

Course Description:

This course covers Informatica Advanced Performance and Tuning concepts. The content of this course covers performance and tuning best practices and guidelines necessary to make the sessions and mappings perform at their best. This class also shares information about memory, disk, hardware, CPU, over-utilization, and performance baseline measurement. The focus of this class is to instruct the student on how to tune the Informatica environment for performance. It will cover advanced concepts and assumes a level of knowledge of the student that they've had at least 6 to 8 months of working with Informatica.

Instructor:

Dan Linstedt

Audience Roles:

Mapping Designer, Workflow Designer, DBA, System Administrators, Informatica Administrators

Course Duration:

3 Days or 24 hours of courseware

Class Delivery:

Public course at Genesee Academy

Lab Work:

There is no lab work for this course.

Agenda:**Day 1:**

- Foundational Concepts
- Performance and Tuning Basic Rules
- Axioms
- Tools in the Toolbox, Identifying Bottlenecks

Introduction to Hardware Layers

- Operating Systems, 32 and 64 bit
- Memory Configuration and RAM
- Network and Disk I/O issues
- CPU, Threading models
- Hardware Platforms (SMP, MPP, NUMA, etc..)

Setting up Baseline Performance Tests

- Developing a base-line performance library of mappings
- Understanding workflow settings
- Server settings and impacts
- Shared application environments and impacts
- Baselining Hardware Performance

Day 2:

RDBMS components and Performance

- RDBMS Basic Configurations, Connections and Settings
- Tuning SQL in an RDBMS, Views, Indexes
- Overview of Informatica Pushdown Models
- Table Block Sizing Algorithms
- Database Fragmentation Issues
- Understanding basic Indexing
- Database Table Partitioning
- Database Index Partitioning

Bulk Loaders

- Bulk Loading Generics
- Oracle SQL*Loader
- Sybase/SQLServer BCP
- SQLServer OLE*DB/SSIS, Bulk Commands
- Teradata FastLoad, MLoad, TPump
- DB2 UDB Loader

Day 3:

Informatica Integration Service (PMServer)

- Memory Allocations
- Informatica Threads
- Session Memory Settings
- Introduction to Parallel Sessions, Partitioned Sessions
- Partitioning Sessions in Depth
- Introduction to GRID (covered in depth in another course)

Informatica Mapping Designs

- Finding Problems

- Common Mapping exhibiting issues

- Simple and Complex Mapping measurements

- Fixing Mapping Issues, changing direction

- Passing Data, Block Sizes, Contention Components

- Transformations in Depth

- Measuring Transformation Speed against the Database

- Interpreting the Session Log

- Multi-passing data

INSTRUCTOR'S BIO IS AVAILABLE ON THE WEB SITE:

<http://www.GeneseeAcademy.com/instructors.htm>