

Stored Procedure Options on Db2 for z/OS

Course Summary

Description

This course presents coding and administration requirements for implementing Db2 Stored Procedures on Db2 for z/OS. Both external (COBOL) and native SQL Procedure Language Stored Procedures are covered.

Objectives

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

- Understand the Stored Procedures Environment and setup requirements to implement stored procedures
- Code and test Db2 for z/OS Stored Procedures using COBOL
- Code and test a Stored Procedure Calling Program
- Use IBM Data Studio to code an SQL PL Stored Procedure
- Understand the two types of Global Temporary Tables and their use with Stored Procedures
- Understand the major Performance Considerations for Db2 z/OS Stored Procedures

Topics

- Introduction to Stored Procedures
- External COBOL Stored Procedures
- Native SQL Procedure Language (SQL PL) Stored Procedures
- Global Temporary Tables
- Stored Procedure Performance

Audience

Database Administrators and Application Developers who will be setting up the Stored Procedures environment on the Db2 for z/OS platform as well as calling and/or coding stored procedures in the Db2 z/OS environment.

Prerequisites

Students should have attended the Db2 for z/OS SQL & Application Programming class or equivalent and have a Working knowledge of COBOL and SQL.

Duration

Four Days

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Course Outline

- I. Introduction to Stored Procedures*
 - A. Distributed Processing
 - B. Stored Procedures Solutions
 - C. Architecture
 - D. Installation Considerations
 - E. WLM-Established Stored Procedures Address Spaces
 - F. Enabling Stored Procedures After Installation
 - G. Stored Procedures Run-time Environment
 - H. Administrator Tasks
 - I. zIIP Eligibility
 - J. Using Commands
- II. External COBOL Stored Procedures*
 - A. Parameter Passing Stored Procedures
 - 1. Writing and Preparing COBOL Stored Procedures
 - 2. Invoking Stored Procedures
 - 3. Defining Your Procedure to Db2
 - 4. Calling Simple COBOL Stored Procedures
 - B. Result Set Passing Stored Procedures
 - 1. Improved Functionality with Result Sets
 - 2. Requirements for Returning Result Sets
 - 3. How to Write Applications That Receive Result Sets
 - C. Coding calling programs in COBOL
- III. Native SQL Procedure Language (SQL PL) Stored Procedures*
 - A. Introduction to Data Studio
 - 1. Managing Database Connections
 - 2. Coding Stored Procedures
 - 3. Deploying Stored Procedures
 - B. SQL PL
 - 1. CREATE PROCEDURE Statement
 - 2. Bind Options
 - 3. Declaring SQL Variables
 - 4. Procedural Statements in SQL
 - 5. Creating Result Sets
 - 6. Calling Another Stored Procedure
 - 7. Retrieving a Result Set
 - C. Debugging with the Unified Debugger
- IV. Global Temporary Tables*
 - A. Created Temporary Tables
 - B. Declared Temporary Tables
 - C. Using Temporary Tables to Hold Result Sets
- V. Stored Procedure Performance*
 - A. Workload Manager Address Space Considerations
 - B. Block / Multi Row Fetch with Stored Procedures
 - C. Distributed Data Facility & Network Issues
 - D. Efficient SQL