DRAG DROP -

Your company identifies the following business continuity and disaster recovery objectives for virtual machines that host sales, finance, and reporting applications in the company's on-premises data center:

- The sales application must be able to fail over to a second on-premises data center.
- The reporting application must be able to recover point-in-time data at a daily granularity. The RTO is eight hours.
- The finance application requires that data be retained for seven years. In the event of a disaster, the application must be able to run from Azure. The recovery time objective (RTO) is 10 minutes.

You need to recommend which services meet the business continuity and disaster recovery objectives. The solution must minimize costs.

What should you recommend for each application? To answer, drag the appropriate services to the correct applications. Each service 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:

Correct Answer:

Box 1: Azure Site Recovery -

Azure Site Recovery -

Coordinates virtual-machine and physical-server replication, failover, and fullback.

DR solutions have low Recovery point objectives; DR copy can be behind by a few seconds/minutes.

DR needs only operational recovery data, which can take hours to a day. Using DR data for long-term retention is not recommended because of the fine-grained data capture.

Disaster recovery solutions have smaller Recovery time objectives because they are more in sync with the source.

Remote monitor the health of machines and create customizable recovery plans.

Box 2: Azure Site Recovery and Azure Backup

Backup ensures that your data is safe and recoverable while Site Recovery keeps your workloads available when/if an outage occurs.

Box 3: Azure Backup only -

Azure Backup -

Backs up data on-premises and in the cloud

Have wide variability in their acceptable Recovery point objective. VM backups usually one day while database backups as low as 15 minutes.

Backup data is typically retained for 30 days or less. From a compliance view, data may need to be saved for years. Backup data is ideal for archiving in such instances.

Because of a larger Recovery point objective, the amount of data a backup solution needs to process is usually much higher, which leads to a

longer Recovery time objective.
Reference:
https://lighthousemsp.com/whats-the-difference-between-azure-backup-and-azure-site-recovery/

Question #13 *Topic 3*

You need to design a highly available Azure SQL database that meets the following requirements:
☞ Failover between replicas of the database must occur without any data loss.
☞ The database must remain available in the event of a zone outage.
☞ Costs must be minimized.
Which deployment option should you use?

A. Azure SQL Managed Instance Business Critical

B. Azure SQL Database Premium

C. Azure SQL Database Basic

D. Azure SQL Managed Instance General Purpose

Correct Answer: *D*
General Purpose service tier provides zone redundant availability.
There are two high availability architectural models:
* Standard availability model that is based on a separation of compute and storage. It relies on high availability and reliability of the remote storage tier. This architecture targets budget-oriented business applications that can tolerate some performance degradation during maintenance activities.
* Premium availability model that is based on a cluster of database engine processes. It relies on the fact that there is always a quorum of available database engine nodes. This architecture targets mission-critical applications with high IO performance, high transaction rate and guarantees minimal performance impact to your workload during maintenance activities.
Note: Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure
Availability Zones ز€‰to replicate databases across multiple physical locations within an Azure region.ز€‰By selecting zone-redundancy, you can make yourز€‰new and existing serverless and provisioned generalز€‰purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.
Incorrect:
Not A: Azure SQL Managed Instance Business Critical is more expensive.
Not B: Premium is more expensive.
Not C: Azure SQL Database Basic, and General purpose provide only locally redundant availability.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla

Community vote distribution

B (96%) 2%

Question #14 *Topic 3*

You need to design a highly available Azure SQL database that meets the following requirements:
☞ Failover between replicas of the database must occur without any data loss.
☞ The database must remain available in the event of a zone outage.
☞ Costs must be minimized.
Which deployment option should you use?

A. Azure SQL Managed Instance Business Critical

B. Azure SQL Database Premium

C. Azure SQL Database Basic

D. Azure SQL Database Hyperscale

Correct Answer: *B*
Azure SQL Database Premium meets the requirements and is the least expensive.
Note: There are two high availability architectural models:
* Standard availability model that is based on a separation of compute and storage. It relies on high availability and reliability of the remote storage tier. This architecture targets budget-oriented business applications that can tolerate some performance degradation during maintenance activities.
* Premium availability model that is based on a cluster of database engine processes. It relies on the fact that there is always a quorum of available database engine nodes. This architecture targets mission-critical applications with high IO performance, high transaction rate and guarantees minimal performance impact to your workload during maintenance activities.
Note: Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure
Availability Zones ג€‰to replicate databases across multiple physical locations within an Azure region.ג€‰By selecting zone-redundancy, you can make yourג€‰new and existing serverless and provisioned generalג€‰purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.
Incorrect:
Not A: Azure SQL Managed Instance Business Critical is more expensive.
Not C: Azure SQL Database Basic, and General purpose provide only locally redundant availability.
Reference:
https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla

Community vote distribution

B (92%) 8%

Question #15 *Topic 3*

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 deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:
☞ Provide access to the full .NET framework.
☞ Provide redundancy if an Azure region fails.
☞ Grant administrators access to the operating system to install custom application dependencies.
Solution: You deploy a web app in an Isolated App Service plan.
Does this meet the goal?

A. Yes

B. No

Correct Answer: *B*
Instead: You deploy two Azure virtual machines to two Azure regions, and you create an Azure Traffic Manager profile.
Note: Azure Traffic Manager is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions, while providing high availability and responsiveness.
Reference:
https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview

Community vote distribution

B (100%)

Question #16 *Topic 3*

You need to design a highly available Azure SQL database that meets the following requirements:
☞ Failover between replicas of the database must occur without any data loss.
☞ The database must remain available in the event of a zone outage.
☞ Costs must be minimized.
Which deployment option should you use?

A. Azure SQL Database Serverless

B. Azure SQL Database Business Critical

C. Azure SQL Database Basic

D. Azure SQL Database Standard

Correct Answer: *A*
Now your new and existing serverless Azure SQL Databases allow for zone redundant configuration. This feature utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone redundancy, you can make your serverless databases resilient to a much larger set of failures, including catastrophic datacenter outagesа€"without any changes of the application logic.
The SQL Database serverless compute tier optimizes price-performance and simplifies performance management for single databases with intermittent, unpredictable usage by auto-scaling compute and billing for compute used per second.
Incorrect:
Not B: Azure SQL Database Business Critical is a more expensive solution.
Not C: Azure SQL Database Basic does not provide zone redundancy.
Not D: Azure SQL Database Standard is a more expensive solution.
Reference:
https://azure.microsoft.com/en-us/updates/public-preview-zone-redundant-configuration-for-azure-sql-database-serverless-compute-tier/

Community vote distribution

B (61%) A (39%)

Question #17 *Topic 3*

HOTSPOT
-

You have an on-premises Microsoft SQL Server database named SQL1.

You plan to migrate SQL1 to Azure.

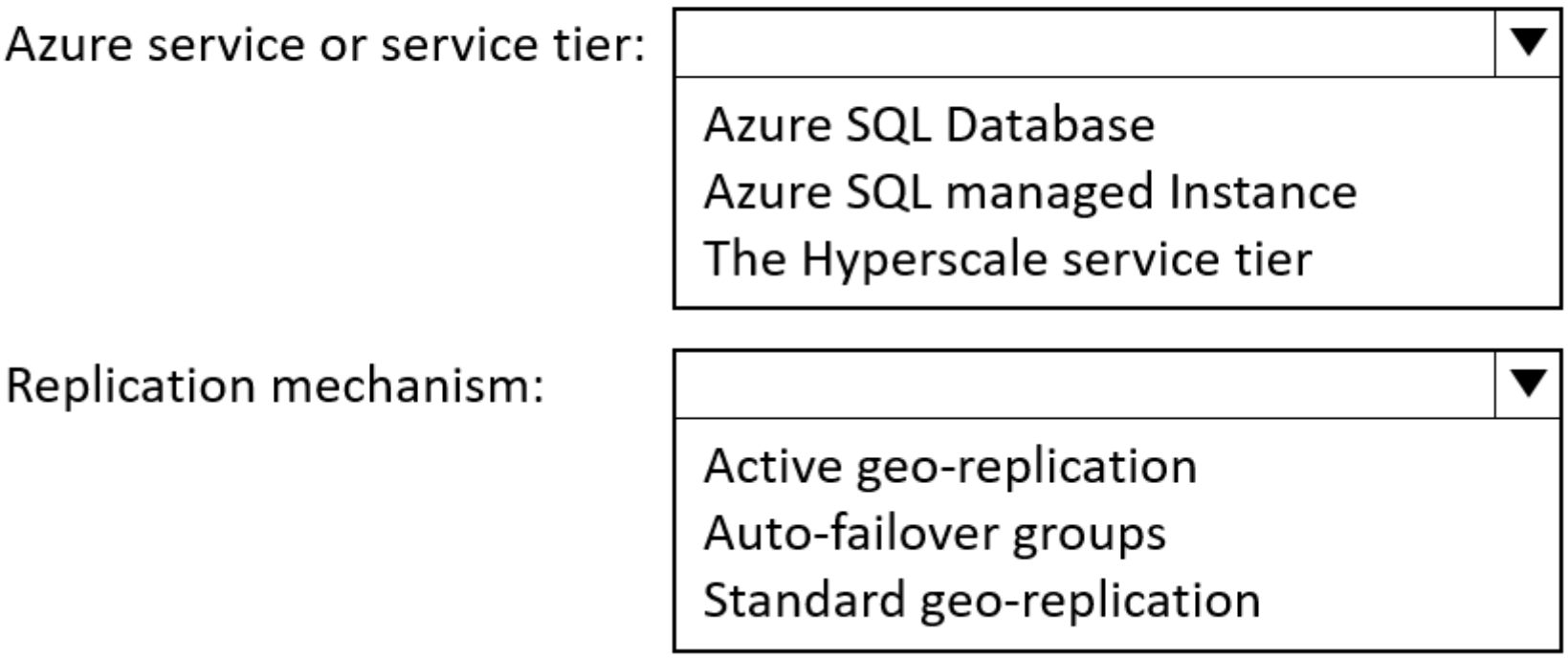
You need to recommend a hosting solution for SQL1. The solution must meet the following requirements:

- Support the deployment of multiple secondary, read-only replicas.
- Support automatic replication between primary and secondary replicas.
- Support failover between primary and secondary replicas within a 15-minute recovery time objective (RTO).

What should you include in the solution? To answer, select the appropriate options in the answer area.

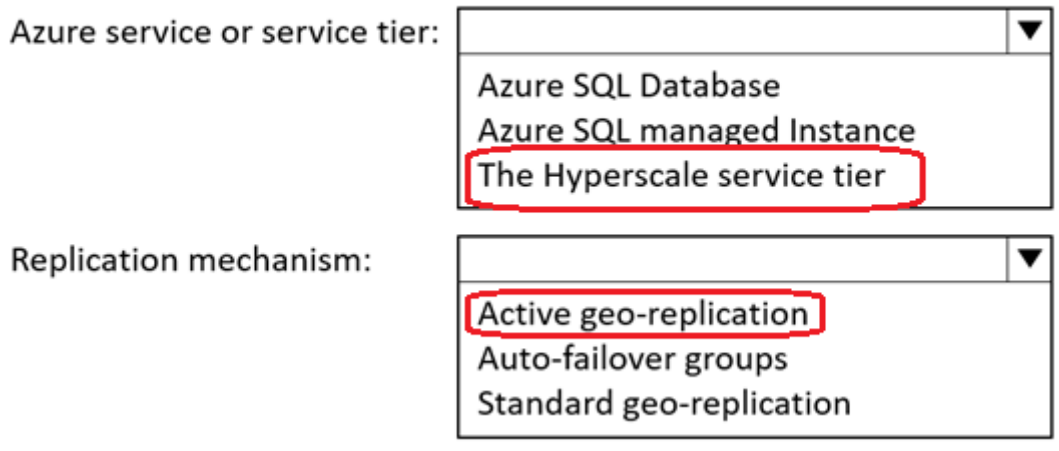
NOTE: Each correct selection is worth one point.

Answer Area



Correct Answer:

Answer Area



Question #18 *Topic 3*

HOTSPOT
-

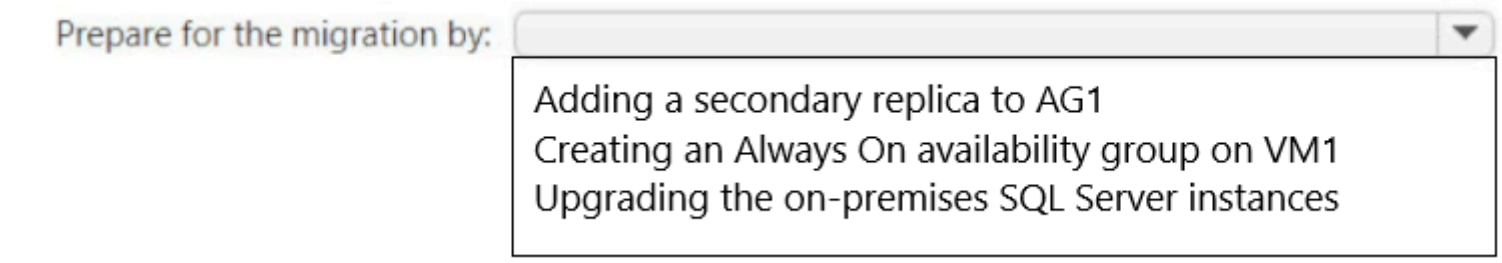
You have two on-premises Microsoft SQL Server 2017 instances that host an Always On availability group named AG1. AG1 contains a single database named DB1.

You have an Azure subscription that contains a virtual machine named VM1. VM1 runs Linux and contains a SQL Server 2019 instance.

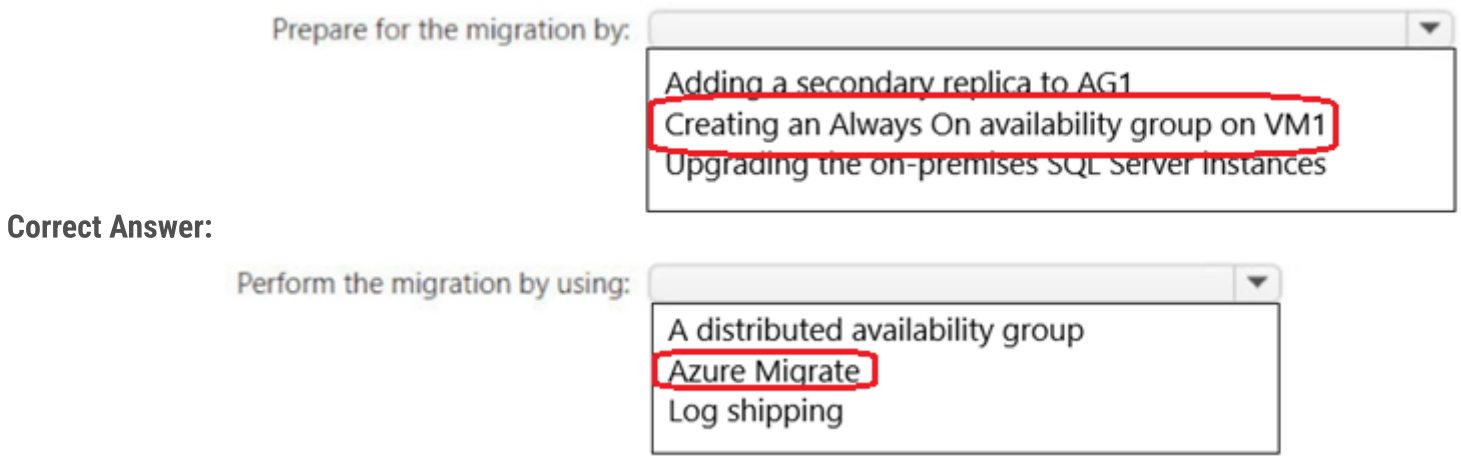
You need to migrate DB1 to VM1. The solution must minimize downtime on DB1.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.



Correct Answer:



Question #19 *Topic 3*

HOTSPOT
-

You are building an Azure web app that will store the Personally Identifiable Information (PII) of employees.

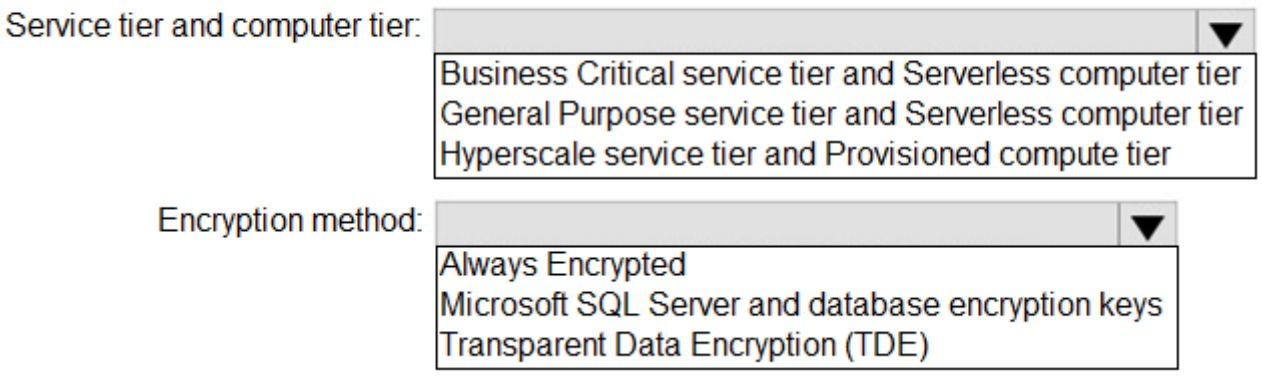
You need to recommend an Azure SQL. Database solution for the web app. The solution must meet the following requirements:

• Maintain availability in the event of a single datacenter outage.
• Support the encryption of specific columns that contain PII.
• Automatically scale up during payroll operations.
• Minimize costs.

What should you include in the recommendations? To answer, select the appropriate options in the answer area.

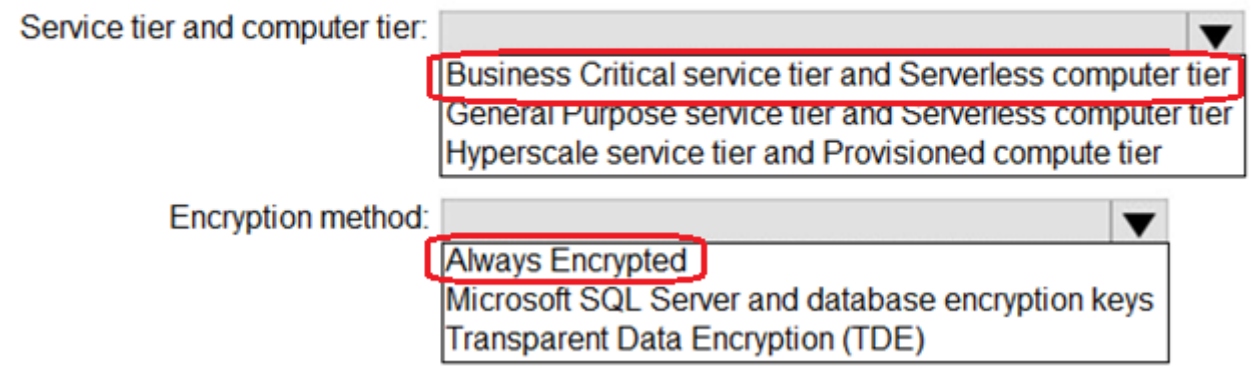
NOTE: Each correct selection is worth one point.

Answer Area



Correct Answer:

Answer Area



Question #20 *Topic 3*

You plan to deploy an Azure Database for MySQL flexible server named Server1 to the East US Azure region.

You need to implement a business continuity solution for Server1. The solution must minimize downtime in the event of a failover to a paired region.

What should you do?

A. Create a read replica.

B. Store the database files in Azure premium file shares.

C. Implement Geo-redundant backup.

D. Configure native MySQL replication.

Correct Answer: *C*

Community vote distribution

C (72%) A (26%)

Question #21 *Topic 3*

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Description
VNet1	Virtual Network	*None*
LB1	Public load balancer	Includes a backend pool name BP1
VMSS1	Azure Virtual Machine Scale Sets	Included in BP1 Connected to VNet1
NVA1	Network Virtual Appliance (NVA)	Connected to VNet1 Performs security filtering of traffic for VMSS1
NVA2	Network Virtual Appliance (NVA)	Connected to VNet1 Performs security filtering of traffic for VMSS1

You need to recommend a load balancing solution that will distribute incoming traffic for VMSS1 across NVA1 and NVA2. The solution must minimize administrative effort.

What should you include in the recommendation?

A. Gateway Load Balancer

B. Azure Front Door

C. Azure Application Gateway

D. Azure Traffic Manager

Correct Answer: *A*

Community vote distribution

A (100%)

Question #22 *Topic 3*

HOTSPOT
-

You have the Azure subscriptions shown in the following table.

Name	Location	Azure AD tenant
Sub1	East US	contoso.onmicrosoft.com
Sub2	East US	contoso-recovery.onmicrosoft.com

Contoso.onmicrosft.com contains a user named User1.

You need to deploy a solution to protect against ransomware attacks. The solution must meet the following requirements:

• Ensure that all the resources in Sub1 are backed up by using Azure Backup.
• Require that User1 first be assigned a role for Sub2 before the user can make major changes to the backup configuration.

What should you create in each subscription? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Sub1:
- A Recovery Services vault
- A Resource Guard
- An Azure Site Recovery job
- Microsoft Azure Backup Server (MABS)
- The Microsoft Azure Recovery Services (MARS) agent

Sub2:
- A Recovery Services vault
- A Resource Guard
- An Azure Site Recovery job
- Microsoft Azure Backup Server (MABS)
- The Microsoft Azure Recovery Services (MARS) agent

Correct Answer:

Answer Area

Sub1:
- A Recovery Services vault
- A Resource Guard
- An Azure Site Recovery job
- Microsoft Azure Backup Server (MABS)
- The Microsoft Azure Recovery Services (MARS) agent

Sub2:
- A Recovery Services vault
- A Resource Guard
- An Azure Site Recovery job
- Microsoft Azure Backup Server (MABS)
- The Microsoft Azure Recovery Services (MARS) agent

HOTSPOT
-

You have 10 on-premises servers that run Windows Server.

You need to perform daily backups of the servers to a Recovery Services vault. The solution must meet the following requirements:

• Back up all the files and folders on the servers.
• Maintain three copies of the backups in Azure.
• Minimize costs.

What should you configure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

On the servers:
- The Azure Site Recovery Mobility service
- The Microsoft Azure Recovery Services (MARS) agent
- Volume Shadow Copy Service (VSS)

For the storage:
- Geo-redundant storage (GRS)
- Locally-redundant storage (LRS)
- Zone-redundant storage (ZRS)

Correct Answer:

Answer Area

On the servers:
- The Azure Site Recovery Mobility service
- The Microsoft Azure Recovery Services (MARS) agent
- Volume Shadow Copy Service (VSS)

For the storage:
- Geo-redundant storage (GRS)
- Locally-redundant storage (LRS)
- Zone-redundant storage (ZRS)