

DB2 Database Administration Advanced Topics

Course Summary

Description

This course is designed to provide the experienced DB2 DBA or application programmer the knowledge to effectively and efficiently design, create and maintain native SQL DB2 UDFs (User Defined Functions), Stored Procedures and Triggers. This course includes features up to and including version 11 of DB2 for z/OS

Objectives

By the end of this course, students will be able to:

- Create and use native SQL User Defined Functions, including best practices for proper use.
- Have in-depth knowledge of creating native SQL Stored Procedures and when to best utilize them.
- Use native SQL Triggers to perform audit and history table creation, as well as the control of database updates.

Topics

- Stored Procedures, Functions and Triggers - Overview
- Creating Stored Procedures
- Trigger Lab
- Appendix
- User Defined Functions Lab
- Triggers
- Create Stored Procedure Example Review
- ALTER Stored Procedure
- Stored Procedures Lab
- User Defined Functions (UDFs)

Audience

This course is intended for intermediate to advanced level DB2 database administrators or application programmers who need to acquire the skills required to create and maintain UDFs, Stored Procedures and Triggers, and properly utilize them in DB2 for z/OS.

Prerequisite

The student should:

- Have completed DB2 DBA Essentials, or equivalent experience.
- Have experience with SQL Data Definition and Data Manipulation Language
- Have experience using TSO/ISPF and JCL

Duration

Two Days

DB2 Database Administration Advanced Topics

Course Outline

- I. *Stored Procedures, Functions and Triggers - Overview*
 - A. Example of UPDATE Stored Procedure
 - B. Example of READ Stored Procedure
 - C. Example of a Function
 - D. Example of a Trigger

- II. *Creating Stored Procedures*
 - A. Declare Statement
 - B. Labels In Procedures
 - C. Set Statement
 - D. Case Statement
 - E. Call Statement
 - F. If Statement
 - G. Goto Statement
 - H. Loop Statement
 - I. Repeat Statement
 - J. While Statement
 - K. For Statement
 - L. Get Diagnostics
 - M. Return Statement
 - N. Signal Statement
 - O. Resignal Statement

- III. *Create Stored Procedure Example Review*

- IV. *ALTER Stored Procedure*

- V. *Stored Procedures Lab*

- VI. *User Defined Functions (UDFs)*
 - A. Create Function
 - B. Alter Function

- VII. *User Defined Functions Lab*

- VIII. *Triggers*
 - A. Create Trigger

- IX. *Trigger Lab*

- X. *Appendix*
 - A. Suggested Lab Solutions