# **SC-100 Microsoft Cybersecurity Architect**

# **Practice Questions**

SC-100: Microsoft Cybersecurity Architect (Pearson Practice Test) - O'Reilly Online Learning (oreilly.com)

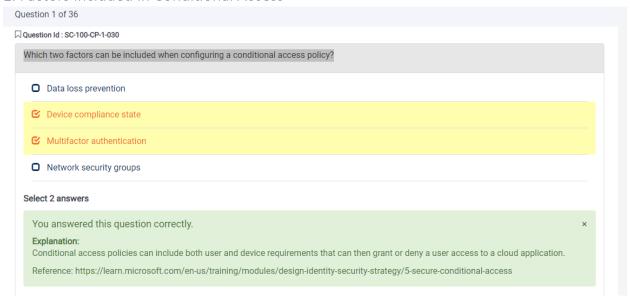
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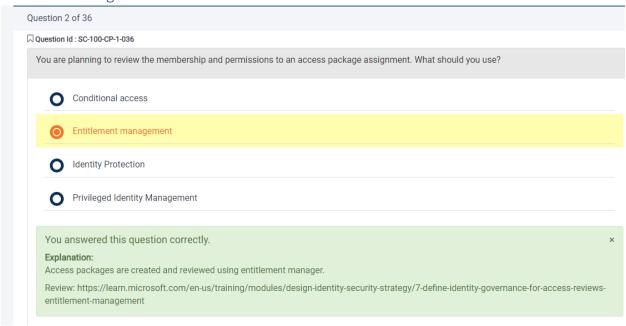
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# Objective 1: Design a Zero Trust strategy and architecture

## 1. Factors included in Conditional Access



#### 2. Entitle Management



# 3. The Cloud Adoption Framework (CAF)

# Question 3 of 36 Question Id: SC-100-CP-1-005 The Cloud Adoption Framework provides best practices, tools, and documentation for using the cloud. Possible answers: Cloud Adoption Framework,CAF You answered this question correctly. Explanation: The Cloud Adoption Framework (CAF) provides best practices, tools, and documentation for using the cloud. Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/4-develop-security-requirements-based-business-goals

#### 4. Microsoft Sentinel – Enable relevant data connectors

#### Question 4 of 36

#### Question Id : SC-100-CP-1-021

You are planning to use Microsoft Sentinel for visibility, automation, and orchestration of security monitoring. You need to ensure that you can establish visibility of third-party virtual appliances in Sentinel. What should you do?

Create an automation rule.

Create a playbook.

Enable incident notifications.

Enable relevant data connectors.

You answered this question correctly.

#### **Explanation:**

To ensure visibility into third-party events and monitoring, the relevant data connector must be configured so that data is captured into the underlying Log Analytics workspace.

Reference: https://learn.microsoft.com/en-us/training/modules/design-security-operations-strategy/5-design-strategy-security-information-event-management

#### 5. Azure Arc

Which Azure service provides centralized management of Azure and on-premises resources?

Azure Arc

Azure Active Directory

Azure Lighthouse

Azure Policy

You answered this question correctly.

#### Explanation

Azure Arc provides hybrid management of resources, whether they are in Azure, on premises, or in other cloud environments.

Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/7-design-for-hybrid-multi-tenant-environments

#### 6. Entitle Management

You are planning an identity strategy and need to simplify the onboarding of new user accounts. New accounts should have a bundle of appropriate permissions based on the department they are joining. What should you use?

Conditional access

Identity protection

Privileged Identity Management

Entitlement management

You answered this question correctly.

#### Explanation

Entitlement management includes the ability to create access packages, which can be used to bundle group and permission membership for new and external users.

Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/7-define-identity-governance-for-access-reviews-entitlement-management

# 7. Microsoft Cybersecurity Reference Architecture (MCRA)

Which Microsoft guidance describes how security capabilities integrate with other services and applications?

Cloud Adoption Framework (CAF)

Microsoft Cybersecurity Reference Architectures (MCRA)

Zero Trust Architecture

You answered this question correctly.

Well-Architected Framework

#### Explanation

The Microsoft Cybersecurity Reference Architectures (MCRA) describes how Microsoft security capabilities integrate with Microsoft services, including Azure and Office 365, as well as third-party applications.

Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/3-develop-integration-points-architecture

#### 8. Network Security Groups

You are designing the security architecture of an Azure virtual network and subnets in a hub and spoke configuration. You need to provide Layer 4 security between subnets to restrict certain types of traffic. What should you use?

Application security groups

Network security groups

Proximity placement groups

You answered this question correctly.

Explanation:
You should include network security groups between the subnets in order to filter traffic based on protocol, port, or IP address.

Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/8-design-technical-governance-strategies-for-traffic-filtering-segmentation

#### 9. Application Insights

Question 9 of 36

Question Id: SC-100-CP-1-017

You are planning the logging strategy for an application. You need to collect performance monitoring and custom diagnostics from the application. Which service logs should you use?

Activity logging

Application insights

Azure Active Directory

Resource logging

You answered this question correctly.

Explanation:
Azure Application insight allows developers to capture exceptions and custom diagnostics for an application running on Azure.

Reference: https://learn.microsoft.com/en-us/training/modules/design-security-operations-strategy/3-design-log-audit-security-strategy

## 10. Activity Logs track changes that are made to Azure resources

You are planning the logging strategy for an application. You need to ensure that you can track change operations to resources deployed in your Azure subscription. Which logs should you monitor?

Activity logs

Application insight logs

Azure Active Directory logs

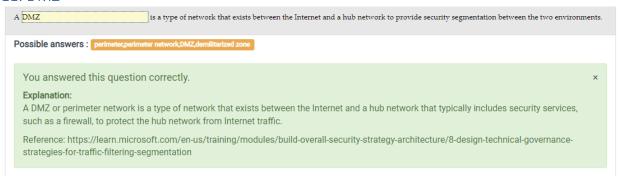
Resource logs

You answered this question correctly.

Explanation:
The Azure activity logs track changes that are made to Azure resources within a subscription at the control plane level.

Reference: https://learn.microsoft.com/en-us/training/modules/design-security-operations-strategy/3-design-log-audit-security-strategy

#### 11. DMZ



#### In this context the Hub Network is the LAN.

#### 12. The mean time to acknowledge (MTTA)



## 13. Designing security with resiliency in mind

When designing security with resiliency in mind, which two goals should be included?

Isolate all business functions.

Isolate all technical functions.

Prevent further damage.

Protect critical operations.

Select 2 answers

You answered this question correctly.

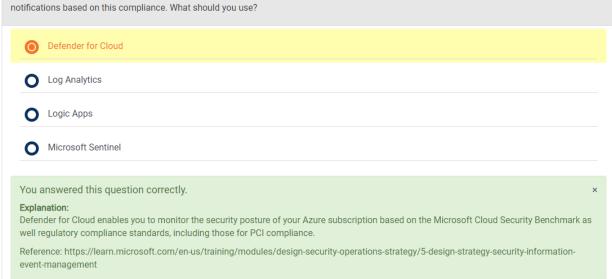
Explanation:

During an incident, it is important to prevent further damage to the environment and protect the critical operations of the business.

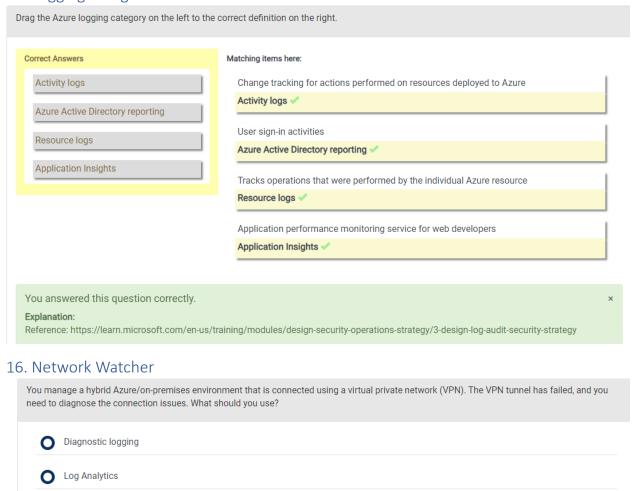
Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/6-design-security-for-resiliency-strategy

#### 14. Defender for Cloud

You plan to deploy on Azure an application that meets PCI compliance. As part of the solution, you need to be able to create alerts and automate notifications based on this compliance. What should you use?



#### 15. Logging Categories



Network Security Group flow logs

Network Watcher

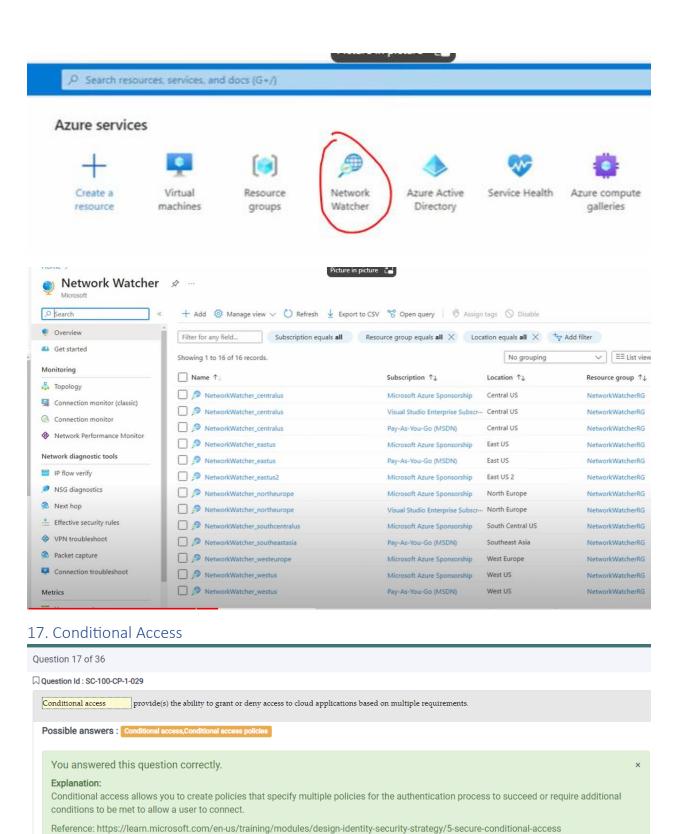
You answered this question correctly.

Explanation

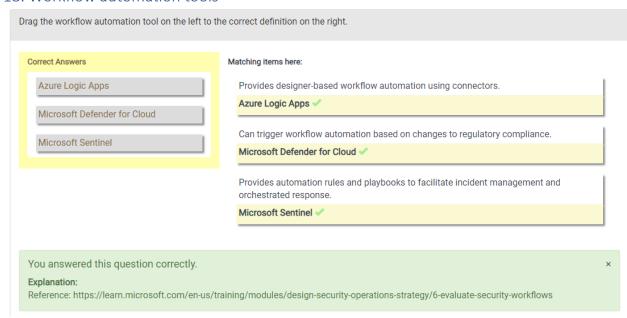
The Network Watcher service includes a tool that provides VPN connection troubleshooting. This service can be used to diagnose IPsec and L2TP VPN tunnel connection issues.

Reference: https://learn.microsoft.com/en-us/training/modules/design-security-operations-strategy/5-design-strategy-security-information-event-management

(151) What is Network Watcher and How Did It Get In My Subscription! - YouTube



#### 18. Workflow automation tools



#### 19. Zero Trust Rapid Modernization Plan (RaMP) components

You are a designing the security architecture for a hybrid environment with Azure and on-premises resources. You need to include the Zero Trust Rapid Modernization Plan (RaMP) components in your design. What should you use?

Cloud Adoption Framework (CAF)

Microsoft Cybersecurity Reference Architectures (MCRA)

Well-Architected Framework

Zero-Trust Architecture

You answered this question correctly.

Explanation:
The Microsoft Cybersecurity Reference Architectures includes the Rapid Modernization Plan (RaMP), which includes specifics on security operations for a Zero Trust environment.

# 20. Azure AD Privileged Identity Management includes the ability to create access reviews

You are planning to review the privileged access of Azure resource roles. What should you use to create the access review?	
O Conditional access	
O Entitlement management	
O Identity Protection	
Privileged Identity Management	
You answered this question correctly.	×
Explanation:  Azure AD Privileged Identity Management includes the ability to create access reviews for Azure resource and Azure Active Directory role assignments.	
Review: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/7-define-identity-governance-for-access-reviews-entitlement-management	

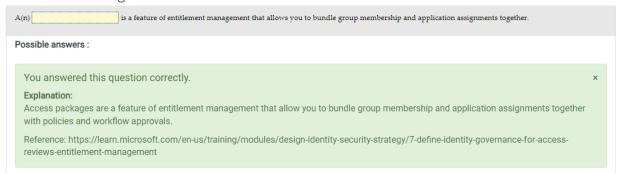
# 21. Privileged Identity Management

1. Thineged identity Management
You are planning a privileged identity strategy and need to ensure that privileged accounts have elevated permissions for only a specific period of time. What should you use?
O Conditional access
O Custom attributes
O Identity Protection
Privileged Identity Management
You answered this question correctly.
Explanation:  Privileged Identity Management allows you to make roles eligible for assignment and then, when they are activated, the roles are only assigned for a configurable amount of time.
Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/6-design-strategy-for-role-assignment-delegation

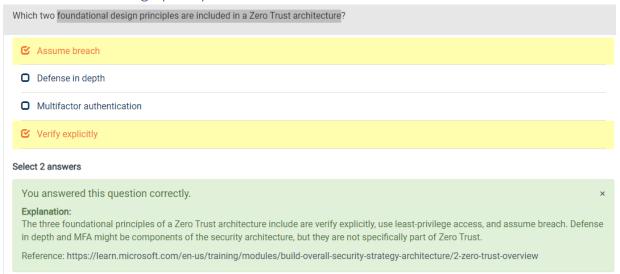
#### 22. The mean time to remediate (MTTR)



#### 23. Access Packages



#### 24. Foundational design principles included in a Zero Trust architecture



#### 25. Azure Logic Apps is a resource type that allows you to create and run workflows

You are planning to automate the notification workflow for new Azure resource events, and you need to identify a platform for creating and running workflows. What should you use?

Defender for Cloud

Graph API

Logic Apps

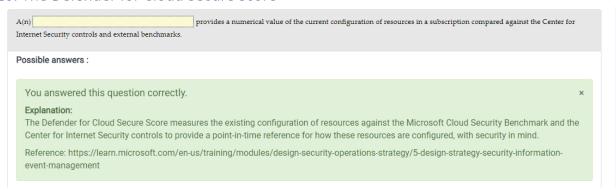
Sentinel

You answered this question correctly.

Explanation:
Azure Logic Apps is a resource type that allows you to create and run workflows that you design and create.

Reference: https://learn.microsoft.com/en-us/training/modules/design-security-operations-strategy/6-evaluate-security-workflows

#### 26. The Defender for Cloud Secure Score



# 27. Azure AD DS requires the use of Azure AD password hash synchronization with Azure AD Connect.

You are planning a hybrid on-premises/Azure authentication strategy. The company plans to use Azure Active Directory Domain Services (Azure AD DS) and synchronize it with Azure Active Directory. Which cloud authentication method should you use?

Azure AD cloud-only users

Azure AD password hash synchronization

Azure AD Pass-through Authentication

Federated authentication

You answered this question correctly.

Explanation:

Azure AD DS requires the use of Azure AD password hash synchronization with Azure AD Connect. This allows the Azure AD DS service to synchronize with Azure AD.

Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/4-recommend-secure-authentication-security-authorization-strategies

# 28. The company security policy states that authentication for cloud services must occur in the cloud.

You are planning a hybrid on-premises/Azure authentication strategy. The company security policy states that authentication for cloud services must occur in the cloud. Which cloud authentication method should you use?

Azure AD cloud-only users

Azure AD password hash synchronization

Azure AD Pass-through Authentication

Federated authentication

You answered this question correctly.

Explanation:

To allow the authentication to stay in the cloud and not be transferred elsewhere, the password of the user account must be synchronized using Azure AD password hash synchronization.

Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/4-recommend-secure-authentication-security-authorization-strategies

#### 29. Azure AD Pass-through Authentication

It requires an agent in the on-premises environment to perform the authentication with the local Active Directory domain controllers.

You are planning a hybrid on-premises/Azure authentication strategy. The company's security policy states that authentication must be performed the on-premises Active Directory environment. Which cloud authentication method should you use?
Azure AD cloud-only users
Azure AD password hash synchronization
Azure AD Pass-through Authentication
Federated authentication
You answered this question correctly.
Azure AD Pass-through Authentication requires an agent in the on-premises environment to perform the authentication with the local Active Directory domain controllers.
Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/4-recommend-secure-authentication-security-authorization-strategies
30. You are designing a hub and spoke network architecture for an Azure environment.
You are designing a hub and spoke network architecture for an Azure environment. You need to identify an available address space to use with the virtual networks. Which two address spaces can you assign to an Azure virtual network?
<b>☑</b> 10.10.0.0/16
□ 169.254.0.0/16
<b>☑</b> 172.16.0.0/16
□ 172.50.0.0/16
Select 2 answers
You answered this question correctly.
Explanation: The address spaces 10.10.0.0/16 and 172.16.0.0/16 fall into the RFC 1918 address ranges for private IP addresses and can be used with Azure virtual networks.
Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/8-design-technical-governance-strategies-for-traffic-filtering-segmentation

31. Access reviews enable administrators and group owners to review membership and privileged role activation

Possible answers:

You answered this question correctly.

Explanation:

An access review enables administrators and group owners to review membership and privileged role activation to ensure that users do not have excessive permissions over time.

Reference: https://learn.microsoft.com/en-us/training/modules/design-identity-security-strategy/7-define-identity-governance-for-access-reviews-entitlement-management

# 32. A firewall can act as a Layer 7 IDS

You are designing a hybrid Azure/on-premises network. You need to ensure that all traffic traverses an intrusion detection system (IDS). What should you include in the design?

0	Application gateway	
0	ExpressRoute	
0	Firewall	
0	Virtual network gateway	
You a	nswered this question correctly.	×
	nation: vall can act as a Layer 7 IDS. An application gateway only has a web application firewall and does not provide full IDS services. ssRoute and virtual network gateways do not provide any IDS capabilities.	
	ence: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/7-design-for-hybrid-multi-tenant-nmentsrr	

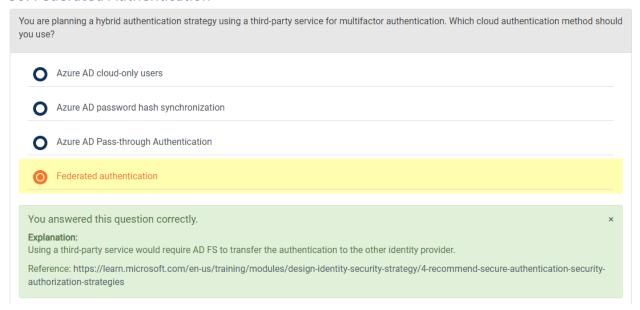
#### 33. Zero Trust principles

#### 34. Report Reader

## 35. Azure Policy

Which Azure service provides methods to implement and manage governance, compliance reporting, security, and cost management?	
Azure Arc	
Azure Active Directory	
Azure Lighthouse	
Azure Policy	
You answered this question correctly.	×
Explanation:  Azure Policy provides a way to implement and require resources to meet governance guidelines, enforce consistent deployments, and help organizations achieve regulatory compliance.	
Reference: https://learn.microsoft.com/en-us/training/modules/build-overall-security-strategy-architecture/7-design-for-hybrid-multi-tenant-environments	

#### 36. Federated Authentication



Objetivo 2: Evaluate Governance Risk Compliance (GRC) technical strategies

#### 1. Azure Policy

You are implementing security for resources in an Azure subscription. You need to ensure that all virtual machines have a specific extension installed. What should you use?

Azure Advisor

Defender for Cloud

Microsoft Sentinel

You answered this question correctly.

Explanation:
Azure Policy enables you to create guardrails for your environment, including using the DeploylfNotExist effect type to deploy additional components.

Reference: https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy

#### 2. Secure Score

Which component of Defender for Cloud provides insights into a key performance indicator related to how many security recommendations have been implemented for a subscription?

Alerts

Secure Score

Workload protection

You answered this question correctly.

Explanation:
Secure Score in Defender for Cloud provides you with a key performance indicator (KPI) related to how many recommendations have been implemented on a subscription.

Reference: https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/7-postures-use-secure-scores

#### 3. Risk Response

When planning to mitigate risks associates with known threats, in which phase of the risk management process would you tolerate or accept a known risk?

Identification

Assessment

Response

Monitoring

You answered this question correctly.

Explanation:

The risk management process has four phases: identification, assessment, response, and monitoring. Taking an action, even if the action is to accept the risk, is considered responding to the threat.

Reference: https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/6-interpret-technical-threat-intelligence-recommend-risk-mitigations

#### 4. Threat intelligence in Sentinel

Which tool in Microsoft Sentinel provides context, relevance, and priority to alerts?

Analytics rules

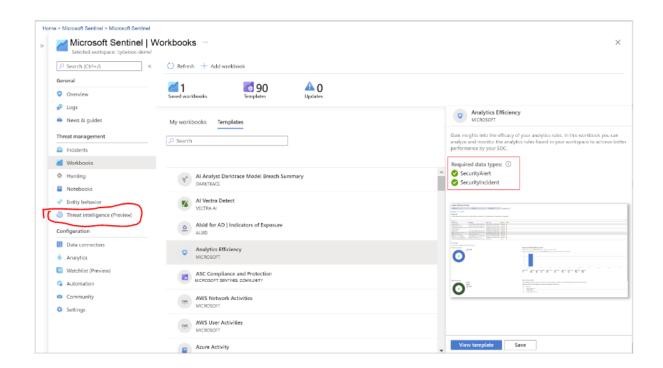
Hunting

Threat intelligence

Workbooks

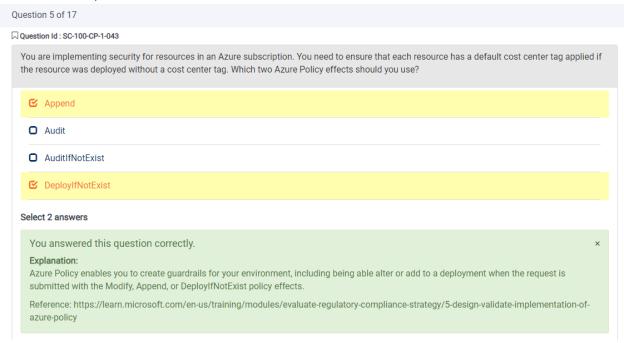
You answered this question correctly.

Explanation:
Threat intelligence in Microsoft Sentinel provides additional information around an alert so that security advisors can come to a solution faster. Reference: https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/6-interpret-technical-threat-intelligence-recommend-risk-mitigations



#### What is Microsoft Sentinel? | Microsoft Learn

#### 5. Azure Policy Effects



Azure Policy enables you to create guardrails for your environment, including being able alter or add to a deployment when the request is submitted with the Modify, Append, or DeployIfNotExist policy effects.

Reference: https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy

#### 6. Azure Policy

You are implementing security for resources in an Azure subscription. You need to ensure that storage accounts cannot be deployed with HTTPS disabled. What should you use?

Azure Advisor

Defender for Cloud

Microsoft Sentinel

Azure Policy enables you to create guardrails for your environment, including blocking deployments that do not meet requirements.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy</a>

#### 7. Defender for Cloud

You are implementing security for resources in an Azure subscription that are subject to SOC TSP regulatory compliance. You need to identify recommendations and reports for the compliance of these resources. What should you use?
O Azure Advisor
Azure Policy
O Defender for Cloud
Microsoft Sentinel

Defender for Cloud provides a unified view of security, including reporting, recommendations, and compliance for an Azure subscription.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/3-evaluate-infrastructure-compliance-use-microsoft-defender-for-cloud">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-use-microsoft-defender-for-cloud</a>

#### 8. Rapid Modernization Plan (RaMP)

□ Question Id: SC-100-CP-1-046	
helps you define how to establish a cloud security posture and provides guidance for deployment paths	

Rapid Modernization Plan (RaMP) can help you define your cloud security posture and provides deployment paths for various layers of cloud security.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/2-postures-use-benchmarks">https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/2-postures-use-benchmarks</a>

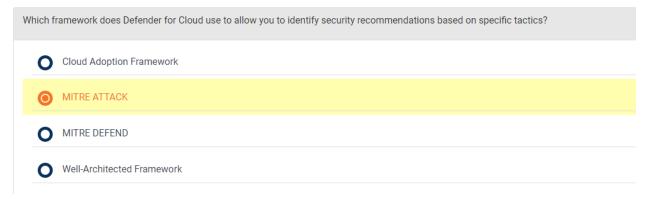
#### 9. Azure Policy Effects

You are implementing security for resources in an Azure subscription. You need to ensure that Azure resource deployments using an Azure region that has not been approved are not deployed. Which Azure Policy component should you configure?
Array
Assignment
© Effect
O Location

Azure Policy enables you to create guardrails for your environment, including being able to deny a deployment based on an Azure region using the Deny effect in the policy definition.

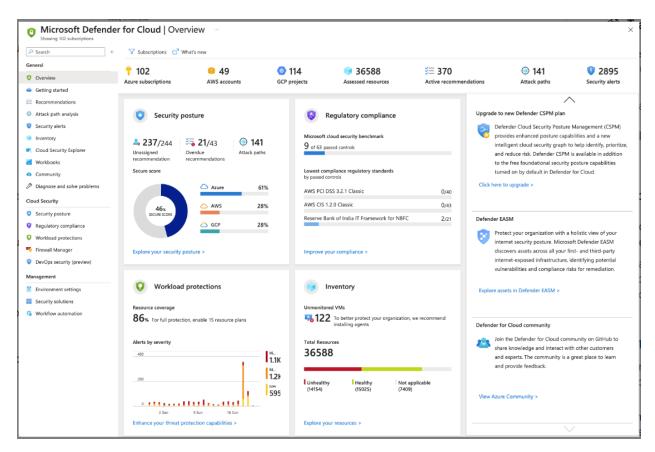
Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/5-design-validate-implementation-of-azure-policy</a>

#### 10. Defender for Cloud uses MITTRE ATTACK framework



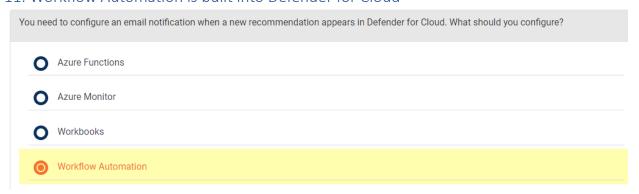
Defender for Cloud correlates recommendations to increase your security posture and provides a reference to the MITRE Attack framework for these recommendations.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/3-postures-use-microsoft-defender-for-cloud">https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/3-postures-use-microsoft-defender-for-cloud</a>



Review cloud security posture in Microsoft Defender for Cloud - Microsoft Defender for Cloud | Microsoft Learn

#### 11. Workflow Automation is built into Defender for Cloud



Workflow Automation is built into Defender for Cloud and allows you to create remediation logic, including email notifications.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/4-hygiene-of-cloud-workloads">https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/4-hygiene-of-cloud-workloads</a>

#### **12**. Data sovereignty

Data sovereignty mandates that data is stored in and under the legal jurisdiction of the country or region where the data is located.

Data sovereignty is part of a design solution involving where data will be stored and how the storage place affects the laws for that data.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/6-design-for-data-residency-requirements">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/6-design-for-data-residency-requirements</a>

#### 13. Azure Automation

	planning operational compliance for an organization. You need to ensure that security updates are scheduled and applied to virtual es. Which tool should you use?
0	Azure Advisor
0	Azure Automation
0	Azure Blueprints
0	Azure Policy

Azure Automation accounts allow you to schedule and implement patch management for virtual machines.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/2-interpret-compliance-requirements-their-technical-capabilities">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/2-interpret-compliance-requirements-their-technical-capabilities</a>

#### 14. Azure Blueprints



Azure Blueprints bundle together ARM templates, Azure policy definitions and assignments, and RBAC roles into a single solution.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/6-design-for-data-residency-requirements">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/6-design-for-data-residency-requirements</a>

# 15. Azure Landing Zone

An Azure landing zone	is a multi-subscription diagram of an Azure environment that plans for security and other aspects of the Well-Architected
Framework at enterprise scale.	

An Azure landing zone (LZ) defines the subscription layout for resources according to the Well-Architected Framework.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/5-design-security-for-azure-landing-zone">https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/5-design-security-for-azure-landing-zone</a>

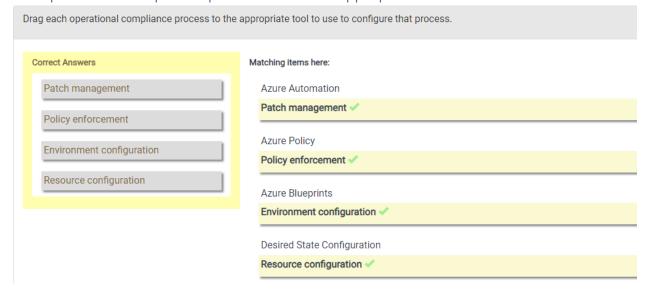
#### 16. Defender for Cloud provides continual assessment



Defender for Cloud provides continual assessment of the resources and configuration of those resources in a subscription.

Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/3-postures-use-microsoft-defender-for-cloud">https://learn.microsoft.com/en-us/training/modules/evaluate-security-posture-recommend-technical-strategies-to-manage-risk/3-postures-use-microsoft-defender-for-cloud</a>

#### 17. Operational compliance processes and the appropriate tools



Reference: <a href="https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/2-interpret-compliance-requirements-their-technical-capabilities">https://learn.microsoft.com/en-us/training/modules/evaluate-regulatory-compliance-strategy/2-interpret-compliance-requirements-their-technical-capabilities</a>

# References

SC-100: Microsoft Cybersecurity Architect (Pearson Practice Test) - O'Reilly Online Learning (oreilly.com)