



Teradata Admin Track

Course description

This training program is designed to prepare the students for Teradata Administrator. The Teradata DBA boot camp training is practical oriented with real time scenarios, which helps you to gain knowledge on field experience. You learn in this course how to replicate data across environments, monitor and manage databases, perform SQL tuning and analysis, provide capacity planning, grant data level access privileges, Implementing monitoring procedures to maximize system availability, Managing and tuning Teradata Workload Management designing and creating workload groups, priorities, throttles, and various day to day activities a DBA has to perform.

Student Take away

- Study Material
- Learning stuff
- Sample project for practice

Teradata Admin Track web based Online Training Curriculum

Introduction

- What is Teradata?
- Teradata Architecture
- Role of Teradata in Data Ware housing industry
- Evolution of Teradata DW
- Significance and characteristics of Teradata
- Advantages of Teradata over other RDBMS

Teradata Architecture

- Understanding H/W and S/W components
- Involved in Architecture of Teradata
- V-disks
- AMP
- PE
- V procs
- BYNET

Data distribution

- Understanding significance of Index in Teradata
- UPI
- NUPI
- SI

Data distribution continues...

- NUSI
- Partitioned index

Data Protection

- Different levels of failures that could happen and fault tolerance of Teradata
- CLIQUE
- CLUSTER
- RAID
- LOCKS
- JORNALS

Advanced Teradata SQL

- HELP
- SHOW
- EXPLAIN
- Define and execution of Macros
- Date calculations
- Data type conversion
- Case
- COALESCE
- Sample
- Ranking
- Qualify
- CSUM
- MSUM
- MDIFF
- MAVG
- WITH
- WITH BY

Others (Optional)

UNIX

- Role of Unix in executing Teradata utility scripts and Basic commands used

General Lifecycle of the projects

- General phases of a Development project
- Documents required in each phase

DBA

- Teradata DBA basics and responsibilities
- Initial Teradata Databases
- Administrative User
- Owners, Parents and Children
- Creating New Users and Databases

DBA continues...

- Transfer of Ownership
- DELETE/DROP Statements

User and Security Management

- Understand the Hierarchy
- Teradata Administrator tool usage to perform creation of users
- Databases
- Identify spaces
- Skew of databases
- Moving spaces and accesses
- Practical's

The Data Dictionary

- Updating Data Dictionary Tables
- Supplied Data Dictionary Views
- Restricted Views
- Suffix Options with Views

Selecting Information about Created Object

- Children View
- Databases View
- Users View
- Tables View
- Columns View
- Indices View

Capacity management and planning

- Spaces and types of tables
- PERM
- SPOOL
- TEMP space terminology
- Derived
- Volatile
- Global temporary tables
- Identify current space usage and estimate the space requirements for the applications

Users, Accounts, and Accounting

- Creating and Using Account IDs
- Using Account IDs with Logon
- Dynamically Changing an Account ID
- Account Priorities
- Account String Expansion

Access Rights

- Privileges and Access Rights
- Implicit

Access Rights continues...

- Automatic
- Explicit Rights
- Grant and Revoke accesses
- Give command
- System Views for Access Rights
- Inheriting Access Rights
- Transfer access rights
- Delete or Drop
- User or Database

Roles and Profiles

- What is a role?
- Advantages of Roles
- Access Rights Using a Role
- Implementing Roles
- Nesting of roles
- Views for roles
- Profiles
- Implementing Profiles
- Teradata password control

Work load management and Priority scheduler

- Levels of Workload Management
- Priority Scheduler Architecture and concepts

Access logging and Query logging

- Setting up Access Logging
- Acc Log Rules View
- Query Logging (DBQL) Concepts and objects
- Used in Defining Rules for DBQL
- DBQL Rules View
- Setting up Access Logging
- Acc Log Rules View
- Query Logging (DBQL) Concepts
- Objects
- Used in Defining Rules for DBQL and DBQL Rules View

Performance monitoring (PMON)

- Resource usage
- Session Management User session Info
- SQL & Explain Steps

Archive and Restore and copy

- Archive and restore data using ARCMAN utility
- Different levels of archiving and restoration

Archive and Restore and copy continue...

- HUT locks
- Revalidate references after restoration

View point

- Demo of view point portlets (which is new tool for DBAs having the features of PMON)
- TDMANAGER and TASM

Performance tuning

- Explain plan
- Statistics and Join strategies
- Explain plan and recommendations
- Significance of collecting and statistics
- Other indexes and techniques
- Determine proper join columns
- Join index
- Spars index
- Aggregate index
- SET / MULTSET with UPI and NUPI combinations
- Compress

BISP