

## **JES2 Operation Course Summary**

### **Description**

This course is designed to get MVS Operators familiar with JES2 concepts, control, and troubleshooting, presenting techniques and skills widely used by experienced system operators. Demos and hands-on Labs are used to reinforce presented topics.

### **Topics**

- The JES2 processing phases
- JES2 commands for managing JES2 resources
- Moving jobs and SYSOUT between JES2 systems
- Managing a JES2 network
- Setting up JES2 automatic commands
- Starting and stopping JES2
- JES2 processing
- Controlling readers/initiators/job execution/printer and punches/job output
- Job transmitters and receivers
- Controlling remote devices and NJE
- Automatic commands
- JES2 startup and shutdown

### **Audience**

This course is intended for MVS operators.

### **Prerequisites**

The student should have a basic understanding of MVS.

### **Duration**

Two days

## JES2 Operation Course Outline

1. **JES2 Overview**
  - A. JES2 vs. JES3
  - B. JES2 Startup and Shutdown
  - C. JES2 Datasets
  - D. JES2 Multi Access Spool
  - E. JES2 Input Processing
  - F. JES2 JCL Conversion
  - G. Job Execution Phase
  - H. Job Output & Purge Phases
  - I. JES2 Initialization Parameters
  - J. Types of MVS Tasks
  - K. JES2 Commands
  - L. Typical JES2 Commands
  - M. Typical JES2 Devices
  - N. JES2 Documentation Bookshelf
  - O. JES2 Release Chart
2. **Using the MCS Console**
  - A. MVS Command Aliases
  - B. Command Groups
  - C. Setting Console Authority w/ VARY
  - D. The INFO Command Group
  - E. The SYS Command Group
  - F. The IO Command Group
  - G. The CONS Command Group
  - H. The MASTER Command Group
  - I. MVS Route code (ROUTCDE) Info
  - J. Controlling Route Codes
  - K. Controlling Message Levels
  - L. Controlling Msg Roll Mode & Rate
  - M. Roll Delete Mode Example
  - N. Non-roll Mode Example
  - O. Conversational Delete Mode Example
  - P. Wrap Mode Example
  - Q. MPF – Console Color Example
  - R. Using Console Display Areas
  - S. Two Display Area Example
  - T. Using Console PF Keys
  - U. Display PFK Example
  - V. Activating Console PF Keys
  - W. Conversational PFK Example
  - X. Defining PF Key Tables
  - Y. Message Processing Facility
  - Z. Displaying Console Status
  - AA. Managing Console Buffers
  - BB. Example: WTO Buffer Shortage
  - CC. Console Failure Recovery
3. **Navigating MVS Documentation**
  - A. IBM Library Reader on CD
  - B. IBM Internet Library
  - C. MVS/QuickRef Overview
  - D. QuickRef Main Menu: Request by Category
  - E. Select Information By Category
  - F. Selecting a Specific Release
  - G. Selecting an Abend Code
  - H. Abend Code Display
  - I. QuickRef Main Menu: Request by Name
  - J. Select Information By Category
  - K. Selecting From Multiple Matches
  - L. Sample JCL Information: NOTIFY Keyword
  - M. Looking up an Error by Message ID
  - N. Example Error Message Info: IOS000I
  - O. Language Syntax Info: REXX Parse
  - P. QuickRef Main Menu: List Vendors, etc.
  - Q. Selecting Vendor, Product, Release
  - R. Selecting by Vendor
  - S. Selecting DASD Free Space Information
  - T. DASD Free Space – Selection Details
  - U. DASD Free Space – Sample Display
  - V. Displaying DASD Hardware Characteristics
4. **Monitoring and Controlling MVS Jobs & Tasks**
  - A. Types of MVS Tasks
  - B. Starting a Task at the Console
  - C. Stopping a Started Task
  - D. Example: Start & Stop RMF
  - E. Canceling a Job or Task
  - F. Example: Cancel STC w/ DSN wait
  - G. Forcing a Job or Task
  - H. Swapping Out a Job or Task
  - I. Communicating to Active Programs
  - J. Using Modify Commands
  - K. Replying to WTOR Messages
  - L. Action Message Retention Facility
  - M. Displaying System Requests
  - N. System Activity Displays
  - O. Example: System Activity Displays

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5. **Using and Managing JES2 Readers**
  - A. Types of Readers
  - B. Built-in Readers
  - C. Starting a Reader
  - D. Draining and Halting a Reader
  - E. Canceling a Reader
  - F. Controlling a Reader
6. **Controlling JES2 Initiators**
  - A. Initiator Concepts
  - B. A Typical Initiator Structure
  - C. How Many Initiators?
  - D. WLM-Managed Initiators
  - E. Enhanced Batch Initiator Balancing
  - F. Displaying Initiators
  - G. Starting Initiators
  - H. Modifying Initiators
  - I. Halting Initiators
  - J. Recycling WLM Initiators
  - K. Draining Initiators
  - L. Holding and Releasing Queues
7. **Controlling JES2 Job Execution**
  - A. Dimensions of Job Execution
  - B. Displaying Job Status
  - C. Displaying Selected Status Info
  - D. Examples: Displaying Job Status
  - E. Displaying Active Jobs
  - F. Displaying Job Queue Contents
  - G. Holding Individual Jobs
  - H. Examples: Holding Individual Jobs
  - I. Releasing Individual Jobs
  - J. Examples: Release Individual Jobs
  - K. Holding and Releasing All Jobs
  - L. Restarting Jobs
  - M. Canceling Jobs
  - N. Adding Messages to Joblog
  - O. Initiator & Job Execution Lab
8. **Controlling JES2 Printers and Output Devices**
  - A. Displaying JES2 Device Status
  - B. Starting JES2 Devices
  - C. Draining JES2 Devices
  - D. Halting & Resuming JES2 Devices
  - E. Restarting JES2 Devices
  - F. Interrupting JES2 Devices
  - G. Repeating Device Output
  - H. Backspacing Device Output
  - I. Forward Spacing Device Output
  - J. Canceling Device Output
  - K. Controlling Printer Characteristics
  - L. Printer Work Selection
  - M. Example: Controlling Printers
  - N. Built-in Writer - Syslog
  - O. External Writers
  - P. Controlling an External Writer
9. **Managing JES2 Job Output**
  - A. Job Output Characteristics
  - B. Display Output Dataset Summaries
10. **JES2 Spool Management**
  - A. Spool Processing Overview
  - B. Displaying the JES2 Spool
  - C. Adding a JES2 Spool Volume
  - D. JES2 Spool Offload
  - E. Start Spool Offload Device
  - F. Drain Spool Offload Device
  - G. Halt Spool Offload Device
  - H. Modify Spool Offload Device
  - I. Display Spool Offload Device
11. **JES2 Networking**
  - A. Overview of NJE
  - B. NJE Nodes
  - C. Starting NJE Nodes
  - D. Controlling JES2/VTAM
  - E. Controlling JES2/TCPIP
  - F. Controlling NJE Lines
  - G. Controlling NJE Static Connections
  - H. Controlling NJE Devices
  - I. Sending Messages and Commands
12. **JES2 Miscellaneous**
  - A. Resetting the Job Number Base
  - B. JES2 Automatic Commands
  - C. Chapter Summary
13. **SDSF for Operators**
  - A. SDSF Overview & Features
  - B. SDSF Primary Option Menu
  - C. SDSF Key End-User Commands
  - D. SDSF Input Queue Display
  - E. SDSF Input Action Characters
  - F. SDSF Display Active Syntax
  - G. SDSF Active Display
  - H. SDSF DA Action Characters
  - I. SDSF Held Output Queue Display
  - J. SDSF Output Queue Display Cmd
  - K. SDSF H and O Action Characters
  - L. System Display Search Facility

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- M. SDSF Filtering
- N. SDSF ST (Status) Display
- O. More SDSF Commands
- P. SDSF LOG
- Q. SDSF System Requests
- R. SDSF Multi Access Spool
- S. SDSF Job Classes
- T. SDSF Scheduling Environments
- U. SDSF WLM Resources
- V. System Initiator Display
- W. SDSF Printers
- X. SDSF Punches
- Y. SDSF Readers
- Z. SDSF Lines
- AA. SDSF Nodes
- BB. SDSF Spool Offload
- CC. SDSF ULOG
- DD. System Display Search Facility
- 14. z/OS Overview (Optional Reference)**
  - A. zSeries Operating Systems
  - B. zSeries vs. the Rest
  - C. A Typical zSeries Data Center
  - D. Real, Expanded, & Virtual Memory
  - E. Multiprogramming vs. Multiprocessing
  - F. Interrupts
  - G. Bits and Bytes
  - H. Bits and Bytes: EBCDIC vs. ASCII
  - I. The CPU (Central Processing Unit)
  - J. MVS in a TCP/IP Network
  - K. Understanding the Network Controllers
  - L. Understanding the 3270 Terminal
  - M. zSeries Printer Hardware Categories
  - N. Storage Devices
  - O. Storage Devices: DASD
  - P. Storage Device Connections
  - Q. Storage Subsystems
  - R. z/OS Address Spaces
  - S. MVS Data Spaces
  - T. z/OS 64 Bit Address Space
  - U. MVS HiperSpaces
  - V. MVS Dispatching
  - W. MVS Customization
  - X. The MCS Console
  - Y. MVS Data Management
  - Z. MVS Data Set Types
  - AA. Sequential Datasets
  - BB. Partitioned Datasets
  - CC. VSAM Datasets
  - DD. Systems Managed Storage (SMS)
  - EE. Catalogs
  - FF. Monitoring & Managing Catalogs
  - GG. VTOC: Volume Table of Contents
  - HH. Tape Labels
  - II. Recovery / Termination Mgmt
  - JJ. SMF - System Management Facilities
  - KK. SMF Data Processing Flow
  - LL. Serialization: ENQ / DEQ
  - MM. Shared DASD & Reserve/Release
  - NN. The Deadly Embrace
  - OO. Shared DASD & GRS Ring
  - PP. Security Overview
  - QQ. JES Overview
  - RR. Job Life Cycle Phases
  - SS. Job Execution Phase
  - TT. JES2 vs. JES3
  - UU. A Parallel Sysplex
  - VV. UNIX System Services
  - WW. The UNIX Hierarchical File System
  - XX. The UNIX Shell
  - YY. Using the OMVS TSO Command
  - ZZ. File Mgmt using the ISPF Shell
  - AAA. Program Products
  - BBB. How CICS Works
  - CCC. CICS Transactions
  - DDD. Program Products: DB2
  - EEE. Program Products: IMS
  - FFF. Classic MVS Applications
  - GGG. Today's Application Architectures
  - HHH. Program Products: WebSphere
  - MQ
  - III. What is a Job Scheduler?