

Lab 4: Resizing Storage in an Azure Virtual Machine

Objectives

1. Understand how to modify the VM size in Azure.
2. Learn how scaling affects virtual hardware (CPU, RAM, storage performance).
3. Perform a VM resize operation using the Azure Portal.
4. Verify the new VM size after resizing.

Tools and Technologies Used

1. Azure Portal
2. Azure Virtual Machine (Ubuntu or Windows)
3. VM Size Management / Availability + Scale options

Steps Performed

Step 1: Check Current VM Size

Before resizing, the current VM size was observed under:

Azure Portal > Virtual Machine > Overview

This showed the existing configuration (vCPUs, RAM, temporary storage capacity).

 Size	
Size	Standard B4as v2
vCPUs	4
RAM	16 GiB

Step 2: Navigate to VM Size Settings

Open Azure Portal.

Go to: Virtual Machine > Availability + scale > Size

A list of available VM sizes appears, based on the region and your subscription.

The screenshot shows the Azure portal's VM Size settings page. At the top, there's a header with the Microsoft Azure logo, a search bar, and a Copilot button. The URL in the address bar is `https://portal.azure.com/#blade/HubsBlade/resourceType=virtualMachines/resource=UBUNTU-VM/section=size`. On the right, a user profile is shown with the email `sandeshcsit21@oic.edu...` and the region `OIC.EDU.NP (OIC.EDU.NP)`. A green success message says `Successfully resized virtual machine 'UBUNTU-VM' to size 'Standard_B4as_v2'.` Below the header, the page title is `UBUNTU-VM | Size`. The main content is a table listing VM sizes. The columns include VM Size, Type, vCPUs, RAM (GB), Data disk, Max IOPS, Local storage (GiB), Premium disk, and Cost/month. The table is grouped by series. A note at the bottom states: "Prices presented are estimates in USD that include only Azure infrastructure costs and any discounts for the subscription and location. The prices don't include any applicable software costs. Final charges will appear in your local currency in cost analysis and billing views. View Azure pricing calculator." A "Give feedback" link is also present.

Step 3: Select a New VM Size

Browse through available VM SKU options.

Choose the desired new VM size based on CPU/RAM requirements.

Click:

Resize

Azure begins reallocating the VM with the new hardware configuration.

During resizing, the VM restarts automatically.

This screenshot is identical to the one above, showing the Azure portal's VM Size settings page for the same virtual machine and filters. It displays the same list of VM sizes, the same success message about resizing, and the same footer information about prices and feedback. The URL in the address bar is `https://portal.azure.com/#blade/HubsBlade/resourceType=virtualMachines/resource=UBUNTU-VM/section=size`.

Step 4: Verify New VM Size

After the resize, operation completes:

Go back to:

Virtual Machine > Overview

Confirm the updated VM specifications (vCPU count, RAM, storage throughput).

The VM now runs with the newly selected hardware resources.

 Size	
Size	Standard B4as v2
vCPUs	4
RAM	16 GiB

Results

Before Resize

VM had resized hardware configuration (CPU/RAM/storage throughput).

After Resize

VM size was successfully upgraded.

Enhanced CPU, memory, and potentially better I/O performance.

Conclusion

In this lab, the VM size was successfully changed using Azure's built-in scaling functionality. Resizing allows rapid hardware adjustments without recreating the VM. The process involved navigating to the VM size page, selecting a new SKU, applying the change, and verifying the new configuration. This demonstrates how Azure makes vertical scaling simple and efficient.