

Multiple Virtual Storage (MVS)

Lesson 00:

IGATE is now a part of Capgemini

People matter, results count.



©2016 Capgemini. All rights reserved.

The information contained in this document is proprietary and confidential. For Capgemini only.

Document History

Date	Course Version No.	Software Version No.	Developer / SME	Change Record Remarks
07-July-2005	1.0			Created
26-Oct-2009	2.0D		Padmaja Purandare	Revamped
07-Dec-2009			CLS Team	Review
10-Oct-2010	3.0		Vaishali Kasture	Revamped
30-June-2011	4.0		Rajita Dhumal	Revamped
21-June-2016	5.0		Veena Keshavalu	Revamped post the integration

Course Goals and Non Goals

- Course Goals

- Basic understanding of MVS job and data management
- Basic understanding of IBM Mainframe system
- Introduction to Mainframe environment
- Work with basic ISPF commands and dataset utility

- Course Non Goals

- JCL coding



Pre-requisites

- Basics of Computer

Intended Audience

- Developers
- Programmers



Day Wise Schedule

- Day 1

- Lesson 1: Introduction to OS Concepts and MVS
- Lesson 2: MVS Environment Concepts
- Lesson 3: MVS Evolution

- Day 2

- Lesson 4: Typical IBM Mainframe Systems
- Lesson 5: MVS Concepts and Terminology
- Lesson 6: MVS Data Management

Day Wise Schedule

- Day 3
 - MVS subsystems
 - System Generation & Initialization
 - Job Management Overview
 - Appendix
 - Appendix A – Compilation process (Translators / Linkage / Loader)
 - Appendix B - Bibliography/References

Table of Contents

- Lesson 1: Introduction to OS Concepts and MVS
 - 1.1: Introduction to MVS
 - 1.2: OS Concepts
 - 1.3: Position of OS in system
 - 1.4: OS Functions
- Lesson 2: MVS Environment Concepts
 - 2.1: Data Processing Concepts
 - 2.2: Command Processing Concepts
 - 2.3: Characteristics of Mainframe OS
 - 2.3.1: Batch Processing
 - 2.3.2: Multiprogramming
 - 2.3.3: Time Sharing
 - 2.3.4: Virtual Storage
 - 2.3.5: Spooling

Table of Contents

- Lesson 3: MVS Evolution
 - 3.1: Family of IBM
 - 3.2: MVS Evolution
 - 3.2.1: MFT
 - 3.2.2: MVT
 - 3.2.3: I/O Management

Table of Contents

- Lesson 4: Typical IBM Systems
 - 4.1: Typical IBM M/F configuration
 - 4.2: Processors
 - 4.2.1: Multiprocessing Concepts
 - 4.3: Cache Memory
 - 4.4: Channels
 - 4.5: I/O Devices
 - 4.5.1: Unit Record Devices
 - 4.5.2: Magnetic Tape
 - 4.5.3: DASD - Direct Access Storage Device
 - 4.6: Data Communication Network
 - 4.6.1: Data Communication Equipment

Table of Contents

- Lesson 5: MVS Concepts and Terminology
 - 5.1: MVS Concepts Overview
 - 5.2: Virtual Storage
 - 5.4: Multiprocessing
 - 5.5: Address Spaces
 - 5.6: MVS address space
 - 5.7: Paging
 - 5.8: Swapping
 - 5.9: Virtual Storage Layout

Table of Contents

- Lesson 6: Data Management in MVS
 - 6.1: Types of Data
 - 6.2: Dataset Organization
 - 6.2.1: Non VSAM
 - 6.2.2: VSAM
 - 6.2.3: Features of Dataset Organization
 - 6.2.4: Dataset Naming Conventions
 - 6.3: Dataset Tracking Mechanism
 - 6.4: Sysplex
 - 6.5: Dataset Management
 - 6.6: Dataset Processing

Table of Contents

- Lesson 7: Tools Overview
 - 7.1: Subsystems
 - 7.2: Working with TSO/ISPF
- Lesson 8: System Generation & Initialization
 - 8.1: System Generation
 - 8.2: System Initialization
 - 8.3: System defined datasets
 - 8.4: ISRDDN diagnostic utility
- Appendices

Table of Contents

- Lesson 9: Job Management Overview
 - 9.1: Concept of Job, step, JCL & JES
 - 9.2: Job Management
 - 9.3: Stages of JOB
 - 9.4: Job Scheduling
 - 9.5: Job Execution
 - 9.6: Dataset Allocation and Job Step Execution
 - 9.7: Using SDSF

References

- Books:

- The MVS JCL Primer; by Saba Zamir, Chander Ranade
- IBM Mainframe Handbook

- URLs:

- <http://hansen-family.com/mvs/MVS%20Commands.htm>
- <http://ibm.com>



Next Step Courses

- JCL
- COBOL
- VSAM
- DB2
- CICS

