Teradata Certification

Exam Objectives - Vantage Administration Exam

The Administration Exam covers the features and functionality of Vantage 2.2 including the Advanced SQL Engine through release 17.05.

Monitoring Vantage - 12%
- Given a scenario, identify the Viewpoint portlet that should be used to investigate or remediate a system condition.
- Identify how to use Viewpoint to monitor queries that access external data.
- Given a scenario, identify the process that should be used to set up and administer a Viewpoint system (for example: user definition, roles definition, and alert infrastructure.)
- Given a scenario, identify the process that should be used to set up and administer a monitored system (for example: data collectors, alert setup, etc.)
- Given a scenario, identify which system resource is constrained.
- Identify how to use Viewpoint to monitor data movement jobs.

Performance Management - 23%
- Given a scenario, identify the effective strategy to collect, implement, and manage statistics.
- Given a scenario, identify the DBQL logging options that should be implemented.
- Given a scenario, identify which logging data is used to isolate the cause of a system, query, or workload performance issue.
- Given a scenario, identify the metrics that should be used to investigate a performance issue.
- Given a scenario, identify the process and tools to resolve a blocking condition.
- Identify lock usage and lock implications (for example: access, write, read, exclusive, and load isolation.)
- Given a scenario, identify how to remediate sub-optimal queries.
- Given a scenario, identify how to assign tables to hash maps for performance optimization.
- Given a scenario, identify the proper advanced indexing strategy to improve performance.
- Identify the performance implications of table and column design options.
- Given a performance troubleshooting scenario, identify the likely cause of the problem or how to identify it.
- Identify performance considerations for accessing external data.

Security Management & Auditing - 9%
- Identify features, functionality and benefits of access logging.
- Given a scenario, identify how to use system log tables for security auditing.
- Identify the features, functionality, and benefits of advanced security configurations.
- Identify the considerations of using database and object level privileges.
- Identify security configurations for accessing external data.

teradata.

User Administration - 9%
- Given a scenario, identify how to meet user security requirements using roles.
- Given a scenario, identify how to meet proxy user data access requirements.
- Identify the features, functionality, and benefits of profiles.
- Given a scenario, identify the attributes that should be set for a new user.

Database Management- 17%
- Given a scenario, identify the access rights that should be granted to a database, user, or role.
- Identify access rights required to execute advanced analytic functions. ▢ Identify the benefits, types, and reasons for logging.
- Given a scenario, identify types of privileges that would apply (for example: explicit, implicit, automatic and inherited privileges.)
- Identify the effects on a user session of changing a global parameter (for example: General, Statistics, Compression, File System, and tdlocaledef.)
- Given a scenario, identify actions or recovery tasks needed after an unplanned system restart.
- Given a scenario, identify the optimal backup strategy for a database object or system.
- Given a scenario, identify the optimal restore strategy for a database object or system.
- Given a scenario about increased customer demand, identify how to determine future capacity requirements.
- Identify the features and implications of using advanced data types in Vantage table design (for example: JSON, BSON, AVRO, BLOB, CLOB.)
- Identify the methods and processes to manage and monitor perm space.
- Identify the methods and processes to manage and monitor temp space and spool space.

Workload Management - 18%
- Given a scenario, identify the TASM feature that should be applied.
- Given a scenario, identify how to use classification criteria for workload management.
- Given a scenario, identify how to use filters or throttles for workload management.
- Given a scenario, identify how to use exceptions for workload management.
- Given a scenario, identify how to manage utilities with workload management.
- Identify how to manage workloads accessing external data such as NOS and QueryGrid.
- Given a scenario, identify how to use the state matrix to create dynamic rules for a workload.
- Identify how to manage advanced analytics workload (for example: R, Python, MLE).
- Given a scenario, identify how to use workload management methods and prioritization.

Integration - 12%
- Identify the benefits, features, and functionality of QueryGrid.
- Given a scenario, identify the database object(s) that support the QueryGrid implementation.
- Identify the benefits, features, and functionality of NOS.
- Given a scenario, identify the performance implications when accessing NOS.
- Given a scenario, identify the performance implications when accessing a foreign server.
- Identify the benefits, features, and functionality of Data Mover including job scheduling and error handling.
- Given a scenario, identify the performance implications when using Data Mover.

teradata.