

MicroStrategy Engine Essentials

First Course in the following:

- Engine Specialist Track

Second Course in the following:

- Engine Tuning Track
- Certified Engine Specialist Program

Overview:

This two-day course explores the logic and behavior of the MicroStrategy Engine. Students learn how the MicroStrategy Engine generates Structured Query Language (SQL) for a variety of reporting scenarios. The course begins with an overview of the MicroStrategy Engine architecture. Next, students study the basic optimizations that the MicroStrategy Engine uses within each SQL clause. The majority of the course focuses on studying the SQL generated by the MicroStrategy Engine for common reporting requirements such as consolidations and custom groups, advanced metrics, set qualification filters, and OLAP Services features. Throughout the course, students gain hands-on practice through a series of exercises.

Cost:

- US\$1,300 per person, or 2 LUs

Number of Days:

- 2 days

Who Should Attend:

- Project Designers
- Report Developers
- Anyone who has an interest in learning how the MicroStrategy Engine works so that they can understand and troubleshoot MicroStrategy reports

Prerequisites:

- SQL Essentials course (or equivalent knowledge)
- MicroStrategy Desktop: Advanced Reporting 100 course

Topics:

Day 1

- Introduction to the MicroStrategy Engine
 - The MicroStrategy Engine's Components
 - SQL Generation Process
- Basic Optimizations
 - Multipass SQL
 - Composing Optimized SQL (SELECT, GROUP BY, and FROM clauses)
 - Logical Table Size
 - Optimizing Joins
 - Intermediate Tables
- Templates
 - Attributes
 - Hierarchies
 - Consolidations
 - Custom Groups
 - Custom Group Banding
- Metrics
 - Metric Formula
 - Level Metrics

Day 2

- Metrics Continued
 - Order of Resolution: Hierarchies in Metrics
 - Nonaggregatable Metrics
 - Conditional Metrics
 - Transformation Metrics
 - Nested Metrics
 - Metric Join Types
- Filters
 - Set Qualification: Metric Qualification, Relationship Filtering, Report as Filter
- The Analytical Engine
 - Report Limits, Evaluation Order, Subtotals, APPLY statements, CASE statements, Analytical Functions
- OLAP Services
 - Intelligent Cubes, Derived Metrics View Filters,