

PDSMAN – FASTCOPY

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FASTCOPY

- IEBCOPY on high octane!
- Transparently replaces IBM's IEBCOPY
- Provides more functional and performance enhancements
 - Compatible with IEBCOPY statements
 - Provides enhanced capabilities not available in IEBCOPY
 - Faster execution times, reduced CPU usage and fewer I/O operations
- No JCL or operational changes are required to enable FASTCOPY
- The next few slides demonstrate how to activate and code FASTCOPY

Agenda

Topic	Description
Implementation	Activate FASTCOPY
Commands	FASTCOPY commands, syntax and return codes
Examples	FASTCOPY examples
Disable	Turn off FASTCOPY
Comments	Items of interest
Links	PDSMAN and other slide decks
Conclusion	Final comments

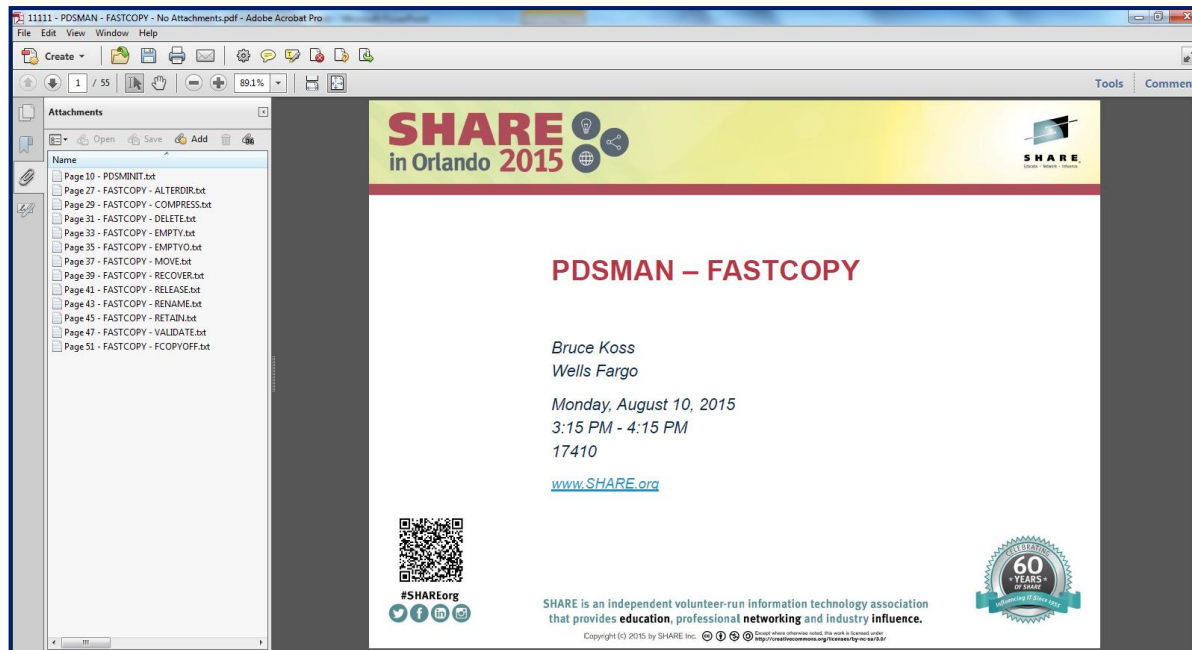
Attachments (📎)

- The following attachments are included in this document:


File	Type
Page 10 – PDSMINIT	TXT
Page 27 – FASTCOPY – ALTERDIR	TXT
Page 29 – FASTCOPY – COMPRESS	TXT
Page 31 – FASTCOPY – DELETE	TXT
Page 33 – FASTCOPY – EMPTY	TXT
Page 35 – FASTCOPY – EMPTYO	TXT
Page 37 – FASTCOPY – MOVE	TXT
Page 39 – FASTCOPY – RECOVER	TXT
Page 41 – FASTCOPY – RELEASE	TXT
Page 43 – FASTCOPY – RENAME	TXT
Page 45 – FASTCOPY – RETAIN	TXT
Page 47 – FASTCOPY – VALIDATE	TXT
Page 51 – FASTCOPY – FCOPYOFF	TXT

Attachments (📎)

- Invoke Adobe Reader and click the ‘Attachments’ button on the left side of the navigational panel of the main Reader window



Disclaimers

- Must use Adobe Reader to view attachments
 - () signifies attachment
- May need to adjust the Adobe Reader zoom value to view text
- Commands and screens may be slightly different depending on the operating system's version and release level
 - These commands and screen prints were executed on
 - **PDSMAN/EZYEDIT V7.70** and **z/OS V2R1**
- Security may prevent access to panels or executing commands
- For more detailed information, please reference the following manual:
 - **CA PDSMAN PDS Library Management**
 - **FastCopy and Space Reuse User Guide**

Implementation

Activation

- The next few slides demonstrate how to turn on (activate) the FASTCOPY feature of PDSMAN
- Notes
 - This section is for the systems programmer who installs and maintains PDSMAN
 - All others can skip this section and go directly to the [Commands](#) section

- From the EZYEDIT selection panel, type in **B** or **E** in the **Function** field, type in **PDSMINIT** in the **DSN/Variable #** field and press **ENTER**

```
----- PDSMAN 7.70 - Ezyedit Selection Panel -----
COMMAND ==>
                                SCROLL ==> CSR

Function      ==> B              06:41          Project ==> DVPSS
DSN/Variable # ==> PDSMINIT      Group    ==> PDSMAN
Member Name   ==>                Type     ==> PARMLIB
Volume Serial ==>                Printer  ==>
                                Profile  ==>

  1 DSN= /*----- DATASETS -----*/          2 DSN= /*----- TSO COMMANDS -----*/
  3 DSN= 'TSTSS.R2221.JCL.*'                    4 DSN= TSO LISTC
  5 DSN= 'TSTSS.R2221.JCL.CNTL(JCL*)'           6 DSN= TSO SYSID
  7 DSN= 'TSTSS.R2221.JCL.CNTL(TST%0*)'        8 DSN= TSO WHOAMI
  9 DSN=
 11 DSN= /*---- PERSONAL LISTS ----*/          12 DSN= /*---- EZYEDIT COMMANDS ----*/
 13 DSN= @MYISPF                                14 DSN= APFLIST
 15 DSN= @MYDSNS                                16 DSN= LLALIST
 17 DSN=
 19 DSN= /*-- ALLOCATION DISPLAY --*/           18 DSN= LNKLIST
 21 DSN= F(*)                                    20 DSN= LPALIST
 23 DSN= F(ISP*)                                22 DSN= PDSMINIT
 25 DSN= F(SYSPROC)                             24 DSN=
 26 DSN=

Press F1   Key for Tutorial and Command Summary
```

- From the primary command line, type in **F \$IEBCOPY** and press **ENTER**

```
Menu Utilities Compilers Help
-----
BROWSE      DVPSS_PDSMAN_R770M04.PARMLIB(PDSMINIT) - 7 Line 00000000 Col 001 080
Command ==> F $IEBCOPY                               Scroll ==> CSR
***** Top of Data *****
*** NOTE: PDSMINIT is unique per sysplex.                *
*** NOTE: Do *NOT* copy across sites without checking for differences.*
=====
* PURPOSE: Wells Fargo Change Log                          *
-----
* FLG  YYMMDD  USERID  DESCRIPTION                                          *
* ---  - - - -  - - - -  - - - - - - - - - - - - - - - - - - - - - - *
* @A6  140611  R2214   Add IBM File Mgr commands to USRCMDs                *
* @A5  120606  R2214   Activate ELOCs support; new $LLA/$UPDATE libs      *
* @A4  120125  R2214   Uncomment/activate FASTCOPY (IEBCOPY frontend) *
* @A3  110811  R2214   Turn on member versioning for TSAPLEX parmlibs *
* @A2  110508  R2221   Chged cmds to use alias, can't use I2/F1/etc. *
* @A1  110209  R2221   Prevent "Confirmation Panel" from displaying *
* @A0  110207  R2214   Implemented PDSMAN                                  *
=====
**
** PDSMINIT - Sample PDSMAN Initialization Control Statements **
**
```

- To activate FASTCOPY, change the **FASTCOPY** parameter to **Y** for **IEBCOPY** and **BSTCOPY** (Endevor)

```
Menu Utilities Compilers Help
-----
BROWSE      DVPSS.PDSMAN.PARMLIB (PDSMINIT) - 77.24      Line 00000110 Col 001 080
Command ==>>                                         Scroll ==>> CSR
*====*
*==
*== $IEBCOPY - Define IEBCOPY Processing Options          *==
*==
*== The $IEBCOPY control statement instructs PDSMAN to front-end *==
*== the named utility (normally IEBCOPY) and defines parameters *==
*== that control associated processing.                   *==
*==
*== IMPORTANT: A number of PDSMAN facilities will be disabled *==
*== or will have their functionality severely limited if this *==
*== control statement is omitted or incorrectly specified. *==
*==
*====*
$IEBCOPY NAME=IEBCOPY          /* Front-end IEBCOPY          *
          FASTCOPY=Y          /* Activate FastCopy processing *

$IEBCOPY NAME=BSTCOPY         /* Front-end BSTCOPY (Endevor) *
          FASTCOPY=Y          /* Enable FastCopy processing  *
```

SDSF LOG – F PDSMAN,NEWRULES

- Invoke **SDSF LOG**, issue the MVS command **F PDSMAN,NEWRULES** and press **ENTER**

```
Display Filter View Print Options Search Help
-----
SDSF OPERLOG SDV27 05/20/2015 11W COLUMNS 52- 131
COMMAND INPUT ==> /F PDSMAN,NEWRULES SCROLL ==> CSR
0010 CONNECTED LASTS (150519224713)
0010 ING819I BCPII ROUTE NVS21/AUTHW006 - O2CFS/R/IBM390PS.O2CFS 930
0010 CONNECTED LASTS (150519224653)
0210 IEF196I IEF237I F910 ALLOCATED TO SYS23919
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0210 IEF196I IEF237I F910 ALLOCATED TO SYS23922
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0210 IEF196I IEF237I F910 ALLOCATED TO SYS23925
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0200 OPSNC01W OPSMVS/NETCOOL LINK CHECK FOR SDV28 20150520 09:16:15
0200 OPS1181O OPSIPSOC OPSS (*Local*) MVS N/A RSSERVER RSSHB NC
0205 RSSHB NC
0200 OPSNC00C OPSMVS/NETCOOL LINK OKAY ON SDV28 20150520 09:16:15
0200 OPS3724O TSO TOD.CPRECOVR Sent CMD=OI CPRECOVR
0200 OPS3092O OI CPRECOVR
0200 OPS3092O READY
0201 ETCL300I Database update commencing
```

SDSF LOG – Messages

- Page down to view the **PDSM*** messages

```
Display Filter View Print Options Search Help
-----
SDSF OPERLOG SDV27 05/20/2015 11W COLUMNS 52- 131
COMMAND INPUT ==> SCROLL ==> CSR
0201 F PDSMAN,NEWRULES
0201 PDSMOPR-00 Input -> NEWRULES
0201 PDSM00-34 PDSMAN RELEASE 7.70 ACTIVE - LAST INIT 05/20/2015
AT 08:53
0201 PDSM00-1 PDSMAN BLDL/STOW INTERFACE RE-INITIALIZATION COMPLETE.
PDSMBSI ADDRESS IS 00FB4C70
0201 PDSMOPR-07 PDSM00 Requested Processing Completed, RC=0000
0210 IEF196I IEF237I F910 ALLOCATED TO SYS11362
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0210 IEF196I IEF237I F910 ALLOCATED TO SYS11365
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0210 IEF196I IEF237I F910 ALLOCATED TO SYS11368
0210 IEF196I IEF285I PRDHC.#TCPXX.TCPPARMS KEPT
0210 IEF196I IEF285I VOL SER NOS= SALIB1.
0200 OPS1181O OPSIPSOC OPSS (*Local*) MVS N/A RSSERV RSSHB NC
0205 RSSHB NC
0200 OPSNC00C OPSMVS/NETCOOL LINK OKAY ON SDV27 20150520 09:16:24
0201 ETCL310I Database update completed
```

Commands

Commands

- FASTCOPY commands and a brief description

Command	Description
ALTERDIR	Alter a PDS directory
ALTERMOD	Alter PDS load members in place to adjust directory RLD counts
COMPRESS	Compress a PDS file
COPY	Copy PDS and PDSE members
COPYMOD	Re-block PDS load members to adjust directory RLD counts
DELETE	Delete PDS members
EMPTY	Empty a PDS and release secondary space
EMPTYO	Empty a PDS and do not release secondary space
MOVE	Move PDS or PDSE members
RECOVER	Recover deleted PDS members since the last compress
RELEASE	Release unused PDS and PDSE secondary extents
VALIDATE	Validate a PDS file
XCOMPRESS	Compress PDS and sequential files on a DASD volume

Commands – Support

- FASTCOPY commands and whether it is supported by IBM's IEBCOPY and if it is applicable to PDS and PDSEs datasets

Command	IEBCOPY	PDS Support	PDSE Support
ALTERDIR	No	Yes	N/A
ALTERMOD	Yes	Yes	N/A
COMPRESS	No	Yes	N/A
COPY	Yes	Yes	Yes
COPYMOD	Yes	Yes	N/A
DELETE	No	Yes	Yes
EMPTY	No	Yes	Yes
EMPTYO	No	Yes	Yes
MOVE	No	Yes	Yes
RECOVER	No	Yes	N/A
RELEASE	No	Yes	Yes
VALIDATE	No	Yes	N/A
XCOMPRESS	No	Yes	N/A

Commands – Syntax

- Syntax of FASTCOPY commands

Command	Syntax
ALTERDIR	Outdd=ddname OUTDSN=dsname[/volume] BLOCKS=[+ -]nnnnn [,FREEDIR%=(mm,nn)] [,SETDIRBLKS%=[tt](ll,tt,uu)]
ALTERMOD	ALTERMOD Outdd=ddname OUTDSN=dsname[/volume] [,List=YES NO]
COMPRESS	Outdd=ddname OUTDSN=dsname[/volume] [,SETDIRBLKS%=[tt](ll,tt,uu)] [,SETSPACE%=[tt](ll,tt,uu)] [,FREEDIR%=(mm,nn)] [,List=YES NO]

Commands – Syntax

- Syntax of FASTCOPY commands

Command	Syntax
COPY	Outdd=ddname OUTDSN=dsname[/volume] ,Indd=[({ddname (ddname,R)}[,...][])] or ,INDSN=[({dsname[/volume]}(dsname[/volume],R)}[,...][])] [,List=YES NO] [,RESET] [,COPYALIAS] [,PACK] [,UNPACK] [,REFORMAT]
COPYMOD	Outdd=ddname OUTDSN=dsname[/volume] ,Indd=[({ddname (ddname,R)}[,...][])] or ,INDSN=[({dsname[/volume]}(dsname[/volume],R)}[,...][])] [,List=YES NO] [,MAXBLK=nnnnn nnK] [,MINBLK=nnnnn nnK] [,COPYALIAS]
EMPTY	Outdd=ddname OUTDSN=dsname[/volume]
EMPTYO	Outdd=ddname OUTDSN=dsname[/volume]

Commands – Syntax

- Syntax of FASTCOPY commands

Command	Syntax
EDITDIR	Outdd=ddname OUTDSN=dsname[/volume] Delete Member=[(]member1[,member2][,...][)] RETAIN Member=[(]member1[,member2][,...][)] REName Member=[(](member1,newname)[,...][)]
MOVE	Outdd=ddname OUTDSN=dsname[/volume] ,Indd=[(]{ddname}(ddname,R)}[,...][)] or ,INDSN=[(]{dsname[/volume]}(dsname[/volume],R)}[,...][)] [,List=YES NO] [,RESET] [,COPYALIAS] [,PACK] [,UNPACK] [,REFORMAT]
RECOVER	Outdd=ddname OUTDSN=dsname[/volume]
RELEASE	Outdd=ddname OUTDSN=dsname[/volume]
VALIDATE	Outdd=ddname OUTDSN=dsname[/volume] [,List=YES NO]

Commands – Syntax

- Syntax of FASTCOPY commands

Command	Syntax
XCOMPRESS	OUTDSN=dsname[/volume] [,EXCLUDEDSN=dsname[/volume]]LINKLIST] [,PROCESS=PO PS BOTH] [,COPYVTOC=ddname] [,THRESHOLD=Pnn Tnn Snn Xnn] [,PROTECT=NONE DISPOLD ENQ RESERVE] [,SETDIRBLKS%=[tt](ll,tt,uu)]] [,SETSPACE%=[tt](ll,tt,uu)]] [,RLSE=NONE ALL FREE>nn] [,BOUNDARY=EXTENT CYLINDER TRACK ALOCUNIT] [,LIST=FULL NO SUMMARY ERRORS USAGE] [,ALOCFAIL=WAIT BYPASS] [,TYPE=STANDARD VALIDATE]

Member Name

- Wild card characters can be used in the **MEMBER** parameter to select or exclude a group of members
- The wild card characters
 - The plus sign (+)
 - Represent a single character
 - The asterisk (*)
 - Represents a string of characters
- Examples:
 - **EXCLUDE MEMBER=DEF*,+XY***
 - **SELECT MEMBER=(ABC*,XY*)**
 - **SELECT MEMBER=(ABC,DEF,(GHI*,,R),(JKL*,MNO*,R))**

- Select members based on the date on which they were updated or last referenced
- Parameters **CHANGED** or **REFERENCED** can be specified on
 - **MOVE/COPY(MOD) SELECT** and **EXCLUDE** statements
 - **EDITDIR DELETE** and **RETAIN** statements.
- Date format

Format	Example
yyyy/mm/dd	2007/08/30
yy/mm/dd	07/08/30
*-nnn	nnn days before the current date
*-nnM	nn months before the current date
*-nnY	nn years before the current date

Date – Examples

- Copy members updated in the last 21 days

```
COPY INDD=IN1,OUTDD=OUT1
```

```
SELECT CHANGED>*-21
```

- Delete ABC and DEF members not having been referenced in the last 18 months

```
EDITDIR OUTDD=OUT1
```

```
DELETE M=ABC*,DEF*,REFERENCED<*-18M
```

Return Codes

- FASTCOPY return codes and their meaning

RC	Meaning
00	Normal completion
04	Completed with one or more error or warning messages being issued
08	Detected errors while reading the input dataset or during a compress SCAN phase <ul style="list-style-type: none">• The input dataset has not been damaged.
12	Various errors during processing as described by accompanying error messages
16	Permanent I/O error while writing the output dataset or during the COMPRESS phase of a compress operation <ul style="list-style-type: none">• For compress operations, any library or member damage is reported on the FCO730A, FCO740A or FCO750A error messages
20	Insufficient storage to process and STORFAIL=TERMINATE has been specified

Examples

Overview

- The next few slides will demonstrate how to code FASTCOPY commands to take advantage of new features

ALTERDIR (📎)

- Add 50 directory blocks to a PDS dataset

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(ALTERDIR) - Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSALTER JOB (SST), 'ALTERDIR',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  ADD 50 DIRECTORY BLOCKS TO A PDS USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
ALTERDIR OUTDD=SYSUT1,BLOCKS=+50
***** Bottom of Data *****
```

ALTERDIR – Results

- **SYSPRINT** report after executing the **ALTERDIR** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSALTER J0423716 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN r7.70 FASTCOPY FACILITY 18
** PDSMFCPC ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE 05/18/2015 10:35:04 JOBNAME @SS
FCO105I ALTERDIR OUTDD=SYSUT1,BLOCKS=+50
FCO110I ALTERDIR PDS OUTDD=SYSUT1 VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO150M TEST001 * MOVED * TO TTR 000501-000502 M-CCHH 00-12420005
FCO150M TEST002 * MOVED * TO TTR 000503-000504 M-CCHH 00-12420005
FCO150M TEST003 * MOVED * TO TTR 000505-000506 M-CCHH 00-12420005
FCO150M TEST004 * MOVED * TO TTR 000507-000508 M-CCHH 00-12420005
FCO340I DIRECTORY SIZE ALTERED TO 200 BLOCKS
FCO220U 00.00.00.06 SECS ELAPSED 00.00.00.01 TCB CPU 00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE 05/18/2015 10:35:04 CC=00
***** BOTTOM OF DATA *****
```

COMPRESS ()

- Compress a PDS dataset

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.JCL.CNTL(IEBCOPY) - 01.11      Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSCOMPR JOB (SST), 'COMPRESS',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  COMPRESS A PDS DATASET USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.EXAMPLES
//SYSIN DD  *
COMPRESS OUTDD=SYSUT1
***** Bottom of Data *****
```

COMPRESS – Results

- **SYSPRINT** report after executing the **COMPRESS** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSCOMPR J0415710  DSID   102 LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN          r7.70                               FASTCOPY FACILITY    18
** PDSMFCPC ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE          05/18/2015   09:02:38  JOBNAME @SS
FCO105I          COMPRESS OUTDD=SYSUT1
FCO110I COMPRESSING PDS  OUTDD=SYSUT1  VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.EX
FCO120I BEGINNING SCAN PHASE          09:02:38
FCO140I BEGINNING COMPRESS PHASE 09:02:38
FCO150M COMPRESS * MOVED *   TO TTR 00020C-00020D M-CCHH 00-123D0002
FCO160U MEMBERS          1 TOTAL          0 IN-PLACE          1 MOVED
FCO170U DIR BLKS          100 TOTAL        1 USED              99 UNUSED
FCO180U TRACKS           75 TOTAL         3 USED              72 UNUSED
FCO190U EXTENTS          1 TOTAL          1 USED              0 UNUSED
FCO195U BYTES ON LAST TRACK          15708 USED          43078 UNUSED
FCO200U EXCPS            7 TOTAL          5 INPUT              2 OUTPUT
FCO215U COMPRESS HAS REGAINED 44 TRACKS 986 BYTES OF WASTED SPACE
FCO210U STORAGE          2048K ALLOC       42K USED
FCO220U 00.00.00.07 SECS ELAPSED 00.00.00.01 TCB CPU 00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE 05/18/2015   09:02:38  CC=00
***** BOTTOM OF DATA *****
```

DELETE (📎)

- Delete all **TEST00_** PDS members

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES (DELETE) - 01 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSDELET JOB (SST), 'DELETE',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  DELETE ALL 'TEST00_' MEMBERS USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
EDITDIR OUTDD=SYSUT1
DELETE MEMBER=(TEST00+)
***** Bottom of Data *****
```

DELETE – Results

- **SYSPRINT** report after executing the **DELETE** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSDELET J0416942  DSID   102 LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN          r7.70                               FASTCOPY FACILITY    18
** PDSMFPCPD ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE          05/18/2015   09:29:36  JOBNAME @SS
FCO105I          EDITDIR OUTDD=SYSUT1
FCO105I          DELETE MEMBER=(TEST00+)
FCO110I EDITDIR          PDS  OUTDD=SYSUT1  VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO772I TEST001  HAS BEEN DELETED
FCO772I TEST002  HAS BEEN DELETED
FCO772I TEST003  HAS BEEN DELETED
FCO780I EDITDIR PROCESSING COMPLETE
FCO220U 00.00.00.02 SECS ELAPSED  00.00.00.00 TCB CPU  00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE      05/18/2015   09:29:36  CC=00
***** BOTTOM OF DATA *****
```


- Empty a PDS dataset and release secondary space

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(EMPTY) - 01. Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSEMPY JOB (SST), 'EMPTY',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  EMPTY PDS AND RELEASE SECONDARY SPACE
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
EMPTY OUTDD=SYSUT1
***** Bottom of Data *****
```

EMPTY – Results

- **SYSPRINT** report after executing the **EMPTY** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSEMPY J0783986 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN r7.70 FASTCOPY FACILITY 26
** PDSMFPCD ** DV21
FCO105I EMPTY OUTDD=SYSUT1
PDSM10-5 LIBRARY EMPTIED PRDSS.R2221.FASTCOPY.TESTFILE
PDSMRLSE-1 Space release complete for PRDSS.R2221.FASTCOPY.TESTFILE on DPS003 -
3 tracks released
PDSM10-6 SECONDARY EXTENT(S) RELEASED PRDSS.R2221.FASTCOPY.TESTFILE
***** BOTTOM OF DATA *****
```

EMPTYO (📎)

- Empty a PDS dataset and do not release secondary space

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(EMPTYO) - 01 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSEMPY JOB (SST), 'EMPTYO',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  EMPTY PDS AND DO NOT RELEASE SECONDARY SPACE
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
EMPTYO OUTDD=SYSUT1
***** Bottom of Data *****
```

EMPTYO – Results

- **SYSPRINT** report after executing the **EMPTYO** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSEEMPTY J0422274 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN r7.70 FASTCOPY FACILITY 18
** PDSMFPCD ** DV21
FCO105I EMPTYO OUTDD=SYSUT1
PDSM10-5 LIBRARY EMPTIED PRDSS.R2221.FASTCOPY.TESTFILE
***** BOTTOM OF DATA *****
```

MOVE (📎)

- Move PDS members

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(MOVE) - 01.0 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSMOVE  JOB (SST), 'MOVE',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  MOVE PDS MEMBERS USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1  DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSUT2  DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFIL2
//SYSIN   DD  *
MOVE INDD= ((SYSUT1,R) ),OUTDD=SYSUT2
SELECT MEMBER=(TEST*)
***** Bottom of Data *****
```

MOVE – Results

- **SYSPRINT** report after executing the **MOVE** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSMOVE J0774213 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN r7.70 FASTCOPY FACILITY 26
** PDSMFPCD ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE 05/26/2015 05:45:02 JOBNAME @SS
FCO105I MOVE INDD=((SYSUT1,R)),OUTDD=SYSUT2
FCO105I SELECT MEMBER=(TEST*)
FCO110I MOVING TO PDS OUTDD=SYSUT2 VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO111I FROM PDS INDD=SYSUT1 VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO141M TEST001 MOVED
FCO141M TEST002 MOVED
FCO141M TEST003 MOVED
FCO141M TEST004 MOVED
FCO164U INPUT MBRS 4 TOTAL 4 COPIED 0 NOT COPIED
FCO165U OUTPUT MBRS 4 TOTAL 4 ADDED 0 REPLACED
FCO200U EXCPS 6 TOTAL 4 INPUT 2 OUTPUT
FCO170U DIR BLKS 200 TOTAL 1 USED 199 UNUSED
FCO180U TRACKS 75 TOTAL 5 USED 70 UNUSED
FCO190U EXTENTS 1 TOTAL 1 USED 0 UNUSED
FCO210U STORAGE 1102K ALLOC 1102K USED
FCO220U 00.00.00.14 SECS ELAPSED 00.00.00.01 TCB CPU 00.00.00.00 SRB CPU
```

RECOVER (📎)

- Recover deleted PDS members since the last compress

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(IEBCOPY) - 0 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSRECOV JOB (SST), 'RECOVER',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  RECOVER DELETED PDS MEMBERS USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.EXAMPLES
//SYSIN DD  *
RECOVER OUTDD=SYSUT1
***** Bottom of Data *****
```

RECOVER – Results

- **SYSPRINT** report after executing the **RECOVER** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSTEST1 J0419078  DSID   102 LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN          r7.70                               FASTCOPY FACILITY      18
** PDSMFPCPD ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE          05/18/2015   09:57:32  JOBNAME @SS
FCO105I          RECOVER OUTDD=SYSUT1
FCO110I RECOVERING  PDS  OUTDD=SYSUT1  VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.EX
FCO776I ZZZ00001 HAS BEEN RECOVERED AT TTR 00020E
FCO776I ZZZ00002 HAS BEEN RECOVERED AT TTR 000210
FCO776I ZZZ00003 HAS BEEN RECOVERED AT TTR 000212
FCO776I ZZZ00004 HAS BEEN RECOVERED AT TTR 000214
FCO776I ZZZ00005 HAS BEEN RECOVERED AT TTR 000216
FCO776I ZZZ00006 HAS BEEN RECOVERED AT TTR 000218
FCO776I ZZZ00007 HAS BEEN RECOVERED AT TTR 00021C
FCO776I ZZZ00008 HAS BEEN RECOVERED AT TTR 000220
FCO781I RECOVER PROCESSING COMPLETE
FCO220U 00.00.00.10 SECS ELAPSED  00.00.00.00 TCB CPU  00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE      05/18/2015   09:57:33  CC=00
***** BOTTOM OF DATA *****
```


- Release unused PDS secondary space

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES (RELEASE) - 0 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSRELEA JOB (SST) , 'RELEASE' ,MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  RELEASE UNUSED PDS SECONDARY SPACE USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
RELEASE OUTDD=SYSUT1
***** Bottom of Data *****
```

RELEASE – Results

- **SYS**PRINT report after executing the **RELEASE** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSRELEA J0783344  DSID   102 LINE 0          COLUMNS 01- 80
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
1PDSMAN           r7.70                               FASTCOPY FACILITY      2
** PDSMFPCPD ** DV21
0FCO105I  RELEASE OUTDD=SYSUT1
PDSMRLSE-1 Space release complete for PRDSS.R2221.FASTCOPY.TESTFILE on DPS003 -
          2 tracks released
PDSM10-6  SECONDARY EXTENT(S) RELEASED  PRDSS.R2221.FASTCOPY.TESTFILE
***** BOTTOM OF DATA *****
```

RENAME (📎)

- Rename PDS members

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES (RENAME) - 01 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSRENAM JOB (SST), 'RENAME',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  RENAME ALL 'TEST*' MEMBERS TO 'ABCD*' USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
EDITDIR OUTDD=SYSUT1
RENAME MEMBER=(TEST*,ABCD*)
***** Bottom of Data *****
```

RENAME – Results

- **SYSPRINT** report after executing the **RENAME** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSRENAM J0416731  DSID    102 LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN          r7.70                               FASTCOPY FACILITY    18
** PDSMFPCPD ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE          05/18/2015   09:20:23  JOBNAME @SS
FCO105I          EDITDIR OUTDD=SYSUT1
FCO105I          RENAME MEMBER=(TEST*,ABCD*)
FCO110I EDITDIR          PDS  OUTDD=SYSUT1  VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO773I TEST001  HAS BEEN RENAMED TO ABCD001
FCO773I TEST002  HAS BEEN RENAMED TO ABCD002
FCO773I TEST003  HAS BEEN RENAMED TO ABCD003
FCO780I EDITDIR PROCESSING COMPLETE
FCO220U 00.00.00.02 SECS ELAPSED  00.00.00.00 TCB CPU  00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE      05/18/2015   09:20:24  CC=00
***** BOTTOM OF DATA *****
```

- Delete all members not beginning with **TEST***

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES (RETAIN) - 01 Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSRETAI JOB (SST), 'RETAIN',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  DELETE ALL MEMBERS NOT BEGINNING WITH TEST*
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
EDITDIR OUTDD=SYSUT1
RETAIN MEMBER=(TEST*)
***** Bottom of Data *****
```

RETAIN – Results

- **SYSPRINT** report after executing the **RETAIN** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSRETAI J0800511 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN r7.70 FASTCOPY FACILITY 26
** PDSMFPCD ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE 05/26/2015 12:53:24 JOBNAME @SS
FCO105I EDITDIR OUTDD=SYSUT1
FCO105I RETAIN MEMBER=(TEST*)
FCO110I EDITDIR PDS OUTDD=SYSUT1 VOL=DPS003 DSN=PRDSS.R2221.FASTCOPY.TE
FCO772I ABCD001 HAS BEEN DELETED
FCO772I ABCD002 HAS BEEN DELETED
FCO780I EDITDIR PROCESSING COMPLETE
FCO220U 00.00.00.02 SECS ELAPSED 00.00.00.00 TCB CPU 00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE 05/26/2015 12:53:24 CC=00
***** BOTTOM OF DATA *****
```

VALIDATE (📎)

- Validate the integrity of a PDS dataset

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES (VALIDATE) - Line 000000 Member in use
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSVALID JOB (SST), 'VALIDATE',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  VALIDATE A PDS DATASET USING FASTCOPY
//*-----*
//FASTCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSIN DD  *
VALIDATE OUTDD=SYSUT1
***** Bottom of Data *****
```

VALIDATE – Results

- **SYSPRINT** report after executing the **VALIDATE** command

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY @SSVALID J0421501  DSID   102 LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                               SCROLL ==> CSR
***** TOP OF DATA *****
PDSMAN          r7.70                               FASTCOPY FACILITY      18
** PDSMFCPC ** DV21
FCO100I PDSMAN FASTCOPY PROCESSING ACTIVE          05/18/2015   10:11:43  JOBNAME @SS
FCO105I  VALIDATE OUTDD=SYSUT1
FCO110I VALIDATING  PDS  OUTDD=SYSUT1  VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
FCO120I BEGINNING SCAN PHASE          10:11:43
FCO150M ** DIRECTORY **          AT TTR 000001-00020B M-CCHH 00-12420000
FCO150M TEST0004 *VERIFIED* AT TTR 000218-000219 M-CCHH 00-12420002
FCO160U MEMBERS          1 TOTAL          1 IN-PLACE          0 MOVED
FCO170U DIR BLKS          100 TOTAL          1 USED          99 UNUSED
FCO180U TRACKS           75 TOTAL          3 USED          72 UNUSED
FCO190U EXTENTS          1 TOTAL          1 USED          0 UNUSED
FCO195U BYTES ON LAST TRACK          25194 USED          33592 UNUSED
FCO200U EXCPS            3 TOTAL          3 INPUT          0 OUTPUT
FCO216U COMPRESS WOULD REGAIN          0 TRACKS 10166 BYTES OF WASTED SPACE
FCO250I NO ERRORS DETECTED IN LIBRARY
FCO210U STORAGE          2048K ALLOC          42K USED
FCO220U 00.00.00.04 SECS ELAPSED 00.00.00.00 TCB CPU 00.00.00.00 SRB CPU
FCO230I PDSMAN FASTCOPY PROCESSING COMPLETE 05/18/2015   10:11:43  CC=00
```


Disable

Overview

- The next few slides will demonstrate how to disable FASTCOPY and use IBM's IEBCOPY

FCOPYOFF (📎)

- Turn off FASTCOPY and use IBM's IEBCOPY

```
Menu Utilities Compilers Help
-----
BROWSE      PRDSS.R2221.FASTCOPY.EXAMPLES(FCOPYOFF) - Line 00000000 Col 001 080
Command ==>                               Scroll ==> CSR
***** Top of Data *****
//@SSCPYOF JOB (SST), 'FCOPYOFF',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
//*-----*
//*  PURPOSE:  DISABLE FASTCOPY
//*-----*
//IEBCOPY EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//SYSUT1 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFILE
//SYSUT2 DD  DISP=SHR,DSN=PRDSS.R2221.FASTCOPY.TESTFIL2
//FCOPYOFF DD  DUMMY
//SYSIN DD  *
COPY INDD=((SYSUT1,R)),OUTDD=SYSUT2
***** Bottom of Data *****
```

FCOPYOFF – Results

- **SYSPRINT** report after coding **FCOPYOFF** DD card and executing **IEBCOPY**

```
Display Filter View Print Options Search Help
-----
SDV21 UTPUT DISPLAY @SSCPYOF J0830697 DSID 102 LINE 0 COLUMNS 02- 81
COMMAND INPUT ==> SCROLL ==> CSR
***** TOP OF DATA *****
IEBCOPY MESSAGES AND CONTROL STATEMENTS
IEB1135I IEBCOPY FMID HDZ2210 SERVICE LEVEL UA74516 DATED 20140814 DFSMS 02.0
IEB1035I @SSCPYOF IEBCOPY 17:46:12 TUE 26 MAY 2015 PARM=''
COPY INDD=((SYSUT1,R)),OUTDD=SYSUT2
IEB1013I COPYING FROM PDS INDD=SYSUT1 VOL=DPS003 DSN=PRDSS.R2221.FASTCOPY.TE
IEB1014I TO PDS OUTDD=SYSUT2 VOL=DPS002 DSN=PRDSS.R2221.FASTCOPY.TE
IEB167I FOLLOWING MEMBER(S) COPIED FROM INPUT DATA SET REFERENCED BY SYSUT1
IEB154I TEST001 HAS BEEN SUCCESSFULLY COPIED
IEB154I TEST002 HAS BEEN SUCCESSFULLY COPIED
IEB154I TEST003 HAS BEEN SUCCESSFULLY COPIED
IEB1098I 3 OF 3 MEMBERS COPIED FROM INPUT DATA SET REFERENCED BY SYSUT1
IEB144I THERE ARE 70 UNUSED TRACKS IN OUTPUT DATA SET REFERENCED BY SYSUT2
IEB149I THERE ARE 199 UNUSED DIRECTORY BLOCKS IN OUTPUT DIRECTORY
IEB147I END OF JOB - 0 WAS HIGHEST SEVERITY CODE
***** BOTTOM OF DATA *****
```

Comments

Items of interest

- FASTCOPY provides limited performance benefit when processing PDSE or program object libraries due to limitations on I/O techniques imposed by the operating system

Links

Links
PDSMAN – EZYEDIT – Introduction
PDSMAN – EZYEDIT – Selection Panel
PDSMAN – EZYEDIT – Dataset List
PDSMAN – EZYEDIT – Member List
PDSMAN – EZYEDIT – SPACE
PDSMAN – EZYEDIT – TSO Command Shell
PDSMAN – Introduction
PDSMAN – Member Versions
PDSMAN – FASTCOPY
PDSMAN – PDSEASY
PDSMAN – PDSM18
PDSMAN – PDSMURPT

Links
<u>ISPF – An Experienced User Shares His Secrets</u>
<u>ISPF – Workstation Agent (WSA)</u>
<u>OPSMVS – OPSLOG Overview</u>
<u>REXX and ISPF – Troubleshooting</u>
<u>SDSF – Beyond the Basics</u>

Conclusion

Final Comments

- PDSMAN provides a wide range of solutions to PDS and PDSE issues users face on a daily basis
 - Saves time and increases productivity
- Every PDSMAN/EZYEDIT release introduces new features and commands which are easy to understand, implement and use
- The tutorials and manuals are exceptional
 - Easy to read and understand
 - Suggest downloading the manuals periodically to obtain new updates

Thank You!

- A special thank you to the CA PDSMAN team for their technical input and assistance
- Suggest checking out the CA PDSMAN community web site at:
[CA – Mainframe Community – PDSMAN](#)
Or
[CA – Mainframe Community](#)
Select '**CA PDSMAN PDS Library Management**' from the '**Products Covered**' section located on the left hand side of the web page

Any questions or comments please contact

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