Oracle Database 12c: Implement Partitioning Ed 1

Duration: 2 Days

What you will learn
This Oracle Database 12c: Implement Partitioning training teaches you how to manage partitioning using Oracle Database 12c. Expert Oracle University instructors will demonstrate the benefits of partitioning for different types of workloads and learn the syntax for partitioning maintenance operations. In this course, you will be introduced to Oracle Database Cloud Service.

Learn To:

- Apply partitioning strategies to enhance application performance.
- Use partitioning techniques to reduce impact of table and index maintenance.
- Use partitioning to decrease the time to refresh materialized views.
- Partition lob segments, nested tables and object tables.
- Understand the Oracle Partitioning methods for tables, index and materialized views available in Oracle Database 12c Release 1.
- Gain an understanding of the Oracle Database Cloud Service.

Benefits to You

Taking this course will introduce you to several new partitioning enhancements, including partition maintenance operations on multiple partitions, heat maps, partial indexes for partitioned tables, interval-reference partitioning and online move partition capabilities. When the new enhancements are added to all the existing methods of partitioning, this large range of choices and capabilities requires that database administrators and data architects understand each partitioning method and it's appropriate uses. Proper use of partitioning can greatly benefit many types of applications including data warehouses, information life cycle management and very large databases.

Related Training

Required Prerequisites

- Basic Database Administration
- Basic SQL Tuning
- SQL Fundamentals

Suggested Prerequisites

- Basic Data Modeling and Relational Database Design
Basic knowledge of Data Warehousing Design

Oracle Database: SQL Tuning for Developers

Course Objectives

Choose appropriate partition attributes for various application requirements

Understand partitioning options with other database features

Describe Oracle Enterprise Manager support of partitioned objects

Describe the partitioning architecture uses and advantages

Describe the partition types supported by the Oracle RDBMS

List all of the options for creating partition tables

Create partitioned tables

Describe the table and index partition relationships

List all the options of partitioned indexes

Create partitioned indexes

List all of the alterable partitioned table and index attributes

Describe the overhead associated with each maintenance command
Use the data dictionary to verify partitioning structure

Create Materialized Views that are partitioned

Explain the benefits of partitioning materialized views

Gain an understanding of the Oracle Database Cloud Service

Course Topics

**Partitioning Concepts**
VLDB Manageability and Performance Constraints
Manual Partitions Versus Partitioning
Partitioned Tables and Indexes
Table Versus Index Partitioning
Partitioned Indexes
Partitioning Strategies: Single-Level Partitioning
Partitioning Strategies: Composite Partitioning
Oracle Partitioning History

**Implementing Partitioned Tables**
Table, Partition, and Segment Relations
Creating Partitions with Enterprise Manager
CREATE TABLE Statement with Partitioning
Logical and Physical Attributes
Partition Strategy Declaration: Single-Level Partitioning
Specifying Partition Attributes
Range Partitioning
Interval Partitioning

**Implementing Partitioned Indexes**
Partitioned Indexes
Partitioned Index Attributes: Global or Local
Partitioned Index Attributes: Prefixed or Nonprefixed
Global Indexes
Local Prefixed Indexes
Local Nonprefixed Index
Index Partitioning and Type Matrix
Specifying an Index with Table Creation

**Maintenance of Partitioned Tables and Indexes**
Maintenance: Overview
Table and Index Interaction During Partition Maintenance