

1. Record Nr.	UNINA9910809956203321
Titolo	Partitioned data set extended usage guide // Mary Lovelace ... [et al.]
Pubbl/distr/stampa	San Jose, CA, : IBM Corp., International Technical Support Organization, c2005
Edizione	[2nd ed.]
Descrizione fisica	xvi, 342 p. : ill
Collana	Redbooks
Disciplina	005.7/4
Soggetti	Database management Computer storage devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This edition applies to Version 1, Release 6 of z/OS (product number 5694-A01)." "May 2005."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover -- Contents -- Notices -- Trademarks -- Preface -- Become a published author -- Comments welcome -- Chapter 1. Release summary -- 1.1 z/OS V1R3 DFSMS changes -- 1.1.1 PDSE enhancements delivered with base code -- 1.1.2 PDSE enhancement delivered with APAR OW53245 -- 1.2 z/OS V1R5 DFSMS changes -- 1.2.1 PDSE enhancements delivered with base code -- 1.3 z/OS V1R6 DFSMS changes -- 1.3.1 PDSE RAS restartable address space enhancement -- Chapter 2. PDSE overview and concepts -- 2.1 History of PDSEs -- 2.1.1 Extended sharing -- 2.1.2 Storing executable code in PDSEs -- 2.1.3 Non-SMS PDSEs -- 2.2 Partitioned data set review -- 2.2.1 Partitioned data set organization -- 2.2.2 Where to use partitioned organization -- 2.2.3 Advantages of partitioned organization -- 2.2.4 PDS customer requirements and limitations -- 2.3 PDSE structure -- 2.3.1 What is a PDSE? -- 2.3.2 Improvements provided by PDSE -- 2.4 Logical views of PDSEs -- 2.4.1 For the user -- 2.4.2 For the storage administrator -- 2.4.3 For the system programmer -- 2.5 PDSE physical components -- 2.5.1 PDSE address spaces -- 2.5.2 Space usage on disk -- 2.5.3 Directory structure -- 2.6 Summary of PDSE characteristics and limits -- 2.7 PDSE storage management concepts -- 2.7.1 Data space and Hiperspace concepts -- 2.7.2 LLA and VLF concepts -- Chapter 3. Managing the PDSE

environment -- 3.1 PARMLIB requirements -- 3.1.1 IGDSMSxx PARMLIB global setting affecting data set allocation -- 3.1.2 PARMLIB required IGDSMSxx parameters for SMSPDSE1 support -- 3.1.3 PARMLIB optional IGDSMSxx changes for SMSPDSE support -- 3.1.4 PARMLIB IGDSMSxx parameters for SMSPDSE1 support -- 3.2 Restartable address space considerations -- 3.2.1 Operational changes -- 3.2.2 Considerations for restarting SMSPDSE1 -- 3.2.3 Operator commands -- 3.2.4 Diagnostic and monitoring commands.

3.3 Link Pack Area (LPA) considerations -- 3.4 Library lookaside (LLA) considerations -- 3.5 LNKLST and LLA considerations -- 3.6 Virtual lookaside facility (VLF) considerations -- 3.6.1 LLA registration with VLF -- 3.6.2 VLF use with REXX EXECs -- 3.7 Hiperspace considerations -- 3.8 SMS considerations -- 3.8.1 PDSE data sets that are not SMS-managed -- 3.8.2 PDSE data sets that are SMS-managed -- 3.8.3 Automatic Class Selection (ACS) routine considerations -- 3.8.4 How to set up an SMS environment for PDSE -- 3.8.5 How to determine the current ACS routines -- 3.9 JES2 PROCLIB considerations -- 3.9.1 JES2 dynamically-allocated PROCLIBs -- 3.9.2 JES2 using PDSE data sets as procedure libraries -- Chapter 4. Converting to PDSE format -- 4.1 When to use a PDSE -- 4.1.1 Common system data sets -- 4.1.2 ISPF data sets -- 4.1.3 z/OS products using PDSE -- 4.1.4 When to use a PDS -- 4.2 Converting a PDS to a PDSE -- 4.2.1 Implicit conversion -- 4.2.2 Explicit conversion -- 4.3 Converting a PDSE to a PDS -- 4.3.1 Using DFSMSdss -- 4.3.2 Using IEBCOPY -- 4.4 Non-SMS PDSEs -- 4.5 How to convert load modules to program objects -- Chapter 5. Using PDSEs -- 5.1 PDSE space usage -- 5.1.1 Use of noncontiguous space -- 5.1.2 Integrated directory -- 5.1.3 Full block allocation -- 5.1.4 PDS gas and PDSE unused space -- 5.1.5 Frequency of data set compression -- 5.1.6 Extent growth -- 5.1.7 Logical block size -- 5.1.8 Physical block size -- 5.1.9 Partial release, free space -- 5.1.10 Fragmentation -- 5.1.11 Directory blocks on the JCL SPACE parameter -- 5.1.12 Sample comparisons of PDSs to PDSEs -- 5.2 Allocating a PDSE -- 5.2.1 Batch allocation -- 5.2.2 TSO/E allocation -- 5.2.3 ISPF allocation -- 5.2.4 How to verify whether a data set is PDSE -- 5.2.5 Dynamic allocation -- 5.3 SMS definitions and settings -- 5.3.1 How to find a Data Class for PDSE. -- 5.3.2 How to find a Storage Class for a PDSE -- 5.3.3 Creating PDSE members -- 5.3.4 Deleting PDSE members -- 5.4 Accessing PDSEs -- 5.5 Non-SMS PDSEs -- 5.5.1 How to implement non-SMS PDSEs -- 5.5.2 Non-SMS PDSE characteristics -- 5.5.3 PDSEs in LNKLST -- 5.5.4 Considerations -- 5.6 Guaranteed Synchronous Write -- 5.7 Concatenating PDSEs -- 5.7.1 Sequential concatenation -- 5.7.2 Partitioned concatenation -- 5.8 DFSMS and z/OS facilities used with PDSE -- 5.8.1 ISMF filtering -- 5.8.2 DFSMSdfp utilities: IEBCOPY -- 5.8.3 DFSMSdfp utilities: IEHLIST -- 5.8.4 IDCAMS LISTCAT command -- 5.8.5 Distributed File Manager/MVS -- 5.8.6 DFSORT™ -- 5.8.7 ISPF -- 5.8.8 TSO/E -- 5.8.9 LISTDSI TSO/E -- 5.9 PDSE restrictions -- 5.9.1 Load module libraries -- 5.9.2 LPALSTxx and PDSE -- 5.9.3 Member size and number of members -- 5.9.4 Other restrictions -- 5.10 PDSE usage differences -- 5.10.1 Device independence -- 5.10.2 Changed macros -- 5.10.3 Buffering changes -- 5.10.4 Access method changes -- 5.10.5 Aliases -- 5.10.6 Block size and record segments -- 5.10.7 Last track indicator -- 5.11 Limitations common to PDSs and PDSEs -- Chapter 6. Backup and recovery of PDSEs -- 6.1 DFSMSdss -- 6.1.1 DFSMSdss filtering using the BY keyword -- 6.1.2 Maintaining PDSE space allocation -- 6.1.3 DFSMSdss RELEASE -- 6.1.4 DFSMSdss COMPRESS -- 6.1.5 DFSMSdss PDS and PDSE conversion -- 6.1.6 DFSMSdss PDSE content reorganization -- 6.1.7 Concurrent copy and

SnapShot -- 6.1.8 DFSMSdss DUMP -- 6.1.9 DFSMSdss RESTORE --
6.1.10 DFSMSdss restore considerations for system or shared user data
sets -- 6.2 DFSMSShsm -- 6.2.1 DFSMSShsm availability management --
6.2.2 DFSMSShsm space management -- 6.2.3 DFSMSShsm commands --
6.2.4 DFSMSShsm ABARS -- 6.3 IEBCOPY -- 6.3.1 IEBCOPY compression
-- 6.3.2 IEBCOPY Unload -- 6.3.3 IEBCOPY Reload -- 6.3.4 IEBCOPY
reload effect when directory blocks omitted.
6.3.5 IEBCOPY reload with directory blocks specified -- 6.3.6 IEBCOPY
reload with aliases specified -- 6.3.7 IEBCOPY reload selecting a
member with an alias but omitting the alias -- 6.3.8 IEBCOPY reload
selecting a member that does not have an alias -- 6.3.9 IEBCOPY
copying PDSE to PDSE -- 6.3.10 IEBCOPY selecting members without
REPLACE -- 6.3.11 IEBCOPY selecting and replacing members that exist
in the output -- 6.3.12 IEBCOPY COPYGRP -- 6.3.13 IEBCOPY COPYGRP
selecting a member without its aliases -- 6.3.14 IEBCOPY to reorganize
a data set -- 6.4 TSO/E TRANSMIT -- 6.5 ISMF data set application --
6.6 Backup considerations for large PDSE data sets -- 6.7 IEBCOPY
performance note -- Chapter 7. Program management and PDSEs --
7.1 Program management overview -- 7.1.1 Linkage editor -- 7.1.2
Batch loader -- 7.1.3 Linkage editor restrictions -- 7.1.4 Limitations
imposed by using partitioned data sets -- 7.2 Program management
using the z/OS binder and loader -- 7.2.1 Differences between the PM
binder and the linkage editor -- 7.2.2 Differences between the PM
loader and program fetch -- 7.2.3 What are program objects? -- 7.2.4
Dynamic link libraries -- 7.2.5 GOFF -- 7.2.6 XOBJ format -- 7.2.7 How
to convert load modules to program objects -- 7.2.8 Program
management levels -- 7.2.9 Migration and compatibility considerations
-- 7.3 Value of PDSEs for executable code -- Chapter 8. PDSE sharing
and serialization -- 8.1 Resource serialization -- 8.1.1 RESERVE macro
-- 8.1.2 ENQ and DEQ macros -- 8.1.3 Global resource serialization
(GRS) -- 8.1.4 DISP keyword on the DD statement -- 8.1.5 OPEN types
-- 8.2 Modes of sharing a PDSE -- 8.2.1 Sharing a PDSE within a single
system -- 8.2.2 Normal sharing across multiple systems -- 8.2.3
Extended sharing across multiple systems -- 8.3 Sharing within a
single system -- 8.3.1 OPEN macro.
8.3.2 Single system data-set-level sharing -- 8.3.3 Single system
member-level sharing -- 8.3.4 ISPF/PDF considerations -- 8.4 PDSE
normal sharing across multiple systems -- 8.4.1 Test results of PDSE
normal sharing across systems -- 8.4.2 Setting up PDSE normal sharing
across systems -- 8.5 PDSE extended sharing across multiple systems
-- 8.5.1 Scenarios for PDSE extended sharing across systems -- 8.5.2
Setting up PDSE extended sharing across systems -- 8.6 Sharing
considerations -- 8.6.1 Changing the sharing mode from extended to
normal -- 8.6.2 PDSE extended sharing requirements -- 8.6.3 PDSE
locking services and the PDSE address spaces -- 8.6.4 PDSE extended
sharing with MVS guests under VM -- 8.6.5 Detecting sharing mode --
8.6.6 Summary of sharing considerations -- 8.7 PDSE serialization --
8.7.1 Definitions -- 8.7.2 ENQs used for PDSE sharing -- 8.7.3 ENQ on
SYSZIGW0 -- 8.7.4 ENQ on SYSZIGW1 -- 8.7.5 ENQ on SYSDSN -- 8.7.6
XCF and XCM -- 8.7.7 XQuiesce -- Chapter 9. Performance
considerations -- 9.1 I/O activity and response time -- 9.2 PDS
buffering -- 9.2.1 QSAM buffering -- 9.2.2 BSAM and BPAM buffering
-- 9.3 PDSE buffering techniques -- 9.3.1 PDSE buffering in the Data
Work Area -- 9.4 Performance influencers and exploiters -- 9.4.1
Effect of Guaranteed Synchronous Write -- 9.4.2 Caching with LLA and
VLF -- 9.4.3 SMSPDSE and SMSPDSE1 -- 9.4.4 IEBCOPY performance
considerations -- 9.5 PDSE use of processor storage -- 9.5.1 PDSE
member caching in Hiperspace -- 9.5.2 PDSE directory caching in data

space -- 9.5.3 Pending delete considerations -- 9.6 Monitoring
performance -- 9.6.1 SMF -- 9.6.2 RMF -- 9.6.3 Block I/O counts --
9.6.4 Buffer management statistics -- 9.6.5 IDCAMS LISTDATA
command output -- 9.6.6 Limiting PDSE usage of expanded storage --
9.6.7 LLA and VLF usage display -- 9.7 Flow chart to run performance
issue analysis.
9.8 PDSE buffer management statistics.
