Stories 21: Azure Monitoring and Alerting service

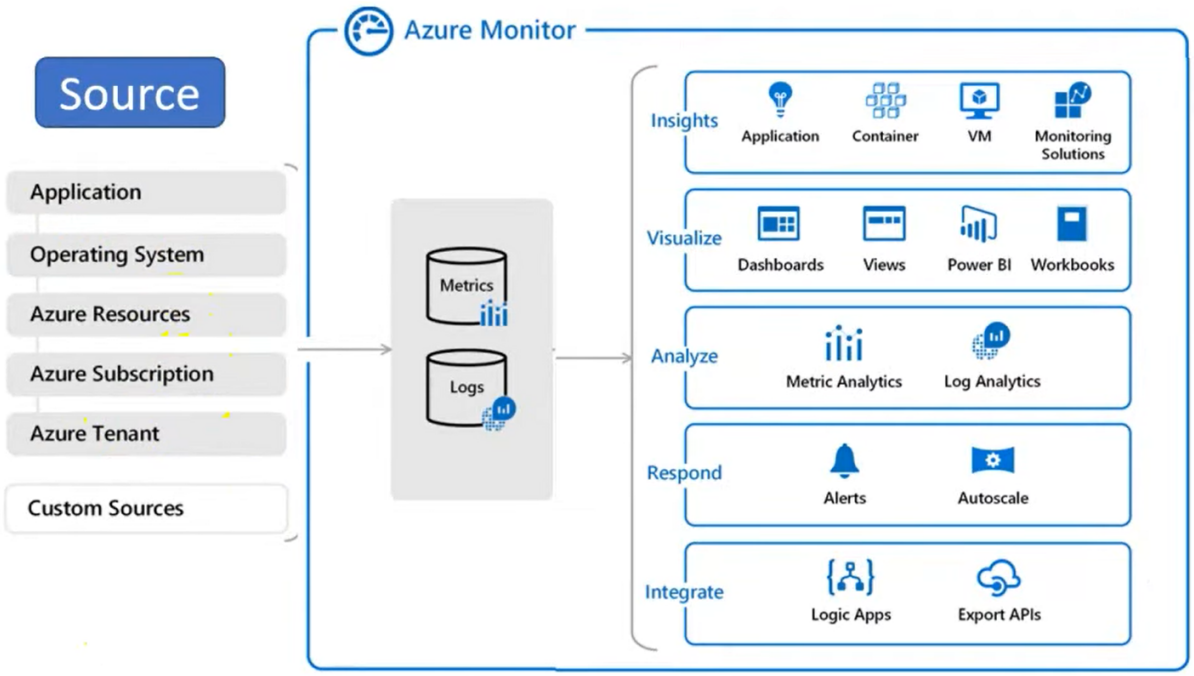
Azure Monitor is a comprehensive monitoring solution provided by Microsoft Azure for applications, infrastructure, and network resources hosted on the Azure cloud platform. It helps you gain insights into the performance and health of your applications and services, enabling you to detect and diagnose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

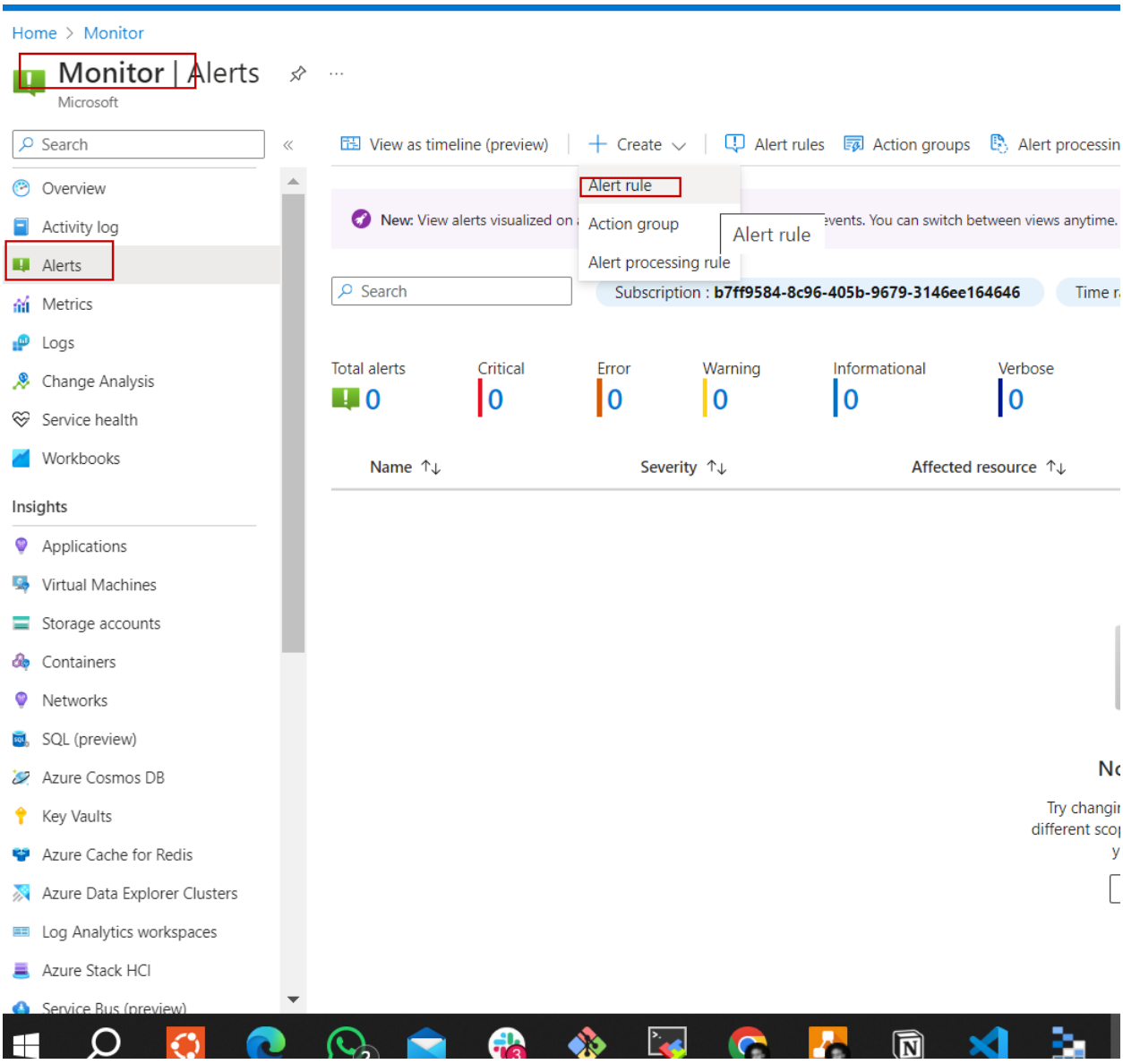
Lab : Configure Alerts for VM if cpu utilization goes beyond 80 Percent sent a email notification to user



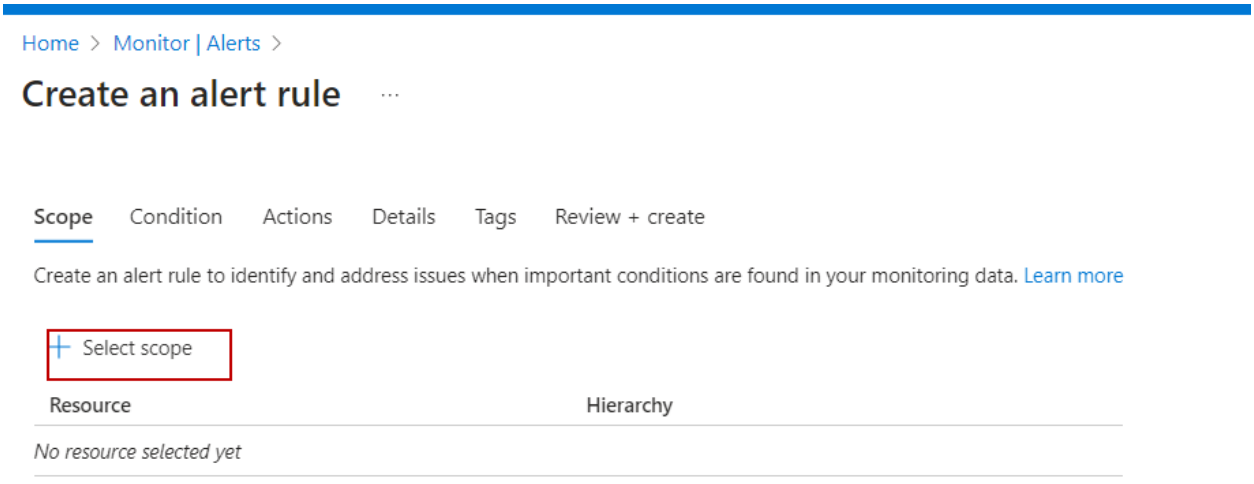
Solution:

Goto Azure monitoring Service

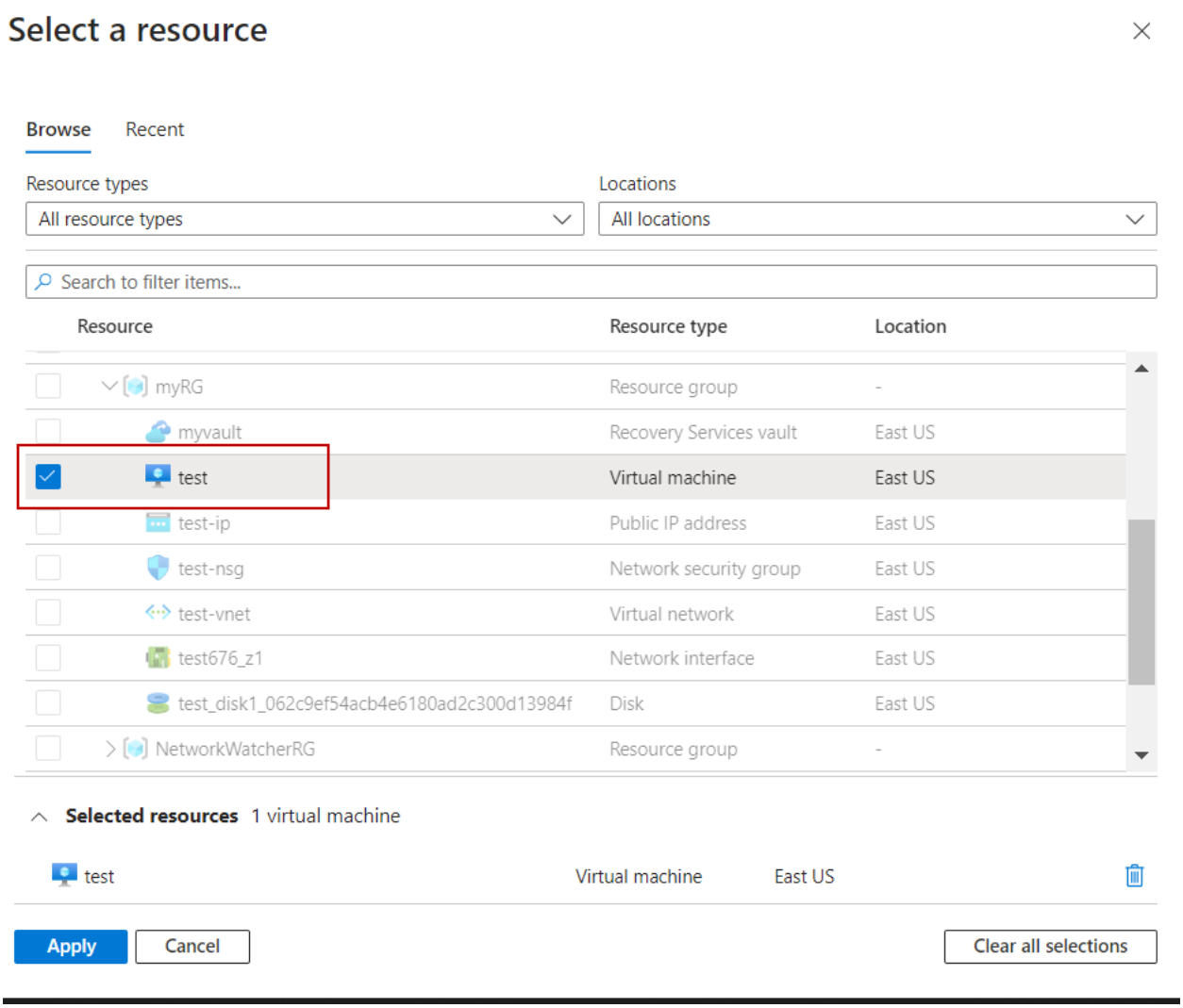
Create a alert rule



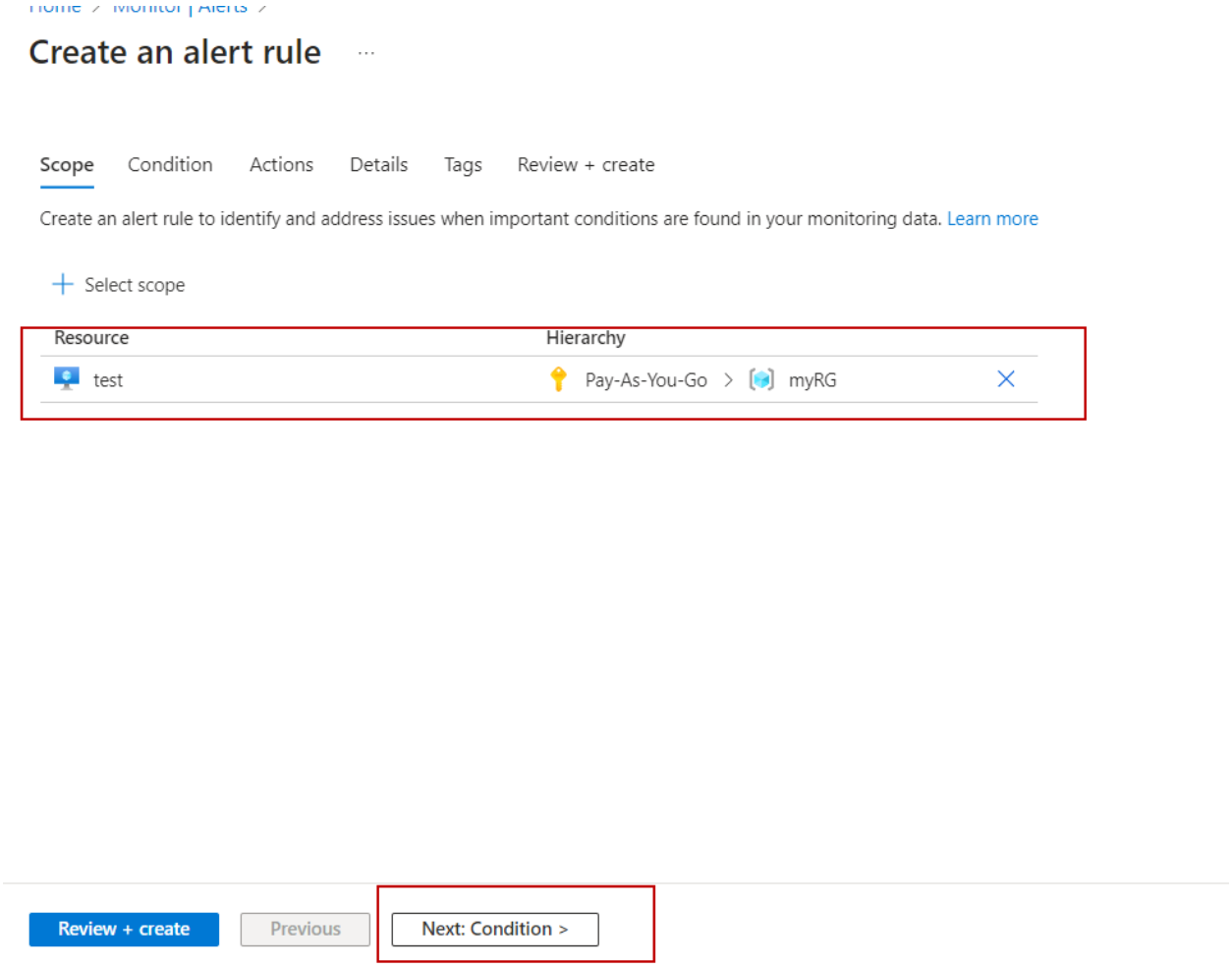
Add scope

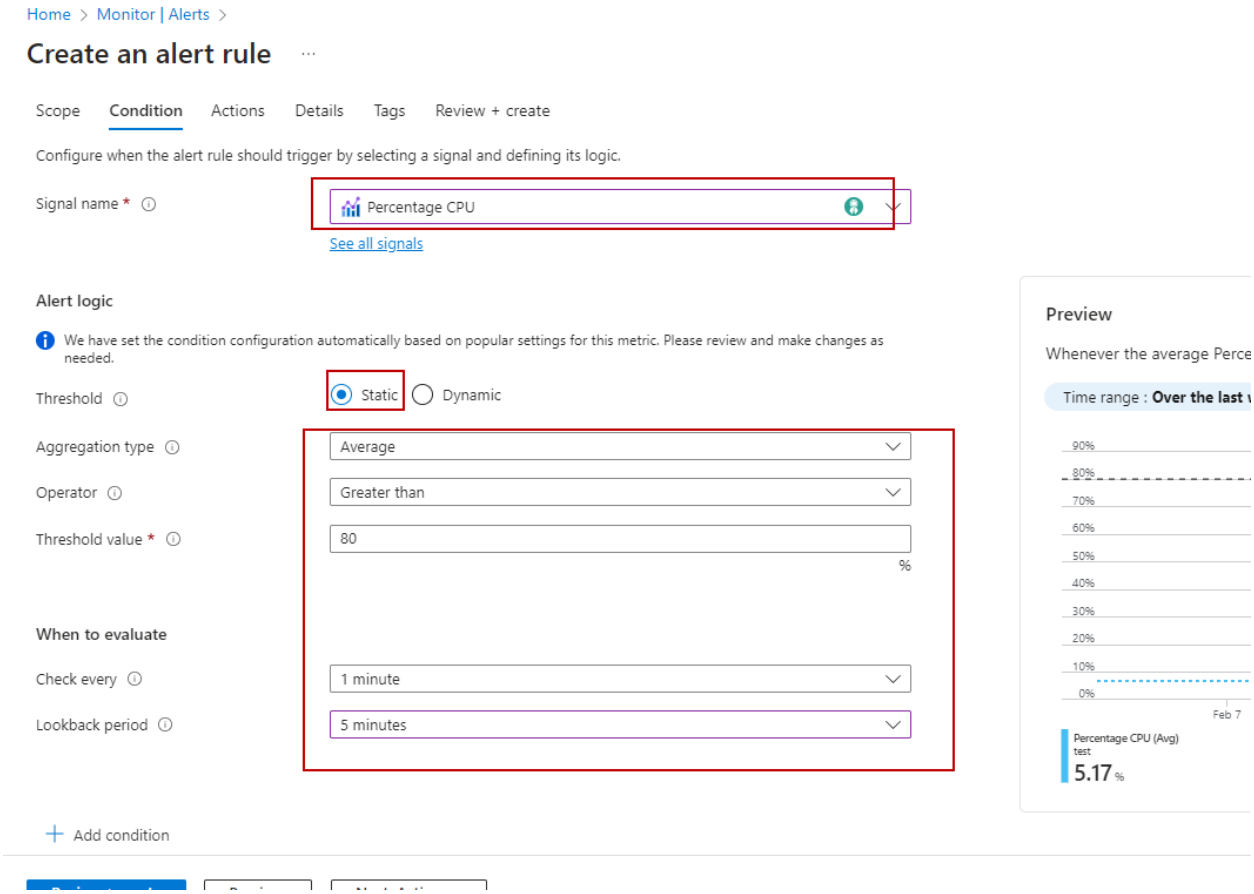


Select your resource or virtual machine



Select add condition


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
test
Pay-As-You-Go > myRG
Review + create
Previous
Next: Condition >

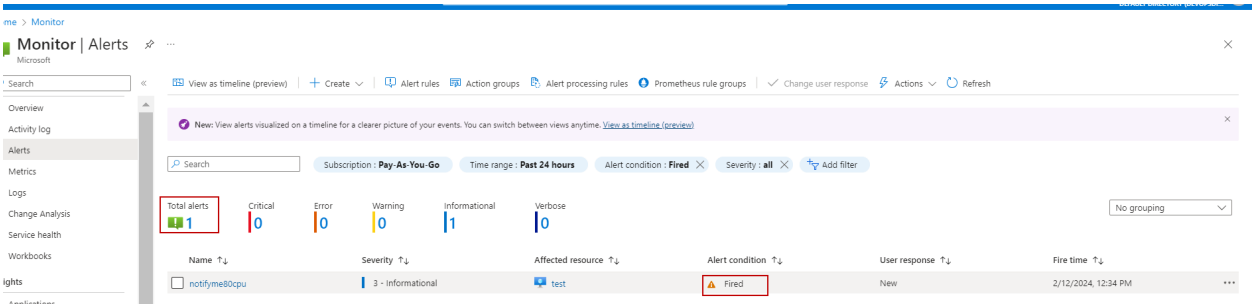


Now apply Stress or Load on CPU for testing

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

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

To: mubeen@digital-edify.com

Microsoft Azure

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	test
Resource type	microsoft.compute/virtualmachines