

COBOL Dumps & Debugging

Learn via: **Classroom**

Duration: **2 Days**

Overview

This course introduces, explains and examines common z/OS COBOL abends, dump debugging and problem solving. Practical exercises based on example situations are integrated at stages throughout the course.

Prerequisites

COBOL programming experience as well as skills with TSO/ISPF and JCL.

Who Should Attend

Experienced COBOL programmers.

What You Will Learn

On successful completion of this course you will be able to:

- examine and analyse COBOL dumps
- debug COBOL programs
- describe the tools available and their use.

Outline

Introduction

- Getting it right: Specification, Design, Writing, Reviews
- Inspection Checklist: Data Errors, Calculation errors, Control-Flow errors, Interface errors, Input/Output errors, Compilation errors, Desk checking.

Using DISPLAY

- Using DISPLAY to trace the logic flow of the program.

FILLERS

- Setting up FILLERS.

Examples of Errors

- Initialisation errors
- Calculation errors
- Control-Flow Errors
- Interface errors: Calling Program, Called Program
- Interface errors
- Input/Output errors

Compiler Options

JESMSGGLG & JESYSMSG ABEND Messages

- Interpreting messages
- Popular QSAM Abends: Code 35, Code 39 , Code 46.

ABEND Codes

Checking Codes Inside the Program

- Checking File Status Word
- Using Declaratives.

SYSUDUMP

- SYSDUMP
- Finding the instruction that caused the abend
 - 1 - no called programs involved
 - 2 - called programs.

SYSOUT

- No Call; Sysout Output
- Compiled Listing
- Called Program
- Sysout Output
- SYSOUT and TEST(SYM).

CEEDUMP

- No Call
- CEEDUMP; Compiled Listing
- Called Program
- CEEDUMP - Page 1
- CEEDUMP and TEST(SYM).

ABEND-AID

- Example
- COMPILED LISTING (using LIST)
- COBOL Source
- Example 2
- COMPILED LISTING
- Example 3.

Compiled Listing

- Using Compiled Listing: Compiled listing can be used to check the size of 01 group items, Using Compiled Listing to determine level of conditions.