

## Oracle9i New Features for DBAs

Duration: 4 day

### Course Description:

The complexity and flexibility of the Oracle9i database provide a major learning challenge for the Oracle DBA. Jumpstart your knowledge of Oracle9i with this new course designed for working Oracle DBAs who need to quickly understand and apply the new features of Oracle9i.

### You will cover

- New Join Syntax
- Embedding SQL Changes in Other Languages
- Other New SQL features
- New Date-based Datatypes
- Enhancements to LOBs and PL/SQL
- PL/SQL Native Compilation

### Who Needs to Attend:

Database administrators who need to have a more complete understanding of Oracle9i's new features.

### Prerequisites:

Basic understanding of Oracle SQL, SQL\*Plus, PL/SQL and Oracle8i architecture and operation.

### Course Labs:

Lab 1 - Writing JOINS using the ANSI SQL 99 Syntax

Lab 2 - Using CASE, NULLIF, COALESCE, Scalar Subqueries and Merge Commands/Expressions

Lab 3 - Using Analytical Functions, the USING and ON clauses, and Grouping Sets

Lab 4 - Managing Date Data with New Datatypes and Functions

Lab 5 - Using PL/SQL Native Compilation

### Security

Virtual Private Database Enhancements  
Privileged connection options  
DBMS\_OBFUSCATION Enhancements  
Fine Grained Auditing  
Locked Database Default Accounts  
Label Security  
Secure Application Role  
Public Key Infrastructure (PKI)

### Backup and Recovery

RMAN Changes in Commands  
RMAN Automatic Channel Allocation  
RMAN Backup File Optimization (BFO)  
RMAN Retention Policy  
RMAN Resumable Backups  
RMAN Database and Archived Redo Log Backups  
Performing Trial Recovery  
Performing Block Level Recovery  
Block Media Recovery (BMR)  
Trial Recovery

### Online Operations

Index Online Rebuilds  
Online Table Reorganization and Rebuilds  
Indexed Organized Tables Online Reorganization  
Database Quiescing for Restricted Access  
Discuss new features designed to reduce planned downtime  
Online ANALYZE Validate  
Initialization Parameter Management  
Server Parameter File (SPFILE)  
Persistent Parameters  
COMMENTS for Persistent Parameters

### Segment and Index Management

Automatic Segment Free Space Management  
Resumable Space Management  
IOT Changes  
Skip Scan Indexes  
Bitmap Join Indexes  
Unloading Metadata  
Automatic Global Index Maintenance  
External Tables  
LIST Partitioning

### Performance Improvements

Index Usage Monitoring  
Cursor Sharing Enhancements  
New Statistics Gathering Options  
Cached Execution Plans  
First Rows Optimization Changes  
Gathering System Statistics  
Changes in Outlines  
New Columns in PLAN\_TABLE

### File Management

Oracle Managed Files (OMF)

### Tablespace Management

Multiple Block Sizes  
Default Temporary Tablespaces  
New Default Behavior for CREATE TABLESPACE  
Automatic Undo Management

### Memory Management

Memory subcaches to support multiple block size tablespaces  
Dynamic SGA  
SGA Allocation Units  
Automatic PGA Memory Management  
Measuring Latch Contention  
Parameters to enable automatic and dynamic sizing of SQL working areas