## **Teradata Aster Certification Exam Objectives**

The high level objectives represent the general content areas. The more detailed information below the objective indicates representative topic areas. All Teradata Aster functions and features that fall within the stated objective areas are eligible topics on an exam.

## TAA-BSC6.1 Teradata Aster Basics 6.10

- Administration Activities
  - Identify the definition of the four table types in Aster (fact, dimension, analytic, temp)
  - Identify the characteristics of an Aster database including the schema compared to traditional databases
  - Given a scenario, including information about a cluster, identify the types of nodes that are included in the cluster
  - Identify the characteristics of the Data Dictionary Views
  - Identify characteristics of LDAP, tdwallet, and Native as they relate to authentication
  - Identify the characteristics of AMC and Viewpoint and identify how they monitor Aster, such as health of the cluster, the node status, processes, etc.
  - Identify the purpose and function of the replication factor in Aster
  - Identify the purpose and components in the Aster database and Aster analytics foundation upgrade processes
  - Identify the Aster function(s) used to leverage other
    programming languages, in order to solve a business r
  - programming languages, in order to solve a business problem(s)
- <u>Foundational Analytical Design</u>
  - Given a scenario, identify which analytic functions should be used or identify the use for a given analytic function
  - $\circ$   $\;$  Identify the business value of visualization in Aster
  - Identify how the high-level steps (acquire, prep, analyze and visualize) operate when analyzing data using Aster

- <u>Custom Function Development</u>
  - Identify the languages and tools that can be used to build custom SQL-MR functions in Aster
  - Identify the languages that can be used to stream custom SQL-MR functions in Aster
- Architecting an Aster Solution
  - Identify the function of the basic components of the Aster structure (for example: Queen, worker node, loader node, backup node, etc.)
- Data Modeling
  - Identify the characteristics of data model types, star and snowflake, used with Aster
  - Identify the characteristics of analytic and temporary tables
- Load Data
  - Identify the characteristics of loading tools such as ncluster\_loader
  - Identify methods to increase the throughput to optimize a load
- <u>Physical Implementation (DDL)</u>
  - Identify how Aster databases and schemas are organized and managed
  - Identify the characteristics of replicated and hash distributed tables
  - Identify the characteristics of the most commonly used column data types
  - Identify the characteristics of a physical and logical partition to a table
  - Identify the situation when a particular partition type should be used
- Performance Tuning
  - Identify how and why an Explain plan is generated and used in Aster
  - Identify the characteristics of AMC, workload management and Ganglia as they relate to performance tuning
  - Identify the characteristics of table maintenance activities including TRUNCATE and VACUUM

- Use Built-in SQL-MR
  - Identify the categories and characteristics of commonly used SQL-MR functions (for example: text, predictive, etc.)
- Integrating Aster into Multi-System Architecture (UDA)
  - Identify the characteristics of UDA
  - $\circ$  Identify the tools and methods that are associated with UDA
- <u>Aster Clients</u>
  - Identify the basic characteristics and purpose of the following client tools: Teradata Studio, ODBC, JDBC, and ACT
- <u>Appcenter</u>
  - Identify the steps to create an application
  - Identify the capabilities of appcenter users and Aster database users
  - Identify the characteristics of LDAP, DB, and appcenter authentication