



# Stories 21: Azure Monitoring and Alerting service

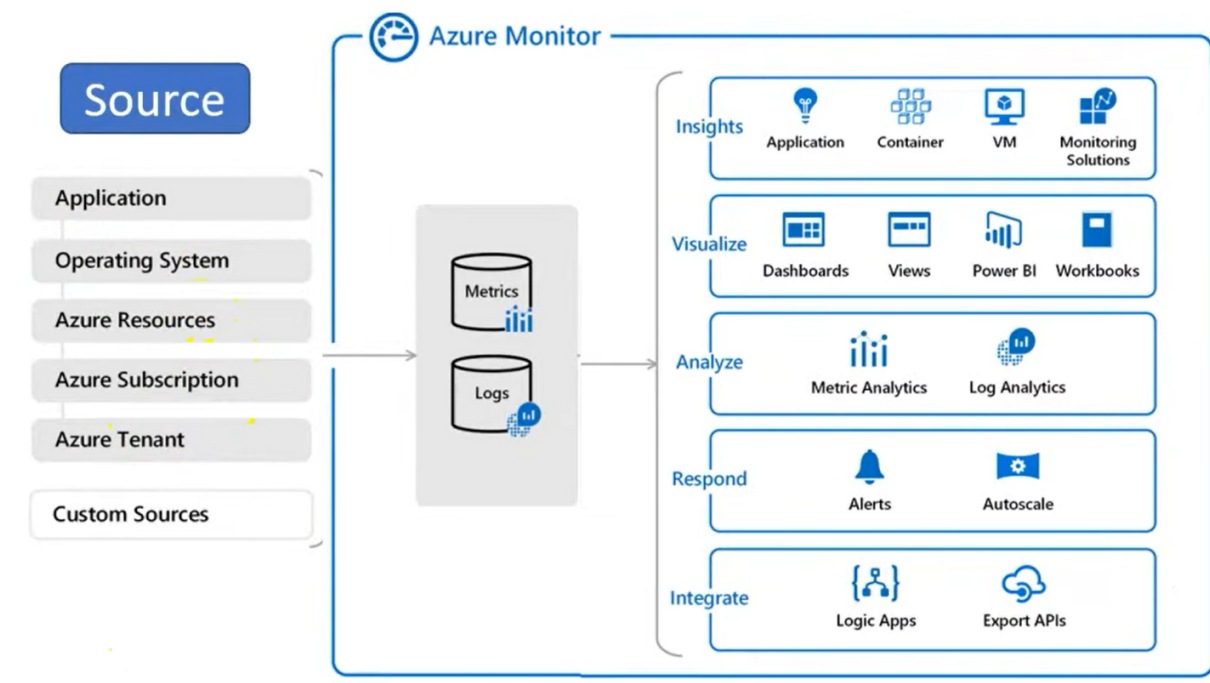
Azure Monitor is a comprehensive monitoring solution provided by Microsoft Azure for applications, infrastructure, and network resources hosted on the Azure cloud platform. It helps you gain insights into the performance and health of your applications and services, enabling you to detect and diagnose issues quickly. Azure Monitor encompasses various services and features, including:

1. **Metrics:** Azure Monitor collects and stores metrics such as CPU usage, memory usage, and network traffic from your Azure resources. These metrics can be used to create charts, set up alerts, and analyze trends over time.
2. **Logs:** Azure Monitor allows you to collect, analyze, and act on telemetry data from different sources, including application logs, system logs, and custom logs. This is achieved through Azure Monitor Logs and Azure Monitor Metrics.
3. **Application Insights:** This service is part of Azure Monitor and is focused on application performance management (APM). It helps you detect and diagnose issues in your web applications and services by providing detailed telemetry data, including request rates, response times, and failure rates.
4. **Azure Monitor for Containers:** If you are using containerized applications with Kubernetes or Azure Kubernetes Service (AKS), Azure Monitor for Containers can provide monitoring and diagnostics for your containerized workloads.
5. **Azure Monitor for VMs:** This service allows you to monitor the performance and health of your virtual machines (VMs) by collecting data on CPU, disk, memory, and network usage. It provides insights into the performance of both Windows and Linux VMs.
6. **Alerts:** Azure Monitor enables you to set up alerts based on predefined conditions or custom queries. This helps you proactively respond to issues

before they impact your users.

7. **Dashboards:** You can create custom dashboards to visualize and monitor key metrics and logs across different Azure resources. This allows you to have a centralized view of your applications and infrastructure.

**Lab : Configure Alerts for VM if cpu utilization goes beyond 80 Percent sent a email notification to user**



Solution:

## Goto Azure monitoring Service

### Create a alert rule

Home > Monitor

**Monitor** Alerts

Search

Overview  
Activity log  
**Alerts**  
Metrics  
Logs  
Change Analysis  
Service health  
Workbooks

Insights

- Applications
- Virtual Machines
- Storage accounts
- Containers
- Networks
- SQL (preview)
- Azure Cosmos DB
- Key Vaults
- Azure Cache for Redis
- Azure Data Explorer Clusters
- Log Analytics workspaces
- Azure Stack HCI
- Service Bus (preview)

View as timeline (preview) | + Create | Alert rules | Action groups | Alert processing rules

New: View alerts visualized on the timeline. You can switch between views anytime.

Search

Subscription : b7ff9584-8c96-405b-9679-3146ee164646 | Time range

Total alerts: 0  
Critical: 0  
Error: 0  
Warning: 0  
Informational: 0  
Verbose: 0

Name ↑↓	Severity ↑↓	Affected resource ↑↓
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No alerts found. Try changing the scope or severity.

## Add scope

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

### Create an alert rule ...

Scope Condition Actions Details Tags Review + create

Create an alert rule to identify and address issues when important conditions are found in your monitoring data. [Learn more](#)

+ Select scope

Resource

Hierarchy

*No resource selected yet*

## Select your resource or virtual machine

## Select a resource



Browse

Recent

Resource types

All resource types

Locations

All locations

Search to filter items...

Resource	Resource type	Location
<input type="checkbox"/> myRG	Resource group	-
<input type="checkbox"/> myvault	Recovery Services vault	East US
<input checked="" type="checkbox"/> test	Virtual machine	East US
<input type="checkbox"/> test-ip	Public IP address	East US
<input type="checkbox"/> test-nsg	Network security group	East US
<input type="checkbox"/> test-vnet	Virtual network	East US
<input type="checkbox"/> test676_z1	Network interface	East US
<input type="checkbox"/> test_disk1_062c9ef54acb4e6180ad2c300d13984f	Disk	East US
<input type="checkbox"/> >  NetworkWatcherRG	Resource group	-

^ **Selected resources** 1 virtual machine

test

Virtual machine

East US



Apply

Cancel

Clear all selections





## Select add condition

## Create an alert rule ...

Scope Condition Actions Details Tags Review + create

Create an alert rule to identify and address issues when important conditions are found in your monitoring data. [Learn more](#)

+ Select scope

Resource	Hierarchy	
 test	 Pay-As-You-Go >  myRG	

Review + create

Previous

Next: Condition >

## Create an alert rule ...

Scope Condition Actions Details Tags Review + create


Configure when the alert rule should trigger by selecting a signal and defining its logic.

Signal name \* ⓘ

 Percentage CPU 

[See all signals](#)

### Alert logic

 We have set the condition configuration automatically based on popular settings for this metric. Please review and make changes as needed.

Threshold ⓘ

☒ Static ☐ Dynamic

Aggregation type ⓘ

Average 

Operator ⓘ

Greater than 

Threshold value \* ⓘ

80 %

### When to evaluate

Check every ⓘ

1 minute 

Lookback period ⓘ

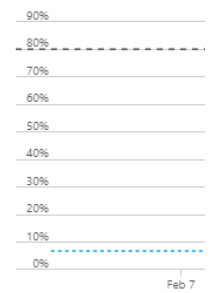
5 minutes 

[+ Add condition](#)

### Preview

Whenever the average Perce

Time range : **Over the last 1**



Now apply Stress or Load on CPU for testing

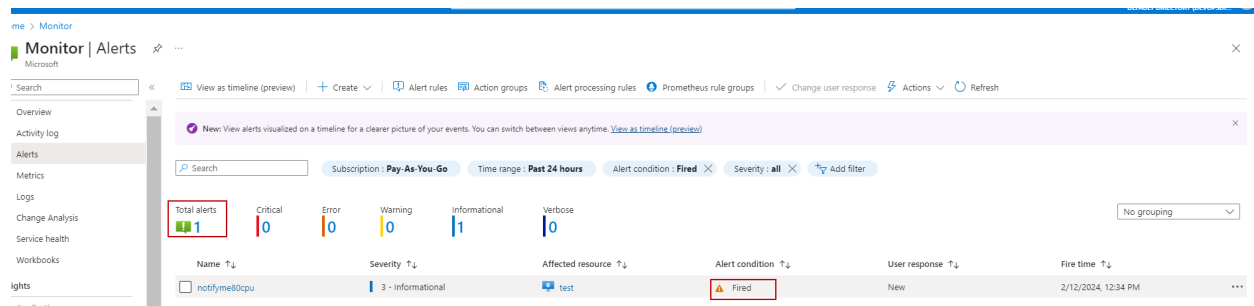
Top command to check the cpu

Increase CPU load

command

yes > /dev/null &

# Triggered or Fired



# Email Received



Fired:Sev3 Azure Monitor Alert notifyme80cpu on test ( microsoft.compute/virtualmachines ) at 2/12/2024 7:04:12 AM



Microsoft Azure <azure-noreply@microsoft.com>  
12:34 PM



To: mubeen@digital-edify.com



Fired:Sev3 Azure Monitor Alert notifyme80cpu on test ( microsoft.compute/virtualmachines ) at 2/12/2024 7:04:12 AM

[View the alert in Azure Monitor >](#)

Summary

Alert name	notifyme80cpu
Severity	Sev3
Monitor condition	Fired
Affected resource	<a href="#">test</a>
Resource type	microsoft.compute/virtualmachines