#### BAIT 3273 Cloud Computing

Week 13

# Apply and monitor infrastructure standards with Azure Policy (Continue)

# Define standard resources with Azure Blueprints

#### Azure Blueprints

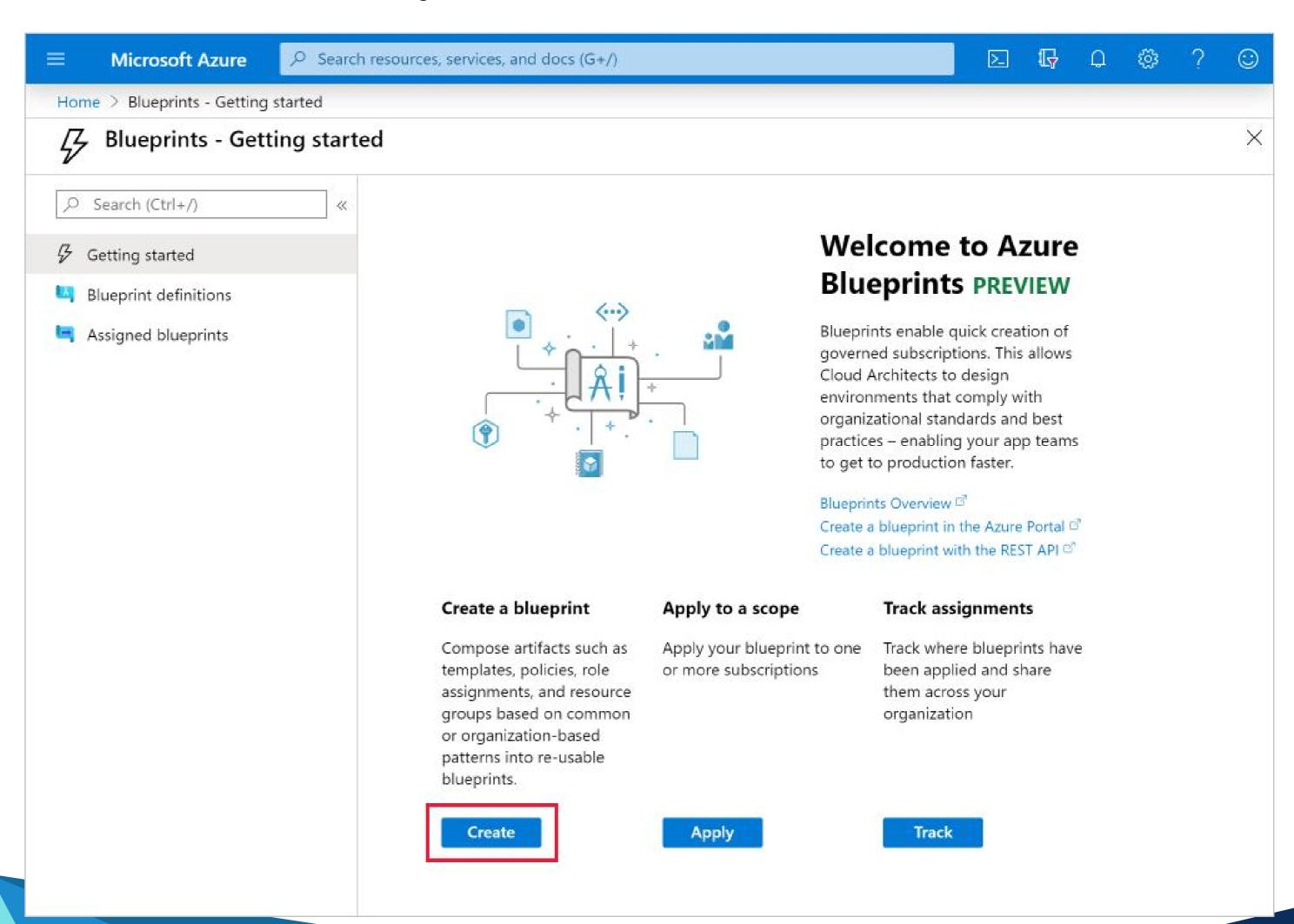
• Enables cloud architects and central IT groups to define a set of Azure resources that are repeatable.

· Can resources be implemented with compliance to an organization's standards, patterns, and requirements.

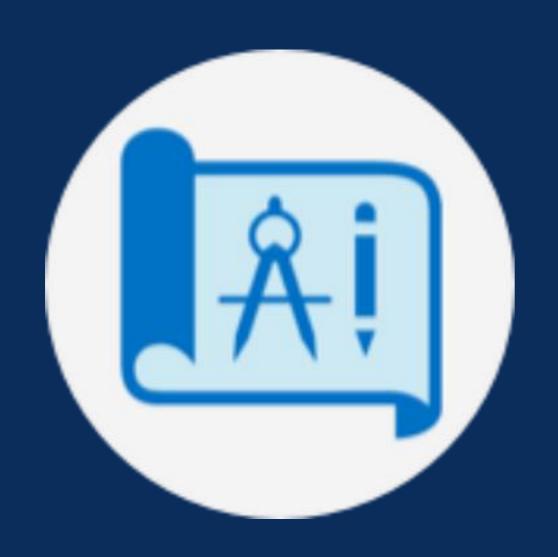


# Azure Blueprints

• A declarative way to coordinate the deployment of discrete resource templates and other artifacts.



# Azure Blueprints



Process of implementing Azure Blueprint

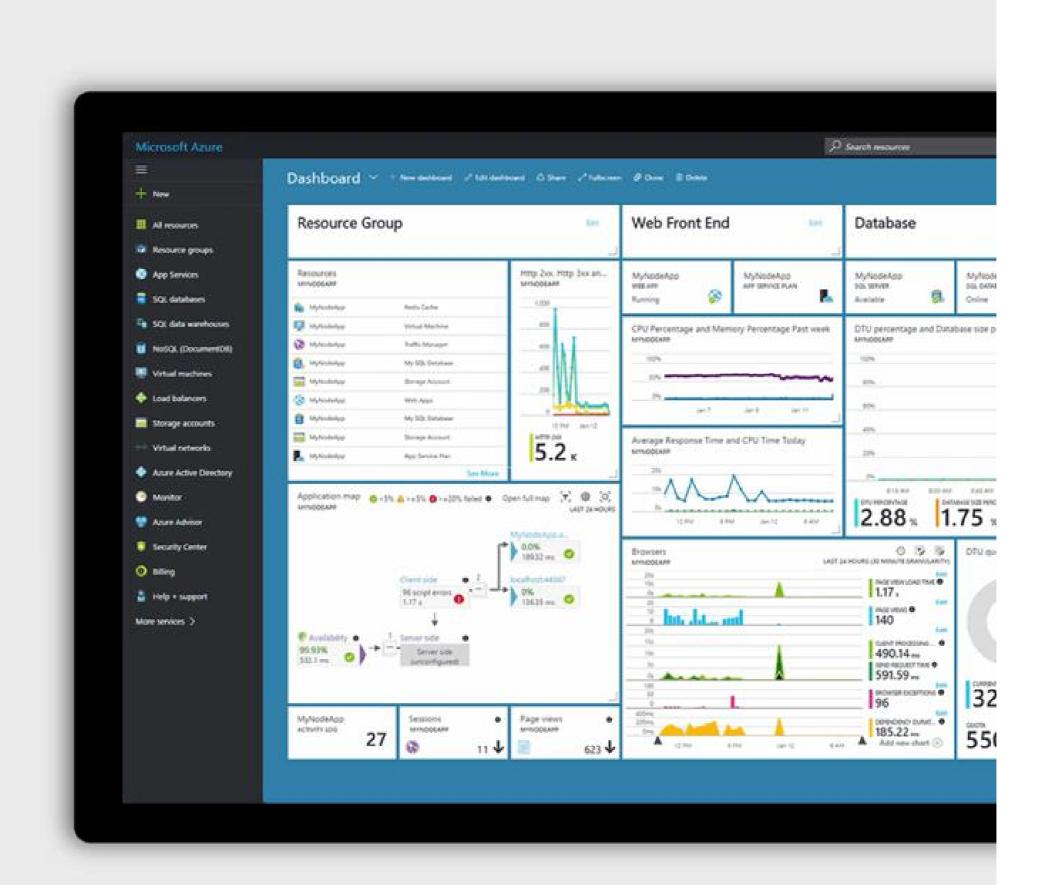
- 1. Create an Azure Blueprint
- 2. Assign the blueprint
- 3. Track the blueprint assignments

# Azure Blueprints



# Azure Tips and Tricks

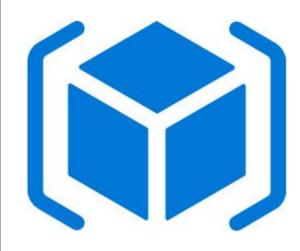
Working with Azure Blueprints



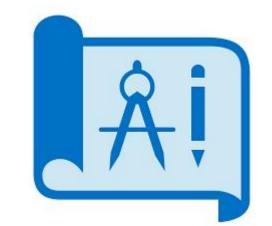
# How is it different from Resource Manager templates?

#### Resource Manager templates

#### Azure Blueprints



- Resource Manager template is a document that does not exist natively in Azure where it is either stored locally or in source control.
- Once the Azure resources are deployed, there is no more relationship between the resources and the template.
- With Blueprints, the relationship between blueprint definition and assignment is preserved which supports tracking and auditing of deployments.



# How it's different from Azure Policy

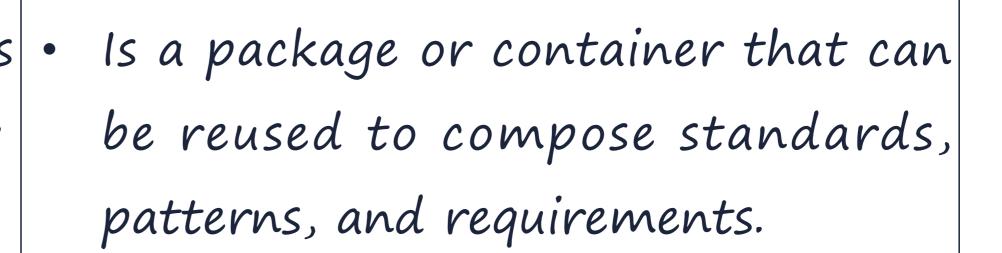
#### Focused on resource properties . during deployment and for existing

Azure Policy

Can be included as one of many

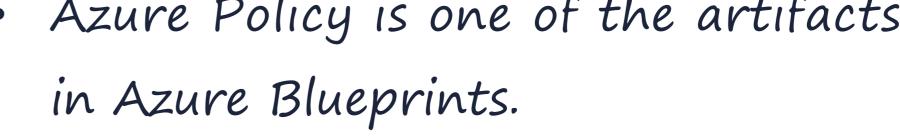
artifacts in a blueprint definition.

resources.



Azure Blueprints

Azure Policy is one of the artifacts in Azure Blueprints.



# Explore your service compliance with Compliance Manager

- · Microsoft Privacy Statement
- · Microsoft Trust Center
- · Service Trust Portal
- · Compliance Manager



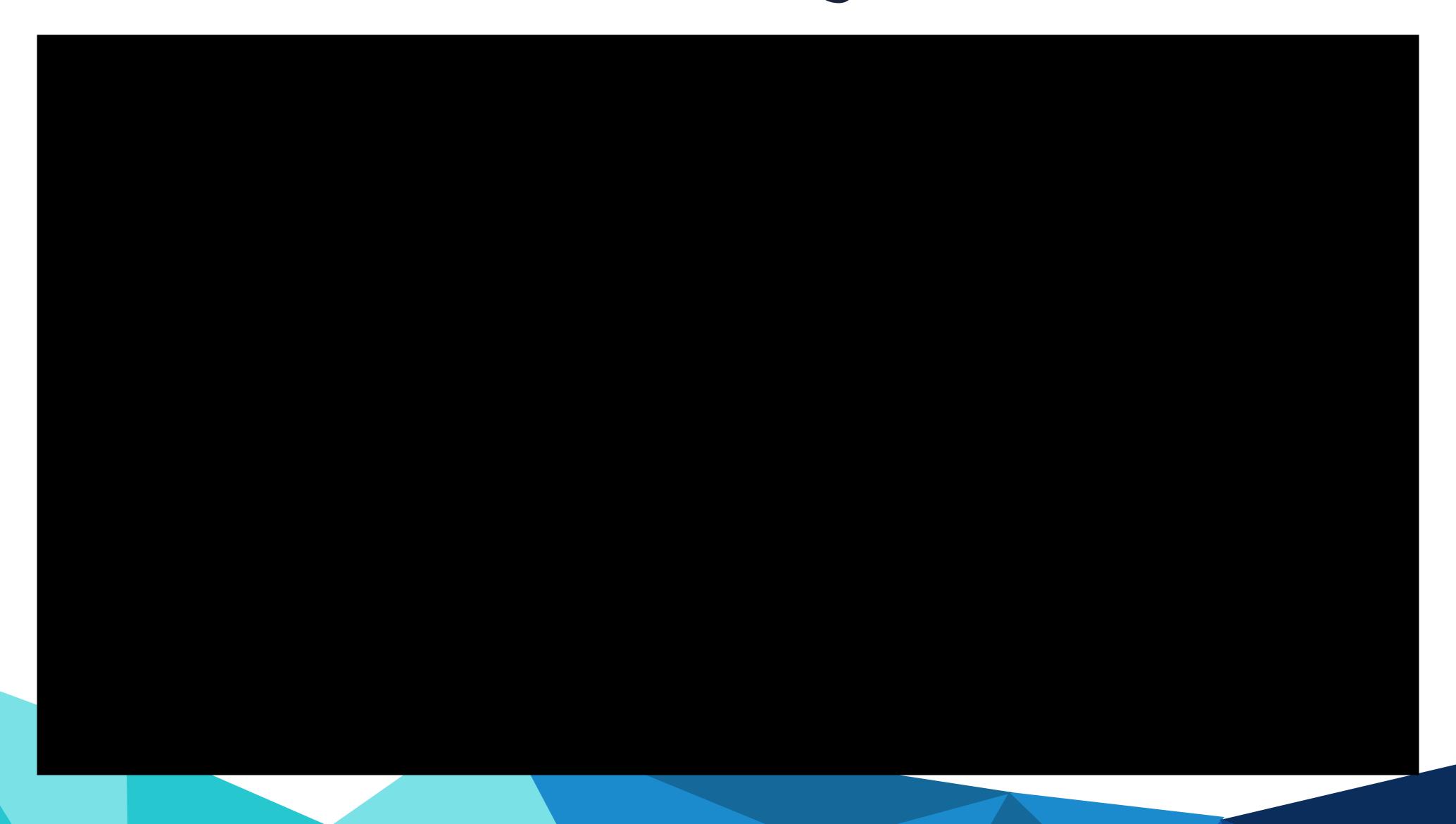


# Microsoft Privacy Statement



- Disclose about personal data that Microsoft:
  - o Processes
  - o How they process it
  - o Used for what purposes
- Applies to the interactions of Microsoft and their products.

# Microsoft Privacy Statement



 A website resource that contains information and details on how Microsoft implements and supports their products and services.

#### Includes:

In-depth information about

- Security, privacy etc.
- Recommended resources

  Direct guidance and support

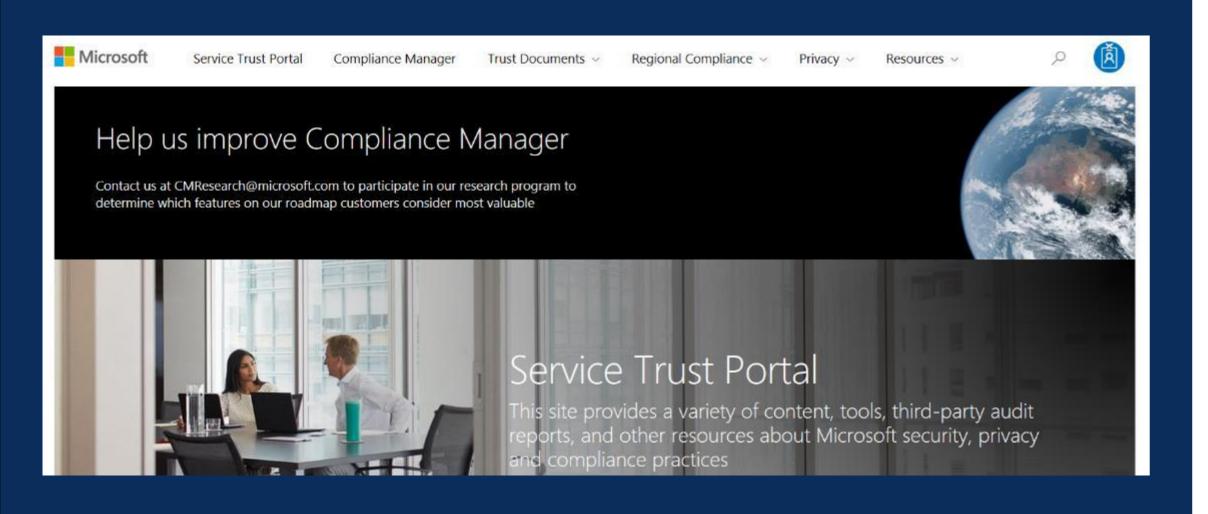
### Microsoft Trust Center



## Azure Trust Center

Azure Trust Center  Cheat sheets, Practice Exams and Flash cards  www.exampro.co/az-900	

# Service Trust Portal (STP)



- Hosts the Compliance Manager service.
- Public site for publishing audit reports and other compliance guides.
- Includes trust documents about Microsoft.

# Service Trust Portal (STP)

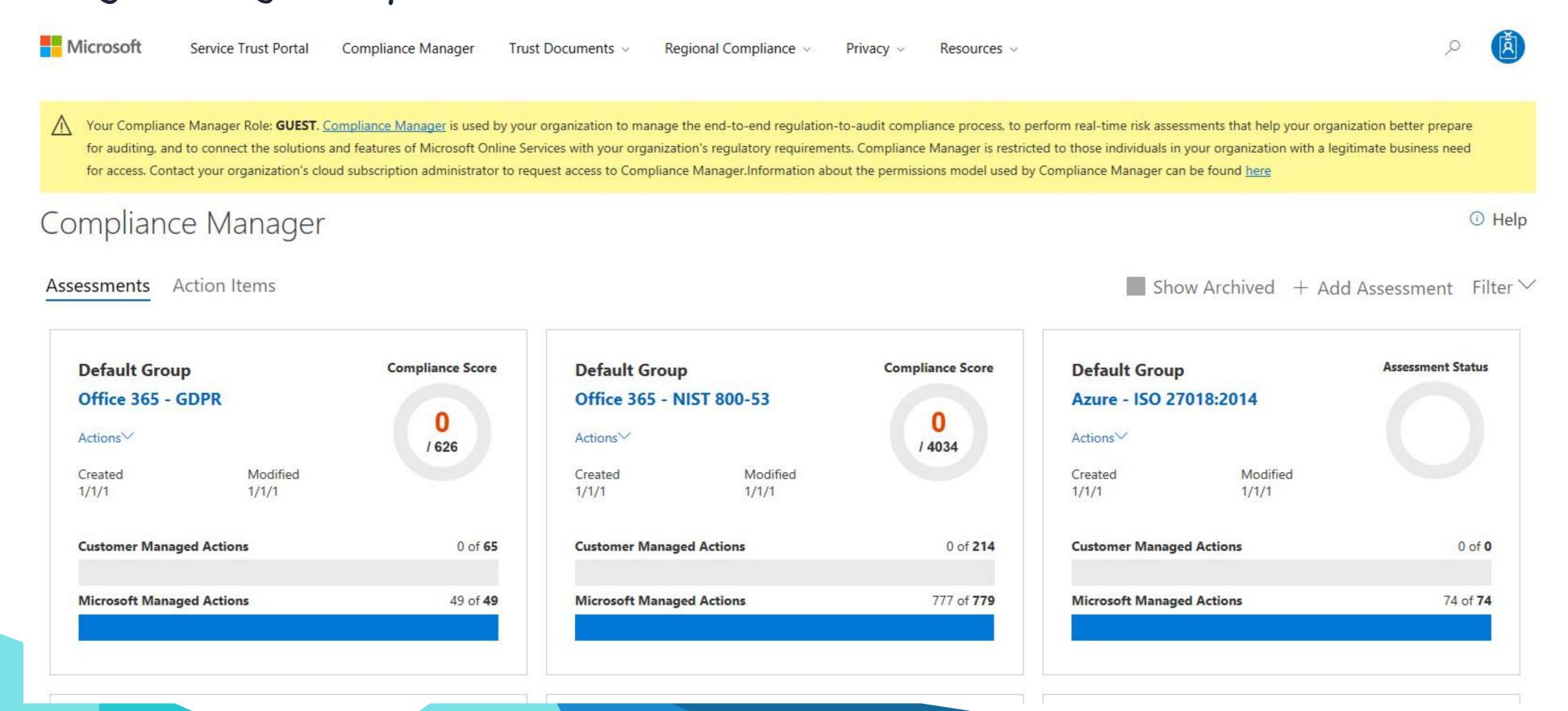


# Compliance Manager

- · Compliance Manager is risk assessment dashboard that based on workflow.
- Enables organization to track, assign, and verify organization's regulatory compliance activities.
- · Features includes:
  - o Assign, track, and record compliance and assessment-related activities.
  - o Provides a secure repository to store and in activities.
  - o Produces abundantly detailed reports.

# Compliance Manager

 Compliance Manager also provides recommendation on improving regulatory compliance.



# Compliance Manager



# Monitor your service health

Azure provides two different services for monitoring the health of applications and resources.

- 1. Azure Monitor
- 2. Azure Service Health





#### Azure Monitor



- Maximizes the availability and performance of applications through comprehensive solution.
- · Helps to understand how applications are performing.

### Data sources

Azure Monitor is capable of collecting data from different

sources in various tiers

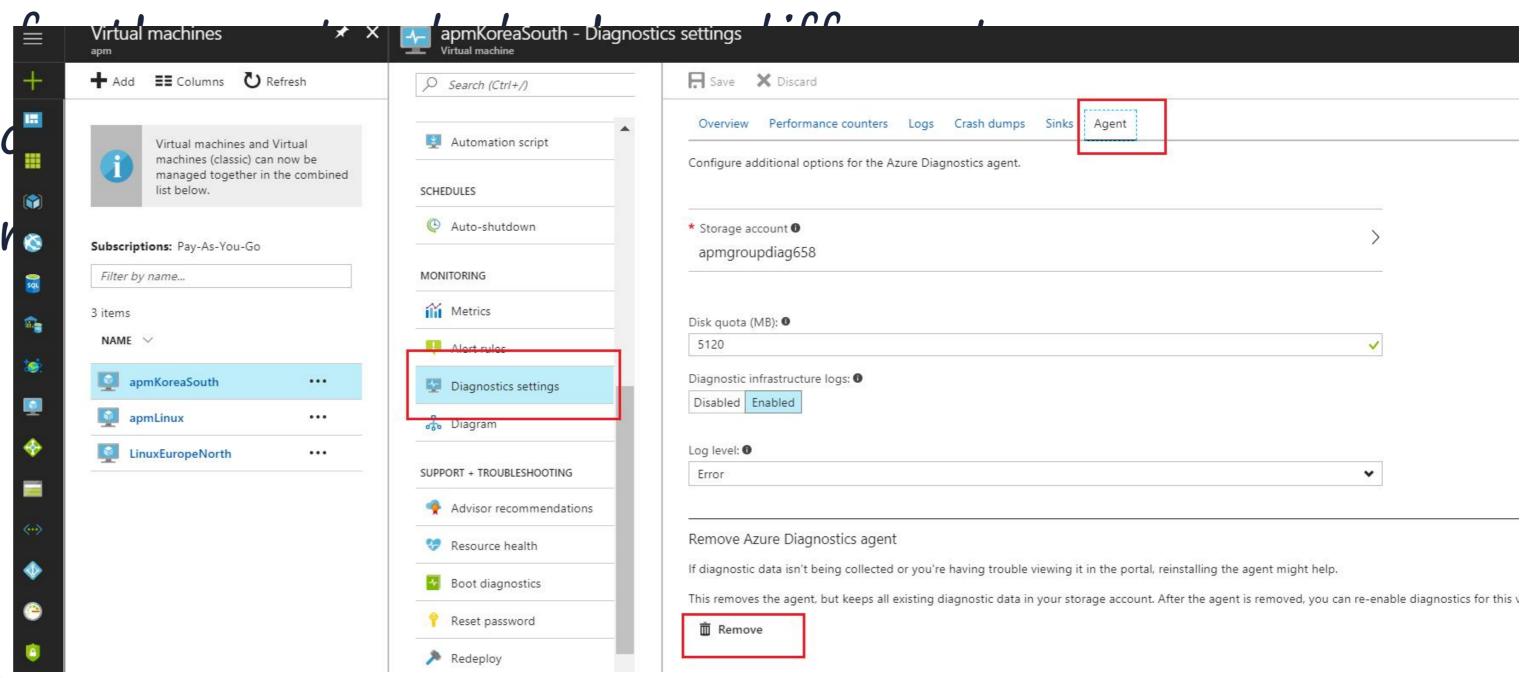
Data Tier	Description
Application monitoring data	Data about the performance and functionality of the code you have written, regardless of its platform.
Guest OS monitoring data	Data about the operating system on which your application is running. This could be running in Azure, another cloud, or on-premises.
Azure resource monitoring data	Data about the operation of an Azure resource.
Azure subscription monitoring data	Data about the operation and management of an Azure subscription, as well as data about the health and operation of Azure itself.
Azure tenant monitoring data	Data about the operation of tenant- level Azure services, such as Azure Active Directory

# Diagnostic settings

Azure Monitor starts collecting data once resources are being added.

The data collected can be diagnostics settings can be collected

- Enable guest-level monitor
- · Performance counters
- · Event Logs
- · Crash Dumps
- Sinks
- Agent



# Getting more data from your

Azure Monitor includes several features and tools that can provide insights on applications and other resources the applications depend on.

#### Features include:

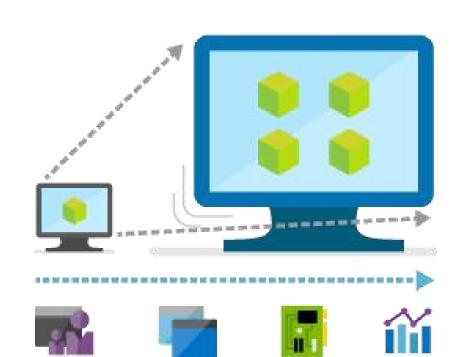
- Application Insights monitors the availability, performance,
   and usage of web applications
- Azure Monitor for containers Monitor performance of container workloads
- Azure Monitor for VMs Monitor Azure VMs at sca





# Responding to alert conditions



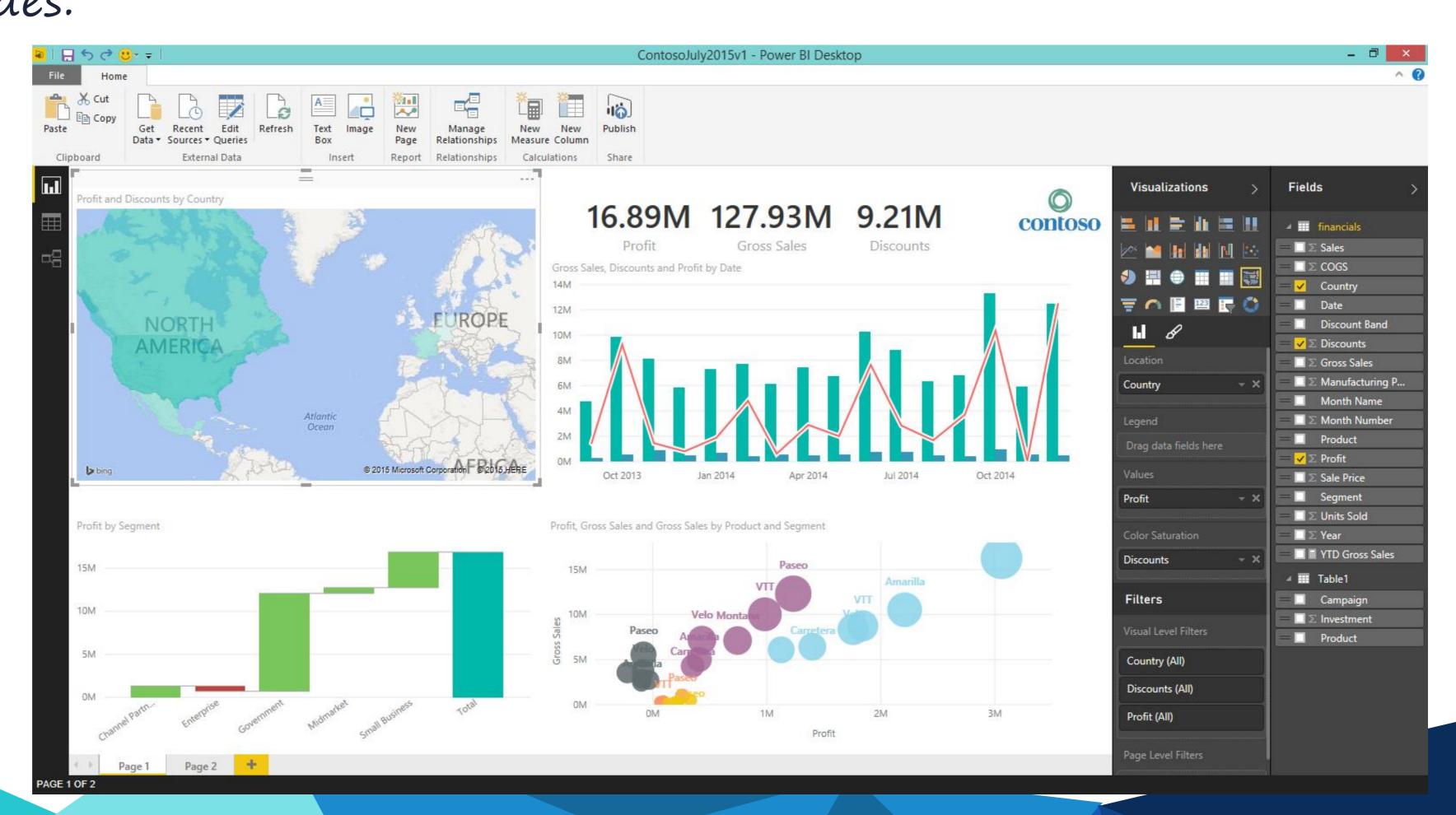


- - o Azure Monitor will alert the organization on critical conditions and might also attempt to take corrective actions.
- Autoscale
  - o Azure Monitor ensures the organization to have the correct amount of resources running to manage the load on their application effectively.

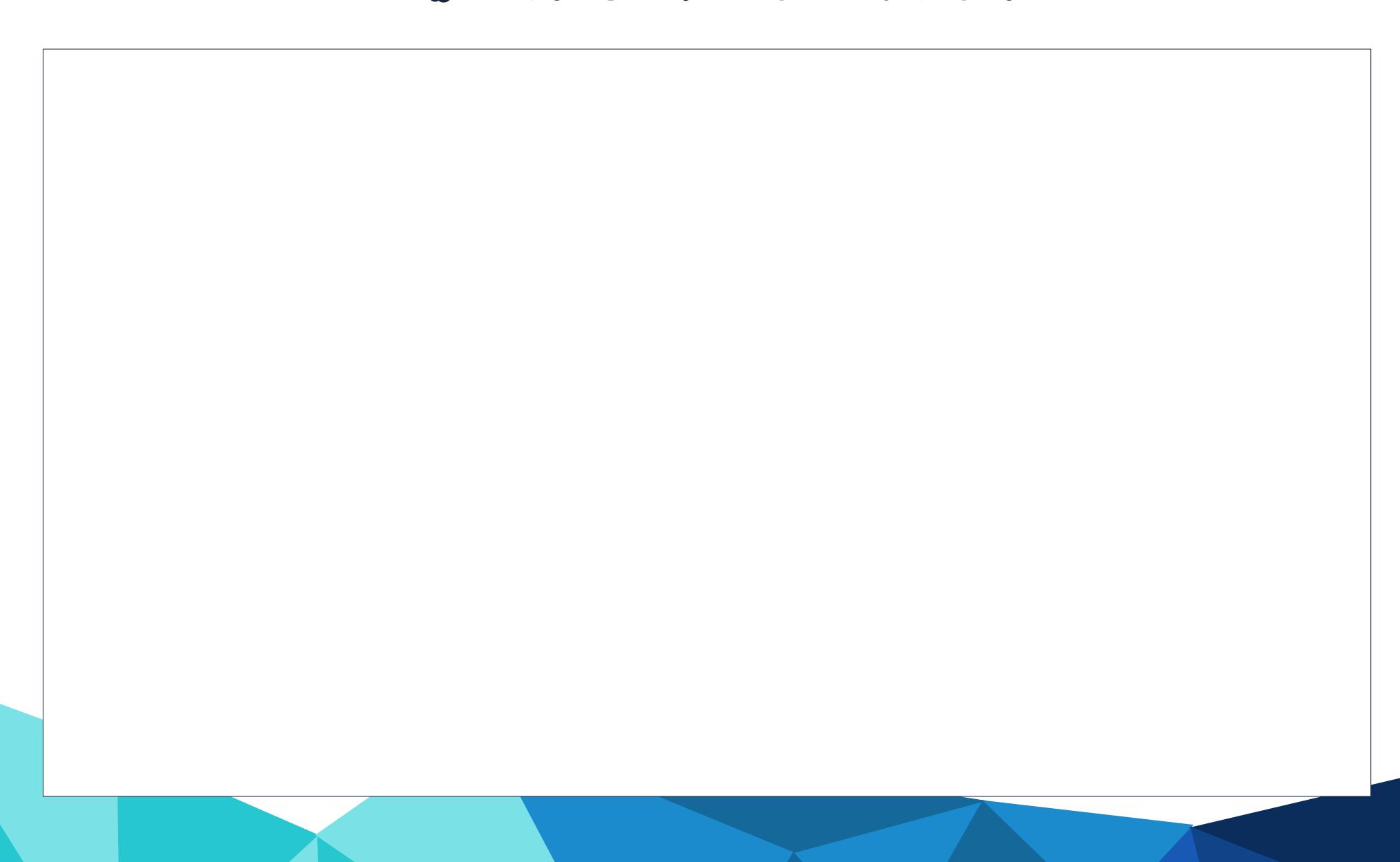
# Visualize monitoring data

Azure Monitor comes with the features of visualizing monitoring data which includes:

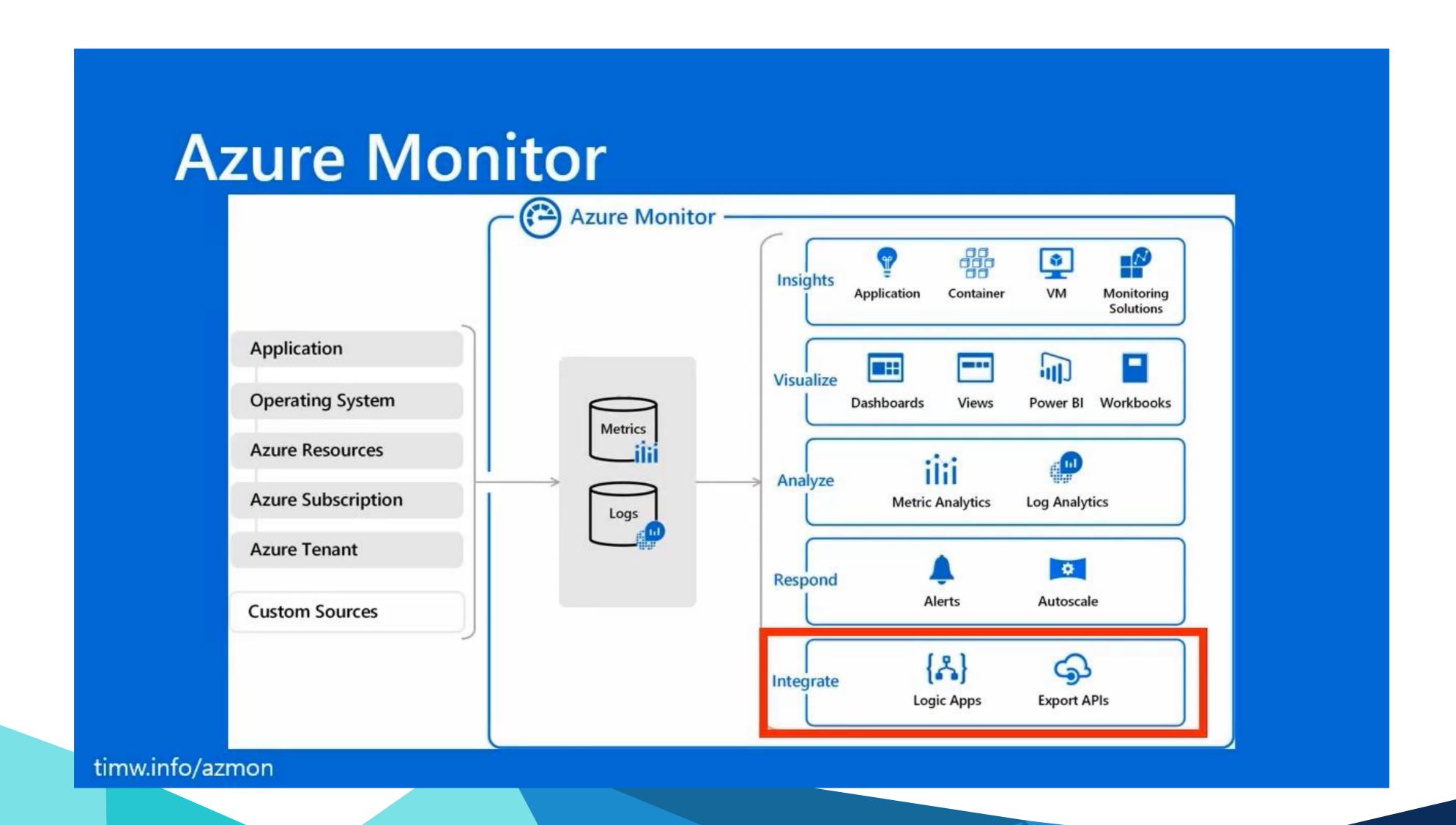
- Dashboards
- Views
- · Power BI



# Azure Monitor



# Azure Monitor Demo



### Azure Service Health



 A suite of experiences that provide personalized advice and assistance when Azure services affect you.

#### · Includes:

- Notifying you
- o Help you understand the impact of issues
- o Update on the status of issue

# Views of Azure Service

#### Azure Status

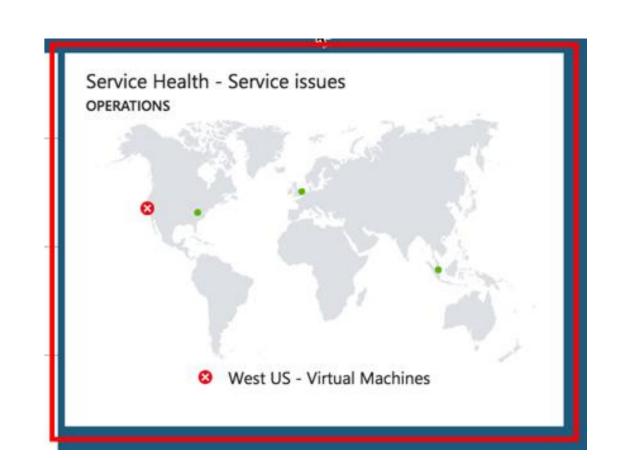
o Provides an overview on health state of all Azure services.

#### · Service Health

- o Provides a customizable dashboard that can track the state of Azure services and active events.
- o Can be used to create and manage service Health alerts.

#### · Resource Health

- o Diagnose and receive assistance when an Azure service issue is affecting resources.
- o Provides details about the state of resources and technical support.

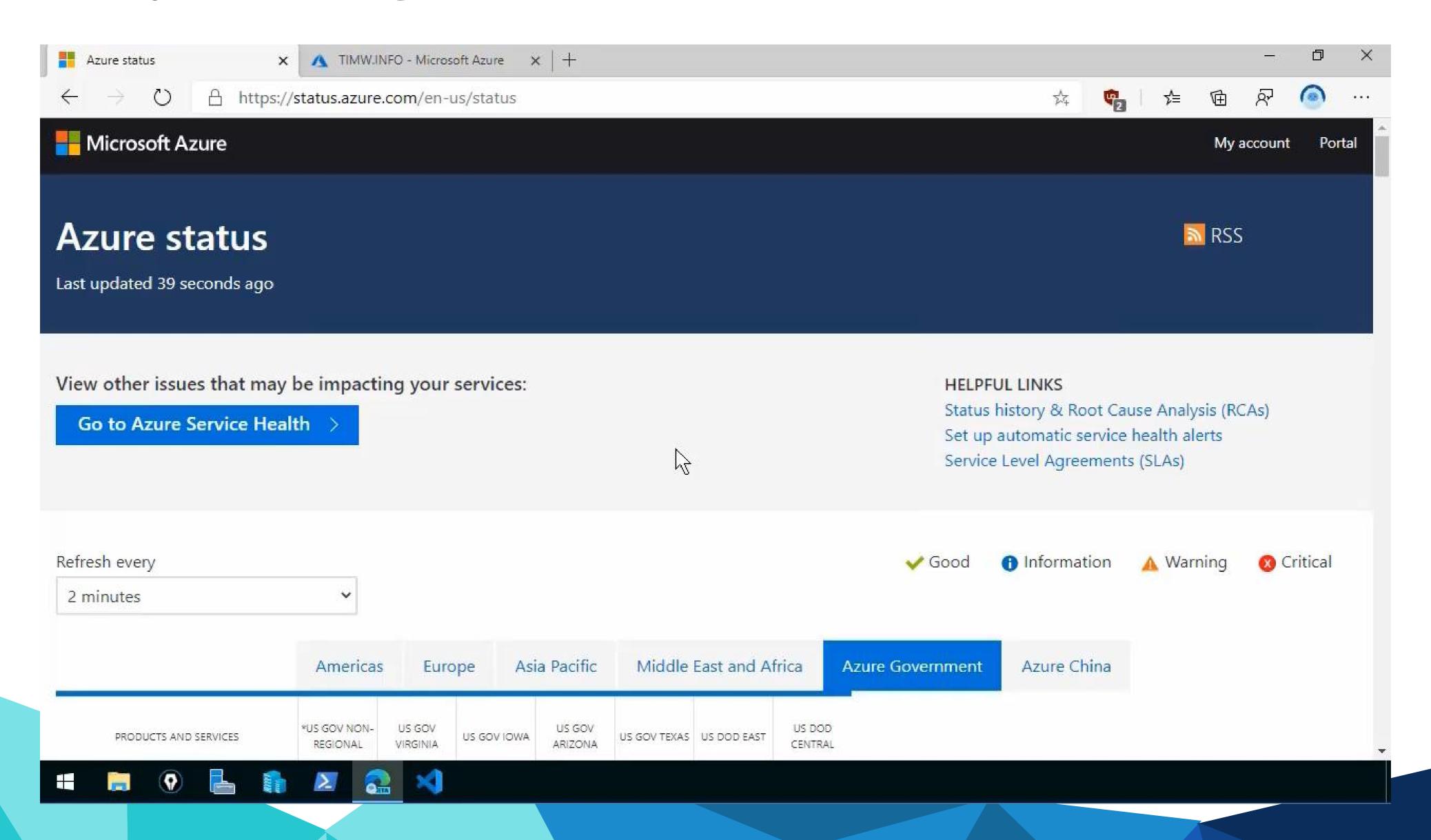


# Azure Service Health

**Azure Service Health** 



# Azure Service Health Demo



# Summary

In this chapter, you've learn about:

- · Azure governance methodologies
- · Monitoring and reporting in Azure
- Privacy, compliance, and data protection standards in Azure

heck	your	know	ledo

1. True or false: You can download published audit reports and other compliance-related information related Microsoft's cloud service from the Service Trust Portal		
	0	True
	0	False
		ure service allows you to configure fine-grained access management for Azure resources, enabling you to only the rights they need to perform their jobs?
	0	Locks
	0	Policy
	0	Initiatives
	0	Role-based Access Control
		ure service allows you to create, assign, and, manage policies to enforce different rules and effects over you d stay compliant with your corporate standards and service-level agreements (SLAs)?
	0	Azure Policy
	0	Azure Blueprints
	0	Azure Security Center
	0	Role-based Access Control

# heck your knowledge

4. Which of t	he following services provides up-to-date status information about the health of Azure services?	
0	Compliance Manager	
0	Azure Monitor	
0	Service Trust Portal	
0	Azure Service Health	
5. Where can you obtain details about the personal data Microsoft processes, how Microsoft processes it, and for wh purposes?		
0	Microsoft Privacy Statement	
0	Compliance Manager	
0	Azure Service Health	
	O O O O S. Where can purposes?	

Trust Center

#### Answer

(o	True
	You can download published audit reports and other compliance-related information related to Microsoft's cloud service from the Service Trust Portal.
0	False
	ure service allows you to configure fine-grained access management for Azure resources, enabling you tonly the rights they need to perform their jobs?
0	Locks
0	Policy
0	Initiatives
(o	Role-based Access Control
	Role-based access control (RBAC) provides fine-grained access management for Azure resources, enabling you to grant users only the rights they need to perform their jobs. RBAC is provided at no additional cost to all Azure subscriber.
	ure service allows you to create, assign, and, manage policies to enforce different rules and effects over and stay compliant with your corporate standards and service-level agreements (SLAs)?
(o	Azure Policy
	Azure Policy is a service in Azure that you use to create, assign, and, manage policies. These policies enforce different rules and effects over your resources, so those resources stay compliant with your corporate standards and service-level agreements (SLAs).
0	Azure Blueprints
0	Azure Security Center
0	Role-based Access Control

#### Answer

4. Which	h of t	he following services provides up-to-date status information about the health of Azure services?
	0	Compliance Manager
	0	Azure Monitor
	0	Service Trust Portal
(	<ul><li>•</li></ul>	Azure Service Health
		Azure Service Health is the correct answer, because it provides you with a global view of the health of Azure services. With Azure Status, a component of Azure Service Health, you can get up-to-the-minute information on service availability.
5. When		you obtain details about the personal data Microsoft processes, how Microsoft processes it, and for what

You can obtain the details about how Microsoft uses personal data in the Microsoft Privacy

Microsoft Privacy Statement

Statement.

Trust Center

Compliance Manager

Azure Service Health

# Banks!