

Describe monitoring tools in Azure

1. Introduction

<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/1-introduction>

Introduction

Completed

In this module, you'll be introduced to tools that help you monitor your environment and applications, both in Azure and in on-premises or multicloud environments.

Learning objectives

After completing this module, you'll be able to:

- Describe the purpose of Azure Advisor.
- Describe Azure Service Health.
- Describe Azure Monitor, including Azure Log Analytics, Azure Monitor Alerts, and Application Insights.

2. Describe the purpose of Azure Advisor

<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/2-describe-purpose-of-azure-advisor>

Describe the purpose of Azure Advisor

Completed

Azure Advisor evaluates your Azure resources and makes recommendations to help you improve reliability, security, performance, and cost efficiency. Think of it as a personalized best-practices guide

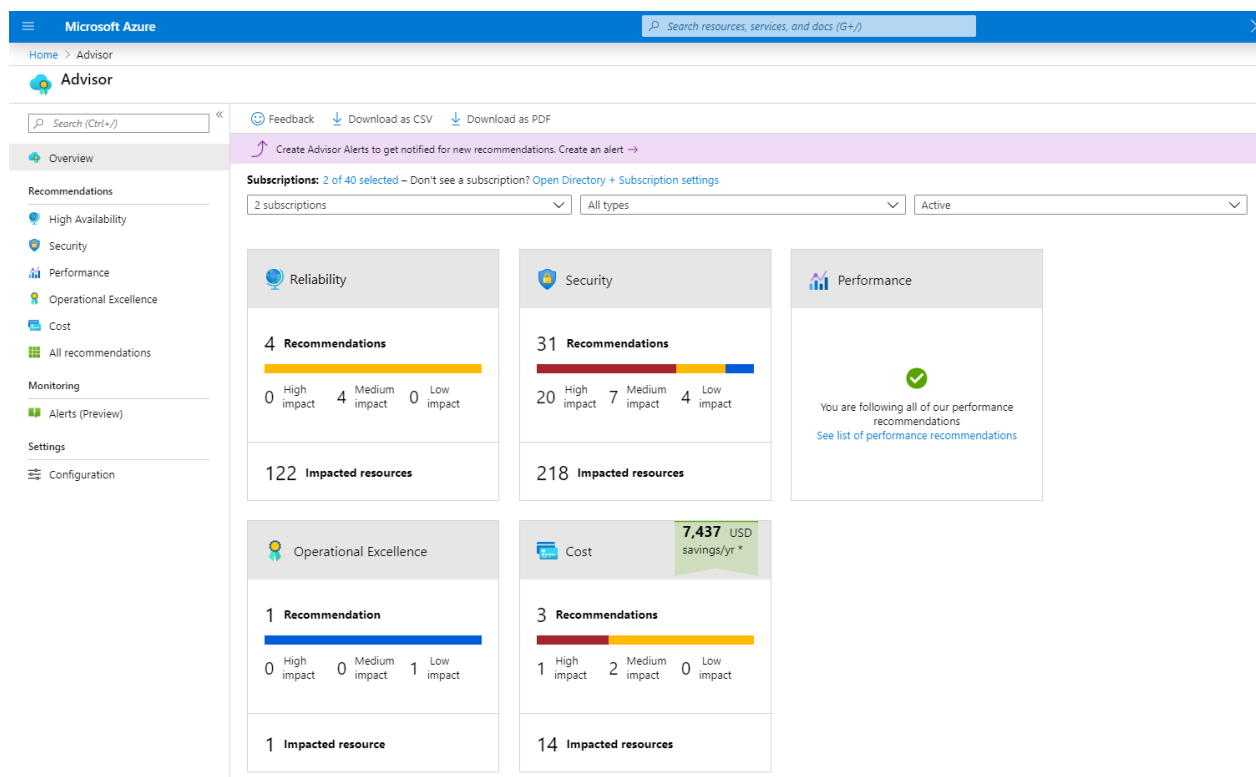
built into the Azure portal. Each recommendation includes a suggested action you can take right away, postpone, or dismiss.

You can also set up notifications so Advisor alerts you when new recommendations appear.

The Advisor dashboard displays recommendations for all your subscriptions, and you can filter by subscription, resource group, or service. Recommendations fall into five categories:

- **Reliability** helps keep your applications running by flagging configuration risks.
- **Security** detects threats and vulnerabilities that could lead to breaches.
- **Performance** identifies changes that can speed up your applications.
- **Operational Excellence** suggests workflow and deployment improvements.
- **Cost** finds ways to reduce your Azure spending.

The following image shows the Azure Advisor dashboard.



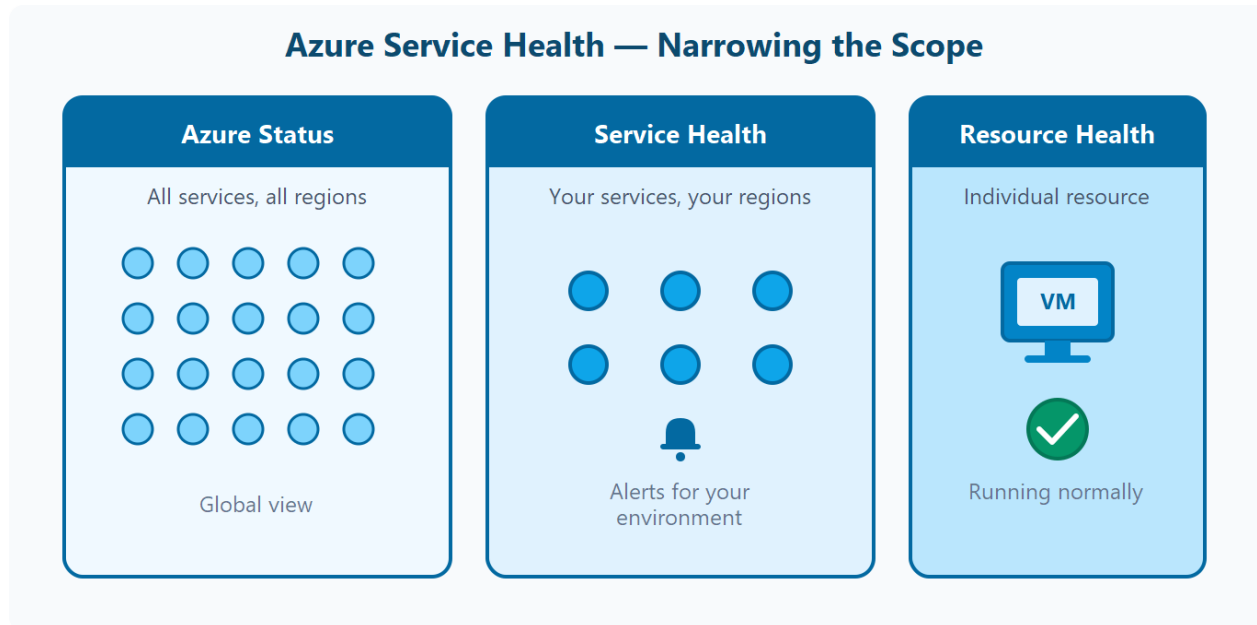
3. Describe Azure Service Health

<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/3-describe-azure-service-health>

Describe Azure Service Health

Completed

Azure Service Health helps you stay informed about the health of Azure itself and the specific resources you run. It combines three views that narrow in scope from global down to individual resources.



Three health views

- **Azure Status** gives you a global picture of Azure health across all services and regions. Check this page when you hear about a widespread outage and want to know whether it affects Azure.
- **Service Health** focuses on the Azure services and regions you actually use. Because you're signed in, Service Health knows which services matter to you and shows outages, planned maintenance, and health advisories relevant to your environment. You can set up alerts so you're notified automatically.
- **Resource Health** zooms in on individual resources, such as a specific virtual machine. It tells you whether a resource is running normally or experiencing a problem, and whether the issue is on Azure's side or yours.

Used together, these three views give you visibility from broad service events all the way down to a single resource. Historical alerts are also retained so you can spot recurring trends.

Operational value

When an event affects one of your workloads, Azure Service Health provides links to support so you can respond quickly.

4. Describe Azure Monitor

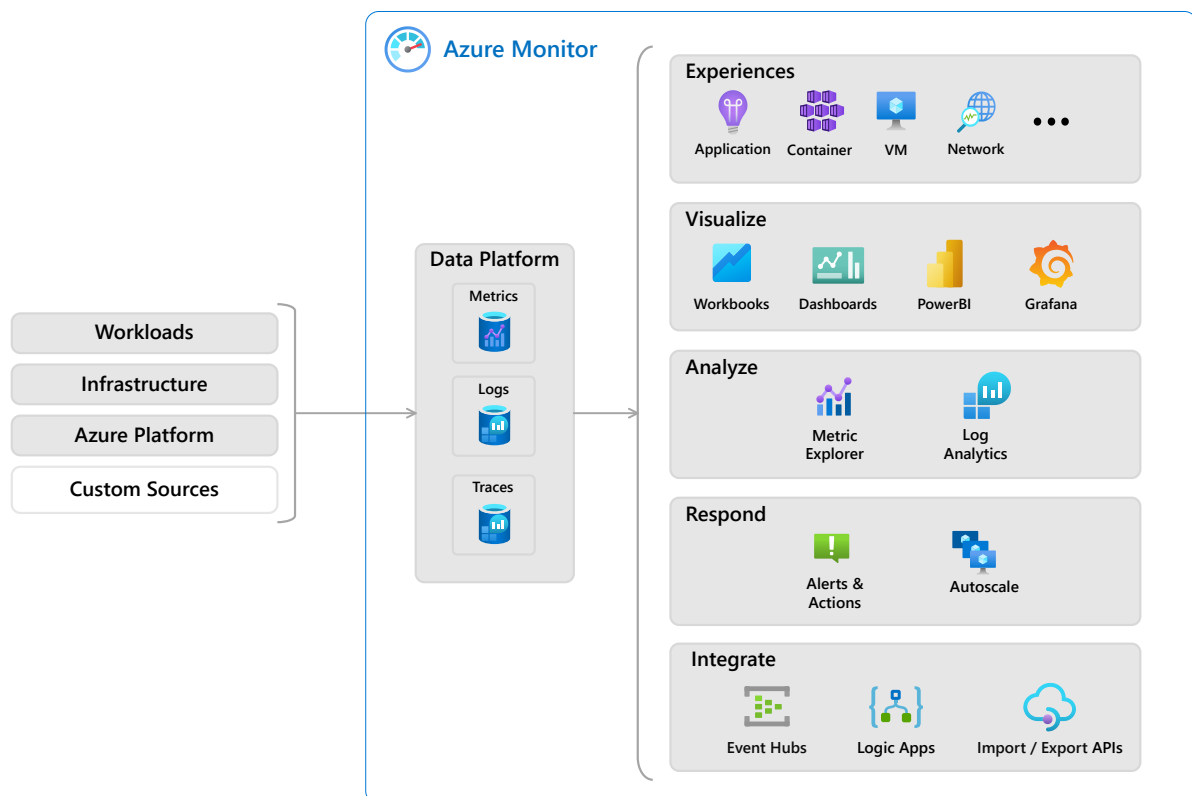
<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/4-describe-azure-monitor>

Describe Azure Monitor

Completed

Azure Monitor is a platform for collecting, analyzing, and acting on data from your Azure resources and applications. It works with Azure, on-premises, and multicloud environments.

The following diagram illustrates the breadth of Azure Monitor:



Azure Monitor gathers logs and metrics from your applications, operating systems, and network layers, stores that data centrally, and makes it available through dashboards, queries, and alerts.

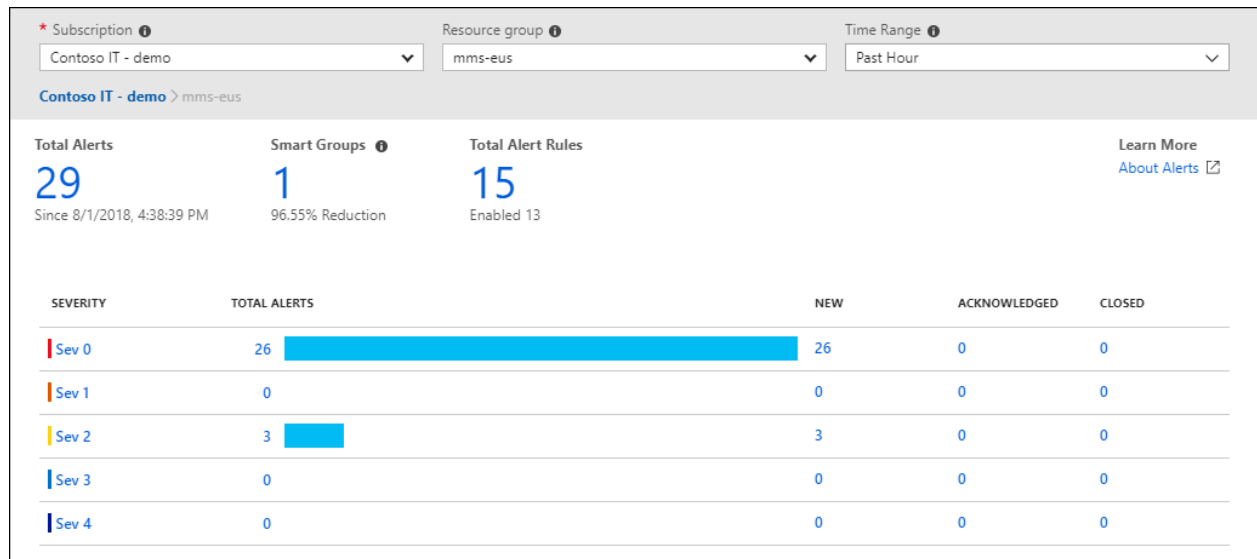
Azure Log Analytics

Log Analytics is the tool in the Azure portal where you write and run queries against the data Azure Monitor collects. You can do simple filtering, like finding all errors in the last hour, or run advanced

analytics to visualize trends over time.

Azure Monitor Alerts

Alerts notify you when Azure Monitor detects that a condition you defined has been met. You create an alert rule that specifies the condition, and an action group that controls who gets notified and what happens next.



Alerts can be metric-based or log-based. For example, a metric alert can send you an email when a VM's CPU stays above 80%, while a log alert can watch for a specific error pattern across multiple resources. Action groups are reusable across Azure Monitor, Service Health, and Azure Advisor.

Application Insights

Application Insights is an Azure Monitor feature that monitors the performance and usage of your web applications, whether they run in Azure, on-premises, or in another cloud.

You can set up Application Insights by adding an SDK to your application code or by enabling the Application Insights agent without code changes.

Application Insights can monitor:

- Request rates, response times, and failure rates
- Dependency calls and their performance
- Page load times, user counts, and session trends
- Server performance counters such as CPU, memory, and network usage

You can also set up availability tests that send synthetic requests to your application so you know it's responding, even during low-traffic periods.

5. Module assessment

<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/5-knowledge-check>

Module assessment

Completed

6. Summary

<https://learn.microsoft.com/en-us/training/modules/describe-monitoring-tools-azure/6-summary>

Summary

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In this module, you were introduced to tools that help you monitor your environment and applications, both in Azure and in on-premises or multicloud environments.

Learning objectives

You should now be able to:

- Describe the purpose of Azure Advisor.
- Describe Azure Service Health.
- Describe Azure Monitor, including Azure Log Analytics, Azure Monitor Alerts, and Application Insights.

Additional resources

The following additional resources are intended to provide more information on topics in this module or on additional topics related to this module.

- [Get started with Azure Advisor](#) is a Microsoft Learn module that helps you get started with Azure Advisor.

- [Intro to Azure Service Health](#) is a Microsoft Learn module that provides additional information about Azure Service Health.
- [Monitor the usage, performance, and availability of resources with Azure Monitor](#) is a Microsoft Learn learning path that dives deeper into Azure Monitor. It provides helpful guidance on setting up and getting the most from the Azure Monitor service.

Explore with Copilot

Tip

Try one of these prompts in Copilot Chat:

- "Design a monitoring strategy that combines Azure Advisor, Service Health, Azure Monitor, Log Analytics, Alerts, and Application Insights."
- "Walk through an outage scenario and explain which monitoring tool to check first at each stage of diagnosis and response."
- "Define an alerting model with severity levels, thresholds, action groups, and escalation paths for a production workload."