

- COURSE CODE:** ORA11P
- COURSE TITLE:** Oracle **11g** New Features & Performance for DBAs
- CURRENCY:** 11g
- AUDIENCE:** Oracle DBAs and system administrators.
- PREREQUISITES:** Conversant with Oracle 10g or 9i architecture, schema objects, etc.
- DURATION:** 3 days
- SUMMARY:** This DBA-oriented course presents the more useful new and enhanced features incorporated as part of Oracle 11g such as:
- Change management
 - Database automation
 - Storage management
 - Fault diagnosis
 - High-availability
 - Security
 - Partitioning
 - Etc.
- At regular intervals, hands-on practicals are used to enhance the attendee's learning experience. Then Oracle 11g features are summarised in terms of best practices and performance. OLTP and BI/data warehousing are given equal billing.
- OBJECTIVES:** Upon completion of this presentation, the delegate should have a practical knowledge of Oracle 11g's new features and enhancements as these relate to both transactional on Bi solutions.
- FORMAT:** Lecture and hands-on, including:
- Management: automatic SQL tuning
 - Storage management: table compression
 - BI (data warehousing): partition manipulation and loading

1. CHANGE MANAGEMENT

- Database Replay
- SQL Performance Analyzer

2. DATABASE AUTOMATION

- Automatic memory management
- Automatic SQL tuning
- Automatic Database Diagnostic Monitor (ADDM)

3. PERFORMANCE

- Automatic Workload Repository
- SQL Plan Management
- Multicolumn statistics
- Private statistics
- Server-side result cache
- SQL Test Case Builder

4. FAULT DIAGNOSIS FEATURE

- Automatic diagnostic repository
- Automatic Health Monitor
- Support Workbench
- Incident Packaging Service

5. DATA GUARD

- Real-time query standby database
- Snapshot standby database
- Logical standby database
- Redo log compression
- Data Guard Broker
- Recovery Manager (RMAN) integration with Data Guard
- Rolling upgrades
- Fast-start failover

6. STORAGE MANAGEMENT

- Rolling upgrades
- ASM fast disk resynchronisation
- ASM preferred read failure groups
- ASM diskgroup attributes for backward compatibility
- Separation of the DBA and SA roles via the **sysasm** role
- New manageability options for **check**, **mount** and **drop** commands
- **copy** command for copying files
- ASM extensions

7. DATABASE MANAGEMENT

- Invisible indexes
- New partitioning schemes
- Virtual columns
- Read-only tables
- Addition of columns
- Data Pump

8. SECURITY

- Tablespace encryption
- Case-sensitive passwords
- Data remapping
- Enterprise Manager Database Console
- OCI security

9. APPLICATION ENHANCEMENTS

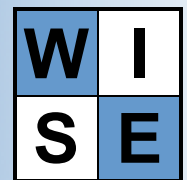
- Pivot operations
- Unpivot operations
- PL/SQL code without a C compiler
- Cross-session PL/SQL function result cache
- Inlining in PL/SQL
- SIMPLE_INTEGER datatype
- Triggers
- REGEXP_INSTR() and REGEXP_SUBSTR()
- Binary XME
- The XML schema
- XQuery
- XMLIndex

10. PARTITIONING

- Reference partitioning
- Interval partitioning
- Extended composite partitioning
- Virtual column partitioning

11. HIGH-AVAILABILITY

- Network-aware duplication
- Flashback transaction backout feature
- Flashback archive
- SQL Repair Advisor
- Data Recovery Advisor
- Virtual private catalogs
- Flashback logs
- Parallel backups of datafiles
- Online patching



12. ADVANCED COMPRESSION

- Compress OLTP data
- Compress export data

13. BUSINESS INTELLIGENCE (BI) & DATA WAREHOUSING

- Oracle Warehouse Builder
- ETL
- Data profiling
- Data sources/destinations (e.g., PeopleSoft, SAP R/3)
- Partitioning (e.g., VLDB)
- Compression
- Data mining
- OLAP

14. INSTALLATION & UPGRADING

- Server installation new features
- Installing Oracle Database 11g
- Database creation new features
- Upgrading to Oracle Database 11g