Practical System Admin for Sybase Adaptive Server

Course Summary

Description

Students learn what tools and resources are used to manage an Adaptive Server. This class covers how to install, monitor, and maintain an Adaptive Server and its databases. Students also learn to provide guidelines for a practical approach to administering a Sybase Adaptive Server.

Topics

- Architecture Overview
- Parallel Query
- Resource Definition
- Server Installation
- Databases
- Security
- Backup & Restore Scenarios
- Maintenance
- Auditing, Installing/Disabling
- Utilities
- Performance & Tuning
- Remote Server Management
- Development Standards
- Cache
- Logging & Recovery
- Understanding & Editing The Configuration File
- Logical Process Manager
- NT Registry
- NT Tools set
- NT: Extended Stored Procedures
- NT: MAPI Support
- Component Integration Services
- NT Event Log Integration

Audience

This class is designed for system administrators of Sybase Adaptive Servers.

Prerequisites

There are no prerequisites for this class.

Duration

Five days

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Course Outline

I. Architecture Overview
- A. System Administration,
- B. Definition
- C. Usage & Interrelation Of System Tables
- D. Procedures

II. Parallel Query
- A. Intro to Parallel Query
- B. Configuration
- C. Maintenance

III. Resource Definition
- A. Disk Initialization
- B. Default Disks
- C. Setting Up
- D. Activating & Deactivating Disk Mirroring Device Migration By Mirroring
- E. Mirroring The Master Device
- F. RAID Issues

IV. Server Installation
- A. Hardware Requirements
- B. Installation Steps
- C. Determining Sort Orders & Character Sets
- D. The Master Device
- E. Name & Connection Information
- F. Interfaces
- G. RUNSERVER & Errorlog Files
- H. Providing Access
- I. Starting
- J. Stopping Server

V. Databases
- A. Creating
- B. Altering
- C. Examining
- D. Setting Options
- E. Size
- F. Tempdb
- G. Changing Ownership
- H. Adding More Log Space
- I. System Tables
- J. Model Database
- K. Defining Segments
- L. Placing Objects On Segments
- M. Getting Info On Segments
- N. Heap Tables

VI. Security
- A. Special Users
- B. Roles
- C. Managing Server Logins and Passwords
- D. Adding Users
- E. Guests
- F. Aliases & Groups To Databases
- G. syslogins sysusers & sysalternates
- H. Tables
- I. Grant
- J. Revoke
- K. Commands
- L. Ownership Chains
- M. User defined Roles
- N. NT & Third party Integrated Security

VII. Backup & Restore Scenarios
- A. Configuring Backup Server
- B. Defining Dump Devices
- C. Dump & Load
- D. Transaction Log
- E. Log Monitoring
- F. Using Thresholds
- G. Restoring Master

VIII. Maintenance
- A. Activity
- B. Errorlog Monitoring
- C. Run-Time Configuration
- D. DBCC
- E. Dumps
- F. Disaster Recovery
- G. Log
- H. Space Management
- I. Verifying Backups

IX. Auditing, Installing/Disabling
- A. Auditing Stored Procedures
- B. Setting Options
- C. The Audit Queue

X. Utilities
- A. Script Maintenance & Organization
- B. Using DEFNCOPY
- C. The Bulk Copy Program

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Course Outline (cont'd)

XI. Performance & Tuning
- A. Understanding
- B. Helping The Optimizer
- C. Monitoring Performance with sp_sysmon

XII. Remote Server Management
- A. Defining Remote Servers
- B. Setting Up Remote Logins
- C. Setting Remote Access Options

XIII. Development Standards
- A. Deciding On
- B. Setting Up & Options for Development
- C. Test & Production Environments

XIV. Cache
- A. Cache Size
- B. Configuration
- C. Using DBCC
- D. Named Caches
- E. Buffer Pools
- F. The Wash Area
- G. Monitoring Behavior
- H. Binding To Caches
- I. Log I/O Buffer Size
- J. Meta data cache

XV. Logging & Recovery
- A. The Transaction Log
- B. Fast Recovery
- C. Commits
- D. Checkpoints
- E. The Housekeeper Function
- F. Recovery Fault Isolation
- G. Point in Time Recovery

XVI. Understanding & Editing The Configuration File
- A. Configuration Options
- B. Dynamic
- C. Static Options
- D. Configuring User Log Cache Size
- E. Recommended Settings
- F. Tuning Data Cache

XVII. Logical Process Manager
- A. Overview
- B. Defining Execution Classes
- C. Using Execution Classes
- D. Resource Governor
- E. Enabling Resource Limits
- F. Creating Limits
- G. Limit Violation Actions
- H. Modifying Limits

XVIII. NT Registry
- A. What Registry areas Adaptive Server uses
- B. How to move the master devices
- C. how to install remotely

XIX. NT Tools set
- A. SQL Advantage
- B. Sybase Central
- C. Sybase Performance Monitor
- D. NT Performance Monitor Integration

XX. NT: Extended Stored Procedures
- A. Creating and Using ESPS
- B. Standard ESPS

XXI. NT: MAPI Support
- A. Overview of NT Mail System
- B. Using the SYBMAIL

XXII. Component Integration Services
- A. Architecture

XXIII. NT Event Log Integration
- A. Overview
- B. What gets log
- C. User defined log events

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