

COB02 VS COBOL II Dump Debugging

Course Description	This course is designed to provide application programmers with the skills required to solve VS COBOL II abends using the formatted dump, snap dump, the system dump and other information available.
Who Should Attend	Participants should be programmers or analyst programmers who are required to solve VS COBOL II dumps in either a development or support environments.
Pre-Requisites	Participants should ideally already have at least three months practical experience using VS COBOL II, but no previous dump solving skills are required. Some additional Assembler background will be an advantage, but is not necessary.
Duration	2 Days

VS COBOL II Introduction

Types of dumps
 Snap dump
 FDUMP
 System dump
 Types of abend
 Program interrupts
 System abends
 User abends
 Special DD statements for dumps
 The VS COBOL II run time environment
 Solving incorrect output type problems
 Display
 With debug mode
 Interactive debug
 The **Program Problem Determination Method**

Machine & Program Architecture

Source, Object & Load modules
 The translation process
 The Program Status Word
 Purpose
 Content
 The General Purpose Registers
 Addressing main storage
 Save area purpose & contents
 VS COBOL II register usage and conventions

The Compiler & Link-Edit Listings

Compiler options to aid debugging
 List, Map, Xref, Test, Fdump, Ssrange, etc...
 The compiler listing in detail
 The link-edit listing in detail
 Some common IGZ... modules

Abend Reason

Program interrupts
 Common causes
 System abends
 Common code descriptions
 Check list
 User abends
 Non-zero program return codes

Abend Location

The point of interrupt / PSW
 The actual point of the problem
 The program name
 The module name
 The statement number
 Non VS COBOL II modules
 Save area chaining revisited

Locating Your Data In the Dump

The Task Global Table
 The base locators (BLW, F, X, L, etc..)
 Locating internal variables
 Locating external variables
 Locating parameter variables
 Locating file information
 FCB
 The buffer contents
 The current record

VS COBOL II Run-time Control Blocks Format

COBCOM
 COBCOV
 THDCOM
 RUNCOM
 TGT

Other Useful Sysudump Formatted Control Blocks

The dump index
 The CDE
 The TIOT
 The save area trace
 The general purpose registers