

Lab 1

CST8912_011

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Submitted to :

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Lab Report Format

Title

Introduction to Creating a Virtual Machine

Introduction or Purpose

This document intends to show the primary steps in creating a virtual machine using Azure. Includes the basic configuration, creating logs, and controlling the VM.

Steps covered in the lab

- On the Azure homepage, click the Create resource
- Click Create under the virtual machine
- Now, under the basics tab, fill out the form
 - Select subscription: Azure for students
 - Resource group: CST8912
 - Virtual machine name: CST8912
 - Region: (Canada) Canada Central
 - Image: Ubuntu Server 24
- Disk Tab
 - OS Disk Type: SSD
- Networking Tab
 - Virtual Network: Create New, Name CST8912
- Not mentioned tabs will remain on the default configuration
- Control the VM by clicking the start, restart, and stop
- To create log analytics workspace, Go to the homepage
- Click the Create resource
- Search Log Analytics Workspace, then create

- Fill up the basics the same as the first virtual machine
- Click Create
- Connect analytics to the virtual machine by:
 - Going to monitor
 - Diagnostic setting
 - Click the VM
 - Add diagnostic settings
 - Check All metrics
- Create another VM, Data Collection Rules
 - Fill up the form the same as above
 - Collect and Deliver Tab
 - Add Data source
 - Select Linux Syslog as the Data source type
- Check insights
 - Go to the created VM for the log analytics workspace
 - Type insights
 - Switch to the health and agent tab
- Once done, go to the home page
- Click All resources
- Select all, then delete all

Results

Created VM

Microsoft Azure

Search resources, services, and docs (G+)

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Home >

CreateVm-canonical.ubuntu-24_04-lts-server-20250120221656 | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

Overview

- Inputs
- Outputs
- Template

Your deployment is complete

Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2... Start time: 1/20/2025, 10:22:23 PM
Subscription: [Azure for Students](#) Correlation ID: b4315355-6e1a-43fd-8e41-1584ea66e927
Resource group: [Romeo-VM_group](#)

Deployment details

Next steps

- Setup auto-shutdown Recommended
- Monitor VM health, performance and network dependencies Recommended
- Run a script inside the virtual machine Recommended

[Go to resource](#) [Create another VM](#)

Cost Management
Get notified to stay within your budget and prevent unexpected charges on your bill.
[Set up cost alerts >](#)

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Control VM

Microsoft Azure

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Home > CreateVm-canonical.ubuntu-24_04-lts-server-20250120221656 | Overview >

Romeo-VM

Virtual machine

Search

Help me copy this VM in any region

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

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Connect
- Networking
- Settings
- Availability + scale
- Security
- Backup + disaster recovery
- Operations
- Monitoring
- Automation
- Help

Essentials

Resource group (move) : [Romeo-VM_group](#)

Status : Running

Location : Canada Central (Zone 1)

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

Subscription ID : cdb9bdf3-e7ee-43e9-8f6c-ba7327868df1

Availability zone : 1

Operating system : Linux (ubuntu 24.04)

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

Public IP address : [20.220.175.206](#)

Virtual network/subnet : [Romeo-VM-vnet/default](#)

DNS name : [Not configured](#)

Health state : -

Time created : 1/21/2025, 3:22 AM UTC

Tags (edit) : [Add tags](#)

Properties Monitoring Capabilities (7) Recommendations Tutorials

Virtual machine

Computer name	Romeo-VM
Operating system	Linux (ubuntu 24.04)
VM generation	V2
VM architecture	x64
Agent status	Ready
Agent version	2.12.0.2
Hibernation	Disabled
Host group	-
Host	-
Proximity placement group	-
Colocation status	N/A
Capacity reservation group	-
Disk controller type	SCSI

Networking

Public IP address	20.220.175.206 (Network interface romeo-vm130_x1)
Public IP address (IPv6)	-
Private IP address	10.0.0.4
Private IP address (IPv6)	-
Virtual network/subnet	Romeo-VM-vnet/default
DNS name	Configure

Size

Size	Standard B1s
vCPUs	1
RAM	1 GiB

Source image details

Source image publisher	canonical
------------------------	-----------

Created Log Analytics

Microsoft Azure

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Home >

Microsoft.LogAnalyticsOMS | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

Overview

Inputs

Outputs

Template

✓ Your deployment is complete

Deployment name : Microsoft.LogAnalyticsOMS
Subscription : Azure for Students
Resource group : Romeo-VM_group

Start time : 1/20/2025, 10:31:01 PM
Correlation ID : 91c7218f-05c9-4e2b-a9d5-6291a49ca686

> Deployment details

Next steps

[Go to resource](#)

Give feedback

[Tell us about your experience with deployment](#)

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VM connected to Log analytics

Microsoft Azure

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Home > Monitor | Diagnostic settings >

Diagnostic setting

Save Discard Delete Feedback

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#)

Diagnostic setting name: R-DiagnosticSettings

Logs

Category groups

☐ audit ☒ allLogs

Categories

☒ DDoS protection notifications

☒ Flow logs of DDoS mitigation decisions

☒ Reports of DDoS mitigations

Metrics

☐ AllMetrics

Destination details

☒ Send to Log Analytics workspace

Subscription: Azure for Students

Log Analytics workspace: LogAnalytics (canadacentral)

☐ Archive to a storage account

☐ Stream to an event hub

☐ Send to partner solution

[JSON View](#)

Created Data collection rule

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Home > Microsoft.DataCollectionRules | Overview >

R-DataCollection

Data collection rule

Search

Delete → Move Feedback Configure DCE

Overview

Activity log

Access control (IAM)

Tags

Settings

Configuration

Automation

Security

Monitoring

Help

Essentials

Resource group (move) : [Romeo-VM_group](#)

Status : Provisioned

Location : Canada Central

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

Subscription ID : cdb9bdf3-e7ee-43e9-8f6c-ba7327868df1

Tags (edit) : [Add tags](#)

Immutable Id : dcr-9e5f3ee9548348cb3dda6d20659ec60

Data Sources : 1

Connected resources : 0

Platform Type : Linux

Data Collection Endpoint : [-](#)

JSON View

Collect, Scope and Route your Resource Monitoring Data

Azure Monitor Data Collection Rules allow you to select what monitoring data you want to collect from which Resources and where you want that data to go. [Learn more](#)

Resources

Select which resources to collect data from for monitoring.

View resources

Data sources

Define what data you want to collect and where you want that data to go.

View data sources

Insights

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Home > LogAnalytics

LogAnalytics | Insights

Log Analytics workspace

insights

WorkbooksCustomizeAuto refresh: Off

Activity log

Monitoring

Insights

Alerts

Metrics

Diagnostic settings

Time Range

Last 24 hours

Overview

Usage

Health

Agents

Query Audit

Change Log

Ingestion Volume

0.0 GB

Hosts Sending Heartbeats

0

Inactive Agents (missing heartbeat)

No inactive agents found

Retention (days)

30

Daily Ingestion / Cap

Daily cap not set

No data was ingested to this workspace over the past month.

Failed to load overview data, click Refresh to reload.

Health Tab

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Home > LogAnalytics

LogAnalytics | Insights

Log Analytics workspace

insights

Activity log

Monitoring

Insights

Alerts

Metrics

Diagnostic settings

Workbooks

Customize

Time Range

Last 24 hours

Overview Usage **Health** Agents Query Audit Change Log

Resource Health (not affected by the time range)

Availability State	Reported Time	Summary
Available	1/20/2025, 10:49:43.974 PM	No workspace issues detected.

Operational errors and warnings

No operational errors or warnings

Learn more on monitoring operational issues and how to set alerts [here](#)

Agents Tab

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Home > LogAnalytics

LogAnalytics | Insights

Log Analytics workspace

insights

Activity log

Monitoring

Insights

Alerts

Metrics

Diagnostic settings

Workbooks

Customize

Time Range

Last 24 hours

Overview Usage Health **Agents** Query Audit Change Log

Azure Monitor Agents

Direct Agents

Gateway Agents

SCOM Agents

SCOM Management servers

0

0

0

0

0

Agents State

No agents found

Select agents

All agents Healthy Unhealthy

Delete all resources

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Home >

All resources

Algonquin College (AlgonquinLivecom.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

Filter for any field... Subscription equals all Resource group equals all Type equals all Location equals all Add

0 Unsecure resources 0 Recommendations 10 Changed resources

Name	Type	Resource group
LogAnalytics	Log Analytics workspace	Romeo-VM_group
NetworkWatcher_canadacentral	Network Watcher	NetworkWatcherRG
R-DataCollection	Data collection rule	Romeo-VM_group
Romeo-VM	Virtual machine	Romeo-VM_group
Romeo-VM-ip	Public IP address	Romeo-VM_group
Romeo-VM-nsg	Network security group	Romeo-VM_group
Romeo-VM-vnet	Virtual network	Romeo-VM_group
romeo-vm130_z1	Network Interface	Romeo-VM_group
Romeo-VM_disk1_3bdbc4a15a85465ba356f3c838bc329d	Disk	ROME-VM_GROUP
Romeo-VM_key	SSH key	Romeo-VM_group

< Previous Page 1 of 1 Next > Showing 1 to 10 of 10 records.

Delete Resources

The selected resources along with their related resources and contents will be permanently deleted. If you are unsure of the selected resource dependencies, navigate to the individual resource page to perform the delete operation. More details of the resource dependencies are available in the manage experience.

Resources to be deleted (10)

Name	Resource type	
LogAnalytics	Log Analytics workspace	Remove
NetworkWatcher_canadacentral	Network Watcher	Remove
R-DataCollection	Data collection rule	Remove
Romeo-VM	Virtual machine	Remove
Romeo-VM-ip	Public IP address	Remove
Romeo-VM-nsg	Network security group	Remove
Romeo-VM-vnet	Virtual network	Remove
romeo-vm130_z1	Network Interface	Remove
Romeo-VM_disk1_3bdbc4a15a85465ba356f3c838bc329d	Disk	Remove
Romeo-VM_key	SSH key	Remove

☒ Apply force delete for selected Virtual machines and Virtual machine scale sets

Enter "delete" to confirm deletion *

delete

Delete Cancel

References

[Azure Monitor Logging using a Log Analytics Workspace](#)