

# CICS/TS Application Debugging Workshop

## **Course Summary**

#### Description

In this course, students will acquire the ability to locate the source of an abend, examine the operands involved and determine corrective action. The workshops supplied are using programs written in COBOL/LE; the dumps were created in a CICS/TS 2.3 environment.

#### **Topics**

- Introduction: CICS history
- Application Programming Interface
- CICS command-level translator; Addressability; Task execution; CECI; CEBR; CECS
- Error Handling
- HANDLE CONDITION; IGNORE CONDITION; NOHANDLE; RESP
- Testing
- Principles; Procedures; Requirements
- Task Execution
- Domain architecture
- CICS areas
  - **Execution Diagnostic Facility**
- Abnormal end processing
- Problem Investigation
- Dump facility; Messages and codes; Dump structure; CICS trace facility, COBOL/LE program structure
- Abend Analysis

#### **Prerequisites**

Students should take CICS Application Programming and Advanced Application Programming Workshop courses, or have equivalent experience before taking this class.

### Audience

This course is designed for CICS application developers and designers, and technical support specialists.

## **Duration**

Four days



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#### **Course Outline**

I. Introduction: CICS history

### II. Application Programming Interface

A. CICS command-level translator; Addressability; Task execution; CECI; CEBR; CECS

## III. Error Handling

A. HANDLE CONDITION; IGNORE CONDITION; NOHANDLE; RESP

### IV. Testing

A. Principles; Procedures; Requirements

#### V. Task Execution

- A. Domain architecture
  - 1. Debugging information
  - 2. Traces
  - 3. AP domain
    - a) Task related control blocks
    - b) EIP trace entries
- B. Domain architecture
  - 1. Transaction manager
  - 2. Dispatcher domain
  - 3. Kernel domain
  - 4. Storage manager
  - 5. Loader domain
  - 6. Program manager
  - 7. AP domain terminal control
  - 8. AP domain file control
  - 9. AP domain interval control
  - 10. AP domain temp storage, transient data
- C. CICS areas
  - 1. Task control area
  - 2. Storage allocation
- D. Execution Diagnostic Facility
- E. Abnormal end processing

### VI. Problem Investigation

A. Dump facility; Messages and codes; Dump structure; CICS trace facility, COBOL/LE program structure

### VII. Abend Analysis

- A. Transaction Abends
  - 1. ASRA/AICA
  - 2. AEIx
- B. Wait / loops problems
- C. Storage violations



