Advanced Assembler Language – The z/series instruction set

Course Summary

Description

This course provides an examination of the z/series instruction set for use with 64-bit registers, immediate operations, arithmetic functions, and new capabilities. This course will use extensive coding labs and exercises to provide the opportunity to gain familiarity with instruction set usage and behavior.

Topics

- General instructions
- Arithmetic instructions
- Immediate instructions and bit manipulation instructions
- Processor dependent instructions

Audience

This course is designed for Assembler language programmers that wish to examine the new instruction capabilities of the z/series processors.

Prerequisites

Students should be familiar with Assembler Language Programming, z/OS JCL, utilities, and TSO/ISPF.

Duration

Three days

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Course Outline

I. General instructions
- A. Relative instructions
- B. 32/64 bit register considerations
- C. Extended displacement instructions

II. Arithmetic instructions
- A. 32/64 bit arithmetic usage

III. Immediate instructions and bit manipulation instructions
- A. Use of High-low operands
- B. Rotating bit positions

IV. Processor dependent instructions
- A. Interruptible instructions
- B. Processor model dependencies

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