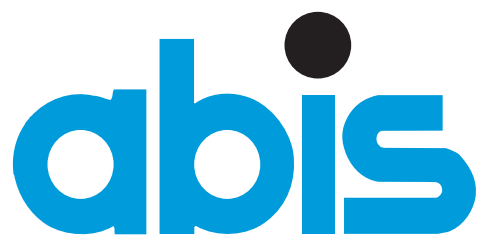


Self test MVS system fundamentals

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ABIS Training & Consulting
Diestsevest 32 / 4b
B-3000 Leuven
Belgium



TRAINING & CONSULTING

INTRODUCTION TO THE SELF TEST MVS SYSTEM FUNDAMENTALS

The delegate must be able to answer the following questions to attend the course [z/OS-MVS system fundamentals part 2 - z/OS infrastructure & services](#).

Answers to the questions can be found in the course [z/OS-MVS system fundamentals part 1 - zArchitecture](#).

QUESTIONS SELF TEST MVS SYSTEM FUNDAMENTALS

1. Architecture

- a. Describe the mechanism used to update the PSW
- b. What is the purpose of an interrupt?
- c. What would be an example of a program interrupt?
- d. How many types of SVC interrupt are there?
- e. What does the hardware do when an interrupt occurs?
- f. What is the purpose of the storage key mechanism?
- g. Can a key 8 user read key 0 storage?
- h. What is prefixing and why is it necessary?
- i. Who uses the following:
 - Unit addresses?
 - Device numbers?
 - Subchannel numbers?
- j. What are the steps involved in starting an I/O operation?
- k. What are the steps involved in obtaining status on I/O completion?
- l. What controls the CPU's ability to execute privileged instructions?

2. Introduction to MVS

- a. Which architecture and operating system does MVS originally stem from?
- b. What are the three products that make up MVS?
- c. What 3 commands create an address space?
- d. Who processes JCL?
- e. Why do batch jobs run in an Initiator's address space?
- f. What do we call a dispatchable unit of work?
- g. When an interrupt occurs, where is the status of the interrupted program saved ultimately?
- h. What is the purpose of an ENQ request?
- i. How do we synchronise I/O requests?
- j. Who maintains the Dispatcher's queue in the right order?

3. Virtual Storage Concepts

- a. State the rules for loading a program, and why they exist
- b. Describe the problems encountered with Real Storage systems
- c. Explain precisely how Virtual Storage overcomes those problems
- d. Explain the Dynamic Address Translation process
- e. Explain how page stealing works
- f. Justify the concept of segmentation
- g. Describe a page fault and explain how it is resolved
- h. Explain the concept of common storage
- i. State who benefits from swapping and why
- j. Explain the following terms – Reclaims, Working Set, Thrashing

4. Storage Management

- a. Why do we have the 16-Mb line?
- b. What are the advantages of putting module in the PLPA?
- c. What is FLPA used for?
- d. What is a subpool?
- e. How much storage could you use if you coded "REGION=22M"?
- f. What's the best way to restrict region allocation?
- g. What is a segment fault?
- h. What are the different page datasets and what do they contain?
- i. What is VIO?

5. Data spaces and hiperspaces

- a. Why was a secondary address space control mode introduced?
- b. What does being in secondary ASC mode actually mean?
- c. Where is the ASC mode indicated?
- d. How does AR mode work?
- e. What is a dataspace?
- f. Can you manipulate data while it is in a dataspace?
- g. What does VLF do?

- h. How do you get to be a user of VLF?
 - i. What is a hiperspace?
 - j. Can you manipulate data while it is in a hiperspace?
6. System initialisation
- a. What is the purpose of HCD?
 - b. What is the purpose of the load parameter?
 - c. What is the purpose of the LOADxx member?
 - d. What are the three phases of IPL?
 - e. What is special about the SYRES volume?
 - f. What does the Program Manager RIM do?
 - g. Which member of SYS1.PARMLIB has overall control over the IPL, and how do you specify an alternative member?
 - h. What is an authorised program?
 - i. What is a subsystem?
 - j. How is the Master Scheduler started?

EVALUATION.

Here are the correct answers to all questions:

If you can answer less than 50% of the questions, please first follow the course [z/OS-MVS system fundamentals part 1 - zArchitecture](#).

If you can answer between 50% and 80% of the questions, you will still learn a lot in the course [z/OS-MVS system fundamentals part 1 - zArchitecture](#).

If you can answer more than 80% of the questions, you are ready to enrol directly to the course [z/OS-MVS system fundamentals part 2 - z/OS infrastructure & services](#).