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## Teradata Dev Track

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### Teradata Dev Track web based Online Training Curriculum

#### ➤ History and Architecture

##### Introduction to TERADATA

- OLTP
- OLAP systems
- Data warehouse and Data Marts
- Dimension modeling
- Schemas
- What is Teradata?
- Role of Teradata in DW
- Evolution of Teradata DW
- Advantages of Teradata over other RDBMS

##### Teradata Architecture

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

##### Database structure

- Data distribution
- Understanding significance of Index in Teradata
- UPI
- NUPI
- SI
- NUSI
- Partitioned index

##### Data Protection

- Different levels of failures that could happen and fault tolerance of Teradata in that situations
- CLIQUE
- CLUSTER

### **Data Protection** continues...

- RAID
- LOCKS
- JORNALS

### **Spaces and types of tables**

- Different levels of accessing the objects granting the Privileges and locking mechanism

### **SQL**

- ASNI SQL
- Brief introduction of Relational concepts
- Understanding users
- Databases
- Tables
- Vies
- Index
- Macro
- Sub query
- Correlated query
- Data types
- Joins
- Arithmetic functions

### **Teradata SQL**

- Explore Teradata specific SQL statements such as show, help, and explain
- SET operations
- Aggregate functions
- String functions
- Aliasing
- FORMAT
- Conversion of data types

### **Advanced Teradata SQL**

- Define and execution of Macros
- Date calculations
- Case
- COALESCE
- Sample
- Ranking
- Qualify
- CSUM

## Advanced Teradata SQL continues...

- MSUM
- WITH
- WITH BY

### ➤ Client utilities

#### SQL Assistant

- Setup ODBC for connecting through SQL assistant
- Options menu and EXPORT/IMPORT

#### BTEQ

- Functionality
- Operations
- Execution
- Limitations

#### FAST LOAD

- Functionality
- Different phases
- Execution
- Restart ability
- Limitations

#### FAST EXPORT

- Functionality
- Different phases
- Execution
- Restart ability
- Limitations

#### MULTI LOAD

- Functionality
- Different phases
- Execution
- Restart ability
- Limitations

#### Performance tuning

- Explain plan & Statistics
- Understanding explain plan and recommendations
- Significance of collecting statistics

#### Other techniques

- Determine the proper join columns
- Join index

**Other techniques continue...**

- Spars index
- Aggregate index
- SET / MULTSET with UPI and NUPI combinations
- Compress

**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

BISP