MINOR PROJECT REPORT
Infrastructure Deployment & Logging (Azure Cloud)

Project Information

Project Title: Infrastructure Deployment & Basic Logging Setup on Microsoft Azure
Course: B.TECH
Institution: RCET

Student Details

Student Name(s) -Lakshya Borikar
ERP / Roll No: 6604273
Azure Tenant Name: 6604273_lakshya_G1
Assigned Company Name: DarkNova_Systems
Azure Resource Group Name (Exact): DarkNova_Systems

Project Overview

This project focuses on deploying a small-scale enterprise infrastructure on Microsoft Azure using Linux-based virtual machines. The environment is intentionally left unsecured to allow future attack simulation and SOC analysis.

Project Objectives

- Deploy enterprise infrastructure on Azure
- Configure VNet, Subnets, and Virtual Machines
- Enable basic logging
- Centralize logs using SIEM
- Maintain intentional vulnerabilities

Azure Resource Group Details

Resource Group Name: DarkNova_Systems
Subscription: Azure for Students
Region: east asia

Network Architecture

VNet Name: DarkNova_Systems_VNet
Address Space: 10.0.0.0/16
Subnets:
- Internal-Subnet (10.0.1.0/24)
- DMZ-Subnet (10.0.2.0/24)

Virtual Machine Inventory

Internal-Server: FreeIPA + File Server
Web-Server: Apache Web Server
SIEM-Server: Wazuh SIEM

Logging Configuration

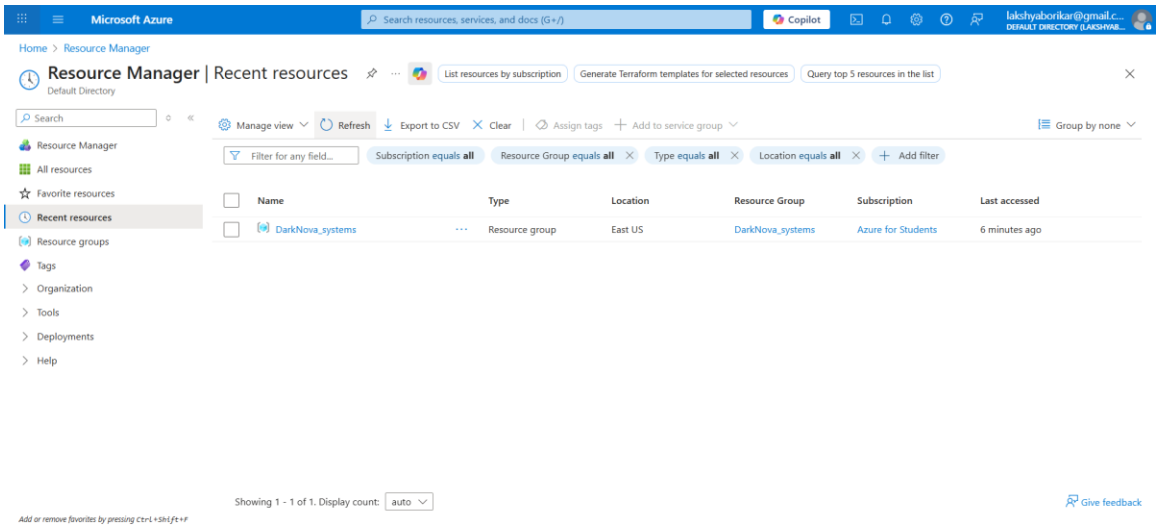
Enabled Logs:
- Syslog
- Authentication Logs
- Apache Access & Error Logs
- Auditd (default)

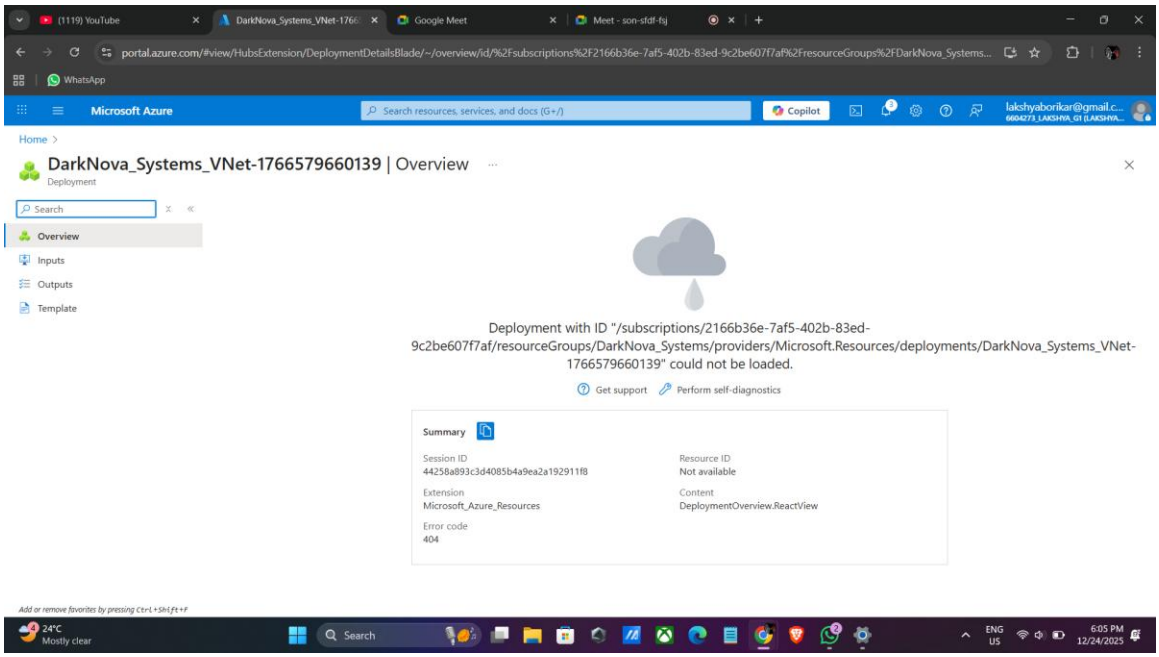
Security Configuration

No firewall hardening, SSH restrictions, or password policies were applied intentionally.

Conclusion

The project successfully deployed a vulnerable cloud infrastructure with centralized logging ready for attack simulation and SOC analysis.

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DarkNova_Systems_VNet-1766579660139 | Overview
Deployment
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Overview
Inputs
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Deployment with ID "/subscriptions/2166b36e-7af5-402b-83ed-9c2be607f7af/resourceGroups/DarkNova_Systems/providers/Microsoft.Resources/deployments/DarkNova_Systems_VNet-1766579660139" could not be loaded.
Get support
Perform self-diagnostics
Summary
Session ID
44258a893c3d4085b4a9ea2a192911f8
Resource ID
Not available
Extension
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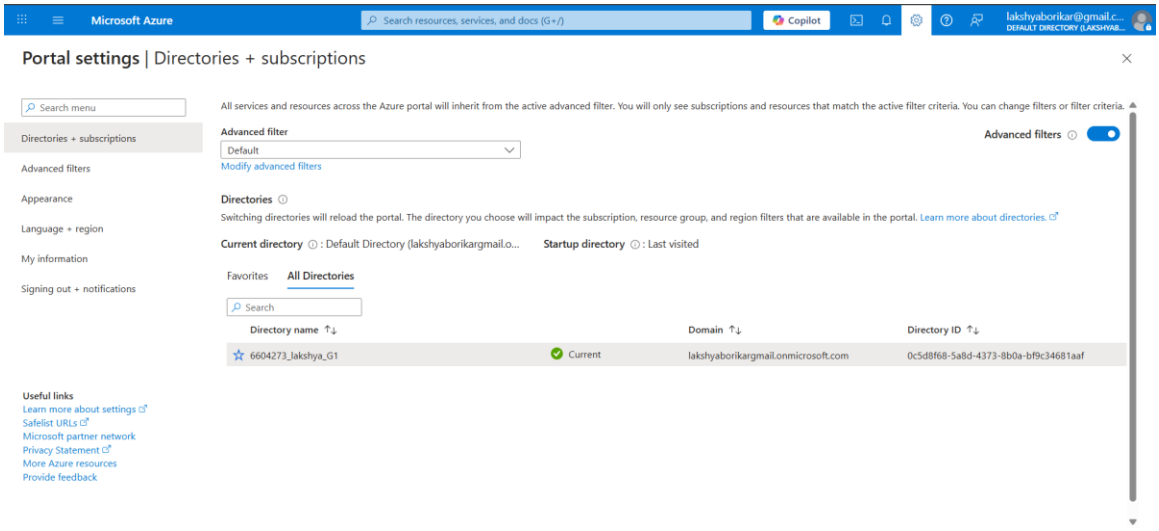
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DEFAULT DIRECTORY (LAKSHYAB...
Portal settings | Directories + subscriptions
Search menu
Directories + subscriptions
Advanced filters
Appearance
Language + region
My information
Signing out + notifications
All services and resources across the Azure portal will inherit from the active advanced filter. You will only see subscriptions and resources that match the active filter criteria. You can change filters or filter criteria.
Advanced filter
Default
Modify advanced filters
Advanced filters
Directories
Switching directories will reload the portal. The directory you choose will impact the subscription, resource group, and region filters that are available in the portal. Learn more about directories.
Current directory : Default Directory (lakshyaborikargmail.o...
Startup directory : Last visited
Favorites
All Directories
Search
Directory name
Domain
Directory ID
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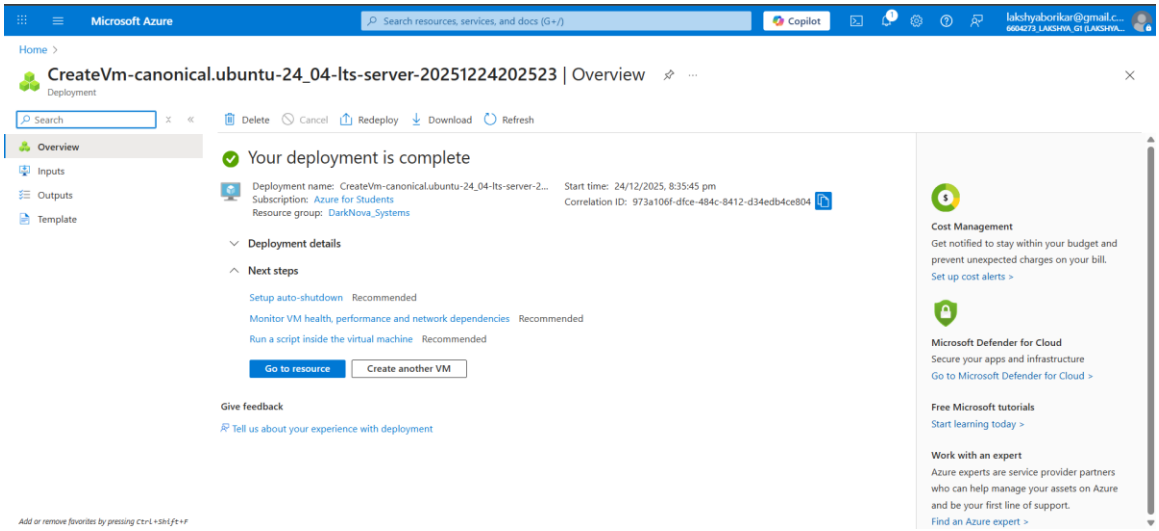
Useful links
Learn more about settings
Safelist URLs
Microsoft partner network
Privacy Statement
More Azure resources
Provide feedback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Home
CreateVm-canonical.ubuntu-24_04-lts-server-20251224202523 | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2...
Subscription: Azure for Students
Resource group: DarkNova_Systems
Start time: 24/12/2025, 8:35:45 pm
Correlation ID: 973a106f-dfce-484c-8412-d34edb4ce804
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
Give feedback
Tell us about your experience with deployment
Cost Management
Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >
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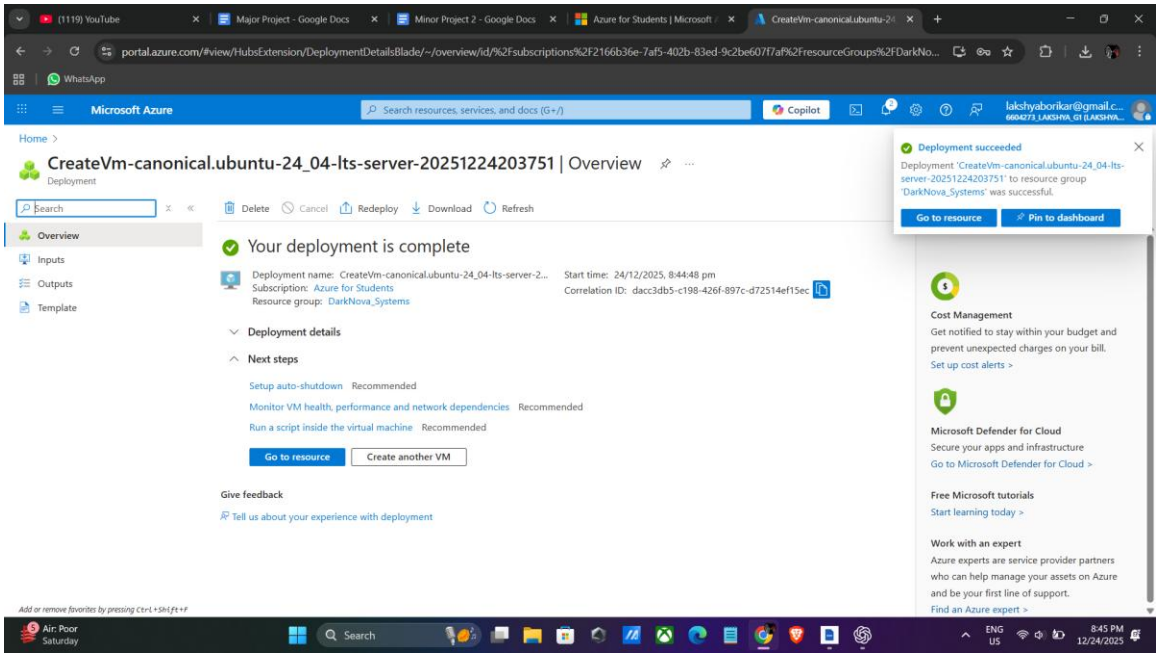
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Minor Project 2 - Google Docs
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CreateVm-canonical.ubuntu-24
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Home
CreateVm-canonical.ubuntu-24_04-lts-server-20251224203751 | Overview
Deployment
Deployment succeeded
Deployment 'CreateVm-canonical.ubuntu-24_04-lts-server-20251224203751' to resource group 'DarkNova_Systems' was successful.
Go to resource
Pin to dashboard
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name: CreateVm-canonical.ubuntu-24_04-lts-server-2...
Subscription: Azure for Students
Resource group: DarkNova_Systems
Start time: 24/12/2025, 8:44:48 pm
Correlation ID: dacc3db5-c198-426f-897c-d72514ef15ec
Deployment details
Next steps
Setup auto-shutdown Recommended
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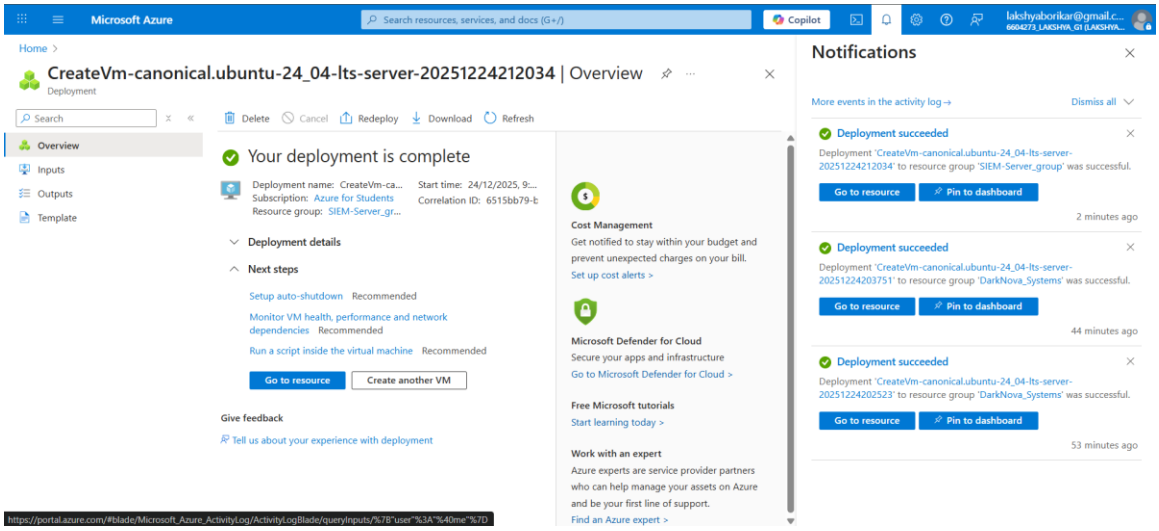
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Home >
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Deployment
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Your deployment is complete
Deployment name: CreateVm-ca...
Start time: 24/12/2025, 9:...
Subscription: Azure for Students
Correlation ID: 6515bb79-b
Resource group: SIEM-Server_gr...
Deployment details
Next steps
Setup auto-shutdown Recommended
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Notifications
More events in the activity log →
Dismiss all
Deployment succeeded
Deployment 'CreateVm-canonical.ubuntu-24_04-lts-server-20251224212034' to resource group 'SIEM-Server_group' was successful.
Go to resource
Pin to dashboard
2 minutes ago
Deployment succeeded
Deployment 'CreateVm-canonical.ubuntu-24_04-lts-server-20251224203751' to resource group 'DarkNova_Systems' was successful.
Go to resource
Pin to dashboard
44 minutes ago
Deployment succeeded
Deployment 'CreateVm-canonical.ubuntu-24_04-lts-server-20251224202523' to resource group 'DarkNova_Systems' was successful.
Go to resource
Pin to dashboard
53 minutes ago
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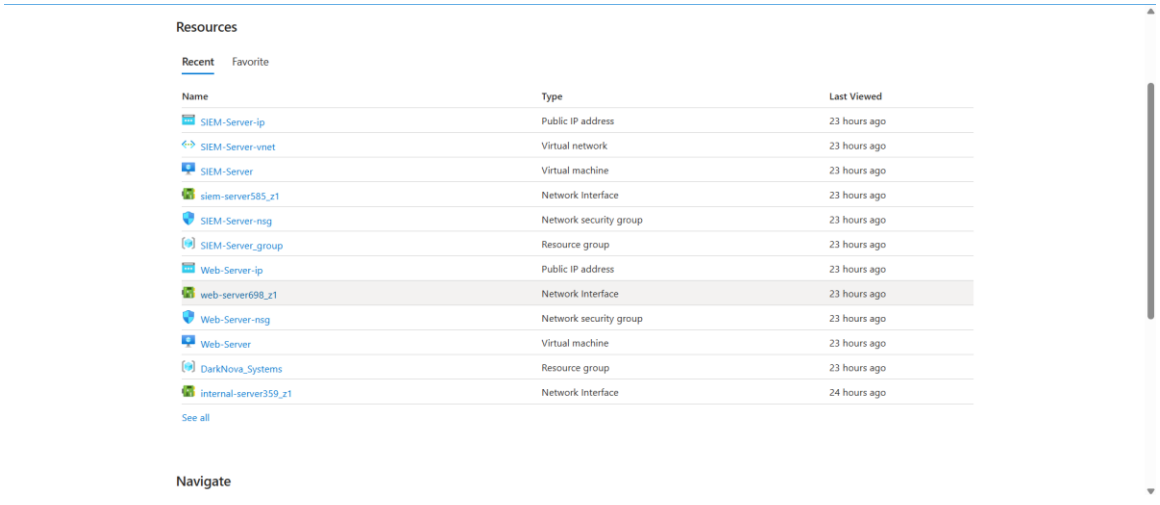
Resources
Recent
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Name
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SIEM-Server-ip
Public IP address
23 hours ago
SIEM-Server-vnet
Virtual network
23 hours ago
SIEM-Server
Virtual machine
23 hours ago
siem-server585_z1
Network Interface
23 hours ago
SIEM-Server-nsg
Network security group
23 hours ago
SIEM-Server_group
Resource group
23 hours ago
Web-Server-ip
Public IP address
23 hours ago
web-server698_z1
Network Interface
23 hours ago
Web-Server-nsg
Network security group
23 hours ago
Web-Server
Virtual machine
23 hours ago
DarkNova_Systems
Resource group
23 hours ago
internal-server359_z1
Network Interface
24 hours ago
See all
Navigate