IT4090
Cloud Computing
4th Year, 1st Semester

Assignment number – Azure Lab 1

Azure Lab 1

Submitted to

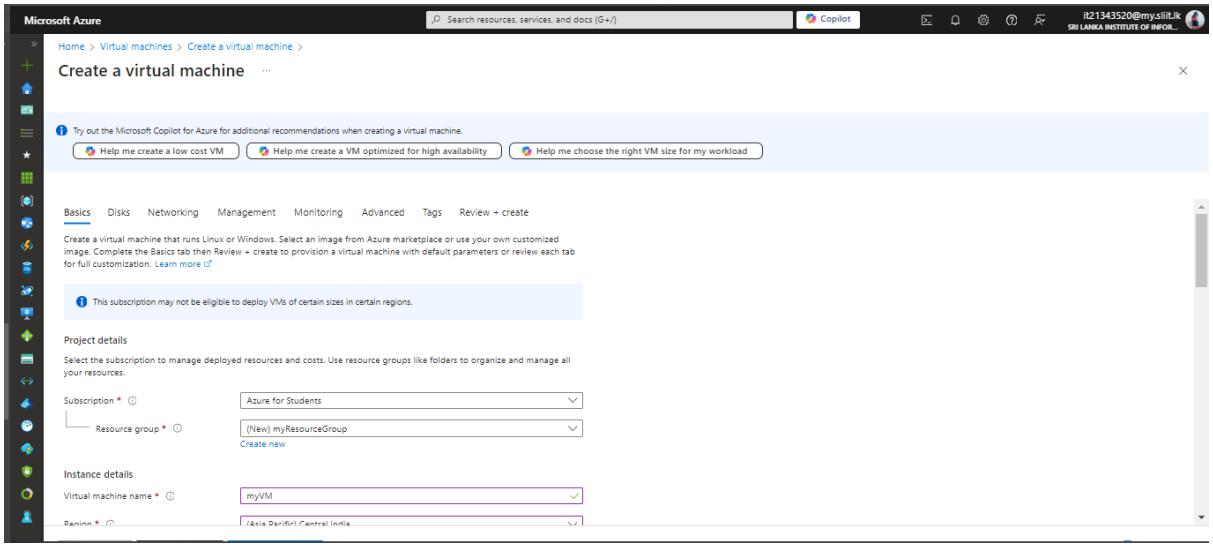
Sri Lanka Institute of Information Technology

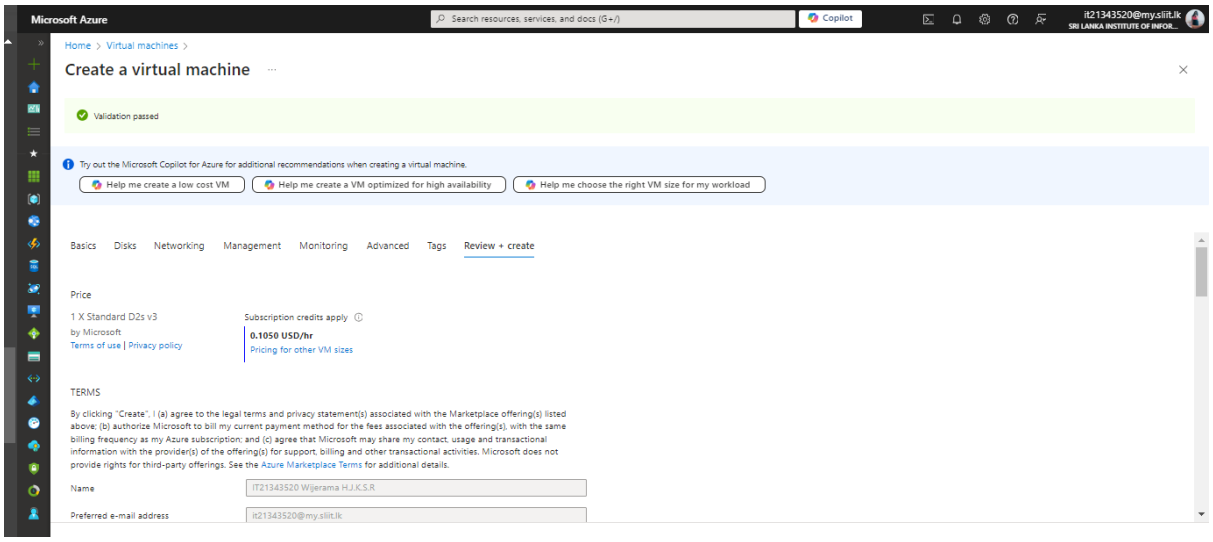
IT21343520

In partial fulfillment of the requirements for the

Bachelor of Science Special Honors Degree in Information Technology

08/11/2024


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
it21343520@my.sliit.lk
SRI LANKA INSTITUTE OF INFOR...
Home > Virtual machines > Create a virtual machine >
Create a virtual machine
Try out the Microsoft Copilot for Azure for additional recommendations when creating 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
Basics Disks Networking Management Monitoring Advanced Tags Review + create
Create a virtual machine that runs Linux or Windows. Select an image from Azure marketplace or use your own customized image. Complete the Basics tab then Review + create to provision a virtual machine with default parameters or review each tab for full customization. Learn more
This subscription may not be eligible to deploy VMs of certain sizes in certain regions.
Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription *
Azure for Students
Resource group *
(New) myResourceGroup
Create new
Instance details
Virtual machine name *
myVM


Microsoft Azure
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SRI LANKA INSTITUTE OF INFOR...
Home > Virtual machines >
Create a virtual machine
Validation passed
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Help me create a low cost VM
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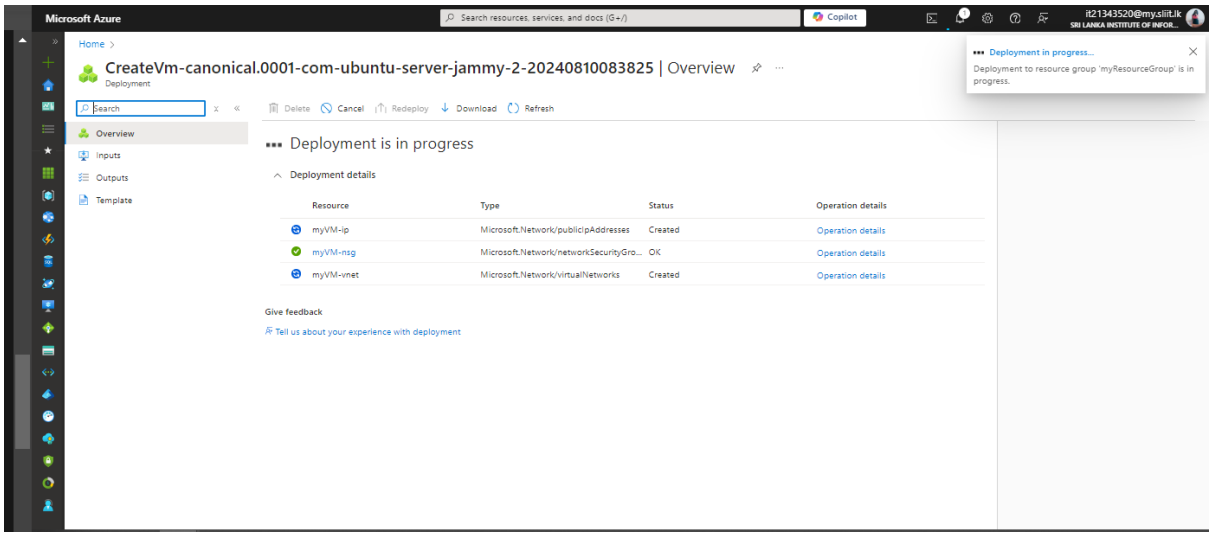
Help me choose the right VM size for my workload
Basics Disks Networking Management Monitoring Advanced Tags Review + create
Price
1 X Standard D2s v3
by Microsoft
Terms of use | Privacy policy
Subscription credits apply
0.1050 USD/hr
Pricing for other VM sizes
TERMS
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.
Name
IT21343520 Wijerama H.J.K.S.R
Preferred e-mail address
it21343520@my.sliit.lk


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
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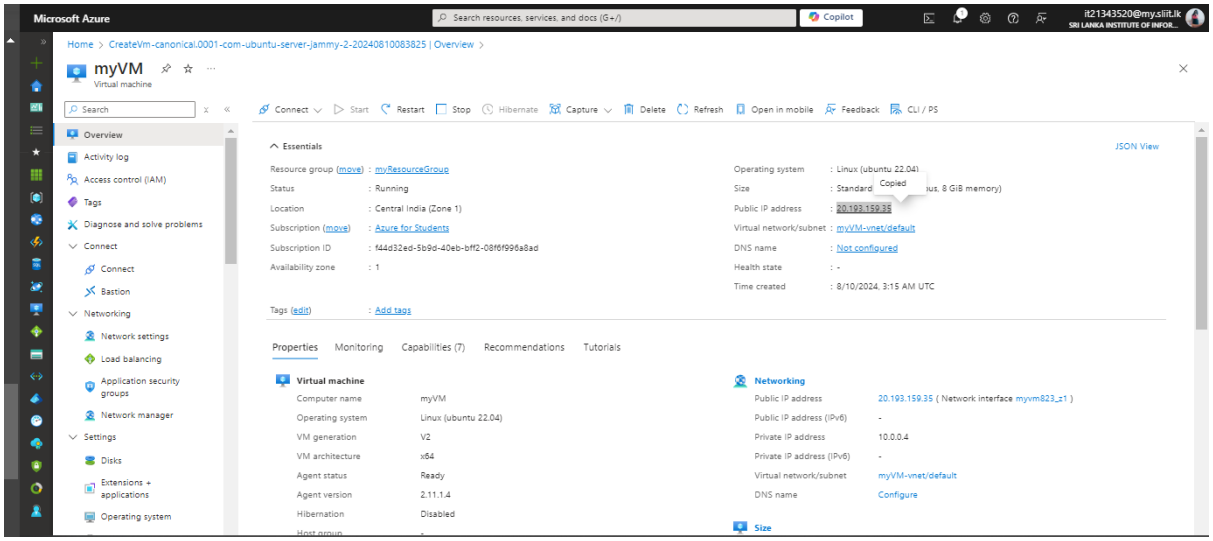
SRI LANKA INSTITUTE OF INFOR...
Home >
CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240810083825 | Overview
Deployment
Deployment in progress...
Deployment to resource group 'myResourceGroup' is in progress.
Search
Overview
Inputs
Outputs
Template
Delete Cancel Redeploy Download Refresh
Deployment is in progress
Deployment details
Resource Type Status Operation details
myVM-ip Microsoft.Network/publicIpAddresses Created Operation details
myVM-nsg Microsoft.Network/networkSecurityGro... OK Operation details
myVM-vnet Microsoft.Network/virtualNetworks Created Operation details
Give feedback
Tell us about your experience with deployment


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
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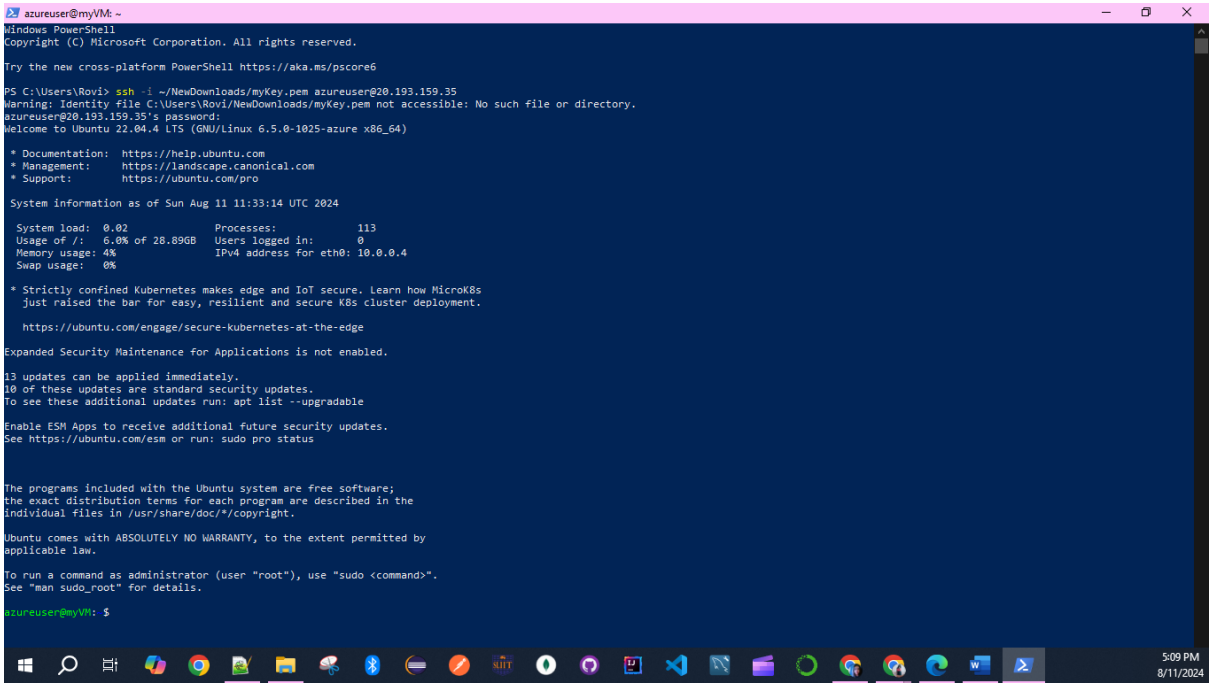
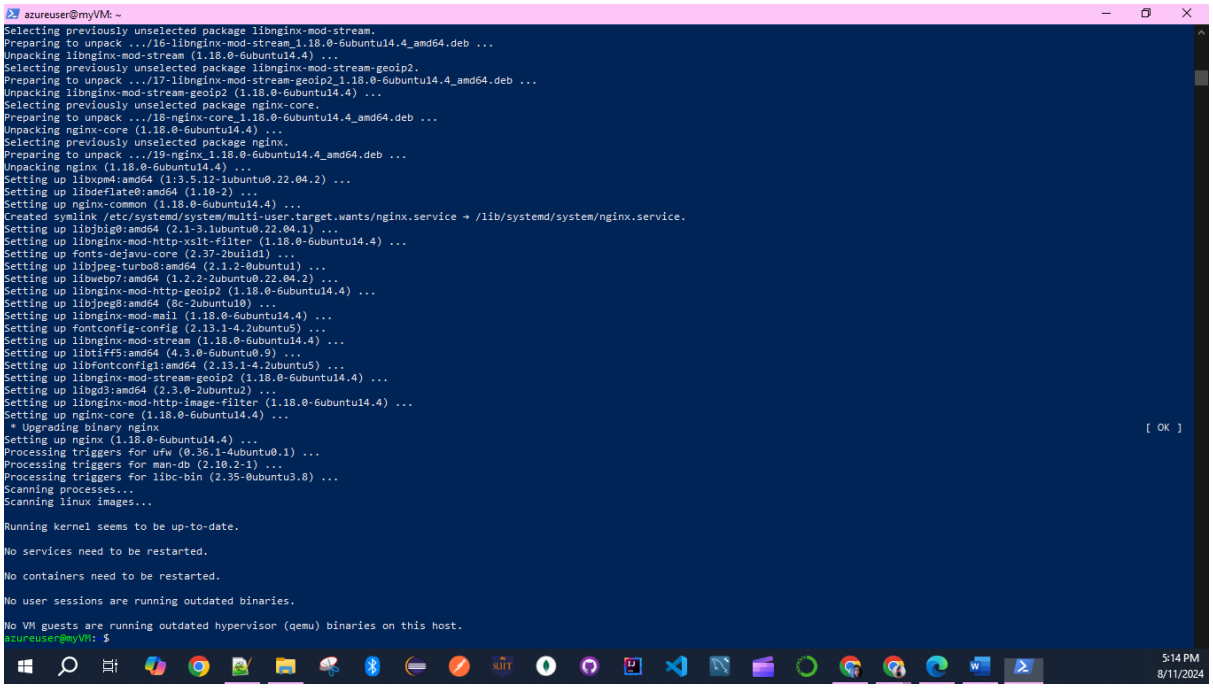
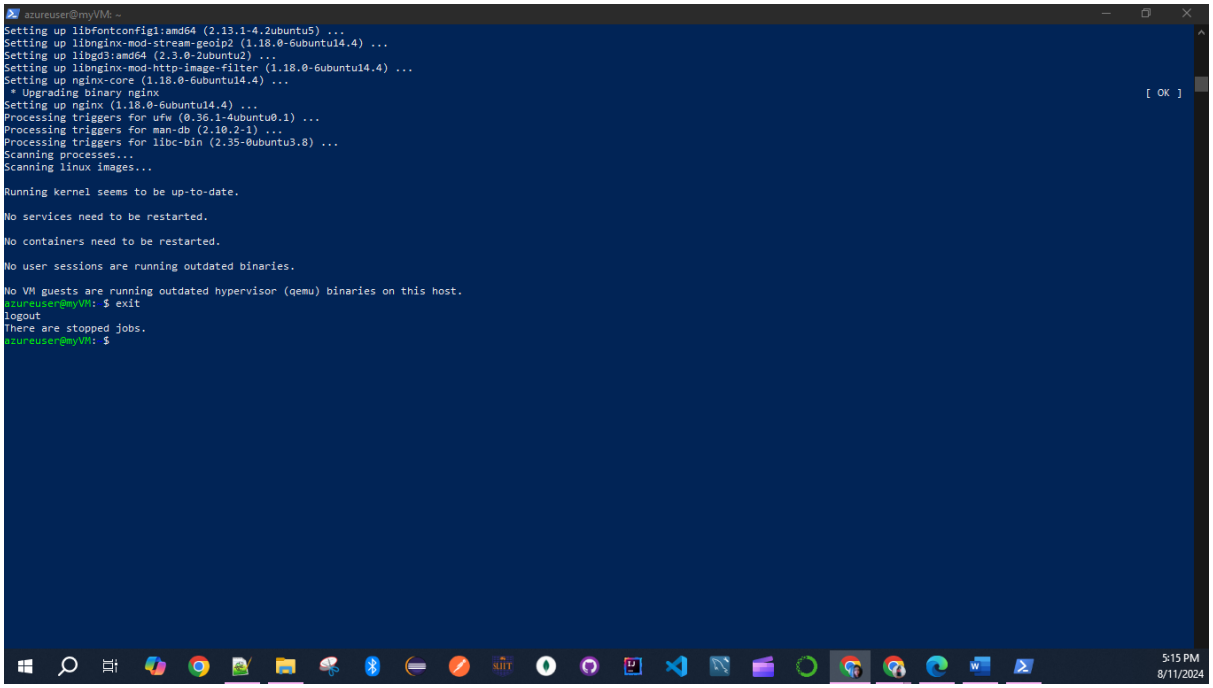
SRI LANKA INSTITUTE OF INFOR...
Home > CreateVm-canonical.0001-com-ubuntu-server-jammy-2-20240810083825 | Overview >
myVM
Virtual machine
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Connect
Connect
Bastion
Networking
Network settings
Load balancing
Application security groups
Network manager
Settings
Disks
Extensions + applications
Operating system
Connect
Start
Restart
Stop
Hibernate
Capture
Delete
Refresh
Open in mobile
Feedback
CLI / PS
Essentials
JSON View
Resource group (move) : myResourceGroup
Status : Running
Location : Central India (Zone 1)
Subscription (move) : Azure for Students
Subscription ID : f44d32ed-5b9d-40eb-bff2-08f6f996a8ad
Availability zone : 1
Operating system : Linux (ubuntu 22.04)
Size : Standard
Copied
Public IP address : 20.193.159.35
Virtual network/subnet : myVM-vnet/default
DNS name : Not configured
Health state : -
Time created : 8/10/2024, 3:15 AM UTC
Tags (edit) : Add tags
Properties
Monitoring
Capabilities (7)
Recommendations
Tutorials
Virtual machine
Computer name myVM
Operating system Linux (ubuntu 22.04)
VM generation V2
VM architecture x64
Agent status Ready
Agent version 2.11.1.4
Hibernation Disabled
Networking
Public IP address 20.193.159.35 (Network interface myvm823_z1)
Public IP address (IPv6) -
Private IP address 10.0.0.4
Private IP address (IPv6) -
Virtual network/subnet myVM-vnet/default
DNS name Configure
Size


azureuser@myVM: ~
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Users\Rovi> ssh -i ~/NewDownloads/myKey.pem azureuser@20.193.159.35
Warning: Identity file C:\Users\Rovi/NewDownloads/myKey.pem not accessible: No such file or directory.
azureuser@20.193.159.35's password:
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1025-azure x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/pro
System information as of Sun Aug 11 11:33:14 UTC 2024
System load: 0.02 Processes: 113
Usage of /: 6.0% of 28.89GB Users logged in: 0
Memory usage: 4% IPv4 address for eth0: 10.0.0.4
Swap usage: 0%
* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
just raised the bar for easy, resilient and secure K8s cluster deployment.
https://ubuntu.com/engage/secure-kubernetes-at-the-edge
Expanded Security Maintenance for Applications is not enabled.
13 updates can be applied immediately.
10 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
azureuser@myVM: $
5:09 PM
8/11/2024


azureuser@myVM: ~
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../16-libnginx-mod-stream_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package libnginx-mod-stream-geoip2.
Preparing to unpack .../17-libnginx-mod-stream-geoip2_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package nginx-core.
Preparing to unpack .../18-nginx-core_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx-core (1.18.0-6ubuntu14.4) ...
Selecting previously unselected package nginx.
Preparing to unpack .../19-nginx_1.18.0-6ubuntu14.4_amd64.deb ...
Unpacking nginx (1.18.0-6ubuntu14.4) ...
Setting up libxpm4:amd64 (1:3.5.12-1ubuntu0.22.04.2) ...
Setting up libdeflate0:amd64 (1.10-2) ...
Setting up nginx-common (1.18.0-6ubuntu14.4) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjbig0:amd64 (2.1-3.1ubuntu0.22.04.1) ...
Setting up libnginx-mod-http-xslt-filter (1.18.0-6ubuntu14.4) ...
Setting up fonts-dejavu-core (2.37-2build1) ...
Setting up libjpeg-turbo8:amd64 (2.1.2-0ubuntu1) ...
Setting up libwebp7:amd64 (1.2.2-2ubuntu0.22.04.2) ...
Setting up libnginx-mod-http-geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libjpeg8:amd64 (8c-2ubuntu10) ...
Setting up libnginx-mod-mail (1.18.0-6ubuntu14.4) ...
Setting up fontconfig-config (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream (1.18.0-6ubuntu14.4) ...
Setting up libtiff5:amd64 (4.3.0-6ubuntu0.9) ...
Setting up libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Setting up nginx-core (1.18.0-6ubuntu14.4) ...
* Upgrading binary nginx
[OK]
Setting up nginx (1.18.0-6ubuntu14.4) ...
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Scanning processes...
Scanning linux images...
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
azureuser@myVM: $
5:14 PM
8/11/2024


azureuser@myVM: ~
Setting up libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Setting up libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
Setting up nginx-core (1.18.0-6ubuntu14.4) ...
* Upgrading binary nginx
[OK]
Setting up nginx (1.18.0-6ubuntu14.4) ...
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Processing triggers for man-db (2.10.2-1) ...
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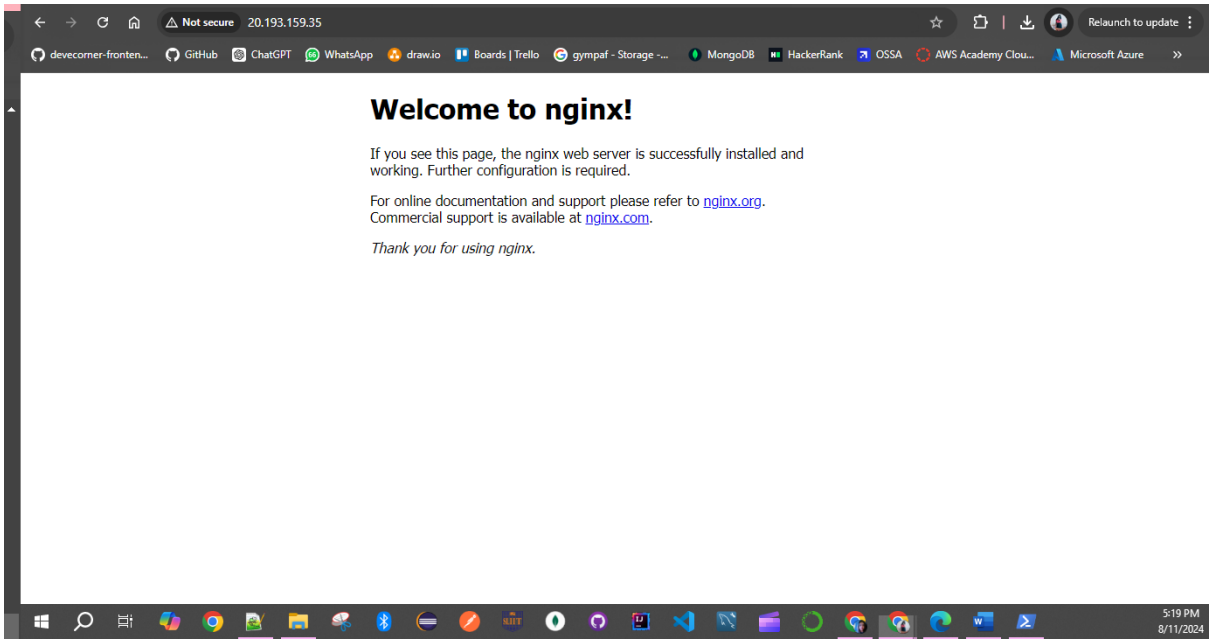
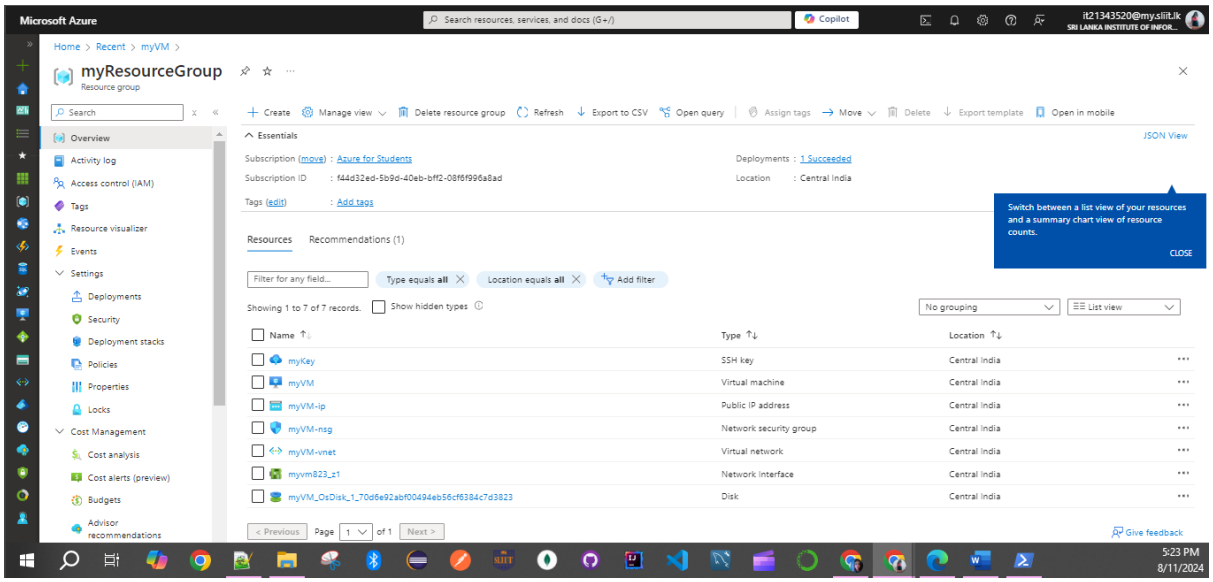
No VM guests are running outdated hypervisor (qemu) binaries on this host.
azureuser@myVM: $ exit
logout
There are stopped jobs.
azureuser@myVM: $
5:15 PM
8/11/2024


Not secure
20.193.159.35
Relaunch to update
devecorner-fronten...
GitHub
ChatGPT
WhatsApp
draw.io
Boards | Trello
gympaf - Storage -...
MongoDB
HackerRank
OSSA
AWS Academy Clou...
Microsoft Azure
Welcome to nginx!
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.
For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.
Thank you for using nginx.
5:19 PM
8/11/2024


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
it21343520@my.sliit.lk
SRI LANKA INSTITUTE OF INFOR...
Home > Recent > myVM >
myResourceGroup
Resource group
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Assign tags
Move
Delete
Export template
Open in mobile
Essentials
JSON View
Subscription (move) : Azure for Students
Subscription ID : f44d32ed-5b9d-40eb-bff2-08f6f996a8ad
Deployments : 1 Succeeded
Location : Central India
Tags (edit) : Add tags
Switch between a list view of your resources and a summary chart view of resource counts.
CLOSE
Resources
Recommendations (1)
Filter for any field...
Type equals all
Location equals all
Add filter
Showing 1 to 7 of 7 records.
Show hidden types
No grouping
List view
Name
Type
Location
myKey
SSH key
Central India
myVM
Virtual machine
Central India
myVM-ip
Public IP address
Central India
myVM-nsg
Network security group
Central India
myVM-vnet
Virtual network
Central India
myvm823_z1
Network interface
Central India
myVM_OsDisk_1_70d6e92abf00494eb56cf6384c7d3823
Disk
Central India
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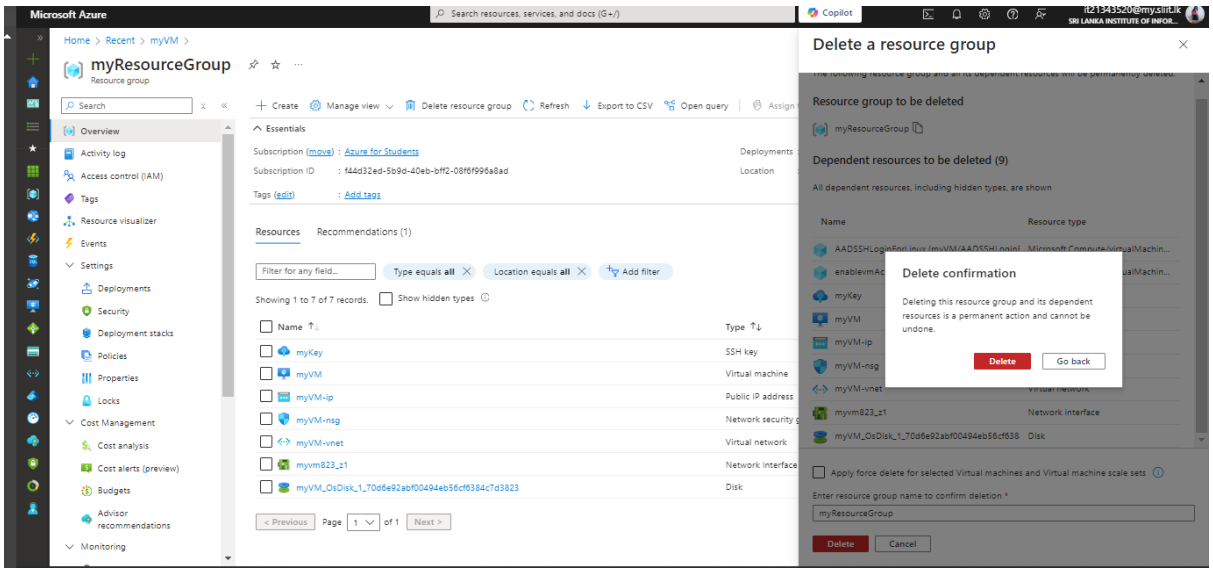
Next
Give feedback
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Deployments
Security
Deployment stacks
Policies
Properties
Locks
Cost Management
Cost analysis
Cost alerts (preview)
Budgets
Advisor recommendations
5:23 PM
8/11/2024


Microsoft Azure
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Home > Recent > myVM >
myResourceGroup
Resource group
Delete a resource group
Resource group to be deleted
myResourceGroup
Dependent resources to be deleted (9)
All dependent resources, including hidden types, are shown
Name
Resource type
Delete confirmation
Deleting this resource group and its dependent resources is a permanent action and cannot be undone.
Delete
Go back
Apply force delete for selected Virtual machines and Virtual machine scale sets
Enter resource group name to confirm deletion *
myResourceGroup
Delete
Cancel
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Essentials
Subscription (move) : Azure for Students
Subscription ID : f44d32ed-5b9d-40eb-bff2-08f6f996a8ad
Tags (edit) : Add tags
Resources
Recommendations (1)
Filter for any field...
Type equals all
Location equals all
Add filter
Showing 1 to 7 of 7 records.
Show hidden types
Name
Type
myKey
SSH key
myVM
Virtual machine
myVM-ip
Public IP address
myVM-nsg
Network security group
myVM-vnet
Virtual network
myvm823_z1
Network interface
myVM_OsDisk_1_70d6e92abf00494eb56cf6384c7d3823
Disk
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Page 1 of 1
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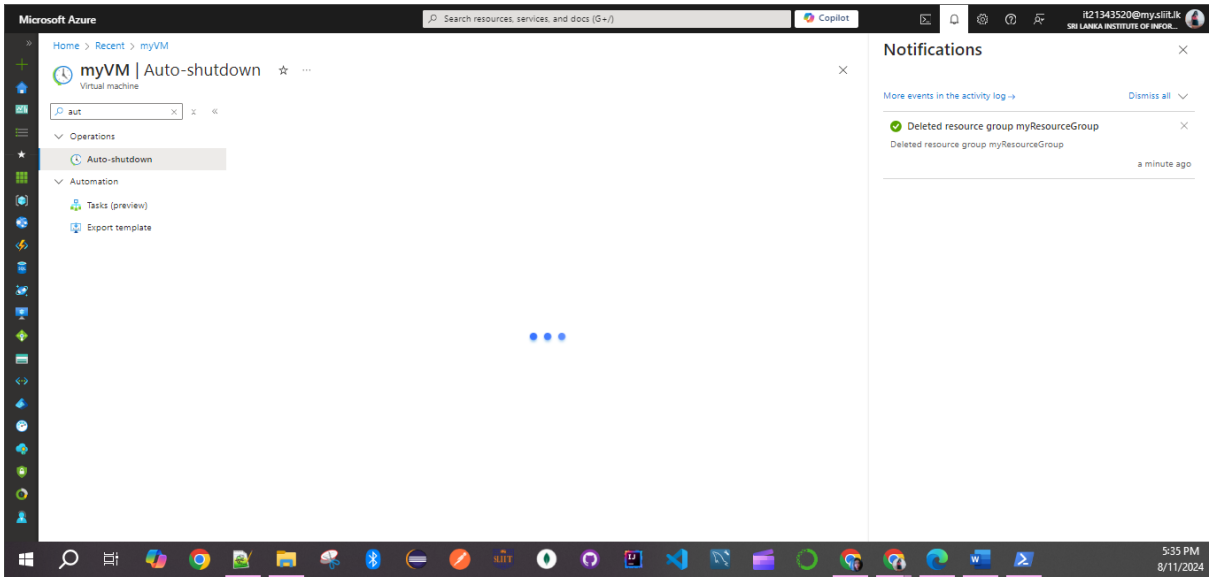
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Deployments
Security
Deployment stacks
Policies
Properties
Locks
Cost Management
Cost analysis
Cost alerts (preview)
Budgets
Advisor recommendations
Monitoring


Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
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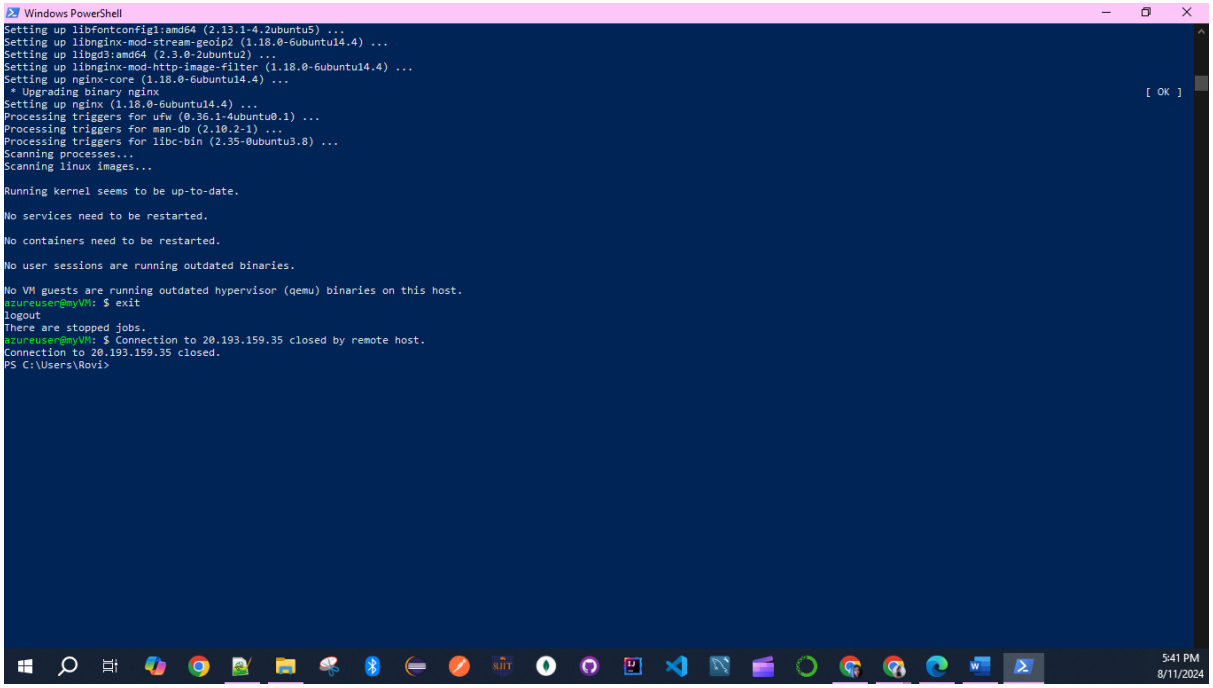
SRI LANKA INSTITUTE OF INFOR...
Home > Recent > myVM
myVM | Auto-shutdown
Virtual machine
aut
Operations
Auto-shutdown
Automation
Tasks (preview)
Export template
Notifications
More events in the activity log →
Dismiss all
Deleted resource group myResourceGroup
Deleted resource group myResourceGroup
a minute ago
5:35 PM
8/11/2024


Windows PowerShell
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Setting up libnginx-mod-stream-geoip2 (1.18.0-6ubuntu14.4) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libnginx-mod-http-image-filter (1.18.0-6ubuntu14.4) ...
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No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
azureuser@myVM: $ exit
logout
There are stopped jobs.
azureuser@myVM: $ Connection to 20.193.159.35 closed by remote host.
Connection to 20.193.159.35 closed.
PS C:\Users\Rovi>
5:41 PM
8/11/2024