IBM Education Assistance for z/OS V2R2

Items: RMM RAS Enhancements
RMM Continuation of SMS Management Class for Tape
Search volumes and data sets by date/time ranges

Element/Component: DFSMSrmm

Material current as of May 2015

Agenda

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Trademarks

- See url http://www.ibm.com/legal/copytrade.shtml for a list of trademarks.

Session Objectives

Cover new enhancements:

- RMM RAS Enhancements
- RMM Continuation of SMS Management Class for Tape
  - New data set attribute WHILECATALOG
- Search volumes and data sets by date/time ranges

Overview

- Problem Statement / Need Addressed
  - EXPDT retention method is fast and simple, but does not allow to manage data by its catalog status
- Solution
  - New WHILECATALOG attribute for datasets
- Benefit / Value
  - Catalog status can control the expiration of volumes retained by the retention method EXPDT. This is especially useful for GDG datasets that get uncataloged automatically.

Usage & Invocation

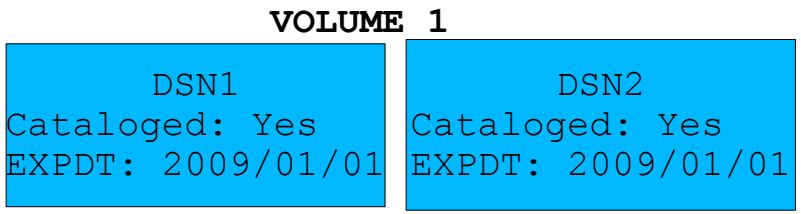
- Datasets that have WHILECATALOG(ON) will not expire as long as they are cataloged. If they are not cataloged, they will expire on their expiration date.
- Datasets that have WHILECATALOG(UntilExpired) will expire on their expiration date as long as they are cataloged. If they are uncataloged, they will be eligible for expiration (their expiration date will decrease).
- The WHILECATALOG attribute can be set as a default, or can be changed using the CHANGEDATASET DFSMSrmm subcommand.

Example 1

- All datasets on volume have WHILECATALOG(On)
  - **Date 2010/01/01**

    Volume Expiration date:
    2009/01/01(KeptByCatlg)
    Datasets Kept By Catalog on Volume: **2**

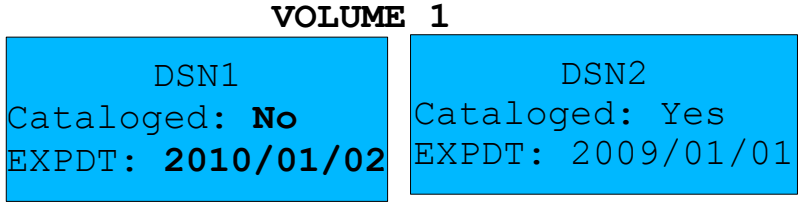
    Volume will not expire



  - **Date 2010/01/02** **DSN1 is uncataloged**

    Volume Expiration date:
    2010/01/02(KeptByCatlg)
    Datasets Kept By Catalog on Volume: **1**

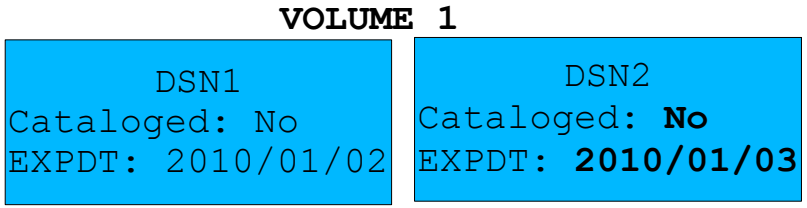
    Volume will not expire



  - **Date 2010/01/03** **DSN2 is uncataloged**

    Volume Expiration date:
    2010/01/03
    Datasets Kept By Catalog on Volume: **0**

    Volume is eligible for expiration

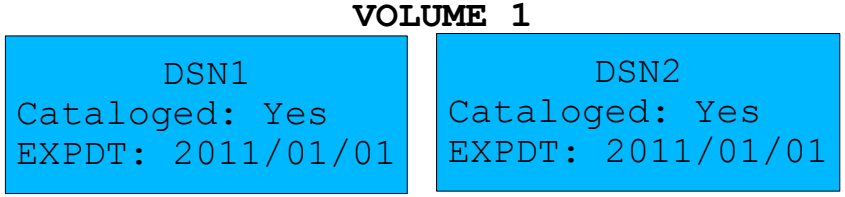


Example 2

- All datasets on volume have WHILECATALOG(UntilExpired)
  - **Date 2010/01/01**

    Volume Expiration date:
    2011/01/01(OrUncatlg)

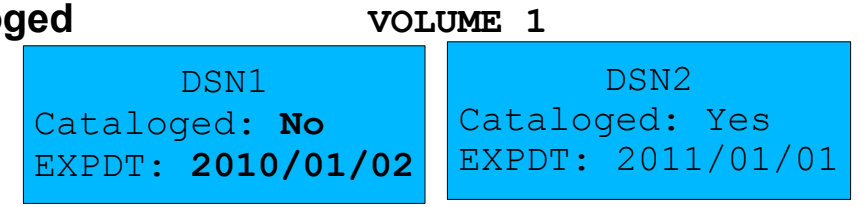
    Volume will not expire



  - **Date 2010/01/02** **DSN1 is uncataloged**

    Volume Expiration date:
    2011/01/01(OrUncatlg)

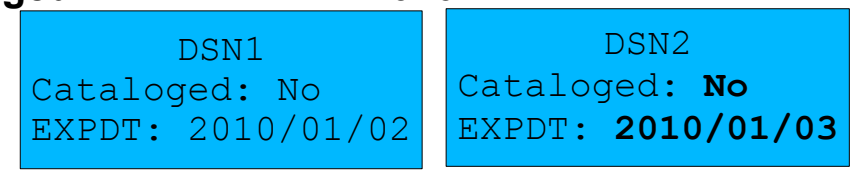
    Volume will not expire



  - **Date 2010/01/03** **DSN2 is uncataloged**

    Volume Expiration date:
    2010/01/03

    Volume expiration date decreases, it is eligible for expiration.



Overview (Miscellaneous items)

- Problem: Changing Expiration Date of many volumes at once takes too long
- Solution: Improve performance of the CHANGEVOLUME subcommand when just EXPDT is changed

- Problem: Client cannot specify permanent retention in the UXTABLE
- Solution: Add the RETPD=PERM option to the EDGCVRSG macro

- Problem: Datasets created shortly before midnight may expire too early
- Solution: Support both Expiration Date and Expiration Time.

Overview

- Problem: Need to assign the same expiration date to data sets recorded during night batch processing
- Solution: Allow to search volumes or datasets by both creation date and creation time
  - Example:

```
RMM SEARCHDATASET OWNER(*) LIMIT(*)
CRDATE(START(2013/110,220000) END(2013/111,040000))
CLIST('RMM CHANGEDATASET ','')EXPDT(2013/120)')
```

Migration & Coexistence Considerations

- Toleration APAR: OA46974
  - If volume is kept by catalog (due to a dataset with WHILECATALOG=On), it will not be expired even if EXPROC is executed on lower level systems in the RMMplex.

Installation

- The default WHILECATALOG setting can be defined in the PARMLIB member
- Different defaults can be specified for GDG and non-GDG datasets

Session Summary

- WHILECATALOG further expands the possibilities of the EXPDT retention method
- Minor improvements to CHANGEVOLUME, SEARCHVOLUME, SEARCHDATASET subcommands and to UXTABLE

Appendix

- SC23-6874-00 *z/OS DFSMSrmm Implementation and Customization Guide*
- SC23-6873-00 *z/OS DFSMSrmm Managing and Using Removable Media*