PERFORMANCE AND TUNING: CONFIGURING ADAPTIVE SERVER ENTERPRISE 15.7

Principles of Performance and Tuning

- Defining Performance and Tuning Principles
- Tuning with Benchmarks

Architectural Overview

- Outlining the Adaptive Server Architecture
- Describing the Task Execution Process in ASE

The Tuning Toolbox

- Using client apps to characterize system performance
- Interpreting the output of set commands
- Analyzing Server Behavior with MDA Tables and QPM
- Using procedures to monitor the server

Locking Principles

- Configuring a Locking Scheme
- Managing Contention

Fragmentation

- Identifying Fragmentation Causes and Prevention
- Diagnosing and Resolving Fragmentation

Multiple Engines

- Comparing the Process Kernel and Threaded Kernel
- Describing the Process Kernel
- Describing the Threaded Kernel
- Monitoring Spinlocks and Contention

Named Caches

- Analyzing Named Cache Concepts and Behavior
- Configuring Named Caches
- Configuring Large I/O
- Monitoring and Tuning Caches
- Configuring Metadata Caches

Specialty Cache Settings

- Changing the MRU - LRU rules
- Controlling Asynchronous Prefetch
- Using Cache Partitioning

Procedure Cache and Statement Cache Tuning

- Outlining Procedure Cache
- Utilizing Statement Cache

Device Usage

- Examining Database Space Usage
- Tuning and Troubleshooting I/O Issues
- Tuning Temporary Storage

Table Partitioning

- Partitioning Tables
- Identifying Benefits of Partitioning

Optimizer Statistics

- Viewing Optimizer Statistics
- Creating, Updating, and Tuning Optimizer Statistics
- Upgrading from Prior Versions

Parallelism

- Outlining Parallelism Concepts and Syntax
- Monitoring Parallel Access
- Executing Parallel Sort

Logical Process Manager

- Configuring Execution Classes
- Binding Objects and Precedence
- Optimizing Performance Using the Logical Process Manager

The Bulk Copy Program (bcp)

- Tuning bcp for Improved Performance