

# Amazon

## Exam Questions AWS-Certified-Database-Specialty

AWS Certified Database - Specialty



#### NEW QUESTION 1

A database specialist needs to review and optimize an Amazon DynamoDB table that is experiencing performance issues. A thorough investigation by the database specialist reveals that the partition key is causing hot partitions, so a new partition key is created. The database specialist must effectively apply this new partition key to all existing and new data.

How can this solution be implemented?

- A. Use Amazon EMR to export the data from the current DynamoDB table to Amazon S3. Then use Amazon EMR again to import the data from Amazon S3 into a new DynamoDB table with the new partition key.
- B. Use AWS DMS to copy the data from the current DynamoDB table to Amazon S3. Then import the DynamoDB table to create a new DynamoDB table with the new partition key.
- C. Use the AWS CLI to update the DynamoDB table and modify the partition key.
- D. Use the AWS CLI to back up the DynamoDB table.
- E. Then use the restore-table-from-backup command and modify the partition key.

**Answer:** A

#### Explanation:

<https://aws.amazon.com/premiumsupport/knowledge-center/back-up-dynamodb-s3/>

#### NEW QUESTION 2

A company uses Amazon Aurora for secure financial transactions. The data must always be encrypted at rest and in transit to meet compliance requirements. Which combination of actions should a database specialist take to meet these requirements? (Choose two.)

- A. Create an Aurora Replica with encryption enabled using AWS Key Management Service (AWS KMS). Then promote the replica to master.
- B. Use SSL/TLS to secure the in-transit connection between the financial application and the Aurora DB cluster.
- C. Modify the existing Aurora DB cluster and enable encryption using an AWS Key Management Service (AWS KMS) encryption key.
- D. Apply the changes immediately.
- E. Take a snapshot of the Aurora DB cluster and encrypt the snapshot using an AWS Key Management Service (AWS KMS) encryption key.
- F. Restore the snapshot to a new DB cluster and update the financial application database endpoints.
- G. Use AWS Key Management Service (AWS KMS) to secure the in-transit connection between the financial application and the Aurora DB cluster.

**Answer:** AB

#### Explanation:

<https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/aurora-replicas-adding.html>

#### NEW QUESTION 3

A company is using Amazon RDS for MySQL to redesign its business application. A Database Specialist has noticed that the Development team is restoring their MySQL database multiple times a day when Developers make mistakes in their schema updates. The Developers sometimes need to wait hours to the restores to complete.

Multiple team members are working on the project, making it difficult to find the correct restore point for each mistake.

Which approach should the Database Specialist take to reduce downtime?

- A. Deploy multiple read replicas and have the team members make changes to separate replica instances
- B. Migrate to Amazon RDS for SQL Server, take a snapshot, and restore from the snapshot
- C. Migrate to Amazon Aurora MySQL and enable the Aurora Backtrack feature
- D. Enable the Amazon RDS for MySQL Backtrack feature

**Answer:** C

#### Explanation:

"Amazon Aurora, a fully-managed relational database service in AWS, is now offering a backtrack feature. With Amazon Aurora with MySQL compatibility, users can backtrack, or "rewind", a database cluster to a specific point in time, without restoring data from a backup. The backtrack process allows a point in time to be specified with one second resolution, and the rewind process typically takes minutes. This new feature facilitates developers in undoing mistakes like deleting data inappropriately or dropping the wrong table."

#### NEW QUESTION 4

A global digital advertising company captures browsing metadata to contextually display relevant images, pages, and links to targeted users. A single page load can generate multiple events that need to be stored individually. The maximum size of an event is 200 KB and the average size is 10 KB. Each page load must query the user's browsing history to provide targeting recommendations. The advertising company expects over 1 billion page visits per day from users in the United States, Europe, Hong Kong, and India. The structure of the metadata varies depending on the event. Additionally, the browsing metadata must be written and read with very low latency to ensure a good viewing experience for the users.

Which database solution meets these requirements?

- A. Amazon DocumentDB
- B. Amazon RDS Multi-AZ deployment
- C. Amazon DynamoDB global table
- D. Amazon Aurora Global Database

**Answer:** C

#### NEW QUESTION 5

A financial company wants to store sensitive user data in an Amazon Aurora PostgreSQL DB cluster. The database will be accessed by multiple applications across the company. The company has mandated that all communications to the database be encrypted and the server identity must be validated. Any non-SSL-based connections should be disallowed access to the database.

Which solution addresses these requirements?

- A. Set the rds.force\_ssl=0 parameter in DB parameter group
- B. Download and use the Amazon RDS certificate bundle and configure the PostgreSQL connection string with sslmode=allow.
- C. Set the rds.force\_ssl=1 parameter in DB parameter group
- D. Download and use the Amazon RDS certificate bundle and configure the PostgreSQL connection string with sslmode=disable.
- E. Set the rds.force\_ssl=0 parameter in DB parameter group
- F. Download and use the Amazon RDS certificate bundle and configure the PostgreSQL connection string with sslmode=verify-ca.
- G. Set the rds.force\_ssl=1 parameter in DB parameter group
- H. Download and use the Amazon RDS certificate bundle and configure the PostgreSQL connection string with sslmode=verify-full.

**Answer:** D

**Explanation:**

PostgreSQL: sslrootcert=rds-cert.pem sslmode=[verify-ca | verify-full]

**NEW QUESTION 6**

A database specialist has been entrusted by an ecommerce firm with designing a reporting dashboard that visualizes crucial business KPIs derived from the company's primary production database running on Amazon Aurora. The dashboard should be able to read data within 100 milliseconds after an update. The Database Specialist must conduct an audit of the Aurora DB cluster's present setup and provide a cost-effective alternative. The solution must support the unexpected read demand generated by the reporting dashboard without impairing the DB cluster's write availability and performance.

Which solution satisfies these criteria?

- A. Turn on the serverless option in the DB cluster so it can automatically scale based on demand.
- B. Provision a clone of the existing DB cluster for the new Application team.
- C. Create a separate DB cluster for the new workload, refresh from the source DB cluster, and set up ongoing replication using AWS DMS change data capture (CDC).
- D. Add an automatic scaling policy to the DB cluster to add Aurora Replicas to the cluster based on CPU consumption.

**Answer:** D

**NEW QUESTION 7**

An AWS CloudFormation stack that included an Amazon RDS DB instance was accidentally deleted and recent data was lost. A Database Specialist needs to add RDS settings to the CloudFormation template to reduce the chance of accidental instance data loss in the future.

Which settings will meet this requirement? (Choose three.)

- A. Set DeletionProtection to True
- B. Set MultiAZ to True
- C. Set TerminationProtection to True
- D. Set DeleteAutomatedBackups to False
- E. Set DeletionPolicy to Delete
- F. Set DeletionPolicy to Retain

**Answer:** ACF

**NEW QUESTION 8**

A company has an AWS CloudFormation template written in JSON that is used to launch new Amazon RDS for MySQL DB instances. The security team has asked a database specialist to ensure that the master password is automatically rotated every 30 days for all new DB instances that are launched using the template.

What is the MOST operationally efficient solution to meet these requirements?

- A. Save the password in an Amazon S3 object
- B. Encrypt the S3 object with an AWS KMS key
- C. Set the KMS key to be rotated every 30 days by setting the EnableKeyRotation property to true
- D. Use a CloudFormation custom resource to read the S3 object to extract the password.
- E. Create an AWS Lambda function to rotate the secret
- F. Modify the CloudFormation template to add an AWS::SecretsManager::RotationSchedule resource
- G. Configure the RotationLambdaARN value and, for the RotationRules property, set the AutomaticallyAfterDays parameter to 30.
- H. Modify the CloudFormation template to use the AWS KMS key as the database password
- I. Configure an Amazon EventBridge rule to invoke the KMS API to rotate the key every 30 days by setting the ScheduleExpression parameter to `*/30/*`.
- J. Integrate the Amazon RDS for MySQL DB instances with AWS IAM and centrally manage the master database user password.

**Answer:** B

**Explanation:**

[https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-secretsmanager-rotationsschedule](https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-resource-secretsmanager-rotationsschedule.html)

**NEW QUESTION 9**

A company has a production environment running on Amazon RDS for SQL Server with an in-house web application as the front end. During the last application maintenance window, new functionality was added to the web application to enhance the reporting capabilities for management. Since the update, the application is slow to respond to some reporting queries.

How should the company identify the source of the problem?

- A. Install and configure Amazon CloudWatch Application Insights for Microsoft .NET and Microsoft SQL Server
- B. Use a CloudWatch dashboard to identify the root cause.
- C. Enable RDS Performance Insights and determine which query is creating the problem
- D. Request changes to the query to address the problem.
- E. Use AWS X-Ray deployed with Amazon RDS to track query system traces.
- F. Create a support request and work with AWS Support to identify the source of the issue.

**Answer:** B

**Explanation:**

Amazon RDS Performance Insights is a database performance tuning and monitoring feature that helps you quickly assess the load on your database, and determine when and where to take action. Performance Insights allows non-experts to detect performance problems with an easy-to-understand dashboard that visualizes database load. <https://aws.amazon.com/rds/performance-insights/>

**NEW QUESTION 10**

A business is operating an on-premises application that is divided into three tiers: web, application, and MySQL database. The database is predominantly accessed during business hours, with occasional bursts of activity throughout the day. As part of the company's shift to AWS, a database expert wants to increase the availability and minimize the cost of the MySQL database tier.

Which MySQL database choice satisfies these criteria?

- A. Amazon RDS for MySQL with Multi-AZ
- B. Amazon Aurora Serverless MySQL cluster
- C. Amazon Aurora MySQL cluster
- D. Amazon RDS for MySQL with read replica

**Answer:** B

**Explanation:**

Amazon Aurora Serverless v1 is a simple, cost-effective option for infrequent, intermittent, or unpredictable workloads. <https://aws.amazon.com/rds/aurora/serverless/>

**NEW QUESTION 10**

A marketing company is using Amazon DocumentDB and requires that database audit logs be enabled. A Database Specialist needs to configure monitoring so that all data definition language (DDL) statements performed are visible to the Administrator. The Database Specialist has set the audit\_logs parameter to enabled in the cluster parameter group.

What should the Database Specialist do to automatically collect the database logs for the Administrator?

- A. Enable DocumentDB to export the logs to Amazon CloudWatch Logs
- B. Enable DocumentDB to export the logs to AWS CloudTrail
- C. Enable DocumentDB Events to export the logs to Amazon CloudWatch Logs
- D. Configure an AWS Lambda function to download the logs using the download-db-log-file-portion operation and store the logs in Amazon S3

**Answer:** C

**Explanation:**

<https://docs.aws.amazon.com/documentdb/latest/developerguide/event-auditing.html> Auditing Amazon DocumentDB Events  
PDF  
Kindle RSS

With Amazon DocumentDB (with MongoDB compatibility), you can audit events that were performed in your cluster. Examples of logged events include successful and failed authentication attempts, dropping a collection in a database, or creating an index. By default, auditing is disabled on Amazon DocumentDB and requires that you opt in to use this feature.

When auditing is enabled, Amazon DocumentDB records Data Definition Language (DDL), authentication, authorization, and user management events to Amazon CloudWatch Logs. When auditing is enabled, Amazon DocumentDB exports your cluster's auditing records (JSON documents) to Amazon CloudWatch Logs. You can use Amazon CloudWatch Logs to analyze, monitor, and archive your Amazon DocumentDB auditing events.

**NEW QUESTION 11**

The Security team for a finance company was notified of an internal security breach that happened 3 weeks ago. A Database Specialist must start producing audit logs out of the production Amazon Aurora PostgreSQL cluster for the Security team to use for monitoring and alerting. The Security team is required to perform real-time alerting and monitoring outside the Aurora DB cluster and wants to have the cluster push encrypted files to the chosen solution.

Which approach will meet these requirements?

- A. Use pg\_audit to generate audit logs and send the logs to the Security team.
- B. Use AWS CloudTrail to audit the DB cluster and the Security team will get data from Amazon S3.
- C. Set up database activity streams and connect the data stream from Amazon Kinesis to consumer applications.
- D. Turn on verbose logging and set up a schedule for the logs to be dumped out for the Security team.

**Answer:** C

**Explanation:**

<https://aws.amazon.com/about-aws/whats-new/2019/05/amazon-aurora-with-postgresql-compatibility-supports-> "Database Activity Streams for Amazon Aurora with PostgreSQL compatibility provides a near real-time data stream of the database activity in your relational database to help you monitor activity. When integrated with third party database activity monitoring tools, Database Activity Streams can monitor and audit database activity to provide safeguards for your database and help meet compliance and regulatory requirements."

<https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/Overview.LoggingAndMonitoring.html>

**NEW QUESTION 16**

A company wants to migrate its existing on-premises Oracle database to Amazon Aurora PostgreSQL. The migration must be completed with minimal downtime using AWS DMS. A Database Specialist must validate that the data was migrated accurately from the source to the target before the cutover. The migration must have minimal impact on the performance of the source database.

Which approach will MOST effectively meet these requirements?

- A. Use the AWS Schema Conversion Tool (AWS SCT) to convert source Oracle database schemas to the target Aurora DB cluster.
- B. Verify the datatype of the columns.
- C. Use the table metrics of the AWS DMS task created for migrating the data to verify the statistics for the tables being migrated and to verify that the data definition language (DDL) statements are completed.
- D. Enable the AWS Schema Conversion Tool (AWS SCT) premigration validation and review the premigration checklist to make sure there are no issues with the

conversion.

E. Enable AWS DMS data validation on the task so the AWS DMS task compares the source and target records, and reports any mismatches.

**Answer: D**

**Explanation:**

"To ensure that your data was migrated accurately from the source to the target, we highly recommend that you use data validation."

[https://docs.aws.amazon.com/dms/latest/userguide/CHAP\\_BestPractices.html](https://docs.aws.amazon.com/dms/latest/userguide/CHAP_BestPractices.html)

**NEW QUESTION 17**

An Amazon RDS EBS-optimized instance with Provisioned IOPS (PIOPS) storage is using less than half of its allocated IOPS over the course of several hours under constant load. The RDS instance exhibits multi-second read and write latency, and uses all of its maximum bandwidth for read throughput, yet the instance uses less than half of its CPU and RAM resources.

What should a Database Specialist do in this situation to increase performance and return latency to sub-second levels?

- A. Increase the size of the DB instance storage
- B. Change the underlying EBS storage type to General Purpose SSD (gp2)
- C. Disable EBS optimization on the DB instance
- D. Change the DB instance to an instance class with a higher maximum bandwidth

**Answer: D**

**Explanation:**

[https://docs.amazonaws.cn/en\\_us/AmazonRDS/latest/UserGuide/CHAP\\_BestPractices.html](https://docs.amazonaws.cn/en_us/AmazonRDS/latest/UserGuide/CHAP_BestPractices.html)

**NEW QUESTION 20**

An online advertising website uses an Amazon DynamoDB table with on-demand capacity mode as its data store. The website also has a DynamoDB Accelerator (DAX) cluster in the same VPC as its web application server. The application needs to perform infrequent writes and many strongly consistent reads from the data store by querying the DAX cluster.

During a performance audit, a systems administrator notices that the application can look up items by using the DAX cluster. However, the QueryCacheHits metric for the DAX cluster consistently shows 0 while the QueryCacheMisses metric continuously keeps growing in Amazon CloudWatch.

What is the MOST likely reason for this occurrence?

- A. A VPC endpoint was not added to access DynamoDB.
- B. Strongly consistent reads are always passed through DAX to DynamoDB.
- C. DynamoDB is scaling due to a burst in traffic, resulting in degraded performance.
- D. A VPC endpoint was not added to access CloudWatch.

**Answer: B**

**Explanation:**

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/DAX.concepts.html>

"If the request specifies strongly consistent reads, DAX passes the request through to DynamoDB. The results from DynamoDB are not cached in DAX. Instead, they are simply returned to the application."

**NEW QUESTION 21**

Recently, a gaming firm purchased a popular iOS game that is especially popular during the Christmas season. The business has opted to include a leaderboard into the game, which will be powered by Amazon DynamoDB. The application's load is likely to increase significantly throughout the Christmas season.

Which solution satisfies these criteria at the lowest possible cost?

- A. DynamoDB Streams
- B. DynamoDB with DynamoDB Accelerator
- C. DynamoDB with on-demand capacity mode
- D. DynamoDB with provisioned capacity mode with Auto Scaling

**Answer: D**

**Explanation:**

"On-demand is ideal for bursty, new, or unpredictable workloads whose traffic can spike in seconds or minutes"

vs.

"DynamoDB released auto scaling to make it easier for you to manage capacity efficiently, and auto scaling continues to help DynamoDB users lower the cost of workloads that have a predictable traffic pattern."

<https://aws.amazon.com/blogs/database/amazon-dynamodb-auto-scaling-performance-and-cost-optimization-at>

**NEW QUESTION 22**

A financial company has allocated an Amazon RDS MariaDB DB instance with large storage capacity to accommodate migration efforts. Post-migration, the company purged unwanted data from the instance. The company now want to downsize storage to save money. The solution must have the least impact on production and near-zero downtime.

Which solution would meet these requirements?

- A. Create a snapshot of the old databases and restore the snapshot with the required storage
- B. Create a new RDS DB instance with the required storage and move the databases from the old instances to the new instance using AWS DMS
- C. Create a new database using native backup and restore
- D. Create a new read replica and make it the primary by terminating the existing primary

**Answer: B**

**Explanation:**

<https://aws.amazon.com/premiumsupport/knowledge-center/rds-db-storage-size/> Use AWS Database Migration Service (AWS DMS) for minimal downtime.

#### NEW QUESTION 26

A company is running its customer feedback application on Amazon Aurora MySQL. The company runs a report every day to extract customer feedback, and a team reads the feedback to determine if the customer comments are positive or negative. It sometimes takes days before the company can contact unhappy customers and take corrective measures. The company wants to use machine learning to automate this workflow. Which solution meets this requirement with the LEAST amount of effort?

- A. Export the Aurora MySQL database to Amazon S3 by using AWS Database Migration Service (AWS DMS). Use Amazon Comprehend to run sentiment analysis on the exported files.
- B. Export the Aurora MySQL database to Amazon S3 by using AWS Database Migration Service (AWS DMS). Use Amazon SageMaker to run sentiment analysis on the exported files.
- C. Set up Aurora native integration with Amazon Comprehend.
- D. Use SQL functions to extract sentiment analysis.
- E. Set up Aurora native integration with Amazon SageMaker.
- F. Use SQL functions to extract sentiment analysis.

**Answer: C**

#### Explanation:

For details about using Aurora and Amazon Comprehend together, see [Using Amazon Comprehend for sentiment detection](#). Aurora machine learning uses a highly optimized integration between the Aurora database and the AWS machine learning (ML) services SageMaker and Amazon Comprehend.

<https://www.stackoverflow.com/2019/11/27/new-for-amazon-aurora-use-machine-learning-directly-from-your>

#### NEW QUESTION 27

A company is going through a security audit. The audit team has identified cleartext master user password in the AWS CloudFormation templates for Amazon RDS for MySQL DB instances. The audit team has flagged this as a security risk to the database team. What should a database specialist do to mitigate this risk?

- A. Change all the databases to use AWS IAM for authentication and remove all the cleartext passwords in CloudFormation templates.
- B. Use an AWS Secrets Manager resource to generate a random password and reference the secret in the CloudFormation template.
- C. Remove the passwords from the CloudFormation templates so Amazon RDS prompts for the password when the database is being created.
- D. Remove the passwords from the CloudFormation template and store them in a separate file.
- E. Replace the passwords by running CloudFormation using a sed command.

**Answer: B**

#### Explanation:

<https://aws.amazon.com/blogs/infrastructure-and-automation/securing-passwords-in-aws-quick-starts-using-aws>

#### NEW QUESTION 31

A large company has a variety of Amazon DB clusters. Each of these clusters has various configurations that adhere to various requirements. Depending on the team and use case, these configurations can be organized into broader categories.

A database administrator wants to make the process of storing and modifying these parameters more systematic. The database administrator also wants to ensure that changes to individual categories of configurations are automatically applied to all instances when required.

Which AWS service or feature will help automate and achieve this objective?

- A. AWS Systems Manager Parameter Store
- B. DB parameter group
- C. AWS Config
- D. AWS Secrets Manager

**Answer: B**

#### NEW QUESTION 34

Amazon RDS for Oracle with Transparent Data Encryption is used by a financial services organization (TDE). At all times, the organization is obligated to encrypt its data at rest. The decryption key must be widely distributed, and access to the key must be restricted. The organization must be able to rotate the encryption key on demand to comply with regulatory requirements. If any possible security vulnerabilities are discovered, the organization must be able to disable the key. Additionally, the company's overhead must be kept to a minimal.

What method should the database administrator use to configure the encryption to fulfill these specifications?

- A. AWS CloudHSM
- B. AWS Key Management Service (AWS KMS) with an AWS managed key
- C. AWS Key Management Service (AWS KMS) with server-side encryption
- D. AWS Key Management Service (AWS KMS) CMK with customer-provided material

**Answer: D**

#### Explanation:

<https://docs.aws.amazon.com/whitepapers/latest/kms-best-practices/aws-managed-and-customer-managed-cmks>

#### NEW QUESTION 35

A Database Specialist is troubleshooting an application connection failure on an Amazon Aurora DB cluster with multiple Aurora Replicas that had been running with no issues for the past 2 months. The connection failure lasted for 5 minutes and corrected itself after that. The Database Specialist reviewed the Amazon RDS events and determined a failover event occurred at that time. The failover process took around 15 seconds to complete.

What is the MOST likely cause of the 5-minute connection outage?

- A. After a database crash, Aurora needed to replay the redo log from the last database checkpoint
- B. The client-side application is caching the DNS data and its TTL is set too high
- C. After failover, the Aurora DB cluster needs time to warm up before accepting client connections
- D. There were no active Aurora Replicas in the Aurora DB cluster

**Answer: B**

**Explanation:**

When your application tries to establish a connection after a failover, the new Aurora PostgreSQL writer will be a previous reader, which can be found using the Aurora read only endpoint before DNS updates have fully propagated. Setting the java DNS TTL to a low value helps cycle between reader nodes on subsequent connection attempts.

Amazon Aurora is designed to recover from a crash almost instantaneously and continue to serve your application data. Unlike other databases, after a crash Amazon Aurora does not need to replay the redo log from the last database checkpoint before making the database available for operations. Amazon Aurora performs crash recovery asynchronously on parallel threads, so your database is open and available immediately after a crash. Because the storage is organized in many small segments, each with its own redo log, the underlying storage can replay redo records on demand in parallel and asynchronously as part of a disk read after a crash. This approach reduces database restart times to less than 60 seconds in most cases

**NEW QUESTION 39**

For the first time, a database professional is establishing a test graph database on Amazon Neptune. The database expert must input millions of rows of test observations from an Amazon S3.csv file. The database professional uploaded the data to the Neptune DB instance through a series of API calls. Which sequence of actions enables the database professional to upload the data most quickly? (Select three.)

- A. Ensure Amazon Cognito returns the proper AWS STS tokens to authenticate the Neptune DB instance to the S3 bucket hosting the CSV file.
- B. Ensure the vertices and edges are specified in different .csv files with proper header column formatting.
- C. Use AWS DMS to move data from Amazon S3 to the Neptune Loader.
- D. Curl the S3 URI while inside the Neptune DB instance and then run the addVertex or addEdge commands.
- E. Ensure an IAM role for the Neptune DB instance is configured with the appropriate permissions to allow access to the file in the S3 bucket.
- F. Create an S3 VPC endpoint and issue an HTTP POST to the database's loader endpoint.

**Answer: BEF**

**Explanation:**

<https://docs.aws.amazon.com/neptune/latest/userguide/bulk-load-optimize.html>

**NEW QUESTION 41**

A business uses Amazon EC2 instances in VPC A to serve an internal file-sharing application. This application is supported by an Amazon ElastiCache cluster in VPC B that is peering with VPC A. The corporation migrates the instances of its applications from VPC A to VPC B. The file-sharing application is no longer able to connect to the ElastiCache cluster, as shown by the logs.

What is the best course of action for a database professional to take in order to remedy this issue?

- A. Create a second security group on the EC2 instance
- B. Add an outbound rule to allow traffic from the ElastiCache cluster security group.
- C. Delete the ElastiCache security group
- D. Add an interface VPC endpoint to enable the EC2 instances to connect to the ElastiCache cluster.
- E. Modify the ElastiCache security group by adding outbound rules that allow traffic to VPC CIDR blocks from the ElastiCache cluster.
- F. Modify the ElastiCache security group by adding an inbound rule that allows traffic from the EC2 instances security group to the ElastiCache cluster.

**Answer: D**

**Explanation:**

<https://docs.aws.amazon.com/vpc/latest/peering/vpc-peering-security-groups.html>

**NEW QUESTION 42**

A company is using an Amazon Aurora PostgreSQL DB cluster with an xlarge primary instance master and two large Aurora Replicas for high availability and read-only workload scaling. A failover event occurs and application performance is poor for several minutes. During this time, application servers in all Availability Zones are healthy and responding normally.

What should the company do to eliminate this application performance issue?

- A. Configure both of the Aurora Replicas to the same instance class as the primary DB instance
- B. Enable cache coherence on the DB cluster, set the primary DB instance failover priority to tier-0, and assign a failover priority of tier-1 to the replicas.
- C. Deploy an AWS Lambda function that calls the DescribeDBInstances action to establish which instance has failed, and then use the PromoteReadReplica operation to promote one Aurora Replica to be the primary DB instance
- D. Configure an Amazon RDS event subscription to send a notification to an Amazon SNS topic to which the Lambda function is subscribed.
- E. Configure one Aurora Replica to have the same instance class as the primary DB instance
- F. Implement Aurora PostgreSQL DB cluster cache management
- G. Set the failover priority to tier-0 for the primary DB instance and one replica with the same instance class
- H. Set the failover priority to tier-1 for the other replicas.
- I. Configure both Aurora Replicas to have the same instance class as the primary DB instance
- J. Implement Aurora PostgreSQL DB cluster cache management
- K. Set the failover priority to tier-0 for the primary DB instance and to tier-1 for the replicas.

**Answer: C**

**Explanation:**

<https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/AuroraPostgreSQL.cluster-cache-mgmt.htm>

<https://aws.amazon.com/blogs/database/introduction-to-aurora-postgresql-cluster-cache-management/>

"You can customize the order in which your Aurora Replicas are promoted to the primary instance after a failure by assigning each replica a priority. Priorities range from 0 for the first priority to 15 for the last priority. If the primary instance fails, Amazon RDS promotes the Aurora Replica with the better priority to the new primary instance. You can modify the priority of an Aurora Replica at any time. Modifying the priority doesn't trigger a failover. More than one Aurora Replica can share the same priority, resulting in promotion tiers. If two or more Aurora Replicas share the same priority, then Amazon RDS promotes the replica that is largest

in size. If two or more Aurora Replicas share the same priority and size, then Amazon RDS promotes an arbitrary replica in the same promotion tier. " Amazon Aurora with PostgreSQL compatibility now supports cluster cache management, providing a faster path to full performance if there's a failover. With cluster cache management, you designate a specific reader DB instance in your Aurora PostgreSQL cluster as the failover target. Cluster cache management keeps the data in the designated reader's cache synchronized with the data in the read-write instance's cache. If a failover occurs, the designated reader is promoted to be the new read-write instance, and workloads benefit immediately from the data in its cache.

#### NEW QUESTION 46

A company is going to use an Amazon Aurora PostgreSQL DB cluster for an application backend. The DB cluster contains some tables with sensitive data. A Database Specialist needs to control the access privileges at the table level. How can the Database Specialist meet these requirements?

- A. Use AWS IAM database authentication and restrict access to the tables using an IAM policy.
- B. Configure the rules in a NACL to restrict outbound traffic from the Aurora DB cluster.
- C. Execute GRANT and REVOKE commands that restrict access to the tables containing sensitive data.
- D. Define access privileges to the tables containing sensitive data in the pg\_hba.conf file.

**Answer: C**

#### NEW QUESTION 47

On a single Amazon RDS DB instance, a business hosts a MySQL database for its ecommerce application. Automatically saving application purchases to the database results in high-volume writes. Employees routinely create purchase reports for the company. The organization wants to boost database performance and minimize downtime associated with upgrade patching. Which technique will satisfy these criteria with the LEAST amount of operational overhead?

- A. Enable a Multi-AZ deployment of the RDS for MySQL DB instance, and enable Memcached in the MySQL option group.
- B. Enable a Multi-AZ deployment of the RDS for MySQL DB instance, and set up replication to a MySQL DB instance running on Amazon EC2.
- C. Enable a Multi-AZ deployment of the RDS for MySQL DB instance, and add a read replica.
- D. Add a read replica and promote it to an Amazon Aurora MySQL DB cluster master.
- E. Then enable Amazon Aurora Serverless.

**Answer: C**

#### NEW QUESTION 48

A company has a production Amazon Aurora DB cluster that serves both online transaction processing (OLTP) transactions and compute-intensive reports. The reports run for 10% of the total cluster uptime while the OLTP transactions run all the time. The company has benchmarked its workload and determined that a six-node Aurora DB cluster is appropriate for the peak workload. The company is now looking at cutting costs for this DB cluster, but needs to have a sufficient number of nodes in the cluster to support the workload at different times. The workload has not changed since the previous benchmarking exercise. How can a Database Specialist address these requirements with minimal user involvement?

- A. Split up the DB cluster into two different clusters: one for OLTP and the other for reporting.
- B. Monitor and set up replication between the two clusters to keep data consistent.
- C. Review and evaluate the peak combined workload.
- D. Ensure that utilization of the DB cluster nodes is at an acceptable level.
- E. Adjust the number of instances, if necessary.
- F. Use the stop cluster functionality to stop all the nodes of the DB cluster during times of minimal workload.
- G. The cluster can be restarted again depending on the workload at the time.
- H. Set up automatic scaling on the DB cluster.
- I. This will allow the number of reader nodes to adjust automatically to the reporting workload, when needed.

**Answer: D**

#### NEW QUESTION 52

A retail company with its main office in New York and another office in Tokyo plans to build a database solution on AWS. The company's main workload consists of a mission-critical application that updates its application data in a data store. The team at the Tokyo office is building dashboards with complex analytical queries using the application data. The dashboards will be used to make buying decisions, so they need to have access to the application data in less than 1 second. Which solution meets these requirements?

- A. Use an Amazon RDS DB instance deployed in the us-east-1 Region with a read replica instance in the ap-northeast-1 Region.
- B. Create an Amazon ElastiCache cluster in the ap-northeast-1 Region to cache application data from the replica to generate the dashboards.
- C. Use an Amazon DynamoDB global table in the us-east-1 Region with replication into the ap-northeast-1 Region.
- D. Use Amazon QuickSight for displaying dashboard results.
- E. Use an Amazon RDS for MySQL DB instance deployed in the us-east-1 Region with a read replica instance in the ap-northeast-1 Region.
- F. Have the dashboard application read from the read replica.
- G. Use an Amazon Aurora global database.
- H. Deploy the writer instance in the us-east-1 Region and the replica in the ap-northeast-1 Region.
- I. Have the dashboard application read from the replica in the ap-northeast-1 Region.

**Answer: D**

#### Explanation:

<https://aws.amazon.com/blogs/database/aurora-postgresql-disaster-recovery-solutions-using-amazon-aurora-global>

#### NEW QUESTION 56

A company is due for renewing its database license. The company wants to migrate its 80 TB transactional database system from on-premises to the AWS Cloud. The migration should incur the least possible downtime on the downstream database applications. The company's network infrastructure has limited network bandwidth that is shared with other applications. Which solution should a database specialist use for a timely migration?

- A. Perform a full backup of the source database to AWS Snowball Edge appliances and ship them to be loaded to Amazon S3. Use AWS DMS to migrate change data capture (CDC) data from the source database to Amazon S3. Use a second AWS DMS task to migrate all the S3 data to the target database.
- B. Perform a full backup of the source database to AWS Snowball Edge appliances and ship them to be loaded to Amazon S3. Periodically perform incremental backups of the source database to be shipped in another Snowball Edge appliance to handle syncing change data capture (CDC) data from the source to the target database.
- C. Use AWS DMS to migrate the full load of the source database over a VPN tunnel using the internet for its primary connection.
- D. Allow AWS DMS to handle syncing change data capture (CDC) data from the source to the target database.
- E. Use the AWS Schema Conversion Tool (AWS SCT) to migrate the full load of the source database over a VPN tunnel using the internet for its primary connection.
- F. Allow AWS SCT to handle syncing change data capture (CDC) data from the source to the target database.

**Answer:** A

**Explanation:**

[https://docs.aws.amazon.com/dms/latest/userguide/CHAP\\_Target.S3.html](https://docs.aws.amazon.com/dms/latest/userguide/CHAP_Target.S3.html) Using Amazon S3 as a target for AWS Database Migration Service

**NEW QUESTION 61**

An ecommerce company is using Amazon DynamoDB as the backend for its order-processing application.

The steady increase in the number of orders is resulting in increased DynamoDB costs. Order verification and reporting perform many repeated GetItem functions that pull similar datasets, and this read activity is contributing to the increased costs. The company wants to control these costs without significant development efforts.

How should a Database Specialist address these requirements?

- A. Use AWS DMS to migrate data from DynamoDB to Amazon DocumentDB
- B. Use Amazon DynamoDB Streams and Amazon Kinesis Data Firehose to push the data into Amazon Redshift
- C. Use an Amazon ElastiCache for Redis in front of DynamoDB to boost read performance
- D. Use DynamoDB Accelerator to offload the reads

**Answer:** D

**Explanation:**

[https://docs.amazonaws.cn/en\\_us/amazondynamodb/latest/developerguide/DAX.html](https://docs.amazonaws.cn/en_us/amazondynamodb/latest/developerguide/DAX.html)

"Applications that are read-intensive, but are also cost-sensitive. With DynamoDB, you provision the number of reads per second that your application requires. If read activity increases, you can increase your tables' provisioned read throughput (at an additional cost). Or, you can offload the activity from your application to a DAX cluster, and reduce the number of read capacity units that you need to purchase otherwise."

**NEW QUESTION 65**

A retail company manages a web application that stores data in an Amazon DynamoDB table. The company is undergoing account consolidation efforts. A database engineer needs to migrate the DynamoDB table from the current AWS account to a new AWS account.

Which strategy meets these requirements with the LEAST amount of administrative work?

- A. Use AWS Glue to crawl the data in the DynamoDB table
- B. Create a job using an available blueprint to export the data to Amazon S3. Import the data from the S3 file to a DynamoDB table in the new account.
- C. Create an AWS Lambda function to scan the items of the DynamoDB table in the current account and write to a file in Amazon S3. Create another Lambda function to read the S3 file and restore the items of a DynamoDB table in the new account.
- D. Use AWS Data Pipeline in the current account to export the data from the DynamoDB table to a file in Amazon S3. Use Data Pipeline to import the data from the S3 file to a DynamoDB table in the new account.
- E. Configure Amazon DynamoDB Streams for the DynamoDB table in the current account
- F. Create an AWS Lambda function to read from the stream and write to a file in Amazon S3. Create another Lambda function to read the S3 file and restore the items to a DynamoDB table in the new account.

**Answer:** C

**Explanation:**

<https://aws.amazon.com/premiumsupport/knowledge-center/dynamodb-cross-account-migration/> <https://aws.amazon.com/premiumsupport/knowledge-center/data-pipeline-account-access-dynamodb-s3/>

**NEW QUESTION 68**

A large retail company recently migrated its three-tier ecommerce applications to AWS. The company's backend database is hosted on Amazon Aurora PostgreSQL. During peak times, users complain about longer page load times. A database specialist reviewed Amazon RDS Performance Insights and found a spike in IO:WaitSync wait events. The SQL attached to the wait events are all single INSERT statements.

How should this issue be resolved?

- A. Modify the application to commit transactions in batches
- B. Add a new Aurora Replica to the Aurora DB cluster.
- C. Add an Amazon ElastiCache for Redis cluster and change the application to write through.
- D. Change the Aurora DB cluster storage to Provisioned IOPS (PIOPS).

**Answer:** A

**Explanation:**

<https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/AuroraPostgreSQL.Reference.html> "This wait most often arises when there is a very high rate of commit activity on the system. You can sometimes alleviate this wait by modifying applications to commit transactions in batches."

<https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/apg-waits.xactsync.html>

**NEW QUESTION 70**

A company recently acquired a new business. A database specialist must migrate an unencrypted 12 TB Amazon RDS for MySQL DB instance to a new AWS account. The database specialist needs to minimize the amount of time required to migrate the database.

Which solution meets these requirements?

- A. Create a snapshot of the source DB instance in the source account
- B. Share the snapshot with the destination account
- C. In the target account, create a DB instance from the snapshot.
- D. Use AWS Resource Access Manager to share the source DB instance with the destination account. Create a DB instance in the destination account using the shared resource.
- E. Create a read replica of the DB instance
- F. Give the destination account access to the read replica
- G. In the destination account, create a snapshot of the shared read replica and provision a new RDS for MySQL DB instance.
- H. Use mysqldump to back up the source database
- I. Create an RDS for MySQL DB instance in the destination account
- J. Use the mysql command to restore the backup in the destination database.

**Answer: A**

**Explanation:**

Sharing an unencrypted manual DB snapshot enables authorized AWS accounts to directly restore a DB instance from the snapshot instead of taking a copy of it and restoring from that. [https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_ShareSnapshot.html](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_ShareSnapshot.html) However Resource Access Manager could not share non-Aurora cluster. <https://docs.aws.amazon.com/ram/latest/userguide/shareable.html>

**NEW QUESTION 74**

Developers have requested a new Amazon Redshift cluster so they can load new third-party marketing data. The new cluster is ready and the user credentials are given to the developers. The developers indicate that their copy jobs fail with the following error message:

"Amazon Invalid operation: S3ServiceException:Access Denied,Status 403,Error AccessDenied."

The developers need to load this data soon, so a database specialist must act quickly to solve this issue. What is the MOST secure solution?

- A. Create a new IAM role with the same user name as the Amazon Redshift developer user
- B. Provide the IAM role with read-only access to Amazon S3 with the assume role action.
- C. Create a new IAM role with read-only access to the Amazon S3 bucket and include the assume role action
- D. Modify the Amazon Redshift cluster to add the IAM role.
- E. Create a new IAM role with read-only access to the Amazon S3 bucket with the assume role action
- F. Add this role to the developer IAM user ID used for the copy job that ended with an error message.
- G. Create a new IAM user with access keys and a new role with read-only access to the Amazon S3 bucket. Add this role to the Amazon Redshift cluster
- H. Change the copy job to use the access keys created.

**Answer: B**

**Explanation:**

<https://docs.aws.amazon.com/redshift/latest/gsg/rs-gsg-create-an-iam-role.html>

"Now that you have created the new role, your next step is to attach it to your cluster. You can attach the role when you launch a new cluster or you can attach it to an existing cluster. In the next step, you attach the role to a new cluster."

[https://docs.aws.amazon.com/redshift/latest/dg/copy-usage\\_notes-access-permissions.html](https://docs.aws.amazon.com/redshift/latest/dg/copy-usage_notes-access-permissions.html)

**NEW QUESTION 77**

A company is planning to close for several days. A Database Specialist needs to stop all applications along with the DB instances to ensure employees do not have access to the systems during this time. All databases are running on Amazon RDS for MySQL.

The Database Specialist wrote and executed a script to stop all the DB instances. When reviewing the logs, the Database Specialist found that Amazon RDS DB instances with read replicas did not stop.

How should the Database Specialist edit the script to fix this issue?

- A. Stop the source instances before stopping their read replicas
- B. Delete each read replica before stopping its corresponding source instance
- C. Stop the read replicas before stopping their source instances
- D. Use the AWS CLI to stop each read replica and source instance at the same time

**Answer: B**

**Explanation:**

[https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_StopInstance.html](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_StopInstance.html)

"The following are some limitations to stopping and starting a DB instance: You can't stop a DB instance that has a read replica, or that is a read replica." So if you can't stop a db with a read replica, you have to delete the read replica first to then stop it???

[https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_MySQL.Replication.ReadReplicas.html#U](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_MySQL.Replication.ReadReplicas.html#U)

**NEW QUESTION 82**

A company is building a software as a service application. As part of the new user sign-on workflow, a Python script invokes the CreateTable operation using the Amazon DynamoDB API. After the call returns, the script attempts to call PutItem.

Occasionally, the PutItem request fails with a ResourceNotFoundException error, which causes the workflow to fail. The development team has confirmed that the same table name is used in the two API calls.

How should a database specialist fix this issue?

- A. Add an allow statement for the dynamodb:PutItem action in a policy attached to the role used by the application creating the table.
- B. Set the StreamEnabled property of the StreamSpecification parameter to true, then call PutItem.
- C. Change the application to call DescribeTable periodically until the TableStatus is ACTIVE, then call PutItem.
- D. Add a ConditionExpression parameter in the PutItem request.

**Answer: C**

**Explanation:**

[https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API\\_DescribeTable.html](https://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API_DescribeTable.html)

### NEW QUESTION 83

A company is load testing its three-tier production web application deployed with an AWS CloudFormation template on AWS. The Application team is making changes to deploy additional Amazon EC2 and AWS Lambda resources to expand the load testing capacity. A Database Specialist wants to ensure that the changes made by the Application team will not change the Amazon RDS database resources already deployed. Which combination of steps would allow the Database Specialist to accomplish this? (Choose two.)

- A. Review the stack drift before modifying the template
- B. Create and review a change set before applying it
- C. Export the database resources as stack outputs
- D. Define the database resources in a nested stack
- E. Set a stack policy for the database resources

**Answer:** BE

**Explanation:**

[https://docs.amazonaws.cn/en\\_us/AWSCloudFormation/latest/UserGuide/best-practices.html#cfn-best-practices](https://docs.amazonaws.cn/en_us/AWSCloudFormation/latest/UserGuide/best-practices.html#cfn-best-practices)

### NEW QUESTION 87

A company is migrating a mission-critical 2-TB Oracle database from on premises to Amazon Aurora. The cost for the database migration must be kept to a minimum, and both the on-premises Oracle database and the Aurora DB cluster must remain open for write traffic until the company is ready to completely cut over to Aurora.

Which combination of actions should a database specialist take to accomplish this migration as quickly as possible? (Choose two.)

- A. Use the AWS Schema Conversion Tool (AWS SCT) to convert the source database schem
- B. Then restore the converted schema to the target Aurora DB cluster.
- C. Use Oracle's Data Pump tool to export a copy of the source database schema and manually edit the schema in a text editor to make it compatible with Aurora.
- D. Create an AWS DMS task to migrate data from the Oracle database to the Aurora DB cluste
- E. Select the migration type to replicate ongoing changes to keep the source and target databases in sync until the company is ready to move all user traffic to the Aurora DB cluster.
- F. Create an AWS DMS task to migrate data from the Oracle database to the Aurora DB cluste
- G. Once the initial load is complete, create an AWS Kinesis Data Firehose stream to perform change data capture (CDC) until the company is ready to move all user traffic to the Aurora DB cluster.
- H. Create an AWS Glue job and related resources to migrate data from the Oracle database to the Aurora DB cluste
- I. Once the initial load is complete, create an AWS DMS task to perform change data capture (CDC) until the company is ready to move all user traffic to the Aurora DB cluster.

**Answer:** AC

### NEW QUESTION 90

A company has applications running on Amazon EC2 instances in a private subnet with no internet connectivity. The company deployed a new application that uses Amazon DynamoDB, but the application cannot connect to the DynamoDB tables. A developer already checked that all permissions are set correctly. What should a database specialist do to resolve this issue while minimizing access to external resources?

- A. Add a route to an internet gateway in the subnet's route table.
- B. Add a route to a NAT gateway in the subnet's route table.
- C. Assign a new security group to the EC2 instances with an outbound rule to ports 80 and 443.
- D. Create a VPC endpoint for DynamoDB and add a route to the endpoint in the subnet's route table.

**Answer:** D

**Explanation:**

<https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/vpc-endpoints-dynamodb.html>

### NEW QUESTION 95

A Database Specialist is designing a disaster recovery strategy for a production Amazon DynamoDB table. The table uses provisioned read/write capacity mode, global secondary indexes, and time to live (TTL). The Database Specialist has restored the latest backup to a new table. To prepare the new table with identical settings, which steps should be performed? (Choose two.)

- A. Re-create global secondary indexes in the new table
- B. Define IAM policies for access to the new table
- C. Define the TTL settings
- D. Encrypt the table from the AWS Management Console or use the update-table command
- E. Set the provisioned read and write capacity

**Answer:** BC

**Explanation:**

The following items need to be reconfigured after restoring the DynamoDB table.

- AutoScaling policy
- IAM policy
- CloudWatch settings
- Tags
- Stream settings
- TTL

[https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/backuprestore\\_HowItWorks.html](https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/backuprestore_HowItWorks.html)

### NEW QUESTION 96

A company is using Amazon with Aurora Replicas for read-only workload scaling. A Database Specialist needs to split up two read-only applications so each application always connects to a dedicated replica. The Database Specialist wants to implement load balancing and high availability for the read-only applications.

Which solution meets these requirements?

- A. Use a specific instance endpoint for each replica and add the instance endpoint to each read-only application connection string.
- B. Use reader endpoints for both the read-only workload applications.
- C. Use a reader endpoint for one read-only application and use an instance endpoint for the other read-only application.
- D. Use custom endpoints for the two read-only applications.

**Answer:** D

**Explanation:**

<https://aws.amazon.com/about-aws/whats-new/2018/11/amazon-aurora-simplifies-workload-management-with-c>

#### NEW QUESTION 99

A large company is using an Amazon RDS for Oracle Multi-AZ DB instance with a Java application. As a part of its disaster recovery annual testing, the company would like to simulate an Availability Zone failure and record how the application reacts during the DB instance failover activity. The company does not want to make any code changes for this activity.

What should the company do to achieve this in the shortest amount of time?

- A. Use a blue-green deployment with a complete application-level failover test
- B. Use the RDS console to reboot the DB instance by choosing the option to reboot with failover
- C. Use RDS fault injection queries to simulate the primary node failure
- D. Add a rule to the NACL to deny all traffic on the subnets associated with a single Availability Zone

**Answer:** B

**Explanation:**

[https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_RebootInstance.html](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_RebootInstance.html) <https://exain.wordpress.com/2017/07/12/amazon-rds-multi-az-setup-failover-simulation/>

"Rebooting with failover is beneficial when you want to simulate a failure of a DB instance for testing, or restore operations to the original AZ after a failover occurs."

#### NEW QUESTION 100

A company is developing a multi-tier web application hosted on AWS using Amazon Aurora as the database. The application needs to be deployed to production and other non-production environments. A Database Specialist needs to specify different MasterUsername and MasterUserPassword properties in the AWS CloudFormation templates used for automated deployment. The CloudFormation templates are version controlled in the company's code repository. The company also needs to meet compliance requirement by routinely rotating its database master password for production.

What is most secure solution to store the master password?

- A. Store the master password in a parameter file in each environment
- B. Reference the environment-specific parameter file in the CloudFormation template.
- C. Encrypt the master password using an AWS KMS key
- D. Store the encrypted master password in the CloudFormation template.
- E. Use the secretsmanager dynamic reference to retrieve the master password stored in AWS Secrets Manager and enable automatic rotation.
- F. Use the ssm dynamic reference to retrieve the master password stored in the AWS Systems Manager Parameter Store and enable automatic rotation.

**Answer:** C

**Explanation:**

"By using the secure string support in CloudFormation with dynamic references you can better maintain your infrastructure as code. You'll be able to avoid hard coding passwords into your templates and you can keep these runtime configuration parameters separated from your code. Moreover, when properly used, secure strings will help keep your development and production code as similar as possible, while continuing to make your infrastructure code suitable for continuous deployment pipelines."

<https://aws.amazon.com/blogs/mt/using-aws-systems-manager-parameter-store-secure-string-parameters-in-aws> <https://aws.amazon.com/blogs/security/how-to-use-aws-secrets-manager-rotate-credentials-amazon-rds-database>

#### NEW QUESTION 101

A business just transitioned from an on-premises Oracle database to Amazon Aurora PostgreSQL. Following the move, the organization observed that every day around 3:00 PM, the application's response time is substantially slower. The firm has determined that the problem is with the database, not the application.

Which set of procedures should the Database Specialist do to locate the erroneous PostgreSQL query most efficiently?

- A. Create an Amazon CloudWatch dashboard to show the number of connections, CPU usage, and disk space consumption
- B. Watch these dashboards during the next slow period.
- C. Launch an Amazon EC2 instance, and install and configure an open-source PostgreSQL monitoring tool that will run reports based on the output error logs.
- D. Modify the logging database parameter to log all the queries related to locking in the database and then check the logs after the next slow period for this information.
- E. Enable Amazon RDS Performance Insights on the PostgreSQL database
- F. Use the metrics to identify any queries that are related to spikes in the graph during the next slow period.

**Answer:** D

**Explanation:**

<https://aws.amazon.com/blogs/database/optimizing-and-tuning-queries-in-amazon-rds-postgresql-based-on-native> "AWS recently released a feature called Amazon RDS Performance Insights, which provides an easy-to-understand dashboard for detecting performance problems in terms of load." "AWS recently released a feature called Amazon RDS Performance Insights, which provides an easy-to-understand dashboard for detecting performance problems in terms of load."

#### NEW QUESTION 104

A financial organization must ensure that the most current 90 days of MySQL database backups are accessible. Amazon RDS for MySQL DB instances are used to host all MySQL databases. A database expert must create

a solution that satisfies the criteria for backup retention with the least amount of development work feasible. Which strategy should the database administrator take?

- A. Use AWS Backup to build a backup plan for the required retention period.
- B. Assign the DB instances to the backup plan.
- C. Modify the DB instances to enable the automated backup option.
- D. Select the required backup retention period.
- E. Automate a daily cron job on an Amazon EC2 instance to create MySQL dumps, transfer to Amazon S3, and implement an S3 Lifecycle policy to meet the retention requirement.
- F. Use AWS Lambda to schedule a daily manual snapshot of the DB instance.
- G. Delete snapshots that exceed the retention requirement.

**Answer:** A

**Explanation:**

[https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\\_WorkingWithAutomatedBackups.html](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithAutomatedBackups.html)

#### NEW QUESTION 105

A clothing company uses a custom ecommerce application and a PostgreSQL database to sell clothes to thousands of users from multiple countries. The company is migrating its application and database from its on-premises data center to the AWS Cloud. The company has selected Amazon EC2 for the application and Amazon RDS for PostgreSQL for the database. The company requires database passwords to be changed every 60 days. A Database Specialist needs to ensure that the credentials used by the web application to connect to the database are managed securely. Which approach should the Database Specialist take to securely manage the database credentials?

- A. Store the credentials in a text file in an Amazon S3 bucket.
- B. Restrict permissions on the bucket to the IAM role associated with the instance profile on the EC2 instance.
- C. Modify the application to download the text file and retrieve the credentials on start up.
- D. Update the text file every 60 days.
- E. Configure IAM database authentication for the application to connect to the database.
- F. Create an IAM user and map it to a separate database user for each ecommerce user.
- G. Require users to update their passwords every 60 days.
- H. Store the credentials in AWS Secrets Manager.
- I. Restrict permissions on the secret to only the IAM role associated with the instance profile on the EC2 instance.
- J. Modify the application to retrieve the credentials from Secrets Manager on start up.
- K. Configure the rotation interval to 60 days.
- L. Store the credentials in an encrypted text file in the application's Amazon Machine Image (AMI).
- M. Use AWS KMS to store the key for decrypting the text file.
- N. Modify the application to decrypt the text file and retrieve the credentials on start up.
- O. Update the text file and publish a new AMI every 60 days.

**Answer:** C

#### NEW QUESTION 110

A company is running a website on Amazon EC2 instances deployed in multiple Availability Zones (AZs). The site performs a high number of repetitive reads and writes each second on an Amazon RDS for MySQL Multi-AZ DB instance with General Purpose SSD (gp2) storage. After comprehensive testing and analysis, a database specialist discovers that there is high read latency and high CPU utilization on the DB instance. Which approach should the database specialist take to resolve this issue without changing the application?

- A. Implementing sharding to distribute the load to multiple RDS for MySQL databases.
- B. Use the same RDS for MySQL instance class with Provisioned IOPS (PIOPS) storage.
- C. Add an RDS for MySQL read replica.
- D. Modify the RDS for MySQL database class to a bigger size and implement Provisioned IOPS (PIOPS).

**Answer:** D

#### NEW QUESTION 113

An online retail company is planning a multi-day flash sale that must support processing of up to 5,000 orders per second. The number of orders and exact schedule for the sale will vary each day. During the sale, approximately 10,000 concurrent users will look at the deals before buying items. Outside of the sale, the traffic volume is very low. The acceptable performance for read/write queries should be under 25 ms. Order items are about 2 KB in size and have a unique identifier. The company requires the most cost-effective solution that will automatically scale and is highly available. Which solution meets these requirements?

- A. Amazon DynamoDB with on-demand capacity mode.
- B. Amazon Aurora with one writer node and an Aurora Replica with the parallel query feature enabled.
- C. Amazon DynamoDB with provisioned capacity mode with 5,000 write capacity units (WCUs) and 10,000 read capacity units (RCUs).
- D. Amazon Aurora with one writer node and two cross-Region Aurora Replicas.

**Answer:** A

**Explanation:**

The number of orders and exact schedule for the sale will vary each day. During the sale, approximately 10,000 concurrent users will look at the deals before buying items. Outside of the sale, the traffic volume is very low ==> Setting provisioning DynamoDB fix read 5000/write 10000 with will waste the resource when the traffic is low. It is not cost-effective.

#### NEW QUESTION 116

A company has multiple applications serving data from a secure on-premises database. The company is migrating all applications and databases to the AWS Cloud. The IT Risk and Compliance department requires that auditing be enabled on all secure databases to capture all log ins, log outs, failed logins, permission changes, and database schema changes. A Database Specialist has recommended Amazon Aurora MySQL as the migration target, and leveraging the Advanced Auditing feature in Aurora.

Which events need to be specified in the Advanced Auditing configuration to satisfy the minimum auditing requirements? (Choose three.)

- A. CONNECT
- B. QUERY\_DCL
- C. QUERY\_DDL
- D. QUERY\_DML
- E. TABLE
- F. QUERY

**Answer:** ABC

**Explanation:**

Connect - logins / DCL - authorizations (grant, revoke), DDL - schema updates

**NEW QUESTION 119**

.....

## **Thank You for Trying Our Product**

### **We offer two products:**

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

### **AWS-Certified-Database-Specialty Practice Exam Features:**

- \* AWS-Certified-Database-Specialty Questions and Answers Updated Frequently
- \* AWS-Certified-Database-Specialty Practice Questions Verified by Expert Senior Certified Staff
- \* AWS-Certified-Database-Specialty Most Realistic Questions that Guarantee you a Pass on Your First Try
- \* AWS-Certified-Database-Specialty Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The AWS-Certified-Database-Specialty Practice Test Here](#)**