

## **z/OS Debug Tool for XL C/C++**

### **Course Summary**

#### **Description**

The student will acquire facility with the C/C++ compiler in support of using Debug Tool, and will acquire facility with Debug Tool.

#### **Objectives**

After taking this course, students will be able to:

- Understand and discuss the capabilities of the Debug Tool
- Utilize the features of the Debug Tool to debug a C or C++ program, using the commands available in the full screen mode of the Debug Tool.

#### **Topics**

- Compiling for Debug Tool testing
- Debug Tool Full Screen usage
- Debug Tool commands
- Debugging techniques

#### **Audience**

This course is designed for experienced C or C++ programmers who are testing C or C++ application programs using Debug Tool.

#### **Prerequisites**

The student entering this course should have experience in coding C or C++ programs, as well as experience in using ISPF/PDF, and should be able to code JCL to run simple batch jobs.

#### **Duration**

Two days

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### Course Outline

- I. Introduction to the Debug Tool**
  - A. Compiling and linking
  - B. Allocation
  - C. Invocation
  - D. Computer Exercise: Setting up to use the Debug Tool
- II. The Session Panel**
  - A. Basic commands
  - B. AT / CLEAR
  - C. GO / GOTO / RUNTO / STEP
  - D. LIST
  - E. QUIT / QQUIT
  - F. ?
  - G. Computer Exercise: Introducing the Debug Tool
- III. Managing the screen**
  - A. SCROLL
  - B. PANEL
  - C. Session colors
  - D. Session layout
  - E. Source listings
  - F. Session profile control
  - G. WINDOW
  - H. Function keys
  - I. RETRIEVE
  - J. FIND
  - K. Advanced breakpoints
  - L. Command lists
  - M. ENABLE / DISABLE
  - N. TRIGGER
  - O. Changing variables - MOVE, SET, and Compute
  - P. Tracking variables - MONITOR
  - Q. Computer Exercise: Tailoring the Screen and Using Advanced Breakpoints
- IV. C/C++ language subset commands**
  - A. block {}
  - B. break
  - C. Declaration
  - D. do/while
  - E. expressions
  - F. for/while
  - G. if
  - H. switch
  - I. Debug Tool variables, expressions, and built-in functions
  - J. Computer Exercise: Working with the language subsets
- V. Session control commands**
  - A. SET
  - B. QUERY
  - C. Prefix commands
  - D. AT / CLEAR
  - E. DISABLE / ENABLE
  - F. QUERY
  - G. SHOW
  - H. Frequency counts
  - I. Computer Exercise: Using Advanced Features
- VI. Debug Tool Logs and Restart**
  - A. Miscellaneous Commands
  - B. COMMENT
  - C. ANALYZE
  - D. DESCRIBE
  - E. TSO / SYSTEM
  - F. Computer Exercise: Restart and Miscellaneous Commands
- VII. Debug Tool in other environments**
- VIII. Miscellaneous Issues**