

Oracle Database 10g Implement & Administer Data Warehouses

Description: This Oracle 10g courseware training will consider how to build, implement, tune and utilize data warehouses with Oracle technology. Logical data warehouse concepts are considered such as dimension tables, fact tables and star schemas. Implementing such logical concepts using the Oracle database is then presented including defining dimensions, hierarchies, measures and other objects. Physical implementation techniques are considered such as bitmap indexes, materialized views, and others. Emphasis is placed on the parallel execution features of the database and how these can yield significant performance advantages.

Audience: Target audience for this course are database administrators, data warehouse administrators and application developers who will be responsible for implementing applications using data warehouse technology.

Prerequisites:

- The course Oracle Database 10g: Implement Parallel SQL & Partitioning For Data Warehouses
- The course Oracle Database 10g: SQL Tuning

Duration: 30 hours.

Objectives: This course highlights the features within the Oracle database specifically intended to support data warehouses and data mining operations. One must use these specialized features to initially implement the data warehouse and thereafter utilize yet other features to administer and manage this unique environment. Due to the enormous volume of data often contained within data warehouses, a proper understanding of these features is essential. Among the specific objectives of this course are:

Understanding star and snowflake schemas and other data warehouse physical and logical database objects.

- Understanding and encouraging optimization of star queries.
- Creating and maintaining materialized views to enhance ad-hoc query performance against enormous volumes of transactional data.
- Manage materialized views to effectively and efficiently maintain their structure over the course of time.
- Creating and maintaining dimensions and hierarchies to enhance ad-hoc query performance and support sophisticated data mining.
- Performing dimensional analysis of data warehouse information and building cubes.
- Discuss and demonstrate options for building Extraction, Transformation and Transformation (ETT) or Loading (ETL) processes.

Content

<p>DATA WAREHOUSE DESIGN & SCHEMAS</p> <ul style="list-style-type: none"> • DATA WAREHOUSE CONCEPTS • ETT / ETL • DATA WAREHOUSE SCHEMAS • The EQUITIES Data Model • PHYSICAL DESIGN CONSIDERATIONS <p>CREATING MATERIALIZED VIEWS</p> <ul style="list-style-type: none"> • ABOUT MATERIALIZED VIEWS • CREATE MATERIALIZED VIEWS • STORAGE & TABLESPACE Clauses • PARALLEL & PARTITION BY Clauses • BUILD Clause • Specifying The SELECT Clause • Including The ORDER BY Clause • NESTED MATERIALIZED VIEWS <p>MAINTAINING MATERIALIZED VIEWS</p> <ul style="list-style-type: none"> • ALTER MATERIALIZED VIEW • DROP MATERIALIZED VIEW • DATA DICTIONARY STORAGE • USER_MVIEWS Example • USING EM 	<p>DIMENSIONS</p> <ul style="list-style-type: none"> • WHAT ARE DIMENSIONS? • CREATING & MAINTAINING DIMENSIONS • ALTER DIMENSION • DROP DIMENSION • DIMENSION METADATA & VALIDATION • Using DBMS_DIMENSION() • Using EM <p>DIMENSIONAL ANALYSIS OF DATA</p> <ul style="list-style-type: none"> • DATA SAMPLING • DIMENSION AGGREGATION TECHNIQUES • Using ROLLUP() • The GROUPING() Function • Using CUBE() • BUILDING THE DATA WAREHOUSE CUBE • The EQUITIES Cube • GROUPING_ID() Function • CUBE() Vs. GROUPING SETS()
---	---

<p>MATERIALIZED VIEW REFRESH</p> <ul style="list-style-type: none"> • ABOUT MATERIALIZED VIEW REFRESH • REFRESH METHODS • CREATE MATERIALIZED VIEW LOG • ALTER MATERIALIZED VIEW LOG • DROP MATERIALIZED VIEW LOG • REFRESH MODES • ON COMMIT Considerations • PERFORMING REFRESH OPERATIONS • DATA DICTIONARY REFRESH METADATA USING EM <p>CONTROLLING THE QUERY REWRITE FACILITY</p> <ul style="list-style-type: none"> • ENABLING QUERY REWRITE • VIEWING EXECUTION PLANS • Create PLAN_TABLE • CONTROLLING QUERY REWRITE • NOREWRITE • REWRITE • UTILIZING CONSTRAINTS WITH QUERY REWRITE • ENABLE VALIDATE Constraint Option • ENABLE NOVALIDATE Constraint Option • DISABLE NOVALIDATE Constraint Option • DISABLE VALIDATE Constraint Option • RELY Constraint Option • ENFORCED Level • TRUSTED Level • STALE_TOLERATED Level • QUERY REWRITE INFLUENCES 	<p>STAR QUERIES & THE OPTIMIZER</p> <ul style="list-style-type: none"> • WHAT IS A STAR QUERY? • A STAR TRANSFORMATION SCENARIO • ENCOURAGING STAR TRANSFORMATION • STAR TRANSFORMATION HINTS • FACT Hint <p>ETL: LOADING FROM EXTERNAL TABLES</p> <ul style="list-style-type: none"> • ABOUT THE EXTRACTION OPTIONS • Offline Extraction Methods • USING EXTERNAL TABLES • ORACLE_LOADER ACCESS PARAMETERS • RECORDS Parameter • BADFILE Parameter • LOGFILE Parameter • DISCARDFILE Parameter • LOAD WHEN Parameter • SKIP Parameter • The LOCATION Clause • REJECT LIMIT Clause • FIELDS TERMINATED BY Parameter • MISSING FIELD VALUES Parameter • ORACLE_DATAPUMP ACCESS DRIVER • MAINTAINING EXTERNAL TABLES • USER_EXTERNAL_TABLES • USER_EXTERNAL_LOCATIONS • Using ALTER TABLE
---	---

Incluye:

DCInternet

- ❖ Un manual del curso original importado.
- ❖ Estacionamiento, en pagos anticipados, si el curso es en nuestras instalaciones.
- ❖ Descanso con servicio de café, agua, té, refrescos y galletas.

Formas de pago:

Para la inscripción a este entrenamiento el pago debe realizarse con anticipación de una semana las siguientes maneras:

1. Depósito en Banamex cuenta 4923239 Suc. 575 a nombre de Desarrollo y Capacitación en Internet, S. A. de C. V. (CLABE en caso de transferencia electrónica vía Internet 002180057549232394)
2. Cheque a nombre de Desarrollo y Capacitación en Internet, S. A. de C. V.
3. Tarjetas de crédito, Visa, Masterd Card o American Express