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: