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DFSMSdfp OAM

V2R1-V2R2 Publication Update Document

The z/OS DFSMS OAM Planning, Installation, and Storage Administration Guide for Object Support (Publication numbers: SC23-6866-00 and SC23-6866-01) to be updated as follows...

- Note:
1. Red text with strikethrough should be removed.
 2. Blue text is new text that should be added.
 3. Black text is existing text for reference.
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Specialized OAM installation procedures

~~It might be necessary to move the OAM application from one system to another to accommodate changes within an installation's storage management policy. The following information can assist you in moving OAM from one system to another (SYS1 and SYS2 are used as example system names).~~

The following procedural information is used as a step by step reference or “cheat sheet” for performing a variety of different OAM setup type tasks during migration, installation, or customization of your OAM environment. Within this section you can find the following procedures:

1. Procedures for moving OAM to another system.
2. Procedures for merging OAMs into an OAMplex.
3. Procedures for adding OAM systems to an existing OAMplex.
4. Procedures for setting up a DB2 DASD only environment for OAM objects.

Procedures for moving OAM to another system

This section provides information on moving OAM from one OAM system to another OAM system, *neither of which is part of an OAMplex*. (SYS1 and SYS2 are used as example system names) To merge OAMs into an OAMplex, perform the procedure in “Merging OAMs into an OAMplex” on page 208.

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10. Start OAM on each system in the OAMplex. Display the DISPLAY SMS,OAMXCF command on each system to verify that they joined the OAMplex successfully.

Result: Now all of the OAM systems belong to the OAMplex.

Procedures for setting up a DB2 DASD only environment for OAM objects.

This section provides step by step instructions on how to minimally configure a new OAM environment to manage OAM objects using only DB2 DASD.

1. Install and configure a DB2 subsystem to be used in conjunction with OAM.

For additional details on how to configure DB2 installation parameters for OAM use see section “Changing DB2 installation parameters” on page 108.

2. (Optional) If you plan on using CICS, then ensure that you install and configure CICS to be used in conjunction with OAM.

For additional details on how to configure CICS installation parameters for OAM use, see section “Changing CICS installation parameters” on page 109.

3. Update the IEFSSNxx PARMLIB member by adding an OAM1 subsystem definition.

The OAM1 subsystem definition is required to enable and start the OAM subsystem during IPL time. This subsystem is critical to OAM function and is required for OAM to be able to process objects within DB2.

For additional details on how to define an OAM1 subsystem definition, see section “Changing system libraries” sub section 5b “Update IEFSSNxx PARMLIB member to initialize the OAM1 subsystem.” on page 113.

4. Update the IGDSMSxx PARMLIB member by adding a DB2SSID (ssid) keyword.

The *ssid* value is the name of the DB2 subsystem you want to be used for OAM object storage.

This value is required for OTIS to establish a connection between the DB2 subsystem and the OAM subsystem.

For additional details on how to specify the DB2SSID keyword, see section “Changing system libraries” sub section 5a “Update IGDSMSxx PARMLIB member.” on page 112.

5. (Optional) If you plan on recording SMF records for OAM, then ensure you update the SMFPRMxx PARMLIB member with OAM type and subtype information.

For additional details on how to specify SMF related types and subtypes for OAM use, see section “Invoking the SMF PARMLIB member” sub section “Changing SMF recording” on page 609.

6. Run the CBRIPROC SAMPLIB job to define the OTIS procedure used by OAM.

Ensure to read the instructions within CBRIPROC as additional setup may be required to successfully run this job.

The OTIS procedure is required by OAM to manage and establish the DB2 connection between DB2 and the OAM subsystem. OTIS is also responsible for

object collection related processing. OTIS is started at IPL time by the OAM subsystem.

For additional details on running the CBRIPROC SAMPLIB job, see section “Appendix b. Sample library members” sub section “CBRIPROC” on page 461.

7. Create DB2 databases for OAM administration, object, and directory tables.

These databases are essential to OAM functionality as each one of these databases contain vital information for OAM processing of objects.

Each job is found within the SAMPLIB data set specific to your installation. Ensure to modify each job specific to your environment and run them in the specified order...

- a) CBRIALCX
- b) CBRISQLX
- c) CBRIALCY
- d) CBRISQLY

- e) CBRIALC0
- f) CBRISQL0

For additional details on creating these DB2 databases, see section “Chapter 3. Migrating, installing, and customizing OAM” sub section “Creating DB2 databases for object tables and directories” on page 162.

8. Create and bind DB2 packages, plans, and grants.

These package and plan binds are essential for OAM (and for other applications) to establish and be granted access to DB2 resources critical to object related processing.

Each job is found within the SAMPLIB data set specific to your installation. Ensure to modify each job specific to your environment and run them in the specified order...

- a) CBRPBIND
- b) CBRIBIND
- c) CBRIGRNT

For additional details on creating and binding these DB2 packages, plans, and grants, see section “Chapter 3. Migrating, installing, and customizing OAM” sub sections “Creating and binding DB2 packages” and “OSR applications plans” on pages 170-172.

10. Specify the SMS construct definitions needed for OAM object processing.

Set the following values for each SMS construct within the ISMF Library Management panels:

- a) Define a Storage Group(s) with the following values...

- 1) Type = OBJECT
- 2) Qualifier = HLQ of the DB2 Object Directory table for this Object Storage Group.

b) Define a Storage Class(s) with the following values...

- 1) Initial Access Response seconds = 0
- 2) Sustained Data Rate (MB/Sec) = "blank"
- 3) OAM Sublevel = 1

c) Define a Management Class(s) with the following values...

- 1) Object Expiration Criteria = "blank"
- 2) Object Backup Criteria -> Autobackup = NO
- 3) Object Transition Criteria = "blank"

Note: Within a DB2 DASD only environment and without starting the OAM address space to utilize the OAM Storage Management Component (OSMC) support, OAM is not able to handle object expirations, backups or transitions which is why the management class specifications are set to bypass those options. If objects need to be expired, then that expiration management will need to be explicitly handled by the application or end user via OSREQ DELETES.

You may already be using (or planning on using) the OAM address space for OAM's system-managed tape support. If so, refer to the "Installation Procedures" section in Chapter 3 of the OAM Planning, Installation, and Storage Administration Guide for Tape Libraries for additional installation considerations. Though the OAM address space would not be used for OAM's object processing, in this case, it would be used for our system-managed tape support.

For additional details on updating and maintaining SMF constructs for OAM use, see section "Chapter 4. Administering OAM" sub section "Changing SMS construct definitions" on page 221.

11. Update your ACS routines to reflect your new SMS construct changes for OAM.

Note: Ensure to update the Storage Group, Storage Class and Management Class routines for the OAM Environment of STORE and CHANGE.

For additional details on how ACS routines are used within OAM, see section "Chapter 3. Migrating, installing, and customizing OAM" sub section "ACS routine input variables" on page 185 as well as section "Appendix B. Sample library members" sub section "Automatic class selection" on page 517 for provided examples of ACS routine logic.

12. Use the Installation Verification program (IVP) from TSO to test and validate your OAM environment.

For additional details on how to use the IVP utility, see section "Appendix B. Sample library members" sub section "OAM installation verification program and OAMUTIL" on page 512.

■ 5a ■ **Update IGDSMSxx PARMLIB member.**

Perform the following steps if you want to automatically start the OAM address space during IPL **and/or will be using OAM's object support with DB2.**

~~Do **not** perform this step if you are using only DB2 sublevel storage (no file system, optical volumes, or tape devices), and do **not** start the OAM address space for processing objects.~~

1. Update PARMLIB member IGDSMSxx to include the OAM-related keywords:
OAMPROC(procname)