



DB2 COBOL External Stored Procedures (HDT633) Two Days

Prerequisites

The student should have COBOL DB2 SQL coding experience.

Who Should Attend

This course is targeted at COBOL programmers, analysts, team leaders and project managers who need to understand how to code, debug, and call DB2 COBOL external stored procedures.

Course Description

This course shows the student how to code, debug, and call DB2 COBOL stored procedures.

Course Topics

- DB2 Stored Procedures
- Defining The COBOL External Stored Procedure To DB2
- Preparing And Binding A DB2 COBOL External Stored Procedure
- Calling A DB2 COBOL External Stored Procedure Returning Output Parameters And No Result Sets
- A DB2 COBOL External Stored Procedure That Returns Output Parameters And A Result Set
- Defining To DB2 A COBOL External Stored Procedure That Returns Output Parameters And Result Sets
- Preparing A DB2 COBOL External Stored Procedure That Returns Output Parameters And Result Sets
- Calling A DB2 COBOL External Stored Procedure From A COBOL Program That Returns Output Parameters And Result Sets



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- I. DB2 STORED PROCEDURES**
 - A. What Is a Stored Procedure?
 - B. Why Write Stored Procedures?
 - C. Nested Stored Procedures
 - D. A Sample DB2 COBOL External Stored Procedure

- II. DEFINING THE COBOL EXTERNAL STORED PROCEDURE TO DB2**
 - A. Dropping and Creating an External DB2 Stored Procedure
 - B. Implicitly or Explicitly Using the Schema Name
 - C. SYSIBM.SYSROUTINES and SYSIBM.SYSPARMS
 - D. Declaring IN, INOUT, and OUT Parameters
 - E. Returning Result Sets
 - F. Supported External Stored Procedure Languages
 - G. The External Name Parameter
 - H. The Parameter Style Settings
 - I. The NOT DETERMINISTIC Setting
 - J. Calling a Stored Procedure on NULL Input
 - K. Reading and Modifying SQL Data
 - L. Referencing the Collection ID
 - M. Referencing the WLM ENVIRONMENT Name
 - N. ASU Time Limit Settings
 - O. The STAY RESIDENT Option
 - P. MAIN and SUBPROGRAM Types
 - Q. Committing On Return
 - R. Defining Security Options
 - S. Handling Stored Procedure Failures
 - T. Language Environment Options
 - U. Inheriting Special Registers
 - V. The FENCED Option

- III. PREPARING AND BINDING A DB2 COBOL EXTERNAL STORED PROCEDURE**
 - A. Pre-Compiling a DB2 COBOL Stored Procedure
 - B. Attaching to the Resource Recovery Services Attachment Facility (RRSAF)
 - C. Compiling the Stored Procedure With Enterprise COBOL
 - D. Link Editing the DB2 COBOL Stored Procedure
 - E. Package Binding the DB2 COBOL Stored Procedure



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- IV. CALLING A DB2 COBOL EXTERNAL STORED PROCEDURE RETURNING OUTPUT PARAMETERS AND NO RESULT SETS**
 - A. Connecting to DB2
 - B. Calling a DB2 Stored Procedure From the DB2 Command Line Processor
 - C. Viewing and Verifying the Returned INOUT and OUT Parameters
 - D. Disconnecting from DB2
 - E. Calling a DB2 Stored Procedure From Within an Enterprise COBOL Program
 - F. The EXEC SQL COBOL Stored Procedure CALL Syntax
 - G. Handling NULL Indicators In the Stored Procedure CALL
 - H. Pre-Compiling the CALLING COBOL Program
 - I. Compiling the CALLING COBOL Program
 - J. Link Editing the CALLING COBOL Program
 - K. Package Binding the CALLING COBOL Program
 - L. Binding the Plan
 - M. The DB2 –START PROCEDURE Command
 - N. The DB2 –DISPLAY PROCEDURE Command
 - O. Refreshing the WLM Environment (MVS VARY WLM Command)

- V. A DB2 COBOL EXTERNAL STORED PROCEDURE THAT RETURNS OUTPUT PARAMETERS AND A RESULT SET**
 - A. A Sample DB2 COBOL External Stored Procedure That Returns Output Parameters and a Result Set
 - B. Declaring Your Cursor Using WITH HOLD and WITH RETURN
 - C. Informing the Calling Program of Success or Failure

- VI. DEFINING TO DB2 A COBOL EXTERNAL STORED PROCEDURE THAT RETURNS OUTPUT PARAMETERS AND RESULT SETS**
 - A. The RESULT SETS n Clause
 - B. Informing the Calling Program of Success or Failure

- VII. PREPARING A DB2 COBOL EXTERNAL STORED PROCEDURE THAT RETURNS OUTPUT PARAMETERS AND RESULT SETS**
 - A. Pre-Compiling a COBOL External Stored Procedure That Returns Result Sets
 - B. Compiling a COBOL External Stored Procedure That Returns Result Sets
 - C. Link Editing a COBOL External Stored Procedure That Returns Result Sets
 - D. Package Binding a COBOL External Stored Procedure That Returns Result Sets



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- VIII. CALLING A DB2 COBOL EXTERNAL STORED PROCEDURE FROM A COBOL PROGRAM THAT RETURNS OUTPUT PARAMETERS AND RESULT SETS**
- A.** Connecting to DB2
 - B.** Calling a DB2 Stored Procedure From the DB2 Command Line Processor
 - C.** Viewing and Verifying the Returned INOUT and OUT Parameters and the Result Sets
 - D.** Disconnecting From DB2
 - E.** Using the SQL TYPE IS RESULT-SET-LOCATOR VARYING Clause in COBOL
 - F.** The EXEC SQL CALL Stored Procedure Syntax
 - G.** Checking SQLCODE and SQLSTATE in the SQLCA Properly
 - H.** Checking How Many Result Sets Were Returned
 - I.** Using the EXEC SQL ASSOCIATE LOCATOR Statement
 - J.** Using the EXEC SQL ALLOCATE CURSOR Statement
 - K.** Fetching From the Returned Result Set
 - L.** Pre-Compiling the CALLING COBOL Program
 - M.** Compiling the CALLING COBOL Program
 - N.** Link Editing the CALLING COBOL Program
 - O.** Package Binding the CALLING COBOL Program