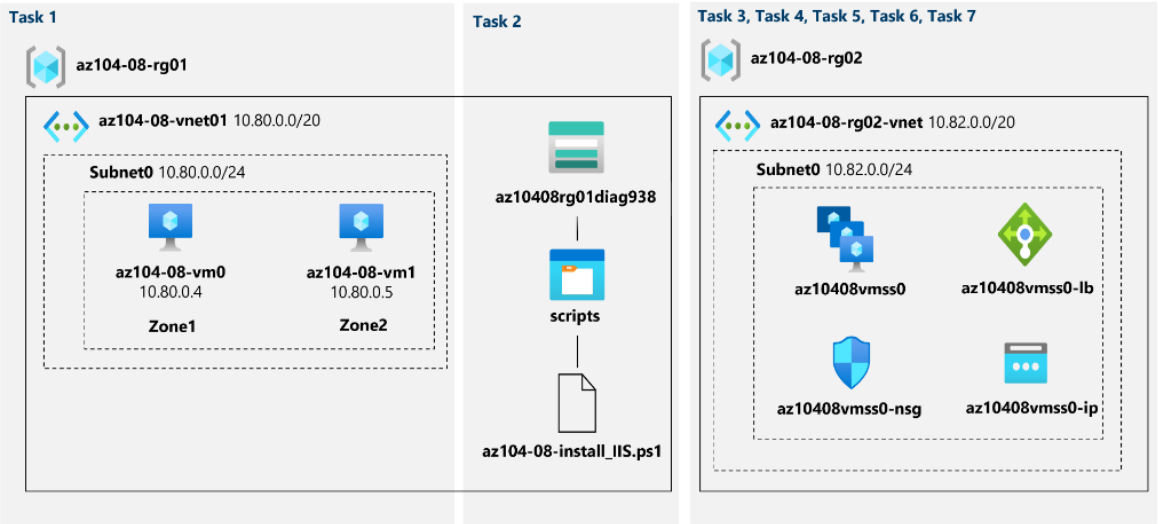
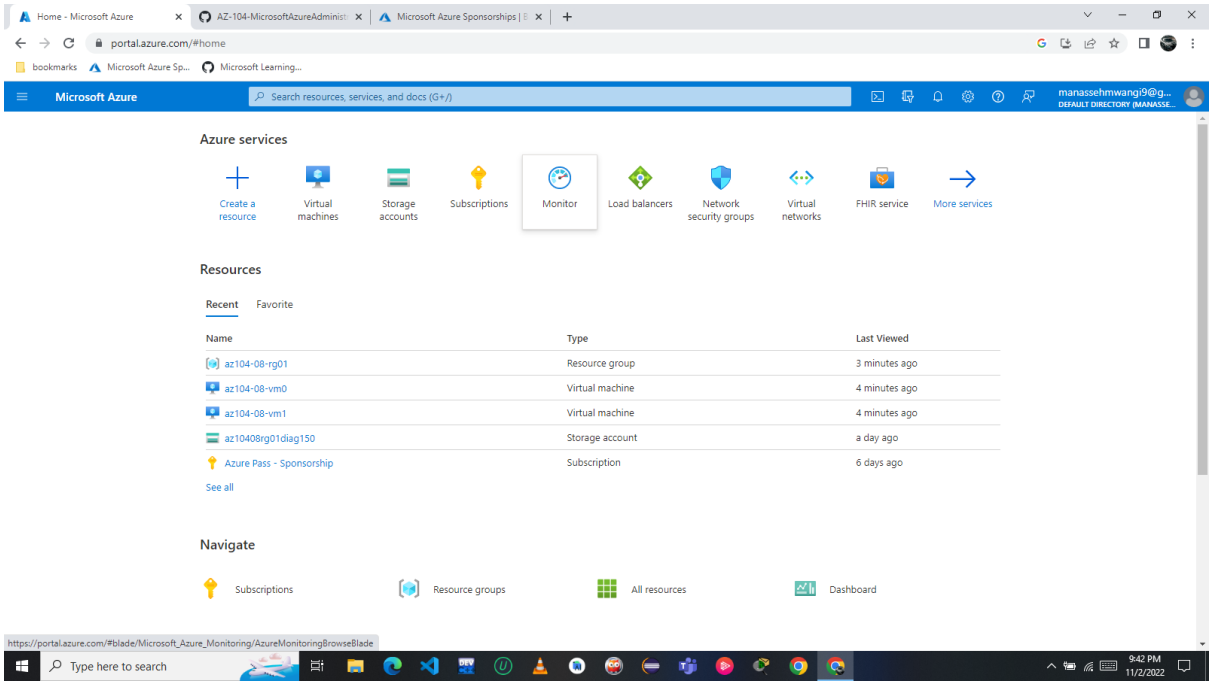
Lab 08 - Manage Virtual Machines

Architecture diagram



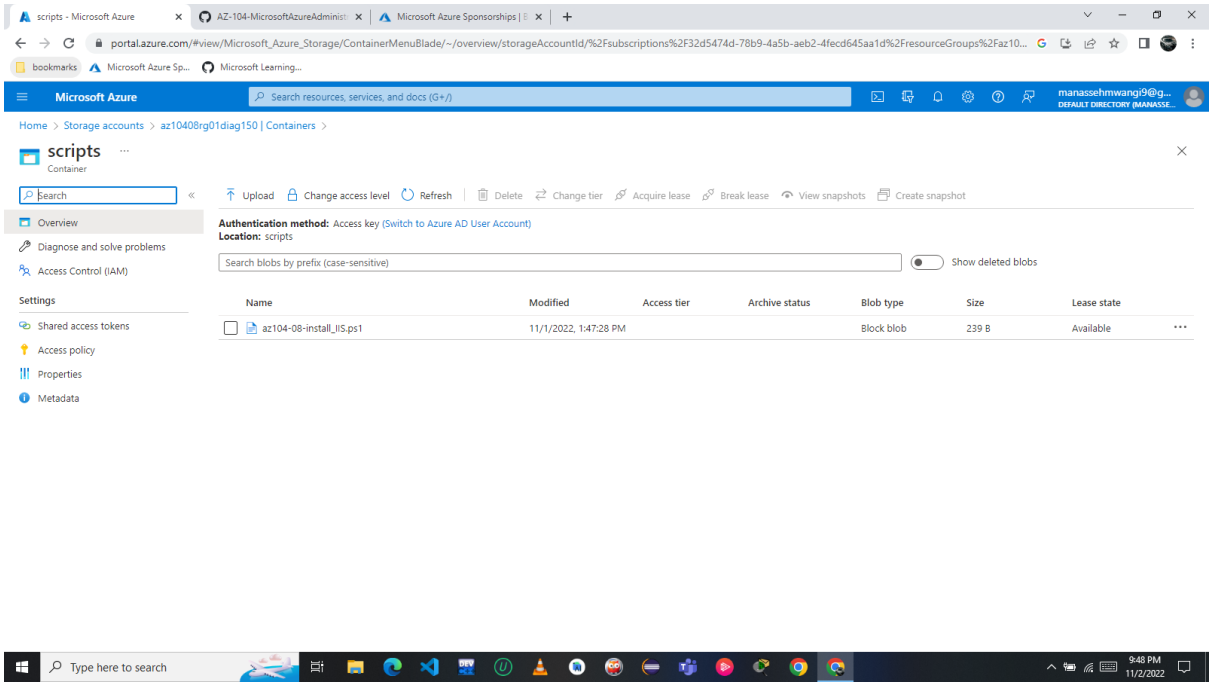
Task 1: Deploy zone-resilient Azure virtual machines by using the Azure portal and an Azure Resource Manager template

Deploying Azure virtual machines into different availability zones by using the Azure portal and an Azure Resource Manager template.



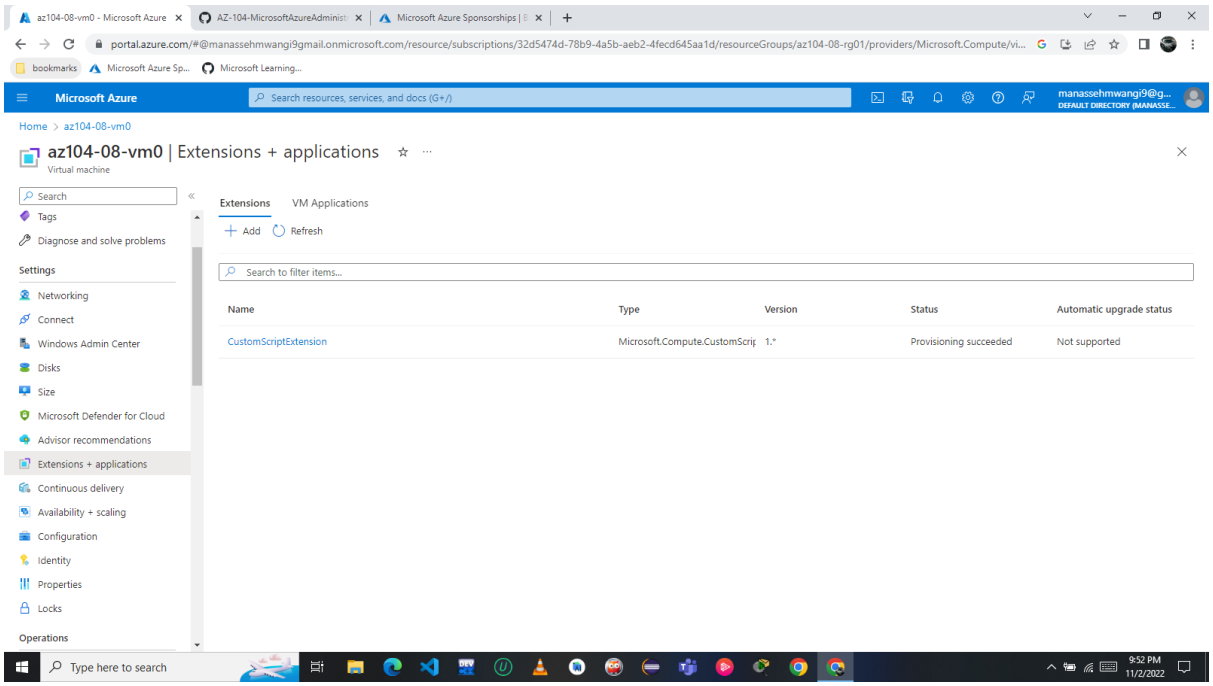
Task 2: Configure Azure virtual machines by using virtual machine extensions

On the **New container** blade, specify the following settings **scripts, Private (no anonymous access**)

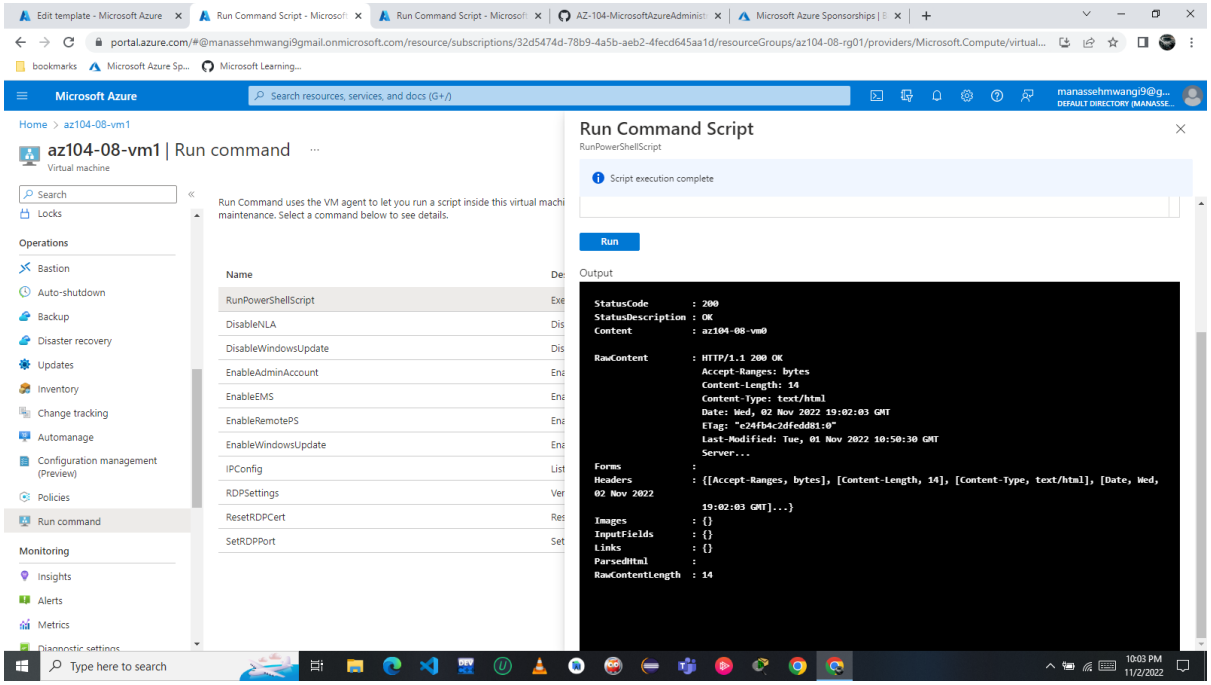


On the **az104-08-vm0 Configure Custom Script Extension Extension** blade

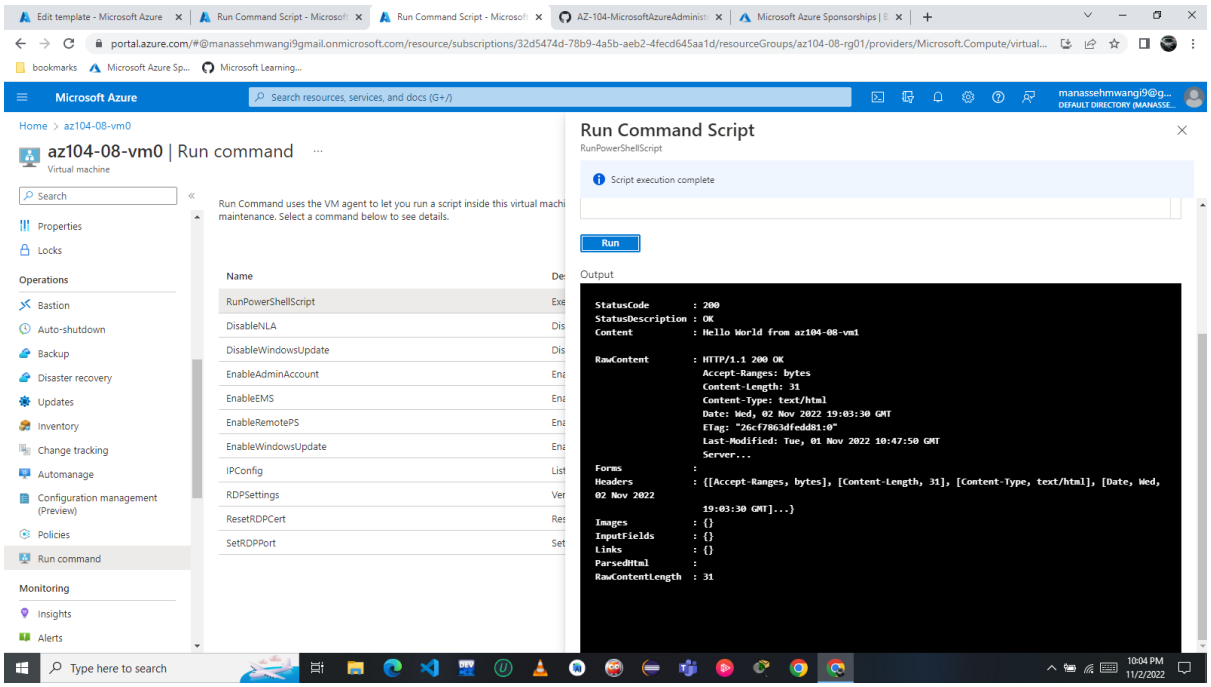
On the **Storage accounts** blade, click the name of the storage account into which you uploaded the **az104-08-install_IIS.ps1** script



To verify that the Custom Script extension-based configuration was successful, navigate back on the **az104-08-vm1** blade, in the **Operations** section, click **Run command**, and, in the list of commands, click **RunPowerShellScript**.

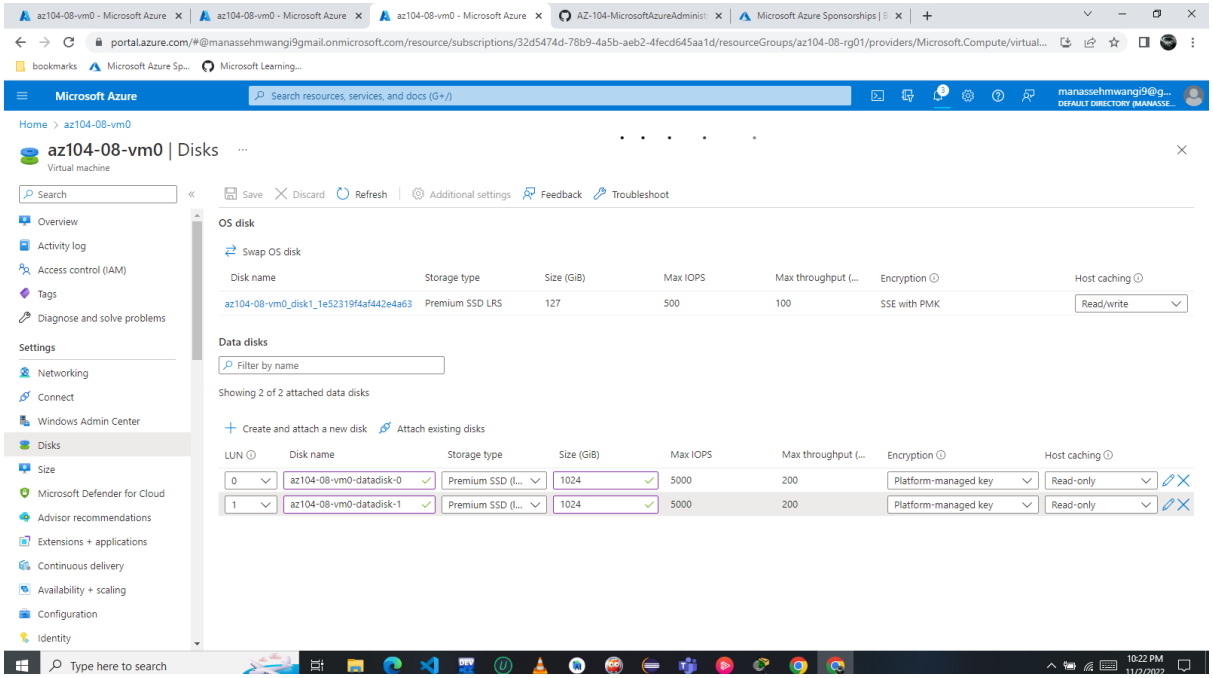


You can also connect to **az104-08-vm0** and run `Invoke-WebRequest -URI http://10.80.0.5 -UseBasicParsing` to access the web site hosted on **az104-08-vm1**.

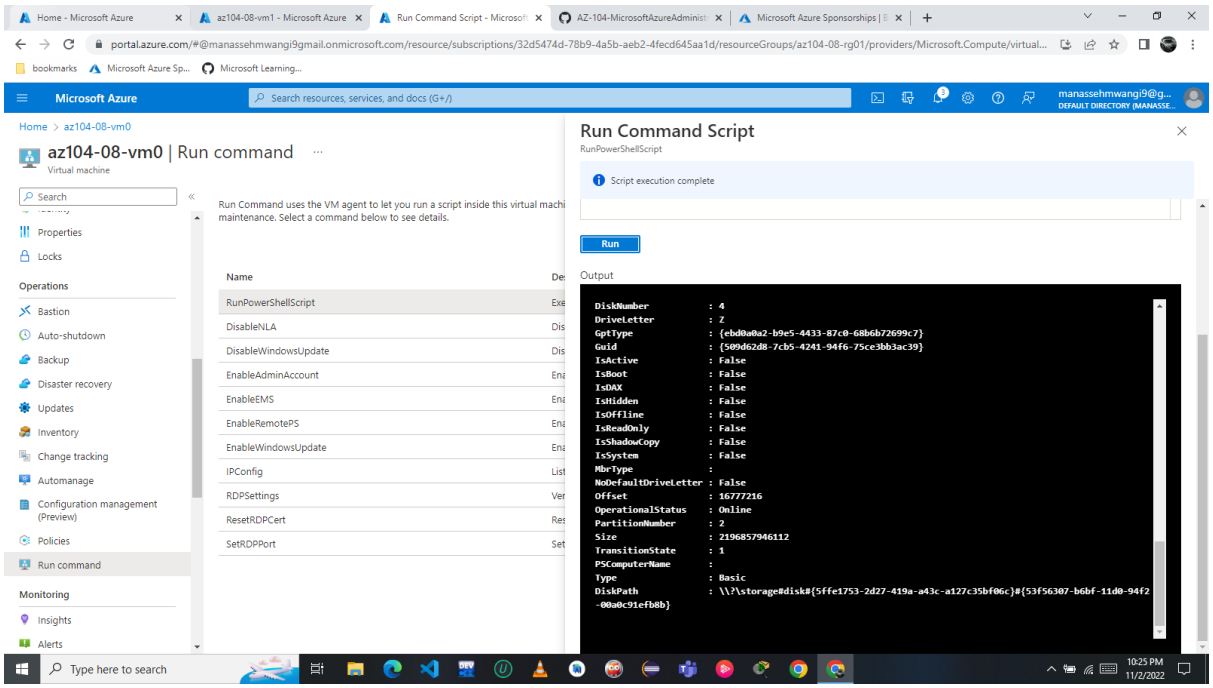


Task 3: Scale compute and storage for Azure virtual machines

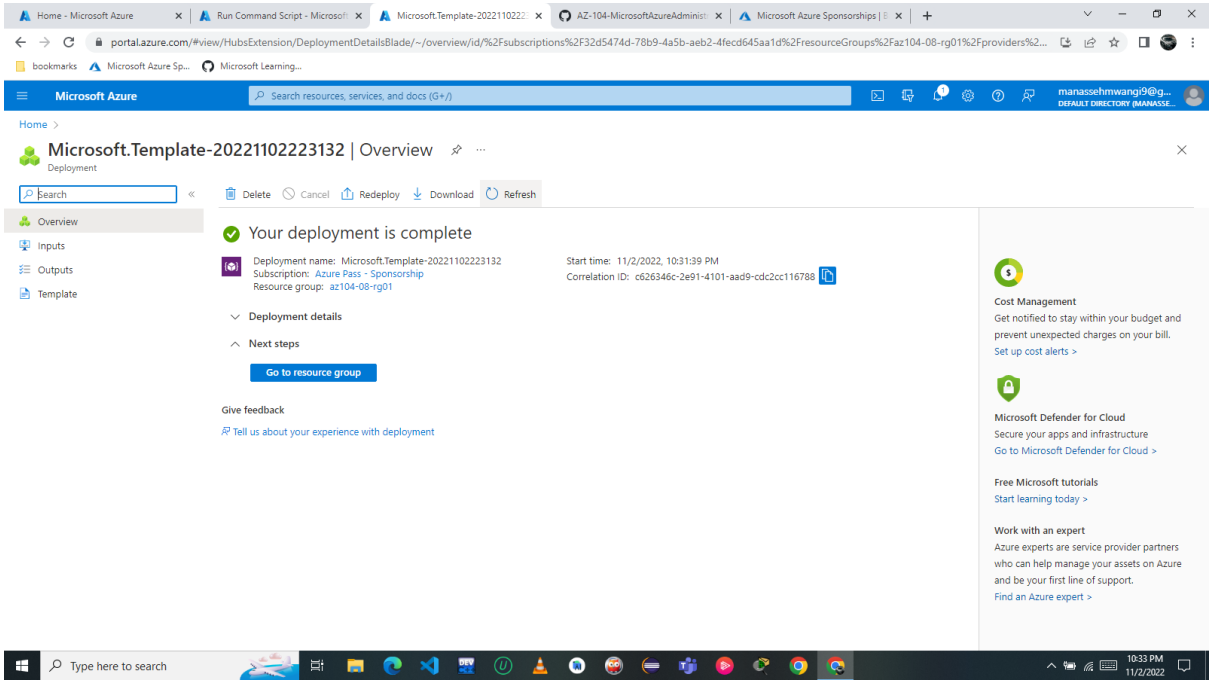
On the az104-08-vm0 **virtual machine blade** create and attach a new disks



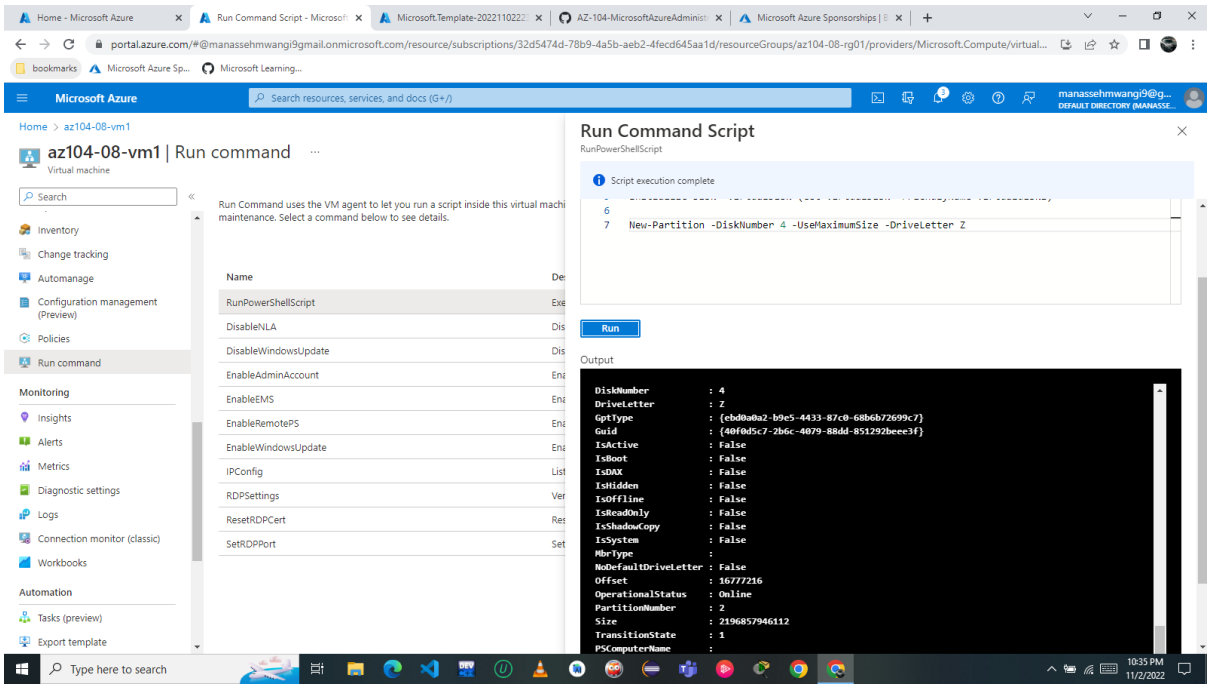
On the **az104-08-vm0** blade **Run Command Script** to create a drive Z: consisting of the two newly attached disks with the simple layout and fixed provisioning:



This section of the template creates two managed disks and attaches them to **az104-08-vm1**, similarly to the storage configuration of the first virtual machine via the Azure portal.

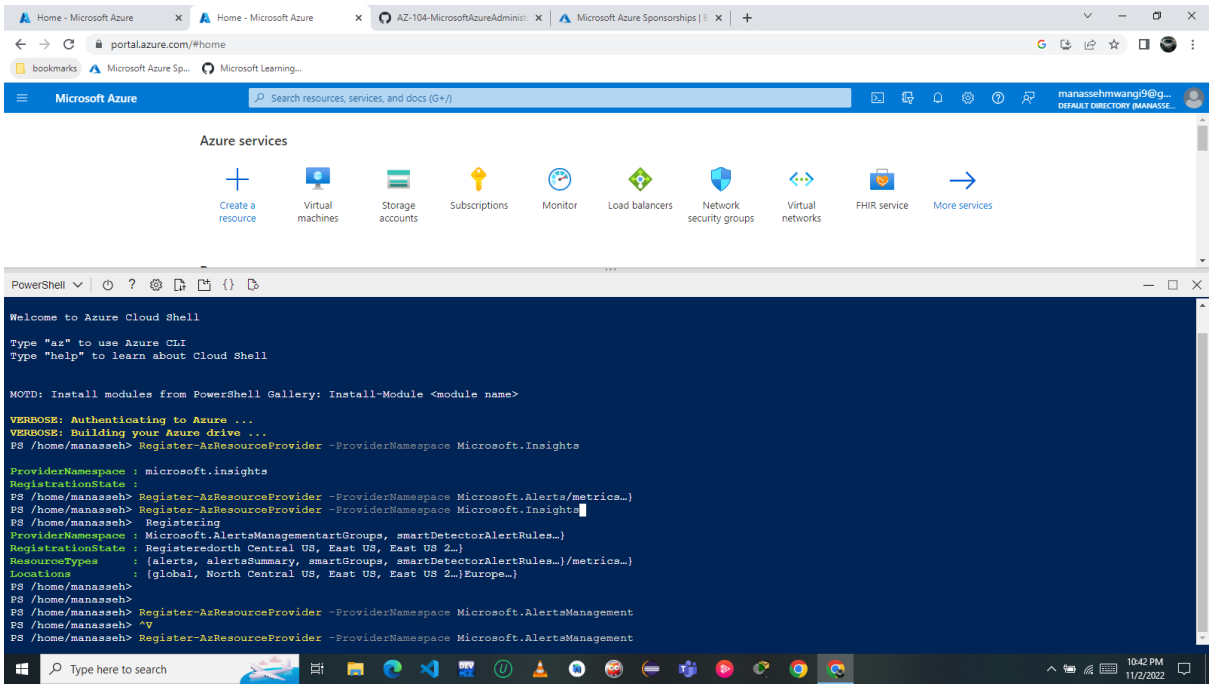


On the **az104-08-vm1 Run Command Script** to create a drive Z: consisting of the two newly attached disks with the simple layout and fixed provisioning:



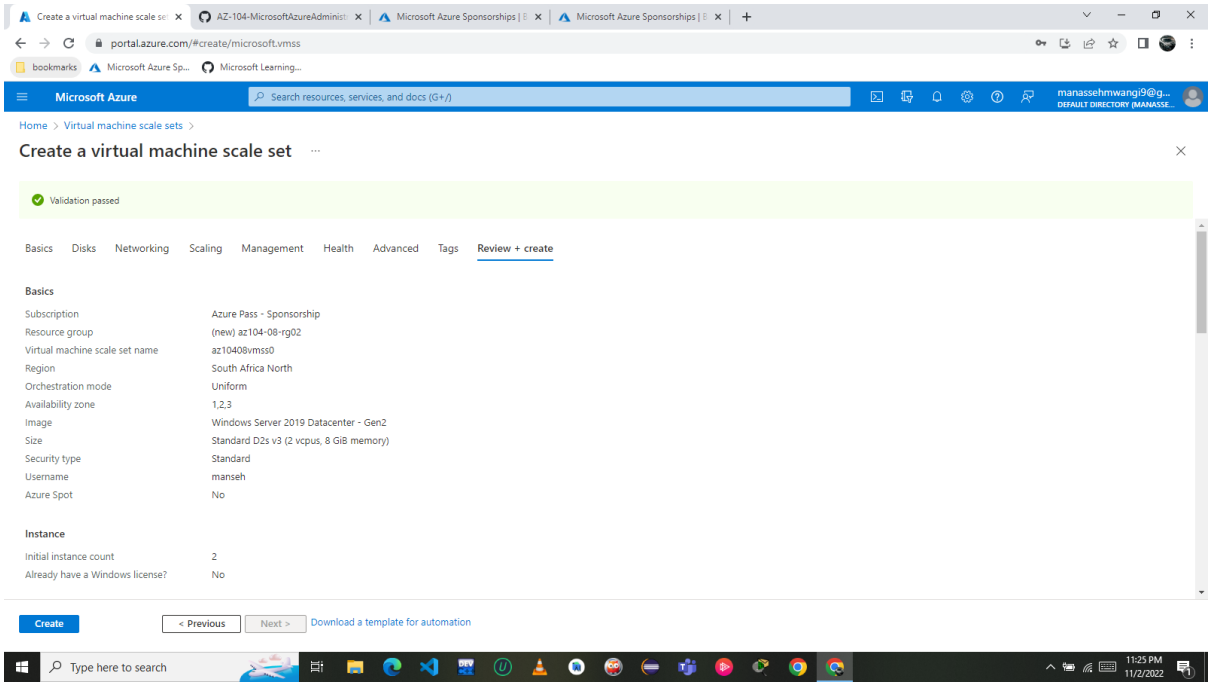
Task 4: Register the Microsoft.Insights and Microsoft.AlertsManagement resource providers

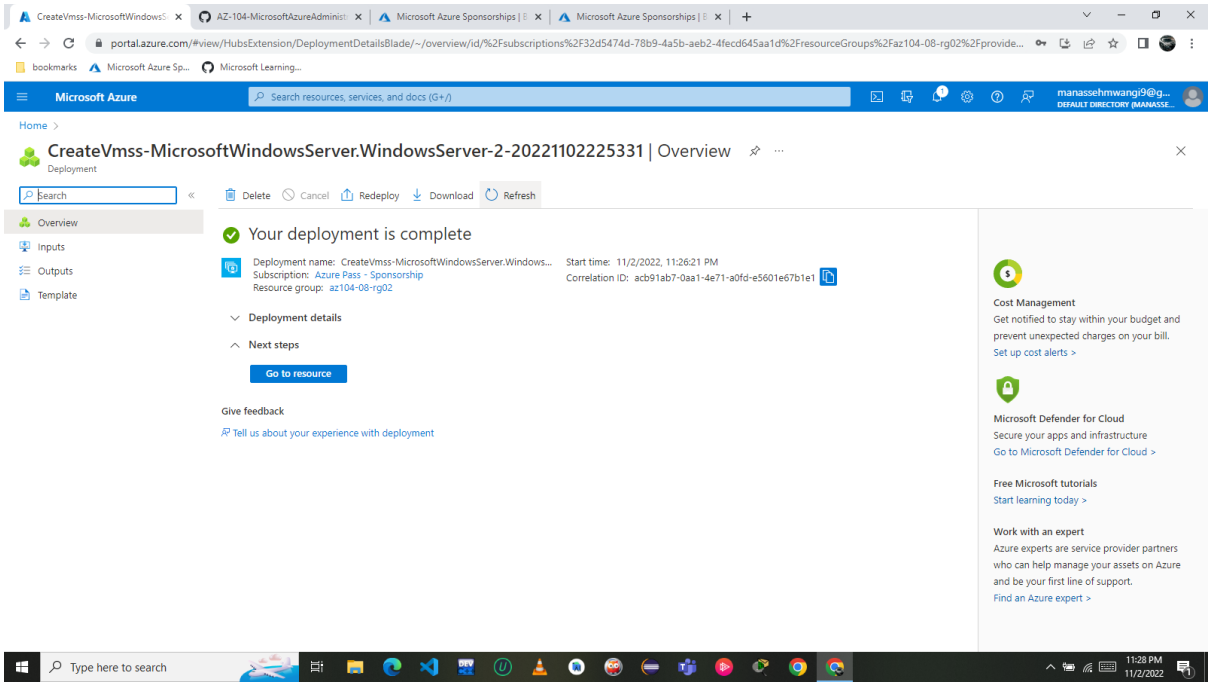
Fromm the Cloud Shell pane, run the following to register the Microsoft.Insights and Microsoft.AlertsManagement resource providers



Task 5: Deploy zone-resilient Azure virtual machine scale sets

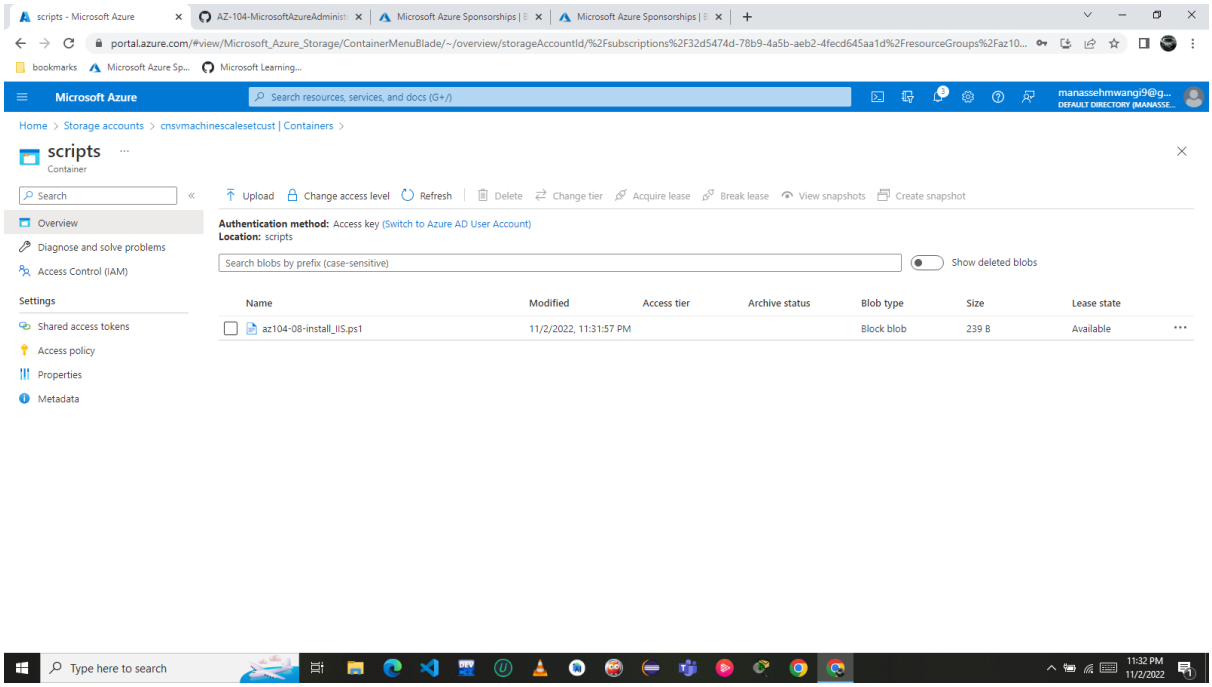
In this task, you will deploy Azure virtual machine scale set across availability zones by using the Azure portal.



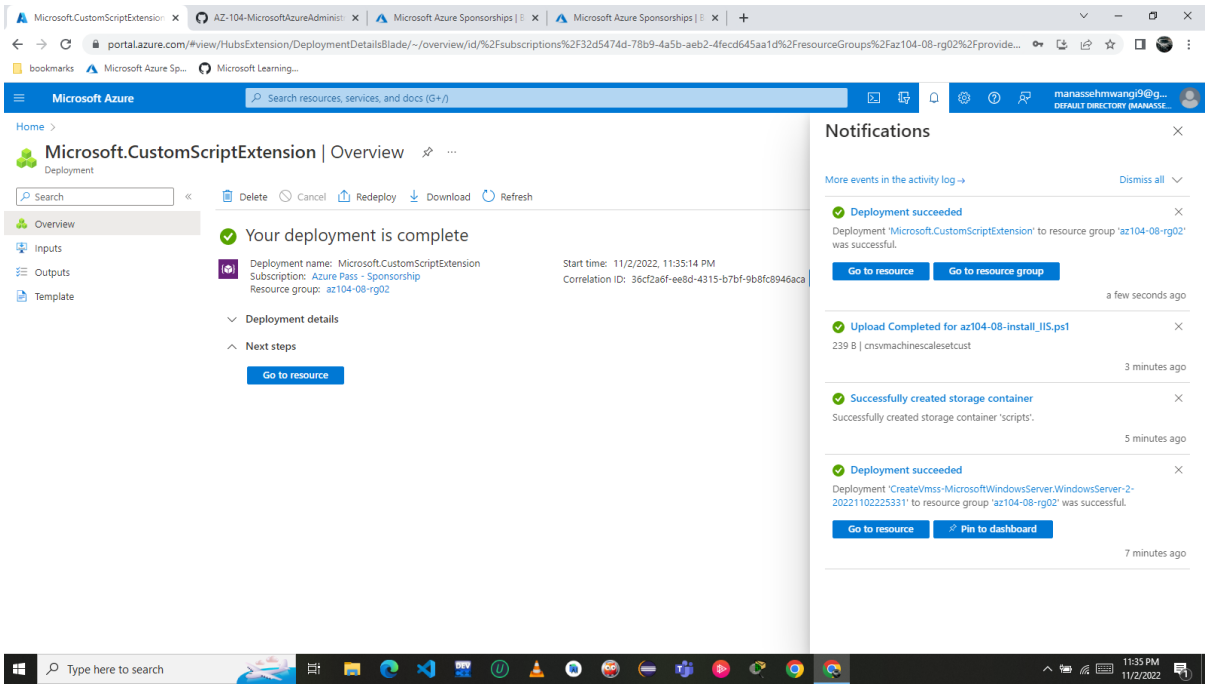


Task 6: Configure Azure virtual machine scale sets by using virtual machine extensions

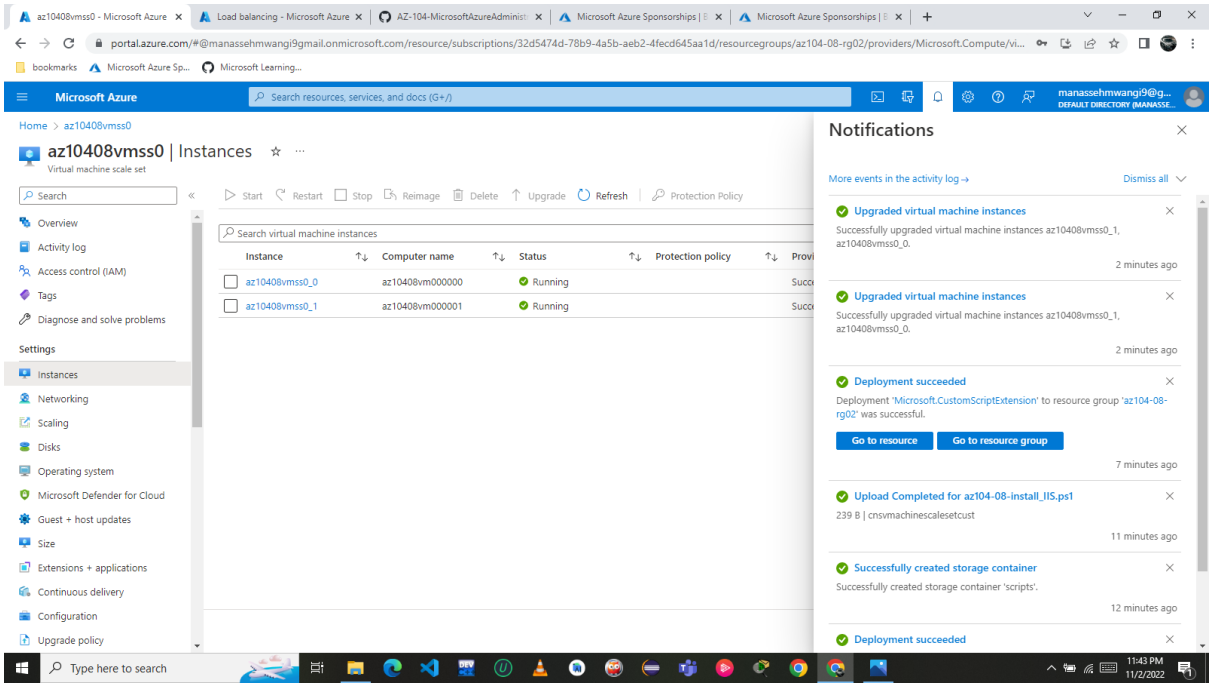
In this task, you will install Windows Server Web Server role on the instances of the Azure virtual machine scale set you deployed in the previous task by using the Custom Script virtual machine extension.



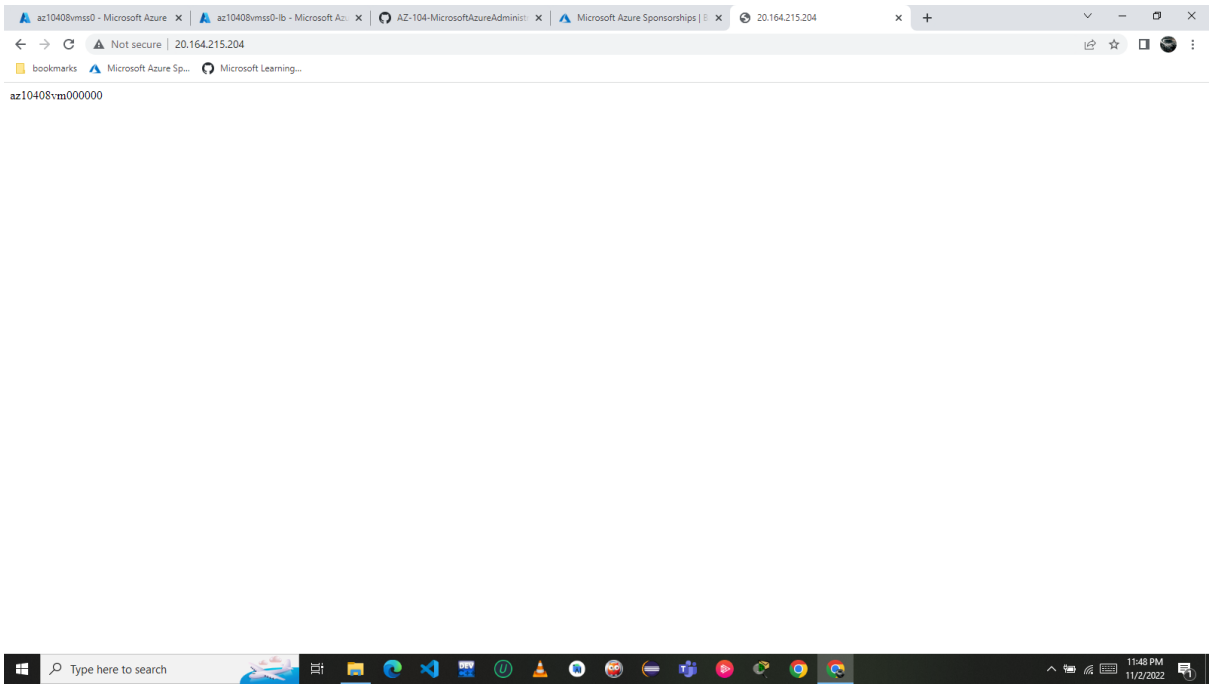
From the **Install extension** blade, **Browse** to and **Select** the **az104-08-install_IIS.ps1** script that was uploaded to the **scripts** container in the storage account earlier in this task, and then click **Create**.



Click **Instances**, select the checkboxes next to the two instances of the virtual machine scale set, click **Upgrade**, and then, when prompted for confirmation, click **Yes**.

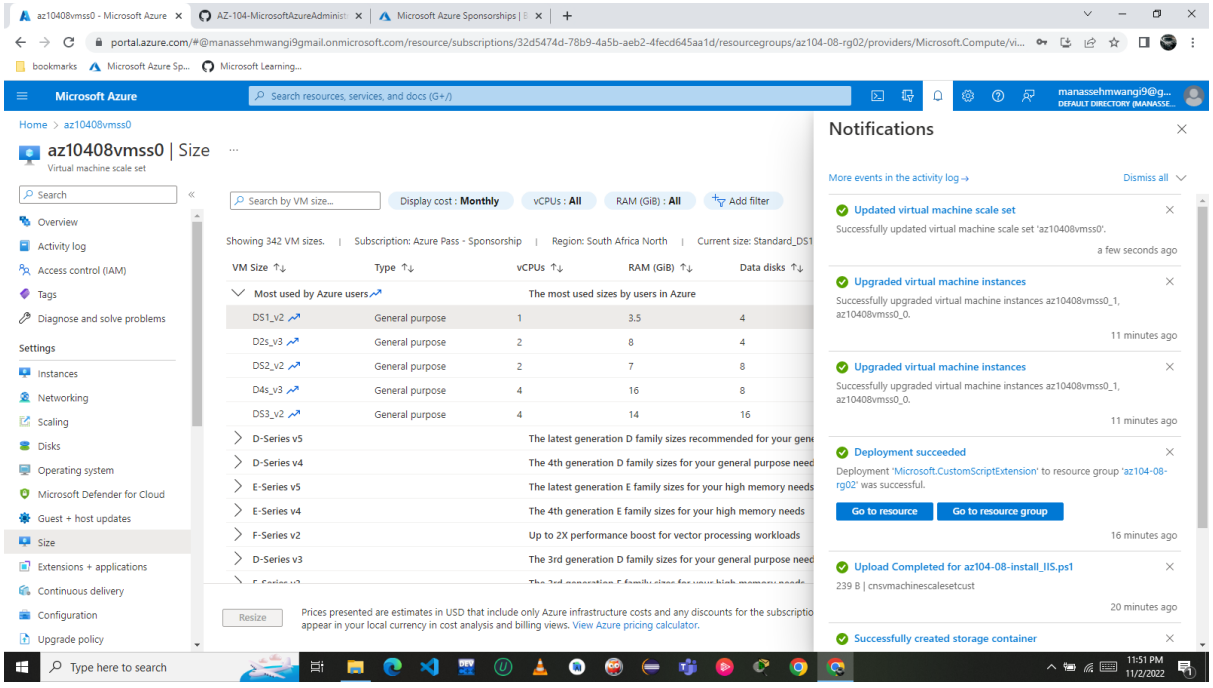


On the **az10408vmss0-lb Load balancer** , note the value of the **Public IP address** assigned to the frontend of the load balancer, open an new browser tab, and navigate to that IP address.

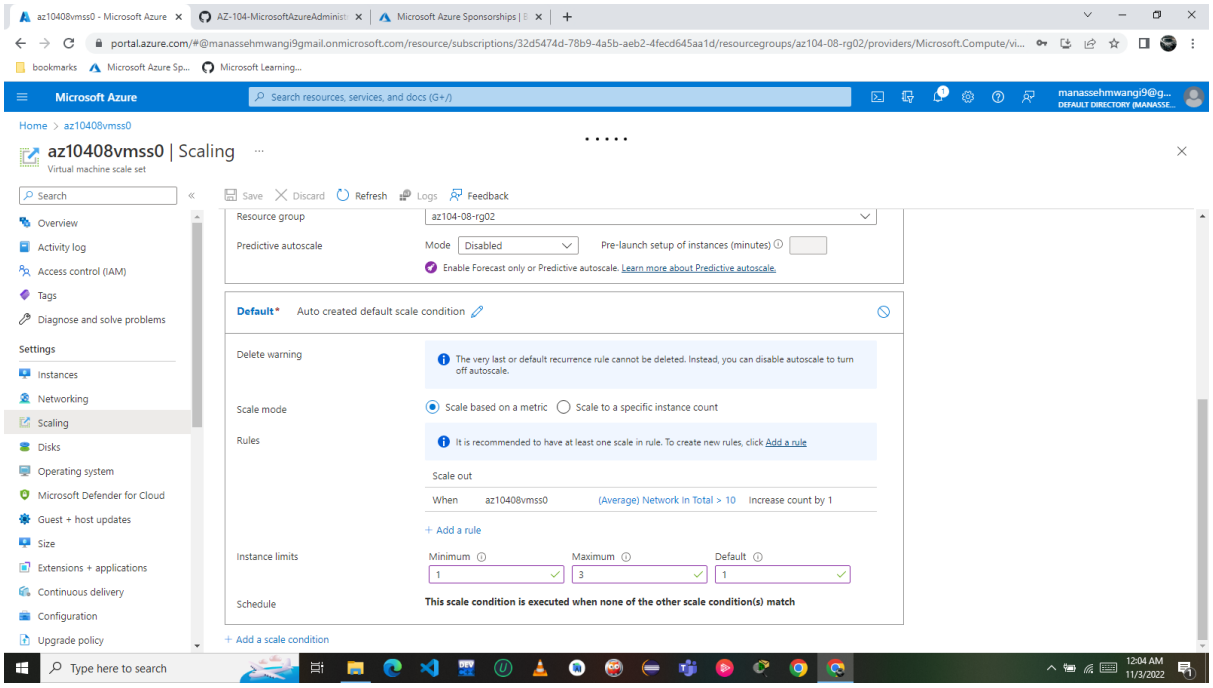


Task 7: Scale compute and storage for Azure virtual machine scale sets

Search for and select **Virtual machine scale sets** and select the **az10408vmss0** scale set. In the list of available sizes, select **Standard DS1_v2** and click **Resize**

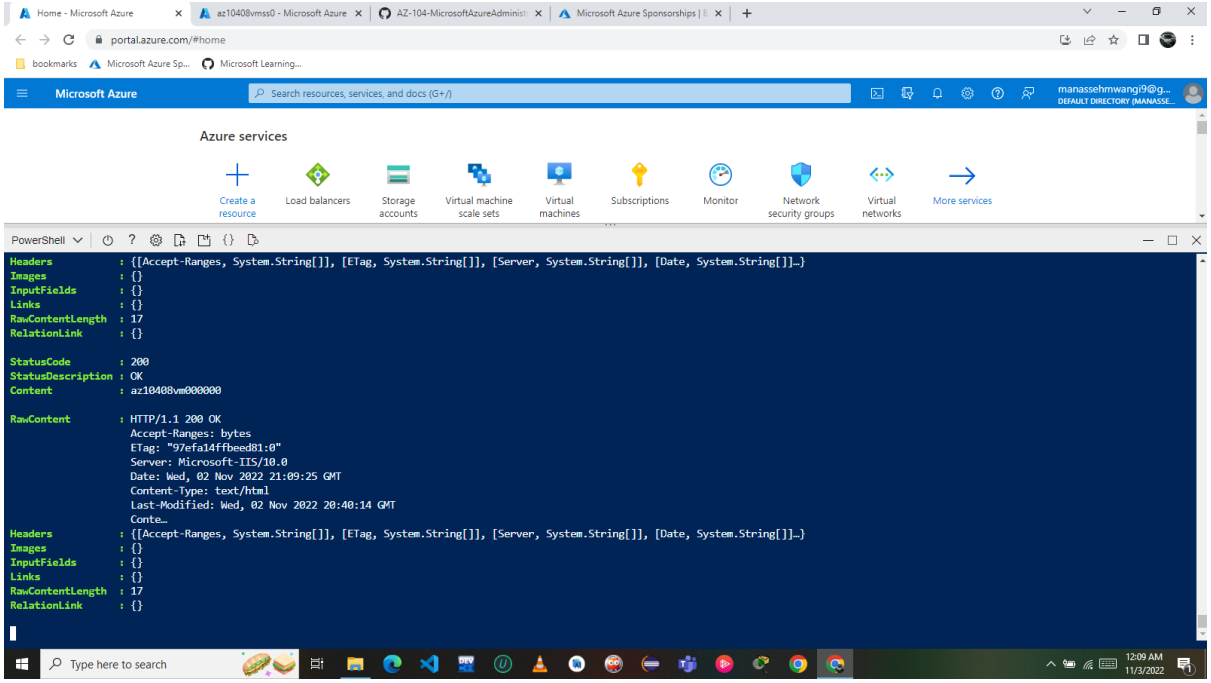


On the **az10408vmss0 - Scaling** blade, select the **Custom autoscale** option and configure autoscale with the following settings (leave others with their default value

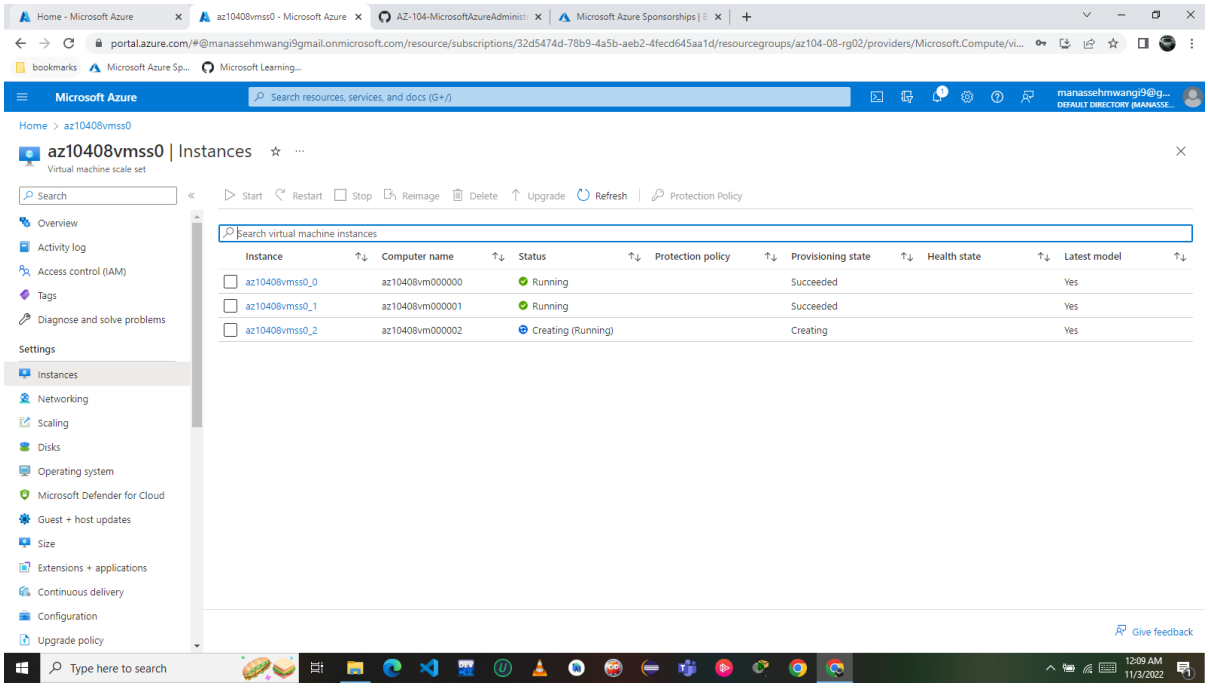


Open the **Azure Cloud Shell** by clicking on the icon in the top right of the Azure Portal. Run the following to identify the public IP address of the load balancer in front of the Azure virtual machine scale set **az10408vmss0**

Run the following to start an infinite loop that sends the HTTP requests to the web sites hosted on the instances of Azure virtual machine scale set **az10408vmss0**.

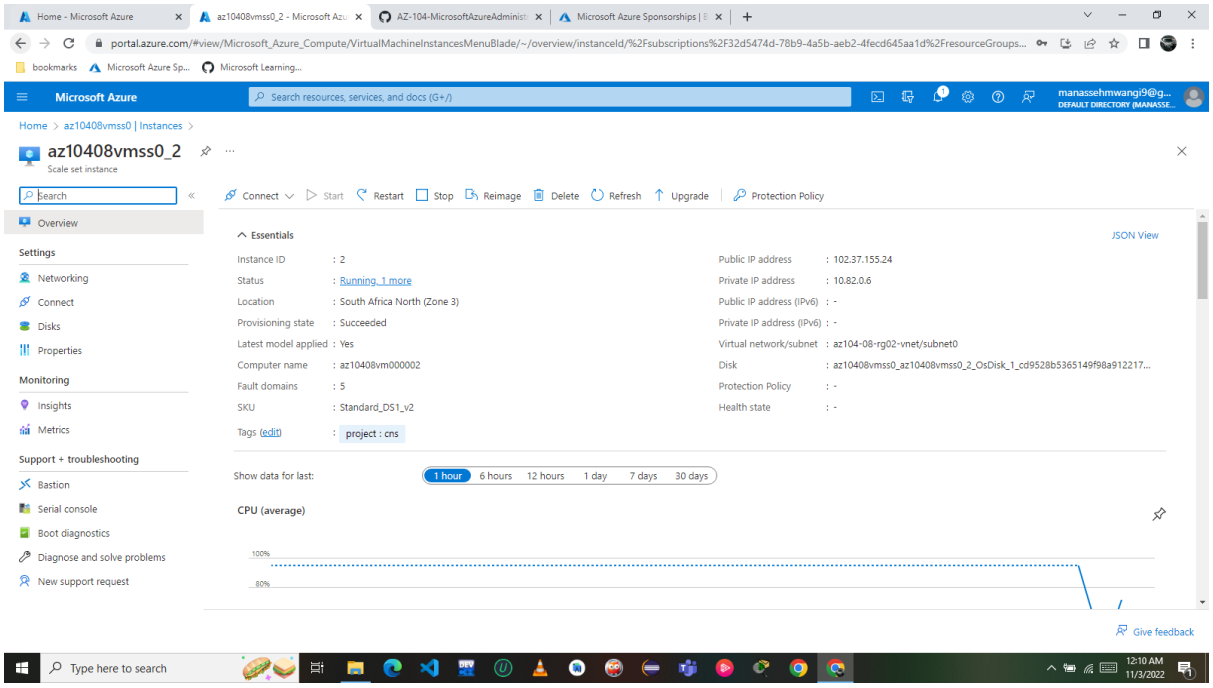


The third instance is provisioned



Its **Location** (it should be different than the first two zones you identified earlier in this task.

SouthAfrica North zone3

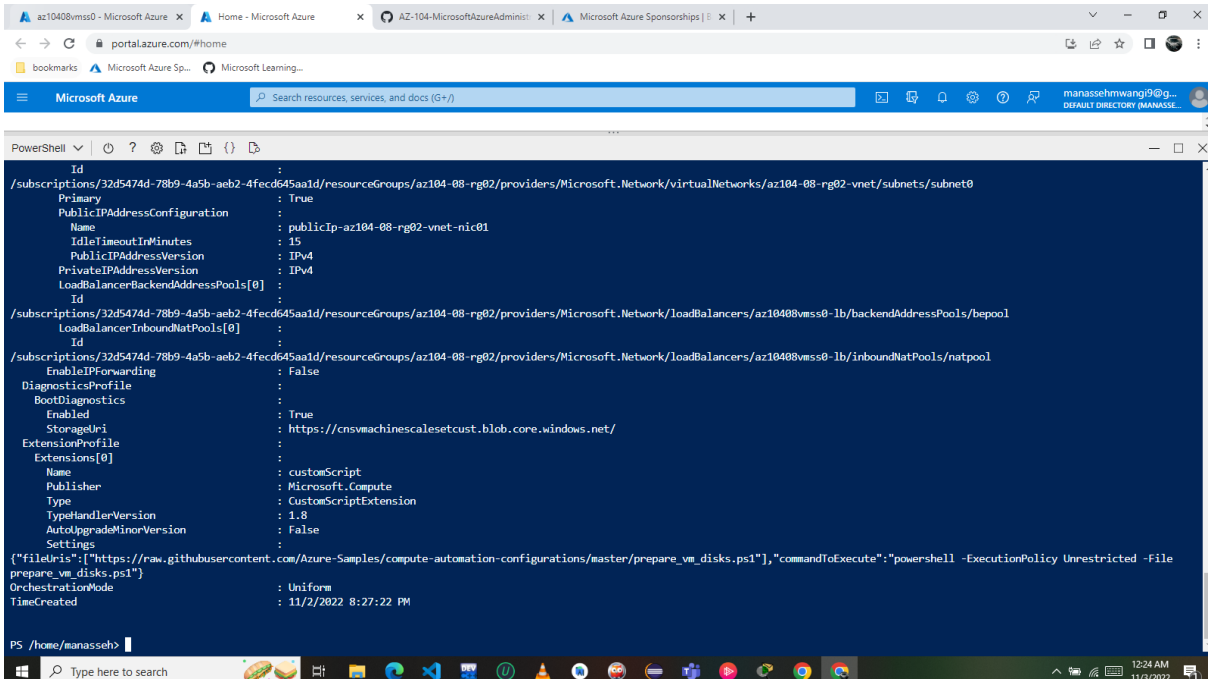


On the **az10408vmss0** blade, in the **Settings** section, click **Disks**, click **+ Create and attach a new disk**, and attach a new managed disk

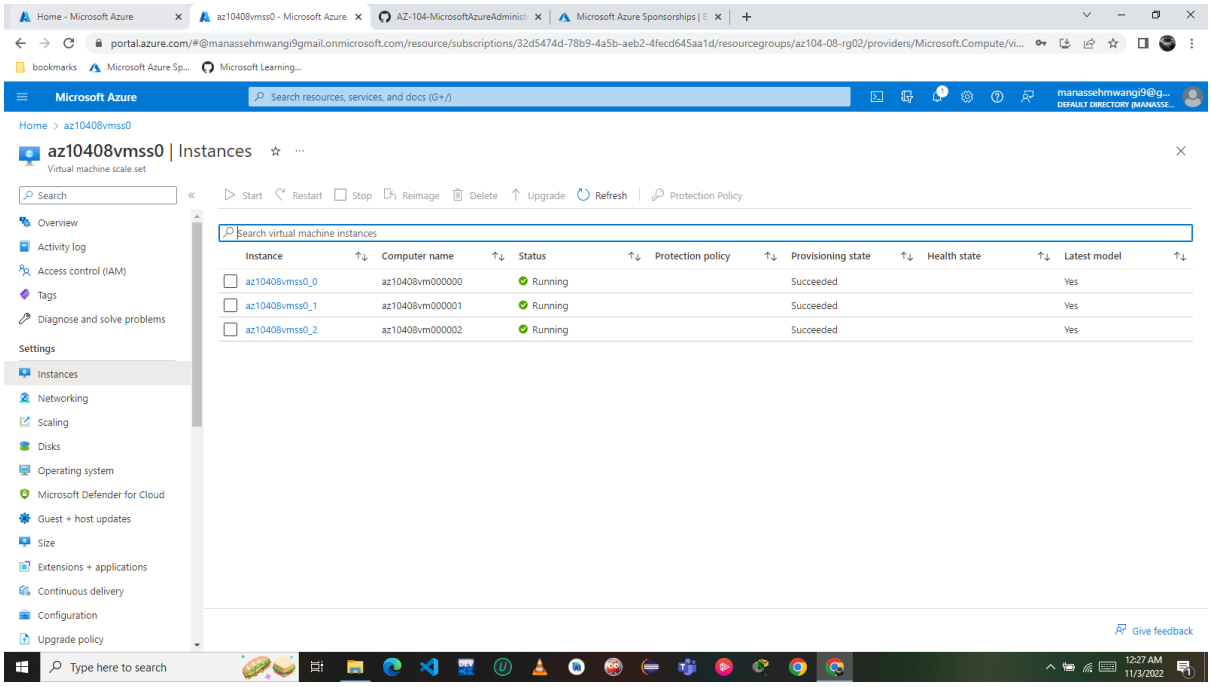
The disk attached in the previous step is a raw disk. Before it can be used, it is necessary to create a partition, create a filesystem, and mount it.

Upload the file **\Allfiles\Labs\08\az104-08-configure_VMSS_disks.ps1** into the Cloud Shell home directory run the script

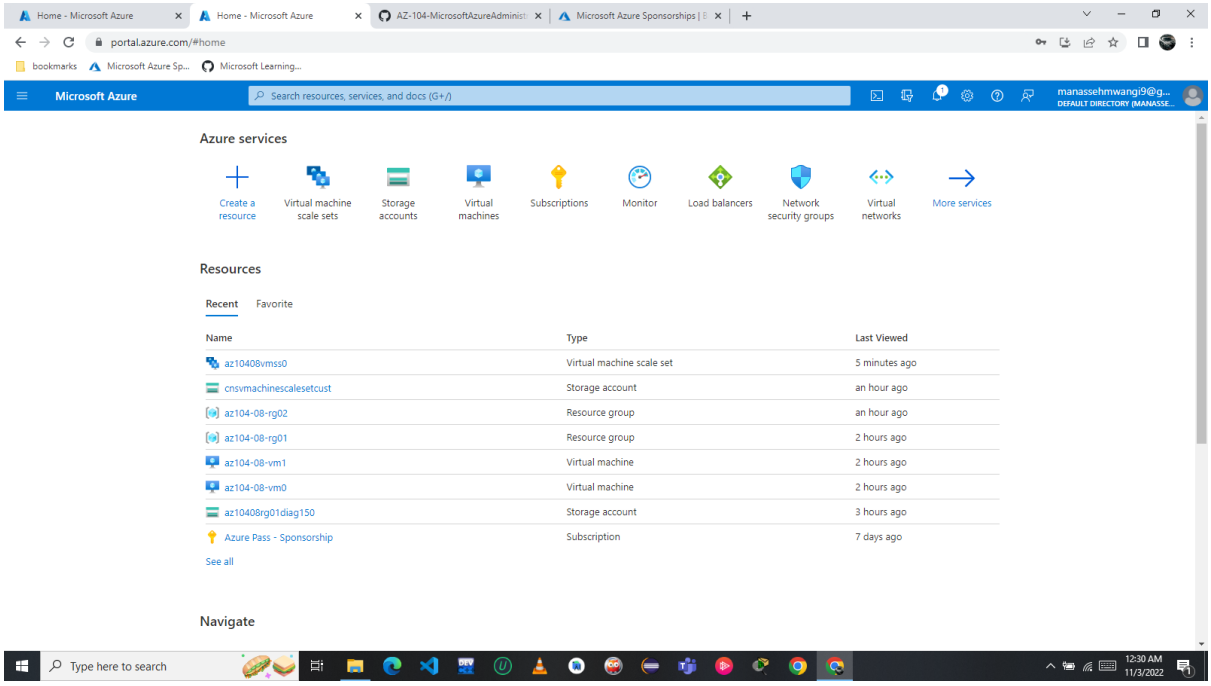
The script installs a custom script extension that configures the attached disk.



click **Upgrade**, and then, when prompted for confirmation, click **Yes**.



Homepage showing all the resource group, virtual machine scale set, virtual machines and storage accounts.



Open the **Azure Cloud Shell**

Remove any newly created Azure resources that you no longer use. Removing unused resources ensures you will not see unexpected charges