Course Content :

Oracle Database 10g Administration II

Oracle Database 10g – Administration II

Duration: 15 Working Days (2 hours every day)
Platform: Oracle 10g on Linux (RHEL5)
Prerequisites:
Participants should have finished OCP Database 10g Administration I course
Prior Linux knowledge is not required, but will be helpful.

Course Topics
Configuring Recovery Manager
Recovery Manager Features and Components
Using a Flash Recovery Area with RMAN
Configuring RMAN
Control File Autobackups
Retention Policies and Channel Allocation
Using Recovery Manager to connect to a target database in default NOCATALOG mode
Displaying the current RMAN configuration settings
Altering the backup retention policy for a database
Using Recovery Manager
RMAN Command Overview
Parallelization of Backup Sets
Compressed Backups
Image Copy
Whole Database and Incremental Backups
LIST and REPORT commands
Enable ARCHIVELOG mode for the database
Use Recovery Manager
Oracle Secure Backup
Installation and Configuration
Implement the Oracle suggested strategy
RMAN and Oracle Secure Backup
Database and File-system files backup/restore to tape
Using obtool and web interface to configure Oracle Secure Backup devices (CLI/GUI)
Configuring EM for Oracle Secure Backup and test backup to tape (EM)
Using RMAN to backup your database to tape (CLI)
Using the OB Web tool to backup file system files
Recovering from Non-critical Losses
Recovery of Non-Critical Files
Creating New Temporary Tablespace
Recreating Redo Log Files, Index Tablespaces, and Indexes
Read-Only Tablespace Recovery
Authentication Methods for Database Administrators
Loss of Password Authentication File
Creating a new temporary tablespace
Altering the default temporary tablespace for a database

Incomplete Recovery
Recovery Steps
Server and User Managed Recovery commands
Recovering a Control File Autobackup
Creating a New Control File
Incomplete Recovery Overview
Incomplete Recovery Best Practices
Simplified Recovery Through RESETLOGS
Point-in-time recovery using RMAN
Flashback
Flashback Database Architecture
Configuring and Monitoring Flashback Database
Backing Up the Flash Recovery Area
Using V$FLASH_RECOVERY_AREA_USAGE
Flashback Database Considerations
Using the Flashback Database RMAN interface
Using Flashback Database EM Interface
Managing and monitoring Flashback Database operations
Dealing with Database Corruption
Block Corruption Symptoms: ORA-1578
DBVERIFY Utility and the ANALYZE command
Initialization parameter DB_BLOCK_CHECKING
Segment Metadata Dump and Verification
Using Flashback for Logical Corruption and using DBMS_REPAIR
Block Media Recovery
RMAN BMR Interface
Dumping and Verifying Segment Metadata
Monitoring and Managing Memory
Oracle Memory Structures
Automatic Shared Memory Management
SGA Tuning Principles
Database Control and Automatic Shared Memory Management
Behavior of Auto-Tuned and Manual SGA Parameters
Resizing SGA_TARGET
PGA Management Resources
Using the Memory Advisor
Automatic Performance Management
Identifying Tunable Components
Oracle Wait Events and System Statistics
Troubleshooting and Tuning Views
Direct Attach to SGA for Statistic Collection
Advisory Framework
Advisory Framework
Using the SQL Tuning and SQL Access Advisor
Workload Repository
Monitoring and Managing Storage I
Database Storage Structures
Space Management Overview ·
Oracle-Managed Files (OMF)
Row Chaining and Migrating
Proactive Tablespace Monitoring
Managing Resumable Space Allocation
SYSAUX Tablespace
Monitoring table and index space usage
Monitoring and Managing Storage II

Automatic Undo Management
Redo Log Files
Table Types
Partitioned Tables
Index-Organized Tables (IOT)
Managing index space with SQL
Configure optimal redo log file size
View “Automatic Tuning of Undo Retention”
Automatic Storage Management
ASM General Architecture and Functionalities
Dynamic Performance View Additions
Managing an ASM Instance
ASM Disk Groups
Using asmcmd Command Line
Migrating Your Database to ASM Storage
Creating an ASM instance in a separate Oracle Home
Migrating a tablespace to use ASM storage
VLDB Support
Creating Bigfile Tablespaces
Packages and data dictionary changes to support VLDB
Creating and maintaining temporary tablespace groups (TTG)
Partitioning and Partitioned Indexes
Skipping unusable indexes
Creating and using hash-partitioned global indexes
DML Error Logging
Interpreting Bigfile ROWIDs
Managing Resources
Database Resource Manager Concepts and Configuration
Creating a New Resource Plan
Active Session Pool Mechanism
Maximum Estimated Execution Time
Creating a Complex Plan
Administering and Monitoring Resource Manager
Resource Plan Directives
Creating Resource Consumer Groups
Automating Tasks with the Scheduler
Scheduler Concepts
Creating a Job Class and a Window
Managing Jobs, Programs, Chains, Events, Schedules, priority
Viewing and Purging Job Logs
Creating a program and a schedule
Creating a job that uses a program and a schedule
Altering the program and schedule for the job and observing the behavior change of the job
Monitoring job runs
Database Security
Virtual Private Database: Overview
Creating a Column-Level Policy
Writing a Policy Function
Policy Types
Column level VPD with column masking
Setting the listener password
Implement VPD
Data Movement
External Tables Concepts
Creating a Directory object and External Table

Data Pump
Transport Database
RMAN CONVERT DATABASE Command
Transport Tablespace
Create a Directory Object
Create a Temporary Table

GRAPHIX TECHNOLOGIES

1st Floor, Kashinath Building, Above Bank of Maharashtra,
Shivajinagar, Pune - 411005,Maharashtra (INDIA).
Ph: +91 20 3048 3021 / 22 Email : info@graphixtech.org