

Oracle 2520 Oracle System Administration II

This course will cover Oracle 11g/10g features. Students will develop abilities to manage the industry's most advanced information system. This course gives the Oracle database administrator (DBA) a firm foundation in Oracle Net administration, backup and recovery operations, and performance and tuning. Students are also introduced to networking concepts and configuration parameters, as well as how to solve some common network problems. This course also addresses backup and recovery techniques, and examines various backup, failure, restore and recovery scenarios. Students use multiple strategies and Oracle Recovery Manager to perform backups, restore and recovery operations. The students learn the necessary knowledge and skills to effectively tune SQL against the Oracle 11g/10g Server. Students gain a thorough conceptual understanding of the Oracle 11g/10g Ruled-Based and Cost-Based Optimizer, and reinforce instructor-led learning with structured hands-on practices. The students learn to use the Oracle diagnostic tools and facilities; EXPLAIN, SQL Trace, TKPROF and SQL*Plus AUTOTRACE. In addition, the participants also learn to influence the behavior of the Optimizer by changing the physical schema and modifying SQL statement syntax.

Required Prerequisites:

- ORC 2510 Oracle Database Administration I

Course Objectives

After successfully completing this course, students will be able to:

- Configure the network environment for an Oracle client-server system
- Define networking requirements and the solutions provided by Oracle to implement these requirements
- Describe the database utilities (SQL*Loader, Export, and Import) and the situations where they can be used
- List the different Oracle backup methods and recovery operations that can be used to resolve database failure
- Perform database and data file backups with and without Recovery Manager (RMAN)
- Describe alternative methods of accessing data
- Understand where SQL tuning fits in an overall tuning methodology
- Describe the causes of performance problems
- Describe the basic steps in processing SQL statements
- Use the diagnostic tools to gather information about SQL statement processing
- Influence the optimizer behavior
- Influence the physical data model so as to avoid performance problems
- Understand the tools available for 11g/10g performance tuning
- Detect and recover from database corruption