

# Oracle 11g Database Backup and Recovery (3 Days) CTI 611

*This course teaches backup and recovery techniques. This course is designed to help students prepare for the Oracle Certified Associate and Oracle Certified Professional exams.*

*Prerequisites: Knowledge of SQL; Introduction to Oracle 11g SQL and SQL\*Plus course or equivalent experience; Introduction to Oracle 11g PL/SQL course or equivalent experience is highly recommended.*

*Minimum software requirements: Windows Server 2003, Windows XP Pro or Vista Pro; Oracle 11g.*

*Minimum hardware requirements for all machines: Minimum 512 MB RAM (2 GB preferred); 20 GB of free space on hard drive (before installation). Machines need static IP addresses.*

*Microsoft PowerPoint and Internet access on instructor's workstation for presentation purposes.*

## **Module 1: Backup and Recovery Concepts**

Basics of Database Backup, Restore and Recovery  
Types of Failure that May Occur in an Oracle Database  
Ways to Tune Instance Recovery  
Importance of Checkpoints, Redo Log Files and Archived Log File  
ARCHIVELOG Mode  
Flashback Database/Table/Query

## **Module 2: Database Backups**

Creating Consistent Database Backups, Incremental Backups and Automate Database Backups  
Monitoring the Flash Recovery Area  
Backing Up Your Database without Shutting It Down

## **Module 3: Database Recovery**

Recovering from Loss of a Control File, a Redo Log File, Data Files, Temp Files and Undo Tablespaces

## **Module 4: Recovery Manager Configuration**

Parameters Affecting RMAN  
Use of a Flashback Recovery Area  
The CONFIGURE Command  
Persistent Settings  
NOCATALOG/CATALOG Mode  
Channel Allocation  
Controlfile Autobackup  
Retention Policies

## **Module 5: Recovery Manager Operations**

Using the BACKUP Command  
Creating Backup Sets/Image Copies  
Parallelization  
Compressed Backups  
Whole Database Copying  
Incremental Backups  
Block Change Tracking  
RMAN Backup Monitoring  
REPORT and LIST Commands

## **Module 6: Non-Critical Loss Recovery**

Password and Network Files  
Read-Only Tablespaces  
Temporary Tablespaces  
Index Tablespaces  
Redo Log Members/Control Files

## **Module 7: Database Recovery**

Recovering the Control File  
Reasons for Incomplete Recovery  
Recovery After RESETLOGS  
Incomplete Recovery Using EM  
Incomplete Recovery Using RMAN  
Incomplete Recovery Using SQL

## **Module 8: Flashback Database**

When to Use  
Configuration and Use  
Monitoring Flashback Database  
Using EM for Flashback Database  
Flash Recovery Area Maintenance  
Flash Recovery Area Monitoring

## **Module 9: User Error Recovery**

The New Recycle Bin  
Flashback a Dropped Table Using EM  
Querying Dropped Tables  
Flashback Versions Query  
Flashback Transaction Query

## **Module 10: Block Corruption Management**

DBVERIFY and ANALYZE  
DBMS\_REPAIR  
Block Media Recovery  
DBMS\_BLOCK\_CHECKING Parameter  
Using RMAN for Block Corruption