Vendor: Microsoft

Exam Code: AZ-204

Exam Name: Developing Solutions for Microsoft Azure

Version: 13.02

Q & As: 300

Topic 1, Windows Server 2016 virtual machine

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. 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.

Current environment
Windows Server 2016 virtual machine
The 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.

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 tracking 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:
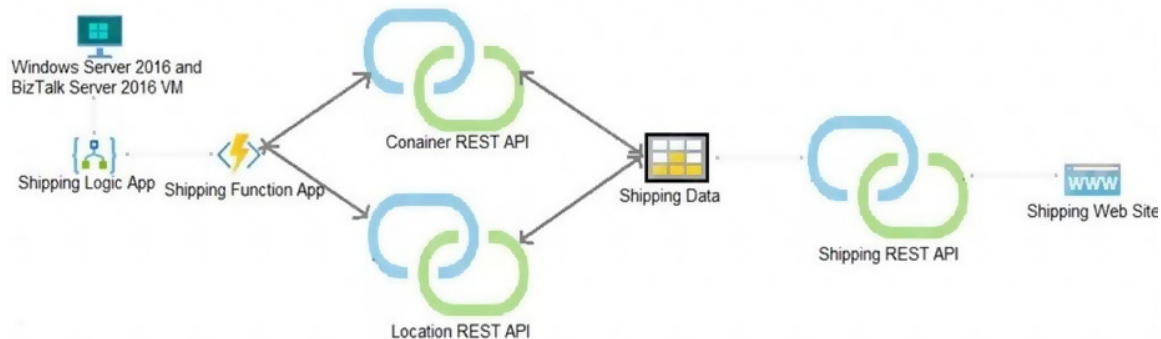
Requirements
Shipping Logic app
The Shipping Logic app must meet the following requirements:

▪ 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:

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 1
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.

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

Correct Answer:

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**

QUESTION 2
HOTSPOT
You need to update the APIs to resolve the testing error.

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.

```
az webapp [▼]          [▼]          -g shipping-apis-test-rg -n web
         ┌──────────┐  ┌──────────┐
         │ cors     │  │ add      │
         │ config   │  │ up       │
         │ deployment│ │ remove   │
         └──────────┘  └──────────┘

-- [▼]              [▼]
   ┌──────────────┐ ┌─────────────────────────────────────────────┐
   │ slot         │ │ http://*.wideworldimporters.com             │
   │ allowed-origins│ http://test-shippingapi.wideworldimporters.com│
   │ name         │ │ http://test.wideworldimporters.com          │
   └──────────────┘ │ http://www.wideworldimporters.com           │
                    └─────────────────────────────────────────────┘
```

Correct Answer:

```
az webapp [▼]          [▼]          -g shipping-apis-test-rg -n web
         ┌──────────┐  ┌──────────┐
         │ cors     │  │ add      │
         │ config   │  │ up       │
         │ deployment│ │ remove   │
         └──────────┘  └──────────┘

-- [▼]              [▼]
   ┌──────────────┐ ┌─────────────────────────────────────────────┐
   │ slot         │ │ http://*.wideworldimporters.com             │
   │ allowed-origins│ http://test-shippingapi.wideworldimporters.com│
   │ name         │ │ http://test.wideworldimporters.com          │
   └──────────────┘ │ http://www.wideworldimporters.com           │
                    └─────────────────────────────────────────────┘
```

QUESTION 3
You need to migrate on-premises shipping data to Azure. What should you use?

A. Azure Migrate
B. Azure Cosmos DB Data Migration tool (dt.exe)
C. AzCopy
D. Azure Database Migration service

Correct Answer: D
Explanation:
Migrate from on-premises or cloud implementations of MongoDB to Azure Cosmos DB with minimal downtime by using Azure Database Migration Service. Perform resilient migrations of MongoDB data at scale and with high reliability.

Scenario:
Data migration from on-premises to Azure must minimize costs and downtime.

The application uses MongoDB JSON document storage database for all container and transport information.

References: