

Duration: 5 days

Course Number: ISI-ZOS-02

Description

This course provides an accelerated introduction to the basic skills required in key areas of IBM mainframe components.

- The course begins with an overview of the z/OS operating system, designed to provide a common basis of terminology that is required for the remainder of the course.
- The second section is an introduction to TSO/ISPF consisting of lecture, review and hands-on lab exercises.
- The final section is an introduction to MVS Job Control Language consisting of lecture, review and hands-on lab exercises.

The lab exercises support the lecture and provide each student a chance to write JCL, test their jobs, and check for errors.

Audience

Programmer, analysts, technical support personnel, operators and managers working in a z/OS environment.

Prerequisites

A basic understanding of data processing concepts from previous experience (any vendor) or self-study.

Course Agenda: Introduction to z/OS

IBM Mainframe Hardware

Operating Systems

- Evolution of z/OS
- z/OS Functional Architecture
- Other Operating Systems

z/OS Memory and Task Management

- Virtual Memory
- Task Management

z/OS Job Management

- Programs
- JCL
- Job Entry Subsystems (JES2)

z/OS Data Management

- File Organizations
- Disk Dataset Organization
- Tape Dataset Organization
- Catalogs
- Record Format and Record Blocking
- Generation Data Groups

Related Software Products

Course Agenda: Using TSO/ISPF

Introduction to TSO

ISPF Concepts

- Purpose
- Entering Commands
- Program Function (PF) Keys
- Scrolling
- General Commands
- Dataset Naming Conventions

Edit and Viewing Data

- Line Commands
- Primary Commands
- Edit Recovery
- Viewing Data Sets
- Browsing Data Sets

Utilities Function

- Library Utility
- Dataset Utility
- Move/Copy Utility
- Dataset List

SDSF

- Input Queue Display
- Display Active Display
- Held Queue Display
- Output Queue Display
- SYSLOG Display

Course Agenda: Using z/OS JCL

Job Control Language Concepts

- Definition
- Main Statement Types
- Statement Format

JOB Statement

EXEC Statement

Data Definition (DD) Statement

- Definition
- DD Name Parameter
- DSN Parameter
- DISP Parameter
- UNIT Parameter
- SPACE Parameter
- AVGREC Parameter
- DSORG Parameter
- RECFM Parameter
- LRECL Parameter
- BLKSIZE Parameter
- DCB Parameter
- Using Disk Data Sets
- Using Tape Data Sets
- EXPDT/RETPD Parameters
- LABEL Parameter
- VOL Parameter
- SYSOUT DD Statement
- In-Stream Input (DD *)
- JOBLIB/STEPLIB Statements

Miscellaneous JCL Statements

Course Agenda: Using z/OS JCL (continued)

Structure of z/OS MVS Output

- Sample Job Output
- Common JCL Errors
- Abends

Advanced DD Statement Topics

- Data Set Concatenation
- Dummy Files
- Using Temporary Data Sets

Generation Data Groups

- Purpose
- Naming Convention
- Using GDGs

JCL Procedures

- Overview
- Cataloged Procedures
- Using Procedures
- Symbolic Parameters
- Procedure Overrides
- MSGLEVEL Parameter
- Common Procedure JCL Errors

Condition Codes and the IF JCL Statement

- Overview
- Statement Syntax
- Testing Return Codes
- Testing for ABENDs
- Testing ABEND Codes
- Testing for Step Execution