Course code: AWSDW

Who is the course for Database architects Database administrators Database developers Data analysts and scientistsWhat we teach you Discuss the core concepts of data warehousing. Evaluate the relationship between Amazon Redshift and other big data   systems. Evaluate use cases for data warehousing workloads and review case studies   that demonstrate implementation of AWS data and analytic services as part of a   data warehousing solution. Choose an appropriate Amazon Redshift node type and size for your data   needs. Discuss security features as they pertain to Amazon Redshift, such as   encryption, IAM permissions, and database permissions. Launch an Amazon Redshift cluster and use the components, features, and   functionality to implement a data warehouse in the cloud. Use other AWS data and analytic services, such as Amazon DynamoDB, Amazon   EMR, Amazon Kinesis Firehose, and Amazon S3, to contribute to the data   warehousing solution. Evaluate approaches and methodologies for designing data warehouses. Identify data sources and assess requirements that affect the data   warehouse design. Design the data warehouse to make effective use of compression, data   distribution, and sort methods. Load and unload data and perform data maintenance tasks. Write queries and evaluate query plans to optimize query performance. Configure the database to allocate resources such as memory to query   queues and define criteria to route certain types of queries to your   configured query queues for improved processing. Use features and services, such as Amazon Redshift database audit logging,   Amazon CloudTrail, Amazon CloudWatch, and Amazon Simple Notification Service   (Amazon SNS), to audit, monitor, and receive event notifications about   activities in the data warehouse. Prepare for operational tasks, such as resizing Amazon Redshift clusters   and using snapshots to back up and restore clusters. Use a business intelligence (BI) application to perform data analysis and   visualization tasks against your data.Required skills Courses taken: AWS Technical Essentials (or equivalent experience with   AWS) Familiarity with relational databases and database design conceptsTeaching methodsThis course will be delivered through a mix of:
 Instructor-led Training (ILT) Hands-on LabsTeaching materialsAmazon Web Services authorized e-book included.
Course outlineDay 1
Course Introduction
Introduction to Data Warehousing
Introduction to Amazon Redshift
Understanding Amazon Redshift Components and Resources
Launching an Amazon Redshift Cluster
Day 2
Reviewing Data Warehousing Approaches
Identifying Data Sources and Requirements
Designing the Data Warehouse
Loading Data into the Data Warehouse
Day 3
Writing Queries and Tuning Performance
Maintaining the Data Warehouse
Analyzing and Visualizing Data
Course Summary

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- Discuss security features as they pertain to Amazon Redshift, such as encryption, IAM permissions, and database permissions.
- Launch an Amazon Redshift cluster and use the components, features, and functionality to implement a data warehouse in the cloud.
- Use other AWS data and analytic services, such as Amazon DynamoDB, Amazon EMR, Amazon Kinesis Firehose, and Amazon S3, to contribute to the data warehousing solution.
- Evaluate approaches and methodologies for designing data warehouses.
- Identify data sources and assess requirements that affect the data warehouse design.
- Design the data warehouse to make effective use of compression, data distribution, and sort methods.
- Load and unload data and perform data maintenance tasks.
- Write queries and evaluate query plans to optimize query performance.
- Configure the database to allocate resources such as memory to query queues and define criteria to route certain types of queries to your configured query queues for improved processing.
- Use features and services, such as Amazon Redshift database audit logging, Amazon CloudTrail, Amazon CloudWatch, and Amazon Simple Notification Service (Amazon SNS), to audit, monitor, and receive event notifications about activities in the data warehouse.
- Prepare for operational tasks, such as resizing Amazon Redshift clusters and using snapshots to back up and restore clusters.
- Use a business intelligence (BI) application to perform data analysis and visualization tasks against your data.

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