Microsoft

AZ-104T00 - Microsoft Azure Administrator

ASSESSMENT GUIDE

Overview

This document provides information and guidance on how to develop formative and summative assessments for AZ-104T00 Microsoft Azure Administrator. It is split into two main sections:

- **Section 1: Module Questions** provides guidance for assessing student mastery as they progress through the course. This section includes a set of items for each course module that you can use throughout the course to monitor student progress and inform your instruction; the assessment items may include multiple-choice questions and/or open-ended questions.
- **Section 2: Capstone Project** (Not applicable).

This guide is intended to be a reference and starting point for instructors as you plan how to assess your students. As you read through the guide, you may choose to tailor the assessment strategies, including the assessment items and rubric, for your classroom.

Section 1. Module Questions

Introduction

This section includes multiple choice and/or open-ended questions that are aligned to the course modules for AZ-104T00 Microsoft Azure Administrator.

You can use the questions as they are presented or modify them as appropriate for your learners. The questions do not appear in any other course materials and are designed to supplement the formative assessment opportunities that are integrated directly into Microsoft Learn and the Microsoft Official Course, such as Knowledge Checks, “Try-It” activities, Exercises, Walkthroughs, Labs, and Demos.

Questions are designed to allow for easy integration into an online quiz through Microsoft Forms or through your institution’s Learning Management System (LMS). If you aren’t familiar with Microsoft Forms short support videos are available. As a best practice, create new quizzes and delete old quizzes each class to keep the response URLs from being circulated and responses continuing to come in after class.

Assigning the module questions to students as an independent activity will enable you to collect data about student progress. However, we recommend that you set aside class time to review

answers and address any common student misconceptions, as later modules depend on knowledge and understanding gained earlier in the course.

Overview of multiple-choice questions

The multiple-choice questions require one or more answer responses and will include plausible distractors. These are set at a level slightly lower than the multiple-choice questions in the AZ-104T00 Microsoft Azure Administrator.

Overview of open-ended questions

The open-ended questions present challenges beyond single answer responses and include scenario-based questions. These questions give students the opportunity to demonstrate critical thinking through their responses.

Learning Path 1: AZ-104: Manage identities and governance in Azure - Training | Microsoft Learn

Multiple-choice questions

1. You have an Azure subscription that contains multiple virtual machines.

   You need to ensure that a user named User1 can view all the resources in a resource group named RG1. You must use the principle of least privilege.

   Which role should you assign to User1?

   Select only one answer.
   a. Billing Reader
   b. Contributor
   c. Reader
   d. Tag Contributor

2. You have an Azure subscription used by multiple departments. Each department needs to be accountable for their costs.

   Which feature can you use to determine costs?

   Select only one answer.
   a. Azure policy
   b. Azure role-based access control
   c. Tagging

Open ended questions

1. Describe the following concepts: identity, account, Azure AD account, Azure AD Account, Azure AD tenant, and Azure subscription. How are these different?

   Answer: Identity is an object that can be authenticated. An Account is an identity that has data associated with it. An Azure AD account is an identity created through Azure AD or another Microsoft cloud service. An Azure AD tenant is a dedicated and trusted instance of Azure AD, A Tenant is automatically created when your organization signs up for a Microsoft cloud service subscription. An Azure subscription is used to pay for Azure cloud services**.**

2. How is Microsoft Entra ID different from Azure Active Directory Domain Services?

   Answer: Microsoft Entra ID is primarily an identity solution and designed for HTTP and HTTPS communications. Microsoft Entra ID can be queried with a REST API, instead of LDAP. Microsoft Entra ID uses federation services, and many third-party services (such as Facebook). Microsoft Entra ID users and groups are created in a flat structure. Microsoft Entra ID does not have Organizational Units (OUs) or Group Policy Objects (GPOs).

3. Describe the Self-Service Password Reset authentication methods can be configured for users.

   Answer: Self-Service Password Reset authentication methods include mobile app notification, mobile app code, email, mobile phone, office phone, and security questions. A combination of authentication methods can be used.

4. List three features of a user account and two ways a user can be assigned to group.

   Answer: All users must have a user account. The user account is used for authentication and authorization. Each user account can have additional properties (user profile), like phone number. You must be a Global Administrator or User Administrator to manage users. Users can be assigned to groups either directly or dynamically. Dynamic assignment lets you create complex attribute-based rules.

6. Describe the steps for creating an Azure policy. What are the advantages of Azure policy?

   Answer: Azure Policy is a service in Azure which allows you to create polices which enforce and control the properties of a resource. The advantages include enforcement and compliance, applying policies at scale, and remediating non-compliant resources. The creation steps are - create a policy definition, create a policy initiative, scope the initiative, and determine compliance. A policy example is

when a company wants to implement geographic compliance requirements to limit locations where services can be deployed.

7. List three RBAC roles and the associated permissions for each role.

   Answer: Owner who has full access to all resources and can delegate access to others. Contributor who can create and manage all types of Azure resources but cannot grant access to others. Reader who can only view Azure resources. User access administrator who manages user access to Azure resources. Other roles are possible.

8. What is the purpose of role-based access control (RBAC) and why would you use it?

   Answer: RBAC provides fine-grained access management of resources in Azure. RBAC can be used to segregate duties within a team. RBAC can also grant just the amount of access users need to perform their jobs. RBAC is an allow model granting access only as assigned.

9. What is resource tagging and why would you use it?

   Answer: Resource tags provide metadata for your Azure resources. Tags are name-value pairs that help logically organize resources into a taxonomy. Tags can be used to roll up billing information, for example the costs on a new project. Tags can also be used by Azure policy to determine when a policy should be applied.

10. Name several ways you can reduce costs in Azure.

    Answer: Azure Reservations helps you save money by pre-paying for services. Azure Hybrid Benefits uses Windows Server and SQL Server on-premises licenses with Software Assurance. Azure Credits provides a monthly benefit that allows you to experiment with, develop, and test new solutions on Azure. Regional pricing can be explored to find the most cost-effective location. You can implement Cost Management to conduct a cost analysis, create a budget, and review cost recommendations.

11. Name at least three tools an Administrator can use to create and manage Azure resources.

    Answer: Azure Portal, Azure CLI, Azure PowerShell, and Azure templates.

12. What is an Azure resource group and what are some basic rules when creating resource groups?

    Answer: A resource group is a container of related resources for an Azure solution. Resources can exist in only one resource group. Groups can have resources of many different types (services) and from many different regions. Groups cannot be nested.

Not all resources can be moved between groups. It is best practice to add resources to the group that share the same lifecycle.

13. What are Azure Resource Manager templates and what are the advantages of using them?

    Answer: Templates are a programmatic way to define your infrastructure with code. Templates let you create and deploy resources in a consistent manner. Templates improve accuracy and reduce manual errors. Templates can be reused and simplify administration. Templates have a defined schema and use a declarative syntax.

14. Describe the Azure Cloud Shell and the two programming languages it supports.

    Answer: The Azure Cloud Shell Interactive, browser-accessible shell. The shell offers coding in either Azure CLI or Azure PowerShell. The shell Is temporary and provided on a per-session, per-user basis. The shell requires a resource group, storage account, and Azure File share. When you use the shell it authenticates automatically and times out after 20 minutes.

15. What are resource limits (quotas) and why are they important?

    Answer: Resource quotas define the number of resources a user subscription can provision or consume. For example, how many resource groups a subscription can have. It is important to monitor your usage to avoid running up against the limits. Some services have adjustable limits. If you want to raise the limit or quota above the default limit, open an online customer support request at no charge. The limit can be raised above the default limit but not above the maximum limit. It is helpful to track current usage, and plan for future use.

Learning Path 2: AZ-104: Configure and manage virtual networks for Azure administrators - Training | Microsoft Learn

Multiple-choice questions

1. You have an Azure subscription that contains the following virtual networks:

   - VNet1 has an IP address range of 192.168.0.0/24.
   - VNet2 has an IP address range of 10.10.0.0/24.
   - VNet3 has an IP address range of 192.168.0.0/16.

   You need to configure virtual network peering. Which two peerings can you create? Each correct answer presents complete solution.

   Select all answers that apply.

   a. VNet1 can be peered with VNet2.

b. VNet1 can be peered with VNet3.
c. VNet2 can be peered with VNet3.
d. VNet3 can be peered with VNet1.

2. You have an Azure subscription that contains two resource groups named RG1 and RG2.

   RG1 contains the following resources:

   - A virtual network named VNet1 located in the East US Azure region
   - A network security group (NSG) named NSG1 located in the West US Azure region

   RG2 contains the following resources:

   - A virtual network named VNet2 located in the East US Azure region
   - A virtual network named VNet3 located in the West US Azure region

   To which subnets can you apply NSG1?

   Select only one answer.
   a. the subnets of all the virtual networks
   b. the subnets of VNet1 only
   c. the subnets of VNet1 and VNet2
   d. the subnets of VNet3 only

3. You deploy web servers to two virtual machines named VM1 and VM2 in an availability set named AVSet1.

   You need to configure Azure Load Balancer with a backend pool of VM1 and VM2. The solution must minimize costs. Which SKU should you use for the Azure Load Balancer configuration?

   Select only one answer.

   a. Azure Standard Load Balancer with Basic SKU public IP
   b. Azure Standard Load Balancer with Standard SKU public IP
   c. Basic Azure Load Balancer with Basic SKU public IP
   d. Basic Azure Load Balancer with Standard SKU public IP

4. You have an Azure subscription that contains a virtual network named VNet1.

   You plan to deploy a virtual machine named VM1 to be used as a network inspection appliance. You need to ensure that all network traffic passes through VM1.

What should you do?

Select only one answer.

a. Configure a user-defined route.
b. Create a virtual network gateway.
c. Modify the default route.
d. Modify the system route.

Open-ended questions

1. What is a virtual network and what things should you consider when creating a virtual network?

   Answer: A virtual network is a logical representation of your own network. Virtual networks can be used in cloud and hybrid cloud scenarios. When creating a virtual network, you will need to define the address space and create at least one subnet. Subnets in the virtual network subnet must have a unique address range that does not overlap with other subnets. Also consider traffic control, resource isolation, and topology.

2. What are the two types of virtual networking addresses and how are the addresses used?

   Answer: Private IP addresses used within an Azure virtual network, and your on-premises network. When you use a VPN gateway or ExpressRoute circuit to extend your network to Azure, you are using private IP addresses. Public IP addresses are used for communication with the internet, including Azure public-facing services. For example, a customer retail website.

3. What is a Network Security Group (NSG) and when would you use it?

   Answer: A NSG filters network traffic to and from Azure resources in an Azure virtual network. An NSG lists the security rules that allow or deny inbound or outbound network traffic. For example, limiting inbound traffic to only frontend web servers. Another example, limiting outbound traffic from internal virtual machines.

4. What is an Application Security Group (ASG) and when would you use it?
   Answer: An ASG is a logical grouping of virtual machines. For example, you could group web servers and SQL database application servers. To control the traffic flow security rules can then be assigned to each ASG. By placing a NSG around the ASGs you can further control inbound and outbound access.

5. What is an Azure DNS domain, and can you change the name assigned to you?

Answer:. The domain name system (DNS) is a naming database in which internet domain names are located and translated into Internet Protocol (IP) addresses. The domain name system maps the name people use to locate a website to the IP address that a computer uses to locate that website. Azure DNS is a hosting service for DNS domains that provides name resolution. When you create an Azure subscription an Azure AD domain is created for you. This initial domain takes the form domainname.onmicrosoft.com. You can change or customize the domain name. However, you will need to verify ownership of the domain name.

6. What is virtual network (VNet) peering and why would use it?

   Answer: VNet peering connects two Azure virtual networks. Peering can be regional or global. Peered networks use the Azure backbone which provides for privacy and isolation. VNet peering is easy to configure and offers great performance.

7. What is the difference between system-defined routes and user-defined routes? Give an example where each type of route would be used.

   Answer: System-defined routes direct network traffic between virtual machines, on-premises networks, and the internet. System-defined routes are the default behavior for Azure routing. Examples include traffic between VMs in the same subnet, between VMs in different subnets in the same virtual network, and data flow from VMs to the internet. User-defined (custom) routes override the system routes or add routes to the routing table. Examples include routing through gateways and virtual appliances.

8. What is the difference between a service endpoint and a private endpoint?

   Answer: A service endpoint limits network access to specific subnets and IP addresses. A service endpoint is a web address (URL) at which clients of a specific service can gain access to it. Service endpoints are supported for a variety of services including Storage, Key Vault, and SQL. A private endpoint. A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service through a private link. Private link integrates with on-premises and peered networks.

9. List at least three types of Azure load balancers. For each load balance describe the usage scenarios.
   Answer: The Application Gateway can optimize delivery from application server farms while increasing application security with web application firewall. Front Door is a scalable, security-enhanced delivery point for global, micro service-based web

applications. The Azure Load Balancer balances inbound and outbound connections and requests to your applications or server endpoints. Traffic Manager distributes traffic optimally to services across global Azure regions, while providing high availability and responsiveness.

10. What is a load balancer and what two types of load balancer does Azure provide? Give an example of where each type of load balancer would be used.

    Answer: A load balancer distributes inbound and outbound traffic using load-balancing rules and health probes. There are two types of load balancers: public and internal. Public facing load balancers maps external IP addresses to internal IP addresses, and vice versa. Public load balancers handle external requests to backend resources, like SQL servers. Internal load balancers direct traffic only to resources inside a virtual network or that use a VPN. Internal load balancers can be used for cross-premises virtual networks, for multi-tier applications, and for line-of-business application balancing.

11. Your retail application allows customers to select and save items for purchase. It is important if the customer returns to the website that they are connected to the same virtual machine they previously used. What distribution methods does the Load Balancer have to handle these requests?

    Answer: Session persistence specifies how client traffic is handled. The default is that requests are handled by any machine. The Client IP requests will be handled by the same virtual machine. Client IP and protocol specifies that successive requests from the same address and protocol will be handled by the same virtual machine.

12. Your website uses static image and video. The images and video are located on different backend servers. What solution would you put in place to handle the requests?

    Answer: An Application Gateway manages web app requests. The Application Gateway can route traffic to a pool of web servers based on the URL of a request. In this case path-based routing can send URL images to one server and URL videos to another server. Multiple-site routing is also available. For example, one set of servers for one organization and another set of servers for a different organization.

13. Name at least three ways to use Network Watcher to troubleshoot and diagnose network problems.

    Answer: Network Watcher is a regional service that provides various network diagnostic and monitoring tools. *IP Flow Verify* diagnoses connectivity issues. *Next Hop* determines if traffic is being correctly routed. *VPN Diagnostics* troubleshoots

gateways and connections. *NSG Flow Logs* maps IP traffic through a network security group. *Connection Troubleshoot* shows connectivity between source VM and destination. *Topology* generates a visual diagram of resources that might be helpful.

Learning Path 3: AZ-104: Implement and manage storage in Azure - Training | Microsoft Learn

Multiple-choice questions

1. You have an Azure subscription that contains several storage accounts.

   You need to provide a user with the ability to perform the following tasks:

   - Manage containers within the storage accounts.
   - View storage account access keys.

   The solution must use the principle of least privilege.

   Which role should you assign to the user?

   Select only one answer.

   a. Owner
   b. Reader
   c. Storage Account Contributor
   d. Storage Blob Data Contributor

2. You need to create an Azure Storage account that meets the following requirements:

   - Stores data in multiple Azure regions.
   - Supports reading the data from primary and secondary regions.

   Which type of storage redundancy should you use?

   Select only one answer.

   a. geo-redundant storage (GRS)
   b. locally-redundant storage (LRS)
   c. read-access geo-redundant storage (RA-GRS)
   d. zone-redundant storage (ZRS)

3. You have an Azure Storage account named storage1.

   You plan to store long-term backups in storage1. The solution must minimize costs.

Which storage tier should you use for the backups?

Select only one answer.

a. Archive
b. Cold
c. Hot

4. You have an Azure subscription that contains a storage account named storage1.

   You need to provide storage1 with access to a partner organization. Access to storage1 must expire after 24 hours.

   What should you configure?

   Select only one answer.

   a. a shared access signature (SAS)
   b. an access key
   c. Azure Content Delivery Network (CDN)
   d. lifecycle management

Open-ended questions

1. What are four types of Azure storage and what is each type used for?

   Answer: Azure Containers is a massively scalable object store for text and binary data. Azure Tables is ideal for storing structured, non-relational data. Azure Queues is a messaging store for reliable messaging between application components. Azure Files provides managed file shares for cloud or on-premises deployments.

2. What are Azure blobs and what three access tiers are provided?

   Answer: Azure blob storage stores unstructured data. Blob storage can store any type of text or binary data. For example, images and video. The hot tier is optimized for frequent access of objects in the storage account. The cool tier is optimized for storing large amounts of data that is infrequently accessed and stored for at least 30 days. The archive tier is optimized for data that can tolerate several hours of retrieval latency and will remain in the Archive tier for at least 180 days.

3. List at least four ways you can secure your Azure storage.

   Answer: Server-side encryption (SSE) to automatically encrypt your data when it is persisted to the cloud. Use RBAC and Azure AD to restrict access. Use Shared Access Signatures (SAS) for delegated access. Use a shared key for storage account access.

Use Azure disk encryption. Use client-side encryption, HTTPS, and SMB 3.0 for data in transit.

4. Name and describe at least three storage specific tools you could use to manage Azure storage.

   Answer: Azure Storage Explorer is an application that helps you to easily access the Azure storage account through any device on any platform. The Import/Export service lets you move large amounts of data to and from Azure storage. AzCopy is a command-line utility that you can use to copy blobs or files to or from a storage account. Students may also know of Data Box is a suite of offline and online storage device products. For simple management tasks, you could also use the Azure portal.

Learning Path 4: AZ-104: Deploy and manage Azure compute resources - Training | Microsoft Learn

Multiple-choice questions

1. You are creating an Azure virtual machine that will run Windows Server.

   You need to ensure that VM1 will be part of a virtual machine scale set. Which setting should you configure during the creation of the virtual machine?

   Select only one answer.
   a. Availability options
   b. Azure Spot instance
   c. Management
   d. Region

2. Your company plans to host an application on four Azure virtual machines.

   You need to ensure that at least two virtual machines are available if a single Azure datacenter fails. Which availability option should you select for the virtual machine?

   Select only one answer.
   a. an availability set
   b. an availability zone
   c. scale sets

3. You need to create an Azure App Service web app that runs on Windows. The web app requires scaling to five instances, 45 GB of storage, and a custom domain name. The solution must minimize costs. Which App Service plan should you use?

   Select only one answer.

a. Basic
b. Free
c. Premium
d. Standard

Open-ended questions

1. Describe at least three things you would need to consider before creating an Azure virtual machine.

   Answer: Locating the virtual machine in a region that is close to your users. Selecting the best virtual machine size for your application. Determining how cost will be determined and estimating the monthly cost. Deciding on disk storage including standard, premium, or ultra. Selecting an operating system and version. How you will monitor and update the virtual machine. If any additional scripts, configuration, or agents are required.

2. Describe two ways to connect and sign-in to a virtual machine.

   Answer: Bastion is the recommended way to connect to a virtual machine. For example, to install required software. Bastion lets you access the virtual machine through the Azure portal over SSL. You can also directly connect to a Windows server with the Remoted Desktop Protocol. For Linux machines you can use Secure Shell Protocol (SSH).

3. What is the difference between virtual and horizontal scaling?

   Answer: Vertical scaling (scale up and scale down) is the process of increasing or decreasing power to a single instance of a workload. For example, selecting a virtual machine with more memory or faster CPU performance. Horizontal scaling (scale out and scale in) is the process of increasing or decreasing the number of instances of a workload. For example, adding additional virtual machines as the workload increases. Vertical scaling is usually a manual process. Horizontal scaling is usually automated.

4. What is a virtual machine scale set and when would you want to deploy them?

   Answer: Azure virtual machine scale sets let you create and manage a group of load balanced VMs. Scale sets provide redundancy and improved performance, applications are typically distributed across multiple instances. Each instance is identical, no pre-provisioning is required. As demand goes up more VMs are added. As demand goes down instances are removed. Scaling can be manual, automated, or a combination of both. To control costs, you control the instance count.

5. What is an App Service Plan and what will you consider in deciding which plan to choose?

   Answer: An App Service Plan defines a set of compute resources for a web app to run. The plan determines performance, price, and features for a web app. Considerations for which plan to choose include how many web apps you can have, the disk space available to the web apps, if the web app can autoscale, how many deployment slots are available, and how many web app instances can be created.

6. What are web app deployment slots and how can they be used?

   Answer: Deployment slots allow your app to run different instances. For example, a staging instance and a production instance. Deployment slots are live apps with their own hostnames. Deployment slots help you validate changes before making the app live. Slots also avoid a cold start which eliminates downtime. Lastly, slots let you fall back to a known good site.

7. List at least three administrator tasks for an organization's web app.

   Answer: If you are administering an Azure web app you will need to monitor, secure, and backup the app. Monitoring includes usage stats, outages, page views, user sessions, performance, and troubleshooting. Securing tasks include access, authentication, certificates, and identity. Backup decisions make sure all parts of the app can be restored, as well as frequency of the backups. Creating a custom domain name is another important task; there are certainly other important tasks.

8. Describe at least two differences between containers and virtual machines.

   Answer: Containers provide only lightweight isolation, whereas VMs provide complete isolation. VMs run the entire operating systems, but containers only run the OS services that are needed. Containers are deployed with Docker and orchestrated with Azure Kubernetes service. VMs are deployed and managed different tools with Azure. Containers can use local disk storage or file shares. VMs use a virtual hard disk and file shares.

Learning Path 5: AZ-104: Monitor and back up Azure resources - Training | Microsoft Learn

Multiple-choice questions

1. You have an Azure subscription that contains network security groups (NSGs).

   Which two resources can be associated with a NSG? Each correct answer presents a complete solution.

   Select all answers that apply.

a. Azure Monitor
b. Azure Network Watcher
c. network interfaces
d. subnets

2. You have an Azure virtual machine that hosts a third-party application named App1. Users report that they experience performance issues when they use the application. You need to find the root cause of the performance issue.

   What should you use?

   Select only one answer.
   a. activity logs
   b. Azure Advisor
   c. Azure Cost
   d. Azure Monitor

3. You have an Azure subscription that contains virtual machines, virtual networks, application gateways, and load balancers.

   You need to monitor the network health of the resources. Which Azure service should you use?

   Select only one answer.
   a. Azure Monitor
   b. Azure Network Watcher
   c. Azure Resource Manager
   d. network security groups (NSGs)

Open-ended questions

1. What workloads can Azure Backup back up? Discuss both on-premises and Azure workloads.

   Answer: Azure Backup is the main tool to backup and restore workloads. On-premises workloads include files and folders, Hyper-V virtual machines, VMware virtual machines, Microsoft SQL Server, Microsoft SharePoint, Microsoft Exchange, System State, and Bare Metal Recovery. Azure workloads include virtual machines, Azure file shares, SQL Server in Azure VM, and SAP HANA in Azure VM.

2. You need to configure on-premises file and folder backups. What are basic steps to configuring the backup?

Answer: First, you will need to create a recovery service vault. Next, download the agent on the on-premises machine. The agent will need a credential certificate. Next, install and register the agent with Azure. Lastly, configure the backup policies. The portal provides a wizard to help with the agent steps.

3. Name at least two ways you can protect virtual machine data.

   Answer: Virtual machine snapshots provide a quick and simple option for backing up VMs that use managed disks. Snapshots help capture information between formal backups. Azure Backup supports application-consistent backups for both Windows and Linux VMs. Azure Site Recovery protects your VMs from a major disaster scenario when a whole region experiences an outage.

4. Several of your virtual machine backups have been accidentally deleted. Is there any way to recover the deleted backups?

   Answer: Soft delete has the capability to protect cloud backups for IaaS virtual machines from accidental as well as malicious deletion of backups. Soft delete provides 14 days of extended retention, allowing recovery with no data loss. Soft delete is offered at no cost and is natively built-in for all recovery service vaults. To recover the deleted backups, use the *undelete* feature.

5. What is the difference between Azure Backup and Azure Site recovery?

   Answer: Azure Backup allows for granular backups and restores specific data. Azure Site Recovery (ASR) allows for the protection of an entire production site. ASR provides automation and orchestration to make the failover and failback processes seamless.

6. Name at least three data sources that can be used by Azure Monitor.

   Answer: Azure Monitor can ingest many different data sources. Sources include application code, operating system, resource, subscription, and tenant data. You can even create your own custom data source. Data sources generally fall into two categories metrics and logs. Metrics are numerical values that describe some aspect of a system at a point in time. For example, virtual machine CPU performance. Logs contain data organized into records with different sets of properties for each type. For example, the activity log shows subscription-level events. This includes such information as when a resource is modified or when a virtual machine is started.

7. You need to configure several Azure alerts. How will you assign/notify the help desk personnel when an alert is triggered? What methods can be used to notify them?

   Answer: The help desk personnel should be added to an action group. An action group is a collection of notification preferences. Alerts use action groups to notify

users that an alert has been triggered. Various alerts may use the same action group or different action groups depending on the user's requirements. Notification methods include push notifications to the Azure mobile app, email, SMS, and voice.

8. You are reviewing the Azure Monitor alerts page. What alert states (statuses) are possible?

   Answer: There are three alert states *New*, *Acknowledged*, and *Closed*. *New* indicates an issue has been detected and hasn't been reviewed. *Acknowledged* indicates an administrator has reviewed the alert and started working on it. *Closed* indicates the issue has been resolved. You can reopen a closed alert if the issue returns.

9. You would like to structure queries against the Windows Event log. Specifically, you would like to identify any errors. What product should you use? What query language is available to construct the query?

   Answer: You should use a Log Analytics workspace. The workspace can receive data from the Windows Event log. The event records can then be visualized or queried. Azure uses the Kusto query language. Windows Event logs are stored in the Event table. to query the event table for errors, use this command:

   ```
   Event | where (EventLevelName == "Error")
   ```

Section 2. Capstone (not applicable)