

SQL Performance Using Data Studio and pureQuery

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Abstract:

The **SQL Performance Using Data Studio and pureQuery** class presents the various SQL Access Paths and the Visual Explain capabilities within the integrated Data Studio and pureQuery development environment. This class teaches the attendee how to use the Data Studio and pureQuery features so they can get the best performance out of their SQL development immediately.

Data Studio with pureQuery facilities can quickly generate both dynamic and static SQL database access modules helping developers test, understand, and debug their java application and SQL modules faster and easier. This class discusses typical application development scenarios along with how to use Data Studio's integrated debugger for quickly resolving programming issues and improving performance.

This class also details the setup, configuration, and improvements the pureQuery Capture facility can quickly bring to change a dynamic java JDBC SQL into a static SQL application dramatically reducing, sometimes up to 20% of its CPU consumption. The Capture facility improves performance without any application code changes, improves trace-ability of the JDBC java module SQL and improves security for the application.

Through this class's lessons, you will learn about SQL performance using Visual Explain within Data Studio and pureQuery. This will help make all your application development quicker and easier and reduce your overall CPU resource demands.

Outline

Chapter 1: Data Studio & pureQuery Overview

- Eclipse Platform Properties
- Perspectives, View and Windows
- Data Studio Components
- pureQuery Components
- Database & Connections
- Connections to DB2 z/OS, LUW and Oracle
- Browsing Databases, Tables and Indexes

Chapter 2: Java Application Development

- Java Application development
- Database Connections
- Data Studio module generation
- Annotated method coding
- Error checking and Handling

Chapter 3: Java Application Scenario

- Sample Database Definition
- Sample SQL generation
- SQL Visual Explain
- Visual Explain Database objects
- Optim Performance History
- Cross Reference SQL with Java Source

Chapter 4: pureQuery Development

- pureQuery Overview
- pureQuery Modules
- pureQuery Generation

- Running pureQuery SQL Modules
- Binding pureQuery SQL
- Testing generated modules
- Parameters, Error checking & SQL Outline

Chapter 5: SQL Performance Analysis

- SQL Access Paths Overview
- Data Studio Visual Explain
- EXPLAIN SQL Access Paths
- Explain Tables
- Expanded Explain Tables
- Database Statistics Overview

Chapter 6: Using the Interactive Debugger

- Module Debugging Overview
- Types of Debugging
- Debugging Configuration &
 - Arguments, JRE, Settings and issues
- Debugging Perspective
- Debug Monitor, Console, Variables, Breakpoints
- Setting Breakpoints and Variables
- Stepping through an executing module

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Additional or custom material substituted per request