VSAM for COBOL Programmers (2 Day)

Benefits

Students who complete this course will be able to define, load, print, and delete VSAM data sets, and to process VSAM data sets from COBOL programs.

Audience

COBOL programmers who need to work with VSAM data sets, both from an AMS (Access Method Services) perspective, and from COBOL programs.

Prerequisites

The student should be able to code a COBOL program and be able to code JCL to run simple batch jobs.

Major Topics Include

- z/Architecture overview
- VSAM concepts and terms
- ESDS, KSDS, RRDS, LSDS
- Access Method Services Commands
- COBOL interfaces to VSAM data
- File status checking
- Alternate indexes

Exercises

There are 6 hands-on exercises.

VSAM for COBOL Programmers - Topical Outline

Introduction
- VSAM Space Concepts
- CI's and CA's
- ESDS, KSDS, RRDS, LSDS
- RBA's
- JCL for VSAM data sets
- Catalog Hierarchy

Entry Sequenced Data Sets (ESDS) and Access Method Services (AMS)
- ESDS Characteristics
- Introduction to AMS
- DEFINE CLUSTER, REPRO, PRINT, DELETE commands
- Computer Exercise: ESDS and AMS

Job Alternatives
- Single versus multiple steps and jobs
- JES2 vs JES3

Sequenced Data Sets (KSDS)
- Creating KSDSs - Overview
- KSDS Terms and Concepts
- Free Space
- CI splits and CA splits
- DEFINE CLUSTER for KSDS
- LISTCAT Command
- Computer Exercise: KSDS and AMS

VSAM and COBOL: An Introduction
- Defining VSAM files in a COBOL program
- File status items for VSAM files
- OPENing and CLOSEing VSAM files
- File Position Indicator
- File status processing concerns

COBOL and ESDS
- File Processing

COBOL and KSDS
- File Processing
- Computer Exercise: Processing a KSDS Randomly

Alternate Indexes
- AIX Concepts
- DEFINE AIX, BLDINDEX, DEFINE PATH Commands
- Computer Exercise: AIX and AMS

Using Alternate Indexes in COBOL

Relative Record Data Sets (RRDS)
- RRDS Concepts
- Randomizing Algorithms
- DEFINE CLUSTER for RRDS

COBOL and RRDS
- File Processing
- Variable Length Record RRDS Support
- Computer Exercise: Random Processing of an RRDS