



Enterprise Solutions (India)



## EDB553: Performance and Tuning: Configuring Adaptive Server Enterprise

### Course Description

Learn to tune Adaptive Server Enterprise (ASE) for optimal performance and explore ASE architecture in depth. Study topics that include designing databases for performance, diagnosing and correcting performance problems, managing ASE system resources (CPUs, disks, I/O), optimizer statistics, SMP features, relevant data structures, benchmarking turning methodology and techniques, table partitions, and parallel processing. Examine the use of Sybase performance monitoring utilities (Monitoring Tables, sp\_sysmon, system Stored Procedures) and major performance trade-offs. Gain insight on choosing appropriate locking schemes.

### Course Objectives

Upon completion of this course, you will be able to:

- Discuss tradeoffs involved in performance tuning
- Use sp\_sysmon and other utilities to tune the server for performance gains
- Properly configure memory for optimal performance
- Manage multiple engines
- Configure, tune, and size data, procedure, and partitioned caches
- Identify and correct problems in database physical design, including table partitions
- Use statistics to manage space on DOL tables and indexes
- Choose the appropriate table locking scheme for a given application
- Reconfigure Adaptive Server dynamically
- Improve performance of tempdb by sizing, placement, and solving locking

### Course Topics

- Principles of Performance and Tuning
- Adaptive Server Architectural Overview
- The Tuning Toolbox
- Locking Principles
- Data-Only Locking Tables and Table Fragmentation
- Working with Multiple Engines

- Named Caches
- Large I/O and MetaData Caches
- Cache Partitioning and Cache Strategies
- Procedure and Statement Cache
- Optimizing Device Usage
- Table Partitioning
- Optimizer Statistics
- Parallel Concepts
- Parallel Tuning
- Tuning with the Logical Process Manager
- Bulk Copy Tuning
- Putting It All Together

### **Who Should Attend**

Database Administrators, Open Interface Developers

### **Prerequisites**

- Fast Track to Adaptive Server Enterprise 12.5/15.0
- System and Database Administration: Adaptive Server Enterprise 12.5/15.0
- Or equivalent work experience to Fast Track and System and Database Administration classes

**Skill:** Expert

### **Format**

50% Lecture  
50% Labs

### **Type**

Classroom, Onsite, SyberLearning LIVE

**Duration:** 5 Days