

Oracle 10g for Experienced SQL Users

Length: 3 Days

Audience: Programmers and Analysts seeking a greater understanding of the Oracle DBMS.

Prerequisites: Experience with non-Oracle relational systems, e.g., DB2, SQL Server.

Overview: This course provides students with an introduction to Oracle 10g database architecture. The course provides an overview of the key issues pertaining to the operation and maintenance of an existing Oracle 10g database. The course includes discussions of database design, administration, and operation of the database. The Data Dictionary is examined to create an awareness among participants of the wealth of system information available to the informed user of the system. Dynamic performance tables are also explored to provide access to additional information about the database.

Some topics are covered briefly so as to provide only an awareness of key features without dwelling on the details of these features. The material presented is also useful for application developers who work with an Oracle database and wish to better understand the Oracle 10g environment.

Topics discussed include:

- Overview of Oracle 10g Architecture
- Memory Structures and Processes
- Relationships Between Database Objects
- User Management and Database Security
 - o Creating Users and Profiles
 - o Creating Roles
 - o Granting Roles and Privileges
- Defining Database Objects
 - o Tablespace and Datafiles
 - + Oracle Managed Files
 - + Dictionary-Managed
 - + Locally-Managed
 - o Tables
 - + Datatype Considerations
 - + Table and Column Constraints
 - + Deferred Integrity Constraint Checking
 - + Temporary Tables
 - o Indexes
 - + B-Tree Indexes
 - + Bitmapmed Indexes
 - + Function-Based Indexes
 - + Guidelines for Creating Indexes

- o Clusters
- o Views
- o Sequences
- o Synonyms
- Oracle Utilities
 - o SQL*Loader
 - o Import & Export
 - o Datapump Import & Export
- Storage Management
 - o Data Block Structure
 - o Chained and Migrated Rows
- Overview of Client-Server Architecture
- Oracle's Data Dictionary