IBM System Storage

**DFSMS 1.8 selected news**

---

IBM System Storage

## DFSMSdfp News

- AMS LISTCAT performance improvements
- Catalog Changes
- SMS Fast Path Volume Selection Performance Enhancements
- Copy SCDS as ACDS
- SMS Serviceability – New Trace Points
- VSAM Code Modernization
- RLS Enhanced Recovery
- RLS New Diagnostic Command
- PDSE 64-bit Virtual Storage
- PDSE Performance Improvement
- Rapid Index Rebuild (using data space to store VTOC during IX build)

## Catalog RAS

- Large Page Data Set Support
  - ► Use VSAM extended addressability = full volume (model 54) possible
- Dynamic Service Task Count
  - ► Currently 180 tasks
- JOBCAT/STEPCAT Removal (No externals)
  - ► Told you in 1988!

---

### SMS Fast Path Volume Selection Performance Enhancements

- Current problem:
  - In some instances, SMS volume selection may take an unacceptable length of time due to the large number of candidate volumes

- Solution:
  - The SMS Fast Path Volume Selection Performance Enhancement will provide a user selectable approach to speed up volume selection
    - Fast volume selection will not be supported for striping allocation

- Benefit:
  - ► Improved performance during SMS volume selection

## Copy SCDS as ACDS

- Current problem:
  - There is currently no way to create an ACDS directly from an SCDS without also activating the SCDS
    - You can issue SETSMS SAVEACDS(acds-dsname) to save the current ACDS to another data set
    - There is no easy way to create an ACDS that is intended for use on another system or sysplex
      - This restriction made it difficult to create ACDSs to be used elsewhere such as disaster recovery locations

- Solution:
  - New keyword for the SETSMS command, COPYSCDS*(scds_dsn,acds_dsn),* will create an ACDS from any valid SCDS

- Benefit:
  - ►Ease of use and improved availability

---

## PDSE Performance Improvement

- Problem:
  - When a PDSE is closed, the buffers for the PDSE are purged
  - For data sets that are opened and closed repeatedly do not get as much benefit from caching buffers as they could

- Solution:
  - Provide an option to retain buffers after the PDSE is closed

- Benefit:
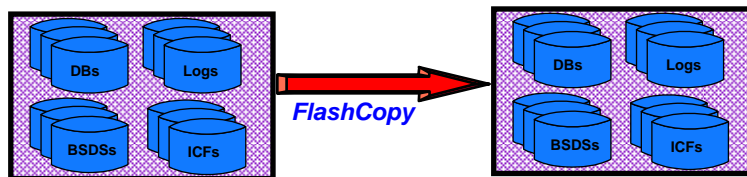  - ►Improved performance

3

# OAM Improvements

- Binary Large Object Support
  - Use DB2 v6+ Large Object Support to store objects up to 256MB in a single row
- Object Tape Enhancements
  - A new command will be provided that allows OAM to select and recycle tape volume(s) per user defined thresholds rather than manually selecting a volume and then performing the recycle
    - "HSM like" implementation
  - Immediate object backup possible based upon management class
    - After object create, don't have to wait for OSMC cycle to start

# DFSMShsm News

- DFSMShsm User Requirements
  - Handling of errors on alternate duplex tapes
  - Recycle SYNCDEV at intervals
  - Migration scratch queue for non-VSAM data set
  - Individual data set restore for ARECOVER processing
- Fast Replication Tape Support
- Fast Replication Data Set Recovery

## DB2 Managed FlashCopy Solution in V8

- Provide an easier and less disruptive way for fast volume-level backup and recovery
  - ► Use FlashCopy to backup DB2 data and logs
  - ► No longer need to suspend logs
  - ► Backups are managed by DB2 and DFSMShsm to support system level PIT recovery

---

## DFSMSrmm Goodies

- Enterprise Level Interface
  - Management via CIM interface, e.g. TPC for Tape
  - Communication to end users via e-mail (not just TSO xmit)
- RMM UTC Implementation and Toleration
- Tape Data Set Authorization
- RMM VRS Policy Management Simplification
- RMM Usability Items

# Tape Data Set Authorization Overview

- Problem:
  - ► Limitations of RACF TVTOCs, overhead of using TAPEVOL profiles. No easy way to use the same DATASET class profiles for tape data sets while fully protecting tape data sets.

- Solution:
  - ► Provide tape data set authorization independent of the TAPEVOL class and TAPEDSN option enabling generic DATASET profiles to be used for both DASD and Tape data sets
  - ► Allow DFSMSrmm to use the ERASE field in RACF generic data set profile to determine if tape data sets should be erased when deleted or the tape is returned to scratch status

- Benefit:
  - ► Increased tape data set security flexibility

Large Systems Update 2006 © 2006 IBM Corporation