Oracle Database 10g Administration I

Course Duration: 5 days

Course Objectives:

This course provides a starting point for administration of the Oracle database. The first 2-day segment considers an in-depth discussion of the database architecture, including the Oracle instance, background processes, the SGA and memory structures, data files, tablespaces, extents, blocks and rows. Common administration tasks are also considered such as security, backup & recovery, physical storage of indexes and tables and many others.

Prerequisites:

- Oracle Database 10g Introduction to SQL
- Oracle Database 10g: Program With PL/SQL

Course Content

THE ORACLE DATABASE ENVIRONMENT

APPLICATION ARCHITECTURES

THE ORACLE DATABASE

COMPONENTS OF A DATABASE

INSTANCE CONFIGURATIONS

ABOUT THE ADMINISTRATION TOOLS

MEMORY STRUCTURES WITHIN THE INSTANCE

PARAMETERS WHICH DETERMINE SGA SIZE

INSTANCE & USER PROCESSES

INSTANCE BACKGROUND PROCESSES

SQL EXECUTION PROCESSES

INSTALLATION & DATABASE CREATION

DATABASE ADMINISTRATOR AUTHENTICATION

PRE-INSTALLATION TASKS

POST-INSTALLATION TASKS

Course content continues on next page:

Oracle Database 10g Administration I

INSTANCE STARTUP & SHUTDOWN

DATABASE STARTUP

DATABASE SHUTDOWN

RESTRICTED SESSIONS

DATABASE FILES

DYNAMIC INSTANCE CONFIGURATION

DYNAMIC PARAMETER CHANGES

DETERMINING THE SCOPE OF CHANGES

VIEWING PARAMETER VALUES

USING LOCALLY-MANAGED TABLESPACES

ABOUT TABLESPACE MAINTENANCE

LOCALLY-MANAGED TABLESPACES

TEMPORARY SEGMENTS & TABLESPACES

THE OPTIMAL FLEXIBLE ARCHITECTURE

USING DICTIONARY-MANAGED TABLESPACES

DICTIONARY-MANAGED TABLESPACES

MIGRATING THE TABLESPACE MANAGEMENT METHOD

MANAGING DATA FILES

THE STORAGE HIERARCHY

EXPLORING THE PHYSICAL STORAGE HIERARCHY

MANAGING THE DATA FILES

MANAGING REDO LOGS

AUTOMATIC UNDO SPACE MANAGEMENT

CONFIGURING AUTOMATIC UNDO SPACE MANAGEMENT

TUNING AUTOMATIC UNDO SPACE MANAGEMENT

IMPLEMENTING ORACLE MANAGED FILES

Course content continues on next page:

Oracle Database 10g Administration I

MANAGING USERS

USER MANAGEMENT

ABOUT PRIVILEGES

RESOURCE LIMITS VIA PROFILES

PASSWORD MANAGEMENT VIA PROFILES

UTILITIES, LOADING DATA

USING THE LOADER

UNDERSTANDING THE LOADER PROCESS

CONTROL FILE OPTIONS

DIRECT PATH LOADS

UTILITIES, EXPORTING & IMPORTING DATA

MANAGING INDEXES

INDEXES & INDEX SEGMENTS

ABOUT B-TREE INDEXES

ABOUT BITMAP INDEXES

INDEX DEFINITIONS WITHIN THE DATA DICTIONARY

MANAGING PRIVILEGES VIA ROLES

MANAGING CLUSTERS & INDEXED ORGANIZED TABLES

GLOBALIZATION WITH NATIONAL LANGUAGE SUPPORT (NLS)

AUDITING DATABASE USAGE

AUDITING USERS & OBJECTS

SPECIFYING AUDITING ACTIONS