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MB-220 - Microsoft Dynamics 365 for Marketing
MB-920 - Microsoft Dynamics 365 Fundamentals Finance and Operations Apps (ERP) (beta)
MB-310 - Microsoft Dynamics 365 Finance Functional Consultant
PL-200 - Microsoft Power Platform Functional Consultant
SC-900 - Microsoft Security, Compliance, and Identity Fundamentals
PL-300 - Microsoft Power BI Data Analyst
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DP-300 - Administering Relational Databases on Microsoft Azure
DP-203 - Data Engineering on Microsoft Azure
AZ-400 - Microsoft Azure DevOps Solutions
MB-910 - Microsoft Dynamics 365 Fundamentals Customer Engagement Apps (CRM)
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DP-420 - Designing and Implementing Cloud-Native Applications Using Microsoft Azure Cosmos DB
AZ-204 - Developing Solutions for Microsoft Azure
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MB-230 - Microsoft Dynamics 365 Customer Service Functional Consultant
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AI-102 - Designing and Implementing a Microsoft Azure AI Solution
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MS-102 - Microsoft 365 Administrator (beta)
MS-700 - Managing Microsoft Teams
SC-300 - Microsoft Identity and Access Administrator
PL-900 - Microsoft Power Platform Fundamentals
AI-900 - Microsoft Azure AI Fundamentals
MB-800 - Microsoft Dynamics 365 Business Central Functional Consultant
AZ-801 - Configuring Windows Server Hybrid Advanced Services
MB-330 - Microsoft Dynamics 365 Supply Chain Management
PL-100 - Microsoft Power Platform App Maker
MB-700 - Microsoft Dynamics 365
PL-600 - Microsoft Power Platform Solution Architect
PL-500 - Microsoft Power Automate RPA Developer
AZ-800 - Administering Windows Server Hybrid Core Infrastructure
AZ-140 - Configuring and Operating Windows Virtual Desktop on

Amazon

AWS Certified Advanced Networking - Specialty ANS-C01 - AWS Certified Advanced Networking - Specialty ANS-C01
AWS Certified Cloud Practitioner - AWS Certified Cloud Practitioner (CLF-C01)
AWS Certified DevOps Engineer - Professional DOP-C02 - AWS Certified DevOps Engineer - Professional DOP-C02
AWS Certified Machine Learning - Specialty - AWS Certified Machine Learning - Specialty (MLS-C01)
AWS Certified Developer Associate - AWS Certified Developer Associate
AWS Certified Developer - Associate DVA-C02 - AWS Certified Developer - Associate DVA-C02
AWS Certified Solutions Architect - Professional SAP-C02 - AWS Certified Solutions Architect - Professional SAP-C02
AWS Certified Security - Specialty SCS-C02 - AWS Certified Security - Specialty SCS-C02
AWS Certified Solutions Architect - Associate SAA-C03 - AWS Certified Solutions Architect - Associate SAA-C03
AWS Certified SysOps Administrator - Associate - AWS Certified SysOps Administrator - Associate (SOA-C02)
AWS Certified Solutions Architect - Professional - AWS Certified Solutions Architect - Professional
AWS Certified SAP on AWS - Specialty PAS-C01 - AWS Certified SAP on AWS - Specialty PAS-C01
AWS Certified Security - Specialty - AWS Certified Security - Specialty
AWS Certified Data Engineer - Associate DEA-C01 - AWS Certified Data Engineer - Associate DEA-C01
AWS DevOps Engineer Professional - AWS DevOps Engineer - Professional (DOP-C01)
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AWS Certified Database - Specialty - AWS Certified Database - Specialty
AWS Certified Data Analytics - Specialty - AWS Certified Data Analytics - Specialty (DAS-C01)

CompTIA

SK0-005 - CompTIA Server+ Certification Exam
CS0-002 - CompTIA CySA+ Certification Exam (CS0-002)
CV0-003 - CompTIA Cloud+
CS0-003 - CompTIA Cybersecurity Analyst (CySA+)
PT0-002 - CompTIA PenTest+ Certification Exam
N10-008 - CompTIA Network+
XK0-005 - CompTIA Linux+
220-1102 - CompTIA A+ Certification Exam
220-1101 - CompTIA A+ Certification Exam
FC0-U61 - CompTIA IT Fundamentals
CAS-004 - CompTIA Advanced Security Practitioner (CASP+) CAS-004
SY0-601 - CompTIA Security+
PK0-005 - CompTIA Project+

VMware

2V0-41.23 - VMware NSX 4.x Professional
3V0-21.21 - Advanced Design VMware vSphere 7.x
2V0-33.22 - VMware Cloud Professional
5V0-22.23 - VMware vSAN Specialist v2
5V0-31.22 - VMware Cloud Foundation Specialist (v2)
2V0-21.20 - Professional VMware vSphere 7.x
2V0-21.23 - VMware vSphere 8.x Professional
1V0-21.20 - Associate VMware Data Center Virtualization

Fortinet

NSE7_EFW-7.0 - NSE 7 - Enterprise Firewall 7.0
NSE7_SDW-7.0 - Fortinet NSE 7 - SD-WAN 7.0
NSE5_FAZ-7.2 - FortiAnalyzer 7.2 Analyst
NSE5_FCT-7.0 - NSE 5 - FortiClient EMS 7.0
NSE5_FMG-7.2 - Fortinet NSE 5 - FortiManager 7.2
NSE4_FGT-7.2 - Fortinet NSE 4 - FortiOS 7.2

Oracle

1z0-082 - Oracle Database Administration I
1z0-808 - Java SE 8 Programmer
1z0-083 - Oracle Database Administration II
1z0-071 - Oracle Datbase 12c SQL
1z0-1072-23 - Oracle Cloud Infrastructure 2023 Architect Associate

Juniper

JN0-104 - Junos, Associate (JNCIA-Junos)
JN0-649 - Enterprise Routing and Switching, Professional (JNCIP-ENT)
JN0-664 - Service Provider Routing and Switching, Professional (JNCIP-SP)
JN0-351 - Enterprise Routing and Switching, Specialist (JNCIS-ENT)
JN0-231 - Security, Associate (JNCIA-SEC)

Splunk®

SPLK-1002 - Splunk Core Certified Power User
SPLK-3001 - Splunk Enterprise Security Certified Admin

Google

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Microsoft - AZ-204 Practice Questions - SecExams.com

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Question #1

You have two Hyper-V hosts named Host1 and Host2. Host1 has an Azure virtual machine named VM1 that was deployed by using a custom Azure Resource Manager template.
You need to move VM1 to Host2.
What should you do?

A) From the Update management blade, click Enable.
B) From the Overview blade, move VM1 to a different subscription.
C) From the Redeploy blade, click Redeploy. (Correct Answer)
D) From the Profile blade, modify the usage location.

Explanation

Correct Answer:
C
When you redeploy a VM, it moves the VM to a new node within the Azure infrastructure and then powers it back on, retaining all your configuration options and associated resources.
Reference:
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/redeploy-to-new-node

Community Discussion

secexams.com Answer is correct.

Just passed the exam 26/04/2023. All the questions were from Exam topics. Got 970 marks!

secexams.com Correct Answer

Just passed the exam 3-Nov-2023. All Qs from the Exam topics - 932/1000. Case Study: VanArsdel, ltd - all 11 Qs from Sec Exams. Case 1: Medical records documents website - all 3 Qs. Case 2: 2000 stores with POS terminals - 3-4 Qs (selected Event Hub as Yes). Total Qs: 44 Exam starts from Case Study (11 Qs), then ~26 general Qs, and finally 2 cases (~6-7 Qs). P.S. This specific Q was not on exam, just put note here since it is most likely to be read by everybody. I think the update which happen in October was really minor. I got just 1 such Q, which appeared in this dump on the day of exam, I analyzed it just 1 hour before the exam :)

Just passed the exam 3/12/2023 thankyou so much lab

SecExams

Question #2

DRAG DROP -

You have downloaded an Azure Resource Manager template to deploy numerous virtual machines. The template is based on a current virtual machine, but must be adapted to reference an administrative password.

You need to make sure that the password is not stored in plain text.

You are preparing to create the necessary components to achieve your goal.

Which of the following should you create to achieve your goal? Answer by dragging the correct option from the list to the answer area.

Select and Place:

Options	Answer
An Azure Key Vault	
An Azure Storage account	
Azure Active Directory (AD) Identity Protection	
An access policy	
An Azure policy	
A backup policy	

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Explanation

Correct Answer:

Options	Answer
	An Azure Key Vault
An Azure Storage account	An access policy
Azure Active Directory (AD) Identity Protection	
An Azure policy	
A backup policy	

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Community Discussion

Key Vault + Access Policy. Using Key Vault we create a secret containing our Password: https://docs.microsoft.com/en-us/azure/key-vault/secrets/quick-create-portal . Using an Access Policy we allow access to the previously created secret. Documentation Guide: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/key-vault-parameter?tabs=azure-cli

Is it me, or is the question misleading since it says "option" - singuar?

https://www.secexams.com/exams/microsoft/az-104/view/2/ Answer is correct, see question in AZ104 #20

Key Vault + Access Policy, Is the correct but the Access Policy option is legacy now, and most likely will be replaced with the option of Azure role-based access control instead of Access Policy

I had the same problem

Question #3

Your company has an Azure Kubernetes Service (AKS) cluster that you manage from an Azure AD-joined device. The cluster is located in a resource group. Developers have created an application named MyApp. MyApp was packaged into a container image.
You need to deploy the YAML manifest file for the application.
Solution: You install the Azure CLI on the device and run the kubectl apply `"f myapp.yaml command.
Does this meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
kubectl apply -f myapp.yaml applies a configuration change to a resource from a file or stdin.
Reference:
https://kubernetes.io/docs/reference/kubectl/overview/
https://docs.microsoft.com/en-us/cli/azure/aks

Community Discussion

Selected Answer: A

- apears as `" at secexams

Selected Answer: A

As the command is written, the answer would be NO, as that is invalid syntax for kubectl. However, assuming that this is just another transcription issue on SecExams, and that `" should be a - instead, the answer is A.

Chat gpt said Yes, and then give me the instruccion to achieve it: Yes, your solution is correct. To deploy the YAML manifest file for the application on your Azure Kubernetes Service (AKS) cluster, you can follow these steps: Install the Azure CLI on your Azure AD-joined device. You can download and install the Azure CLI from the official Microsoft Azure CLI documentation. Once the Azure CLI is installed, open a terminal or command prompt. Log in to your Azure account by running the following command and following the prompts:...

Install Azure CLI cannot enable you to use kubectl commands. For it, you need to install Kubernetes command-line tool (kubectl) - my opnion, B!

Did you study all the questions?

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Question #4

Your company has an Azure Kubernetes Service (AKS) cluster that you manage from an Azure AD-joined device. The cluster is located in a resource group. Developers have created an application named MyApp. MyApp was packaged into a container image.
You need to deploy the YAML manifest file for the application.
Solution: You install the docker client on the device and run the docker run -it microsoft/azure-cli:0.10.17 command.
Does this meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Community Discussion

Correct Answer NO docker run -it microsoft/azure-cli:0.10.17 is no k8s command

K8 Out of scope for 2021!

The Answer is NO To deploy a YAML file to Kubernetes you need to use the “kubectl” command. An example could be: kubectl apply -f myapp.yaml

Selected Answer: B

To apply the Kubernetes manifest file to the AKS cluster, you would typically use the kubectl apply command. This command applies the desired state described in the manifest file to the cluster, which will result in the creation and deployment of the specified resources, including the containerized application.

Selected Answer: B

Answer is No

SecExams

Question #5

Your company has a web app named WebApp1.
You use the WebJobs SDK to design a triggered App Service background task that automatically invokes a function in the code every time new data is received in a queue.
You are preparing to configure the service processes a queue data item.
Which of the following is the service you should use?

A) Logic Apps
B) WebJobs (Correct Answer)
C) Flow
D) Functions

Explanation

Correct Answer:

B
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-compare-logic-apps-ms-flow-webjobs

Community Discussion

"You use the WebJobs SDK to design a triggered App Service background task" B - WebJob Usually you'll host the WebJobs SDK in Azure WebJobs, but you can also run your jobs in a Worker Role. The Azure WebJobs feature of Azure Web Apps provides an easy way for you to run programs such as services or background tasks in a Web App... https://github.com/Azure/azure-webjobs-sdk

the Correct Answer, D: Function

Azure WebJobs is not a service, you'll host the WebJobs SDK functions in Azure WebApps. With Webjobs you program code in your webapp and you'll be able to execute 'kind of Azure functions' inside your Web App. It is automatically deployed with the deployment of the web app. WebJobs is the predecessor of Azure functions.

Azure WebJobs is not a service, you'll host the WebJobs SDK functions in Azure WebApps. With Webjobs you program code in your webapp and you'll be able to execute 'kind of Azure functions' inside your Web App. It is automatically deployed with the deployment of the web app. WebJobs is the predecessor of Azure functions.

Without any rationale?

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Question #6

Your company has an Azure subscription.
You need to deploy a number of Azure virtual machines to the subscription by using Azure Resource Manager (ARM) templates. The virtual machines will be included in a single availability set.
You need to ensure that the ARM template allows for as many virtual machines as possible to remain accessible in the event of fabric failure or maintenance.
Which of the following is the value that you should configure for the platformFaultDomainCount property?

A) 10
B) 30
C) Min Value
D) Max Value (Correct Answer)

SecExams

Explanation

Correct Answer:
D
The number of fault domains for managed availability sets varies by region - either two or three per region.
Reference:
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/manage-availability

Community Discussion

Answer D Max Value. [values could be 1,2,3] https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-manage-fault-domains

As described here: https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-manage-fault-domains You can set the parameter --platform-fault-domain-count to 1, 2, or 3 (default of 3 if not specified). And as described here: https://docs.microsoft.com/en-us/azure/virtual-machines/availability-set-overview Each virtual machine in your availability set is assigned an update domain and a fault domain by the underlying Azure platform. Each availability set can be configured with up to three fault domains and twenty update domains. So answer is D Max Value

Correct. Values can be 1,2 or 3

Correct. Values can be 1,2 or 3

Vm are not in the exam anymore as of summer 2023.

Question #7

Your company has an Azure subscription.
You need to deploy a number of Azure virtual machines to the subscription by using Azure Resource Manager (ARM) templates. The virtual machines will be included in a single availability set.
You need to ensure that the ARM template allows for as many virtual machines as possible to remain accessible in the event of fabric failure or maintenance.
Which of the following is the value that you should configure for the platformUpdateDomainCount property?

A) 10
B) 20 (Correct Answer)
C) 30
D) 40

Explanation

Correct Answer:
B
Each virtual machine in your availability set is assigned an update domain and a fault domain by the underlying Azure platform. For a given availability set, five non-user-configurable update domains are assigned by default (Resource Manager deployments can then be increased to provide up to 20 update domains) to indicate groups of virtual machines and underlying physical hardware that can be rebooted at the same time.
Reference:
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/manage-availability

Community Discussion

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Answer is B 20 Each availability set can be configured with up to three fault domains and twenty update domains. https://docs.microsoft.com/en-us/azure/virtual-machines/availability-set-overview

Should be 20

Selected Answer: B

The upper limit of platformUpdateDomainCount is 20

Selected Answer: B

https://learn.microsoft.com/en-us/azure/virtual-machines/availability-set-overview

Explained the concept of availability sets, fault domain, and update domain in azure. https://www.youtube.com/watch?v=9UX7Qq0u2oU

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Question #8

DRAG DROP -

You are creating an Azure Cosmos DB account that makes use of the SQL API.

Data will be added to the account every day by a web application.

You need to ensure that an email notification is sent when information is received from IoT devices, and that compute cost is reduced.

You decide to deploy a function app.

Which of the following should you configure the function app to use? Answer by dragging the correct options from the list to the answer area.

Select and Place:

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Explanation

Correct Answer:

Options	Answer
Azure Cosmos DB connector	Consumption plan
SendGrid action	SendGrid binding
Azure Event Hubs binding	

Community Discussion

Answer is correct: Consumption plan will reduce the cost and SendGrid is used to send emails from azure functions. https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-sendgrid?tabs=in-process%2Cfunctionsv2&pivots=programming-language-csharp

event hub might be able to be used because it's an event, and from IoT - But generally, Event hub is for a massive amount of processing from many IoT devices. Sounds expensive, right?

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Question #9

This question requires that you evaluate the underlined text to determine if it is correct.
You company has an on-premises deployment of MongoDB, and an Azure Cosmos DB account that makes use of the MongoDB API.
You need to devise a strategy to migrate MongoDB to the Azure Cosmos DB account.
You include the Data Management Gateway tool in your migration strategy.
Instructions: Review the underlined text. If it makes the statement correct, select `No change required.` If the statement is incorrect, select the answer choice that makes the statement correct.

A) No change required
B) mongorestore (Correct Answer)
C) Azure Storage Explorer
D) AzCopy

Explanation

Correct Answer:
B
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/mongodb-migrate https://docs.mongodb.com/manual/reference/program/mongorestore/

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Community Discussion

I cannot see the 'underlined text' in the question.

Answer: B --mongorestore https://docs.microsoft.com/en-us/azure/cosmos-db/mongodb-pre-migration

my gut tells me that it's Data Management Gateway since it's the only one that looks out of place

my gut tells me that it's Data Management Gateway since it's the only one that looks out of place

Azure Database Migration Service [is for online Migration] but it is not a choice https://docs.microsoft.com/en-us/azure/dms/tutorial-mongodb-cosmos-db-online

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Question #10

You are developing an e-Commerce Web App.
You want to use Azure Key Vault to ensure that sign-ins to the e-Commerce Web App are secured by using Azure App Service authentication and Azure Active Directory (AAD).
What should you do on the e-Commerce Web App?

A) Run the az keyvault secret command.
B) Enable Azure AD Connect.
C) Enable Managed Service Identity (MSI). (Correct Answer)
D) Create an Azure AD service principal.

Explanation

Correct Answer:
C
A managed identity from Azure Active Directory allows your app to easily access other AAD-protected resources such as Azure Key Vault.
Reference:

https://docs.microsoft.com/en-us/azure/app-service/overview-managed-identity
https://docs.microsoft.com/en-us/samples/azure-samples/app-service-msi-keyvault-dotnet/keyvault-msi-appservice-sample/

Community Discussion

100% Correct

"Azure Key Vault provides a way to store credentials and other secrets with increased security. But your code needs to authenticate to Key Vault to retrieve them. Managed identities for Azure resources help to solve this problem by giving Azure services an automatically managed identity in Azure Active Directory (Azure AD). You can use this identity to authenticate to any service that supports Azure AD authentication, including Key Vault, without having to display credentials in your code." https://docs.microsoft.com/en-us/azure/key-vault/general/tutorial-net-create-vault-azure-web-app

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"Azure Key Vault provides a way to store credentials and other secrets with increased security. But your code needs to authenticate to Key Vault to retrieve them. Managed identities for Azure resources help to solve this problem by giving Azure services an automatically managed identity in Azure Active Directory (Azure AD). You can use this identity to authenticate to any service that supports Azure AD authentication, including

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Key Vault, without having to display credentials in your code." https://docs.microsoft.com/en-us/azure/key-vault/general/tutorial-net-create-vault-azure-web-app

Question #11

This question requires that you evaluate the underlined text to determine if it is correct.
Your Azure Active Directory Azure (Azure AD) tenant has an Azure subscription linked to it.
Your developer has created a mobile application that obtains Azure AD access tokens using the OAuth 2 implicit grant type.
The mobile application must be registered in Azure AD.
You require a redirect URI from the developer for registration purposes.
Instructions: Review the underlined text. If it makes the statement correct, select `No change is needed.` If the statement is incorrect, select the answer choice that makes the statement correct.

A) No change required. (Correct Answer)
B) a secret
C) a login hint
D) a client ID

Explanation

Correct Answer:
A
For Native Applications you need to provide a Redirect URI, which Azure AD will use to return token responses.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/develop/v1-protocols-oauth-code

Community Discussion

You don't need client id to register an application in Azure AD. You just need redirect URI. Upon registration, the portal will give client id and tenant id. Both of them must be

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included in the app configuration json file, so given answer is correct as far as app registration is concerned. https://docs.microsoft.com/en-us/learn/modules/secure-app-with-oidc-and-azure-ad/4-exercise-create-aad-register-app

"This question requires that you evaluate the underlined text to determine if it is correct." - where is the underlined text to determine? i did not get it

I believe in this case it's "redirect URI" that should be underlined.

I believe in this case it's "redirect URI" that should be underlined.

I believe in this case it's "redirect URI" that should be underlined.

Question #12

You are creating an Azure key vault using PowerShell. Objects deleted from the key vault must be kept for a set period of 90 days.
Which two of the following parameters must be used in conjunction to meet the requirement? (Choose two.)

A) EnabledForDeployment
B) EnablePurgeProtection (Correct Answer)
C) EnabledForTemplateDeployment
D) EnableSoftDelete (Correct Answer)

Explanation

Correct Answer:
BD
Reference:
https://docs.microsoft.com/en-us/powershell/module/azurerm.keyvault/new-azurermkeyvault https://docs.microsoft.com/en-us/azure/key-vault/key-vault-ovw-soft-delete

Community Discussion

Selected Answer: BD

The EnablePurgeProtection parameter prevents the deletion of key vault objects by enabling purge protection. This parameter ensures that objects deleted from the key vault cannot be permanently deleted until the purge protection period has expired. The EnableSoftDelete parameter allows the key vault to retain deleted objects for a specified duration. This parameter enables soft delete, which allows the key vault to retain deleted objects for a specified period of time (90 days in this case) before they are permanently deleted.

Selected Answer: BD

BD is correct. You'll need to enable soft delete, and then purge protection to make sure that soft-deleted objects are not purged early.

The answer is correct!!!

BD EnabledForDeployment is a property of Azure Key Vault that allows you to control whether the Key Vault can be deployed as part of an Azure Resource Manager (ARM) template deployment. When EnabledForDeployment is set to true, it means that the Key Vault can be included in ARM templates and deployed using Azure Resource Manager. EnablePurgeProtection is a property of Azure Key Vault's soft delete feature. When EnablePurgeProtection is set to true, it ensures that deleted Key Vault entities (such as secrets, keys, or certificates) cannot be permanently deleted immediately. EnabledForTemplateDeployment is a property of Azure Key Vault that determines whether the Key Vault can be deployed as part of an Azure Resource Manager (ARM) template deployment. EnableSoftDelete is a property of Azure Key Vault that enables the soft delete feature for the Key Vault. Soft delete allows you to recover deleted entities (secrets, keys, or certificates) within a specified retention period, even after they have been deleted.

B. EnablePurgeProtection D. EnableSoftDelete To meet the requirement of keeping objects deleted from the key vault for 90 days, you need to use the EnablePurgeProtection and EnableSoftDelete parameters when creating the key vault using PowerShell. EnablePurgeProtection prevents the key vault from being permanently deleted before the soft-delete retention period has elapsed. EnableSoftDelete allows deleted vault and its contents to be retained and recoverable for the specified number of days.

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Question #13

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HOTSPOT -

You have an Azure Active Directory (Azure AD) tenant.

You want to implement multi-factor authentication by making use of a conditional access policy. The conditional access policy must be applied to all users when they access the Azure portal.

Which three settings should you configure? To answer, select the appropriate settings in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

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Explanation

Correct Answer:

Box 1:
The conditional access policy must be applied or assigned to Users and Groups.
Box 2:
The conditional access policy must be applied when users access the Azure portal, which is a cloud app. That is: Microsoft Azure Management

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Box 3:
Access control must require multi-factor authentication when granting access.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/app-based-mfa

Community Discussion

Microsoft wants a developer to remember their unfortunate choice to put the requirement (condition) for MFA not in the "conditions" tab, but in the "grants"? And the people go along with these without complaining and just trying to remember this totally useless information?

The answer is correct! Please refer to: https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-azure-management

The answer seems correct: https://youtu.be/FxW8vLxAjSk?t=463

The answer is correct. It's explicit here: https://learn.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-all-users-mfa#create-a-conditional-access-policy

Assignments: Include all users or a specific group that you want to apply the policy to.
Cloud apps or actions: Select "Microsoft Azure Management" or "Microsoft Azure portal".
Access controls: Configure the policy to require multi-factor authentication.

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Question #14

You manage an Azure SQL database that allows for Azure AD authentication. You need to make sure that database developers can connect to the SQL database via Microsoft SQL Server Management Studio (SSMS). You also need to make sure the developers use their on-premises Active Directory account for authentication. Your strategy should allow for authentication prompts to be kept to a minimum.
Which of the following should you implement?

A) Azure AD token.

B) Azure Multi-Factor authentication.

C) Active Directory integrated authentication. (Correct Answer)

D) OATH software tokens.

Explanation

Correct Answer:

C

Azure AD can be the initial Azure AD managed domain. Azure AD can also be an on-premises Active Directory Domain Services that is federated with the Azure AD.

Using an Azure AD identity to connect using SSMS or SSDT

The following procedures show you how to connect to a SQL database with an Azure AD identity using SQL Server Management Studio or SQL Server Database Tools.

Active Directory integrated authentication

Use this method if you are logged in to Windows using your Azure Active Directory credentials from a federated domain.

1. Start Management Studio or Data Tools and in the Connect to Server (or Connect to Database Engine) dialog box, in the Authentication box, select Active Directory - Integrated. No password is needed or can be entered because your existing credentials will be presented for the connection.

2. Select the Options button, and on the Connection Properties page, in the Connect to

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database box, type the name of the user database you want to connect to.
(The AD domain name or tenant ID‡€ option is only supported for Universal with MFA connection options, otherwise it is greyed out.)

Community Discussion

Correct

Selected Answer: C

Received this in my exam day (22/02/2023). Selected C. Score 927.

I think is not part of the 204 exam...

Active Directory integrated authentication allows developers to use their on-premises AD account to authenticate and connect to the Azure SQL database. With this method, SSMS uses the logged-in Windows credentials of the user to authenticate against the database. By configuring SSO between on-premises AD and Azure AD, developers can achieve a seamless authentication experience without additional prompts.

Are we sure this is a question that comes in a developer exam?

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Question #15

You are developing an application to transfer data between on-premises file servers and Azure Blob storage. The application stores keys, secrets, and certificates in Azure Key Vault and makes use of the Azure Key Vault APIs.
You want to configure the application to allow recovery of an accidental deletion of the key vault or key vault objects for 90 days after deletion.
What should you do?

A) Run the Add-AzKeyVaultKey cmdlet.
B) Run the az keyvault update --enable-soft-delete true --enable-purge-protection true CLI. (Correct Answer)
C) Implement virtual network service endpoints for Azure Key Vault.
D) Run the az keyvault update --enable-soft-delete false CLI.

Explanation

Correct Answer:
B
When soft-delete is enabled, resources marked as deleted resources are retained for a specified period (90 days by default). The service further provides a mechanism for recovering the deleted object, essentially undoing the deletion.
Purge protection is an optional Key Vault behavior and is not enabled by default. Purge protection can only be enabled once soft-delete is enabled.
When purge protection is on, a vault or an object in the deleted state cannot be purged until the retention period has passed. Soft-deleted vaults and objects can still be recovered, ensuring that the retention policy will be followed.
The default retention period is 90 days, but it is possible to set the retention policy interval to a value from 7 to 90 days through the Azure portal. Once the retention policy interval is set and saved it cannot be changed for that vault.
Reference:
https://docs.microsoft.com/en-us/azure/key-vault/general/overview-soft-delete

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Community Discussion

Selected Answer: B

Correct Answer

Selected Answer: B

The --enable-soft-delete flag enables soft-delete on the key vault, which means that when objects are deleted, they are retained in a recoverable state for a specified period (90 days, in this case), rather than being immediately deleted. The --enable-purge-protection flag turns on purge protection, which prevents the permanent deletion of objects until the soft-delete retention period has expired. This ensures that deleted objects can be recovered within the retention period.

Correct

B. Run the az keyvault update --enable-soft-delete true --enable-purge-protection true CLI. To configure the application to allow recovery of an accidental deletion of the key vault or key vault objects for 90 days after deletion, you should run the az keyvault update --enable-soft-delete true --enable-purge-protection true CLI command. This command enables both soft delete and purge protection for the key vault. Soft delete allows deleted key vaults and their contents to be retained and recoverable for the

specified number of days after deletion. Purge protection prevents key vault from being permanently deleted before the soft-delete retention period has elapsed.

Selected Answer: B

correct

Question #16

HOTSPOT -

You have developed a Web App for your company. The Web App provides services and must run in multiple regions.

You want to be notified whenever the Web App uses more than 85 percent of the available CPU cores over a 5 minute period. Your solution must minimize costs.

Which command should you use? To answer, select the appropriate settings in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

az monitor metrics alert create -n myAlert -g myResourceGroup --scopes targetResourceID --condition " [ ] > 85" [ ] 5m

--window size
--evaluation-frequency
--auto-mitigate

CPU Usage
Percentage CPU
avg Percentage CPU

Explanation

Correct Answer:

Answer Area

az monitor metrics alert create -n myAlert -g myResourceGroup
--scopes targetResourceID --condition " [ ] > 85"

[ ] 5m

- --window size
- --evaluation-frequency
- --auto-mitigate

- CPU Usage
- Percentage CPU
- avg Percentage CPU

Reference:
https://docs.microsoft.com/sv-se/cli/azure/monitor/metrics/alert

Community Discussion

For anyone wondering why it's --window-size and not --evaluation-frequency: you want the average across 5 minutes. With --evaluation-frequency you don't go for averages, you simply check what the given value is at specific intervals.

Correct, Eng reference is here https://docs.microsoft.com/en-us/cli/azure/monitor/metrics/alert?view=azure-cli-latest

Window size is the period of time over which Azure Monitor will collect metrics for a metric alert rule. Evaluation frequency is the frequency with which Azure Monitor will evaluate the metric alert rule for violations. if you set the window size to 5 minutes and the evaluation frequency to 1 minute, Azure Monitor will collect metrics for the previous 5 minutes and then evaluate the metric alert rule for violations every minute. This means that if there is a violation in the 5 minute window, Azure Monitor will detect it within 1 minute. We want to get percent “over a 5 minute period”, we have to use window size parameter. Only use evaluation frequency parameter is not enough for getting question request.

According to 2bruhornot2bruh explanation, Windows size is the correct answer.

According to 2bruhornot2bruh explanation, Windows size is the correct answer.

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Question #17

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are configuring a web app that delivers streaming video to users. The application makes use of continuous integration and deployment.
You need to ensure that the application is highly available and that the users' streaming experience is constant. You also want to configure the application to store data in a geographic location that is nearest to the user.
Solution: You include the use of Azure Redis Cache in your design.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Community Discussion

Correct - Instead, use CDN - https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

Azure Cache for Redis is Distributed, in-memory, scalable solution providing super-fast data access. I think it is more suitable for database query results or session data caching and not content like video/images which you just fetch from azure storage and display.

Azure Cache for Redis is Distributed, in-memory, scalable solution providing super-fast data access. I think it is more suitable for database query results or session data caching and not content like video/images which you just fetch from azure storage and display.

Further supporting the use of a CDN (Content Distributed Network), per Microsoft docs URL https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn#how-and-why-a-cdn-is-used "Streaming video files to the client on demand. Video benefits from

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the low latency and reliable connectivity available from the globally located datacenters that offer CDN connections. Microsoft Azure Media Services (AMS) integrates with Azure CDN to deliver content directly to the CDN for further distribution."

Azure Cache for Redis is Distributed, in-memory, scalable solution providing super-fast data access. I think it is more suitable for database query results or session data caching and not content like video/images which you just fetch from azure storage and display.

Question #18

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are configuring a web app that delivers streaming video to users. The application makes use of continuous integration and deployment.
You need to ensure that the application is highly available and that the users' streaming experience is constant. You also want to configure the application to store data in a geographic location that is nearest to the user.
Solution: You include the use of an Azure Content Delivery Network (CDN) in your design.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Reference:
https://docs.microsoft.com/en-in/azure/cdn/

Community Discussion

you can safely delete 17 zeroes)

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you can safely delete 17 zeroes)

1000000000000000000% CORRECT!

Just type "CORRECT"

Just type "CORRECT"

Question #19

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are configuring a web app that delivers streaming video to users. The application makes use of continuous integration and deployment.
You need to ensure that the application is highly available and that the users' streaming experience is constant. You also want to configure the application to store data in a geographic location that is nearest to the user.
Solution: You include the use of a Storage Area Network (SAN) in your design.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

A Storage Area Network (SAN) is a dedicated network that provides access to consolidated, block-level data storage. It is used to increase the availability of data and improve the performance of applications that require access to shared data. However,

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SANs do not provide features to ensure high availability of web applications, nor do they provide a mechanism to store data in the geographic location nearest to the user.

Instead you use CDN

Selected Answer: B

B. No A Storage Area Network (SAN) is a specialized, high-speed network that provides block-level access to data storage. SANs are mainly used to enhance the performance and availability of data storage. While a SAN can provide high-speed access to stored data, it would not meet the goal of ensuring high availability and constant streaming experience for the web app. SANs also do not provide geographical replication or automatic failover to ensure high availability.

What storage u use has nothing to do with what your app is doing. OK, you will not use cold storage, of course, but faster or little slower disks don't have a big impact on the solution that has to provide a lot of content over internet and fast. This question is not about disk (storage) latency, but about internet access to content and its latency. Definitely NO. https://www.backblaze.com/blog/whats-the-diff-nas-vs-san/

No is correct answer

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Question #20

You develop a Web App on a tier D1 app service plan.
You notice that page load times increase during periods of peak traffic.
You want to implement automatic scaling when CPU load is above 80 percent.
Your solution must minimize costs.
What should you do first?

A) Enable autoscaling on the Web App.
B) Switch to the Premium App Service tier plan.
C) Switch to the Standard App Service tier plan. (Correct Answer)
D) Switch to the Azure App Services consumption plan.

Explanation

Correct Answer:
C
Configure the web app to the Standard App Service Tier. The Standard tier supports auto-

scaling, and we should minimize the cost. We can then enable autoscaling on the web app, add a scale rule and add a Scale condition.
Reference:
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-autoscale-get-started https://azure.microsoft.com/en-us/pricing/details/app-service/plans/

Community Discussion

D1 is Shared Tier and does not offer autoscaling. You need to switch to Standard, Premium or Isolated.

Tier D1 is a basically shared app service plan, so we need to move standard or premium plan to enable auto scaling. As we need to provide low cost solution, then standard plan will be best for this approach

So you have to reduce cost som you need standard app tier. 1000% correct!

So you have to reduce cost som you need standard app tier. 1000% correct!

Because the consumption plan is for the Azure Function, not for a web app.

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Question #21

Your company's Azure subscription includes an Azure Log Analytics workspace. Your company has a hundred on-premises servers that run either Windows Server 2012 R2 or Windows Server 2016, and is linked to the Azure Log Analytics workspace. The Azure Log Analytics workspace is set up to gather performance counters associated with security from these linked servers.
You must configure alerts based on the information gathered by the Azure Log Analytics workspace.
You have to make sure that alert rules allow for dimensions, and that alert creation time should be kept to a minimum. Furthermore, a single alert notification must be created when the alert is created and when the alert is resolved.
You need to make use of the necessary signal type when creating the alert rules.
Which of the following is the option you should use?

A) The Activity log signal type.
B) The Application Log signal type.
C) The Metric signal type. (Correct Answer)
D) The Audit Log signal type.

Explanation

Correct Answer:
C
Metric alerts in Azure Monitor provide a way to get notified when one of your metrics cross a threshold. Metric alerts work on a range of multi-dimensional platform metrics, custom metrics, Application Insights standard and custom metrics.
Note: Signals are emitted by the target resource and can be of several types. Metric, Activity log, Application Insights, and Log.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/platform/alerts-metric

Community Discussion

Signal types: * Activity Log ... includes service health records along with records on any configuration changes made to the resources (and is available to all Azure resources) *

Audit Log ... contains the history of sign-in activity and audit trail of changes made within a particular tenant * Metric ... numerical values that are collected at regular intervals and describe some aspect of a system at a particular time * Application Log ... ? The Metrics feature can only store numeric data in a particular structure, whereas the Logs feature can store a variety of datatypes (each with its own structure). https://docs.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-overview https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/data-platform-metrics https://docs.microsoft.com/en-us/azure/azure-monitor/logs/data-platform-logs

C, https://docs.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-metric-logs#configuring-metric-alert-for-logs

From that page: "Metric Alerts are stateful - only notifying once when alert is fired and once when alert is resolved; as opposed to Log alerts, which are stateless and keep firing at every interval if the alert condition is met."

From that page: "Metric Alerts are stateful - only notifying once when alert is fired and once when alert is resolved; as opposed to Log alerts, which are stateless and keep firing at every interval if the alert condition is met."

From that page: "Metric Alerts for Log provide multiple dimensions, allowing filtering to specific values like Computers, OS Type, etc. simpler; without the need for defining a complex query in Log Analytics."

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Question #22

You are developing a .NET Core MVC application that allows customers to research independent holiday accommodation providers.
You want to implement Azure Search to allow the application to search the index by using various criteria to locate documents related to accommodation.
You want the application to allow customers to search the index by using regular expressions.
What should you do?

A) Configure the SearchMode property of the SearchParameters class.
B) Configure the QueryType property of the SearchParameters class. (Correct Answer)
C) Configure the Facets property of the SearchParameters class.
D) Configure the Filter property of the SearchParameters class.

Explanation

Correct Answer:
B
The SearchParameters.QueryType Property gets or sets a value that specifies the syntax of the search query. The default is 'simple'. Use 'full' if your query uses the Lucene query syntax.
You can write queries against Azure Search based on the rich Lucene Query Parser syntax for specialized query forms: wildcard, fuzzy search, proximity search, regular expressions are a few examples.
Reference:
https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.search.models.searchparameters https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.search.models.searchparameters.querytype

Community Discussion

Correct, although I'm not sure Azure search is in the exam...

Answer is correct https://docs.microsoft.com/en-us/azure/search/search-query-overview

This is not part of AZ-204 anymore.

out of the scope for AZ-204 exam; please remove/hide this question from the Question Bank

B. Configure the QueryType property of the SearchParameters class. The QueryType property of the SearchParameters class allows you to specify the type of query that will be executed against the Azure Search index. By setting the QueryType to "full" or "full+regex", you can enable regular expression support in the search queries.

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Question #23

You are a developer at your company.
You need to update the definitions for an existing Logic App.
What should you use?

A) the Enterprise Integration Pack (EIP)
B) the Logic App Code View (Correct Answer)
C) the API Connections
D) the Logic Apps Designer

Explanation

Correct Answer:
B
Edit JSON - Azure portal -
1. Sign in to the Azure portal.
2. From the left menu, choose All services. In the search box, find "logic apps", and then from the results, select your logic app.
3. On your logic app's menu, under Development Tools, select Logic App Code View.
4. The Code View editor opens and shows your logic app definition in JSON format.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-enterprise-integration-overview https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-author-definitions

Community Discussion

the Logic App has not been part of the exam since March

I think being a developer I can use both options - Logic App Code View or Logic Apps Designer. It depends on the change required, usage of a source control, the project complexity, CI/CD... Note: Some Azure Logic Apps capabilities, such as defining parameters and multiple triggers in logic app definitions, are available only in JSON, not the Logic Apps Designer. So for these tasks, you must work in Code View or another editor. https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-author-definitions

out-of-the-scope for the AZ-204 Exam; please remove from the Question Bank

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Selected Answer: B

ChatGPT: B: B. the Logic App Code View Logic Apps in Azure provide a Code View that allows you to directly edit the JSON definition of your Logic App. This can be useful if you need to make advanced changes that are not easily done in the designer view, or if you are more comfortable working directly with the underlying code. The Logic Apps Designer is more for creating and configuring workflows in a visual manner, but the Code View is the more direct method to update the definitions.

Selected Answer: B

B or D works for me, but I guess the keyword is "developer"?

Question #24

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are developing a solution for a public facing API.
The API back end is hosted in an Azure App Service instance. You have implemented a RESTful service for the API back end.
You must configure back-end authentication for the API Management service instance.
Solution: You configure Basic gateway credentials for the Azure resource.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
API Management allows to secure access to the back-end service of an API using client certificates.
Reference:
https://docs.microsoft.com/en-us/rest/api/apimanagement/apimanagementrest/azure-api-management-rest-api-backend-entity

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Community Discussion

Hmm, there is "Authenticate with Basic policy" for api-management https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies#Basic So maybe Yes is correct answer

Selected Answer: B

Basic client credentials can be defined for HTTP endpoint, not an App Service. My previous answer is incorrect. https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies#Basic

My own correction... :-(The answer is NO. The solution mentions "You configure Basic gateway credentials for the Azure resource." and there is no such option for generic Azure resource.

My own correction... :-(The answer is NO. The solution mentions "You configure Basic gateway credentials for the Azure resource." and there is no such option for generic Azure resource.

My own correction... :-(The answer is NO. The solution mentions "You configure Basic gateway credentials for the Azure resource." and there is no such option for generic Azure resource.

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Question #25

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.

You are developing a solution for a public facing API.

The API back end is hosted in an Azure App Service instance. You have implemented a RESTful service for the API back end.

You must configure back-end authentication for the API Management service instance.

Solution: You configure Client cert gateway credentials for the HTTP(s) endpoint.

Does the solution meet the goal?

A) Yes (Correct Answer)

B) No

Explanation

Correct Answer:
A
The API back end is hosted in an Azure App Service instance. It is an Azure resource and not an HTTP(s) endpoint.
Reference:
https://docs.microsoft.com/en-us/rest/api/apimanagement/apimanagementrest/azure-api-management-rest-api-backend-entity

Community Discussion

This is scenario questions. If backend is accepts HTTP(S) Then Basic AUTH or Certificate will work. so Client Certificate + HTTP(s) YES

yes? https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates

The answer is YES (client cert + the HTTP(s) endpoint) based on this screenshot: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert"

The answer is YES (client cert + the HTTP(s) endpoint) based on this screenshot: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert"

The solution mentioned, which is configuring Client cert gateway credentials for the HTTP(s) endpoint, does not meet the goal of configuring back-end authentication for the API Management service instance. Client certificate authentication is used for authenticating clients accessing the API Management service, not for authenticating the back-end service itself. To configure back-end authentication for the API Management service instance hosted in an Azure App Service, you have several options, such as: API key authentication: Generate an API key and configure it in the API Management service

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to authenticate requests sent to the back-end service. OAuth 2.0 authentication: Configure OAuth 2.0 authentication between the API Management service and the back-end service, allowing clients to authenticate using OAuth 2.0 tokens. Certificate-based authentication: If your back-end service supports certificate-based authentication, you can configure the API Management service to authenticate requests using client certificates. Therefore, the correct answer is: B. No

Question #26

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are developing a solution for a public facing API.
The API back end is hosted in an Azure App Service instance. You have implemented a RESTful service for the API back end.
You must configure back-end authentication for the API Management service instance.
Solution: You configure Basic gateway credentials for the HTTP(s) endpoint.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
API Management allows to secure access to the back-end service of an API using client certificates. Furthermore, the API back end is hosted in an Azure App
Service instance. It is an Azure resource and not an HTTP(s) endpoint.
Reference:
https://docs.microsoft.com/en-us/rest/api/apimanagement/apimanagementrest/azure-api-management-rest-api-backend-entity

Community Discussion

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This is scenario questions. If backend is accepts HTTP(S) Then Basic AUTH or Certificate will work. so Basic + HTTPS Yes

The correct answer is Yes. https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies#ClientCertificate

Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert" https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert" https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

The backend is App Service. Afaik it doesn't allow basic auth, so your only choice is client cert or managed identity. It shouldn't matter if you have the option to enable basic auth at the frontend settings, you won't be able to make it work at the backend. So I'd say NO.

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Question #27

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.
You are developing a solution for a public facing API.
The API back end is hosted in an Azure App Service instance. You have implemented a RESTful service for the API back end.
You must configure back-end authentication for the API Management service instance.
Solution: You configure Client cert gateway credentials for the Azure resource.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
API Management allows to secure access to the back-end service of an API using client certificates.
Reference:
https://docs.microsoft.com/en-us/rest/api/apimanagement/apimanagementrest/azure-api-management-rest-api-backend-entity

Community Discussion

This is scenario questions. If backend is accepts HTTP(S) Then Basic AUTH or Certificate will work. so Certificate + Azure Resource NO https://www.youtube.com/watch?v=HQ0U7lwP93o

Hope don't find this question in my exam.

Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert" https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

Target: "Azure Logic App" or "HTTP(s) endpoint" Gateway credentials: "None" or "Basic" or "Client cert" https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

Selected Answer: B

The answer is; NO Configuring "Client cert gateway credentials" for the Azure resource suggests that you are configuring client certificate authentication for the API Management gateway itself when accessing Azure resources, but it may not necessarily secure the communication between API Management and the back-end Azure App Service.

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Question #28

You are developing a .NET Core MVC application that allows customers to research independent holiday accommodation providers.
You want to implement Azure Search to allow the application to search the index by using various criteria to locate documents related to accommodation venues.
You want the application to list holiday accommodation venues that fall within a specific price range and are within a specified distance to an airport.
What should you do?

A) Configure the SearchMode property of the SearchParameters class.
B) Configure the QueryType property of the SearchParameters class.
C) Configure the Facets property of the SearchParameters class.
D) Configure the Filter property of the SearchParameters class. (Correct Answer)

Explanation

Correct Answer:
D
The Filter property gets or sets the OData $filter expression to apply to the search query.
Reference:
https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.search.models.searchparameters https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.search.models.searchparameters.querytype

Community Discussion

Azure search was in AZ-203, but it's not in the AZ-204 list of measured skills. Is this even still relevant?

The solution D - Filter is correct. The thing is that you filter the queried information by a price range and distance to airport. The QueryType is about the syntax of what you can pass into the search. Read the explanations in the docs: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.search.models.searchparameters?view=azure-dotnet

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Geo-search example: https://docs.microsoft.com/en-us/azure/search/search-query-simple-examples#example-6-geo-search

Geo-search example: https://docs.microsoft.com/en-us/azure/search/search-query-simple-examples#example-6-geo-search

out-of-the-scope for the AZ-204 Exam; please remove from the Question Bank

Question #29

You are a developer at your company.
You need to edit the workflows for an existing Logic App.
What should you use?

A) the Enterprise Integration Pack (EIP)
B) the Logic App Code View
C) the API Connections
D) the Logic Apps Designer (Correct Answer)

Explanation

Correct Answer:
D
For business-to-business (B2B) solutions and seamless communication between organizations, you can build automated scalable enterprise integration workflows by using the Enterprise Integration Pack (EIP) with Azure Logic Apps.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-enterprise-integration-overview https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-author-definitions

Community Discussion

Selected Answer: D

For definitions use the Code View, for the Workflows use the Designer I think

Since the question says developer, I think B(the Logic App Code View) should be the answer

yes. Test in Azure

yes. Test in Azure

Selected Answer: D

Both Code View and Designer can be used to edit the workflow. But it's easier to edit the workflow in the designer, so I think that is what we *should* use. We shouldn't use the more complicated tool just because we are developers.

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Question #30

DRAG DROP -

You are a developer for a company that provides a bookings management service in the tourism industry. You are implementing Azure Search for the tour agencies listed in your company's solution.

You create the index in Azure Search. You now need to use the Azure Search .NET SDK to import the relevant data into the Azure Search service.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions from left to right and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Answer Area

Create a DataSource instance and set its Container property to the DataContainer.	Create a SearchIndexClient object to connect to the search index.
	Create an IndexBatch that contains the documents which must be added.
Set the DataSources property of the SearchServiceClient.	Call the Documents.Index method of the SearchIndexClient and pass the IndexBatch.
Call the Documents.Suggest method of the SearchIndexClient and pass the DataSource.	

1. The index needs to be populated. To do this, we will need a SearchIndexClient. There are two ways to obtain one: by constructing it, or by calling Indexes.GetClient on the SearchServiceClient. Here we will use the first method.
2. Create the indexBatch with the documents
Something like:

```
var hotels = new Hotel[];
{
new Hotel()
{
HotelId = "3",
BaseRate = 129.99,
Description = "Close to town hall and the river"
}
};
¦€ƛ
var batch = IndexBatch.Upload(hotels);
```

3. The next step is to populate the newly-created index
Example:

```
var batch = IndexBatch.Upload(hotels);
try
{
indexClient.Documents.Index(batch);
}
```

Reference:
https://docs.microsoft.com/en-us/azure/search/search-howto-dotnet-sdk

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Community Discussion

Azure search is out of scope for AZ-204

out-of-the-scope for the AZ-204 Exam; please remove from the Question Bank

Azure Search doesn't seem to be in the latest study guide. Best to avoid this question for less cram.

Can't be true : uploading the data by putting it hardcoded in the source? Would suggest the solutions that use a datasource. After all you had to extract the data from the "company's solution"

https://docs.microsoft.com/en-us/azure/search/search-howto-dotnet-sdk

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Question #31

You are developing an application that applies a set of governance policies for internal and external services, as well as for applications.
You develop a stateful ASP.NET Core 2.1 web application named PolicyApp and deploy it to an Azure App Service Web App. The PolicyApp reacts to events from Azure Event Grid and performs policy actions based on those events.
You have the following requirements:
✑ Authentication events must be used to monitor users when they sign in and sign out.
✑ All authentication events must be processed by PolicyApp.
✑ Sign outs must be processed as fast as possible.
What should you do?

A) Create a new Azure Event Grid subscription for all authentication events. Use the subscription to process sign-out events.
B) Create a separate Azure Event Grid handler for sign-in and sign-out events.
C) Create separate Azure Event Grid topics and subscriptions for sign-in and sign-out events.
D) Add a subject prefix to sign-out events. Create an Azure Event Grid subscription. Configure the subscription to use the subjectBeginsWith filter. (Correct Answer)

Explanation

Correct Answer:
D
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/subscription-creation-schema

Community Discussion

Only C is mentioned both topic and subscription, which are two critical parts for event grid, so I will go C, anyway, this question is very poorly worded

For your interest, please see https://docs.microsoft.com/en-us/azure/event-grid/event-filtering Correct answer is D.

D doesn't contain any action of Sign-in. I am more inclined to C

D doesn't contain any action of Sign-in. I am more inclined to C

"chatgpt" The requirement is to process authentication events, specifically sign-in and sign-out, and make sure that sign-outs are processed as quickly as possible. You want to be able to filter events specifically for this purpose. Option D will fulfill these requirements. By adding a subject prefix to sign-out events and creating an Azure Event Grid subscription that is configured to use the subjectBeginsWith filter, you can specifically target and process the sign-out events quickly. The subjectBeginsWith filter allows for efficient filtering of events, which aligns with the requirement of processing sign-outs as fast as possible. Therefore, the correct answer is: D. Add a subject prefix to sign-out events. Create an Azure Event Grid subscription. Configure the subscription to use the subjectBeginsWith filter.

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Question #32

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HOTSPOT -

You are developing a C++ application that compiles to a native application named process.exe. The application accepts images as input and returns images in one of the following image formats: GIF, PNG, or JPEG.

You must deploy the application as an Azure Function.

You need to configure the function and host json files.

How should you complete the json files? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

```
function.json
{
  [ ▼ ]
    "direction": "out",
    "name" : "result"
}
host.json
[ ▼ ]
    "defaultExecutablePath": "process.exe"
},
[ ▼ ]
}
```

- "type": "http"
- "platform": "gcm"
- "datatype": "stream"
- "path": "process.exe"

- "customHandler": { "description": {
- "languageWorker": { "path": {
- "extensions": {"worker": {
- "extensionBundle": {

- "enableForwardingHttpRequest": true
- "enableForwardingHttpRequest": false

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Explanation

Correct Answer:

```
function.json
{
  [ "type": "http" | "platform": "gcm" | "datatype": "stream" | "path": "process.exe" ]
  "direction": "out",
  "name" : "result"
}
host.json
[ "customHandler": { "description": { | "languageWorker": { "path": { | "extensions": {"worker": { | "extensionBundle": { ]
    "defaultExecutablePath": "process.exe"
},
[ "enableForwardingHttpRequest": true | "enableForwardingHttpRequest": false ]
}
```

Box 1: "type": "http"
Box 2: "customHandler": { "description":{
A custom handler is defined by configuring the host.json file with details on how to run the web server via the customHandler section.
The customHandler section points to a target as defined by the defaultExecutablePath.
Example:
"customHandler": {
"description": {
"defaultExecutablePath": "handler.exe"

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Box 3: "enableForwardingHttpRequest": false
Incorrect:
For HTTP-triggered functions with no additional bindings or outputs, you may want your handler to work directly with the HTTP request and response instead of the custom handler request and response payloads. This behavior can be configured in host.json using the enableForwardingHttpRequest setting.
At the root of the app, the host.json file is configured to run handler.exe and enableForwardingHttpRequest is set to true.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-custom-handlers

Community Discussion

I just hope the real questions are not this deep to know if enableForwardingHttpRequest is true or false. I use Azure functions every day but I never used a custom handler and I hope most people do not have the burning need to use this when there are so many other solutions to handle this.

On my exam 2022-11-02

Thanks for mentioning the date

Thanks for mentioning the date

NOTHING infuriates me more than statements like this.

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Question #33

HOTSPOT -

You are implementing a software as a service (SaaS) ASP.NET Core web service that will run as an Azure Web App. The web service will use an on-premises SQL Server database for storage. The web service also includes a WebJob that processes data updates. Four customers will use the web service.

✎ Each instance of the WebJob processes data for a single customer and must run as a singleton instance.

✎ Each deployment must be tested by using deployment slots prior to serving production data.

✎ Azure costs must be minimized.

✎ Azure resources must be located in an isolated network.

You need to configure the App Service plan for the Web App.

How should you configure the App Service plan? To answer, select the appropriate settings in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

App service plan setting	Value
Number of VM instances	2 4 8 16
Pricing tier	Isolated Standard Premium Consumption

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Explanation

Correct Answer:

Number of VM instances: 4 -
You are not charged extra for deployment slots.

Pricing tier: Isolated -
The App Service Environment (ASE) is a powerful feature offering of the Azure App Service that gives network isolation and improved scale capabilities. It is essentially a deployment of the Azure App Service into a subnet of a customer's Azure Virtual Network (VNet).
Reference:
https://azure.microsoft.com/sv-se/blog/announcing-app-service-isolated-more-power-scale-and-ease-of-use/

Community Discussion

Box 1: 4 There are four customers that use this service, and each instance of the WebJob processes data for a single customer and must run as a singleton instance. So, the number of VM should be 4. WebJobs is a feature of Azure App Service that enables you to run a program or script in the same instance as a web app. Like running background

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tasks. Box 2: Isolated Azure resources must be located in an isolated network . In the Isolated tier, the App Service Environment defines the number of isolated workers that run your apps, and each worker is charged. In addition, there's a flat Stamp Fee for the running the App Service Environment itself. Isolated: This tier runs dedicated Azure VMs on dedicated Azure Virtual Networks. It provides network isolation on top of compute isolation to your apps. It provides the maximum scale-out capabilities.

Got this in the exam yesterday.

4 & isolated

4 & isolated

4 & isolated

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Question #34

DRAG DROP -

You are a developer for a software as a service (SaaS) company that uses an Azure Function to process orders. The Azure Function currently runs on an Azure Function app that is triggered by an Azure Storage queue.

You are preparing to migrate the Azure Function to Kubernetes using Kubernetes-based Event Driven Autoscaling (KEDA).

You need to configure Kubernetes Custom Resource Definitions (CRD) for the Azure Function.

Which CRDs should you configure? To answer, drag the appropriate CRD types to the correct locations. Each CRD type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Answer Area

CRD types	Setting	CRD type
Secret	Azure Function code	Deployment
Deployment	Polling interval	ScaledObject
ScaledObject	Azure Storage connection string	Secret
TriggerAuthentication		

Box 1: Deployment -
To deploy Azure Functions to Kubernetes use the func kubernetes deploy command has several attributes that directly control how our app scales, once it is deployed to Kubernetes.

Box 2: ScaledObject -
With --polling-interval, we can control the interval used by KEDA to check Azure Service Bus Queue for messages.
Example of ScaledObject with polling interval
apiVersion: keda.k8s.io/v1alpha1
kind: ScaledObject
metadata:
name: transformer-fn
namespace: tt
labels:
deploymentName: transformer-fn
spec:
scaleTargetRef:
deploymentName: transformer-fn
pollingInterval: 5
minReplicaCount: 0
maxReplicaCount: 100

Box 3: Secret -
Store connection strings in Kubernetes Secrets.
Example: to create the Secret in our demo Namespace:
create the k8s demo namespace
kubectl create namespace tt
# grab connection string from Azure Service Bus
KEDA_SCALER_CONNECTION_STRING=$(az servicebus queue authorization-rule keys list \
-g $RG_NAME \
--namespace-name $SBN_NAME \
--queue-name inbound \

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```
-n keda-scaler \
--query "primaryConnectionString" \
-o tsv)
# create the kubernetes secret
kubectl create secret generic tt-keda-auth \
--from-literal KedaScaler=$KEDA_SCALER_CONNECTION_STRING \
--namespace tt
```

Reference:
https://www.thinktecture.com/en/kubernetes/serverless-workloads-with-keda/

Community Discussion

Box 1: Deployment To deploy Azure Functions to Kubernetes use the func kubernetes deploy command has several attributes that directly control how our app scales, once it is deployed to Kubernetes. Box 2: ScaledObject With --polling-interval, we can control the interval used by KEDA to check Azure Service Bus Queue for messages. Box 3: Secret Store connection strings in Kubernetes Secrets.

kubernetes is marked as out of scope but still there are few questions coming in the exam from this section

1. Azure Function code - Deployment -To deploy Azure Functions to Kubernetes use the func kubernetes deploy command 2. Polling interval - ScaledObject - This is the interval to check each trigger on. By default KEDA will check each trigger source on every ScaleObject every 30 seconds. 3. Azure Storage connection string - Secret - Store connection string in Kubernetes secret Source for ScaledObject: https://keda.sh/docs/1.4/concepts/scaling-deployments/

https://www.thinktecture.com/en/kubernetes/serverless-workloads-with-keda/ serverless-workloads-with-keda/ is the right link

out-of-the-scope for the AZ-204 Exam; please remove from the Question Bank

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Question #35

HOTSPOT -

You are creating a CLI script that creates an Azure web app and related services in Azure App Service. The web app uses the following variables:

Variable name	Value
$gitrepo	https://github.com/Contos/webapp
$webappname	Webapp1103

You need to automatically deploy code from GitHub to the newly created web app.

How should you complete the script? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
az group create --location westeurope --name myResourceGroup
[ ▼ ] --name $webappname --resource-group myResourceGroup --sku FREE
[ ▼ ] --name $webappname --resource-group myResourceGroup
[ ▼ ]
[ ▼ ] source config --name $webappname
--resource-group myResourceGroup [ ▼ ]
```

az webapp
az appservice plan create
az webapp deployment
az group delete

az webapp create
az appservice plan create
az webapp deployment
az group delete

--repo-url $gitrepo --branch master --manual-integration
git clone $gitrepo
--plan $webappname

az webapp
az appservice plan create
az webapp deployment
az group delete

--repo-url $gitrepo --branch master --manual-integration
git clone $gitrepo
--plan $webappname

Explanation

Correct Answer:

Answer Area

```
az group create --location westeurope --name myResourceGroup
```

[▼] `--name $webappname --resource-group myResourceGroup --sku FREE`

- az webapp
- az appservice plan create
- az webapp deployment
- az group delete

[▼] `--name $webappname --resource-group myResourceGroup`

- az webapp create
- az appservice plan create
- az webapp deployment
- az group delete

[▼]

- --repo-url $gitrepo --branch master --manual-integration
- git clone $gitrepo
- --plan $webappname

[▼] `source config --name $webappname`

- az webapp
- az appservice plan create
- az webapp deployment
- az group delete

`--resource-group myResourceGroup` [▼]

- --repo-url $gitrepo --branch master --manual-integration
- git clone $gitrepo
- --plan $webappname

Box 1: az appservice plan create
The azure group creates command successfully returns JSON result. Now we can use resource group to create a azure app service plan

Box 2: az webapp create -
Create a new web app..

Box 3: --plan $webappname -
..with the serviceplan we created in step 1.

Box 4: az webapp deployment -
Continuous Delivery with GitHub. Example:
az webapp deployment source config --name firstsamplewebsite1 --resource-group websites--repo-url $gitrepo --branch master --git-token $token
Box 5: --repo-url $gitrepo --branch master --manual-integration
Reference:
https://medium.com/@satish1v/devops-your-way-to-azure-web-apps-with-azure-cli-206ed4b3e9b1

Community Discussion

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Given answer is correct, got this on my test yesterday

#!/bin/bash # Replace the following URL with a public GitHub repo URL gitrepo=https://github.com/Azure-Samples/php-docs-hello-world webappname=mywebapp$RANDOM # Create a resource group. az group create --location westeurope --name myResourceGroup # Create an App Service plan in `FREE` tier. az appservice plan create --name $webappname --resource-group myResourceGroup --sku FREE # Create a web app. az webapp create --name $webappname --resource-group myResourceGroup --plan $webappname # Deploy code from a public GitHub repository. az webapp deployment source config --name $webappname --resource-group myResourceGroup \ --repo-url $gitrepo --branch master --manual-integration # Copy the result of the following command into a browser to see the web app. echo http://$webappname.azurewebsites.net

correct, in 2023Mar24, score: 904/1000

correct, in 2023Mar24, score: 904/1000

Got this question on 30-Sep-2022 exam. Answer is correct. Passed with 870 score.

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Question #36

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.
Solution: Trigger the photo processing from Blob storage events.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
You need to catch the triggered event, so move the photo processing to an Azure Function triggered from the blob upload.
Note: Azure Storage events allow applications to react to events. Common Blob storage event scenarios include image or video processing, search indexing, or any file-oriented workflow.
Events are pushed using Azure Event Grid to subscribers such as Azure Functions, Azure Logic Apps, or even to your own http listener.
However, the processing must start in less than one minute.
Note: Only storage accounts of kind StorageV2 (general purpose v2) and BlobStorage support event integration. Storage (general purpose v1) does not support integration with Event Grid.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

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Community Discussion

Hi All, The answer (B) is correct. Because, the trick is in the "less than one minute" detail. You can read about "..10-minute delay in processing new blobs.." in "3-Minimizing latency" description. Microsoft says: "....Use Event Grid instead of the Blob storage trigger for the following scenarios:" 1-Blob-only storage accounts: Blob-only storage accounts are supported for blob input and output bindings but not for blob triggers. 2-High-scale: High scale can be loosely defined as containers that have more than 100,000 blobs in them or storage accounts that have more than 100 blob updates per second. 3-Minimizing latency: If your function app is on the Consumption plan, there can be up to a ##10-minute delay in processing new blobs## if a function app has gone idle. To avoid this latency, you can switch to an App Service plan with Always On enabled. You can also use an Event Grid trigger with your Blob storage account. For an example, see the Event Grid tutorial. REFENCE: https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger?tabs=csharp#event-grid-trigger I wish you a good day.

I've experienced this in one project I was participating in. If the amount of blobs becomes high enough (like 50k+) blob trigger becomes completely unreliable. It may not trigger at all or delay can be greater than 1 hour. It had nothing to do with Consumption Plan. Switching to Event Grid resolved that issue. So blob trigger DOESN'T guarantee processing within 1 minute, so anwer (B) is correct

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Except the question says what triggers the processing, not what does the processing. Question/answer is poorly written.

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Question #37

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After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop and deploy an Azure App Service API app to a Windows-hosted deployment slot named Development. You create additional deployment slots named Testing and Production. You enable auto swap on the Production deployment slot.
You need to ensure that scripts run and resources are available before a swap operation occurs.
Solution: Update the web.config file to include the applicationInitialization configuration element. Specify custom initialization actions to run the scripts.
Does the solution meet the goal?

A) No
B) Yes (Correct Answer)

Explanation

Correct Answer:
B
Specify custom warm-up.
Some apps might require custom warm-up actions before the swap. The applicationInitialization configuration element in web.config lets you specify custom initialization actions. The swap operation waits for this custom warm-up to finish before swapping with the target slot. Here's a sample web.config fragment.

```
<system.webServer>
<applicationInitialization>
<add initializationPage="/" hostName="[app hostname]" />
<add initializationPage="/Home/About" hostName="[app hostname]" />
</applicationInitialization>
</system.webServer>
```

Reference:
https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots#troubleshoot-swaps

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Community Discussion

Selected Answer: B

This should work: https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots#specify-custom-warm-up

Selected Answer: A

I think the correct answer really might be A (No). It's not because of the last part about the warm-up being wrong. The incorrect part is before that: "You enable auto swap on the Production deployment slot.". The auto swap is enabled on the source slot, not the destination slot. https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots#configure-auto-swap

correct, in 2023Mar24, score: 904/1000

correct, in 2023Mar24, score: 904/1000

I got this question on my exam, 2023Dec, go with I remember was the most voted answer. Score 902, most of the questions were here, slightly different on wording because the Azure Ad <-> Entra Id change. Case was City Power & Light. Good luck!

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Question #38

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After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop and deploy an Azure App Service API app to a Windows-hosted deployment slot named Development. You create additional deployment slots named Testing and Production. You enable auto swap on the Production deployment slot.
You need to ensure that scripts run and resources are available before a swap operation occurs.
Solution: Enable auto swap for the Testing slot. Deploy the app to the Testing slot.
Does the solution meet the goal?

A) No (Correct Answer)
B) Yes

Explanation

Correct Answer:
A
Instead update the web.config file to include the applicationInitialization configuration element. Specify custom initialization actions to run the scripts.
Note: Some apps might require custom warm-up actions before the swap. The applicationInitialization configuration element in web.config lets you specify custom initialization actions. The swap operation waits for this custom warm-up to finish before swapping with the target slot. Here's a sample web.config fragment.

```
<system.webServer>
<applicationInitialization>
<add initializationPage="/" hostName="[app hostname]" />
<add initializationPage="/Home/About" hostName="[app hostname]" />
</applicationInitialization>
</system.webServer>
```

Reference:
https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots#troubleshoot-swaps

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Community Discussion

Would say "No"

Selected Answer: A

I vote A, No, because for me the solution is updating the web.config file to include the applicationInitialization configuration element.

correct, in 2023Mar24, score: 904/1000

correct, in 2023Mar24, score: 904/1000

All the respect for you guys commenting here, but just left: "The correct answer is X" without saying why or providing documentation kinda sucks.

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Question #39

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After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop and deploy an Azure App Service API app to a Windows-hosted deployment slot named Development. You create additional deployment slots named Testing and Production. You enable auto swap on the Production deployment slot.
You need to ensure that scripts run and resources are available before a swap operation occurs.
Solution: Disable auto swap. Update the app with a method named statuscheck to run the scripts. Re-enable auto swap and deploy the app to the Production slot.
Does the solution meet the goal?

A) No (Correct Answer)

B) Yes

Explanation

Correct Answer:
A
Instead update the web.config file to include the applicationInitialization configuration element. Specify custom initialization actions to run the scripts.
Note: Some apps might require custom warm-up actions before the swap. The applicationInitialization configuration element in web.config lets you specify custom initialization actions. The swap operation waits for this custom warm-up to finish before swapping with the target slot. Here's a sample web.config fragment.
<system.webServer>
<applicationInitialization>
<add initializationPage="/" hostName="[app hostname]" />
<add initializationPage="/Home/About" hostName="[app hostname]" />
</applicationInitialization>
</system.webServer>
Reference:
https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots#troubleshoot-swaps

Community Discussion

Selected Answer: A

Instead, use applicationInitialization

It depends.... has the app an WEBSITE_SWAP_WARMUP_PING_PATH set to /statuscheck?? Seriously, I hold multiple certifications, tricky hands-on ones but this certification is a joke. Microsoft, who is designing those questions?!? It's not just this one, there are so many bad questions.

Same experience here. I have many AWS certifications, OCP-11 certification, etc. This is really a joke of a certification. I do not even know what Microsoft expects and more importantly the kind of people ready to live with this kind of questions from Microsoft and trying to remember it.

Same experience here. I have many AWS certifications, OCP-11 certification, etc. This is really a joke of a certification. I do not even know what Microsoft expects and more

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importantly the kind of people ready to live with this kind of questions from Microsoft and trying to remember it.

Ok, my bad autoswap has to be configured on the Staging Slot. So "You enable auto swap on the Production deployment slot." is not what you would do. Answer is A (NO).

Question #40

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.
Solution: Convert the Azure Storage account to a BlockBlobStorage storage account.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Not necessary to convert the account, instead move photo processing to an Azure Function triggered from the blob upload..
Azure Storage events allow applications to react to events. Common Blob storage event scenarios include image or video processing, search indexing, or any file- oriented workflow.
Note: Only storage accounts of kind StorageV2 (general purpose v2) and BlobStorage

support event integration. Storage (general purpose v1) does not support integration with Event Grid.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

Community Discussion

B is correct

A BlockBlobStorage account is a specialized storage account in the premium performance tier for storing unstructured object data as block blobs or append blobs. Compared with general-purpose v2 and BlobStorage accounts, BlockBlobStorage accounts provide low, consistent latency and higher transaction rates.

The answer is NO - the Even Grid integration should be used. https://docs.microsoft.com/en-us/azure/event-grid/resize-images-on-storage-blob-upload-event

The answer is NO - the Even Grid integration should be used. https://docs.microsoft.com/en-us/azure/event-grid/resize-images-on-storage-blob-upload-event

Selected Answer: B

No - The account type does not affect how the photo processing code is triggered.

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Question #41

HOTSPOT -

You are developing an Azure Web App. You configure TLS mutual authentication for the web app.

You need to validate the client certificate in the web app. To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

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Answer Area

Property	Value
Client certificate location	HTTP request header Client cookie HTTP message body URL query string
Encoding type	HTML URL Unicode Base64

Accessing the client certificate from App Service.
If you are using ASP.NET and configure your app to use client certificate authentication, the certificate will be available through the HttpRequest.ClientCertificate property. For other application stacks, the client cert will be available in your app through a base64 encoded value in the "X-ARR-ClientCert" request header. Your application can create a certificate from this value and then use it for authentication and authorization purposes in your application.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/app-service-web-configure-tls-mutual-auth

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Community Discussion

Box 1: HTTP request header If you are using ASP.NET and configure your app to use client certificate authentication, the certificate will be available through the HttpRequest.ClientCertificate property. Box 2: Base64 For other application stacks, the client cert will be available in your app through a base64 encoded value in the "X-ARR-ClientCert" request header. Your application can create a certificate from this value and then use it for authentication and authorization purposes in your application. Reference: https://docs.microsoft.com/en-us/azure/app-service/app-service-web-configure-tls-mutual-auth

With client certificates enabled, App Service injects an X-ARR-ClientCert request header with the client certificate.

Got this question on 2-Dec-2022 exam. Answer is correct. Passed with 857 score.

Had this question today: 2023-07-26

Received this in my exam today (22/02/2023). Selected HTTP request header, and Base64. Score 927.

Question #42

DRAG DROP -

You are developing a Docker/Go using Azure App Service Web App for Containers. You plan to run the container in an App Service on Linux. You identify a

Docker container image to use.

None of your current resource groups reside in a location that supports Linux.

You must minimize the number of resource groups required.

You need to create the application and perform an initial deployment.

Which three Azure CLI commands should you use to develop the solution? To answer, move the appropriate commands from the list of commands to the answer area and arrange them in the correct order.

Select and Place:

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Explanation

Correct Answer:

You can host native Linux applications in the cloud by using Azure Web Apps. To create a Web App for Containers, you must run Azure CLI commands that create a group, then a service plan, and finally the web app itself.

Step 1: az group create -
In the Cloud Shell, create a resource group with the az group create command.
Step 2: az appservice plan create
In the Cloud Shell, create an App Service plan in the resource group with the az appservice plan create command.

Step 3: az webapp create -
In the Cloud Shell, create a web app in the myAppServicePlan App Service plan with the az webapp create command. Don't forget to replace with a unique app name, and <docker-ID> with your Docker ID.
Reference:
https://docs.microsoft.com/mt-mt/azure/app-service/containers/quickstart-docker-go?view=sql-server-ver15

Community Discussion

Within the same resource group, you can't mix Windows and Linux apps in the same region. https://docs.microsoft.com/en-us/azure/app-service/overview#app-service-on-

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linux "None of your current resource groups reside in a location that supports Linux" So you have to create new resource group. Answer is correct.

Many are missing the point here, it says "None of your current resource groups reside in a location that supports Linux". So you need to create a group in an area that does support Linux. Doesn't matter if you mix them or not, there is currently nothing that supports Linux, so something new is required. For me the answer is correct.

Many are missing the point here, it says "None of your current resource groups reside in a location that supports Linux". So you need to create a group in an area that does support Linux. Doesn't matter if you mix them or not, there is currently nothing that supports Linux, so something new is required. For me the answer is correct.

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Question #43

DRAG DROP -

Fourth Coffee has an ASP.NET Core web app that runs in Docker. The app is mapped to the www.fourthcoffee.com domain.

Fourth Coffee is migrating this application to Azure.

You need to provision an App Service Web App to host this docker image and map the custom domain to the App Service web app.

A resource group named FourthCoffeePublicWebResourceGroup has been created in the WestUS region that contains an App Service Plan named AppServiceLinuxDockerPlan.

Which order should the CLI commands be used to develop the solution? To answer, move all of the Azure CLI commands from the list of commands to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: #bin/bash -
The appName is used when the webapp-name is created in step 2.

Step 2: az webapp create -
Create a web app. In the Cloud Shell, create a web app in the myAppServicePlan App Service plan with the az webapp create command.
Step 3: az webapp config container set
In Create a web app, you specified an image on Docker Hub in the az webapp create command. This is good enough for a public image. To use a private image, you need to configure your Docker account ID and password in your Azure web app.
Step 4: az webapp config hostname add
The webapp-name is used when the webapp is created in step 2.
In the Cloud Shell, follow the az webapp create command with az webapp config container set.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/containers/tutorial-custom-docker-image https://docs.microsoft.com/en-us/azure/app-service/tutorial-custom-container?pivots=container-linux https://docs.microsoft.com/en-us/azure/app-service/scripts/cli-configure-custom-domain

Community Discussion

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1. /bin/bash 2. az webpp create 3. ~ config container set 4. ~ config hostname add

Shouldn' it be az webapp create as 2nd, az webapp config container set as 3rd and az webapp config hostname as last ?

received 2023-04-17 went above answer, score 926

received 2023-04-17 went above answer, score 926

I would agree with the propose solution 1. /bin/bash 2. az webpp create 3. ~ config container set URL: https://docs.microsoft.com/en-us/azure/app-service/tutorial-custom-container?pivots=container-linux At the bottom of tutorial, link to next tutorial In the next tutorial, you learn how to map a custom DNS name to your app. 4. ~ config hostname add https://docs.microsoft.com/en-us/azure/app-service/app-service-web-tutorial-custom-domain

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Question #44

DRAG DROP -

You are developing a serverless Java application on Azure. You create a new Azure Key Vault to work with secrets from a new Azure Functions application.

The application must meet the following requirements:

✎ Reference the Azure Key Vault without requiring any changes to the Java code.

✎ Dynamically add and remove instances of the Azure Functions host based on the number of incoming application events.

✎ Ensure that instances are perpetually warm to avoid any cold starts.

✎ Connect to a VNet.

✎ Authentication to the Azure Key Vault instance must be removed if the Azure Function application is deleted.

You need to grant the Azure Functions application access to the Azure Key Vault.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

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Explanation

Correct Answer:

Step 1: Create the Azure Functions app with a Consumption plan type.
Use the Consumption plan for serverless.
Step 2: Create a system-assigned managed identity for the application.
Create a system-assigned managed identity for your application.
Key Vault references currently only support system-assigned managed identities. User-assigned identities cannot be used.
Step 3: Create an access policy in Key Vault for the application identity.
Create an access policy in Key Vault for the application identity you created earlier. Enable the "Get" secret permission on this policy. Do not configure the "authorized application" or applicationId settings, as this is not compatible with a managed identity.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references

Community Discussion

1. create ~Premium plan Type (Consumption X) 2. create system-assigned ~ (user-assigned X) 3. create an access policy in Azure Key Vault~

I agree with you. 1. Premium plan (avoid any cold starts and connect to a VNet) Overview of plans here: https://docs.microsoft.com/th-th/azure/azure-functions/functions-scale 2.

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create system-assigned => "A system-assigned identity is tied to your application and is deleted if your app is deleted." 3. create an access policy https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?toc=%2Fazure%2Fazure-functions%2Ftoc.json&tabs=azure-cli

I agree with you. 1. Premium plan (avoid any cold starts and connect to a VNet) Overview of plans here: https://docs.microsoft.com/th-th/azure/azure-functions/functions-scale 2. create system-assigned => "A system-assigned identity is tied to your application and is deleted if your app is deleted." 3. create an access policy https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?toc=%2Fazure%2Fazure-functions%2Ftoc.json&tabs=azure-cli

Received this in my exam today (22/02/2023). Selected 'Created the Azure Function app with Premium plan type', 'Create a system-assigned managed identity for the application', and 'Create an access policy in Azure Key Vault for the application identity'. Score 927.

App Service plan can connect to Vnet but it won't "Ensure that instances are perpetually warm to avoid any cold starts".

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Question #45

You develop a website. You plan to host the website in Azure. You expect the website to experience high traffic volumes after it is published.
You must ensure that the website remains available and responsive while minimizing cost.
You need to deploy the website.
What should you do?

A) Deploy the website to a virtual machine. Configure the virtual machine to automatically scale when the CPU load is high.
B) Deploy the website to an App Service that uses the Shared service tier. Configure the App Service plan to automatically scale when the CPU load is high.
C) Deploy the website to a virtual machine. Configure a Scale Set to increase the virtual machine instance count when the CPU load is high.
D) Deploy the website to an App Service that uses the Standard service tier. Configure the App Service plan to automatically scale when the CPU load is high. (Correct Answer)

Explanation

Correct Answer:
D
Windows Azure Web Sites (WAWS) offers 3 modes: Standard, Free, and Shared.
Standard mode carries an enterprise-grade SLA (Service Level Agreement) of 99.9% monthly, even for sites with just one instance.
Standard mode runs on dedicated instances, making it different from the other ways to buy Windows Azure Web Sites.
Incorrect Answers:
B: Shared and Free modes do not offer the scaling flexibility of Standard, and they have some important limits.
Shared mode, just as the name states, also uses shared Compute resources, and also has a CPU limit. So, while neither Free nor Shared is likely to be the best choice for your production environment due to these limits.

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Community Discussion

Answer is correct. No doubts!

answer is d- this is production and requires autoscaling when cpu is peak. the rest is constraints by limit without auto scaling

Selected Answer: D

D - To ensure that the website remains available and responsive while minimizing cost, you should deploy the website to an App Service that uses the Standard service tier and configure the App Service plan to automatically scale when the CPU load is high. This way, the website can handle high traffic volumes by automatically scaling the number of instances of the website, reducing the risk of the website becoming unavailable due to high traffic.

It does, check it out here: https://azure.microsoft.com/en-us/pricing/details/app-service/windows/#pricing

I was wrong. "Standard" Tier does "not allow" Automatic scaling BASED ON TRAFFIC But is allow BASED ON METRICS (Like CPU suage)

Question #46

HOTSPOT -

A company is developing a Java web app. The web app code is hosted in a GitHub repository located at https://github.com/Contoso/webapp.

The web app must be evaluated before it is moved to production. You must deploy the initial code release to a deployment slot named staging.

You need to create the web app and deploy the code.

How should you complete the commands? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
gitrepo=https://github.com/Contoso/webapp
webappname=businesswebapp
resourcegroupname=BusinessAppResourceGroup
az [group | webapp | appservice plan | webapp deployment slot | webapp deployment source] create --location centralus --name $resourcegroupname
az [group | webapp | appservice plan | webapp deployment slot | webapp deployment source] create --name $webappname --resource-group $resourcegroupname --sku S3
az [group | webapp | appservice plan | webapp deployment slot | webapp deployment source] create --name $webappname --resource-group $resourcegroupname --plan $webappname
az [group | webapp | appservice plan | webapp deployment slot | webapp deployment source] create --name $webappname --resource-group $resourcegroupname --slot staging
az [group | webapp | appservice plan | webapp deployment slot | webapp deployment source] config --name $webappname --resource-group $resourcegroupname \
--slot staging --repo-url $gitrepo --branch master --manual-integration
```

Explanation

Correct Answer:

Answer Area

gitrepo=https://github.com/Contoso/webapp
webappname=businesswebapp
resourcegroupname=BusinessAppResourceGroup

az [▼] create --location centralus --name $resourcegroupname
- group
- webapp
- appservice plan
- webapp deployment slot
- webapp deployment source

az [▼] create --name $webappname --resource-group $resourcegroupname --sku S3
- group
- webapp
- appservice plan
- webapp deployment slot
- webapp deployment source

az [▼] create --name $webappname --resource-group $resourcegroupname --plan $webappname
- group
- webapp
- appservice plan
- webapp deployment slot
- webapp deployment source

az [▼] create --name $webappname --resource-group $resourcegroupname --slot staging
- group
- webapp
- appservice plan
- webapp deployment slot
- webapp deployment source

az [▼] config --name $webappname --resource-group $resourcegroupname \
--slot staging --repo-url $gitrepo --branch master --manual-integration
- group
- webapp
- appservice plan
- webapp deployment slot
- webapp deployment source

Box 1: group -
Create a resource group.
az group create --location westeurope --name myResourceGroup

Box 2: appservice plan -
Create an App Service plan in STANDARD tier (minimum required by deployment slots).
az appservice plan create --name $webappname --resource-group myResourceGroup --sku S1

Box 3: webapp -
Create a web app.
az webapp create --name $webappname --resource-group myResourceGroup \
--plan $webappname

Box 4: webapp deployment slot -
#Create a deployment slot with the name "staging".
az webapp deployment slot create --name $webappname --resource-group myResourceGroup \
--slot staging

Box 5: webapp deployment source -
Deploy sample code to "staging" slot from GitHub.
az webapp deployment source config --name $webappname --resource-group

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myResourceGroup \
--slot staging --repo-url $gitrepo --branch master --manual-integration
Reference:
https://docs.microsoft.com/en-us/azure/app-service/scripts/cli-deploy-staging-environment

Community Discussion

Because some answers are wrong and commenting when correct is just comforting for others.

Because some answers are wrong and commenting when correct is just comforting for others.

Given answer is correct.

Agree! love this site because of the community and the discussions. they also help to understand the reasoning!!

Agree! love this site because of the community and the discussions. they also help to understand the reasoning!!

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Question #47

HOTSPOT -

You have a web service that is used to pay for food deliveries. The web service uses Azure Cosmos DB as the data store.

You plan to add a new feature that allows users to set a tip amount. The new feature requires that a property named tip on the document in Cosmos DB must be present and contain a numeric value.

There are many existing websites and mobile apps that use the web service that will not be updated to set the tip property for some time.

How should you complete the trigger?

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
function ensureTip() {
  var r = [ __.value(); | __.readDocument('item'); | getContext().getRequest(); | getContext().getResponse(); ]
  var i = r.getBody();
  [ if (!("tip" in i)) { | if (request.getValue("tip") = = = null) { | if (isNaN(i)["tip"] || i["tip"] = = = null) { | if (typeof __.pluck("tip") = = 'number') { ]
    i["tip"] = 0;
  }
  [ r.setBody(i); | r.setValue(i); | __.upsertDocument(i); | __.replaceDocument(i); ]
}
```

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Explanation

Correct Answer:

Answer Area

```
function ensureTip() {
    var r = [ __.value(); | __.readDocument('item'); | getContext().getRequest(); | getContext().getResponse(); ]
    var i = r.getBody();
    [ if (!("tip" in i)) { | if (request.getValue("tip") = = = null) { | if (isNaN(i)["tip"] || i["tip"] = = = null) { | if (typeof __.pluck("tip") = = 'number') { ]
        i["tip"] = 0;
    }
    [ r.setBody(i); | r.setValue(i); | __.upsertDocument(i); | __.replaceDocument(i); ]
}
```

Community Discussion

Right answer in second drop down is the first one (..."tip" in i...) Similiar example can be found on https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-write-stored-procedures-triggers-udfs

SecExams

Admin, requst you to update answers to avoid any further confusion. 1. getRequest 2. (!"tip" in i) 3. setBody

Sadheesh88 has a valid point. Although the question states "there will be many apps not updating their value for some time", a good solution should always validate user input. If the value of "tip" is null or "junk", the first option will fail. Option 3 has a typo and is missing a closing parenthesis. If we make a small change to option 3, so it reads: if(isNaN(i["tip"]) || i["tip"] === null){ then this becomes the best answer. Check for yourself with this fiddle: https://jsfiddle.net/d4x3fota/2/ So I think it comes down to if the answers were copied correctly.

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Sadheesh88 has a valid point. Although the question states "there will be many apps not updating their value for some time", a good solution should always validate user input. If the value of "tip" is null or "junk", the first option will fail. Option 3 has a typo and is missing a closing parenthesis. If we make a small change to option 3, so it reads: if(isNaN(i["tip"]) || i["tip"] === null){ then this becomes the best answer. Check for yourself with this fiddle: https://jsfiddle.net/d4x3fota/2/ So I think it comes down to if the answers were copied correctly.

SecExams

Question #48

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop an HTTP triggered Azure Function app to process Azure Storage blob data. The app is triggered using an output binding on the blob.
The app continues to time out after four minutes. The app must process the blob data.
You need to ensure the app does not time out and processes the blob data.
Solution: Use the Durable Function async pattern to process the blob data.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Instead pass the HTTP trigger payload into an Azure Service Bus queue to be processed by a queue trigger function and return an immediate HTTP success response.
Note: Large, long-running functions can cause unexpected timeout issues. General best practices include:
Whenever possible, refactor large functions into smaller function sets that work together and return responses fast. For example, a webhook or HTTP trigger function might require an acknowledgment response within a certain time limit; it's common for webhooks to require an immediate response. You can pass the
HTTP trigger payload into a queue to be processed by a queue trigger function. This approach lets you defer the actual work and return an immediate response.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-best-practices

Community Discussion

SecExams

if someone knows the exact answer or any reference , then only comment. It is so confusing

Shouldn't this be TRUE? https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-overview?tabs=csharp#async-http

A. Yes "230 seconds is the maximum amount of time[...] For longer processing times, consider using the DURABLE FUNCTIONS ASYNC PATTERN[...]" https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout

A. Yes "230 seconds is the maximum amount of time[...] For longer processing times, consider using the DURABLE FUNCTIONS ASYNC PATTERN[...]" https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout

Agree :) Durable function is one of the suggested two options for long processing tasks (the other is to defer the actual work (e.g. push to service bus queue + queue triggered function solution) https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout Regardless of the function app timeout setting, 230 seconds is the maximum amount of time that an HTTP triggered function can take to respond to a request. This is because of the default idle timeout of Azure Load Balancer. For longer processing times, consider using the Durable Functions async pattern or defer the actual work and return an immediate response.

SecExams

Question #49

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop an HTTP triggered Azure Function app to process Azure Storage blob data. The app is triggered using an output binding on the blob.
The app continues to time out after four minutes. The app must process the blob data.
You need to ensure the app does not time out and processes the blob data.
Solution: Pass the HTTP trigger payload into an Azure Service Bus queue to be processed by a queue trigger function and return an immediate HTTP success response.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Large, long-running functions can cause unexpected timeout issues. General best practices include:
Whenever possible, refactor large functions into smaller function sets that work together and return responses fast. For example, a webhook or HTTP trigger function might require an acknowledgment response within a certain time limit; it's common for webhooks to require an immediate response. You can pass the
HTTP trigger payload into a queue to be processed by a queue trigger function. This approach lets you defer the actual work and return an immediate response.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-best-practices

Community Discussion

SecExams

Answer is correct

Answer is NO. The best solution is durable functions Durable Functions provides built-in support for this pattern(Pattern #3: Async HTTP APIs), simplifying or even removing the code you need to write to interact with long-running function executions. Durable Functions provides built-in support for this pattern(Pattern #3: Async HTTP APIs), simplifying or even removing the code you need to write to interact with long-running function executions. https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-overview?tabs=csharp#async-http

Why should this Answer be false? Can`t be both correct? They are not asking for the optimal solution.

Why should this Answer be false? Can`t be both correct? They are not asking for the optimal solution.

you aren't asked for best solution, but for solution that works.

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Question #50

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop an HTTP triggered Azure Function app to process Azure Storage blob data. The app is triggered using an output binding on the blob.
The app continues to time out after four minutes. The app must process the blob data.
You need to ensure the app does not time out and processes the blob data.
Solution: Configure the app to use an App Service hosting plan and enable the Always On setting.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead pass the HTTP trigger payload into an Azure Service Bus queue to be processed by a queue trigger function and return an immediate HTTP success response.
Note: Large, long-running functions can cause unexpected timeout issues. General best practices include:
Whenever possible, refactor large functions into smaller function sets that work together and return responses fast. For example, a webhook or HTTP trigger function might require an acknowledgment response within a certain time limit; it's common for webhooks to require an immediate response. You can pass the
HTTP trigger payload into a queue to be processed by a queue trigger function. This approach lets you defer the actual work and return an immediate response.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-best-practices

SecExams

Community Discussion

Answer "No" is correct. Always On enables waking up on HTTPTrigger, but does not prevent the exceeding the max time out time of 230 seconds. https://docs.microsoft.com/en-us/azure/azure-functions/dedicated-plan#always-on

Answer "B.No" seems right because this is not about App Services Best Practices.

No is the answer, but the reason is the timeout being raised by HTTP layer from the Azure Load Balancer, not the App layer that at least it gives 5 minutes for the cheapest type, Consumption, so however you enhance the app layer, the http layer Azure Load Balance will not wait more than 230 second and will reply it as timeout. Use the durable function pattern to poll the status for completion will be the easiest solution, else avoid the http layer like service bus will work too. https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout:~:text=1%20Regardless%20of,immediate%20response.

No is the answer, but the reason is the timeout being raised by HTTP layer from the Azure Load Balancer, not the App layer that at least it gives 5 minutes for the cheapest type, Consumption, so however you enhance the app layer, the http layer Azure Load Balance will not wait more than 230 second and will reply it as timeout. Use the durable function pattern to poll the status for completion will be the easiest solution, else avoid the http layer like service bus will work too. https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout:~:text=1%20Regardless%20of,immediate%20response.

Agreed. 'No' is correct. Here is the reference cited above. https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout

Question #51

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.
Solution: Move photo processing to an Azure Function triggered from the blob upload.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Azure Storage events allow applications to react to events. Common Blob storage event

scenarios include image or video processing, search indexing, or any file- oriented workflow.
Events are pushed using Azure Event Grid to subscribers such as Azure Functions, Azure Logic Apps, or even to your own http listener.
Note: Only storage accounts of kind StorageV2 (general purpose v2) and BlobStorage support event integration. Storage (general purpose v1) does not support integration with Event Grid.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

Community Discussion

as is correct

The answer is correct, but it should have also mentioned that the function app must not be on a consumption plan. because in that case, it might take up to 10 minutes to process the event.

So the answer is NO. Cant wait 10 minutes

So the answer is NO. Cant wait 10 minutes

That limitation is only for Consumption plan. Since no mention of it, we can assume user can opt for premium, app service plan.

SecExams

Question #52

You are developing an application that uses Azure Blob storage.
The application must read the transaction logs of all the changes that occur to the blobs and the blob metadata in the storage account for auditing purposes. The changes must be in the order in which they occurred, include only create, update, delete, and copy operations and be retained for compliance reasons.
You need to process the transaction logs asynchronously.
What should you do?

A) Process all Azure Blob storage events by using Azure Event Grid with a subscriber Azure Function app.

B) Enable the change feed on the storage account and process all changes for available events. (Correct Answer)

C) Process all Azure Storage Analytics logs for successful blob events.

D) Use the Azure Monitor HTTP Data Collector API and scan the request body for successful blob events.

Explanation

Correct Answer:

B

Change feed support in Azure Blob Storage

The purpose of the change feed is to provide transaction logs of all the changes that occur to the blobs and the blob metadata in your storage account. The change feed provides ordered, guaranteed, durable, immutable, read-only log of these changes. Client applications can read these logs at any time, either in streaming or in batch mode. The change feed enables you to build efficient and scalable solutions that process change events that occur in your Blob Storage account at a low cost.

Reference:

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed

Community Discussion

B: the change feed provides transaction logs of all the changes that occur to the blobs and the blob metadata in your storage account. The change feed provides ordered, guaranteed, a durable, immutable, read-only log of these changes. You can process these logs asynchronously, incrementally or in-full.

Correct Answer: B The purpose of the change feed is to provide transaction logs of all the changes that occur to the blobs and the blob metadata in your storage account. The change feed provides ordered, guaranteed, durable, immutable, read-only log of these changes. Client applications can read these logs at any time, either in streaming or in batch mode. The change feed enables you to build efficient and scalable solutions that process change events that occur in your Blob Storage account at a low cost. Reference: https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed

What about the delete operations that are not logged by the change feed?

Question was in Exam 2023-03-30

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Right!

Question #53

DRAG DROP -

You plan to create a Docker image that runs an ASP.NET Core application named ContosoApp. You have a setup script named setupScript.ps1 and a series of application files including ContosoApp.dll.

You need to create a Dockerfile document that meets the following requirements:

- ✑ Call setupScripts.ps1 when the container is built.
- ✑ Run ContosoApp.dll when the container starts.

The Dockerfile document must be created in the same folder where ContosoApp.dll and setupScript.ps1 are stored.

Which five commands should you use to develop the solution? To answer, move the appropriate commands from the list of commands to the answer area and arrange them in the correct order.

Select and Place:

Commands	Answer Area
`FROM microsoft/aspnetcore:latest`	
`WORKDIR /apps/ContosoApp`	
`CMD ["dotnet", "ContosoApp.dll"]`	
`COPY ./ .`	
`RUN powershell ./setupScript.ps1`	

Explanation

Correct Answer:

Commands	Answer Area
`FROM microsoft/aspnetcore:latest`	`CMD ["dotnet", "ContosoApp.dll"]`
`WORKDIR /apps/ContosoApp`	`FROM microsoft/aspnetcore:latest`
`CMD ["dotnet", "ContosoApp.dll"]`	`WORKDIR /apps/ContosoApp`
`COPY ./ .`	`COPY ./ .`
`RUN powershell ./setupScript.ps1`	`RUN powershell ./setupScript.ps1`

Box 1: CMD [..]

Cmd starts a new instance of the command interpreter, Cmd.exe.
Syntax: CMD <string>
Specifies the command you want to carry out.
Box 2: FROM microsoft/aspnetcore-build:latest

Box 3: WORKDIR /apps/ContosoApp -
Bxo 4: COPY ./ .
Box 5: RUN powershell ./setupScript.ps1

Community Discussion

It should be: - FROM - WORKDIR - COPY - RUN - CMD Same question on: https://www.secexams.com/discussions/microsoft/view/13131-exam-az-300-topic-3-question-4-discussion/ And: https://www.secexams.com/discussions/microsoft/view/11045-exam-az-203-topic-1-question-7-discussion/

You are correct. This has been discussed in Udemy course as well as follows, The first statement in the Dockefile must be the FROM statement to specify the image to use as the base image. Then specify the Image working directory Then copy all of the application contents using the COPY command And then use the CMD command to run the PowerShell command and the ENTRYPOINT statement to run the dotnet application.

You are correct. This has been discussed in Udemy course as well as follows, The first statement in the Dockefile must be the FROM statement to specify the image to use as the base image. Then specify the Image working directory Then copy all of the application contents using the COPY command And then use the CMD command to run the PowerShell command and the ENTRYPOINT statement to run the dotnet application.

Just wondering who put the answers for the questions in this site? most of them are not correct.

This is correct answer It should be: - FROM - WORKDIR - COPY - RUN - CMD because WORKDIR will create directory if it doesn't exist https://docs.docker.com/engine/reference/builder/#workdir

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Question #54

You are developing an Azure Function App that processes images that are uploaded to an Azure Blob container.
Images must be processed as quickly as possible after they are uploaded, and the solution must minimize latency. You create code to process images when the
Function App is triggered.
You need to configure the Function App.
What should you do?

A) Use an App Service plan. Configure the Function App to use an Azure Blob Storage input trigger.
B) Use a Consumption plan. Configure the Function App to use an Azure Blob Storage trigger. (Correct Answer)
C) Use a Consumption plan. Configure the Function App to use a Timer trigger.
D) Use an App Service plan. Configure the Function App to use an Azure Blob Storage trigger.
E) Use a Consumption plan. Configure the Function App to use an Azure Blob Storage input trigger.

Explanation

Correct Answer:
B
The Blob storage trigger starts a function when a new or updated blob is detected. The blob contents are provided as input to the function.
The Consumption plan limits a function app on one virtual machine (VM) to 1.5 GB of memory.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger

Community Discussion

SecExams

The answer is D. Use an App Service plan. Configure the Function App to use an Azure Blob Storage trigger. Consumption plan can cause a 10-min delay in processing new blobs if a function app has gone idle. To avoid this latency, you can switch to an App Service plan with Always On enabled. https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger?tabs=csharp

Seemingly there is no such thing as "input trigger" it is "input binding" See: https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-input?tabs=csharp

Seemingly there is no such thing as "input trigger" it is "input binding" See: https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-input?tabs=csharp

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Seemingly there is no such thing as "input trigger" it is "input binding" See: https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-input?tabs=csharp

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Question #55

SecExams

HOTSPOT -

You are configuring a new development environment for a Java application. The environment requires a Virtual Machine Scale Set (VMSS), several storage accounts, and networking components.

The VMSS must not be created until the storage accounts have been successfully created and an associated load balancer and virtual network is configured.

How should you complete the Azure Resource Manager template? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
{
. . .
"resources": [
  {
    "apiVersion": "2016-01-01",
    "type": "Microsoft.Storage/storageAccounts",
    "name": "[concat(                    ), 'storage', uniqueString(resourceGroup().id))]",
                          copy
                          copyIndex
                          priority
                          dependsOn
     "location": "[resourceGroup().location]",
     . . .
       "sku": {
       "name": "Standard_LRS"
     },
     "kind": "Storage",
     "properties": {},
     "                    ": {
        copy
        copyIndex
        priority
        dependsOn
       "name": "storagesetup",
       "count": 3
     }
  },
  {
     "apiVersion": "2015-06-15",
     "type": "Microsoft.Compute/virtualMachines",
     "name": "[concat('VM', uniqueString(resourceGroup().id))]",
     "                    ": [
        copy
        copyIndex
        priority
        dependsOn
       "[variables('loadBalancerName')]",
       "[variables('virtualNetworkName')]",
       "storagesetup",
       ],
     . . .
   }
],
"outputs": {}
}
```

Explanation

Correct Answer:

Answer Area

```
{
. . .
"resources": [
  {
    "apiVersion": "2016-01-01",
    "type": "Microsoft.Storage/storageAccounts",
    "name": "[concat(                    ), 'storage', uniqueString(resourceGroup().id))]",
                                  copy
                                  copyIndex
                                  priority
                                  dependsOn
    "location": "[resourceGroup().location]",
    . . .
      "sku": {
      "name": "Standard_LRS"
    },
    "kind": "Storage",
    "properties": {},
    "                    ": {
                                  copy
                                  copyIndex
                                  priority
                                  dependsOn
      "name": "storagesetup",
      "count": 3
    }
  },
  {
    "apiVersion": "2015-06-15",
    "type": "Microsoft.Compute/virtualMachines",
    "name": "[concat('VM', uniqueString(resourceGroup().id))]",
    "                    ": [
                                  copy
                                  copyIndex
                                  priority
                                  dependsOn
      "[variables('loadBalancerName')]",
      "[variables('virtualNetworkName')]",
      "storagesetup",
      ],
    . . .
  }
],
"outputs": {}
}
```

Box 1: copyIndex -

Notice that the name of each resource includes the copyIndex() function, which returns the current iteration in the loop. copyIndex() is zero-based.

Box 2: copy -

By adding the copy element to the resources section of your template, you can dynamically set the number of resources to deploy.

Box 3: dependsOn -

Example:

```
"type": "Microsoft.Compute/virtualMachineScaleSets",
"apiVersion": "2020-06-01",
"name": "[variables('namingInfix')]",
"location": "[parameters('location')]",
"sku": {
"name": "[parameters('vmSku')]",
"tier": "Standard",
"capacity": "[parameters('instanceCount')]"
},
"dependsOn": [
"[resourceId('Microsoft.Network/loadBalancers', variables('loadBalancerName'))]",
"[resourceId('Microsoft.Network/virtualNetworks', variables('virtualNetworkName'))]"
],
```

Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/copy-resources https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/quick-create-template-windows

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Community Discussion

Answer: copyIndex, copy, Dependson. Check this link https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/define-resource-dependency.

Box 1: copyIndex Notice that the name of each resource includes the copyIndex() function, which returns the current iteration in the loop. copyIndex() is zero-based. Box 2: copy By adding copy loop to the resources section of your template, you can dynamically set the number of resources to deploy. You also avoid having to repeat template syntax. Box 3: dependsOn Within your Azure Resource Manager template (ARM template), the dependsOn element enables you to define one resource as a dependent on one or more resources. Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/copy-resources https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/quick-create-template-windows https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/define-resource-dependency

Received this in my exam today (22/02/2023). Selected copyIndex, copy, and dependsOn. Score 927.

Do I need to remember these functions? The options are made in a way to confuse you and make a mistake. These are things developers just lookup in documentation. Not writing an ARM template every day

Got this on 20 Apr 2022.. (copyIndex, copy, dependsOn)

Question #56

HOTSPOT -

You are developing an Azure Function App by using Visual Studio. The app will process orders input by an Azure Web App. The web app places the order information into Azure Queue Storage.

You need to review the Azure Function App code shown below.

```
public static class OrderProcessor
{
  [FunctionName("ProcessOrders")]
  public static void ProcessOrders([QueueTrigger("incoming-orders")]CloudQueueMessage myQueueItem, [Table("Orders")]ICollector<Order> tableBindings, TraceWriter log)
  {
    log.Info($"Processing Order: {myQueueItem.Id}");
    log.Info($"Queue Insertion Time: {myQueueItem.InsertionTime}");
    log.Info($"Queue Expiration Time: {myQueueItem.ExpirationTime}");
    tableBindings.Add(JsonConvert.DeserializeObject<Order>(myQueueItem.AsString));
  }
  [FunctionName("ProcessOrders-Poison")]
  public static void ProcessFailedOrders([QueueTrigger("incoming-orders-poison")]CloudQueueMessage myQueueItem, TraceWriter log)
  {
    log.Error($"Failed to process order: {myQueueItem.AsString}");
    . . .
  }
}
```

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

	Yes	No
The code will log the time that the order was processed from the queue.	○	○
When the ProcessOrders function fails, the function will retry up to five times for a given order, including the first try.	○	○
When there are multiple orders in the queue, a batch of orders will be retrieved from the queue and the ProcessOrders function will run multiple instances concurrently to process the orders.	○	○
The ProcessOrders function will output the order to an Orders table in Azure Table Storage.	○	○

Explanation

Correct Answer:

SecExams

Answer Area

	Yes	No
The code will log the time that the order was processed from the queue.	○	○
When the ProcessOrders function fails, the function will retry up to five times for a given order, including the first try.	○	○
When there are multiple orders in the queue, a batch of orders will be retrieved from the queue and the ProcessOrders function will run multiple instances concurrently to process the orders.	○	○
The ProcessOrders function will output the order to an Orders table in Azure Table Storage.	○	○

Box 1: No -
ExpirationTime - The time that the message expires.
InsertionTime - The time that the message was added to the queue.

Box 2: Yes -
maxDequeueCount - The number of times to try processing a message before moving it to the poison queue. Default value is 5.

Box 3: Yes -
When there are multiple queue messages waiting, the queue trigger retrieves a batch of messages and invokes function instances concurrently to process them.
By default, the batch size is 16. When the number being processed gets down to 8, the runtime gets another batch and starts processing those messages. So the maximum number of concurrent messages being processed per function on one virtual machine (VM) is 24.

Box 4: Yes -
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-queue

Community Discussion

Box 1: No It logs the following: - ExpirationTime - The time that the message expires. - InsertionTime - The time that the message was added to the queue. Box 2: Yes maxDequeueCount: The number of times to try processing a message before moving it to the poison queue. Default value is 5. Box 3: Yes When there are multiple queue messages waiting, the queue trigger retrieves a batch of messages and invokes function instances concurrently to process them. By default, the batch size is 16. When the number being processed gets down to 8, the runtime gets another batch and starts processing those messages. So the maximum number of concurrent messages being processed per function on one virtual machine (VM) is 24. Box 4: Yes [Table("Orders")]ICollector<Order>

table bindings And in the code it adds the order:
tableBindings.Add(JsonConvert.DeserializeObject<Object>(myQueueItem.AsString));

Microsoft thinks that a good developer should remember the default value for the dequeueCount (and not forget that in a stress exam situation that there is that property, which is not shown in the code, very convenient).

Seems correct https://docs.microsoft.com/fr-fr/azure/azure-functions/functions-bindings-storage-queue#hostjson-settings

Would love to answer this correctly but the full code isn't showing. The maxDequeueCount value isn't showing in the question codeset provided. Does anyone have the full codeset?

Image isn't showing a full code? Please send me full code

SecExams

Question #57

DRAG DROP -

You are developing a solution for a hospital to support the following use cases:

✑ The most recent patient status details must be retrieved even if multiple users in different locations have updated the patient record.

✑ Patient health monitoring data retrieved must be the current version or the prior version.

✑ After a patient is discharged and all charges have been assessed, the patient billing record contains the final charges.

You provision a Cosmos DB NoSQL database and set the default consistency level for the database account to Strong. You set the value for Indexing Mode to Consistent.

You need to minimize latency and any impact to the availability of the solution.

You must override the default consistency level at the query level to meet the required consistency guarantees for the scenarios.

Which consistency levels should you implement? To answer, drag the appropriate consistency levels to the correct requirements. Each consistency level may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: Strong -

Strong: Strong consistency offers a linearizability guarantee. The reads are guaranteed to return the most recent committed version of an item. A client never sees an uncommitted or partial write. Users are always guaranteed to read the latest committed write.

Box 2: Bounded staleness -
Bounded staleness: The reads are guaranteed to honor the consistent-prefix guarantee. The reads might lag behind writes by at most "K" versions (that is "updates") of an item or by "t" time interval. When you choose bounded staleness, the "staleness" can be configured in two ways:
The number of versions (K) of the item
The time interval (t) by which the reads might lag behind the writes

Box 3: Eventual -
Eventual: There's no ordering guarantee for reads. In the absence of any further writes, the replicas eventually converge.
Incorrect Answers:
Consistent prefix: Updates that are returned contain some prefix of all the updates, with no gaps. Consistent prefix guarantees that reads never see out-of-order writes.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels

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Community Discussion

Answers are correct

Box 1: Strong Box 2: Bounded staleness Box 3: Eventual Note: Consistent prefix: Updates that are returned contain some prefix of all the updates, with no gaps. Consistent prefix guarantees that reads never see out-of-order writes. Reference: https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels

what is the Note for in your comment? you just copied it from the correct answer description which doesn't make sense to me.

what is the Note for in your comment? you just copied it from the correct answer description which doesn't make sense to me.

Got this on 6/28/2023 and passed with 850. Went with answer.

Question #58

HOTSPOT -

You are configuring a development environment for your team. You deploy the latest Visual Studio image from the Azure Marketplace to your Azure subscription.

The development environment requires several software development kits (SDKs) and third-party components to support application development across the organization. You install and customize the deployed virtual machine (VM) for your development team. The customized VM must be saved to allow provisioning of a new team member development environment.

You need to save the customized VM for future provisioning.

Which tools or services should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Action	Tool or service
Generalize the VM.	Azure PowerShell Visual Studio command prompt Azure Migrate Azure Backup
Store images.	Azure Blob Storage Azure Data Lake Storage Azure File Storage Azure Table Storage

Explanation

Correct Answer:

SecExams

Answer Area

Action	Tool or service
Generalize the VM.	Azure PowerShell Visual Studio command prompt Azure Migrate Azure Backup
Store images.	Azure Blob Storage Azure Data Lake Storage Azure File Storage Azure Table Storage

Box 1: Azure Powershell -
Creating an image directly from the VM ensures that the image includes all of the disks associated with the VM, including the OS disk and any data disks.
Before you begin, make sure that you have the latest version of the Azure PowerShell module.
You use Sysprep to generalize the virtual machine, then use Azure PowerShell to create the image.

Box 2: Azure Blob Storage -
You can store images in Azure Blob Storage.
Reference:
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/capture-image-resource#create-an-image-of-a-vm-using-powershell

SecExams

Community Discussion

The answer is right, it is show in AZ-900 as well.

Box 1: Azure Powershell Creating an image directly from the VM ensures that the image includes all of the disks associated with the VM, including the OS disk and any data disks. Before you begin, make sure that you have the latest version of the Azure PowerShell module. You use Sysprep to generalize the virtual machine, then use Azure PowerShell to create the image. Box 2: Azure Blob Storage A VM Image is a collection of metadata and pointers to a set of VHDs (one VHD per disk) stored as page blobs in Azure Storage. Reference: https://azure.microsoft.com/en-us/blog/vm-image-blog-post https://docs.microsoft.com/en-us/azure/virtual-machines/windows/capture-image-resource

Powershell is correct. https://docs.microsoft.com/en-us/azure/virtual-machines/windows/capture-image-resource

Powershell is correct. https://docs.microsoft.com/en-us/azure/virtual-machines/windows/capture-image-resource

Is it still relevant for az-204 since they removed VMs from scope in 28th of april?

Question #59

You are preparing to deploy a website to an Azure Web App from a GitHub repository. The website includes static content generated by a script.
You plan to use the Azure Web App continuous deployment feature.
You need to run the static generation script before the website starts serving traffic.
What are two possible ways to achieve this goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Add the path to the static content generation tool to WEBSITE_RUN_FROM_PACKAGE setting in the host.json file. (Correct Answer)
B) Add a PreBuild target in the websites csproj project file that runs the static content generation script.
C) Create a file named run.cmd in the folder /run that calls a script which generates the static content and deploys the website.
D) Create a file named .deployment in the root of the repository that calls a script which generates the static content and deploys the website. (Correct Answer)

Explanation

Correct Answer:
AD
A: In Azure, you can run your functions directly from a deployment package file in your function app. The other option is to deploy your files in the d:\home\site\wwwroot directory of your function app (see A above).
To enable your function app to run from a package, you just add a WEBSITE_RUN_FROM_PACKAGE setting to your function app settings.
Note: The host.json metadata file contains global configuration options that affect all functions for a function app.
D: To customize your deployment, include a .deployment file in the repository root.
You just need to add a file to the root of your repository with the name .deployment and the content:

[config]
command = YOUR COMMAND TO RUN FOR DEPLOYMENT
this command can be just running a script (batch file) that has all that is required for your deployment, like copying files from the repository to the web root directory for example.
Reference:
https://github.com/projectkudu/kudu/wiki/Custom-Deployment-Script https://docs.microsoft.com/bs-latn-ba/azure/azure-functions/run-functions-from-deployment-package

Community Discussion

I think it is B and D

Me: Do I need to know .Net shit to pass AZ-204? Microsoft: No, it is only concept you need to know. It does not check your knowledge of .Net (or whatever it is) Questions: .csproj file PreBuild Event Target Me: Microsoft oh Microsoft.

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Question #60

DRAG DROP -

You are developing an application to use Azure Blob storage. You have configured Azure Blob storage to include change feeds.

A copy of your storage account must be created in another region. Data must be copied from the current storage account to the new storage account directly between the storage servers.

You need to create a copy of the storage account in another region and copy the data.

In which order should you perform the actions? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

To move a storage account, create a copy of your storage account in another region. Then, move your data to that account by using AzCopy, or another tool of your choice.
The steps are:
- ✎ Export a template.
- ✎ Modify the template by adding the target region and storage account name.
- ✎ Deploy the template to create the new storage account.
- ✎ Configure the new storage account.
- ✎ Move data to the new storage account.
- ✎ Delete the resources in the source region.

Note: You must enable the change feed on your storage account to begin capturing and recording changes. You can enable and disable changes by using Azure Resource Manager templates on Portal or Powershell.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-move
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed

Community Discussion

I think you first have to export the Resource Manager template before you can create a new template deployment. So, swap options 1 and 2 from the solution. In the first link of the solution's text, exporting is also considere as the first step.

Answer is Wrong. correct Sequence is Export Create Modify Deploy AZ copy

No need to be this aggressive tho

No need to be this aggressive tho

SecExams

No need to be this aggressive tho

Question #61

DRAG DROP -

You are preparing to deploy an Azure virtual machine (VM)-based application. The VMs that run the application have the following requirements:

✑ When a VM is provisioned the firewall must be automatically configured before it can access Azure resources.

✑ Supporting services must be installed by using an Azure PowerShell script that is stored in Azure Storage.

You need to ensure that the requirements are met.

Which features should you use? To answer, drag the appropriate features to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Reference: https://docs.microsoft.com/en-us/azure/automation/automation-hybrid-runbook-worker https://docs.microsoft.com/en-us/azure/virtual-machines/windows/run-command

Community Discussion

1. Run Command 2. Customer Script Extension Some question: https://www.secexams.com/discussions/microsoft/view/12062-exam-az-203-topic-1-question-11-discussion/

Box 1: Run Command This capability is useful in all scenarios where you want to run a script within a VM. It's one of the only ways to troubleshoot and remediate a VM that doesn't have the RDP or SSH port open, because of improper network or administrative user configuration. Box 2: Customer Script Extension The Custom Script Extension downloads and executes scripts on Azure virtual machines. This extension is useful for post deployment configuration, software installation, or any other configuration or management tasks. Scripts can be downloaded from Azure storage or GitHub, or provided to the Azure portal at extension run time. The Custom Script Extension integrates with Azure Resource Manager templates, and can be run using the Azure CLI, PowerShell, Azure portal, or the Azure Virtual Machine REST API.

Reference: https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/custom-script-windows https://docs.microsoft.com/en-us/azure/virtual-machines/windows/run-scripts-in-vm

Reference: https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/custom-script-windows https://docs.microsoft.com/en-us/azure/virtual-machines/windows/run-scripts-in-vm

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but it says the firewall cofiguration has to happen automatically. How does "Run command" do that?

Question #62

HOTSPOT -

A company is developing a Node.js web app. The web app code is hosted in a GitHub repository located at https://github.com/TailSpinToys/webapp.

The web app must be reviewed before it is moved to production. You must deploy the initial code release to a deployment slot named review.

You need to create the web app and deploy the code.

How should you complete the commands? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
$gitrepo="https://github.com/TailSpinToys/webapp"
$webappname="TailSpinToysWeb"
$location="WestUS2"
[ ▼ ] -Name myResourceGroup -Location $location
[ ▼ ] -Name $webappname -Location $location -ResourceGroupName myResourceGroup -Tier Standard
[ ▼ ] -Name $webappname -Location $location -AppServicePlan $webappname -ResourceGroupName myResourceGroup
[ ▼ ] -Name $webappname -ResourceGroupName myResourceGroup -Slot review
$PropertiesObject = @{repoUrl = "$gitrepo";branch = "master";}
Set-AzResource -PropertyObject $PropertiesObject -ResourceGroupName myResourceGroup -ResourceType
Microsoft.Web/sites/slots/sourcecontrols -ResourceName $webappname/review/web -ApiVersion 2015-08-01 -Force
Switch-AzWebAppSlot -Name $webappname -ResourceGroupName myResourceGroup
-SourceSlotName review -DestinationSlotName production
```

New-AzWebAppSlot
New-AzWebApp
New-AzAppServicePlan
New-AzResourceGroup

Explanation

Correct Answer:

Answer Area

```
$gitrepo="https://github.com/TailSpinToys/webapp"
$webappname="TailSpinToysWeb"
$location="WestUS2"
```

[ ] -Name myResourceGroup -Location $location
- New-AzWebAppSlot
- New-AzWebApp
- New-AzAppServicePlan
- New-AzResourceGroup

[ ] -Name $webappname -Location $location -ResourceGroupName myResourceGroup -Tier Standard
- New-AzWebAppSlot
- New-AzWebApp
- New-AzAppServicePlan
- New-AzResourceGroup

[ ] -Name $webappname -Location $location -AppServicePlan $webappname -ResourceGroupName myResourceGroup
- New-AzWebAppSlot
- New-AzWebApp
- New-AzAppServicePlan
- New-AzResourceGroup

[ ] -Name $webappname -ResourceGroupName myResourceGroup -Slot review
- New-AzWebAppSlot
- New-AzWebApp
- New-AzAppServicePlan
- New-AzResourceGroup

```
$PropertiesObject = @{repoUrl = "$gitrepo";branch = "master";}
Set-AzResource -PropertyObject $PropertiesObject -ResourceGroupName myResourceGroup -ResourceType
Microsoft.Web/sites/slots/sourcecontrols -ResourceName $webappname/review/web -ApiVersion 2015-08-01 -Force
Switch-AzWebAppSlot -Name $webappname -ResourceGroupName myResourceGroup
-SourceSlotName review -DestinationSlotName production
```

Box 1: New-AzResourceGroup -
The New-AzResourceGroup cmdlet creates an Azure resource group.

Box 2: New-AzAppServicePlan -
The New-AzAppServicePlan cmdlet creates an Azure App Service plan in a given location

Box 3: New-AzWebApp -
The New-AzWebApp cmdlet creates an Azure Web App in a given a resource group

Box 4: New-AzWebAppSlot -
The New-AzWebAppSlot cmdlet creates an Azure Web App slot.
Reference:
https://docs.microsoft.com/en-us/powershell/module/az.resources/new-azresourcegroup?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azappserviceplan?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebapp?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebappslot?view=azps-2.3.2

Community Discussion

Answer is correct

Box 1: New-AzResourceGroup The New-AzResourceGroup cmdlet creates an Azure resource group. Box 2: New-AzAppServicePlan The New-AzAppServicePlan cmdlet creates

an Azure App Service plan in a given location Box 3: New-AzWebApp The New-AzWebApp cmdlet creates an Azure Web App in a given a resource group Box 4: New-AzWebAppSlot The New-AzWebAppSlot cmdlet creates an Azure Web App slot.

Reference: https://docs.microsoft.com/en-us/powershell/module/az.resources/new-azresourcegroup?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azappserviceplan?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebapp?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebappslot?view=azps-2.3.2

Reference: https://docs.microsoft.com/en-us/powershell/module/az.resources/new-azresourcegroup?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azappserviceplan?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebapp?view=azps-2.3.2 https://docs.microsoft.com/en-us/powershell/module/az.websites/new-azwebappslot?view=azps-2.3.2

Question was in Exam 2023-03-30

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Question #63

HOTSPOT -

You are developing an application that needs access to an Azure virtual machine (VM).

The access lifecycle for the application must be associated with the VM service instance.

You need to enable managed identity for the VM.

How should you complete the PowerShell segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
$vm = Get-AzVM -ResourceGroupName "ContosoRG" -Name "ContosoVM"
Update-AzVM -ResourceGroupName "ContosoRG" -VM $vm [ ▼ ] [ ▼ ]
```

-AssignIdentity:	$SystemAssigned
-IdentityId:	$UserAssigned

Explanation

Correct Answer:

Answer Area

```
$vm = Get-AzVM -ResourceGroupName "ContosoRG" -Name "ContosoVM"
Update-AzVM -ResourceGroupName "ContosoRG" -VM $vm [ ▼ ] [ ▼ ]
```

-AssignIdentity:	$SystemAssigned
-IdentityId:	$UserAssigned

Box 1: -IdentityType -

Enable system-assigned managed identity on an existing Azure VM:

To enable a system-assigned managed identity, use the -IdentityType switch on the Update-AzVM cmdlet (see below).

Box 2: $SystemAssigned -

$vm = Get-AzVM -ResourceGroupName myResourceGroup -Name myVM

Update-AzVM -ResourceGroupName myResourceGroup -VM $vm -IdentityType SystemAssigned

Reference:

https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/qs-configure-powershell-windows-vm

Community Discussion

The parameter should be "IdentityType", not "IdentityId" as it's stated in the reference link. "SystemAssigned" is correct

Box 1: -IdentityType -IdentityType: The type of identity used for the virtual machine. Valid values are SystemAssigned, UserAssigned, SystemAssignedUserAssigned, and None. - IdentityId: Specifies the list of user identities associated with the virtual machine. The user identity references will be ARM resource IDs in the form: Box 2: $SystemAssigned There are two types of managed identities: - System-assigned: Some Azure services allow you to enable a managed identity directly on a service instance. When you enable a system-assigned managed identity an identity is created in Azure AD that is tied to the lifecycle of that service instance. So when the resource is deleted, Azure automatically deletes the identity for you. By design, only that Azure resource can use this identity to request tokens from Azure AD. - User-assigned: You may also create a managed identity as a standalone Azure resource. You can create a user-assigned managed identity and assign it to one or more instances of an Azure service. In the case of user-assigned managed identities, the identity is managed separately from the resources that use it.

1- You can think there are two distinct errors in the question. 2- ...or then you can try to answer thinking both IdentityId and the "$" in the second ddl are ok. The $ means that's a variable. So it must contains a specific User Managed Identity path for the paramenter IdentityId. Can't be System Assigned. I'll go for the second one...

1- You can think there are two distinct errors in the question. 2- ...or then you can try to answer thinking both IdentityId and the "$" in the second ddl are ok. The $ means that's a variable. So it must contains a specific User Managed Identity path for the paramenter IdentityId. Can't be System Assigned. I'll go for the second one...

correct, in 2023Mar24, score: 904/1000

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Question #64

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.
Solution: Create an Azure Function app that uses the Consumption hosting model and that is triggered from the blob upload.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
In the Consumption hosting plan, resources are added dynamically as required by your functions.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-blob-triggered-function

Community Discussion

Answer should be "No". Consumption plan can take up to several minutes to trigger the function. See note from https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-blob-triggered-function. "When your function app runs in the

default Consumption plan, there may be a delay of up to several minutes between the blob being added or updated and the function being triggered. If you need low latency in your blob triggered functions, consider running your function app in an App Service plan."

Hi all. I would say, that this has to be "No"... Quote: "The process to produce a mobile-friendly version of the image must start in less than one minute." And this is only a feature from the "Premium plan" (Perpetually warm instances to avoid any cold start).... Consumption plan = up to several minutes...

In my opinion you're right. Often in a consumption plan the function starts immediately but it's not guaranteed and in production environment minimizing latency is very important as required in the question. For further info about cold starts i found an interesting article: https://azure.microsoft.com/en-us/blog/understanding-serverless-cold-start/ #:~:text=In%20the%20context%20of%20Azure,haven't%20been%20called%20recently.

In my opinion you're right. Often in a consumption plan the function starts immediately but it's not guaranteed and in production environment minimizing latency is very important as required in the question. For further info about cold starts i found an interesting article: https://azure.microsoft.com/en-us/blog/understanding-serverless-cold-start/ #:~:text=In%20the%20context%20of%20Azure,haven't%20been%20called%20recently.

Selected Answer: B

Answer should be "no" after reviewing this article. The processing needs to begin sooner and Microsoft specifies the difference between an Event Grid trigger and a storage blob trigger. https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger?tabs=in-process%2Cextensionv5&pivots=programming-language-csharp "Minimizing latency: If your function app is on the Consumption plan, there can be up to a 10-minute delay in processing new blobs if a function app has gone idle. To avoid this latency, you can switch to an App Service plan with Always On enabled. You can also use an Event Grid trigger with your Blob storage account. For an example, see the Event Grid tutorial."

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Question #65

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop and deploy an Azure App Service API app to a Windows-hosted deployment slot named Development. You create additional deployment slots named Testing and Production. You enable auto swap on the Production deployment slot.
You need to ensure that scripts run and resources are available before a swap operation occurs.
Solution: Update the app with a method named statuscheck to run the scripts. Update the app settings for the app. Set the WEBSITE_SWAP_WARMUP_PING_PATH and WEBSITE_SWAP_WARMUP_PING_STATUSES with a path to the new method and appropriate response codes.
Does the solution meet the goal?

A) No (Correct Answer)
B) Yes

Explanation

Correct Answer:
A
These are valid warm-up behavior options, but are not helpful in fixing swap problems. Instead update the web.config file to include the applicationInitialization configuration element. Specify custom initialization actions to run the scripts.
Note: Some apps might require custom warm-up actions before the swap. The applicationInitialization configuration element in web.config lets you specify custom initialization actions. The swap operation waits for this custom warm-up to finish before swapping with the target slot. Here's a sample web.config fragment.
<system.webServer>
<applicationInitialization>
<add initializationPage="/" hostName="[app hostname]" />
<add initializationPage="/Home/About" hostName="[app hostname]" />

</applicationInitialization>
</system.webServer>
Reference:
https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots#troubleshoot-swaps

Community Discussion

Should be YES? https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots You can also customize the warm-up behavior with one or both of the following app settings: WEBSITE_SWAP_WARMUP_PING_PATH: The path to ping to warm up your site. Add this app setting by specifying a custom path that begins with a slash as the value. An example is /statuscheck. The default value is /. WEBSITE_SWAP_WARMUP_PING_STATUSES: Valid HTTP response codes for the warm-up operation. Add this app setting with a comma-separated list of HTTP codes. An example is 200,202 . If the returned status code isn't in the list, the warmup and swap operations are stopped. By default, all response codes are valid. WEBSITE_WARMUP_PATH: A relative path on the site that should be pinged whenever the site restarts (not only during slot swaps). Example values include /statuscheck or the root path, /.

The answer is right to be marked as 'No' as the warm up is done correctly but the web config part is not mentioned i.e, AppInitialization.

Question is not only for warm-up but also to execute custom script. So Answer No is correct.

Question is not only for warm-up but also to execute custom script. So Answer No is correct.

it states that a new method called statuscheck is added to the application that executes these scripts. if you add the path to /statuscheck in WEBSITE_SWAP_WARMUP_PING_PATH the application executes the scripts

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Question #66

HOTSPOT -

You create the following PowerShell script:

```
$source = New-AzScheduledQueryRuleSource -Query 'Heartbeat | where TimeGenerated > ago(1h)' -DataSourceId "contoso"
$schedule = New-AzScheduledQueryRuleSchedule -FrequencyInMinutes 60 -TimeWindowInMinutes 60
$triggerCondition = New-AzScheduledQueryRuleTriggerCondition -ThresholdOperator "LessThan" -Threshold 5
$aznsActionGroup = New-AzScheduledQueryRuleAznsActionGroup -ActionGroup "contoso" -EmailSubject "Custom email subject"
 -CustomWebhookPayload "{ '"alert'":'"#alertrulename'", '"IncludeSearchResults'":true }"
$alertingAction = New-AzScheduledQueryRuleAlertingAction -AznsAction $aznsActionGroup -Severity "3" -Trigger $triggerCondition
New-AzScheduledQueryRule -ResourceGroupName "contoso" -Location "eastus" -Action $alertingAction -Enabled $true
 -Description "Alert description" -Schedule $schedule -Source $source -Name "Alert Name"
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
A log alert is created that sends an email when the CPU percentage is above 60 percent for five minutes.	○	○
A log alert is created that sends an email when the number of virtual machine heartbeats in the past hour is less than five.	○	○
The log alert is scheduled to run every two hours.	○	○

Explanation

Correct Answer:

Answer Area

Statements	Yes	No
A log alert is created that sends an email when the CPU percentage is above 60 percent for five minutes.	○	○
A log alert is created that sends an email when the number of virtual machine heartbeats in the past hour is less than five.	○	○
The log alert is scheduled to run every two hours.	○	○

Box 1: No -
The AzScheduledQueryRuleSource is Heartbeat, not CPU.

Box 2: Yes -
The AzScheduledQueryRuleSource is Heartbeat!
Note: New-AzScheduledQueryRuleTriggerCondition creates an object of type Trigger Condition. This object is to be passed to the command that creates Alerting Action object.

Box 3: No -
The schedule is 60 minutes, not two hours.
-FrequencyInMinutes: The alert frequency.
-TimeWindowInMinutes: The alert time window
The New-AzAscheduledQueryRuleSchedule command creates an object of type Schedule. This object is to be passed to the command that creates Log Alert Rule.
Reference:
https://docs.microsoft.com/en-us/powershell/module/az.monitor/new-azscheduledqueryrule https://docs.microsoft.com/en-us/powershell/module/az.monitor/new-azscheduledqueryruletriggercondition

Community Discussion

I agree. No Yes No

I agree. NO YES NO

correct, in 2023Mar24, score: 904/1000

SecExams

correct, in 2023Mar24, score: 904/1000

No, the answer should be No, Yes, No as per this link https://learn.microsoft.com/en-us/javascript/api/@azure/arm-monitor/schedule?view=azure-node-latest

Question #67

DRAG DROP -

You are developing an Azure Function app.

The app must meet the following requirements:

- ✎ Enable developers to write the functions by using the Rust language.
- ✎ Declaratively connect to an Azure Blob Storage account.

You need to implement the app.

Which Azure Function app features should you use? To answer, drag the appropriate features to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Features	Answer Area	
	Requirement	**Feature**
Extension bundle	Enable developers to write the functions by using the Rust language.	Custom handler
	Declaratively connect to an Azure Blob Storage account.	Trigger
Runtime		
Policy		
Hosting plan		

Box 1: Custom handler -
Custom handlers can be used to create functions in any language or runtime by running an HTTP server process, for example Go or Rust.

Box 2: Trigger -
Functions are invoked by a trigger and can have exactly one. In addition to invoking the function, certain triggers also serve as bindings. You may also define multiple bindings in addition to the trigger. Bindings provide a declarative way to connect data to your code.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/create-first-function-vs-code-other https://docs.microsoft.com/en-us/dotnet/architecture/serverless/azure-functions

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Community Discussion

Box 1: Custom handler Custom handlers can be used to create functions in any language or runtime by running an HTTP server process, for example Go or Rust. Box 2: extension bundles is needed to support the bindings and triggers that you use https://docs.microsoft.com/en-us/azure/azure-functions/functions-custom-handlers?WT.mc_id=thomasmaurer-blog-thmaure#bindings-support

Answer is correct. Box 1: Custom handler Custom handlers can be used to create functions in any language or runtime by running an HTTP server process, for example Go or Rust. Box 2: Trigger Functions are invoked by a trigger and can have exactly one. In addition to invoking the function, certain triggers also serve as bindings. You may also define multiple bindings in addition to the trigger. Bindings provide a declarative way to connect data to your code. Reference: https://docs.microsoft.com/en-us/azure/azure-functions/create-first-function-vs-code-other https://docs.microsoft.com/en-us/dotnet/architecture/serverless/azure-functions

What's your answer? You can just point out incorrect without any updates.

What's your answer? You can just point out incorrect without any updates.

What's your answer? You can just point out incorrect without any updates.

Question #68

HOTSPOT -

You are developing an ASP.NET Core web application. You plan to deploy the application to Azure Web App for Containers.

The application needs to store runtime diagnostic data that must be persisted across application restarts. You have the following code:

```
public void SaveDiagData(string data)
{
    var path = Environment.GetEnvironmentVariable("DIAGDATA");
    File.WriteAllText(Path.Combine(path, "data"), data);
}
```

You need to configure the application settings so that diagnostic data is stored as required.

How should you configure the web app's settings? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Explanation

Correct Answer:

Answer Area

App setting	Value
LOCALAPPDATA WEBSITE_LOCALCACHE_ENABLED DOTNET_HOSTING_OPTIMIZATION_CACHE WEBSITES_ENABLE_APP_SERVICE_STORAGE DIAGDATA	true /home /local D:\home D:\local

Box 1: If WEBSITES_ENABLE_APP_SERVICE_STORAGE
If WEBSITES_ENABLE_APP_SERVICE_STORAGE setting is unspecified or set to true, the /home/ directory will be shared across scale instances, and files written will persist across restarts

Box 2: /home -
Reference:
https://docs.microsoft.com/en-us/azure/app-service/containers/app-service-linux-faq

Community Discussion

I think the printed image is creating confusion. The correct answers (according to the image) are: WEBSITES_ENABLE_APP_SERVICE_STORAGE=true DIAGDATA=/home

Given answer correct.

For Windows,it would be C:\Home, which is not a provided option.. but /home is provided. https://docs.microsoft.com/en-us/azure/app-service/configure-custom-container?pivots=container-windows

For Windows,it would be C:\Home, which is not a provided option.. but /home is provided. https://docs.microsoft.com/en-us/azure/app-service/configure-custom-container?pivots=container-windows

For Windows,it would be C:\Home, which is not a provided option.. but /home is provided. https://docs.microsoft.com/en-us/azure/app-service/configure-custom-container?pivots=container-windows

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Question #69

You are developing a web app that is protected by Azure Web Application Firewall (WAF). All traffic to the web app is routed through an Azure Application Gateway instance that is used by multiple web apps. The web app address is contoso.azurewebsites.net.
All traffic must be secured with SSL. The Azure Application Gateway instance is used by multiple web apps.
You need to configure the Azure Application Gateway for the web app.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) In the Azure Application Gateway's HTTP setting, enable the Use for App service setting. (Correct Answer)
B) Convert the web app to run in an Azure App service environment (ASE).
C) Add an authentication certificate for contoso.azurewebsites.net to the Azure Application Gateway.
D) In the Azure Application Gateway's HTTP setting, set the value of the Override backend path option to contoso22.azurewebsites.net. (Correct Answer)

Explanation

Correct Answer:
AD
D: The ability to specify a host override is defined in the HTTP settings and can be applied to any back-end pool during rule creation.
The ability to derive the host name from the IP or FQDN of the back-end pool members. HTTP settings also provide an option to dynamically pick the host name from a back-end pool member's FQDN if configured with the option to derive host name from an individual back-end pool member.
A (not C): SSL termination and end to end SSL with multi-tenant services.
In case of end to end SSL, trusted Azure services such as Azure App service web apps do not require whitelisting the backends in the application gateway.
Therefore, there is no need to add any authentication certificates.

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Reference:
https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-web-app-overview

Community Discussion

A&D are correct. The question was not copied correctly from AZ-203 https://www.secexams.com/discussions/microsoft/view/21243-exam-az-203-topic-24-question-22-discussion/

Is this a valid question for AZ204? I don't see this topic in the skills measured?

Agreed A & D are correct. Note: [T]here is no requirement to add authentication certificates when App service is selected as backend. https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-web-app-overview#tls-termination-and-end-to-end-tls-with-multi-tenant-services

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Agreed A & D are correct. Note: [T]here is no requirement to add authentication certificates when App service is selected as backend. https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-web-app-overview#tls-termination-and-end-to-end-tls-with-multi-tenant-services

Selected Answer: AC

A, C, Bings exaplanation: The correct answers are: A. In the Azure Application Gateway's HTTP setting, enable the Use for App service setting. C. Add an authentication certificate for contoso.azurewebsites.net to the Azure Application Gateway. Explanation: Option A: The Azure Application Gateway needs to be configured to use the App service setting. This is because the traffic is being routed through an Azure Application Gateway instance that is used by multiple web apps1. Option C: Since all traffic must be secured with SSL, an authentication certificate for contoso.azurewebsites.net needs to be added to the Azure Application Gateway1. Option B is not correct because converting the web app to run in an Azure App service environment (ASE) is not necessary for configuring the Azure Application Gateway for the web app1. Option D is not correct because changing the backend path to a different web app (contoso22.azurewebsites.net) does not align with the requirement of routing traffic to contoso.azurewebsites.net1.

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Question #70

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop a software as a service (SaaS) offering to manage photographs. Users upload photos to a web service which then stores the photos in Azure Storage Blob storage. The storage account type is General-purpose V2.
When photos are uploaded, they must be processed to produce and save a mobile-friendly version of the image. The process to produce a mobile-friendly version of the image must start in less than one minute.
You need to design the process that starts the photo processing.
Solution: Use the Azure Blob Storage change feed to trigger photo processing.
Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer:
B
The change feed is a log of changes that are organized into hourly segments but appended to and updated every few minutes. These segments are created only when there are blob change events that occur in that hour.
Instead catch the triggered event, so move the photo processing to an Azure Function triggered from the blob upload.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

Community Discussion

The answer is 100% correct. Change feed publishes records to the log within few minutes of the change. The process to produce a mobile-friendly version of the image must start in less than one minute. https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed?tabs=azure-portal

Got this in exam today (5 April 2023)

Selected Answer: B

Change feed is for logging.

Change feed is for logging purpose only

Change feed is for logging purpose only

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Question #71

You are developing a web application that runs as an Azure Web App. The web application stores data in Azure SQL Database and stores files in an Azure Storage account. The web application makes HTTP requests to external services as part of normal operations.
The web application is instrumented with Application Insights. The external services are OpenTelemetry compliant.
You need to ensure that the customer ID of the signed in user is associated with all operations throughout the overall system.
What should you do?

A) Add the customer ID for the signed in user to the CorrelationContext in the web application (Correct Answer)
B) On the current SpanContext, set the TraceId to the customer ID for the signed in user
C) Set the header Ocp-Apim-Trace to the customer ID for the signed in user
D) Create a new SpanContext with the TraceFlags value set to the customer ID for the signed in user

Explanation

Correct Answer:
A
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/correlation

Community Discussion

Option B, On the current SpanContext, set the TraceId to the customer ID for the signed in user, is not correct because the TraceId is a unique identifier for a trace, and it is not meant to be used to store contextual information about the request. Option C, Set the header Ocp-Apim-Trace to the customer ID for the signed in user, is not correct because the Ocp-Apim-Trace header is used by Azure API Management to track requests as they pass through the API gateway, and it is not related to application instrumentation or tracing. Option D, Create a new SpanContext with the TraceFlags value set to the customer ID for the signed in user, is not correct because the TraceFlags value is used to indicate the state of the trace and is not meant to be used to store contextual information about the request."

SecExams

Option B, On the current SpanContext, set the TraceId to the customer ID for the signed in user, is not correct because the TraceId is a unique identifier for a trace, and it is not meant to be used to store contextual information about the request. Option C, Set the header Ocp-Apim-Trace to the customer ID for the signed in user, is not correct because the Ocp-Apim-Trace header is used by Azure API Management to track requests as they pass through the API gateway, and it is not related to application instrumentation or tracing. Option D, Create a new SpanContext with the TraceFlags value set to the customer ID for the signed in user, is not correct because the TraceFlags value is used to indicate the state of the trace and is not meant to be used to store contextual information about the request."

This question was on exam. 09/01/2024. Passed 872.

Selected Answer: A

A SpanContext represents the portion of a Span which must be serialized and propagated along side of a Baggage. https://open-telemetry.github.io/opentelemetry-js-api/interfaces/spancontext.html

got this question today, answer A - 7/30/2023, score 895/1000

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Question #72

HOTSPOT -

You are developing an Azure Function App. You develop code by using a language that is not supported by the Azure Function App host. The code language supports HTTP primitives.

You must deploy the code to a production Azure Function App environment.

You need to configure the app for deployment.

Which configuration values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Configuration parameter	Configuration value
Publish	Code / Docker Container
Runtime stack	Node.js / Python / PowerShell Core / Custom Handler
Version	14 LTS / 7.0 / custom

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Explanation

Correct Answer:

Answer Area

Configuration parameter	Configuration value
Publish	Code / Docker Container
Runtime stack	Node.js / Python / PowerShell Core / Custom Handler
Version	14 LTS / 7.0 / custom

Box 1: Docker container -
A custom handler can be deployed to every Azure Functions hosting option. If your handler requires operating system or platform dependencies (such as a language runtime), you may need to use a custom container. You can create and deploy your code to Azure Functions as a custom Docker container.

Box 2: PowerShell core -
When creating a function app in Azure for custom handlers, we recommend you select .NET Core as the stack. A "Custom" stack for custom handlers will be added in the future. PowerShell Core (PSC) is based on the new .NET Core runtime.

Box 3: 7.0 -
On Windows: The Azure Az PowerShell module is also supported for use with PowerShell

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5.1 on Windows.
On Linux: PowerShell 7.0.6 LTS, PowerShell 7.1.3, or higher is the recommended version of PowerShell for use with the Azure Az PowerShell module on all platforms.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-function-linux-custom-image https://docs.microsoft.com/en-us/powershell/azure/install-az-ps?view=azps-7.1.0

Community Discussion

answer is wrong: if you pick docker container you cant specify stack and version, So ill go with >Code >Custom Handler >custom (only option when you pick Custom Handler)

I checked it on Azure portal and the answer should be Code > Custom Handler > custom

correct, in 2023Mar24, score: 904/1000

correct, in 2023Mar24, score: 904/1000

Got this today. Went with answer here. Score 927

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Question #73

DRAG DROP -

You provision virtual machines (VMs) as development environments.

One VM does not start. The VM is stuck in a Windows update process. You attach the OS disk for the affected VM to a recovery VM.

You need to correct the issue.

In which order should you perform the actions? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Remove the update that causes the problem

1. Take a snapshot of the OS disk of the affected VM as a backup.

2. Attach the OS disk to a recovery VM.
3. Once the OS disk is attached on the recovery VM, run diskmgmt.msc to open Disk Management, and ensure the attached disk is ONLINE.
4. (Step 1) Open an elevated command prompt instance (Run as administrator). Run the following command to get the list of the update packages that are on the attached OS disk: dism /image:<Attached OS disk>:\ /get-packages > c:\temp\Patch_level
5. (Step 2) Open the C:\temp\Patch_level.txt file, and then read it from the bottom up. Locate the update that's in Install Pending or Uninstall Pending state.
6. Remove the update that caused the problem:
dism /Image:<Attached OS disk>:\ /Remove-Package /PackageName:<PACK
7. (Step 4) Detach the OS disk and recreate the VM. Then check whether the issue is resolved.
Reference:
https://docs.microsoft.com/en-us/troubleshoot/azure/virtual-machines/troubleshoot-stuck-updating-boot-error

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Community Discussion

sure i will use this knowledge for my developer work...

Correct. All steps are listed here - https://docs.microsoft.com/en-us/troubleshoot/azure/virtual-machines/troubleshoot-stuck-updating-boot-error

Question says "The VM is stuck in a Windows update process". I ques it's common ;)

Question says "The VM is stuck in a Windows update process". I ques it's common ;)

Is this a part of AZ-204? Then I must have missed something....

Question #74

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop an HTTP triggered Azure Function app to process Azure Storage blob data. The app is triggered using an output binding on the blob.
The app continues to time out after four minutes. The app must process the blob data.
You need to ensure the app does not time out and processes the blob data.
Solution: Update the functionTimeout property of the host.json project file to 10 minutes.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead pass the HTTP trigger payload into an Azure Service Bus queue to be processed by a queue trigger function and return an immediate HTTP success response.
Note: Large, long-running functions can cause unexpected timeout issues. General best practices include:
Whenever possible, refactor large functions into smaller function sets that work together and return responses fast. For example, a webhook or HTTP trigger function might require an acknowledgment response within a certain time limit; it's common for webhooks to require an immediate response. You can pass the
HTTP trigger payload into a queue to be processed by a queue trigger function. This approach lets you defer the actual work and return an immediate response.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-best-practices

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Community Discussion

Regardless of the function app timeout setting, 230 seconds is the maximum amount of time that an HTTP triggered function can take to respond to a request. https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout

Selected Answer: B

HTTP triggers on function apps can timeout in 230 seconds. Hence B is the answer.

Do not use chatGPT as a source, is really faulty with this kind of questions

Do not use chatGPT as a source, is really faulty with this kind of questions

received 2023-04-17 went given answer, score 926

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Question #75

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HOTSPOT -

You are developing an Azure Durable Function based application that processes a list of input values. The application is monitored using a console application that retrieves JSON data from an Azure Function diagnostic endpoint.

During processing a single instance of invalid input does not cause the function to fail. Invalid input must be available to the monitoring application.

You need to implement the Azure Durable Function and the monitoring console application.

How should you complete the code segments? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
[FunctionName("App")]
public static async Task<List<string>> RunOrchestrator(
  [OrchestrationTrigger] IDurableOrchestrationContext context) {
  EntityId[] input = . . .
  int errIndex =. . .
  [                                                    ];
}
  using (var client = new HttpClient())
  {
    while (true)
    {
      var response = await client.GetAsync(". . .");
      response.EnsureSuccessStatusCode();
      var json = await response.Content.ReadAsStringAsync();
      dynamic result = JsonConvert.DeserializeObject(json);
      if (result.runtimeStatus == "                  ")
      {
        return result.                  ;
      }
    }
}
```

context.SetOutput(input[errIndex])
context.SetCustomStatus(input[errIndex])
context.SignalEntity(input[errIndex], "error")
await context.CallEntityAsync(input[errIndex], "error")

Failed
Awaited
Listening
Completed

input
output
runtimeStatus
customStatus

Explanation

Correct Answer:

SecExams

Answer Area

```
[FunctionName("App")]
public static async Task<List<string>> RunOrchestrator(
  [OrchestrationTrigger] IDurableOrchestrationContext context) {
  EntityId[] input = . . .
  int errIndex =. . .
  [                                                    ];
}
  using (var client = new HttpClient())
  {
    while (true)
    {
      var response = await client.GetAsync(". . .");
      response.EnsureSuccessStatusCode();
      var json = await response.Content.ReadAsStringAsync();
      dynamic result = JsonConvert.DeserializeObject(json);
      if (result.runtimeStatus == "                    ")
      {
        return result.                    ;
      }
    }
}
```

context.SetOutput(input[errIndex])
context.SetCustomStatus(input[errIndex])
context.SignalEntity(input[errIndex], "error")
await context.CallEntityAsync(input[errIndex], "error")

Failed
Awaited
Listening
Completed

input
output
runtimeStatus
customStatus

Box 1: await context.CallEntityAsync(input[errindex],"error")
Orchestration signals and calls an entity
Orchestrator functions can access entities by using APIs on the orchestration trigger binding.
Example:
[FunctionName("CounterOrchestration")]
public static async Task Run(
[OrchestrationTrigger] IDurableOrchestrationContext context)
{
var entityId = new EntityId(nameof(Counter), "myCounter");
// Two-way call to the entity which returns a value - awaits the response int currentValue = await context.CallEntityAsync<int>(entityId, "Get");

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Box 2: Failed -
During processing a single instance of invalid input does not cause the function to fail.
Note: RuntimeStatus: One of the following values:
Failed: The instance failed with an error.
Completed: The instance has completed normally.
Terminated: The instance was stopped abruptly.
Pending: The instance has been scheduled but has not yet started running.
Running: The instance has started running.
ContinuedAsNew: The instance has restarted itself with a new history. This state is a transient state.

Box 3: Input -
Invalid input must be available to the monitoring application.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-entities https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-instance-management

SecExams

Community Discussion

I've not seen any of this stuff in Microsoft's Learning Path's for AZ-204

I'd say: SetOutput() == Completed result.output The function needs to return the one invalid input, so you could use either SetOutput or SetCustomStatus, but custom status is not available after the function completes. The one invalid input does not cause the function to fail, therefore Completed.

The learning path and the preparation videos are showing things you need not know for the exam.

The learning path and the preparation videos are showing things you need not know for the exam.

This question was in today's exam at 10-June-2023

Question #76

You are developing an Azure Durable Function to manage an online ordering process.
The process must call an external API to gather product discount information.
You need to implement the Azure Durable Function.
Which Azure Durable Function types should you use? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Orchestrator (Correct Answer)
B) Entity (Correct Answer)
C) Client
D) Activity

Explanation

Correct Answer:
AB
The Durable Functions extension exposes a set of built-in HTTP APIs that can be used to perform management tasks on orchestrations, entities, and task hubs.
These HTTP APIs are extensibility webhooks that are authorized by the Azure Functions host but handled directly by the Durable Functions extension.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-http-api

Community Discussion

Got this in 09/22 , went with Orchestrator and Entity, score 927.

It should be orchestrator, client & activity right?

orchestrator and activity

orchestrator and activity

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Durable functions are out of scope as of 28th April 2023

Question #77

DRAG DROP -

You are authoring a set of nested Azure Resource Manager templates to deploy multiple Azure resources.

The templates must be tested before deployment and must follow recommended practices.

You need to validate and test the templates before deployment.

Which tools should you use? To answer, drag the appropriate tools to the correct requirements. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Tools
Parameter file
Template function
Azure Resource Manager test toolkit
User-defined function
What-if operation
Azure Deployment Manager

Answer Area

Requirement	Tool
Determine whether the templates follow recommended practices.	Tool
Test and validate changes that templates will make to the environment.	Tool

Explanation

Correct Answer:

Tools
Parameter file
Template function
Azure Resource Manager test toolkit
User-defined function
What-if operation
Azure Deployment Manager

Answer Area

Requirement	Tool
Determine whether the templates follow recommended practices.	Azure Resource Manager test toolkit
Test and validate changes that templates will make to the environment.	What-if operation

Box 1: Azure Resource Manager test toolkit

Use ARM template test toolkit -

The Azure Resource Manager template (ARM template) test toolkit checks whether your template uses recommended practices. When your template isn't compliant with recommended practices, it returns a list of warnings with the suggested changes. By using the test toolkit, you can learn how to avoid common problems in template development.

Box 2: What-if operation -
ARM template deployment what-if operation
Before deploying an Azure Resource Manager template (ARM template), you can preview the changes that will happen. Azure Resource Manager provides the what-if operation to let you see how resources will change if you deploy the template. The what-if operation doesn't make any changes to existing resources.
Instead, it predicts the changes if the specified template is deployed.
Reference:
https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/test-toolkit
https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/deploy-what-if

Community Discussion

Looks Correct https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/test-toolkit https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/deploy-what-if?tabs=azure-powershell

received 2023-04-17 went given answer, score 926

received 2023-04-17 went given answer, score 926

on exam oct 2022

got it on my exam 30-12-2022 score: 818

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Question #78

HOTSPOT -

You are developing a solution that uses the Azure Storage Client library for .NET.

You have the following code: (Line numbers are included for reference only.)

```
01 CloudBlockBlob src = null;
02 try
03 {
04    src = container.ListBlobs().OfType<CloudBlockBlob>().FirstOrDefault();
05    var id = await src.AcquireLeaseAsync(null);
06    var dst = container.GetBlockBlobReference(src.Name);
07    string cpid = await dst.StartCopyAsync(src);
08    await dst.FetchAttributeAsync();
09    return id;
10 }
11 catch (Exception e)
12 {
13    throw;
14 }
15 finally
16 {
17    if (src != null)
18    await src.FetchAttributesAsync();
19    if (src.Properties.LeaseState != LeaseState.Available)
20    await src.BreakLeaseAsync(new TimeSpan(0));
21 }
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statement	Yes	No
The code creates an infinite lease	○	○
The code at line 06 always creates a new blob	○	○
The finally block releases the lease	○	○

Explanation

Correct Answer:

Answer Area

Statement	Yes	No
The code creates an infinite lease	○	○
The code at line 06 always creates a new blob	○	○
The finally block releases the lease	○	○

Box 1: Yes -
AcquireLeaseAsync does not specify leaseTime.
leaseTime is a TimeSpan representing the span of time for which to acquire the lease, which will be rounded down to seconds. If null, an infinite lease will be acquired. If not null, this must be 15 to 60 seconds.

Box 2: No -
The GetBlockBlobReference method just gets a reference to a block blob in this container.

Box 3: Yes -
The BreakLeaseAsync method initiates an asynchronous operation that breaks the current lease on this container.
Reference:
https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.cloudblobcontainer.acquireleaseasync https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.cloudblobcontainer.getblockblobreference https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.cloudblobcontainer.breakleaseasync

Community Discussion

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I think the answer is correct: Optional. Version 2012-02-12 and newer. For a break operation, this is the proposed duration of seconds that the lease should continue before it is broken, between 0 and 60 seconds. This break period is only used if it is shorter than the time remaining on the lease. If longer, the time remaining on the lease is used. A new lease will not be available before the break period has expired, but the lease may be held for longer than the break period. If this header does not appear with a break operation, a fixed-duration lease breaks after the remaining lease period elapses, and an infinite lease breaks immediately. From: https://docs.microsoft.com/en-us/rest/api/storageservices/lease-blob

I think Box 3 should be no insetad of yes. BreakRelease don`t release the lease directly. You use ReleaseLease to do this: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.cloudblobcontainer.releaselease?view=azure-dotnet-legacy

Last few words "infinite lease breaks immediately" is the key for this context.

Last few words "infinite lease breaks immediately" is the key for this context.

Ah I think modele is right: BreakLeaseAsync (TimeSpan? breakPeriod) breakPeriod Nullable<TimeSpan> A TimeSpan representing the amount of time to allow the lease to remain, which will be rounded down to seconds. If null, the break period is the remainder of the current lease, or zero for infinite leases.

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Question #79

You are building a website that uses Azure Blob storage for data storage. You configure Azure Blob storage lifecycle to move all blobs to the archive tier after 30 days.
Customers have requested a service-level agreement (SLA) for viewing data older than 30 days.
You need to document the minimum SLA for data recovery.
Which SLA should you use?

A) at least two days
B) between one and 15 hours (Correct Answer)
C) at least one day
D) between zero and 60 minutes

Explanation

Correct Answer:
B
The archive access tier has the lowest storage cost. But it has higher data retrieval costs compared to the hot and cool tiers. Data in the archive tier can take several hours to retrieve depending on the priority of the rehydration. For small objects, a high priority rehydrate may retrieve the object from archive in under 1 hour.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers?tabs=azure-portal

Community Discussion

Answer is correct

Correct Answer: B - Standard priority: The rehydration request will be processed in the order it was received and may take up to 15 hours. - High priority: The rehydration request will be prioritized over Standard requests and may finish in under 1 hour for objects under ten GB in size. Reference: https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers?tabs=azure-portal#archive-access-tier https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-rehydration?tabs=azure-portal

received 2023-04-17 went given answer, score 926

received 2023-04-17 went given answer, score 926

This question is sooo open for interpretation: "For small objects, a high priority rehydrate may retrieve the object from archive in under 1 hour.". Where is this 15 hours coming from?

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Question #80

SecExams

HOTSPOT -

You are developing a ticket reservation system for an airline.

The storage solution for the application must meet the following requirements:

✐ Ensure at least 99.99% availability and provide low latency.

✐ Accept reservations even when localized network outages or other unforeseen failures occur.

✐ Process reservations in the exact sequence as reservations are submitted to minimize overbooking or selling the same seat to multiple travelers.

✐ Allow simultaneous and out-of-order reservations with a maximum five-second tolerance window.

You provision a resource group named airlineResourceGroup in the Azure South-Central US region.

You need to provision a SQL API Cosmos DB account to support the app.

How should you complete the Azure CLI commands? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
resourceGroupName='airlineResourceGroup'
name='docdb-airline-reservations'
databaseName='docdb-tickets-database'
collectionName='docdb-tickets-collection'
consistencyLevel=
```

- Strong
- Eventual
- ConsistentPrefix
- BoundedStaleness

```
az cosmosdb create \
--name $name \
```

- --enable-virtual-network true \
- --enable-automatic-failover true \
- --kind 'GlobalDocumentDB' \
- --kind 'MongoDB' \

```
--resource-group $resourceGroupName \
--max-interval 5 \
```

- --locations 'southcentralus'
- --locations 'eastus'
- --locations 'southcentralus=0 eastus=1 westus=2'
- --locations 'southcentralus=0'

```
--default-consistency-level = $consistencylevel
```

Explanation

Correct Answer:

Answer Area

```
resourceGroupName='airlineResourceGroup'
name='docdb-airline-reservations'
databaseName='docdb-tickets-database'
collectionName='docdb-tickets-collection'
consistencyLevel=
```

- Strong
- Eventual
- ConsistentPrefix
- BoundedStaleness

```
az cosmosdb create \
--name $name \
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- --enable-virtual-network true \
- --enable-automatic-failover true \
- --kind 'GlobalDocumentDB' \
- --kind 'MongoDB' \

```
--resource-group $resourceGroupName \
--max-interval 5 \
```

- --locations 'southcentralus'
- --locations 'eastus'
- --locations 'southcentralus=0 eastus=1 westus=2'
- --locations 'southcentralus=0'

```
--default-consistency-level = $consistencylevel
```

Box 1: BoundedStaleness -
Bounded staleness: The reads are guaranteed to honor the consistent-prefix guarantee. The reads might lag behind writes by at most "K" versions (that is, "updates") of an item or by "T" time interval. In other words, when you choose bounded staleness, the "staleness" can be configured in two ways:
The number of versions (K) of the item
The time interval (T) by which the reads might lag behind the writes
Incorrect Answers:

Strong -
Strong consistency offers a linearizability guarantee. Linearizability refers to serving requests concurrently. The reads are guaranteed to return the most recent committed version of an item. A client never sees an uncommitted or partial write. Users are always guaranteed to read the latest committed write.

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Box 2: --enable-automatic-failover true\
For multi-region Cosmos accounts that are configured with a single-write region, enable automatic-failover by using Azure CLI or Azure portal. After you enable automatic failover, whenever there is a regional disaster, Cosmos DB will automatically failover your account.
Question: Accept reservations event when localized network outages or other unforeseen failures occur.
Box 3: --locations'southcentralus=0 eastus=1 westus=2
Need multi-region.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/cosmos-db/manage-with-cli.md

Community Discussion

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Answer is correct.

No need to overthink here, max-interval, indicates this must be bounded-slateness, enable-automatic-failover, indicated this must be multi-region

The strong consistency doesn't work here: 1) there is a --max-interval property which is being used with bounded staleness only 2) there is a requirement "Accept reservations event when localized network outages or other unforeseen failures occur." which points us to multiple writes for multiple regions which is not being supported by the Strong consistency. --locations syntax looks like obsolete as for late march 2021

Eventual is definitely not correct

Eventual is definitely not correct

Question #81

HOTSPOT -

You are preparing to deploy a Python website to an Azure Web App using a container. The solution will use multiple containers in the same container group. The

Dockerfile that builds the container is as follows:

```
FROM python:3
ADD website.py
CMD [ "python", "./website.py"]
```

You build a container by using the following command. The Azure Container Registry instance named images is a private registry.

```
docker build -t images.azurecr.io/website:v1.0.0
```

The user name and password for the registry is admin.

The Web App must always run the same version of the website regardless of future builds.

You need to create an Azure Web App to run the website.

How should you complete the commands? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
az configure --defaults web=website
az configure --defaults group=website
az appservice plan create --name websitePlan [ ▼ ]
```

- --sku SHARED
- --tags container
- --sku B1 --hyper-v
- --sku B1 --is-linux

```
az webapp create --plan websitePlan [ ▼ ]
```

- --deployment-source-url images.azurecr.io/website:v1.0.0
- --deployment-source-url images.azurecr.io/website:latest
- --deployment-container-image-name images.azurecr.io/website:v1.0.0
- --deployment-container-image-name images.azurecr.io/website:latest

```
az webapp config [ ▼ ]
```

- set --python-version 2.7 --generic-configurations user=admin password=admin
- set –python-version 3.6 --generic-configurations user=admin password=admin
- container set --docker-registry-server-url https://images.azurecr.io –u admin –p admin
- container set --docker-registry-server-url https://images.azurecr.io/website -u admin -p admin

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Explanation

Correct Answer:

Answer Area

```
az configure --defaults web=website
az configure --defaults group=website
az appservice plan create --name websitePlan [ ▼ ]
```

- --sku SHARED
- --tags container
- --sku B1 --hyper-v
- --sku B1 --is-linux

```
az webapp create --plan websitePlan [ ▼ ]
```

- --deployment-source-url images.azurecr.io/website:v1.0.0
- --deployment-source-url images.azurecr.io/website:latest
- --deployment-container-image-name images.azurecr.io/website:v1.0.0
- --deployment-container-image-name images.azurecr.io/website:latest

```
az webapp config [ ▼ ]
```

- set --python-version 2.7 --generic-configurations user=admin password=admin
- set –python-version 3.6 --generic-configurations user=admin password=admin
- container set --docker-registry-server-url https://images.azurecr.io –u admin –p admin
- container set --docker-registry-server-url https://images.azurecr.io/website -u admin -p admin

Box 1: --SKU B1 --hyper-v -
--hyper-v
Host web app on Windows container.
Box 2: --deployment-source-url images.azurecr.io/website:v1.0.0
--deployment-source-url -u
Git repository URL to link with manual integration.
The Web App must always run the same version of the website regardless of future builds.
Incorrect:
--deployment-container-image-name -i
Linux only. Container image name from Docker Hub, e.g. publisher/image-name:tag.
Box 3: az webapp config container set -url https://images.azurecr.io -u admin -p admin az webapp config container set
Set a web app container's settings.
Paremeter: --docker-registry-server-url -r
The container registry server url.
The Azure Container Registry instance named images is a private registry.
Example:
az webapp config container set --docker-registry-server-url https://{azure-container-registry-name}.azurecr.io
Reference:
https://docs.microsoft.com/en-us/cli/azure/appservice/plan

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Community Discussion

--sku B1 --is-linux --deployment-container-image-name images.azurecr.io/website:v1.0.0 -- container set --docker-registry-server-url https://images.azurecr.io -u admin -p admin

"use multiple containers in the same container group" this not is possible in windows. Solution is: --is-linux --deployment-container-image-name

That's true. "Multi-container groups are currently restricted to Linux containers." https://docs.microsoft.com/en-us/azure/container-instances/container-instances-multi-container-group

That's true. "Multi-container groups are currently restricted to Linux containers." https://docs.microsoft.com/en-us/azure/container-instances/container-instances-multi-container-group

microsoft promote good practises for -u and -p (͡° ͜ʖ ͡°)

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Question #82

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HOTSPOT -

You are developing a back-end Azure App Service that scales based on the number of messages contained in a Service Bus queue.

A rule already exists to scale up the App Service when the average queue length of unprocessed and valid queue messages is greater than 1000.

You need to add a new rule that will continuously scale down the App Service as long as the scale up condition is not met.

How should you configure the Scale rule? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

Scale rule ×

Metric source

Storage queue
Service Bus queue
Current resource
Storage queue (classic)

Resource type
Service Bus Namespaces

Resource
MessageQueue1103

* Queues
itemqueue

Criteria

* Metric name

Message Count
Active Message Count

1 minute time grain

* Time grain statistic

Total
Maximum
Average
Count

* Operator

Explanation

Correct Answer:

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Answer Area

Scale rule ×

Metric source

Storage queue
Service Bus queue
Current resource
Storage queue (classic)

Resource type
Service Bus Namespaces

Resource
MessageQueue1103

* Queues
itemqueue

Criteria

* Metric name

Message Count
Active Message Count

1 minute time grain

* Time grain statistic

Total
Maximum
Average
Count

* Operator

Box 1: Service bus queue -
You are developing a back-end Azure App Service that scales based on the number of messages contained in a Service Bus queue.

Box 2: ActiveMessage Count -
ActiveMessageCount: Messages in the queue or subscription that are in the active state and ready for delivery.

Box 3: Count -

Box 4: Less than or equal to -

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You need to add a new rule that will continuously scale down the App Service as long as the scale up condition is not met.
Box 5: Decrease count by

Community Discussion

The correct answers are 1) Service bus queue 2) Active message count 3) Average 4) Less than or equal to 5) Decrease count by

Full image: https://vceguide.com/wp-content/uploads/2019/10/Microsoft-AZ-203-date-01-06-2019-00001_Page_062_Image_0001.jpg

this is correct (the "official" solution is wrong) Also check the proper image https://vceguide.com/wp-content/uploads/2019/10/Microsoft-AZ-203-date-01-06-2019-00001_Page_062_Image_0001.jpg

this is correct (the "official" solution is wrong) Also check the proper image https://vceguide.com/wp-content/uploads/2019/10/Microsoft-AZ-203-date-01-06-2019-00001_Page_062_Image_0001.jpg

Box 1: Service bus queue You are developing a back-end Azure App Service that scales based on the number of messages contained in a Service Bus queue. Box 2: ActiveMessage Count ActiveMessageCount: Number of messages in the queue or subscription that are in the active state and ready for delivery. Box 3: Average For special metrics such as Storage or Service Bus Queue length metric, the threshold is the average number of messages available per current number of instances. Box 4: Less than or equal to You need to add a new rule that will continuously scale down the App Service, as long as the scale up condition is not met. Box 5: Decrease count by

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Question #83

DRAG DROP -

You have an application that uses Azure Blob storage.

You need to update the metadata of the blobs.

Which three methods should you use to develop the solution? To answer, move the appropriate methods from the list of methods to the answer area and arrange them in the correct order.

Select and Place:

Methods	Answer Area
Metadata.Add	
SetMetadataAsync	
FetchAttributesAsync	
UploadFileStream	
SetPropertiesAsync	

Explanation

Correct Answer:

Methods	Answer Area
	Metadata.Add
	SetMetadataAsync
FetchAttributesAsync	SetPropertiesAsync
UploadFileStream	

Metadata.Add example:

// Add metadata to the dictionary by calling the Add method

metadata.Add("docType", "textDocuments");

SetMetadataAsync example:

// Set the blob's metadata.

```
await blob.SetMetadataAsync(metadata);
// Set the blob's properties.
await blob.SetPropertiesAsync();
```

Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-properties-metadata

Community Discussion

Since we're talking about updating the metadata, - first we need to fetch it, to populate blob's properties and metadata (we want to update it - without fetching we would just set the new metadata): FetchAttributesAsync - second, we need to manipulate the metadatas to update them and the best fitting is Metadata.Add - third, we have to persist our changes. We can use a method that initiates an asynchronous operation to update the blob's metadata, which is SetMetadataAsync

I suppose there are two correct answers, depending on the version of Azure.Storage.Blobs. For v11: FetchAttributesAsync, Metadata.Add, SetMetadataAsync. For v12: GetPropertiesAsync, Metadata.Add, SetMetadataAsync. Just look here, there are two tabs with source code. One for v11, one for v12: https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-properties-metadata?tabs=dotnet#set-and-retrieve-metadata

Correct. But GetPropertiesAsync not mentioned in answer options. We can go with FetchAttributesAsync

Correct. But GetPropertiesAsync not mentioned in answer options. We can go with FetchAttributesAsync

This is correct answer. Others answers suggesting GetProperties/SetProperties are wrong, because GetProperties is no in options at all, and there is no SetProperties method.

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Question #84

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores located throughout the world. A single device can produce 2 megabytes (MB) of data every 24 hours. Each store location has one to five devices that send data.
You must store the device data in Azure Blob storage. Device data must be correlated based on a device identifier. Additional stores are expected to open in the future.
You need to implement a solution to receive the device data.
Solution: Provision an Azure Event Grid. Configure the machine identifier as the partition key and enable capture.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/compare-messaging-services

Community Discussion

I don't know who gave all the answer, but that person definitely failed the exam..

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I think event hub. Azure Event Hub can be used to get the messages from the various devices. Azure Event Hub capture can then be used to persist the events to Azure Blob storage.

Its Event Hub not, Grid.

Its Event Hub not, Grid.

I agree. The solution says "enable capture". I have found capture only for Event Hub, not for Event Grid. https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview

Question #85

You develop Azure solutions.
A .NET application needs to receive a message each time an Azure virtual machine finishes processing data. The messages must NOT persist after being processed by the receiving application.
You need to implement the .NET object that will receive the messages.
Which object should you use?

A) QueueClient (Correct Answer)
B) SubscriptionClient
C) TopicClient
D) CloudQueueClient

Explanation

Correct Answer:
A
A queue allows processing of a message by a single consumer. Need a CloudQueueClient to access the Azure VM.
Incorrect Answers:
B, C: In contrast to queues, topics and subscriptions provide a one-to-many form of communication in a publish and subscribe pattern. It's useful for scaling to large numbers of recipients.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-queues-topics-subscriptions

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Community Discussion

Correct Answer: A Azure.Storage.Queues.QueueClient: .NET v12 Azure.Storage.Queues.CloudQueueClient: .NET v11 (Legacy) So, the question is really about what kind of queue message tool you should use. And the key word here is that "message must NOT persist after being processed". Azure.Storage.Queues.QueueClient supports "At-Most-Once" deliver mode, while Azure.Storage.Queues.CloudQueueClient doesn't. Reference: https://docs.microsoft.com/en-us/dotnet/api/azure.storage.queues.queueclient?view=azure-dotnet https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.queue.cloudqueueclient?view=azure-dotnet-legacy

First of all - question is not precise as we don't know which QueueClient they are asking about. There are two options: - Microsoft.AzureService.Bus.QueueClient? - Azure.Storage.Queues.QueueClient? I would say it is about Microsoft.AzureService.Bus.QueueClient as the difference between Azure.Storage.Queues.CloudQueueClient (v12) is just a legacy version of the Azure.Storage.Queues.QueueClient (v11) So the question is really about what kind of queue message tool you should use. And the key word here is that "message must NOT persist after being processed". So correct answer would be Microsoft.AzureService.Bus.QueueClient (A) as it supports "At-Most-Once" deliver mode while Azure.Storage.Queues.CloudQueueClient doesn't.

Microsoft creates all these random naming convention showing how disorganized they are in individual islands and they dare to ask questions along this fault lines.

It's QueueClient of Service Bus.

It's QueueClient of Service Bus.

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Question #86

DRAG DROP -

You are maintaining an existing application that uses an Azure Blob GPv1 Premium storage account. Data older than three months is rarely used.

Data newer than three months must be available immediately. Data older than a year must be saved but does not need to be available immediately.

You need to configure the account to support a lifecycle management rule that moves blob data to archive storage for data not modified in the last year.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: Upgrade the storage account to GPv2
Object storage data tiering between hot, cool, and archive is supported in Blob Storage and General Purpose v2 (GPv2) accounts. General Purpose v1 (GPv1) accounts don't support tiering.
You can easily convert your existing GPv1 or Blob Storage accounts to GPv2 accounts through the Azure portal.
Step 2: Copy the data to be archived to a Standard GPv2 storage account and then delete the data from the original storage account
Step 3: Change the storage account access tier from hot to cool
Note: Hot - Optimized for storing data that is accessed frequently.
Cool - Optimized for storing data that is infrequently accessed and stored for at least 30 days.
Archive - Optimized for storing data that is rarely accessed and stored for at least 180 days with flexible latency requirements, on the order of hours.
Only the hot and cool access tiers can be set at the account level. The archive access tier can only be set at the blob level.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers

Community Discussion

Since we already have a premium P1 account with gpv1. Why not: - Upgrade the existing one to GPv2 - Create a new GPV2 standard account with default access level to cool - And then copy archive data to the GPV2 and delete the data from original storage account. That makes sense to me.

Step 1: Upgrade the storage account to GPv2 Object storage data tiering between hot, cool, and archive is supported in Blob Storage and General Purpose v2 (GPv2) accounts. General Purpose v1 (GPv1) accounts don't support tiering. You can easily convert your

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existing GPv1 or Blob Storage accounts to GPv2 accounts through the Azure portal. Step 2: Create a new GPV2 standard account with default access level to cool Step 3: Copy the data to be archived to a Standard GPv2 storage account and then delete the data from the original storage account

Why we need to Upgrade the existing one to GPv2 as we are creating a new one?

Why we need to Upgrade the existing one to GPv2 as we are creating a new one?

Also look at this blog: https://www.apptio.com/blog/essential-guide-azure-blob-storage-pricing/ Only GPv2 and Blob storage accounts support tiering. If you are using GPv1, and you want to leverage tiering, convert your account to GPv2 through the Azure portal.

Question #87

You develop Azure solutions.
You must connect to a No-SQL globally-distributed database by using the .NET API.
You need to create an object to configure and execute requests in the database.
Which code segment should you use?

A) new Container(EndpointUri, PrimaryKey);
B) new Database(EndpointUri, PrimaryKey);
C) new CosmosClient(EndpointUri, PrimaryKey); (Correct Answer)

Explanation

Correct Answer:
C
Example:
// Create a new instance of the Cosmos Client
this.cosmosClient = new CosmosClient(EndpointUri, PrimaryKey)
//ADD THIS PART TO YOUR CODE
await this.CreateDatabaseAsync();
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/sql-api-get-started

Community Discussion

The Answer is correct!

Correct Answer: C Azure Cosmos DB is a fully managed NoSQL database for modern app development. Single-digit millisecond response times, and automatic and instant scalability, guarantee speed at any scale. // Create a new instance of the Cosmos Client this.cosmosClient = new CosmosClient(EndpointUri, PrimaryKey) //ADD THIS PART TO YOUR CODE await this.CreateDatabaseAsync(); Reference: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.cosmosclient?view=azure-dotnet https://docs.microsoft.com/en-us/azure/cosmos-db/sql-api-get-started

Got this one 02/2022. Went with highly voted answer.

Got this in the exam 01/22

Got this one 01/2022. Went with most voted (to avoid writing answers again)

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Question #88

You have an existing Azure storage account that stores large volumes of data across multiple containers.
You need to copy all data from the existing storage account to a new storage account. The copy process must meet the following requirements:
✑ Automate data movement.
✑ Minimize user input required to perform the operation.
✑ Ensure that the data movement process is recoverable.
What should you use?

A) AzCopy (Correct Answer)
B) Azure Storage Explorer
C) Azure portal
D) .NET Storage Client Library

Explanation

Correct Answer:
A

You can copy blobs, directories, and containers between storage accounts by using the AzCopy v10 command-line utility.
The copy operation is synchronous so when the command returns, that indicates that all files have been copied.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-blobs-copy

Community Discussion

AzCopy is A... please do not write confusing responses... response is already correct, A - AzCopy

AzCopy is A... please do not write confusing responses... response is already correct, A - AzCopy

Answer – AzCopy, The Azcopy tool can be used to copy data from one storage account to another. You can use the tool within automation scripts to ensure the data can be copied automatically.

Correct Answer: C Azure Storage Explorer uses AzCopy to perform all of its data transfer operations. But in this questions, there is a requirement to minimize user interaction which is why AzCopy is more appropriate. Reference: https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-v10 https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-blobs-copy

please stop commenting..you are always misanswering.

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Question #89

DRAG DROP -

You are developing a web service that will run on Azure virtual machines that use Azure Storage. You configure all virtual machines to use managed identities. You have the following requirements:

✑ Secret-based authentication mechanisms are not permitted for accessing an Azure Storage account.

✑ Must use only Azure Instance Metadata Service endpoints.

You need to write code to retrieve an access token to access Azure Storage. To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Code segment 1

```
http://localhost:50342/oauth2/token
http://169.254.169.254:50432/oauth2/token
http://localhost/metadata/identity/oauth2/token
```

Code segment 2

```
XDocument.Parse(payload);
new MultipartContent(payload);
new NetworkCredential("Azure", payload);
```

Answer Area

```
var url = " http://169.254.169.254/metadata/identity/oauth2/token " ;
var queryString = "...";
var client = new HttpClient();
var response = await client.GetAsync(url + queryString);
var payload = await response.Content.ReadAsStringAsync();
return JsonConvert.DeserializeObject<Dictionary<string, string>>(payload);
```

Azure Instance Metadata Service endpoints "/oauth2/token"
Box 1: http://169.254.169.254/metadata/identity/oauth2/token
Sample request using the Azure Instance Metadata Service (IMDS) endpoint (recommended):
GET 'http://169.254.169.254/metadata/identity/oauth2/token?api-version=2018-02-01&resource=https://management.azure.com/' HTTP/1.1 Metadata: true
Box 2: JsonConvert.DeserializeObject<Dictionary<string,string>>(payload);
Deserialized token response; returning access code.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/how-to-use-vm-token https://docs.microsoft.com/en-us/azure/service-fabric/how-to-managed-identity-service-fabric-app-code

Community Discussion

Box 1: http://169.254.169.254/metadata/identity/oauth2/token Sample request using the Azure Instance Metadata Service (IMDS) endpoint (recommended): GET 'http://169.254.169.254/metadata/identity/oauth2/token?api-version=2018-02-01&resource=https://management.azure.com/' HTTP/1.1 Metadata: true Box 2: JsonConvert.DeserializeObject<Dictionary<string,string>>(payload); Deserialized token response; returning access code. Reference: https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/how-to-use-vm-token https://docs.microsoft.com/en-us/azure/service-fabric/how-to-managed-identity-service-fabric-app-code

I got this same question. Provided answers are correct. (Note: I failed the exam 20/9/23. I only scored 644 and I felt bad. I think because many questions here in Examtopics are not accurate. I suggest following the most voted answers and don't just not rely on Examtopics answers. At the beginning of the exam, you will be asked which programming languages you want to use. C#/Python. I chose C#. Also, I just want to add that some

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questions here are really in the actual exams, but the choices are written and formatted differently. Please be aware of that. Goodluck. I feel bad for failing it, but I want to retake next month. I will try Python. T_T

IMDS is a REST API that's available at a well-known, non-routable IP address (169.254.169.254). You can only access it from within the VM. https://docs.microsoft.com/en-us/azure/virtual-machines/windows/instance-metadata-service?tabs=windows

IMDS is a REST API that's available at a well-known, non-routable IP address (169.254.169.254). You can only access it from within the VM. https://docs.microsoft.com/en-us/azure/virtual-machines/windows/instance-metadata-service?tabs=windows

It was there in 13 Feb 2023 exam

SecExams

Question #90

DRAG DROP -

You are developing a new page for a website that uses Azure Cosmos DB for data storage. The feature uses documents that have the following format:

```
{
     "name": "John",
     "city" : "Seattle"
}
```

You must display data for the new page in a specific order. You create the following query for the page:

```
SELECT*
FROM People p
ORDER BY p.name, p.city DESC
```

You need to configure a Cosmos DB policy to support the query.

How should you configure the policy? To answer, drag the appropriate JSON segments to the correct locations. Each JSON segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

JSON segments

- orderBy
- sortOrder
- ascending
- descending
- compositeIndexes

Answer Area

```
{
   "automatic": true,
   "ngMode": "Consistent",
   "includedPaths": [
     {
        "path": "/*"
     }
   ], "excludedPaths": [],
   " [compositeIndexes] ": [
     [
            {                                                    }
             "path": "/name", "order": "descending"

            },
            {
               "path": "/city", "order": " [descending] "

            }
        ]
   ]
```

Box 1: compositeIndexes -
You can order by multiple properties. A query that orders by multiple properties requires a composite index.

Box 2: descending -
Example: Composite index defined for (name ASC, age ASC):
It is optional to specify the order. If not specified, the order is ascending.

```
{
"automatic":true,
"indexingMode":"Consistent",
"includedPaths":[
{
"path":"/*"
}
],
"excludedPaths":[],
"compositeIndexes":[
[
{
"path":"/name",
},
{
"path":"/age",
```

```
}
]
]
}
```

Community Discussion

ORDER BY queries on multiple properties: The composite index also supports an ORDER BY clause with the opposite order on all paths. So I think it's about reversed index to the query. Answer should be 'ascending'. You cannot support ASC (default), DESC query with DESC, DESC index.

"name" field should be marked ascending (default if not specified). It's mislabeled

The problem here is the SQL that makes many people think that "ORDER BY p.name, p.city DESC" means it's ordered by name and city both descending. But the DESC only applies to city. name is ASC - this would be less confusing: "ORDER BY p.name ASC, p.city DESC" Thus in the JSON you can only state ascending+descending or the opposite: descending+ascending. Since descending for name is already set the answer is "ascending". At first I had misread the SQL wrong myself and didn't understand kayleena's comment right away.

The problem here is the SQL that makes many people think that "ORDER BY p.name, p.city DESC" means it's ordered by name and city both descending. But the DESC only applies to city. name is ASC - this would be less confusing: "ORDER BY p.name ASC, p.city DESC" Thus in the JSON you can only state ascending+descending or the opposite: descending+ascending. Since descending for name is already set the answer is "ascending". At first I had misread the SQL wrong myself and didn't understand kayleena's comment right away.

NO. Box 2 is "ascending" See explanation here: https://docs.microsoft.com/en-us/azure/cosmos-db/index-policy#order-by-queries-on-multiple-properties "The composite index also supports an ORDER BY clause with the __opposite order on all paths__." The table in the section also shows an example similar to this question.

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Question #91

HOTSPOT -

You are building a traffic monitoring system that monitors traffic along six highways. The system produces time series analysis-based reports for each highway.

Data from traffic sensors are stored in Azure Event Hub.

Traffic data is consumed by four departments. Each department has an Azure Web App that displays the time series-based reports and contains a WebJob that processes the incoming data from Event Hub. All Web Apps run on App Service Plans with three instances.

Data throughput must be maximized. Latency must be minimized.

You need to implement the Azure Event Hub.

Which settings should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Setting	Value
Number of partitions	3 4 6 12
Partition Key	Highway Department Timestamp VM name

Explanation

Correct Answer:

Answer Area

Setting	Value
Number of partitions	3 4 6 12
Partition Key	Highway Department Timestamp VM name

Box 1: 6 -
The number of partitions is specified at creation and must be between 2 and 32.
There are 6 highways.

Box 2: Highway -
Reference:
https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features

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Community Discussion

Partitions relate to producers - and the logical way to partition the incoming data is by the only value you have at that point, the highway name/id. So the selected answer is correct (6 Partitions, by Highway). People are getting confused by the departments which would actually each be an event consumer with an associated Consumer Group which would have it's own isolated view of each of the highway partitions.

The answer should be 4 and Highway. Sec Exams - Please provide correct answers. What is the use of buying questions on your site...if you are not sure of the answer yourself

There are 6 highways and 6 reports. Each department only needs to read one partition to produce their report on that one highway. If you had 4 partitions you would have to duplicate all the data 4 times (BAD) and then each department would need to read all the data and filter the data for one report (VERY BAD).

There are 6 highways and 6 reports. Each department only needs to read one partition to produce their report on that one highway. If you had 4 partitions you would have to duplicate all the data 4 times (BAD) and then each department would need to read all the data and filter the data for one report (VERY BAD).

https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-faq The number of partitions in an event hub directly relates to the number of concurrent readers you expect to have

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Question #92

DRAG DROP -

You are developing a microservices solution. You plan to deploy the solution to a multinode Azure Kubernetes Service (AKS) cluster.

You need to deploy a solution that includes the following features:

- ✐ reverse proxy capabilities
- ✐ configurable traffic routing
- ✐ TLS termination with a custom certificate

Which components should you use? To answer, drag the appropriate components to the correct requirements. Each component may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Answer Area

Components	Action	Component
Helm		
Draft	Deploy solution.	Helm
Brigade	View cluster and external IP addressing.	KubeCtl
KubeCtl	Implement a single, public IP endpoint that is routed to multiple microservices.	Ingress Controller
Ingress Controller		
CoreDNS		
Virtual Kubelet		

Box 1: Helm -
To create the ingress controller, use Helm to install nginx-ingress.

Box 2: kubectl -
To find the cluster IP address of a Kubernetes pod, use the kubectl get pod command on your local machine, with the option -o wide .

Box 3: Ingress Controller -
An ingress controller is a piece of software that provides reverse proxy, configurable traffic routing, and TLS termination for Kubernetes services. Kubernetes ingress resources are used to configure the ingress rules and routes for individual Kubernetes services.
Incorrect Answers:
Virtual Kubelet: Virtual Kubelet is an open-source Kubernetes kubelet implementation that masquerades as a kubelet. This allows Kubernetes nodes to be backed by Virtual Kubelet providers such as serverless cloud container platforms.
CoreDNS: CoreDNS is a flexible, extensible DNS server that can serve as the Kubernetes cluster DNS. Like Kubernetes, the CoreDNS project is hosted by the
CNCF.
Reference:
https://docs.microsoft.com/bs-cyrl-ba/azure/aks/ingress-basic https://www.digitalocean.com/community/tutorials/how-to-inspect-kubernetes-networking

Community Discussion

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Box 1: Helm Helm helps you manage Kubernetes applications — Helm Charts help you define, install, and upgrade even the most complex Kubernetes application. To create the ingress controller, use Helm to install nginx-ingress. Box 2: Kubectl The Kubernetes command-line tool, kubectl, allows you to run commands against Kubernetes clusters. To find the cluster IP address of a Kubernetes pod, use the kubectl get pod command on your local machine, with the option -o wide . Box 3: Ingress Controller An ingress controller is a piece of software that provides reverse proxy, configurable traffic routing, and TLS termination for Kubernetes services. Kubernetes ingress resources are used to configure the ingress rules and routes for individual Kubernetes services. Using an ingress controller and ingress rules, a single IP address can be used to route traffic to multiple services in a Kubernetes cluster.

I believe there is no AKS question in the exam: https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE4oZ7B

Correct, I am a certified CKA und CKAD. The question isn't that well written though as you could also deploy a solution with kubectl...

Correct, I am a certified CKA und CKAD. The question isn't that well written though as you could also deploy a solution with kubectl...

Reference: https://helm.sh https://kubernetes.io/docs/tasks/tools https://kubernetes.io/docs/concepts/services-networking/ingress-controllers https://docs.microsoft.com/bs-cyrl-ba/azure/aks/ingress-basic https://www.digitalocean.com/community/tutorials/how-to-inspect-kubernetes-networking

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Question #93

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DRAG DROP -

You are implementing an order processing system. A point of sale application publishes orders to topics in an Azure Service Bus queue. The Label property for the topic includes the following data:

Property	Description
ShipLocation	the country/region where the order will be shipped
CorrelationId	a priority value for the order
Quantity	a user-defined field that stores the quantity of items in an order
AuditedAt	a user-defined field that records the date an order is audited

The system has the following requirements for subscriptions:

Subscription type	Comments
FutureOrders	This subscription is reserved for future use and must not receive any orders
HighPriorityOrders	Handle all high priority orders and international orders
InternationalOrders	Handle orders where the country/region is not United States
HighQuantityOrders	Handle only orders with quantities greater than 100 units
AllOrders	This subscription is used for auditing purposes. This subscription must receive every single order. AllOrders has an Action defined that updates the AuditedAt property to include the date and time it was received by the subscription.

You need to implement filtering and maximize throughput while evaluating filters.

Which filter types should you implement? To answer, drag the appropriate filter types to the correct subscriptions. Each filter type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

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Explanation

Correct Answer:

FutureOrders: SQLFilter -
HighPriortyOrders: CorrelationFilter

CorrelationID only -

InternationalOrders: SQLFilter -
Country NOT USA requires an SQL Filter

HighQuantityOrders: SQLFilter -
Need to use relational operators so an SQL Filter is needed.

AllOrders: No Filter -
SQL Filter: SQL Filters - A SqlFilter holds a SQL-like conditional expression that is evaluated in the broker against the arriving messages' user-defined properties and system properties. All system properties must be prefixed with sys. in the conditional expression. The SQL-language subset for filter conditions tests for the existence of properties (EXISTS), as well as for null-values (IS NULL), logical NOT/AND/OR, relational operators, simple numeric arithmetic, and simple text pattern matching with LIKE.
Correlation Filters - A CorrelationFilter holds a set of conditions that are matched against one or more of an arriving message's user and system properties. A common use is to match against the CorrelationId property, but the application can also choose to match against ContentType, Label, MessageId, ReplyTo,
ReplyToSessionId, SessionId, To, and any user-defined properties. A match exists when an arriving message's value for a property is equal to the value specified in the correlation filter. For string expressions, the comparison is case-sensitive. When specifying multiple match properties, the filter combines them as a logical
AND condition, meaning for the filter to match, all conditions must match.
Boolean filters - The TrueFilter and FalseFilter either cause all arriving messages (true) or

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none of the arriving messages (false) to be selected for the subscription.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/topic-filters

Community Discussion

I think that it should be -Correlation Filter (with the not existing value of any filed to avoid getting any message) -SQL filter (as we need to get all high priority AND international orders, but for Correlation filter: A match exists when an arriving message's value for a property is equal to the value specified in the correlation filter and we need not equal) -SQL filter -SQL filter -No Filter

The Correct answers are: No Filter Correleation Filter SQL filter SQL filter SQL filter

https://docs.microsoft.com/en-us/azure/service-bus-messaging/topic-filters "If you don't explicitly specify a filter condition for the rule, the applied filter is the true filter that enables all messages to be selected into the subscription."

https://docs.microsoft.com/en-us/azure/service-bus-messaging/topic-filters "If you don't explicitly specify a filter condition for the rule, the applied filter is the true filter that enables all messages to be selected into the subscription."

https://docs.microsoft.com/en-us/azure/service-bus-messaging/topic-filters "If you don't explicitly specify a filter condition for the rule, the applied filter is the true filter that enables all messages to be selected into the subscription."

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Question #94

DRAG DROP -

Your company has several websites that use a company logo image. You use Azure Content Delivery Network (CDN) to store the static image.

You need to determine the correct process of how the CDN and the Point of Presence (POP) server will distribute the image and list the items in the correct order.

In which order do the actions occur? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: A user requests the image..
A user requests a file (also called an asset) by using a URL with a special domain name, such as <endpoint name>.azureedge.net. This name can be an endpoint hostname or a custom domain. The DNS routes the request to the best performing POP location, which is usually the POP that is geographically closest to the user.
Step 2: If no edge servers in the POP have the..
If no edge servers in the POP have the file in their cache, the POP requests the file from the origin server. The origin server can be an Azure Web App, Azure
Cloud Service, Azure Storage account, or any publicly accessible web server.
Step 3: The origin server returns the..
The origin server returns the file to an edge server in the POP.
An edge server in the POP caches the file and returns the file to the original requestor (Alice). The file remains cached on the edge server in the POP until the time-to-live (TTL) specified by its HTTP headers expires. If the origin server didn't specify a TTL, the default TTL is seven days.
Step 4: Subsequent requests for..
Additional users can then request the same file by using the same URL that the original user used, and can also be directed to the same POP.
If the TTL for the file hasn't expired, the POP edge server returns the file directly from the cache. This process results in a faster, more responsive user experience.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-overview

Community Discussion

Given ans is correct

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It feels so good when there are no debates on what is the correct answer.

It feels so good when there are no debates on what is the correct answer.

The given answer is correct.

time travel!!

Question #95

You are developing an Azure Cosmos DB solution by using the Azure Cosmos DB SQL API. The data includes millions of documents. Each document may contain hundreds of properties.
The properties of the documents do not contain distinct values for partitioning.
Azure Cosmos DB must scale individual containers in the database to meet the performance needs of the application by spreading the workload evenly across all partitions over time.
You need to select a partition key.
Which two partition keys can you use? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) a single property value that does not appear frequently in the documents
B) a value containing the collection name
C) a single property value that appears frequently in the documents
D) a concatenation of multiple property values with a random suffix appended (Correct Answer)
E) a hash suffix appended to a property value (Correct Answer)

Explanation

Correct Answer:
DE
You can form a partition key by concatenating multiple property values into a single artificial partitionKey property. These keys are referred to as synthetic keys.
Another possible strategy to distribute the workload more evenly is to append a random number at the end of the partition key value. When you distribute items in this way, you can perform parallel write operations across partitions.

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Note: It's the best practice to have a partition key with many distinct values, such as hundreds or thousands. The goal is to distribute your data and workload evenly across the items associated with these partition key values. If such a property doesn't exist in your data, you can construct a synthetic partition key.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/synthetic-partition-keys

Community Discussion

The given answer is correct

D and E Reference: https://docs.microsoft.com/en-us/azure/cosmos-db/synthetic-partition-keys

Selected Answer: DE

If no property in the document data will have unique values, you need to make one. This is called a synthetic partition key. These sorts of keys are made by adding a unique suffix at the end of some property. One other way is to create a property that will have the hashed data + a random suffix. The objective is to have a property that is random enough so that you can rely on it to be your key.

Got this one 02/2022. Went with highly voted answer.

Got this in the exam 01/22

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Question #96

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HOTSPOT -

You are developing an Azure-hosted e-commerce web application. The application will use Azure Cosmos DB to store sales orders. You are using the latest SDK to manage the sales orders in the database.

You create a new Azure Cosmos DB instance. You include a valid endpoint and valid authorization key to an appSettings.json file in the code project.

You are evaluating the following application code: (Line number are included for reference only.)

```
01 using System;
02 using System.Threading.Tasks;
03 using Microsoft.Azure.Cosmos;
04 using Microsoft.Extensions.Configuration;
05 using Newtonsoft.Json;
06 namespace SalesOrders
07 {
08   public class SalesOrder
09   {
10     . . .
11   }
12   internal class ManageSalesOrders
13     {
14       private static async Task GenerateSalesOrders()
15         {
16           IConfigurationRoot configuration = new ConfigurationBuilder().AddJsonFile("appSettings.json").Build();
17           string endpoint = configuration["EndPointUrl"];
18           string authKey = configuration["AuthorizationKey"];
19           using CosmosClient client = new CosmosClient(endpoint, authKey);
20           Database database = null;
21           using (await client.GetDatabase("SalesOrders").DeleteStreamAsync()) { }
22           database = await client.CreateDatabaseIfNotExistsAsync("SalesOrders");
23           Container container1 = await database.CreateContainerAsync(id: "Container1", partitionKeyPath: "/AccountNumber");
24           Container container2 = await database.CreateContainerAsync(id: "Container2", partitionKeyPath: "/AccountNumber");
25           SalesOrder salesOrder1 = new SalesOrder() { AccountNumber = "123456" };
26           await container1.CreateItemAsync(salesOrder1, new PartitionKey(salesOrder1.AccountNumber));
27           SalesOrder salesOrder2 = new SalesOrder() { AccountNumber = "654321" };
28           await container1.CreateItemAsync(salesOrder2, new PartitionKey(salesOrder2.AccountNumber));
29           SalesOrder salesOrder3 = new SalesOrder() { AccountNumber = "109876" };
30           await container2.CreateItemAsync(salesOrder3, new PartitionKey(salesOrder3.AccountNumber));
31           _ = await database.CreateUserAsync("User1");
32           User user1 = database.GetUser("User1");
33           _ = await user1.ReadAsync();
34     }
35   }
36 }
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

Statements	Yes	No
A database named SalesOrders is created. The database will include two containers.	○	○
Container1 will contain two items.	○	○
Container2 will contain one item.	○	○

Explanation

Correct Answer:

Answer Area

Statements	Yes	No
A database named SalesOrders is created. The database will include two containers.	○	○
Container1 will contain two items.	○	○
Container2 will contain one item.	○	○

Box 1: Yes -
The createDatabaseIfNotExistsAsync method checks if a database exists, and if it doesn't, create it.
The Database.CreateContainerAsync method creates a container as an asynchronous operation in the Azure Cosmos service.

Box 2: Yes -
The CosmosContainer.CreateItemAsync method creates an item as an asynchronous operation in the Azure Cosmos service.

Box 3: Yes -
Reference:
https://docs.microsoft.com/en-us/dotnet/api/

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microsoft.azure.cosmos.cosmosclient.createdatabaseifnotexistsasync https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.database.createcontainerasync https://docs.microsoft.com/en-us/dotnet/api/azure.cosmos.cosmoscontainer.createitemasync

Community Discussion

Box 1: Yes The createDatabaseIfNotExistsAsync method checks if a database exists, and if it doesn't, create it. (Line 22) The Database.CreateContainerAsync method creates a container as an asynchronous operation in the Azure Cosmos service. (Line 23 and 24) Box 2: Yes The CosmosContainer.CreateItemAsync method creates an item as an asynchronous operation in the Azure Cosmos service. (Line 26 and 28) Box 3: Yes The CosmosContainer.CreateItemAsync method creates an item as an asynchronous operation in the Azure Cosmos service. (Line 30)

Reference: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.cosmosclient.createdatabaseifnotexistsasync https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.database.createcontainerasync https://docs.microsoft.com/en-us/dotnet/api/azure.cosmos.cosmoscontainer.createitemasync

Reference: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.cosmosclient.createdatabaseifnotexistsasync https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.cosmos.database.createcontainerasync https://docs.microsoft.com/en-us/dotnet/api/azure.cosmos.cosmoscontainer.createitemasync

Line 21 is tricky, it assumes the database is already created as it calls DeleteStreamAsync. I'm confused.

On my exam 2023-08-20. Scored 925 Yes Yes Yes

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Question #97

DRAG DROP -

You develop an Azure solution that uses Cosmos DB.

The current Cosmos DB container must be replicated and must use a partition key that is optimized for queries.

You need to implement a change feed processor solution.

Which change feed processor components should you use? To answer, drag the appropriate components to the correct requirements. Each component may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view the content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: The monitored container -

The monitored container has the data from which the change feed is generated. Any inserts and updates to the monitored container are reflected in the change feed of the container.

Box 2: The lease container -

The lease container acts as a state storage and coordinates processing the change feed across multiple workers. The lease container can be stored in the same account as the monitored container or in a separate account.
Box 3: The host: A host is an application instance that uses the change feed processor to listen for changes. Multiple instances with the same lease configuration can run in parallel, but each instance should have a different instance name.

Box 4: The delegate -
The delegate is the code that defines what you, the developer, want to do with each batch of changes that the change feed processor reads.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/change-feed-processor

Community Discussion

The given answer is correct.

And your given answer, that MattXu is right, is also correct.

that observation is correct, john

And your given answer, that MattXu is right, is also correct.

And your given answer, that MattXu is right, is also correct.

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Question #98

HOTSPOT -

You are developing a web application that will use Azure Storage. Older data will be less frequently used than more recent data.

You need to configure data storage for the application. You have the following requirements:

- ✐ Retain copies of data for five years.
- ✐ Minimize costs associated with storing data that is over one year old.
- ✐ Implement Zone Redundant Storage for application data.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Requirement	Solution
Configure an Azure Storage account	▼ Implement Blob Storage Implement Azure Cosmos DB Implement Storage (general purpose v1) Implement StorageV2 (general purpose v2)
Configure data retention	▼ Snapshot blobs and move them to the archive tier Set a lifecycle management policy to move blobs to the cool tier Use AzCopy to copy the data to an on-premises device for backup Set a lifecycle management policy to move blobs to the archive tier

Explanation

Correct Answer:

Answer Area

Requirement	Solution
Configure an Azure Storage account	Implement Blob Storage Implement Azure Cosmos DB Implement Storage (general purpose v1) Implement StorageV2 (general purpose v2)
Configure data retention	Snapshot blobs and move them to the archive tier Set a lifecycle management policy to move blobs to the cool tier Use AzCopy to copy the data to an on-premises device for backup Set a lifecycle management policy to move blobs to the archive tier

Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers
https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy?toc=/azure/storage/blobs/toc.json

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Community Discussion

So, because it is ZRS, and that does not support arhive tier, it cannot be moved to archive tier even though the questions mention the red-herring key-word "infrequently accessed" (which triggers feelings for archive tier). For no logically apparent reason Microsoft decided not to support archive tier in ZRS and unfortunately I have to remember that Microsoft "feature"?

ZRS, and that does not support arhive tier - this is key point, Thanks

ZRS, and that does not support arhive tier - this is key point, Thanks

Got in exam. go with given answer

Correct answer. Got this in exam on 30/12/2023. Case study: Contoso Ltd. Total questions: 46 Time: 1:40 minutes Score: 940 43 questions from Sec Exams. Just 3 questions outside of it.

Question #99

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HOTSPOT -

A company develops a series of mobile games. All games use a single leaderboard service.

You have the following requirements:

✎ Code must be scalable and allow for growth.

✎ Each record must consist of a playerId, gameId, score, and time played.

✎ When users reach a new high score, the system will save the new score using the SaveScore function below.

Each game is assigned an Id based on the series title.

▪

You plan to store customer information in Azure Cosmos DB. The following data already exists in the database:

PartitionKey	RowKey	Email
Harp	Walter	wharp@contoso.com
Smith	Steve	ssmith@contoso.com
Smith	Jeff	jsmith@contoso.com

You develop the following code to save scores in the data store. (Line numbers are included for reference only.)

```
01 public void SaveScore(string gameId, string playerId, int score, long timePlayed)
02 {
03 CloudStorageAccount storageAccount = CloudStorageAccount.Parse(connectionString);
04 CloudTableClient tableClient = storageAccount.CreateCloudTableClient();
05 CloudTable table = tableClient.GetTableReference("scoreTable");
06 table.CreateIfNotExists();
07 var scoreRecord = new PlayerScore(gameId, playerId, score, timePlayed);
08 TableOperation insertOperation = TableOperation.Insert(scoreRecord);
09 table.Execute(insertOperation);
10 }
```

You develop the following code to query the database. (Line numbers are included for reference only.)

```
01 CloudTableClient tableClient = account.CreateCloudTableClient();
02 CloudTable table = tableClient.GetTableReference ("people");
03 TableQuery < CustomerEntity> query = new TableQuery <CustomerEntity >( )
04 .Where( TableQuery.CombineFilters (
05 TableQuery.GenerateFilterCondition (PartitionKey, QueryComparisons.Equal , "Smith"),
06 TableOperators.And , TableQuery.GenerateFilterCondition(Email, QueryComparisons.Equal, "ssmith@contoso.com")
07 ));
08 await table.ExecuteQuerySegmentedAsync< CustomerEntity>(query, null);
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
SaveScore will work with Cosmos DB.	○	○
SaveScore will update and replace a record if one already exists with the same playerId and gameId.	○	○
Leader board data for the game will be automatically partitioned using gameId.	○	○
SaveScore will store the values for the gameId and playerId parameters in the database.	○	○

Explanation

Correct Answer:

Answer Area

Statements	Yes	No
SaveScore will work with Cosmos DB.	○	○
SaveScore will update and replace a record if one already exists with the same playerId and gameId.	○	○
Leader board data for the game will be automatically partitioned using gameId.	○	○
SaveScore will store the values for the gameId and playerId parameters in the database.	○	○

Box 1: Yes -
Create a table.
A CloudTableClient object lets you get reference objects for tables and entities. The following code creates a CloudTableClient object and uses it to create a new CloudTable object, which represents a table

```
// Retrieve storage account from connection-string.
CloudStorageAccount storageAccount =
CloudStorageAccount.parse(storageConnectionString);
// Create the table client.
CloudTableClient tableClient = storageAccount.createCloudTableClient();
// Create the table if it doesn't exist.
```

```
String tableName = "people";
CloudTable cloudTable = tableClient.getTableReference(tableName);
cloudTable.createIfNotExists();
```

Box 2: No -
New records are inserted with TableOperation.insert. Old records are not updated.
To update old records TableOperation.insertOrReplace should be used instead.

Box 3: No -

Box 4: Yes -
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/table-storage-how-to-use-java

Community Discussion

given answer is correct.

the given answer seems correct

Inserting will fail, this would require InsertOrReplace to work

What code should be there if doing automatic partitioning (C) remains a total secret to me. Should be somewhere on the table level...

Incorrect. First one is "No"

SecExams

Question #100

You develop and deploy a web application to Azure App Service. The application accesses data stored in an Azure Storage account. The account contains several containers with several blobs with large amounts of data. You deploy all Azure resources to a single region.
You need to move the Azure Storage account to the new region. You must copy all data to the new region.
What should you do first?

A) Export the Azure Storage account Azure Resource Manager template (Correct Answer)
B) Initiate a storage account failover
C) Configure object replication for all blobs
D) Use the AzCopy command line tool
E) Create a new Azure Storage account in the current region
F) Create a new subscription in the current region

Explanation

Correct Answer:
A
To move a storage account, create a copy of your storage account in another region. Then, move your data to that account by using AzCopy, or another tool of your choice and finally, delete the resources in the source region.
To get started, export, and then modify a Resource Manager template.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-move?tabs=azure-portal

Community Discussion

Selected Answer: A

We can create a new Storage account in the new region, using the existing storage account ARM template. All we need to do is change the region name after exporting the ARM of existing account..

Answer is correct.

SecExams

Step One is always "Export"

Did my exam on 15th November 2022. This question was on it.

And the name of the storage account which needs to be unique. I think all these questions are about some sentence in some azure documentation.

SecExams

Question #101

HOTSPOT -

You are developing an application to collect the following telemetry data for delivery drivers: first name, last name, package count, item id, and current location coordinates. The app will store the data in Azure Cosmos DB.

You need to configure Azure Cosmos DB to query the data.

Which values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Answer Area

Configuration Parameter	Value
Azure Cosmos DB API	Gremlin Table API Core (SQL)
Azure Cosmos DB partition key	first name last name package count item id

Box 1: Core (SQL)
Core(SQL) API stores data in document format. It offers the best end-to-end experience as we have full control over the interface, service, and the SDK client libraries. SQL API supports analytics and offers performance isolation between operational and analytical workloads.

Box 2: item id -
item id is a unique identifier and is suitable for the partition key.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/choose-api
https://docs.microsoft.com/en-us/azure/cosmos-db/partitioning-overview

Community Discussion

Without knowing the functionality or the usage pattern or what it is for. Good lord, Microsoft

Got this in 09/22 , went with SQL and Item Id, score 927.

SecExams

They changed names again. "Core (SQL)" is "Api for NoSQL" now. Its wonderful to choose "SQL" for "NoSQL". https://www.c-sharpcorner.com/article/road-to-az-2044/#:~:text=Core%20SQL%20API%2C%20default%20API%20for%20using%20Azure%20Cosmos%20DB%20enable https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api#coresql-api:~:text=API%20for%20NoSQL%20is%20native%20to%20Azure%20Cosmos%20DB.

On my exam 2023sept

Answer seems correct, but the question is very bad. It doesn't even tell about the usage, so it could be Table API as well

Question #102

DRAG DROP -

You are implementing an Azure solution that uses Azure Cosmos DB and the latest Azure Cosmos DB SDK. You add a change feed processor to a new container instance.

You attempt to read a batch of 100 documents. The process fails when reading one of the documents. The solution must monitor the progress of the change feed processor instance on the new container as the change feed is read. You must prevent the change feed processor from retrying the entire batch when one document cannot be read.

You need to implement the change feed processor to read the documents.

Which features should you use? To answer, drag the appropriate features to the cored requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each cored selection is worth one point.

Select and Place:

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Explanation

Correct Answer:

Box 1: Change feed estimator -
You can use the change feed estimator to monitor the progress of your change feed processor instances as they read the change feed or use the life cycle notifications to detect underlying failures.

Box 2: Dead-letter queue -
To prevent your change feed processor from getting "stuck" continuously retrying the same batch of changes, you should add logic in your delegate code to write documents, upon exception, to a dead-letter queue. This design ensures that you can keep track of unprocessed changes while still being able to continue to process future changes. The dead-letter queue might be another Cosmos container. The exact data store does not matter, simply that the unprocessed changes are persisted.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/sql/change-feed-processor

SecExams

Community Discussion

The answer is correct.

Got this on 16/03/23. Went with proposed solution. Make sure to prepare for case study. I got city and lights case study. No Kubernetes, Search, Logic Apps questions for me.

I got this same question. Provided answers are correct. (Note: I failed the exam 20/9/23. I only scored 644 and I felt bad. I think because many questions here in Examtopics are not accurate. I suggest following the most voted answers and don't just not rely on Examtopics answers. At the beginning of the exam, you will be asked which programming languages you want to use. C#/Python. I chose C#. Also, I just want to add that some questions here are really in the actual exams, but the choices are written and formatted

differently. Please be aware of that. Goodluck. I feel bad for failing it, but I want to retake next month. I will try Python. T_T

On exam 3-Nov-2023. Went with proposed anwer - 932/1000. 1) Change feed estimator 2) Dead letter queue

this is a bad site

SecExams

Question #103

SecExams

HOTSPOT -

You are developing an application that uses a premium block blob storage account. The application will process a large volume of transactions daily. You enable

Blob storage versioning.

You are optimizing costs by automating Azure Blob Storage access tiers. You apply the following policy rules to the storage account. (Line numbers are included for reference only.)

```
01 {
02   "rules" : [
03     {
04       "name" : "versionRule",
05       "enabled" : true,
06       "type" : "Lifecycle",
07       "definition" : {
08         "actions" : {
09           "version" : {
10             "tierToCool" : {
11               "daysAfterCreationGreaterThan" : 60
12             },
13             "delete" : {
14               "daysAfterCreationGraterThan" : 365
15             }
16           }
17         },
18         "filters" : {
19           "blobTypes" : [ "blockBlob" ], "prefixMatch" : [ "transactions" ]
20         }
21       }
22     }
23   ]
24 }
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
Block blobs prefixed with **transactions** will transition blobs that have not been modified in over 60 days to cool storage, and delete blobs not modified in 365 days	○	○
Blobs are moved to cool storage if they have not been accessed for 60 days	○	○
The policy rule tiers previous versions within a container named transactions that are 60 days or older to the cool tier and deletes previous versions that are 365 days or older	○	○
Blobs will automatically be tiered from cool back to hot if accessed again after being tiered to cool	○	○

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Explanation

Correct Answer:

Answer Area

Statements	Yes	No
Block blobs prefixed with **transactions** will transition blobs that have not been modified in over 60 days to cool storage, and delete blobs not modified in 365 days	○	○
Blobs are moved to cool storage if they have not been accessed for 60 days	○	○
The policy rule tiers previous versions within a container named transactions that are 60 days or older to the cool tier and deletes previous versions that are 365 days or older	○	○
Blobs will automatically be tiered from cool back to hot if accessed again after being tiered to cool	○	○

Box 1: No -
Would be true if daysAfterModificationGreaterThan was used, but here daysAfterCreationGreaterThan

Box 2: No -
Would need to use the daysAfterLastAccessTimeGreaterThan predicate.

Box 3: Yes -

Box 4: Yes -
With the lifecycle management policy, you can:
Transition blobs from cool to hot immediately when they are accessed, to optimize for performance.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview

Community Discussion

I guess, third statement (The policy rule tiers..) result is Yes. Container name "transactions" is in prefixMatch. https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview#archive-data-after-ingest Solution is: - No - No - Yes - No

SecExams

I guess, third statement (The policy rule tiers..) result is Yes. Container name "transactions" is in prefixMatch. https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview#archive-data-after-ingest Solution is: - No - No - Yes - No

With this image, all answers are NO: - Container named transaction is not in code - is no present line "enableAutoTierToHotFromCool": true

No - Not modified, created. No - Not accessed, created. Yes - Rules are matching the statement. The prefix "transactions" can be applicable for containers as well. "container" / "container/blob" or "blob" can be used under this context. Source: https://learn.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview#archive-data-after-ingest No - "enableAutoTierToHotFromCool": "true" should be enabled.

received 2023-04-17 went N,N,Y, score 926 last box was not there only first three

SecExams

Question #104

An organization deploys Azure Cosmos DB.
You need to ensure that the index is updated as items are created, updated, or deleted.
What should you do?

A) Set the indexing mode to Lazy.
B) Set the value of the automatic property of the indexing policy to False.
C) Set the value of the EnableScanInQuery option to True.
D) Set the indexing mode to Consistent. (Correct Answer)

Explanation

Correct Answer:
D
Azure Cosmos DB supports two indexing modes:
Consistent: The index is updated synchronously as you create, update or delete items. This means that the consistency of your read queries will be the consistency configured for the account.
None: Indexing is disabled on the container.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/index-policy

Community Discussion

Correct !!!

Answer: D (consistent) Setting indexing mode to consistent ensures that index is updated in sync with data Setting it to lazy means index is updated async, meaning you may not get latest version of data Setting the value of the automatic property to false means you have to manually manage indexing of data Setting EnableScanInQuery to true allows query operations to perform scans across all documents, this is not really relevant + it provides poor performance

Given answer is correct. Consistent: The index is updated synchronously as you create, update or delete items. This means that the consistency of your read queries will be the consistency configured for the account. None: Indexing is disabled on the container. This mode is commonly used when a container is used as a pure key-value store without the need for secondary indexes. It can also be used to improve the performance of bulk operations. After the bulk operations are complete, the index mode can be set to Consistent and then monitored using the IndexTransformationProgress until complete.

Selected Answer: D

D. Set the indexing mode to Consistent.

Selected Answer: D

Setting the indexing mode to Consistent ensures that the index is always kept up to date with the changes made to the items in Azure Cosmos DB. With this mode, whenever an item is created, updated, or deleted, the index is automatically updated in real-time to reflect those changes.

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Question #105

You are developing a .Net web application that stores data in Azure Cosmos DB. The application must use the Core API and allow millions of reads and writes. The Azure Cosmos DB account has been created with multiple write regions enabled. The application has been deployed to the East US2 and Central US regions.
You need to update the application to support multi-region writes.
What are two possible ways to achieve this goal? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Update the ConnectionPolicy class for the Cosmos client and populate the PreferredLocations property based on the geo-proximity of the application.
B) Update Azure Cosmos DB to use the Strong consistency level. Add indexed properties to the container to indicate region.
C) Update the ConnectionPolicy class for the Cosmos client and set the UseMultipleWriteLocations property to true. (Correct Answer)
D) Create and deploy a custom conflict resolution policy. (Correct Answer)
E) Update Azure Cosmos DB to use the Session consistency level. Send the SessionToken property value from the FeedResponse object of the write action to the end-user by using a cookie.

Explanation

Correct Answer:
CD
C: The UseMultipleWriteLocations of the ConnectionPolicy class gets or sets the flag to enable writes on any locations (regions) for geo-replicated database accounts in the Azure Cosmos DB service.
Note: Once an account has been created with multiple write regions enabled, you must make two changes in your application to the ConnectionPolicy for the
Cosmos client to enable the multi-region writes in Azure Cosmos DB. Within the ConnectionPolicy, set UseMultipleWriteLocations to true and pass the name of the region where the application is deployed to ApplicationRegion. This will populate the PreferredLocations property based on the geo-proximity from location passed in. If a new region is later added to the account, the application does not have to be updated or redeployed, it will automatically detect the closer region and will auto-home on to it should a regional event occur.
Azure core API application " ConnectionPolicy class" cosmos db multiple write regions enabled

D: With multi-region writes, when multiple clients write to the same item, conflicts may occur. When a conflict occurs, you can resolve the conflict by using different conflict resolution policies.
Note: Conflict resolution policy can only be specified at container creation time and cannot be modified after container creation.
Reference:
https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.documents.client.connectionpolicy https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-multi-master https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-manage-conflicts

Community Discussion

The goal is "You need to update the application to support multi-region writes", that is enable multi-region writes (bool, option C) and add the regions (option A) Then you have to apply the Conflict resolution policies.This can be LLW(default, not mentioned) or custom (option D). Hence : there is only ONE way to to support multi-region writes (both apply C AND A) and there are subsequently TWO ways to apply the Conflict resolution policies (@ SQL) to solve write, update and delete conflicts of which one is mentioned in the question (D). To support multi-region writes I would answer A and C , but they have to be set both, not one or the other. See https://learn.microsoft.com/en-us/azure/cosmos-db/sql/how-to-multi-master?tabs=api-async and https://learn.microsoft.com/en-us/azure/cosmos-db/conflict-resolution-policies

Selected Answer: AC

A + C = Clearly stated in documentation that both are required: https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/how-to-multi-master?tabs=api-async. And according to the question "Each correct answer presents part of the solution". "Part" Not D -> "Custom conflict resolution policy is available only for API for NoSQL accounts and can be set only at creation time." The question states the account was already created. Source: https://learn.microsoft.com/en-us/azure/cosmos-db/conflict-resolution-policies

From the documentation you provided: Within the ConnectionPolicy, set UseMultipleWriteLocations to true and pass the name of the region where the application is deployed to ApplicationRegion. This will populate the PreferredLocations property based on the geo-proximity from location passed in. If a new region is later added to the account, the application does not have to be updated or redeployed, it will automatically detect the closer region and will auto-home on to it should a regional event occur. I take that paragraph to mean that it automatically updates the

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PreferredLocations property, when you set the UseMultipleWriteLocations property with true and pass the region name. That means you actually only need to update UseMultipleWriteLocations, thus C. And as you mentioned, apply the Conflict resolution policies (D).

From the documentation you provided: Within the ConnectionPolicy, set UseMultipleWriteLocations to true and pass the name of the region where the application is deployed to ApplicationRegion. This will populate the PreferredLocations property based on the geo-proximity from location passed in. If a new region is later added to the account, the application does not have to be updated or redeployed, it will automatically detect the closer region and will auto-home on to it should a regional event occur. I take that paragraph to mean that it automatically updates the PreferredLocations property, when you set the UseMultipleWriteLocations property with true and pass the region name. That means you actually only need to update UseMultipleWriteLocations, thus C. And as you mentioned, apply the Conflict resolution policies (D).

Selected Answer: AC

Option C: Update the ConnectionPolicy class for the Cosmos client and set the UseMultipleWriteLocations property to true. This will enable the application to use multiple write regions when storing data in Azure Cosmos DB. Option A: Update the ConnectionPolicy class for the Cosmos client and populate the PreferredLocations property based on the geo-proximity of the application. This will allow the application to use the closest write region to the application's location, improving performance and reducing latency. Other options, such as updating the consistency level or creating a custom conflict resolution policy, are not directly related to enabling multi-region writes and are not necessary for this goal.

SecExams

Question #106

HOTSPOT -

You are developing a solution to store documents in Azure Blob storage. Customers upload documents to multiple containers. Documents consist of PDF, CSV,

Microsoft Office format and plain text files.

The solution must process millions of documents across hundreds of containers. The solution must meet the following requirements:

✑ Documents must be categorized by a customer identifier as they are uploaded to the storage account.

✑ Allow filtering by the customer identifier.

✑ Allow searching of information contained within a document

✑ Minimize costs.

You create and configure a standard general-purpose v2 storage account to support the solution.

You need to implement the solution.

What should you implement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Requirement	Solution
Search and filter by customer identifier	Azure Cognitive Search Azure Blob index tags Azure Blob inventory policy Azure Blob metadata
Search information inside documents	Azure Cognitive Search Azure Blob index tags Azure Blob inventory policy Azure Blob metadata

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Explanation

Correct Answer:

Answer Area

Requirement	Solution
Search and filter by customer identifier	Azure Cognitive Search **Azure Blob index tags** Azure Blob inventory policy Azure Blob metadata
Search information inside documents	**Azure Cognitive Search** Azure Blob index tags Azure Blob inventory policy Azure Blob metadata

Box 1: Azure Blob index tags -
As datasets get larger, finding a specific object in a sea of data can be difficult. Blob index tags provide data management and discovery capabilities by using key- value index tag attributes. You can categorize and find objects within a single container or across all containers in your storage account. As data requirements change, objects can be dynamically categorized by updating their index tags. Objects can remain in-place with their current container organization.

Box 2: Azure Cognitive Search -
Only index tags are automatically indexed and made searchable by the native Blob Storage service. Metadata can't be natively indexed or searched. You must use a separate service such as Azure Search.
Azure Cognitive Search is the only cloud search service with built-in AI capabilities that enrich all types of information to help you identify and explore relevant content at scale. Use cognitive skills for vision, language, and speech, or use custom machine learning models to uncover insights from all types of content.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-manage-find-blobs
https://azure.microsoft.com/en-us/services/search/

Community Discussion

SecExams

right Azure Blob Index tags: https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-index-how-to?tabs=azure-portal Azure Cognitive Search: Search inside documents

Did my exam on 15th November 2022. This question was on it.

Farmers and Distributors is that a new case study?

Farmers and Distributors is that a new case study?

On exam 9 Nov 2023, went with given answer, socre 865. Case Study: Farmers and Distributors

SecExams

Question #107

HOTSPOT -

You are developing a web application by using the Azure SDK. The web application accesses data in a zone-redundant BlockBlobStorage storage account.

The application must determine whether the data has changed since the application last read the data. Update operations must use the latest data changes when writing data to the storage account.

You need to implement the update operations.

Which values should you use? To answer, select the appropriate option in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Answer Area

Code evaluation	Value
HTTP Header value	ETag / Last Modified / VersionId
Conditional header	If-Match / If-Modified-Since / If-None-Match

Box 1: Last Modified -
The Last-Modified response HTTP header contains a date and time when the origin server believes the resource was last modified. It is used as a validator to determine if the resource is the same as the previously stored one. Less accurate than an ETag header, it is a fallback mechanism.

Box 2: If-Modified-Since -
Conditional Header If-Modified-Since:
A DateTime value. Specify this header to perform the operation only if the resource has been modified since the specified time.
Incorrect:

Not ETag/If-Match -
Conditional Header If-Match:
An ETag value. Specify this header to perform the operation only if the resource's ETag matches the value specified. For versions 2011-08-18 and newer, the
ETag can be specified in quotes.
Reference:
https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Last-Modified https://docs.microsoft.com/en-us/rest/api/storageservices/specifying-conditional-headers-for-blob-service-operations

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Community Discussion

I think it should be: - ETag - server returns this tag for a resource to ensure we operate on the same version of the resource in subsequent API calls - If-Match - update is processed by the server only if the ETag provided matches the latest resource version ETag The reason for that is we want to make sure we update the latest version of a resource: "Update operations must use the latest data changes when writing" So, when using Last-Modified with If-Modified-Since, the operation executes only when another client modifies the resource between our READ and WRITE operations. If we wanted to use Last-Modified instead, we would need If-Unmodified-Since instead.

I referred to the documentation also and I cannot convince my mind I care enough to even understand this because there is no chance I will ever have to know these options in details unless I have to use it. Who reads and understands all these information when this is available as documentation and with Microsoft documentation it is all about trial and error and hoping for the best

You should trust the discussions and other users experiencies. The default answers in the questions might be right or wrong.

You should trust the discussions and other users experiencies. The default answers in the questions might be right or wrong.

I agree with you. (ETag + If-Match) https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/If-Match

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Question #108

HOTSPOT -

An organization deploys a blob storage account. Users take multiple snapshots of the blob storage account over time.

You need to delete all snapshots of the blob storage account. You must not delete the blob storage account itself.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
Delete (Azure.Storage.Blobs.Models.DeleteSnapshotsOption
snapshotsOption = Azure.Storage.Blobs.Models.[ ▼ ] . [ ▼ ] )
```

DeleteIfExists	IncludeSnapshots
DeleteSnapshotsOption	None
WithSnapshot	OnlySnapshots
WithSnapshotCore	

Explanation

Correct Answer:

Answer Area

```
Delete (Azure.Storage.Blobs.Models.DeleteSnapshotsOption
snapshotsOption = Azure.Storage.Blobs.Models.[ ▼ ] . [ ▼ ] )
```

DeleteIfExists	IncludeSnapshots
DeleteSnapshotsOption	None
WithSnapshot	OnlySnapshots
WithSnapshotCore	

Box 1: DeleteSnapshotsOption -

Sample code in powershell:

```
//dont forget to add the include snapshots :)
await batchClient.DeleteBlobsAsync(listofURIforBlobs,
Azure.Storage.Blobs.Models.DeleteSnapshotsOption.IncludeSnapshots);
```

Sample code in .Net:

```
// Create a batch with three deletes
BlobBatchClient batchClient = service.GetBlobBatchClient();
BlobBatch batch = batchClient.CreateBatch();
batch.DeleteBlob(foo.Uri, DeleteSnapshotsOption.IncludeSnapshots);
batch.DeleteBlob(bar.Uri, DeleteSnapshotsOption.OnlySnapshots);
batch.DeleteBlob(baz.Uri);
// Submit the batch
```

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batchClient.SubmitBatch(batch);

Box 2: OnlySnapshots -
Reference:
https://docs.microsoft.com/en-us/dotnet/api/overview/azure/storage.blobs.batch-readme https://stackoverflow.com/questions/39471212/programmatically-delete-azure-blob-storage-objects-in-bulks

Community Discussion

it is DeleteSnapshotsOption.OnlySnapshots but the explanation in the answer is bogus as usual. see https://learn.microsoft.com/en-us/dotnet/api/azure.storage.blobs.models.deletesnapshotsoption?view=azure-dotnet

It was there in 13 Feb 2023 exam

Correct!!

Got this in exam today (5 April 2023)

DeleteSnapshotsOption.OnlySnapshots

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Question #109

HOTSPOT -

An organization deploys a blob storage account. Users take multiple snapshots of the blob storage account over time.

You need to delete all snapshots of the blob storage account. You must not delete the blob storage account itself.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
delete_blob ( [ ] = [ ] )
```

delete_conteiner
delete_snapshots
snapshot_blob
snapshots_present

False
Include
Only

Explanation

Correct Answer:

Answer Area

```
delete_blob ( [ ] = [ ] )
```

delete_conteiner
delete_snapshots
snapshot_blob
snapshots_present

False
Include
Only

Box 1: delete_snapshots -

Delete only the snapshot (blob itself is retained)

blob_client.delete_blob(delete_snapshots="only")

Box 2: only -

Reference:

https://github.com/Azure/azure-sdk-for-python/blob/main/sdk/storage/azure-storage-blob/samples/blob_samples_common.py

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Community Discussion

So, according to Microsoft a developer has to remember how the Microsoft guy chose to write in the .Net library and also how the python person thought and the unfortunate inconsistencies they built into these APIs?

The answer looks correct and the link proves it: Link to exact line with comment: https://github.com/Azure/azure-sdk-for-python/blob/main/sdk/storage/azure-storage-blob/samples/blob_samples_common.py#L65

Weird comments. When there is only 1 or 2 comments, everyone is saying secexams is correct...

or you can retake the exam?

or you can retake the exam?

SecExams

Question #110

You are developing a Java application that uses Cassandra to store key and value data. You plan to use a new Azure Cosmos DB resource and the Cassandra API in the application. You create an Azure Active Directory (Azure AD) group named Cosmos DB Creators to enable provisioning of Azure Cosmos accounts, databases, and containers.

The Azure AD group must not be able to access the keys that are required to access the data.

You need to restrict access to the Azure AD group.

Which role-based access control should you use?

A) DocumentDB Accounts Contributor

B) Cosmos Backup Operator

C) Cosmos DB Operator (Correct Answer)

D) Cosmos DB Account Reader

Explanation

Correct Answer:
C
Azure Cosmos DB now provides a new RBAC role, Cosmos DB Operator. This new role lets you provision Azure Cosmos accounts, databases, and containers, but can't access the keys that are required to access the data. This role is intended for use in scenarios where the ability to grant access to Azure Active Directory service principals to manage deployment operations for Cosmos DB is needed, including the account, database, and containers.
Reference:
https://azure.microsoft.com/en-us/updates/azure-cosmos-db-operator-role-for-role-based-access-control-rbac-is-now-available/

Community Discussion

Correct Answer: C DocumentDB Account Contributor: Can manage Azure Cosmos DB accounts. Cosmos Backup Operator: Can submit a restore request for Azure portal for a periodic backup enabled database or a container. Can modify the backup interval and retention on the Azure portal. Cannot access any data or use Data Explorer. Cosmos DB Operator: Can provision Azure Cosmos accounts, databases, and containers. Cannot access any data or use Data Explorer. Cosmos DB Account Reader: Can read Azure Cosmos DB account data. CosmosRestoreOperator: Can perform restore action for Azure Cosmos DB account with continuous backup mode. Reference: https://docs.microsoft.com/en-us/azure/cosmos-db/role-based-access-control

Answer is correct

Got this one in 2023-08-08

Selected Answer: C

Got this on 6/28/2023 and passed with 850. Went with answer.

very good and helpful explanation

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Question #111

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing a website that will run as an Azure Web App. Users will authenticate by using their Azure Active Directory (Azure AD) credentials.
You plan to assign users one of the following permission levels for the website: admin, normal, and reader. A user's Azure AD group membership must be used to determine the permission level.
You need to configure authorization.
Solution: Configure the Azure Web App for the website to allow only authenticated requests and require Azure AD log on.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead in the Azure AD application's manifest, set value of the groupMembershipClaims option to All.
Reference:
https://blogs.msdn.microsoft.com/waws/2017/03/13/azure-app-service-authentication-aad-groups/

Community Discussion

Answer is correct. The proposed solution lacks the authorization part.

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Answer – No, Here you need to create an application in Azure AD. Then set the groupMembershipClaims claims. Then inspect the token in the application to see if the user is part of that group. Hence - B is correct

Aggree. Setting up the access on AD is one thing. The application should be set up to differentiate different roles and access.

Aggree. Setting up the access on AD is one thing. The application should be set up to differentiate different roles and access.

This question was in today's exam on 10-June-2023

Question #112

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You are developing a website that will run as an Azure Web App. Users will authenticate by using their Azure Active Directory (Azure AD) credentials.
You plan to assign users one of the following permission levels for the website: admin, normal, and reader. A user's Azure AD group membership must be used to determine the permission level.
You need to configure authorization.
Solution:
✑ Create a new Azure AD application. In the application's manifest, set value of the groupMembershipClaims option to All.
✑ In the website, use the value of the groups claim from the JWT for the user to determine permissions.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
To configure Manifest to include Group Claims in Auth Token
1. Go to Azure Active Directory to configure the Manifest. Click on Azure Active Directory, and go to App registrations to find your application:
2. Click on your application (or search for it if you have a lot of apps) and edit the Manifest by clicking on it.
3. Locate the ƛ€groupMembershipClaimsƛ€ setting. Set its value to either
:To help you decide which .€ƛAll€ƛ or €ƛSecurityGroup€ƛ
groups claim will contain the identifiers of all security groups of - €ƛSecurityGroup€ƛ ☞ which the user is a member.
groups claim will contain the identifiers of all security groups and all - €ƛAll€ƛ ☞ distribution lists of which the user is a member
Now your application will include group claims in your manifest and you can use this fact in your code.
Reference:
https://blogs.msdn.microsoft.com/waws/2017/03/13/azure-app-service-authentication-aad-groups/

Community Discussion

Correct Answer: Yes Reference: https://docs.microsoft.com/en-us/archive/blogs/waws/azure-app-service-authentication-aad-groups

Answer – Yes, this is the correct approach. The Application manifest has a setting for groupMembershipClaims. By setting this to all, the Azure AD groups that the user belongs to will be returned as part of the claims in the JWT token.

Got this in 09/22 , went just with this as YES, score 927.

Selected Answer: A

A is correct answer.

Had this question in today's exam: 2023-07-26

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Question #113

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing a website that will run as an Azure Web App. Users will authenticate by using their Azure Active Directory (Azure AD) credentials.
You plan to assign users one of the following permission levels for the website: admin, normal, and reader. A user's Azure AD group membership must be used to determine the permission level.
You need to configure authorization.
Solution:
✑ Create a new Azure AD application. In the application's manifest, define application roles that match the required permission levels for the application.
✑ Assign the appropriate Azure AD group to each role. In the website, use the value of the roles claim from the JWT for the user to determine permissions.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
To configure Manifest to include Group Claims in Auth Token
1. Go to Azure Active Directory to configure the Manifest. Click on Azure Active Directory, and go to App registrations to find your application:
2. Click on your application (or search for it if you have a lot of apps) and edit the Manifest by clicking on it.
3. Locate the ƛ€groupMembershipClaimsƛ€ setting. Set its value to either
:To help you decide which .€ƛAll€ƛ or €ƛSecurityGroup€ƛ
groups claim will contain the identifiers of all security groups of - €ƛSecurityGroup€ƛ ✑ which the user is a member.
groups claim will contain the identifiers of all security groups and all - €ƛAll€ƛ ✑ distribution lists of which the user is a member

Now your application will include group claims in your manifest and you can use this fact in your code.
Reference:
https://blogs.msdn.microsoft.com/waws/2017/03/13/azure-app-service-authentication-aad-groups/

Community Discussion

I agree that this solution should work as well. The roles get assigned by AD groups, so the requirement "A user's Azure AD group membership must be used to determine the permission level" is met. This solution should be answered with "yes". This scenario has 2 solutions provided as the approach using the "groupMembershipClaims" is possible as well. That's OK as it says "Some question sets might have more than one correct solution, while others might not have a correct solution."

This should be the correct answer: https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-add-app-roles-in-azure-ad-apps

I am not too sure about this. "groupMembershipClaims" will include AAD groups' IDs in the JWT "group" array, which is one way to go. The other way would be to add a app role in the manifest (which is not necessary for the first approach!) and then add groups to this role. This will include the app roles (but not the group IDs) in the JWT's "roles" array (but not in the "groups" array!). I liked this blog post to understand the difference: https://joonasw.net/view/using-groups-vs-using-app-roles-in-azure-ad-apps

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SecExams

Question #114

DRAG DROP -

You are developing an application to securely transfer data between on-premises file systems and Azure Blob storage. The application stores keys, secrets, and certificates in Azure Key Vault. The application uses the Azure Key Vault APIs.

The application must allow recovery of an accidental deletion of the key vault or key vault objects. Key vault objects must be retained for 90 days after deletion.

You need to protect the key vault and key vault objects.

Which Azure Key Vault feature should you use? To answer, drag the appropriate features to the correct actions. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Features

- Access policy
- Purge protection
- Soft delete
- Shared access signature

Answer Area

Action	Feature
Enable retention period and accidental deletion.	Feature
Enforce retention period and accidental deletion.	Feature

Explanation

Correct Answer:

Features

- Access policy
- Purge protection
- Soft delete
- Shared access signature

Answer Area

Action	Feature
Enable retention period and accidental deletion.	Soft delete
Enforce retention period and accidental deletion.	Purge protection

Box 1: Soft delete -

When soft-delete is enabled, resources marked as deleted resources are retained for a specified period (90 days by default). The service further provides a mechanism for recovering the deleted object, essentially undoing the deletion.

Box 2: Purge protection -

Purge protection is an optional Key Vault behavior and is not enabled by default. Purge protection can only be enabled once soft-delete is enabled.

When purge protection is on, a vault or an object in the deleted state cannot be purged until the retention period has passed. Soft-deleted vaults and objects can still be recovered, ensuring that the retention policy will be followed.
Reference:
https://docs.microsoft.com/en-us/azure/key-vault/general/soft-delete-overview

Community Discussion

The answer is correct.

Box 1: Soft delete When soft-delete is enabled, resources marked as deleted resources are retained for a specified period (90 days by default). The service further provides a mechanism for recovering the deleted object, essentially undoing the deletion. This can be achieved with the help of the soft-delete feature of the key vault. Box 2: Purge protection Purge protection is an optional Key Vault behavior and is not enabled by default. Purge protection can only be enabled once soft-delete is enabled. When purge protection is on, a vault or an object in the deleted state cannot be purged until the retention period has passed. Soft-deleted vaults and objects can still be recovered, ensuring that the retention policy will be followed. This can be achieved with the help of the purge protection feature of the key vault. Reference: https://docs.microsoft.com/en-us/azure/key-vault/general/soft-delete-overview

Thank mlantonis, learn from you a lot (AZ-104, AZ-204)

Thank mlantonis, learn from you a lot (AZ-104, AZ-204)

ot it on 03/2022, I chose Soft delete => Purge protection

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Question #115

You provide an Azure API Management managed web service to clients. The back-end web service implements HTTP Strict Transport Security (HSTS). Every request to the backend service must include a valid HTTP authorization header.
You need to configure the Azure API Management instance with an authentication policy.
Which two policies can you use? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Basic Authentication
B) Digest Authentication
C) Certificate Authentication (Correct Answer)
D) OAuth Client Credential Grant (Correct Answer)

Explanation

Correct Answer:
CD

Community Discussion

A, C https://www.secexams.com/exams/microsoft/az-203/view/15/ https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies

A, D The question states that the solution MUST use the HTTP authorization header. The only two options that do are Basic Authentication (where the header would be "Authorization: Basic <auth-base64-encoded-string> or "Bearer <bearer-token-string>).

Must be A,C As the API documentation only allows 3 options. It states: >>>> Authentication policies Authenticate with Basic - Authenticate with a backend service using Basic authentication. Authenticate with client certificate - Authenticate with a backend service using client certificates. Authenticate with managed identity - Authenticate with the managed identity for the API Management service.

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Must be A,C As the API documentation only allows 3 options. It states: >>>> Authentication policies Authenticate with Basic - Authenticate with a backend service using Basic authentication. Authenticate with client certificate - Authenticate with a backend service using client certificates. Authenticate with managed identity - Authenticate with the managed identity for the API Management service.

Client certificate does use the x-arr-clientcert header As Kitkit pointed out below, check this link https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies.

Question #116

DRAG DROP -

You are developing an ASP.NET Core website that can be used to manage photographs which are stored in Azure Blob Storage containers.

Users of the website authenticate by using their Azure Active Directory (Azure AD) credentials.

You implement role-based access control (RBAC) role permissions on the containers that store photographs. You assign users to RBAC roles.

You need to configure the website's Azure AD Application so that user's permissions can be used with the Azure Blob containers.

How should you configure the application? To answer, drag the appropriate setting to the correct location. Each setting can be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

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Explanation

Correct Answer:

Settings

client_id
profile
delegated
application
user_impersonation

Answer Area

API	Permission	Type
Azure Storage	user_impersonation	delegated
Microsoft Graph	User.Read	delegated

Box 1: user_impersonation -

Box 2: delegated -
Example:
1. Select the API permissions section
2. Click the Add a permission button and then:
Ensure that the My APIs tab is selected
3. In the list of APIs, select the API TodoListService-aspnetcore.
4. In the Delegated permissions section, ensure that the right permissions are checked: user_impersonation.
5. Select the Add permissions button.

Box 3: delegated -

Example -
1. Select the API permissions section
2. Click the Add a permission button and then,
Ensure that the Microsoft APIs tab is selected
3. In the Commonly used Microsoft APIs section, click on Microsoft Graph
4. In the Delegated permissions section, ensure that the right permissions are checked: User.Read. Use the search box if necessary.
5. Select the Add permissions button
Reference:
https://docs.microsoft.com/en-us/samples/azure-samples/active-directory-dotnet-webapp-webapi-openidconnect-aspnetcore/calling-a-web-api-in-an-aspnet-core- web-application-using-azure-ad/

Community Discussion

The given answer is correct.

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Box 1: user_impersonation The built-in user_impersonation scope indicates that the token is being requested on behalf of the user. Azure Storage exposes a single delegation scope named user_impersonation that permits applications to take any action allowed by the user. Box 2: delegated Box 3: delegated Reference: https://stackoverflow.com/questions/31404128/azure-ad-app-application-permissions-vs-delegated-permissions https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-permissions-and-consent https://docs.microsoft.com/en-us/azure/storage/common/storage-auth-aad-app?tabs=dotnet https://docs.microsoft.com/en-us/rest/api/storageservices/authorize-with-azure-active-directory

correct, in 2023Mar24, score: 904/1000

correct, in 2023Mar24, score: 904/1000

Got this in 09/22 , went with the most voted answers, score 927.

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Question #117

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HOTSPOT -

You are developing an ASP.NET Core app that includes feature flags which are managed by Azure App Configuration. You create an Azure App Configuration store named AppFeatureFlagStore that contains a feature flag named Export.

You need to update the app to meet the following requirements:

✑ Use the Export feature in the app without requiring a restart of the app.

✑ Validate users before users are allowed access to secure resources.

✑ Permit users to access secure resources.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
public void Configure(IApplicationBuilder app, IWebHostEnvironment env)
{
if (env.IsDevelopment())
{
   app.UseDeveloperExceptionPage();
{
else
{
   app.UseExceptionHandler("/Error");
}
```

app. [ ] ();
- UseAuthentication
- UseStaticFiles
- UseSession
- UseCookiePolicy

app. [ ] ();
- UseAuthorization
- UseHttpsRedirection
- UseSession
- UseCookiePolicy

app. [ ] ();
- UseAzureAppConfiguration
- UseRequestLocalization
- UseCors
- UseStaticFiles

```
app.UseEndpoint(endpoints =>
{
   endpoints.MapRazorPages();
});
}
```

Explanation

Correct Answer:

SecExams

Answer Area

```
public void Configure(IApplicationBuilder app, IWebHostEnvironment env)
{
if (env.IsDevelopment())
{
   app.UseDeveloperExceptionPage();
{
else
{
   app.UseExceptionHandler("/Error");
}

app.  [                    ]  ();
      UseAuthentication
      UseStaticFiles
      UseSession
      UseCookiePolicy

app.  [                    ]  ();
      UseAuthorization
      UseHttpsRedirection
      UseSession
      UseCookiePolicy

app.  [                    ]  ();
      UseAzureAppConfiguration
      UseRequestLocalization
      UseCors
      UseStaticFiles

app.UseEndpoint(endpoints =>
{
   endpoints.MapRazorPages();
});
}
```

Box 1: UseAuthentication -
Need to validate users before users are allowed access to secure resources.
UseAuthentication adds the AuthenticationMiddleware to the specified IApplicationBuilder, which enables authentication capabilities.

Box 2: UseAuthorization -
Need to permit users to access secure resources.
UseAuthorization adds the AuthorizationMiddleware to the specified IApplicationBuilder, which enables authorization capabilities.

Box 3: UseStaticFiles -
Need to use the Export feature in the app without requiring a restart of the app.
UseStaticFiles enables static file serving for the current request path
Reference:

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https://docs.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.builder.iapplicationbuilder?view=aspnetcore-5.0

Community Discussion

UseAuthentication, Use Authorization, UseAzureAppConfiguration. The last option allows dynamic configuration to be reloaded without an app restart. https://docs.microsoft.com/en-us/azure/azure-app-configuration/enable-dynamic-configuration-aspnet-core?tabs=core5x

Box 1: UseAuthentication Need to validate users before users are allowed access to secure resources. UseAuthentication adds the AuthenticationMiddleware to the specified IApplicationBuilder, which enables authentication capabilities. To verify users, we need to use the Authentication middleware. Box 2: UseAuthorization Need to permit users to access secure resources. UseAuthorization adds the AuthorizationMiddleware to the specified IApplicationBuilder, which enables authorization capabilities. To authorize users to access resources , we need to use the Authorization middleware. Box 3: UseAzureAppConfiguration Adding the UseAzureAppConfiguration middleware to allow the configuration settings registered for refresh to be updated while the ASP.NET Core web app continues to receive requests. For using feature flags, you need to make use of the Azure App Configuration service. To ensure the configuration settings are refreshed without the need to restart the web app, you can use the middleware of UseAzureAppConfiguration();

Order matters

According to the site provided by you it should be 1. UseAzureAppConfiguration 2.UseAuthentication 3. Use Authorization

According to the site provided by you it should be 1. UseAzureAppConfiguration 2.UseAuthentication 3. Use Authorization

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Question #118

You have an application that includes an Azure Web app and several Azure Function apps. Application secrets including connection strings and certificates are stored in Azure Key Vault.
Secrets must not be stored in the application or application runtime environment. Changes to Azure Active Directory (Azure AD) must be minimized.
You need to design the approach to loading application secrets.
What should you do?

A) Create a single user-assigned Managed Identity with permission to access Key Vault and configure each App Service to use that Managed Identity.
B) Create a single Azure AD Service Principal with permission to access Key Vault and use a client secret from within the App Services to access Key Vault.
C) Create a system assigned Managed Identity in each App Service with permission to access Key Vault. (Correct Answer)
D) Create an Azure AD Service Principal with Permissions to access Key Vault for each App Service and use a certificate from within the App Services to access Key Vault.

Explanation

Correct Answer:
C
Use Key Vault references for App Service and Azure Functions.
Key Vault references currently only support system-assigned managed identities. User-assigned identities cannot be used.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references

Community Discussion

I think the answer is A. Create a single user-assigned Managed Identity with permission to access Key Vault and configure each App Service to use that Managed Identity.
Because we have more than one App (Web App and other Function Apps) , So we agree it is going to be a managed identity but should I create one for each app or one for all apps? If I create system MI then there should be one for each App. If I create user MI then I can re-use it for any App I want with minimum change to AD

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Correct Answer: C Key Vault references currently only support system-assigned managed identities. User-assigned identities cannot be used. Reference: https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview#managed-identity-types https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references

You are wrong. your second link OBVISOULY says "Key Vault references will use the app's system assigned identity by default, but you can specify a user-assigned identity."

You are wrong. your second link OBVISOULY says "Key Vault references will use the app's system assigned identity by default, but you can specify a user-assigned identity."

I just tried this, I was able to give access to a user assigned managed identity to a key vault.

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Question #119

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing a medical records document management website. The website is used to store scanned copies of patient intake forms.
If the stored intake forms are downloaded from storage by a third party, the contents of the forms must not be compromised.
You need to store the intake forms according to the requirements.
Solution:
1. Create an Azure Key Vault key named skey.
2. Encrypt the intake forms using the public key portion of skey.
3. Store the encrypted data in Azure Blob storage.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A

Community Discussion

Correct!

The answer is right, but not good. Because we should use symmetric key to encrypt file, instead of public key. The best practise is: encrypt file by symmetric key, and the symmetric key is protected by public key.

Not sure what do you mean, but check the link below. Symmetric key means the same key is used for encryption and decryption. When you use an Asymmetric key, you encrypt with the public key and decrypt with a secret key, which is what the solution is talking about and is better. https://www.ssl2buy.com/wiki/symmetric-vs-asymmetric-encryption-what-are-differences#:~:text=Symmetric%20encryption%20uses%20a%20single,and%20decrypt%20messages%20whe

Not sure what do you mean, but check the link below. Symmetric key means the same key is used for encryption and decryption. When you use an Asymmetric key, you encrypt with the public key and decrypt with a secret key, which is what the solution is talking about and is better. https://www.ssl2buy.com/wiki/symmetric-vs-asymmetric-encryption-what-are-differences#:~:text=Symmetric%20encryption%20uses%20a%20single,and%20decrypt%20messages%20whe

We should use symmetric key not asymmetric key. Asymmetric key is used for small amount's of data to encrypt. Usually asymmetric key encrypts symmetric key, and symmetric key encrypts data

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Question #120

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You are developing a medical records document management website. The website is used to store scanned copies of patient intake forms.
If the stored intake forms are downloaded from storage by a third party, the contents of the forms must not be compromised.
You need to store the intake forms according to the requirements.
Solution:
1. Create an Azure Cosmos DB database with Storage Service Encryption enabled.
2. Store the intake forms in the Azure Cosmos DB database.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead use an Azure Key vault and public key encryption. Store the encrypted from in Azure Storage Blob storage.

Community Discussion

I think the rationale is Azure Cosmos is not the best place to store blob data, like scanned patient intake forms. https://stackoverflow.com/questions/49343675/how-can-i-store-images-in-azure-cosmos-db

Correct Answer: B - No If storage is encrypted by default but you need to encrypt the content so when downloaded, its useless to unauthorised party. Instead use an Azure

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Key vault and public key encryption. Store the encrypted from in Azure Storage Blob storage.

Although it's not ideal, it is still a valid solution (sort of)... media files are stored in blob storage https://docs.microsoft.com/en-us/azure/cosmos-db/database-encryption-at-rest The key thing to point here is that the solution requires encrypted files when downloaded, but the solution here is only encryption at rest

Although it's not ideal, it is still a valid solution (sort of)... media files are stored in blob storage https://docs.microsoft.com/en-us/azure/cosmos-db/database-encryption-at-rest The key thing to point here is that the solution requires encrypted files when downloaded, but the solution here is only encryption at rest

If I have any doubts about the question, I would check these users (who are the top commenters) to be sure: - Eltooth - mlantonis - glam Thank you guys. ?

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Question #121

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing a medical records document management website. The website is used to store scanned copies of patient intake forms.
If the stored intake forms are downloaded from storage by a third party, the contents of the forms must not be compromised.
You need to store the intake forms according to the requirements.
Solution: Store the intake forms as Azure Key Vault secrets.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:

B
Instead use an Azure Key vault and public key encryption. Store the encrypted from in Azure Storage Blob storage.

Community Discussion

B. No You'd definitely not want to store "data" in Azure Key Vault.

Correct Answer: B - No You'd definitely not want to store "data" in Azure Key Vault. Instead use an Azure Key vault and public key encryption. Store the encrypted from in Azure Storage Blob storage.

No, that's crazy.

B. No Technically possible.. but KeyValut is intended to store securely Application secrets, certificates etc. and not to store application data like the Intake forms and other documents.

Selected Answer: B

B is correct answer.

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Question #122

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HOTSPOT -

You plan to deploy a new application to a Linux virtual machine (VM) that is hosted in Azure.

The entire VM must be secured at rest by using industry-standard encryption technology to address organizational security and compliance requirements.

You need to configure Azure Disk Encryption for the VM.

How should you complete the Azure CLI commands? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

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Answer Area

```
az provider register -n Microsoft.KeyVault
resourcegroup="myResourceGroup"
az group create --name $resourcegroup --location westus
keyvault_name=myvaultname$RANDOM
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--name $keyvault_name \
--resource-group $resourcegroup \
--location eastus \
--enabled-for-disk-encryption True
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--vault-name $keyvault_name \
--name Name1 \
--protection software
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--resource-group $resourcegroup \
--name Name2 \
--image Canonical:UbuntuServer:16.04-LTS:latest \
--admin-username azureuser \
--generate-ssh-keys \
--data-disk-sizes-gb 5
```

az [▼] enable\

- vm
- keyvault
- keyvault key
- vm encryption

```
--resource-group $resourcegroup \
--name Name2 \
--disk-encryption-keyvault $keyvault_name \
--key-encryption-key Name1 \
--volume-type
```

[▼]

- all
- data
- os

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Explanation

Correct Answer:

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Answer Area

```
az provider register -n Microsoft.KeyVault
resourcegroup="myResourceGroup"
az group create --name $resourcegroup --location westus
keyvault_name=myvaultname$RANDOM
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--name $keyvault_name \
--resource-group $resourcegroup \
--location eastus \
--enabled-for-disk-encryption True
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--vault-name $keyvault_name \
--name Name1 \
--protection software
```

az [▼] create \

- vm
- keyvault
- keyvault key
- vm encryption

```
--resource-group $resourcegroup \
--name Name2 \
--image Canonical:UbuntuServer:16.04-LTS:latest \
--admin-username azureuser \
--generate-ssh-keys \
--data-disk-sizes-gb 5
```

az [▼] enable\

- vm
- keyvault
- keyvault key
- vm encryption

```
--resource-group $resourcegroup \
--name Name2 \
--disk-encryption-keyvault $keyvault_name \
--key-encryption-key Name1 \
--volume-type
```

[▼]

- all
- data
- os

Box 1: keyvault -

Create an Azure Key Vault with az keyvault create and enable the Key Vault for use with disk encryption. Specify a unique Key Vault name for keyvault_name as follows:
keyvault_name=myvaultname$RANDOM az keyvault create \
--name $keyvault_name \
--resource-group $resourcegroup \
--location eastus \
--enabled-for-disk-encryption True

Box 2: keyvault key -
The Azure platform needs to be granted access to request the cryptographic keys when the VM boots to decrypt the virtual disks. Create a cryptographic key in your Key Vault with az keyvault key create. The following example creates a key named myKey: az keyvault key create \
--vault-name $keyvault_name \
--name myKey \
--protection software

Box 3: vm -
Create a VM with az vm create. Only certain marketplace images support disk encryption. The following example creates a VM named myVM using an Ubuntu
16.04 LTS image:
az vm create \
--resource-group $resourcegroup \
--name myVM \
--image Canonical:UbuntuServer:16.04-LTS:latest \
--admin-username azureuser \
--generate-ssh-keys \

Box 4: vm encryption -
Encrypt your VM with az vm encryption enable:
az vm encryption enable \
--resource-group $resourcegroup \
--name myVM \
--disk-encryption-keyvault $keyvault_name \
--key-encryption-key myKey \
--volume-type all
Note: seems to an error in the question. Should have enable instead of create.

Box 5: all -
Encrypt both data and operating system.
Reference:
https://docs.microsoft.com/en-us/azure/virtual-machines/linux/disk-encryption-cli-quickstart

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Community Discussion

The answer is correct. Other possiblities doesn't make sense. Although it seems strange to me to create the VM when the question says that we already have one.

Ok, now I see that the question doesn't say that the VM is already created. Sorry for that :)

Ok, now I see that the question doesn't say that the VM is already created. Sorry for that :)

correct

Was on my exam today (03-01-2023)

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Question #123

Your company is developing an Azure API hosted in Azure.
You need to implement authentication for the Azure API to access other Azure resources. You have the following requirements:
➪ All API calls must be authenticated.
➪ Callers to the API must not send credentials to the API.
Which authentication mechanism should you use?

A) Basic
B) Anonymous
C) Managed identity (Correct Answer)
D) Client certificate

Explanation

Correct Answer:
C
Azure Active Directory Managed Service Identity (MSI) gives your code an automatically managed identity for authenticating to Azure services, so that you can keep credentials out of your code.

Note: Use the authentication-managed-identity policy to authenticate with a backend service using the managed identity. This policy essentially uses the managed identity to obtain an access token from Azure Active Directory for accessing the specified resource. After successfully obtaining the token, the policy will set the value of the token in the Authorization header using the Bearer scheme.
Incorrect Answers:
A: Use the authentication-basic policy to authenticate with a backend service using Basic authentication. This policy effectively sets the HTTP Authorization header to the value corresponding to the credentials provided in the policy.
B: Anonymous is no authentication at all.
D: Your code needs credentials to authenticate to cloud services, but you want to limit the visibility of those credentials as much as possible. Ideally, they never appear on a developer's workstation or get checked-in to source control. Azure Key Vault can store credentials securely so they aren't in your code, but to retrieve them you need to authenticate to Azure Key Vault. To authenticate to Key Vault, you need a credential! A classic bootstrap problem.
Reference:
https://azure.microsoft.com/en-us/blog/keep-credentials-out-of-code-introducing-azure-ad-managed-service-identity/ https://docs.microsoft.com/en-us/azure/api-management/api-management-authentication-policies

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Community Discussion

C is correct.

A and D will send credential to the API. B is not meet the requirement. only C can be selected

Got this on 04/05/22 (selected Managed Identity)

Question is about from APIM to other azure resource, C is correct managed identity. Question is NOT about how end users access APIM

got this in the exam :)

Question #124

DRAG DROP -

You are developing an application. You have an Azure user account that has access to two subscriptions.

You need to retrieve a storage account key secret from Azure Key Vault.

In which order should you arrange the PowerShell commands to develop the solution? To answer, move all commands from the list of commands to the answer area and arrange them in the correct order.

Select and Place:

Powershell commands

```
$secretvalue = ConvertTo-SecureString
$storAcctkey -AsPlainText
-Force
     Set-AzKeyVaultSecret -VaultName
$vaultName -Name $secretName
-SecretValue $secretvalue
```

```
Get-AzStorageAccountKey -
ResourceGroupName $resGroup -Name
$storAcct
```

```
Set-AzContext -SubscriptionId
$subscriptionID
```

```
Get-AzKeyVaultSecret -VaultName
$vaultName
```

```
Get-AzSubscription
```

Answer Area

Explanation

Correct Answer:

Powershell commands

```
$secretvalue = ConvertTo-SecureString
$storAcctkey -AsPlainText
-Force
     Set-AzKeyVaultSecret -VaultName
$vaultName -Name $secretName
-SecretValue $secretvalue
```

```
Get-AzStorageAccountKey -
ResourceGroupName $resGroup -Name
$storAcct
```

```
Set-AzContext -SubscriptionId
$subscriptionID
```

```
Get-AzKeyVaultSecret -VaultName
$vaultName
```

```
Get-AzSubscription
```

Answer Area

```
Get-AzSubscription
```

```
Set-AzContext -SubscriptionId
$subscriptionID
```

```
Get-AzStorageAccountKey -
ResourceGroupName $resGroup -Name
$storAcct
```

```
$secretvalue = ConvertTo-SecureString
$storAcctkey -AsPlainText
-Force
     Set-AzKeyVaultSecret -VaultName
$vaultName -Name $secretName
-SecretValue $secretvalue
```

```
Get-AzKeyVaultSecret -VaultName
$vaultName
```

Step 1: Get-AzSubscription -
If you have multiple subscriptions, you might have to specify the one that was used to create your key vault. Enter the following to see the subscriptions for your account:

Get-AzSubscription -
Step 2: Set-AzContext -SubscriptionId
To specify the subscription that's associated with the key vault you'll be logging, enter:
Set-AzContext -SubscriptionId <subscriptionID>

Step 3: Get-AzStorageAccountKey -
You must get that storage account key.
Step 4: $secretvalue = ConvertTo-SecureString <storageAccountKey> -AsPlainText -Force
Set-AzKeyVaultSecret -VaultName <vaultName> -Name <secretName> -SecretValue $secretvalue
After retrieving your secret (in this case, your storage account key), you must convert that key to a secure string, and then create a secret with that value in your key vault.

Step 5: Get-AzKeyVaultSecret -
Next, get the URI for the secret you created. You'll need this URI in a later step to call the key vault and retrieve your secret. Run the following PowerShell command and make note of the ID value, which is the secret's URI:
Get-AzKeyVaultSecret ƛ€"VaultName <vaultName>
Reference:
https://docs.microsoft.com/bs-latn-ba/Azure/key-vault/key-vault-key-rotation-log-monitoring

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Community Discussion

Answer looks correct

Question does not explain where the variables come from... Assuming I set the variables myself (as a "side effect" of the command), the solution below does make sense: 1. Get-AzSubscription 2. Set-AzContext –SubscriptionId $subscriptionID 3. Get-AzKeyVaultSecret –VaultName $vaultName 4. Get-AzStorageAccountKey –ResourceGroupName $resGroup –Name $storAcct 5. $secretvalue = ConvertTo-SecureString $storAcctkey –AsPlainText –Force Set-AzKeyVaultSecret –VaultName $vaultName –Name $secretName –SecretValue $secretvalue

I believe the assignment wants to select a proper subscription, then to retrieve the storage account key, then to store this key into the KeyVault and finally to check the secret was inserted properly. So: 1. Get-AzSubscription ($subscriptionID = (...).SubscriptionName) 2. Set-AzContext 3. Get-AzStorageAccountKey ($storAcctkey = "(...)[0].Value") 4. ConvertTo-SecureString, Set-AzKeyVaultSecret 5. Get-AzKeyVaultSecret (list the secrets stored in the KeyVault - check only)

Does the question miss some part? Why it has to save the key before retrieval? No where in the question mentioned that ... First two Get-AzSubscription Set-AzContext –SubscriptionId $subscriptionID are absolutely correct, since there are two subscriptions, you have to point to the correct one ... but I am confused with 3, 4, 5 steps, what are those?

Agree with some people saying the question and picture does not make sense. The question only says how to retrieve the secret from Key Vault. Based on the options, we also have to retrieve the value and insert it to Key Vault first. The question/picture lacks information based on what we have.

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Question #125

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop Azure solutions.
You must grant a virtual machine (VM) access to specific resource groups in Azure Resource Manager.
You need to obtain an Azure Resource Manager access token.
Solution: Use an X.509 certificate to authenticate the VM with Azure Resource Manager.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead run the Invoke-RestMethod cmdlet to make a request to the local managed identity for Azure resources endpoint.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Community Discussion

No is the right answer: Explanation : Using the Invoke-WebRequest cmdlet, make a request to the local managed identity for Azure resources endpoint to get an access token for Azure Resource Manager. link : https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

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Correct Answer: B - No A certificate cannnot be used to authenticate. Instead run the Invoke-RestMethod or Invoke-WebRequest cmdlet to make a request to the local managed identity for Azure resources endpoint. Reference: https://docs.microsoft.com/en-us/azure/role-based-access-control/overview https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Using Invoke-WebRequest vs Invoke-RestMethod doesn't matter. The point is that using a certificate is wrong for Identity Management.

Using Invoke-WebRequest vs Invoke-RestMethod doesn't matter. The point is that using a certificate is wrong for Identity Management.

No , is the correct Answer

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Question #126

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop Azure solutions.
You must grant a virtual machine (VM) access to specific resource groups in Azure Resource Manager.
You need to obtain an Azure Resource Manager access token.
Solution: Use the Reader role-based access control (RBAC) role to authenticate the VM with Azure Resource Manager.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Instead run the Invoke-RestMethod cmdlet to make a request to the local managed identity for Azure resources endpoint.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Community Discussion

Correct Answer: B - No Azure RBAC is an authorization system built on Azure Resource Manager that provides fine-grained access management of Azure resources. Here we need to authenticate. Here we need to make use of managed identities for the virtual machine. Role-based access control is used for authorization and not authentication. Instead run the Invoke-RestMethod or Invoke-WebRequest cmdlet to make a request to the local managed identity for Azure resources endpoint. Reference: https://docs.microsoft.com/en-us/azure/role-based-access-control/overview https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

ITs not a invoke-RestMethod , it is: Invoke-WebRequest cmdlet https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Both Invoke-RestMethod and Invoke-WebRequest can be used. Their behaviour is very similar. https://blog.truesec.com/2020/07/29/invoke-webrequest-vs-invoke-restmethod/

Both Invoke-RestMethod and Invoke-WebRequest can be used. Their behaviour is very similar. https://blog.truesec.com/2020/07/29/invoke-webrequest-vs-invoke-restmethod/

https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm Here it says that you first need to go to the Resource Group, and in the IAM tab grant access to the VM as a Reader Role Then, when you are inside the VM, you can use the command Invoke-WebRequest cmdlet in order to get the Token 4 is Correct because it is the first step you need to do in order to get the Token and question 5 is correct too

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Question #127

HOTSPOT -

You are building a website that is used to review restaurants. The website will use an Azure CDN to improve performance and add functionality to requests.

You build and deploy a mobile app for Apple iPhones. Whenever a user accesses the website from an iPhone, the user must be redirected to the app store.

You need to implement an Azure CDN rule that ensures that iPhone users are redirected to the app store.

How should you complete the Azure Resource Manager template? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
"conditions": [ {
    "name": "IsDevice",
    "parameters": {
      "@odata.type": "#Microsoft.Azure.Cdn.Models. [ ] ",
      "operator": "Equal",
      "matchValues": [ " [ ] " ]
} },
  {
    "name": "RequestHeader",
    "parameters": {
      "@odata.type": "#Microsoft.Azure.Cdn.Models. [ ] ",
      "operator": "Contains",
      "selector": " [ ] ",
      "matchValues": [ " [ ] " ]
  } }
]
```

Drop-down options:

- DeliveryRuleIsDeviceConditionParameters
- DeliveryRuleCookiesConditionParameters
- DeliveryRulePostArgsConditionParameters
- DeliveryRuleRequestHeaderConditionParameters

- iOS
- Mobile
- iPhone
- Desktop

- DeliveryRuleIsDeviceConditionParameters
- DeliveryRuleCookiesConditionParameters
- DeliveryRulePostArgsConditionParameters
- DeliveryRuleRequestHeaderConditionParameters

- FROM
- PRAGMA
- X-POWERED-BY
- HTTP_USER_AGENT

- iOS
- Mobile
- iPhone
- Desktop

Explanation

Correct Answer:

Answer Area

```
"conditions": [ {
    "name": "IsDevice",
    "parameters": {
      "@odata.type": "#Microsoft.Azure.Cdn.Models.
      "operator": "Equal",
      "matchValues": [ "
                          " ]
} },
  {
    "name": "RequestHeader",
    "parameters": {
      "@odata.type": "#Microsoft.Azure.Cdn.Models.
      "operator": "Contains",
      "selector": "
                    ",
      "matchValues": [ "
                          " ]
  } }
]
```

Dropdowns:

- Box 1: iOS / Mobile / iPhone / Desktop
- Box 2: DeliveryRuleIsDeviceConditionParameters / DeliveryRuleCookiesConditionParameters / DeliveryRulePostArgsConditionParameters / DeliveryRuleRequestHeaderConditionParameters
- Box 3: FROM / PRAGMA / X-POWERED-BY / HTTP_USER_AGENT
- Box 4: DeliveryRuleIsDeviceConditionParameters / DeliveryRuleCookiesConditionParameters / DeliveryRulePostArgsConditionParameters / DeliveryRuleRequestHeaderConditionParameters
- Box 5: iOS / Mobile / iPhone / Desktop

Box 1: iOS -
Azure AD Conditional Access supports the following device platforms:
✎ Android
✎ iOS
✎ Windows Phone
✎ Windows
macOS
▪
Box 2: DeliveryRuleIsDeviceConditionParameters
The DeliveryRuleIsDeviceCondition defines the IsDevice condition for the delivery rule. parameters defines the parameters for the condition.

Box 3: HTTP_USER_AGENT -
Incorrect Answers:
✎ The Pragma HTTP/1.0 general header is an implementation-specific header that may have various effects along the request-response chain. It is used for backwards compatibility with HTTP/1.0 caches.
✎ "X-Powered-By" is a common non-standard HTTP response header (most headers prefixed with an 'X-' are non-standard).
Box 4: DeliveryRuleRequestHeaderConditionParameters
DeliveryRuleRequestHeaderCondition defines the RequestHeader condition for the delivery rule. parameters defines the parameters for the condition.

Box 5: iOS -
The Require approved client app requirement only supports the iOS and Android for

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device platform condition.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-conditions https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-grant

Community Discussion

First box: Mobile https://docs.microsoft.com/en-us/python/api/azure-mgmt-cdn/azure.mgmt.cdn.models.isdevicematchconditionparametersmatchvaluesitem Third box: iPhone. We are not looking for other Apple devices running iOS. It's the iPhone we're looking for.

1 DeliveryRuleDeviceConditionParameters - we are first checking for a device condition, hence we need to use the condition of DeliveryRuleDeviceConditionParameters 2.Mobile - The devices can be either Desktop or Mobile. These are the two accepted values. Here since we need to route requests based on mobile devices, we need to choose the value of Mobile. 3.DeliveryRequestHeaderConditionParameters. we need to understand the type of operating system running on the device. We can get this information from the request headers. Hence, we need to use the parameter of DeliveryRequestHeaderConditionParameters. 4.HTTP_USER_AGENT - we can check the HTTP_USER_AGENT property in the request header. In the user agent property of the request header, you will normally get information about the environment where the request is originating from. An example is given below where I am showing the request header from my own machine when I browse to a site. 5.iOS - we need to check the operating system which will be iOS.

https://deviceatlas.com/blog/list-of-user-agent-strings#iphone For 5 it has to be iPhone (this is not something Microsoft we are matching, but the details pulled from the device). So I get: 1. DeliveryRuleDeviceConditionParameters 2. Mobile (as below: https://docs.microsoft.com/en-us/python/api/azure-mgmt-cdn/azure.mgmt.cdn.models.isdevicematchconditionparametersmatchvaluesitem?view=azure-python) 3.DeliveryRequestHeaderConditionParameters 4. HTTP_USER_AGENT 5. iPhone

https://deviceatlas.com/blog/list-of-user-agent-strings#iphone For 5 it has to be iPhone (this is not something Microsoft we are matching, but the details pulled from the device). So I get: 1. DeliveryRuleDeviceConditionParameters 2. Mobile (as below: https://docs.microsoft.com/en-us/python/api/azure-mgmt-cdn/azure.mgmt.cdn.models.isdevicematchconditionparametersmatchvaluesitem?view=azure-python) 3.DeliveryRequestHeaderConditionParameters 4. HTTP_USER_AGENT 5. iPhone

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I agree on the first four points, but the fifth point is incorrect. The correct answer is iPhone. Here you can see lots of iOS User Agent examples: https://developers.whatismybrowser.com/useragents/explore/operating_system_name/ios/ "iPhone" appears all the time and "Mac OS X" is used instead of "iOS" Example: Mozilla/5.0 (iPhone; CPU iPhone OS 9_3_1 like Mac OS X) AppleWebKit/601.1.46 (KHTML, like Gecko) Version/9.0 Mobile/13E238 Safari/601.1

Question #128

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing a website that will run as an Azure Web App. Users will authenticate by using their Azure Active Directory (Azure AD) credentials.
You plan to assign users one of the following permission levels for the website: admin, normal, and reader. A user's Azure AD group membership must be used to determine the permission level.
You need to configure authorization.
Solution:
✑ Configure and use Integrated Windows Authentication in the website.
✑ In the website, query Microsoft Graph API to load the groups to which the user is a member.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Microsoft Graph is a RESTful web API that enables you to access Microsoft Cloud service resources.
Instead in the Azure AD application's manifest, set value of the groupMembershipClaims option to All. In the website, use the value of the groups claim from the

JWT for the user to determine permissions.
Reference:
https://blogs.msdn.microsoft.com/waws/2017/03/13/azure-app-service-authentication-aad-groups/

Community Discussion

Correct Answer: B - No Reference: https://docs.microsoft.com/en-us/archive/blogs/waws/azure-app-service-authentication-aad-groups https://github.com/AzureAD/microsoft-authentication-library-for-dotnet/wiki/Integrated-Windows-Authentication https://docs.microsoft.com/en-us/graph/api/resources/azure-ad-overview?view=graph-rest-1.0

I would say the solution meets the goal, according to this: https://github.com/AzureAD/microsoft-authentication-library-for-dotnet/wiki/Integrated-Windows-Authentication

This question was in today's exam on 10-June-2023

No, that is only for desktop or mobile application that runs on Windows. This is a web app in Azure.

No, that is only for desktop or mobile application that runs on Windows. This is a web app in Azure.

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Question #129

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You develop Azure solutions.
You must grant a virtual machine (VM) access to specific resource groups in Azure Resource Manager.
You need to obtain an Azure Resource Manager access token.
Solution: Run the Invoke-RestMethod cmdlet to make a request to the local managed identity for Azure resources endpoint.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Get an access token using the VM's system-assigned managed identity and use it to call Azure Resource Manager
You will need to use PowerShell in this portion.
1. In the portal, navigate to Virtual Machines and go to your Windows virtual machine and in the Overview, click Connect.
2. Enter in your Username and Password for which you added when you created the Windows VM.
3. Now that you have created a Remote Desktop Connection with the virtual machine, open PowerShell in the remote session.
4. Using the Invoke-WebRequest cmdlet, make a request to the local managed identity for Azure resources endpoint to get an access token for Azure Resource Manager.
Example:
$response = Invoke-WebRequest -Uri 'http://169.254.169.254/metadata/identity/oauth2/token?api-version=2018-02-01&resource=https:// management.azure.com/' -Method GET -Headers @{Metadata="true"}
Reference:

https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Community Discussion

Correct Answer: Yes Using the Invoke-WebRequest cmdlet, make a request to the local managed identity for Azure resources endpoint to get an access token for Azure Resource Manager. I believe we can you Invoke-RestMethod too. https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

This does make sense since a web-request can be a rest call! In the link below, it explains how web-request supports HTML content while Rest-Method supports JSON and XML content. The link provided for the solution is correct as well. https://superuser.com/questions/1235349/what-is-the-difference-between-invoke-webrequest-and-invoke-restmethod

Answer is YES, you can make use of the PowerShell commands to make a request to managed identity service of the virtual machine. The Invoke-RestMethod is a generic call that is available in PowerShell for making a call to a web service.

In order to grant VM access to ARM you need to: - assign VM user/system managed identity - configure permission to ARM for that identity - and then you can access token by Invoke-WebRequest cmdlet and use to to authenticate in ARM. There is nothing in the question which indicates that those 2 previous steps are already done, so I would say it is not a correct answer.

Selected Answer: A

Answer A - The 2 most upvoted comments say this is correct and they are right.

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Question #130

HOTSPOT -

You are building a website to access project data related to teams within your organization. The website does not allow anonymous access. Authentication is performed using an Azure Active Directory (Azure AD) app named internal.

The website has the following authentication requirements:

✑ Azure AD users must be able to login to the website.

✑ Personalization of the website must be based on membership in Active Directory groups.

You need to configure the application's manifest to meet the authentication requirements.

How should you configure the manifest? To answer, select the appropriate configuration in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Answer Area

```
{
  . . .
  "appId": "d61126e3-089b-4adb-b721-d5023213df7d",
   "displayName": "internal",
  [ ▼ ] : "All",
  [ ▼ ] : true
  . . .
}
```

"optionalClaims"
"groupMembershipClaims"

"allowPublicClient"
"oauth2Permissions"
"requiredResourceAccess"
"oauth2AllowImplicitFlow"

Box 1: groupMembershipClaims -
Scenario: Personalization of the website must be based on membership in Active Directory groups.
Group claims can also be configured in the Optional Claims section of the Application Manifest.
Enable group membership claims by changing the groupMembershipClaim
The valid values are:
"All"
"SecurityGroup"
"DistributionList"
"DirectoryRole"

Box 2: oauth2Permissions -
Scenario: Azure AD users must be able to login to the website. oauth2Permissions specifies the collection of OAuth 2.0 permission scopes that the web API (resource) app exposes to client apps. These permission scopes may be granted to client apps during consent.
Incorrect Answers:
oauth2AllowImplicitFlow. oauth2AllowImplicitFlow specifies whether this web app can request OAuth2.0 implicit flow access tokens. The default is false. This flag is used for browser-based apps, like Javascript single-page apps.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-fed-group-claims

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Community Discussion

Second answer is incorrect. Well, oauth2Permissions can only accept collections value like an array not a boolean. It should be oauth2AllowImplicitFlow.

Box 1: groupMembershipClaims Personalization of the website must be based on membership in Active Directory groups. Group claims can also be configured in the Optional Claims section of the Application Manifest. Enable group membership claims by changing the groupMembershipClaim The valid values are: - "All" - "SecurityGroup" - "DistributionList" - "DirectoryRole" Here we need to mention that we want to get the groups for the users. Hence we need to mention to set the groupMembershipClaims property to All. Box 2: oauth2AllowImplicitFlow Azure AD users must be able to login to the website. auth2Permissions can only accept collections value like an array, not a boolean. oauth2AllowImplicitFlow accepts boolean value. Here from the list of options given, if we want the application to fetch the required tokens , we would need to allow Implicit Flow.

I Agree with you: 1) groupMembershipClaims 2) oauth2AllowImplicitFlow

I Agree with you: 1) groupMembershipClaims 2) oauth2AllowImplicitFlow

Agree. oauth2permissions: https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest#oauth2permissions-attribute oauth2allowimplicitflow: https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest#oauth2allowimplicitflow-attribute

SecExams

Question #131

You develop an app that allows users to upload photos and videos to Azure storage. The app uses a storage REST API call to upload the media to a blob storage account named Account1. You have blob storage containers named Container1 and Container2.
Uploading of videos occurs on an irregular basis.
You need to copy specific blobs from Container1 to Container2 when a new video is uploaded.
What should you do?

A) Copy blobs to Container2 by using the Put Blob operation of the Blob Service REST API
B) Create an Event Grid topic that uses the Start-AzureStorageBlobCopy cmdlet (Correct

Answer)

C) Use AzCopy with the Snapshot switch to copy blobs to Container2

D) Download the blob to a virtual machine and then upload the blob to Container2

Explanation

Correct Answer:
B
The Start-AzureStorageBlobCopy cmdlet starts to copy a blob.

Example 1: Copy a named blob -
C:\PS>Start-AzureStorageBlobCopy -SrcBlob "ContosoPlanning2015" -DestContainer "ContosoArchives" -SrcContainer "ContosoUploads"
This command starts the copy operation of the blob named ContosoPlanning2015 from the container named ContosoUploads to the container named ContosoArchives.
Reference:
https://docs.microsoft.com/en-us/powershell/module/azure.storage/start-azurestorageblobcopy?view=azurermps-6.13.0

Community Discussion

B looks correct. Common Blob storage event scenarios include image or video processing, search indexing, or any file-oriented workflow. Asynchronous file uploads are a great fit for events. When changes are infrequent, but your scenario requires immediate responsiveness, event-based architecture can be especially efficient. https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

Correct Answer: B The Start-AzureStorageBlobCopy cmdlet starts to copy a blob. Reference: https://docs.microsoft.com/en-us/powershell/module/azure.storage/start-azurestorageblobcopy?view=azurermps-6.13.0 https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

I do get it is the correct answer but the option looked very weird when I first read it: "B. Create an Event Grid topic that uses the Start-AzureStorageBlobCopy cmdlet". Probably Microsoft guy wanted that effect. I would have said event-grid topic with an Start-AzureStorageBlobCopy event handler. Microsoft wins again.

Got this in exam today (5 April 2023)

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Selected Answer: B

Only B is automated, since this happens on an irregular basis it needs to be automated

Question #132

You are developing an ASP.NET Core website that uses Azure FrontDoor. The website is used to build custom weather data sets for researchers. Data sets are downloaded by users as Comma Separated Value (CSV) files. The data is refreshed every 10 hours.
Specific files must be purged from the FrontDoor cache based upon Response Header values.
You need to purge individual assets from the Front Door cache.
Which type of cache purge should you use?

A) single path (Correct Answer)
B) wildcard
C) root domain

Explanation

Correct Answer:
A
These formats are supported in the lists of paths to purge:
✑ Single path purge: Purge individual assets by specifying the full path of the asset (without the protocol and domain), with the file extension, for example, /
[1]
✑ Wildcard purge: Asterisk (*) may be used as a wildcard. Purge all folders, subfolders, and files under an endpoint with /* in the path or purge all subfolders and files under a specific folder by specifying the folder followed by /*, for example, /pictures/*.
✑ Root domain purge: Purge the root of the endpoint with "/" in the path.
Reference:
https://docs.microsoft.com/en-us/azure/frontdoor/front-door-caching

Community Discussion

Correct Answer: A These formats are supported in the lists of paths to purge: - Single path purge: Purge individual assets by specifying the full path of the asset (without the

protocol and domain), with the file extension, for example, /pictures/strasbourg.png; - Wildcard purge: Asterisk (*) may be used as a wildcard. Purge all folders, subfolders, and files under an endpoint with /* in the path or purge all subfolders and files under a specific folder by specifying the folder followed by /*, for example, /pictures/*. - Root domain purge: Purge the root of the endpoint with "/" in the path. Here since we just need to purge individual assets, we can just make use of the Single path purge as the format for purging assets. Reference: https://docs.microsoft.com/en-us/azure/frontdoor/front-door-caching

The given answer is correct.

Selected Answer: A

A is correct answer. Specific file = Single path

In 28-12-2022 exam

Selected Answer: A

Got this on 04/29/2022. Correct Answer: A

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Question #133

Your company is developing an Azure API.
You need to implement authentication for the Azure API. You have the following requirements:
All API calls must be secure.
▪
➪ Callers to the API must not send credentials to the API.
Which authentication mechanism should you use?

A) Basic
B) Anonymous
C) Managed identity (Correct Answer)
D) Client certificate

Explanation

Correct Answer:
C

Use the authentication-managed-identity policy to authenticate with a backend service using the managed identity of the API Management service. This policy essentially uses the managed identity to obtain an access token from Azure Active Directory for accessing the specified resource. After successfully obtaining the token, the policy will set the value of the token in the Authorization header using the Bearer scheme.
Reference:
https://docs.microsoft.com/bs-cyrl-ba/azure/api-management/api-management-authentication-policies

Community Discussion

If a caller outside Azure doesn't look like we can use Managed Identity in such a situation. I think the client certificate is better.

Ans is correct: managed identities eliminate the need for developers having to manage credentials by providing an identity for the Azure resource in Azure AD and using it to obtain Azure Active Directory (Azure AD) tokens. https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview

it says : You need to implement authentication for the Azure API. So the Azure API is the one that needs to have an authenticated access to the backend services. That means Managed Identity.

Those are NOT managed identity, those are claim based authentication.

Those are NOT managed identity, those are claim based authentication.

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Question #134

You are a developer for a SaaS company that offers many web services.
All web services for the company must meet the following requirements:
✑ Use API Management to access the services
✑ Use OpenID Connect for authentication
✑ Prevent anonymous usage
A recent security audit found that several web services can be called without any authentication.
Which API Management policy should you implement?

A) jsonp
B) authentication-certificate
C) check-header
D) validate-jwt (Correct Answer)

Explanation

Correct Answer:
D
Add the validate-jwt policy to validate the OAuth token for every incoming request.
Incorrect Answers:
A: The jsonp policy adds JSON with padding (JSONP) support to an operation or an API to allow cross-domain calls from JavaScript browser-based clients.
JSONP is a method used in JavaScript programs to request data from a server in a different domain. JSONP bypasses the limitation enforced by most web browsers where access to web pages must be in the same domain.
JSONP - Adds JSON with padding (JSONP) support to an operation or an API to allow cross-domain calls from JavaScript browser-based clients.
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad

Community Discussion

Correct. It's validate-jwt for Open ID, API, secure authentication.

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Correct Answer: D Add the validate-jwt policy to validate the OAuth token for every incoming request. Reference: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad

JWT is a token issued by an identity provider, sent in the request, and that can be verified by the receiving site. A HTTP header is not issued by an identity provider.

JWT is a token issued by an identity provider, sent in the request, and that can be verified by the receiving site. A HTTP header is not issued by an identity provider.

The answer might be correct, but in the explanation of the incorrect answers it sounds very confusing to read jsonp described 3-times in a similar way? Since I don't know and I coldn't find anything: Could someone please explain the other two answers, what it is or where to find sothing about that?

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Question #135

DRAG DROP -

Contoso, Ltd. provides an API to customers by using Azure API Management (APIM). The API authorizes users with a JWT token.

You must implement response caching for the APIM gateway. The caching mechanism must detect the user ID of the client that accesses data for a given location and cache the response for that user ID.

You need to add the following policies to the policies file:

✑ a set-variable policy to store the detected user identity

✑ a cache-lookup-value policy

✑ a cache-store-value policy

✑ a find-and-replace policy to update the response body with the user profile information

To which policy section should you add the policies? To answer, drag the appropriate sections to the correct policies. Each section may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

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Explanation

Correct Answer:

Box 1: Inbound.
A set-variable policy to store the detected user identity.
Example:
<policies>
<inbound>
<!-- How you determine user identity is application dependent -->
<set-variable
name="enduserid"
value="@(context.Request.Headers.GetValueOrDefault("Authorization","").Split(' ')
[1].AsJwt()?.Subject)" />

Box 2: Inbound -

A cache-lookup-value policy -
Example:
<inbound>
<base />
<cache-lookup vary-by-developer="true | false" vary-by-developer-groups="true | false"
downstream-caching-type="none | private | public" must- revalidate="true | false">
<vary-by-query-parameter>parameter name</vary-by-query-parameter> <!-- optional,
can repeated several times -->
</cache-lookup>
</inbound>

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Box 3: Outbound -
A cache-store-value policy.
Example:
<outbound>
<base />
<cache-store duration="3600" />
</outbound>

Box 4: Outbound -
A find-and-replace policy to update the response body with the user profile information.
Example:
<outbound>
<!-- Update response body with user profile-->
<find-and-replace
from="'$userprofile$'"
to="@((string)context.Variables["userprofile"])" />
<base />
</outbound>
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-caching-policies https://docs.microsoft.com/en-us/azure/api-management/api-management-sample-cache-by-key

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Community Discussion

Inbound Inbound Inbound Outbound

The answer provided is correct.

Best score ever, compliments.

looks correct, in Nov182023, scored 962

correct! -> https://docs.microsoft.com/en-us/azure/api-management/api-management-sample-cache-by-key#fragment-caching

Question #136

DRAG DROP -

You are developing an Azure solution.

You need to develop code to access a secret stored in Azure Key Vault.

How should you complete the code segment? To answer, drag the appropriate code segments to the correct location. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: SecretClient -

Box 2: DefaultAzureCredential -

In below example, the name of your key vault is expanded to the key vault URI, in the format "https://<your-key-vault-name>.vault.azure.net". This example is using 'DefaultAzureCredential()' class from Azure Identity Library, which allows to use the same code across different environments with different options to provide identity. string keyVaultName = Environment.GetEnvironmentVariable("KEY_VAULT_NAME"); var kvUri = "https://" + keyVaultName + ".vault.azure.net"; var client = new SecretClient(new Uri(kvUri), new DefaultAzureCredential());

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Reference:
https://docs.microsoft.com/en-us/azure/key-vault/secrets/quick-create-net

Community Discussion

Answer is correct. string keyVaultName = Environment.GetEnvironmentVariable("KEY_VAULT_NAME"); var kvUri = "https://" + keyVaultName + ".vault.azure.net"; var client = new SecretClient(new Uri(kvUri), new DefaultAzureCredential()); Box 1: SecretClient Box 2: DefaultAzureCredential Reference: https://docs.microsoft.com/en-us/azure/key-vault/secrets/quick-create-net

Got this one 02/2022. Went with most voted

DefaultAzureCredential DefaultAzureCredential is appropriate for most scenarios where the application is intended to run in the Azure Cloud. This is because the DefaultAzureCredential determines the appropriate credential type based of the environment it is executing in. It supports authenticating both as a service principal or managed identity, and can be configured so that it will work both in a local development environment or when deployed to the cloud. The DefaultAzureCredential will first attempt to authenticate using credentials provided in the environment. In a development environment you can authenticate as a service principal with the DefaultAzureCredential by providing configuration in environment variables as described in the next section. If the environment configuration is not present or incomplete, the DefaultAzureCredential will then determine if a managed identity is available in the current environment. Authenticating as a managed identity requires no configuration, but does require platform support. See the managed identity documentation for more details on this.

Correct

got it on my exam 30-12-2022 score: 818

SecExams

Question #137

You are developing an Azure App Service REST API.
The API must be called by an Azure App Service web app. The API must retrieve and update user profile information stored in Azure Active Directory (Azure AD).
You need to configure the API to make the updates.
Which two tools should you use? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Microsoft Graph API (Correct Answer)
B) Microsoft Authentication Library (MSAL)
C) Azure API Management (Correct Answer)
D) Microsoft Azure Security Center
E) Microsoft Azure Key Vault SDK

Explanation

Correct Answer:
AC
A: You can use the Azure AD REST APIs in Microsoft Graph to create unique workflows between Azure AD resources and third-party services.
Enterprise developers use Microsoft Graph to integrate Azure AD identity management and other services to automate administrative workflows, such as employee onboarding (and termination), profile maintenance, license deployment, and more.
C: API Management (APIM) is a way to create consistent and modern API gateways for existing back-end services.
API Management helps organizations publish APIs to external, partner, and internal developers to unlock the potential of their data and services.
Reference:
https://docs.microsoft.com/en-us/graph/azuread-identity-access-management-concept-overview

Community Discussion

The Answer is Graph API and MSAL. API managment as nothing to do with the developing of the REST API...

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Answer is correct. A: Microsoft Graph to retrieve and update user profile info from Azure AD. C: API Management (APIM) Reference: https://docs.microsoft.com/en-us/graph/azuread-identity-access-management-concept-overview https://docs.microsoft.com/en-us/graph/overview https://docs.microsoft.com/en-us/azure/api-management/api-management-key-concepts

So wrong, API Management is supossed to create API gateways and rules to manage API calls

Fiest time see you are wrong. AAAAAAAAABBBBBBBBBB

So wrong, API Management is supossed to create API gateways and rules to manage API calls

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Question #138

You develop a REST API. You implement a user delegation SAS token to communicate with Azure Blob storage.
The token is compromised.
You need to revoke the token.
What are two possible ways to achieve this goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Revoke the delegation key. (Correct Answer)
B) Delete the stored access policy. (Correct Answer)
C) Regenerate the account key.
D) Remove the role assignment for the security principle.

Explanation

Correct Answer:
AB
A: Revoke a user delegation SAS -
To revoke a user delegation SAS from the Azure CLI, call the az storage account revoke-delegation-keys command. This command revokes all of the user delegation keys associated with the specified storage account. Any shared access signatures associated with those keys are invalidated.
B: To revoke a stored access policy, you can either delete it, or rename it by changing the

signed identifier. Changing the signed identifier breaks the associations between any existing signatures and the stored access policy. Deleting or renaming the stored access policy immediately effects all of the shared access signatures associated with it. Reference: https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/storage/blobs/storage-blob-user-delegation-sas-create-cli.md https://docs.microsoft.com/en-us/rest/api/storageservices/define-stored-access-policy#modifying-or-revoking-a-stored-access-policy

Community Discussion

Given answer is incorrect. Correct answers are A , D https://docs.microsoft.com/en-us/rest/api/storageservices/create-user-delegation-sas#revoke-a-user-delegation-sas

Your link literally says you're correct it should be A and D. "If you believe that a SAS has been compromised, then you should revoke the SAS. You can revoke a user delegation SAS either by revoking the user delegation key, or by changing or removing RBAC role assignments for the security principal used to create the SAS."

Your link literally says you're correct it should be A and D. "If you believe that a SAS has been compromised, then you should revoke the SAS. You can revoke a user delegation SAS either by revoking the user delegation key, or by changing or removing RBAC role assignments for the security principal used to create the SAS."

Answer seems correct. A: Use az storage account revoke-delegation-keys command. B: To revoke a stored access policy, you can either delete it, or rename it by changing the signed identifier. Reference: https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/storage/blobs/storage-blob-user-delegation-sas-create-cli.md https://docs.microsoft.com/en-us/rest/api/storageservices/define-stored-access-policy#modifying-or-revoking-a-stored-access-policy https://docs.microsoft.com/en-us/cli/azure/storage/account?view=azure-cli-latest#az_storage_account_revoke_delegation_keys

Thanks https://www.secexams.com/user/jay158/ no doubt after referring the ink that it is A and D

SecExams

Question #139

DRAG DROP -

You are developing an Azure-hosted application that must use an on-premises hardware security module (HSM) key.

The key must be transferred to your existing Azure Key Vault by using the Bring Your Own Key (BYOK) process.

You need to securely transfer the key to Azure Key Vault.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Generate a key transfer blob file by using the HSM vendor-provided tool.	
Generate a Key Exchange Key (KEK).	
Create a custom policy definition in Azure Policy.	
Run the `az keyvault key import` command.	
Run the `az keyvault key restore` command.	
Retrieve the Key Exchange Key (KEK) public key.	

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Explanation

Correct Answer:

Actions	Answer Area
	Generate a Key Exchange Key (KEK).
	Retrieve the Key Exchange Key (KEK) public key.
Create a custom policy definition in Azure Policy.	Generate a key transfer blob file by using the HSM vendor-provided tool.
	Run the `az keyvault key import` command.
Run the `az keyvault key restore` command.	

To perform a key transfer, a user performs following steps:

✎ Generate KEK.

✎ Retrieve the public key of the KEK.

✎ Using HSM vendor provided BYOK tool - Import the KEK into the target HSM and exports the Target Key protected by the KEK.

✎ Import the protected Target Key to Azure Key Vault.

Step 1: Generate a Key Exchange Key (KEK).

Step 2: Retrieve the Key Exchange Key (KEK) public key.

Step 3: Generate a key transfer blob file by using the HSM vendor-provided tool.
Generate key transfer blob using HSM vendor provided BYOK tool
Step 4: Run the az keyvault key import command
Upload key transfer blob to import HSM-key.
Customer will transfer the Key Transfer Blob (".byok" file) to an online workstation and then run a az keyvault key import command to import this blob as a new HSM-backed key into Key Vault.
To import an RSA key use this command:
az keyvault key import
Reference:
https://docs.microsoft.com/en-us/azure/key-vault/keys/byok-specification

Community Discussion

correct: https://docs.microsoft.com/en-us/azure/key-vault/keys/byok-specification#user-steps

Got this on the exam. :) top kek

this is still showing up in feb 2022 exams, the kek definitely made this question unforgettable for me top kek

this is still showing up in feb 2022 exams, the kek definitely made this question unforgettable for me top kek

is it enough to pass the exam to read up to 22 pages

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Question #140

You develop and deploy an Azure Logic app that calls an Azure Function app. The Azure Function app includes an OpenAPI (Swagger) definition and uses an Azure Blob storage account. All resources are secured by using Azure Active Directory (Azure AD).
The Azure Logic app must securely access the Azure Blob storage account. Azure AD resources must remain if the Azure Logic app is deleted.
You need to secure the Azure Logic app.
What should you do?

A) Create a user-assigned managed identity and assign role-based access controls. (Correct Answer)
B) Create an Azure AD custom role and assign the role to the Azure Blob storage account.
C) Create an Azure Key Vault and issue a client certificate.
D) Create a system-assigned managed identity and issue a client certificate.
E) Create an Azure AD custom role and assign role-based access controls.

Explanation

Correct Answer:
A
To give a managed identity access to an Azure resource, you need to add a role to the target resource for that identity.
Note: To easily authenticate access to other resources that are protected by Azure Active Directory (Azure AD) without having to sign in and provide credentials or secrets, your logic app can use a managed identity (formerly known as Managed Service Identity or MSI). Azure manages this identity for you and helps secure your credentials because you don't have to provide or rotate secrets.
If you set up your logic app to use the system-assigned identity or a manually created, user-assigned identity, the function in your logic app can also use that same identity for authentication.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/create-managed-service-identity
https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates-for-clients

Community Discussion

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correct "Azure AD resources must remain if the Azure Logic app is deleted."

User-assigned keys are individual components. Even if the logic apps are deleted, the keys remain. But in case of system-assigned keys, those are auto generated and are deleted when the Azure resources themselves are deleted.

correct, in 2023Mar24, score: 904/1000.

correct, in 2023Mar24, score: 904/1000.

Selected Answer: A

User assigned will persist after resource is removed

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Question #141

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HOTSPOT -

You are developing an application that uses a premium block blob storage account. You are optimizing costs by automating Azure Blob Storage access tiers.

You apply the following policy rules to the storage account. You must determine the implications of applying the rules to the data. (Line numbers are included for reference only.)

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```
01 {
02   "rules":
03     {
04       "name": "agingDataRule",
05       "enabled": true,
06       "type": "Lifecycle",
07       "definition":
08         "filters": {
09           "blobTypes": [ "blockBlob" ],
10           "prefixMatch": [ "container1/salesorders", "container2/inventory" ]
11         },
12         "actions": {
13           "baseBlob": {
14             "tierToCool": { "daysAfterModificationGreaterThan": 60 },
15             "tierToArchive": { "daysAfterModificationGreaterThan": 120 }
16           }
17         }
18       }
19     },
20     {
21       "enabled": true,
22       "name": "lastAccessedDataRule",
23       "type": "Lifecycle",
24       "definition": {
25         "actions": {
26           "baseBlob": {
27             "enableAutoTierToHotFromCool": true,
28             "tierToCool": {
29               "daysAfterLastAccessTimeGreaterThan": 30
30             }
31           }
32         },
33         "filters": {
34           "blobTypes": [ "blockBlob" ]
35         }
36       }
37     },
38     {
39       "rules": [
40         {
41           "name": "expirationDataRule",
42           "enabled": true,
43           "type": "Lifecycle",
44           "definition": {
45             "filters": {
46               "blobTypes": [ "blockBlob" ]
47             },
48             "actions": {
49               "baseBlob": {
50                 "delete": { "daysAfterModificationGreaterThan": 730 }
51               }
52             }
53           }
54         }
55       ]
56     }
57   ]
58 }
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

	Yes	No
Block blobs prefixed with container1/salesorders or container2/inventory which have not been modified in over 60 days are moved to cool storage. Blobs that have not been modified in 120 days are moved to the archive tier.	○	○
Blobs are moved to cool storage if they have not been accessed for 30 days.	○	○
Blobs will automatically be tiered from cool back to hot if accessed again after being tiered to cool.	○	○
All block blobs older than 730 days will be deleted.	○	○

Explanation

Correct Answer:

Answer Area

	Yes	No
Block blobs prefixed with container1/salesorders or container2/inventory which have not been modified in over 60 days are moved to cool storage. Blobs that have not been modified in 120 days are moved to the archive tier.	○	○
Blobs are moved to cool storage if they have not been accessed for 30 days.	○	○
Blobs will automatically be tiered from cool back to hot if accessed again after being tiered to cool.	○	○
All block blobs older than 730 days will be deleted.	○	○

Box 1: Yes -

```
"rules":
  {
    "name": "agingDataRule",
    "enabled": true,
    "type": "Lifecycle",
    "definition":
      "filters": {
        "blobTypes": [ "blockBlob" ],
        "prefixMatch": [ "container1/salesorders", "container2/inventory" ]
      },
      "actions": {
        "baseBlob": {
          "tierToCool": { "daysAfterModificationGreaterThan": 60 },
          "tierToArchive": { "daysAfterModificationGreaterThan": 120 }
```

Box 2: Yes -

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```
"enabled": true,
"name": "lastAccessedDataRule",
"type": "Lifecycle",
"definition": {
  "actions": {
    "baseBlob": {
      "enableAutoTierToHotFromCool": true,
      "tierToCool": {
        "daysAfterLastAccessTimeGreaterThan": 30
      }
    }
  },
```

Box 3: Yes -

Box 4: Yes -

```
"rules": [
  {
    "name": "expirationDataRule",
    "enabled": true,
    "type": "Lifecycle",
    "definition": {
      "filters": {
        "blobTypes": [ "blockBlob" ]
      },
      "actions": {
        "baseBlob": {
          "delete": { "daysAfterModificationGreaterThan": 730 }
```

Community Discussion

Correct answer: 1. Yes 2. Yes 3. Yes 4. No

Answer is correct 1. Yes 2. Yes 3. Yes 4. Yes

wrong - 4 is No. If a block has recently been modified then it will not be deleted despite being older than 730 days.

wrong - 4 is No. If a block has recently been modified then it will not be deleted despite being older than 730 days.

Agree, 4 should be no. Instead of "All block blobs older than 730 days will be deleted", it should be: "all block blobs 730 days after last modified". All info can be found at: https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview?tabs=azure-portal#move-aging-data-to-a-cooler-tier

SecExams

Question #142

You are developing a solution that will use a multi-partitioned Azure Cosmos DB database. You plan to use the latest Azure Cosmos DB SDK for development.
The solution must meet the following requirements:
✑ Send insert and update operations to an Azure Blob storage account.
✑ Process changes to all partitions immediately.
✑ Allow parallelization of change processing.
You need to process the Azure Cosmos DB operations.
What are two possible ways to achieve this goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Create an Azure App Service API and implement the change feed estimator of the SDK. Scale the API by using multiple Azure App Service instances. (Correct Answer)
B) Create a background job in an Azure Kubernetes Service and implement the change feed feature of the SDK.
C) Create an Azure Function to use a trigger for Azure Cosmos DB. Configure the trigger to connect to the container. (Correct Answer)
D) Create an Azure Function that uses a FeedIterator object that processes the change feed by using the pull model on the container. Use a FeedRange object to parallelize the processing of the change feed across multiple functions.

Explanation

Correct Answer:
AC
Azure Functions is the simplest option if you are just getting started using the change feed. Due to its simplicity, it is also the recommended option for most change feed use cases. When you create an Azure Functions trigger for Azure Cosmos DB, you select the container to connect, and the Azure Function gets triggered whenever there is a change in the container. Because Azure Functions uses the change feed processor behind the scenes, it automatically parallelizes change processing across your container's partitions.
Note: You can work with change feed using the following options:
✑ Using change feed with Azure Functions
✑ Using change feed with change feed processor
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/read-change-feed

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Community Discussion

Answer C & D. "What are two possible ways to achieve this goal?"

c and d ? https://docs.microsoft.com/en-us/azure/cosmos-db/read-change-feed#azure-functions https://docs.microsoft.com/en-us/azure/cosmos-db/change-feed-pull-model#using-feedrange-for-parallelization

CD (36%) D (21%) A (21%) Other ...OMG :D

C is the correct answer. Each answer has two possible ways that in combination, gives the solution. Moreover, because of the requirement to "Process changes to all partitions immediately", D cannot be the answer or part of it since it "processes the change feed by using the pull model on the container"

C is the correct answer. Each answer has two possible ways that in combination, gives the solution. Moreover, because of the requirement to "Process changes to all partitions immediately", D cannot be the answer or part of it since it "processes the change feed by using the pull model on the container"

SecExams

Question #143

HOTSPOT -

You have an Azure Web app that uses Cosmos DB as a data store. You create a CosmosDB container by running the following PowerShell script:

```
$resourceGroupName = "testResourceGroup"
$accountName = "testCosmosAccount"
$databaseName = "testDatabase"
$containerName = "testContainer"
$partitionKeyPath = "/EmployeeId"
$autoscaleMaxThroughput = 5000

New-AzCosmosDBSqlContainer -
-ResourceGroupName $resourceGroupName
-AccountName $accountName
-DatabaseName $databaseName
-Name $containerName
-PartitionKeyKind Hash
-PartitionKeyPath $partitionKeyPath
-AutoscaleMaxThroughput $autoscaleMaxThroughput
```

You create the following queries that target the container:

```
SELECT * FROM c WHERE c.EmployeeId > '12345'
SELECT * FROM c WHERE c.UserID = '12345'
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

	Yes	No
The minimum throughput for the container is 400 R/Us.	○	○
The first query statement is an in-partition query.	○	○
The second query statement is a cross-partition query.	○	○

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Explanation

Correct Answer:

Answer Area

	Yes	No
The minimum throughput for the container is 400 R/Us.	○	○
The first query statement is an in-partition query.	○	○
The second query statement is a cross-partition query.	○	○

Box 1: No -
You set the highest, or maximum RU/s Tmax you don't want the system to exceed. The system automatically scales the throughput T such that 0.1* Tmax <= T <= Tmax.
In this example we have autoscaleMaxThroughput = 5000, so the minimum throughput for the container is 500 R/Us.

Box 2: No -
First query: SELECT * FROM c WHERE c.EmployeeId > '12345'
Here's a query that has a range filter on the partition key and won't be scoped to a single physical partition. In order to be an in-partition query, the query must have an equality filter that includes the partition key:
SELECT * FROM c WHERE c.DeviceId > 'XMS-0001'

Box 3: Yes -
Example of In-partition query:
Consider the below query with an equality filter on DeviceId. If we run this query on a container partitioned on DeviceId, this query will filter to a single physical partition.
SELECT * FROM c WHERE c.DeviceId = 'XMS-0001'
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-choose-offer https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-query-container

Community Discussion

correct: 1° no => line 6 2° no => https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-choose-offer#overview-of-provisioned-throughput-types https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-query-container#in-partition-query "Here's a query that has a range filter on the partition key and won't be scoped to a single physical partition. In order to be an in-partition query, the query must have an equality filter that includes the partition key: SELECT * FROM c WHERE c.DeviceId >

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'XMS-0001'" 3° : yes => partition key is EmployeeId. https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-query-container#cross-partition-query

1. No : Because as question specifies max RUs = 5000, so minimum RUs = 5000/10 = 500 https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-choose-offer#overview-of-provisioned-throughput-types 2. No : In-partition query needs equality filter that is missing here 3. Yes: Though we have equality filter here, 'UserId' is not a partition key here. https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-query-container

The documentation on the second point could be better. They put the most important part at the end and that is that even if the query uses the partition key it MUST use an equality filter to be considered in-partition.

The documentation on the second point could be better. They put the most important part at the end and that is that even if the query uses the partition key it MUST use an equality filter to be considered in-partition.

Got this in exam today (5 April 2023)

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Question #144

HOTSPOT -

You are developing a web application that makes calls to the Microsoft Graph API. You register the application in the Azure portal and upload a valid X509 certificate.

You create an appsettings.json file containing the certificate name, client identifier for the application, and the tenant identifier of the Azure Active Directory (Azure

AD). You create a method named ReadCertificate to return the X509 certificate by name.

You need to implement code that acquires a token by using the certificate.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
AuthenticationConfig config = AuthenticationConfig.ReadFromJsonFile("appsettings.json");
X509Certificate2 certificate = ReadCertificate(config.CertificateName);
var app =                                   .Create(config.ClientId)
```

- ConfidentialClientApplicationBuilder
- GetAccountAsync()
- GetAccountsAsync()
- ConfidentialClientApplication

```
  .WithCertificate(certificate)
  .WithAuthority(new Uri(config.Authority))
  .Build();
string[] scopes = new string[] { $"{config.ApiUrl}.default" };
AuthenticationResult result = await app.AcquireTokenForClient(          ).ExecuteAsync();
```

- scopes
- app
- config

Explanation

Correct Answer:

Answer Area

```
AuthenticationConfig config = AuthenticationConfig.ReadFromJsonFile("appsettings.json");
X509Certificate2 certificate = ReadCertificate(config.CertificateName);
var app =                                          .Create(config.ClientId)
```

ConfidentialClientApplicationBuilder
GetAccountAsync()
GetAccountsAsync()
ConfidentialClientApplication

```
  .WithCertificate(certificate)
  .WithAuthority(new Uri(config.Authority))
  .Build();
string[] scopes = new string[] { $"{config.ApiUrl}.default" };
AuthenticationResult result = await app.AcquireTokenForClient(                ).ExecuteAsync();
```

scopes
app
config

Box 1: ConfidentialClientApplicationBuilder
Here's the code to instantiate the confidential client application with a client secret: app = ConfidentialClientApplicationBuilder.Create(config.ClientId)
.WithClientSecret(config.ClientSecret)
.WithAuthority(new Uri(config.Authority))
.Build();

Box 2: scopes -
After you've constructed a confidential client application, you can acquire a token for the app by calling AcquireTokenForClient, passing the scope, and optionally forcing a refresh of the token.
Sample code: result = await app.AcquireTokenForClient(scopes)
.ExecuteAsync();
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/develop/scenario-daemon-app-configuration https://docs.microsoft.com/en-us/azure/active-directory/develop/scenario-daemon-acquire-token

Community Discussion

correct https://docs.microsoft.com/en-us/azure/active-directory/develop/scenario-daemon-app-configuration?tabs=dotnet#instantiate-the-confidential-client-application-with-a-client-certificate https://docs.microsoft.com/en-us/azure/active-directory/develop/scenario-daemon-acquire-token?tabs=dotnet#acquiretokenforclient-api

Provided answer is correct.

Got this one 01/2022. Went with most voted (to avoid writing answers again)

got this question on 06-29-2023

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Did my exam on 15th November 2022. This question was on it.

Question #145

HOTSPOT -

You develop a containerized application. You plan to deploy the application to a new Azure Container instance by using a third-party continuous integration and continuous delivery (CI/CD) utility.

The deployment must be unattended and include all application assets. The third-party utility must only be able to push and pull images from the registry.

The authentication must be managed by Azure Active Directory (Azure AD). The solution must use the principle of least privilege.

You need to ensure that the third-party utility can access the registry.

Which authentication options should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Authentication	Option
Registry authentication method	Service principal Individual identity Repository-scoped access token Managed identity for Azure resources
RBAC role	AcrPull Owner AcrPush Contributor

Explanation

Correct Answer:

Answer Area

Authentication	Option
Registry authentication method	Service principal Individual identity Repository-scoped access token Managed identity for Azure resources
RBAC role	AcrPull Owner AcrPush Contributor

Box 1: Service principal -
Applications and container orchestrators can perform unattended, or "headless," authentication by using an Azure Active Directory (Azure AD) service principal.
Incorrect Answers:
✐ Individual AD identity does not support unattended push/pull
✐ Repository-scoped access token is not integrated with AD identity
✐ Managed identity for Azure resources is used to authenticate to an Azure container registry from another Azure resource.

Box 2: AcrPush -
AcrPush provides pull/push permissions only and meets the principle of least privilege.
Incorrect Answers:
AcrPull only allows pull permissions it does not allow push permissions.
▪
✐ Owner and Contributor allow pull/push permissions but does not meet the principle of least privilege.
Reference:
https://docs.microsoft.com/en-us/azure/container-registry/container-registry-authentication?tabs=azure-cli https://docs.microsoft.com/en-us/azure/container-registry/container-registry-roles?tabs=azure-cli

Community Discussion

Got this 4/29. I passed test, but scored poorly in third party integration questions. I went with Managed Identity and Contributor, and I think both are WRONG. I had not heard of ACR Push/Pull, so went with Contributor, but upon learning that ACR Push satisfies least privilege, that is probably the best answer. Table of privileges: https://

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docs.microsoft.com/en-us/azure/container-registry/container-registry-roles?tabs=azure-cli I suggest ACR Push is the correct permission level.

Correct. It is only service principal. acr-token: cannot be because the AD authentication requirement. The roles are RBAC but the identity is not AD managed Managed identity: Not an option because it is third party AcrPush includes AcrPull. I did not know that nuance and the choice made by Microsoft to do this

Got this on 16/03/23. Chosen Service Principal and AcrPush. Make sure to prepare for case study. I got city and lights case study. No Kubernetes, Search, Logic Apps questions for me.

Individual identity - no, you don't want to use somebody's username, when he left, service will stop working (saw this tens of times). Managed identity - yes that could work, but you're not sure if CI/CD is running on Azure resource. Repository scoped access token - the next question would be regarding Scope Map, but they are apparently asking about RBAC role. So the correct answer is Service Principal with AcrPush role, which will meet the least priviledge requirement.

on exam 02/23

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Question #146

You deploy an Azure App Service web app. You create an app registration for the app in Azure Active Directory (Azure AD) and Twitter.
The app must authenticate users and must use SSL for all communications. The app must use Twitter as the identity provider.
You need to validate the Azure AD request in the app code.
What should you validate?

A) ID token header
B) ID token signature (Correct Answer)
C) HTTP response code
D) Tenant ID

Explanation

Correct Answer:
B

Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-auth-aad-app?tabs=dotnet

Community Discussion

Selected Answer: B

To validate the Azure AD request in the app code when using Twitter as the identity provider, you should validate the ID token signature (option B). The ID token is a JSON Web Token (JWT) that contains claims about the user. It is signed by Azure AD using a private key, and the signature can be verified using the corresponding public key. Validating the ID token signature ensures that the token was issued by a trusted source and that it has not been tampered with in transit. Option A, validating the ID token header, is not sufficient for validating the entire ID token. The header only contains metadata about the token, such as the algorithm used for signing. Option C, validating the HTTP response code, is unrelated to validating the ID token. Option D, validating the tenant ID, is important for ensuring that the app is only accepting tokens from a trusted Azure AD tenant, but it does not ensure the integrity of the token itself.

Got it in exam 20/10/2022

Selected Answer: B

B https://docs.microsoft.com/en-us/azure/active-directory-b2c/tokens-overview#validation

Selected Answer: B

B. ID token signature

B is the correct answer https://docs.microsoft.com/en-us/azure/active-directory-b2c/tokens-overview#validation

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Question #147

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HOTSPOT
-

You are developing an Azure Static Web app that contains training materials for a tool company. Each tool's training material is contained in a static web page that is linked from the tool's publicly available description page.

A user must be authenticated using Azure AD prior to viewing training.

You need to ensure that the user can view training material pages after authentication.

How should you complete the configuration file? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

```
{
"  [routes / headers / responseOverrides / navigationFallback]  ": {
  "  [400 / 401 / 403 / 404]  ": {
    "redirect": "/auth/login/   ?post_l [add / azure / graph / microsoftonline]
    "statusCode":302 [orig / route / return / .referrer]
      }
    }
  }
```

Explanation

Correct Answer:

Answer Area

```
{
"  [ ▼ ]  ": {
```

routes
headers
responseOverrides
navigationFallback

```
"  [ ▼ ]  ": {
```

400
401
403
404

```
"redirect": "/auth/login/   ?post_l [ ▼ ]
```

add
azure
graph
microsoftonline

```
"statusCode":302 [ ▼ ]
```

orig
route
return
.referrer

```
    }
  }
}
```

Community Discussion

I think this should look like this (.referrer will be replaced with the URL of original request): "responseOverrides": { "401": { "statusCode": "302", "redirect": "/.auth/login/aad?post_login_redirect_uri=.referrer" } }

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Got it in the exam 7/03/23. Went with the given answer

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Question #148

SecExams

HOTSPOT
-

You are authoring a set of nested Azure Resource Manager templates to deploy Azure resources. You author an Azure Resource Manager template named mainTemplate.json that contains the following linked templates: linkedTemplate1.json, linkedTemplate2.json.

You add parameters to a parameters template file named mainTemplate.parameters,json. You save all templates on a local device in the C:\templates\ folder.

You have the following requirements:

• Store the templates in Azure for later deployment.
• Enable versioning of the templates.
• Manage access to the templates by using Azure RBAC.
• Ensure that users have read-only access to the templates.
• Allow users to deploy the templates.

You need to store the templates in Azure.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

```
az [ts create / storage account create / storage account update / blueprint artifact template create] \
  --name templateStore \
   --version "1.0" \
   --resource-group templatesRG \
   --location "eastus" \

  --template-file [mainTemplate.json / linkedTemplate1.json / linkedTemplate2.json / mainTemplate.parameters.json] "\
   "C:\templates\
    --tags Dept=HumanResources Environment=Production
```

Explanation

Correct Answer:

SecExams

Answer Area

```
az [ts create | storage account create | storage account update | blueprint artifact template create] \
  --name templateStore \
   --version "1.0" \
   --resource-group templatesRG \
   --location "eastus" \

  --template-file [mainTemplate.json | linkedTemplate1.json | linkedTemplate2.json | mainTemplate.parameters.json] "\
   "C:\templates\
    --tags Dept=HumanResources Environment=Production
```

Community Discussion

correct https://learn.microsoft.com/en-us/azure/azure-resource-manager/templates/template-specs-create-linked?tabs=azure-cli

This whole text is wrong. Please, ignore this answer

This whole text is wrong. Please, ignore this answer

This was on the exam (08/20/2023). Went with proposed. Scored 925

Because the code is not about creating a storage account. Pay attention to the part: --name TemplateStore

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Question #149

SecExams

HOTSPOT
-

You are developing a service where customers can report news events from a browser using Azure Web PubSub. The service is implemented as an Azure Function App that uses the JSON WebSocket subprotocol to receive news events.

You need to implement the bindings for the Azure Function App.

How should you configure the binding? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

```
{
  "bindings": [
      {
      "type": "  [ user | system | message | connected | webPubSubTrigger | webPubSubConnection ]  ",
      "direction": "in",
      "name": "data",
      "eventName": "message",
      "eventType": "  [ user | system | message | connected | webPubSubTrigger | webPubSubConnection ]  "
      }
  ]
}
```

Explanation

Correct Answer:

Answer Area

```
{
  "bindings": [
      {
      "type": "  [ ▼ ]  ",
                 user
                 system
                 message
                 connected
                 webPubSubTrigger
                 webPubSubConnection
      "direction": "in",
      "name": "data",
      "eventName": "message",
      "eventType": "  [ ▼ ]  "
                 user
                 system
                 message
                 connected
                 webPubSubTrigger
                 webPubSubConnection
        }
    ]
  }
```

Community Discussion

received 2023-17-04 went with given answer, score 926

Given answer is correct. https://learn.microsoft.com/en-us/azure/azure-web-pubsub/reference-functions-bindings?tabs=javascript

were all Qs from sec exams?

were all Qs from sec exams?

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what does eventType "user" do ?

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Question #150

SecExams

HOTSPOT
-

You are building a software-as-a-service (SaaS) application that analyzes DNA data that will run on Azure virtual machines (VMs) in an availability zone. The data is stored on managed disks attached to the VM. The performance of the analysis is determined by the speed of the disk attached to the VM.

You have the following requirements:

• The application must be able to quickly revert to the previous day's data if a systemic error is detected.
• The application must minimize downtime in the case of an Azure datacenter outage.

You need to provision the managed disk for the VM to maximize performance while meeting the requirements.

Which type of Azure Managed Disk should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Solution
Disk type	Premium SSD Standard SSD Standard HDD
Redundancy	Geo-redundant storage (GRS) Zone-redundant storage (ZRS) Locally-redundant storage (LRS)

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Explanation

Correct Answer:

Answer Area

Requirement	Solution
Disk type	Premium SSD
Redundancy	Geo-redundant storage (GRS)

Community Discussion

Wrong answer: Managed disk doesn't support GRS Ans: Premium SSD and ZRS They are asking for high performance workloads which is supported by Premium tier https://learn.microsoft.com/en-us/azure/virtual-machines/disks-types Also they are asking for zone redundancy (if datacenter goes down, NOT region outage). Also managed disk doesn't support GRS https://learn.microsoft.com/en-us/azure/virtual-machines/disks-redundancy

Azure managed disks offer two storage redundancy options, zone-redundant storage (ZRS), and locally-redundant storage. Ans: Premium SSD and ZRS https://learn.microsoft.com/en-us/azure/virtual-machines/disks-redundancy

I greed. Premium SSD, ZRS are correct answers

I greed. Premium SSD, ZRS are correct answers

I believe the VMs are not in the AZ-204 anymore

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Question #151

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HOTSPOT
-

You are developing an application that includes two Docker containers.

The application must meet the following requirements:

• The containers must not run as root.
• The containers must be deployed to Azure Container Instances by using a YAML file.
• The containers must share a lifecycle, resources, local network, and storage volume.
• The storage volume must persist through container crashes.
• The storage volume must be deployed on stop or restart of the containers.

You need to configure Azure Container Instances for the application.

Which configuration values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Configuration setting	Configuration value
Shared lifecycle	Container group Container image Service endpoint Resource group
Storage volume	Azure file share Secret Empty directory Cloned Git repo

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Explanation

Correct Answer:

Answer Area

Configuration setting	Configuration value
Shared lifecycle	Container group / Container image / Service endpoint / Resource group
Storage volume	Azure file share / Secret / Empty directory / Cloned Git repo

Community Discussion

Ans: Container group, EmptyDir Container group is the only logical answer that can have shared lifecycle https://learn.microsoft.com/en-us/azure/container-instances/container-instances-container-groups?source=recommendations#what-is-a-container-group Azure files need root permission Secret is for secrets and read-only EmtyDir can persist through crash and redeployed on stop and restart https://learn.microsoft.com/en-us/azure/container-instances/container-instances-volume-emptydir#emptydir-volume Cloned Git Repo also does the job but it needs more details like Git URL and stuff which are not mentioned to be available in the question

correct, in 2023Mar24, score:904/1000

correct, in 2023Mar24, score:904/1000

Chat GPT : Container Group, Azure fileshare

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Data in an emptyDir volume is persisted through container crashes. Containers that are restarted, however, are not guaranteed to persist the data in an emptyDir volume. If you stop a container group, the emptyDir volume is not persisted.

Question #152

You develop Azure Durable Functions to manage vehicle loans.

The loan process includes multiple actions that must be run in a specified order. One of the actions includes a customer credit check process, which may require multiple days to process.

You need to implement Azure Durable Functions for the loan process.

Which Azure Durable Functions type should you use?

A) orchestrator (Correct Answer)
B) client
C) entity
D) activity

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: A

An orchestrator function is the appropriate type of Azure Durable Function to use in this scenario, because it allows you to define the overall flow of the loan process and call other functions or activities as needed. The credit check process can be implemented as a separate activity function, which can be called by the orchestrator function and run in parallel with other actions in the loan process. Entity functions are designed for use cases where you need to perform operations on a shared piece of state in a reliable and atomic way, such as a distributed queue or counter. In this scenario, it does not appear that there is a need to use entity functions. There is no such thing as a "client" function

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in Azure Durable Functions. "Activity" functions are called by orchestrator functions to perform specific tasks, but the orchestrator function is the one that defines the overall flow of the loan process, so it is the correct answer in this case.

received 2023-04-17 went given answer, score 926

received 2023-04-17 went given answer, score 926

Selected Answer: A

If we can only choose one then A, would also include D if possible

Selected Answer: A

The key is "specified order" so A. Orchestrator

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Question #153

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HOTSPOT
-

You are developing an Azure Function app.

All functions in the app meet the following requirements:

• Run until either a successful run or until 10 run attempts occur.
• Ensure that there are at least 20 seconds between attempts for up to 15 minutes.

You need to configure the host.json file.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

```
{
"  [ retry | healthMonitor | singleton ]  ": {
"strategy": "  [ exponentialBackoff | counterThreshold | fixedDelay ]  ",
  "  [ maxRetryCount | healthCheckInterval | healthCheckThreshold ]  ": 10,
    "minimumInterval": "00:00:20",
    "maximumInterval": "00:15:00"
  }
}
```

Explanation

Correct Answer:

SecExams

Answer Area

```
{
"  [retry | healthMonitor | singleton]  ": {
"strategy": "  [exponentialBackoff | counterThreshold | fixedDelay]  ",
  "  [maxRetryCount | healthCheckInterval | healthCheckThreshold]  ": 10,
    "minimumInterval": "00:00:20",
    "maximumInterval": "00:15:00"
  }
}
```

Community Discussion

Answer seems correct. Did some research about exponential backoff: The "exponential backoff" retry strategy is a technique for retrying failed operations in a manner that avoids overloading the system being accessed. It works by increasing the amount of time that is waited between each retry attempt, using an exponential function to calculate the wait time. For example, with a coefficient of 2.0 and an initial retry interval of 1 second, the wait times between retries might be 1 second, 2 seconds, 4 seconds, 8 seconds, and so on. This allows the system being accessed to recover from any failures or load spikes before the next retry attempt is made, reducing the likelihood of further failures.

Received this in my exam today (22/02/2023). Selected retry, exponentialBackoff, and maxRetry. Score 927.

Had this question today: 2023-07-26

Got this in exam today (5 April 2023)

Where is then the coefficient argument in the code? or is this an implicit value?

Question #154

You develop Azure Web Apps for a commercial diving company. Regulations require that all divers fill out a health questionnaire every 15 days after each diving job starts.

You need to configure the Azure Web Apps so that the instance count scales up when divers are filling out the questionnaire and scales down after they are complete.

You need to configure autoscaling.

What are two possible auto scaling configurations to achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) Recurrence profile
B) CPU usage-based autoscaling
C) Fixed date profile (Correct Answer)
D) Predictive autoscaling (Correct Answer)

Explanation

Correct Answer:
CD

Community Discussion

SecExams

Selected Answer: BD

I think it should B. CPU usage-based autoscaling D. Predictive autoscaling A. Recurrence profile is used to schedule the scaling of resources at specific times or dates, but it does not meet the requirement to scale up when divers are filling out the questionnaire and scale down after they are complete. It only triggers scaling based on a set schedule, not based on actual usage. C. Fixed date profile is used to specify the number of instances at a specific date and time, but it also does not meet the requirement to dynamically scale based on actual usage. It only sets a fixed number of instances and does not adjust based on changing workloads.

Selected Answer: AC

I think it should be A and C instead because: Options "B. CPU usage-based autoscaling" and "D. Predictive autoscaling" are not relevant to this scenario, because they are based on resource utilization or predictive analytics rather than a fixed schedule.

Hope don't have this question in my exam.

You have many drivers and they dont always fall on same 15day cycle? correct? I think B and D is right also because they mentioned "scaled UP" not scale "OUT" which also validates further its Azure web apps on a VM

You have many drivers and they dont always fall on same 15day cycle? correct? I think B and D is right also because they mentioned "scaled UP" not scale "OUT" which also validates further its Azure web apps on a VM

SecExams

Question #155

HOTSPOT

-

You are developing an application that monitors data added to an Azure Blob storage account.

You need to process each change made to the storage account.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
var changeFeedClient = new BlobServiceClient("…").GetChangeFeedClient();
var x = default(string);
while (true)
{
    var changeFeed = changeFeedClient. [                    ] ;
                                       GetChanges()
                                       GetChangesAsync()
                                       GetChanges(x).AsPages()
                                       GetChanges(x).GetEnumerator()

    foreach (var c in changeFeed)
    {
        x = c. [                    ] ;
               ContinuationToken
               GetRawResponse().ReasonPhrase
               Values.Max(x = > x.EventTime).ToString()
               Values.Min(x = > x.EventTime).ToString()

        ProcessChanges(c.Values);

    }
}
```

Explanation

Correct Answer:

Answer Area

```
var changeFeedClient = new BlobServiceClient("…").GetChangeFeedClient();
var x = default(string);
while (true)
{
    var changeFeed = changeFeedClient. [GetChanges() / GetChangesAsync() / GetChanges(x).AsPages() / GetChanges(x).GetEnumerator()] ;

    foreach (var c in changeFeed)
    {
        x = c. [ContinuationToken / GetRawResponse().ReasonPhrase / Values.Max(x => x.EventTime).ToString() / Values.Min(x => x.EventTime).ToString()] ;

        ProcessChanges(c.Values);
      }
  }
```

Community Discussion

I've tried the code in VS. Here's some thoughts: 1. box: - GetChanges() - wrong - var c in the foreach would be BlobChangeFeedEvent which doesn't contain Values property used in ProcessChanges(c.Values) line below - GetChangesAsync - wrong - code won't compile because it would require await foreach loop instead - GetChanges(x).AsPages() - correct - it's the only option to make this code even compile - GetChanges(x).GetEnumerator() - wrong - you cannot use IEnumerator type as foreach source 2. box: - x = c.ContinuationToken - right - variable x was used as continuationToken parameter in changeFeedClient.GetChanges(x).AsPages() above - c.GetRawResponse().ReasonPhrase - wrong - that does not make sense to use this value as continuation token - x = c.Values.Min - wrong - continuation token is a number not date - x = c.Values.Max - wrong - as above So to sum up 1. changeFeedClient.GetChanges(x).AsPages() 2. x = c.ContinuationToken; You can find more about Continuation Token here: https://jessehouwing.net/azure-devops-accessing-apis-with-large-volumes-of-data/

you are right... 1. changeFeedClient.GetChanges(x).AsPages() -> returns an IEnumerable<Page<BlobChangeFeedEvent>> ... when you loop through these pages "Page<BlobChangeFeedEvent>" you will get the options "page.ContinuationToken" and page.Values which are used in this example 100% Correct... found the code here https://github.com/Azure/azure-sdk-for-net/tree/main/sdk/storage/Azure.Storage.Blobs.ChangeFeed#resume-with-continuationtoken

you are right... 1. changeFeedClient.GetChanges(x).AsPages() -> returns an IEnumerable<Page<BlobChangeFeedEvent>> ... when you loop through these pages "Page<BlobChangeFeedEvent>" you will get the options "page.ContinuationToken" and page.Values which are used in this example 100% Correct... found the code here https://github.com/Azure/azure-sdk-for-net/tree/main/sdk/storage/Azure.Storage.Blobs.ChangeFeed#resume-with-continuationtoken

var x = default(string); so, x is string ContinuationToken is not string

var x = default(string); so, x is string ContinuationToken is not string

SecExams

Question #156

SecExams

HOTSPOT
-

You develop an application that sells AI generated images based on user input. You recently started a marketing campaign that displays unique ads every second day.

Sales data is stored in Azure Cosmos DB with the date of each sale being stored in a property named 'whenFinished'.

The marketing department requires a view that shows the number of sales for each unique ad.
You need to implement the query for the view.

How should you complete the query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Explanation

Correct Answer:

Community Discussion

Correct! Can't be DateTimePart as it takes two args only, see https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/query/date-time-functions

This question was in today's exam on 10-June-2023

On exam 9 Nov 2023, went with given answer, socre 865. Case Study: Farmers and Distributors

SecExams

Given answers Count, DateTimeBin are correct answers as per MS docs DateTimebin takes 3 and 4 parameters but DateTimepart takes only 2 args https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/query/date-time-functions

You are right good sir I stand corrected.

SecExams

Question #157

HOTSPOT

-

You implement an Azure solution to include Azure Cosmos DB, the latest Azure Cosmos DB SDK, and the Core (SQL) API. You also implement a change feed processor on a new container instance by using the Azure Functions trigger for Azure Cosmos DB.

A large batch of documents continues to fail when reading one of the documents in the batch. The same batch of documents is continuously retried by the triggered function and a new batch of documents must be read.

You need to implement the change feed processor to read the documents.

Which feature should you implement? To answer, select the appropriate features in the answer area.

NOTE: Each correct selection is worth one point.

Requirement	Feature
Read a new batch of documents while keeping track of the failing batch of documents.	Lease container Dead-letter queue Life-cycle notifications Change feed estimator
Handle errors in the change feed processor.	Lease container Dead-letter queue Life-cycle notifications Change feed estimator

Explanation

Correct Answer:

SecExams

Requirement	Feature
Read a new batch of documents while keeping track of the failing batch of documents.	Lease container Dead-letter queue Life-cycle notifications Change feed estimator
Handle errors in the change feed processor.	Lease container Dead-letter queue Life-cycle notifications Change feed estimator

Community Discussion

Got this on 16/03/23. Went with proposed solution. Make sure to prepare for case study. I got city and lights case study. No Kubernetes, Search, Logic Apps questions for me.

I agree with the answer! 1. Change feed estimators monitor change feed processors' progress 2. Dead-letter queues handle errors and are able to monitor failed attempts, require failed attempts and even trigger a follow-up action (remediation or response)

Agreed. This was on the exam (08/20/2023). Scored 925 Change feed estimator Dead-letter queue

Agreed. This was on the exam (08/20/2023). Scored 925 Change feed estimator Dead-letter queue

should be vice versa

SecExams

Question #158

You are developing an application to store business-critical data in Azure Blob storage.

The application must meet the following requirements:

• Data must not be modified or deleted for a user-specified interval.
• Data must be protected from overwrites and deletes.
• Data must be written once and allowed to be read many times.

You need to protect the data in the Azure Blob storage account.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Configure a time-based retention policy for the storage account. (Correct Answer)
B) Create an account shared-access signature (SAS).
C) Enable the blob change feed for the storage account.
D) Enable version-level immutability support for the storage account.
E) Enable point-in-time restore for containers in the storage account.
F) Create a service shared-access signature (SAS). (Correct Answer)

Explanation

Correct Answer:
AF

Community Discussion

I think the answer should be AD A. Configure a time-based retention policy for the storage account - A time-based retention policy stores blob data in a Write-Once, Read-Many (WORM) format for a specified interval. When a time-based retention policy is set, clients can create and read blobs, but can't modify or delete them. After the retention interval has expired, blobs can be deleted but not overwritten. https://

SecExams

learn.microsoft.com/en-us/azure/storage/blobs/immutable-time-based-retention-policy-overview D. Before you can apply a time-based retention policy to a blob version, you must enable support for version-level immutability. https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-policy-configure-version-scope?tabs=azure-portal

received 2023-04-17 went with above answer, score 926

received 2023-04-17 went with above answer, score 926

I Agree with you A and D are correct answers

I Agree with you A and D are correct answers

Question #159

You are updating an application that stores data on Azure and uses Azure Cosmos DB for storage. The application stores data in multiple documents associated with a single username.

The application requires the ability to update multiple documents for a username in a single ACID operation.

You need to configure Azure Cosmos DB.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Create a collection sharded on username to store documents.
B) Configure Azure Cosmos DB to use the Gremlin API.
C) Create an unsharded collection to store documents. (Correct Answer)
D) Configure Azure Cosmos DB to use the MongoDB API. (Correct Answer)

Explanation

Correct Answer:
CD

Community Discussion

Selected Answer: CD

Agreed! To update multiple documents for a username in a single ACID operation in Azure Cosmos DB, you need to ensure that the documents are stored in the same logical partition. To do this, you should perform the following actions: Create an unsharded collection to store documents. This will ensure that all documents are stored in the same logical partition. Configure Azure Cosmos DB to use the MongoDB API. The MongoDB API supports multi-document ACID transactions, which allow you to update multiple documents in a single atomic operation.

Selected Answer: CD

To update multiple documents for a username in a single ACID operation in Azure Cosmos DB, you should perform the following actions: C. Create an unsharded collection to store documents, since sharded collections do not support multi-document transactions. D. Configure Azure Cosmos DB to use the MongoDB API, since it is the only API that supports multi-document transactions. Therefore, the correct actions are C and D.

Got this in exam today (5 April 2023)

CD are correct update multiple documents for a username in a single ACID operation.

https://learn.microsoft.com/en-us/azure/cosmos-db/mongodb/use-multi-document-transactions#requirements

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Question #160

You develop Azure solutions.

You must connect to a No-SQL globally-distributed database by using the .NET API.

You need to create an object to configure and execute requests in the database.

Which code segment should you use?

A) database_name = 'MyDatabase'
database = client.create_database_if_not_exists(id=database_name)
B) client = CosmosClient(endpoint, key) (Correct Answer)
C) container_name = 'MyContainer'
container = database.create_container_if_not_exists(
id=container_name, partition_key=PartitionKey(path="/lastName"), offer_throughput=400)

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

CosmosClient has to be created before you can do option A and C to create databases and execute requests. client = CosmosClient(endpoint, key) database_name = 'MyDatabase' database = client.create_database_if_not_exists(id=database_name) container_name = 'MyContainer' container = database.create_container_if_not_exists(id=container_name, partition_key=PartitionKey(path="/lastName"), offer_throughput=400)

It doesn't matter. Question is asking about .NET API. A and C are not .NET code

It doesn't matter. Question is asking about .NET API. A and C are not .NET code

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The correct code segment to configure and execute requests in the No-SQL globally-distributed database by using the .NET API would be option B: client = CosmosClient(endpoint, key) This code initializes the CosmosClient class and connects to the database with the specified endpoint and key parameters. This is the first step in creating a client to communicate with the Azure Cosmos DB. Option A shows how to create a database, and option C shows how to create a container inside a database, but they do not create the client object that is needed to communicate with the database. Therefore, they are not correct options for this scenario.

B is only one .NET code here. So, B is a correct answer

SecExams

Question #161

HOTSPOT

-

You are developing an online game that allows players to vote for their favorite photo that illustrates a word. The game is built by using Azure Functions and uses durable entities to track the vote count.

The voting window is 30 seconds. You must minimize latency.

You need to implement the Azure Function for voting.

How should you complete the code? To answer, select the appropriate options in the answer area.

Answer Area

```
[FunctionName("Vote")]
public static async Task<HttpResponseMessage> Run(
  [HttpTrigger("POST", Route = "pic/{id}")] HttpRequestMessage req,
  [                                        ] c,
    CallEntityAsync
    SignalEntityAsync
    [DurableClient] IDurableEntityClient
    [DurableClient] IDurableOrchestrationClient
  string id)
{
  var eid = new EntityId("pic", id);
  await c.[                                        ](eid, "vote");
    CallEntityAsync
    SignalEntityAsync
    [DurableClient] IDurableEntityClient
    [DurableClient] IDurableOrchestrationClient

  return req.CreateResponse(HttpStatusCode.OK);
}
```

SecExams

Explanation

Correct Answer:

Answer Area

```
[FunctionName("Vote")]
public static async Task<HttpResponseMessage> Run(
  [HttpTrigger("POST", Route = "pic/{id}")] HttpRequestMessage req,
  [ ▼ ]  c,
    CallEntityAsync
    SignalEntityAsync
    [DurableClient] IDurableEntityClient
    [DurableClient] IDurableOrchestrationClient
  string id)
{
  var eid = new EntityId("pic", id);
  await c. [ ▼ ] (eid, "vote");
    CallEntityAsync
    SignalEntityAsync
    [DurableClient] IDurableEntityClient
    [DurableClient] IDurableOrchestrationClient
  return req.CreateResponse(HttpStatusCode.OK);
}
```

Community Discussion

Answer is correct: https://learn.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-dotnet-entities

Got this today. Went with answer here. Score 927

Got this today. Went with answer here. Score 927

IDurableEntityClient is correct to works with entities. Signal is used for 1-way Call would be used for 2-way

This seems to be a new question. It's not here last month. Will exam next week

SecExams

Question #162

You develop a web application that provides access to legal documents that are stored on Azure Blob Storage with version-level immutability policies. Documents are protected with both time-based policies and legal hold policies. All time-based retention policies have the AllowProtectedAppendWrites property enabled.

You have a requirement to prevent the user from attempting to perform operations that would fail only when a legal hold is in effect and when all other policies are expired.

You need to meet the requirement.

Which two operations should you prevent? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) adding data to documents
B) deleting documents (Correct Answer)
C) creating documents
D) overwriting existing documents (Correct Answer)

Explanation

Correct Answer:
BD

Community Discussion

The legal hold policies prevent the deletion of the legal documents that are stored on Azure Blob Storage, but they do not prevent other types of operations such as read, write, or update. Therefore, you need to prevent the following two operations that would fail only when a legal hold is in effect and when all other policies are expired: Delete operation: When a legal hold is in effect and all other policies are expired, attempting to delete the document will fail. Therefore, you should prevent the user from attempting to

delete a document. Overwrite operation: When a legal hold is in effect and all other policies are expired, attempting to overwrite the document with a new version will fail. Therefore, you should prevent the user from attempting to overwrite a document with a new version. By preventing these two operations, you can ensure that the legal documents are not accidentally deleted or overwritten when they are protected by legal hold policies. CHatgpt answer. Is this correct?

This was on the exam (July 2023). Went with BD. Scored 917

I don't really understand this question

On exam 3-Nov-2023. Wend with proposed answer - 932/1000. B & D

b,d IS CORRECT

SecExams

Question #163

HOTSPOT

-

You provisioned an Azure Cosmos DB for NoSQL account named account1 with the default consistency level.

You plan to configure the consistency level on a per request basis. The level needs to be set for consistent prefix for read and write operations to account1.

You need to identify the resulting consistency level for read and write operations.

Which levels should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Operation type	Resulting consistency level
Read operations	strong session consistent prefix
Write operations	strong session consistent prefix

SecExams

Explanation

Correct Answer:

Answer Area

Operation type	Resulting consistency level
Read operations	strong session consistent prefix
Write operations	strong session consistent prefix

Community Discussion

Still more useful than yours :)

Still more useful than yours :)

Still more useful than yours :)

Still more useful than yours :)

Just passed the exam 26/04/2023. All the questions were from Exam topics. Got 970 marks!

SecExams

Question #164

DRAG DROP

-

You are developing an application to store millions of images in Azure blob storage. The images are uploaded to an Azure blob storage container named companyimages contained in an Azure blob storage account named companymedia. The stored images are uploaded with multiple blob index tags across multiple blobs in the container.

You must find all blobs whose tags match a search expression in the container. The search expression must evaluate an index tag named status with a value of final.

You need to construct the GET method request URI.

How should you complete the URI? To answer, drag the appropriate parameters to the correct request URI targets. Each parameter may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

Explanation

Correct Answer:

Community Discussion

Answer is correct!

Just for information: I just had this question on my AZ204 exam - 16-jun-2023. I barely made it (with only 767 points) so I can't inform anyony if this answer is correct or not, just stating that this is an actual exam question.

Got this question on the exam at 2023/05/31

Correct

Do you have contributor access? what other websites did you study from?

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Question #165

HOTSPOT

-

You have an App Service plan named asp1 based on the Free pricing tier.

You plan to use asp1 to implement an Azure Function app with a queue trigger. Your solution must minimize cost.

You need to identify the configuration options that will meet the requirements.

Which value should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Configuration option	Value
Azure App Service feature	Always On Managed identity Continuous deployment
Azure App Service pricing tier	Basic Shared Standard

Explanation

Correct Answer:

Answer Area

Configuration option	Value
Azure App Service feature	Always On Managed identity Continuous deployment
Azure App Service pricing tier	Basic Shared Standard

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Community Discussion

1. Always on If you run on an App Service plan, you should enable the Always on setting so that your function app runs correctly. On an App Service plan, the functions runtime goes idle after a few minutes of inactivity, so only HTTP triggers will "wake up" your functions. The Always on setting is available only on an App Service plan. On a Consumption plan, the platform activates function apps automatically. Even with Always On enabled, the execution timeout for individual functions is controlled by the functionTimeout setting in the host.json project file. 2. Basic The dedicated App Service plans supported for function app hosting include Basic, Standard, Premium, and Isolated SKUs. Free and Shared tier App Service plans aren't supported by Azure Functions. Basic is the correct answer since it is cheaper than Standard. https://learn.microsoft.com/en-us/azure/azure-functions/dedicated-plan

Always On and Continuous Deployment are not supported on the Free tier plans. Answer: Managed Identity & Basic

1. Always on 2. Basic

Answer is correct. https://learn.microsoft.com/en-us/azure/azure-functions/dedicated-plan

It was on my exam today (2023-09-26) I went with the secexams answer - score 850

Question #166

DRAG DROP

-

You are developing several microservices to run on Azure Container Apps.

The microservices must allow HTTPS access by using a custom domain.

You need to configure the custom domain in Azure Container Apps.

In which order should you perform the actions? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Explanation

Correct Answer:

SecExams

Answer Area

Enable ingress.

Add the custom domain name.

Validate the custom domain name.

Bind the certificate.

Add DNS records to the domain provider.

Community Discussion

1. Enable ingress: Enable ingress for the Azure Container Apps. This allows external traffic to reach the microservices. 2. Add the custom domain name: Add the custom domain name that you want to use for HTTPS access to your Azure Container Apps. 3. Add DNS records to the domain provider: After adding the custom domain name in Azure Container Apps, you need to add the required DNS records (such as CNAME or A records) to your domain provider's DNS settings. This step is essential for directing traffic from the custom domain to your Azure Container Apps. 4. Validate the custom domain name (after adding the dns records to the provider): After adding the DNS records to the domain provider, you need to validate the custom domain name in Azure Container Apps. This step ensures that the DNS records are correctly configured and the domain is pointing to your Azure Container Apps. 5. Bind the certificate (only enabled after finishing the validation): Once the custom domain name is validated, you can bind the SSL/TLS certificate to enable HTTPS access for the custom domain.

from my understanding of https://learn.microsoft.com/en-us/azure/container-apps/custom-domains-certificates 1) Enable Ingress == step 2 2) Add the custom domain name == step 4 3) Bind certificate == steps 5 to 11 4) Add DNS records to the domain provider == 12 to 14 5) Validate the custom domain name == step 15 Using similar questions as a basis, I'm assuming that "Add the custom.." means click the button and not step 16 "Once validation succeeds, select the Add button" Not very clear.

Latest correct answer based on this link https://learn.microsoft.com/en-us/azure/container-apps/custom-domains-certificates Please look at No.2, No. 4, No.7, No. 10, No.14 --> This is the correct order. Note: No. 15 is validating the DNS not the CDN. Correct answer. 1. Enable Ingress 2. Add the custom domain name 3. Bind certificate 4. Validate the custom domain name 5. Add DNS records to the domain provider

The correct answer is: 1. Enable ingress 2. Add the custom domain name 3. Bind the certificate 4. Add DNS records to the domain provider 5. Validate the custom domain

SecExams

name Explanation: -Enable ingress: This is the first step as it allows HTTP access to your container app. -Add the custom domain name: After enabling ingress, you can add the custom domain name to your container app. -Bind the certificate: Once the custom domain name is added, you can bind the certificate to it. This can be a certificate you upload or a free managed certificate provided by Azure. -Add DNS records to the domain provider: After binding the certificate, you need to add DNS records to your domain provider. This points the domain to your container app and verifies that you own it. -Validate the custom domain name: Finally, you validate the custom domain name. This ensures that the DNS records have been correctly configured and that the domain correctly points to your container app.

Occurs to me that steps 5-11 adding the cert maybe irrelevant and binding the cert is actually the last step, based on what you click in the UI.. so I'd revise that to: 1) Enable Ingress 2) Add the custom domain name 3) Add DNS records to the domain provider 4) Validate the custom domain name 5) Bind certificate, Still not clear!

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Question #167

You are developing several microservices to run on Azure Container Apps. External HTTP ingress traffic has been enabled for the microservices.

The microservices must be deployed to the same virtual network and write logs to the same Log Analytics workspace.

You need to deploy the microservices.

What should you do?

A) Enable single revision mode.
B) Use a separate environment for each container.
C) Use a private container registry image and single image for all containers.
D) Use a single environment for all containers. (Correct Answer)
E) Enable multiple revision mode.

Explanation

Correct Answer:
D

Community Discussion

The correct answer should be D

Selected Answer: D

https://learn.microsoft.com/en-us/azure/container-apps/environment#single-environment

That is what I thought as well. The single revision would not solve anything here.

That is what I thought as well. The single revision would not solve anything here.

D. Use a single environment for all containers. Explanation: Using a single environment for all containers can help in managing multiple microservices within the same context, which may include deploying them to the same virtual network and configuring them to write logs to the same Log Analytics workspace. The concept of "environment" in this context could refer to a shared Azure Container Apps instance or a broader resource group or Azure region where the microservices are deployed and managed together.4

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Question #168

HOTSPOT

-

You develop two Python scripts to process data.

The Python scripts must be deployed to two, separate Linux containers running in an Azure Container Instance container group. The containers must access external data by using the Server Message Block (SMB) protocol. Containers in the container group must run only once.

You need to configure the Azure Container Instance.

Which configuration value should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

Configuration Setting	Configuration Value
External data volume	Secret Empty directory Cloned git repo Azure file share
Container restart policy	Never Always OnFailure

Explanation

Correct Answer:

Answer Area

Configuration Setting	Configuration Value
External data volume	Secret Empty directory Cloned git repo Azure file share
Container restart policy	Never Always OnFailure

Community Discussion

I believe the answer is correct. Azure file share: https://learn.microsoft.com/en-us/azure/storage/files/files-smb-protocol?tabs=azure-portal

Azure File Share is the only option that supports SMB

Answer is correct.

Is not Empty Directory, but Azure File Share.

Whyyyy??????????????

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Question #169

SecExams

HOTSPOT
-

You are developing a static website hosted on Azure Blob Storage. You create a storage account and enable static website hosting.

The website must support the following requirements:

• Custom domain name
• Custom header values for all responses
• Custom SSL certificate

You need to implement the static website.

What should you configure? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

Requirement	Configuration Value
Custom domain name	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)
Custom header values	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)
Custom SSL certificate	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)

SecExams

Explanation

Correct Answer:

Answer Area

Requirement	Configuration Value
Custom domain name	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)
Custom header values	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)
Custom SSL certificate	Blob index tags Azure Content Delivery Network (CDN) Cross-Origin Resource Sharing (CORS) Azure Storage Service Encryption (SSE)

SecExams

Community Discussion

Answer seems correct. "Static websites have some limitations. For example, If you want to configure headers, you'll have to use Azure Content Delivery Network (Azure CDN)" and " To enable HTTPS, you'll have to use Azure CDN because Azure Storage doesn't yet natively support HTTPS with custom domains" https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-static-website

On exam 9 Nov 2023, went with given answer, socre 865. Case Study: Farmers and Distributors

"Farmers and Distribuor" is a new one (not present here on SecExams).

"Farmers and Distribuor" is a new one (not present here on SecExams).

The answers are correct. The most appropriate answer is Azure CDN, as it can fulfill all three requirements: custom domain name, custom header values, and a custom SSL certificate.

Question #170

You are developing an inventory tracking solution. The solution includes an Azure Function app containing multiple functions triggered by Azure Cosmos DB. You plan to deploy the solution to multiple Azure regions.

The solution must meet the following requirements:

• Item results from Azure Cosmos DS must return the most recent committed version of an item.
• Items written to Azure Cosmos DB must provide ordering guarantees.

You need to configure the consistency level for the Azure Cosmos DB deployments.

Which consistency level should you use?

A) consistent prefix
B) eventual
C) bounded staleness
D) strong (Correct Answer)
E) session

Explanation

Correct Answer:
D

Community Discussion

I believe its C 'bounded staleness' Because strong consistency is not supported for multiple regions

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Strong consistency offers a linearizability guarantee. Linearizability refers to serving requests concurrently. The reads are guaranteed to return the most recent committed version of an item. A client never sees an uncommitted or partial write. Users are always guaranteed to read the latest committed write. Source: https://learn.microsoft.com/en-us/azure/cosmos-db/consistency-levels

Azure Cosmos DB accounts configured with multiple write regions can't be configured for strong consistency as it isn't possible for a distributed system to provide an RPO of zero and an RTO of zero https://learn.microsoft.com/en-us/azure/cosmos-db/consistency-levels

Azure Cosmos DB accounts configured with multiple write regions can't be configured for strong consistency as it isn't possible for a distributed system to provide an RPO of zero and an RTO of zero https://learn.microsoft.com/en-us/azure/cosmos-db/consistency-levels

but the question didn't mention that there will be multiple WRITE regions ?

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Question #171

SecExams

HOTSPOT
-

You are developing an application that runs in several customer Azure Kubernetes Service clusters. Within each cluster, a pod runs that collects performance data to be analyzed later. A large amount of data is collected so saving latency must be minimized.

The performance data must be stored so that pod restarts do not impact the stored data. Write latency should be minimized.

You need to configure blob storage.

How should you complete the YAML configuration? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

```
apiVersion: storage.k8s.io/v1
kind: [ ]
metadata:
  name: data-store
provisioner: kubernetes.io/[ ]
parameters:
  skuName: Premium_LRS
reclaimPolicy: [ ]
```

kind:
- PodStorage
- StorageClass
- PersistentVolume
- PersistentVolumeClaim

provisioner: kubernetes.io/
- azure-disk
- azure-file
- portworx-volume
- scaleio

reclaimPolicy:
- local
- retain
- delete

Explanation

Correct Answer:

SecExams

Answer Area

```
apiVersion: storage.k8s.io/v1
kind:
```

- PodStorage
- StorageClass
- PersistentVolume
- PersistentVolumeClaim

```
metadata:
  name: data-store
provisioner: kubernetes.io/
```

- azure-disk
- azure-file
- portworx-volume
- scaleio

```
parameters:

  skuName: Premium_LRS
reclaimPolicy:
```

- local
- retain
- delete

SecExams

Community Discussion

Thanks for mentioning, so this question is definitely not out of scope! In fact, I don't even believe "scope" is in Microsoft's dictionary

Thanks for mentioning, so this question is definitely not out of scope! In fact, I don't even believe "scope" is in Microsoft's dictionary

got in 28/09/23 , totally out of scope

Sadly got this question 08/17/23 in the exam

Out of scope. Suggested answer seems correct. Ref: https://learn.microsoft.com/en-us/azure/aks/azure-csi-disk-storage-provision https://kubernetes.io/docs/concepts/storage/storage-classes/#azure-disk Ref azure-file https://learn.microsoft.com/en-us/azure/aks/azure-csi-files-storage-provision#create-a-storage-class (Create a storage class) https://kubernetes.io/docs/concepts/storage/storage-classes/#azure-file Ref PodStorage / Persistent Volume / PersistentVolumeClaim https://kubernetes.io/docs/tasks/configure-pod-container/configure-persistent-volume-storage/ Ref portworx-volume https://docs.portworx.com/portworx-enterprise/operations/operate-kubernetes/storage-operations/kubernetes-storage-101/volumes Ref Reclaim Policy https://kubernetes.io/docs/concepts/storage/storage-classes/#reclaim-policy

SecExams

Question #172

SecExams

HOTSPOT
-

Case study
-

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study
-
To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background
-

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VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment

-

Corporate website

-

The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

Retail Store Locations

-

The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements

-

The application components must meet the following requirements:

Corporate website

-

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• Secure the website by using SSL.
• Minimize costs for data storage and hosting.
• Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
• Distribute the website content globally for local use.
• Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
• The website must have 99.95 percent uptime.

Retail store locations
-

• Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
• Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services
-

• Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
• Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services
-

The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to
include read-only access to the data.

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Security
-

• All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
• Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues
-

Retail Store Locations
-

• You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
• Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling.

You need to implement the delivery service telemetry data.

How should you configure the solution? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Azure Cosmos DB	Value
API	Core (SQL) Gremlin Table MongoDB
Partition Key	Item id Vehicle license plate Vehicle package capacity Vehicle location coordinates

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Explanation

Correct Answer:

Answer Area

Azure Cosmos DB	Value
API	Core (SQL) Gremlin Table MongoDB
Partition Key	Item id Vehicle license plate Vehicle package capacity Vehicle location coordinates

Community Discussion

API: "Core (SQL)" Partition Key: "Item id" See: https://learn.microsoft.com/en-us/azure/cosmos-db/partitioning-overview#use-item-id-as-the-partition-key

On exam 3-Nov-2023. Went with most-voted answer - 932/1000: 1) Core SQL 2) Item Id Note: all 11 Qs from VanArsdel case study were on Exam.

Why item.id is not used for Partition Key?

This should be Core(SQL) and Partition Key (item.id) i belive ?

Why can I see only 1 question here is it because I dont have contributors access?

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Question #173

HOTSPOT

-

You are developing several microservices to run on Azure Container Apps. External HTTP ingress traffic has been enabled for the microservices.

A deployed microservice must be updated to allow users to test new features. You have the following requirements:

• Enable and maintain a single URL for the updated microservice to provide to test users.
• Update the microservice that corresponds to the current microservice version.

You need to configure Azure Container Apps.

Which features should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Feature
Single URL for test users	
Current microservice activation	Revision label Revision mode Container image Container registry
Current microservice activation	Revision label Revision mode Container image Container registry

SecExams

Explanation

Correct Answer:

Answer Area

Requirement	Feature
Single URL for test users	Revision label / Revision mode / Container image / Container registry
Current microservice activation	Revision label / Revision mode / Container image / Container registry

Community Discussion

1. Revision Label Labels are useful for testing new revisions. For example, when you want to give access to a set of test users, you can give them the label's URL. Then when you want to move your users to a different revision, you can move the label to that revision. 2. Revision Mode: The revision mode controls whether only a single revision or multiple revisions of your container app can be simultaneously active. You can set your app's revision mode from your container app's Revision management page in the Azure portal, using Azure CLI commands, or in the ARM template. https://learn.microsoft.com/en-us/azure/container-apps/revisions

Correct. Revision labels are most useful when the app is in multiple revision mode. Revision mode controls whether only a single revision or multiple revisions of your container app can be simultaneously active.

Question in my exam 22sept 2023

1. Revision Label: For container apps with external HTTP traffic, labels are a portable means to direct traffic to specific revisions. A label provides a unique URL that you can use to route traffic to the revision that the label is assigned. 2. Revision Mode The revision mode controls whether only a single revision or multiple revisions of your

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container app can be simultaneously active. https://learn.microsoft.com/en-us/azure/container-apps/revisions

me too, today

Question #174

You create and publish a new Azure App Service web app.

User authentication and authorization must use Azure Active Directory (Azure AD).

You need to configure authentication and authorization.

What should you do first?

A) Add an identity provider. (Correct Answer)
B) Map an existing custom DNS name.
C) Create and configure a new app setting.
D) Add a private certificate.
E) Create and configure a managed identity.

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: A

A- Add an identity provide is correct https://learn.microsoft.com/en-us/azure/app-service/scenario-secure-app-authentication-app-service#3-configure-authentication-and-authorization

I think it is because you need to implement user authentication and authorization. Managed identity is used to authenticate Azure resources

SecExams

I think it is because you need to implement user authentication and authorization. Managed identity is used to authenticate Azure resources

Selected Answer: A

Answer seems correct based on https://learn.microsoft.com/en-us/azure/app-service/configure-authentication-provider-aad?tabs=workforce-tenant

I think E is right

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Question #175

DRAG DROP

-

You have an Azure Cosmos DB for NoSQL account.

You plan to develop two apps named App1 and App2 that will use the change feed functionality to track changes to containers. App1 will use the pull model and App2 will use the push model.

You need to choose the method to track the most recently processed change in App1 and App2.

Which component should you use? To answer, drag the appropriate components to the correct apps. Each component may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

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Answer Area

App	Component
App1	Continuation token
App2	Lease container

Community Discussion

Seems correct. App2 Push Model - Lease container "When reading from the Azure Cosmos DB change feed, we usually recommend using a push model because you won't need to worry about: ... Storing state for the last processed change. If you are reading from the change feed processor, state is automatically stored in a lease container. Ref: https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/read-change-feed#reading-change-feed-with-a-push-model"

Correct. App1 (Pull Model): This model involves explicitly querying the change feed and managing the state of what has been read. Best Component: Continuation Token. The pull model typically relies on continuation tokens to keep track of where the last read operation ended and to resume from that point. App2 (Push Model): In this model, the change feed processor pushes changes to the application, and the application logic processes these changes. Best Component: Lease Container. The push model, especially when using the change feed processor, leverages a lease container to maintain state and ensure reliable processing.

Correct! The change feed pull model allows you to consume the change feed at your own pace. Changes must be requested by the client and there's no automatic polling for changes. If you want to permanently "bookmark" the last processed change (similar to the push model's lease container), you'll need to save a continuation token. https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/read-change-feed

The answer is correct. Link: https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/change-feed-pull-model?tabs=dotnet#compare-to-the-change-feed-processor

Correct

SecExams

Question #176

HOTSPOT

-

You plan to develop an Azure Functions app with an HTTP trigger.

The app must support the following requirements:

• Event-driven scaling
• Ability to use custom Linux images for function execution

You need to identify the app's hosting plan and the maximum amount of time that the app function can take to respond to incoming requests.

Which configuration setting values should you use? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Configuration setting	Value
Hosting plan	Consumption Dedicated Premium
Timeout value	230 seconds 10 minutes unlimited

Explanation

Correct Answer:

Answer Area

Configuration setting	Value
Hosting plan	Consumption Dedicated Premium
Timeout value	230 seconds 10 minutes unlimited

Community Discussion

Correct: The Premium plan supports event-driven scaling and allows to use custom Linux images. The default timeout for Azure Functions on the Consumption and Premium plans is 5 minutes (300 seconds), and 230 is a good fit.

Ignore me. I'm stupid

Have to correct my answer: Consumption plan does not allow for CUSTOM Linux images. So the correct answer would have to be: Premium unlimited again source: https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale

Have to correct my answer: Consumption plan does not allow for CUSTOM Linux images. So the correct answer would have to be: Premium unlimited again source: https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale

Ignore me. I'm stupid

SecExams

Question #177

HOTSPOT

-

You develop a Python application for image rendering. The application uses GPU resources to optimize rendering processes.

You have the following requirements:

• The application must be deployed to a Linux container.
• The container must be stopped when the image rendering is complete.
• The solution must minimize cost.

You need to deploy the application to Azure.

Answer Area

Environment configuration	Configuration value
Compute target	Azure Container Instances Azure Kubernetes Service Azure Container Apps Azure App Service
Container termination	Restart policy Environment variable System-assigned Managed identity User-assigned Managed identity

Explanation

Correct Answer:

SecExams

Answer Area

Environment configuration	Configuration value
Compute target	Azure Container Instances Azure Kubernetes Service Azure Container Apps Azure App Service
Container termination	Restart policy Environment variable System-assigned Managed identity User-assigned Managed identity

SecExams

Community Discussion

ACI - Because the GPU usage. Kubernetes can manage ACIs but is not a 'compute target' and it will increment the cost. "The container instances in the group can access one or more NVIDIA Tesla GPUs while running container workloads such as CUDA and deep learning applications." https://learn.microsoft.com/en-us/azure/container-instances/container-instances-gpu Restart Policy - To stop the container after the execution (In fact is avoiding to restart it after a succeeded execution) "Set an appropriate restart policy for the container instance, depending on whether the command-line specifies a long-running task or a run-once task. For example, a restart policy of Never or OnFailure is recommended for a run-once task." https://learn.microsoft.com/en-us/azure/container-instances/container-instances-start-command#command-line-guidelines

given that AKS is not in the exam curriculum , only ACA and ACI are left. out of which, only ACI supports GPU (though still in preview). As for the container termination-> restart policy set to never should be true

To deploy a Python application for image rendering with the specified requirements on Azure, you can use Azure Container Instances (ACI). ACI provides an easy and cost-effective way to run containers in the cloud. Here are the options you can choose: Compute Value: Choose the ACI option for running your Linux container. Container Termination: Since you want the container to be stopped when the image rendering is complete to minimize cost, you can use the "Single" container group mode in Azure Container Instances. This mode is suitable for scenarios where you want to run a single

container task and stop it when it's done. This command creates a single container instance (--restart-policy Never) and stops it when the image rendering is complete, minimizing cost. Adjust the resource limits (--cpu and --memory) based on your application's requirements.

As suggested ACI is preferred for one time or demand script and jobs execution whereas as ACA is preferred for deploying container continually running full lifecycle apps, I am leaning towards ACI.

I agree with ACI Since its a new question the preview thing makes sense as well. source: https://learn.microsoft.com/en-gb/azure/container-instances/container-instances-overview

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Question #178

HOTSPOT

-

You plan to develop an Azure Functions app with an Azure Blob Storage trigger. The app will be used infrequently, with a limited duration of individual executions.

The app must meet the following requirements:

• Event-driven scaling
• Support for deployment slots
• Minimize costs

You need to identify the hosting plan and the maximum duration when executing the app.

Which configuration setting values should you use? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Configuration setting	Value
Hosting plan	Consumption Dedicated Premium
Maximum execution time	230 seconds 10 minutes unlimited

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Explanation

Correct Answer:

Answer Area

Configuration setting	Value
Hosting plan	Consumption / Dedicated / Premium
Maximum execution time	230 seconds / 10 minutes / unlimited

Community Discussion

Correct. "used infrequently" -> Consumption And 10mins is a good choice.

Right Answer: Premium - 230 Event-Driven requirement: Is only souported by Consumption and Premium https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#scale Slot requirement: Is only souported by Dedicated and Premium "Function apps running under the Apps Service plan may have multiple slots, while under the Consumption plan only one slot is allowed." https://learn.microsoft.com/en-us/azure/azure-functions/functions-deployment-slots Minimize costs: Is not relevant because there is just one service plan that meets the previous requirements

Consumption plan also supports 2 slots..https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#service-limits Answer; Consumption - 10 min

Consumption plan also supports 2 slots..https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#service-limits Answer; Consumption - 10 min

"Support for deployment slotS" not slot (more than one)

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Question #179

You have a Linux container-based console application that uploads image files from customer sites all over the world. A back-end system that runs on Azure virtual machines processes the images by using the Azure Blobs API.

You are not permitted to make changes to the application.

Some customer sites only have phone-based internet connections.

You need to configure the console application to access the images.

What should you use?

A) Azure BlobFuse (Correct Answer)
B) Azure Disks
C) Azure Storage Network File System (NFS) 3.0 support
D) Azure Files

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: A

The correct answer is: A. Azure BlobFuse Azure BlobFuse allows you to access Azure Blob Storage from Linux and Azure services as if it were a local file system, without changing the application. This is particularly useful for your scenario where you can't modify the application and need to process images stored in Azure Blob Storage. BlobFuse provides the necessary interface between the application and Azure Blob Storage.

Azure BlobFuse, as Azure Disks are block storage devices that are not designed to be accessed directly by applications. Azure Storage NFS 3.0 support is still in preview and is not yet available for all accounts. Azure Files is a managed file share service that is not designed to be used with slow and unreliable internet connections.

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Selected Answer: A

https://learn.microsoft.com/en-us/azure/storage/blobs/blobfuse2-what-is

Selected Answer: A

Azure BlobFuse is the correct answer in this scenario.

Linuxis unbased. we should ff

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Question #180

SecExams

DRAG DROP
-

You are developing several microservices named serviceA, serviceB, and serviceC. You deploy the microservices to a new Azure Container Apps environment.

You have the following requirements:

• The microservices must persist data to storage.
• serviceA must persist data only visible to the current container and the storage must be restricted to the amount of disk space available in the container.
• serviceB must persist data for the lifetime of the replica and allow multiple containers in the replica to mount the same storage location.
• serviceC must persist data beyond the lifetime of the replica while allowing multiple containers to access the storage and enable per object permissions.

You need to configure storage for each microservice.

Which storage type should you use? To answer, drag the appropriate storage types to the correct microservices. Each storage type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

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Explanation

Correct Answer:

Answer Area

Microservice	Storage type
serviceA	Container file system
serviceB	Ephemeral volume
serviceC	Azure Files storage

Community Discussion

ACA does not mount to blob storage(https://learn.microsoft.com/en-us/azure/container-apps/storage-mounts), AKS i belive it does. so original answer is right

ACA does not mount to blob storage(https://learn.microsoft.com/en-us/azure/container-apps/storage-mounts), AKS i belive it does. so original answer is right

Sorry. I'm mean: ServiceA: Container file system ServiceB: Ephemeral volumes (it lives as long as replica lives) ServiceC: Azure Blob Storage (it lives outside of replica. So it's beyond the lifetime. And we want to have blob instead of file)

ACA does not mount to blob storage(https://learn.microsoft.com/en-us/azure/container-apps/storage-mounts), AKS i belive it does. so original answer is right

ACA does not mount to blob storage(https://learn.microsoft.com/en-us/azure/container-apps/storage-mounts), AKS i belive it does. so original answer is right

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Question #181

You are developing an ASP.NET Core app hosted in Azure App Service.

The app requires custom claims to be returned from Microsoft Entra ID for user authorization. The claims must be removed when the app registration is removed.

You need to include the custom claims in the user access token.

What should you do?

A) Require the https://graph.microsoft.com/.default scope during authentication.
B) Configure the app to use the OAuth 2.0 authorization code flow.
C) Implement custom middleware to retrieve role information from Azure AD.
D) Add the groups to the groupMembershipClaims attribute in the app manifest.
E) Add the roles to the appRoles attribute in the app manifest. (Correct Answer)

Explanation

Correct Answer:
E

Community Discussion

Selected Answer: E

E not D because of this condition "The claims must be removed when the app registration is removed."

Selected Answer: E

AppRoles is the way to go. https://learn.microsoft.com/en-us/entra/identity-platform/howto-add-app-roles-in-apps#app-roles-vs-groups

To include custom claims in the user access token from Microsoft Identity for user authorization, you should: E. Add the roles to the appRoles attribute in the app manifest. Explanation: In the Azure AD app manifest, you can define custom roles using the appRoles attribute. These roles can then be assigned to users, and the associated claims

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will be included in the user's token. Ensure that the appRoles attribute in the app manifest includes the necessary roles with associated claims, and assign these roles to users accordingly. This approach allows you to customize the claims included in the user's access token when they authenticate with Microsoft Identity.

Selected Answer: E

Azure Active Directory (Azure AD) supports adding custom roles to an application's manifest, which can then be assigned to users or groups. When a user is authenticated, these roles are included in the token as claims. This approach allows for fine-grained access control within your application based on these role assignments. Moreover, when the application registration is deleted, these roles and corresponding claims automatically cease to exist, fulfilling the requirement that the claims must be removed when the app registration is removed.

E not D because of this condition "The claims must be removed when the app registration is removed."

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Question #182

You are developing a microservice to run on Azure Container Apps for a company. External HTTP ingress traffic has been enabled.

The company requires that updates to the microservice must not cause downtime.

You need to deploy an update to the microservices.

What should you do?

A) Enable single revision mode. (Correct Answer)
B) Use multiple environments for each container.
C) Use a private container registry and single image for all containers.
D) Use a single environment for all containers.
E) Enable multiple revision mode.

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: A

Zero downtime deployment using single mode https://learn.microsoft.com/en-us/azure/container-apps/revisions#zero-downtime-deployment

Selected Answer: E

Wrong. Should be multiple revision mode.

Selected Answer: A

In single revision mode, Container Apps ensures your app doesn't experience downtime when creating a new revision. The existing active revision isn't deactivated until the new revision is ready. If ingress is enabled, the existing revision continues to receive 100% of the traffic until the new revision is ready. https://learn.microsoft.com/en-us/azure/container-apps/revisions

E. Enable multiple revision mode. Explanation: Azure Container Apps supports multiple revision mode, allowing you to deploy updates without causing downtime. With multiple revision mode, you can deploy new revisions of your microservice while keeping the previous revision running. This approach enables a smooth transition without interruption to your application. So, choose option E to enable multiple revision mode when deploying updates to your microservice on Azure Container Apps.

Selected Answer: A

https://learn.microsoft.com/en-us/azure/container-apps/revisions#zero-downtime-deployment

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Question #183

HOTSPOT

-

A company uses Azure Container Apps. A container app named App1 resides in a resource group named RG1.

The company requires testing of updates to App1.

You enable multiple revision modes on App1.

You need to ensure traffic is routed to each revision of App1.

How should you complete the code segment?

NOTE: Each correct selection is worth one point.

Answer Area

```
az [ container | containerapp | network | resource ] [ app | connection | ingress | revision ] traffic set \
    --name App1 \
    --resource-group RG1 \
    --revision-weight <REVISION_1>=80 <REVISION_2>=20
```

Explanation

Correct Answer:

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Answer Area

```
az [ container | containerapp | network | resource ] [ app | connection | ingress | revision ] traffic set \
  --name App1 \
  --resource-group RG1 \
  --revision-weight <REVISION_1>=80 <REVISION_2>=20
```

Community Discussion

Correct. containerapp, ingress Source: https://learn.microsoft.com/en-us/azure/container-apps/traffic-splitting?pivots=azure-cli

CORRECT

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Question #184

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You deploy an Azure Container Apps app and disable ingress on the container app.

Users report that they are unable to access the container app. You investigate and observe that the app has scaled to 0 instances.

You need to resolve the issue with the container app.

Solution: Enable ingress, create an HTTP scale rule, and apply the rule to the container app.

Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: B

Must be carefull with Default Scale Rule: https://learn.microsoft.com/en-us/azure/container-apps/scale-app?pivots=azure-cli#default-scale-rule Make sure you create a

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scale rule or set minReplicas to 1 or more if you don't enable ingress. If ingress is disabled and you don't define a minReplicas or a custom scale rule, then your container app will scale to zero and have no way of starting back up.

Answer is A: Enabling Ingress: This would allow external traffic to reach the container app, which is necessary for users to access the app from outside the Azure network. Creating an HTTP Scale Rule: Azure Container Apps can automatically scale based on various metrics, including HTTP traffic. An HTTP scale rule would allow the app to scale up based on the incoming HTTP traffic. Applying the Rule to the Container App: Implementing the scale rule ensures that the container app scales appropriately in response to traffic, preventing it from scaling down to 0 instances when there is demand.

Selected Answer: B

Answer is B

No! Enabling ingress and creating an HTTP scale rule won't directly address the issue of the app having scaled to 0 instances. Ingress relates to the network traffic coming into the app, and scale rules define when and how the app scales based on certain conditions. However, they won't directly bring the app back to running instances if it has scaled down to 0. To address the issue of the app having 0 instances, you might need to investigate why the app scaled down and take appropriate action, such as adjusting the scaling settings, reviewing resource constraints, or identifying any issues in the app itself.

Selected Answer: B

Though Enable Ingress, Set Scale rule to Http is correct, it will work based on Http traffic coming in when the Instance is already running. But it doesn't address the problem mentioned in the question - where it already scaled down to 0 instances. So to address this first, we need to ensure that there is at least one instance of the container app running to handle incoming requests. This may involve adjusting the scaling settings, configuring minimum instance limits, or implementing a health check mechanism to keep at least one instance running at all times, even during periods of low traffic.

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Question #185

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You deploy an Azure Container Apps app and disable ingress on the container app.

Users report that they are unable to access the container app. You investigate and observe that the app has scaled to 0 instances.

You need to resolve the issue with the container app.

Solution: Enable ingress, create a custom scale rule, and apply the rule to the container app.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Community Discussion

No, Enabling ingress and creating a custom scale rule won't directly address the issue of the app having scaled to 0 instances. Ingress and scale rules are related to managing the app's scalability and handling incoming traffic conditions, but they won't bring the app

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back to running instances if it has scaled down to 0. To resolve the issue of the app having 0 instances, you need to investigate why the app scaled down and take appropriate action. Reviewing scaling settings, resource constraints, and identifying any issues in the app itself would be more relevant to resolving this specific problem.

Selected Answer: A

A is correct since scale rule can be custom https://learn.microsoft.com/en-us/azure/container-apps/scale-app?pivots=azure-cli#:~:text=Scale%20rules%20are%20implemented%20as%20HTTP%2C%20TCP%2C%20or%20custom.

The problem is the same as #60.

Right, page says : Important Make sure you create a scale rule or set minReplicas to 1 or more if you don't enable ingress. If ingress is disabled and you don't define a minReplicas "or a custom scale rule", then your container app will scale to zero and have no way of starting back up.

Right, page says : Important Make sure you create a scale rule or set minReplicas to 1 or more if you don't enable ingress. If ingress is disabled and you don't define a minReplicas "or a custom scale rule", then your container app will scale to zero and have no way of starting back up.

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Question #186

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You deploy an Azure Container Apps app and disable ingress on the container app.

Users report that they are unable to access the container app. You investigate and observe that the app has scaled to 0 instances.

You need to resolve the issue with the container app.

Solution: Enable ingress and configure the minimum replicas to 1 for the container app.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

Community Discussion

Answer is A: From the documention: Make sure you create a scale rule or set minReplicas to 1 or more if you don't enable ingress. If ingress is disabled and you don't define a minReplicas or a custom scale rule, then your container app will scale to zero and have

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no way of starting back up. https://learn.microsoft.com/en-us/azure/container-apps/scale-app?pivots=azure-cli#default-scale-rule

answer is A: Enable Ingress: Ingress is crucial for allowing external access to your container app. Disabling ingress had led to the app being inaccessible to users. Enabling it will reopen external traffic routes, allowing users to access the app. Configure the Minimum Replicas to 1: This setting ensures that there is always at least one instance of the app running. By setting the minimum number of replicas to 1, you prevent the app from scaling down to 0 instances, which addresses the issue observed where the app had no running instances.

Selected Answer: A

Answer is A Only

A, Yes, the solution meets the goal. By enabling ingress and configuring the minimum replicas to 1, you ensure that there is at least one running instance of the container app. This allows users to access the app, as there is at least one instance available to handle incoming requests.

Selected Answer: A

For me this could be a good solution. The minimum replicas setting=1 ensures that the app always has at least one instance running.

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Question #187

SecExams

HOTSPOT
-

Case study
-

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study
-
To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background
-

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Munson's Pickles and Preserves Farm is an agricultural cooperative corporation based in Washington, US, with farms located across the United States. The company supports agricultural production resources by distributing seeds fertilizers, chemicals, fuel, and farm machinery to the farms.

Current Environment

-

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website

-

• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms

-

• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors

-

• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements

-

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The application components must meet the following requirements:

Corporate website
-
• The site must be migrated to Azure App Service.
• Costs must be minimized when hosting in Azure.
• Applications must automatically scale independent of the compute resources.
• All code changes must be validated by internal staff before release to production.
• File transfer speeds must improve, and webpage-load performance must increase.
• All site settings must be centrally stored, secured without using secrets, and encrypted at rest and in transit.
• A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.

Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
-
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
• API telemetry values must be charted to evaluate variations and trends for resource data.

Internal staff
-
• App and API updates must be validated before release to production.
• Staff must be able to select a link to direct them back to the production app

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when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
-
• All web communications must be secured by using TLS/HTTPS.
• Web content must be restricted by country/region to support corporate compliance standards.
• The principle of least privilege must be applied when providing any user rights or process access rights.
• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
• Distributors report HTTP 502 errors at the same time as internal staff report that average response times and networking traffic are high.
• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

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You need to configure App Service to support the corporate website migration.

Which configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Azure App Service configuration

Configuration setting	Configuration value
App Service plan	Basic Standard Premium Isolated
Code change validation feature	Deployment slot Custom container Domain certificate Deployment credentials

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Explanation

Correct Answer:

Azure App Service configuration

Configuration setting	Configuration value
App Service plan	Basic Standard Premium Isolated
Code change validation feature	Deployment slot Custom container Domain certificate Deployment credentials

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Community Discussion

Basic App Service Plan does not have multiple Deployment slot. Answer should be Standard and Deployment Slot.

Standard and Deployment Slot.

Absolutely wrong, because "applications must autoscale", basic plan doesn't allowe this, the answer is Standard: https://learn.microsoft.com/en-us/azure/app-service/manage-automatic-scaling?tabs=azure-portal

App Service Plan: Standard. It meets the need for auto-scaling and cost efficiency while providing the necessary features such as SSL and custom domains. Code Change Validation Feature: Deployment Slot. Enables the company to validate all code changes in a pre-production environment, ensuring stability and performance before changes are made live.

correct: https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots?source=recommendations&tabs=portal

Question #188

DRAG DROP

-

You are developing a web service that will run on Azure virtual machines that use Azure Storage. You configure all virtual machines to use managed identities.

You have the following requirements:

• Secret-based authentication mechanisms are not permitted for accessing an Azure Storage account.
• Must use only Azure Instance Metadata Service endpoints.

You need to write code to retrieve an access token to access Azure Storage. To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

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Explanation

Correct Answer:

Answer Area

```
import urllib.request
url = "  http://169.254.169.254/metadata/identity/oauth2/token  "
queryString = ""
response = urllib.request.urlopen(url + queryString)
import json
return json.loads(response.read())
```

Community Discussion

Not relevant question and answer!

I asked Google AI tool the following question: How do I retrieve an access token using Azure Instance Metadata Service endpoints ? I think the given answer here is correct!

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Question #189

HOTSPOT

-

You are developing an Azure Function app.

The Azure Function app must enable a WebHook to read an image from Azure Blob Storage and create a new Azure Cosmos DB document.

You need to implement the Azure Function app.

Which configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Trigger	Input binding	Output binding
HTTP	HTTP	HTTP
Timer	Timer	Timer
Blob Storage	Blob Storage	Blob Storage
Azure Cosmos DB	Azure Cosmos DB	Azure Cosmos DB

Explanation

Correct Answer:

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Answer Area

Trigger	Input binding	Output binding
HTTP	HTTP	HTTP
Timer	Timer	Timer
Blob Storage	Blob Storage	Blob Storage
Azure Cosmos DB	Azure Cosmos DB	Azure Cosmos DB

Community Discussion

Given Answer is Correct: A- HTTP Trigger for webhook B- Input binding for blob storage to read image C- Output binding to output a document to Cosmos DB https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-input?tabs=python-v2%2Cisolated-process%2Cnodejs-v4&pivots=programming-language-csharp https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-cosmosdb-v2-output?tabs=python-v2%2Cisolated-process%2Cnodejs-v4%2Cextensionv4&pivots=programming-language-csharp

Given answer is false: Blob storage, Blob storage, Azure Cosmos DB

provided answer is correct: https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-http-webhook-trigger?tabs=python-v2%2Cisolated-process%2Cnodejs-v4%2Cfunctionsv2&pivots=programming-language-csharp

Answer is correct because you can route storage events to webhook https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-quickstart?toc=%2Fazure%2Fevent-grid%2Ftoc.json

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Question #190

You create an Azure Cosmos DB for NoSQL database.

You plan to use the Azure Cosmos DB .NET SDK v3 API for NoSQL to upload the following files:

File Name	File Size
File1	1MB
File2	2MB
File3	3MB
File4	4MB
File5	5MB

You receive the following error message when uploading the files: “413 Entity too large”.

You need to determine which files you can upload to the Azure Cosmos DB for NoSQL database.

Which files can you upload?

A) File1, File2, File3, File4, and File5
B) File1 and File2 only (Correct Answer)
C) File1, File2, and File3 only
D) File1, File2, File3, and File4 only
E) File1 only

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

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Correct - 2MB limit -https://learn.microsoft.com/en-us/azure/cosmos-db/concepts-limits#per-item-limits

Correct Answer is E: Azure Cosmos DB limits single request's size to 2MB. The formula is Request Size = Single Document Size * Write Batch Size. If you hit error saying "Request size is too large.", reduce the writeBatchSize value in copy sink configuration https://learn.microsoft.com/en-us/azure/data-factory/connector-azure-cosmos-db?tabs=data-factory

The requirements do not specify that they MUST be uploaded in one batch

The requirements do not specify that they MUST be uploaded in one batch

Selected Answer: B

Option B is correct. Each file has a maximum size of 2 MB. So File 1, File 2 Only can be uploaded.

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Question #191

A development team is creating a new REST API. The API will store data in Azure Blob storage. You plan to deploy the API to Azure App Service.
Developers must access the Azure Blob storage account to develop the API for the next two months. The Azure Blob storage account must not be accessible by the developers after the two-month time period.
You need to grant developers access to the Azure Blob storage account.
What should you do?

A) Generate a shared access signature (SAS) for the Azure Blob storage account and provide the SAS to all developers. (Correct Answer)
B) Create and apply a new lifecycle management policy to include a last accessed date value. Apply the policy to the Azure Blob storage account.
C) Provide all developers with the access key for the Azure Blob storage account. Update the API to include the Coordinated Universal Time (UTC) timestamp for the request header.
D) Grant all developers access to the Azure Blob storage account by assigning role-based access control (RBAC) roles.

Explanation

Correct Answer:
A
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

Community Discussion

Selected Answer: A

A. Generate a shared access signature (SAS) for the Azure Blob storage account and provide the SAS to all developers. A shared access signature (SAS) is a secure token that can be used to grant temporary and revocable access to a blob container or individual blobs. You can specify an expiration time for the SAS, so it will automatically expire after the two-month time period, making the blob storage account no longer accessible to the developers. This approach allows you to grant the developers the necessary access to the Azure Blob storage account while still maintaining control over the access, and it also allows you to revoke access easily after the two-month time period.

Selected Answer: A

A seems to be the correct answer

Comment applies to different question

Comment applies to different question

got this question on 06-29-2023

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Question #192

DRAG DROP -

You develop a web application.

You need to register the application with an active Azure Active Directory (Azure AD) tenant.

Which three actions should you perform in sequence? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Actions	Answer Area
Select **Manifest** from the middle-tier service registration.	In App Registrations, select **New registration.**
In Enterprise Applications, select **New application.**	Select the Azure AD instance.
Add a Cryptographic key.	Create a new application and provide the name, account type, and redirect URI.
Create a new application and provide the name, account type, and redirect URI.	
Select the Azure AD instance.	
Use an access token to access the secure resource.	
In App Registrations, select **New registration.**	

Register a new application using the Azure portal
1. Sign in to the Azure portal using either a work or school account or a personal Microsoft account.
2. If your account gives you access to more than one tenant, select your account in the upper right corner. Set your portal session to the Azure AD tenant that you want.
3. Search for and select Azure Active Directory. Under Manage, select App registrations.
4. Select New registration. (Step 1)
5. In Register an application, enter a meaningful application name to display to users.
6. Specify who can use the application. Select the Azure AD instance. (Step 2)
7. Under Redirect URI (optional), select the type of app you're building: Web or Public client (mobile & desktop). Then enter the redirect URI, or reply URL, for your application. (Step 3)
8. When finished, select Register.

Community Discussion

1 Azure AD instance 2 In App Registration, select new registration 3 Create a new application and provide the name Disscussion: https://www.secexams.com/discussions/microsoft/view/22224-exam-az-204-topic-3-question-3-discussion/

I agree with you that it should be in following order: 1. Select AD instance - select AD tenant in portal 2. In App Registration, select new registration - use switched tenant 3. Create a new application and provide the name

I would say Komat is right, I would select the same steps.

I would say Komat is right, I would select the same steps.

Komat is right, reference is here: https://docs.microsoft.com/en-us/azure/active-directory/develop/quickstart-register-app

Question #193

You have a new Azure subscription. You are developing an internal website for employees to view sensitive data. The website uses Azure Active Directory (Azure
AD) for authentication.
You need to implement multifactor authentication for the website.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Configure the website to use Azure AD B2C.
B) In Azure AD, create a new conditional access policy. (Correct Answer)
C) Upgrade to Azure AD Premium. (Correct Answer)
D) In Azure AD, enable application proxy.
E) In Azure AD conditional access, enable the baseline policy.

Explanation

Correct Answer:
BC
B: MFA Enabled by conditional access policy. It is the most flexible means to enable two-step verification for your users. Enabling using conditional access policy only works for Azure MFA in the cloud and is a premium feature of Azure AD.
C: Multi-Factor Authentication comes as part of the following offerings:
✑ Azure Active Directory Premium licenses - Full featured use of Azure Multi-Factor Authentication Service (Cloud) or Azure Multi-Factor Authentication Server (On-premises).
✑ Multi-Factor Authentication for Office 365
✑ Azure Active Directory Global Administrators
Reference:

https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-mfa-getstarted

Community Discussion

B and C are correct. https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa

Correct Answer: B and C Azure AD Multi-Factor Authentication and Conditional Access policies give the flexibility to enable MFA for users during specific sign-in events. The recommended way to enable and use Azure AD Multi-Factor Authentication is with Conditional Access policies. You need a working Azure AD tenant with at least an Azure AD Premium P1. Reference: https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-mfa-getstarted https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa https://azure.microsoft.com/en-us/pricing/details/active-directory

Yes, based on the link you provided: "Prerequisites A working Azure AD tenant with at least an Azure AD Premium P1 or trial license enabled."

Yes, based on the link you provided: "Prerequisites A working Azure AD tenant with at least an Azure AD Premium P1 or trial license enabled."

Selected Answer: BC

Answers are correct

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Question #194

DRAG DROP -

An organization plans to deploy Azure storage services.

You need to configure shared access signature (SAS) for granting access to Azure Storage.

Which SAS types should you use? To answer, drag the appropriate SAS types to the correct requirements. Each SAS type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

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Community Discussion

Correct

If you have reached this far, question no 160+ then you have taken paid subscription (Contributor role)

I got this question on 6th August 2023. chose highly voted. passed with 904. I got Case study: city and Lights. All questions are from SecExams.

I can see it without contributor, for now :)

I can see it without contributor, for now :)

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Question #195

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HOTSPOT -

You are developing an ASP.NET Core app that includes feature flags which are managed by Azure App Configuration. You create an Azure App Configuration store named AppFeatureflagStore as shown in the exhibit:

Key	Label	State	Description	Last modified
Export	Export	Off On	Ability to export data.	6/11/2020, 9:13:26 ... •••

You must be able to use the feature in the app by using the following markup:

```
<feature name="Export">
  <li class="nav-item">
    <a class="nav-link text-dark" asp-area="" asp-controller="Home" asp-action="Export">Export Data</a>
  </li>
</feature>
```

You need to update the app to use the feature flag.

Which values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Code section	Value
Controller attribute	FeatureGate Route ServiceFilter TypeFilter
Startup method	AddAzureAppConfiguration AddControllersWithViews AddUserSecrets
AppConfig endpoint setting	https://appfeatureflagstore.azconfig.io https://appfeatureflagstore.vault.azure.net https://export.azconfig.io https://export.vault.azure.net

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Explanation

Correct Answer:

Answer Area

Code section	Value
Controller attribute	FeatureGate Route ServiceFilter TypeFilter
Startup method	AddAzureAppConfiguration AddControllersWithViews AddUserSecrets
AppConfig endpoint setting	https://appfeatureflagstore.azconfig.io https://appfeatureflagstore.vault.azure.net https://export.azconfig.io https://export.vault.azure.net

Box 1: FeatureGate -
You can use the FeatureGate attribute to control whether a whole controller class or a specific action is enabled.

Box 2: AddAzureAppConfiguration -
The extension method AddAzureAppConfiguration is used to add the Azure App Configuration Provider.
Box 3: https://appfeatureflagstore.azconfig.io
You need to request the access token with resource=https://<yourstorename>.azconfig.io
Reference:
https://docs.microsoft.com/en-us/azure/azure-app-configuration/use-feature-flags-dotnet-core https://csharp.christiannagel.com/2020/05/19/azureappconfiguration/ https://stackoverflow.com/questions/61899063/how-to-use-azure-app-configuration-rest-api

Community Discussion

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And Microsoft claims this is not .Net specific.

Got it in exam 20/10/2022

This was on the exam (July 2023). Went with proposed. Scored 917

Got it in exam 28/08/23. Went with proposed answer. Scored 912

2027 LOL

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Question #196

HOTSPOT -

You have a single page application (SPA) web application that manages information based on data returned by Microsoft Graph from another company's Azure

Active Directory (Azure AD) instance.

Users must be able to authenticate and access Microsoft Graph by using their own company's Azure AD instance.

You need to configure the application manifest for the app registration.

How should you complete the manifest? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

```
{
  "oauth2AllowImplicitFlow": [ ▼ ],
                              add
                              false
                              spa
                              true

  "[ ▼ ]":[{
            addIns
            orgRestrictions
            availableToOtherTenants
            requiredResourceAccess

  "resourceAppId": "00000003-0000-0000-c000-000000000000",
  "resourceAccess:[{
    "id" : "24a6cdd6-fab1-4aaf-91b8-3cc8225e90d0",
    "type": "Scope"
  }]}],
  "signInAudience": "[ ▼ ]"
                     All
                     AzureADMyOrg
                     AzureADMultipleOrgs
                     AzureADandPersonalMicrosoftAccount

}
```

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Explanation

Correct Answer:

```
{
  "oauth2AllowImplicitFlow": [ add | false | spa | true ],
  "[ addIns | orgRestrictions | availableToOtherTenants | requiredResourceAccess ]":[{
  "resourceAppId": "00000003-0000-0000-c000-000000000000",
  "resourceAccess:[{
    "id" : "24a6cdd6-fab1-4aaf-91b8-3cc8225e90d0",
    "type": "Scope"
  }]}],
  "signInAudience": "[ All | AzureADMyOrg | AzureADMultipleOrgs | AzureADandPersonalMicrosoftAccount ]"

}
```

Box 1: true -
The oauth2AllowImplicitFlow attribute Specifies whether this web app can request OAuth2.0 implicit flow access tokens. The default is false. This flag is used for browser-based apps, like JavaScript single-page apps.
In implicit flow, the app receives tokens directly from the Azure Active Directory (Azure AD) authorize endpoint, without any server-to-server exchange. All authentication logic and session handling is done entirely in the JavaScript client with either a page redirect or a pop-up box.

Box 2: requiredResourceAccess -
With dynamic consent, requiredResourceAccess drives the admin consent experience and the user consent experience for users who are using static consent.
However, this parameter doesn't drive the user consent experience for the general case.
resourceAppId is the unique identifier for the resource that the app requires access to. This value should be equal to the appId declared on the target resource app.
resourceAccess is an array that lists the OAuth2.0 permission scopes and app roles that the app requires from the specified resource. Contains the id and type values of the specified resources.
Example:
"requiredResourceAccess": [

{
"resourceAppId": "00000002-0000-0000-c000-000000000000",
"resourceAccess": [
{
"id": "311a71cc-e848-46a1-bdf8-97ff7156d8e6",
"type": "Scope"
}
]
}
],

Incorrect Answers:
✎ The legacy attribute availableToOtherTenants is no longer supported.
✎ The addIns attribute defines custom behavior that a consuming service can use to call an app in specific contexts. For example, applications that can render file streams may set the addIns property for its "FileHandler" functionality. This parameter will let services like Microsoft 365 call the application in the context of a document the user is working on.
Example:

"addIns": [
{
"id": "968A844F-7A47-430C-9163-07AE7C31D407",
"type":" FileHandler",
"properties": [
{
"key": "version",
"value": "2"
}
]
}
],

Box 3: AzureADMyOrg -
The signInAudience attribute specifies what Microsoft accounts are supported for the current application. Supported values are:
✎ AzureADMyOrg - Users with a Microsoft work or school account in my organization's Azure AD tenant (for example, single tenant)
✎ AzureADMultipleOrgs - Users with a Microsoft work or school account in any organization's Azure AD tenant (for example, multi-tenant)
✎ AzureADandPersonalMicrosoftAccount - Users with a personal Microsoft account, or a work or school account in any organization's Azure AD tenant
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-implicit-grant-flow

SecExams

Community Discussion

I think the last one should be AzureADMultipleOrgs

got on my exam 6/22/2023

I think Gmishra88 is correct. Question states that - "Users must be able to authenticate and access Microsoft Graph by using their own company's Azure AD instance." So it should be AzureADMyOrg

same, question states that AD data is from external organisation

I think Gmishra88 is correct. Question states that - "Users must be able to authenticate and access Microsoft Graph by using their own company's Azure AD instance." So it should be AzureADMyOrg

SecExams

Question #197

You manage a data processing application that receives requests from an Azure Storage queue.

You need to manage access to the queue. You have the following requirements:

✑ Provide other applications access to the Azure queue.

✑ Ensure that you can revoke access to the queue without having to regenerate the storage account keys.

✑ Specify access at the queue level and not at the storage account level.

Which type of shared access signature (SAS) should you use?

A) Service SAS with a stored access policy (Correct Answer)

B) Account SAS

C) User Delegation SAS

D) Service SAS with ad hoc SAS

Explanation

Correct Answer:

A

A service SAS is secured with the storage account key. A service SAS delegates access to a resource in only one of the Azure Storage services: Blob storage,
Queue storage, Table storage, or Azure Files.
Stored access policies give you the option to revoke permissions for a service SAS without having to regenerate the storage account keys.
Incorrect Answers:
Account SAS: Account SAS is specified at the account level. It is secured with the storage account key.
User Delegation SAS: A user delegation SAS applies to Blob storage only.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

Community Discussion

Argee A

User delegation SAS is only for blob storage? These random restrictions that microsoft creates just makes me so happy. It is a maze of that works with this but not if that and only if those cases. Why do they expect human beings to remember these unfortunate mistakes Microsoft makes

Selected Answer: A

Was on my exam today (03-01-2023)

there is not a valid explanation. Question says: Service SAS with ad hoc SAS So it is at service level not account level It is not a valid answer because ad-hoc signature cannot be invalidated. With access policy you can change access policy

there is not a valid explanation. Question says: Service SAS with ad hoc SAS So it is at service level not account level It is not a valid answer because ad-hoc signature cannot be invalidated. With access policy you can change access policy

SecExams

Question #198

HOTSPOT -

You are developing an application to store and retrieve data in Azure Blob storage. The application will be hosted in an on-premises virtual machine (VM). The

VM is connected to Azure by using a Site-to-Site VPN gateway connection. The application is secured by using Azure Active Directory (Azure AD) credentials. The application must be granted access to the Azure Blob storage account with a start time, expiry time, and read permissions. The Azure Blob storage account access must use the Azure AD credentials of the application to secure data access. Data access must be able to be revoked if the client application security is breached.

You need to secure the application access to Azure Blob storage.

Which security features should you use? To answer select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Component	Security Feature
Application (Client)	Storage Account Access Key System-assigned Managed Identity Shared access signature (SAS) token
Azure Storage (Server)	Stored Access Policy User-assigned Managed Identity Cross-Origin Resource Sharing (CORS)

SecExams

Explanation

Correct Answer:

Answer Area

Component	Security Feature
Application (Client)	Storage Account Access Key System-assigned Managed Identity Shared access signature (SAS) token
Azure Storage (Server)	Stored Access Policy User-assigned Managed Identity Cross-Origin Resource Sharing (CORS)

Box 1: Shared access signature (SAS) token
When your application design requires shared access signatures for access to Blob storage, use Azure AD credentials to create a user delegation SAS when possible for superior security.

Box 2: Stored access policy -
Stored access policies give you the option to revoke permissions for a service SAS without having to regenerate the storage account keys.
A shared access signature can take one of the following two forms:
✑ Service SAS with stored access policy. A stored access policy is defined on a resource container, which can be a blob container, table, queue, or file share.
The stored access policy can be used to manage constraints for one or more service shared access signatures. When you associate a service SAS with a stored access policy, the SAS inherits the constraints ג€" the start time, expiry time, and permissions ג€" defined for the stored access policy.
✑ Ad hoc SAS.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

SecExams

Community Discussion

storage account access keys : similar to a root password for your storage account, not for distrbution system assigned managed identity : only for use within of services in azure SAS token : right answer Stored Access Policy : right answer user assigned managed identity : only for use within of services in azure, this must connect to a server outside CORS protectection : Site-to-Site VPN gateway, there is no other domain involved

The answer is correct since none of the other possible combinations make sense. Even though service level SAS doesnt use Azure AD credentials.

"Data access must be able to be revoked if the client application security is breached." - isn't that a clue to use access policy? Typical SAS is not revokable itself.

"Data access must be able to be revoked if the client application security is breached." - isn't that a clue to use access policy? Typical SAS is not revokable itself.

SAS with user-delegation works with AD roles

SecExams

Question #199

You are building a web application that uses the Microsoft identity platform for user authentication.
You are implementing user identification for the web application.
You need to retrieve a claim to uniquely identify a user.
Which claim type should you use?

A) aud
B) nonce
C) oid (Correct Answer)
D) idp

Explanation

Correct Answer:
C
oid -The object identifier for the user in Azure AD. This value is the immutable and non-reusable identifier of the user. Use this value, not email, as a unique identifier for users;

email addresses can change. If you use the Azure AD Graph API in your app, object ID is that value used to query profile information.
Incorrect:
Not A: aud - Who the token was issued for. This will be the application's client ID.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/multitenant-identity/claims

Community Discussion

Got this in 09/22 , went with oid, score 927.

Selected Answer: C

oid - correct

Got it in exam 20/10/2022

Correct

Selected Answer: C

C: oid "The immutable identifier for the requestor, which is the verified identity of the user or service principal." Reference: https://learn.microsoft.com/en-us/azure/active-directory/develop/access-token-claims-reference#payload-claims

SecExams

Question #200

You are developing an Azure Function that calls external APIs by providing an access token for the API. The access token is stored in a secret named token in an
Azure Key Vault named mykeyvault.
You need to ensure the Azure Function can access to the token. Which value should you store in the Azure Function App configuration?

A) KeyVault:mykeyvault;Secret:token
B) App:Settings:Secret:mykeyvault:token
C) AZUREKVCONNSTR_ https://mykeyveult.vault.ezure.net/secrets/token/
D) @Microsoft.KeyVault(SecretUri=https://mykeyvault.vault.azure.net/secrets/token/)

(Correct Answer)

Explanation

Correct Answer:
D
Add Key Vault secrets reference in the Function App configuration.
Syntax: @Microsoft.KeyVault(SecretUri={copied identifier for the username secret})
Reference:
https://daniel-krzyczkowski.github.io/Integrate-Key-Vault-Secrets-With-Azure-Functions/

Community Discussion

Selected Answer: D

It's right! D. https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?tabs=azure-powershell

correct, in 2023Mar24, score: 904/1000.

correct, in 2023Mar24, score: 904/1000.

This was on the exam (July 2023). Went with proposed. Scored 917

Did my exam on 15th November 2022. This question was on it.

Question #201

A company maintains multiple web and mobile applications. Each application uses custom in-house identity providers as well as social identity providers. You need to implement single sign-on (SSO) for all the applications.
What should you do?

A) Use Azure Active Directory B2C (Azure AD B2C) with custom policies.
B) Use Azure Active Directory B2B (Azure AD B2B) and enable external collaboration. (Correct Answer)
C) Use Azure Active Directory B2C (Azure AD B2C) with user flows.

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D) Use Azure Active Directory B2B (Azure AD B2B).

Explanation

Correct Answer:
B
You can add Google as an identity provider for B2B guest users.
Federation with SAML/WS-Fed identity providers for guest users.
Make sure your organization's external collaboration settings are configured such that you're allowed to invite guests.
Note 1: As a user who is assigned any of the limited administrator directory roles, you can use the Azure portal to invite B2B collaboration users. You can invite guest users to the directory, to a group, or to an application. After you invite a user through any of these methods, the invited user's account is added to Azure
Active Directory (Azure AD), with a user type of Guest.
Note 2: Direct federation in Azure Active Directory is now referred to as SAML/WS-Fed identity provider (IdP) federation.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/external-identities/google-federation https://docs.microsoft.com/en-us/azure/active-directory/external-identities/add-users-administrator

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Community Discussion

The provided answer is wrong! Based on this article: https://docs.microsoft.com/en-us/azure/active-directory/external-identities/external-collaboration-settings-configure External collaboration settings let you specify what roles in your organization can invite external users for B2B collaboration. These settings also include options for allowing or blocking specific domains, and options for restricting what external guest users can see in your Azure AD directory. So, you use B2B external collaboration to invite guests into your Azure AD tenant. I vote for Custom Policies. Both Custom Policies and User Flows support external identity providers, but because of required custom in-house providers support, I'd choose Custom Policies over the User Flows - see https://docs.microsoft.com/en-us/azure/active-directory-b2c/user-flow-overview#comparing-user-flows-and-custom-policies

Selected Answer: C

"C. Use Azure Active Directory B2C (Azure AD B2C) with user flows." Azure AD B2C is a cloud-based identity management service that enables you to customize and control how users sign up, sign in, and manage their profiles when interacting with your

applications. With Azure AD B2C, you can create user flows that define the steps in the authentication and authorization process for your applications, and you can use these user flows to enable SSO across your applications. User flows allow you to customize the authentication experience for your users, including specifying the identity providers that you want to use, such as custom in-house identity providers or social identity providers. You can also customize the user interface, branding, and policies that apply to each user flow. References: https://learn.microsoft.com/en-us/azure/active-directory-b2c/user-flow-overview

Selected Answer: A

A - correct answer

Selected Answer: A

A for sure

A https://docs.microsoft.com/en-us/azure/active-directory-b2c/custom-policy-reference-sso

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Question #202

You develop a Python application for image rendering that uses GPU resources to optimize rendering processes. You deploy the application to an Azure Container Instances (ACI) Linux container.
The application requires a secret value to be passed when the container is started. The value must only be accessed from within the container.
You need to pass the secret value.
What are two possible ways to achieve this goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Create an environment variable Set the secureValue property to the secret value. (Correct Answer)
B) Add the secret value to the container image. Use a managed identity.
C) Add the secret value to the application code Set the container startup command.
D) Add the secret value to an Azure Blob storage account. Generate a SAS token.
E) Mount a secret volume containing the secret value in a secrets file. (Correct Answer)

Explanation

Correct Answer:
AE
A: Secure environment variables -
Another method (another than a secret volume) for providing sensitive information to containers (including Windows containers) is through the use of secure environment variables.
E: Use a secret volume to supply sensitive information to the containers in a container group. The secret volume stores your secrets in files within the volume, accessible by the containers in the container group. By storing secrets in a secret volume, you can avoid adding sensitive data like SSH keys or database credentials to your application code.
Reference:
https://docs.microsoft.com/en-us/azure/container-instances/container-instances-volume-secret

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Community Discussion

Selected Answer: AE

A and E

Got it in exam 20/10/2022

Selected Answer: AE

Secure values Objects with secure values are intended to hold sensitive information like passwords or keys for your application. Using secure values for environment variables is both safer and more flexible than including it in your container's image. Another option is to use secret volumes, described in Mount a secret volume in Azure Container Instances..... https://docs.microsoft.com/en-us/azure/container-instances/container-instances-environment-variables

got this question on 06-29-2023

correct, in 2023Mar24, score: 904/1000.

Question #203

You are developing a user portal for a company.
You need to create a report for the portal that lists information about employees who are subject matter experts for a specific topic. You must ensure that administrators have full control and consent over the data.
Which technology should you use?

A) Microsoft Graph data connect (Correct Answer)
B) Microsoft Graph API
C) Microsoft Graph connectors

Explanation

Correct Answer:
A
Data Connect grants a more granular control and consent model: you can manage data, see who is accessing it, and request specific properties of an entity. This enhances the Microsoft Graph model, which grants or denies applications access to entire entities.
Microsoft Graph Data Connect augments Microsoft Graph's transactional model with an intelligent way to access rich data at scale. The data covers how workers communicate, collaborate, and manage their time across all the applications and services in Microsoft 365.
Incorrect:
Not B: The Microsoft Graph API is a RESTful web API that enables you to access Microsoft Cloud service resources. After you register your app and get authentication tokens for a user or service, you can make requests to the Microsoft Graph API.
A simplistic definition of a Graph API is an API that models the data in terms of nodes and edges (objects and relationships) and allows the client to interact with multiple nodes in a single request.
Not C: Microsoft Graph connectors, your organization can index third-party data so that it appears in Microsoft Search results.
With Microsoft Graph connectors, your organization can index third-party data so that it appears in Microsoft Search results.
Reference:
https://docs.microsoft.com/en-us/graph/data-connect-concept-overview

Community Discussion

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Selected Answer: A

https://learn.microsoft.com/en-us/graph/overview#access-microsoft-graph-data-at-scale:~:text=Find%20you%20the%20closest%20expert%20on%20a%20topic%20to%20you%20in%20your%20

Big Microsoft Brother is watching you with some kind of shady tool : 'Data Connect'

I got this question on my exam, 2023Dec, go with what I remember was the most voted answer. Score 902, most of the questions were here, slightly different on wording because the Azure Ad <-> Entra Id change. Case was City Power & Light. Good luck! Important tip, you have access to microsoft learn during the exam!

The people who are commenting the right ans have paid subscription (Contributor role) as bec i am one of them and you can notice, comments are reduced from others who doesnt have access to this role. they cant access this content..

Selected Answer: B

The Microsoft Graph API is the best technology to use for creating a report that lists information about employees who are subject matter experts for a specific topic. It provides a comprehensive set of APIs that allow you to retrieve, create, update, and delete data across Microsoft 365 services. Additionally, the Microsoft Graph API provides a number of security features that can be used to ensure that administrators have full control and consent over the data.

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Question #204

HOTSPOT -

You are a developer building a web site using a web app. The web site stores configuration data in Azure App Configuration.

Access to Azure App Configuration has been configured to use the identity of the web app for authentication. Security requirements specify that no other authentication systems must be used.

You need to load configuration data from Azure App Configuration.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
Host .CreateDefaultBuilder(args)
.ConfigureWebHostDefaults(wb =>
{

  wb.ConfigureAppConfiguration((hc, config) =>
  {
    var settings = config.Build();
    config.                                  (options =>
```

AddAzureKeyVault
DefaultAzureCredential
ChainedTokenCredential
ManagedIdentityCredential
AddAzureAppConfiguration

```
      options.Connect(new Uri(settings["AppConfig:Endpoint"]),
        new                                  ()));
```

AddAzureKeyVault
DefaultAzureCredential
ChainedTokenCredential
ManagedIdentityCredential
AddAzureAppConfiguration

```
  });
})
```

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Explanation

Correct Answer:

Answer Area

```
Host .CreateDefaultBuilder(args)
.ConfigureWebHostDefaults(wb =>
{

  wb.ConfigureAppConfiguration((hc, config) =>
  {
    var settings = config.Build();
    config.                                  (options =>
```

AddAzureKeyVault
DefaultAzureCredential
ChainedTokenCredential
ManagedIdentityCredential
AddAzureAppConfiguration

```
      options.Connect(new Uri(settings["AppConfig:Endpoint"]),
        new                                  ()));
```

AddAzureKeyVault
DefaultAzureCredential
ChainedTokenCredential
ManagedIdentityCredential
AddAzureAppConfiguration

```
  });
})
```

Box 1: AddAzureAppConfiguration -

Load data from App Configuration, code example:

public static IHostBuilder CreateHostBuilder(string[] args) =>

Host.CreateDefaultBuilder(args)

.ConfigureWebHostDefaults(webBuilder =>

webBuilder.ConfigureAppConfiguration((hostingContext, config) =>

{

var settings = config.Build();

config.AddAzureAppConfiguration(options =>

{

Etc.

Box 2: ManagedIdentityCredential

Use managed identities to access App Configuration
If you want to use a user-assigned managed identity, be sure to specify the clientId when creating the ManagedIdentityCredential. config.AddAzureAppConfiguration(options =>
{
options.Connect(new Uri(settings["AppConfig:Endpoint"]), new ManagedIdentityCredential("<your_clientId>"))
});
Full code sample:
public static IHostBuilder CreateHostBuilder(string[] args) =>
Host.CreateDefaultBuilder(args)
.ConfigureWebHostDefaults(webBuilder =>
webBuilder.ConfigureAppConfiguration((hostingContext, config) =>
{
var settings = config.Build();
config.AddAzureAppConfiguration(options =>
options.Connect(new Uri(settings["AppConfig:Endpoint"]), new ManagedIdentityCredential()));
})
.UseStartup<Startup>());
Reference:
https://docs.microsoft.com/en-us/azure/azure-app-configuration/howto-integrate-azure-managed-service-identity?tabs=core5x&pivots=framework- dotnet

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Community Discussion

Answer is right. "Security requirements specify that no other authentication systems must be used" So you cannot use DefaultAzureCredential, risk of other authentication systems being used. otherwise you could have used DefaultAzureCredential for ease

Got this in 09/22 , went with the answers given, score 927.

Ans is correct AddAzureAppConfiguration ManagedIdentityCredential

https://learn.microsoft.com/en-us/azure/azure-app-configuration/howto-integrate-azure-managed-service-identity?tabs=core6x&pivots=framework-dotnet#use-a-managed-identity

second answer is wrong ->https://learn.microsoft.com/en-us/answers/questions/987373/azure-app-configuration-label

Question #205

HOTSPOT -

You are building an application that stores sensitive customer data in Azure Blob storage. The data must be encrypted with a key that is unique for each customer.

If the encryption key has been corrupted it must not be used for encryption.

You need to ensure that the blob is encrypted.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
Uri blobUri = ... ; TokenCredential c = ...
byte[] key = ...; string verify = ...
var x = new                                                    ;
            AesManaged(key)
            AsnEncodedData(key)
            CustomerProvidedKey(key)
            BlobContainerEncryptionScopeOptions { DefaultEncryptionScope = key }
if (                                                           ) {
      x.IV == verify
      x.RawData == verify
      x.Encryption == verify
      x.PreventEncryptionScopeOverride == verify
  var o = new BlobClientOptions()
  {
                                        = x
      Version
      Transport
      EncryptionScope
      CustomerProvidedKey
  };
  var blobClient = new BlobClient(blobUri, c, o);
}
```

Explanation

Correct Answer:

Answer Area

```
Uri blobUri = ... ; TokenCredential c = ...
byte[] key = ...; string verify = ...
var x = new                                                    ;
```

- AesManaged(key)
- AsnEncodedData(key)
- CustomerProvidedKey(key)
- BlobContainerEncryptionScopeOptions { DefaultEncryptionScope = key }

```
if (                                                    ) {
```

- x.IV == verify
- x.RawData == verify
- x.Encryption == verify
- x.PreventEncryptionScopeOverride == verify

```
  var o = new BlobClientOptions()
  {
                                  = x
```

- Version
- Transport
- EncryptionScope
- CustomerProvidedKey

```
  };
  var blobClient = new BlobClient(blobUri, c, o);
}
```

Box 1: CustomerProvidedKey(key)
The data must be encrypted with a key that is unique for each customer.
Sample code:
```
async static Task UploadBlobWithClientKey(Uri blobUri,
Stream data,
byte[] key,
string keySha256)
{
// Create a new customer-provided key.
// Key must be AES-256.
var cpk = new CustomerProvidedKey(key);
```

Box 2: Encryption -
CustomerProvidedKey.EncryptionKey Property
Sample code continued:
```
// Check the key's encryption hash.
if (cpk.EncryptionKeyHash != keySha256)
{
throw new InvalidOperationException("The encryption key is corrupted.");
}
```

Box 3: CustomerProvidedKey -
Sample code continued;

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```
// Specify the customer-provided key on the options for the client.
BlobClientOptions options = new BlobClientOptions()
{

CustomerProvidedKey = cpk -
};
// Create the client object with options specified.
BlobClient blobClient = new BlobClient(
blobUri,
new DefaultAzureCredential(),
options);
```

Incorrect:

* Version - Gets the BlobClientOptions.ServiceVersion of the service API used when making requests.

Transport - The HttpPipelineTransport to be used for this client.

Reference:

https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-customer-provided-key

Community Discussion

This looks correct! https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-customer-provided-key

Shouldn't it be EncryptionKeyHash based on the link provided?

Had this question in today's exam: 2023-07-26 Also the exam did have the value as EncryptedKeyHash

AZ204 should be renamed as Azure .NET/c# Developer

The second box probably should be EncryptionKey, CustomerProvidedKey doesn't even has Encryption property, https://docs.microsoft.com/en-us/dotnet/api/azure.storage.blobs.models.customerprovidedkey?view=azure-dotnet

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Question #206

DRAG DROP -

You develop a web app that uses the tier D1 app service plan by using the Web Apps feature of Microsoft Azure App Service.

Spikes in traffic have caused increases in page load times.

You need to ensure that the web app automatically scales when CPU load is about 85 percent and minimize costs.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Select and Place:

Explanation

Correct Answer:

Step 1: Configure the web app to the Standard App Service Tier
The Standard tier supports auto-scaling, and we should minimize the cost.
Step 2: Enable autoscaling on the web app

First enable autoscale -

Step 3: Add a scale rule -

Step 4: Add a Scale condition -
Reference:
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-autoscale-get-started

Community Discussion

The Provided Answer is Correct

the correct answer is :- Configure the web app to the Standard App Service Tier Enable autoscaling on the web app Add a Scale condition Add a scale rule Please refer - https://docs.microsoft.com/en-us/learn/modules/app-service-autoscale-rules/6-autoscale-a-web-app

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the correct answer is :- Configure the web app to the Standard App Service Tier Enable autoscaling on the web app Add a Scale condition Add a scale rule Please refer - https://docs.microsoft.com/en-us/learn/modules/app-service-autoscale-rules/6-autoscale-a-web-app

Configure the web app to the Standard App Service Tier Enable autoscaling on the web app Add a Scale condition Add a scale rule

No. This is for Monitor auto scale. Question is for Web App auto scale, and for that steps would be as follow: Configure the web app to the Standard App Service Tier Enable autoscaling on the web app Add a Scale condition Add a scale rule Reference: https://docs.microsoft.com/en-us/learn/modules/app-service-autoscale-rules/6-autoscale-a-web-app

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Question #207

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.
You are developing and deploying several ASP.NET web applications to Azure App Service. You plan to save session state information and HTML output.
You must use a storage mechanism with the following requirements:
☞ Share session state across all ASP.NET web applications.
☞ Support controlled, concurrent access to the same session state data for multiple readers and a single writer.
☞ Save full HTTP responses for concurrent requests.
You need to store the information.
Proposed Solution: Enable Application Request Routing (ARR).
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead deploy and configure Azure Cache for Redis. Update the web applications.

Reference:
https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching#managing-concurrency-in-a-cache

Community Discussion

B. NoNoNoNo

The correct answer is NO. Application Request Routing is for controlling internet traffic in IIS using a proxy server. It doesn't deal with managing state information.

As stated, "No" is the correct answer. Application Request Routing is for scaling and load balancing. https://www.iis.net/downloads/microsoft/application-request-routing

As stated, "No" is the correct answer. Application Request Routing is for scaling and load balancing. https://www.iis.net/downloads/microsoft/application-request-routing

In Azure, you can store ASP.NET Session State in a SQL database, Azure Table Storage or an in-memory distributed cache such as REDIS. https://docs.microsoft.com/en-us/archive/msdn-magazine/2014/august/microsoft-azure-use-distributed-cache-in-microsoft-azure

SecExams

Question #208

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.
You are developing and deploying several ASP.NET web applications to Azure App Service. You plan to save session state information and HTML output.
You must use a storage mechanism with the following requirements:
✑ Share session state across all ASP.NET web applications.
✑ Support controlled, concurrent access to the same session state data for multiple readers and a single writer.
✑ Save full HTTP responses for concurrent requests.
You need to store the information.
Proposed Solution: Deploy and configure an Azure Database for PostgreSQL. Update the web applications.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead deploy and configure Azure Cache for Redis. Update the web applications.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching#managing-concurrency-in-a-cache

Community Discussion

The worst solution from a performance and scalability standpoint is to use a database backed session state provider. https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-aspnet-session-state-provider

But the question says, does it meet the goal? So using a postgres db to save the session does meet the goal. Any thoughts on this

Although Postgres will lack the performance compared to Redis, the solution will work. Any thought?

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-aspnet-session-state-provider Postgresql is not listed as viable option on MS site. So I guess this is why it is not acceptable.

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-aspnet-session-state-provider Postgresql is not listed as viable option on MS site. So I guess this is why it is not acceptable.

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Question #209

HOTSPOT -

A company is developing a gaming platform. Users can join teams to play online and see leaderboards that include player statistics. The solution includes an entity named Team.

You plan to implement an Azure Redis Cache instance to improve the efficiency of data operations for entities that rarely change.

You need to invalidate the cache when team data is changed.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
void ClearCachedTeams()
{
    [IDatabase cache = Connection.GetDatabase();
     ICache cache = Connection.GetDatabase();]
    [cache.KeyDelete("Team");
     cache.StringSet("Team", "");
     cache.ValueDelete("Team");
     cache.StringGet("Team", "");]
  ViewBag.msg += "Team data removed from cache.";
}
```

Explanation

Correct Answer:

Answer Area

```
void ClearCachedTeams()
{
    [IDatabase cache = Connection.GetDatabase();
    ICache cache = Connection.GetDatabase();]
    [cache.KeyDelete("Team");
    cache.StringSet("Team", "");
    cache.ValueDelete("Team");
    cache.StringGet("Team", "");]
  ViewBag.msg += "Team data removed from cache.";
}
```

Box 1: IDatabase cache = connection.GetDatabase();
Connection refers to a previously configured ConnectionMultiplexer.
Box 2: cache.StringSet("teams","")
To specify the expiration of an item in the cache, use the TimeSpan parameter of StringSet. cache.StringSet("key1", "value1", TimeSpan.FromMinutes(90));
Reference:
https://azure.microsoft.com/sv-se/blog/lap-around-azure-redis-cache-preview/ https://docs.microsoft.com/en-us/cli/azure/webapp/config/container

Community Discussion

Same question on AZ203 Answer is: IDatabase cache = Connection.GetDatabase(); cache.KeyDelete("teams") https://www.secexams.com/discussions/microsoft/view/12706-exam-az-203-topic-5-question-9-discussion/

Answer is incorrect (for the 2nd part). cache.KeyDelete() is the correct method for removing a key from the redis cache.

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-cache-aside-leaderboard#update-the-teamscontroller-to-read-from-the-cache-or-the-database

SecExams

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-cache-aside-leaderboard#update-the-teamscontroller-to-read-from-the-cache-or-the-database

https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-cache-aside-leaderboard#update-the-teamscontroller-to-read-from-the-cache-or-the-database

Question #210

DRAG DROP -

A company has multiple warehouses. Each warehouse contains IoT temperature devices which deliver temperature data to an Azure Service Bus queue.

You need to send email alerts to facility supervisors immediately if the temperature at a warehouse goes above or below specified threshold temperatures.

Which five actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Add a logic app trigger that fires when one or more messages arrive in the queue.	
Add a Recurrence trigger that schedules the app to run every 15 minutes.	
Add an action that sends an email to specified personnel if the temperature is outside of those thresholds.	
Add a trigger that reads IoT temperature data from a Service Bus queue.	
Add a logic app action that fires when one or more messages arrive in the queue.	
Add a condition that compares the temperature against the upper and lower thresholds.	
Create a blank Logic app.	
Add an action that reads IoT temperature data from the Service Bus queue.	

Explanation

Correct Answer:

Actions	Answer Area
Add a logic app trigger that fires when one or more messages arrive in the queue.	Create a blank Logic app.
Add a Recurrence trigger that schedules the app to run every 15 minutes.	Add a logic app action that fires when one or more messages arrive in the queue.
Add an action that sends an email to specified personnel if the temperature is outside of those thresholds.	Add an action that reads IoT temperature data from the Service Bus queue.
Add a trigger that reads IoT temperature data from a Service Bus queue.	Add a condition that compares the temperature against the upper and lower thresholds.
Add a logic app action that fires when one or more messages arrive in the queue.	Add an action that sends an email to specified personnel if the temperature is outside of those thresholds.
Add a condition that compares the temperature against the upper and lower thresholds.	
Create a blank Logic app.	
Add an action that reads IoT temperature data from the Service Bus queue.	

Step 1: Create a blank Logic app.
Create and configure a Logic App.
Step 2: Add a logical app trigger that fires when one or more messages arrive in the queue.
Configure the logic app trigger.
Under Triggers, select When one or more messages arrive in a queue (auto-complete).
Step 3: Add an action that reads IoT temperature data from the Service Bus queue
Step 4: Add a condition that compares the temperature against the upper and lower thresholds.
Step 5: Add an action that sends an email to specified personnel if the temperature is outside of those thresholds
Reference:
https://docs.microsoft.com/en-us/azure/iot-hub/iot-hub-monitoring-notifications-with-azure-logic-apps

Community Discussion

The 2nd step sholud be "logic app trigger". You need a trigger to fire the logic app Ref: https://docs.microsoft.com/en-us/azure/iot-hub/iot-hub-monitoring-notifications-with-azure-logic-apps

Order: 1. Create blank logic app 2. Add logic app trigger when one or more messages arrive in the queue 3. Action to read IoT Temp data 4. Compare upper and lower temp 5. Send emails

SecExams

Logic apps are supposed to be out of scope as of March 2021. Can anybody confirm they have gotten this question recently?

First , we need to create a blank logic app. Then we need to add a trigger to the logic app which will fire when one or more messages arrives in the queue. Then we need an action to read the IoT temperature data. Then we need to have a condition that compares the temperature against the upper and lower thresholds. And finally, we have to have an action that sends an email to the specified personnel.

Logic Apps are out of Scope from AZ-204 now !

Question #211

DRAG DROP -

You develop an ASP.NET Core MVC application. You configure the application to track webpages and custom events.

You need to identify trends in application usage.

Which Azure Application Insights Usage Analysis features should you use? To answer, drag the appropriate features to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Features	Answer Area	
Users	**Requirement**	**Feature**
Funnels	Which pages visited by users most often correlate to a product purchase?	Users
Impact	How does load time of the product display page affect a user's decision to purchase a product?	Impact
Retention	Which events most influence a user's decision to continue to use the application?	Retention
User Flows	Are there places in the application that users often perform repetitive actions?	User Flows

Box 1: Users -

Box 2: Impact -
One way to think of Impact is as the ultimate tool for settling arguments with someone on your team about how slowness in some aspect of your site is affecting whether users stick around. While users may tolerate a certain amount of slowness, Impact gives you insight into how best to balance optimization and performance to maximize user conversion.

Box 3: Retention -
The retention feature in Azure Application Insights helps you analyze how many users return to your app, and how often they perform particular tasks or achieve goals. For example, if you run a game site, you could compare the numbers of users who return to the site after losing a game with the number who return after winning. This knowledge can help you improve both your user experience and your business strategy.

Box 4: User flows -
The User Flows tool visualizes how users navigate between the pages and features of your site. It's great for answering questions like:
✏ How do users navigate away from a page on your site?
✏ What do users click on a page on your site?
✏ Where are the places that users churn most from your site?
✏ Are there places where users repeat the same action over and over?
Incorrect Answers:
Funnel: If your application involves multiple stages, you need to know if most customers are progressing through the entire process, or if they are ending the process at some point. The progression through a series of steps in a web application is known as a funnel. You can use Azure Application Insights Funnels to gain insights into your users, and monitor step-by-step conversion rates.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/usage-impact

Community Discussion

SecExams

1st one Funnels

1.Funnels 2.Impact 3.Retention 4.User flow

On my exam 2022-12-26. Chose： Funnels Impact Retention User Flows

On my exam 2022-12-26. Chose： Funnels Impact Retention User Flows

The end-goal of a 'Funnel' is a product purchase. 'Users' is just about how users use your app.

Question #212

You develop a gateway solution for a public facing news API. The news API back end is implemented as a RESTful service and uses an OpenAPI specification.
You need to ensure that you can access the news API by using an Azure API Management service instance.
Which Azure PowerShell command should you run?

A) Import-AzureRmApiManagementApi -Context $ApiMgmtContext -SpecificationFormat "Swagger" -SpecificationPath $SwaggerPath -Path $Path
B) New-AzureRmApiManagementBackend -Context $ApiMgmtContext -Url $Url -Protocol http
C) New-AzureRmApiManagement -ResourceGroupName $ResourceGroup -Name $Name Location $Location -Organization $Org -AdminEmail $AdminEmail"€ƛ
D) New-AzureRmApiManagementBackendProxy -Url $ApiUrl (Correct Answer)

Explanation

Correct Answer:
D
New-AzureRmApiManagementBackendProxy creates a new Backend Proxy Object which can be piped when creating a new Backend entity.
Example: Create a Backend Proxy In-Memory Object
PS C:\>$secpassword = ConvertTo-SecureString "PlainTextPassword" -AsPlainText -Force
PS C:\>$proxyCreds = New-Object System.Management.Automation.PSCredential ("foo", $secpassword)
PS C:\>$credential = New-AzureRmApiManagementBackendProxy -Url "http://12.168.1.1:8080" -ProxyCredential $proxyCreds
PS C:\>$apimContext = New-AzureRmApiManagementContext -ResourceGroupName "Api-

Default-WestUS" -ServiceName "contoso"
PS C:\>$backend = New-AzureRmApiManagementBackend -Context $apimContext -BackendId 123 -Url 'https://contoso.com/awesomeapi' -Protocol http -Title "first backend" -SkipCertificateChainValidation $true -Proxy $credential -Description "backend with proxy server"
Creates a Backend Proxy Object and sets up Backend
Incorrect Answers:
A: The Import-AzureRmApiManagementApi cmdlet imports an Azure API Management API from a file or a URL in Web Application Description Language (WADL),
Web Services Description Language (WSDL), or Swagger format.
B: New-AzureRmApiManagementBackend creates a new backend entity in Api Management.
C: The New-AzureRmApiManagement cmdlet creates an API Management deployment in Azure API Management.
Reference:
https://docs.microsoft.com/en-us/powershell/module/azurerm.apimanagement/new-azurermapimanagementbackendproxy?view=azurermps-6.13.0

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Community Discussion

I think the correct answer is A because it is the one tuhat takes advantage of the swagger definition of the API?

D should be the answer - it is about accessing API - not creating it (eg based on swagger)

Swagger and OpenAPI specs are the same

Swagger and OpenAPI specs are the same

Swagger and OpenAPI specs are the same

Question #213

You are creating a hazard notification system that has a single signaling server which triggers audio and visual alarms to start and stop.
You implement Azure Service Bus to publish alarms. Each alarm controller uses Azure Service Bus to receive alarm signals as part of a transaction. Alarm events must be recorded for audit purposes. Each transaction record must include information about the alarm type that was activated.
You need to implement a reply trail auditing solution.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Assign the value of the hazard message SessionID property to the ReplyToSessionId property. (Correct Answer)
B) Assign the value of the hazard message MessageId property to the DevileryCount property.
C) Assign the value of the hazard message SessionID property to the SequenceNumber property.
D) Assign the value of the hazard message MessageId property to the CorrelationId property. (Correct Answer)
E) Assign the value of the hazard message SequenceNumber property to the DeliveryCount property.
F) Assign the value of the hazard message MessageId property to the SequenceNumber property.

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Explanation

Correct Answer:
AD
D: CorrelationId: Enables an application to specify a context for the message for the purposes of correlation; for example, reflecting the MessageId of a message that is being replied to.
A: ReplyToSessionId: This value augments the ReplyTo information and specifies which SessionId should be set for the reply when sent to the reply entity.
Incorrect Answers:

B, E: DeliveryCount -
Number of deliveries that have been attempted for this message. The count is incremented when a message lock expires, or the message is explicitly abandoned by the receiver. This property is read-only.

C, E: SequenceNumber -
The sequence number is a unique 64-bit integer assigned to a message as it is accepted and stored by the broker and functions as its true identifier. For partitioned entities, the topmost 16 bits reflect the partition identifier. Sequence numbers monotonically increase and are gapless. They roll over to 0 when the 48-
64 bit range is exhausted. This property is read-only.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messages-payloads

Community Discussion

Answer is correct. ReplyToSessionId (reply-to-group-id) This value augments the ReplyTo information and specifies which SessionId should be set for the reply when sent to the reply entity. CorrelationId (correlation-id) Enables an application to specify a context for the message for the purposes of correlation; for example, reflecting the MessageId of a message that is being replied to.

I have no clue what this is about, but I get the feeling we are supposed to arrive at the correct answer by elimination.

You're right : DeliveryCount, SequenceNumber are read only, two remaining.

You're right : DeliveryCount, SequenceNumber are read only, two remaining.

Answer is correct. Nice example to show the purpose of CorrelationId and ReplyToSessionId.

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Question #214

You are developing an Azure function that connects to an Azure SQL Database instance. The function is triggered by an Azure Storage queue.
You receive reports of numerous System.InvalidOperationExceptions with the following message:
`Timeout expired. The timeout period elapsed prior to obtaining a connection from the pool. This may have occurred because all pooled connections were in use and max pool size was reached.`
You need to prevent the exception.
What should you do?

A) In the host.json file, decrease the value of the batchSize option
B) Convert the trigger to Azure Event Hub
C) Convert the Azure Function to the Premium plan (Correct Answer)
D) In the function.json file, change the value of the type option to queueScaling

Explanation

Correct Answer:
C
With the Premium plan the max outbound connections per instance is unbounded compared to the 600 active (1200 total) in a Consumption plan.
Note: The number of available connections is limited partly because a function app runs in a sandbox environment. One of the restrictions that the sandbox imposes on your code is a limit on the number of outbound connections, which is currently 600 active (1,200 total) connections per instance. When you reach this limit, the functions runtime writes the following message to the logs: Host thresholds exceeded: Connections.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/manage-connections https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#service-limits

Community Discussion

A is the correct answer

The error shown is a SQL Server error not an Azure functions error. https://forums.asp.net/t/2004198.aspx?

Timeout+expired+The+timeout+period+elapsed+prior+to+obtaining+a+connection+from+the+pool+This+ma
The actual issue appears to be that you have too many simultaneous functions running, the solution is to limit the batch size (# functions that can run in parallel) https://social.msdn.microsoft.com/Forums/azure/en-US/a2955297-1c14-45f2-b799-6346b340519a/how-does-batchsize-works-in-hostjson?forum=AzureFunctions

Correct! We have to consider we are speaking about Azure Function with Azure Storage Queue Trigger. This is a case where execution could happens in parallel based on the queue batchSize property (see https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-queue). I think this is the batchSize property referred in the question (and not that in the functions aggregator. That's another thing). Besides, we have to consider the origin of the error message: Azure Sql Database!! So upgrading the plan the problem could only get worse thing.

Correct! We have to consider we are speaking about Azure Function with Azure Storage Queue Trigger. This is a case where execution could happens in parallel based on the queue batchSize property (see https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-queue). I think this is the batchSize property referred in the question (and not that in the functions aggregator. That's another thing). Besides, we have to consider the origin of the error message: Azure Sql Database!! So upgrading the plan the problem could only get worse thing.

got this question on 29/06/2023

SecExams

Question #215

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.
You are developing and deploying several ASP.NET web applications to Azure App Service. You plan to save session state information and HTML output.
You must use a storage mechanism with the following requirements:
✑ Share session state across all ASP.NET web applications.
✑ Support controlled, concurrent access to the same session state data for multiple readers and a single writer.
✑ Save full HTTP responses for concurrent requests.
You need to store the information.
Proposed Solution: Deploy and configure Azure Cache for Redis. Update the web applications.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
The session state provider for Azure Cache for Redis enables you to share session information between different instances of an ASP.NET web application.
The same connection can be used by multiple concurrent threads.
Redis supports both read and write operations.
The output cache provider for Azure Cache for Redis enables you to save the HTTP responses generated by an ASP.NET web application.
Note: Using the Azure portal, you can also configure the eviction policy of the cache, and control access to the cache by adding users to the roles provided. These roles, which define the operations that members can perform, include Owner, Contributor, and Reader. For example, members of the Owner role have complete control over the cache (including security) and its contents, members of the Contributor role can read and write information in the cache, and members of the
Reader role can only retrieve data from the cache.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching

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Community Discussion

Correct answer

This question is part of a series of questions that present the same scenario. Each question in the series contains "" a unique solution"""". Determine whether the solution meets the stated goals. This is the unique solution A: Yes.

A. Yes

Selected Answer: A

Correct answer

Selected Answer: A

A is correct answer.

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Question #216

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HOTSPOT -

You are debugging an application that is running on Azure Kubernetes cluster named cluster1. The cluster uses Azure Monitor for containers to monitor the cluster.

The application has sticky sessions enabled on the ingress controller.

Some customers report a large number of errors in the application over the last 24 hours.

You need to determine on which virtual machines (VMs) the errors are occurring.

How should you complete the Azure Monitor query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
let startTimestamp = [ago(1d) | since(1d) | totimespan(1d) | date(now() - 1d)] ;
let ContainerIDs = KubePodInventory
| where ClusterName == "Cluster1"
| [top ContainerID | union ContainerID | sample ContainerID | distinct ContainerID] ;
ContainerLog
| [fork containerIDs | where ContainerID in (ContainerIDs) | restrict ContainerID in (ContainerIDs) | join ContainerID = = ContainerIDs.ContainerID]
| where TimeGenerated > startTimestamp
| where LogEntrySource = = "stderr"
| [project by Computer | summarize by Computer | partition count() by Computer | summarize count() by Computer]
```

Explanation

Correct Answer:

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Answer Area

let startTimestamp = [▼] ;

- ago(1d)
- since(1d)
- totimespan(1d)
- date(now() - 1d)

```
let ContainerIDs = KubePodInventory
| where ClusterName == "Cluster1"
```

| [▼] ;

- top ContainerID
- union ContainerID
- sample ContainerID
- distinct ContainerID

ContainerLog

| [▼]

- fork containerIDs
- where ContainerID in (ContainerIDs)
- restrict ContainerID in (ContainerIDs)
- join ContainerID = = ContainerIDs.ContainerID

```
| where TimeGenerated > startTimestamp
| where LogEntrySource = = "stderr"
```

| [▼]

- project by Computer
- summarize by Computer
- partition count() by Computer
- summarize count() by Computer

Box 1: ago(1d)

Box 2: distinct containerID -
Box 3: where ContainerID in (ContainerIDs)
Box 4: summarize Count by Computer
Summarize: aggregate groups of rows
Use summarize to identify groups of records, according to one or more columns, and apply aggregations to them. The most common use of summarize is count, which returns the number of results in each group.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/get-started-queries
https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/query-optimization

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Community Discussion

the answer is correct

You'll notice it really isn't about kubernetes per say, but how to query your logs from Log Analytics

You'll notice it really isn't about kubernetes per say, but how to query your logs from Log Analytics

Isn't kubernetes out of scope for AZ-204?

This was on the exam (July 2023). Went with proposed. Scored 917

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Question #217

HOTSPOT -

You plan to deploy a web app to App Service on Linux. You create an App Service plan. You create and push a custom Docker image that contains the web app to Azure Container Registry.

You need to access the console logs generated from inside the container in real-time.

How should you complete the Azure CLI command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Explanation

Correct Answer:

Answer Area

Box 1: config -
To Configure logging for a web app use the command:
az webapp log config
Box 2: --docker-container-logging
Syntax include:
az webapp log config [--docker-container-logging {filesystem, off}]

Box 3: webapp -
To download a web app's log history as a zip file use the command: az webapp log download

Box 4: download -
Reference:
https://docs.microsoft.com/en-us/cli/azure/webapp/log

Community Discussion

It never said dowload, it says "access real time" Will go with TAIL: https://docs.microsoft.com/en-us/cli/azure/webapp/log?view=azure-cli-latest#az_webapp_log_tail

Correct Answers are config docker-container-logging webapp tail

It says the same for download.

It says the same for download.

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It says the same for download.

Question #218

You develop and deploy an ASP.NET web app to Azure App Service. You use Application Insights telemetry to monitor the app.
You must test the app to ensure that the app is available and responsive from various points around the world and at regular intervals. If the app is not responding, you must send an alert to support staff.
You need to configure a test for the web app.
Which two test types can you use? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) integration
B) multi-step web (Correct Answer)
C) URL ping (Correct Answer)
D) unit
E) load

Explanation

Correct Answer:
BC
There are three types of availability tests:
✑ URL ping test: a simple test that you can create in the Azure portal.
✑ Multi-step web test: A recording of a sequence of web requests, which can be played back to test more complex scenarios. Multi-step web tests are created in Visual Studio Enterprise and uploaded to the portal for execution.
✑ Custom Track Availability Tests: If you decide to create a custom application to run availability tests, the TrackAvailability() method can be used to send the results to Application Insights.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability

Community Discussion

Given answer is correct

True: https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability There are three types of availability tests: URL ping test Multi-step web test Custom Track Availability Tests

True: https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability There are three types of availability tests: URL ping test Multi-step web test Custom Track Availability Tests

Correctemundo!

Got similar one 01/2022. But tests needed to also test for SSL and custom headers.. went with multistep and Standard test (not ping or custom track).

SecExams

Question #219

DRAG DROP -

A web service provides customer summary information for e-commerce partners. The web service is implemented as an Azure Function app with an HTTP trigger.

Access to the API is provided by an Azure API Management instance. The API Management instance is configured in consumption plan mode. All API calls are authenticated by using OAuth.

API calls must be cached. Customers must not be able to view cached data for other customers.

You need to configure API Management policies for caching.

How should you complete the policy statement?

Select and Place:

Explanation

Correct Answer:

Box 1: internal - caching-type

Choose between the following values of the attribute:
✎ internal to use the built-in API Management cache,
✎ external to use the external cache as Azure Cache for Redis prefer-external to use external cache if configured or internal cache otherwise.
▪

Box 2: private -
downstream-caching-type
This attribute must be set to one of the following values.
✎ none - downstream caching is not allowed.
✎ private - downstream private caching is allowed.
✎ public - private and shared downstream caching is allowed.

Box 3: Authorization -
<vary-by-header>Authorization</vary-by-header>
<!-- should be present when allow-private-response-caching is "true"-->
Note: Start caching responses per value of specified header, such as Accept, Accept-Charset, Accept-Encoding, Accept-Language, Authorization, Expect, From,

Host, If-Match -
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-caching-policies

SecExams

Community Discussion

Internal Cache isn't available for Consumption plan. So shouldn't it be External (using Redis)?

Consumption Pricing Tier of API Management does not support Built-in Cache. Therefore caching-type should be set to "external". Reference: https://docs.microsoft.com/en-us/azure/api-management/api-management-features

Yes, you are right. In the feature-based comparison of the tiers, it says that built-in cache is not available. https://docs.microsoft.com/en-us/azure/api-management/api-management-features And here it says that "internal" would be using the built-in cache. https://docs.microsoft.com/en-us/azure/api-management/api-management-caching-policies

Yes, you are right. In the feature-based comparison of the tiers, it says that built-in cache is not available. https://docs.microsoft.com/en-us/azure/api-management/api-

management-features And here it says that "internal" would be using the built-in cache. https://docs.microsoft.com/en-us/azure/api-management/api-management-caching-policies

Got this one 02/2022. Went with: External Private Authorization

Question #220

You are developing applications for a company. You plan to host the applications on Azure App Services.
The company has the following requirements:
✑ Every five minutes verify that the websites are responsive.
✑ Verify that the websites respond within a specified time threshold.
Dependent requests such as images and JavaScript files must load properly.
✑ Generate alerts if a website is experiencing issues.
✑ If a website fails to load, the system must attempt to reload the site three more times.
You need to implement this process with the least amount of effort.
What should you do?

A) Create a Selenium web test and configure it to run from your workstation as a scheduled task.
B) Set up a URL ping test to query the home page.
C) Create an Azure function to query the home page.
D) Create a multi-step web test to query the home page. (Correct Answer)
E) Create a Custom Track Availability Test to query the home page.

Explanation

Correct Answer:
D
You can monitor a recorded sequence of URLs and interactions with a website via multi-step web tests.
Incorrect Answers:
A: Selenium is an umbrella project for a range of tools and libraries that enable and support the automation of web browsers.
It provides extensions to emulate user interaction with browsers, a distribution server for scaling browser allocation, and the infrastructure for implementations of the W3C WebDriver specification that lets you write interchangeable code for all major web

browsers.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/availability-multistep

Community Discussion

IMO, B is correct, a URL ping test is enough.

The Given Answer D is correct. Ping URL, does not satisfies : Verify that the websites respond within a specified time threshold. Dependent requests such as images and JavaScript files must load properly

Second thought Correct answer is B. ie URL Ping Test https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability

Second thought Correct answer is B. ie URL Ping Test https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability

Not really, all the objectives can be achieved through Ping-test. Multi-step test in a complex solution requiring more effort and dives into much deeper details that requested in the question. https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability#create-a-test : All the options listed here map1-1 with the question requirements.

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Question #221

You develop and add several functions to an Azure Function app that uses the latest runtime host. The functions contain several REST API endpoints secured by using SSL. The Azure Function app runs in a Consumption plan.
You must send an alert when any of the function endpoints are unavailable or responding too slowly.
You need to monitor the availability and responsiveness of the functions.
What should you do?

A) Create a URL ping test.
B) Create a timer triggered function that calls TrackAvailability() and send the results to Application Insights. (Correct Answer)

C) Create a timer triggered function that calls GetMetric("Request Size") and send the results to Application Insights.
D) Add a new diagnostic setting to the Azure Function app. Enable the FunctionAppLogs and Send to Log Analytics options.

Explanation

Correct Answer:
B
You can create an Azure Function with TrackAvailability() that will run periodically according to the configuration given in TimerTrigger function with your own business logic. The results of this test will be sent to your Application Insights resource, where you will be able to query for and alert on the availability results data.
This allows you to create customized tests similar to what you can do via Availability Monitoring in the portal. Customized tests will allow you to write more complex availability tests than is possible using the portal UI, monitor an app inside of your Azure VNET, change the endpoint address, or create an availability test even if this feature is not available in your region.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/availability-azure-functions

Community Discussion

Based on the doc, I believe B is correct. https://docs.microsoft.com/en-us/azure/azure-monitor/app/availability-azure-functions

I think the answer should be URL Ping Test. It can send an alert when the website is unavailable or unresponsive. See test timeouts and alerts in the link. https://docs.microsoft.com/en-us/azure/azure-monitor/app/monitor-web-app-availability

"responsiveness of the functions"<=== this one will need more than the ping test

"responsiveness of the functions"<=== this one will need more than the ping test

"responsiveness of the functions"<=== this one will need more than the ping test

SecExams

Question #222

DRAG DROP -

You are developing an application to retrieve user profile information. The application will use the Microsoft Graph SDK.

The app must retrieve user profile information by using a Microsoft Graph API call.

You need to call the Microsoft Graph API from the application.

In which order should you perform the actions? To answer, move all actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: Register the application with the Microsoft identity platform.

To authenticate with the Microsoft identity platform endpoint, you must first register your app at the Azure app registration portal

Step 2: Build a client by using the client app ID

Step 3: Create an authentication provider

Create an authentication provider by passing in a client application and graph scopes.
Code example:
DeviceCodeProvider authProvider = new DeviceCodeProvider(publicClientApplication, graphScopes);
// Create a new instance of GraphServiceClient with the authentication provider.
GraphServiceClient graphClient = new GraphServiceClient(authProvider);
Step 4: Create a new instance of the GraphServiceClient
Step 5: Invoke the request to the Microsoft Graph API
Reference:
https://docs.microsoft.com/en-us/graph/auth-v2-service
https://docs.microsoft.com/en-us/graph/sdks/create-client

Community Discussion

Answer is correct

I got this in my exam this morning. The provided answer is correct.

Hahaha, that's so classic, creating acronyms for memorizing stuff like this.

The answer is correct - RBCCI

Did my exam on 15th November 2022. This question was on it.

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Question #223

DRAG DROP -

You develop and deploy an Azure Logic App that calls an Azure Function app. The Azure Function App includes an OpenAPI (Swagger) definition and uses an Azure Blob storage account. All resources are secured by using Azure Active Directory (Azure AD).

The Logic App must use Azure Monitor logs to record and store information about runtime data and events. The logs must be stored in the Azure Blob storage account.

You need to set up Azure Monitor logs and collect diagnostics data for the Azure Logic App.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: Create a Log Analytics workspace
Before you start, you need a Log Analytics workspace.
Step 2: Install the Logic Apps Management solution
To set up logging for your logic app, you can enable Log Analytics when you create your logic app, or you can install the Logic Apps Management solution in your
Log Analytics workspace for existing logic apps.
Step 3: Add a diagnostic setting to the Azure Logic App

Set up Azure Monitor logs -
1. In the Azure portal, find and select your logic app.
2. On your logic app menu, under Monitoring, select Diagnostic settings > Add diagnostic setting.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/monitor-logic-apps-log-analytics

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Community Discussion

After the March 26 changes, Logic apps are out of scope for the AZ-204 exam

Got this one today. So much for being out of scope. 2023-09-19

Answer is correct https://docs.microsoft.com/en-us/azure/logic-apps/monitor-logic-apps-log-analytics

I got this on 6/29/2023 and passed with 850. Answer is correct.

Got this one today. So much for being out of scope. 2023-09-19

Question #224

DRAG DROP -

You develop an application. You plan to host the application on a set of virtual machines (VMs) in Azure.

You need to configure Azure Monitor to collect logs from the application.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Create a Log Analytics workspace.	
Install agents on the VM and VM scale set to be monitored.	
Send console logs.	
Add a VMInsights solution.	
Create an Application Insights resource.	

Explanation

Correct Answer:

Actions	Answer Area
	Create a Log Analytics workspace.
	Add a VMInsights solution.
Send console logs.	Install agents on the VM and VM scale set to be monitored.
	Create an Application Insights resource.

Step 1: Create a Log Analytics workspace.

First create the workspace.

Step 2: Add a VMInsights solution.

Before a Log Analytics workspace can be used with VM insights, it must have the VMInsights solution installed.

Step 3: Install agents on the VM and VM scale set to be monitored.

Prior to onboarding agents, you must create and configure a workspace. Install or update the Application Insights Agent as an extension for Azure virtual machines and VM scalet sets.

Step 4: Create an Application Insights resource

Sign in to the Azure portal, and create an Application Insights resource.

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Once a workspace-based Application Insights resource has been created, configuring monitoring is relatively straightforward.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/vm/vminsights-configure-workspace https://docs.microsoft.com/en-us/azure/azure-monitor/app/create-workspace-resource

Community Discussion

correct https://docs.microsoft.com/en-us/azure/azure-monitor/vm/vminsights-configure-workspace?tabs=CLI https://docs.microsoft.com/en-us/azure/azure-monitor/app/create-workspace-resource

Was on my exam today (3rd of Jan 2023)

You must make the workspace in the portal In Monitor you must add Application insights with the workspace In Monitor you must activate VMInsights and add your VM's and assign a workspace to it Then install and run the agents in each VM 1. Create Log Analytics workspace (in Azure Portal) 2. Create Application Insights resource (in Monitor, Application Insights with workspace attached) 3.Add VMInsights solution (== activate VMInsights in Monitor, choose VM's, attach workspace). 4.Install agents on VM

Configuring VM insights The steps to configure VM insights are as follows. Follow each link for detailed guidance on each step: 1.Create Log Analytics workspace. 2.Add VMInsights solution to workspace. 3.Install agents on virtual machine and virtual machine scale set to be monitored.

After lots of research ... 1. Log analytics name space 2. Application insights 3. VM solutions 4. Install agents

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Question #225

You develop and deploy an Azure App Service web app. The app is deployed to multiple regions and uses Azure Traffic Manager. Application Insights is enabled for the app.
You need to analyze app uptime for each month.
Which two solutions will achieve the goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Azure Monitor logs
B) Application Insights alerts (Correct Answer)
C) Azure Monitor metrics
D) Application Insights web tests (Correct Answer)

Explanation

Correct Answer:
BD
Reference:
https://azure.microsoft.com/en-us/blog/creating-a-web-test-alert-programmatically-with-application-insights/

Community Discussion

A and C. Metrics will give you the uptime. Logs will give you the causes of the downtime. wrong B: Alerts are not required wrong D: Web tests has nothing to do with uptime.

"You need to analyze app uptime for each month." how web tests and alerts will help you to analyze previous data?

Selected Answer: AC

A. Azure Monitor logs: By querying logs, you can analyze detailed information about app uptime and other metrics over a specified time period, such as a month. C. Azure Monitor metrics: Metrics provide numerical data about your system's operation, including uptime. You can use Azure Monitor metrics to track and analyze the availability and responsiveness of your app over time, including on a monthly basis.

Selected Answer: CD

ChatGPT: C. Azure Monitor metrics D. Application Insights web tests Azure Monitor metrics can be used to track the availability of the app by analyzing the uptime percentage. Application Insights web tests can be configured to periodically check the availability of the app and provide uptime data.

Certainly web tests don't help, but for alerts, you can get use of the availability alerts, refer to https://learn.microsoft.com/en-us/azure/azure-monitor/app/availability-alerts. I don't think the Metrics logs work here, hence BC makes more sense.

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Question #226

DRAG DROP -

You develop and deploy an Azure App Service web app. The web app accesses data in an Azure SQL database.

You must update the web app to store frequently used data in a new Azure Cache for Redis Premium instance.

You need to implement the Azure Cache for Redis features.

Which feature should you implement? To answer, drag the appropriate feature to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Answer Area

Features	Requirement	Feature
horizontal partitioning	Create a data structure for storing collections of related items	Feature
channel	Create a data structure for the most recently accessed cache items	Feature
list	Send messages through a high-performance publisher/subscriber mechanism	Feature
set		

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Explanation

Correct Answer:

Answer Area

Features	Requirement	Feature
horizontal partitioning	Create a data structure for storing collections of related items	set
channel	Create a data structure for the most recently accessed cache items	list
list	Send messages through a high-performance publisher/subscriber mechanism	channel
set		

Reference:

https://www.red-gate.com/simple-talk/development/dotnet-development/overview-of-azure-cache-for-redis/ https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching

Community Discussion

This is correct! https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching If you look for the right words (related > set | high-performance > channel | recent > list) in documentation, it helps you validate this answer. Ignore the other comments as it only leads to confusion.

This was on the exam (July 2023). Went with proposed. Scored 917

Got it in exam 20/10/2022

Set: for related items https://learn.microsoft.com/en-us/azure/architecture/best-practices/caching#use-tags-to-cross-correlate-cached-items List: to find the most recently accessed items https://learn.microsoft.com/en-us/azure/architecture/best-practices/caching#find-recently-accessed-items

Correct https://docs.microsoft.com/en-us/azure/architecture/best-practices/caching

SecExams

Question #227

You are developing an ASP.NET Core Web API web service. The web service uses Azure Application Insights for all telemetry and dependency tracking. The web service reads and writes data to a database other than Microsoft SQL Server. You need to ensure that dependency tracking works for calls to the third-party database.

Which two dependency telemetry properties should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Telemetry.Context.Cloud.RoleInstance

B) Telemetry.Id (Correct Answer)

C) Telemetry.Name

D) Telemetry.Context.Operation.Id (Correct Answer)

E) Telemetry.Context.Session.Id

Explanation

Correct Answer:

BD
Example:
```
public async Task Enqueue(string payload)
{
// StartOperation is a helper method that initializes the telemetry item
// and allows correlation of this operation with its parent and children. var operation =
telemetryClient.StartOperation<DependencyTelemetry>("enqueue " + queueName);

operation.Telemetry.Type = "Azure Service Bus";
operation.Telemetry.Data = "Enqueue " + queueName;
var message = new BrokeredMessage(payload);
// Service Bus queue allows the property bag to pass along with the message.
// We will use them to pass our correlation identifiers (and other context)
// to the consumer.
message.Properties.Add("ParentId", operation.Telemetry.Id);
message.Properties.Add("RootId", operation.Telemetry.Context.Operation.Id);
```
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-operations-tracking

Community Discussion

the Given answer is correct IMHO

Correct Answer: B and D message.Properties.Add("ParentId", operation.Telemetry.Id); message.Properties.Add("RootId", operation.Telemetry.Context.Operation.Id); Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/app/custom-operations-tracking#enqueue

Yes. Makes sense to me too.

Yes. Makes sense to me too.

The given answer is correct, also available on udemy course

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Question #228

HOTSPOT -

You are using Azure Front Door Service.

You are expecting inbound files to be compressed by using Brotli compression.

You discover that inbound XML files are not compressed. The files are 9 megabytes (MB) in size.

You need to determine the root cause for the issue.

To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statement	Yes	No
The file MIME type is supported by the service.	○	○
Edge nodes must be purged of all cache assets.	○	○
The compression type is supported.	○	○

Explanation

Correct Answer:

SecExams

Answer Area

Statement	Yes	No
The file MIME type is supported by the service.	○	○
Edge nodes must be purged of all cache assets.	○	○
The compression type is supported.	○	○

Box 1: No -
Front Door can dynamically compress content on the edge, resulting in a smaller and faster response to your clients. All files are eligible for compression.
However, a file must be of a MIME type that is eligible for compression list.

Box 2: No -
Sometimes you may wish to purge cached content from all edge nodes and force them all to retrieve new updated assets. This might be due to updates to your web application, or to quickly update assets that contain incorrect information.

Box 3: Yes -
These profiles support the following compression encodings: Gzip (GNU zip), Brotli
Reference:
https://docs.microsoft.com/en-us/azure/frontdoor/front-door-caching

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Community Discussion

1.Yes 2.No Refer - https://docs.microsoft.com/en-us/azure/frontdoor/front-door-caching ,You don't need to purge the cache assets. Here the issue is that the file size needs to be less than 8MB 3.Yes

application/xml is a MIME type and therefore, is supported. Answer 1 should be yes.

Why are the admins not correcting the answers having gone thru the highly voted discussion comments!!!

Compression isn't but the answer states "compression TYPE". And Brotli is supported.

Compression isn't but the answer states "compression TYPE". And Brotli is supported.

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Question #229

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HOTSPOT -

You are developing an Azure App Service hosted ASP.NET Core web app to deliver video-on-demand streaming media. You enable an Azure Content Delivery

Network (CDN) Standard for the web endpoint. Customer videos are downloaded from the web app by using the following example URL: http://www.contoso.com/ content.mp4?quality=1.

All media content must expire from the cache after one hour. Customer videos with varying quality must be delivered to the closest regional point of presence (POP) node.

You need to configure Azure CDN caching rules.

Which options should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

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Explanation

Correct Answer:

Answer Area

Setting	Action
Caching behavior	Bypass cache / Override / Set if missing
Cache expiration duration	1 second / 1 minute / 1 hour / 1 day
Query string caching behavior	Ignore query strings / Bypass caching for query strings / Cache every unique URL

Box 1: Override -
Override: Ignore origin-provided cache duration; use the provided cache duration instead. This will not override cache-control: no-cache.
Set if missing: Honor origin-provided cache-directive headers, if they exist; otherwise, use the provided cache duration.
Incorrect:
Bypass cache: Do not cache and ignore origin-provided cache-directive headers.

Box 2: 1 hour -
All media content must expire from the cache after one hour.

Box 3: Cache every unique URL -
Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache. For example, the response from the origin server for a request for example.ashx?q=test1 is cached at the POP node and returned for subsequent caches with the same query string. A request for example.ashx?q=test2 is cached as a separate asset with its own time-to-live setting.
Incorrect Answers:

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Bypass caching for query strings: In this mode, requests with query strings are not cached at the CDN POP node. The POP node retrieves the asset directly from the origin server and passes it to the requestor with each request.
Ignore query strings: Default mode. In this mode, the CDN point-of-presence (POP) node passes the query strings from the requestor to the origin server on the first request and caches the asset. All subsequent requests for the asset that are served from the POP ignore the query strings until the cached asset expires.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-query-string

Community Discussion

Given Answers are correct

Box 1: Override Override: Ignore origin-provided cache duration; use the provided cache duration instead. This will not override cache-control: no-cache. Set if missing: Honor origin-provided cache-directive headers, if they exist; otherwise, use the provided cache duration. Bypass cache: Do not cache and ignore origin-provided cache-directive headers. Box 2: 1 hour All media content must expire from the cache after one hour.

Box 3: Cache every unique URL Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache. For example, the response from the origin server for a request for example.ashx?q=test1 is cached at the POP node and returned for subsequent caches with the same query string. A request for example.ashx?q=test2 is cached as a separate asset with its own time-to-live setting. Bypass caching for query strings: In this mode, requests with query strings are not cached at the CDN POP node. The POP node retrieves the asset directly from the origin server and passes it to the requestor with each request. Ignore query strings: Default mode. In this mode, the CDN point-of-presence (POP) node passes the query strings from the requestor to the origin server on the first request and caches the asset. All subsequent requests for the asset that are served from the POP ignore the query strings until the cached asset expires.

Box 3: Cache every unique URL Cache every unique URL: In this mode, each request with a unique URL, including the query string, is treated as a unique asset with its own cache. For example, the response from the origin server for a request for example.ashx?q=test1 is cached at the POP node and returned for subsequent caches with the same query string. A request for example.ashx?q=test2 is cached as a separate asset with its own time-to-live setting. Bypass caching for query strings: In this mode, requests with query strings are not cached at the CDN POP node. The POP node retrieves the asset directly from the origin server and passes it to the requestor with each request. Ignore query

SecExams

strings: Default mode. In this mode, the CDN point-of-presence (POP) node passes the query strings from the requestor to the origin server on the first request and caches the asset. All subsequent requests for the asset that are served from the POP ignore the query strings until the cached asset expires.

1. Override - because we are explicitly defining the duration to be 1 hour . We DO NEED Cache (hence it cannot be bypass cache) We need EXACT 1 HOUR (so can't use Set If Missing which could change the specific value) 2. 1 Hour as required 3. We do need to 'Cache every unique url' because we need to provide cache for different qualities that is specified in the query parameter.

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Question #230

HOTSPOT -

You are developing an ASP.NET Core time sheet application that runs as an Azure Web App. Users of the application enter their time sheet information on the first day of every month.

The application uses a third-party web service to validate data.

The application encounters periodic server errors due to errors that result from calling a third-party web server. Each request to the third-party server has the same chance of failure.

You need to configure an Azure Monitor alert to detect server errors unrelated to the third-party service. You must minimize false-positive alerts.

How should you complete the Azure Resource Manager template? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

```
"type": "Microsoft.Insights/metricAlerts",
"properties": {
"criteria": {
   "odata.type": ". . .",
   "allOf": [
     {
       "criterionType": "[                                    ]",
                         DynamicThresholdCriterion
                         SingleResourceMultipleMetricCriteria

       "metricName": "[          ]",
                      Http4xx
                      Http5xx

       "alertSensitivity": "[          ]"
                            Low
                            High
   }]}}
```

Explanation

Correct Answer:

```
"type": "Microsoft.Insights/metricAlerts",
"properties": {
"criteria": {
   "odata.type": ". . .",
   "allOf": [
     {
       "criterionType": "[                                    ]",
                         DynamicThresholdCriterion
                         SingleResourceMultipleMetricCriteria
       "metricName": "[        ]",
                      Http4xx
                      Http5xx
       "alertSensitivity": "[      ]"
                            Low
                            High
   }]}}
```

Box 1: DynamicThresholdCriterion

Box 2: Http5xx -
Server errors are in the 5xx range.
Client errors are in the 4xx range

Box 3: Low -
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-dynamic-thresholds

Community Discussion

DynamicThresholdCriterion Http5XX Low

I think sensitivity should be low due to "false positive" requirements, if we set to high we report on every smallest deviation, and it means there is a highly chance of false positive

I think sensitivity should be low due to "false positive" requirements, if we set to high we report on every smallest deviation, and it means there is a highly chance of false positive

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DynamicThresholdCriterion: Dynamic thresholds in metric alerts use advanced machine learning to learn metric Http5XX, just a name , we are monitoring server errors, so 500 range error reponses AlertSensitvity : would set is to high. "You must minimize false-positive alerts" The thresholds will be tight and close to the metric series pattern. An alert rule will be triggered on the smallest deviation, resulting in more alerts.

Agree. Definition according to MS: High: The thresholds will be tight and close to the metric series pattern. An alert rule will be triggered on the smallest deviation, resulting in more alerts. Medium: The thresholds will be less tight and more balanced. There will be fewer alerts than with high sensitivity (default). Low: The thresholds will be loose with more distance from metric series pattern. An alert rule will only trigger on large deviations, resulting in fewer alerts.

Question #231

You are developing a web application that uses Azure Cache for Redis. You anticipate that the cache will frequently fill and that you will need to evict keys. You must configure Azure Cache for Redis based on the following predicted usage pattern: A small subset of elements will be accessed much more often than the rest.
You need to configure the Azure Cache for Redis to optimize performance for the predicted usage pattern.
Which two eviction policies will achieve the goal?
NOTE: Each correct selection is worth one point.

A) noeviction
B) allkeys-lru (Correct Answer)
C) volatile-lru (Correct Answer)
D) allkeys-random
E) volatile-ttl
F) volatile-random

Explanation

Correct Answer:
BC
B: The allkeys-lru policy evict keys by trying to remove the less recently used (LRU) keys first, in order to make space for the new data added. Use the allkeys-lru policy when you expect a power-law distribution in the popularity of your requests, that is, you expect

that a subset of elements will be accessed far more often than the rest.
C: volatile-lru: evict keys by trying to remove the less recently used (LRU) keys first, but only among keys that have an expire set, in order to make space for the new data added.
Note: The allkeys-lru policy is more memory efficient since there is no need to set an expire for the key to be evicted under memory pressure.
Reference:
https://redis.io/topics/lru-cache

Community Discussion

my choices are BC

Selected Answer: BC

B. allkeys-lru C. volatile-lru allkeys-lru : This eviction policy evicts the least recently used (LRU) key among all keys, regardless of the key's time-to-live (TTL) value. This policy is suitable when you have a small subset of elements that will be accessed much more often than the rest, as the most frequently used elements will be kept in cache while the least frequently used elements will be evicted. volatile-lru: This eviction policy evicts the least recently used (LRU) key among keys with an expiring TTL. This policy is suitable when you have a small subset of elements that will be accessed much more often than the rest and also when you want to expire keys that are not used frequently.

Did my exam on 15th November 2022. This question was on it.

agree!

agree!

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Question #232

DRAG DROP -

An organization has web apps hosted in Azure.

The organization wants to track events and telemetry data in the web apps by using Application Insights.

You need to configure the web apps for Application Insights.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Step 1: Create an Application Insights resource

Creating an Application Insights workspace-based resource us a prerequisite.

Step 2: Copy the connection string

A connection string identifies the resource that you want to associate with your telemetry data. It also allows you to modify the endpoints that your resource will use as

a destination for your telemetry. You'll need to copy the connection string and add it to your application's code or to an environment variable.
Step 3: Configure the Application Insights SDK in the app
The Application Insights SDK for ASP.NET Core can monitor your applications no matter where or how they run.
Install the Application Insights SDK NuGet package for ASP.NET Core.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/asp-net-core

Community Discussion

The given answer is correct. 1. Create an Application Insights resource 2. Copy the instrumentation key 3. Install the SDK in your app https://learn.microsoft.com/en-us/azure/azure-monitor/app/create-new-resource

Why would you make a Machine Learning Workspace LOL

Got it in exam 20/10/2022

1. Create resource 2. install Application insight SDK 3. setup connection string according to provided link: https://docs.microsoft.com/en-us/azure/azure-monitor/app/asp-net-core

bad question, connection string != instrumentation key

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Question #233

An organization hosts web apps in Azure. The organization uses Azure Monitor. You discover that configuration changes were made to some of the web apps. You need to identify the configuration changes.
Which Azure Monitor log should you review?

A) AppServiceAppLogs
B) AppServiceEnvironmentPlatformlogs (Correct Answer)
C) AppServiceConsoleLogs
D) AppServiceAuditLogs

Explanation

Correct Answer:
B
The log type AppServiceEnvironmentPlatformLogs handles the App Service Environment: scaling, configuration changes, and status logs.
Incorrect:
AppServiceAppLogs contains logs generated through your application.
AppServiceAuditLogs logs generated when publishing users successfully log on via one of the App Service publishing protocols.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs

Community Discussion

Got it 10/09/2022. Went with B. Score 927

AppServiceEnvironmentPlatformlogs only logs when app services are hosted in an App Service Environment witch is a deployment of Azure App Service into a subnet in your Azure Virtual Network (VNet). It is a Premium service option The problem is, all other anwers are wrong : AppServiceAppLogs : logs from inside your app AppServiceConsoleLogs : logs from the console AppServiceAuditLogs : logs who are logged in or out. but... AppServiceFileAuditLogs will do the job for premium tiers. https://ruslany.net/2020/01/how-to-monitor-azure-app-service-content-changes-and-publishing-activity/

got this question on 29/06/2023

Ref: https://learn.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs#supported-log-types

AppServiceEnvironmentPlatformLogs - App Service Environment: scaling, configuration changes, and status logs AppServiceFileAuditLogs - File changes made to the site content; only available for Premium tier and above So, the correct answer is AppServiceEnvironmentPlatformlogs

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Question #234

You develop and deploy an Azure App Service web app to a production environment. You enable the Always On setting and the Application Insights site extensions.
You deploy a code update and receive multiple failed requests and exceptions in the web app.
You need to validate the performance and failure counts of the web app in near real time.
Which Application Insights tool should you use?

A) Profiler
B) Smart Detection
C) Live Metrics Stream (Correct Answer)
D) Application Map
E) Snapshot Debugger

Explanation

Correct Answer:
C
Live Metrics Stream -
Deploying the latest build can be an anxious experience. If there are any problems, you want to know about them right away, so that you can back out if necessary. Live Metrics Stream gives you key metrics with a latency of about one second.
With Live Metrics Stream, you can:
* Validate a fix while it's released, by watching performance and failure counts.
* Etc.

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Incorrect:
* Profiler
Azure Application Insights Profiler provides performance traces for applications running in production in Azure. Profiler:
Captures the data automatically at scale without negatively affecting your users.
Helps you identify the ƛ€hotƛ€ code path spending the most time handling a particular web request.
* Snapshot debugger
When an exception occurs, you can automatically collect a debug snapshot from your live web application. The snapshot shows the state of source code and variables at the moment the exception was thrown. The Snapshot Debugger in Azure Application Insights monitors exception telemetry from your web app. It collects snapshots on your top-throwing exceptions so that you have the information you need to diagnose issues in production.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/live-stream

Community Discussion

C is correct

Selected Answer: C

C. Live Metrics Stream

Selected Answer: C

SecExams

correct

the key is near real time. https://learn.microsoft.com/en-us/azure/azure-monitor/app/live-stream

Selected Answer: B

Isnt it B ? "Smart detection automatically warns you of potential performance problems and failure anomalies in your web application. It performs proactive analysis of the telemetry that your app sends to Application Insights. " https://learn.microsoft.com/en-us/azure/azure-monitor/alerts/proactive-diagnostics

SecExams

Question #235

HOTSPOT -

You deploy an ASP.NET web app to Azure App Service.

You must monitor the web app by using Application Insights.

You need to configure Application Insights to meet the requirements.

Which feature should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Requirement	Feature
Automatically warn you of potential performance problems and failure anomalies in the web app.	Smart Detection Snapshot Debugger Profiler Multi-step test
Automatically collect the state of the source code and variables when an exception is thrown in the web app.	Smart Detection Snapshot Debugger Profiler Multi-step test
Capture performance traces of the web app without negatively affecting users of the web app.	Smart Detection Snapshot Debugger Profiler Multi-step test

Explanation

Correct Answer:

SecExams

Answer Area

Requirement	Feature
Automatically warn you of potential performance problems and failure anomalies in the web app.	Smart Detection / Snapshot Debugger / Profiler / Multi-step test
Automatically collect the state of the source code and variables when an exception is thrown in the web app.	Smart Detection / Snapshot Debugger / Profiler / Multi-step test
Capture performance traces of the web app without negatively affecting users of the web app.	Smart Detection / Snapshot Debugger / Profiler / Multi-step test

Box 1: Smart Detection -
Smart detection automatically warns you of potential performance problems and failure anomalies in your web application. It performs proactive analysis of the telemetry that your app sends to Application Insights. If there is a sudden rise in failure rates, or abnormal patterns in client or server performance, you get an alert. This feature needs no configuration. It operates if your application sends enough telemetry.

Box 2: Snapshot Debugger -
When an exception occurs, you can automatically collect a debug snapshot from your live web application. The snapshot shows the state of source code and variables at the moment the exception was thrown. The Snapshot Debugger in Azure Application Insights monitors exception telemetry from your web app. It collects snapshots on your top-throwing exceptions so that you have the information you need to diagnose issues in production.

Box 3: Profiler -
Azure Application Insights Profiler provides performance traces for applications running in production in Azure. Profiler:
Captures the data automatically at scale without negatively affecting your users.
Helps you identify the ג€hotג€ code path spending the most time handling a particular web request.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/proactive-diagnostics https://docs.microsoft.com/en-us/azure/azure-monitor/snapshot-debugger/snapshot-debugger https://docs.microsoft.com/en-us/azure/azure-monitor/profiler/profiler-overview

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Community Discussion

Answer is correct

1.Smart detection 2.Snapshot 3.user profile

On my exam 2022-12-26. Chose：Given Answer (1、2、3)

On my exam 2022-12-26. Chose：Given Answer (1、2、3)

Did my exam on 15th November 2022. This question was on it.

SecExams

Question #236

You are building a web application that performs image analysis on user photos and returns metadata containing objects identified. The image analysis is very costly in terms of time and compute resources. You are planning to use Azure Redis Cache so duplicate uploads do not need to be reprocessed.
In case of an Azure data center outage, metadata loss must be kept to a minimum.
You need to configure the Azure Redis cache instance.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Configure Azure Redis with AOF persistence.
B) Configure Azure Redis with RDB persistence. (Correct Answer)
C) Configure second storage account for persistence.
D) Set backup frequency to the minimum value. (Correct Answer)

Explanation

Correct Answer:
BD
RDB persistence - When you use RDB persistence, Azure Cache for Redis persists a

snapshot of your cache in a binary format. The snapshot is saved in an Azure Storage account. The configurable backup frequency determines how often to persist the snapshot. If a catastrophic event occurs that disables both the primary and replica cache, the cache is reconstructed using the most recent snapshot.
Note: Azure Cache for Redis supports zone redundant configurations in the Premium and Enterprise tiers. A zone redundant cache can place its nodes across different Azure Availability Zones in the same region. It eliminates data center or AZ outage as a single point of failure and increases the overall availability of your cache.
Incorrect:
Not A: Zone redundancy doesn't support AOF persistence or work with geo-replication currently.
Not C: No need for a second storage account.
Reference:
https://docs.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-premium-persistence

SecExams

Community Discussion

The key here is "In case of an Azure data center outage, metadata loss must be kept to a minimum." So the correct answer is AC.

got it 10/09/2022. went with AC. Score 927

Selected Answer: AC

Technically here could be just 2 valid answer: AC and BD. But, we need to select the option mostly matching the requirements. Since, they ask to minimize data loss (rather than speed of recovery) then AC is the right answer, because: 1) With AOF persistence every write transaction is logged. So, in theory we can recover everything up to the moment of failure. 2) Additionally, we'll enable Secondary Storage for AOF, which will help to restore Redis image if primary zone was fully destroyed. Why RDB is worse? Even if we minimize the period of snapshotting to minimum (15 mins), then we can lose up to 15 mins of data in case of data center outage. Though advantage is that we can restore the snapshot much faster than from the AOF logs. You can find full info about AOF and RDB settings in Azure Redis Cache on this link: https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-premium-persistence?tabs=premium

I think this is correct. "RDB is NOT good if you need to minimize the chance of data loss in case Redis stops working". source: https://redis.io/docs/management/persistence/ since the question doesn't mention ZRS for Redis cache, we can use AOF with a 2nd storage to store replica cache data. check the config with AOF: https://

learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-premium-persistence#set-up-data-persistence

I think this is correct. "RDB is NOT good if you need to minimize the chance of data loss in case Redis stops working". source: https://redis.io/docs/management/persistence/ since the question doesn't mention ZRS for Redis cache, we can use AOF with a 2nd storage to store replica cache data. check the config with AOF: https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-how-to-premium-persistence#set-up-data-persistence

Question #237

You are developing an Azure-based web application. The application goes offline periodically to perform offline data processing. While the application is offline, numerous Azure Monitor alerts fire which result in the on-call developer being paged.
The application must always log when the application is offline for any reason.
You need to ensure that the on-call developer is not paged during offline processing.
What should you do?

A) Add Azure Monitor alert processing rules to suppress notifications.
B) Disable Azure Monitor Service Health Alerts during offline processing.
C) Create an Azure Monitor Metric Alert.
D) Build an Azure Monitor action group that suppresses the alerts. (Correct Answer)

Explanation

Correct Answer:
D
You can use alert processing rules to add action groups or remove (suppress) action groups from your fired alerts.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-action-rules

Community Discussion

SecExams

Selected Answer: A

I'd choose A.

It's A 100% sure https://docs.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-processing-rules?tabs=portal

Selected Answer: A

It's A

Selected Answer: D

D. as of 18Oct23

ChatGPT is incorrect as usual

SecExams

Question #238

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores located throughout the world. A single device can produce 2 megabytes (MB) of data every 24 hours. Each store location has one to five devices that send data.
You must store the device data in Azure Blob storage. Device data must be correlated based on a device identifier. Additional stores are expected to open in the future.
You need to implement a solution to receive the device data.
Solution: Provision an Azure Service Bus. Configure a topic to receive the device data by using a correlation filter.
Does the solution meet the goal?

A) Yes (Correct Answer)

B) No

Explanation

Correct Answer:
A
A message is raw data produced by a service to be consumed or stored elsewhere. The Service Bus is for high-value enterprise messaging, and is used for order processing and financial transactions.
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/compare-messaging-services

Community Discussion

First of all - that question is not about THE BEST solution but about THE VALID solution. So responses like "Event Hub is the best choice" doesn't bring anything to the table. That being said - is the provided solution valid? I would say NO, because: - topics allows multiple subscribers, and here we need to process each event once - correlation filter is for subscriptions, not topics - even when assuming there is typo in the question and correlation filter is defined on the subscription level - it still is not a valid solution, because new stores can be opened in the future with many new device identifiers which you can't know in advance. Besides that filter make no sense in this scenario whatsoever, you just need to save data in storage account and basically partition it by device identifier.

Answer should be event hub

The event hub message size limit is 1MB.

The event hub message size limit is 1MB.

Why Event Hub? This is clearly about delivering messages (with the actual data) and not events.

SecExams

Question #239

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores located throughout the world. A single device can produce 2 megabytes (MB) of data every 24 hours. Each store location has one to five devices that send data.
You must store the device data in Azure Blob storage. Device data must be correlated based on a device identifier. Additional stores are expected to open in the future.
You need to implement a solution to receive the device data.
Solution: Provision an Azure Event Grid. Configure event filtering to evaluate the device identifier.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead use an Azure Service Bus, which is used order processing and financial transactions.
Note: An event is a lightweight notification of a condition or a state change. Event hubs is usually used reacting to status changes.
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/compare-messaging-services

Community Discussion

SecExams

For the ones above me. Sensors do not send events, they send messages containing specific data that has been gathered. This makes automatically the solution incorrect, because you need a Service Bus to collect them. Event Grids and Event Hubs won't do the job here.

Event Grid and and Event Hubs are basically for event based communication . here the scenario is more suited to Message based communication . so the answer is correct

The question doesn't mention 'message', it's just plain 'data'. Events can also be data.

The question doesn't mention 'message', it's just plain 'data'. Events can also be data.

Selected Answer: B

B is correct answer. Event Hub would be a solution here NOT Event Grid.

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Question #240

DRAG DROP -

You manage several existing Logic Apps.

You need to change definitions, add new logic, and optimize these apps on a regular basis.

What should you use? To answer, drag the appropriate tools to the correct functionalities. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Answer Area

Tools	Functionality	Tool
Logic Apps Designer	Edit B2B workflows	
Code View Editor	Edit definitions in JSON	
Enterprise Integration Pack	Visually add functionality	

Explanation

Correct Answer:

Answer Area

Tools	Functionality	Tool
Logic Apps Designer	Edit B2B workflows	Enterprise Integration Pack
Code View Editor	Edit definitions in JSON	Code View Editor
Enterprise Integration Pack	Visually add functionality	Logic Apps Designer

Box 1: Enterprise Integration Pack
For business-to-business (B2B) solutions and seamless communication between organizations, you can build automated scalable enterprise integration workflows by using the Enterprise Integration Pack (EIP) with Azure Logic Apps.

Box 2: Code View Editor -

Edit JSON - Azure portal -
1. Sign in to the Azure portal.
2. From the left menu, choose All services. In the search box, find "logic apps", and then from the results, select your logic app.
3. On your logic app's menu, under Development Tools, select Logic App Code View.
4. The Code View editor opens and shows your logic app definition in JSON format.

Box 3: Logic Apps Designer -
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-enterprise-integration-overview https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-author-definitions

Community Discussion

start from march 2021 no logic apps in the exam!

The answer is correct

Correct answer ?

SecExams

That's correct Answer

Hope to get this question in my exam.

Question #241

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.
The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.
You need to complete the configuration.
Which Azure CLI or PowerShell command should you run?

A.
```
az servicebus queue create
--resource-group fridge-rg
--namespace-name fridge-ns
--name fridge-q
```

B.
```
New-AzureRmResourceGroup
-Name fridge-rg
-Location fridge-loc
```

C.
```
az servicebus namespace create
  --resource-group fridge-rg
  --name fridge-ns
  --location fridge-loc
```

D.
```
connectionString-$)az serviceBus namespace authorization-rule keys list
--resource-group fridge-rg
--fridge-ns fridge-ns
--query primaryConnectionString -output tsv)
```

Explanation

Correct Answer:
A
A service bus instance has already been created (Step 2 below). Next is step 3, Create a

Service Bus queue.
Note:
Steps:
Step 1: # Create a resource group
resourceGroupName="myResourceGroup"
az group create --name $resourceGroupName --location eastus
Step 2: # Create a Service Bus messaging namespace with a unique name
namespaceName=myNameSpace$RANDOM az servicebus namespace create --resource-group $resourceGroupName --name $namespaceName --location eastus
Step 3: # Create a Service Bus queue
az servicebus queue create --resource-group $resourceGroupName --namespace-name $namespaceName --name BasicQueue
Step 4: # Get the connection string for the namespace
connectionString=$(az servicebus namespace authorization-rule keys list --resource-group $resourceGroupName --namespace-name $namespaceName --name RootManageSharedAccessKey --query primaryConnectionString --output tsv)
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-quickstart-cli

Community Discussion

I think the Service Bus has already been created and now they ask you to complete the configuration. The next step is creating the queue. In fact, all the steps are shown: B. Create group. C. Create Service Bus. A. Create Queue. <-- Correct answer. D. Get connectionstring.

It Ask for create an Azure Service Bus instance by providing not the Service bus Queue So correct Answes should be C

Got this question at the exam and scored 100% on Azure Storage, so I'm sure this is correct.

Got this question at the exam and scored 100% on Azure Storage, so I'm sure this is correct.

I'm really sorry, Service Bus falls in another section where I scored 85%, so I can't be sure if this is the correct answer.

SecExams

Question #242

HOTSPOT -

You are developing an application that uses Azure Storage Queues.

You have the following code:

```
CloudStorageAccount storageAccount = CloudStorageAccount.Parse
(CloudConfigurationManager.GetSetting("StorageConnectionString"));
CloudQueueClient queueClient = storageAccount.CreateCloudQueueClient();

CloudQueue queue = queueClient.GetQueueReference("appqueue");
await queue.CreateIfNotExistsAsync();

CloudQueueMessage peekedMessage = await queue.PeekMessageAsync();
if (peekedMessage != null)
{
     Console.WriteLine("The peeked message is: {0}", peekedMessage.AsString);
}
CloudQueueMessage message = await queue.GetMessageAsync() ;
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statement	Yes	No
The code configures the lock duration for the queue.	○	○
The last message read remains in the queue after the code runs.	○	○
The storage queue remains in the storage account after the code runs.	○	○

Explanation

Correct Answer:

SecExams

Answer Area

Statement	Yes	No
The code configures the lock duration for the queue.	○	○
The last message read remains in the queue after the code runs.	○	○
The storage queue remains in the storage account after the code runs.	○	○

Box 1: No -
The QueueDescription.LockDuration property gets or sets the duration of a peek lock; that is, the amount of time that the message is locked for other receivers.
The maximum value for LockDuration is 5 minutes; the default value is 1 minute.

Box 2: Yes -
You can peek at the message in the front of a queue without removing it from the queue by calling the PeekMessage method.

Box 3: Yes -
Reference:
https://docs.microsoft.com/en-us/azure/storage/queues/storage-dotnet-how-to-use-queues https://docs.microsoft.com/en-us/dotnet/api/microsoft.servicebus.messaging.queuedescription.lockduration

SecExams

Community Discussion

Given answer is correct

GetMessageAsync: Gets a message from the queue using the default request options. This operation marks the retrieved message as invisible in the queue for the default visibility timeout period. Only marks the message is invisible but does not delete.

Answer: No Yes Yes

peek: get the message, don't lock, don't delete get: get the message, lock the message (make it invisible for some seconds) delete: delete the message intention is: if get would also delete the message from the queue, an error in the function would render the message unhandled. Thus first get, process than delete. "at least handled once"

peek: get the message, don't lock, don't delete get: get the message, lock the message (make it invisible for some seconds) delete: delete the message intention is: if get would also delete the message from the queue, an error in the function would render the message unhandled. Thus first get, process than delete. "at least handled once"

Question #243

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.
The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.
You need to complete the configuration.
Which Azure CLI or PowerShell command should you run?

A.
```
az group create
  --name fridge-rg
  --location fridge-loc
```

B.
```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

C.
```
New-AzureRmServiceBusQueue
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Name fridge-q
  -EnablePartitioning $False
```

D.
```
az servicebus namespace create
  --resource-group fridge-rg
  --name fridge-rg
  --location fridge-loc
```

Explanation

Correct Answer:
C

A service bus instance has already been created (Step 2 below). Next is step 3, Create a Service Bus queue.
Note:
Steps:
Step 1: # Create a resource group
resourceGroupName="myResourceGroup"
az group create --name $resourceGroupName --location eastus
Step 2: # Create a Service Bus messaging namespace with a unique name
namespaceName=myNameSpace$RANDOM az servicebus namespace create --resource-group $resourceGroupName --name $namespaceName --location eastus
Step 3: # Create a Service Bus queue
az servicebus queue create --resource-group $resourceGroupName --namespace-name $namespaceName --name BasicQueue
Step 4: # Get the connection string for the namespace
connectionString=$(az servicebus namespace authorization-rule keys list --resource-group $resourceGroupName --namespace-name $namespaceName --name RootManageSharedAccessKey --query primaryConnectionString --output tsv)
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-quickstart-cli

SecExams

Community Discussion

Question is poorly worded. I think what is asked here is that service bus instance is already created and now you need to complete the configuration to start using the bus. In this case, you will need to create Queue and hence correct answer is C

This question is equal to the question #9, the ONLY difference here is that we have to pick the Powershell answer, because it's the only that has the creation of the service bus queue. Go to the question #9 to see my answer why we should create the queue.

C is correct answer.

Got this 2023July13. Went with given answer. score 917

Agree with the accepted answer but given question 9, this seems less like it is testing your knowledge and more an attempt to trick you.

Question #244

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure Service application that processes queue data when it receives a message from a mobile application. Messages may not be sent to the service consistently.
You have the following requirements:
✑ Queue size must not grow larger than 80 gigabytes (GB).
✑ Use first-in-first-out (FIFO) ordering of messages.
✑ Minimize Azure costs.
You need to implement the messaging solution.
Solution: Use the .Net API to add a message to an Azure Storage Queue from the mobile application. Create an Azure Function App that uses an Azure Storage Queue trigger.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Create an Azure Function App that uses an Azure Service Bus Queue trigger.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-queue-triggered-function

Community Discussion

SecExams

Answer is B (NO), Becz FIFO is supported by Service bus queue and Service bus queue should be use for data less than 80GB https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted

The most important thing is not capacity, but the FIFO guarantee that is provided only by the service bus and not the service queue. The link you provided is specifying that as well.

The most important thing is not capacity, but the FIFO guarantee that is provided only by the service bus and not the service queue. The link you provided is specifying that as well.

Got it in exam 20/10/2022

Got this one 01/2022. Went with NO

SecExams

Question #245

DRAG DROP -

You develop software solutions for a mobile delivery service. You are developing a mobile app that users can use to order from a restaurant in their area. The app uses the following workflow:

1. A driver selects the restaurants for which they will deliver orders.
2. Orders are sent to all available drivers in an area.
3. Only orders for the selected restaurants will appear for the driver.
4. The first driver to accept an order removes it from the list of available orders.

You need to implement an Azure Service Bus solution.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Create a single Service Bus topic.	
Create a Service Bus Namespace for each restaurat for which a driver can receive messages.	
Create a single Service Bus subscription.	
Create a Service Bus subscription for each restaurant for which a driver can receive orders.	
Create s single Service Bus Namespace.	
Create a Service Bus topic for each restaurant for which a driver can receive messages.	

SecExams

Explanation

Correct Answer:

Actions	Answer Area
Create a single Service Bus topic.	Create s single Service Bus Namespace.
Create a Service Bus Namespace for each restaurat for which a driver can receive messages.	Create a Service Bus topic for each restaurant for which a driver can receive messages.
Create a single Service Bus subscription.	Create a Service Bus subscription for each restaurant for which a driver can receive orders.
Create a Service Bus subscription for each restaurant for which a driver can receive orders.	
Create s single Service Bus Namespace.	
Create a Service Bus topic for each restaurant for which a driver can receive messages.	

Box 1: Create a single Service Bus Namespace
To begin using Service Bus messaging entities in Azure, you must first create a namespace with a name that is unique across Azure. A namespace provides a scoping container for addressing Service Bus resources within your application.
Box 2: Create a Service Bus Topic for each restaurant for which a driver can receive messages.
Create topics.
Box 3: Create a Service Bus subscription for each restaurant for which a driver can receive orders.
Topics can have multiple, independent subscriptions.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview

Community Discussion

SecExams

Create a single Service Bus Namespace. Create a single Service Bus Topic. Create a Service Bus subscription for each restaurant for which a driver can receive orders.

In fact all the drivers, who have subscribed to restaurant will get notification. The first driver, who accepts it, will click the order, and it shall be dequeued.

In fact all the drivers, who have subscribed to restaurant will get notification. The first driver, who accepts it, will click the order, and it shall be dequeued.

In fact all the drivers, who have subscribed to restaurant will get notification. The first driver, who accepts it, will click the order, and it shall be dequeued.

In fact all the drivers, who have subscribed to restaurant will get notification. The first driver, who accepts it, will click the order, and it shall be dequeued.

Question #246

HOTSPOT -

You develop a news and blog content app for Windows devices.

A notification must arrive on a user's device when there is a new article available for them to view.

You need to implement push notifications.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
string notificationHubName = "contoso_hub";
string notificationHubConnection = "connection_string";
[                                ] hub =
  NotificationHubClient
  NotificationHubClientSettings
  NotificationHubJob
  NotificationDetails

[                                ] .  [                                ]
  NotificationHubClient                GetInstallation
  NotificationHubClientSettings        CreateClientFromConnectionString
  NotificationHubJob                   CreateOrUpdateInstallation
  NotificationDetails                  PatchInstallation
 (notificationHubConnection, notificationHubName);
string windowsToastPayload =
 @"<toast><visual><binding template=""ToastText01""><text id=""1"">" +
 @"New item to view" + @"</text></binding></visual></toast>";
try
{
var result =
  await hub. [                                ] (windowsToastPayload);
             SendWindowsNativeNotificationAsync
             SubmitNotificationHubJobAsync
             ScheduleNotificationAsync
             SendAppleNativeNotificationAsync
  ...
}
catch (System.Exception ex)
{
 ...
}
...
```

Explanation

Correct Answer:

Answer Area

```
string notificationHubName = "contoso_hub";
string notificationHubConnection = "connection_string";
[                                ] hub =
```

- NotificationHubClient
- NotificationHubClientSettings
- NotificationHubJob
- NotificationDetails

```
[                                ] .
```

- NotificationHubClient
- NotificationHubClientSettings
- NotificationHubJob
- NotificationDetails

- GetInstallation
- CreateClientFromConnectionString
- CreateOrUpdateInstallation
- PatchInstallation

```
 (notificationHubConnection, notificationHubName);
string windowsToastPayload =
 @"<toast><visual><binding template=""ToastText01""><text id=""1""">" +
 @"New item to view" + @"</text></binding></visual></toast>";
try
{
var result =
  await hub. [                                ] (windowsToastPayload);
```

- SendWindowsNativeNotificationAsync
- SubmitNotificationHubJobAsync
- ScheduleNotificationAsync
- SendAppleNativeNotificationAsync

```
  ...
}
catch (System.Exception ex)
{
 ...
}
...
```

Box 1: NotificationHubClient -

Box 2: NotificationHubClient -

Box 3: CreateClientFromConnectionString

// Initialize the Notification Hub

NotificationHubClient hub =

NotificationHubClient.CreateClientFromConnectionString(listenConnString, hubName);

Box 4: SendWindowsNativeNotificationAsync

Send the push notification.

var result = await hub.SendWindowsNativeNotificationAsync(windowsToastPayload);

Reference:

https://docs.microsoft.com/en-us/azure/notification-hubs/notification-hubs-push-notification-registration-management https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/app-service-mobile/app-service-mobile-windows-store-dotnet-get-started-push.md

Community Discussion

SecExams

Answer is correct.

The answer is correct, but the first reference is not very helpful and the second one doesn't even exists. Here are references of the methods used in the answer: https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.notificationhubs.notificationhubclient.createclientfromconnectionstring?view=azure-dotnet#Microsoft_Azure_NotificationHubs_NotificationHubClient_CreateClientFromConnectionString_Syste
https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.notificationhubs.notificationhubclient.sendwindowsnativenotificationasync?view=azure-dotnet#Microsoft_Azure_NotificationHubs_NotificationHubClient_SendWindowsNativeNotificationAsync_Sy

1- NotificationHubClient 2 - NotificationHubClient 3- CreateClientFromConnectionString 4- SendWindowsNativeNotificationAsync

This the GitHub link https://github.com/uglide/azure-content/blob/master/articles/app-service-mobile/app-service-mobile-windows-store-dotnet-get-started-push.md

Is this one still a valid question for AZ-204? Didn't see anything about Notification Hubs in study guide anymore.

SecExams

Question #247

You are developing an Azure messaging solution.
You need to ensure that the solution meets the following requirements:
✑ Provide transactional support.
✑ Provide duplicate detection.
✑ Store the messages for an unlimited period of time.
Which two technologies will meet the requirements? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Azure Service Bus Topic (Correct Answer)
B) Azure Service Bus Queue (Correct Answer)
C) Azure Storage Queue
D) Azure Event Hub

Explanation

Correct Answer:
AB
The Azure Service Bus Queue and Topic has duplicate detection.
Enabling duplicate detection helps keep track of the application-controlled MessageId of all messages sent into a queue or topic during a specified time window.
Incorrect Answers:
C: There is just no mechanism that can query a Storage queue and find out if a message with the same contents is already there or was there before.
D: Azure Event Hub does not have duplicate detection
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/duplicate-detection

Community Discussion

Answer is correct. Queue Storage does not provide transactional support and Event Hub can't be configured to store events for infinite time.

The stress is on 'messaging' which Event Hub is not (it's eventing)

The stress is on 'messaging' which Event Hub is not (it's eventing)

The stress is on 'messaging' which Event Hub is not (it's eventing)

The stress is on 'messaging' which Event Hub is not (it's eventing)

SecExams

Question #248

DRAG DROP -

You develop a gateway solution for a public facing news API.

The news API back end is implemented as a RESTful service and hosted in an Azure App Service instance.

You need to configure back-end authentication for the API Management service instance.

Which target and gateway credential type should you use? To answer, drag the appropriate values to the correct parameters. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: Azure Resource -

Box 2: Client cert -
API Management allows to secure access to the back-end service of an API using client certificates.
Reference:
https://docs.microsoft.com/en-us/rest/api/apimanagement/apimanagementrest/azure-api-management-rest-api-backend-entity

Community Discussion

#1 Http ?

Answer : 1. Https(s) endpoint, 2. Client cert Reference : https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

You might be right: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

You might be right: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-mutual-certificates#configure-an-api-to-use-client-certificate-for-gateway-authentication

agreed 1. Https(s) endpoint, 2. Client cert

SecExams

Question #249

HOTSPOT -

You are creating an app that uses Event Grid to connect with other services. Your app's event data will be sent to a serverless function that checks compliance.

This function is maintained by your company.

You write a new event subscription at the scope of your resource. The event must be invalidated after a specific period of time.

You need to configure Event Grid.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Answer Area

Option	Value
WebHook event delivery	SAS tokens Key authentication Management Access Control
Topic publishing	ValidationCode handshake ValidationURL handshake JWT token

Box 1: SAS tokens -
Custom topics use either Shared Access Signature (SAS) or key authentication. Microsoft recommends SAS, but key authentication provides simple programming, and is compatible with many existing webhook publishers.
In this case we need the expiration time provided by SAS tokens.

Box 2: ValidationCode handshake -
Event Grid supports two ways of validating the subscription: ValidationCode handshake (programmatic) and ValidationURL handshake (manual).
If you control the source code for your endpoint, this method is recommended.
Incorrect Answers:
ValidationURL handshake (manual): In certain cases, you can't access the source code of the endpoint to implement the ValidationCode handshake. For example, if you use a third-party service (like Zapier or IFTTT), you can't programmatically respond with the validation code.
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/security-authentication

Community Discussion

Dropdowns placement in Answer area is incorrect WebHook Event Delivery --- ValidationCode handsShake Topic publishing --- SAS Tokens https://docs.microsoft.com/en-us/azure/event-grid/concepts https://docs.microsoft.com/en-us/azure/event-grid/webhook-event-delivey

SecExams

Agreed and your last link is not working so here: https://docs.microsoft.com/en-us/azure/event-grid/webhook-event-delivery

got this question today, go with this answer - 7/30/2023, score 895/1000

Agreed and your last link is not working so here: https://docs.microsoft.com/en-us/azure/event-grid/webhook-event-delivery

got this question today, go with this answer - 7/30/2023, score 895/1000

Question #250

HOTSPOT -

You are working for Contoso, Ltd.

You define an API Policy object by using the following XML markup:

```
<set-variable name= "bodySize" value="@(context.Request.Headers["Content-Length"] [0])"/>
<choose>
 <when condition= "@(int.Parse(context.Variables.GetValueOrDefault<string> ("bodySize"))<512000)">
</when>
<otherwise>
     <rewrite-uri template= "/put"/>
     <set-backend-service base-url= "http://contoso.com/api/9.1/"/>
</otherwise>
</choose>
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statement	Yes	No
The XML segment belongs in the <inbound> section of the policy.	○	○
If the body size is >256k, an error will occur.	○	○
If the request is http://contoso.com/api/9.2/, the policy will retain the higher version.	○	○

Explanation

Correct Answer:

Answer Area

Statement	Yes	No
The XML segment belongs in the <inbound> section of the policy.	○	○
If the body size is >256k, an error will occur.	○	○
If the request is http://contoso.com/api/9.2/, the policy will retain the higher version.	○	○

Box 1: Yes -
Use the set-backend-service policy to redirect an incoming request to a different backend than the one specified in the API settings for that operation. Syntax:
<set-backend-service base-url="base URL of the backend service" />

Box 2: No -
The condition is on 512k, not on 256k.

Box 3: No -
The set-backend-service policy changes the backend service base URL of the incoming request to the one specified in the policy.
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-transformation-policies

Community Discussion

Answer: Yes No No

It's doing nothing in the When condition. So if msg is <512, it does nothing. The otherwise gets executed only for >512 ??? So it will set backend service only for msgs >512? Question doesn't talk about this case. Also, like someone said in the other discussion for this question: technically >256k can be >512k Poorly framed question!!!

I would say "it depends" for the third question. Since the set-backend-service policy is in the otherwise block, it would only rewrite the URL for requests with a body size of >=512000. Or am I missing a clue here?

SecExams

I think that no action in <when> means nothing needs to be changed (for requests with body < 512000) so the back-end service URL remains as specified in the policy. And only large requests (> 512000) will be redirected to API 9.1 using <set-backend-service> in <otherwise> branch. https://docs.microsoft.com/en-us/azure/api-management/api-management-transformation-policies#SetBackendService

I think that no action in <when> means nothing needs to be changed (for requests with body < 512000) so the back-end service URL remains as specified in the policy. And only large requests (> 512000) will be redirected to API 9.1 using <set-backend-service> in <otherwise> branch. https://docs.microsoft.com/en-us/azure/api-management/api-management-transformation-policies#SetBackendService

Question #251

You are developing a solution that will use Azure messaging services.
You need to ensure that the solution uses a publish-subscribe model and eliminates the need for constant polling.
What are two possible ways to achieve the goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Service Bus (Correct Answer)
B) Event Hub
C) Event Grid (Correct Answer)
D) Queue

Explanation

Correct Answer:
AC
It is strongly recommended to use available messaging products and services that support a publish-subscribe model, rather than building your own. In Azure, consider using Service Bus or Event Grid. Other technologies that can be used for pub/sub messaging include Redis, RabbitMQ, and Apache Kafka.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/patterns/publisher-subscriber

SecExams

Community Discussion

Correct Ans is A & C https://docs.microsoft.com/en-us/azure/architecture/patterns/publisher-subscriber#issues-and-considerations

The article has been updated, the new text says "In Azure, consider using Service Bus, Event Hubs or Event Grid." So A, B and C should be all correct. https://docs.microsoft.com/en-us/azure/architecture/patterns/publisher-subscriber#issues-and-considerations

"In Azure, consider using Service Bus or Event Grid. "

"In Azure, consider using Service Bus or Event Grid. "

Selected Answer: AC

Correct answer is A and C Ref: https://docs.microsoft.com/en-us/azure/architecture/patterns/publisher-subscriber#issues-and-considerations. Wrong answer B (eliminate the need for constant polling)Ref: https://docs.microsoft.com/en-us/azure/connectors/connectors-create-api-azure-event-hubs#trigger-polling-behavior

SecExams

Question #252

A company is implementing a publish-subscribe (Pub/Sub) messaging component by using Azure Service Bus. You are developing the first subscription application.

In the Azure portal you see that messages are being sent to the subscription for each topic. You create and initialize a subscription client object by supplying the correct details, but the subscription application is still not consuming the messages.

You need to ensure that the subscription client processes all messages.

Which code segment should you use?

A) await subscriptionClient.AddRuleAsync(new RuleDescription(RuleDescription.DefaultRuleName, new TrueFilter()));

B) subscriptionClient = new SubscriptionClient(ServiceBusConnectionString, TopicName, SubscriptionName);

C) await subscriptionClient.CloseAsync();

D) subscriptionClient.RegisterMessageHandler(ProcessMessagesAsync,

messageHandlerOptions); (Correct Answer)

Explanation

Correct Answer:
D
Using topic client, call RegisterMessageHandler which is used to receive messages continuously from the entity. It registers a message handler and begins a new thread to receive messages. This handler is waited on every time a new message is received by the receiver. subscriptionClient.RegisterMessageHandler(ReceiveMessagesAsync, messageHandlerOptions);
Reference:
https://www.c-sharpcorner.com/article/azure-service-bus-topic-and-subscription-pub-sub/

Community Discussion

Agreed on D Clientsubcriber object initialization is done, so B incorrect. Here Nothing to do with Rule and closeclient so A and C incorrect

Answer: D

Appeared in my exam on 27 May 2023. I chose 'D'

Selected Answer: D

D is correct

Old library : Microsoft.Azure.ServiceBus v5.2.0 I think nowadays (Azure.Messaging.ServiceBus v7.11.0) you simply would use : processor = client.CreateProcessor(queueName, new ServiceBusProcessorOptions()); processor.ProcessMessageAsync += MessageHandler; Still : the anwer is correct

SecExams

Question #253

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure Service application that processes queue data when it receives a message from a mobile application. Messages may not be sent to the service consistently.
You have the following requirements:
✑ Queue size must not grow larger than 80 gigabytes (GB).
✑ Use first-in-first-out (FIFO) ordering of messages.
✑ Minimize Azure costs.
You need to implement the messaging solution.
Solution: Use the .Net API to add a message to an Azure Storage Queue from the mobile application. Create an Azure VM that is triggered from Azure Storage Queue events.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Don't use a VM, instead create an Azure Function App that uses an Azure Service Bus Queue trigger.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-queue-triggered-function

Community Discussion

the reason that the solution is service bus because of this message "Use first-in-first-out (FIFO) ordering of messages." https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted#foundational-capabilities Storage account does not have ordering guarantee

I also think the explanation should be corrected. Size <80GB + FIFO guarantee is what makes Service Bus a good option, not the existence of a VM or not.

I also think the explanation should be corrected. Size <80GB + FIFO guarantee is what makes Service Bus a good option, not the existence of a VM or not.

I think the reason for not using a VM is the 'Minimize Azure costs' requirement

I think the reason for not using a VM is the 'Minimize Azure costs' requirement

SecExams

Question #254

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
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You have the following requirements:
✑ Queue size must not grow larger than 80 gigabytes (GB).
✑ Use first-in-first-out (FIFO) ordering of messages.
✑ Minimize Azure costs.
You need to implement the messaging solution.
Solution: Use the .Net API to add a message to an Azure Service Bus Queue from the mobile application. Create an Azure Windows VM that is triggered from Azure Service Bus Queue.
Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer:
B
Don't use a VM, instead create an Azure Function App that uses an Azure Service Bus Queue trigger.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-queue-triggered-function

Community Discussion

Using Service bus is fine, however having a Windows VM does not address the cost requirement. Answer is 'NO'

answer explanation is wrong. It should be azure service bus queues and not storage queues trigger for Azure functions

So if I may ask, if the cost wasn't an issue would Windows VM be okay?

So if I may ask, if the cost wasn't an issue would Windows VM be okay?

Yes. It would be ok

SecExams

Question #255

DRAG DROP -

You are developing a REST web service. Customers will access the service by using an Azure API Management instance.

The web service does not correctly handle conflicts. Instead of returning an HTTP status code of 409, the service returns a status code of 500. The body of the status message contains only the word conflict.

You need to ensure that conflicts produce the correct response.

How should you complete the policy? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: on-error -
Policies in Azure API Management are divided into inbound, backend, outbound, and on-error.
If there is no on-error section, callers will receive 400 or 500 HTTP response messages if an error condition occurs.

Box 2: context -

Box 3: context -

Box 4: set-status -
The return-response policy aborts pipeline execution and returns either a default or custom response to the caller. Default response is 200 OK with no body.
Custom response can be specified via a context variable or policy statements.
Syntax:
<return-response response-variable-name="existing context variable">
<set-header/>
<set-body/>
<set-status/>
</return-response>

Box 5: on-error -
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-error-handling-policies https://docs.microsoft.com/en-us/azure/api-management/api-management-transformation-policies

Community Discussion

SecExams

Just want to add that "set-status" also has code and reason (e.g. set-status code="409" reason="Conflict"). https://docs.microsoft.com/en-us/azure/api-management/api-management-advanced-policies#SetStatus

THE ANSWER IS CORRECT.

Thanks. set-status on it's own seemed a bit strange. Minor detail: Last on-error must be preceded by a slash.

Thanks. set-status on it's own seemed a bit strange. Minor detail: Last on-error must be preceded by a slash.

Got this in 11/2022 Went with on-error, context, context, set-status, override-status, on-error One more blank space after <otherwise />, I selected override-status

SecExams

Question #256

DRAG DROP -

You are a developer for a Software as a Service (SaaS) company. You develop solutions that provide the ability to send notifications by using Azure Notification

Hubs.

You need to create sample code that customers can use as a reference for how to send raw notifications to Windows Push Notification Services (WNS) devices. The sample code must not use external packages.

How should you complete the code segment? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: windows -
Example code:
var request = new HttpRequestMessage(method, $"{resourceUri}?api-version=2017-04");
request.Headers.Add("Authorization", createToken(resourceUri, KEY_NAME, KEY_VALUE));
request.Headers.Add("X-WNS-Type", "wns/raw");
request.Headers.Add("ServiceBusNotification-Format", "windows"); return request;

Box 2: application/octet-stream -
Example code capable of sending a raw notification:
string resourceUri = $"https://{NH_NAMESPACE}.servicebus.windows.net/{HUB_NAME}/messages/"; using (var request = CreateHttpRequest(HttpMethod.Post, resourceUri))
{
request.Content = new StringContent(content, Encoding.UTF8, "application/octet-stream");
request.Content.Headers.ContentType.CharSet = string.Empty;
var httpClient = new HttpClient();
var response = await httpClient.SendAsync(request);
Console.WriteLine(response.StatusCode);
}
Reference:
https://stackoverflow.com/questions/31346714/how-to-send-raw-notification-to-azure-notification-hub/31347901

SecExams

Community Discussion

Answer is correct. https://docs.microsoft.com/en-us/rest/api/notificationhubs/send-wns-native-notification

Got this one 01/2022. Went with most voted (to avoid writing answers again)

about second box: Set to application/json;charset=utf-8 or application/xml. If the notification type (X-WNS-Type) is wns/raw, set to application/octet-stream

Notification hub and logic apps are removed from scope

got this question on 29/06/2023

Question #257

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores located throughout the world. A single device can produce 2 megabytes (MB) of data every 24 hours. Each store location has one to five devices that send data.
You must store the device data in Azure Blob storage. Device data must be correlated based on a device identifier. Additional stores are expected to open in the future.
You need to implement a solution to receive the device data.
Solution: Provision an Azure Event Hub. Configure the machine identifier as the partition key and enable capture.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
Reference:
https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-programming-guide

Community Discussion

When the question comes in the exam, then we need to pray to God

Answer is NO How many partitions event hub can have? NOT MORE than 1024 https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-quotas

SecExams

Let's pray the question doesn't appear.

Let's pray the question doesn't appear.

Indeed, strong reasoning! On a dedicated plan it is max 1024 partitions, on lower plans even less. Because you want to partition per device id, and you have 2000 stores with 1-5 devices per store, you need at least 2000 partitions. So Event Hub is not gonna work. Answer: NO.

SecExams

Question #258

DRAG DROP -

You are developing an Azure solution to collect inventory data from thousands of stores located around the world. Each store location will send the inventory data hourly to an Azure Blob storage account for processing.

The solution must meet the following requirements:

✎ Begin processing when data is saved to Azure Blob storage.

✎ Filter data based on store location information.

✎ Trigger an Azure Logic App to process the data for output to Azure Cosmos DB.

✎ Enable high availability and geographic distribution.

✎ Allow 24-hours for retries.

✎ Implement an exponential back off data processing.

You need to configure the solution.

What should you implement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Technologies	Answer Area	
Azure Event Hub	**Object**	**Technology**
	Event Source	Azure Event Grid
	Event Receiver	Azure Logic App
Azure Blob Storage	Event Handler	Azure Service Bus
Azure App Service		

Box 1: Azure Event Grid -
Blob storage events are pushed using Azure Event Grid to subscribers such as Azure Functions, Azure Logic Apps, or even to your own http listener. Event Grid provides reliable event delivery to your applications through rich retry policies and dead-lettering.

Box 2: Azure Logic App -
Event Grid uses event subscriptions to route event messages to subscribers. This image illustrates the relationship between event publishers, event subscriptions, and event handlers.

Box 3: Azure Service Bus -
The Event Grid service doesn't store events. Instead, events are stored in the Event Handlers, including ServiceBus, EventHubs, Storage Queue, WebHook endpoint, or many other supported Azure Services.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview
https://docs.microsoft.com/en-us/java/api/overview/azure/messaging-eventgrid-readme

SecExams

Community Discussion

Source -> blob storage Receiver -> event grid Handler -> logic app

I'm always wondering who is the big brain behind the secexams question solutions...

Got it on 03/2022, chose Source: Blob storage, Receiver: Event Grid, Handler: Logic App.

Receiver ?? https://docs.microsoft.com/en-us/azure/event-grid/overview

Receiver ?? https://docs.microsoft.com/en-us/azure/event-grid/overview

SecExams

Question #259

You are creating an app that will use CosmosDB for data storage. The app will process batches of relational data.
You need to select an API for the app.
Which API should you use?

A) MongoDB API
B) Table API
C) SQL API
D) Cassandra API

Explanation

Correct Answer:
Incorrect Answer:
For relational data you will need the SQL API
A: The MongoDB API is not used for relational data.
B: The Table API only supports data in the key/value format
D: The Cassandra API only supports OLTP (Online Transactional Processing) and not batch processing.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/choose-api

Community Discussion

Finally a question I can answer without any knowledge of Azure!

Selected Answer: C

Because the app will process batches of relational data

Selected Answer: C

Relational data

Selected Answer: C

C is correct

Selected Answer: C

C - correct answer

SecExams

Question #260

HOTSPOT -

You are developing a .NET application that communicates with Azure Storage.

A message must be stored when the application initializes.

You need to implement the message.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
CloudStorageAccount storageAccount = CloudStorageAccount.Parse
(CloudConfigurationManager.GetSetting ("StorageConnectionString"));
```

[▼] pVar1 = storageAccount. [▼] ();

- CloudQueueClient
- CloudTableClient
- CloudQueue
- CloudTable

- CreateCloudQueueClient
- CreateCloudTableClient
- GetQueueReference
- GetTableReference

[▼] pVar2 = pVar1. [▼] ("contoso-storage");

- CloudQueueClient
- CloudTableClient
- CloudQueue
- CloudTable

- CreateCloudQueueClient
- CreateCloudTableClient
- GetQueueReference
- GetTableReference

```
try
{
  await pVar2.CreateIfNotExistsAsync();
}
catch (StorageException x)
{
  throw;
}
CloudQueueMessage cloudQueueMessage = new CloudQueueMessage("App Launch: <iUserID>");
await pVar2.AddMessageAsync(cloudQueueMessage);
```

Explanation

Correct Answer:

Answer Area

```
CloudStorageAccount storageAccount = CloudStorageAccount.Parse
(CloudConfigurationManager.GetSetting ("StorageConnectionString"));
```

[▼] pVar1 = storageAccount. [▼] ();

- CloudQueueClient
- CloudTableClient
- CloudQueue
- CloudTable

- CreateCloudQueueClient
- CreateCloudTableClient
- GetQueueReference
- GetTableReference

[▼] pVar2 = pVar1. [▼] ("contoso-storage");

- CloudQueueClient
- CloudTableClient
- CloudQueue
- CloudTable

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- CreateCloudTableClient
- GetQueueReference
- GetTableReference

```
try
{
  await pVar2.CreateIfNotExistsAsync();
}
catch (StorageException x)
{
  throw;
}
CloudQueueMessage cloudQueueMessage = new CloudQueueMessage("App Launch: <iUserID>");
await pVar2.AddMessageAsync(cloudQueueMessage);
```

Reference:
https://docs.microsoft.com/en-us/azure/storage/queues/storage-dotnet-how-to-use-queues?tabs=dotnetv11

Community Discussion

Correct, just that this is deprecated For .NET V12 SDK is as follows : string connectionString = ConfigurationManager.AppSettings["StorageConnectionString"]; QueueClient queueClient = new QueueClient(connectionString, queueName); queueClient.CreateIfNotExists();

This was on the exam (July 2023). Went with proposed. Scored 917

Answer is correct: 1. Create the queue client 2. Retrieve a reference to a queue

Got it in the exam 14/12/23. Scored 912/1000. All questions are from SecExams. Case study - VanArsdel, Ltd (11 questions)

SecExams

Question #261

SecExams

HOTSPOT -

A software as a service (SaaS) company provides document management services. The company has a service that consists of several Azure web apps. All Azure web apps run in an Azure App Service Plan named PrimaryASP.

You are developing a new web service by using a web app named ExcelParser. The web app contains a third-party library for processing Microsoft Excel files. The license for the third-party library stipulates that you can only run a single instance of the library.

You need to configure the service.

How should you complete the script? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Hot Area:

Answer Area

```
Set-AzAppServicePlan `
  -ResourceGroupName $rg `
  -Name "PrimaryASP" `
```

NumberOfSites 1
PerSiteScaling $true
TargetWorkerCount = 1
MaxNumberOfWorkers = 1
SiteConfig.NumberOfWorkers = 1

```
$app = Get-AzWebApp `
  -ResourceGroupName $rg `
  -Name "ExcelParser"
$app.
```

NumberOfSites 1
PerSiteScaling $true
TargetWorkerCount = 1
MaxNumberOfWorkers = 1
SiteConfig.NumberOfWorkers = 1

```
Set-AzWebApp $app
```

Explanation

Correct Answer:

SecExams

Answer Area

```
Set-AzAppServicePlan `
  -ResourceGroupName $rg `
  -Name "PrimaryASP" `
```

[▼]
- NumberOfSites 1
- PerSiteScaling $true
- TargetWorkerCount = 1
- MaxNumberOfWorkers = 1
- SiteConfig.NumberOfWorkers = 1

```
$app = Get-AzWebApp `
  -ResourceGroupName $rg `
  -Name "ExcelParser"
$app.
```

[▼]
- NumberOfSites 1
- PerSiteScaling $true
- TargetWorkerCount = 1
- MaxNumberOfWorkers = 1
- SiteConfig.NumberOfWorkers = 1

```
Set-AzWebApp $app
```

Reference:
https://docs.microsoft.com/en-us/azure/app-service/manage-scale-per-app

Community Discussion

Answer is correct, -PerSiteScaling $true; $app.SiteConfig.NumberOfWorkers = 1

yes, the Answer is correct.

This was on the exam (9th August 2023). Went with proposed.

Why PerSiteScaling $true is needed?

i guess not to impact other apps on the service plan

Question #262

DRAG DROP -

You have an application that provides weather forecasting data to external partners. You use Azure API Management to publish APIs.

You must change the behavior of the API to meet the following requirements:

- ✎ Support alternative input parameters
- ✎ Remove formatting text from responses
- ✎ Provide additional context to back-end services

Which types of policies should you implement? To answer, drag the policy types to the correct requirements. Each policy type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Reference: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-policies https://docs.microsoft.com/en-us/azure/api-management/api-management-transformation-policies#forward-context-information-to-the-backend-service

Community Discussion

Inbound Outbound Backend

Based on https://docs.microsoft.com/en-us/azure/api-management/policies/send-request-context-info-to-backend-service Inbound is correct answer for the third question <policies> <inbound> <base /> <!-- Forward the name of the product associated with the subscription key in the request to the backend service. --> <set-query-parameter name="x-product-name" exists-action="override"> <value>@(context.Product.Name)</value> </set-query-parameter> <!-- Forward the user id associated with the subscription key in the request as well as the region where the proxy processing the request is hosted. --> <set-header name="x-request-context-data" exists-action="override"> <value>@(context.User.Id)</value> <value>@(context.Deployment.Region)</value> </set-header> </inbound>

last one is backend https://learn.microsoft.com/en-us/azure/api-management/forward-request-policy

last one is backend https://learn.microsoft.com/en-us/azure/api-management/forward-request-policy

I'm not 100% sure, but based on the following statement I think that the third option should be backend: "statements to be applied before the request is forwarded to the backend service go here" Source: https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-policies#-understanding-policy-configuration

SecExams

Question #263

You are developing an e-commerce solution that uses a microservice architecture.
You need to design a communication backplane for communicating transactional messages between various parts of the solution. Messages must be communicated in first-in-first-out (FIFO) order.
What should you use?

A) Azure Storage Queue (Correct Answer)
B) Azure Event Hub
C) Azure Service Bus
D) Azure Event Grid

Explanation

Correct Answer:
A
As a solution architect/developer, you should consider using Service Bus queues when:
✑ Your solution requires the queue to provide a guaranteed first-in-first-out (FIFO) ordered delivery.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted

Community Discussion

Answer Should be C, even explanation is saying so

SecExams

Choose Service Bus queues if: You need an At-Most-Once delivery guarantee. You need a FIFO guarantee. You need to group messages into transactions. You want to receive messages without polling the queue. You need to provide a role-based access model to the queues. You need to handle messages larger than 64 KB but less than 256 KB. Your queue size will not grow larger than 80 GB. You would like to be able to publish and consume batches of messages. Queue storage isn't quite as feature-rich, but if you don't need any of those features, it can be a simpler choice. In addition, it's the best solution if your app has any of the following requirements. Choose Queue storage if: You need an audit trail of all messages that pass through the queue. You expect the queue to exceed 80 GB in size. You want to track progress for processing a message inside of the queue.

C will be the answer...

C will be the answer...

I think so. https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted

SecExams

Question #264

DRAG DROP -

A company backs up all manufacturing data to Azure Blob Storage. Admins move blobs from hot storage to archive tier storage every month.

You must automatically move blobs to Archive tier after they have not been modified within 180 days. The path for any item that is not archived must be placed in an existing queue. This operation must be performed automatically once a month. You set the value of TierAgeInDays to -180.

How should you configure the Logic App? To answer, drag the appropriate triggers or action blocks to the correct trigger or action slots. Each trigger or action block may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

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Explanation

Correct Answer:

Box 1: Reoccurance..

To regularly run tasks, processes, or jobs on specific schedule, you can start your logic app workflow with the built-in Recurrence - Schedule trigger. You can set a date and time as well as a time zone for starting the workflow and a recurrence for repeating that workflow.

Set the interval and frequency for the recurrence. In this example, set these properties to run your workflow every week.

Box 2: Condition..
To run specific actions in your logic app only after passing a specified condition, add a conditional statement. This control structure compares the data in your workflow against specific values or fields. You can then specify different actions that run based on whether or not the data meets the condition.

Box 3: Put a message on a queue -
The path for any item that is not archived must be placed in an existing queue.
Note: Under If true and If false, add the steps to perform based on whether the condition is met.
Box 4: ..tier it to Cool or Archive tier.
Archive item.

Box 5: List blobs 2 -
Reference:
https://docs.microsoft.com/en-us/azure/connectors/connectors-native-recurrence
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-control-flow-loops
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-control-flow-conditional-statement

Community Discussion

Logic App is not part of 204 exam since March 2021

For Box 3, refer to the answer's text that says "Put a message on a queue". The answer's graphic implies "When there are messages in a queue" forBox 3 by mistake.

It is clear that : box 1 should be recurrence box 2 should be the condition However, there is confusion about the condition, and rightly so: the right half, ticks(addDaysInMonth(), variables("TierAgeInDays")) has a few problems, first off: addDaysInMonth() doesn't exist as a function at all Second, ticks does not accept two parameters as is done here. (see reference:https://docs.microsoft.com/en-us/azure/logic-apps/workflow-definition-language-functions-reference#date-and-time-functions) So, the condition block is bogus. However, they probably wanted to write something like: addDays(utcNow(), variables("TierAgeInDays")) which IS valid. The less-than will return true for anything older, which leaves the next boxes to be: box 3: Tier blob box 4: Message queue box 5: optional, they probably want to show the results with list blob2

You're right!! Let's not waste our time with questions about Logic Apps anymore! Please upvote Cricketer!

SecExams

You're right!! Let's not waste our time with questions about Logic Apps anymore! Please upvote Cricketer!

Question #265

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure Service application that processes queue data when it receives a message from a mobile application. Messages may not be sent to the service consistently.
You have the following requirements:
✑ Queue size must not grow larger than 80 gigabytes (GB).
✑ Use first-in-first-out (FIFO) ordering of messages.
✑ Minimize Azure costs.
You need to implement the messaging solution.
Solution: Use the .Net API to add a message to an Azure Service Bus Queue from the mobile application. Create an Azure Function App that uses an Azure Service Bus Queue trigger.
Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer:
A
You can create a function that is triggered when messages are submitted to an Azure Storage queue.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-storage-queue-triggered-function

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Community Discussion

Yes, is correct answer

i enjoys questions on azure functions a lot :)

Some people get high before leaving a comment

Some people get high before leaving a comment

Probably, cuz it's common to use so easy to answer.

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Question #266

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores located throughout the world. A single device can produce 2 megabytes (MB) of data every 24 hours. Each store location has one to five devices that send data.
You must store the device data in Azure Blob storage. Device data must be correlated based on a device identifier. Additional stores are expected to open in the future.
You need to implement a solution to receive the device data.
Solution: Provision an Azure Notification Hub. Register all devices with the hub.
Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B
Instead use an Azure Service Bus, which is used order processing and financial transactions.
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/compare-messaging-services

Community Discussion

Azure Event Hub is for telemetry and distributed data broadcasting, while Azure Service Bus can be used for order processing and financial transactions. What is clearly specified in the statement: "You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores ...". It's Service Bus

Azure Event Hub is for telemetry and distributed data broadcasting, while Azure Service Bus can be used for order processing and financial transactions. What is clearly specified in the statement: "You are developing an Azure solution to collect point-of-sale (POS) device data from 2,000 stores ...". It's Service Bus

Azure event Hub is the best choice

Explanation should be that notification hub is for pushing to mobile devices?

True, notification hub is for pushing the data, to a mobile device, not for collecting the data.

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Question #267

You are building a loyalty program for a major snack producer. When customers buy a snack at any of 100 participating retailers the event is recorded in Azure Event Hub. Each retailer is given a unique identifier that is used as the primary identifier for the loyalty program.
Retailers must be able to be added or removed at any time. Retailers must only be able to record sales for themselves.
You need to ensure that retailers can record sales.
What should you do?

A) Use publisher policies for retailers. (Correct Answer)
B) Create a partition for each retailer.
C) Define a namespace for each retailer.

Explanation

Correct Answer:
A
Event Hubs enables granular control over event publishers through publisher policies. Publisher policies are run-time features designed to facilitate large numbers of independent event publishers. With publisher policies, each publisher uses its own unique identifier when publishing events to an event hub.
Incorrect:
Not C: An Event Hubs namespace is a management container for event hubs (or topics, in Kafka parlance). It provides DNS-integrated network endpoints and a range of access control and network integration management features such as IP filtering, virtual network service endpoint, and Private Link.
Reference:
https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features

Community Discussion

ChatGPT is not a reliable source for Azure.

Given answer is correct!

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On my exam 2022-12-26. Chose : A

On my exam 2022-12-26. Chose : A

ChatGPT is not a reliable source for Azure.

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Question #268

DRAG DROP -

You develop and deploy a web app to Azure App Service in a production environment. You scale out the web app to four instances and configure a staging slot to support changes.

You must monitor the web app in the environment to include the following requirements:

✑ Increase web app availability by re-routing requests away from instances with error status codes and automatically replace instances if they remain in an error state after one hour.

✑ Send web server logs, application logs, standard output, and standard error messaging to an Azure Storage blob account.

You need to configure Azure App Service.

Which values should you use? To answer, drag the appropriate configuration value to the correct requirements. Each configuration value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Configuration values	Answer Area	
Health check	**Requirement**	**Configuration value**
Diagnostic setting	Increase availability	Health check
Deployment slot	Send logs	Diagnostic setting
Autoscale rule		
Zone redundancy		

Box 1: Health check -
Health check increases your application's availability by re-routing requests away from unhealthy instances, and replacing instances if they remain unhealthy. Your
App Service plan should be scaled to two or more instances to fully utilize Health check.

Box 2: Diagnostic setting -
Azure provides built-in diagnostics to assist with debugging an App Service app.
With the new Azure Monitor integration, you can create Diagnostic Settings to send logs to Storage Accounts, Event Hubs and Log Analytics.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/monitor-instances-health-check
https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs

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Community Discussion

Box 1: Health check Box 2: Diagnostic setting

disregard my answer please

1. Autoscale rule 2. Diagnostic setting

The answer looks correct, https://learn.microsoft.com/en-us/azure/app-service/monitor-instances-health-check?tabs=dotnet#what-happens-if-my-app-is-running-on-a-single-instance

I got this question on my exam, 2023Dec, go with what I remember was the most voted answer. Score 902, most of the questions were here, slightly different on wording because the Azure Ad <-> Entra Id change. Case was City Power & Light. Good luck! Important tip, you have access to microsoft learn during the exam!

Question #269

You develop a solution that uses Azure Virtual Machines (VMs).
The VMs contain code that must access resources in an Azure resource group.
You grant the VM access to the resource group in Resource Manager.
You need to obtain an access token that uses the VM's system-assigned managed identity.
Which two actions should you perform? Each correct answer presents part of the solution.

A) From the code on the VM, call Azure Resource Manager using an access token.
B) Use PowerShell on a remote machine to make a request to the local managed identity for Azure resources endpoint. (Correct Answer)
C) Use PowerShell on the VM to make a request to the local managed identity for Azure resources endpoint.
D) From the code on the VM, call Azure Resource Manager using a SAS token. (Correct Answer)
E) From the code on the VM, generate a user delegation SAS token.

Explanation

Correct Answer:
BD

Community Discussion

Selected Answer: AC

https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

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Selected Answer: AC

From le129 link 1. Call local managed identity: C $response = Invoke-WebRequest -Uri 'http://169.254.169.254/metadata/identity/oauth2/token?api-version=2018-02-01&resource=https://management.azure.com/' -Method GET -Headers @{Metadata="true"} 2. Extract token and call Azure Resource Manager using the access token: A (Invoke-WebRequest -Uri https://management.azure.com/subscriptions/<SUBSCRIPTION ID>/resourceGroups/<RESOURCE GROUP>?api-version=2016-06-01 -Method GET -ContentType "application/json" -Headers @{ Authorization ="Bearer $ArmToken"}).content

Selected Answer: AC

https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-arm

Got this 2023-05-12. my cases: case: You need to configure authorization. case: You need to ensure the app does not time out and processes the blob data case study: VanArsdel Inc Canada

VM are not out-of-scope for AZ-204 exam?

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Question #270

You are developing a road tollway tracking application that sends tracking events by using Azure Event Hubs using premium tier.
Each road must have a throttling policy uniquely assigned.
You need to configure the event hub to allow for per-road throttling.
What should you do?

A) Use a unique consumer group for each road.
B) Ensure each road stores events in a different partition. (Correct Answer)
C) Ensure each road has a unique connection string.
D) Use a unique application group for each road.

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: D

https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features. Application groups An application group is a collection of client applications that connect to an Event Hubs namespace sharing a unique identifying condition such as the security context - shared access policy or Azure Active Directory (Azure AD) application ID. Azure Event Hubs enables you to define resource access policies such as throttling policies for a given application group and controls event streaming (publishing or consuming) between client applications and Event Hubs. For more information, see Resource governance for client applications with application groups.

Selected Answer: D

Definitely D. Never heard of before and wondering how many things to remember

Can you share the resource you used to claim this answer ?

Selected Answer: A

ChatGPT: A. Use a unique consumer group for each road. In order to configure the Event Hub to allow for per-road throttling, you can use a unique consumer group for each road. This way, you can assign a unique throttling policy to each consumer group, which in turn controls the number of events that can be sent and received by the corresponding road. Option B and C are not correct solutions to this problem, because partitioning and unique connection strings are not related to throttling policies. Option D is not correct solution too, application groups are not related to throttling policies and they are used to group related Event Hubs together.

Application groups An application group is a collection of client applications that connect to an Event Hubs namespace sharing a unique identifying condition such as the security context - shared access policy or Azure Active Directory (Azure AD) application ID. Azure Event Hubs enables you to define resource access policies such as throttling policies for a given application group and controls event streaming (publishing or consuming) between client applications and Event Hubs.

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Question #271

You develop and deploy an ASP.NET Core application that connects to an Azure Database for MySQL instance.
Connections to the database appear to drop intermittently and the application code does not handle the connection failure.
You need to handle the transient connection errors in code by implementing retries.
What are three possible ways to achieve this goal? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Close the database connection and immediately report an error. (Correct Answer)
B) Disable connection pooling and configure a second Azure Database for MySQL instance.
C) Wait five seconds before repeating the connection attempt to the database. (Correct Answer)
D) Set a maximum number of connection attempts to 10 and report an error on subsequent connections. (Correct Answer)
E) Increase connection repeat attempts exponentially up to 120 seconds.

Explanation

Correct Answer:
ACD

Community Discussion

C,D,E The first and second case are fairly straight forward to handle. Try to open the connection again. When you succeed, the transient error has been mitigated by the system. You can use your Azure Database for MySQL again. We recommend having waits before retrying the connection. Back off if the initial retries fail. This way the system can use all resources available to overcome the error situation. A good pattern to follow is: Wait for 5 seconds before your first retry. For each following retry, the increase the wait exponentially, up to 60 seconds. Set a max number of retries at which point your application considers the operation failed. https://docs.microsoft.com/en-us/azure/mysql/single-server/concepts-connectivity

Selected Answer: CDE

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C, D, E are the only ones implementing retries

Selected Answer: CDE

CDE for sure

Got this in 10/2022 Went with C, D, E

Correct answers are C, D, E

Question #272

You are building a B2B web application that uses Azure B2B collaboration for authentication. Paying customers authenticate to Azure B2B using federation. The application allows users to sign up for trial accounts using any email address.
When a user converts to a paying customer, the data associated with the trial should be kept, but the user must authenticate using federation.
You need to update the user in Azure Active Directory (Azure AD) when they convert to a paying customer.
Which Graph API parameter is used to change authentication from one-time passcodes to federation?

A) resetRedemption
B) Status (Correct Answer)
C) userFlowType
D) invitedUser

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: A

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"When a user redeems a one-time passcode and later obtains an MSA, Azure AD account, or other federated account, they'll continue to be authenticated using a one-time passcode. If you want to update the user's authentication method, you can reset their redemption status." https://docs.microsoft.com/en-us/azure/active-directory/external-identities/one-time-passcode#user-experience-for-one-time-passcode-guest-users

Selected Answer: A

https://learn.microsoft.com/en-us/azure/active-directory/external-identities/reset-redemption-status

got this question today, answer A - 7/30/2023, score 895/1000

Selected Answer: A

https://learn.microsoft.com/en-us/azure/active-directory/external-identities/reset-redemption-status

Selected Answer: A

A. resetRedemption Most Voted

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Question #273

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Introductory Info Case study -
This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.
To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.
At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -
To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background -
Wide World Importers is moving all their datacenters to Azure. The company has developed several applications and services to support supply chain operations and would like to leverage serverless computing where possible.

Current environment -
Windows Server 2016 virtual machine
This virtual machine (VM) runs BizTalk Server 2016. The VM runs the following workflows:
Ocean Transport `" This workflow gathers and validates container information including container contents and arrival notices at various shipping ports.
Inland Transport `" This workflow gathers and validates trucking information including fuel usage, number of stops, and routes.

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The VM supports the following REST API calls:
Container API `" This API provides container information including weight, contents, and other attributes.
Location API `" This API provides location information regarding shipping ports of call and trucking stops.
Shipping REST API `" This API provides shipping information for use and display on the shipping website.

Shipping Data -
The application uses MongoDB JSON document storage database for all container and transport information.

Shipping Web Site -
The site displays shipping container tracking information and container contents. The site is located at http://shipping.wideworldimporters.com/

Proposed solution -
The on-premises shipping application must be moved to Azure. The VM has been migrated to a new Standard_D16s_v3 Azure VM by using Azure Site Recovery and must remain running in Azure to complete the BizTalk component migrations. You create a Standard_D16s_v3 Azure VM to host BizTalk Server. The Azure architecture diagram for the proposed solution is shown below:

Requirements -

Shipping Logic app -
The Shipping Logic app must meet the following requirements:
Support the ocean transport and inland transport workflows by using a Logic App.

Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.

Shipping Function app -
Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).

REST APIs -
The REST API's that support the solution must meet the following requirements:
Secure resources to the corporate VNet.
Allow deployment to a testing location within Azure while not incurring additional costs.
Automatically scale to double capacity during peak shipping times while not causing application downtime.
Minimize costs when selecting an Azure payment model.

Shipping data -
Data migration from on-premises to Azure must minimize costs and downtime.

Shipping website -
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.

Issues -

Windows Server 2016 VM -
The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.

Shipping website and REST APIs -
The following error message displays while you are testing the website:

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Failed to load http://test-shippingapi.wideworldimporters.com/: No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access. Question HOTSPOT -

You need to configure Azure CDN for the Shipping web site.

Which configuration options should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Answer Area

Option	Value
Tier	Standard / Premium
Profile	Akamai / Microsoft
Optimization	general web delivery / large file download / dynamic site acceleration / video-on-demand media streaming

Scenario: Shipping website -
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.

Tier: Standard -

Profile: Akamai -
Optimization: Dynamic site acceleration
Dynamic site acceleration (DSA) is available for Azure CDN Standard from Akamai, Azure CDN Standard from Verizon, and Azure CDN Premium from Verizon profiles.
DSA includes various techniques that benefit the latency and performance of dynamic content. Techniques include route and network optimization, TCP optimization, and more. You can use this optimization to accelerate a web app that includes numerous responses that aren't cacheable. Examples are search results, checkout transactions, or real-time data. You can continue to use core Azure CDN caching capabilities for static data.
Reference:
https://docs.microsoft.com/en-us/azure/cdn/cdn-optimization-overview

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Community Discussion

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) Wide World Importers 46 7 1 Azure CDN tiers 46 7 2 azure tools on/with VM 49 12 1 secure Function app : auth + token + trigger type 49 12 2 secure Logic App : tool used 55 23 1 setup workflow in logic app 55 23 2 setup network to trigger logic app from external server

Correct. Standard Akamai does support dynamic site acceleration. Microsoft requires front door, meaning additional costs. Verizon should also work I suppose, but isn't an options, so let's ignore that.

Great help

Great help

Standard Microsoft General Web Delivery https://learn.microsoft.com/en-us/azure/cdn/cdn-features

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Question #274

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Introductory Info Case study -
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Background -
Wide World Importers is moving all their datacenters to Azure. The company has developed several applications and services to support supply chain operations and would like to leverage serverless computing where possible.

Current environment -
Windows Server 2016 virtual machine
This virtual machine (VM) runs BizTalk Server 2016. The VM runs the following workflows:
Ocean Transport `" This workflow gathers and validates container information including container contents and arrival notices at various shipping ports.
Inland Transport `" This workflow gathers and validates trucking information including fuel usage, number of stops, and routes.

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The VM supports the following REST API calls:
Container API `" This API provides container information including weight, contents, and other attributes.
Location API `" This API provides location information regarding shipping ports of call and trucking stops.
Shipping REST API `" This API provides shipping information for use and display on the shipping website.

Shipping Data -
The application uses MongoDB JSON document storage database for all container and transport information.

Shipping Web Site -
The site displays shipping container tracking information and container contents. The site is located at http://shipping.wideworldimporters.com/

Proposed solution -
The on-premises shipping application must be moved to Azure. The VM has been migrated to a new Standard_D16s_v3 Azure VM by using Azure Site Recovery and must remain running in Azure to complete the BizTalk component migrations. You create a Standard_D16s_v3 Azure VM to host BizTalk Server. The Azure architecture diagram for the proposed solution is shown below:

Requirements -

Shipping Logic app -
The Shipping Logic app must meet the following requirements:
Support the ocean transport and inland transport workflows by using a Logic App.

Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.

Shipping Function app -
Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).

REST APIs -
The REST API's that support the solution must meet the following requirements:
Secure resources to the corporate VNet.
Allow deployment to a testing location within Azure while not incurring additional costs.
Automatically scale to double capacity during peak shipping times while not causing application downtime.
Minimize costs when selecting an Azure payment model.

Shipping data -
Data migration from on-premises to Azure must minimize costs and downtime.

Shipping website -
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.

Issues -

Windows Server 2016 VM -
The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.

Shipping website and REST APIs -
The following error message displays while you are testing the website:

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Failed to load http://test-shippingapi.wideworldimporters.com/: No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access. Question HOTSPOT -

You need to correct the VM issues.

Which tools should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

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Answer Area

Issue	Tool
Backup and Restore	Azure Site Recovery Azure Backup Azure Data Box Azure Migrate
Performance	Azure Network Watcher Azure Traffic Manager ExpressRoute Accelerated Networking

Box 1: Azure Backup -
The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.
In-Place restore of disks in IaaS VMs is a feature of Azure Backup.
Performance: Accelerated Networking
Scenario: The VM shows high network latency, jitter, and high CPU utilization.

Box 2: Accelerated networking -
The VM shows high network latency, jitter, and high CPU utilization.
Accelerated networking enables single root I/O virtualization (SR-IOV) to a VM, greatly improving its networking performance. This high-performance path bypasses the host from the datapath, reducing latency, jitter, and CPU utilization, for use with the most demanding network workloads on supported VM types.
Reference:
https://azure.microsoft.com/en-us/blog/an-easy-way-to-bring-back-your-azure-vm-with-in-place-restore/

Community Discussion

Hoow the f could you memorize all this.

SecExams

Accelerated Networking only works in conjunction with a Azure Virtual Network (VNet). That is mentioned in the case and is a clue as well.

Virtual Machines no longer exists on az 204

The given answer is correct. https://learn.microsoft.com/en-us/azure/virtual-network/accelerated-networking-overview#benefits

same thoughts.

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Question #275

SecExams

Introductory Info Case study -
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Background -
You are a developer for Litware Inc., a SaaS company that provides a solution for managing employee expenses. The solution consists of an ASP.NET Core Web API project that is deployed as an Azure Web App.

Overall architecture -
Employees upload receipts for the system to process. When processing is complete, the employee receives a summary report email that details the processing results. Employees then use a web application to manage their receipts and perform any additional tasks needed for reimbursement.

Receipt processing -
Employees may upload receipts in two ways:

SecExams

Uploading using an Azure Files mounted folder
Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

Users table -

Column	Description
UserId	unique identifier for and employee
ExpenseAccount	employees expense account number in the format 1234-123-1234
AllowedAmount	limit of allowed expenses before approval is needed
SupervisorId	unique identifier for employee's supervisor
SecurityPin	value used to validate user identity

Web Application -
You enable MSI for the Web App and configure the Web App to use the security principal name WebAppIdentity.

Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.

Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging enabled.

SecExams

Application Insights must always contain all log messages.

Requirements -

Receipt processing -
Concurrent processing of a receipt must be prevented.

Disaster recovery -
Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Security -
User's SecurityPin must be stored in such a way that access to the database does not allow the viewing of SecurityPins. The web application is the only system that should have access to SecurityPins.
All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
All access to Azure Storage and Azure SQL database must use the application's Managed Service Identity (MSI).
Receipt data must always be encrypted at rest.
All data must be protected in transit.
User's expense account number must be visible only to logged in users. All other views of the expense account number should include only the last segment, with the remaining parts obscured.
In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete the file in the file share and use the web application, which returns a 500

SecExams

Internal
Server error page.

Capacity issue -
During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

SecExams

```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

SecExams

```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21 }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16 }
```

ConfigureSSE.ps1 -

SecExams

```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question DRAG DROP -

You need to add code at line PC32 in Processing.cs to implement the GetCredentials method in the Processing class.

How should you complete the code? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: AzureServiceTokenProvider()
Box 2: tp.GetAccessTokenAsync("..")
Acquiring an access token is then quite easy. Example code:

```
private async Task<string> GetAccessTokenAsync()
{
var tokenProvider = new AzureServiceTokenProvider();
return await tokenProvider.GetAccessTokenAsync("https://storage.azure.com/");
}
```

Reference:
https://joonasw.net/view/azure-ad-authentication-with-azure-storage-and-managed-service-identity

Community Discussion

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) Litware Inc 47 8 1 code : GetCredentials method 47 8 2 code : disaster recovery requirements 51 14 1 code : set encryption with request to blob storage 51 14 2 ARM set keyVault access policy 53 20 1 prevent blob writing concurrency problems 54 20 2 resolve capacity issue at function processing 54 20 3 resolve capacity issue at extensive logging

Answer is correct: https://docs.microsoft.com/en-us/azure/app-service/overview-managed-identity?context=azure%2Factive-directory%2Fmanaged-identities-azure-resources%2Fcontext%2Fmsi-context&tabs=python#asal

Wide World Importers 7/1 7/2 12/1 12/2 23/1 23/2 Litware Inc. 8/1 8/2 14/1 14/2 20/1 20/2 20/3 Coho Winery produces 9/1 9/2 22/1 22/2 28/1 28/2 VanArsdel, Ltd. 10/1 10/2 10/3 10/4 15/1 15/2 21/1 29/1 29/2 30/1 Contoso, Ltd. 11/1 11/2 11/3 11/4 11/5 16/1 16/2 27/1 27/2 31/1 31/2 31/3 City Power & Light 13/1 13/2 13/3 13/4 13/5 13/6 17/1 17/2 18/1 24/1 24/2 32/1 Proseware, Inc. 19/1 19/2 19/3 19/4 25/1 25/2 25/3 26/1

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31/1 31/2 31/3 City Power & Light 13/1 13/2 13/3 13/4 13/5 13/6 17/1 17/2 18/1 24/1 24/2 32/1 Proseware, Inc. 19/1 19/2 19/3 19/4 25/1 25/2 25/3 26/1

This is Microsoft.Azure.Services.AppAuthentication and is since 2019 legacy. Instead use the Azure Identity client library for .NET Azure.Identity using Azure.Identity; using Azure.Security.KeyVault.Secrets; // Create a secret client using the DefaultAzureCredential var client = new SecretClient(new Uri("https://myvault.azure.vaults.net/"), new DefaultAzureCredential()); etc.

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Question #276

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Introductory Info Case study -
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Employees may upload receipts in two ways:

SecExams

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Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

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AllowedAmount	limit of allowed expenses before approval is needed
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SecurityPin	value used to validate user identity

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Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
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Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging enabled.

SecExams

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Requirements -

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Concurrent processing of a receipt must be prevented.

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Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

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Receipt data must always be encrypted at rest.
All data must be protected in transit.
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In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete the file in the file share and use the web application, which returns a 500

SecExams

Internal
Server error page.

Capacity issue -
During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

SecExams

```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

SecExams

```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21 }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16 }
```

ConfigureSSE.ps1 -

SecExams

```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question DRAG DROP -

You need to ensure disaster recovery requirements are met.

What code should you add at line PC16?

To answer, drag the appropriate code fragments to the correct locations. Each code fragment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Scenario: Disaster recovery. Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Box 1: DirectoryTransferContext -
We transfer all files in the directory.
Note: The TransferContext object comes in two forms: SingleTransferContext and DirectoryTransferContext. The former is for transferring a single file and the latter is for transferring a directory of files.
Box 2: ShouldTransferCallbackAsync
The DirectoryTransferContext.ShouldTransferCallbackAsync delegate callback is invoked to tell whether a transfer should be done.

Box 3: False -
If you want to use the retry policy in Copy, and want the copy can be resume if break in the middle, you can use SyncCopy (isServiceCopy = false).
Note that if you choose to use service side copy ('isServiceCopy' set to true), Azure (currently) doesn't provide SLA for that. Setting 'isServiceCopy' to false will download the source blob loca
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-use-data-movement-library https://docs.microsoft.com/en-us/dotnet/api/microsoft.windowsazure.storage.datamovement.directorytransfercontext.shouldtransfercallbackasync?view=azure- dotnet

Community Discussion

Answers in box 1 and 2 arent' correct. They should be SingleTranferConext and ShouldOverwriteCallbackAsync because we are copying a single blob (see CopyAsync method). We are inside a foreach loop that scan each file in the share.

SingleTranferConext ShouldOverwriteCallbackAsync true

SecExams

Correct 1. https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.datamovement.singletransfercontext?view=azure-dotnet 2. According to a link above, there is only "ShouldOverwriteCallbackAsync" available for "SingleTranferConext " 3. https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.datamovement.transfermanager.copyasync?view=azure-dotnet#Microsoft_Azure_Storage_DataMovement_TransferManager_CopyAsync_Microsoft_Azure_Storage_B
The question is should it be server side copy or not? I would say "true".

Correct 1. https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.datamovement.singletransfercontext?view=azure-dotnet 2. According to a link above, there is only "ShouldOverwriteCallbackAsync" available for "SingleTranferConext " 3. https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.datamovement.transfermanager.copyasync?view=azure-dotnet#Microsoft_Azure_Storage_DataMovement_TransferManager_CopyAsync_Microsoft_Azure_Storage_B
The question is should it be server side copy or not? I would say "true".

Srry im didnt read well

SecExams

Question #277

SecExams

Introductory Info Case study -
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LabelMaker app -
Coho Winery produces, bottles, and distributes a variety of wines globally. You are a developer implementing highly scalable and resilient applications to support online order processing by using Azure solutions.
Coho Winery has a LabelMaker application that prints labels for wine bottles. The application sends data to several printers. The application consists of five modules that run independently on virtual machines (VMs). Coho Winery plans to move the application to Azure and continue to support label creation. External partners send data to the LabelMaker application to include artwork and text for custom label designs.

Requirements. Data -
You identify the following requirements for data management and

SecExams

manipulation:
Order data is stored as nonrelational JSON and must be queried using SQL.
Changes to the Order data must reflect immediately across all partitions. All reads to the Order data must fetch the most recent writes.

Requirements. Security -
You have the following security requirements:
Users of Coho Winery applications must be able to provide access to documents, resources, and applications to external partners.
▪
External partners must use their own credentials and authenticate with their organization's identity management solution.
External partner logins must be audited monthly for application use by a user account administrator to maintain company compliance.
Storage of e-commerce application settings must be maintained in Azure Key Vault.
E-commerce application sign-ins must be secured by using Azure App Service authentication and Azure Active Directory (AAD).
Conditional access policies must be applied at the application level to protect company content.
The LabelMaker application must be secured by using an AAD account that has full access to all namespaces of the Azure Kubernetes Service (AKS) cluster.

Requirements. LabelMaker app -
Azure Monitor Container Health must be used to monitor the performance of workloads that are deployed to Kubernetes environments and hosted on Azure Kubernetes Service (AKS).
You must use Azure Container Registry to publish images that support the AKS deployment.

Architecture -

SecExams

Issues -
Calls to the Printer API App fail periodically due to printer communication timeouts.
Printer communication timeouts occur after 10 seconds. The label printer must only receive up to 5 attempts within one minute.
The order workflow fails to run upon initial deployment to Azure.

Order.json -
Relevant portions of the app files are shown below. Line numbers are included for reference only.
This JSON file contains a representation of the data for an order that includes a single item.

Order.json -

Order.json

```
01 {
02   "id" : 1,
03   "customers" : [
04   {
05      "familyName" : "Doe",
06      "givenName" : "John",
07      "customerid" : 5
08    }
09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
15     "product_id" : 7513594,
16     "quantity": 1,
17     "requires_shipping" : true ,
18     "sku": "SFC-342-N" ,
19     "title" : "Surface Go" ,
20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
30     "total_discount" : "5.00" ,
31     "discount_allocations" : [
32      {
33        "amount" : "5.00" ,
34        "discount_application_index" : 2
35        }
36     ]
```

Question HOTSPOT -

You need to configure Azure Cosmos DB.

Which settings should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Hot Area:

Answer Area

Setting	Value
Consistency Level	Strong Bounded-staleness Session Eventual
API	SQL MongoDB Graph Table

Explanation

Correct Answer:

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Box 1: Strong -
When the consistency level is set to strong, the staleness window is equivalent to zero, and the clients are guaranteed to read the latest committed value of the write operation.
Scenario: Changes to the Order data must reflect immediately across all partitions. All reads to the Order data must fetch the most recent writes.
Note: You can choose from five well-defined models on the consistency spectrum. From strongest to weakest, the models are: Strong, Bounded staleness,
Session, Consistent prefix, Eventual

Box 2: SQL -
Scenario: You identify the following requirements for data management and manipulation:
Order data is stored as nonrelational JSON and must be queried using Structured Query Language (SQL).

Community Discussion

correct 100%

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) Coho Winery 47 9 1 configure Azure

SecExams

Cosmos DB 47 9 2 SQL 54 22 1 Review logs/history to troubleshoot workflow 54 22 2 ARM function configuration : retries etc 57 28 1 workflow for Azure Container Registry 57 28 2 access data from the user claim object

(ノ◕ヮ◕)ノ*:･ﾟ✧

Answer is correct - Strong consistency matches requirements and MS recommends that if you have no preference or specific reason to use any of the other cosmos APIs, you should use the SQL api

correct Answer: 1. Strong consistency 2. Sql Api

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Question #278

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Introductory Info Case study -
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Architecture -

SecExams

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09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
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16     "quantity": 1,
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20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
30     "total_discount" : "5.00" ,
31     "discount_allocations" : [
32      {
33        "amount" : "5.00" ,
34        "discount_application_index" : 2
35        }
36     ]
```

Question HOTSPOT -

You need to retrieve all order line items from Order.json and sort the data alphabetically by the city.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

SELECT li.id AS lineitemid, li.price

FROM [ ]
- Orders o
- LineItems li

JOIN [ ] IN [ ]

[ ]
- li
- o

[ ]
- o.line_items
- li.line_items
- o.address

ORDER BY [ ] ASC

[ ]
- o.address.city
- li.address.city
- o.city
- li.city

Explanation

Correct Answer:

SecExams

Answer Area

SELECT li.id AS lineitemid, li.price

FROM [Orders o | Lineitems li]

JOIN [li | o] IN [o.line_items | li.line_items | o.address]

ORDER BY [o.address.city | li.address.city | o.city | li.city] ASC

Box 1: orders o -
Scenario: Order data is stored as nonrelational JSON and must be queried using SQL.

Box 2:li -

Box 3: o.line_items -

Box 4: o.city -
The city field is in Order, not in the 2s.

Community Discussion

goodluck!

The last one should be o.address.city

I passed with only these questions, so don't stress guys. 80% of these questions is exactly the same. Good luck!

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I Cleared it with 88%. And I got this question too.:-)

I Cleared it with 88%. And I got this question too.:-)

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Question #279

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Background -
VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -
The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

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Retail Store Locations -
The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -
The application components must meet the following requirements:

Corporate website -
Secure the website by using SSL.
Minimize costs for data storage and hosting.
Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
Distribute the website content globally for local use.
Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
The website must have 99.95 percent uptime.

Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question HOTSPOT -
You need to implement the Azure Function for delivery driver profile information.
Which configurations should you use? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.
Hot Area:

Answer Area

Configuration	Value
Code library	Microsoft Authentication Library (MSAL) Microsoft Azure Key Vault SDK Azure Identity library
API	Microsoft Graph Azure Active Directory Graph Azure Key Vault

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Explanation

Correct Answer:

Answer Area

Configuration	Value
Code library	Microsoft Authentication Library (MSAL) Microsoft Azure Key Vault SDK Azure Identity library
API	Microsoft Graph Azure Active Directory Graph Azure Key Vault

Box 1: Azure Identity library -
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.
We recommend that you use a managed identity for applications deployed to Azure.
The preceding authentication scenarios are supported by the Azure Identity client library and integrated with Key Vault SDKs.
Note: What is Managed Service Identity?
Azure Key Vault avoids the need to store keys and secrets in application code or source control. However, in order to retrieve keys and secrets from Azure Key
Vault, you need to authorize a user or application with Azure Key Vault, which in its turn needs another credential. Managed Service Identity avoids the need of storing credentials for Azure Key Vault in application or environment settings by creating a Service Principal for each application or cloud service on which
Managed Service Identity is enabled. This Service Principal enables you to call a local MSI endpoint to get an access token from Azure AD using the credentials of the Service Principal. This token is then used to authenticate to an Azure Service, for example Azure Key Vault.

Box 2: Azure Key Vault -
Azure Key Vault allows you to securely access sensitive information from within your applications:
* Keys, secrets, and certificates are protected without your having to write the code yourself, and you can easily use them from your applications.
Use Azure Key Vault to store only secrets for your application. Examples of secrets that should be stored in Key Vault include:

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Client application secrets -

Connection strings -

Passwords -

Shared access keys -

SSH keys -
Reference:
https://docs.microsoft.com/en-us/azure/key-vault/general/developers-guide https://integration.team/blog/retrieve-azure-key-vault-secrets-using-azure-functions-and-managed-service-identity

Community Discussion

Store delivery driver profile information in Azure Active Directory (Azure AD), I would use: Code Library: MSAL API: Microsoft Graph https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-overview

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) VanArsdel, Ltd. 47 10 1 delivery profile information in code 48 10 2 grant access SAS or AD? 48 10 3 JWT +claims 48 10 4 place to store the RSA-HSM key 51 15 1 reduce read latency Cosmos DB 51 15 2 audit transactions in blob 54 21 1 systems for source-receiver-handler 57 29 1 funcion configuration : binding , trigger, direction 57 29 2 tier of SPA web app 57 30 1 Azure Blob features for point-in-time restore and accidental deletion of data

Why...o...why are so many of the revealed answers incorrect? Without the topic discussions you would have hard times...

MSAL MS Graph

I got this question (12-Aug-2023) and I chose highly voted answer - 932 passed

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Question #280

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Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
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Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question You need to grant access to the retail store location data for the inventory service development effort.
What should you use?

A) Azure AD access token
B) Azure RBAC role
C) Shared access signature (SAS) token (Correct Answer)
D) Azure AD ID token
E) Azure AD refresh token

Explanation

Correct Answer:
C
A shared access signature (SAS) provides secure delegated access to resources in your storage account. With a SAS, you have granular control over how a client can access your data. For example:
What resources the client may access.
What permissions they have to those resources.
How long the SAS is valid.
Note: Inventory services:
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview

Community Discussion

Seems Correct as access is required to access for 3 months

All that reading to check if the person knows SAS exist with an expiry date?

This is why I hate case studies

This is why I hate case studies

I got this question (12-Aug-2023) and I chose C as my answer - 932 passed

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Question #281

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SecExams

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You need to reliably identify the delivery driver profile information.
How should you configure the system? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

Configuration	Value
JSON web token (JWT) type	ID Refresh Access
Payload claim value	oid aud idp

Explanation

Correct Answer:

SecExams

Answer Area

Configuration	Value
JSON web token (JWT) type	ID / Refresh / Access
Payload claim value	oid / aud / idp

Box 1: ID -
Scenario: Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.
ID token - A JWT that contains claims that you can use to identify users in your application. This token is securely sent in HTTP requests for communication between two components of the same application or service. You can use the claims in an ID token as you see fit. They're commonly used to display account information or to make access control decisions in an application. ID tokens are signed, but the're not encrypted. When your application or API receives an ID token, it must validate the signature to prove that the token is authentic. Your application or API must also validate a few claims in the token to prove that it's valid.
Depending on the scenario requirements, the claims validated by an application can vary, but your application must perform some common claim validations in every scenario.

Box 2: Oid -
Oid - The immutable identifier for the "principal" of the request - the user or service principal whose identity has been verified. In ID tokens and app+user tokens, this is the object ID of the user. In app-only tokens, this is the object ID of the calling service principal. It can also be used to perform authorization checks safely and as a key in database tables. This ID uniquely identifies the principal across applications - two different applications signing in the same user will receive the same value in the oid claim.
Incorrect:
Aud - Identifies the intended recipient of the token. For Azure AD B2C, the audience is the

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application ID. Your application should validate this value and reject the token if it doesn't match. Audience is synonymous with resource.
Idp - Records the identity provider that authenticated the subject of the token. This value is identical to the value of the Issuer claim unless the user account not in the same tenant as the issuer - guests, for instance. If the claim isn't present, it means that the value of iss can be used instead. For personal accounts being used in an organizational context (for instance, a personal account invited to an Azure AD tenant), the idp claim may be 'live.com' or an STS URI containing the
Microsoft account tenant.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory-b2c/tokens-overview https://docs.microsoft.com/en-us/azure/active-directory/develop/access-tokens

Community Discussion

Got this question on 30-Sep-2022 exam. Answer is correct. Passed with 870 score.

Looks correct. Ref.: https://learn.microsoft.com/en-us/azure/active-directory/develop/id-tokens

I got this question (12-Aug-2023) and I chose highly voted answer - 932 passed

Look correct. Got this question on 26-Mar-2023 exam. Go with suggested answer got 890 score.

This was on the exam (July 2023). Went with highly voted. Scored 917

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Question #282

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Background -
VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -
The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

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Retail Store Locations -
The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -
The application components must meet the following requirements:

Corporate website -
Secure the website by using SSL.
Minimize costs for data storage and hosting.
Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
Distribute the website content globally for local use.
Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
The website must have 99.95 percent uptime.

Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

SecExams

Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question You need to secure the Azure Functions to meet the security requirements.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Store the RSA-HSM key in Azure Key Vault with soft-delete and purge-protection features enabled. (Correct Answer)
B) Store the RSA-HSM key in Azure Blob storage with an immutability policy applied to the container.
C) Create a free tier Azure App Configuration instance with a new Azure AD service principal.
D) Create a standard tier Azure App Configuration instance with an assigned Azure AD managed identity. (Correct Answer)
E) Store the RSA-HSM key in Azure Cosmos DB. Apply the built-in policies for customer-managed keys and allowed locations.

Explanation

Correct Answer:
AD
Scenario: All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Microsoft Azure Key Vault is a cloud-hosted management service that allows users to

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encrypt keys and small secrets by using keys that are protected by hardware security modules (HSMs).
You need to create a managed identity for your application.
Reference:
https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references

Community Discussion

There is no need to read all that text to identify the answer.

Got this question on 30-Sep-2022 exam. Answer is correct. Passed with 870 score.

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All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key. Authentication and authorization must use Azure AD and services must use managed identities where possible.

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Question #283

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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

SecExams

```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question DRAG DROP -

You need to add markup at line AM04 to implement the ContentReview role. How should you complete the markup? To answer, drag the appropriate json segments to the correct locations. Each json segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or

scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Json segments

User

value

role

Application

allowedMemberTypes

allowedAccountTypes

Answer Area

```
"appRoles": [
{
    " [          ]": [
    " [          ] "
    ],
    "displayName": "ContentReviewer",
    "id": "e1c2ade8-98f8-45fd-aa4a-6d24b512c22a",
    "isEnabled" : true,
    " [          ] "    :"ContentReviewer"
  }
],
```

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Explanation

Correct Answer:

Json segments

User

value

role

Application

allowedMemberTypes

allowedAccountTypes

Answer Area

```
"appRoles": [
{
    " allowedMemberTypes ": [
    " User "
    ],
    "displayName": "ContentReviewer",
    "id": "e1c2ade8-98f8-45fd-aa4a-6d24b512c22a",
    "isEnabled" : true,
    " value "    :"ContentReviewer"
  }
],
```

Box 1: allowedMemberTypes -

allowedMemberTypes specifies whether this app role definition can be assigned to users and groups by setting to "User", or to other applications (that are accessing this application in daemon service scenarios) by setting to "Application", or to both.

Note: The following example shows the appRoles that you can assign to users.

"appId": "8763f1c4-f988-489c-a51e-158e9ef97d6a",

"appRoles": [

{

"allowedMemberTypes": [

"User"
],
"displayName": "Writer",
"id": "d1c2ade8-98f8-45fd-aa4a-6d06b947c66f",
"isEnabled": true,
"description": "Writers Have the ability to create tasks.",
"value": "Writer"
}
],
"availableToOtherTenants": false,

Box 2: User -
Scenario: In order to review content a user must be part of a ContentReviewer role.

Box 3: value -
value specifies the value which will be included in the roles claim in authentication and access tokens.
Reference:
https://docs.microsoft.com/en-us/graph/api/resources/approle

Community Discussion

Correct. See MS example here: https://docs.microsoft.com/de-de/azure/active-directory/develop/howto-add-app-roles-in-azure-ad-apps#example-user-app-role

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) Contoso, Ltd 48 11 1 configure ApplicationManifest 48 11 2 configure ApplicationManifest 49 11 3 type of SSL certificate / proxy used 49 11 4 YAML @Azure Container Instances for mounting 49 11 5 ApplicationManifest optional claims 52 16 1 cli : az monitor metrics alert create 52 16 2 cli : az for http server log output 56 27 1 code : read properties from GRID event 56 27 2 tier of function plan @Vnet 58 31 1 choose best storage solution 58 31 2 code : bindings for function 58 31 3 docker file : Private/Public Windows/Linux

On exam December 2, 2022

Here below find same case studies topics: Wide World Importers 7, 12, 23 Litware Inc. 8, 14, 20 Coho Winery produces 9, 22, 28 VanArsdel, Ltd. 10, 15, 21, 29, 30 Contoso, Ltd. 11, 16, 27, 31 City Power & Light 13, 17, 18, 24, 32 Proseware, Inc. 19, 25, 26

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Got this in the exam today! Feb 28, 2023

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Question #284

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Introductory Info Case study -
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Azure Active Directory -
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Requirements -

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Costs -
You must minimize costs for all Azure services.

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React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
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Issues -
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Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question HOTSPOT -

You need to add code at line AM09 to ensure that users can review content using ContentAnalysisService.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

[ ] ,

- "allowPublicClient":true
- "oauth2Permissions": ["login"]
- "oauth2AllowUrlPathMatching":true
- "oauth2AllowIdTokenImplicitFlow":true

[ ] ,

- "oauth2AllowImplicitFlow": true
- "oauth2RequiredPostResponse":true
- "preAuthorizedApplications":["SPA"]
- "knownClientApplications":["ContentAnalysisService"]

Explanation

Correct Answer:

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Answer Area

Box 1: "oauth2Permissions": ["login"]
oauth2Permissions specifies the collection of OAuth 2.0 permission scopes that the web API (resource) app exposes to client apps. These permission scopes may be granted to client apps during consent.
Box 2: "oauth2AllowImplicitFlow":true
For applications (Angular, Ember.js, React.js, and so on), Microsoft identity platform supports the OAuth 2.0 Implicit Grant flow.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest

Community Discussion

https://www.secexams.com/discussions/microsoft/view/25371-exam-az-204-topic-8-question-2-discussion/ oauth2AllowImplicitFlow = true, oauth2AllowIdTokenImplicitFlow = true

Box 1: "oauth2AllowIdTokenImplicitFlow":true This value indicates whether the web app can request ID tokens of the implicit OAuth 2.0 flow. The default setting is "false". Box 2: "oauth2AllowImplicitFlow":true This value indicates whether the web app can request OAuth 2.0 implicit flow access tokens. The default setting is "false". Reference: https://

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docs.microsoft.com/de-de/azure/active-directory/develop/reference-app-manifest https://docs.microsoft.com/de-de/azure/active-directory/develop/reference-app-manifest#oauth2allowidtokenimplicitflow-attribute https://docs.microsoft.com/de-de/azure/active-directory/develop/reference-app-manifest#oauth2allowimplicitflow-attribute

"allowPublicClient": true > Not required as infered from replyUrlsWithType "oauth2Permissions": ["login"] > only for resource server exposing an API "oauth2AllowUrlPathMatching: true > Couldn't find in the docu "oauth2AllowIdTokenImplicitFlow": true > Correct one to choose! "oauth2AllowImplicitFlow": true > Correct one to choose! "oauth2RequiredPostResponse": true > Not relevant "preAuthorizedApplications": ["SPA"] > Not relevant "knownClientApplications": ["ContentAnalysisService"] > Not relevant https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest?WT.mc_id=Portal-Microsoft_AAD_RegisteredApps#manifest-reference

Since it is a browser app (React), Implicit Grant Flow, should be enabled: oauth2AllowImplicitFlow = true, oauth2AllowIdTokenImplicitFlow = true "To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the "reviewer's email address for auditing purposes. This is a web app so we need oauth2AllowImplicitFlow. We need to have information about the user (reviewer email), so we need to have Id Token thus oauth2AllowIdTokenImplicitFlow must be set to true

I think the first answer should be allowPublicClient: true because this is SPA application and be default is is set to false. implicit flow does not make sense with confidential clients, it would be client credentials flow.

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Question #285

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High availability -
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Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Code -

ContentUploadService -

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CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question HOTSPOT -

You need to ensure that network security policies are met.

How should you configure network security? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

Box 1: Valid root certificate -

Scenario: All websites and services must use SSL from a valid root certificate authority.

Box 2: Azure Application Gateway

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Scenario:
✑ Any web service accessible over the Internet must be protected from cross site scripting attacks.
✑ All Internal services must only be accessible from Internal Virtual Networks (VNets)
All parts of the system must support inbound and outbound traffic restrictions.
▪
Azure Web Application Firewall (WAF) on Azure Application Gateway provides centralized protection of your web applications from common exploits and vulnerabilities. Web applications are increasingly targeted by malicious attacks that exploit commonly known vulnerabilities. SQL injection and cross-site scripting are among the most common attacks.
Application Gateway supports autoscaling, SSL offloading, and end-to-end SSL, a web application firewall (WAF), cookie-based session affinity, URL path-based routing, multisite hosting, redirection, rewrite HTTP headers and other features.
Note: Both Nginx and Azure Application Gateway act as a reverse proxy with Layer 7 load-balancing features plus a WAF to ensure strong protection against common web vulnerabilities and exploits.
You can modify Nginx web server configuration/SSL for X-XSS protection. This helps to prevent cross-site scripting exploits by forcing the injection of HTTP headers with X-XSS protection.
Reference:
https://docs.microsoft.com/en-us/azure/web-application-firewall/ag/ag-overview
https://www.upguard.com/articles/10-tips-for-securing-your-nginx-deployment

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Community Discussion

Box 1: Valid root certificate Scenario: All websites and services must use SSL from a valid root certificate authority. Box 2: Azure Application Gateway Scenario: - Any web service accessible over the Internet must be protected from cross site scripting attacks. - All Internal services must only be accessible from Internal Virtual Networks (VNets).

Got this in 16/02/2023

On my exam 2022-12-26. Chose： Valid root certificate Azure Application Gateway

Yeah! Box 1: Answer is written inside security tab: "must use SSL from a valid root certificate authority" Must read carefully sometime to get the answer :) Box 2: nginx as service is not provided by Microsoft azure

On my exam 2022-12-26. Chose： Valid root certificate Azure Application Gateway

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Question #286

SecExams

Introductory Info Case study -
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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question DRAG DROP -

You need to add YAML markup at line CS17 to ensure that the ContentUploadService can access Azure Storage access keys.

How should you complete the YAML markup? To answer, drag the appropriate YAML segments to the correct locations. Each YAML segment may be used once,

more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Explanation

Correct Answer:

Box 1: volumeMounts -

Example:

volumeMounts:

- mountPath: /mnt/secrets

name: secretvolume1

volumes:

- name: secretvolume1

secret:
mysecret1: TXkgZmlyc3Qgc2VjcmV0IEZPTwo=

Box 2: volumes -

Box 3: secret -
Reference:
https://docs.microsoft.com/en-us/azure/container-instances/container-instances-volume-secret

Community Discussion

Box 1: volumeMounts Box 2: volumes Box 3: secret Reference: https://docs.microsoft.com/en-us/azure/container-instances/container-instances-volume-secret

Answers are correct!

Correct. But a trick question. accesskey is the name of the volume

On my exam 2022-12-26. Chose： volumeMounts volumes secert

On my exam 2022-12-26. Chose： volumeMounts volumes secert

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Question #287

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Overview -
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You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
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Security -
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Issues -
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Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question HOTSPOT -

You need to add code at line AM10 of the application manifest to ensure that the requirement for manually reviewing content can be met.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

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Answer Area

Box 1: sid -
Sid: Session ID, used for per-session user sign-out. Personal and Azure AD accounts.

Scenario: Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role.

Box 2: email -
Scenario: All completed reviews must include the reviewer's email address for auditing purposes.

Community Discussion

Box 1: sid Sid: Session ID, used for per-session user sign-out. Personal and Azure AD accounts. Scenario: To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. Box 2: email Scenario: All completed reviews must include the reviewer's email address for auditing purposes. Reference: https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-

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manifest https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-optional-claims

The answer is correct. References: https://docs.microsoft.com/en-us/azure/active-directory/develop/reference-app-manifest https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-optional-claims

"To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials." sid = Personal and Azure AD accounts Session ID https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-optional-claims

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On my exam 2022-12-26. Chose： sid email

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Question #288

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Background -
Wide World Importers is moving all their datacenters to Azure. The company has developed several applications and services to support supply chain operations and would like to leverage serverless computing where possible.

Current environment -
Windows Server 2016 virtual machine
This virtual machine (VM) runs BizTalk Server 2016. The VM runs the following workflows:
Ocean Transport `" This workflow gathers and validates container information including container contents and arrival notices at various shipping ports.
Inland Transport `" This workflow gathers and validates trucking information including fuel usage, number of stops, and routes.

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The VM supports the following REST API calls:
Container API `" This API provides container information including weight, contents, and other attributes.
Location API `" This API provides location information regarding shipping ports of call and trucking stops.
Shipping REST API `" This API provides shipping information for use and display on the shipping website.

Shipping Data -
The application uses MongoDB JSON document storage database for all container and transport information.

Shipping Web Site -
The site displays shipping container tracking information and container contents. The site is located at http://shipping.wideworldimporters.com/

Proposed solution -
The on-premises shipping application must be moved to Azure. The VM has been migrated to a new Standard_D16s_v3 Azure VM by using Azure Site Recovery and must remain running in Azure to complete the BizTalk component migrations. You create a Standard_D16s_v3 Azure VM to host BizTalk Server. The Azure architecture diagram for the proposed solution is shown below:

Requirements -

Shipping Logic app -
The Shipping Logic app must meet the following requirements:
Support the ocean transport and inland transport workflows by using a Logic App.

Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.

Shipping Function app -
Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).

REST APIs -
The REST API's that support the solution must meet the following requirements:
Secure resources to the corporate VNet.
Allow deployment to a testing location within Azure while not incurring additional costs.
Automatically scale to double capacity during peak shipping times while not causing application downtime.
Minimize costs when selecting an Azure payment model.

Shipping data -
Data migration from on-premises to Azure must minimize costs and downtime.

Shipping website -
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.

Issues -

Windows Server 2016 VM -
The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.

Shipping website and REST APIs -
The following error message displays while you are testing the website:

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Failed to load http://test-shippingapi.wideworldimporters.com/: No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access. Question

HOTSPOT -

You need to secure the Shipping Function app.

How should you configure the app? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Explanation

Correct Answer:

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Answer Area

Setting	Value
Authorization level	Function Anonymous Admin
User claims	JSON Web Token (JWT) Shared Access Signature (SAS) token API Key
Trigger type	blob HTTP queue timer

Scenario: Shipping Function app: Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).

Box 1: Function -
Box 2: JSON based Token (JWT)
Azure AD uses JSON based tokens (JWTs) that contain claims

Box 3: HTTP -
How a web app delegates sign-in to Azure AD and obtains a token
User authentication happens via the browser. The OpenID protocol uses standard HTTP protocol messages.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/develop/authentication-scenarios

Community Discussion

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The correct answer is: Anonymous JWT HTTP Scenario: Shipping Function app: Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD). 1. Authorization Level must be anonymous to use function app level security methods. 2. User claims must be JWT tokens; API Key is not recommended due to security issues. 3. Function App is triggered from Logic App. So it must be http https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-http-webhook-trigger?tabs=csharp#secure-an-http-endpoint-in-production

Function JWT HTTP

Based on description it should be anonymous https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-http-webhook-trigger?tabs=in-process%2Cfunctionsv2&pivots=programming-language-csharp#secure-an-http-endpoint-in-production

"Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD)." How can it be Function is AAD requires "Anonymous"? My vote: Anonymous JWT HTTP

here is the link: Anonymous is the only authorization level that doesn't require a key. So : function, JWT HTTP is still valid . https://learn.microsoft.com/en-us/azure/azure-functions/security-concepts?tabs=v4#function-access-keys

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Question #289

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SecExams

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You need to secure the Shipping Logic App.
What should you use?

A) Azure App Service Environment (ASE)
B) Integration Service Environment (ISE) (Correct Answer)
C) VNet service endpoint
D) Azure AD B2B integration

Explanation

Correct Answer:
B
Scenario: The Shipping Logic App requires secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
You can access to Azure Virtual Network resources from Azure Logic Apps by using integration service environments (ISEs).
Sometimes, your logic apps and integration accounts need access to secured resources, such as virtual machines (VMs) and other systems or services, that are inside an Azure virtual network. To set up this access, you can create an integration service environment (ISE) where you can run your logic apps and create your integration accounts.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/connect-virtual-network-vnet-isolated-environment-overview

Community Discussion

B is correct. confirmed

Shipping Logic app: Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model. For scenarios where your logic apps and integration accounts need access to an Azure virtual network, create an integration service environment (ISE). An ISE is a dedicated environment that uses dedicated storage and other resources that are kept separate from the "global" multi-tenant Logic Apps service. This separation also reduces any impact that other Azure tenants might have on your apps' performance. An ISE also provides you with your own static IP addresses. These IP addresses are separate from the static IP addresses that are shared by the logic

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apps in the public, multi-tenant service. Reference: https://docs.microsoft.com/en-us/azure/logic-apps/connect-virtual-network-vnet-isolated-environment

B. Integration Service Environment (ISE)

B. Integration Service Environment (ISE)

Selected Answer: B

B is correct answer.

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Question #290

SecExams

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Background -
City Power & Light company provides electrical infrastructure monitoring solutions for homes and businesses. The company is migrating solutions to Azure.

Current environment -

Architecture overview -
The company has a public website located at http://www.cpandl.com/. The site is a single-page web application that runs in Azure App Service on Linux. The website uses files stored in Azure Storage and cached in Azure Content Delivery Network (CDN) to serve static content.
API Management and Azure Function App functions are used to process and

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
The solution uses Application Insights, Azure Monitor, and Azure Key Vault.

Architecture diagram -
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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
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While testing the site, the following error message displays:
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Question HOTSPOT -

You need to retrieve the database connection string.

Which values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Explanation

Correct Answer:

Answer Area

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Azure database connection string retrieve REST API vault.azure.net/secrets/

Box 1: cpandlkeyvault -
We specify the key vault, cpandlkeyvault.
Scenario: The database connection string is stored in Azure Key Vault with the following attributes:
Azure Key Vault name: cpandlkeyvault

Secret name: PostgreSQLConn -
Id: 80df3e46ffcd4f1cb187f79905e9a1e8

Box 2: PostgreSQLConn -
We specify the secret, PostgreSQLConn
Example, sample request:
https://myvault.vault.azure.net//secrets/mysecretname/4387e9f3d6e14c459867679a90fd0f79?api-version=7.1

Box 3: Querystring -
Reference:
https://docs.microsoft.com/en-us/rest/api/keyvault/getsecret/getsecret

Community Discussion

As per requirement: - Azure Key Vault name: cpandlkeyvault - Secret name: PostgreSQLConn - Id: 80df3e46ffcd4f1cb187f79905e9a1e8 https://myvault.vault.azure.net//secrets/mysecretname/4387e9f3d6e14c459867679a90fd0f79?api-version=7.1 Box 1: cpandlkeyvault We specify the key vault, cpandlkeyvault. Box 2: PostgreSQLConn We specify the secret, PostgreSQLConn. Box 3: Environment If a reference is not resolved properly, the reference value will be used instead. This means that for application settings, an environment variable would be created

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) City Power & Light company 50 13 1 API endpoint to Key Vault + variable 50 13 2 create and import certificate in azure web app 50 13 3 configure APIM for authentication with JWT 50 13 4 authenticate user by JWT 50 13 5 MI Authentication to Azure Logic app 51 13 6 Azure Service Bus to Event Grid integration Tier of bus + RBAC role 52 17 1 Application Insights/Monitor/Log Analytics 52 17 2 Azure Blob storage settings SAS or MI, file auditing 52 18 1 solve function timeout 55 24 1 cli for integration Azure Service Bus and Azure Event Grid 55 24 2 ingestion for Grid events 58 32 1 create appropriate storage account + geo settings + cool/hot

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Box 3 is QueryString (query string to specify the API version along with the secret version), the other part is fine. (Answer provided is CORRECT)

Box 3 is QueryString (query string to specify the API version along with the secret version), the other part is fine. (Answer provided is CORRECT)

Got this case on my exam 2023July13. Went with highest wote and scored 917.

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Question #291

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RA14 {
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RA16 }
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```

Question DRAG DROP -

You need to correct the corporate website error.

Which four actions should you recommend be performed in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Explanation

Correct Answer:

Scenario: Corporate website -
While testing the site, the following error message displays:
CryptographicException: The system cannot find the file specified.

Step 1: Generate a certificate -
Step 2: Upload the certificate to Azure Key Vault
Scenario: All SSL certificates and credentials must be stored in Azure Key Vault.
Step 3: Import the certificate to Azure App Service
Step 4: Update line SCO5 of Security.cs to include error handling and then redeploy the code
Reference:
https://docs.microsoft.com/en-us/azure/app-service/configure-ssl-certificate

Community Discussion

Answer: • Generate a certificate • Upload the certificate to Azure key vault • Import the certificate to Azure App Service • Add the certificate thumbprint to the WEBSITE_LOAD_CERTIFICATES app setting https://ankitvijay.net/2021/04/14/certificate-azure-app-service-linux/

1. Generate a certificate. 2. Upload the certificate to Azure Key Vault. 3. Import the certificate to Azure App Service. 4. Add the certificate thumbprint to the WEBSITE_LOAD_CERTIFICATES app setting. Prerequisite: Scale up your App Service plan if your app is in a shared infrastructure tier. https://docs.microsoft.com/en-us/azure/app-

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service/configure-ssl-certificate https://docs.microsoft.com/en-us/azure/app-service/configure-ssl-certificate-in-code#load-certificate-in-linuxwindows-containers

received 2023-04-17 went with above answer, score 926

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Got this on Dec 16th, 2022. Scored 921 and went with: • Generate a certificate • Upload the certificate to Azure key vault • Import the certificate to Azure App Service • Add the certificate thumbprint to the WEBSITE_LOAD_CERTIFICATES app setting

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Question #292

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Question HOTSPOT -

You need to configure API Management for authentication.

Which policy values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Setting	Value
Policy	Check HTTP header Restrict caller IPs Limit call rate by key Validate JWT
Policy section	Inbound Outbound

Explanation

Correct Answer:

Answer Area

Setting	Value
Policy	Check HTTP header Restrict caller IPs Limit call rate by key Validate JWT
Policy section	Inbound Outbound

Box 1: Validate JWT -
The validate-jwt policy enforces existence and validity of a JWT extracted from either a specified HTTP Header or a specified query parameter.
Scenario: User authentication (see step 5 below)
The following steps detail the user authentication process:
1. The user selects Sign in in the website.
2. The browser redirects the user to the Azure Active Directory (Azure AD) sign in page.
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5. The web application calls an API and includes the access token in the authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.
Incorrect Answers:
✐ Limit call rate by key - Prevents API usage spikes by limiting call rate, on a per key basis.
✐ Restrict caller IPs - Filters (allows/denies) calls from specific IP addresses and/or address ranges.
✐ Check HTTP header - Enforces existence and/or value of a HTTP Header.

Box 2: Outbound -
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies

Community Discussion

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The second box should be Inbound instead of Outbound. https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies Quoting: This policy can be used in the following policy sections and scopes. Policy sections: inbound Policy scopes: all scopes

Box 1: Validate JWT The validate-jwt policy enforces existence and validity of a JWT extracted from either a specified HTTP Header or a specified query parameter. Box 2: Inbound Authentication should be done on Incoming Request and that should be done in Inbound section of the policy of course. This policy can be used in the following policy sections and scopes. Policy sections: inbound Policy scopes: all scopes Reference: https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies#ValidateJWT https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies

you are correct. it should be INBOUND for Validate JWT https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies#ValidateJWT

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Question You need to authenticate the user to the corporate website as indicated by the architectural diagram.
Which two values should you use? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) ID token signature (Correct Answer)
B) ID token claims
C) HTTP response code
D) Azure AD endpoint URI (Correct Answer)
E) Azure AD tenant ID

Explanation

Correct Answer:
AD
A: Claims in access tokens -
JWTs (JSON Web Tokens) are split into three pieces:
➩ Header - Provides information about how to validate the token including information about the type of token and how it was signed.
➩ Payload - Contains all of the important data about the user or app that is attempting to call your service.
➩ Signature - Is the raw material used to validate the token.
E: Your client can get an access token from either the v1.0 endpoint or the v2.0 endpoint using a variety of protocols.
Scenario: User authentication (see step 5 below)
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6. The back-end API validates the access token.
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies

Community Discussion

You need ID Token Claims for authorisation. You need to validate ID Token signature as a part of authentication. So the correct answer is A. Having both D & E does not make sense, URI has tenant ID in it, so answer D.

it should be D & E

received 2023-04-17 went with given answer, score 926

received 2023-04-17 went with given answer, score 926

Appeared in exam I took at 27-5-2023 I chose A and D

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Question #294

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Background -
City Power & Light company provides electrical infrastructure monitoring solutions for homes and businesses. The company is migrating solutions to Azure.

Current environment -

Architecture overview -
The company has a public website located at http://www.cpandl.com/. The site is a single-page web application that runs in Azure App Service on Linux. The website uses files stored in Azure Storage and cached in Azure Content Delivery Network (CDN) to serve static content.
API Management and Azure Function App functions are used to process and

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
The solution uses Application Insights, Azure Monitor, and Azure Key Vault.

Architecture diagram -
The company has several applications and services that support their business. The company plans to implement serverless computing where possible. The overall architecture is shown below.

User authentication -
The following steps detail the user authentication process:
1. The user selects Sign in in the website.
2. The browser redirects the user to the Azure Active Directory (Azure AD) sign in page.
3. The user signs in.
4. Azure AD redirects the user's session back to the web application. The URL includes an access token.
5. The web application calls an API and includes the access token in the

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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.

Requirements -

Corporate website -
Communications and content must be secured by using SSL.
Communications must use HTTPS.
Data must be replicated to a secondary region and three availability zones.
Data storage costs must be minimized.

Azure Database for PostgreSQL -
The database connection string is stored in Azure Key Vault with the following attributes:
Azure Key Vault name: cpandlkeyvault
Secret name: PostgreSQLConn
Id: 80df3e46ffcd4f1cb187f79905e9a1e8
The connection information is updated frequently. The application must always use the latest information to connect to the database.
Azure Service Bus and Azure Event Grid
Azure Event Grid must use Azure Service Bus for queue-based load leveling.
Events in Azure Event Grid must be routed directly to Service Bus queues for use in buffering.
Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing.

Security -
All SSL certificates and credentials must be stored in Azure Key Vault.
File access must restrict access by IP, protocol, and Azure AD rights.
All user accounts and processes must receive only those privileges which are essential to perform their intended function.

Compliance -
Auditing of the file updates and transfers must be enabled to comply with General Data Protection Regulation (GDPR). The file updates must be read-only, stored in the order in which they occurred, include only create, update, delete,

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and copy operations, and be retained for compliance reasons.

Issues -

Corporate website -
While testing the site, the following error message displays:
CryptographicException: The system cannot find the file specified.

Function app -
You perform local testing for the RequestUserApproval function. The following error message displays:
'Timeout value of 00:10:00 exceeded by function: RequestUserApproval'
The same error message displays when you test the function in an Azure development environment when you run the following Kusto query:

FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"

Logic app -
You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.

Code -

Corporate website -
Security.cs:

```
SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question HOTSPOT -

You need to correct the Azure Logic app error message.

Which configuration values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Setting	Value
authentication level	anonymous function admin
managed identity	system-assigned user-assigned

Explanation

Correct Answer:

Answer Area

Setting	Value
authentication level	anonymous function admin
managed identity	system-assigned user-assigned

Scenario: You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.
Note: If the inbound call's request body doesn't match your schema, the trigger returns an HTTP 400 Bad Request error.

Box 1: function -
If you have an Azure function where you want to use the system-assigned identity, first enable authentication for Azure functions.

Box 2: system-assigned -
Your logic app or individual connections can use either the system-assigned identity or a single user-assigned identity, which you can share across a group of logic apps, but not both.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/create-managed-service-identity

Community Discussion

Logic app: You test the Logic app in a development environment. The following error message displays: '400 Bad Request'. Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function. Box 1: anonymous To use your logic app's managed identity in your function, you must set your function's authentication level to anonymous. Otherwise, your logic app throws a "BadRequest" error. Box 2: system-assigned Your logic app or individual connections can use either the system-assigned identity or a single user-assigned identity, which you can share across a group

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of logic apps, but not both. On your logic app menu, under Settings, select Identity > System assigned

According to this article Function authz should be set to anonymous as we're using AAD auth. https://adatum.no/azure/azure-ad-authentication-in-azure-functions

Reference: https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions#set-up-anonymous-authentication-in-your-function

Reference: https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions#set-up-anonymous-authentication-in-your-function

For some weird reason Microsoft decided that logic apps cannot use the user-assigned identity when it is given to multiple. Totally random restriction that shows the inter-departmental issues in this organization. And they think that fault-line is a good question to ask.

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Question #295

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
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5. The web application calls an API and includes the access token in the

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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.

Requirements -

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SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question HOTSPOT -

You need to configure Azure Service Bus to Event Grid integration.

Which Azure Service Bus settings should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Setting	Value
Tier	Basic Standard Premium
RBAC role	Owner Contributor Azure Service Bus Data Owner Azure Service Bus Data Receiver

Explanation

Correct Answer:

Answer Area

Setting	Value
Tier	Basic Standard Premium
RBAC role	Owner Contributor Azure Service Bus Data Owner Azure Service Bus Data Receiver

Box 1: Premium -
Service Bus can now emit events to Event Grid when there are messages in a queue or a subscription when no receivers are present. You can create Event Grid subscriptions to your Service Bus namespaces, listen to these events, and then react to the events by starting a receiver. With this feature, you can use Service
Bus in reactive programming models.
To enable the feature, you need the following items:
A Service Bus Premium namespace with at least one Service Bus queue or a Service Bus topic with at least one subscription.
Contributor access to the Service Bus namespace.

Box 2: Contributor -
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-to-event-grid-integration-concept

Community Discussion

To enable the feature, you need the following items: - A Service Bus Premium namespace with at least one Service Bus queue or a Service Bus topic with at least one subscription. - Contributor access to the Service Bus namespace. Box 1: Premium Box 2: Contributor Reference: https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-to-event-grid-integration-concept

The answer is correct

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Tier = Premium, because the requirement says "Data must be replicated to a secondary region and three availability zones". Standard and basic don't support Geo Disasster Recover and Availability Zones.

Tier = Premium, because the requirement says "Data must be replicated to a secondary region and three availability zones". Standard and basic don't support Geo Disasster Recover and Availability Zones.

Azure Service Bus to Event Grid integration overview To enable the feature, you need the following items: A Service Bus *Premium* namespace with at least one Service Bus queue or a Service Bus topic with at least one subscription. *Contributor access* to the Service Bus namespace. Navigate to your Service Bus namespace in the Azure portal, and then select Access control (IAM), and select Role assignments tab. Verify that you have the contributor access to the namespace. https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-to-event-grid-integration-concept?tabs=event-grid-event-schema

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Question #296

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Background -
You are a developer for Litware Inc., a SaaS company that provides a solution for managing employee expenses. The solution consists of an ASP.NET Core Web API project that is deployed as an Azure Web App.

Overall architecture -
Employees upload receipts for the system to process. When processing is complete, the employee receives a summary report email that details the processing results. Employees then use a web application to manage their receipts and perform any additional tasks needed for reimbursement.

Receipt processing -
Employees may upload receipts in two ways:

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Uploading using an Azure Files mounted folder
Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

Users table -

Column	Description
UserId	unique identifier for and employee
ExpenseAccount	employees expense account number in the format 1234-123-1234
AllowedAmount	limit of allowed expenses before approval is needed
SupervisorId	unique identifier for employee's supervisor
SecurityPin	value used to validate user identity

Web Application -
You enable MSI for the Web App and configure the Web App to use the security principal name WebAppIdentity.

Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.

Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging enabled.

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Application Insights must always contain all log messages.

Requirements -

Receipt processing -
Concurrent processing of a receipt must be prevented.

Disaster recovery -
Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Security -
User's SecurityPin must be stored in such a way that access to the database does not allow the viewing of SecurityPins. The web application is the only system that should have access to SecurityPins.
All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
All access to Azure Storage and Azure SQL database must use the application's Managed Service Identity (MSI).
Receipt data must always be encrypted at rest.
All data must be protected in transit.
User's expense account number must be visible only to logged in users. All other views of the expense account number should include only the last segment, with the remaining parts obscured.
In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete the file in the file share and use the web application, which returns a 500

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Internal
Server error page.

Capacity issue -
During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

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```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

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```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21  }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16  }
```

ConfigureSSE.ps1 -

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```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question HOTSPOT -

You need to add code at line PC26 of Processing.cs to ensure that security policies are met.

How should you complete the code that you will add at line PC26? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
var resolver = new KeyVaultKeyResolver(_keyVaultClient);
var keyBundle = await _keyVaultClient.GetKeyAsync("...", "...");
```

```
var key = keyBundle.Key;
var key = keyBundle.KeyIdentifier.Identifier;
var key = await resolver.ResolveKeyAsync("encrypt", null);
var key = await resolver.ResolveKeyAsync(keyBundle.KeyIdentifier.Identifier, CancellationToken.None);
```

```
var x = keyBundle.Managed;
var x = AuthenticationScheme.SharedKey;
var x = new BlobEncryptionPolicy(key, resolver);
var x = new DeleteRetentionPolicy {Enabled = key.Kid != null};
```

```
cloudBlobClient.AuthenticationScheme = x;
cloudBlobClient.DefaultRequestOptions.RequireEncryption = x;
cloudBlobClient.DefaultRequestOptions.EncryptionPolicy = x;
cloudBlobClient.SetServiceProperties(new ServiceProperties(deleteRetentionPolicy:x));
```

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Explanation

Correct Answer:

Answer Area

```
var resolver = new KeyVaultKeyResolver(_keyVaultClient);
var keyBundle = await _keyVaultClient.GetKeyAsync("...", "...");
```

```
var key = keyBundle.Key;
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cloudBlobClient.DefaultRequestOptions.RequireEncryption = x;
cloudBlobClient.DefaultRequestOptions.EncryptionPolicy = x;
cloudBlobClient.SetServiceProperties(new ServiceProperties(deleteRetentionPolicy:x));
```

Box 1: var key = await Resolver.ResolveKeyAsyn(keyBundle,KeyIdentifier.CancellationToken.None);
Box 2: var x = new BlobEncryptionPolicy(key,resolver);
Example:
// We begin with cloudKey1, and a resolver capable of resolving and caching Key Vault secrets.
BlobEncryptionPolicy encryptionPolicy = new BlobEncryptionPolicy(cloudKey1, cachingResolver); client.DefaultRequestOptions.EncryptionPolicy = encryptionPolicy;
Box 3: cloudblobClient. DefaultRequestOptions.EncryptionPolicy = x;
Reference:
https://github.com/Azure/azure-storage-net/blob/master/Samples/GettingStarted/EncryptionSamples/KeyRotation/Program.cs

Community Discussion

The answer is correct

Also Microsoft says : you need not know .Net for this certification and proceed to ask questions deep in the dark corners of .Net libraries

BlobEncryptionPolicy accept "Ikey" on constructor => https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.blobencryptionpolicy.-ctor?view=azure-dotnet-

legacy#Microsoft_Azure_Storage_Blob_BlobEncryptionPolicy__ctor_Microsoft_Azure_KeyVault_Core_IKey_M (keyBundle.Key return a Microsoft.Azure.KeyVault.WebKey.JsonWebKey). The answer is correct !

1. var key = keyBundle.Key; 2. var x = new BlobEncryptionPolicy(key, resolver); 3. cloudBlobClient.DefaultRequestOptions.EncryptionPolicy = x; But I'm afraid I've wasted my time. As you can see in the links, it's all legacy code. https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.keyvault.keyvaultclientextensions.getkeyasync?view=azure-dotnet-legacy&viewFallbackFrom=azure-dotnet https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.blobencryptionpolicy.-ctor?view=azure-dotnet-legacy#Microsoft_Azure_Storage_Blob_BlobEncryptionPolicy__ctor_Microsoft_Azure_KeyVault_Core_IKey_M https://docs.microsoft.com/en-us/dotnet/api/microsoft.azure.storage.blob.blobrequestoptions.encryptionpolicy?view=azure-dotnet-legacy#Microsoft_Azure_Storage_Blob_BlobRequestOptions_EncryptionPolicy

To be honest, if you are an experienced programmer you can guess the right answer to this question by pure logic, no .Net code or even Azure knowledge is needed.

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Question #297

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Introductory Info Case study -
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Background -
You are a developer for Litware Inc., a SaaS company that provides a solution for managing employee expenses. The solution consists of an ASP.NET Core Web API project that is deployed as an Azure Web App.

Overall architecture -
Employees upload receipts for the system to process. When processing is complete, the employee receives a summary report email that details the processing results. Employees then use a web application to manage their receipts and perform any additional tasks needed for reimbursement.

Receipt processing -
Employees may upload receipts in two ways:

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Uploading using an Azure Files mounted folder
Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

Users table -

Column	Description
UserId	unique identifier for and employee
ExpenseAccount	employees expense account number in the format 1234-123-1234
AllowedAmount	limit of allowed expenses before approval is needed
SupervisorId	unique identifier for employee's supervisor
SecurityPin	value used to validate user identity

Web Application -
You enable MSI for the Web App and configure the Web App to use the security principal name WebAppIdentity.

Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.

Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging enabled.

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Application Insights must always contain all log messages.

Requirements -

Receipt processing -
Concurrent processing of a receipt must be prevented.

Disaster recovery -
Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Security -
User's SecurityPin must be stored in such a way that access to the database does not allow the viewing of SecurityPins. The web application is the only system that should have access to SecurityPins.
All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
All access to Azure Storage and Azure SQL database must use the application's Managed Service Identity (MSI).
Receipt data must always be encrypted at rest.
All data must be protected in transit.
User's expense account number must be visible only to logged in users. All other views of the expense account number should include only the last segment, with the remaining parts obscured.
In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete the file in the file share and use the web application, which returns a 500

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Internal
Server error page.

Capacity issue -
During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

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```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

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```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21  }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16  }
```

ConfigureSSE.ps1 -

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```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question You need to ensure the security policies are met.
What code do you add at line CS07 of ConfigureSSE.ps1?

A) ג€"PermissionsToKeys create, encrypt, decrypt
B) ג€"PermissionsToCertificates create, encrypt, decrypt (Correct Answer)
C) ג€"PermissionsToCertificates wrapkey, unwrapkey, get
D) ג€"PermissionsToKeys wrapkey, unwrapkey, get

Explanation

Correct Answer:
B
Scenario: All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
The Set-AzureRmKeyValutAccessPolicy parameter -PermissionsToKeys specifies an array of key operation permissions to grant to a user or service principal.
The acceptable values for this parameter: decrypt, encrypt, unwrapKey, wrapKey, verify, sign, get, list, update, create, import, delete, backup, restore, recover, purge
Incorrect Answers:
A, C: The Set-AzureRmKeyValutAccessPolicy parameter -PermissionsToCertificates specifies an array of certificate permissions to grant to a user or service principal. The acceptable values for this parameter: get, list, delete, create, import, update, managecontacts, getissuers, listissuers, setissuers, deleteissuers, manageissuers, recover, purge, backup, restore
Reference:

https://docs.microsoft.com/en-us/powershell/module/azurerm.keyvault/set-azurermkeyvaultaccesspolicy

Community Discussion

My opinion is that the answer is D. The policy should belong to a key. In the case study the code retrieve the key so the GET access policy is mandatory. The wrap/unwrap is used for symmetric encryption and in this case study the task is to encrypt the blobs.

Correct Answer: D PS C:\>Set-AzKeyVaultAccessPolicy -VaultName "MyKeyVault" -ObjectId $account.Identity.PrincipalId -PermissionsToKeys wrapkey,unwrapkey,get Reference: https://docs.microsoft.com/en-us/powershell/module/az.storage/set-azstorageaccount?view=azps-5.8.0#example-5--set-encryption-keysource-to-keyvault

Yes! it's D PermissionsToKeys wrapkey, unwrapkey, get https://docs.microsoft.com/en-us/powershell/module/az.storage/set-azstorageaccount?view=azps-5.8.0#example-5--set-encryption-keysource-to-keyvault code example at line 7

Yes! it's D PermissionsToKeys wrapkey, unwrapkey, get https://docs.microsoft.com/en-us/powershell/module/az.storage/set-azstorageaccount?view=azps-5.8.0#example-5--set-encryption-keysource-to-keyvault code example at line 7

Selected Answer: D

100% D - All certificates and secrets used to secure data must be stored in Azure Key Vault. You need to retrieve the keys so get permission is required. The wrapkey and unwrapkey will be used for symmetric encryption to encrypt the blobs. Below link contains an example of same scenario. https://docs.microsoft.com/en-us/powershell/module/az.storage/set-azstorageaccount?view=azps-8.0.0#example-5-set-encryption-keysource-to-keyvault https://docs.microsoft.com/en-us/azure/key-vault/keys/about-keys-details#key-access-control

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Question #298

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Background -
VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -
The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

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Retail Store Locations -
The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -
The application components must meet the following requirements:

Corporate website -
Secure the website by using SSL.
Minimize costs for data storage and hosting.
Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
Distribute the website content globally for local use.
Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
The website must have 99.95 percent uptime.

Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question You need to reduce read latency for the retail store solution.
What are two possible ways to achieve the goal? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A) Create a new composite index for the store location data queries in Azure Cosmos DB. Modify the queries to support parameterized SQL and update the Azure Function app to call the new queries.
B) Provision an Azure Cosmos DB dedicated gateway. Update the Azure Function app connection string to use the new dedicated gateway endpoint. (Correct Answer)
C) Configure Azure Cosmos DB consistency to session consistency. Cache session tokens in a new Azure Redis cache instance after every write. Update reads to use the session token stored in Azure Redis. (Correct Answer)
D) Provision an Azure Cosmos DB dedicated gateway. Update blob storage to use the new dedicated gateway endpoint.
E) Configure Azure Cosmos DB consistency to strong consistency. Increase the RUs for the container supporting store location data.

Explanation

Correct Answer:
BC
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage

and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling.
B: A dedicated gateway is server-side compute that is a front-end to your Azure Cosmos DB account. When you connect to the dedicated gateway, it both routes requests and caches data.
You can provision a dedicated gateway to improve performance at scale.
You must connect to Azure Cosmos DB using the dedicated gateway in order to use the integrated cache. The dedicated gateway has a different endpoint from the standard one provided with your Azure Cosmos DB account. When you connect to your dedicated gateway endpoint, your application sends a request to the dedicated gateway, which then routes the request to different backend nodes. If possible, the integrated cache will serve the result.
C: Azure Cache for Redis perfectly complements Azure database services such as Cosmos DB. It provides a cost-effective solution to scale read and write throughput of your data tier. Store and share database query results, session states, static contents, and more using a common cache-aside pattern.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/solution-ideas/articles/data-cache-with-redis-cache https://docs.microsoft.com/en-us/azure/cosmos-db/dedicated-gateway

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Community Discussion

Got this question on 30-Sep-2022 exam. Correct answer is A and B. Passed with 870 score.

C makes no sense... so A and B

Selected Answer: AC

A and C B & D are off due to Azure Cosmos DB dedicated gateway not supporting SQL queries. See limitations on: https://learn.microsoft.com/en-us/azure/cosmos-db/dedicated-gateway#dedicated-gateway-in-multi-region-accounts E. Makes no sense as increasing consistency to Strong only makes the reads slower Thus A & C which makes sense: Composite Index in Cosmos DB and Redis Cache for reads

https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/query/getting-started In Azure Cosmos DB for NoSQL accounts, there are two ways to read data : Point reads& SQL queries https://learn.microsoft.com/en-us/azure/cosmos-db/dedicated-gateway#dedicated-gateway-in-multi-region-accounts Dedicated gateways are only supported on API for NoSQL accounts So dedicated gateway is support NoSQL

account.How do you found that Azure Cosmos DB dedicated gateway not supporting SQL queries?

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What are two possible ways to achieve the goal? Each correct answer presents a complete solution.
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A) Update the retail store location data upload process to include blob index tags. Create an Azure Function to process the blob index tags and filter by store location.
B) Process the change feed logs of the Azure Blob storage account by using an Azure Function. Specify a time range for the change feed data. (Correct Answer)
C) Enable blob versioning for the storage account. Use an Azure Function to process a list of the blob versions per day.
D) Process an Azure Storage blob inventory report by using an Azure Function. Create rule filters on the blob inventory report.
E) Subscribe to blob storage events by using an Azure Function and Azure Event Grid. Filter the events by store location. (Correct Answer)

Explanation

Correct Answer:
BE
Scenario: Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.
"Process the change feed logs of the Azure Blob storage account by using an Azure

Function. Specify a time range for the change feed data": Change feed support is well-suited for scenarios that process data based on objects that have changed. For example, applications can:
Store, audit, and analyze changes to your objects, over any period of time, for security, compliance or intelligence for enterprise data management.
"Subscribe to blob storage events by using an Azure Function and Azure Event Grid. Filter the events by store location": Azure Storage events allow applications to react to events, such as the creation and deletion of blobs. It does so without the need for complicated code or expensive and inefficient polling services. The best part is you only pay for what you use.
Blob storage events are pushed using Azure Event Grid to subscribers such as Azure Functions, Azure Logic Apps, or even to your own http listener. Event Grid provides reliable event delivery to your applications through rich retry policies and dead-lettering.
Incorrect Answers:
"Enable blob versioning for the storage account. Use an Azure Function to process a list of the blob versions per day": You can enable Blob storage versioning to automatically maintain previous versions of an object. When blob versioning is enabled, you can access earlier versions of a blob to recover your data if it is modified or deleted.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview

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Community Discussion

Selected Answer: BE

B and E

B. Process the change feed logs of the Azure Blob storage account by using an Azure Function. Specify a time range for the change feed data. The change feed provides a way to log changes to blobs in a storage account. By using an Azure Function to process the change feed logs, it is possible to track and audit sales transaction information. The time range for the change feed data can be specified to capture the transactions within a specific time period. E. Subscribe to blob storage events by using an Azure Function and Azure Event Grid. Filter the events by store location. Azure Event Grid allows subscribing to events raised by Azure services or third-party services. By using an Azure Function and Event Grid, it is possible to filter the events for a specific store location and track sales transactions. This approach can help to monitor sales transactions in real-time and provide an audit trail for reconciliation.

Sorry, I did not read the question fully or forgot. It says clearly it needs to audit the transactions. The option to use Azure storage blob inventory does not give the transactions, but the properties for the blob containers. So, it is clearly not the option to audit the transactions. Hope it is clear

Sorry, I did not read the question fully or forgot. It says clearly it needs to audit the transactions. The option to use Azure storage blob inventory does not give the transactions, but the properties for the blob containers. So, it is clearly not the option to audit the transactions. Hope it is clear

in English https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed?tabs=azure-portal

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Question #300

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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question You need to monitor ContentUploadService according to the requirements.
Which command should you use?

A) az monitor metrics alert create ƛ€"n alert ƛ€"g ƛ€¦ - -scopes ƛ€¦ - -condition "avg Percentage CPU > 8"

B) az monitor metrics alert create ƛ€"n alert ƛ€"g ƛ€¦ - -scopes ƛ€¦ - -condition "avg Percentage CPU > 800" (Correct Answer)

C) az monitor metrics alert create ƛ€"n alert ƛ€"g ƛ€¦ - -scopes ƛ€¦ - -condition "CPU Usage > 800"

D) az monitor metrics alert create ƛ€"n alert ƛ€"g ƛ€¦ - -scopes ƛ€¦ - -condition "CPU Usage > 8"

Explanation

Correct Answer:
B
Scenario: An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.
Reference:
https://docs.microsoft.com/sv-se/cli/azure/monitor/metrics/alert

Community Discussion

C is the correct answer. We are dealing with containers here not VM so "CPU usage" is a valid condition. Had it been VM then it should have been "Percentage CPU usage". 800 is also correct since for containers its measured in millicores. Ref : https://docs.microsoft.com/en-us/azure/azure-monitor/platform/metrics-supported#microsoftcontainerinstancecontainergroups

The CPU Usage measurement is in milicores (1/1000 of a core). So, 80% of a core would be 800 milicores.

The CPU Usage measurement is in milicores (1/1000 of a core). So, 80% of a core would be 800 milicores.

Shouldn't it be > 80 (instead of 800)?

The CPU usage measurement is in milicores. 80% of a core would be 800 milicores.

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Question #301

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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
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AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
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AM14        "legalAgeGroupRule" : "Allow"
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Question You need to investigate the http server log output to resolve the issue with the ContentUploadService.
Which command should you use first?

A) az webapp log
B) az ams live-output

C) az monitor activity-log (Correct Answer)

D) az container attach

Explanation

Correct Answer:

C

Scenario: Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

"502 bad gateway" and "503 service unavailable" are common errors in your app hosted in Azure App Service.

Microsoft Azure publicizes each time there is a service interruption or performance degradation.

The az monitor activity-log command manages activity logs.

Note: Troubleshooting can be divided into three distinct tasks, in sequential order:

1. Observe and monitor application behavior
2. Collect data
3. Mitigate the issue

Reference:

https://docs.microsoft.com/en-us/cli/azure/monitor/activity-log

Community Discussion

Answer is az container attach Ref: https://docs.microsoft.com/en-us/azure/container-instances/container-instances-get-logs

It is not A. "az webapp log" by itself is not a command. It would need to be "az webapp log tail" or "az webapp log download". https://docs.microsoft.com/en-us/cli/azure/webapp/log?view=azure-cli-latest

Correct. If one will take a look at "CS09" line, it's clear that "ContentUploadService" is a container, so the first step should be "az container attach"

Correct. If one will take a look at "CS09" line, it's clear that "ContentUploadService" is a container, so the first step should be "az container attach"

It's not deployed to a container. This is a regular webapp so A, az webapp log is the correct answer.

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Question #302

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Background -
City Power & Light company provides electrical infrastructure monitoring solutions for homes and businesses. The company is migrating solutions to Azure.

Current environment -

Architecture overview -
The company has a public website located at http://www.cpandl.com/. The site is a single-page web application that runs in Azure App Service on Linux. The website uses files stored in Azure Storage and cached in Azure Content Delivery Network (CDN) to serve static content.
API Management and Azure Function App functions are used to process and

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
The solution uses Application Insights, Azure Monitor, and Azure Key Vault.

Architecture diagram -
The company has several applications and services that support their business. The company plans to implement serverless computing where possible. The overall architecture is shown below.

User authentication -
The following steps detail the user authentication process:
1. The user selects Sign in in the website.
2. The browser redirects the user to the Azure Active Directory (Azure AD) sign in page.
3. The user signs in.
4. Azure AD redirects the user's session back to the web application. The URL includes an access token.
5. The web application calls an API and includes the access token in the

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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.

Requirements -

Corporate website -
Communications and content must be secured by using SSL.
Communications must use HTTPS.
Data must be replicated to a secondary region and three availability zones.
Data storage costs must be minimized.

Azure Database for PostgreSQL -
The database connection string is stored in Azure Key Vault with the following attributes:
Azure Key Vault name: cpandlkeyvault
Secret name: PostgreSQLConn
Id: 80df3e46ffcd4f1cb187f79905e9a1e8
The connection information is updated frequently. The application must always use the latest information to connect to the database.
Azure Service Bus and Azure Event Grid
Azure Event Grid must use Azure Service Bus for queue-based load leveling.
Events in Azure Event Grid must be routed directly to Service Bus queues for use in buffering.
Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing.

Security -
All SSL certificates and credentials must be stored in Azure Key Vault.
File access must restrict access by IP, protocol, and Azure AD rights.
All user accounts and processes must receive only those privileges which are essential to perform their intended function.

Compliance -
Auditing of the file updates and transfers must be enabled to comply with General Data Protection Regulation (GDPR). The file updates must be read-only, stored in the order in which they occurred, include only create, update, delete,

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and copy operations, and be retained for compliance reasons.

Issues -

Corporate website -
While testing the site, the following error message displays:
CryptographicException: The system cannot find the file specified.

Function app -
You perform local testing for the RequestUserApproval function. The following error message displays:
'Timeout value of 00:10:00 exceeded by function: RequestUserApproval'
The same error message displays when you test the function in an Azure development environment when you run the following Kusto query:

FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"

Logic app -
You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.

Code -

Corporate website -
Security.cs:

```
SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question You need to investigate the Azure Function app error message in the development environment.
What should you do?

A) Connect Live Metrics Stream from Application Insights to the Azure Function app and filter the metrics. (Correct Answer)
B) Create a new Azure Log Analytics workspace and instrument the Azure Function app with Application Insights.
C) Update the Azure Function app with extension methods from Microsoft.Extensions.Logging to log events by using the log instance.
D) Add a new diagnostic setting to the Azure Function app to send logs to Log Analytics.

Explanation

Correct Answer:
A
Azure Functions offers built-in integration with Azure Application Insights to monitor functions.
The following areas of Application Insights can be helpful when evaluating the behavior, performance, and errors in your functions:
Live Metrics: View metrics data as it's created in near real-time.

Failures -

Performance -

Metrics -
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-monitoring

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Community Discussion

Given answer is correct. Live Metrics Stream: when your function app is connected to Application Insights, you can view log data and other metrics in near real time in the Azure portal using Live Metrics Stream. Open below link for this statement. https://docs.microsoft.com/en-us/azure/azure-functions/functions-monitoring

Live Metrics Stream: when your function app is connected to Application Insights, you can view log data and other metrics in near real time in the Azure portal using Live Metrics Stream. Use this method when monitoring functions running on multiple-instances or on Linux in a Consumption plan. This method uses sampled data.. Answer is A https://docs.microsoft.com/en-us/azure/azure-functions/functions-monitoring

I think the answer should be (D) - Add new diagnostics settings. https://docs.microsoft.com/en-us/azure/azure-functions/functions-monitor-log-analytics?tabs=csharp "From the Monitoring section of your function app in the Azure portal, select Diagnostic settings, and then select Add diagnostic setting." Live Metrics is used for monitoring a live system and should not be necessary in a development environment, because there are not that many events to use the "big canon". https://docs.microsoft.com/en-us/azure/azure-monitor/app/live-stream

The question specifically says "in a development environment". Live Metrics Stream is recommended for production applications. I would go for D. https://docs.microsoft.com/en-us/azure/azure-monitor/app/live-stream

shouldn't be D as mentioned in Issues section it's 400 error https://docs.microsoft.com/en-us/azure/azure-functions/functions-diagnostics

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Question #303

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Current environment -

Architecture overview -
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and copy operations, and be retained for compliance reasons.

Issues -

Corporate website -
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RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question HOTSPOT -

You need to configure security and compliance for the corporate website files. Which Azure Blob storage settings should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Action	Setting
Restrict file access	role-based access control (RBAC) managed identity shared access signature (SAS) token connection string
Enable file auditing	access tier change feed blob indexer storage account type

Explanation

Correct Answer:

Answer Area

Action	Setting
Restrict file access	role-based access control (RBAC) / managed identity / shared access signature (SAS) token / connection string
Enable file auditing	access tier / change feed / blob indexer / storage account type

Box 1: role-based access control (RBAC)
Azure Storage supports authentication and authorization with Azure AD for the Blob and Queue services via Azure role-based access control (Azure RBAC).
Scenario: File access must restrict access by IP, protocol, and Azure AD rights.

Box 2: storage account type -
Scenario: The website uses files stored in Azure Storage
Auditing of the file updates and transfers must be enabled to comply with General Data Protection Regulation (GDPR).
Creating a diagnostic setting:
1. Sign in to the Azure portal.
2. Navigate to your storage account.
3. In the Monitoring section, click Diagnostic settings (preview).

4. Choose file as the type of storage that you want to enable logs for.
5. Click Add diagnostic setting.
Reference:

https://docs.microsoft.com/en-us/azure/storage/common/storage-introduction https://docs.microsoft.com/en-us/azure/storage/files/storage-files-monitoring

Community Discussion

shared access signature (SAS) token change feed

Box 1: shared access signature (SAS) token According to the diagram, blob storage is accessed from Azure CDN. Azure CDN doesn't support authentication with managed identity. If you want to grant limited access to private storage containers, you can use the Shared Access Signature (SAS) feature of your Azure storage account. Also, using a managed identity you can't restrict access by IP as requested. Box 2: change feed The purpose of the change feed is to provide transaction logs of all the changes that occur to the blobs and the blob metadata in your storage account. The file updates must be read-only, stored in the order in which they occurred, include only create, update, delete, and copy operations, and be retained for compliance reasons. Reference: https://docs.microsoft.com/en-us/azure/cdn/cdn-sas-storage-support https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-change-feed?tabs=azure-portal

Professor is back :)))

Professor is back :)))

received 2023-04-17 went with above, score 926

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Question #304

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Issues -

Corporate website -
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CryptographicException: The system cannot find the file specified.

Function app -
You perform local testing for the RequestUserApproval function. The following error message displays:
'Timeout value of 00:10:00 exceeded by function: RequestUserApproval'
The same error message displays when you test the function in an Azure development environment when you run the following Kusto query:

FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"

Logic app -
You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.

Code -

Corporate website -
Security.cs:

```
SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question You need to correct the RequestUserApproval Function app error. What should you do?

A) Update line RA13 to use the async keyword and return an HttpRequest object value.
B) Configure the Function app to use an App Service hosting plan. Enable the Always On setting of the hosting plan.
C) Update the function to be stateful by using Durable Functions to process the request payload. (Correct Answer)
D) Update the functionTimeout property of the host.json project file to 15 minutes.

Explanation

Correct Answer:
C
Async operation tracking -
The HTTP response mentioned previously is designed to help implement long-running HTTP async APIs with Durable Functions. This pattern is sometimes referred to as the polling consumer pattern.
Both the client and server implementations of this pattern are built into the Durable Functions HTTP APIs.

Function app -
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'Timeout value of 00:10:00 exceeded by function: RequestUserApproval'
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FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"
Reference:

SecExams

https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-http-features

Community Discussion

Answer is correct. In addition you can see this pattern in microosoft documentation and it's known as Human Interaction. https://docs.microsoft.com/en-us/azure/azure-functions/durable/durable-functions-overview?tabs=csharp#human

http trigger timeout is maxed to 230 seconds, so the only available option is to change to a durable one

Selected Answer: C

C is correct answer. Durable Function.

received 2023-04-17 went with given answer, score 926

received 2023-04-17 went with given answer, score 926

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Question #305

SecExams

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You develop and deploy a stateful ASP.NET Core 2.1 web application named Policy service to an Azure App Service Web App. The application reacts to events from Azure Event Grid and performs policy actions based on those events.
The application must include the Event Grid Event ID field in all Application

SecExams

Insights telemetry.
Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.

Policies -

Log policy -
All Azure App Service Web Apps must write logs to Azure Blob storage. All log files should be saved to a container named logdrop. Logs must remain in the container for 15 days.

Authentication events -
Authentication events are used to monitor users signing in and signing out. All authentication events must be processed by Policy service. Sign outs must be processed as quickly as possible.

PolicyLib -
You have a shared library named PolicyLib that contains functionality common to all ASP.NET Core web services and applications. The PolicyLib library must:
Exclude non-user actions from Application Insights telemetry.
Provide methods that allow a web service to scale itself.
Ensure that scaling actions do not disrupt application usage.

Other -

Anomaly detection service -
You have an anomaly detection service that analyzes log information for anomalies. It is implemented as an Azure Machine Learning model. The model is deployed as a web service. If an anomaly is detected, an Azure Function that emails administrators is called by using an HTTP WebHook.

Health monitoring -
All web applications and services have health monitoring at the /health service endpoint.

Issues -

SecExams

Policy loss -
When you deploy Policy service, policies may not be applied if they were in the process of being applied during the deployment.

Performance issue -
When under heavy load, the anomaly detection service undergoes slowdowns and rejects connections.

Notification latency -
Users report that anomaly detection emails can sometimes arrive several minutes after an anomaly is detected.

App code -

EventGridController.cs -
Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.

SecExams

EventGridController.cs

```
EG01 public class EventGridController : Controller
EG02 {
EG03   public static AsyncLocal<string> EventId = new AsyncLocal<string>();
EG04   public IActionResult Process([fromBody] string eventsJson)
EG05   {
EG06     var events = JArray.Parse(eventsJson);
EG07
EG08     foreach (var @event in events)
EG09     {
EG10       EventId.Value = @event["id"].ToString();
EG11       if (@event["topic"].ToString().Contains("providers/Microsoft.Storage"))
EG12       {
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EG20     return null;
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EG29     var scoreRequest = new
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EG33         {
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EG36           {
EG37             new Dictionary<string, string>()
EG38             {
EG39               {
EG40                 "logcontent", content
EG41               }
EG42             }
EG43           }
EG44         },
EG45       },
EG46       GlobalParameters = new Dictionary<string, string>() { }
EG47     };
EG48     var result = await (new HttpClient()).PostAsJsonAsync("...", scoreRequest);
EG49     var rawModelResult = await result.Content.ReadAsStringAsync();
EG50     var modelResult = JObject.Parse(rawModelResult);
EG51     if (modelResult["notify"].HasValues)
EG52     {
EG53       . . .
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EG55   }
EG56   private (string name, string resourceGroup) ParseResourceId(string resourceId)
EG57   {
```

SecExams

LoginEvent.cs -
Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.

```
LoginEvent.cs
LE01 public class LoginEvent
LE02 {
LE03
LE04   public string subject { get; set; }
LE05   public DateTime eventTime { get; set; }
LE06   public Dictionary<string, string> data { get; set; }
LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question DRAG DROP -
You need to implement the Log policy.
How should you complete the Azure Event Grid subscription? To answer, drag the appropriate JSON segments to the correct locations. Each JSON segment may be used once, more than once, or not at all. You may need to drag the split bar between panes to view content.
NOTE: Each correct selection is worth one point.
Select and Place:

Explanation

Correct Answer:

Code segment

All
WebHook
EventHub
subjectEndsWith
Mictosoft.Storage
subjectBeginsWith
Microsoft.Storage.BlobCreated

Answer Area

```
{
  "name": "newlogs",
  "properties": {
    "topic": "/subscriptions/. . ./providers/Microsoft.EventGrid/topics/. . .",
    "destination": {
    "endpointType"  : " [WebHook] " },
    "filter": {
      " [subjectBeginsWith] ": "/blobServices/default/containers/logdrop/",
      "includedEventTypes": [ " [Microsoft.Storage.BlobCreated] "  ] },
    },
    "labels": [],
    "eventDeliverySchema": "EventGridSchema"
```

Box 1:WebHook -
Scenario: If an anomaly is detected, an Azure Function that emails administrators is called by using an HTTP WebHook. endpointType: The type of endpoint for the subscription (webhook/HTTP, Event Hub, or queue).

Box 2: SubjectBeginsWith -
Box 3: Microsoft.Storage.BlobCreated

Scenario: Log Policy -
All Azure App Service Web Apps must write logs to Azure Blob storage. All log files should be saved to a container named logdrop. Logs must remain in the container for 15 days.

Example subscription schema -
{
"properties": {
"destination": {
"endpointType": "webhook",
"properties": {
"endpointUrl": "https://example.azurewebsites.net/api/HttpTriggerCSharp1?code=VXbGWce53l48Mt8wuotr0GPmyJ/nDT4hgdFj9DpBiRt38qqnnm5OFg=="
}
},
"filter": {
"includedEventTypes": ["Microsoft.Storage.BlobCreated", "Microsoft.Storage.BlobDeleted"],
"subjectBeginsWith": "blobServices/default/containers/mycontainer/log",
[1]
"isSubjectCaseSensitive ": "true"
}
}
}
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/subscription-creation-schema

SecExams

Community Discussion

Looks correct based on the provided reference. https://docs.microsoft.com/en-us/azure/event-grid/subscription-creation-schema

To prevent reading the cases multiple times: Please see the spots below where you can find the questions (page/topic/question/subject) Proseware, Inc. 53 19 1 ARM for Azure Event Grid subscription, enable + filter logging 53 19 2 use Application Insights for scaling 53 19 3 code : telemetry filter/ telemetry processor 53 19 4 code : telemetry initializer 55 25 1 code : if-then condition on properties of incomming event from GRID 56 25 2 code : class for login event, properties needed 56 25 3 code : programatically update application settings for blob 56 26 1 azure function delay : always on and tier

marvelous microsoftiness, probably this is for the subscription for the anomaly detection service and not the policy service where they expliclty mentioned event grid to confuse you. Once you pass this exam, the certification can be used when applying for a job at CSI new york. For finding clues where they do not exist.

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The question is really worded poorly. The subscription is for events that are inserted into the container and a webhook is invoked when a log file is created in the storage container. I assume that the webhook point to a function (?) that analyze the log with a machine learning model and THEN if there is an anomaly call an azure function to notify adminstrator via mail. Am I missing something ?

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Question #306

SecExams

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SecExams

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SecExams

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SecExams

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LE07   public string Serialize()
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LE11 }
```

Question You need to ensure that the solution can meet the scaling requirements for Policy Service.
Which Azure Application Insights data model should you use?

A) an Application Insights dependency
B) an Application Insights event
C) an Application Insights trace
D) an Application Insights metric (Correct Answer)

Explanation

Correct Answer:
D
Application Insights provides three additional data types for custom telemetry:
Trace - used either directly, or through an adapter to implement diagnostics logging using an instrumentation framework that is familiar to you, such as Log4Net or System.Diagnostics.
Event - typically used to capture user interaction with your service, to analyze usage patterns.
Metric - used to report periodic scalar measurements.
Scenario:
Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model

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Community Discussion

Answer is correct. User can use metric telemetry to get different application metrics like: requestsPerSecond, requestsInQueue, and use these values to know when to scale https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model-metric-telemetry

Application Insights provides three additional data types for custom telemetry: - Trace: used either directly, or through an adapter to implement diagnostics logging using an instrumentation framework that is familiar to you, such as Log4Net or System.Diagnostics. - Event: typically used to capture user interaction with your service, to analyze usage patterns. - Metric: used to report periodic scalar measurements. Scenario: Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing. So, it is D.

Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model-metric-telemetry

Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-model-metric-telemetry

Selected Answer: D

Always metric

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Question #307

SecExams

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SecExams

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LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question DRAG DROP -

You need to implement telemetry for non-user actions.

How should you complete the Filter class? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Code segments

- /health
- /status
- RequestTelemetry
- PageViewTelemetry
- ITelementryProcessor
- ITelementryInitializer

Answer Area

```
public class Filter : [ code segment ]
{
   private readonly [ code segment ] _next;
   public (Filter [ code segment ] next)
   {
   _next = next;
   }
   public void Process(ITelemetry item)
   {
     var x = item as [ code segment ] ;
      if (x?.Url.AbsolutePath == " [ code segment ] " )
     {
       return;
     }
     _next.Process(item);
   }
}
```

SecExams

Explanation

Correct Answer:

Code segments

- /health
- /status
- RequestTelemetry
- PageViewTelemetry
- ITelementryProcessor
- ITelementryInitializer

Answer Area

```
public class Filter : [ITelementryProcessor]
{
   private readonly [ITelementryProcessor] _next;
   public (Filter [ITelementryProcessor] next)
   {
   _next = next;
   }
   public void Process(ITelemetry item)
   {
     var x = item as [RequestTelemetry] ;
      if (x?.Url.AbsolutePath == " [/health] " )
     {
       return;
     }
     _next.Process(item);
   }
}
```

Scenario: Exclude non-user actions from Application Insights telemetry.

Box 1: ITelemetryProcessor -
To create a filter, implement ITelemetryProcessor. This technique gives you more direct control over what is included or excluded from the telemetry stream.

Box 2: ITelemetryProcessor -

Box 3: ITelemetryProcessor -

Box 4: RequestTelemetry -

Box 5: /health -
To filter out an item, just terminate the chain.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-filtering-sampling

Community Discussion

(ᑎ^o^)⊃━☆

"ITelemetryProcessor" typo, no "n" https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-filtering-sampling#create-a-telemetry-processor-c

Answer: ITelemetryProcessor, ITelemetryProcessor,ITelemetryProcessor,RequestTelemetry, /health Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-filtering-sampling public class SuccessfulDependencyFilter : ITelemetryProcessor { private ITelemetryProcessor Next { get; set; } // next will point to the next TelemetryProcessor in the chain. public SuccessfulDependencyFilter(ITelemetryProcessor next) { this.Next = next; } } var requestTelemetry = telemetry as RequestTelemetry;

Also the constructor is incorrect. Should be "public Filter(" instead of "public (Filter".

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Question #308

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Background -
You are a developer for Proseware, Inc. You are developing an application that applies a set of governance policies for Proseware's internal services, external services, and applications. The application will also provide a shared library for common functionality.

Requirements -

Policy service -
You develop and deploy a stateful ASP.NET Core 2.1 web application named Policy service to an Azure App Service Web App. The application reacts to events from Azure Event Grid and performs policy actions based on those events.
The application must include the Event Grid Event ID field in all Application

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Insights telemetry.
Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.

Policies -

Log policy -
All Azure App Service Web Apps must write logs to Azure Blob storage. All log files should be saved to a container named logdrop. Logs must remain in the container for 15 days.

Authentication events -
Authentication events are used to monitor users signing in and signing out. All authentication events must be processed by Policy service. Sign outs must be processed as quickly as possible.

PolicyLib -
You have a shared library named PolicyLib that contains functionality common to all ASP.NET Core web services and applications. The PolicyLib library must:
Exclude non-user actions from Application Insights telemetry.
Provide methods that allow a web service to scale itself.
Ensure that scaling actions do not disrupt application usage.

Other -

Anomaly detection service -
You have an anomaly detection service that analyzes log information for anomalies. It is implemented as an Azure Machine Learning model. The model is deployed as a web service. If an anomaly is detected, an Azure Function that emails administrators is called by using an HTTP WebHook.

Health monitoring -
All web applications and services have health monitoring at the /health service endpoint.

Issues -

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Policy loss -
When you deploy Policy service, policies may not be applied if they were in the process of being applied during the deployment.

Performance issue -
When under heavy load, the anomaly detection service undergoes slowdowns and rejects connections.

Notification latency -
Users report that anomaly detection emails can sometimes arrive several minutes after an anomaly is detected.

App code -

EventGridController.cs -
Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.

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EventGridController.cs

```
EG01 public class EventGridController : Controller
EG02 {
EG03   public static AsyncLocal<string> EventId = new AsyncLocal<string>();
EG04   public IActionResult Process([fromBody] string eventsJson)
EG05   {
EG06     var events = JArray.Parse(eventsJson);
EG07
EG08     foreach (var @event in events)
EG09     {
EG10       EventId.Value = @event["id"].ToString();
EG11       if (@event["topic"].ToString().Contains("providers/Microsoft.Storage"))
EG12       {
EG13         SendToAnomalyDetectionService(@event["data"]["url"].ToString());
EG14       }
EG15
EG16       {
EG17         EnsureLogging(@event["subject"].ToString());
EG18       }
EG19     }
EG20     return null;
EG21   }
EG22   private void EnsureLogging(string resource)
EG23   {
EG24     . . .
EG25   }
EG26   private async Task SendToAnomalyDetectionService(string uri)
EG27   {
EG28     var content = GetLogData(uri);
EG29     var scoreRequest = new
EG30     {
EG31       Inputs = new Dictionary<string, List<Dictionary<string, string>>>()
EG32       {
EG33         {
EG34           "input1",
EG35           new List<Dictionary<string, string>>()
EG36           {
EG37             new Dictionary<string, string>()
EG38             {
EG39               {
EG40                 "logcontent", content
EG41               }
EG42             }
EG43           }
EG44         },
EG45       },
EG46       GlobalParameters = new Dictionary<string, string>() { }
EG47     };
EG48     var result = await (new HttpClient()).PostAsJsonAsync("...", scoreRequest);
EG49     var rawModelResult = await result.Content.ReadAsStringAsync();
EG50     var modelResult = JObject.Parse(rawModelResult);
EG51     if (modelResult["notify"].HasValues)
EG52     {
EG53       . . .
EG54     }
EG55   }
EG56   private (string name, string resourceGroup) ParseResourceId(string resourceId)
EG57   {
```

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LoginEvent.cs -
Relevant portions of the app files are shown below. Line numbers are included for reference only and include a two-character prefix that denotes the specific file to which they belong.

```
LoginEvent.cs
LE01 public class LoginEvent
LE02 {
LE03
LE04   public string subject { get; set; }
LE05   public DateTime eventTime { get; set; }
LE06   public Dictionary<string, string> data { get; set; }
LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question DRAG DROP -
You need to ensure that PolicyLib requirements are met.
How should you complete the code segment? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.
NOTE: Each correct selection is worth one point.
Select and Place:

Explanation

Correct Answer:

Code segments

- Process
- Initialize
- telemetry.Sequence
- ITelemetryProcessor
- ITelemetryInitializer
- telemetry.Context
- EventGridController.EventId.Value
- ((EventTelemetry)telemetry).Properties["EventId"]

Answer Area

```
public class IncludeEventId : ITelemetryInitializer
{
   public void   Initialize                                  (ITelemetry telemetry)
   {
      telemetry.Context                                      .Properties["EventId"] =
       ((EventTelemetry)telemetry).Properties["EventId"]  ;
   }
}
```

Scenario: You have a shared library named PolicyLib that contains functionality common to all ASP.NET Core web services and applications. The PolicyLib library must:

- ✎ Exclude non-user actions from Application Insights telemetry.
- ✎ Provide methods that allow a web service to scale itself.
- ✎ Ensure that scaling actions do not disrupt application usage.

Box 1: ITelemetryInitializer -
Use telemetry initializers to define global properties that are sent with all telemetry; and to override selected behavior of the standard telemetry modules.

Box 2: Initialize -

Box 3: Telemetry.Context -
Box 4: ((EventTelemetry)telemetry).Properties["EventID"]
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-filtering-sampling

Community Discussion

* EventId is held by class EventGridController * You can add properties to telemetry by implementing ITelemetryInitializer which defines the Initialize method. * ITelemetry.Context.Properties is correct, but shouldnt be used any more as obsoloete public class IncludeEventId : ITelemetryInitializer { public void Initialize (ITelemetry telemetry) { telemetry.Context.Properties["EventId"] = EventgridController.EventId.Value; } } https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-custom-events-metrics#sampling-filtering-and-processing-telemetry https://docs.microsoft.com/en-us/dotnet/api/microsoft.applicationinsights.datacontracts.telemetrycontext.properties?view=azure-dotnet#Microsoft_ApplicationInsights_DataContracts_TelemetryContext_Properties

No, in my opinion it has no sense assign event id to telemetry object from the same object itself. you should take in from other objects, and in this case the only option possible seems to be EventGridController class.

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Box 1: ITelemetryInitializer Box 2: Initialize Box 3: Telemetry.Context Box 4: EventGridController.EventId.Value Scenario: The application reacts to events from Azure Event Grid and performs policy actions based on those events. The application must include the Event Grid Event ID field in all Application Insights telemetry. \You can add properties to telemetry by implementing ITelemetryInitializer which defines the Initialize method. https://docs.microsoft.com/en-us/azure/azure-monitor/app/api-custom-events-metrics#sampling-filtering-and-processing-telemetry

Not correct. = > Use the EventId static prop of EventgridController

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Background -
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Overall architecture -
Employees upload receipts for the system to process. When processing is complete, the employee receives a summary report email that details the processing results. Employees then use a web application to manage their receipts and perform any additional tasks needed for reimbursement.

Receipt processing -

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Employees may upload receipts in two ways:
Uploading using an Azure Files mounted folder
Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

Users table -

Column	Description
UserId	unique identifier for and employee
ExpenseAccount	employees expense account number in the format 1234-123-1234
AllowedAmount	limit of allowed expenses before approval is needed
SupervisorId	unique identifier for employee's supervisor
SecurityPin	value used to validate user identity

Web Application -
You enable MSI for the Web App and configure the Web App to use the security principal name WebAppIdentity.

Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.

Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging

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enabled.
Application Insights must always contain all log messages.

Requirements -

Receipt processing -
Concurrent processing of a receipt must be prevented.

Disaster recovery -
Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Security -
User's SecurityPin must be stored in such a way that access to the database does not allow the viewing of SecurityPins. The web application is the only system that should have access to SecurityPins.
All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
All access to Azure Storage and Azure SQL database must use the application's Managed Service Identity (MSI).
Receipt data must always be encrypted at rest.
All data must be protected in transit.
User's expense account number must be visible only to logged in users. All other views of the expense account number should include only the last segment, with the remaining parts obscured.
In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete

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the file in the file share and use the web application, which returns a 500 Internal
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Capacity issue -
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Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

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```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

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```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21  }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16  }
```

ConfigureSSE.ps1 -

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```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question You need to ensure receipt processing occurs correctly.
What should you do?

A) Use blob properties to prevent concurrency problems
B) Use blob SnapshotTime to prevent concurrency problems (Correct Answer)
C) Use blob metadata to prevent concurrency problems
D) Use blob leases to prevent concurrency problems

Explanation

Correct Answer:
B
You can create a snapshot of a blob. A snapshot is a read-only version of a blob that's taken at a point in time. Once a snapshot has been created, it can be read, copied, or deleted, but not modified. Snapshots provide a way to back up a blob as it appears at a moment in time.
Scenario: Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in
Azure Blob Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.
Reference:
https://docs.microsoft.com/en-us/rest/api/storageservices/creating-a-snapshot-of-a-blob

Community Discussion

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Answer is D: Use blob leases to prevent concurrency problems

I think it is lease (see this link) https://docs.microsoft.com/en-us/azure/storage/blobs/concurrency-manage?tabs=dotnet

Agreed. The question is about the receipt processing. The case states "Concurrent processing of a receipt must be prevented", which can't be done with snapshots and leases are made for this specifically. So answer should be D.

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DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
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CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question You need to resolve the capacity issue.
What should you do?

A) Convert the trigger on the Azure Function to an Azure Blob storage trigger
B) Ensure that the consumption plan is configured correctly to allow scaling
C) Move the Azure Function to a dedicated App Service Plan
D) Update the loop starting on line PC09 to process items in parallel (Correct Answer)

Explanation

Correct Answer:
D
If you want to read the files in parallel, you cannot use forEach. Each of the async callback function calls does return a promise. You can await the array of promises that you'll get with Promise.all.
Scenario: Capacity issue: During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

```
PC08      var container = await GetCloudBlobContainer();
PC09      foreach (var fileItem in await ListFiles())
PC10      {
PC11        var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12        var ms = new MemoryStream();
PC13        await file.DownloadToStreamAsync(ms);
PC14        var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15        await blob.UploadFromStreamAsync(ms);
PC16
PC17      }
```

Reference:
https://stackoverflow.com/questions/37576685/using-async-await-with-a-foreach-loop

Community Discussion

Receipts are uploaded to the File Storage (not Blob Storage) which does not support triggers. Concurrent processing of a (SINGLE!) receipt must be prevented - so parallel processing is OK. So answer D.

Cleared AZ-204 today, the question appeared, the option "D" was not there, but a "replace the solution with durable functions". I went for that.

Selected Answer: D

A. Convert the trigger on the Azure Function to an Azure Blob storage trigger => won't help because we have Azure Fileshare B. Ensure that the consumption plan is configured correctly to allow scaling => Trigger is time based. Multiple instances scanning the same folder => bad idea; also clearly stated in the requirements that parallel processing is not allowed C. Move the Azure Function to a dedicated App Service Plan => the Trigger every 5 seconds should keep the function "alive". The function work is also not CPU bound so I cannot see a real benefit for ASP in this scenario D. Update the loop starting on line PC09 to process items in parallel => might help. D2 (alternative to D as by PaulMD) replace the solution with durable functions => looks even better than D If D2 is an option I'd go for that. Maybe they realized that the current "D" is not a really good solution and D2 is also way more "azure" Otherwise D.

I believe it's "B" - since issue happens in busy period when CPU is over-utilized. Then only reasonable action will be to scale. And for that we should properly configure Consumption Plan. "D" - could be an answer if Q was about slow speed of processing in normal situation, when CPU resources in enough. In this case, I/O operations are the bottleneck. But, if we try to spawn more thread when CPU is already super-busy, it would even worsen user experience. And it's not "C" since Dedicated Plan is used in very specific situation. Exerpt: "Consider a dedicated App Service plan in the following situations: - You have existing, underutilized VMs that are already running other App Service instances. - You want to provide a custom image on which to run your functions."

1000% D !!!!!!!! CORRECT!

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Question #311

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Introductory Info Case study -
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Background -
You are a developer for Litware Inc., a SaaS company that provides a solution for managing employee expenses. The solution consists of an ASP.NET Core Web API project that is deployed as an Azure Web App.

Overall architecture -
Employees upload receipts for the system to process. When processing is complete, the employee receives a summary report email that details the processing results. Employees then use a web application to manage their receipts and perform any additional tasks needed for reimbursement.

Receipt processing -

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Employees may upload receipts in two ways:
Uploading using an Azure Files mounted folder
Uploading using the web application

Data Storage -
Receipt and employee information is stored in an Azure SQL database.

Documentation -
Employees are provided with a getting started document when they first use the solution. The documentation includes details on supported operating systems for
Azure File upload, and instructions on how to configure the mounted folder.

Solution details -

Users table -

Column	Description
UserId	unique identifier for and employee
ExpenseAccount	employees expense account number in the format 1234-123-1234
AllowedAmount	limit of allowed expenses before approval is needed
SupervisorId	unique identifier for employee's supervisor
SecurityPin	value used to validate user identity

Web Application -
You enable MSI for the Web App and configure the Web App to use the security principal name WebAppIdentity.

Processing -
Processing is performed by an Azure Function that uses version 2 of the Azure Function runtime. Once processing is completed, results are stored in Azure Blob
Storage and an Azure SQL database. Then, an email summary is sent to the user with a link to the processing report. The link to the report must remain valid if the email is forwarded to another user.

Logging -
Azure Application Insights is used for telemetry and logging in both the processor and the web application. The processor also has TraceWriter logging

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enabled.
Application Insights must always contain all log messages.

Requirements -

Receipt processing -
Concurrent processing of a receipt must be prevented.

Disaster recovery -
Regional outage must not impact application availability. All DR operations must not be dependent on application running and must ensure that data in the DR region is up to date.

Security -
User's SecurityPin must be stored in such a way that access to the database does not allow the viewing of SecurityPins. The web application is the only system that should have access to SecurityPins.
All certificates and secrets used to secure data must be stored in Azure Key Vault.
You must adhere to the principle of least privilege and provide privileges which are essential to perform the intended function.
All access to Azure Storage and Azure SQL database must use the application's Managed Service Identity (MSI).
Receipt data must always be encrypted at rest.
All data must be protected in transit.
User's expense account number must be visible only to logged in users. All other views of the expense account number should include only the last segment, with the remaining parts obscured.
In the case of a security breach, access to all summary reports must be revoked without impacting other parts of the system.

Issues -

Upload format issue -
Employees occasionally report an issue with uploading a receipt using the web application. They report that when they upload a receipt using the Azure File Share, the receipt does not appear in their profile. When this occurs, they delete

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the file in the file share and use the web application, which returns a 500 Internal
Server error page.

Capacity issue -
During busy periods, employees report long delays between the time they upload the receipt and when it appears in the web application.

Log capacity issue -
Developers report that the number of log messages in the trace output for the processor is too high, resulting in lost log messages.

Application code -

Processing.cs -

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```
PC01 public static class Processing
PC02 {
PC03   public static class Function
PC04   {
PC05     [FunctionName("IssueWork")]
PC06     public static async Task Run([TimerTrigger("0 */5 * * * *")] TimerInfo timer, ILogger
log)
PC07     {
PC08       var container = await GetCloudBlobContainer();
PC09       foreach (var fileItem in await ListFiles())
PC10       {
PC11         var file = new CloudFile(fileItem.StorageUri.PrimaryUri);
PC12         var ms = new MemoryStream();
PC13         await file.DownloadToStreamAsync(ms);
PC14         var blob = container.GetBlockBlobReference(fileItem.Uri.ToString());
PC15         await blob.UploadFromStreamAsync(ms);
PC16
PC17       }
PC18     }
PC19     private static CloudBlockBlob GetDRBlob(CloudBlockBlob sourceBlob)
PC20     {
PC21        . . .
PC22     }
PC23     private static async Task<CloudBlobContainer> GetCloudBlobContainer()
PC24     {
PC25       var cloudBlobClient = new CloudBlobClient(new Uri(". . ."), await GetCredentials());
PC26
PC27       await cloudBlobClient.GetRootContainerReference().CreateIfNotExistsAsync();
PC28       return cloudBlobClient.GetRootContainerReference();
PC29     }
PC30     private static async Task<StorageCredentials> GetCredentials()
PC31     {
PC32        . . .
PC33     }
PC34     private static async Task<List<IListFileItem>> ListFiles()
PC35     {
PC36        . . .
PC37     }
PC37     private KeyVaultClient _keyVaultClient = new KeyVaultClient(". . .");
PC38   }

PC39 }
```

Database.cs -

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```
DB01 public class Database
DB02 {
DB03   private string ConnectionString =
DB04
DB05   public async Task<object> LoadUserDetails(string userId)
DB06   {
DB07
DB08     return await policy.ExecuteAsync(async () =>
DB09     {
DB10       using (var connection = new SqlConnection(ConnectionString))
DB11       {
DB12         await connection.OpenAsync();
DB13         using (var command = new SqlCommand("…", connection))
DB14         using (var reader = command.ExecuteReader())
DB15         {
DB16           …
DB17         }
DB18       }
DB19     });
DB20   }

DB21 }
```

ReceiptUploader.cs -

```
RU01 public class ReceiptUploader
RU02 {
RU03   public async Task UploadFile(string file, byte[] binary)
RU04   {
RU05     var httpClient = new HttpClient();
RU06     var response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU07     while (ShouldRetry(response))
RU08     {
RU09       response = await httpClient.PutAsync("…", new ByteArrayContent(binary));
RU10     }
RU11   }
RU12   private bool ShouldRetry(HttpResponseMessage response)
RU13   {
RU14
RU15   }
RU16 }
```

ConfigureSSE.ps1 -

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```
CS01 $storageAccount = Get-AzureRmStorageAccount -ResourceGroupName "..." -AccountName "..."
CS02 $keyVault = Get-AzureRmKeyVault -VaultName "..."
CS03 $key = Get-AzureKeyVaultKey -VaultName $keyVault.VaultName -Name "..."
CS04  Set-AzureRmKeyVaultAccessPolicy `
CS05   -VaultName $keyVault.VaultName `
CS06   -ObjectId $storageAccount.Identity.PrincipalId `
CS07
CS08
CS09  Set-AzureRmStorageAccount `
CS10   -ResourceGroupName $storageAccount.ResourceGroupName `
CS11   -AccountName $storageAccount.StorageAccountName `
CS12   -EnableEncryptionService File `
CS13   -KeyvaultEncryption `
CS14   -KeyName $key.Name
CS15   -KeyVersion $key.Version `
CS16   -KeyVaultUri $keyVault.VaultUri
```

Question You need to resolve the log capacity issue.
What should you do?

A) Create an Application Insights Telemetry Filter
B) Change the minimum log level in the host.json file for the function
C) Implement Application Insights Sampling (Correct Answer)
D) Set a LogCategoryFilter during startup

Explanation

Correct Answer:
C
Scenario, the log capacity issue: Developers report that the number of log message in the trace output for the processor is too high, resulting in lost log messages.
Sampling is a feature in Azure Application Insights. It is the recommended way to reduce telemetry traffic and storage, while preserving a statistically correct analysis of application data. The filter selects items that are related, so that you can navigate between items when you are doing diagnostic investigations. When metric counts are presented to you in the portal, they are renormalized to take account of the sampling, to minimize any effect on the statistics.
Sampling reduces traffic and data costs, and helps you avoid throttling.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/sampling

Community Discussion

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I had the exam last Friday and I notice that they change one sentence in case study from: Application Insights must always contain all log messages. to: Application Insights currently contain all log messages. So I chosen C. Implement Application Insights Sampling.

The answer is "B". From the problem description: "Developers report that the number of log messages in the trace output for the processor is too high" The keywords are "too high". The answer is to change the minimum logging level.

I don't agree. Sampling does not meet "Application Insights must always contain ALL log messages" since it drops items. https://learn.microsoft.com/en-us/azure/azure-monitor/app/sampling#how-sampling-works I think it would be simply adjusting the log level in the app.

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Question #312

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Background -
VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -
The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

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Retail Store Locations -
The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -
The application components must meet the following requirements:

Corporate website -
Secure the website by using SSL.
Minimize costs for data storage and hosting.
Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
Distribute the website content globally for local use.
Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
The website must have 99.95 percent uptime.

Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question HOTSPOT -
You need to implement event routing for retail store location data.
Which configurations should you use? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

Event data	Configuration
Source	Azure Blob Storage Azure Event Grid Azure Service Bus Azure Event Hub
Receiver	Azure Event Grid Azure Event Hub Azure Service Bus Azure Blob Storage
Handler	Azure Function App Azure Logic App Azure Event Grid Azure Blob Storage

Explanation

Correct Answer:

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Answer Area

Event data	Configuration
Source	Azure Blob Storage Azure Event Grid Azure Service Bus Azure Event Hub
Receiver	Azure Event Grid Azure Event Hub Azure Service Bus Azure Blob Storage
Handler	Azure Function App Azure Logic App Azure Event Grid Azure Blob Storage

Box 1: Azure Blob Storage -
Azure event publishers and event handlers are at the core of the Event Grid routing-service. Event Grid listens to Azure event publishers, such as Blog Storage, then reacts by routing specific events to Azure event handlers, such as WebHooks. You can easily control this entire process at a granular level through event subscriptions and event filters.

Box 2: Azure Event Grid -
Azure Event Grid is a highly scalable event-routing service that listens for specific system events, then reacts to them according to your precise specifications. In the past, event handling has relied largely on polling ג€" a high latency, low-efficiency approach that can prove prohibitively expensive at scale.

Box 3: Azure Logic App -
Event Grid's supported event handlers currently include Event Hubs, WebHooks, Logic Apps, Azure Functions, Azure Automation and Microsoft Flow.

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Reference:
https://www.appliedi.net/blog/using-azure-event-grid-for-highly-scalable-event-routing

Community Discussion

Shouldn't it be Azure Function App for the handler?

This was on the exam (July 2023). Went with blob/grid/function. Scored 917

Retail store locations - Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries. Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory. Logic app is not mentioned anywhere in the case study. So #3 should be Function app?

Agree, there is no logic app in the solution.

Agree, there is no logic app in the solution.

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Question #313

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Introductory Info Case study -
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LabelMaker app -
Coho Winery produces, bottles, and distributes a variety of wines globally. You are a developer implementing highly scalable and resilient applications to support online order processing by using Azure solutions.
Coho Winery has a LabelMaker application that prints labels for wine bottles. The application sends data to several printers. The application consists of five modules that run independently on virtual machines (VMs). Coho Winery plans to move the application to Azure and continue to support label creation. External partners send data to the LabelMaker application to include artwork and text for custom label designs.

Requirements. Data -
You identify the following requirements for data management and

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manipulation:
Order data is stored as nonrelational JSON and must be queried using SQL.
Changes to the Order data must reflect immediately across all partitions. All reads to the Order data must fetch the most recent writes.

Requirements. Security -
You have the following security requirements:
Users of Coho Winery applications must be able to provide access to documents, resources, and applications to external partners.
▪
External partners must use their own credentials and authenticate with their organization's identity management solution.
External partner logins must be audited monthly for application use by a user account administrator to maintain company compliance.
Storage of e-commerce application settings must be maintained in Azure Key Vault.
E-commerce application sign-ins must be secured by using Azure App Service authentication and Azure Active Directory (AAD).
Conditional access policies must be applied at the application level to protect company content.
The LabelMaker application must be secured by using an AAD account that has full access to all namespaces of the Azure Kubernetes Service (AKS) cluster.

Requirements. LabelMaker app -
Azure Monitor Container Health must be used to monitor the performance of workloads that are deployed to Kubernetes environments and hosted on Azure Kubernetes Service (AKS).
You must use Azure Container Registry to publish images that support the AKS deployment.

Architecture -

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Issues -
Calls to the Printer API App fail periodically due to printer communication timeouts.
Printer communication timeouts occur after 10 seconds. The label printer must only receive up to 5 attempts within one minute.
The order workflow fails to run upon initial deployment to Azure.

Order.json -
Relevant portions of the app files are shown below. Line numbers are included for reference only.
This JSON file contains a representation of the data for an order that includes a single item.

Order.json

```
01 {
02   "id" : 1,
03   "customers" : [
04   {
05      "familyName" : "Doe",
06      "givenName" : "John",
07      "customerid" : 5
08    }
09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
15     "product_id" : 7513594,
16     "quantity": 1,
17     "requires_shipping" : true ,
18     "sku": "SFC-342-N" ,
19     "title" : "Surface Go" ,
20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
```

Question You need to troubleshoot the order workflow.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Review the API connections.

B) Review the activity log.

C) Review the run history. (Correct Answer)

D) Review the trigger history. (Correct Answer)

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Explanation

Correct Answer:

CD

Scenario: The order workflow fails to run upon initial deployment to Azure.

Check runs history: Each time that the trigger fires for an item or event, the Logic Apps engine creates and runs a separate workflow instance for each item or event. If a run fails, follow these steps to review what happened during that run, including the status for each step in the workflow plus the inputs and outputs for each step.

Check the workflow's run status by checking the runs history. To view more information about a failed run, including all the steps in that run in their status, select the failed run.

Example:

Check the trigger's status by checking the trigger history

To view more information about the trigger attempt, select that trigger event, for example:

Reference:

https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-diagnosing-failures

Community Discussion

Answer seems correct

very convenience answer

very convenience answer

Please Ignore my answer, the default answer was right because we have the Logic App in the architecture!

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02   "id" : 1,
03   "customers" : [
04   {
05      "familyName" : "Doe",
06      "givenName" : "John",
07      "customerid" : 5
08    }
09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
15     "product_id" : 7513594,
16     "quantity": 1,
17     "requires_shipping" : true ,
18     "sku": "SFC-342-N" ,
19     "title" : "Surface Go" ,
20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
```

Question

HOTSPOT -

You need to update the order workflow to address the issue when calling the Printer API App.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
"print_label": {
  "type": "Http",
  "inputs": {
    "method": "POST",
    "uri": "https://www.cohowinery.com/printer/printlabel",
    "retryPolicy": {
    "type": "  [ ]  ",
    "interval": "  [ ]  ",
    "count":  [ ]
    }
  }
}
```

type: default / none / fixed / exponential

interval: PT10S / PT30S / PT60S / PT1D

count: 5 / 10 / 60

Explanation

Correct Answer:

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Answer Area

```
"print_label": {
  "type": "Http",
  "inputs": {
    "method": "POST",
    "uri": "https://www.cohowinery.com/printer/printlabel",
    "retryPolicy": {
    "type": "  [ default | none | fixed | exponential ]  ",
    "interval": "  [ PT10S | PT30S | PT60S | PT1D ]  ",
    "count":  [ 5 | 10 | 60 ]
    }
  }
}
```

Box 1: fixed -
The 'Default' policy does 4 exponential retries and from my experience the interval times are often too short in situations.

Box 2: PT60S -
We could set a fixed interval, e.g. 5 retries every 60 seconds (PT60S).
PT60S is 60 seconds.
Scenario: Calls to the Printer API App fail periodically due to printer communication timeouts.
Printer communication timeouts occur after 10 seconds. The label printer must only receive up to 5 attempts within one minute.

Box 3: 5 -
Reference:
https://michalsacewicz.com/error-handling-in-power-automate/

Community Discussion

1. Fixed 2. PT10S 3. 5 PT10 means retry after 10sec , https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-exception-handling

I think Given ans is right "PT60 and count 5" menas try 5 times in 60sec.

If you read the following: https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-exception-handling#fixed-interval pt60s = 60s delay between each attempt. PT10s will be the better answer, 5 attempts with each 10 seconds delay satisfy the requirement “The label printer must only receive up to 5 attempts within one minute”.

If you read the following: https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-exception-handling#fixed-interval pt60s = 60s delay between each attempt. PT10s will be the better answer, 5 attempts with each 10 seconds delay satisfy the requirement “The label printer must only receive up to 5 attempts within one minute”.

Agreed. PT10S means a 10 second delay between each try defined as the retry value.

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Question #315

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Background -
Wide World Importers is moving all their datacenters to Azure. The company has developed several applications and services to support supply chain operations and would like to leverage serverless computing where possible.

Current environment -
Windows Server 2016 virtual machine
This virtual machine (VM) runs BizTalk Server 2016. The VM runs the following workflows:
Ocean Transport `" This workflow gathers and validates container information including container contents and arrival notices at various shipping ports.
Inland Transport `" This workflow gathers and validates trucking information including fuel usage, number of stops, and routes.

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The VM supports the following REST API calls:
Container API `" This API provides container information including weight, contents, and other attributes.
Location API `" This API provides location information regarding shipping ports of call and trucking stops.
Shipping REST API `" This API provides shipping information for use and display on the shipping website.

Shipping Data -
The application uses MongoDB JSON document storage database for all container and transport information.

Shipping Web Site -
The site displays shipping container tracking information and container contents. The site is located at http://shipping.wideworldimporters.com/

Proposed solution -
The on-premises shipping application must be moved to Azure. The VM has been migrated to a new Standard_D16s_v3 Azure VM by using Azure Site Recovery and must remain running in Azure to complete the BizTalk component migrations. You create a Standard_D16s_v3 Azure VM to host BizTalk Server. The Azure architecture diagram for the proposed solution is shown below:

Requirements -

Shipping Logic app -
The Shipping Logic app must meet the following requirements:
Support the ocean transport and inland transport workflows by using a Logic

App.
Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.

Shipping Function app -
Implement secure function endpoints by using app-level security and include Azure Active Directory (Azure AD).

REST APIs -
The REST API's that support the solution must meet the following requirements:
Secure resources to the corporate VNet.
Allow deployment to a testing location within Azure while not incurring additional costs.
Automatically scale to double capacity during peak shipping times while not causing application downtime.
Minimize costs when selecting an Azure payment model.

Shipping data -
Data migration from on-premises to Azure must minimize costs and downtime.

Shipping website -
Use Azure Content Delivery Network (CDN) and ensure maximum performance for dynamic content while minimizing latency and costs.

Issues -

Windows Server 2016 VM -
The VM shows high network latency, jitter, and high CPU utilization. The VM is critical and has not been backed up in the past. The VM must enable a quick restore from a 7-day snapshot to include in-place restore of disks in case of failure.

Shipping website and REST APIs -

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The following error message displays while you are testing the website:
Failed to load http://test-shippingapi.wideworldimporters.com/: No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access. Question
DRAG DROP -
You need to support the message processing for the ocean transport workflow. Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.
Select and Place:

Explanation

Correct Answer:

Step 1: Create an integration account in the Azure portal
You can define custom metadata for artifacts in integration accounts and get that metadata during runtime for your logic app to use. For example, you can provide metadata for artifacts, such as partners, agreements, schemas, and maps - all store metadata using key-value pairs.
Step 2: Link the Logic App to the integration account
A logic app that's linked to the integration account and artifact metadata you want to use.
Step 3: Add partners, schemas, certificates, maps, and agreements
Step 4: Create a custom connector for the Logic App.
Reference:
https://docs.microsoft.com/bs-latn-ba/azure/logic-apps/logic-apps-enterprise-integration-metadata

Community Discussion

This is about logic app, which is not part anymore of the exam However : 1.Create integration account 2.Link Logic app 3.Add partners... 4.Update logic app https://learn.microsoft.com/en-us/azure/logic-apps/add-artifacts-integration-service-environment-ise#create-integration-accounts Why not custom connector? X12 is Managed connector, as it is opposed to a custom connector https://learn.microsoft.com/en-us/azure/logic-apps/add-artifacts-integration-service-environment-ise#add-ise-connectors

Source?

Source?

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disregard above ans 1.Create integration account 2.Link Logic app 3.Add partners... 4.Update logic app

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Question #316

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Issues -

Windows Server 2016 VM -
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Shipping website and REST APIs -

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Failed to load http://test-shippingapi.wideworldimporters.com/: No 'Access-Control-Allow-Origin' header is present on the requested resource. Origin 'http://test.wideworldimporters.com/' is therefore not allowed access. Question
You need to support the requirements for the Shipping Logic App.
What should you use?

A) Azure Active Directory Application Proxy
B) Site-to-Site (S2S) VPN connection
C) On-premises Data Gateway (Correct Answer)
D) Point-to-Site (P2S) VPN connection

Explanation

Correct Answer:
C
Before you can connect to on-premises data sources from Azure Logic Apps, download and install the on-premises data gateway on a local computer. The gateway works as a bridge that provides quick data transfer and encryption between data sources on premises (not in the cloud) and your logic apps.
The gateway supports BizTalk Server 2016.
Note: Microsoft have now fully incorporated the Azure BizTalk Services capabilities into Logic Apps and Azure App Service Hybrid Connections.
Logic Apps Enterprise Integration pack bring some of the enterprise B2B capabilities like AS2 and X12, EDI standards support
Scenario: The Shipping Logic app must meet the following requirements:
✑ Support the ocean transport and inland transport workflows by using a Logic App.
✑ Support industry-standard protocol X12 message format for various messages including vessel content details and arrival notices.
✑ Secure resources to the corporate VNet and use dedicated storage resources with a fixed costing model.
✑ Maintain on-premises connectivity to support legacy applications and final BizTalk migrations.
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-install

Community Discussion

Agreed: On-premises Data Gateway

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The question does NOT ask if S2S VPN would "help in logic app creation." The question does ask for on-prem connectivity for legacy apps. Data Gateway provides access to on-prem data sources for tools like PowerBI or Analysis Services (which are not needed by the workflow), not legacy apps or support final BizTalk migration. These need general on-prem to VNet connectivity. The answer is S2S VPN.

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Hasn't the VM been already migrated to Azure?

Selected Answer: C

On-premises data Gateway

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Question #317

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Background -
City Power & Light company provides electrical infrastructure monitoring solutions for homes and businesses. The company is migrating solutions to Azure.

Current environment -

Architecture overview -
The company has a public website located at http://www.cpandl.com/. The site is a single-page web application that runs in Azure App Service on Linux. The website uses files stored in Azure Storage and cached in Azure Content Delivery Network (CDN) to serve static content.
API Management and Azure Function App functions are used to process and

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
The solution uses Application Insights, Azure Monitor, and Azure Key Vault.

Architecture diagram -
The company has several applications and services that support their business. The company plans to implement serverless computing where possible. The overall architecture is shown below.

User authentication -
The following steps detail the user authentication process:
1. The user selects Sign in in the website.
2. The browser redirects the user to the Azure Active Directory (Azure AD) sign in page.
3. The user signs in.
4. Azure AD redirects the user's session back to the web application. The URL includes an access token.
5. The web application calls an API and includes the access token in the

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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.

Requirements -

Corporate website -
Communications and content must be secured by using SSL.
Communications must use HTTPS.
Data must be replicated to a secondary region and three availability zones.
Data storage costs must be minimized.

Azure Database for PostgreSQL -
The database connection string is stored in Azure Key Vault with the following attributes:
Azure Key Vault name: cpandlkeyvault
Secret name: PostgreSQLConn
Id: 80df3e46ffcd4f1cb187f79905e9a1e8
The connection information is updated frequently. The application must always use the latest information to connect to the database.
Azure Service Bus and Azure Event Grid
Azure Event Grid must use Azure Service Bus for queue-based load leveling.
Events in Azure Event Grid must be routed directly to Service Bus queues for use in buffering.
Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing.

Security -
All SSL certificates and credentials must be stored in Azure Key Vault.
File access must restrict access by IP, protocol, and Azure AD rights.
All user accounts and processes must receive only those privileges which are essential to perform their intended function.

Compliance -
Auditing of the file updates and transfers must be enabled to comply with General Data Protection Regulation (GDPR). The file updates must be read-only, stored in the order in which they occurred, include only create, update, delete,

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and copy operations, and be retained for compliance reasons.

Issues -

Corporate website -
While testing the site, the following error message displays:
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Function app -
You perform local testing for the RequestUserApproval function. The following error message displays:
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FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"

Logic app -
You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.

Code -

Corporate website -
Security.cs:

```
SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question HOTSPOT -

You need to configure the integration for Azure Service Bus and Azure Event Grid.

How should you complete the CLI statement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Explanation

Correct Answer:

Answer Area

Box 1: eventgrid -

To create event subscription use: az eventgrid event-subscription create

Box 2: event-subscription -

Box 3: servicebusqueue -
Scenario: Azure Service Bus and Azure Event Grid
Azure Event Grid must use Azure Service Bus for queue-based load leveling.
Events in Azure Event Grid must be routed directly to Service Bus queues for use in buffering.
Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing.
Reference:
https://docs.microsoft.com/en-us/cli/azure/eventgrid/event-subscription?view=azure-cli-latest#az_eventgrid_event_subscription_create

Community Discussion

correcto... https://docs.microsoft.com/en-us/azure/event-grid/handler-service-bus

Got this one 01/2022. Went with most voted (to avoid writing answers again)

Agreed. Note that the casus also denotes the opposite integration: "Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing". But none of the given options seem to do just this, so the given answer is correct.

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received 2023-04-17 went with given answer, score 926

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```

Question You need to ensure that all messages from Azure Event Grid are processed.
What should you use?

A) Azure Event Grid topic
B) Azure Service Bus topic
C) Azure Service Bus queue (Correct Answer)
D) Azure Storage queue
E) Azure Logic App custom connector

Explanation

Correct Answer:
C
As a solution architect/developer, you should consider using Service Bus queues when:
☞ Your solution needs to receive messages without having to poll the queue. With Service Bus, you can achieve it by using a long-polling receive operation using the TCP-based protocols that Service Bus supports.
Reference:
https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted

Community Discussion

Answer is Correct C. Service Bus Only C. ServiceBus Queue and B. Service Bus Topic give a guarantee of delivery. Since Topics can only receive messages from a Queue that leaves only C.

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Azure Event Grid must use Azure Service Bus for queue-based load leveling.

Horrible question, just why Microsoft, why...

YEP CORRECT IS C ! 100% > I HATE THIS QUESTION,, Who create this one LOL

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Background -
You are a developer for Proseware, Inc. You are developing an application that applies a set of governance policies for Proseware's internal services, external services, and applications. The application will also provide a shared library for common functionality.

Requirements -

Policy service -
You develop and deploy a stateful ASP.NET Core 2.1 web application named Policy service to an Azure App Service Web App. The application reacts to events from Azure Event Grid and performs policy actions based on those events.
The application must include the Event Grid Event ID field in all Application

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Insights telemetry.
Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.

Policies -

Log policy -
All Azure App Service Web Apps must write logs to Azure Blob storage. All log files should be saved to a container named logdrop. Logs must remain in the container for 15 days.

Authentication events -
Authentication events are used to monitor users signing in and signing out. All authentication events must be processed by Policy service. Sign outs must be processed as quickly as possible.

PolicyLib -
You have a shared library named PolicyLib that contains functionality common to all ASP.NET Core web services and applications. The PolicyLib library must:
Exclude non-user actions from Application Insights telemetry.
Provide methods that allow a web service to scale itself.
Ensure that scaling actions do not disrupt application usage.

Other -

Anomaly detection service -
You have an anomaly detection service that analyzes log information for anomalies. It is implemented as an Azure Machine Learning model. The model is deployed as a web service. If an anomaly is detected, an Azure Function that emails administrators is called by using an HTTP WebHook.

Health monitoring -
All web applications and services have health monitoring at the /health service endpoint.

Issues -

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Policy loss -
When you deploy Policy service, policies may not be applied if they were in the process of being applied during the deployment.

Performance issue -
When under heavy load, the anomaly detection service undergoes slowdowns and rejects connections.

Notification latency -
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SecExams

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EG34           "input1",
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EG36           {
EG37             new Dictionary<string, string>()
EG38             {
EG39               {
EG40                 "logcontent", content
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SecExams

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LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question DRAG DROP -
You need to add code at line EG15 in EventGridController.cs to ensure that the Log policy applies to all services.
How should you complete the code? To answer, drag the appropriate code segments to the correct locations. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.
NOTE: Each correct selection is worth one point.
Select and Place:

Explanation

Correct Answer:

Code segments

- topic
- status
- eventType
- Succeeded
- operationName
- resourceProvider

Answer Area

```
if {
  @event[ "data" ][ "  status  " ].ToString() == "  Succeeded  "
  &&
  @event[ "data" ][ "  operationName  " ].ToString() == "Microsoft.Web/sites/write"
)
```

Scenario, Log policy: All Azure App Service Web Apps must write logs to Azure Blob storage.

Box 1: Status -

Box 2: Succeeded -

Box 3: operationName -
Microsoft.Web/sites/write is resource provider operation. It creates a new Web App or updates an existing one.
Reference:
https://docs.microsoft.com/en-us/azure/role-based-access-control/resource-provider-operations

Community Discussion

Answer seems to be correct. Once a new web app is created, an event is triggered from the resource group... https://docs.microsoft.com/en-us/azure/event-grid/event-schema-resource-groups?tabs=event-grid-event-schema That event contains the status, which must be Succeeded in order for it to make sense to apply the policy. The above site also mentions that the event["data"] contains an operationName property for resource group events, which in this case is an "Microsoft.web/sites/write" operation.

operationName ... Name of the operation. status ... String describing the status of the operation. Some common values are: Started, In Progress, Succeeded, Failed, Active, Resolved. https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log-schema#administrative-category Microsoft.Web/sites/Write ... Create a new Web App or update an existing one https://docs.microsoft.com/en-us/azure/role-based-access-control/resource-provider-operations But why do we need to call EnsureLogging() upon creating/updating the Web App? I cannot find such requirement in the assignment. Or am I wrong?

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Confusing is the opening brace - it should be "(" instead of "{" as it is a logical expression for the "if" statement. ;-)

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Question #320

SecExams

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SecExams

Insights telemetry.
Policy service must use Application Insights to automatically scale with the number of policy actions that it is performing.

Policies -

Log policy -
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Other -

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Health monitoring -
All web applications and services have health monitoring at the /health service endpoint.

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SecExams

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SecExams

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LE06   public Dictionary<string, string> data { get; set; }
LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question HOTSPOT -
You need to insert code at line LE03 of LoginEvent.cs to ensure that all authentication events are processed correctly.
How should you complete the code? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

```
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
```

Explanation

Correct Answer:

SecExams

Answer Area

```
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
public string [ id | eventType | dataVersion | metadataVersion ] ( get; set; )
```

Box 1: id -
id is a unique identifier for the event.

Box 2: eventType -
eventType is one of the registered event types for this event source.

Box 3: dataVersion -
dataVersion is the schema version of the data object. The publisher defines the schema version.
Scenario: Authentication events are used to monitor users signing in and signing out. All authentication events must be processed by Policy service. Sign outs must be processed as quickly as possible.
The following example shows the properties that are used by all event publishers:

```
[
{
"topic": string,
"subject": string,
"id": string,
"eventType": string,
"eventTime": string,
"data":{
object-unique-to-each-publisher
},
```

SecExams

"dataVersion": string,
"metadataVersion": string
}
]
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/event-schema

Community Discussion

This question proves how ridiculous this test is.

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Question #321

SecExams

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Other -

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SecExams

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SecExams

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LE04   public string subject { get; set; }
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LE06   public Dictionary<string, string> data { get; set; }
LE07   public string Serialize()
LE08   {
LE09     return JsonConvert.SerializeObject(this);
LE10   }
LE11 }
```

Question HOTSPOT -

You need to implement the Log policy.

How should you complete the EnsureLogging method in EventGridController.cs?

To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
var client = new WebSiteManagementClient(. . .);
var id = ParseResourceID(resource);
var appSettings = new StringDictionary(name: "properties",
  properties: new Dictionary<string, string> {
  {"DIAGNOSTICS_AZUREBLOBCONTAINERSASURL", BlobStoreAccountSAS(" [ ] ")},
  {"DIAGNOSTICS_AZUREBLOBRETENTIONINDAYS", " [ ] "}
});
client.WebApps. [ ] (
  id.resourceGroup,
  id.name, appSettings);
```

logs
logdrop

15
30

UploadLoggingSettings
UpdateApplicationSetting

Explanation

Correct Answer:

Answer Area

```
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  {"DIAGNOSTICS_AZUREBLOBRETENTIONINDAYS", "  [15 / 30]  "}

});
client.WebApps.  [UploadLoggingSettings / UpdateApplicationSetting]  (
  id.resourceGroup,
  id.name, appSettings);
```

Box 1: logdrop -
All log files should be saved to a container named logdrop.

Box 2: 15 -
Logs must remain in the container for 15 days.
Box 3: UpdateApplicationSettings
All Azure App Service Web Apps must write logs to Azure Blob storage.
Reference:
https://blog.hompus.nl/2017/05/29/adding-application-logging-blob-to-a-azure-web-app-service-using-powershell/

Community Discussion

answer is correct

Right, maybe MS needs even more complicated tests, so we can memorize even more info that we can find using Google in 10 minutes or less.

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SecExams

First 2 are simple and straight from the requirements but why do you have to know a property name for a .NET class for the 3rd??

BlobStoreAccountSAS() is just a method listed in the case on line EG64

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Question #322

SecExams

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LE11 }
```

Question You need to resolve a notification latency issue.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Set Always On to true. (Correct Answer)
B) Ensure that the Azure Function is using an App Service plan. (Correct Answer)
C) Set Always On to false.
D) Ensure that the Azure Function is set to use a consumption plan.

Explanation

Correct Answer:
AB
Azure Functions can run on either a Consumption Plan or a dedicated App Service Plan. If you run in a dedicated mode, you need to turn on the Always On setting for your Function App to run properly. The Function runtime will go idle after a few minutes of inactivity, so only HTTP triggers will actually "wake up" your functions. This is similar to how WebJobs must have Always On enabled.
Scenario: Notification latency: Users report that anomaly detection emails can sometimes arrive several minutes after an anomaly is detected.
Anomaly detection service: You have an anomaly detection service that analyzes log information for anomalies. It is implemented as an Azure Machine Learning model. The model is deployed as a web service.
If an anomaly is detected, an Azure Function that emails administrators is called by using

an HTTP WebHook.
Reference:
https://github.com/Azure/Azure-Functions/wiki/Enable-Always-On-when-running-on-dedicated-App-Service-Plan

Community Discussion

Correct

Correct Answer: A and B Always On enables waking up on HTTP trigger, but does not prevent the exceeding the max time out time of 230 seconds. If your function app is on the Consumption plan, there can be up to a 10-minute delay in processing new blobs if a function app has gone idle. To avoid this latency, you can switch to an App Service plan with Always On enabled. You can also use an Event Grid trigger with your Blob storage account. Reference: https://docs.microsoft.com/en-us/azure/azure-functions/dedicated-plan#always-on https://github.com/Azure/Azure-Functions/wiki/Enable-Always-On-when-running-on-dedicated-App-Service-Plan https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-event-overview https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger?tabs=csharp#event-grid-trigger

Correct ;)

Selected Answer: AB

Always On is required and you need App Servie Plan for that feature

A and B is correct

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Question #323

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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
Messages are sent to ContentUploadService.
Content is processed by ContentAnalysisService.
After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question HOTSPOT -

You need to ensure that validation testing is triggered per the requirements.

How should you complete the code segment? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
var event = getEvent();
if (event.eventType === '[ ]'
```

- ImagePushed
- RepositoryItem
- ImageDeployed
- RepositoryUpdated

```
 && event.data.target.[ ] === 'contentanalysisservice'
```

- aci
- image
- service
- repository

```
 && event.[ ].contains('contosoimages'))
```

- topic
- service
- repository
- imageCollection

```
{
  startValidationTesting();
}
```

Explanation

Correct Answer:

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Answer Area

```
var event = getEvent();
if (event.eventType === '[ImagePushed | RepositoryItem | ImageDeployed | RepositoryUpdated]'
 && event.data.target.[aci | image | service | repository] === 'contentanalysisservice'
 && event.[topic | service | repository | imageCollection].contains('contosoimages'))
{
  startValidationTesting();
}
```

Box 1: RepositoryUpdated -
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Box 2: service -

Box 3: imageCollection -
Reference:
https://docs.microsoft.com/en-us/azure/devops/notifications/oob-supported-event-types

Community Discussion

Incorrect... 1. ImagePushed 2. repository 3. topic https://docs.microsoft.com/hu-hu/azure/event-grid/event-schema-container-registry?tabs=event-grid-event-schema

Ok, I need to start memorizing all schemes of possible event system topics: Azure API Management Azure App Configuration Azure App Service Azure Blob Storage Azure Cache for Redis Azure Communication Services Azure Container Registry Azure Event Hubs Azure

FarmBeats Azure Health Data Services Azure IoT Hub Azure Key Vault Azure Kubernetes Service Azure Machine Learning Azure Maps Azure Media Services Azure Policy Azure resource groups Azure Service Bus Azure SignalR Azure subscriptions....

The number of questions with incorrect responses is overwhelming. SecExams should mark the correct answers properly to make life easier for us. :(

thanks for the tip! The answer indicated by the test seems to be completely "off topic" ;-)

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Question #324

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ContentUploadService -

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CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15             cpu: 1.0
CS16             memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question You need to deploy the CheckUserContent Azure Function. The solution must meet the security and cost requirements.
Which hosting model should you use?

A) Premium plan
B) App Service plan (Correct Answer)
C) Consumption plan

Explanation

Correct Answer:
B
Scenario:
You must minimize costs for all Azure services.
All Internal services must only be accessible from internal Virtual Networks (VNets).
Best for long-running scenarios where Durable Functions can't be used. Consider an App Service plan in the following situations:
✑ You have existing, underutilized VMs that are already running other App Service instances.
✑ You want to provide a custom image on which to run your functions.
✑ Predictive scaling and costs are required.
Note: When you create a function app in Azure, you must choose a hosting plan for your app. There are three basic hosting plans available for Azure Functions:
Consumption plan, Premium plan, and Dedicated (App Service) plan.
Incorrect Answers:
A: A Premium plan would be more costly.
C: Need the VNET functionality.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale

Community Discussion

A is correct! I guess the guy gives the answer confused with which one is cheaper. Premium is cheaper than app service place. It can auto scale, warm starting and with VNET integration. In addition, it can run custom container as well, just the same as app service plan.

Premium does NOT support VNET in multiple regions: https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#networking-features, i beleive it's B

Premium does NOT support VNET in multiple regions: https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#networking-features, i beleive it's B

SecExams

I believed the answer is correct. https://docs.microsoft.com/en-us/azure/azure-functions/dedicated-plan "You pay for function apps in an App Service Plan as you would for other App Service resources. This differs from Azure Functions Consumption plan or Premium plan hosting..." So.. ASE can be made available on the App service plan that hosting the function

Selected Answer: B

https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#networking-features Premium plan Vnet integration is regional hence for this question it is not the correct answer. Correct Anser - App Service Plan

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Question #325

SecExams

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LabelMaker app -
Coho Winery produces, bottles, and distributes a variety of wines globally. You are a developer implementing highly scalable and resilient applications to support online order processing by using Azure solutions.
Coho Winery has a LabelMaker application that prints labels for wine bottles. The application sends data to several printers. The application consists of five modules that run independently on virtual machines (VMs). Coho Winery plans to move the application to Azure and continue to support label creation. External partners send data to the LabelMaker application to include artwork and text for custom label designs.

Requirements. Data -
You identify the following requirements for data management and

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manipulation:
Order data is stored as nonrelational JSON and must be queried using SQL.
Changes to the Order data must reflect immediately across all partitions. All reads to the Order data must fetch the most recent writes.

Requirements. Security -
You have the following security requirements:
Users of Coho Winery applications must be able to provide access to documents, resources, and applications to external partners.
▪
External partners must use their own credentials and authenticate with their organization's identity management solution.
External partner logins must be audited monthly for application use by a user account administrator to maintain company compliance.
Storage of e-commerce application settings must be maintained in Azure Key Vault.
E-commerce application sign-ins must be secured by using Azure App Service authentication and Azure Active Directory (AAD).
Conditional access policies must be applied at the application level to protect company content.
The LabelMaker application must be secured by using an AAD account that has full access to all namespaces of the Azure Kubernetes Service (AKS) cluster.

Requirements. LabelMaker app -
Azure Monitor Container Health must be used to monitor the performance of workloads that are deployed to Kubernetes environments and hosted on Azure Kubernetes Service (AKS).
You must use Azure Container Registry to publish images that support the AKS deployment.

Architecture -

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Issues -
Calls to the Printer API App fail periodically due to printer communication timeouts.
Printer communication timeouts occur after 10 seconds. The label printer must only receive up to 5 attempts within one minute.
The order workflow fails to run upon initial deployment to Azure.

Order.json -
Relevant portions of the app files are shown below. Line numbers are included for reference only.
This JSON file contains a representation of the data for an order that includes a single item.

Order.json -

Order.json

```
01 {
02   "id" : 1,
03   "customers" : [
04   {
05      "familyName" : "Doe",
06      "givenName" : "John",
07      "customerid" : 5
08    }
09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
15     "product_id" : 7513594,
16     "quantity": 1,
17     "requires_shipping" : true ,
18     "sku": "SFC-342-N" ,
19     "title" : "Surface Go" ,
20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
30     "total_discount" : "5.00" ,
31     "discount_allocations" : [
32      {
33        "amount" : "5.00" ,
34        "discount_application_index" : 2
35        }
36     ]
```

Question DRAG DROP -

You need to deploy a new version of the LabelMaker application to ACR. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

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Select and Place:

Actions	Answer area
Log in to the registry and push image.	
Create an alias of the image with a new build number.	
Create an alias of the image with the fully qualified path to the registry.	
Download the image to your local computer.	
Build a new application image by using dockerfile.	

Explanation

Correct Answer:

Actions	Answer area
	Build a new application image by using dockerfile.
Create an alias of the image with a new build number.	Create an alias of the image with the fully qualified path to the registry.
	Log in to the registry and push image.
Download the image to your local computer.	

Step 1: Build a new application image by using dockerfile
Step 2: Create an alias if the image with the fully qualified path to the registry
Before you can push the image to a private registry, you've to ensure a proper image name. This can be achieved using the docker tag command. For demonstration purpose, we'll use Docker's hello world image, rename it and push it to ACR.
# pulls hello-world from the public docker hub
$ docker pull hello-world
# tag the image in order to be able to push it to a private registry
$ docker tag hello-word <REGISTRY_NAME>/hello-world
# push the image

$ docker push <REGISTRY_NAME>/hello-world
Step 3: Log in to the registry and push image
In order to push images to the newly created ACR instance, you need to login to ACR form the Docker CLI. Once logged in, you can push any existing docker image to your ACR instance.
Scenario:
Coho Winery plans to move the application to Azure and continue to support label creation.

LabelMaker app -
Azure Monitor Container Health must be used to monitor the performance of workloads that are deployed to Kubernetes environments and hosted on Azure Kubernetes Service (AKS).
You must use Azure Container Registry to publish images that support the AKS deployment.
Reference:
https://thorsten-hans.com/how-to-use-a-private-azure-container-registry-with-kubernetes-9b86e67b93b6 https://docs.microsoft.com/en-us/azure/container-registry/container-registry-tutorial-quick-task

Community Discussion

Correct answer given. Step 1: Build a new application image by using dockerfile FROM node:8.9.3-alpine RUN mkdir -p /usr/src/app COPY ./app/ /usr/src/app/ WORKDIR /usr/src/app RUN npm install CMD node /usr/src/app/index.js docker build ./aci-helloworld -t aci-test-app docker images docker run -d -p 8080:80 aci-test-app (Example to build image only and run locally) Step 2: Create an alias if the image with the fully qualified path to the registry docker tag mcr.microsoft.com/oss/nginx/nginx:1.15.5-alpine myregistry.azurecr.io/samples/nginx Step 3: Log in to the registry and push image docker push myregistry.azurecr.io/samples/nginx

Correct https://docs.microsoft.com/en-us/azure/container-registry/container-registry-get-started-docker-cli?tabs=azure-cli

It is a Microsoft question. Keep intelligence out of it

It is a Microsoft question. Keep intelligence out of it

Strange question. I realize that from the provided options this is the only solution one can assemble. But the project describes LabelMaker app to be a set of images running in

AKS. Pushing a new image into ACR won't change a thing, as one needs to update the YAML deployment file for Kubernetes to pick up the image, and then tell AKS to reconcile.

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Question #326

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06      "givenName" : "John",
07      "customerid" : 5
08    }
09   ],
10   "line_items" : [
11   {
12     "fulfillable_quantity" : 1,
13     "id": 6,
14     "price" : "199.99" ,
15     "product_id" : 7513594,
16     "quantity": 1,
17     "requires_shipping" : true ,
18     "sku": "SFC-342-N" ,
19     "title" : "Surface Go" ,
20     "vendor" : "Microsoft" ,
21     "name" : "Surface Go - 8GB" ,
22     "taxable" : true ,
23     "tax_lines" : [
24     {
25       "title" : "State Tax" ,
26       "price" : "3.98" ,
27       "rate" : 0.06
28      }
29     ],
30     "total_discount" : "5.00" ,
31     "discount_allocations" : [
32      {
33        "amount" : "5.00" ,
34        "discount_application_index" : 2
35        }
36     ]
```

Question You need to access data from the user claim object in the e-commerce web app.
What should you do first?

A) Write custom code to make a Microsoft Graph API call from the e-commerce web app.
B) Assign the Contributor RBAC role to the e-commerce web app by using the Resource Manager create role assignment API.
C) Update the e-commerce web app to read the HTTP request header values. (Correct Answer)
D) Using the Azure CLI, enable Cross-origin resource sharing (CORS) from the e-commerce

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checkout API to the e-commerce web app.

Explanation

Correct Answer:
C
Methods to Get User Identity and Claims in a .NET Azure Functions App include:
➪ ClaimsPrincipal from the Request Context
The ClaimsPrincipal object is also available as part of the request context and can be extracted from the HttpRequest.HttpContext.
➪ User Claims from the Request Headers.
App Service passes user claims to the app by using special request headers.
Reference:
https://levelup.gitconnected.com/four-alternative-methods-to-get-user-identity-and-claims-in-a-net-azure-functions-app-df98c40424bb

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Community Discussion

https://docs.microsoft.com/en-us/azure/app-service/configure-authentication-user-identities The answer C

To quote the link provided: "For all language frameworks, App Service makes the claims in the incoming token (whether from an authenticated end user or a client application) available to your code by injecting them into the request headers. External requests aren't allowed to set these headers, so they are present only if set by App Service...." So the first thing that happens in the the Web App is to read the information from the request headers that was inserted by the App Service as part of authenticating the user in order to provide the user's claims.

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Question #327

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Background -
VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -
The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

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Retail Store Locations -
The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -
The application components must meet the following requirements:

Corporate website -
Secure the website by using SSL.
Minimize costs for data storage and hosting.
Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
Distribute the website content globally for local use.
Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
The website must have 99.95 percent uptime.

Retail store locations -
Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -
Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

Inventory services -
The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

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Security -
All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -
You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question HOTSPOT -
You need to implement the retail store location Azure Function.
How should you configure the solution? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

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Hot Area:

Answer Area

Configuration	Value
Binding	Blob storage Azure Cosmos DB Event Grid HTTP
Binding Direction	Input Output
Trigger	Blob storage Azure Cosmos DB Event Grid HTTP

Explanation

Correct Answer:

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Answer Area

Configuration	Value
Binding	Blob storage Azure Cosmos DB Event Grid HTTP
Binding Direction	Input Output
Trigger	Blob storage Azure Cosmos DB Event Grid HTTP

Scenario: Retail store locations: Azure Functions must process data immediately when data is uploaded to Blob storage.

Box 1: HTTP -
Binding configuration example: https://<storage_account_name>.blob.core.windows.net

Box 2: Input -
Read blob storage data in a function: Input binding

Box 3: Blob storage -
The Blob storage trigger starts a function when a new or updated blob is detected. Azure Functions integrates with Azure Storage via triggers and bindings. Integrating with Blob storage allows you to build functions that react to changes in blob data as well as read and write values.
Reference:

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https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-trigger

Community Discussion

1. azure cosmos 2. output 3. blob storage

1. (binding) = Azure CosmosDB reason: Azure Functions must update Azure Cosmos DB 2. (direction) = output reason: all triggers are input, so we are not talking about the trigger binding. we must update Azure Cosmos DB so we need output binding. If input and output were selectable, i'd probably go for that 3. (trigger) = EventGrid reason: the azure function is triggered by an EventGrid event so that processing happens immediately

Seems ok, te person who writes answers in sec exams doesn't read questions...

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Agreed: We need write to cosmos output, so that deals box1 and 2, and func is triggered by changes on bloob

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You need to implement the corporate website.
How should you configure the solution? To answer, select the appropriate options in the answer area.
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Hot Area:

Answer Area

Azure	Configuration
Plan	Free Standard Premium Isolated
Service	App Service Web App App Service Static Web App Azure Function App Azure Blob Storage

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Explanation

Correct Answer:

Answer Area

Azure	Configuration
Plan	Free Standard Premium Isolated
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Box 1: Standard -
Below is a high-level comparison of the features as per the pricing tier for the App Service Plan.

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SKUs	FREE	SHARED	BASIC	STANDARD	PREMIUM	ISOLATED*
Limits						
Apps	10	100	Unlimited	Unlimited	Unlimited	Unlimited
Disk space	1 GB	1 GB	10 GB	50 GB	250 GB	
Max instances			Up to 3	Up to 10	Up to 20	
SLA			99.95%	99.95%	99.95%	
App Deployment						
Continuous Deployment	Available	Available	Available	Available	Available	Available
Deployment Slots				Available	Available	Available
Development Tools						
Clone App					Available	Available
Site Extensions	Available	Available	Available	Available	Available	Available
Testing in Production				Available	Available	Available

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Corporate website requirements:
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✎ Distribute the website content globally for local use.
✎ Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
✎ The website must have 99.95 percent uptime.

Box 2: App Service Web App -
A Web App is a web application that is hosted in an App Service. The App Service is the

managed service in Azure that enables you to deploy a web application and make it available to your customers on the Internet in a very short amount of time.
Incorrect:
A Static Web Application is any web application that can be delivered directly to an end user's browser without any server-side alteration of the HTML, CSS, or JavaScript content.
Reference:
https://azure-training.com/2018/12/27/understanding-app-services-app-service-plan-and-ase/ https://docs.microsoft.com/en-us/azure/app-service/overview

Community Discussion

Got this question on 30-Sep-2022 exam. Answer is correct. Passed with 870 score.

Static web apps only support HTTP triggered functions (https://learn.microsoft.com/en-us/azure/static-web-apps/functions-bring-your-own#link-an-existing-azure-functions-app). The top of the case study reads: "several APIs hosted in Azure Functions." If we assume that the referenced azure functions here (APIs) are NOT the Azure functions for processing blob storage, then they can be HTTP triggered and we are fine choosing Static Web App. I think this is a reasonable assumption, but I leave it to the test taker to interpret which is correct.

I would have said host it in azure static web app (a fine option) that has static part as well as support functions. A perfect option. If functions are to be created outside in another function app and then it contains only the static part then I will host it in blob-storage to get the 99.95% availability SLA of blob storage hot tier and CDN is also easy. It is very difficult to choose one when I cannot look into the head of the question creator. Another vague question from the "M$"

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Standard plan with app service web app would be the appropriate option.

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Question #329

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Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling. Question You need to implement a solution to resolve the retail store location data issue.
Which three Azure Blob features should you enable? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Soft delete (Correct Answer)
B) Change feed (Correct Answer)
C) Snapshots
D) Versioning (Correct Answer)
E) Object replication
F) Immutability

Explanation

Correct Answer:
ABD
Scenario: You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
Before you enable and configure point-in-time restore, enable its prerequisites for the storage account: soft delete, change feed, and blob versioning.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/point-in-time-restore-manage

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Community Discussion

Selected Answer: ABD

a b and d

correct

Selected Answer: ABD

https://learn.microsoft.com/en-us/azure/storage/blobs/point-in-time-restore-overview#prerequisites-for-point-in-time-restore according to the above reference Point-in-time restore requires that the following Azure Storage features be enabled before you can enable point-in-time restore: Soft delete Change feed Blob versioning

This was on the exam (July 2023). Went with highly voted. Scored 917

In portal "Select Turn on point-in-time restore. When you select this option, soft delete for blobs, versioning, and change feed are also enabled" So it needs the three options to do point in time restore. You probably can't clear them, once Turn on point-in-time is chosen.

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Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question You need to store the user agreements.
Where should you store the agreement after it is completed?

A) Azure Storage queue
B) Azure Event Hub (Correct Answer)
C) Azure Service Bus topic

D) Azure Event Grid topic

Explanation

Correct Answer:
B
Azure Event Hub is used for telemetry and distributed data streaming.
This service provides a single solution that enables rapid data retrieval for real-time processing as well as repeated replay of stored raw data. It can capture the streaming data into a file for processing and analysis.
It has the following characteristics:
✑ low latency
✑ capable of receiving and processing millions of events per second
✑ at least once delivery
Reference:
https://docs.microsoft.com/en-us/azure/event-grid/compare-messaging-services

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Community Discussion

Correct: "Information regarding agreements is used by multiple divisions within Contoso, Ltd. User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour."

B - Azure Event Hub is Correct. If you are looking at millions of agreements per hour, you need to use a data ingestion service like the Azure Event Hub. You can use Event Capture to store the agreements into Azure blob storage for long term storage.

Another brilliant question from Microsoft. The wording is very vague. Where to store after it is completed. After it is completed, store it in Archive till the retention period. But because that is not in the answer, and I guess Microsoft does not potentially understand the meaning of "complete" properly, and guessing that word is added just to add some: entertainment: I choose event-hub But you should not use any of these options for storing information. But yes, you can use events capture with storage blob, but that is a lot of thinking

Azure Storage Queue can process 2000 messages per second. i.e. 72 million messages per hour. Since message is to be processed here, it cannot be event and hence Storage Queue will be used to store data and hence answer is A - Storage Queue https://

docs.microsoft.com/en-us/learn/modules/communicate-between-apps-with-azure-queue-storage/2-create-the-azure-storage-infrastructure

"If you need to store data for more than 7 days, a feature of Azure Event Hubs called Capture is the preferred solution for longer-term storage. When configuring Capture, there are two locations where this information can be stored: Azure Blob Storage or Azure Data Lake Store account" So Event capture just uses a storage solution as well.

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Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

Manual review -
To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

Monitoring -
An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
Any web service accessible over the Internet must be protected from cross site scripting attacks.
All websites and services must use SSL from a valid root certificate authority.
Azure Storage access keys must only be stored in memory and must be available only to the service.
All Internal services must only be accessible from internal Virtual Networks (VNets).
All parts of the system must support inbound and outbound traffic restrictions.
All service calls must be authenticated by using Azure AD.

User agreements -
When a user submits content, they must agree to a user agreement. The agreement allows employees of Contoso, Ltd. to review content, store cookies on user devices, and track user's IP addresses.
Information regarding agreements is used by multiple divisions within Contoso, Ltd.
User responses must not be lost and must be available to all parties regardless of individual service uptime. The volume of agreements is expected to be in the millions per hour.

Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

SecExams

```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question HOTSPOT -

You need to implement the bindings for the CheckUserContent function.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
public static class CheckUserContent
{
   [FunctionName("CheckUserContent")]
   public static void Run(
```

[ ] string content,

- [QueueTrigger("userContent")]
- [BlobTrigger("userContent/{name}")]
- [CosmosDBTrigger("content", "userContent")]
- [Table("content", "userContent", "{name}")]

[ ] Stream output)

- [Queue("userContent")]
- [CosmosDB("content", "userContent")]
- [Table("content", "userContent", "{name}")]
- [Blob("userContent/{name}", FileAccess.Write)]

```
   {
      ...
   }
}
```

Explanation

Correct Answer:

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Answer Area

```
public static class CheckUserContent
{
   [FunctionName("CheckUserContent")]
   public static void Run(
```

[ ] ▼ `string content,`

- [QueueTrigger("userContent")]
- [BlobTrigger("userContent/{name}")]
- [CosmosDBTrigger("content", "userContent")]
- [Table("content", "userContent", "{name}")]

[ ] ▼ `Stream output)`

- [Queue("userContent")]
- [CosmosDB("content", "userContent")]
- [Table("content", "userContent", "{name}")]
- [Blob("userContent/{name}", FileAccess.Write)]

```
   {
      ...
   }
}
```

Box 1: [BlobTrigger(..)]
Box 2: [Blob(..)]
Azure Blob storage output binding for Azure Functions. The output binding allows you to modify and delete blob storage data in an Azure Function.
The attribute's constructor takes the path to the blob and a FileAccess parameter indicating read or write, as shown in the following example:
[FunctionName("ResizeImage")]
public static void Run(
[BlobTrigger("sample-images/{name}")] Stream image,
[Blob("sample-images-md/{name}", FileAccess.Write)] Stream imageSmall)
{
...
}
Scenario: You must create an Azure Function named CheckUserContent to perform the content checks.
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-output

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Community Discussion

1- Queue Trigre[] 2- Blob[]

The "content" parameter is of type "string" so it must be QueueTrigger. For example BlobTrigger uses Stream type, CosmosDBTrigger uses IReadOnlyList<> type, it seems the Table Storage has no trigger binding. https://docs.microsoft.com/en-us/azure/azure-functions/functions-triggers-bindings?tabs=csharp#supported-bindings https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-queue-trigger https://docs.microsoft.com/cs-cz/azure/azure-functions/functions-bindings-storage-blob-trigger https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-cosmosdb-v2-trigger

The "content" parameter is of type "string" so it must be QueueTrigger. For example BlobTrigger uses Stream type, CosmosDBTrigger uses IReadOnlyList<> type, it seems the Table Storage has no trigger binding. https://docs.microsoft.com/en-us/azure/azure-functions/functions-triggers-bindings?tabs=csharp#supported-bindings https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-queue-trigger https://docs.microsoft.com/cs-cz/azure/azure-functions/functions-bindings-storage-blob-trigger https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-cosmosdb-v2-trigger

Correct. Ref: https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-output?tabs=csharp https://docs.microsoft.com/en-us/azure/azure-functions/functions-bindings-storage-blob-input?tabs=csharp

Another CSI Miami question from Microsoft. Yes, detectives, the content has to be a Stream if it is Blob trigger. Microsoft (don't be evil) did not give any information on how the function is triggered, but stereotypically put the red-herring in the description: " website shows the content from azure storage blob". Of course that does not mean the function is triggered from it. Next my only clue is the type of this parameter. Microsoft says .Net knowledge is required and any SDK is enough. But how will a javascript person know this that it is Stream and not the content given as String?

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Question #332

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Introductory Info Case study -
This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.
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To start the case study -
To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background -

Overview -
You are a developer for Contoso, Ltd. The company has a social networking website that is developed as a Single Page Application (SPA). The main web application for the social networking website loads user uploaded content from blob storage.
You are developing a solution to monitor uploaded data for inappropriate content. The following process occurs when users upload content by using the SPA:
* Messages are sent to ContentUploadService.
* Content is processed by ContentAnalysisService.
* After processing is complete, the content is posted to the social network or a

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rejection message is posted in its place.
The ContentAnalysisService is deployed with Azure Container Instances from a private Azure Container Registry named contosoimages.
The solution will use eight CPU cores.

Azure Active Directory -
Contoso, Ltd. uses Azure Active Directory (Azure AD) for both internal and guest accounts.

Requirements -

ContentAnalysisService -
The company's data science group built ContentAnalysisService which accepts user generated content as a string and returns a probable value for inappropriate content. Any values over a specific threshold must be reviewed by an employee of Contoso, Ltd.
You must create an Azure Function named CheckUserContent to perform the content checks.

Costs -
You must minimize costs for all Azure services.

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To review content, the user must authenticate to the website portion of the ContentAnalysisService using their Azure AD credentials. The website is built using
React and all pages and API endpoints require authentication. In order to review content a user must be part of a ContentReviewer role. All completed reviews must include the reviewer's email address for auditing purposes.

High availability -
All services must run in multiple regions. The failure of any service in a region must not impact overall application availability.

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An alert must be raised if the ContentUploadService uses more than 80 percent of available CPU cores.

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Security -
You have the following security requirements:
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Validation testing -
When a new version of the ContentAnalysisService is available the previous seven days of content must be processed with the new version to verify that the new version does not significantly deviate from the old version.

Issues -
Users of the ContentUploadService report that they occasionally see HTTP 502 responses on specific pages.

Code -

ContentUploadService -

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```
CS01 apiVersion: '2018-10-01'
CS02 type: Microsoft.ContainerInstance/containerGroups
CS03 location: westus
CS04 name: contentUploadService
CS05 properties:
CS06     containers:
CS07     - name: service
CS08         properties:
CS09         image: contoso/contentUploadService:latest
CS10         ports:
CS11         -  port: 80
CS12            protocol: TCP
CS13         resources:
CS14           requests:
CS15              cpu: 1.0
CS16              memoryInGB: 1.5
CS17
CS18 ipAddress:
CS19     ip: 10.23.121.112
CS20     ports:
CS21       - port: 80
CS22        protocol: TCP
CS23
CS24
CS25 networkProfile:
CS26
id: /subscriptions/98...19/resourceGroups/container/providers/Microsoft.Network/networkProfiles/subnet
```

ApplicationManifest -

```
AM01 {
AM02      "id" : "2b079f03-9b06-2d44-98bb-e9182901fcb6",
AM03      "appId" : "7118a7f0-b5c2-4c9d-833c-3d711396fe65",
AM04
AM05      "createdDateTime" : "2019-12-24T06:01:44Z",
AM06      "logoUrl" : null,
AM07      "logoutUrl" : null,
AM08      "name" : "ContentAnalysisService",
AM09
AM10
AM11      "orgRestrictions" : [],
AM12      "parentalControlSettings" : {
AM13       "countriesBlockedForMinors" : [],
AM14        "legalAgeGroupRule" : "Allow"
AM15      },
AM16      "passwordCredentials" : []
AM17 }
```

Question You need to configure the ContentUploadService deployment.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A) Add the following markup to line CS23: type: Private (Correct Answer)

B) Add the following markup to line CS24: osType: Windows

C) Add the following markup to line CS24: osType: Linux
D) Add the following markup to line CS23: type: Public

Explanation

Correct Answer:
A
Scenario: All Internal services must only be accessible from Internal Virtual Networks (VNets)
There are three Network Location types ג€" Private, Public and Domain
Reference:
https://devblogs.microsoft.com/powershell/setting-network-location-to-private/

Community Discussion

A https://docs.microsoft.com/en-us/azure/container-instances/container-instances-virtual-network-concepts#unsupported-networking-scenarios C https://docs.microsoft.com/en-us/azure/container-instances/container-instances-region-availability#windows-container-groups

Besides, IP address is in the private address range 10.0.0.0/24, so it can only be private.

yep currently, container groups are not supported on Windows containers

yep currently, container groups are not supported on Windows containers

Selected Answer: A

A. Private - it's internal app C. Linux - container groups not supported on Win

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Question #333

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Introductory Info Case study -
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Background -
City Power & Light company provides electrical infrastructure monitoring solutions for homes and businesses. The company is migrating solutions to Azure.

Current environment -

Architecture overview -
The company has a public website located at http://www.cpandl.com/. The site is a single-page web application that runs in Azure App Service on Linux. The website uses files stored in Azure Storage and cached in Azure Content Delivery Network (CDN) to serve static content.
API Management and Azure Function App functions are used to process and

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store data in Azure Database for PostgreSQL. API Management is used to broker communications to the Azure Function app functions for Logic app integration. Logic apps are used to orchestrate the data processing while Service Bus and Event Grid handle messaging and events.
The solution uses Application Insights, Azure Monitor, and Azure Key Vault.

Architecture diagram -
The company has several applications and services that support their business. The company plans to implement serverless computing where possible. The overall architecture is shown below.

User authentication -
The following steps detail the user authentication process:
1. The user selects Sign in in the website.
2. The browser redirects the user to the Azure Active Directory (Azure AD) sign in page.
3. The user signs in.
4. Azure AD redirects the user's session back to the web application. The URL includes an access token.
5. The web application calls an API and includes the access token in the

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authentication header. The application ID is sent as the audience ('aud') claim in the access token.
6. The back-end API validates the access token.

Requirements -

Corporate website -
Communications and content must be secured by using SSL.
Communications must use HTTPS.
Data must be replicated to a secondary region and three availability zones.
Data storage costs must be minimized.

Azure Database for PostgreSQL -
The database connection string is stored in Azure Key Vault with the following attributes:
Azure Key Vault name: cpandlkeyvault
Secret name: PostgreSQLConn
Id: 80df3e46ffcd4f1cb187f79905e9a1e8
The connection information is updated frequently. The application must always use the latest information to connect to the database.
Azure Service Bus and Azure Event Grid
Azure Event Grid must use Azure Service Bus for queue-based load leveling.
Events in Azure Event Grid must be routed directly to Service Bus queues for use in buffering.
Events from Azure Service Bus and other Azure services must continue to be routed to Azure Event Grid for processing.

Security -
All SSL certificates and credentials must be stored in Azure Key Vault.
File access must restrict access by IP, protocol, and Azure AD rights.
All user accounts and processes must receive only those privileges which are essential to perform their intended function.

Compliance -
Auditing of the file updates and transfers must be enabled to comply with General Data Protection Regulation (GDPR). The file updates must be read-only, stored in the order in which they occurred, include only create, update, delete,

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and copy operations, and be retained for compliance reasons.

Issues -

Corporate website -
While testing the site, the following error message displays:
CryptographicException: The system cannot find the file specified.

Function app -
You perform local testing for the RequestUserApproval function. The following error message displays:
'Timeout value of 00:10:00 exceeded by function: RequestUserApproval'
The same error message displays when you test the function in an Azure development environment when you run the following Kusto query:

FunctionAppLogs -
| where FunctionName = = "RequestUserApproval"

Logic app -
You test the Logic app in a development environment. The following error message displays:
'400 Bad Request'
Troubleshooting of the error shows an HttpTrigger action to call the RequestUserApproval function.

Code -

Corporate website -
Security.cs:

```
SC01 public class Security
SC02 {
SC03 var bytes = System.IO.File.ReadAllBytes("~/var/ssl/private");
SC04 var cert = new System.Security.Cryptography.X509Certificate2(bytes);
SC05 var certName = cert.FriendlyName;
SC06 }
```

Function app -
RequestUserApproval.cs:

```
RA01 public static class RequestUserApproval
RA02 {
RA03 [FunctionName("RequestUserApproval")]
RA04 public static async Task<IActionResult> Run(
RA05 [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req.
ILogger log)
RA06 {
RA07   log.LogInformation("RequestUserApproval function processed a request.");
RA08 ...
RA09 return ProcessRequest(req)
RA10   ? (ActionResult)new OkObjectResult($"User approval processed")
RA11   : new BadRequestObjectResult("Failed to process user approval");
RA12 }
RA13 private static bool ProcessRequest(HttpRequest req)
RA14 {
RA15   ...
RA16 }
RA17 }
```

Question HOTSPOT -

You need to configure the Account Kind, Replication, and Access tier options for the corporate website's Azure Storage account.

How should you complete the configuration? To answer, select the appropriate options in the dialog box in the answer area.

NOTE: Each correct selection is worth one point.

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Hot Area:

Create storage account

Basics | Networking | Advanced | Tags | Review + create

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * : Visual Studio Enterprise

Resource group * : (New) cplcorporatesite

Create new

Instance details

The default deployment model is Resource Manager, which supports the latest Azure features. You may choose to deploy using the classic deployment model instead. Choose classic deployment model

Storage account name * : corporatewebsitecontent

Location * : (US) East US

Performance : Standard / Premium

Account kind :
- StorageV2 (general purpose v2)
- Storage (general purpose v1)
- BlobStorage

Replication :
- Locally-redundant storage (LRS)
- Zone-redundant storage (ZRS)
- Geo-redundant storage (GRS)
- Read-access geo-redundant storage (RA-GRS)
- Geo-zone-redundant storage (GZRS)
- Read-access geo-zone-redundant storage (RA-GZRS)

Access tier (default) : Cool / Hot

Explanation

Correct Answer:

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Account Kind: StorageV2 (general-purpose v2)
Scenario: Azure Storage blob will be used (refer to the exhibit). Data storage costs must be minimized.
General-purpose v2 accounts: Basic storage account type for blobs, files, queues, and tables. Recommended for most scenarios using Azure Storage.
Incorrect Answers:
✐ BlockBlobStorage accounts: Storage accounts with premium performance characteristics for block blobs and append blobs. Recommended for scenarios with high transactions rates, or scenarios that use smaller objects or require consistently low

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storage latency.
✐ General-purpose v1 accounts: Legacy account type for blobs, files, queues, and tables. Use general-purpose v2 accounts instead when possible.
Replication: Geo-redundant Storage
Scenario: Data must be replicated to a secondary region and three availability zones.
Geo-redundant storage (GRS) copies your data synchronously three times within a single physical location in the primary region using LRS. It then copies your data asynchronously to a single physical location in the secondary region.
Incorrect Answers:
Geo-zone-redundant storage (GZRS), but it would be more costly.

Access tier: Cool -
Data storage costs must be minimized.
Note: Azure storage offers different access tiers, which allow you to store blob object data in the most cost-effective manner. The available access tiers include:
Hot - Optimized for storing data that is accessed frequently.
Cool - Optimized for storing data that is infrequently accessed and stored for at least 30 days.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers?tabs=azure-portal

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Community Discussion

Replication should be GZRS. Requirements ask "Data must be replicated to a secondary region and three availability zones". GRS option doesn't copy data in different availability zones

What about cool vs hot in the last box? Shouldn't this be hot, because the site gets accessed frequently?

GZRS is correct answer https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

GZRS is correct answer https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

GZRS is correct answer https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

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Question #334

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HOTSPOT
-

You are developing a web application that uses the Microsoft Identity platform for user and resource authentication. The web application called several REST APIs.

You are implementing various authentication and authorization flows for the web application.

You need to validate the claims in the authentication token.

Which token type should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Requirement	Token type
Identify users for the application by using a JWT token that contains claims.	Access ID Refresh SAML
Identify the permissions granted to APIs by using a JWT token that contains claims.	Access ID Refresh SAML
Provide the web application with long-term access to resources on behalf of users without requiring interaction with those users.	Access ID Refresh SAML
Provide XML representations of claims that can be consumed by applications that use WS-Federation.	Access ID Refresh SAML

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Explanation

Correct Answer:

Answer Area

Requirement	Token type
Identify users for the application by using a JWT token that contains claims.	Access / **ID** / Refresh / SAML
Identify the permissions granted to APIs by using a JWT token that contains claims.	**Access** / ID / Refresh / SAML
Provide the web application with long-term access to resources on behalf of users without requiring interaction with those users.	Access / ID / **Refresh** / SAML
Provide XML representations of claims that can be consumed by applications that use WS-Federation.	Access / ID / Refresh / **SAML**

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Community Discussion

How to remember: 1) Identify users -> ID (ID of the user) 2) Permissions -> Access (how to access? with permissions) 3) Without interactions -> Refresh (with refresh, there is no interaction) 4) Provide XML -> SAML (similar in writing)

Got this on 6/28/2023 and passed with 850. Answer is correct.

looks correct https://learn.microsoft.com/en-us/azure/active-directory/develop/active-directory-configurable-token-lifetimes#token-lifetime-policies-for-access-saml-and-id-tokens https://learn.microsoft.com/en-us/azure/active-directory/develop/refresh-tokens#refresh-token-lifetime

Answer is correct, got this one in Nov182023, scored 962

Suggested answer makes sense

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Question #335

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HOTSPOT
-

You are developing a content management application for technical manuals. The application is deployed as an Azure Static Web app.

Authenticated users can view pages under/manuals but only contributors can access the page /manuals/new.html.

You need to configure the routing for the web app.

How should you complete the configuration? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

```
"routes": [
{
  "route": "  [ ▼ ]  ",
                /manuals*
                contributors
                authenticated
                /manuals/new.html
 "allowedRoles": ["  [ ▼ ]  "]
                /manuals*
                contributors
                authenticated
                /manuals/new.html
  },
   {
    "route": "  [ ▼ ]  ",
                /manuals*
                contributors
                authenticated
                /manuals/new.html
   "allowedRoles": ["  [ ▼ ]  "]
                /manuals*
                contributors
                authenticated
                /manuals/new.html
     }
   ]
```

Explanation

Correct Answer:

Answer Area

```
"routes": [
{
  "route": "[ /manuals* | contributors | authenticated | /manuals/new.html ]",
  "allowedRoles": ["[ /manuals* | contributors | authenticated | /manuals/new.html ]"]
},
{
  "route": "[ /manuals* | contributors | authenticated | /manuals/new.html ]",
  "allowedRoles": ["[ /manuals* | contributors | authenticated | /manuals/new.html ]"]
}
]
```

Community Discussion

Correct. "Rule evaluation stops at the first match. A match occurs when the route property and a value in the methods array (if specified) match the request. Each request can match at most one rule." So the first rule must be for the /manuals/new.html page. https://learn.microsoft.com/en-us/azure/static-web-apps/configuration#routes

This was on the exam (July 2023). Went with proposed. Scored 917

couldn't it just have easily have been manuals/authenticated then html/contributers?

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Rule evaluation stops at the first match. If authenticated came first all users including contributors would have access to /manuals/new.html page which goes against the requirement

got it exam 31/07/2023. correct

Question #336

You are developing a web application that uses the Microsoft identity platform for user and resource authentication. The web application calls several REST APIs.

A REST API call must read the user's calendar. The web application requires permission to send an email as the user.

You need to authorize the web application and the API.

Which parameter should you use?

A) tenant
B) code_challenge
C) state
D) client_id
E) scope (Correct Answer)

Explanation

Correct Answer:
E

Community Discussion

Selected Answer: E

E. scope Scope is the parameter used to specify the permissions that the web application is requesting to access the user's resources, such as the calendar and the ability to send

SecExams

an email as the user. The scope parameter is typically included in the API call or in the authorization request sent to the Microsoft identity platform.

right https://learn.microsoft.com/en-us/azure/active-directory/develop/scopes-oidc

Had this question in today's exam: 2023-07-26

Selected Answer: E

scope The scope parameter in OAuth 2.0 specifies the permissions that the application is requesting. These permissions can be related to user delegated permissions (like reading a user's calendar) or application permissions (like sending an email on behalf of a user). Relevance to Authorization: This is the key parameter for defining the specific permissions your web application requires to access Microsoft Graph or other APIs.

SecExams

Question #337

HOTSPOT

-

You develop and deploy a web app to Azure App service. The web app allows users to authenticate by using social identity providers through the Azure B2C service. All user profile information is stored in Azure B2C.

You must update the web app to display common user properties from Azure B2C to include the following information:

• Email address
• Job title
• First name
• Last name
• Office location

You need to implement the user properties in the web app.

Which code library and API should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Explanation

Correct Answer:

Requirement	Value
API to access user properties	Microsoft Graph Azure AD Graph Azure Key Vault Azure AD entitlement management
Code library to interface to Azure AD B2C	Microsoft Authentication Library (MSAL) Microsoft Azure Key Vault SDK Azure Identity library

Community Discussion

right.. https://learn.microsoft.com/en-us/azure/active-directory-b2c/microsoft-graph-operations https://learn.microsoft.com/en-us/azure/active-directory/develop/msal-net-aad-b2c-considerations

Got this on 6/28/2023 and passed with 850. Graph, MASL is correct.

Received on 27 May 2023 - Microsoft Graph - MSAL

Received on 31/07/2023

Correct - Microsoft Graph - MSAL

SecExams

Question #338

SecExams

HOTSPOT

-

You develop and deploy the following staticwebapp.config.json file to the app_location value specified in the workflow file of an Azure Static Web app:

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```
{
  "routes": [
    {
      "route": "/api/*",
      "methods": ["GET"],
      "allowedRoles": ["registeredusers"]
    },
    {
      "route": "/api/*",
      "methods": ["PUT", "POST", "PATCH", "DELETE"],
      "allowedRoles": ["administrator"]
    },
    {
      "route": "/login",
      "rewrite": "/.auth/login/github"
    },
    {
      "route": "/.auth/login/twitter",
      "statusCode": 404
    },
    {
      "route": "/logout",
      "redirect": "/.auth/logout"
    }
  ],
  "navigationFallback": {
    "rewrite": "index.html",
    "exclude": ["/images/*.{png,jpg,gif}", "/css/*"]
  },
  "responseOverrides": {
    "400": {
      "rewrite": "/invalid-invitation-error.html"
    },
    "401": {
      "redirect": "/.auth/login/aad",
      "statusCode": 302
    },
    "403": {
      "rewrite": "/forbidden.html"
    },
    "404": {
      "rewrite": "/404.html"
    }
  },
  "mimeTypes": {
    ".json": "text/json"
```

SecExams

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
Unauthenticated users are challenged to authenticate with GitHub.	○	○
A non-existent file in the `/images/` folder will generate a 404 response code.	○	○
HTTP GET method requests from authenticated users in the role named **registeredusers** are sent to the API folder.	○	○
Authenticated users that are not in the role named **registeredusers** and unauthenticated users are served a 401 HTTP error when accessing the API folder.	○	○

SecExams

Explanation

Correct Answer:

Answer Area

Statements	Yes	No
Unauthenticated users are challenged to authenticate with GitHub.	○	○
A non-existent file in the `/images/` folder will generate a 404 response code.	○	○
HTTP GET method requests from authenticated users in the role named **registeredusers** are sent to the API folder.	○	○
Authenticated users that are not in the role named **registeredusers** and unauthenticated users are served a 401 HTTP error when accessing the API folder.	○	○

Community Discussion

1 should be no. Unauthenticated users get a 401 - Unauthorized response and are redirected by the responseOverrides to "/.auth/login/aad". I believe that is not Github. You will only be redirected to GitHub if the an unauthenticated user routes to "/login".

1 should be no. Unauthenticated users get a 401 - Unauthorized response and are redirected by the responseOverrides to "/.auth/login/aad". I believe that is not Github. You will only be redirected to GitHub if the an unauthenticated user routes to "/login".

1) Y. login with github 2) Y. true because it is excluded from returning index.html in navigation fallback, so the other option is a 404 not found 3) Y. straight forward from first routes object 4) N. from https://learn.microsoft.com/en-us/azure/static-web-apps/configuration 401 is for requesting when unauthenticated but here are you are authenticated and so the error should be 403, because you are authenticated but don't have authorization (due to not having the registeredusers role)

It should be: 1. N In the example written here: https://learn.microsoft.com/en-us/azure/static-web-apps/configuration#example-configuration-file - If you go to the login page, you redirect to Github, just like in the question. - If the request got a 401 error (Unauthorized), it redirects the user to the login route (with 302 response), which then redirects to the GitHub login. But in this question, if you check what happens when the request got a 401 error (Unauthorized), it redirects to the AAD route (with 302 response), not to Github. So this part of the question and the example are different. 2. Y That part of the question seems the same as the example above. A non-existent file in the /images/ folder -> A 404 error. 3. Y That part of the question seems the same as the example above. GET requests from authenticated users in the registeredusers role are sent to the API. Authenticated users not in the registeredusers role and unauthenticated users are served a 401 error. 4. N It overrides the 401 error to the 302 and redirects the user to the AAD URL.

received 2023-04-17 went with N,Y,Y,N , score 926 i have doubts about second one - I don't now that status code will persist or not. We set new page 404.html without status code like in example with 401 where status code id set to 302. Needs to be verified, good luck

SecExams

Question #339

You develop and deploy an Azure App Service web app named App1. You create a new Azure Key Vault named Vault1. You import several API keys, passwords, certificates, and cryptographic keys into Vault1.

You need to grant App1 access to Vault1 and automatically rotate credentials. Credentials must not be stored in code.

What should you do?

A) Enable App Service authentication for Appl. Assign a custom RBAC role to Vault1.
B) Add a TLS/SSL binding to App1.
C) Upload a self-signed client certificate to Vault1. Update App1 to use the client certificate.
D) Assign a managed identity to App1. (Correct Answer)

Explanation

Correct Answer:
D

Community Discussion

Selected Answer: D

D. Assign a managed identity to App1. To grant App1 access to Vault1 and automatically rotate credentials without storing them in code, you should assign a managed identity to App1. Managed identities for Azure resources enable Azure services to authenticate to other Azure resources without needing to manage the authentication details. After you enable a managed identity for App1, you can grant the identity access to Vault1 and use Azure Key Vault's built-in rotation feature to automatically rotate the credentials. Additionally, you can use Azure Key Vault's built-in rotation feature to automatically rotate the credentials.

Don't put ChatGPT shit here, please

Don't put ChatGPT shit here, please

SecExams

D is correct https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/service-accounts-managed-identities

In this case ChatGPT got the right answer.

Question #340

You are developing a Java application to be deployed in Azure. The application stores sensitive data in Azure Cosmos DB.

You need to configure Always Encrypted to encrypt the sensitive data inside the application.

What should you do first?

A) Create a new container to include an encryption policy with the JSON properties to be encrypted.
B) Create a customer-managed key (CMK) and store the key in a new Azure Key Vault instance. (Correct Answer)
C) Create a data encryption key (DEK) by using the Azure Cosmos DB SDK and store the key in Azure Cosmos DB.
D) Create an Azure AD managed identity and assign the identity to a new Azure Key Vault instance.

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

B. Create a customer-managed key (CMK) and store the key in a new Azure Key Vault instance. In order to configure Always Encrypted for the Java application, you need to first create a customer-managed key (CMK) using Azure Key Vault. This key will be used to encrypt and decrypt the sensitive data stored in Cosmos DB. After creating the key, you should store it in a new Azure Key Vault instance, which will be used to manage and

secure the key. Once you have the key stored in Key vault, you can use Azure Cosmos DB SDK to encrypt the sensitive data and store it in Cosmos DB. It's important to note that Always Encrypted in Azure Cosmos DB is a client-side encryption feature that encrypts and decrypts sensitive data inside the application and not in the Azure Cosmos DB service.

Selected Answer: B

https://learn.microsoft.com/en-us/azure/cosmos-db/how-to-always-encrypted?tabs=dotnet

Don't post ChatGPT answers here. They are not always correct, even if they look logical.

Don't post ChatGPT answers here. They are not always correct, even if they look logical.

CMK does not encrypt the data. It wraps the DEK. But CMK is produced first. So the answer is correct, but the explanation is usual ChatGPT shit.

SecExams

Question #341

HOTSPOT

-

You develop a web app that interacts with Azure Active Directory (Azure AD) groups by using Microsoft Graph.

You build a web page that shows all Azure AD groups that are not of the type 'Unified'.

You need to build the Microsoft Graph query for the page.

How should you complete the query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

https://graph.microsoft.com/v1.0/groups? [▼] = [▼]

filter
search
contain

groupTypes/any(s:s ne 'Unified')
not groupTypes/contains('Unified')
not groupTypes/any(s:s eq 'Unified')
groupTypes/contains('Unified') eq false

&$ [▼]

$top=true
$count=true
$filter=nested
$consistencylevel=eventual

Explanation

Correct Answer:

Answer Area

https://graph.microsoft.com/v1.0/groups? [ ] =

- filter
- search
- contain

[ ]

- groupTypes/any(s:s ne 'Unified')
- not groupTypes/contains('Unified')
- not groupTypes/any(s:s eq 'Unified')
- groupTypes/contains('Unified') eq false

&$ [ ]

- $top=true
- $count=true
- $filter=nested
- $consistencylevel=eventual

Community Discussion

~/groups?$filter=NOT groupTypes/any(c:c eq 'Unified')&$count=true This exact example is mentioned in Microsoft documentation: https://learn.microsoft.com/en-us/graph/filter-query-parameter?tabs=http#examples-using-the-filter-query-operator

it is correct https://learn.microsoft.com/en-us/azure/cosmos-db/how-to-always-encrypted?tabs=dotnet

Not sure since then but now it supports the ne parameter too: "As Microsoft Entra ID continues to deliver more capabilities and improvements in stability, availability, and performance, Microsoft Graph also continues to evolve and scale to efficiently access the data. One way is through Microsoft Graph's increasing support for advanced query capabilities on various Microsoft Entra ID objects, also called directory objects, and their properties. For example, the addition of not (not), not equals (ne), and ends with (endsWith) operators on the $filter query parameter." https://learn.microsoft.com/en-us/graph/aad-advanced-queries?tabs=http#count-of-a-collection-in-a-filter-expression

Not sure since then but now it supports the ne parameter too: "As Microsoft Entra ID continues to deliver more capabilities and improvements in stability, availability, and performance, Microsoft Graph also continues to evolve and scale to efficiently access the data. One way is through Microsoft Graph's increasing support for advanced query capabilities on various Microsoft Entra ID objects, also called directory objects, and their properties. For example, the addition of not (not), not equals (ne), and ends with (endsWith) operators on the $filter query parameter." https://learn.microsoft.com/en-us/graph/aad-advanced-queries?tabs=http#count-of-a-collection-in-a-filter-expression

got this question on 06/29/2023

SecExams

Question #342

DRAG DROP

-

You are developing an Azure solution.

You need to develop code to access a secret stored in Azure Key Vault.

How should you complete the code segment? To answer, drag the appropriate code segments to the correct location. Each code segment may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

SecExams

Code segments

- DefaultAzureCredential
- ClientSecretCredential
- CloudClients
- SecretClient

Answer area

```
def get_secret():
    var1 = os.environ.get("KEY_VAULT_URI")
    var2 = [                    ] ( var1 , [                    ]())
    var3 = var2.get_secret("secret" )
    return "secret value {}" .format(var3.value)
```

Explanation

Correct Answer:

Answer area

```
def get_secret():
    var1 = os.environ.get("KEY_VAULT_URI")
    var2 = [SecretClient          ] ( var1 , [DefaultAzureCredential   ]())
    var3 = var2.get_secret("secret" )
    return "secret value {}" .format(var3.value)
```

Community Discussion

Looks good but I think this URL should be more accurate https://learn.microsoft.com/en-us/python/api/azure-keyvault-secrets/azure.keyvault.secrets.secretclient?view=azure-python#examples

Looks good but I think this URL should be more accurate https://learn.microsoft.com/en-us/python/api/azure-keyvault-secrets/azure.keyvault.secrets.secretclient?view=azure-python#examples

it's correct https://learn.microsoft.com/en-us/azure/cosmos-db/how-to-always-encrypted?tabs=dotnet

Got this on 6/28/2023 and passed with 850. Correct answer.

SecExams

Question #343

HOTSPOT

-

You are a developer building a web site using a web app. The web site stores configuration data in Azure App Configuration.

Access to Azure App Configuration has been configured to use the identity of the web app for authentication. Security requirements specify that no other authentication systems must be used.

You need to load configuration data from Azure App Configuration.

How should you complete the code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

```
from azure.identity import [ ▼ ]
```

- DefaultAzureCredential
- ChainedTokenCredential
- ManagedIdentityCredential
- AddAzureAppConfiguration

```
from azure.app configuration import [ ▼ ]
```

- DefaultAzureCredential
- ChainedTokenCredential
- ManagedIdentityCredential
- AddAzureAppConfiguration

```
credential = [ ▼ ] ()
```

- DefaultAzureCredential
- ChainedTokenCredential
- ManagedIdentityCredential
- AddAzureAppConfiguration

```
client = [ ▼ ] (base_url="…", credential=credential)
```

- DefaultAzureCredential
- ChainedTokenCredential
- ManagedIdentityCredential
- AddAzureAppConfiguration

SecExams

Explanation

Correct Answer:

```
from azure.identity import [DefaultAzureCredential | ChainedTokenCredential | ManagedIdentityCredential | AddAzureAppConfiguration]

from azure.app configuration import [DefaultAzureCredential | ChainedTokenCredential | ManagedIdentityCredential | AddAzureAppConfiguration]

credential = [DefaultAzureCredential | ChainedTokenCredential | ManagedIdentityCredential | AddAzureAppConfiguration] ()

client = [DefaultAzureCredential | ChainedTokenCredential | ManagedIdentityCredential | AddAzureAppConfiguration] (base_url="…", credential=credential)
```

Community Discussion

I think it should be ManagedIdentityCredential: ManagedIdentityCredential: attempts to authenticate using a managed identity that is assigned to the deployment environment (if any). DefaultAzureCredential can not be, since only one type of authentication is allowed. ChainedTokenCredential could work if there is only one authentication type is specified in code. Source: https://yourazurecoach.com/2020/08/13/managed-identity-simplified-with-the-new-azure-net-sdks/

Answer is correct. It is here: https://learn.microsoft.com/en-us/python/api/overview/azure/appconfiguration-readme?view=azure-python#create-a-client

from azure.identity import DefaultAzureCredential from azure.appconfiguration import AzureAppConfigurationClient credential = DefaultAzureCredential() client = AzureAppConfigurationClient(base_url="your_endpoint_url", credential=credential)

SecExams

from azure.identity import DefaultAzureCredential from azure.appconfiguration import AzureAppConfigurationClient credential = DefaultAzureCredential() client = AzureAppConfigurationClient(base_url="your_endpoint_url", credential=credential)

To load configuration data from Azure App Configuration using the identity of the web app for authentication, you would typically use the ManagedIdentityCredential class for authentication. Here's how you should complete the code: from azure.identity import ManagedIdentityCredential from azure.appconfiguration import AzureAppConfigurationClient credential = ManagedIdentityCredential() client = AzureAppConfigurationClient(base_url="your_endpoint_url", credential=credential)

Question #344

You are developing an online game that includes a feature that allows players to interact with other players on the same team within a certain distance. The calculation to determine the players in range occurs when players move and are cached in an Azure Cache for Redis instance.

The system should prioritize players based on how recently they have moved and should not prioritize players who have logged out of the game.

You need to select an eviction policy.

Which eviction policy should you use?

A) allkeys-lru (Correct Answer)
B) volatile-lru
C) allkeys-lfu
D) volatile-ttl

Explanation

Correct Answer:
A

Community Discussion

SecExams

Selected Answer: B

Changed my mind; There must be a way to tell our redis that logged off users must not be prioritized. Sample: User A moves and then automatically logs-off. With allkeys-lru we can't distinguish this particularity. With volatile-lru we can tell our redis what are good candidates to be removed using different TTL values.

Selected Answer: B

Think it should be B : volatile-lru volatile-lru : Removes least recently used keys with the expire field set to true. The expire field for the logged out players can be marked true indicating Redis to evict those entries

correct, in 2023Mar24, score: 904/1000.

totally agree with you my friend

correct, in 2023Mar24, score: 904/1000.

SecExams

Question #345

You develop an Azure App Service web app and deploy to a production environment. You enable Application Insights for the web app.

The web app is throwing multiple exceptions in the environment.

You need to examine the state of the source code and variables when the exceptions are thrown.

Which Application Insights feature should you configure?

A) Smart detection
B) Profiler
C) Snapshot Debugger (Correct Answer)
D) Standard test

Explanation

Correct Answer:

C

Community Discussion

Selected Answer: C

C. Snapshot Debugger The Snapshot Debugger is an Application Insights feature that allows you to examine the state of the source code and variables when an exception is thrown. It captures a snapshot of the call stack, local variables, and object state at the time of the exception. With this feature, you can easily identify the cause of the exception and fix the issue.

Selected Answer: C

Correct answer

Selected Answer: C

'The Snapshot Debugger in Application Insights: ...' at https://learn.microsoft.com/en-us/azure/azure-monitor/snapshot-debugger/snapshot-debugger

The Snapshot Debugger in Azure is a debugging tool and feature that helps developers diagnose and troubleshoot issues in their applications running on Azure App Service without impacting the application's availability or performance. It allows you to capture snapshots of the application's state at specific points in time when an issue or exception occurs, allowing you to inspect the state of variables and the call stack to identify the root cause of problems.

SecExams

Question #346

DRAG DROP

-

You develop and deploy a Java application to Azure. The application has been instrumented by using the Application Insights SDK.

The telemetry data must be enriched and processed before it is sent to the Application Insights service.

You need to modify the telemetry data.

Which Application Insights SDK features should you use? To answer, drag the appropriate features to the correct requirements. Each feature may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

SecExams

Answer Area

Requirement	Feature
Reduce the volume of telemetry without affecting statistics.	Sampling
Enrich telemetry with additional properties or override an existing one.	Telemetry initializer
Completely replace or discard a telemetry item.	Telemetry processor

Community Discussion

Correct answers Link: https://learn.microsoft.com/en-us/azure/azure-monitor/app/api-filtering-sampling

I got this question on 6th August 2023. chose given answers. passed with 904. I got Case study: city and Lights. All questions are from SecExams.

Normally, 1 case study per exam , with 5 questions

Normally, 1 case study per exam , with 5 questions

Normally, 1 case study per exam , with 5 questions

SecExams

Question #347

HOTSPOT

-

You develop new functionality in a web application for a company that provides access to seismic data from around the world. The seismic data is stored in Redis Streams within an Azure Cache for Redis instance.

The new functionality includes a real-time display of seismic events as they occur.

You need to implement the Azure Cache for Redis command to receive seismic data.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

XLEN XREAD XRANGE	BLOCK 0 COUNT 0 BLOCK -1 COUNT -1	STREAMS seismicData	$ (& (0-0 + (0-0 -

Explanation

Correct Answer:

Answer Area

XLEN XREAD XRANGE	BLOCK 0 COUNT 0 BLOCK -1 COUNT -1	STREAMS seismicData	$ (& (0-0 + (0-0 -

Community Discussion

puuh... knowing all this little things/ remembering all this little things for the exam sounds impossible :(

Correct. BLOCK 0 means that we will wait infinitely (timeout 0 means it will never expire) for new items in a stream. $ ID means that we will receive only new messages, starting from the time we started listening https://redis.io/docs/data-types/streams-tutorial/#listening-for-new-items-with-xread

This question is so ridiculous that I actually remember its answer better than any other.

These AZ exam questions are some of the most ridiculous ones ever. Looks like MS wants you to fail unless you senselessly memorize stupid things. I wonder how dumb the team that sets these questions must be.

Exactly! That's why we study the exam in question bank :)

SecExams

Question #348

You develop an ASP.NET Core app that uses Azure App Configuration. You also create an App Configuration containing 100 settings.

The app must meet the following requirements:

• Ensure the consistency of all configuration data when changes to individual settings occur.
• Handle configuration data changes dynamically without causing the application to restart.
• Reduce the overall number of requests made to App Configuration APIs.

You must implement dynamic configuration updates in the app.

What are two ways to achieve this goal? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Create and register a sentinel key in the App Configuration store. Set the refreshAll parameter of the Register method to true. (Correct Answer)
B) Increase the App Configuration cache expiration from the default value. (Correct Answer)
C) Decrease the App Configuration cache expiration from the default value.
D) Create and configure Azure Key Vault. Implement the Azure Key Vault configuration provider.
E) Register all keys in the App Configuration store. Set the refreshAll parameter of the Register method to false.
F) Create and implement environment variables for each App Configuration store setting.

Explanation

Correct Answer:
AB

Community Discussion

SecExams

Correct Answers Link: https://learn.microsoft.com/en-us/azure/azure-app-configuration/enable-dynamic-configuration-aspnet-netfx

Selected Answer: AB

Quotes from the reference below: "A sentinel key is a key that you update after you complete the change of all other keys. Your app monitors the sentinel key. When a change is detected, your app refreshes all configuration values. This approach helps to ensure the consistency of configuration in your app and reduces the overall number of requests made to your App Configuration store, compared to monitoring all keys for changes." "You can add a call to the refreshOptions.SetCacheExpiration method to specify the minimum time between configuration refreshes. In this example, you use the default value of 30 seconds. Adjust to a higher value if you need to reduce the number of requests made to your App Configuration store." Reference: https://learn.microsoft.com/en-us/azure/azure-app-configuration/enable-dynamic-configuration-aspnet-core?tabs=core6x

Selected Answer: AF

Option B, Increase the App Configuration cache expiration from the default value, is not a good solution for dynamic configuration updates.

A,B 100% correct answer!

Selected Answer: AB

AB , looks correct.

SecExams

Question #349

HOTSPOT

-

You develop an image upload service that is exposed using Azure API Management. Images are analyzed after upload for automatic tagging.

Images over 500 KB are processed by a different backend that offers a lower tier of service that costs less money. The lower tier of service is denoted by a header named x-large-request. Images over 500 KB must never be processed by backends for smaller images and must always be charged the lower price.

You need to implement API Management policies to ensure that images are processed correctly.
How should you complete the API Management inbound policy? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
<inbound>
  <base/>
  <set-variable name="imageSize" value="@(context.Request.Headers["Content-Length="][0])"/>
  <choose>
    <when condition="@(int.Parse(context.Variables.GetValueOrDefault<string>("imageSize"))<512000)">
      <set-headername="x-large-request"exists-action="  [ ]  ">
        <value>true</value>
      </set-header>
    </when>
    <otherwise>
      <  [ ]  [ ]  ="{{large-image-host}}"/>
    </otherwise>
  </choose>
</inbound>
```

skip
append
delete
override

set-body
forward-request
set-backend-service
set-query-parameter

base-url
dimension
vary-by-header
publish-to-dapr

Explanation

Correct Answer:

Answer Area

```
<inbound>
  <base/>
  <set-variable name="imageSize" value="@(context.Request.Headers["Content-Length="][0])"/>
  <choose>
    <when condition="@(int.Parse(context.Variables.GetValueOrDefault<string>("imageSize"))<512000)">
      <set-headername="x-large-request"exists-action="  [skip / append / delete / override]  ">
        <value>true</value>
      </set-header>
    </when>
    <otherwise>
      <  [set-body / forward-request / set-backend-service / set-query-parameter]  [base-url / dimension / vary-by-header / publish-to-dapr]  ="{{large-image-host}}"/>
    </otherwise>
  </choose>
</inbound>
```

Community Discussion

I got this question on 6th August 2023. chose given answers. passed with 904. I got Case study: city and Lights. All questions are from SecExams.

x-large-request should be set on Size>=512.if Size<512kb,remove this header.

x-large-request should be set on Size>=512.if Size<512kb,remove this header.

x-large-request should be set on Size>=512.if Size<512kb,remove this header.

x-large-request should be set on Size>=512.if Size<512kb,remove this header.

SecExams

Question #350

HOTSPOT

-

You develop several Azure Functions app functions to process JSON documents from a third-party system. The third-party system publishes events to Azure Event Grid to include hundreds of event types, such as billing, inventory, and shipping updates.

Events must be sent to a single endpoint for the Azure Functions app to process. The events must be filtered by event type before processing. You must have authorization and authentication control to partition your tenants to receive the event data.

You need to configure Azure Event Grid.

Which configuration should you use? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

Requirement	Configuration Value
Third-party system endpoint to send events	system topic custom topic event domain event subscription
Azure Functions app endpoint to handle filtered events	system topic custom topic event domain event subscription

Explanation

Correct Answer:

Answer Area

Requirement	Configuration Value
Third-party system endpoint to send events	system topic custom topic event domain event subscription
Azure Functions app endpoint to handle filtered events	system topic custom topic event domain event subscription

Community Discussion

Check this from official trainig material: https://learn.microsoft.com/en-us/training/modules/azure-event-grid/2-event-grid-overview 1. custom topic Because according to link: "Topics. The event grid topic provides an endpoint where the source sends events(...)Custom topics are application and third-party topics" 2. event subscription Because according to link: "Event subscriptions. A subscription tells Event Grid which events on a topic you're interested in receiving. When creating the subscription, you provide an endpoint for handling the event"

I don't know, but from the description of the event domain, I'd say the correct answer is: 1. event domain 2. event subscription https://learn.microsoft.com/en-us/azure/event-grid/event-domains 1. event domain: Using event domain, the third party system does not send data directly to topics. Event domain provides a single endpoint for the system to publish events. 2. event subscription: Azure functions are event handlers. They use subscriptions. It is true that the event domain also provides a single subscription endpoint, but the handler would then receive all events, not just a filtered set as required: "Event domains also allow for domain-scope subscriptions. An event subscription on an event domain will receive all events sent to the domain regardless of the topic the events are sent to." https://learn.microsoft.com/en-us/azure/event-grid/event-domains#domain-scope-subscriptions

SecExams

i received this one on 2023-04-17, I did not know what to do I selected custom topic twice. I passed with 926. This definitely need more reasarch because it is still there

I got this question on 6th August 2023. I was confused so chose a custom topic for the both boxs passed with 904. I got a Case study: city and Lights. All questions are from SecExams.

Received the same question today on the exam, 15th of June 2023. Scored 887. Answered the same.

Question #351

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
az group create
  --name fridge-rg
  --location fridge-loc
```

B)
```
New-AzureRmServiceBusQueue
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Name fridge-q
  -EnablePartitioning $False
```

(Correct Answer)

C)
```
connectionString=$(az servicebus namespace authorization-rule keys list
  --resource-group fridge-rg
  --fridge-ns fridge-ns
  --name RootManageSharedAccessKey
  --query primaryConnectionString --output tsv)
```

D)

```
az servicebus namespace create
  --resource-group fridge-rg
  --name fridge-ns
  --location fridge-loc
```

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

The next step in the process should be to create a queue IMO (as discussed in similar questions earlier). How the commans looks depends on what type of command prompt you are using (Azure CLI, PowerShell, Bash, ...).

there were similar question earlier it is posted as answer B. as service bus already exists we need to complete the configuration which is queue. the command is available :https://learn.microsoft.com/zh-cn/powershell/module/azurerm.servicebus/new-azurermservicebusqueue?view=azurermps-6.13.0&viewFallbackFrom=azurermps-6.11.0

there were similar question earlier it is posted as answer B. as service bus already exists we need to complete the configuration which is queue. the command is available :https://learn.microsoft.com/zh-cn/powershell/module/azurerm.servicebus/new-azurermservicebusqueue?view=azurermps-6.13.0&viewFallbackFrom=azurermps-6.11.0

and also the --location value in D looks wrong... so B. would be the only right answer

and also the --location value in D looks wrong... so B. would be the only right answer

SecExams

Question #352

You are developing several microservices to deploy to a new Azure Kubernetes Service cluster. The microservices manage data stored in Azure Cosmos DB and Azure Blob storage. The data is secured by using customer-managed keys stored in Azure Key Vault.

You must automate key rotation for all Azure Key Vault keys and allow for manual key rotation. Keys must rotate every three months. Notifications of expiring keys must be sent before key expiry.

You need to configure key rotation and enable key expiry notifications.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Create and configure a new Azure Event Grid instance. (Correct Answer)
B) Configure Azure Key Vault alerts.
C) Create and assign an Azure Key Vault access policy. (Correct Answer)
D) Create and configure a key rotation policy during key creation.

Explanation

Correct Answer:
AC

Community Discussion

Selected Answer: AD

A&D for sure! https://learn.microsoft.com/en-us/azure/key-vault/keys/how-to-configure-key-rotation

Selected Answer: AD

Key rotation policy and Event Grid notification

SecExams

B & D To configure key rotation and enable key expiry notifications for Azure Key Vault, you should perform the following two actions: B. Configure Azure Key Vault alerts: Configure alerts for when a key is expiring, so that you can receive notifications before the key expiry. You can configure these alerts in Azure Key Vault using Azure Monitor, which sends an email or a webhook notification to a recipient or service when the key is about to expire. You can specify the notification threshold in terms of days, so you can receive alerts, for example, seven days before the key expiry. C. Create and assign an Azure Key Vault access policy: Create and assign an access policy for your Azure Key Vault that allows your microservices to perform key rotations manually, and automated key rotations using a key rotation script. You can create and assign access policies for Azure Key Vault through the Azure portal or the Azure CLI. These actions enable you to configure key rotation and notifications for key expiry.

Selected Answer: AD

We can use the Key Rotation Policy in Azure Key Vault combined with Event Grid to trigger sending notification when a secret in the key vault is about to expire. https://learn.microsoft.com/en-us/azure/key-vault/general/event-grid-tutorial

Options A and D are not relevant to the solution. Azure Event Grid is a service that allows you to react to events in Azure services by routing them to different endpoints, but it is not required for key rotation or notifications for Azure Key Vault. Key rotation policies are not created during key creation, but rather they are created and applied to existing keys.

SecExams

Question #353

SecExams

HOTSPOT
-

You develop and deploy an Azure App Service web app that connects to Azure Cache for Redis as a content cache. All resources have been deployed to the East US 2 region.

The security team requires the following audit information from Azure Cache for Redis:

• The number of Redis client connections from an associated IP address.
• Redis operations completed on the content cache.
• The location (region) in which the Azure Cach3e for Redis instance was accessed.

The audit information must be captured and analyzed by a security team application deployed to the Central US region.

You need to log information on all client connections to the cache.

Which configuration values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

Requirement	Configuration value
Store log information.	Log Analytics workspace Blob Storage account Data Lake Storage Gen2 Storage account Event hub
Enable client connection logging.	Diagnostic setting Managed identity App registration Environment variable

SecExams

Explanation

Correct Answer:

Answer Area

Requirement	Configuration value
Store log information.	Log Analytics workspace Blob Storage account Data Lake Storage Gen2 Storage account Event hub
Enable client connection logging.	Diagnostic setting Managed identity App registration Environment variable

Community Discussion

Correct. Only Log Analytics supports cross-region logging Reference: https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-monitor-diagnostic-settings?tabs=basic-standard-premium#enable-connection-logging-using-the-azure-portal

Log Analytics Workspace - used to store log information. Diagnostic setting - diagnostic logs are streamed to that workspace as soon as new event data is generated

Question #354

You develop and deploy a web app to Azure App Service. The Azure App Service uses a Basic plan in a single region.

Users report that the web app is responding slow. You must capture the complete call stack to help identify performance issues in the code. Call stack data must be correlated across app instances. You must minimize cost and impact to users on the web app.

You need to capture the telemetry.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Restart all apps in the App Service plan.
B) Enable Application Insights site extensions.
C) Upgrade the Azure App Service plan to Premium.
D) Enable Profiler. (Correct Answer)
E) Enable the Always On setting for the app service. (Correct Answer)
F) Enable Snapshot debugger. (Correct Answer)
G) Enable remote debugging.

Explanation

Correct Answer:
DEF

SecExams

Community Discussion

B E F B. Enable Application Insights site extensions: Application Insights provides end-to-end insights into the web app's performance and usage. Enabling the Application Insights site extension allows you to collect telemetry data, including call stack traces, to help identify performance issues in the code. E. Enable the Always On setting for the app service: Enabling the Always On setting ensures that the web app is always running, even when there is no traffic. This reduces the impact of cold starts and improves the web app's response time. F. Enable Snapshot debugger: Enabling Snapshot debugger allows you to capture the complete call stack and local variables for an exception that occurred in the web app. This helps to identify performance issues and diagnose issues in the code.

Selected Answer: BDE

B, D, E Gotta enable App Insights. Always On can solve the performance issues. Profiler can help find performance issues. You can eliminate Premium upgrade because it says minimize costs, snapshot debugger is for debugging exceptions and has nothing to do with performance issues, restarting app impacts users and it says minimize impact.

Option A, restarting all apps in the App Service plan, and option G, enabling remote debugging, are not necessary for capturing telemetry and identifying performance issues in the web app. Option C, upgrading the Azure App Service plan to Premium, is not necessary for capturing telemetry and identifying performance issues in the web app, and it would significantly increase the cost of the App Service plan. Option D, enabling Profiler, is not necessary as it is an outdated feature and has been replaced by the more powerful and comprehensive Snapshot debugger.

Option A, restarting all apps in the App Service plan, and option G, enabling remote debugging, are not necessary for capturing telemetry and identifying performance issues in the web app. Option C, upgrading the Azure App Service plan to Premium, is not necessary for capturing telemetry and identifying performance issues in the web app, and it would significantly increase the cost of the App Service plan. Option D, enabling Profiler, is not necessary as it is an outdated feature and has been replaced by the more powerful and comprehensive Snapshot debugger.

I think, it's BDF: - Enable Application Insights site extensions - Enable Profiler - Enable Snapshot debugger

SecExams

Question #355

You are building an application to track cell towers that are available to phones in near real time. A phone will send information to the application by using the Azure Web PubSub service. The data will be processed by using an Azure Functions app. Traffic will be transmitted by using a content delivery network (CDN).

The Azure function must be protected against misconfigured or unauthorized invocations.

You need to ensure that the CDN allows for the Azure function protection.

Which HTTP header should be on the allowed list?

A) Authorization
B) WebHook-Request-Callback
C) Resource
D) WebHook-Request-Origin (Correct Answer)

Explanation

Correct Answer:
D

Community Discussion

Selected Answer: D

https://learn.microsoft.com/en-us/azure/azure-web-pubsub/howto-develop-eventhandler#upstream-and-validation

wrong questions, this relates to #39

Most likely, it's A, since they ask about "Unauthorized protection" instead of "Abuse Protection", which are both supported by underlying "CloudEvents HTTP protocols" (web-hooks). https://github.com/cloudevents/spec/blob/v1.0/http-webhook.md#4-abuse-protection So, if we read attentively about Abuse Protection / webhook-request-origin,

we can find this excerpt: "It is important to understand is that the handshake does not aim to establish an authentication or authorization context. It only serves to protect the sender from being told to a push to a destination that is not expecting the traffic. While this specification mandates use of an authorization model, this mandate is not sufficient to protect any arbitrary website from unwanted traffic if that website doesn't implement access control and therefore ignores the Authorization header." And this is Authorization header description in this protocol: https://github.com/cloudevents/spec/blob/v1.0/http-webhook.md#3-authorization

Selected Answer: A

The Authorization header (Option A) is widely used for authentication in HTTP requests. It is a standard header for including credentials, tokens, or other authentication information. By allowing the Authorization header on the CDN, you can ensure that only requests with valid authorization tokens or credentials can invoke your Azure function, providing a secure method of protection against unauthorized invocations.

Selected Answer: A

Why not A? To ensure that the Azure Function is protected against misconfigured or unauthorized invocations when using a CDN, you should allow the "Authorization" HTTP header.

SecExams

Question #356

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

B)
```
New-AzureRmResourceGroup
 -Name fridge-rg
 -Location fridge-loc

New-AzureRmServiceBusQueue
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Name fridge-q
  -EnablePartitioning $False
```

C)

(Correct Answer)

D)
```
connectionString=$(az servicebus namespace authorization-rule keys list
  --resource-group fridge-rg
  --fridge-ns fridge-ns
  --name RootManageSharedAccessKey
  --query primaryConnectionString --output tsv)
```

Explanation

Correct Answer:
C

Community Discussion

Selected Answer: C

Service Bus Queue

Lol, there are so many duplications for this question!

The answer seems correct although uses an outdated command: https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-quickstart-powershell

SecExams

Question #357

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
az group create
  --name fridge-rg
  --location fridge-loc
```

B)
```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

C) (Correct Answer)
```
New-AzureRmServiceBusQueue
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Name fridge-q
  -EnablePartitioning $False
```

D)
```
New-AzureRmResourceGroup
-Name fridge-rg
-Location fridge-loc
```

Explanation

Correct Answer:
C

Community Discussion

I found this question three times already, please admins, avoid duplicated (triplicated) questions, I did not pay my contributor access for this.

Selected Answer: B

Where the admins at?

LOL ONCE MORE!

C is the correct as answer is similar to previous same questions

I think correct one is C

SecExams

Question #358

DRAG DROP

-

You develop and deploy several APIs to Azure API Management.

You create the following policy fragment named APICounts:

```
<fragment>
    <emit-metric value="1" namespace="custom-metrics">
        <dimension name="User ID" />
        <dimension name="Operation ID" />
        <dimension name="API ID" />
        <dimension name="Client IP" value="@(context.Request.IpAddress)" />
    </emit-metric>
</fragment>
```

The policy fragment must be reused across various scopes and APIs. The policy fragment must be applied to all APIs and run when a calling system invokes any API.

You need to implement the policy fragment.

XML elements

- name
- inbound
- outbound
- set-variable
- fragment-id
- include-fragment

Answer Area

```
<policies>
    < [ XML ] >
        < [ XML ] [ XML ] ="APICounts" />
        <base />
    </ [ XML ] >
    . . .
</policies>
```

SecExams

Explanation

Correct Answer:

Answer Area

```
<policies>
    < [inbound] >
        < [include-fragment] [fragment-id] ="APICounts" />
        <base />
    </ [inbound] >
    . . .
</policies>
```

Community Discussion

This was on the exam (July 2023). Went with proposed answer. Scored 917

provided answer seems correct according to https://learn.microsoft.com/en-us/azure/api-management/include-fragment-policy

Got it in the exam 14/12/23. Went with provided answer. Scored 912/1000. All questions are from SecExams. Case study - VanArsdel, Ltd (11 questions)

around 60-70%

around 60-70%

SecExams

Question #359

HOTSPOT

-

You are developing a solution that uses several Azure Service Bus queues. You create an Azure Event Grid subscription for the Azure Service Bus namespace. You use Azure Functions as subscribers to process the messages.

You need to emit events to Azure Event Grid from the queues. You must use the principal of least privilege and minimize costs.

Which Azure Service Bus values should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Configuration	Value
Tier	Basic Standard Premium
Access control (IAM) level	Contributor Data Receiver Data Sender Data Owner

SecExams

Explanation

Correct Answer:

Answer Area

Configuration	Value
Tier	Basic Standard Premium
Access control (IAM) level	Contributor Data Receiver Data Sender Data Owner

Community Discussion

Remember with Service bus + event grid its always premimum

I got this question on 6th August 2023. chose given answers. passed with 904. I got Case study: city and Lights. All questions are from SecExams.

got this question on 29/06/2023

Received the question, 15th of June 2023. Scored 887. Went with the given answers.

Looks correct: https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-to-event-grid-integration-concept?tabs=event-grid-event-schema

SecExams

Question #360

You are developing a web application that uses the Microsoft identity platform to authenticate users and resources. The web application calls several REST APIs.

The APIs require an access token from the Microsoft identity platform.

You need to request a token.

Which three properties should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Redirect URI/URL (Correct Answer)
B) Application ID (Correct Answer)
C) Application name
D) Application secret (Correct Answer)
E) Supported account type

Explanation

Correct Answer:
ABD

Community Discussion

Answer seems correct! https://learn.microsoft.com/en-us/graph/auth-v2-user?tabs=http#3-request-an-access-token

Seems plausible

I got this question on my exam, 2023Dec, go with what I remember was the most voted answer. Score 902, most of the questions were here, slightly different on wording because the Azure Ad <-> Entra Id change. Case was City Power & Light. Good luck! Important tip, you have access to microsoft learn during the exam!

SecExams

Selected Answer: ABD

correct

Selected Answer: ABD

correct

SecExams

Question #361

HOTSPOT

-

You are developing an application that uses Azure Storage to store customer data. The data must only be decrypted by the customer and the customer must be provided a script to rotate keys.

You need to provide a script to rotate keys to the customer.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
$h = $(az keyvault show --hsm-name … --query "properties.hsmUri"
$x = az keyvault [ ] list-versions --name ""
```

key
secret
recover
certificate

```
  --vault-name "" --query "[0].kid"
az storage account update
  --name … \
  --resource-group … \
  --encryption-key-name … \
  --encryption-key-version $x \
  --encryption-key-source [ ]
```

Microsoft.Secret
Microsoft.Storage
Microsoft.Keyvault
Microsoft.Certificate

```
  --encryption-key-vault $h
```

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Explanation

Correct Answer:

Answer Area

```
$h = $(az keyvault show --hsm-name … --query "properties.hsmUri"
$x = az keyvault [ key | secret | recover | certificate ] list-versions --name ""
  --vault-name "" --query "[0].kid"
az storage account update
  --name … \
  --resource-group … \
  --encryption-key-name … \
  --encryption-key-version $x \
  --encryption-key-source [ Microsoft.Secret | Microsoft.Storage | Microsoft.Keyvault | Microsoft.Certificate ]
  --encryption-key-vault $h
```

Community Discussion

Answers is correct. https://learn.microsoft.com/en-us/cli/azure/storage/account?view=azure-cli-latest#az-storage-account-update https://learn.microsoft.com/en-us/cli/azure/keyvault/key?view=azure-cli-latest

got this question on 29/06/2023

maybe the answer should be , secret and Microsoft.Keyvault ??

Would really help if you provided documentation to back up your answer.

Would really help if you provided documentation to back up your answer.

SecExams

Question #362

You are developing an Azure App Service web app.

The web app must securely store session information in Azure Redis Cache.

You need to connect the web app to Azure Redis Cache.

Which three Azure Redis Cache properties should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Access key (Correct Answer)
B) SSL port (Correct Answer)
C) Subscription name
D) Location
E) Host name (Correct Answer)
F) Subscription id

Explanation

Correct Answer:
ABE

Community Discussion

At least let us know when you are posting chatGPT-shit here. This time is seems to be correct. https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-howto#retrieve-host-name-ports-and-access-keys-from-the-azure-portal

At least let us know when you are posting chatGPT-shit here. This time is seems to be correct. https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-howto#retrieve-host-name-ports-and-access-keys-from-the-azure-portal

Answer is correct. https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-web-app-howto#retrieve-host-name-ports-and-access-keys-from-the-azure-portal

SecExams

When connecting a web app to Azure Redis Cache, you need to specify certain properties. Here are three Azure Redis Cache properties you should use: Hostname: This property represents the fully qualified domain name (FQDN) or the endpoint URL of the Azure Redis Cache instance. It is used to establish a connection between the web app and the cache. The hostname typically follows the format yourcache.redis.cache.windows.net. Port: This property specifies the port number used for communication with the Azure Redis Cache instance. The default port for Redis is 6379, but you can configure it differently if needed. Access key: This property is the primary or secondary access key for the Azure Redis Cache instance.

When connecting a web app to Azure Redis Cache, you need to specify certain properties. Here are three Azure Redis Cache properties you should use: Hostname: This property represents the fully qualified domain name (FQDN) or the endpoint URL of the Azure Redis Cache instance. It is used to establish a connection between the web app and the cache. The hostname typically follows the format yourcache.redis.cache.windows.net. Port: This property specifies the port number used for communication with the Azure Redis Cache instance. The default port for Redis is 6379, but you can configure it differently if needed. Access key: This property is the primary or secondary access key for the Azure Redis Cache instance. It acts as a password for authentication purposes. The access key is used by the web app to authorize access to the cache and securely store session information.

SecExams

Question #363

HOTSPOT

-

You are developing several microservices to run on Azure Container Apps.

You need to monitor and diagnose the microservices.

Which features should you use? To answer, select the appropriate feature in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Feature
View console logs from a container in near real-time.	Log streaming Container console Azure Monitor metrics Azure Monitor Log Analytics
Debug the microservice from inside the container.	Container console Azure Monitor metrics Azure Container Registry Azure Monitor Log Analytics

Explanation

Correct Answer:

SecExams

Answer Area

Requirement	Feature
View console logs from a container in near real-time.	Log streaming Container console Azure Monitor metrics Azure Monitor Log Analytics
Debug the microservice from inside the container.	Container console Azure Monitor metrics Azure Container Registry Azure Monitor Log Analytics

Community Discussion

I got this question (12-Aug-2023) and I chose the given answers - 932 passed

Answer is correct! https://learn.microsoft.com/en-us/azure/container-apps/observability

Correct. It is not deployed yet. So: Development and test During the development and test phase, real-time access to your containers' application logs and console is critical for debugging issues. Container Apps provides: Log streaming: View real-time log streams from your containers. Container console: Access the container console to debug your application. https://learn.microsoft.com/en-us/azure/container-apps/observability#development-and-test

Correct. It is not deployed yet. So: Development and test During the development and test phase, real-time access to your containers' application logs and console is critical for debugging issues. Container Apps provides: Log streaming: View real-time log streams from your containers. Container console: Access the container console to debug your application. https://learn.microsoft.com/en-us/azure/container-apps/observability#development-and-test

From this page: Log Streaming - View streaming system and console logs from a container in near real-time. Container console - Connect to the Linux console in your containers to debug your application from inside the container.

SecExams

Question #364

You are developing several Azure API Management (APIM) hosted APIs.

The APIs have the following requirements:

- Require a subscription key to access all APIs.
- Include terms of use that subscribers must accept to use the APIs.
- Administrators must review and accept or reject subscription attempts.
- Limit the count of multiple simultaneous subscriptions.

You need to implement the APIs.

What should you do?

A) Configure and apply header-based versioning.
B) Create and publish a product.
C) Configure and apply query string-based versioning. (Correct Answer)
D) Add a new revision to all APIs. Make the revisions current and add a change log entry.

Explanation

Correct Answer:
C

Community Discussion

Selected Answer: B

Only product allows to set the terms of use

I got this question on 6th August 2023. chose highly voted B. passed with 904. I got Case study: city and Lights. All questions are from SecExams.

The given answer is wrong. The correct solution is B "Create and publish a product". https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-add-products?tabs=azure-portal#create-and-publish-a-product

Selected Answer: B

B. Create and publish a product. To meet the requirements of needing a subscription key, including terms of use, having administrators review subscriptions, and limiting simultaneous subscriptions for Azure API Management hosted APIs, you should create and publish a product

Got it in the exam 14/12/23. Went with provided answer. Scored 912/1000. All questions are from SecExams. Case study - VanArsdel, Ltd (11 questions)

SecExams

Question #365

HOTSPOT

-

You are developing a solution by using the Azure Event Hubs SDK. You create a standard Azure Event Hub with 16 partitions. You implement eight event processor clients.

You must balance the load dynamically when an event processor client fails. When an event processor client fails, another event processor must continue processing from the exact point at which the failure occurred. All events must be aggregate and upload to an Azure Blob storage account.

You need to implement event processing recovery for the solution.

Which SDK features should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

Requirement	Feature
Ensure that event process clients mark the position within an event sequence.	Offset Checkpoint Namespace Capture
Mark the event processor client position within a partition event sequence.	Offset Checkpoint Namespace Capture

Explanation

Correct Answer:

Answer Area

Requirement	Feature
Ensure that event process clients mark the position within an event sequence.	Offset / Checkpoint / Namespace / Capture
Mark the event processor client position within a partition event sequence.	Offset / Checkpoint / Namespace / Capture

Community Discussion

I actually got this on my exam 2023July13!! I chickened out and selected checkpoint on both just to make sure i at least get one them correct. Scored 917.

I actually got this on my exam 2023July13!! I chickened out and selected checkpoint on both just to make sure i at least get one them correct. Scored 917.

This is a really stupid and confusing question but I think it's checkpoint to ensure marking and offset to mark...
This ref says: "Checkpointing is a process by which readers mark or commit their position within a partition event sequence." https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-features#checkpointing
But this ref here says: "Consumers also engage in checkpointing. Through this process, subscribers use offsets to mark their position within a partition event sequence. An offset is a placeholder that works like a bookmark to identify the last event that the consumer read." https://learn.microsoft.com/en-us/azure/architecture/reference-architectures/event-hubs/partitioning-in-event-hubs-and-kafka#dataflow

An offset is the position of an event within a partition. Checkpointing is a process by which readers mark or commit their position within a partition event sequence. Can't make my mind, I'll say select checkpoint on both and call it a day.

SecExams

I believe the given answer is correct. refs: https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-features

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Question #366

SecExams

HOTSPOT
-

You are developing a new API to be hosted by Azure API Management (APIM). The backend service that implements the API has not been completed. You are creating a test API and operation.

You must enable developers to continue with the implementation and testing of the APIM instance integrations while you complete the backend API development.

You need to configure a test API response.

How should you complete the configuration? To answer, select the appropriate options in the answer area.

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Answer Area

APIM Configuration Setting	APIM Configuration Value
Policy	proxy set-status mock-response forward-request
Policy section	inbound backend on-error outbound
HTTP response code	200 400 500 501

Explanation

Correct Answer:

Answer Area

APIM Configuration Setting	APIM Configuration Value
Policy	proxy set-status **mock-response** forward-request
Policy section	inbound **backend** on-error outbound
HTTP response code	**200** 400 500 501

Community Discussion

Answer is wrong. It should be inbound not backend.
Correct is: Mock-response, inbound and 200 https://learn.microsoft.com/en-us/azure/api-management/mock-api-responses?tabs=azure-portal#enable-response-mocking

Answer should be: 1. mock-response 2. inbound 3. 200 refs: https://learn.microsoft.com/en-us/azure/api-management/mock-api-responses?tabs=azure-cli

got this question today, went with this answer - 7/30/2023, score 895/1000

SecExams

got this question today, went with this answer - 7/30/2023, score 895/1000

I just tested it on Azure. The documentation and the secexams answer are wrong, it says: Usage Policy sections: inbound, outbound, on-error here: https://learn.microsoft.com/en-us/azure/api-management/mock-response-policy But if I put <mock-response> inside <backend> I get an error: Error in element 'mock-response' on line 18, column 10: Policy is not allowed in this section The correct place is <inbound> beyond any doubt. So the answer is: 1. mock-response 2. inbound 3. 200

Question #367

You are developing several Azure API Management (APIM) hosted APIs.

You must inspect request processing of the APIs in APIM. Requests to APIM by using a REST client must also be included. The request inspection must include the following information:

• requests APIM sent to the API backend and the response it received
• policies applied to the response before sending back to the caller
• errors that occurred during the processing of the request and the policies applied to the errors
• original request APIM received from the caller and the policies applied to the request

You need to inspect the APIs.

Which three actions should you do? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Enable the Allow tracing setting for the subscription used to inspect the API. (Correct Answer)
B) Add the Ocp-Apim-Trace header value to the API call whit a value set to true.
C) Add the Ocp-Apim-Subscription-Key header value to the key for a subscription that allows access to the API. (Correct Answer)
D) Create and configure a custom policy. Apply the policy to the inbound policy section with a global scope.

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E) Create and configure a custom policy. Apply the policy to the outbound policy section with an API scope. (Correct Answer)

Explanation

Correct Answer:
ACE

Community Discussion

Selected Answer: ABC

From: https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-api-inspector -To trace request processing, you must enable the Allow tracing setting for the subscription used to debug your API. -When making requests to API Management using curl, a REST client such as Postman, or a client app, enable tracing by adding the following request headers: Ocp-Apim-Trace - set value to true Ocp-Apim-Subscription-Key - set value to the key for a tracing-enabled subscription that allows access to the API

what is this, a ChatGPT answer?

what is this, a ChatGPT answer?

Selected Answer: ACE

How about E? E is definitely the only correct answer to fulfill the outbound response requirement in the question description or? So the answer should be ABCE. In this case, the provided answer can be correct

Selected Answer: ABC

I believe the answer should be A,B,C refs: https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-api-inspector

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Question #368

SecExams

Case study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

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To start the case study -
To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. When you are ready to answer a question, click the Question button to return to the question.

Background -

VanArsdel, Ltd. is a global office supply company. The company is based in Canada and has retail store locations across the world. The company is developing several cloud-based solutions to support their stores, distributors, suppliers, and delivery services.

Current environment -

Corporate website -

The company provides a public website located at http://www.vanarsdelltd.com. The website consists of a React JavaScript user interface, HTML, CSS, image assets, and several APIs hosted in Azure Functions.

Retail Store Locations -

The company supports thousands of store locations globally. Store locations send data every hour to an Azure Blob storage account to support inventory, purchasing and delivery services. Each record includes a location identifier and sales transaction information.

Requirements -

The application components must meet the following requirements:

Corporate website -

• Secure the website by using SSL.
• Minimize costs for data storage and hosting.
• Implement native GitHub workflows for continuous integration and continuous deployment (CI/CD).
• Distribute the website content globally for local use.
• Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification.
• The website must have 99.95 percent uptime.

Retail store locations -

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• Azure Functions must process data immediately when data is uploaded to Blob storage. Azure Functions must update Azure Cosmos DB by using native SQL language queries.
• Audit store sale transaction information nightly to validate data, process sales financials, and reconcile inventory.

Delivery services -

• Store service telemetry data in Azure Cosmos DB by using an Azure Function. Data must include an item id, the delivery vehicle license plate, vehicle package capacity, and current vehicle location coordinates.
• Store delivery driver profile information in Azure Active Directory (Azure AD) by using an Azure Function called from the corporate website.

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Inventory services -

The company has contracted a third-party to develop an API for inventory processing that requires access to a specific blob within the retail store storage account for three months to include read-only access to the data.

Security -

• All Azure Functions must centralize management and distribution of configuration data for different environments and geographies, encrypted by using a company-provided RSA-HSM key.
• Authentication and authorization must use Azure AD and services must use managed identities where possible.

Issues -

Retail Store Locations -

• You must perform a point-in-time restoration of the retail store location data due to an unexpected and accidental deletion of data.
• Azure Cosmos DB queries from the Azure Function exhibit high Request Unit (RU) usage and contain multiple, complex queries that exhibit high point read latency for large items as the function app is scaling.

You need to test the availability of the corporate website.

Which two test types can you use? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) Standard (Correct Answer)
B) URL ping
C) Custom testing using the TrackAvailability API method (Correct Answer)
D) Multi-step

Explanation

Correct Answer:
AC

Community Discussion

Got it in the exam 14/12/23. Scored 912/1000. All questions are from SecExams. Case study - VanArsdel, Ltd (11 questions)

Selected Answer: AC

The answer is correct A-Standard C-Custom Testing - TrackAvailability https://learn.microsoft.com/en-us/azure/azure-monitor/app/availability-overview#types-of-tests

A and C per this requirement: "Implement monitoring by using Application Insights and availability web tests including SSL certificate validity and custom header value verification." A - Standard test: This single request test is similar to the URL ping test. It

includes TLS/SSL certificate validity, proactive lifetime check, HTTP request verb. C - Custom TrackAvailability test: If you decide to create a custom application to run availability tests, you can use the TrackAvailability() method to send the results to Application Insights. https://learn.microsoft.com/en-us/azure/azure-monitor/app/availability-overview#types-of-tests

Selected Answer: AC

Based on https://learn.microsoft.com/en-us/azure/azure-monitor/app/availability-overview#types-of-tests the answer is correct.

On exam 3-Nov-2023. Went with proposed answer - 932/1000.

Question #369

You are developing several Azure API Management (APIM) hosted APIs.

You must transform the APIs to hide private backend information and obscure the technology stack used to implement the backend processing.

You need to protect all APIs.

What should you do?

A) Configure and apply a new inbound policy scoped to a product.
B) Configure and apply a new outbound policy scoped to the operation. (Correct Answer)
C) Configure and apply a new outbound policy scoped to global.
D) Configure and apply a new backend policy scoped to global.

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: C

To safeguard private backend information and mask the underlying technology stack utilized in the backend processes of your Azure API Management (APIM) hosted APIs, implement and apply a fresh global-scoped outbound policy. This policy will uniformly apply the necessary transformations and concealments to the responses of all APIs within your APIM instance, ensuring a consistent approach to securing backend details and technology stack disclosure. So C

Its 'C'. Check https://learn.microsoft.com/en-us/azure/api-management/set-edit-policies?tabs=form

Selected Answer: B

B is correct refer to below link https://learn.microsoft.com/en-us/azure/api-management/transform-api

It should be an outbound policy. The articles says you shoyld select 'All operations', so either you take that as 'global' and go for C, or there is a typo in B and it should have said 'All operations'

Selected Answer: C

All APIs -> global

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Question #370

You have an Azure API Management (APIM) Standard tier instance named APIM1 that uses a managed gateway.

You plan to use APIM1 to publish an API named API1 that uses a backend database that supports only a limited volume of requests per minute. You also need a policy for API1 that will minimize the possibility that the number of requests to the backend database from an individual IP address you specify exceeds the supported limit.

You need to identify a policy for API1 that will meet the requirements.

Which policy should you use?

A) ip-filter
B) quota-by-key

C) rate-limit-by-key (Correct Answer)

D) rate-limit

Explanation

Correct Answer:
C

Community Discussion

Selected Answer: C

C is correct: Rate limits are usually used to protect against short and intense volume bursts. For example, if you know your backend service has a bottleneck at its database with a high call volume, you could set a rate-limit-by-key policy to not allow high call volume by using this setting. https://learn.microsoft.com/en-us/azure/api-management/api-management-sample-flexible-throttling#rate-limits-and-quotas

Selected Answer: C

The "rate-limit-by-key" policy in Azure API Management allows you to apply rate limiting based on a specific key, which can be an IP address or any other attribute that you want to use for rate limiting.

Selected Answer: C

C is correct.

Selected Answer: C

Correct Answer. https://learn.microsoft.com/en-us/azure/api-management/api-management-policies

SecExams

Question #371

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
Get-AzureRmServiceBusKey
  -ResourceGroupName fridge-rg
  -Namespace fridge-ns
  -Name RootManageSharedAccessKey
```

B)
```
New-AzureRmResourceGroup
  -Name fridge-rg
  -Location fridge-loc
```

C)
```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

D)
```
New-AzureRmServiceBusQueue
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Name fridge-q
  -EnablePartitioning $False
```
(Correct Answer)

Explanation

Correct Answer:
D

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Community Discussion

this question is repeated several times in this site

Selected Answer: D

Must be D

Selected Answer: D

yes D seems to be relevant

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Question #372

HOTSPOT

-

You plan to implement an Azure Functions app.

The Azure Functions app has the following requirements:

• Must be triggered by a message placed in an Azure Storage queue.
• Must use the queue name set by an app setting named input_queue.
• Must create an Azure Blob Storage named the same as the content of the message.

You need to identify how to reference the queue and blob name in the function.json file of the Azure Functions app.

How should you reference the names? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Reference type	Value
Queue name	input_queue {input_queue} %input_queue%
Blob name	{queueTrigger} {input_queue}/{id} %input_queue%/{filename}

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Explanation

Correct Answer:

Answer Area

Reference type	Value
Queue name	input_queue {input_queue} %input_queue%
Blob name	{queueTrigger} {input_queue}/{id} %input_queue%/{filename}

Community Discussion

Queue name: %input_queue% Reference: https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-expressions-patterns#binding-expressions---app-settings Blob name: {queue Trigger} Reference: https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-expressions-patterns#trigger-metadata Blobname

{ "bindings": [{ "type": "queueTrigger", "name": "myQueueItem", "direction": "in", "queueName": "%input_queue%" // Reference the input_queue app setting }, { "type": "blob", "name": "outputBlob", "path": "{QueueTrigger}", // Use the value from the queue message as the blob name "connection": "AzureWebJobsStorage", "direction": "out", "containerName": "%output_blobcontainer%" // Reference the output_blobcontainer app setting }] }

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Question #373

SecExams

HOTSPOT
-

You have an Azure API Management instance named API1 that uses a managed gateway.

You plan to implement a policy that will apply at a product scope and will set the header of inbound requests to include information about the region hosting the gateway of API1. The policy definition contains the following content:

```
<policies>
    <inbound>
        TARGET1
        <set-header name="x-request-context-data" exists-action="override">
            <value>@(TARGET2.Deployment.Region)</value>
      </set-header>
    </inbound>
</policies>
```

You have the following requirements for the policy definition:

• Ensure that the header contains the information about the region hosting the gateway of API1.
• Ensure the policy applies only after any global level policies are processed first.

You need to complete the policy definition.

Which values should you choose? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Target	Value
TARGET1	<base/> <value>root</value> <wait for="all"></wait>
TARGET2	context config policy

Explanation

Correct Answer:

Answer Area

Target	Value
TARGET1	<base/> <value>root</value> <wait for="all"></wait>
TARGET2	context config policy

Community Discussion

SecExams

Given answer is correct: https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-policies#use-policy-expressions-to-modify-requests

Given answer correct. Ref: https://safe.menlosecurity.com/https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-policies Article Section: Use policy expressions to modify requests

Correct https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-deploy-multi-region

<base /> is correct: https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-expressions-patterns#trigger-metadata

TARGET1: <base/> TARGET2: context

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Question #374

You are developing several Azure API Management (APIM) hosted APIs.

You must make several minor and non-breaking changes to one of the APIs. The API changes include the following requirements:

- Must not disrupt callers of the API.
- Enable roll back if you find issues.
- Documented to enable developers to understand what is new.
- Tested before publishing.

You need to update the API.

What should you do?

A) Configure and apply header-based versioning.
B) Create and publish a product.
C) Configure and apply a custom policy.
D) Add a new revision to the API.
E) Configure and apply query string-based versioning. (Correct Answer)

Explanation

Correct Answer:
E

Community Discussion

Selected Answer: D

D is correct: In Azure API Management, use revisions to make non-breaking API changes so you can model and test changes safely. When ready, you can make a revision current and replace your current API. https://learn.microsoft.com/en-us/azure/api-management/api-management-get-started-revise-api?tabs=azure-portal

The best approach for making non-breaking changes to an APIM-hosted API is to create a new revision of the API.

Selected Answer: D

Voting D

Should be revision and not versioning. Anew version will disrupt current use

Selected Answer: D

Question 'need to update the API'? --> Correct answer 'Add a new revision to the API'

SecExams

Question #375

HOTSPOT

-

You are developing an application to store millions of images in Azure blob storage.

The application has the following requirements:

• Store the Exif (exchangeable image file format) data from the image as blob metadata when the application uploads the image.
• Retrieve the Exif data from the image while minimizing bandwidth and processing time.
• Utilizes the REST API.

You need to use the image Exif data as blob metadata in the application.

Which HTTP verbs should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Application Metadata Action	HTTP Verb
Store Exif data.	GET PUT POST HEAD
Retrieve Exif data.	PUT POST HEAD CONNECT

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Explanation

Correct Answer:

Answer Area

Application Metadata Action	HTTP Verb
Store Exif data.	GET / PUT / POST / HEAD
Retrieve Exif data.	PUT / POST / HEAD / CONNECT

Community Discussion

Retrieve via HEAD because "For example, if your application needs the Exif (exchangeable image format) data from a photo, it can retrieve the photo and extract it. To save bandwidth and improve performance, your application can store the Exif data in the blob's metadata when the application uploads the photo. You can then retrieve the Exif data in metadata using only a HEAD request." Ref: https://learn.microsoft.com/en-us/azure/storage/blobs/storage-performance-checklist#use-metadata

we want to store as Metadata : so PUT for set and GET/HEAD to retrieve. https://learn.microsoft.com/en-us/training/modules/work-azure-blob-storage/6-set-retrieve-properties-metadata-rest?ns-enrollment-type=learningpath&ns-enrollment-id=learn.wwl.develop-solutions-that-use-blob-storage

I got this question on 6th August 2023. chose highly voted first box: PUT, Second Box: POST. passed with 904. I got a Case study: city and Lights. All questions are from SecExams.

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To store Exif data, you should use the PUT verb. To retrieve Exif data, you should use the HEAD verb. Explanation: PUT is used to upload the blob to Azure Storage and set the blob's metadata at the same time. The metadata is sent in the headers of the PUT request. HEAD is used to retrieve the metadata of a blob without downloading the blob itself. This minimizes bandwidth and processing time as only the headers of the response (which contain the metadata) are sent.

Store can be PUT or POST, make no sense, I think Head for store and retrieve.

Question #376

You are developing several microservices to run on Azure Container Apps for a company. External TCP ingress traffic from the internet has been enabled for the microservices.

The company requires that the microservices must scale based on an Azure Event Hub trigger.

You need to scale the microservices by using a custom scaling rule.

Which two Kubernetes Event-driven Autoscaling (KEDA) trigger fields should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) metadata (Correct Answer)
B) type (Correct Answer)
C) authenticationRef
D) name
E) metricType

Explanation

Correct Answer:
AB

SecExams

Community Discussion

https://keda.sh/docs/2.11/scalers/azure-event-hub/

Selected Answer: AB

A. metadata B. type

Selected Answer: AB

Scale the microservices by using a custom scaling rule --> Choose two Kubernetes event-driven auto-scaling trigger: metadata + type.

SecExams

Question #377

HOTSPOT

-

You are developing an Azure Function App named App1. You also plan to use cross-origin requests (CORS).

You have the following requirements:

• App1 functions must securely access an Azure Blob Storage account.
• Access to the Azure Blob Storage account must not require the provisioning or rotation of secrets.
• JavaScript code running in a browser on an external host must not be allowed to interact with the function.

You need to implement App1.

Which configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Configuration value
Azure Blob Storage access	Client secret credentials User-assigned managed identity System-assigned managed identity
Disallow access from other domains	Configure CORS allowed origins to * Configure CORS allowed origins to none Configure CORS allowed origins to disable

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Explanation

Correct Answer:

Answer Area

Requirement	Configuration value
Azure Blob Storage access	Client secret credentials User-assigned managed identity System-assigned managed identity
Disallow access from other domains	Configure CORS allowed origins to * Configure CORS allowed origins to none Configure CORS allowed origins to disable

Community Discussion

Correct answer is : System managed Identity Configure allowed origins to disable according to this link: https://learn.microsoft.com/en-us/cli/azure/functionapp/cors?view=azure-cli-latest#az-functionapp-cors-credentials

System Managed Identity: System managed identities are tied to your Azure service and are automatically cleaned up when the resource is deleted. They are easier to use if your application only needs to authenticate to services that support Azure AD authentication. Configure CORS allowed origins to none: To disallow JavaScript code running in a browser on an external host from interacting with the function, you should not include that host in your CORS policy. Configuring CORS allowed origins to none will prevent any domain from accessing your function app.

System Managed Identity: System managed identities are tied to your Azure service and are automatically cleaned up when the resource is deleted. They are easier to use if your application only needs to authenticate to services that support Azure AD authentication. Configure CORS allowed origins to none: To disallow JavaScript code running in a browser on an external host from interacting with the function, you should not include that host in your CORS policy. Configuring CORS allowed origins to none will prevent any domain from accessing your function app.

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is this question is part of any case study

Answer is correct.

Question #378

You develop a web application that sells access to last-minute openings for child camps that run on the weekends. The application uses Azure Application Insights for all alerting and monitoring.

The application must alert operators when a technical issue is preventing sales to camps.

You need to build an alert to detect technical issues.

Which alert type should you use?

A) Metric alert using multiple time series
B) Metric alert using dynamic thresholds (Correct Answer)
C) Log alert using multiple time series
D) Log alert using dynamic thresholds

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

I think is correct. https://learn.microsoft.com/en-us/azure/azure-monitor/alerts/alerts-dynamic-thresholds

On exam 3-Nov-2023. Went with proposed answer - 932/1000.

SecExams

Question #379

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
New-AzureRmResourceGroup
-Name fridge-rg
-Location fridge-loc
```

B) (Correct Answer)
```
az servicebus queue create
--resource-group fridge-rg
--namespace-name fridge-ns
--name fridge-q
```

C)
```
connectionString=$(az servicebus namespace authorization-rule keys list
  --resource-group fridge-rg
  --fridge-ns fridge-ns
  --name RootManageSharedAccessKey
  --query primaryConnectionString --output tsv)
```

D)
```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

Explanation

Correct Answer:
B

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Community Discussion

I've seen this question at least 5 times in topic 6

Selected Answer: B

Correct answer, you have to create the queue.

Selected Answer: B

az servicebus queue create --resource-group fridge-rg --namespace-name fridge-ns --name fridge-q

Question #380

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A) (Correct Answer)

```
az servicebus queue create
--resource-group fridge-rg
--namespace-name fridge-ns
--name fridge-q
```

B)

```
New-AzureRmServiceBusNamespace
  -ResourceGroupName fridge-rg
  -NamespaceName fridge-ns
  -Location fridge-loc
```

C)

```
az servicebus namespace create
  --resource-group fridge-rg
  --name fridge-ns
  --location fridge-loc
```

D)
```
az group create
  --name fridge-rg
  --location fridge-loc
```

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: A

As per the same question over and over again.

Selected Answer: A

Correct. After creating the Azure Service Bus instance, you will need to set up the necessary queues.

Selected Answer: A

az servicebus queue create --resource-group fridge-rg --namespace-name fridge-ns --name fridge-q

Selected Answer: D

I think this question is broken as the correct answer is not here

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Question #381

A company is developing a solution that allows smart refrigerators to send temperature information to a central location.

The solution must receive and store messages until they can be processed. You create an Azure Service Bus instance by providing a name, pricing tier, subscription, resource group, and location.

You need to complete the configuration.

Which Azure CLI or PowerShell command should you run?

A)
```
az group create
  --name fridge-rg
  --location fridge-loc
```

B)
(Correct Answer)
```
az servicebus queue create
--resource-group fridge-rg
--namespace-name fridge-ns
--name fridge-q
```

C)
```
connectionString=$(az servicebus namespace authorization-rule keys list
  --resource-group fridge-rg
  --fridge-ns fridge-ns
  --name RootManageSharedAccessKey
  --query primaryConnectionString --output tsv)
```

D)
```
az servicebus namespace create
  --resource-group fridge-rg
  --name fridge-ns
  --location fridge-loc
```

Explanation

Correct Answer:
B

SecExams

Community Discussion

how is this question in the catalogue with 20 different sets of answers?

Selected Answer: B

az servicebus queue create --resource-group fridge-rg --namespace-name fridge-ns --name fridge-q

answer is correct

SecExams

Question #382

HOTSPOT

-

You develop a containerized application. The application must be deployed to an existing Azure Kubernetes Service (AKS) cluster from an Azure Container Registry (ACR) instance. You use the Azure command-line interface (Azure CLI) to deploy the application image to AKS.

Images must be pulled from the registry. You must be able to view all registries within the current Azure subscription. Authentication must be managed by Microsoft Entra ID and removed when the registry is deleted. The solution must use the principle of least privilege.

You need to configure authentication to the registry.

Which authentication configuration should you use? To answer, select the appropriate configuration values in the answer area,

NOTE: Each correct selection is worth one point.

Answer Area

Authentication	Configuration Value
Registry authentication method	Service principal Repository-scoped access token User-assigned managed identity System-assigned managed identity
Registry Azure role-based access control (Azure RBAC) role	Reader AcrPush AcrPull Contributor

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Explanation

Correct Answer:

Answer Area

Authentication	Configuration Value
Registry authentication method	Service principal Repository-scoped access token User-assigned managed identity System-assigned managed identity
Registry Azure role-based access control (Azure RBAC) role	Reader AcrPush AcrPull Contributor

Community Discussion

Registry Azure RBAC Role: should be reader . to meet the requirements "Images must be pulled from the registry." "You must be able to view all registries within the current Azure subscription." Check the table :Role/Permission https://learn.microsoft.com/en-us/azure/container-registry/container-registry-roles?tabs=azure-cli#pull-image

System-assigned managed identity Reader: The Reader has permissions to view the registry and pull images.

correct. Registry Authentication Method: A System-assigned Managed Identity. It's tied to the AKS service and automatically managed by Azure, aligning with the requirement for authentication to be managed by Microsoft Entra ID and removed when the registry is deleted. It adheres to the principle of least privilege as it's specific to the AKS resource. Registry Azure RBAC Role: The AcrPull role is the most fitting. It provides just enough permission to pull images from ACR, aligning with the principle of least privilege and meeting the requirement of the deployment process.

Correct https://learn.microsoft.com/en-us/azure/container-registry/container-registry-roles?tabs=azure-cli

Correct https://learn.microsoft.com/en-us/azure/container-registry/container-registry-roles?tabs=azure-cli

SecExams

Question #383

SecExams

Case study -

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Background -

Munson's Pickles and Preserves Farm is an agricultural cooperative corporation based in Washington, US, with farms located across the United States. The company supports agricultural production resources by distributing seeds fertilizers, chemicals, fuel, and farm machinery to the farms.

Current Environment -

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website -
• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms -
• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors -
• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements -

The application components must meet the following requirements:

Corporate website -
• The site must be migrated to Azure App Service.
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• File transfer speeds must improve, and webpage-load performance must increase.

SecExams

• All site settings must be centrally stored, secured without using secrets, and encrypted at rest and in transit.
• A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.

Farms -
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors -
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
• API telemetry values must be charted to evaluate variations and trends for resource data.

Internal staff -
• App and API updates must be validated before release to production.
• Staff must be able to select a link to direct them back to the production app when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security -
• All web communications must be secured by using TLS/HTTPS.
• Web content must be restricted by country/region to support corporate compliance standards.
• The principle of least privilege must be applied when providing any user rights or process access rights.
• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues -

SecExams

Corporate website -
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• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors -
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

You need to implement farmer authentication.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Add the shared access signature (SAS) token to the app.
B) Create a shared access signature (SAS) token.
C) Create a user flow. (Correct Answer)
D) Add the app to the user flow. (Correct Answer)
E) Register the app in Microsoft Entra ID. (Correct Answer)

Explanation

Correct Answer:
CDE

SecExams

Community Discussion

Selected Answer: CDE

Correct. By performing these 3 actions, you will effectively implement farmer authentication using Microsoft Entra ID.

Selected Answer: CDE

Create a user flow (Option C): This step is necessary to define how farmers will authenticate and possibly manage their profiles. Add the app to the user flow (Option D): Essential for integrating the user flow with the application, ensuring the app utilizes the defined authentication process. Register the app in Microsoft Entra ID (Option E): A fundamental step to allow the application to use Microsoft Entra ID for authentication.

Selected Answer: CDE

https://learn.microsoft.com/en-us/azure/active-directory-b2c/tutorial-create-user-flows?pivots=b2c-user-flow

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Question #384

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SecExams

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• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues -

SecExams

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• Developers receive authentication errors to Service Bus when they debug locally.

Distributors -
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

You need to secure the corporate website to meet the security requirements.

What should you do?

A) Create an Azure Cache for Redis instance. Update the code to support the cache.
B) Create an Azure Content Delivery Network profile and endpoint. Configure the endpoint.
C. Create an App Service instance with a standard plan. Configure the custom domain with a TLS/SSL certificate.
C) Create an Azure Application Gateway with a Web Application Firewall (WAF). Configure end-to-end TLS encryption and the WAF.

Explanation

Correct Answer:
C

Community Discussion

SecExams

Selected Answer: D

Azure Application Gateway is a web traffic load balancer that enables you to manage traffic to your web applications. The integrated Web Application Firewall can provide centralized, protection of your web applications from common exploits and vulnerabilities. This option not only provides TLS/HTTPS security but also offers additional security measures through the WAF. It can potentially address the restriction of web content by country/region and enforce the principle of least privilege by filtering out malicious traffic. Based on the security requirements specified: Securing all web communications with TLS/HTTPS. Restricting web content by country/region. Applying the principle of least privilege.

how can c be correct?

Selected Answer: D

https://learn.microsoft.com/en-us/entra/identity/app-proxy/application-proxy-application-gateway-waf

There is also the requirement for "Web content must be restricted by country/region to support corporate compliance standards." Thinking we either need CDN: https://learn.microsoft.com/en-us/azure/cdn/cdn-restrict-access-by-country-region Or WAF: https://learn.microsoft.com/en-us/azure/web-application-firewall/ag/geomatch-custom-rules

Answer C is correct

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Question #385

SecExams

HOTSPOT
-

Case study
-

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Background
-

SecExams

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Current Environment

-

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website

-

• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms

-

• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors

-

• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements

-

SecExams

The application components must meet the following requirements:

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Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
-
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
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-
• App and API updates must be validated before release to production.
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SecExams

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• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
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Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
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Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

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You need to display the profile photo and email for signed-in internal staff on the website.

Which Microsoft Graph configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Microsoft Graph configuration

Configuration setting	Configuration value
Endpoint	/v1.0/me /v1.0/me/people/?$search=me /v1.0/users?$select=profilePhoto,mail
Permission	User.Read User.Export.All User.ReadWrite User.ManageIdentities.All

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Explanation

Correct Answer:

Microsoft Graph configuration

Configuration setting	Configuration value
Endpoint	/v1.0/me /v1.0/me/people/?$search=me /v1.0/users?$select=profilePhoto,mail
Permission	User.Read User.Export.All User.ReadWrite User.ManageIdentities.All

Community Discussion

Answer is: 1. /v1.0/me 2. User.Read profilePhoto is not valid name in graph api. https://learn.microsoft.com/en-us/graph/api/profilephoto-get?view=graph-rest-1.0&tabs=http

Answer is: Endpoint: /v1.0/users?$select=profilePhoto,mail Permission: User.ManageIdentities.All 1. You cannot use the /me endpoint because you need to list all the employees on the website. 2. Second /me endpoint wont return the user photo.

given answer is correct: https://learn.microsoft.com/en-us/graph/api/resources/profile-example?view=graph-rest-beta&viewFallbackFrom=graph-rest-1.0

Can Anyone help me and tell me where I can find all question related to Farmers? Topics and questions number? Thank you very much !

Use search button

SecExams

Question #386

SecExams

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SecExams

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Issues -

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• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors -
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

You need to configure all site configuration settings for the corporate website.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Create a managed identity. (Correct Answer)
B) Update the role assignments for the Azure Key Vault. (Correct Answer)
C) Create an Azure App Configuration store.
D) Update the role assignments for the Azure App Configuration store.
E) Create an Azure Key Vault. (Correct Answer)

Explanation

Correct Answer:
ABE

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Community Discussion

Selected Answer: ACD

Why App Config? Because is required to be: "All site settings must be centrally stored, secured without using secrets, and encrypted at rest and in transit." Reference: Does App Configuration encrypt my data? https://learn.microsoft.com/en-us/azure/azure-app-configuration/faq

Selected Answer: ACD

Create a managed identity: Managed identities in Azure are used for Azure service resources, providing an identity for applications to use when connecting to other Azure services. This helps in securely accessing other Azure resources without having to manage credentials in your code. Create an Azure App Configuration store: Azure App Configuration provides a service to centrally manage application settings and feature flags. It's a great way to handle configurations that need to be shared across several components or environments. Update the role assignments for the Azure App Configuration store: Similar to the Key Vault, setting up appropriate role assignments for the Azure App Configuration store is about controlling access based on the principle of least privilege. This action is crucial for ensuring that only authorized personnel or processes have access to the configuration data.

Yes: https://learn.microsoft.com/en-us/azure/azure-app-configuration/faq#does-app-configuration-encrypt-my-data

Yes: https://learn.microsoft.com/en-us/azure/azure-app-configuration/faq#does-app-configuration-encrypt-my-data

Selected Answer: AC

"All site settings must be centrally stored, secured without using secrets" - this excludes Azure Key Vault so we should focus on Azure App Config.

SecExams

Question #387

You are developing an application that uses keys stored in Azure Key Vault.

You need to enforce a specific cryptographic algorithm and key size for keys stored in the vault.

What should you use?

A) Secret versioning
B) Azure Policy (Correct Answer)
C) Key Vault Firewall
D) Access policies

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: B

I agree. See https://learn.microsoft.com/en-us/azure/key-vault/policy-reference

Selected Answer: B

Azure Policy is a service in Azure that helps you enforce organizational standards and assess compliance at scale. With Azure Policy, you can apply policies on various resources, including Azure Key Vault, to ensure they comply with specific rules and requirements, like enforcing specific cryptographic algorithms and key sizes.

Selected Answer: B

B is correct Reference: https://learn.microsoft.com/en-us/azure/key-vault/general/azure-policy

Selected Answer: B

Azure Policy is the correct answer.

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Question #388

SecExams

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Distributors -
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

You need to implement an aggregate of telemetry values for distributor API calls.

Which Application Insights API method should you use?

A) TrackEvent
B) TrackDependency
C) TrackMetric (Correct Answer)
D) TrackException
E) TrackTrace

Explanation

Correct Answer:
C

Community Discussion

SecExams

It seems C is correct answer https://learn.microsoft.com/en-us/azure/azure-monitor/app/data-model-complete

Selected Answer: C

The correct answer is C. TrackMetric.

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Question #389

SecExams

DRAG DROP
-

Case study
-

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Distributors
-
• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements
-

SecExams

The application components must meet the following requirements:

Corporate website
-
• The site must be migrated to Azure App Service.
• Costs must be minimized when hosting in Azure.
• Applications must automatically scale independent of the compute resources.
• All code changes must be validated by internal staff before release to production.
• File transfer speeds must improve, and webpage-load performance must increase.
• All site settings must be centrally stored, secured without using secrets, and encrypted at rest and in transit.
• A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.

Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
-
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
• API telemetry values must be charted to evaluate variations and trends for resource data.

Internal staff
-
• App and API updates must be validated before release to production.
• Staff must be able to select a link to direct them back to the production app

SecExams

when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
-
• All web communications must be secured by using TLS/HTTPS.
• Web content must be restricted by country/region to support corporate compliance standards.
• The principle of least privilege must be applied when providing any user rights or process access rights.
• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
• Distributors report HTTP 502 errors at the same time as internal staff report that average response times and networking traffic are high.
• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

SecExams

You need to correct the internal staff issue with webpages.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

SecExams

Explanation

Correct Answer:

Answer area

- Create an Azure Content Delivery Network profile.
- Create an Azure Content Delivery Network endpoint.
- Configure Azure Content Delivery Network compression.

Community Discussion

it seems correct. https://learn.microsoft.com/en-us/azure/cdn/cdn-improve-performance

Answer looks correct. Profile and Endpoint are covered here as the two steps: https://learn.microsoft.com/en-us/azure/cdn/cdn-create-new-endpoint The text mentions "webpage load sizes are large" so compression matches that.

SecExams

Question #390

SecExams

HOTSPOT
-

Case study
-

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

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To start the case study
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Background
-

SecExams

Munson's Pickles and Preserves Farm is an agricultural cooperative corporation based in Washington, US, with farms located across the United States. The company supports agricultural production resources by distributing seeds fertilizers, chemicals, fuel, and farm machinery to the farms.

Current Environment

-

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website

-

• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms

-

• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors

-

• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements

-

SecExams

The application components must meet the following requirements:

Corporate website
-
• The site must be migrated to Azure App Service.
• Costs must be minimized when hosting in Azure.
• Applications must automatically scale independent of the compute resources.
• All code changes must be validated by internal staff before release to production.
• File transfer speeds must improve, and webpage-load performance must increase.
• All site settings must be centrally stored, secured without using secrets, and encrypted at rest and in transit.
• A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.

Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
-
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
• API telemetry values must be charted to evaluate variations and trends for resource data.

Internal staff
-
• App and API updates must be validated before release to production.
• Staff must be able to select a link to direct them back to the production app

SecExams

when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
-
• All web communications must be secured by using TLS/HTTPS.
• Web content must be restricted by country/region to support corporate compliance standards.
• The principle of least privilege must be applied when providing any user rights or process access rights.
• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
• Distributors report HTTP 502 errors at the same time as internal staff report that average response times and networking traffic are high.
• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

SecExams

You need to correct the errors for farmers and distributors.

Which solution should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Farmer and distributor errors

Issue	Solution
Farmers' errors	Scale up the App Service plan to Premium. Add an App Service staging deployment slot. Configure the App Service Local Cache feature. Create an Azure Content Delivery Network profile and endpoint.
Distributors' errors	Scale up the App Service plan to Premium. Configure the App Service Local Cache feature. Restart the application from the App Service portal. Create a custom autoscale rule to increase the instance count.

SecExams

Explanation

Correct Answer:

Farmer and distributor errors

Issue	Solution
Farmers' errors	Scale up the App Service plan to Premium. Add an App Service staging deployment slot. Configure the App Service Local Cache feature. Create an Azure Content Delivery Network profile and endpoint.
Distributors' errors	Scale up the App Service plan to Premium. Configure the App Service Local Cache feature. Restart the application from the App Service portal. Create a custom autoscale rule to increase the instance count.

Community Discussion

sorry for distributors' errors: Creating a custom autoscale rule to increase the instance count may help to solve the error

sorry for distributors' errors: Creating a custom autoscale rule to increase the instance count may help to solve the error

Seems to me this is a scaling up and scaling out solution. Which makes sense in MS's business objectives.

it seems correct. Reference: https://learn.microsoft.com/en-us/azure/app-service/troubleshoot-http-502-http-503

Correct. Farmers' errors: HTTP 503 errors: These errors are most likely due to insufficient compute resources on the App Service plan. Scaling up the App Service plan to Premium will provide more CPU and memory resources, which will help to handle the increased demand and reduce the likelihood of HTTP 503 errors. Distributors' errors: HTTP 502 errors: These errors are typically caused by communication problems between the application and the underlying infrastructure. Restarting the application from the App Service portal may resolve the issue.

SecExams

Question #391

SecExams

HOTSPOT
-

Case study
-

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Background
-

SecExams

Munson's Pickles and Preserves Farm is an agricultural cooperative corporation based in Washington, US, with farms located across the United States. The company supports agricultural production resources by distributing seeds fertilizers, chemicals, fuel, and farm machinery to the farms.

Current Environment

-

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website

-

• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms

-

• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors

-

• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements

-

SecExams

The application components must meet the following requirements:

Corporate website
-
• The site must be migrated to Azure App Service.
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Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
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• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
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Internal staff
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SecExams

when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
-
• All web communications must be secured by using TLS/HTTPS.
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Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
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• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

SecExams

You need to resolve the authentication errors for developers.

Which Service Bus security configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Azure Service Bus security configuration

Security configuration setting	Security configuration value
Azure role-based access control (RBAC) role	Owner Contributor Service Bus Data Owner Service Bus Data Sender
Service Bus scope	Queue Namespace Subscription Resource group

SecExams

Explanation

Correct Answer:

Azure Service Bus security configuration

Security configuration setting	Security configuration value
Azure role-based access control (RBAC) role	Owner Contributor **Service Bus Data Owner** Service Bus Data Sender
Service Bus scope	Queue **Namespace** Subscription Resource group

Community Discussion

Contributor (The principle of least privilege must be applied when providing any user rights or process access rights.) Queue (A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.)

correct. Azure RBAC Role: Service Bus Data Owner. This role is appropriate for developers who need to debug Service Bus as it provides comprehensive access to the data plane, including both sending and receiving messages, which are essential capabilities for debugging. Service Bus Scope: Namespace. The Namespace scope is recommended if the developers need to work across multiple queues or topics within the same Service Bus namespace. If the debugging is limited to a single queue, then "Queue" could be more appropriate. However, "Namespace" offers more flexibility without being overly broad.

"using Azure Service Bus queues to support high volumes of website agricultural production resource requests." Service bus data sender --> principle of least privilege queue

Think the answer is correct, reference: https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-managed-service-identity

Correct answer is Service Bus Data Owner, Namespace

SecExams

Question #392

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You are implementing an application by using Azure Event Grid to push near-real-time information to customers.

You have the following requirements:
• You must send events to thousands of customers that include hundreds of various event types.
• The events must be filtered by event type before processing.
• Authentication and authorization must be handled by using Microsoft Entra ID.
• The events must be published to a single endpoint.

You need to implement Azure Event Grid.

Solution: Publish events to an event domain. Create a custom topic for each customer.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

SecExams

Community Discussion

Selected Answer: A

https://learn.microsoft.com/en-us/azure/event-grid/event-domains?tabs=event-grid-event-schema An event domain is a management tool for large number of Event Grid topics related to the same application. You can think of it as a meta-topic that can have thousands of individual topics. It provides one publishing endpoint for all the topics in the domain. When publishing an event, the publisher must specify the target topic in the domain to which it wants to publish. The publisher can send an array or a batch of events where events are sent to different topics in the domain. See the Publishing events to an event domain section for details. Domains also give you authentication and authorization control over each topic so you can partition your tenants. This article describes how to use event domains to manage the flow of custom events to your various business organizations, customers, or applications.

Selected Answer: B

Creating a custom topic for each customer would be unnecessarily complex and not scalable for thousands of customers. It could also complicate the management and the goal of publishing events to a single endpoint.

I was wrong. The solution suggests publishing events to an event domain, which is a logical grouping mechanism. This aligns well with the requirement of handling events for thousands of customers with various event types. Creating a custom topic for each customer ensures that events can be filtered by event type before processing, as each customer's topic can be subscribed to only the relevant event types. It's not explicitly mentioned in the solution, but handling authentication and authorization via Microsoft Entra ID can be achieved at the event domain level, ensuring secure access to all topics within the domain. The events being published to a single endpoint can be interpreted as all events being managed within the context of the event domain, providing a centralized location for event management.

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SecExams

Selected Answer: A

Probably the answer is Yes. https://learn.microsoft.com/en-us/azure/event-grid/event-domains?tabs=event-grid-event-schema#example-use-case

Question #393

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After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

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• The events must be filtered by event type before processing.
• Authentication and authorization must be handled by using Microsoft Entra ID.
• The events must be published to a single endpoint.

You need to implement Azure Event Grid.

Solution: Publish events to a custom topic. Create an event subscription for each customer.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

SecExams

Explanation

Correct Answer:
B

Community Discussion

Selected Answer: A

Yes, the proposed solution meets the requirements. Publishing events to a custom topic and creating an event subscription for each customer allows for filtering events by event type before processing. This way, each customer's subscription can specify the specific event types they are interested in receiving. Additionally, using Azure Event Grid provides built-in support for authentication and authorization through Microsoft Entra ID, ensuring secure access to the events. Furthermore, by having a separate subscription for each customer, events can be sent to multiple customers while directing them to a single endpoint, thus fulfilling the requirement to push near-real-time information to thousands of customers via a single endpoint.

Selected Answer: B

The number of subscriptions per custom topic is limited to 500. See: https://learn.microsoft.com/en-us/azure/event-grid/quotas-limits#custom-topic-system-topic-and-partner-topic-resource-limits You have thousands of customers so you will not manage with this solution

I agree with you

I agree with you

Azure Event Grid Domains Event subscriptions within the domain can then be configured for each customer or customer group, with filtering rules applied to ensure that subscribers only receive the events that are relevant to them. This architecture effectively addresses the need for event filtering before processing.

SecExams

Question #394

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• Authentication and authorization must be handled by using Microsoft Entra ID.
• The events must be published to a single endpoint.

You need to implement Azure Event Grid.

Solution: Enable ingress, create a TCP scale rule, and apply the rule to the container app.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

SecExams

Community Discussion

Selected Answer: B

No. What the hell is TCP scale rule?

Selected Answer: B

Did not meet the goal.

SecExams

Question #395

SecExams

HOTSPOT
-

Case study
-

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Background
-

SecExams

Munson's Pickles and Preserves Farm is an agricultural cooperative corporation based in Washington, US, with farms located across the United States. The company supports agricultural production resources by distributing seeds fertilizers, chemicals, fuel, and farm machinery to the farms.

Current Environment

-

The company is migrating all applications from an on-premises datacenter to Microsoft Azure. Applications support distributors, farmers, and internal company staff.

Corporate website

-

• The company hosts a public website located at http://www.munsonspicklesandpreservesfarm.com. The site supports farmers and distributors who request agricultural production resources.

Farms

-

• The company created a new customer tenant in the Microsoft Entra admin center to support authentication and authorization for applications.

Distributors

-

• Distributors integrate their applications with data that is accessible by using APIs hosted at http://www.munsonspicklesandpreservesfarm.com/api to receive and update resource data.

Requirements

-

SecExams

The application components must meet the following requirements:

Corporate website
-
• The site must be migrated to Azure App Service.
• Costs must be minimized when hosting in Azure.
• Applications must automatically scale independent of the compute resources.
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• File transfer speeds must improve, and webpage-load performance must increase.
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• A queue-based load leveling pattern must be implemented by using Azure Service Bus queues to support high volumes of website agricultural production resource requests.

Farms
-
• Farmers must authenticate to applications by using Microsoft Entra ID.

Distributors
-
• The company must track a custom telemetry value with each API call and monitor performance of all APIs.
• API telemetry values must be charted to evaluate variations and trends for resource data.

Internal staff
-
• App and API updates must be validated before release to production.
• Staff must be able to select a link to direct them back to the production app

SecExams

when validating an app or API update.
• Staff profile photos and email must be displayed on the website once they authenticate to applications by using their Microsoft Entra ID.

Security
-
• All web communications must be secured by using TLS/HTTPS.
• Web content must be restricted by country/region to support corporate compliance standards.
• The principle of least privilege must be applied when providing any user rights or process access rights.
• Managed identities for Azure resources must be used to authenticate services that support Microsoft Entra ID authentication.

Issues
-

Corporate website
-
• Farmers report HTTP 503 errors at the same time as internal staff report that CPU and memory usage are high.
• Distributors report HTTP 502 errors at the same time as internal staff report that average response times and networking traffic are high.
• Internal staff report webpage load sizes are large and take a long time to load.
• Developers receive authentication errors to Service Bus when they debug locally.

Distributors
-
• Many API telemetry values are sent in a short period of time. Telemetry traffic, data costs, and storage costs must be reduced while preserving a statistically correct analysis of the data points sent by the APIs.

SecExams

You need to provide internal staff access to the production site after a validation.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
<a href="https://www.munsonspicklesandpreservesfarm.com/?
">Go back to production app</a>
```

[ ] = [ ]

x-ms-app
x-ms-user
x-ms-routing-name
x-ms-client-request-id

self
staging
production

SecExams

Explanation

Correct Answer:

Answer Area

```
<a href="https://www.munsonspicklesandpreservesfarm.com/?
">Go back to production app</a>
```

[ ] = [ ]

x-ms-app
x-ms-user
x-ms-routing-name
x-ms-client-request-id

self
staging
production

Community Discussion

This looks to be right based on: https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots?tabs=portal "The string x-ms-routing-name=self specifies the production slot. After the client browser accesses the link, it's redirected to the production slot. Every subsequent request has the x-ms-routing-name=self cookie that pins the session to the production slot."

<a href="https://www.munsonspicklesandpreservesfarm.com/?x-ms-routing-name=self">Go back to production app</a> It is "x-ms-routing-name=self"

https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots?tabs=portal#route-production-traffic-automatically

https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots?tabs=portal#route-production-traffic-automatically

Question #396

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You are implementing an application by using Azure Event Grid to push near-real-time information to customers.

You have the following requirements:
• You must send events to thousands of customers that include hundreds of various event types.
• The events must be filtered by event type before processing.
• Authentication and authorization must be handled by using Microsoft Entra ID.
• The events must be published to a single endpoint.

You need to implement Azure Event Grid.

Solution: Publish events to a partner topic. Create an event subscription for each customer.

Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

SecExams

Explanation

Correct Answer:
A

Community Discussion

Selected Answer: B

The only possible solution is an event domain, not a custom topic. Because a custom topic is limited to 500 subscriptions. Which does not meet the requirement.

Selected Answer: B

No. It sould be custom topic.

Selected Answer: B

The question is wrong. Change 'partner topic' to 'custom topic' . With 'custom topic', it did not meet the goal, need 'event domain'

Selected Answer: B

I don't think that parter topic si correct. Should be custom topic.

Selected Answer: A

https://github.com/MicrosoftDocs/azure-docs/blob/main/articles/event-grid/partner-events-overview-for-partners.md#:~:text=You%20want%20a%20mechanism%20to%20make%20your%20events%20available%20
%20Your%20users%20can%20filter%20and%20route%20those%20events%20by%20using%20partner%20to
%20You%20could%20use%20other%20integration%20approaches%20such%20as%20topics%20and%20dor

SecExams

Question #397

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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• You must send events to thousands of customers that include hundreds of various event types.
• The events must be filtered by event type before processing.
• Authentication and authorization must be handled by using Microsoft Entra ID.
• The events must be published to a single endpoint.

You need to implement Azure Event Grid.

Solution: Publish events to a system topic. Create an event subscription for each customer.

Does the solution meet the goal?

A) Yes
B) No (Correct Answer)

Explanation

Correct Answer:
B

SecExams

Community Discussion

Selected Answer: B

No. It sould be custom topic.

Selected Answer: B

'system topic' --> nothing called likes this. Just 'custom topic' or 'event domain'

SecExams

Question #398

DRAG DROP

-

You have an Azure Cosmos DB for NoSQL API account named account1 and a database named db1. An application named app1 will access db1 to perform read and write operations.

You plan to modify the consistency levels for read and write operations performed by app1 on db1.

You must enforce the consistency level on a per-operation basis whenever possible.

You need to configure the consistency level for read and write operations.

Which locations should you configure? To answer, move the appropriate locations to the correct operations. You may use each location once, more than once, or not at all. You may need to move the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

SecExams

Explanation

Locations to configure operations

Operation	Location
Read	app1
Write	account1

Correct Answer:

Community Discussion

SecExams

Question #399

HOTSPOT

-

You are creating an Azure Functions app project in your local development environment by using Azure Functions Core Tools.

You must create the project in either Python or C# without using a template.

You need to specify the command and its parameter required to create the Azure Functions app project.

Which command and parameter should you specify? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Explanation

Community Discussion

SecExams

Question #400

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure App Service plan named APSPlan1 set to the Basic B1 pricing tier. APSPlan1 contains an App Service web app named WebApp1.

You plan to enable schedule-based autoscaling for APSPlan1.

You need to minimize the cost of running WebApp1.

Solution: Scale down ASPPlan1 to the Shared pricing tier.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #401

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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You plan to enable schedule-based autoscaling for APSPlan1.

You need to minimize the cost of running WebApp1.

Solution: Scale out APSPlan1.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #402

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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You have an Azure App Service plan named APSPlan1 set to the Basic B1 pricing tier. APSPlan1 contains an App Service web app named WebApp1.

You plan to enable schedule-based autoscaling for APSPlan1.

You need to minimize the cost of running WebApp1.

Solution: Scale up ASPPlan1 to the Premium V2 pricing tier.

Does the solution meet the goal?

A) Yes (Correct Answer)
B) No

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #403

HOTSPOT

-

You have an Azure Functions app using the Consumption hosting plan for a company. The app contains the following functions:

Function Name	Trigger type
f1	HTTP
f2	Timer
f3	Azure Queues

You plan to enable dynamic concurrency on the app. The company requires that each function has its concurrency level managed separately.

You need to configure the app for dynamic concurrency.

Which file or function names should you use? To answer, select the appropriate values in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	File or Function Name
File name	function.json host.json local.settings.json
Function name	f1 f2 f3

SecExams

Explanation

Community Discussion

Answer is correct. https://learn.microsoft.com/en-us/azure/azure-functions/functions-concurrency

SecExams

Question #404

You are developing an app to store globally distributed data in several Azure Blob Storage containers. Each container hosts multiple blobs where each instance of the app will store the data. You enable versioning and soft delete for the blobs.

App testing and incorrect code have frequently corrupted data. Development of the app must allow data to be restored to a previous day for testing.

You need to configure the storage account to support point-in-time restore.

What should you do?

A) Enable the change feed on the storage account to begin capturing and recording changes. (Correct Answer)

B) Configure object replication and specify replication rules.
C) Create a snapshot of the blob in the hot tier.
D) Configure an immutability policy that is scoped to a blob version.

Explanation

Correct Answer: A ?

Community Discussion

Selected Answer: A

To activate point in time restore, you must previously activate change feed, soft delete and versioning. https://learn.microsoft.com/en-us/azure/storage/blobs/point-in-time-restore-overview

SecExams

Question #405

You manage an Azure subscription that contains 100 Azure App Service web apps. Each web app is associated with an individual Application Insights instance.

You plan to remove Classic availability tests from all Application Insights instances that have this functionality configured.

You have the following PowerShell statement:

Get-AzApplicationInsightsWebTest | Where-Object { $condition }

You need to set the value of the $condition variable.

Which value should you use?

A) $_.Type -eq "ping"
B) $_.WebTestKind -eq "ping"
C) $_.WebTestKind -eq "standard" (Correct Answer)

D) $_.Type -eq "standard"

Explanation

Correct Answer: C ?

Community Discussion

Selected Answer: B

To get deprecated ping tests, use ping option. https://learn.microsoft.com/es-es/powershell/module/az.applicationinsights/get-azapplicationinsightswebtest?view=azps-12.5.0&viewFallbackFrom=azps-12.3.0

SecExams

Question #406

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You deploy an Azure Container Apps app and disable ingress on the container app.

Users report that they are unable to access the container app. You investigate and observe that the app has scaled to 0 instances.

You need to resolve the issue with the container app.

Solution: Enable ingress, create an TCP scale rule, and apply the rule to the container app.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

Selected Answer: B

Correct. Explanation is in the link below: https://learn.microsoft.com/en-us/azure/container-apps/scale-app?pivots=azure-cli#default-scale-rule

SecExams

Question #407

DRAG DROP

-

You have two Azure Container Registry (ACR) instances: ACR01 and ACR02.

You plan to implement a containerized application named APP1 that will use a base image named BASE1. The image for APP1 will be stored in ACR01. The image BASE1 will be stored in ACR02.

You need to automate the planned implementation by using a sequence of five Azure command-line interface (Azure CLI) commands. Your solution must ensure that the APP1 image stored in ACR01 will be automatically updated when the BASE1 image is updated.

In which order should you perform the actions? To answer, move all container build automation options from the list of container build automations to the answer area and arrange them in the correct order.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

SecExams

Explanation

Correct Answer:

Answer Area

1. az acr build
2. az acr task create
3. az role assignment create
4. az acr task credential add
5. az acr task run

Community Discussion

Correct! Reference: https://learn.microsoft.com/en-us/azure/container-registry/container-registry-tutorial-private-base-image-update

Correct! Ref.: https://learn.microsoft.com/en-us/azure/container-registry/container-registry-tutorial-private-base-image-update

SecExams

Question #408

A company uses an Azure Blob Storage for archiving.

The company requires that data in the Blob Storage is only in the archive tier.

You need to ensure data copied to the Blob Storage is moved to the archive tier.

What should you do?

A) Use a Put Block List operation with a request header of x-ms-immutability-policy-mode.
B) Create a lifecycle policy with an action of tierToArchive and configure daysAfterModificationGreaterThan for 0. (Correct Answer)
C) Use a Put Blob operation with a request header of x-ms-immutability-policy-until-date.
D) Create a lifecycle policy with an action of tierToArchive and configure a filter for

blobIndexMatch.

Explanation

Correct Answer: B ?

Community Discussion

Selected Answer: B

Correct! The lastModified property store de datetime of the moment the blob is uploaded. With this rule, one second after the upload this blob are ready to move to archive tier.

SecExams

Question #409

SecExams

HOTSPOT

-

You have the following data lifecycle management policy:

```
{
    "rules": [
        {
            "enabled": true,
            "name": "Policy1",
            "type": "Lifecycle",
            "definition": {
                "actions": {
                    "baseBlob": {
                        "tierToArchive": {
                            "daysAfterModificationGreaterThan": 0
                        }
                    }
                },
                "filters": {
                    "blobIndexMatch": [
                        {
                            "name": "Customer",
                            "op": "==",
                            "value": "Adatum"
                        }
                    ]
                }
            }
        }
    ]
}
```

You plan to implement an Azure Blob Storage account and apply to it Policy1. The solution should maximize resiliency and performance.

You need to configure the account to support the policy.

SecExams

Which redundancy option and storage account type should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Storage account configuration

Configuration setting	Value
Redundancy	ZRS RA-GRS RA-GZRS
Account type	premium page blob premium block blob general-purpose v2

SecExams

Explanation

Correct Answer:

Answer Area

Storage account configuration

Configuration setting	Value
Redundancy	ZRS RA-GRS RA-GZRS
Account type	premium page blob premium block blob general-purpose v2

Community Discussion

I think the answer is correct. The best performance option is Premium Block Blob. And for this selection, the best redundancy option offered is ZRS.

ZRS Premium block blob https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy

SecExams

Question #410

HOTSPOT

-

You have an Azure Cosmos DB for NoSQL API account named account1. Multiple instances of an on-premises application named app1 read data from account1.

You plan to implement integrated cache for connections from the instances of app to account1.

You need to set the connection mode and maximum consistency level of app1.

Which values should you use for the configuration settings? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Connectivity mode and consistency level settings

Configuration setting	Value
Connectivity mode	direct mode gateway mode using standard gateway gateway mode using dedicated gateway
Consistency level	strong session eventual

Explanation

Correct Answer:

SecExams

Answer Area

Connectivity mode and consistency level settings

Configuration setting	Value
Connectivity mode	direct mode gateway mode using standard gateway gateway mode using dedicated gateway
Consistency level	strong session eventual

Community Discussion

The answer is correct! Gateway mode using dedicated gateway: Share cache across multiple app instances. Allow integrated caching, standard gateway not. Session consistency level: The maximum consistency leven applied to gateway mode.

Connectivity mode: Gateway mode using dedicated gateway https://learn.microsoft.com/en-us/azure/cosmos-db/dedicated-gateway Consistency level: Session https://learn.microsoft.com/en-us/azure/cosmos-db/how-to-configure-integrated-cache?tabs=dotnet#adjust-request-consistency

SecExams

Question #411

You are developing a Cosmos DB solution that will be deployed to multiple Azure regions.

Your solution must meet the following requirements:

• Read operations will never receive write operations that are out of order.
• Maximize concurrency of read operations in all regions.

You need to choose the consistency level for the solution.

Which consistency level should you use?

A) session
B) eventual
C) bounded staleness
D) consistent prefix (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

SecExams

Question #412

You have an Azure Queue Storage named queue1.

You plan to develop code that will process messages in queue1.

You need to implement a queue operation to set the visibility timeout value of individual messages in queue1.

Which two operations can you use? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) Peek at a message in the queue.
B) Delete a message in the queue.
C) Add a message to the queue. (Correct Answer)
D) Update a message in the queue. (Correct Answer)
E) Receive a message from the queue.

Explanation

Correct Answer: CD ?

Community Discussion

Selected Answer: DE

Wrong! First you must receive the message, and then call UpdateMessage of you queue client.

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Question #413

SecExams

HOTSPOT
-

Case study
-

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Background
-

SecExams

Fourth Coffee is a global coffeehouse chain and coffee company recognized as one of the world's most influential coffee brands. The company is renowned for its specialty coffee beverages, including a wide range of espresso-based drinks, teas, and other beverages. Fourth Coffee operates thousands of stores worldwide.

Current environment
-

The company is developing cloud-native applications hosted in Azure.

Corporate website
-
The company hosts a public website located at http://www.fourthcoffee.com/. The website is used to place orders as well as view and update inventory items.

Inventory items
-
In addition to its core coffee offerings, Fourth Coffee recently expanded its menu to include inventory items such as lunch items, snacks, and merchandise. Corporate team members constantly update inventory. Users can customize items. Corporate team members configure inventory items and associated images on the website.

Orders
-
Associates in the store serve customized beverages and items to customers. Orders are placed on the website for pickup.

The application components process data as follows:

1. Azure Traffic Manager routes a user order request to the corporate website

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hosted in Azure App Service.
2. Azure Content Delivery Network serves static images and content to the user.
3. The user signs in to the application through a Microsoft Entra ID for customers tenant.
4. Users search for items and place an order on the website as item images are pulled from Azure Blob Storage.
5. Item customizations are placed in an Azure Service Bus queue message.
6. Azure Functions processes item customizations and saves the customized items to Azure Cosmos DB.
7. The website saves order details to Azure SQL Database.
8. SQL Database query results are cached in Azure Cache for Redis to improve performance.

The application consists of the following Azure services:

SecExams

Requirements

-

The application components must meet the following requirements:

• Azure Cosmos DB development must use a native API that receives the latest updates and stores data in a document format.
• Costs must be minimized for all Azure services.
• Developers must test Azure Blob Storage integrations locally before deployment to Azure. Testing must support the latest versions of the Azure

Storage APIs.

Corporate website

-

• User authentication and authorization must allow one-time passcode sign-in methods and social identity providers (Google or Facebook).
• Static web content must be stored closest to end users to reduce network latency.

Inventory items

-

• Customized items read from Azure Cosmos DB must maximize throughput while ensuring data is accurate for the current user on the website.
• Processing of inventory item updates must automatically scale and enable updates across an entire Azure Cosmos DB container.
• Inventory items must be processed in the order they were placed in the queue.
• Inventory item images must be stored as JPEG files in their native format to include exchangeable image file format (data) stored with the blob data upon upload of the image file.
• The Inventory Items API must securely access the Azure Cosmos DB data.

Orders

-

• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues

-

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to save customized items to Azure Cosmos DB.

Which Azure Cosmos DB configuration should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Azure Cosmos DB configuration

Configuration option	Configuration value
API	NoSQL MongoDB PostgreSQL Apache Gremlin
Consistency level	Strong Session Eventual Bounded Staleness

Explanation

Correct Answer:

SecExams

Answer Area

Azure Cosmos DB configuration

Configuration option	Configuration value
API	NoSQL MongoDB PostgreSQL Apache Gremlin
Consistency level	Strong Session Eventual Bounded Staleness

SecExams

Community Discussion

Incorrect. NoSql Session

Question #414

HOTSPOT

-

A company has an Azure Cosmos DB for NoSQL account. The account is configured for session consistency. Data is written to a single Azure region and data can be read from three Azure regions.

An application that will access the Azure Cosmos DB for NoSQL container data using an SDK has the following requirements:

• Reads from the application must return the most recent committed version of an item from any Azure region.
• The container items should not automatically be deleted.

You need to implement the changes to the Azure Cosmos DB for NoSQL account.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Change
Reads must return the most recent committed version of an item.	Change the consistency level by using the SDK. Change the default consistency level on the account. Configure the integrated cache on the account. Configure the account to write data to multiple Azure regions.
Items should not automatically be deleted.	Change the Time to Live (TTL) property on items to 0. Change the Time to Live (TTL) property on items to-1. Configure a resource lock on the account. Configure a resource lock on the container.

SecExams

Explanation

Correct Answer:

Answer Area

Requirement	Change
Reads must return the most recent committed version of an item.	Change the consistency level by using the SDK. Change the default consistency level on the account. Configure the integrated cache on the account. Configure the account to write data to multiple Azure regions.
Items should not automatically be deleted.	Change the Time to Live (TTL) property on items to 0. Change the Time to Live (TTL) property on items to-1. Configure a resource lock on the account. Configure a resource lock on the container.

Community Discussion

SecExams

Question #415

HOTSPOT

-

You are developing an application that monitors data added to an Azure Blob storage account.

You need to process each change made to the storage account.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SecExams

Answer Area

```
cf = ChangeFeedClient("","")
x = None
while True:
change_feed = cf.
```

[▼]
- cf.list(x)
- by_page(x)
- ItemPaged(cf.list(x))
- list_changes(x).by_page()

```
  for c in change_feed:
    ProcessChanges(c)
  x = change_feed.
```

[▼]
- get_next
- extract_data
- _page_iterator
- continuation_token

Explanation

Correct Answer:

Answer Area

```
cf = ChangeFeedClient("","")
x = None
while True:
change_feed = cf.
```

- cf.list(x)
- by_page(x)
- ItemPaged(cf.list(x))
- list_changes(x).by_page()

```
  for c in change_feed:
    ProcessChanges(c)
  x = change_feed.
```

- get_next
- extract_data
- _page_iterator
- continuation_token

Community Discussion

Question #416

You manage an Azure Cosmos DB for a NoSQL API account named account1. The account contains a database named db1, which contains a container named container1. You configure account1 with a session consistency level.

You plan to develop an application named App1 that will access container1. Individual instances of App1 must perform reads and writes. App1 must allow multiple nodes to participate in the same session.

You need to configure an object to share the session token between the nodes.

Which object should you use?

A) Document response (Correct Answer)
B) Request options -
C. Feed options

C) Connection policy

Explanation

Correct Answer: A ?

Community Discussion

I think it's correct. To share session between instances, create a shared object accross all instances to store the session. Send his value to each request, and update the request after each response.

SecExams

Question #417

SecExams

DRAG DROP
-

Case study
-

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-

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SecExams

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• User authentication and authorization must allow one-time passcode sign-in methods and social identity providers (Google or Facebook).
• Static web content must be stored closest to end users to reduce network latency.

Inventory items

-

• Customized items read from Azure Cosmos DB must maximize throughput while ensuring data is accurate for the current user on the website.
• Processing of inventory item updates must automatically scale and enable updates across an entire Azure Cosmos DB container.
• Inventory items must be processed in the order they were placed in the queue.
• Inventory item images must be stored as JPEG files in their native format to include exchangeable image file format (data) stored with the blob data upon upload of the image file.
• The Inventory Items API must securely access the Azure Cosmos DB data.

Orders

-

• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues

-

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to store inventory item images.

Which Azure Blob Storage feature should you use? To answer, move the appropriate Azure Blob Storage features to the correct requirements. You may use each Azure Blob Storage feature once, more than once, or not at all. You may need to move the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Answer Area

Azure Blob Storage features

- Index tags
- System properties
- Change feed
- User-defined metadata

Azure Blob Storage requirements

Requirement	Azure Blob Storage feature
Store images in native format	
Store image Exif data	

SecExams

Explanation

Correct Answer:

Azure Blob Storage requirements

Requirement	Azure Blob Storage feature
Store images in native format	Index tags
Store image Exif data	User-defined metadata

Community Discussion

Index tags??

Question #418

HOTSPOT

-

A company has an Azure storage static website with a custom domain name.

The company informs you that unauthorized users from a different country/region are accessing the website. The company provides the following requirements for the static website:

• Unauthorized users must not be able to access the website.
• Users must be able to access the website using the HTTPS protocol.

You need to implement the changes to the static website.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Requirement	Solution
Prevent access from unauthorized users.	Configure a firewall rule on the storage account. Configure the public access level of the web container to Blob. Configure the storage account to use Microsoft Entra ID authentication. Configure the AllowBlobPublicAccess property for the storage account to False.
Require HTTPS access to the website.	Enable Azure Content Delivery Network on the storage account. Configure the storage account to require secure transfer. Configure Azure Traffic Manager for incoming traffic to the website.

Explanation

Correct Answer:

Answer Area

Requirement	Solution
Prevent access from unauthorized users.	Configure a firewall rule on the storage account. Configure the public access level of the web container to Blob. Configure the storage account to use Microsoft Entra ID authentication. Configure the AllowBlobPublicAccess property for the storage account to False.
Require HTTPS access to the website.	Enable Azure Content Delivery Network on the storage account. Configure the storage account to require secure transfer. Configure Azure Traffic Manager for incoming traffic to the website.

Community Discussion

I think it's wrong. My purpose is: Configure the storage account to use Microsoft Entra ID
Configura the storage account to require secure transfer

SecExams

Question #419

SecExams

DRAG DROP
-

Case study
-

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Inventory items
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Corporate website

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Orders

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• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues

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• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to secure the corporate website for users.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Explanation

Correct Answer:

Community Discussion

Question #420

You are developing a Microsoft Entra ID integrated app that interacts with Microsoft Graph.

You must allow GET operations to receive unknown members that might be defined in the future in Microsoft Graph API. You plan to include support for evolvable enumerations in the app.

You need to specify the HTTP request header that will provide the evolvable enumerations support in the app.

Which header should you specify?

A) Accept
B) Content-Type
C) If-Match
D) Prefer (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

Correct!

Selected Answer: D

Seems to be correct: https://learn.microsoft.com/en-us/graph/best-practices-concept

SecExams

Question #421

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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You have an Azure App Service web app named WebApp1 and an Azure Functions app named Function1. WebApp1 is associated with an Application Insights instance named appinsights1.

You configure a web test and a corresponding alert for WebApp1 in appinsights1. Each alert triggers a delivery of email to your mailbox.

You need to ensure that each alert also triggers execution of Function1.

Solution: Configure an Azure Monitor Insights workbook.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #422

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You need to ensure that each alert also triggers execution of Function1.

Solution: Configure an Application Insights smart detection.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #423

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You need to ensure that each alert also triggers execution of Function1.

Solution: Configure an Azure Monitor action group.

Does the solution meet the goal?

A) Yes (Correct Answer)

B) No

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #424

You have a Standard tier instance of Azure Cache for Redis named redis1 configured with the default settings.

You need to configure a Maxmemory policy to increase the amount of cache available for read operations.

How should you configure the Maxmemory policy?

A) Decrease the value of maxmemory-reserved. (Correct Answer)
B) Increase the value of maxmemory-reserved.
C) Set the Maxmemory policy to noeviction.
D) Set the Maxmemory policy to volatile-lru.

Explanation

Correct Answer: A ?

Community Discussion

Selected Answer: B

It's increase de value of MaxMemory-Reserved.

Selected Answer: B

SecExams

Question #425

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You have an Azure App Service web app named WebApp1 and an Azure Functions app named Function1. WebApp1 is associated with an Application Insights instance named appinsights1.

You configure a web test and a corresponding alert for WebApp1 in appinsights1. Each alert triggers a delivery of email to your mailbox.

You need to ensure that each alert also triggers execution of Function1.

Solution: Configure an Application Insights funnel.

Does the solution meet the goal?

A) Yes

B) No (Correct Answer)

Explanation

Correct Answer: B ?

Community Discussion

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Question #426

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Case study -

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SecExams

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Background -

Fourth Coffee is a global coffeehouse chain and coffee company recognized as one of the world's most influential coffee brands. The company is renowned for its specialty coffee beverages, including a wide range of espresso-based drinks, teas, and other beverages. Fourth Coffee operates thousands of stores worldwide.

Current environment -

The company is developing cloud-native applications hosted in Azure.

Corporate website -
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performance.

The application consists of the following Azure services:

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The application components must meet the following requirements:

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• Costs must be minimized for all Azure services.
• Developers must test Azure Blob Storage integrations locally before deployment to Azure. Testing must support the latest versions of the Azure Storage APIs.

Corporate website -
• User authentication and authorization must allow one-time passcode sign-in methods and social identity providers (Google or Facebook).
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Orders -
• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues -

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to mitigate the Azure Cache for Redis issue.

What are two possible ways to achieve this goal? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A) Test application code by rebooting all nodes in the test environment. (Correct Answer)
B) Configure client connections to retry commands with exponential backoff. (Correct Answer)
C) Modify the maxmemory policy to evict the least frequently used keys out of all keys.
D) Increase the maxmemory-reserved and maxfragmentationmemory-reserved values.
E) Test application code by purging the cache in the test environment.

Explanation

Correct Answer: AB ?

Community Discussion

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Question #427

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SecExams

You need to serve static content from the corporate website.

What are two possible ways to achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) Store all static content in Azure Blob Storage. Enable Azure Content Delivery Network for the storage account. (Correct Answer)
B) Configure App Service networking to create a Content Delivery Network profile and endpoint.
C) Configure the Azure App Service Local Cache feature and set the app setting WEBSITE_LOCAL_CACHE_SIZEINMB value.
D) Create a nested Azure Traffic Manager profile. Configure the parent profile to the performance traffic routing method and the child profile to the priority traffic routing method. (Correct Answer)
E) Update the Azure Traffic Manager routing method to priority.

Explanation

Correct Answer: AD ?

Community Discussion

SecExams

Question #428

You develop an ASP. Net Care application by integrating the Application Insights SDK into your solution.

The application sends a very high rate of telemetry in a short time interval. You observe a reduced number of events, traces, and metrics being recorded and increased error rates for telemetry ingestion. Telemetry data must synchronize the client and server information to allow HTTP request and response correlation.

You need to reduce telemetry traffic, data costs, and storage costs while preserving a statistically correct analysis of application telemetry data.

What should you do?

A) Set a daily cap on the Log Analytics workspace. Create an Activity log alert rule.
B) Modify the pricing tier for the Log Analytics workspace.
C) Update the application code to reduce the number of DiagnosticSource events. Use filtering to exclude these events. (Correct Answer)
D) Disable adaptive sampling. Enable and configure the fixed-rate sampling module.

Explanation

Correct Answer: C ?

Community Discussion

Wrong! D is correct https://learn.microsoft.com/en-us/azure/azure-monitor/app/sampling-classic-api#types-of-sampling

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Question #429

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You need to implement the processing of enqueue inventory items.

Which message value should you use?

A) Sequence number (Correct Answer)
B) Timestamp
C) Session identifier
D) Partition key

Explanation

Correct Answer: A ?

Community Discussion

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Question #430

SecExams

HOTSPOT
-

Case study
-

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SecExams

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SecExams

You need to implement a function by using Azure Functions to process customized items.

How should you implement the function? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Azure Functions implementation

Implementation option	Implementation value
Azure Functions feature	Trigger Input binding Output binding
Event source	Blob HTTP Service Bus Cosmos DB

Explanation

Correct Answer:

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Answer Area

Azure Functions implementation

Implementation option	Implementation value
Azure Functions feature	Trigger Input binding Output binding
Event source	Blob HTTP Service Bus Cosmos DB

Community Discussion

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Question #431

HOTSPOT

-

You plan to implement an Azure function named Function1 that will use the timer trigger.

You plan to use a TimeSpan value to set the schedule of function execution.

You need to select the hosting model and the schedule expression assignment method.

Which hosting model and schedule expression assignment method should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

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Function configuration option	Value
Hosting model	Consumption App Service plan Azure Arc-enabled Kubernetes
Schedule expression assignment	App settings host.json file function.json file

Community Discussion

SecExams

Question #432

HOTSPOT

-

You are developing a microservices-based application that uses Azure Container Apps. The application consists of several containerized services that handle tasks, such as processing orders, managing inventory, and generating reports.

You must secure the container apps. All apps must reside in the same virtual network, share the same Dapr configuration, and share the same logging location.

Apps must support the configuration of the amount of memory and compute resources available to containers.

You need to configure the Azure Container App.

How should you complete the CLI command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

```
az containerapp [ env | create | add-on ] [ env | create | add-on ]
-n MyContainerApp -g MyResourceGroup --location eastus2 [ --enable-mtls | --internal-only | --enable-workload-profiles ]
```

Community Discussion

SecExams

Question #433

DRAG DROP

-

You have a static website hosted in an Azure Storage account named storage1. You access the website by using a URL that ends with the web.core.windows.net suffix.

You plan to configure the website to be accessible through the URL www.contoso.com. The website must be accessible during configuration.

The contoso.com zone is hosted in Azure DNS.

You need to complete the website configuration.

Which four actions should you perform in sequence? To answer, move the appropriate domain name configuration steps from the list of domain name configuration steps to the answer area and arrange them in the correct order.

Domain name configuration steps	Answer Area	
Create a CNAME record asverify.www.contoso.com in Azure DNS.	1	
Set the custom domain name of storage1 to www.contoso.com.	2	
Identify the host name of the storage endpoint of the website.	3	
Create an A record asverify.www.contoso.com in Azure DNS.	4	
Create a CNAME record www.contoso.com in Azure DNS.		

Explanation

Correct Answer:

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Domain name configuration steps	Answer Area	
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Set the custom domain name of storage1 to www.contoso.com.	2	
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Create an A record asverify.www.contoso.com in Azure DNS.	4	
Create a CNAME record www.contoso.com in Azure DNS.		

Community Discussion

Question #434

You have an Azure Queue Storage account that contains a queue named queue1.

You plan to use Azure SDK for .NET to develop a solution that uses queue1.

You need to author C# code that will return an approximate number of messages in queue1. Your solution must minimize the development effort.

Which method should you use in your code?

A) GetProperties method of the QueueClient class (Correct Answer)
B) GetProperties method of the QueueServiceClient class
C) PeekMessages method of the QueueClient class
D) GetStatistics method of the QueueServiceClient class

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #435

You manage an Azure Storage account named storage1.

You plan to load 1 million blobs into storage1.

You must assign key-value pairs to blobs so that both keys and their values are automatically indexed and searchable by using the built-in services of storage1.

You need to run the command to assign key-value pairs.

Which command should you run?

A) Update -AzStorageBobServiceProperty
B) Set-AzStorageBlobTag (Correct Answer)
C) az storage blob service-properties update
D) Set-AzStorageBlobContent

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #436

SecExams

Case study -

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To start the case study -
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Background -

Fourth Coffee is a global coffeehouse chain and coffee company recognized as one of the world's most influential coffee brands. The company is renowned for its specialty coffee beverages, including a wide range of espresso-based drinks, teas, and other beverages. Fourth Coffee operates thousands of stores worldwide.

Current environment -

The company is developing cloud-native applications hosted in Azure.

Corporate website -
The company hosts a public website located at http://www.fourthcoffee.com/. The website is used to place orders as well as view and update inventory items.

Inventory items -
In addition to its core coffee offerings, Fourth Coffee recently expanded its menu to include inventory items such as lunch items, snacks, and merchandise. Corporate team members constantly update inventory. Users can customize items. Corporate team members configure inventory items and associated images on the website.

Orders -
Associates in the store serve customized beverages and items to customers. Orders are placed on the website for pickup.

The application components process data as follows:

1. Azure Traffic Manager routes a user order request to the corporate website hosted in Azure App Service.
2. Azure Content Delivery Network serves static images and content to the user.
3. The user signs in to the application through a Microsoft Entra ID for customers tenant.
4. Users search for items and place an order on the website as item images are pulled from Azure Blob Storage.
5. Item customizations are placed in an Azure Service Bus queue message.
6. Azure Functions processes item customizations and saves the customized items to Azure Cosmos DB.
7. The website saves order details to Azure SQL Database.
8. SQL Database query results are cached in Azure Cache for Redis to improve

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performance.

The application consists of the following Azure services:

Requirements -

The application components must meet the following requirements:

• Azure Cosmos DB development must use a native API that receives the latest updates and stores data in a document format.

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• Costs must be minimized for all Azure services.
• Developers must test Azure Blob Storage integrations locally before deployment to Azure. Testing must support the latest versions of the Azure Storage APIs.

Corporate website -
• User authentication and authorization must allow one-time passcode sign-in methods and social identity providers (Google or Facebook).
• Static web content must be stored closest to end users to reduce network latency.

Inventory items -
• Customized items read from Azure Cosmos DB must maximize throughput while ensuring data is accurate for the current user on the website.
• Processing of inventory item updates must automatically scale and enable updates across an entire Azure Cosmos DB container.
• Inventory items must be processed in the order they were placed in the queue.
• Inventory item images must be stored as JPEG files in their native format to include exchangeable image file format (data) stored with the blob data upon upload of the image file.
• The Inventory Items API must securely access the Azure Cosmos DB data.

Orders -
• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues -

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to securely access inventory items when developing the Inventory Items API.

What are three possible ways to achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A) Create a SQL role definition under the Azure Cosmos DB account.
Create a user-assigned managed identity and assign the identity to the function app.
Assign the user assigned managed identity the SQL role definition.
Update the function app code to implement the DefaultAzureCredential class and reference the user-assigned managed identity. (Correct Answer)
B) Create a SQL role definition under the Azure Cosmas DB account.
Assign the role to the function apps system-assigned managed identity.
Programmatically access the Azure Cosmos DB keys from the function app. (Correct Answer)
C) Create a custom Microsoft Entra role.
Assign the custom roe to the Azure Cosmos DB account
Update the function app to use certificate-based authentication.
D) Create a custom Microsoft Entra role.
Assign the custom role to Azure Key Vault.
Assign the custom role to the function app.
Reference the custom role in the function app code when accessing Azure Key Vault values.
E) Create a system-assigned managed ident for the function app with read access to secrets in Azure Key Vault.
Store the Azure Cosmos DB primary key and UR in Azure Key Vaults secrets.
Use function app settings to reference the secret values. (Correct Answer)

Explanation

Correct Answer: ABE ?

Community Discussion

SecExams

Question #437

You manage an Azure Key Vault named kv1 of Standard SKU.

You plan to programmatically store in kv1 an asymmetric key pair and use the key pair for encryption and decryption.

You must develop an application named app1 that will access the key pair in kv1.

You need to configure an object to retrieve a key pair from kv1.

Which object should you use?

A) SecretClient
B) KeyVaultSettingsClient
C) CertificateClient
D) KeyClient (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

SecExams

Question #438

You develop an ASP. Net Care application by integrating the Application Insights SDK into your solution.

The application sends a very high rate of telemetry in a short time interval. You observe a reduced number of events, traces, and metrics being recorded and increased error rates for telemetry ingestion. Telemetry data must synchronize the client and server information to allow HTTP request and response correlation.

You need to reduce telemetry traffic, data costs, and storage costs while preserving a statistically correct analysis of application telemetry data.

What should you do?

A) Set a daily cap on the Log Analytics workspace. Create an Activity log alert rule.
B) Modify the pricing tier for the Log Analytics workspace.
C) Verify adaptive sampling is enabled. Set the maxTelemetryItemsPerSecond value. (Correct Answer)
D) Set retention and archive policies by table in the Log Analytics workspace. Purge retained data beyond 30 days.

Explanation

Correct Answer: C ?

Community Discussion

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Question #439

SecExams

HOTSPOT
-

Case study
-

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To start the case study
-
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Background
-

SecExams

Fourth Coffee is a global coffeehouse chain and coffee company recognized as one of the world's most influential coffee brands. The company is renowned for its specialty coffee beverages, including a wide range of espresso-based drinks, teas, and other beverages. Fourth Coffee operates thousands of stores worldwide.

Current environment
-

The company is developing cloud-native applications hosted in Azure.

Corporate website
-
The company hosts a public website located at http://www.fourthcoffee.com/. The website is used to place orders as well as view and update inventory items.

Inventory items
-
In addition to its core coffee offerings, Fourth Coffee recently expanded its menu to include inventory items such as lunch items, snacks, and merchandise. Corporate team members constantly update inventory. Users can customize items. Corporate team members configure inventory items and associated images on the website.

Orders
-
Associates in the store serve customized beverages and items to customers. Orders are placed on the website for pickup.

The application components process data as follows:

1. Azure Traffic Manager routes a user order request to the corporate website

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hosted in Azure App Service.
2. Azure Content Delivery Network serves static images and content to the user.
3. The user signs in to the application through a Microsoft Entra ID for customers tenant.
4. Users search for items and place an order on the website as item images are pulled from Azure Blob Storage.
5. Item customizations are placed in an Azure Service Bus queue message.
6. Azure Functions processes item customizations and saves the customized items to Azure Cosmos DB.
7. The website saves order details to Azure SQL Database.
8. SQL Database query results are cached in Azure Cache for Redis to improve performance.

The application consists of the following Azure services:

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Requirements

-

The application components must meet the following requirements:

• Azure Cosmos DB development must use a native API that receives the latest updates and stores data in a document format.
• Costs must be minimized for all Azure services.
• Developers must test Azure Blob Storage integrations locally before deployment to Azure. Testing must support the latest versions of the Azure

Storage APIs.

Corporate website

-

• User authentication and authorization must allow one-time passcode sign-in methods and social identity providers (Google or Facebook).
• Static web content must be stored closest to end users to reduce network latency.

Inventory items

-

• Customized items read from Azure Cosmos DB must maximize throughput while ensuring data is accurate for the current user on the website.
• Processing of inventory item updates must automatically scale and enable updates across an entire Azure Cosmos DB container.
• Inventory items must be processed in the order they were placed in the queue.
• Inventory item images must be stored as JPEG files in their native format to include exchangeable image file format (data) stored with the blob data upon upload of the image file.
• The Inventory Items API must securely access the Azure Cosmos DB data.

Orders

-

• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues

-

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

SecExams

You need to implement code to process inventory changes and update orders.

Which configuration should you use? To answer, select the appropriate options in the answer area

NOTE: Each correct selection is worth one point.

Inventory and order processing

Configuration option	Configuration value
Compute host	REST API hosted in Azure App Service Serverless function in Azure Functions Process in an instance of Azure Virtual Machines Continuous running instance of WebJobs in Azure App Service
Read Azure Cosmos DB change feed	Pull model Push model

Explanation

Correct Answer:

Configuration option	Configuration value
Compute host	REST API hosted in Azure App Service Serverless function in Azure Functions Process in an instance of Azure Virtual Machines Continuous running instance of WebJobs in Azure App Service
Read Azure Cosmos DB change feed	Pull model Push model

Community Discussion

it should be push model

Question #440

A large retail company operates online and physical stores. The company tracks inventory levels in real time to manage stock efficiently across all locations. You develop an Azure Event Grid solution to handle events generated by the inventory management system deployed to Azure.

You need to implement a subscription filter that dynamically adjusts to seasonal changes in product demand.

Which event filter should you use?

A) An advanced filter using a Boolean condition that evaluates multiple data fields, including a season field within the event data (Correct Answer)
B) A prefix filter on the event type field that matches the current season's name
C) A subscription filter that uses label filter to include events tagged with seasonal promotional codes
D) A static subject filter that targets events with a subject ending in "/seasonal/inventory"

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #441

HOTSPOT -

You have an Azure Service Bus namespace that contains a topic named Topic1.

You plan to create a subscription named Sub1 to Topic1. In Sub1, you plan to filter messages from Topic1 based on their system properties and apply an action that will annotate each filtered message.

You need to configure the filtering.

How should you configure the filtering? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

Topic filtering	Configuration
Filter type	Use the SQL type. Use the Boolean type. Use the Correlation type.
Filtering action	Copy a message and update its body. Copy a message and annotate its metadata. Annotate the metadata of the original message.

Community Discussion

SecExams

Question #442

HOTSPOT

-

You have a Dockerfile that builds a container image named image1. The container image and its base image are stored in separate repositories of an Azure Container registry named registry1. The codebase of image1 is stored in a GitHub repo named app1 of an account named account1.

You plan to implement automatic updates to image1 whenever its base image is updated or an update to the main branch of the GitHub repo occurs.

You need to complete the Azure CLI command that will apply the planned implementation.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Explanation

Correct Answer:

Community Discussion

SecExams

Question #443

DRAG DROP

-

You manage an Azure Cosmos DB for a NoSQL API account named account1. You configure account1 with the default consistency level.

An application named app1 must access containers in account1 to perform read and write operations. The connections from app1 to account1 must be established by using the direct mode.

You plan to configure app1 to override the default consistency level by using the Azure Cosmos DB SDK client.

You need to set the maximum consistency level for app1 to use for read and write operations.

Which consistency level should you set? To answer, move the appropriate maximum consistency levels to the correct operation types. You may use each maximum consistency level once, more than once, or not at all. You may need to move the split bar between panes or scroll to view content.

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Explanation

Correct Answer:

Consistency levels for operations

Operation type	Maximum consistency level
Reads	Bounded staleness
Writes	Strong

Community Discussion

SecExams

Question #444

DRAG DROP

-

You manage an Azure subscription associated with a Microsoft Entra tenant named contoso.com. The subscription contains an Azure Blob Storage account named storage1. Your user account has the Contributor Azure role-based access control (RBAC) role within the scope of the subscription.

You plan to implement secure access to containers and blobs in storage1. Your solution must satisfy the following requirements:

• Authorization requests to access storage1 content must be authenticated by using Microsoft Entra credentials.
• Authorized access to storage1 content must be time-limited based on arbitrary values specified when requests are raised.
• The principle of least privilege must be satisfied.

You need to implement the plan.

Which three actions should you perform in sequence? To answer, move the appropriate secure access implementation options from the list of secure access implementations to the answer area and arrange them in the correct order.

Secure access implementation	Answer Area
Assign the Owner role to your user account at the scope of the storage account.	
Request a user delegation key.	
Generate a shared access signature token.	
Configure a stored access policy.	
Acquire an OAuth 2.0 token from Microsoft Entra ID.	

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Explanation

Correct Answer:

Answer Area

Acquire an OAuth 2.0 token from Microsoft Entra ID.
Request a user delegation key.
Generate a shared access signature token.

Community Discussion

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Question #445

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Case study -

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6. Azure Functions processes item customizations and saves the customized items to Azure Cosmos DB.
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performance.

The application consists of the following Azure services:

Requirements -

The application components must meet the following requirements:

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• The Inventory Items API must securely access the Azure Cosmos DB data.

Orders -
• Orders must receive inventory item changes automatically after inventory items are updated or saved.

Issues -

• Developers are storing the Azure Cosmos DB credentials in an insecure clear text manner within the Inventory Items API code.
• Production Azure Cache for Redis maintenance has negatively affected application performance.

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You need to support local development testing for developers.

Which tool should you use?

A) Azurite (Correct Answer)
B) Azure Storage Emulator
C) SQL Server Management Studio (SSMS)
D) Azure Storage Explorer

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #446

HOTSPOT

-

You have an Azure Blob Storage account named account1.

You plan to grant permissions for access to blobs in account1 by using a combination of a shared access signature token and a stored access policy. You must set the duration of the token validity by using the stored access policy.

You need to complete the configuration of the stored access policy and generate the shared access signature token.

Which token setting and token type should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Storage access configuration

Configuration setting	**Value**
Token setting to configure	Protocol Source IP Permissions
Token type to generate	Account shared access signatures Blob container shared access signatures User delegation shared access signatures

Explanation

Correct Answer:

Answer Area

Storage access configuration

Configuration setting	**Value**
Token setting to configure	Protocol Source IP Permissions
Token type to generate	Account shared access signatures Blob container shared access signatures User delegation shared access signatures

Community Discussion

SecExams

Question #447

You have 100 Azure virtual machines (VMs) with the system-assigned managed identity enabled.

You need to identify the value of the object ID attribute for each of the identities.

Which command should you use?

A) az ad sp credential list
B) Get-AzVM
C) Get-AzureADUser
D) az resource show (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

Question #448

You have 100 Azure virtual machines (VMs) with the system-assigned managed identity enabled.

You need to identify the value of the object ID attribute for each of the identities.

Which command should you use?

A) Get-AzureADUser
B) Get-AzResource (Correct Answer)
C) Get-AzureADUserOwnedObject
D) az ad signed-in-user list-owned-objects

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #449

HOTSPOT

-

You are developing a web application that makes calls to the Microsoft Graph API. You register the application in the Azure portal and upload a valid X509 certificate.

You create an appsettings.json file containing the certificate name, client identifier for the application, and the tenant identifier of the Microsoft Entra ID. You create a method named ReadCertificate to return the X509 certificate by name.

You need to implement code that acquires a token by using the certificate.

How should you complete the code segment? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

```
config = json.load(open(sys.argv[1]))
app = msal.                                  (
```

ConfidentialClientApplication
GetAccountAsync()
GetAccountsAsync()
ConfidentialClientApplicationBuilder

```
    config["client_id"], authority=config["authority"],
    client_credential={"thumbprint": config["thumbprint"], "private_key":
open(config['private_key_file']).read()})
result = None
scopes = config["scope"]
result = app.acquire_token_silent(                  , account=None)
```

scopes
app
config

Explanation

Answer Area

```
config = json.load(open(sys.argv[1]))
app = msal.                                   (
```

ConfidentialClientApplication
GetAccountAsync()
GetAccountsAsync()
ConfidentialClientApplicationBuilder

```
    config["client_id"], authority=config["authority"],
    client_credential={"thumbprint": config["thumbprint"], "private_key":
open(config['private_key_file']).read()})
result = None
scopes = config["scope"]
result = app.acquire_token_silent(                    , account=None)
```

scopes
app
config

Correct Answer:

Community Discussion

Question #450

You develop applications that integrate with a Microsoft Entra tenant.

You plan to implement a permission classification in the tenant.

You need to select permissions to include in your classification.

Which permissions should you select?

A) app-only access permissions that require admin consent
B) delegated permissions that require only user consent (Correct Answer)
C) app-only access permissions that require only user consent
D) delegated permissions that require admin consent

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #451

DRAG DROP

-

You have an Azure Virtual Machine (VM) named VM1 running Windows Server 2022 and an Azure Key Vault instance named kv1.

You are developing a .NET application named App1 that you plan to deploy to VM1.

You have the following requirements:

• App1 will require access to kv1.
• The identity used by App1 to access kv1 must be automatically deprovisioned when VM1 is deleted.

You need to identify the procedure that will meet the requirements.

Which three actions should you include in the procedure? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

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Explanation

Answer Area

Create a system assigned managed identity for the VM.

Retrieve an access token from Azure Instance Metadata Service endpoint.

Modify access policy on kv1.

Correct Answer:

Community Discussion

SecExams

Question #452

HOTSPOT

-

You have an Azure App Service web app named App1. App1 has Application Insights enabled.

You plan to review the configuration of telemetry sampling for Application Insights of App1.

You need to author an analytics query that will return the sampling rate.

How should you complete the provided query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

Answer Area

Analytics query that returns the sampling rate

union [ ] ,dependencies,pageViews,browserTimings,exceptions,traces | where timestamp > ago(1d)

- requests
- customMetrics
- performanceCounters

| summarize RetainedPercentage = 100/avg([ ]) by bin(timestamp, 1h), itemType

- itemCount
- operationId
- Measurements

Community Discussion

SecExams

Question #453

HOTSPOT

-

You have a web app named App1 hosted on you, on-premises web server.

You plan to use the Application Insights JavaScript SDK to implement client-side Real User Monitoring (RUM) of individual pages of App1.

You need to author the script element that will be added to each of the pages.

What should you set for the value of src and cfg keys in the script element of each page? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Explanation

Correct Answer:

Community Discussion

Question #454

You develop an ASP. Net Core application by integrating the Application Insights SDK into your solution.

The application sends a very high rate of telemetry in a short time interval. You observe a reduced number of events, traces, and metrics being recorded and increased error rates for telemetry ingestion.

You need to reduce telemetry traffic, data costs, and storage costs while preserving a statistically correct analysis of application telemetry data. Your solution must ensure that you will be able to correlate HTTP request and response data.

What should you do?

A) Configure a Log Analytics workspace data collection rule (DCR). Use a Kusto Query Language (KQL) statement to filter incoming data.

B) Disable adaptive sampling. Enable and configure the fixed-rate sampling module. (Correct Answer)

C) Set a daily cap on the Log Analytics workspace. Create an Activity log alert rule.

D) Configure the TelemetryConfiguration object in the instrumented code. Increase the metric aggregation interval to 15 minutes.

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Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #455

HOTSPOT

-

You have an Azure Function app named App1 written in C# and an Application Insights workspace named Workspace1. App is implemented with Application Insights enabled and is configured to send its telemetry to Workspace1.

You observe that App1 telemetry collection regularly exceeds monthly quotas of Workspace1.

You need to ensure that the telemetry volume remains within the monthly quotas of Workspace1.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Sampling configuration

Configuration	Setting
App1	Disable adaptive sampling. Enable fixed-rate sampling. Configure sampling overrides.
Workspace1	Enable ingestion sampling. Disable ingestion sampling. Configure sampling overrides.

Explanation

Community Discussion

Question #456

You have an Azure subscription that contains an Application Insights resource named AI1 and an Azure App Service web app named App1.

You create a Standard availability test in AI1. You set its URL to point to App1.

You need to ensure that any failed tests generate email notifications to the owners of the subscription.

What should you do?

A) Create an action group.
B) Create an alert rule. (Correct Answer)
C) Enable the test.
D) Enable the alert.

Explanation

Correct Answer: B ?

Community Discussion

Question #457

You create an Azure subscription named Sub1. In Sub1, you create a custom Azure Event Grid topic named Topic1. Next, you create an Event Grid event subscription named EventSub1. EventSub1 uses Topic1 as the event source and a Web Hook as the endpoint.

You plan to enable dead-lettering in EventSub1.

You need to ensure that you can enable dead-lettering in EventSub1.

What should you do first?

A) Configure delivery properties of EventSub1.
B) Create an Azure Blob Storage container in Sub1. (Correct Answer)
C) Create an Azure Storage queue in Sub1.
D) Configure the retry policy of EventSub1.

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #458

HOTSPOT

-

You are developing a microservices-based application by using Azure Container Apps. The application consists of several containerized services that handle tasks, such as processing orders, managing inventory, and generating reports.

Processing orders has the following requirements:

• Orders must be triggered by a web request.
• Additional replicas must be added when the total number of web requests exceeds 300 for at least 15 seconds.
• Processing orders must always be available based on incoming web requests.
• Costs must be minimized for the Azure Container Apps instance.

You need to configure scaling.

How should you complete the CLI command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Azure Container App CLI command

```
az containerapp [ env | create | add-on ] \
--name OrderProcessingApp \
--resource-group MyResourceGroup \
--environment MyEnvironmentName \
--image myimage:latest
--min-replicas [ 0 | 1 | 10 ] \
--max-replicas 10 \
--scale-rule-name azure-http-rule \
--scale-rule-type http \
--scale-rule-http-concurrency 20
```

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Explanation

Answer Area

Azure Container App CLI command

```
az containerapp [create] \
--name OrderProcessingApp \
--resource-group MyResourceGroup \
--environment MyEnvironmentName \
--image myimage:latest
--min-replicas [0] \
--max-replicas 10 \
--scale-rule-name azure-http-rule \
--scale-rule-type http \
--scale-rule-http-concurrency 20
```

Correct Answer:

Community Discussion

SecExams

Question #459

DRAG DROP

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You create an Azure subscription. You then create an Azure resource group.

You plan to create a containerized task that will run as an Azure Container App in regular intervals.

You need to automate the process of creating the task in the resource group by using Azure CLI commands.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Explanation

Correct Answer:

Community Discussion

Question #460

You are developing a microservices-based application that uses Azure Container Apps. The application consists of several containerized services that handle tasks, such as processing orders, managing inventory, and generating reports. You deploy a new revision of the processing orders app.

Processing orders must be triggered by a web request and must always be available based on incoming web requests.

You need to validate that the replica is ready to handle incoming requests.

What should you implement?

A) HTTP readiness probe (Correct Answer)
B) TCP readiness probe
C) HTTP startup probe
D) TCP liveness probe
E) HTTP liveness probe

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #461

You are developing a microservices-based application that uses Azure Container Apps. The application consists of several containerized services that handle tasks, such as processing orders, managing inventory, and generating reports. You deploy two microservices named serviceA and serviceB to support managing inventory.

You have the following requirements:

• serviceA and serviceB must publish events to a single Azure Event Hub by using the Event Hubs SDK.
• serviceA must publish 1,000 events per second.
• serviceB must publish 3,000 events per second.
• Costs must be minimized.

You need to support the publishing of events.

What should you do?

A) Create four partitions. Update serviceA to use one partition and serviceB to use three partitions. (Correct Answer)
B) Enable and configure Azure Event Hubs Capture.
C) Create an Azure Event Hubs dedicated cluster. Configure the capacity units to one and the scaling units to two.
D) Create and configure an Azure Schema Registry in Event Hubs. Update serviceA and serviceB to validate message schemas.
E) Create four consumer groups. Update serviceA to use one consumer group and serviceB to use three consumer groups.

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #462

SecExams

DRAG DROP
-

You are developing a microservices-based application by using Azure Container Apps. The application consists of several containerized services that handle tasks, such as processing orders, managing inventory, and generating reports.

You must deploy two microservices named serviceA and serviceB to support managing inventory. Deployment of the microservices have the following requirements:

• serviceA must create and configure all necessary Azure resources, including multiple Dapr components and an Azure Blob Storage account, by using Bicep files.
• serviceB must create and configure all necessary Azure resources without using Bicep files.
• All microservices must use the same resource group, environment, Azure Container Registry, and Log Analytics workspace.

You need to deploy the microservices.

Which CLI command should you use? To answer, move the appropriate CLI commands to the correct microservices. You may use each CLI command once, more than once, or not at all. You may need to move the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

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Answer Area

CLI commands	Azure Container App CLI command	
azd up	**Microservice**	**CLI command**
az acr build	serviceA	
az containerapp up	serviceB	
docker-compose up		

Explanation

Azure Container App CLI command

Microservice	CLI command
serviceA	azd up
serviceB	az containerapp up

Correct Answer:

Community Discussion

SecExams

Question #463

You are developing an Azure Function app for scalability and integration with Azure Blob Storage.

You must run the code in an Azure production environment that allows the function to scale based on demand, providing instance size selection and higher concurrency control.

The function must connect to other Azure services secured inside a virtual network, scale to zero instances when there are no incoming events and minimize costs.

You need to select a hosting plan to meet the requirement.

Which plan should you use?

A) Flex Consumption (Correct Answer)
B) Consumption
C) Premium
D) Dedicated

Explanation

Correct Answer: A ?

Community Discussion

SecExams

Question #464

You have 100 Azure virtual machines (VMs) with the system-assigned managed identity enabled.

You need to identify the value of the object ID attribute for each of the identities.

Which command should you use?

A) az ad signed-in-user list-owned-objects
B) az ad sp credential list
C) az ad user show
D) Get-AzResource (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

SecExams

Question #465

You have a workspace-based Azure Application Insights resource named Insights1 and an Azure App Service Web App named App1. Insights1 collects telemetry generated by App1.

You plan to evaluate the alerting functionality of the availability testing that is enabled for App1 by taking it offline for 50 minutes.

You create a standard availability test for App1, set its frequency to 15 minutes, and set its alert status to Enabled.

You need to assess the number of alerts that you should expect by taking App1 offline for 50 minutes.

How many alerts should you expect?

A) 1
B) 2 (Correct Answer)
C) 3
D) 4

Explanation

Correct Answer: B ?

Community Discussion

SecExams

Question #466

HOTSPOT

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You have an Azure Application Insights resource named AI1. AI1 monitors an Azure App Service web app named App1.

You plan to regularly analyze the usage of specific pages of App1 by a subset of users. The subset will consist of users who access specific App1 pages five or more times in a given month. You must be able to filter sessions and events based on that subset when viewing AI1 in the Azure portal.

You need to configure AI1 to facilitate your analysis.

What should you configure for AI1? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

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Answer Area

Application Insights configuration

Application Insights configuration	Setting
Feature to configure	Cohort Funnel User flow
Language to use	KQL JSON XPath

Explanation

Correct Answer:

Answer Area

Application Insights configuration

Application Insights configuration	Setting
Feature to configure	Cohort Funnel User flow
Language to use	KQL JSON XPath

Community Discussion

SecExams

Question #467

HOTSPOT

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You have an on-premises, internal-only website named www-contoso.com and an Azure Application Insights instance named AppInsights1.

You need to implement availability testing of www.contoso.com by using AppInsights1. Your solution must minimize development effort.

How should you configure the test? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Availability testing configuration

Configuration	Value
www.contoso.com connectivity method	Azure Private Link Azure Service Endpoint Azure Site-to-Site VPN
availability test type	URL ping test Standard test Custom TrackAvailability test

Explanation

Correct Answer:

Community Discussion

SecExams

Question #468

You are a developer for a company that recently transitioned to using workspace-based Application Insights for a C# .NET web application that runs on Azure.

The application has intermittent performance issues.

You need to use the AI-powered code analysis feature in Application Insights to help diagnose the problem.

What should you do?

A) Enable and configure smart detection.
B) Enable and configure availability tests.
C) Use the Application Map to visualize dependencies and interactions, then trace the performance issues through the map.
D) Enable the profiler and snapshot debugger. (Correct Answer)
E) Configure continuous export of telemetry data to Azure Storage.

Explanation

Correct Answer: D ?

Community Discussion

Question #469

You have an Azure Service Bus namespace with a partitioned queue named queue1.

You plan to send a large number of messages through queue1 over the next few weeks. The order of messages will be random. You must minimize the possibility of message transmission interruption by transient failures of individual partitions.

You need to use the optimal configuration of the partition key in the messages.

Which configuration should you use?

A) Set the partition key of messages to the message ID value.
B) Enable sessions. Set the partition key of messages to the session ID value.
C) Enable sessions. Ensure that the partition key is different from the session ID value.
D) Leave the partition key value as null. (Correct Answer)

Explanation

Correct Answer: D ?

Community Discussion

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