DB207 DB2 System Performance & Tuning

Course description This course focuses on DB2 system tuning in order to achieve optimum performance. In doing so, the course covers the DB2 component systems and their relationships with each other, OS/390 and other OS/390 sub-systems. Students are introduced to various monitoring, measurement and reporting facilities, and are given guide-lines for interpreting the statistics produced by them.

Who Should Attend System Administrators, Database Administrators and System Programmers responsible for DB2 system performance monitoring & tuning.

Pre-Requisites Students should be familiar with those DB2 concepts covered in DB203, DB205 & DB206.

Duration 3 Days

DB2 / OS/390 Architecture

Hardware Architecture
OS/390 Architecture
Basic Resource Management
The SRM / WLM
Threads & Connections
Introduction to DB2PM Reports
DB2 Address Spaces
Allied DB2 Address Spaces

DB2 Instrumentation Facility

DB2PM Reports Introduction
The Accounting Reports
The Statistics Reports
DB2 Trace

Measuring & Monitoring The Workload

Number Of Threads
Work Performed By Thread
Accounting Classes
Statistics Classes

OS/390 Performance Considerations

User Address Spaces
DB2 Address Spaces
CPU Utilisation
Paging
CPU Queuing
WLM
Virtual Storage Utilisation

The DB2 System

Buffer Pools
Dataspaces
Hiper Pools
I/O Types
Prefetch
Buffer Pool Thresholds
EDM Pool
RID Pool
Sort Pool
I/O Parallelism
CPU Parallelism
Logging

IRLM, Locking & Concurrency

The IRLM
IRLM Parms
Lock Attributes
Locking Parameters
Isolation Levels
Lock Contention
Lock Avoidance
Resource Limit Facility
Performance Considerations

DB2 Utilities

Utility Performance Considerations
Claims & Drains
DB2 *Performance* Options

Attachments

CICS, IMS, TSO/Batch
Controlling The Workload