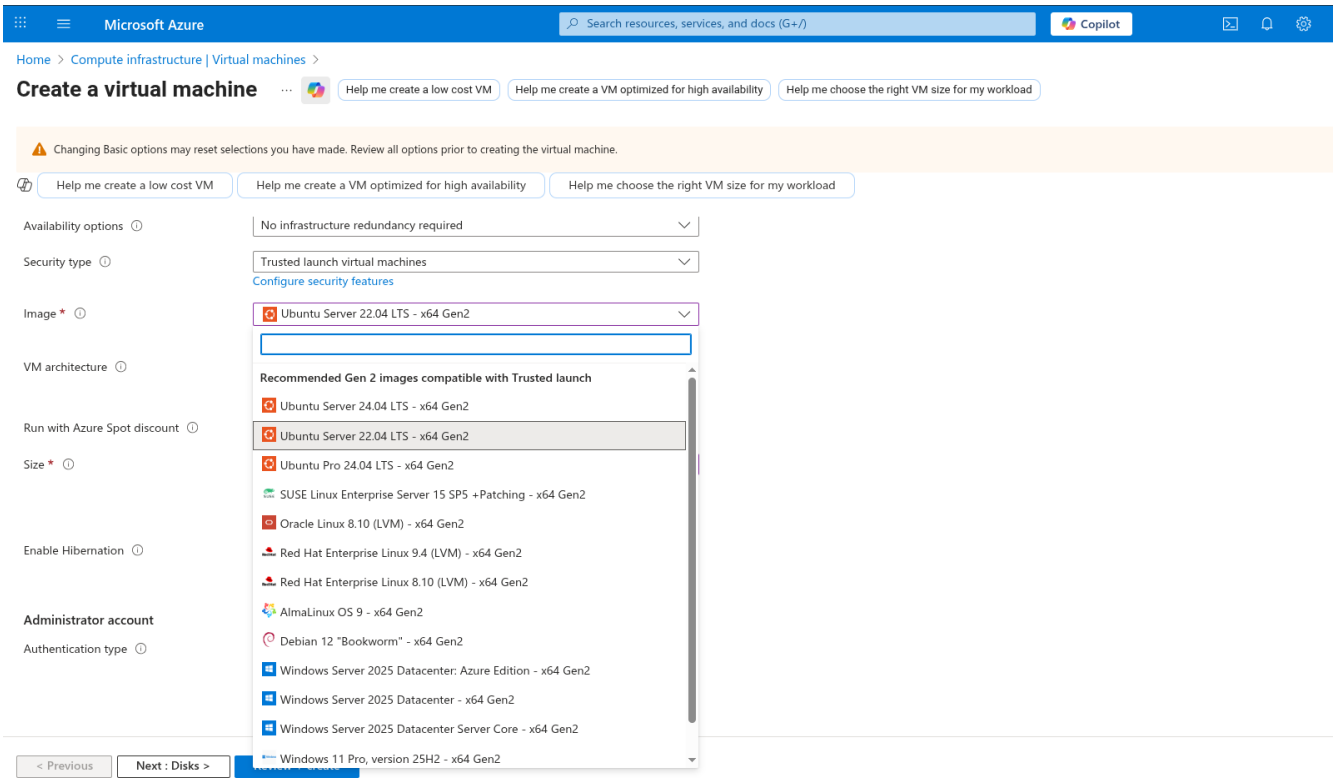
- Clicked **Create → Azure virtual machine**



Step 4: Configure Basic VM Settings

Configured the following settings:

- **Subscription:** Selected the active subscription
- **Resource Group:** Selected an existing resource group for organization
- **Virtual Machine Name:** Assigned a meaningful VM name
- **Region:** Selected the appropriate Azure region
- **Image:** Selected a Linux-based OS image
- **Size:** Chosen based on workload requirements – According to task Standard_B1
- **Authentication Type:** SSH public key
- **SSH Key:** Selected the previously created SSH key


Microsoft Azure
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Copilot
Home > Compute infrastructure | Virtual machines >
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
Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.
Availability options
No infrastructure redundancy required
Security type
Trusted launch virtual machines
Configure security features
Image *
Ubuntu Server 22.04 LTS - x64 Gen2
VM architecture
Run with Azure Spot discount
Size *
Enable Hibernation
Administrator account
Authentication type
Recommended Gen 2 images compatible with Trusted launch
Ubuntu Server 24.04 LTS - x64 Gen2
Ubuntu Server 22.04 LTS - x64 Gen2
Ubuntu Pro 24.04 LTS - x64 Gen2
SUSE Linux Enterprise Server 15 SP5 +Patching - x64 Gen2
Oracle Linux 8.10 (LVM) - x64 Gen2
Red Hat Enterprise Linux 9.4 (LVM) - x64 Gen2
Red Hat Enterprise Linux 8.10 (LVM) - x64 Gen2
AlmaLinux OS 9 - x64 Gen2
Debian 12 "Bookworm" - x64 Gen2
Windows Server 2025 Datacenter: Azure Edition - x64 Gen2
Windows Server 2025 Datacenter - x64 Gen2
Windows Server 2025 Datacenter Server Core - x64 Gen2
Windows 11 Pro, version 25H2 - x64 Gen2
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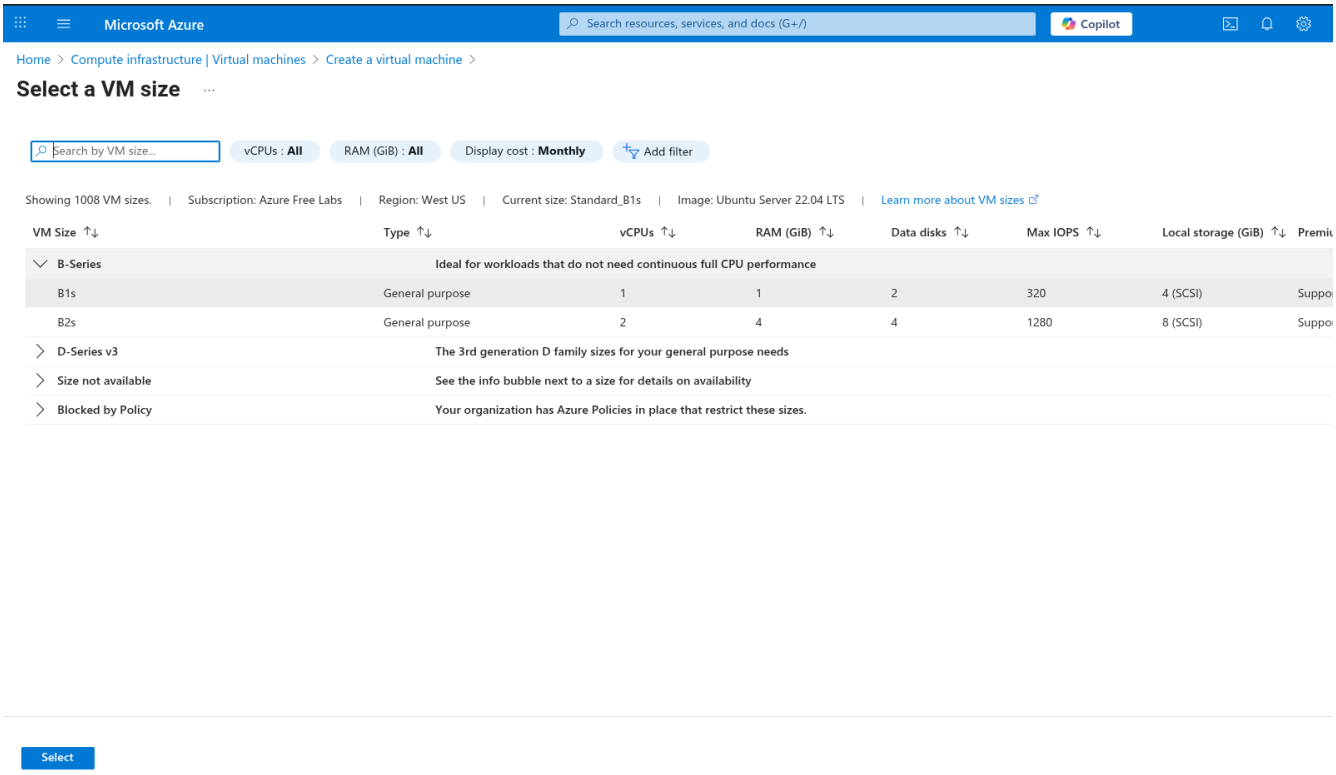
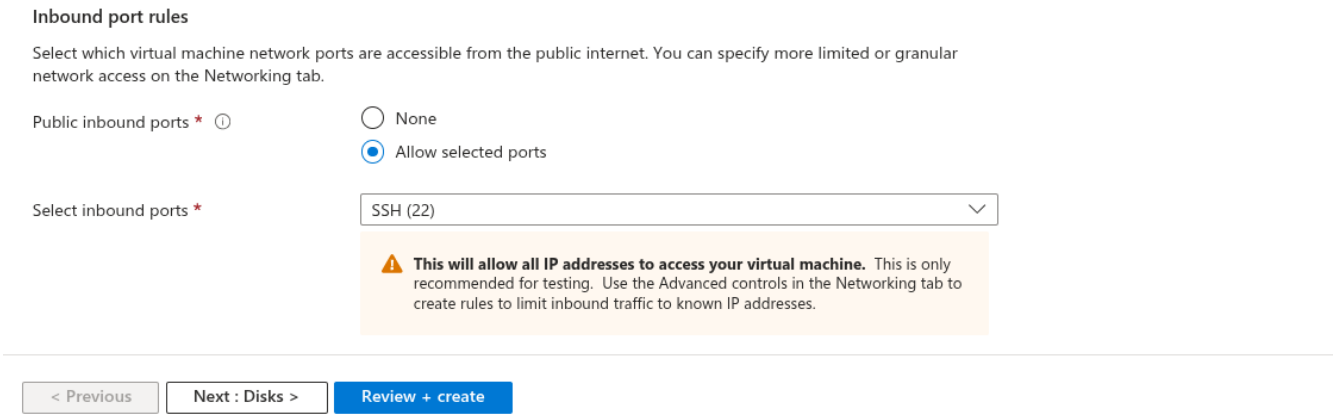
Next : Disks >


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
Home > Compute infrastructure | Virtual machines > Create a virtual machine >
Select a VM size
Search by VM size...
vCPUs : All
RAM (GiB) : All
Display cost : Monthly
Add filter
Showing 1008 VM sizes. | Subscription: Azure Free Labs | Region: West US | Current size: Standard_B1s | Image: Ubuntu Server 22.04 LTS | Learn more about VM sizes
VM Size
Type
vCPUs
RAM (GiB)
Data disks
Max IOPS
Local storage (GiB)
B-Series
Ideal for workloads that do not need continuous full CPU performance
B1s
General purpose
1
1
2
320
4 (SCSI)
B2s
General purpose
2
4
4
1280
8 (SCSI)
D-Series v3
The 3rd generation D family sizes for your general purpose needs
Size not available
See the info bubble next to a size for details on availability
Blocked by Policy
Your organization has Azure Policies in place that restrict these sizes.
Select

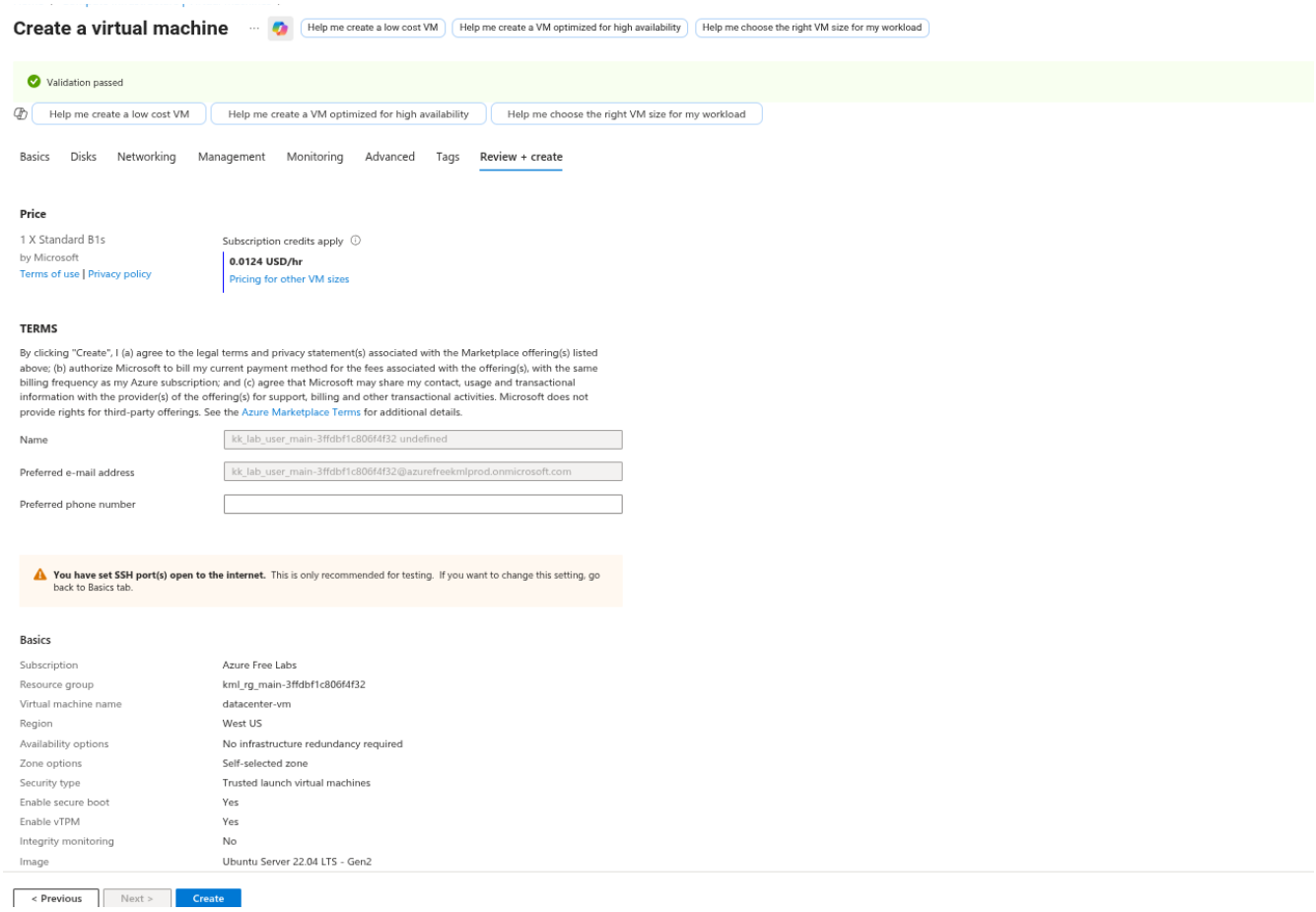
Step 5: Configure Networking

- Used default Virtual Network and Subnet
- Ensured Public IP was enabled
- Allowed SSH access for secure connectivity

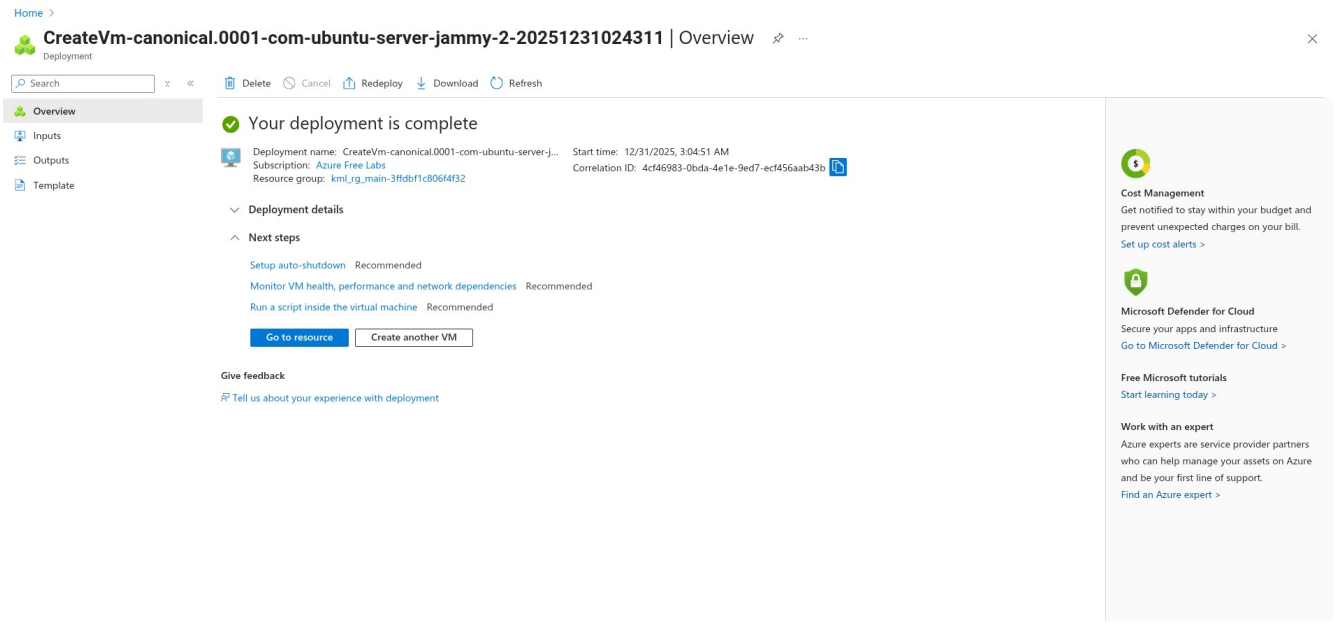


Step 6: Review and Create

- Reviewed all configuration settings
- Clicked **Create** to deploy the virtual machine



Deployment complete:



Outcome

- Successfully created an Azure Virtual Machine
- VM is running and accessible via SSH
- Compute resources are ready for application deployment

Key Takeaways

- Azure Virtual Machines provide flexible compute capacity
- Proper configuration of region, size, and authentication is critical
- SSH keys improve security over password-based access

Proof of Work

This task demonstrates hands-on experience with: - Azure Portal navigation - Virtual Machine provisioning - Secure VM authentication - Azure compute resource management

Screenshots included provide visual proof of real Azure console work.

Next: Day 3 – Create Virtual Machine Using Azure CLI