Microsoft.Premium.70-535.by.VCEPlus.41q

Exam Code: 70-535
Exam Name: Architecting Microsoft Azure Solutions
Certification Provider: Microsoft

Website: www.vceplus.com
Free Exam: https://vceplus.com/exam-70-535/
Questions & Answers Exam Engine is rigorously checked before being put up for sale. We make sure there is nothing irrelevant in 70-535 exam products and you get latest questions. We strive to deliver the best 70-535 exam product for top grades in your first attempt.

VCE to PDF Converter : https://vceplus.com/vce-to-pdf/
Facebook: https://www.facebook.com/VCE.For.All.VN/
Twitter : https://twitter.com/VCE_Plus
Google+ : https://plus.google.com/+Vcepluscom
LinkedIn : https://www.linkedin.com/company/vceplus

QUESTION 1
A company uses Microsoft Operations Management Suite (OMS) to manage 1,000 virtual machines (VMs) in Azure.
The security officer reports that VMs often are not updated. You recommend to the company that they implement the OMS Update Management solution You need to describe the OMS Update Management solution to the company.
Which functionality does the OMS Update Management solution provide?

A. assessment of missing Windows and Linux updates on the VMs

B. assessment of antimalware on the VMs

C. assessment of Windows and Linux upgrades on the VMs

D. alerts regarding VM issues

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/operations-management-suite/oms-solution-update-management

QUESTION 2
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 designing a storage solution to support on-premises resources and Azure-hosted resources.
You need to provide on-premises storage that has built-in replication to Azure.
Solution: You include Azure Blob storage in the design.
Does this solution meet the goal?

A. Yes

B. No

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions

QUESTION 3
You are designing an Azure Web App that includes many static content files.
The application is accessed from locations all over the world by using a custom domain name.
You need to recommend an approach for providing access to the static content with the least amount of latency. Which two actions should you recommend? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Place the static content in Azure Blob storage and enable Content Delivery Network (CDN) on the account

B. Place the static content in Azure Table storage.

C. Configure a custom domain name that is an alias for the Azure Storage domain.

D. Configure a CNAME DNS record for the Azure Content Delivery Network (CDN) domain.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/architecture/best-practices/cdn

QUESTION 4
Your company uses Office 365 for all employees. The company plans to create a website where customers can view and register technical support cases.
The solution must meet the following requirements:
•Provision customer identities by using social media accounts.
•Users must be able to access the website by using social media accounts including Facebook.
•Employees of the customer service department must be able to access the site to read the cases and resolve them.
You need to design an identity solution for the company.
Which two actions should you recommend? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. a custom policy to link internal store to the external store

B. a new Azure Active Directory (Azure AD) business-to-business (B2B) tenant

C. an Azure SQL data sync to link the internal store to the external one

D. a new Azure Active Directory (Azure AD) business-to-consumer (B2C) tenant

E. a new Azure Active Directory (Azure AD) tenant

Correct Answer: AD
Section: (none)

Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-overview
https://docs.microsoft.com/en-us/azure/active-directory-b2c/active-directory-b2c-overview-custom

QUESTION 5
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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.
Background
Security
The security team at Tailspin Toys plans to eliminate legacy authentication methods that are in use, including NTLM and Windows pass-through authentication.
Tailspin Toys needs to share resources with several business partners. You are investigating options to securely share corporate data.
Tailspin Toys has several databases that contain personally identifiable information (PII). User access PII only through the Tailspin Toys e-commerce website.
You secure apps by using on-premises Active Directory Domain Services (AD DS) credentials or Microsoft SQL Server logins.
Apps
The Tailspin Toys e-commerce site is hosted on multiple on-premises virtual machines (VMs). The VM runs either Internet Information Server (IIS) or SQL Server 2012 depending on role. The site is published to the Internet by using a single endpoint that balances the load across web servers. The site does not encrypt traffic between database servers and web servers.
The Tailspin Toys Customer Analyzer app analyzes e-commerce transactions to identify customer buying patterns, and outputs recommended product sale pricing. The app runs large processing jobs that run for 75-120 minutes several times each day. The application development team plans to replace the current solution with a parallel processing solution that scales based on computing demands.
The Tailspin Toys Human Resources (HR) app is an in-house developed app that hosts sensitive employee data. The app uses SQL authentication for Role-Based Access Control (RBAC).
Problem statement
The Tailspin Toys IT Leadership Team plans to address deficiencies in access control, data security, performance, and availability requirements. All applications must be updated to meet any new standards that are defined.
The Tailspin Toys e-commerce site was recently targeted by a cyberattack. In the attack, account information was stolen from the customer database.
Transactions that were in progress during the attack were not completed. Forensic investigation of the attack has revealed that the stolen customer data was

captured in-transit from the database to a compromised web server.

The HR team reports that unauthorized IT employees can view sensitive employee data by using service or application accounts.

Business Requirements

Tailspin Toys e-commerce site

The business has requested that security and availability of the e-commerce site is improved to meet the following requirements.

Communication between site components must be secured to stop data breaches. If servers are breached, the data must not be readable.

The site must be highly available at each application tier, as well as the published endpoint.

Customers must be able to authenticate to the e-commerce site with their existing social media accounts.

Tailspin Toys Customer Analyzer app

The business requires that processing time be reduced from 75-120 minutes to 5-15 minutes.

Tailspin Toys HR app

Only authorized employees and business partners are allowed to view sensitive employee data. HR has requested a mobile experience for end users.

Technical Requirements

Security

The security team has established the following requirements for role-separation and RBAC:

Log on hours defined in AD DS must be enforced for users that access cloud resources.

IT operations team members must be able to deploy and manage all resources in Azure, but must not be able to grant permissions to others.

Application development team members must be able to deploy and manage Azure Web Apps.

SQL database administrators must be able to deploy and manage SQL databases used by TailSpin Toys applications.

Application support analysts must be able to manage resources for the application(s) for which they are responsible.

Service desk analysts must be able to view service status and component settings.

Role assignment should use the principle of least privilege.

Tailspin Toys e-commerce site

The application is currently using a pair of hardware load balancers behind a single published endpoint to load balance traffic. Customer data is hosted in a SQL Server 2012 database. Customer user accounts are stored in an AD DS instance.

The updated application and supporting infrastructure must:

Provide high availability in the event of failure in a single Azure SQL Database instance.

Allow secure web traffic on port 443 only.

Enable customers to authentication with Facebook, Microsoft Live ID or other social media identities. Encrypt SQL data at-rest.

Encrypt data in motion between back-end SQL database instances and web application instances. Prevent administrator and service accounts from viewing PII data.

Mask account and PII data presented to end user.

Minimize outage duration in event of an Azure datacenter failure.

The site should scale automatically to meet customer demand.

The site should continue to serve requests, even in the event of failure of an Azure datacenter.

Optimize site response time by auto-directing to the closest datacenter based on customer's geographic location.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

Tailspin Toys Customer Analyzer app

The app uses several compute-intensive tasks that create long-running requests to the system, processing large amounts of data. The app runs on two large VMs that are scaled to max capacity in the corporate datacenter. The VMs cannot be scaled up or out to meet processing demands.

The new solution must meet the following requirements:

Schedule processing of a large amount of pricing data on an hourly basis.

Provide parallel processing and scale-on-demand computing resources to provide additional capacity as required.
Processing times must meet the 5-15 minute processing requirement.
Use simultaneous compute nodes to enable high performance computing for analysis.
Minimal administrative efforts and custom development.
Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.
Tailspin Toys HR app
The solution architecture must meet the following requirements:
Integrate with Azure Active Directory (Azure AD).
Encrypt data at rest and in-transit.
Limit access based on location, filtered by IP addresses for corporate sites and authorized business partners. Mask data presented to employees.
Must be available on mobile devices.
Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.
You need to select Azure components to meet site performance and availability requirements for the Tailspin Toys e-commerce site.
Which components should you use?

A. Azure Batch and Azure Load Balancer
B. Virtual Machine Scale Set and Azure Load Balancer
C. Azure App Service Environment and Azure Traffic Manager
D. Azure App Service and Azure Load Balancer

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Case Study: Tailspin Toys

QUESTION 6
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 designing a storage solution to support on-premises resources and Azure-hosted resources.
You need to provide on-premises storage that has built-in replication to Azure.
Solution: You include Azure Table storage in the design.
Does this solution meet the goal?

A. Yes
B. No

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions

QUESTION 7
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.
A company has custom ASP.net and Java applications that run on old versions of Windows and Linux. The company plans to place applications in containers.
You need to design a solution that includes networking, service discovery, and load balancing for the applications. The solution must support storage orchestration.
Solution: Deploy a Kubernetes cluster that has the desired number of instances of the applications.
Does the solution meet the goal?

A. Yes

B. No

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/container-service/kubernetes/container-service-intro-kubernetes

QUESTION 8
You use a virtual network to extend an on-premises IT environment into the cloud. The virtual network has two virtual machines (VMs) that store sensitive data The data must only be available using internal communication channels. Internet access to those VMs is not permitted.
You need to ensure that the VMs cannot access Internet.
Which two options should you recommend? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Azure ExpressRoute

B. network interface (NIC)

C. Source Network Address Translation (SNAT)

D. Network Security Groups (NSG)

Correct Answer: AD

Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction
https://reticent.net.nz/prevent-internet-access-from-azure-virtual-machines/

QUESTION 9
A company has a public-facing website that is being monitored using Microsoft Operations Management Suite (OMS). The OMS service map solution is deployed.
Customers report that the website displays error messages and is very slow to load pages each day at 04:00. The company plans to use the OMS Service Map solution to investigate the issues.
You need to recommend actions that the company should perform with OMS Service Map.
Which three actions should you recommend? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. View alerts that show critical CPU utilization.

B. Install updates to the device that hosts the website.

C. Create a backup of the web server.

D. View the device that hosts the website.

E. View the process that produced the alert.

Correct Answer: ADE
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/operations-management-suite/operations-management-suite-service-map

QUESTION 10
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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Background

You are an architect for Trey Research Inc., a software as a service (SaaS) company. The company is developing a new product named Tailspin for consumer and small business financial monitoring. The product will be offered as an API to banks and financial instructions. Banks and financial institutions will integrate Tailspin into their own online banking offerings.

All employees of Trey Research are members of an Active Directory Domain Services (AD DS) group named TREY.

Technical Requirement

Architecture

The Tailspin product will be implemented in ASP.NET Web API that runs in an Azure Web App.

All application and customer data will be stored in Azure SQL Database instances.

API calls that modify data will be implemented as queue messages in an Azure Storage Queue. Queue messages must expire after 90 minutes.

Security

The solution has the following security requirements:

Common security issues such as SQL injection and XSS must be prevented.

Database-related security issues must not result in customers' data being exposed.

Exposure of application source code and deployment artifacts must not result in customer data being exposed.

Every 90 days, all application code must undergo a security review to ensure that new or changed code does not introduce a security risk. Remote code execution in the Web App must not result in the loss of security secrets.

Auditing, Monitoring, Alerting

The solution has the following requirements for auditing, monitoring, and alerting:

Changes to administrative group membership must be auditable.

Operations involving encryption keys must be auditable by users in the Azure Key Vault Auditors user role.

Resources must have monitoring and alerting configured in Azure Security Center.

Authorization, authentication

The solution has the following authentication and authorization requirements:

Azure Active Directory (Azure AD) must be used to authenticate users.

Compromised user accounts should be disabled as quickly as possible.

Only employees of Trey Research Inc. should be able to address automated security recommendations.

Service Level agreement

Failure of any one Azure region must not impact service availability. Customer data must not be lost once accepted by the application.

Performance, resource utilization

The solution must meet the following performance and resource usage requirements: Azure costs must be minimized.

Application performance must remain level, regardless of the geographic location of users. All application diagnostic and activity logs must be captured without loss.

Compute resources must be shared across all databases used by the solution.

You need to ensure that the logging, monitoring, and alerting requirements are met.

What should you recommend?

A. Azure Storage Queue

B. Azure Cosmos DB
C. Azure Table storage
D. Azure Event Hub

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Case Study: Trey Research Inc.

QUESTION 11

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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Background

Security

The security team at Tailspin Toys plans to eliminate legacy authentication methods that are in use, including NTLM and Windows pass-through authentication.

Tailspin Toys needs to share resources with several business partners. You are investigating options to securely share corporate data.

Tailspin Toys has several databases that contain personally identifiable information (PII). User access PII only through the Tailspin Toys e-commerce website.

You secure apps by using on-premises Active Directory Domain Services (AD DS) credentials or Microsoft SQL Server logins.

Apps

The Tailspin Toys e-commerce site is hosted on multiple on-premises virtual machines (VMs). The VM runs either Internet Information Server (IIS) or SQL Server 2012 depending on role. The site is published to the Internet by using a single endpoint that balances the load across web servers. The site does not encrypt traffic between database servers and web servers.

The Tailspin Toys Customer Analyzer app analyzes e-commerce transactions to identify customer buying patterns, and outputs recommended product sale pricing. The app runs large processing jobs that run for 75-120 minutes several times each day. The application development team plans to replace the current solution with a parallel processing solution that scales based on computing demands.

The Tailspin Toys Human Resources (HR) app is an in-house developed app that hosts sensitive employee data. The app uses SQL authentication for Role-Based Access Control (RBAC).

Problem statement

The Tailspin Toys IT Leadership Team plans to address deficiencies in access control, data security, performance, and availability requirements. All applications must be updated to meet any new standards that are defined.

The Tailspin Toys e-commerce site was recently targeted by a cyberattack. In the attack, account information was stolen from the customer database. Transactions that were in progress during the attack were not completed. Forensic investigation of the attack has revealed that the stolen customer data was captured in-transit from the database to a compromised web server.

The HR team reports that unauthorized IT employees can view sensitive employee data by using service or application accounts.

Business Requirements

Tailspin Toys e-commerce site

The business has requested that security and availability of the e-commerce site is improved to meet the following requirements.

Communication between site components must be secured to stop data breaches. If servers are breached, the data must not be readable.

The site must be highly available at each application tier, as well as the published endpoint.

Customers must be able to authenticate to the e-commerce site with their existing social media accounts.

Tailspin Toys Customer Analyzer app

The business requires that processing time be reduced from 75-120 minutes to 5-15 minutes.

Tailspin Toys HR app

Only authorized employees and business partners are allowed to view sensitive employee data. HR has requested a mobile experience for end users.

Technical Requirements

Security

The security team has established the following requirements for role-separation and RBAC:

Log on hours defined in AD DS must be enforced for users that access cloud resources.

IT operations team members must be able to deploy and manage all resources in Azure, but must not be able to grant permissions to others.

Application development team members must be able to deploy and manage Azure Web Apps.

SQL database administrators must be able to deploy and manage SQL databases used by TailSpin Toys applications.

Application support analysts must be able to manage resources for the application(s) for which they are responsible.

Service desk analysts must be able to view service status and component settings.

Role assignment should use the principle of least privilege.

Tailspin Toys e-commerce site

The application is currently using a pair of hardware load balancers behind a single published endpoint to load balance traffic. Customer data is hosted in a SQL Server 2012 database. Customer user accounts are stored in an AD DS instance.

The updated application and supporting infrastructure must:

Provide high availability in the event of failure in a single Azure SQL Database instance.

Allow secure web traffic on port 443 only.

Enable customers to authentication with Facebook, Microsoft Live ID or other social media identities.

Encrypt SQL data at-rest.

Encrypt data in motion between back-end SQL database instances and web application instances.

Prevent administrator and service accounts from viewing PII data.

Mask account and PII data presented to end user.

Minimize outage duration in event of an Azure datacenter failure.

The site should scale automatically to meet customer demand.

The site should continue to serve requests, even in the event of failure of an Azure datacenter.

Optimize site response time by auto-directing to the closest datacenter based on customer's geographic location.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

Tailspin Toys Customer Analyzer app

The app uses several compute-intensive tasks that create long-running requests to the system, processing large amounts of data. The app runs on two large VMs that are scaled to max capacity in the corporate datacenter. The VMs cannot be scaled up or out to meet processing demands.

The new solution must meet the following requirements:

Schedule processing of a large amount of pricing data on an hourly basis.

Provide parallel processing and scale-on-demand computing resources to provide additional capacity as required.

Processing times must meet the 5-15 minute processing requirement.

Use simultaneous compute nodes to enable high performance computing for analysis.

Minimal administrative efforts and custom development.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

Tailspin Toys HR app

The solution architecture must meet the following requirements:

Integrate with Azure Active Directory (Azure AD).

Encrypt data at rest and in-transit.

Limit access based on location, filtered by IP addresses for corporate sites and authorized business partners. Mask data presented to employees.

Must be available on mobile devices.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

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 need to recommend a solution architecture for the Tailspin Toys e-commerce website for app tier, data tier, and user authentication.

Solution:

Web site based on Azure App Service

App data stored in Azure SQL Database

Authentication provided through Azure AD business-to-consumer (B2C)

Solution deployed to multiple Azure regional datacenters

Load balancing with Azure Traffic Manager

Does the solution meet the goal?

A. Yes

B. No

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Section: Case Study: Tailspin Toys

QUESTION 12
You are designing an Azure Media Services solution The solution must meet the following requirements
•Allow only authenticated users to play back media.

•Ensure that media playback uses dynamic and envelope encryption.
Which three actions should you recommend? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Configure the media encoder to use AES clear key encryption.

B. Encode source files into single-bitrate MP4 files.

C. Configure a content key authorization policy.

D. Configure the media encoder to use DRM encryption.

E. Configure an asset delivery policy.

F. Encode source files into adaptive-bitrate MP4 files.

G. Encrypt the files using AES 256 bit encryption and upload to Azure Storage.

Correct Answer: CEF
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/media-services/media-services-protect-with-aes128.md

QUESTION 13
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.
A company has custom ASP.net and Java applications that run on old versions of Windows and Linux. The company plans to place applications in containers.
You need to design a solution that includes networking, service discovery, and load balancing for the applications The solution must support storage orchestration.
Solution: You create an Azure virtual network, a public IP address, and load balancer Then add virtual machines (VMs) to the solution and deploy individual containers on them.
Does the solution meet the goal?

A. Yes

B. No

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Section: Mixed Questions

QUESTION 14
A partner manages on-premises and Azure environments. The partner deploys an on-premises solution that needs to use Azure services. The partner deploys a virtual appliance.
All network traffic that is directed to a specific subnet must flow through the virtual appliance.
You need to recommend solutions to manage network traffic.
Which two options should you recommend? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Configure Azure Traffic Manager.

B. Configure a routing table with forced tunneling.

C. Implement an Azure virtual network.

D. Implement Azure ExpressRoute.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview
https://docs.microsoft.com/en-us/azure/expressroute/expressroute-routing

QUESTION 15
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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.
Background
Security

The security team at Tailspin Toys plans to eliminate legacy authentication methods that are in use, including NTLM and Windows pass-through authentication.
Tailspin Toys needs to share resources with several business partners. You are investigating options to securely share corporate data.
Tailspin Toys has several databases that contain personally identifiable information (PII). User access PII only through the Tailspin Toys e-commerce website.
You secure apps by using on-premises Active Directory Domain Services (AD DS) credentials or Microsoft SQL Server logins.
Apps
The Tailspin Toys e-commerce site is hosted on multiple on-premises virtual machines (VMs). The VM runs either Internet Information Server (IIS) or SQL Server 2012 depending on role. The site is published to the Internet by using a single endpoint that balances the load across web servers. The site does not encrypt traffic between database servers and web servers.
The Tailspin Toys Customer Analyzer app analyzes e-commerce transactions to identify customer buying patterns, and outputs recommended product sale pricing. The app runs large processing jobs that run for 75-120 minutes several times each day. The application development team plans to replace the current solution with a parallel processing solution that scales based on computing demands.
The Tailspin Toys Human Resources (HR) app is an in-house developed app that hosts sensitive employee data. The app uses SQL authentication for Role-Based Access Control (RBAC).
Problem statement
The Tailspin Toys IT Leadership Team plans to address deficiencies in access control, data security, performance, and availability requirements. All applications must be updated to meet any new standards that are defined.
The Tailspin Toys e-commerce site was recently targeted by a cyberattack. In the attack, account information was stolen from the customer database.
Transactions that were in progress during the attack were not completed. Forensic investigation of the attack has revealed that the stolen customer data was captured in-transit from the database to a compromised web server.
The HR team reports that unauthorized IT employees can view sensitive employee data by using service or application accounts.
Business Requirements
Tailspin Toys e-commerce site
The business has requested that security and availability of the e-commerce site is improved to meet the following requirements.
Communication between site components must be secured to stop data breaches. If servers are breached, the data must not be readable.
The site must be highly available at each application tier, as well as the published endpoint.
Customers must be able to authenticate to the e-commerce site with their existing social media accounts.
Tailspin Toys Customer Analyzer app
The business requires that processing time be reduced from 75-120 minutes to 5-15 minutes.
Tailspin Toys HR app
Only authorized employees and business partners are allowed to view sensitive employee data. HR has requested a mobile experience for end users.
Technical Requirements
Security
The security team has established the following requirements for role-separation and RBAC:
Log on hours defined in AD DS must be enforced for users that access cloud resources.
IT operations team members must be able to deploy and manage all resources in Azure, but must not be able to grant permissions to others.
Application development team members must be able to deploy and manage Azure Web Apps.
SQL database administrators must be able to deploy and manage SQL databases used by TailSpin Toys applications.
Application support analysts must be able to manage resources for the application(s) for which they are responsible.
Service desk analysts must be able to view service status and component settings.
Role assignment should use the principle of least privilege.
Tailspin Toys e-commerce site
The application is currently using a pair of hardware load balancers behind a single published endpoint to load balance traffic. Customer data is hosted in a SQL

Server 2012 database. Customer user accounts are stored in an AD DS instance.
The updated application and supporting infrastructure must:
Provide high availability in the event of failure in a single Azure SQL Database instance.
Allow secure web traffic on port 443 only.
Enable customers to authentication with Facebook, Microsoft Live ID or other social media identities. Encrypt SQL data at-rest.
Encrypt data in motion between back-end SQL database instances and web application instances. Prevent administrator and service accounts from viewing PII data.
Mask account and PII data presented to end user.
Minimize outage duration in event of an Azure datacenter failure.
The site should scale automatically to meet customer demand.
The site should continue to serve requests, even in the event of failure of an Azure datacenter.
Optimize site response time by auto-directing to the closest datacenter based on customer's geographic location.
Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.
Tailspin Toys Customer Analyzer app
The app uses several compute-intensive tasks that create long-running requests to the system, processing large amounts of data. The app runs on two large VMs that are scaled to max capacity in the corporate datacenter. The VMs cannot be scaled up or out to meet processing demands.
The new solution must meet the following requirements:
Schedule processing of a large amount of pricing data on an hourly basis.
Provide parallel processing and scale-on-demand computing resources to provide additional capacity as required.
Processing times must meet the 5-15 minute processing requirement.
Use simultaneous compute nodes to enable high performance computing for analysis.
Minimal administrative efforts and custom development.
Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.
Tailspin Toys HR app
The solution architecture must meet the following requirements:
Integrate with Azure Active Directory (Azure AD).
Encrypt data at rest and in-transit.
Limit access based on location, filtered by IP addresses for corporate sites and authorized business partners.
Mask data presented to employees.
Must be available on mobile devices.
Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.
You need to select an Azure compute provider for the Tailspin Toys Customer Analyzer app.
What should you use?

A. Microsoft Flow

B. Azure Batch

C. Azure Logic Apps

D. Azure Web Jobs

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:
Section: Case Study: Tailspin Toys

QUESTION 16
You manage on-premises network and Azure virtual networks.
You need a secure private connection between the on-premises networks and the Azure virtual networks. The connection must offer a redundant pair of cross connections to provide high availability.
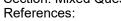What should you recommend?

A. virtual network peering

B. Azure Load Balancer

C. VPN Gateway

D. ExpressRoute

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-overview

QUESTION 17
You are designing a microservices architecture that will support a web application
The solution must meet the following requirements:
•Allow independent upgrades to each microservice.
•Deploy the solution on-premises and to Azure.
•Set policies for performing automatic repairs to the microservices.
•Support low-latency and hyper-scale operations.
You need to recommend a technology.
What should you recommend?

A. Azure Container Instance

B. Azure Container Service

C. Azure Virtual Machine Scale Set

D. Azure Service Fabric

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://msdn.microsoft.com/en-us/magazine/mt595752.aspx

QUESTION 18
A company hosts a website and exposes web services on the company intranet. The intranet is secured by using a firewall. Company policies prohibit changes to firewall rules.
Devices outside the firewall must be able to access the web services.
You need to recommend an approach to enable inbound communication.
What should you recommend?

A. the Azure Access Control Service

B. Windows Azure Pack

C. the Azure WCF Relay

D. a web service in an Azure role that relays data to the internal web services

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/service-bus-relay/relay-what-is-it

QUESTION 19
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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Background

You are an architect for Trey Research Inc., a software as a service (SaaS) company. The company is developing a new product named Tailspin for consumer and small business financial monitoring. The product will be offered as an API to banks and financial instructions. Banks and financial institutions will integrate Tailspin into their own online banking offerings.

All employees of Trey Research are members of an Active Directory Domain Services (AD DS) group named TREY.

Technical Requirement

Architecture

The Tailspin product will be implemented in ASP.NET Web API that runs in an Azure Web App.

All application and customer data will be stored in Azure SQL Database instances.

API calls that modify data will be implemented as queue messages in an Azure Storage Queue. Queue messages must expire after 90 minutes.

Security

The solution has the following security requirements:

Common security issues such as SQL injection and XSS must be prevented.

Database-related security issues must not result in customers' data being exposed.

Exposure of application source code and deployment artifacts must not result in customer data being exposed.

Every 90 days, all application code must undergo a security review to ensure that new or changed code does not introduce a security risk. Remote code execution in the Web App must not result in the loss of security secrets.

Auditing, Monitoring, Alerting

The solution has the following requirements for auditing, monitoring, and alerting:

Changes to administrative group membership must be auditable.

Operations involving encryption keys must be auditable by users in the Azure Key Vault Auditors user role.

Resources must have monitoring and alerting configured in Azure Security Center.

Authorization, authentication

The solution has the following authentication and authorization requirements:

Azure Active Directory (Azure AD) must be used to authenticate users.

Compromised user accounts should be disabled as quickly as possible.

Only employees of Trey Research Inc. should be able to address automated security recommendations.

Service Level agreement

Failure of any one Azure region must not impact service availability. Customer data must not be lost once accepted by the application.

Performance, resource utilization

The solution must meet the following performance and resource usage requirements: Azure costs must be minimized.

Application performance must remain level, regardless of the geographic location of users. All application diagnostic and activity logs must be captured without loss.

Compute resources must be shared across all databases used by the solution.

You are developing the application security review document.

You need to ensure that application data security requirements are met.

What should you verify?

A. Azure SQL connections use an account that does have administrative access,

B. Connection strings use encryption and not trust server certificates,

C. Azure SQL connections use Azure Key Vault certificates for TLS.

D. Connection strings are not stored in application code.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Section: Case Study: Trey Research Inc.
References:
https://docs.microsoft.coin/emus/azure/sql-database/sqkdatabase security-tutorial

QUESTION 20
You are designing an Azure solution
The network traffic for the solution must be securely distributed by providing the following features
•HTTPS protocol
•Round robin routing
•SSL offloading
You need to recommend a load balancing option.
What should you recommend?

A. Azure Internet Load Balancer (ILB)

B. Azure Load Balancer

C. Azure Traffic Manager

D. Azure Application Gateway

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-introduction

QUESTION 21
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 designing a storage solution to support on-premises resources and Azure-hosted resources.

You need to provide on-premises storage that has built-in replication to Azure.
Solution: You include Azure StorSimple storage in the design.
Does this solution meet the goal?

A. Yes

B. No

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Section: Mixed Questions
References:
https://docs.microsoft.com/en-us/azure/storsimple/storsimple-overview

QUESTION 22
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 answer 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. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.
Background
Security
The security team at Tailspin Toys plans to eliminate legacy authentication methods that are in use, including NTLM and Windows pass-through authentication.
Tailspin Toys needs to share resources with several business partners. You are investigating options to securely share corporate data.
Tailspin Toys has several databases that contain personally identifiable information (PII). User access PII only through the Tailspin Toys e-commerce website.
You secure apps by using on-premises Active Directory Domain Services (AD DS) credentials or Microsoft SQL Server logins.
Apps
The Tailspin Toys e-commerce site is hosted on multiple on-premises virtual machines (VMs). The VM runs either Internet Information Server (IIS) or SQL Server 2012 depending on role. The site is published to the Internet by using a single endpoint that balances the load across web servers. The site does not encrypt traffic between database servers and web servers.
The Tailspin Toys Customer Analyzer app analyzes e-commerce transactions to identify customer buying patterns, and outputs recommended product sale pricing. The app runs large processing jobs that run for 75-120 minutes several times each day. The application development team plans to replace the current

solution with a parallel processing solution that scales based on computing demands.

The Tailspin Toys Human Resources (HR) app is an in-house developed app that hosts sensitive employee data. The app uses SQL authentication for Role-Based Access Control (RBAC).

Problem statement

The Tailspin Toys IT Leadership Team plans to address deficiencies in access control, data security, performance, and availability requirements. All applications must be updated to meet any new standards that are defined.

The Tailspin Toys e-commerce site was recently targeted by a cyberattack. In the attack, account information was stolen from the customer database. Transactions that were in progress during the attack were not completed. Forensic investigation of the attack has revealed that the stolen customer data was captured in-transit from the database to a compromised web server.

The HR team reports that unauthorized IT employees can view sensitive employee data by using service or application accounts.

Business Requirements

Tailspin Toys e-commerce site

The business has requested that security and availability of the e-commerce site is improved to meet the following requirements. Communication between site components must be secured to stop data breaches. If servers are breached, the data must not be readable. The site must be highly available at each application tier, as well as the published endpoint.

Customers must be able to authenticate to the e-commerce site with their existing social media accounts.

Tailspin Toys Customer Analyzer app

The business requires that processing time be reduced from 75-120 minutes to 5-15 minutes.

Tailspin Toys HR app

Only authorized employees and business partners are allowed to view sensitive employee data. HR has requested a mobile experience for end users.

Technical Requirements

Security

The security team has established the following requirements for role-separation and RBAC:

Log on hours defined in AD DS must be enforced for users that access cloud resources.

IT operations team members must be able to deploy and manage all resources in Azure, but must not be able to grant permissions to others.

Application development team members must be able to deploy and manage Azure Web Apps.

SQL database administrators must be able to deploy and manage SQL databases used by TailSpin Toys applications.

Application support analysts must be able to manage resources for the application(s) for which they are responsible.

Service desk analysts must be able to view service status and component settings.

Role assignment should use the principle of least privilege.

Tailspin Toys e-commerce site

The application is currently using a pair of hardware load balancers behind a single published endpoint to load balance traffic. Customer data is hosted in a SQL Server 2012 database. Customer user accounts are stored in an AD DS instance.

The updated application and supporting infrastructure must:

Provide high availability in the event of failure in a single Azure SQL Database instance. Allow secure web traffic on port 443 only.

Enable customers to authentication with Facebook, Microsoft Live ID or other social media identities.

Encrypt SQL data at-rest.

Encrypt data in motion between back-end SQL database instances and web application instances.

Prevent administrator and service accounts from viewing PII data.

Mask account and PII data presented to end user.

Minimize outage duration in event of an Azure datacenter failure.

The site should scale automatically to meet customer demand.

The site should continue to serve requests, even in the event of failure of an Azure datacenter.

Optimize site response time by auto-directing to the closest datacenter based on customer's geographic location.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

Tailspin Toys Customer Analyzer app

The app uses several compute-intensive tasks that create long-running requests to the system, processing large amounts of data. The app runs on two large VMs that are scaled to max capacity in the corporate datacenter. The VMs cannot be scaled up or out to meet processing demands.

The new solution must meet the following requirements:

Schedule processing of a large amount of pricing data on an hourly basis.

Provide parallel processing and scale-on-demand computing resources to provide additional capacity as required.

Processing times must meet the 5-15 minute processing requirement.

Use simultaneous compute nodes to enable high performance computing for analysis.

Minimal administrative efforts and custom development.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

Tailspin Toys HR app

The solution architecture must meet the following requirements:

Integrate with Azure Active Directory (Azure AD).

Encrypt data at rest and in-transit.

Limit access based on location, filtered by IP addresses for corporate sites and authorized business partners. Mask data presented to employees.

Must be available on mobile devices.

Operations must be able to deploy the solution using an Azure Resource Manager (ARM) template.

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 need to recommend a solution architecture for the Tailspin Toys e-commerce website for app tier, data tier, and user authentication.

Solution:

Web App hosted in Azure virtual machines

App data stored in Azure SQL Server 2016, hosted in Azure virtual machines

Authentication provided through Azure AD business-to-consumer (B2C)

Solution deployed to multiple Azure regional datacenters Load balancing with Azure Traffic Manager

Does the solution meet the goal?

A. Yes

B. No

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Section: Case Study: Tailspin Toys

QUESTION 23