Google Cloud

Partner Certification Academy


Professional Cloud Developer

v2309

# Quiz questions*

## Cloud Memorystore

* These are for practice only and are not actual exam questions

**Note: While many of the questions are specific to the Redis or Memcached versions of Cloud Memorystore, in most cases you could substitute Redis for Memcached or vice versa in the answer.**

Question: What is Memorystore for Redis primarily designed for on Google Cloud?

- A. A fully managed SQL database
- B. A NoSQL document database
- C. A fully managed Redis service
- D. A managed Kubernetes service

Question: Which of the following tasks does Memorystore for Redis relieve you from?

- A. Managing complex SQL queries
- B. Managing complex Redis deployments
- C. Managing Kubernetes nodes
- D. Managing NoSQL collections

Question: Which of the following is NOT a primary feature of Memorystore for Redis?

- A. Highly scalable
- B. Available
- C. Secure
- D. SQL support

Question: For which of the following scenarios would you typically use Memorystore?

- A. Long-term data archival
- B. Storing session data for web applications
- C. Video transcoding
- D. Image storage

Question: You are developing a gaming application on Google Cloud and need to maintain a sorted list of scores while ensuring the uniqueness of elements. Which feature of Memorystore for Redis would be most suitable for this use case?

- A. Redis hash
- B. Sorted Set
- C. Redis list
- D. Redis set

Question: Your application on Google Cloud requires fast, real-time processing of a Twitter feed. Which combination would be ideal for this requirement?

- A. Memorystore with Dataflow and Pub/Sub
- B. Memorystore with BigQuery and Dataproc
- C. Memorystore with Cloud Storage and Dataflow
- D. Memorystore with Pub/Sub and Cloud Storage

Question: You are deploying a microservices-based application on Google Kubernetes Engine and need to connect to Memorystore. What must be ensured for connectivity?

- A. Both should be in different VPCs.
- B. Both should be in the same authorized Virtual Private Cloud.
- C. Both should be in the same region but different zones.
- D. Both should be publicly accessible.

Question: You are deploying a serverless application on App Engine and need to connect it to Memorystore. What is a prerequisite for connectivity in some serverless environments?

- A. Cloud NAT
- B. Serverless VPC Access connector
- C. Cloud VPN
- D. Cloud Interconnect

Question: You are developing a social media application where users frequently access their friend lists. Which feature of Memorystore for Memcached would be most suitable to enhance the speed of retrieving these lists?

- A. Persistent Disk Storage
- B. In-memory caching
- C. Data replication across zones
- D. Scheduled backups

Question: A social media platform wants to display trending topics in real-time. How can Memorystore for Memcached assist in this scenario?

- A. By storing user profiles
- B. By caching historical data
- C. By caching frequently updated data like trending topics
- D. By archiving old posts

Question: In a social media application, user sessions need to be managed efficiently to ensure a seamless user experience. How can Memorystore for Memcached be utilized in this context?

- A. For long-term storage of user data
- B. For caching user session data
- C. For backup and recovery of posts
- D. For analyzing user behavior

Correct Answer: B. For caching user session data

Question: A social media platform is experiencing latency when users try to view their notifications. How can Memorystore help in reducing this latency?

- A. By analyzing user preferences
- B. By caching user notifications
- C. By storing multimedia content
- D. By managing user connections

Question: For a social media application that allows users to vote on polls, the results need to be displayed in real-time. How can Memorystore assist in displaying real-time poll results?

- A. By storing the poll questions
- B. By archiving old polls
- C. By caching the real-time poll results
- D. By managing user comments on polls

Question: In a microservices architecture deployed on Google Kubernetes Engine, you want to reduce the database load caused by frequent reads. How can Memorystore  assist?

- A. By serving as the primary database for all microservices.
- B. By caching the results of database reads for quick access.
- C. By handling the deployment of microservices.
- D. By managing network traffic between microservices.

Question: For a microservices-based e-commerce platform, you want to ensure that the shopping cart data is quickly retrievable across services. How can Memorystore help?

- A. By permanently storing all shopping cart data.
- B. By caching active shopping cart data for quick retrieval.
- C. By managing payment gateways.
- D. By analyzing user purchase behavior.

Question: You have deployed a Cloud Run service and a Cloud Memorystore for Redis instance. When trying to access the service, you receive a connectivity error. Upon checking, you find that the Cloud Run service is in us-central1 and the Memorystore instance is in us-west1. What is the most likely reason for this connectivity error?

- A. The Cloud Run service is using an outdated Redis client.
- B. The Cloud Run service and Memorystore instance are in different regions.
- C. The VPC connector's egress settings are not set to All traffic.
- D. The Cloud Run service's memory allocation is too low.

# Answers to Quiz questions

## Cloud Memorystore

Note: While many of the questions are specific to the Redis or Memcached versions of Cloud Memorystore, in most cases you could substitute Redis for Memcached or vice versa in the answer.

Question: What is Memorystore for Redis primarily designed for on Google Cloud?

- A. A fully managed SQL database
- B. A NoSQL document database
- C. A fully managed Redis service
- D. A managed Kubernetes service

Correct Answer: C. A fully managed Redis service

Explanation: Memorystore for Redis is a fully managed Redis service designed for applications running on Google Cloud.
Resource: Memorystore for Redis Documentation

Question: Which of the following tasks does Memorystore for Redis relieve you from?

- A. Managing complex SQL queries
- B. Managing complex Redis deployments
- C. Managing Kubernetes nodes
- D. Managing NoSQL collections

Correct Answer: B. Managing complex Redis deployments

Explanation: Memorystore for Redis allows applications to leverage the Redis service without the burden of managing complex Redis deployments.
Resource: Memorystore for Redis Documentation

Question: Which of the following is NOT a primary feature of Memorystore for Redis?

- A. Highly scalable
- B. Available
- C. Secure
- D. SQL support

Correct Answer: D. SQL support

Explanation: Memorystore for Redis is described as highly scalable, available, and secure.
Resource: Memorystore for Redis Documentation

Question: For which of the following scenarios would you typically use Memorystore?

- A. Long-term data archival
- B. Storing session data for web applications
- C. Video transcoding
- D. Image storage

Correct Answer: B. Storing session data for web applications

Explanation: Memorystore is commonly used as an in-memory data structure store and is suitable for scenarios like storing session data for web applications due to its fast access times.
Resource: Memorystore for Redis Documentation

Question: You are developing a gaming application on Google Cloud and need to maintain a sorted list of scores while ensuring the uniqueness of elements. Which feature of Memorystore for Redis would be most suitable for this use case?

- A. Redis hash
- B. Sorted Set
- C. Redis list
- D. Redis set

Correct Answer: B. Sorted Set

Explanation: In gaming applications, leaderboards are crucial for enhancing user engagement. With its in-memory store and the Sorted Set data structure, Memorystore for Redis makes it easy to maintain a sorted list of scores while ensuring the uniqueness of elements.
Resource: Memorystore for Redis Overview

Question: Your application on Google Cloud requires fast, real-time processing of a Twitter feed. Which combination would be ideal for this requirement?

- A. Memorystore with Dataflow and Pub/Sub
- B. Memorystore with BigQuery and Dataproc
- C. Memorystore with Cloud Storage and Dataflow
- D. Memorystore with Pub/Sub and Cloud Storage

Correct Answer: A. Memorystore with Dataflow and Pub/Sub

Explanation: For real-time stream processing, such as processing a Twitter feed, combining Memorystore with Dataflow and Pub/Sub provides a scalable, fast in-memory store for storing intermediate data that thousands of clients can access with very low latency.

Resource: Memorystore for Redis Overview

Question: You are deploying a microservices-based application on Google Kubernetes Engine and need to connect to Memorystore. What must be ensured for connectivity?

- A. Both should be in different VPCs.
- B. Both should be in the same authorized Virtual Private Cloud.
- C. Both should be in the same region but different zones.
- D. Both should be publicly accessible.

Correct Answer: B. Both should be in the same authorized Virtual Private Cloud.

Explanation: To connect to a Memorystore instance, the client (in this case, the microservices-based application on GKE) must be connected to the same network as the Memorystore instance.
Resource: Memorystore for Redis Overview

Question: You are deploying a serverless application on App Engine and need to connect it to Memorystore.  What is a prerequisite for connectivity in some serverless environments?

- A. Cloud NAT
- B. Serverless VPC Access connector
- C. Cloud VPN
- D. Cloud Interconnect

Correct Answer: B. Serverless VPC Access connector

Explanation: Some serverless environments require a Serverless VPC Access connector as a prerequisite for connectivity with Memorystore.
Resource: Memorystore for Redis Overview

Question: You are developing a social media application where users frequently access their friend lists. Which feature of Memorystore for Memcached would be most suitable to enhance the speed of retrieving these lists?

- A. Persistent Disk Storage
- B. In-memory caching
- C. Data replication across zones
- D. Scheduled backups

Correct Answer: B. In-memory caching

Explanation: In-memory caching with Memorystore for Memcached provides low-latency access to frequently accessed data, making it ideal for quickly retrieving frequently accessed lists like a user's friend list in a social media application.
Resource: Memorystore for Memcache Overview

Question: A social media platform wants to display trending topics in real-time. How can Memorystore for Memcached assist in this scenario?

- A. By storing user profiles
- B. By caching historical data
- C. By caching frequently updated data like trending topics
- D. By archiving old posts

Correct Answer: C. By caching frequently updated data like trending topics

Explanation: Memorystore for Memcached can cache frequently updated data, allowing the platform to quickly access and display trending topics to users in real-time without querying the primary database repeatedly.
Resource:Memorystore for Memcache Overview

Question: In a social media application, user sessions need to be managed efficiently to ensure a seamless user experience. How can Memorystore for Memcached be utilized in this context?

- A. For long-term storage of user data
- B. For caching user session data
- C. For backup and recovery of posts
- D. For analyzing user behavior

Correct Answer: B. For caching user session data

Explanation: Memorystore for Memcached can be used to cache user session data, ensuring quick access and a seamless experience for users as they navigate through the application.
Resource: Memorystore for Memcache Overview

Question: A social media platform is experiencing latency when users try to view their notifications. How can Memorystore help in reducing this latency?

- A. By analyzing user preferences
- B. By caching user notifications
- C. By storing multimedia content

- D. By managing user connections

Correct Answer: B. By caching user notifications

Explanation: By caching user notifications in Memorystore, the platform can provide quick access to notifications, reducing the latency users experience when trying to view them.
Resource: Memorystore for Memcache Overview

Question: For a social media application that allows users to vote on polls, the results need to be displayed in real-time. How can Memorystore assist in displaying real-time poll results?

- A. By storing the poll questions
- B. By archiving old polls
- C. By caching the real-time poll results
- D. By managing user comments on polls

Correct Answer: C. By caching the real-time poll results

Explanation: Memorystore can cache the real-time results of polls, allowing the application to quickly display updated results to users without having to compute them from the primary database every time.
Resource: Memorystore for Memcache Overview

Question: In a microservices architecture deployed on Google Kubernetes Engine, you want to reduce the database load caused by frequent reads. How can Memorystore assist?

- A. By serving as the primary database for all microservices.
- B. By caching the results of database reads for quick access.
- C. By handling the deployment of microservices.
- D. By managing network traffic between microservices.

Correct Answer: B. By caching the results of database reads for quick access.

Explanation: Memorystore for Memcached can act as an in-memory cache, storing frequently accessed data, thus reducing the need to query the primary database repeatedly. This can significantly reduce the database load in a microservices environment.

Question: For a microservices-based e-commerce platform, you want to ensure that the shopping cart data is quickly retrievable across services. How can Memorystore help?

- A. By permanently storing all shopping cart data.
- B. By caching active shopping cart data for quick retrieval.
- C. By managing payment gateways.
- D. By analyzing user purchase behavior.

Correct Answer: B. By caching active shopping cart data for quick retrieval.

Explanation: Memorystore for Memcached can cache active shopping cart data, ensuring that it's quickly retrievable across different services, providing a seamless shopping experience for users.

Question: You have deployed a Cloud Run service and a Cloud Memorystore for Redis instance. When trying to access the service, you receive a connectivity error. Upon checking, you find that the Cloud Run service is in us-central1 and the Memorystore instance is in us-west1. What is the most likely reason for this connectivity error?

- A. The Cloud Run service is using an outdated Redis client.
- B. The Cloud Run service and Memorystore instance are in different regions.
- C. The VPC connector's egress settings are not set to All traffic.

- D. The Cloud Run service's memory allocation is too low.

Correct Answer: B. The Cloud Run service and Memorystore instance are in different regions.

Explanation: Cloud Memorystore for Redis instances are regional resources, and they do not support cross-region access. If Cloud Run and Memorystore are deployed in different regions, the Cloud Run service won't be able to connect to the Memorystore instance.
Resource: Cloud Memorystore Locations