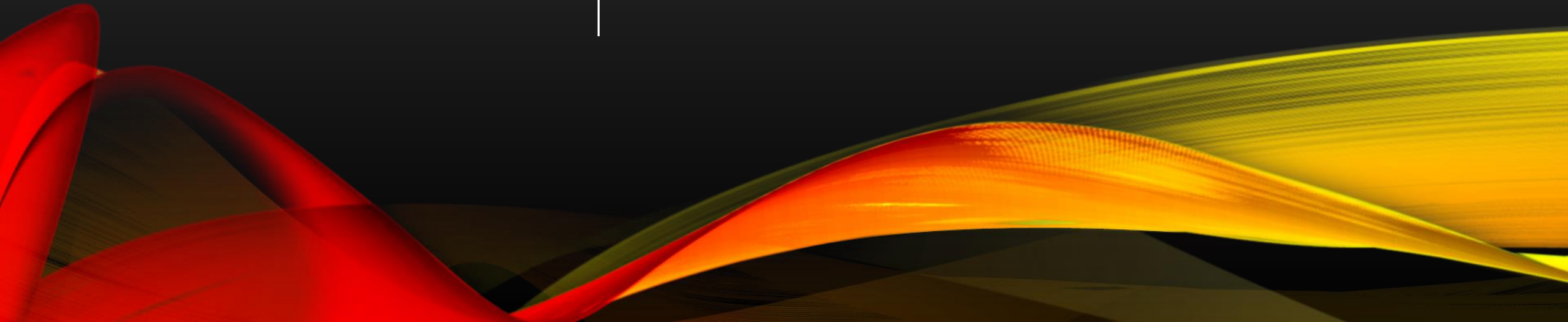


Professor:
Hassan Marzouk

Author:
Kimberly Morrison

NETW211 FINAL COURSE PROJECT



INTRODUCTION



The purpose of this project was to gain experience creating infrastructure in Azure



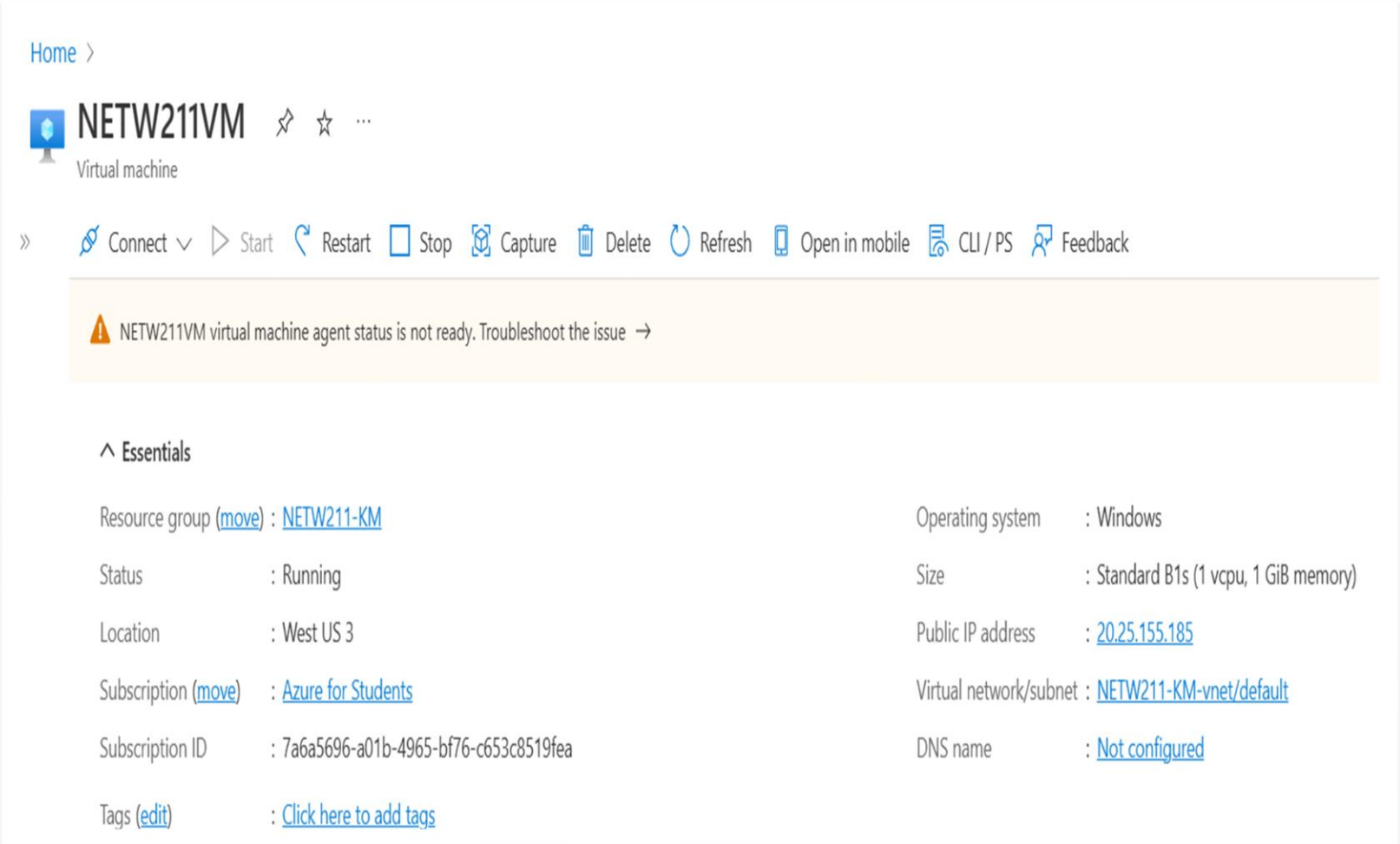
Over 6 weeks, we were tasked with setting up different infrastructure pieces such as network with IP addresses, virtual machines and data storage



VIRTUAL
MACHINES

DEPLOYING A VM IN AZURE

This screenshot should show the NETW211VM page with information such as the resource group name, subscription, public IP address, etc.



The screenshot displays the Azure portal interface for a virtual machine named "NETW211VM". At the top, there is a navigation bar with "Home >" and a breadcrumb trail. Below this, the VM name "NETW211VM" is shown with a monitor icon and a "Virtual machine" label. A toolbar contains several action buttons: "Connect", "Start", "Restart", "Stop", "Capture", "Delete", "Refresh", "Open in mobile", "CLI / PS", and "Feedback". A yellow warning banner indicates that the "NETW211VM virtual machine agent status is not ready" and provides a link to "Troubleshoot the issue". Underneath, an "Essentials" section lists key VM details in two columns. The left column includes Resource group, Status, Location, Subscription, Subscription ID, and Tags. The right column includes Operating system, Size, Public IP address, Virtual network/subnet, and DNS name.

^ Essentials			
Resource group (move) :	NETW211-KM	Operating system :	Windows
Status :	Running	Size :	Standard B1s (1 vcpu, 1 GiB memory)
Location :	West US 3	Public IP address :	20.25.155.185
Subscription (move) :	Azure for Students	Virtual network/subnet :	NETW211-KM-vnet/default
Subscription ID :	7a6a5696-a01b-4965-bf76-c653c8519fea	DNS name :	Not configured
Tags (edit) :	Click here to add tags		

Launching a VM

This screenshot should show the *NETW211-VM-Your Initials* page, with information such as the resource group name, subscription, public IP address, etc.

The screenshot displays the Azure portal interface for a virtual machine. The top navigation bar includes 'Home >' and the VM name 'NETW211-VM-KM' with a 'Virtual machine' subtitle. A search bar and a toolbar with actions like 'Connect', 'Start', 'Restart', 'Stop', 'Capture', 'Delete', 'Refresh', 'Open in mobile', 'CLI / PS', and 'Feedback' are visible. The left sidebar contains navigation options: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Networking, Connect, Disks, Size, Microsoft Defender for Cloud, Advisor recommendations, Extensions + applications, and Continuous delivery. The main content area is divided into 'Essentials' and 'Properties' sections. The 'Essentials' section provides a summary of the VM's configuration, including its resource group, status, location, subscription, and various identifiers. The 'Properties' section is further divided into 'Virtual machine' and 'Networking' sub-sections, each with a table of specific attributes.

Home >

NETW211-VM-KM Virtual machine

Search

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

Essentials [JSON View](#)

Resource group (move): [NETW211-RG-KM](#)

Operating system: Linux (ubuntu 20.04)

Status: Running

Size: Standard B1s (1 vcpu, 1 GiB memory)

Location: East US 2

Public IP address: [20.119.234.193](#)

Subscription (move): [Azure for Students](#)

Virtual network/subnet: [NETW211-RG-KM-vnet/default](#)

Subscription ID: 7a6a5696-a01b-4965-bf76-c653c8519fea

DNS name: [Not configured](#)

Tags (edit): [Click here to add tags](#)

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name	NETW211-VM-KM
Health state	-
Operating system	Linux (ubuntu 20.04)
Publisher	canonical
Offer	0001-com-ubuntu-server-focal

Networking

Public IP address	20.119.234.193
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	NETW211-RG-KM-vnet/default



NETWORK WITH
SUBNETS

CREATING A VNET WITH TWO SUBNETS

With a /24 network prefix, how many usable IPv4 host addresses are there?

There are a total of 251 usable IPv4 addresses

Given the answer above, why is the number of available IP addresses for Subnet0 (10.0.0.0/24) or Subnet1 (10.0.1.0/24) shown as 251?

They are being used as the following:

- 10.0.0.0 – network address
- 10.0.0.1 – default gateway
- 10.0.0.2 and 10.0.0.3 – used to map the Azure DNS IPs for the VNet
- 10.0.0.255 – is the network broadcast,

Deploying VMs into Subnets

This screenshot should show the *Properties* section of the **Subnet0-VM** page, showing the networking and size information of the VM.

Subnet0-VM Virtual machine

Search << >> Connect Start Restart Stop Capture Delete Refresh Open in mobile CLI / PS Feedback

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings
 - Networking
 - Connect
 - Windows Admin Center
 - Disks
 - Size
 - Microsoft Defender for Cloud
 - Advisor recommendations
 - Extensions + applications
 - Continuous delivery
 - Availability + scaling

Virtual machine

Computer name	Subnet0-VM
Health state	-
Operating system	Windows (Windows Server 2019 Datacenter)
Publisher	MicrosoftWindowsServer
Offer	WindowsServer
Plan	2019-datacenter-gensecond
VM generation	V2
VM architecture	x64
Agent status	Ready
Agent version	2.7.41491.1057
Host group	None
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-

Networking

Public IP address	20.119.165.81
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	NETW211-VNet-KM/Subnet0
DNS name	Configure

Size

Size	Standard B1s
vCPUs	1
RAM	1 GiB

Disk

OS disk	Subnet0-VM_disk1_d3f9e0c72cd549bcb7909b04dfc9ca7a
Encryption at host	Disabled
Azure disk encryption	Not enabled
Ephemeral OS disk	N/A
Data disks	0

Availability + scaling

Availability zone	-
-------------------	---

Deploying VMs into Subnets (continued)

This screenshot should show the *Properties* section of the **Subnet1-VM** page, showing the networking and size information of the VM.

Subnet1-VM Virtual machine

Search

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

Subnet1-VM virtual machine agent status is not ready. Troubleshoot the issue →

Properties Monitoring Capabilities (8) Recommendations Tutorials

Virtual machine

Computer name	Subnet1-VM
Health state	-
Operating system	Windows
Publisher	MicrosoftWindowsServer
Offer	WindowsServer
Plan	2019-datacenter-gensecond
VM generation	V2
VM architecture	x64
Agent status	Not Ready
Agent version	Unknown
Host group	None
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-

Networking

Public IP address	20.10.50.185
Public IP address (IPv6)	-
Private IP address	10.0.1.4
Private IP address (IPv6)	-
Virtual network/subnet	NETW211-VNet-KM/Subnet1
DNS name	Configure

Size

Size	Standard B1s
vCPUs	1
RAM	1 GiB

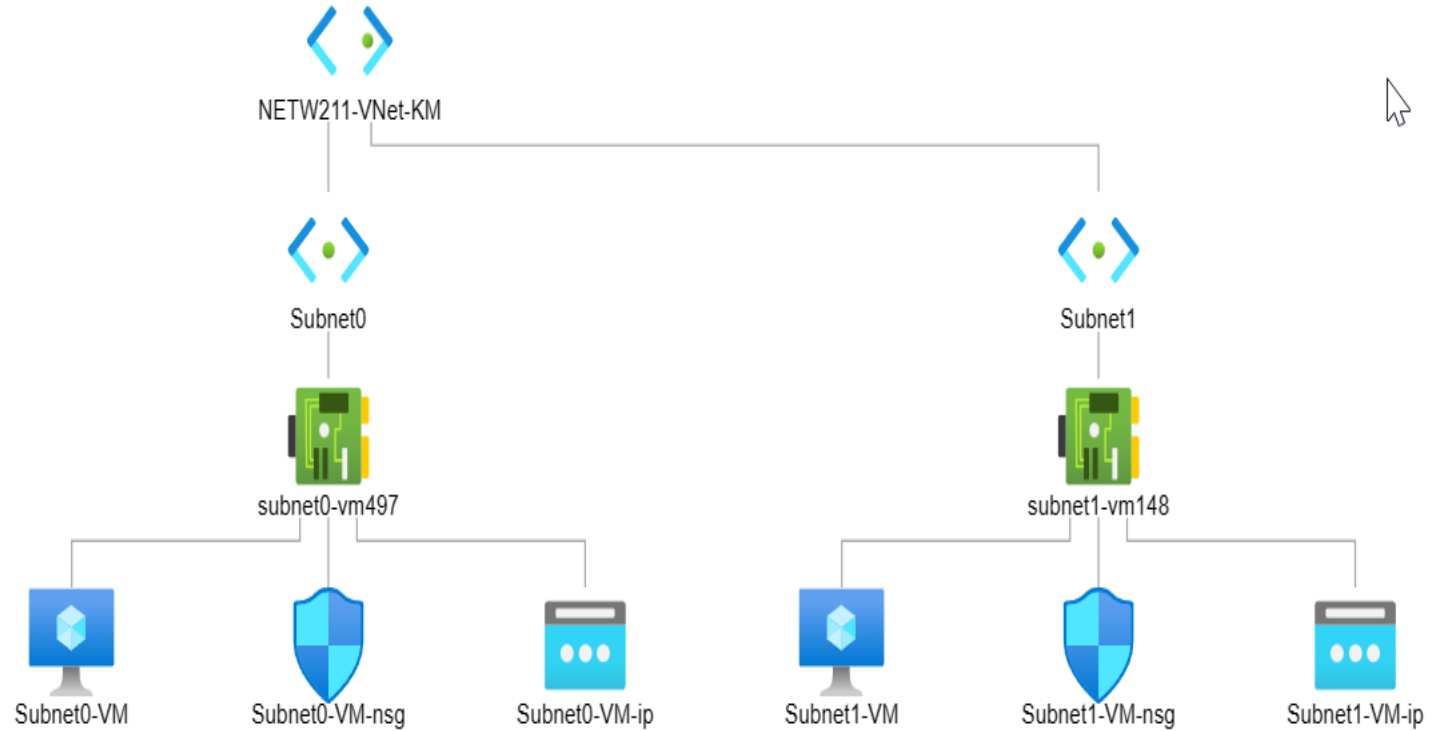
Disk

OS disk	Subnet1-VM_OsDisk_1_93c6d64be01d4aacb05d49faea835324
Encryption at host	Disabled

Deploying VMs into Subnets (continued)

This screenshot should show the topology diagram of your VNet (*NETW211-VNet-Your Initials*) with two subnets (*Subnet0* and *Subnet1*) and one VM in each subnet (*Subnet0-VM* and *Subnet1-VM*).

Subscription ⓘ Azure for Students
Resource Group ⓘ NETW211-RG
Virtual Network ⓘ NETW211-VNet-KM



Configuring an NSG

This screenshot should show the Inbound port rules section with the newly added Allow_Ping rule.

The screenshot displays the Azure portal interface for configuring a Network Security Group (NSG) on a virtual machine. The breadcrumb path is Home > NETW211-VM-KM. The page title is NETW211-VM-KM | Networking, and it is identified as a Virtual machine. The left-hand navigation pane includes sections for Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings (with Networking selected), Connect, Disks, Size, Microsoft Defender for Cloud, Advisor recommendations, and Extensions & applications.

The main content area shows the configuration for the network interface 'ipconfig1 (Primary)'. It includes links for 'Attach network interface', 'Detach network interface', and 'Feedback'. The network interface is identified as 'netw211-vm-km804' and is associated with the virtual network/subnet 'NETW211-RG-KM-vnet/default'. The NIC Public IP is '20.119.234.193' and the NIC Private IP is '10.0.0.4'. Accelerated networking is disabled.

The 'Inbound port rules' section is active, showing a table of rules for the network security group 'NETW211-VM-KM-nsg' (attached to network interface 'netw211-vm-km804'). The table lists five rules with their respective priorities, names, ports, protocols, sources, destinations, and actions.

Priority	Name	Port	Protocol	Source	Destination	Action
300	SSH	22	TCP	Any	Any	Allow
310	Allow_Ping	Any	ICMP	Any	Any	Allow
65000	AllowVnetInBound	Any	Any	VirtualNetwork	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInBound	Any	Any	AzureLoadBalancer	Any	Allow
65500	DenyAllInBound	Any	Any	Any	Any	Deny

The background features a dark grey gradient. A thin white vertical line is positioned on the left side. At the bottom, there are abstract, flowing shapes in red and yellow, resembling liquid or smoke. The text 'CLOUD STORAGE' is centered in a white, sans-serif font.

CLOUD STORAGE

QUESTION

What does the access tier setting do?

Access tier settings allow the administrator to determine how data is organized by how often it is accessed and what its retention rate is.

What are the Azure blob storage access tiers?

Hot Tier – these files are accessed and modified most often. Has highest storage cost and can be accessed most quickly

Cool Tier – these files are accessed or modified less frequently and should have a minimum retention rate of 30 days. Has lower storage cost than hot but takes longer to access the data

Archive Tier – this is data that is not used or rarely used and should have a retention rate of at least 180 days. Has the lowest storage cost but takes the longest to access and download

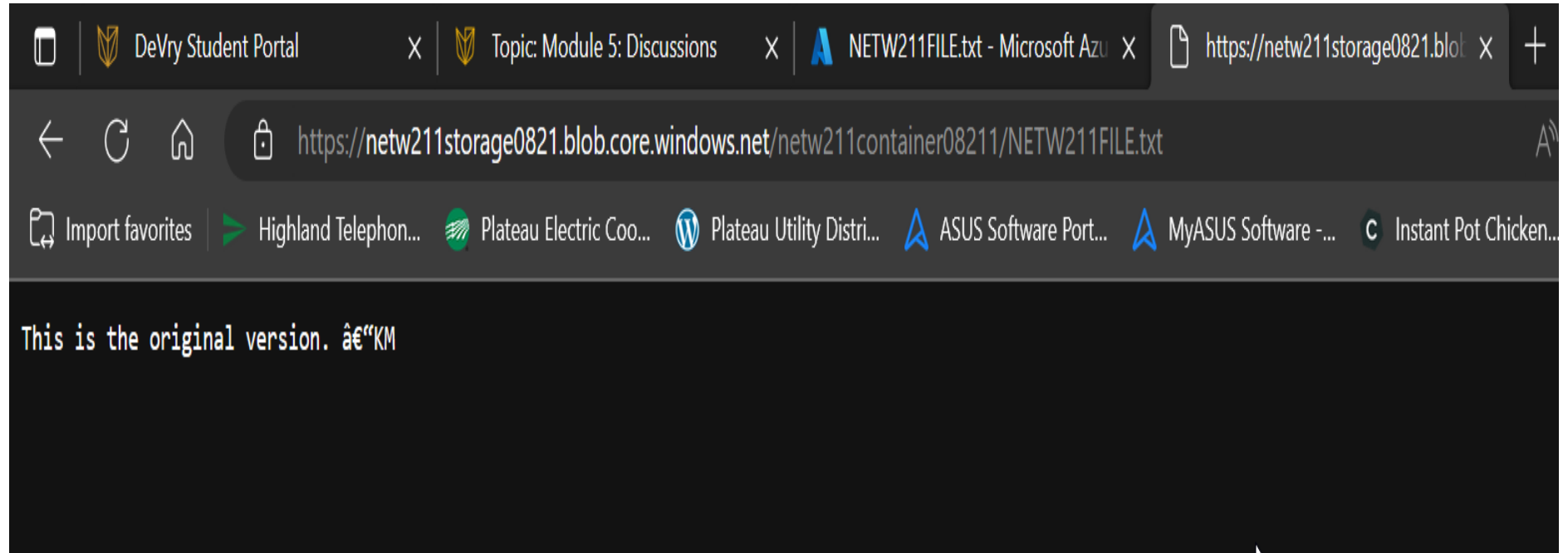
Uploading & Accessing a File

This screenshot should show the browser window with the image uploaded from your local computer and the URL on top of the window.

The screenshot displays a Webex meeting interface. At the top, a browser window is visible with the URL https://netw211storage0821.blob.core.windows.net/netw211container0821/week%203%20screenshot_KMorrison.jpg. The meeting interface includes a header with 'Webex Meeting Info' and a 'Show Menu Bar' dropdown. Below the header, there are participant tiles for Kim Morrison (Me), Prof. Toni McGee (Cohost), and Alex Leung (Cohost). The main content area shows a slide titled 'Hybrid Cloud Use Case Cont.' with a pink callout box containing the text: 'A hybrid cloud is a typical transition phase as companies migrate to the cloud, and many companies ultimately decide to continue with a hybrid infrastructure. Here are some use cases for a hybrid cloud.' To the right of the callout is a list of use cases: Application development, Market testing, Cloud Bursting, High availability and disaster recovery, Compliance, and Archives. A chat window is open on the right side, showing messages from Zeng, Jingdi, Alex Leung, and John O'Leary. The chat window has a 'To:' dropdown set to 'Everyone' and a text input field for entering a message. The bottom of the interface features a control bar with buttons for Unmute, Start video, Share, and other meeting controls.

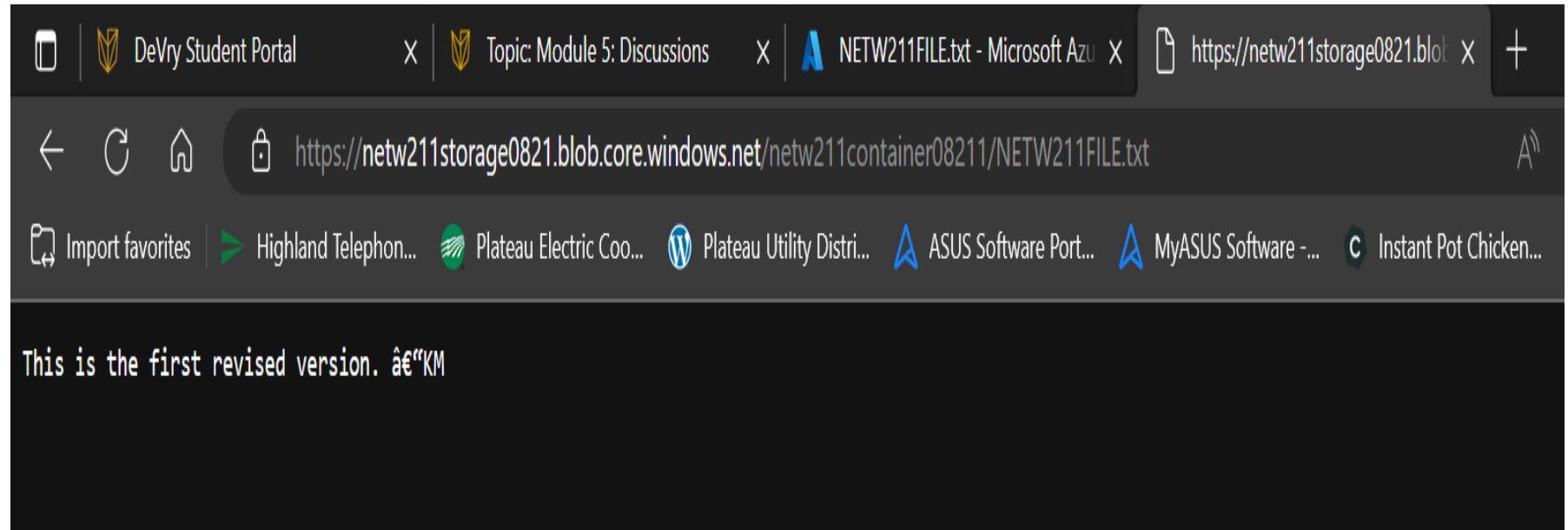
Creating Blob Snapshots

This screenshot should show the browser window with the “*This is the original version. – Your Initials*” message and the URL on top of the window



Enabling Blob Versioning

This screenshot should show the browser window with the “*This is the first revised version. – Your Initials*” message and the URL on top of the window.



Setting up an Action Group and Notifications

This screenshot should show the “VM-Status-Change” action group on the *Manage actions* page.

The screenshot shows the Microsoft Azure portal interface. At the top, there is a navigation bar with the Microsoft Azure logo, a search bar, and user information for 'kmorrison14@my.devry...'. Below the navigation bar, the breadcrumb path is 'Home > Monitor | Alerts >'. The main heading is 'Action groups'. Below the heading, there are several action buttons: '+ Create', 'Columns', 'Refresh', 'Open query', 'Delete', 'Enable', 'Disable', and 'Test action group (preview)'. There is also a search bar and filter buttons for 'Subscription : all', 'Resource group : all', 'Location : all', and 'Status : Enabled'. The text 'Showing 1 to 1 of 1 Action groups.' is displayed. A table lists the action groups with columns for Name, Short name, Resource group, Subscription, Actions, and Status. The table contains one entry: 'VM-Status-Change' with short name 'VM-Status', resource group 'netw211-rg-km0821', subscription 'Azure for Students', 1 Email action, and status 'Enabled'.

Name ↑↓	Short name ↑↓	Resource group ↑↓	Subscription ↑↓	Actions	Status ↑↓
<input type="checkbox"/> VM-Status-Change	VM-Status	netw211-rg-km0821	Azure for Students	1 Email	Enabled

Setting up Alert Rules

This screenshot should show the *Alert rules* window showing the *VM-Deallocate* and *VM-Restart* rules.

The screenshot shows the Microsoft Azure portal interface. At the top, there is a navigation bar with the Microsoft Azure logo, a search bar, and user information for kmorrison14@my.devry... (DEVRY UNIVERSITY (MYDEVRY...)). The breadcrumb trail indicates the current location: Home > NETW211-VM-KM | Alerts > Alert rules. Below the breadcrumb, there is a toolbar with options: + Create, Columns, Refresh, Export to CSV, Open query, Delete, Enable, and Disable. A search bar is present, and several filter buttons are visible: Target resource type: all, Target scope: NETW211-VM-KM, Subscription: all, Signal type: all, Severity: all, and Status: Enabled. The main content area shows "Showing 1 to 2 of 2 Alert rules." and a table of alert rules. The table has columns for Name, Condition, Severity, Target scope, Target resource type, Signal type, and Status. Two rules are listed: VM-DEALLOCATE and VM-RESTART, both with a severity of 4 - Verbose, targeting virtual machines, and are in an Enabled status.

Name ↑↓	Condition	Severity ↑↓	Target scope	Target resource type	Signal type ↑↓	Status ↑↓
<input type="checkbox"/> VM-DEALLOCATE	Category=Administrative, Op...	4 - Verbose	NETW211-VM-KM	Virtual machine	Activity log	✓ Enabled
<input type="checkbox"/> VM-RESTART	Category=Administrative, Op...	4 - Verbose	NETW211-VM-KM	Virtual machine	Activity log	✓ Enabled



TESTING
CONNECTIONS

Connecting to the VM via SSH

This screenshot should show the `azureuser@NETW211-VM-Your Initials` window showing the IPv4 address of the VM in the Azure cloud.

```
azureuser@NETW211-VM-KM x + v
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
VERSION_CODENAME=focal
UBUNTU_CODENAME=focal
azureuser@NETW211-VM-KM:~$ ping -c 4 facebook.com
PING facebook.com (157.240.3.35) 56(84) bytes of data:
64 bytes from edge-star-mini-shv-01-sea1.facebook.com (157.240.3.35): icmp_seq=1 ttl=46 time=76.6 ms
64 bytes from edge-star-mini-shv-01-sea1.facebook.com (157.240.3.35): icmp_seq=2 ttl=46 time=76.2 ms
64 bytes from edge-star-mini-shv-01-sea1.facebook.com (157.240.3.35): icmp_seq=3 ttl=46 time=76.0 ms
64 bytes from edge-star-mini-shv-01-sea1.facebook.com (157.240.3.35): icmp_seq=4 ttl=46 time=75.9 ms

--- facebook.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3003ms
rtt min/avg/max/mdev = 75.860/76.157/76.644/0.301 ms
azureuser@NETW211-VM-KM:~$ ^C
azureuser@NETW211-VM-KM:~$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
    link/ether 60:45:bd:ba:87:bd brd ff:ff:ff:ff:ff:ff
    inet 10.0.0.4/24 brd 10.0.0.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::6245:bdff:feba:87bd/64 scope link
        valid_lft forever preferred_lft forever
azureuser@NETW211-VM-KM:~$
```


CONNECTING TO THE VM

This screenshot should show the PROPERTIES for NETW211VM page, with the computer name, operating system version, hardware information, etc.

The screenshot shows the Server Manager interface for a local server named NETW211VM. The left sidebar contains navigation options: Dashboard, Local Server (selected), All Servers, and File and Storage Services. The main area displays the 'PROPERTIES' for NETW211VM, organized into two columns of key-value pairs.

PROPERTIES	
For NETW211VM	
Computer name	NETW211VM
Workgroup	WORKGROUP
Windows Defender Firewall	Private: On
Remote management	Enabled
Remote Desktop	Enabled
NIC Teaming	Disabled
Ethernet	IPv4 address assigned by DHCP, IPv6 enabled
Operating system version	Microsoft Windows Server 2019 Datacenter
Hardware information	Microsoft Corporation Virtual Machine
Last installed updates	Never
Windows Update	Install updates automatically using Windows Update
Last checked for updates	Never
Windows Defender Antivirus	Real-Time Protection: On
Feedback & Diagnostics	Settings
IE Enhanced Security Configuration	On
Time zone	(UTC) Coordinated Universal Time
Product ID	00430-00000-00000-AA587 (activated)
Processors	Intel(R) Xeon(R) Platinum 8370C CPU @ 2.80GHz
Installed memory (RAM)	1 GB
Total disk space	130.45 GB

Verifying Connectivity between VMs

This screenshot should show the *ipconfig* and *ping 10.0.0.4* results in the command prompt window, including the **Subnet0-VM – 10.0.0.4 – Remote Desktop Connection** window title.

```
Administrator: Command Prompt
C:\>hostname
Subnet1-VM

C:\>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : 2m41equeruunekhpav5ecpvmke.cx.internal.cloudapp.net
    Link-local IPv6 Address . . . . . : fe80::cbf1:30d6:3828:ceaf%6
    IPv4 Address. . . . . : 10.0.1.4
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.0.1.1

C:\>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:
Reply from 10.0.0.4: bytes=32 time=1ms TTL=128
Reply from 10.0.0.4: bytes=32 time=1ms TTL=128
Reply from 10.0.0.4: bytes=32 time=1ms TTL=128
Reply from 10.0.0.4: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms

C:\>_
```

Verifying Connectivity between VMs (continued)

This screenshot should show the *ipconfig* and *ping 10.0.1.4* results in the command prompt window, including the **Subnet1-VM – 10.0.1.4 – Remote Desktop Connection** window title.

```
Select Administrator: Command Prompt

C:\>hostname
Subnet0-VM

C:\>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : 2m41equeruunejkhpv5ecpvmke.cx.internal.cloudapp.net
    Link-local IPv6 Address . . . . . : fe80::bebf:7510:6ab1:fe8e%4
    IPv4 Address. . . . . : 10.0.0.4
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.0.0.1

C:\>ping 10.0.1.4

Pinging 10.0.1.4 with 32 bytes of data:
Reply from 10.0.1.4: bytes=32 time=1ms TTL=128
Reply from 10.0.1.4: bytes=32 time=1ms TTL=128
Reply from 10.0.1.4: bytes=32 time=1ms TTL=128
Reply from 10.0.1.4: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms
```

Testing a configured NSG

This screenshot should show the successful ping result from your local computer to the VM in the Azure cloud.

```

Select Administrator: Command Prompt
Microsoft Windows [Version 10.0.22621.1105]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd\

C:\>ping 20.119.234.193

Pinging 20.119.234.193 with 32 bytes of data:
Request timed out.

Ping statistics for 20.119.234.193:
    Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
Control-C
^C
C:\>ping 20.119.234.193

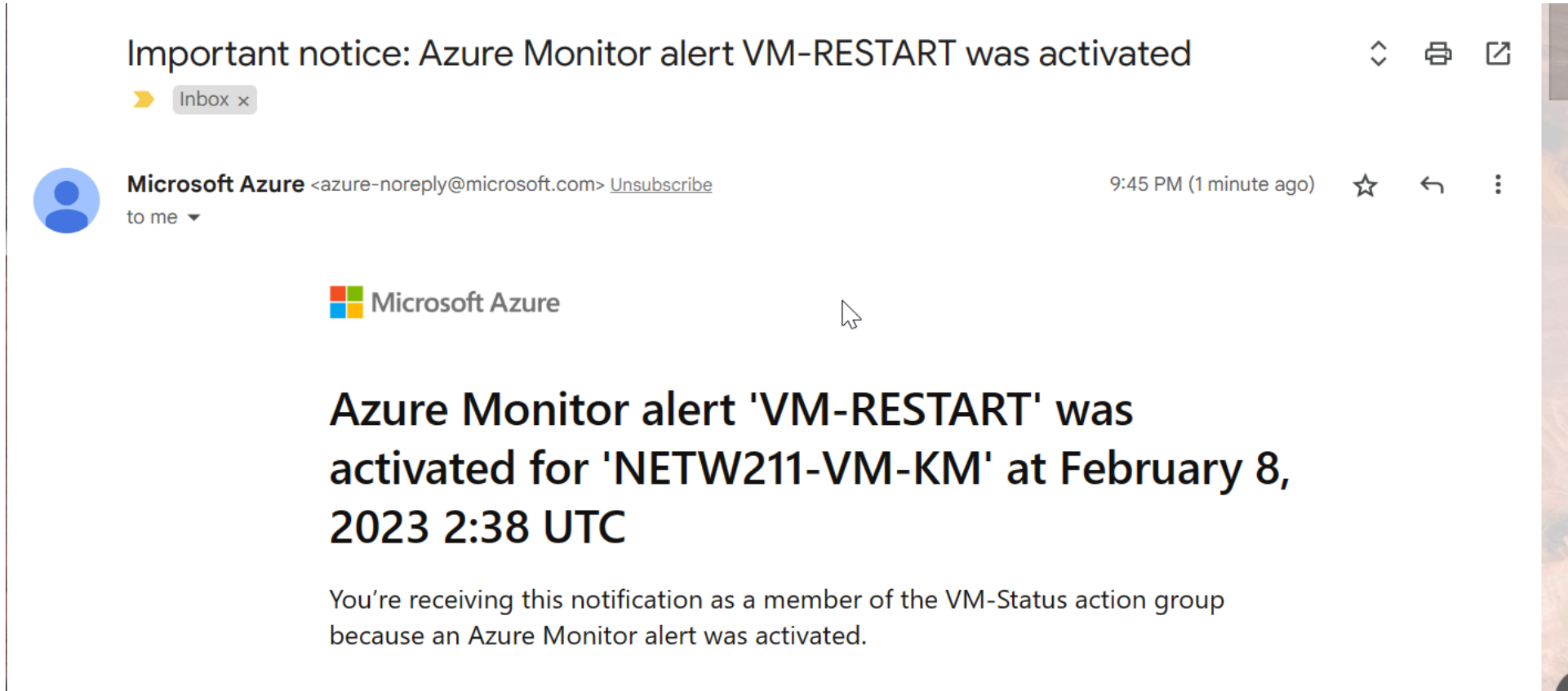
Pinging 20.119.234.193 with 32 bytes of data:
Reply from 20.119.234.193: bytes=32 time=38ms TTL=46
Reply from 20.119.234.193: bytes=32 time=49ms TTL=46
Reply from 20.119.234.193: bytes=32 time=38ms TTL=46
Reply from 20.119.234.193: bytes=32 time=39ms TTL=46

Ping statistics for 20.119.234.193:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 38ms, Maximum = 49ms, Average = 41ms

C:\>
```

Testing Alerts

This screenshot should show the 'VM-Restart' was activated email message with the date and time of the alert.



Important notice: Azure Monitor alert VM-RESTART was activated

Inbox x

 **Microsoft Azure** <azure-noreply@microsoft.com> [Unsubscribe](#) 9:45 PM (1 minute ago) ☆ ↶ ⋮
to me ▾

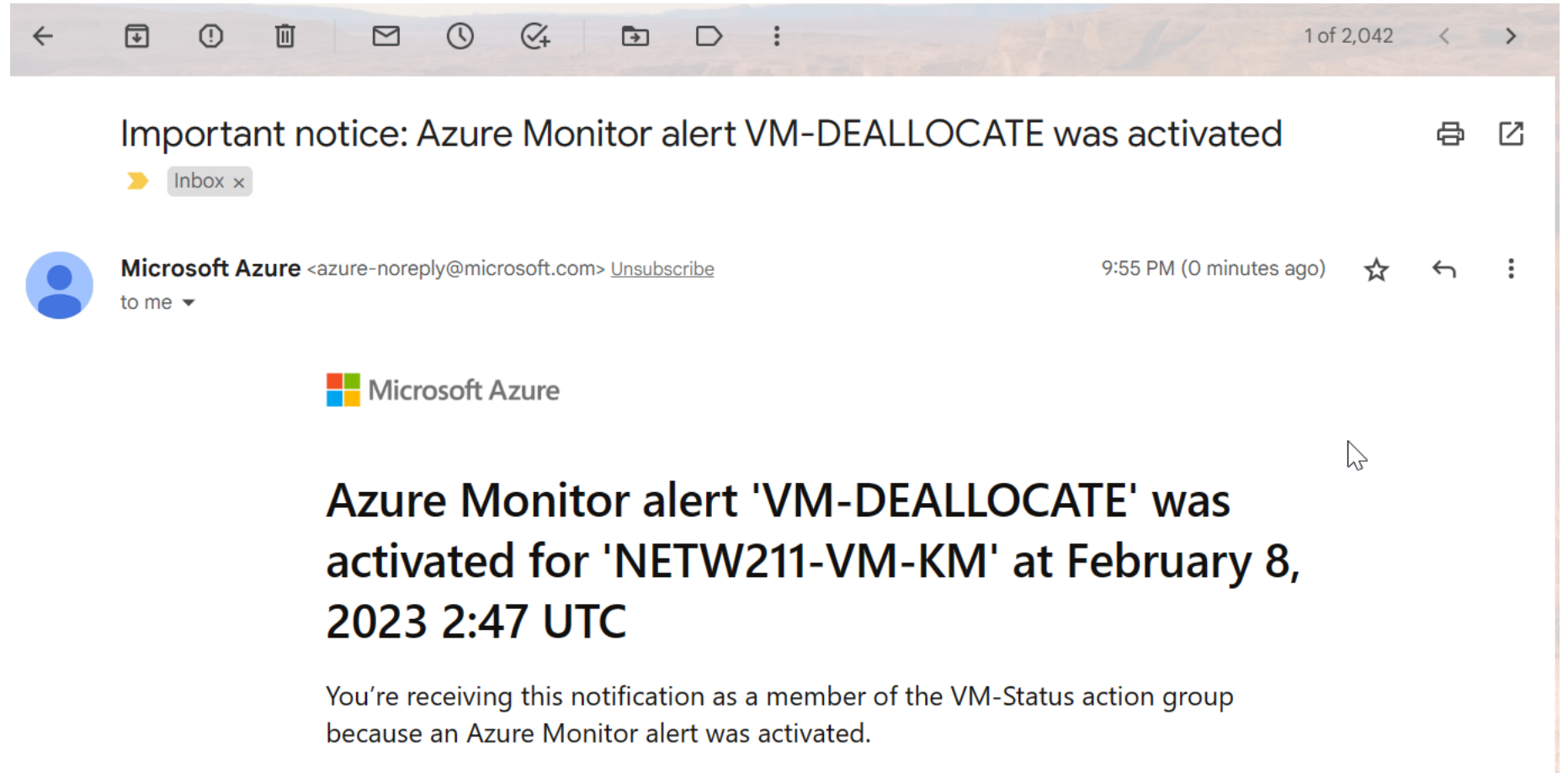
 Microsoft Azure

Azure Monitor alert 'VM-RESTART' was activated for 'NETW211-VM-KM' at February 8, 2023 2:38 UTC

You're receiving this notification as a member of the VM-Status action group because an Azure Monitor alert was activated.

Testing Alerts (continued)

This screenshot should show the 'VM-Deallocate' was activated email message with the date and time of the alert.



The screenshot displays an email client interface. At the top, there is a navigation bar with icons for back, forward, search, and other functions. The main content area shows an email with the following details:

- Subject:** Important notice: Azure Monitor alert VM-DEALLOCATE was activated
- Sender:** Microsoft Azure <azure-noreply@microsoft.com> [Unsubscribe](#)
- Recipient:** to me
- Time:** 9:55 PM (0 minutes ago)

The email body contains the following text:

Azure Monitor alert 'VM-DEALLOCATE' was activated for 'NETW211-VM-KM' at February 8, 2023 2:47 UTC

You're receiving this notification as a member of the VM-Status action group because an Azure Monitor alert was activated.



SUMMING UP THE
PROJECT

CHALLENGES



Setting up the network in 2 segments and assigning a VM to that network



Navigating the Azure GUI to find the RBAC for specific areas



Using SSH to connect to a VMStuff

SKILLS LEARNED

Best practices to secure network devices in the Azure environment

Best Practices on how data should be stored and accessed

How to keep data storage costs low to ensure accurate and easy access to data

CONCLUSION

This project gave a thorough experience on how to use Azure cloud and set up each piece of the infrastructure.

It was emphasized that even though we are hosting in the cloud, we should be aware of how to secure the infrastructure to ensure only users that were vetted and approved are allowed access.

REFERENCES



IP Subnet Calculator,
<https://www.calculator.net/ip-subnet-calculator.html>



Azure Virtual Network frequently asked questions,
<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-faq>



Hot, Cool, and Archive access tiers for blob data,
<https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview>