

Lab 11: Implement Monitoring

Task 1: Use a template to provision an infrastructure.

The screenshot shows the 'Custom deployment' configuration page in the Microsoft Azure portal. The page is titled 'Custom deployment' and has a subtitle 'Deploy from a custom template'. It contains a list of configuration parameters under the 'Basics' section, each with a corresponding value. At the bottom, there are three buttons: 'Previous', 'Next', and 'Create'.

Parameter	Value
Subscription	Azure for Students
Resource group	az104-rg11
Region	East US
Admin Username	localadmin
Admin Password	*****
Vm Name Prefix	az104-vm
Pip Name Prefix	az104-pip
Nic Name Prefix	az104-nic
Image Publisher	MicrosoftWindowsServer
Image Offer	WindowsServer
Image SKU	2019-Datacenter
Vm Size	Standard_D2s_v3
Virtual Network Name	az104-vnet
Address Prefix	10.0.0/24
Virtual Network Resource Group	az104-rg11
Subnet0Name	subnet0
Subnet0Prefix	10.0.0/26
Nsg Name	az104-nsg01

The screenshot shows the 'Overview' page for the resource group 'az104-rg11' in the Microsoft Azure portal. The page displays a list of resources provisioned from the template, including a network interface, a network security group, a public IP address, a virtual machine, a disk, a virtual network, and a storage account. The resources are listed in a table with columns for Name, Type, and Location.

Name	Type	Location
az104-nic0	Network Interface	East US
az104-nsg01	Network security group	East US
az104-pip0	Public IP address	East US
az104-vm0	Virtual machine	East US
az104-vm0_disk1_73c8440443784db882523f9d3481c9f5	Disk	East US
az104-vnet	Virtual network	East US
az10411ugwdwe63xun7e	Storage account	East US

Task 2: Create an alert.

Task 3: Configure action group notifications.

Microsoft

Search resources, services, and docs (G+/I)

Copilot

[Home](#) > [Monitor | Alerts](#) > [Create an alert rule](#) >

Create action group ...

BasicsNotificationsActionsTagsReview + create

This is a summary of your action group. Please review to ensure the information is correct and consider [Azure Monitoring Pricing](#) and the [Azure Privacy Statement](#).

Basics

Subscription

Azure for Students

Resource group

az104-rg11

Region

global

Action group name

Alert the operations team

Display name

AlertOpsTeam

Notifications

Notification type

Name

Selected

Email/SMS message/Push/Voice

VM was deleted

Email

Actions

None

Microsoft

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[Home](#) > [Monitor | Alerts](#) >

Create an alert rule ...

ScopeConditionActionsDetailsTagsReview + create

Scope

Resource

Azure for Students

az104-rg11

Condition

Condition preview

Whenever the Activity Log has an event with Category='Administrative', Signal name='Delete Virtual Machine (Virtual Machines)'

Actions

Action group name

Contain actions

Alert the operations team

1 Email

Details

Project details

Subscription

Azure for Students

Task 4: Trigger an alert and confirm it is working.

Azure Monitor alert 'VM was deleted' was activated for 'az104-vm0' at March 26, 2025 12:40 UTC

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

Activity log alert	VM was deleted
Time	March 26, 2025 12:40 UTC
Category	Administrative
Operation name	Microsoft.Compute/virtualMachines/delete
Correlation ID	d7484bc9-4a28-4551-8da7-9038aebb6e2a
Level	Informational
Resource ID	/subscriptions/16fcb738-3661-4bf0-8442-5f3f16e61ad0/resourcegroups/az104-rg11/providers/Microsoft.Compute/virtualMachines/az104-vm0
Caller	Oleksandr.Kozak.IT.2022@edu.lpnu.ua

Microsoft Azure

Search resources, services, and docs (G+/)

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Oleksandr.Kozak.IT.2022...
НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ...

Home > Monitor

Monitor | Alerts

Microsoft

Search

View as timeline (preview)

Create

Alert rules

Action groups

Alert processing rules

Prometheus rule groups

Overview

Activity log

Alerts

Metrics

Logs

Change Analysis

Service health

Workbooks

Investigator (preview)

Subscription : 16fcb738-3661-4bf0-8442-5f3f16e61ad0

Add filter

More (3)

Total alerts

Critical

Error

Warning

Informational

Verbose

No grouping

Name ↑↓	Severity ↑↓	Affected resource ↑↓	Alert condition ↑↓	User response ↑↓	Fire time ↑↓	
<input type="checkbox"/> VM was deleted	4 - Verbose	az104-vm0	Fired	New	3/26/2025, 2:45 PM	...
<input type="checkbox"/> VM was deleted	4 - Verbose	az104-vm0	Fired	New	3/26/2025, 2:45 PM	...
<input type="checkbox"/> VM was deleted	4 - Verbose	az104-vm0	Fired	New	3/26/2025, 2:45 PM	...

Task 5: Configure an alert processing rule.

Microsoft

Search resources, services, and docs (G+)

Copilot

Home

Monitor

Alerts

Alert processing rules

Create an alert processing rule

Scope

Rule settings

Scheduling

Details

Tags

Review + create

Here's a summary of your alert processing rule.
When you review it, keep our [Privacy statement](#) in mind.

Scope

Resource

Azure for Students

az104-rg11

Rule settings

Rule type

Suppress notifications

Scheduling

Apply the rule

At a specific time

Schedule

From 03/26/2025 at 10:00 PM to 03/27/2025 at 7:00 AM
(UTC+02:00 Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius)

Create

Previous

Task 6: Use Azure Monitor log queries.

Micro

Search resources, services, and docs (G+)

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Home

Monitor

Monitor | Logs

New Query 1*

+

Run

Time range: Set in query

Show: 1000

KQL mode

```
1 // Count heartbeats
2 // Count all computers heartbeats from the last hour.
3 // Count computers heartbeats in the last hour.
4 // Normally, agents on VMs generate Heartbeat event every minute.
5 Heartbeat
6 | where TimeGenerated > ago(1h)
7 | summarize count() by Computer
```

Results

Chart

Computer	count_
> az104-vm0	8

