



Exam Study Guide

Exam 250-608 Tanzu Greenplum v7 Technical Specialist

Exam Study Guide v. 1.0

Exam Description

Candidates can validate technical knowledge and competency by becoming a Tanzu Greenplum Technical Specialist based on your specific area of technology expertise. To achieve this level of certification, candidates must pass this proctored exam that is based on a combination of training material, commonly referenced product documentation, and real-world job scenarios.

This exam targets IT Professionals using Tanzu Greenplum in a Pre-Sales, Architect, Implementor, or Support role. This certification exam tests the candidate's knowledge of key features and functionality which can be broadly categorized into two class of users:

Database Administrator

- Managing a data warehouse
- Viewing the health of the database warehouse
- Creating and managing resource group
- Develop a backup and disaster recovery strategy
- Build data loading ETL pipeline

General Database User

- Understand basics of a distributed database system, writing and optimizing transactional and analytical queries
- Enable users to write workloads that queries on graphs, employ established AI/ML algorithms and query time series data
- Guide naive users into AI/ML algorithms with an automated bot
- Build and query vector databases that can accelerate queries on images, documents, videos and audio files
- Query spatial and text data as scale

Recommended Experience

It is recommended that the candidate has at least 3-6 months experience working with Tanzu Greenplum in a production or lab environment.

Study References

On-Demand

<https://brocade.csod.com/ui/lms-learning-details/app/curriculum/20c57ea0-3cac-47b6-8504-8ac2ccfd4eac>

Tanzu Greenplum Technical Foundation Training (12 Hours Online)

- 1.1 Greenplum Introduction: Foundational Concepts
- 1.2 Greenplum Introduction: Database Objects
- 1.3 Greenplum Introduction: Data Organization
- 1.4 Greenplum Introduction: SQL Fundamentals and Functions
- 2 Optimizing Queries on Greenplum
- 3 Data Loading and Querying External Data
- 4 Greenplum Data Protection
- 5 Greenplum Command Center

- 6 Artificial Intelligence and Machine Learning
- 7 Spatial Queries
- 8 Greenplum Management Utilities and Support Tools
- 9 Text Analytics with GPText

Documentation

- [Tanzu Greenplum 7](#)

Product Websites

- <https://partnerportal.broadcom.com/group/partner-portal/tanzu-greenplum2>

Exam Objectives

The following tables list the Certification exam objectives for the exam and how these objectives align to the corresponding course topics and their associated lab exercises as well as the referenced product documentation.

Candidates are encouraged to complete applicable lab exercises as part of their preparation for the exam.

For more information on the Certification Program, visit
<https://www.broadcom.com/support/education/software>.

Exam Objectives	Content	Exam Focus
1.1 Greenplum Introduction: Foundational Concepts	Tests knowledge of the basic foundational knowledge of Greenplum, and Greenplum Architecture.	5%
1.2 Greenplum Introduction: Database Objects	Tests knowledge of creating different database objects such as tables, indexes, constraints, partition tables, etc.	5%
1.3 Greenplum Introduction: Data Organization	Tests knowledge of how data is organized inside Greenplum such that data distribution and partitioning.	5%
1.4 Greenplum Introduction: SQL Fundamentals and Functions	Tests knowledge of SQL functions and fundamentals.	5%
2 Optimizing Queries on Greenplum	Tests knowledge of how to optimize queries and meeting SLAs.	11%
3 Data Loading and Querying External Data	Tests knowledge of how to load data and query data from external sources.	12%
4 Greenplum Data Protection	Tests knowledge of Greenplum disaster recovery as well as data protection strategies.	11%
5 Greenplum Command Center	Tests knowledge of Greenplum Command Center (GPCC), a web-based application for monitoring and managing Greenplum clusters.	7%
6 Artificial Intelligence and	Tests knowledge of how Greenplum users can	11%

Machine Learning	perform in-database Artificial Intelligence (AI) and Machine Learning (ML) algorithms.	
7 Spatial Queries	Tests the knowledge of querying spatial data stores in Greenplum efficiently with PostGIS and H3 Index*. PostGIS is a spatial database extension for PostgreSQL that allows you to store GIS (Geographic Information Systems) objects in the database. [*] <i>H3 is a geospatial indexing system using a hexagonal grid that can be (approximately) subdivided into finer and finer hexagonal grids.</i>	10%
8 Greenplum Management Utilities and Support Tools	Tests knowledge on Greenplum utilities to manage Greenplum cluster.	8%
9 Text Analytics with GPText	Tests knowledge of how users can store, index and query massive quantities of raw text data (such as social media feeds or e-mail databases) into mission-critical information that guides business and project decisions.	10%

Sample Exam Questions

Review the following sample questions prior to taking an exam to gain a better understanding of the types of questions asked.

- Which component in Greenplum handles query planning?
 - Query Executor
 - Query Optimizer
 - Query Dispatcher
 - Coordinator Host
- What is the primary purpose of Redistribute Motion node in a Greenplum query plan?
 - To broadcast the tuples from each segment to all other segment
 - To send tuples to a particular segment based on the hash value of the defined distribution column
 - To gather tuples from the segments to the coordinator node
 - To manage container orchestration
- Which of the following are the in-database ML solutions with Greenplum?
 - PostgresML
 - Pandas
 - SparkML
 - Apache MADlib
- Which of the following does Greenplum's time series feature support?
 - Enables users to analyze the historical dataset and identify patterns
 - Understand and match the current trends with previous derived patterns

- C. Understand the factor or factors that influence certain variable(s) at different points of time
- D. Enable spatial pattern recognition in datasets

Sample Exam Answers:

- 1. B
- 2. B
- 3. A, D
- 4. A, B, C