



DFSMS Basics: How to Write ACS Routines - Hands-on Lab (Section 2)

Steve Huber and David Legendre IBM March 14,2012 Session Number 10937



S H A R E Instruing - Connectant

Resources

- Lab TSO USERIDs
 - SHARA01 thru SHARA20 w/ password (firstpw)
- Lab Data Sets
 - SHARAxx.S2412.ACS
 - SHARAxx.S2412.SMS.SCDS
- Publications
 - DFSMS Storage Administration Reference (section hand-out)
 - DFSMS Implementing System-Managed Storage
 - DFSMS Using the Interactive Storage Management Facility



Lab Basics

- SHARAxx.S2412.ACS
 - Contains the ACS routines for a minimal configuration
 SCMIN and SGMIN
 - Contains some example routines
 DCEXAMPL, SCEXAMPL, MCEXAMPL and SGEXAMPL
 - Members for your lab use
 - DCLAB, SCLAB, MCLAB and SGLAB
 - Example solutions
 - DCANSWER, SCANSWER, MCANSWER and SGANSWER
 - ACS Routine stubs
 - STUB
- SHARAxx.S2412.SMS.SCDS
 - SMS Configuration to code ACS against









Lab Configuration

- SHARAxx.S2412.SMS.SCDS
 - SMS Configuration to code ACS against
- DATACLAS(s)
 - Default, Extended, HFS, PDSE, VEAEXTND
- STORCLAS(s)
 - Default, Extended, GSPACE
- MGMTCLAS(s)
 - RLSEIMM
- STORGRP(s)
 - Default, Extended



Lab Pre-stuff

- Set yourself up as a Storage Administrator
 - ISMF

5

- 0 Profile Options
- 0 User Mode Selections
- 2 Storage Administrator
- End/Exit 3 times
- NOTE: This is an exercise in syntax, not logic.







- Create the 'stubs' for each Class and Group
 - Put them in members DCLAB, SCLAB and MCLAB and SGLAB of data set SHARAxx.S2412.ACS
 - The 'stubs' can be found in SHARAxx.S2412.ACS(STUB)
 - Translate the ACS routines via ISMF 7 / 2 to your configuration (SCDS) data set (SHARAxx.S2412.SMS.SCDS)





- Create Filter Lists
 - Use the SC ACS routine created in the previous lab
 - Modify the routine such that it contains FILTLISTs
 - Create a filter of SYSTEM for HLQ of SYS1 and SYS2
 - Create a filter for SPF for 2nd level qualifier of SPF*
 - Translate the ACS routine





- If/Then Logic
 - Use the SC ACS routine created in the previous lab
 - Modify the routine such that it contains IF/THEN logic
 - Compare the HLQ to the SYSTEM filter and set no (null/' ') SC
 - Compare the second-level qualifier to the SPF filter and set a Storage Class of Default
 - Translate the ACS routine





- SELECT Logic
 - Use the SC ACS routine created in the previous lab
 - Modify the routine such that it contains a SELECT statement
 - SELECT on Read/Write variable &DATACLAS
 - 2 methods to accomplish this
 - When incoming DC is VEAEXTND set the SC to EXTENDED
 - Translate the ACS routine





- WRITE Statement
 - Use the SC ACS routine created in the previous lab
 - Modify the routine such that it contains a WRITE statement(s)
 - WRITE 'message'
 - Translate the ACS routine





- Based on the second-level qualifier starting with SPF, set a Storage Group of Default
- Translate the ACS routine







- Based on the 2nd level qualifier starting with SPF, set a Data Class of Default and Management Class of RLSEIMM.
- Translate the ACS routines







- Use SELECT Logic
 - When the DSNTYPE is LIBRARY, set a Data Class of PDSE, Storage Class of Default and Storage Group of Default
- Translate the ACS routines





- Based on MAXSIZE of 100MB and DSORG of VS, set Data Class of VEAEXTND, Storage Class of Extended and Storage Group of Extended
 - HINT: The SC aspect of this assignment is already complete.
- Translate the ACS routines





Lab Assignment (cont)

 Validate the configuration with ISMF 7 / 3 to your configuration (SCDS) data set (SHARAxx.S2412.SMS.SCDS)



Summary



- Upon completion of this session, you should...
 - Have a better understanding of the ACS environment
 - Be able to write a basic ACS routine
 - Understand how to Translate and Validate an ACS routine
 - Understand how to determine what Translate and/or Validate errors occurred





Notices & Disclaimers

Copyright © 2006 by International Business Machines Corporation.

No part of this document may be reproduced or transmitted in anyform without written permission from IBM Corporation.

Product information and data has been reviewed for accuracy as of the date of initial publication. Product information and data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements and/or changes in the product(s) and/or programs(s) described herein at any time without notice.

References in this document to IBM products, programs, or services does not imply that IBM intends to make such such products, programs or services available in all countries in which IBM operates or does business. Consult your local IBM representative or IBM Business Partner for information about the product and services available in your area.

Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectually property rights, may be used instead. It is the user's responsibility to evaluate and verify the operation of any non-IBM product, program or service.

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS"WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR INFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted according to the terms and conditions of the agreements (e.g., IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. IBM is not responsible for the performance or interoperability of any non-IBM products discussed herein.





Notices & Disclaimers

The performance data contained herein was obtained in a controlled, isolated environment. Actual results that may be obtained in other operating environments may vary significantly. While IBM has reviewed each item for accuracy in a specific situation, there is no guarantee that the same or similar results will be obtained elsewhere.

The responsibility for use of this information or the implementation of any of these techniques is a customer responsibility and depends on the customer's or user's ability to evaluate and integrate them into their operating environment. Customers or users attempting to adapt these techniques to their own environments do so at their own risk. IN NO EVENT SHALL IBM BE LIABLE FOR ANY DAMAGE ARISING FROM THE USE OF THIS INFORMATION, INCLUDING BUT NOT LIMITED TO, LOSS OF DATA, BUSINESS INTERRUPTION, LOSS OF PROFIT OR LOSS OF OPPORTUNITY.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not necessarily tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or anyother claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.



18



Trademarks

DFSMSdfp, DFSMSdss, DFSMShsm, DFSMSrmm, IBM, IMS, MVS, MVS/DFP, MVS/ESA, MVS/SP, MVS/XA, OS/390, SANergy, and SP are trademarks of International Business Machines Corporation in the United States, other countries, or both.

AIX, CICS, DB2, DFSMS/MVS, Parallel Sysplex, OS/390, S/390, Seascape, and z/OS are registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

Domino, Lotus, Lotus Notes, Notes, and SmartSuite are trademarks or registered trademarks of Lotus Development Corporation. Tivoli, TME, Tivoli Enterprise are trademarks of Tivoli Systems Inc. in the United States and/or other countries.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both. UNIX is a registered trademark in the United States and other countries licensed exclusively through The Open Group.

Other company, product, and service names may be trademarks or service marks of others.

