z/OS VSAM and Access Method Services

Duración: 4 Días   Código del Curso: SS83G   Método de Impartición: Curso Cerrado (In-Company)

Temario:

This course is designed to teach how to manage VSAM and non-VSAM data sets by coding and using the functions and features of the Access Method Services program, IDCAMS.

To reinforce the lecture material, machine exercises are provided that enable students to code and test selected IDCAMS commands such as DEFINE, REPRO, ALTER, and LISTCAT.

Learn to manage Virtual Storage Access Method (VSAM) and non-VSAM data sets. Particularly emphasize coding and using the functions of the IDCAMS program. Lab exercises enable you to code and test selected IDCAMS commands, such as DEFINE, REPRO, ALTER, and LISTCAT.

Hands-On Labs

Eight labs are included to address: IDCAMS commands, including ALTER, DEFINE, CLUSTER, EXPORT, IMPORT, EXAMINE, LISTCAT, REPRO, and PRINT tuning VSAM and the VSAM buffers alternate indexes

Dirigido a:

This is an intermediate course for individuals who manage data sets using IDCAMS and VSAM.

Objetivos:

- Understand the structure and use of VSAM data sets or clusters

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- Code IDCAMS commands to define and load VSAM clusters

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- Code IDCAMS commands to define and load alternate indexes

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- Code IDCAMS commands to list, alter, and delete catalog entries

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- Code IDCAMS commands to print data sets

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- Calculate the Direct Access Storage Device (DASD) space requirements for VSAM clusters

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- Code the Job Control Language (JCL) for IDCAMS and programs which process VSAM clusters

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- Use IDCAMS and JCL options to improve the performance of a VSAM job

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- Reorganize, back up, and recover VSAM and non-VSAM data sets

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- Interpret an IDCAMS listing of an Integrated Catalog Facility (ICF) catalog

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- Select and use the appropriate documentation to utilize VSAM and IDCAMS

Prerequisitos:

You should complete:

- z/OS Facilities (ES15)
- z/OS Job Control Language and Utilities (ES07) or
- Fundamental System Skills in z/OS (ES10)
- or have equivalent experience

Contenido:

- describe the structure, organization, and use of VSAM clusters
- discuss the use of the ICF catalog
- discuss the IDCAMS program
- explain creation and deletion of VSAM clusters using JCL and the DFSMS data class facility
- describe the function of REPRO, PRINT and DELETE commands
- explain how buffer space may impact performance either positively or negatively
- explain how integrity and security is maintained
- explain the use of CI and CA FREESPACE
- explain the basic functions of the ALTER command
- describe the reasons for using an alternate index
- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
- explain the use of the DCOLLECT command to gather management and planning information about the storage subsystem
- explain techniques to conserve virtual storage by sharing buffers and control blocks
- describe the major functions of CICS VSAM recovery
- describe VSAM processing terminology

- explain the function of Control Intervals (CI) and Control Areas (CA)
- describe the purpose of CI splits and CA splits and how they are accomplished
- estimate DASD space requirements for various cluster types
- ICF catalogs
- describe the structure, purpose, and basic contents of the master catalog
- describe how the master catalog is located at initial program load (IPL) time
- discuss the structure, purpose, and basic contents of user catalogs
- create the ICF catalogs
- describe the catalog search
- discuss and create the two types of alias
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- use PRINT to print a VSAM cluster in various formats
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- describe the reasons for using an alternate index
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- describe Data-In-Virtual (DIV)
- explain the use of the DCOLLECT command to gather management and planning information about the storage subsystem
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- Buffering
- explain the use of data and index buffers in sequential processing and direct processing
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- describe the additional JCL parameters that support VSAM clusters
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- IDCAMS commands, part 2
- use REPRO to load and back up a VSAM cluster
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- options for processing existing VSAM objects
- code the ALTER command to modify options for buffering, FREESPACE, SHAREOPTIONS and passwords
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- discuss backup frequency
- determine when reorganization is required
- code the AMS commands for backup, recovery, and reorganization
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- discuss the use of the ICF catalog
- discuss the IDCAMS program
- explain creation and deletion of VSAM clusters using JCL and the DFSMS data class facility
- describe the function of REPRO, PRINT and DELETE commands
- explain how buffer space may impact performance either positively or negatively
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- describe the reasons for using an alternate index
- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
- explain the use of the DCOLLECT command to gather management and planning information about the storage subsystem
- explain techniques to conserve virtual storage by sharing buffers and control blocks
- describe the major functions of CICS VSAM recovery
- describe VSAM processing terminology

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- explain how integrity and security is maintained
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- describe the reasons for using an alternate index
- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
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- code the ALTER command to modify options for buffering, FREESPACE, SHAREOPTIONS and passwords
- Alternate indexes
- discuss the basic contents of an alternate index

VSAM recovery
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- explain how buffer space may impact performance either positively or negatively
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- explain the use of CI and CA FREESPACE
- explain the basic functions of the ALTER command
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- define and load an alternate index
- explain the impact of SHAREOPTIONS when opening a base cluster and associated alternate indices
- explain programming and JCL considerations
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- explain compression
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- determine when reorganization is required
- code the AMS commands for backup, recovery, and reorganization
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- interpret EXAMINE output to determine how to recover from a KSDS structural error
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- discuss the advantages and disadvantages of Local Shared Resources (LSR)
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- IDCAMS commands, part 2
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- explain how integrity and security is maintained
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- explain the basic functions of the ALTER command
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- discuss the concept of shared resource pools
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- discuss how to specify and monitor shared buffer allocation in CICS and Information Management System (IMS)
- CICS VSAM recovery
- explain the concept of transaction processing, backup, and recovery
- explain how to implement and manage CICS VSAM recovery
- Application coding considerations

- use the VSAM integrity and security options: RECOVERY, ERASE, VERIFY, and passwords
- compare VSAM passwords with Resource Access Control Facility (RACF) security
- Tuning
- discuss the performance impact of cache
- describe the space allocation process with KEYRANGES and multivolume data sets
- explain the contents of an Index CI
- explain how VSAM key compression works
- IDCAMS ALTER
- code the ALTER command to modify options for processing existing VSAM objects
- code the ALTER command to modify options for buffering, FREESPACE, SHAREOPTIONS and passwords
- Alternate indexes
- discuss the basic contents of an alternate index
- use a PATH to process base cluster records directly and in alternate key sequence
- define and load an alternate index
- explain the impact of SHAREOPTIONS when opening a base cluster and associated alternate indices
- explain programming and JCL considerations
- Advanced functions and extended format data sets
- explain data stripping
- explain compression
- explain multivolume allocation options
- explain extended addressability
- explain system managed buffering
- explain partial space release
- explain space constraint relief
- Data set reorganization, backup, and recovery
- explain the advantages and disadvantages of REPRO
- explain the advantages and disadvantages of EXPORT / IMPORT
- explain the advantages and disadvantages of DFSMS Data Set Services (DFSMSdss) DUMP / RESTORE
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- discuss VSAM programming support, and JCL requirements in Common Business Oriented Language (COBOL), Programming Language One (PL/I), and Assembler languages
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- discuss and create the two types of alias
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- describe the additional JCL parameters that support VSAM clusters
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- explain the assignment of data class through JCL and the Automatic Class Selection (ACS) routines
- IDCAMS commands, part 2
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- describe the structure, organization, and use of VSAM clusters
- discuss the use of the ICF catalog
- discuss the IDCAMS program
- explain creation and deletion of VSAM clusters using JCL and the DFSMS data class facility
- describe the function of REPRO, PRINT and DELETE commands
- explain how buffer space may impact performance either positively or negatively
- explain how integrity and security is maintained
- explain the use of CI and CA FREESPACE
- explain the basic functions of the ALTER command
- describe the reasons for using an alternate index
- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
- explain the use of the DCOLLECT command to gather management and planning information about the storage subsystem
- explain techniques to conserve virtual storage by sharing buffers and control blocks
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- describe how ENQ/DEQ macros are used to serialize data set updates in multiregion and multisystem environments
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- Alternate indexes
- discuss the basic contents of an alternate index
- use a PATH to process base cluster records directly and in alternate key sequence
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- explain how integrity and security is maintained
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- explain the basic functions of the ALTER command
- describe the reasons for using an alternate index
- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
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- explain how integrity and security is maintained
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- explain VSAM advanced functions, extended format data sets, and their major features
- describe the need for data set backup
- describe Data-In-Virtual (DIV)
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- discuss the advantages and disadvantages of Global Shared Resources (GSR)
- describe macros that control use and allocation of shared resources
- discuss how to specify and monitor shared buffer allocation in CICS and Information Management System (IMS)
- CICS VSAM recovery
- explain the concept of transaction processing, backup, and recovery
- explain how to implement and manage CICS VSAM recovery
- Application coding considerations
- define various VSAM processing options
- explain the merge of catalog entries, JCL parameters, and program definitions that determine processing options
- discuss VSAM programming support, and JCL requirements in Common Business Oriented Language (COBOL), Programming Language One (PL/I), and Assembler languages
- describe JCL and programming requirements for COBOL, PL/I, and Assembler languages

Más información:

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