PDSMAN – PDSMURPT

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PDSMURPT

- This batch utility will provide usage statistics on how the PDSMAN product is currently being used within the lpar or the entire sysplex

- Since the PDSMAN software product is so large, PDSMURPT will help identify which options are being used and which ones are not

- Usage statistics will display
  - Summary and recorded statistical information
  - PDSMAN components, facilities, services and utilities

- Note
  - This utility is for the systems programmer who installs and maintains PDSMAN, all others can disregard this slide deck

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PDSMURPT

- The PDSMURPT utility was introduced on September 22, 2011, with maintenance RO33883

- Below are the PTFs needed:

PTF	Year	Month/Day
RO58121	2013	April 29
RO50409	2012	September 24
RO46743	2012	July 11
RO45849	2012	May 16
RO42345	2012	March 12
RO33883	2011	September 22

- The next few slides provide a general high level overview of the PDSMURPT utility and how it works

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Agenda

Topic	Description
Customization	Control writing statistics to the database
JCL	JCL used to execute PDSMURPT
Statements	SYSIN statements, syntax and parameters
Examples	JCL examples
Reports	Usage statistics reports
Links	PDSMAN and other slides decks
Conclusion	Final comments

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Attachments (📎)

- The following attachments are included in this document:

File	Type
Page 26 – PDSMURPT – All Reports	TXT
Page 27 – PDSMURPT – Single Report	TXT
Page 28 – PDSMURPT – Multiple Reports	TXT
Page 31 – PDSMURPT – SUMMARY	TXT
Page 35 – PDSMURPT – ARCHUSE	TXT
Page 38 – PDSMURPT – AUDUSE	TXT
Page 41 – PDSMURPT – COMMUSE	TXT
Page 44 – PDSMURPT – COMPUSE	TXT
Page 45 – PDSMURPT – DATAPER	TXT
Page 48 – PDSMURPT – EZYUSE	TXT
Page 49 – PDSMURPT – FCOUSE	TXT
Page 52 – PDSMURPT – LLAEUSE	TXT

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Attachments (📎)

- The following attachments are included in this document:

File	Type
Page 55 – PDSMURPT – LSMUSE	TXT
Page 57 – PDSMURPT – PERFUSE	TXT
Page 58 – PDSMURPT – PMONUSE	TXT
Page 60 – PDSMURPT – PTUSE	TXT

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Attachments (📎)

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

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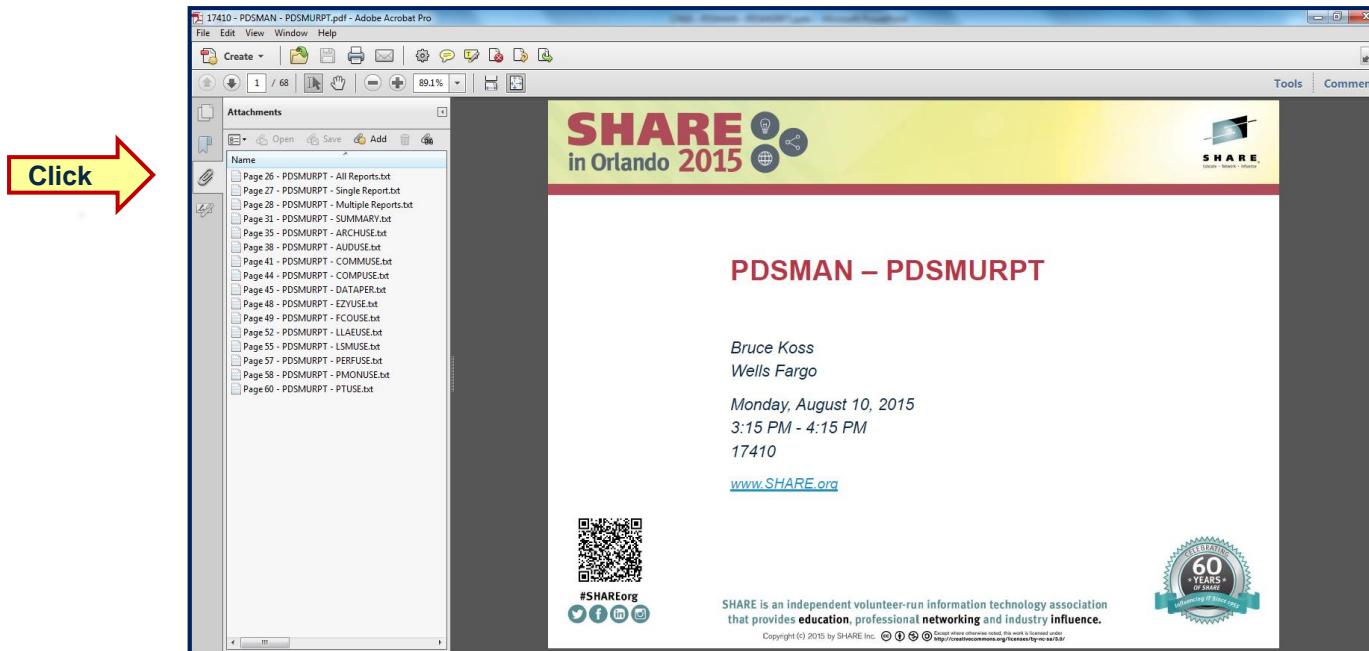
Disclaimers

- 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
    - Partitioned Resource Monitoring User Guide
      - Chapter 11: PDSMAN Usage Statistics

Customization

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Overview

- PDSMAN usage data is collected and recorded by the PDSMAN usage statistics recording service

  - This service executes as part of the Partitioned Resource Monitoring (PDSMPMON) subtask in the PDSMAN address space

    - A usage statistics recording session starts automatically when the PDSMPMON subtask initializes
    - Usage statistics are written to the PDSMAN database periodically and immediately before the session terminates

- To control usage statistics recording, specify a $USESTATS initialization control statement in the PDSMAN parameter deck (PDSMINIT)

  - Coding $USESTATS is <u>not</u> required, since PDSMAN usage statistics recording is enabled by default

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$USESTATS

- Syntax:
  - $USESTATS RECORD=[Y|N]
              HISTORY=[Y|N]
              RETAINHIST=[####]

- The control statement parameters are as follows:

Parameter	Description
RECORD	Enables or disables Usage Statistics Recording (Y or N) • Default is Y
HISTORY	Controls the writing of usage statistics to the PDSMAN database (Y or N) • Default is Y
RETAINHIST	Specifies how long usage statistics for this system are retained in the PDSMAN database • Default is 365 days
DIAGLEVEL	Sets the internal diagnostic level • Only use at the direction of CA PDSMAN Technical Support/Client Services

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JCL

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JCL

- The JCL below is used to obtain PDSMAN usage statistics

```
//PDSMURPT EXEC PGM=PDSMURPT
//PDSMRPT DD SYSOUT=class
//SYSIN DD *
```

JCL – DD Cards

- Description of DD cards

DD	Description
PDSMRPT	Defines an output report dataset to which the reports are written • This file requires DCB attributes of RECFM=FBA and LRECL=133
SYSIN	Defines an optional dataset or in-stream source containing utility control statements • This file requires DCB attributes of RECFM=FB and LRECL=80

JCL – Return Codes

- PDSMURPT return codes and their meaning

RC	Meaning
00	Normal completion
04	A warning was produced while generating a requested report • Review the report output for the cause of the warning and correct the condition if necessary • The utility continues processing the next report request
08	An error occurred while validating the input control statements or while generating a requested report • Review the output and correct the cause of the error • The utility terminates without processing any additional report requests
12	An internal error occurred while generating a requested report • This type of error is not usually user-correctable • Retain the report output for additional diagnosis

SYSIN
Statements

SELECT

- The SELECT statement is used to select PDSMAN usage statistics records for one or more reports
    - Selected records are used for all subsequent reports until another SELECT statement is encountered

- If no SELECT statements are specified
    - All available active usage statistics records are selected for the lpar where the program executed

- Syntax:
    - SELECT [STARTDATE=date]
                    [,STARTTIME=time]
                    [,ENDDATE=date]
                    [,ENDTIME=time]
                    [,SYS=sysids]
                    [,XSYS=sysids]
                    [,SOURCE=ALL|ACTIVE|HISTORY]

SELECT – Parameters

Parameter	Description
STARTDATE	Specifies the starting date for the selected records • If this parameter is <u>not</u> specified, the date of the oldest extracted usage statistics record is used, effectively selecting all records
STARTTIME	Specifies the starting time for the selected records • The time can be specified in the HH:MM:SS or HHMMSS format • The minute (MM) and second (SS) parts of the parameter are optional and default to zero if not specified • If this parameter is <u>not</u> specified, a value of 00:00:00 is used
ENDDATE	Specifies the ending date for the selected records • If this parameter is <u>not</u> specified, the current date is used
ENDTIME	Specifies the ending time for the selected records • The time can be specified in the HH:MM:SS or HHMMSS format • The minute (MM) and second (SS) parts of the parameter are optional and default to zero if <u>not</u> specified • If this parameter is <u>not</u> specified, the current time is used

SYS	Specifies an SMF system ID or pattern used to select records for reporting
	
	  sysid A four-character SMF system ID or pattern
	        • Wild card characters can be used (+ and *); ex: SYS=* to match all systems
	
	• Multiple system IDs or patterns can be specified on a single SYS parameter
	  • For example: SYS=(SYSA,SYSB,SYSC)
	• If this parameter is <u>not</u> specified, only records created by the system on which the reporting program is executing are selected

SELECT – Parameters

Parameter	Description

XSYS	Specifies an SMF system ID or pattern used to <u>exclude</u> previously selected records from reporting
	
	    sysid A four-character SMF system ID or pattern
	          • Wild card characters can be used (+ and *)
	
	• Multiple system IDs or patterns can be specified on a single SYS parameter
	    • For example: XSYS=(SYSD,SYSE,SYSF)
	• If this parameter is <u>not</u> specified, all of the previously selected records are used

SOURCE	Specifies the type of usage statistics selected for reporting
	
	    ACTIVE Usage statistics from the current recording session on the system on which the report is being generated are selected
	
	    HISTORY Usage statistics from specified systems are selected from the PDSMAN database
	          • Since the database is updated periodically during a Usage Statistics recording session, historical records selected from the database may lag the current date and time by up to five minutes
	
	    ALL Both active and history records are selected (default)

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SELECT – STARTDATE and ENDDATE

- The following date formats are valid for STARTDATE and ENDDATE

Format	Description
yy/mm/dd or yyyy/mm/dd	Gregorian date
yyddd, yy.ddd or yyyyy.ddd	Julian date
TODAY-[nn, nnM or nnY]	Relative date • Where nn is a relative number of days, months (M) or years (Y), respectively, prior to the current date • A single asterisk can be specified in place of the parameter TODAY when using this format

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REPORT

- The REPORT statement is used to specify the individual reports to be produced

- Syntax:
  - REPORT [NAME=name]
              [,LEVEL=SUMMARY|NORMAL|DETAIL]

- Wild card characters can be specified in the NAME parameter
  - The plus sign (+)
    - Represents a single character
  - The asterisk (*)
    - Represents a string of characters

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REPORT – Parameters

Parameter	Description
NAME	Specifies the name of the usage statistics report to be produced • A pattern can also be specified • A warning message is displayed when the name is <u>not</u> a valid report • A single asterisk produces all available reports

LEVEL	Specifies the relative level of detail at which a report is generated
	• The actual information reported for each level setting varies by report
	• Not all reports make use of the level specification
	
	SUMMARY A summary report is produced
	        • Includes less information
	
	NORMAL A normal report is produced
	        • This level is the default
	
	DETAIL A detailed report is produced
	        • Includes more information

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REPORT – NAME

- The following are valid report names:

Name	Description
SUMMARY	PDSMAN Facilities Usage Summary
ARCHUSE	Archiving and Recovery Facilities Usage
AUDUSE	Auditing Facilities Usage
COMMUSE	PDSMAN Common Services and Facilities Usage
COMPUSE	Comparison Facilities Usage
DATAPER	Usage Statistics Recording Data Period Information
EZYUSE	EZYEDIT ISPF Productivity Platform Usage
FCOUSE	FastCopy Facility Usage
LLAEUSE	LLA Extensions Facility Usage
LSMUSE	Library Space Management Usage
PERFUSE	Performance Facilities Usage
PMONUSE	Partitioned Resource Monitoring Facility Usage
PTUSE	Productivity Tools Facility Usage

JCL
Examples

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Overview

- The next few slides will demonstrate how to code PDSMURPT

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PDSMURPT – ALL Reports (📎)

- Generate all of the usage statistics reports

```
   Menu   Utilities   Compilers   Help
 ---------------------------------------------------------------------------
 BROWSE     PRDSS.R2221.PDSMURPT.EXAMPLES(PDSMURP1) -  Line 00000000 Col 001 080
 Command ===>                                             Scroll ===> CSR
 ******************************** Top of Data ********************************
 //@SSPDSM1 JOB (SST),'PDSMURPT',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
 //*-----------------------------------------------------------------*
 //*  PURPOSE:  ALL USAGE STATISTICS REPORTS
 //*-----------------------------------------------------------------*
 //REPORT    EXEC PGM=PDSMURPT
 //PDSMRPT   DD   SYSOUT=*
 //SYSIN     DD   *
 REPORT NAME=*                                /* GENERATE ALL REPORTS */
 ****************************** Bottom of Data *******************************
```

PDSMURPT – Single Report (📎)

- Generate Partitioned Resource Monitoring usage statistics

```
   Menu   Utilities   Compilers   Help
 -----------------------------------------------------------------------
 BROWSE     PRDSS.R2221.PDSMURPT.EXAMPLES(PDSMURP3) -  Line 00000000 Col 001 080
 Command ===>                                             Scroll ===> CSR
 ******************************** Top of Data ********************************
 //@SSPDSM3 JOB (SST),'PDSMURPT',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
 //*-------------------------------------------------------------------*
 //*  PURPOSE:  PARTITIONED RESOURCE MONITORING STATS FOR LAST 2 DAYS
 //*-------------------------------------------------------------------*
 //REPORT    EXEC PGM=PDSMURPT
 //PDSMRPT   DD   SYSOUT=*
 //SYSIN     DD   *
   SELECT  STARTDATE=TODAY-2            /* SELECT DATA FROM LAST 2 DAYS */
   REPORT  NAME=PMONUSE                 /* REPORT PMON USAGE            */
 ****************************** Bottom of Data ******************************
```

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PDSMURPT – Multiple Reports (📎)

- Generate both the summary Partitioned Resource Monitoring and detailed input usage statistics records being used

```
   Menu   Utilities   Compilers   Help
 ------------------------------------------------------------------------
 BROWSE     PRDSS.R2221.PDSMURPT.EXAMPLES(PDSMURP2)  -  Line 00000000 Col 001 080
 Command ===>                                               Scroll ===> CSR
 ******************************* Top of Data ********************************
 //@SSPDSM2 JOB (SST),'PDSMURPT',MSGCLASS=T,CLASS=R,NOTIFY=&SYSUID
 //*----------------------------------------------------------------*
 //* PURPOSE:  PMONUSE SUMMARY AND DATAPER DETAIL WITH START DATE/TIME
 //*----------------------------------------------------------------*
 //REPORT    EXEC PGM=PDSMURPT
 //PDSMRPT   DD   SYSOUT=*
 //SYSIN     DD   *
  SELECT  STARTDATE=2015/07/09,           /* START DATE SPECIFICATION */
          STARTTIME=12:00                 /* START TIME SPECIFICATION */
  REPORT NAME=PMONUSE,                    /* REPORT PMON USAGE        */
          LEVEL=SUMMARY                   /* SUMMARY LEVEL ONLY       */
  REPORT NAME=DATAPER,                    /* DATA PERIOD REPORT       */
          LEVEL=DETAIL                    /* DETAIL LEVEL ONLY        */
 ****************************** Bottom of Data *******************************
```

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Reports

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Overview

- The next few slides display all the usage statistics reports

Report	Description
SUMMARY	PDSMAN Facilities Usage Summary
ARCHUSE	Archiving and Recovery Facilities Usage
AUDUSE	Auditing Facilities Usage
COMMUSE	PDSMAN Common Services and Facilities Usage
COMPUSE	Comparison Facilities Usage
DATAPER	Usage Statistics Recording Data Period Information
EZYUSE	EZYEDIT ISPF Productivity Platform Usage
FCOUSE	FastCopy Facility Usage
LLAEUSE	LLA Extensions Facility Usage
LSMUSE	Library Space Management Usage
PERFUSE	Performance Facilities Usage
PMONUSE	Partitioned Resource Monitoring Facility Usage
PTUSE	Productivity Tools Facility Usage

PDSMURPT – SUMMARY (📎)

- PDSMAN Facilities Usage Summary report

```
Report Name    : PDSMAN Facilities Usage Summary (SUMMARY)
Time Period    : Start of Usage Data  To Current Date/Time
Data Sources   : Active Data, Historical Data (Database)
Selected Systems: DV26
$USESTATS Rule : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

PDSMAN Feature Usage Summary                          Used    Time Stamp
  LLA Extensions and Performance Facilities (Feature A) ......  Yes    07/10/2015 at 03:14:11
  Auditing and Comparison Facilities      (Feature B) ......  Yes    07/10/2015 at 03:14:10
  FastCopy and Library Space Reuse        (Feature C) ......  Yes    07/10/2015 at 12:44:55
  Member Archiving and Recovery Facilities (Feature D) ......  No
  EZYEDIT and Productivity Tool Facilities (Feature E) ......  Yes    07/10/2015 at 12:44:55
  PDSMAN Common Services and Facilities    (Common) ........  Yes    07/10/2015 at 12:45:05

PDSMAN Component Usage Summary                        Used    Time Stamp
  A - LLA Extensions Facilities .............................  Yes    07/10/2015 at 03:14:11
  A - Performance    Facilities .............................  No
  B - Auditing   Facilities .................................  Yes    07/10/2015 at 03:14:07
  B - Comparison Facilities .................................  Yes    07/10/2015 at 03:14:10
  C - FastCopy IEBCOPY Replacement ..........................  Yes    07/10/2015 at 12:44:55
  C - Library  Space Reuse ..................................  No
  D - Member Archiving Facilities ...........................  No
  D - Member Recovery  Facilities ...........................  Yes    07/10/2015 at 03:14:11
  E - EZYEDIT ISPF Productivity Platform ....................  Yes    07/10/2015 at 12:44:55
  E - Productivity Tool Facilities ..........................  Yes    07/10/2015 at 10:59:51
  * - Partitioned Resource Monitoring .......................  No
  * - PDSMAN Subtasks and Services ..........................  Yes    07/10/2015 at 12:45:05
```

- PDSMAN Facilities Usage Summary report

```
LLA Extensions (Feature A)                                Used    Time Stamp
  LLA Auto-Update .........................................  Yes    06/25/2015 at 08:59:13
  LLA Synchronization Management ..........................  No
  Extended LLA Operator Commands ..........................  No
  LLA Monitoring ..........................................  Yes    07/07/2015 at 10:52:40
  Batch Reporting and Control .............................  Yes    07/10/2015 at 03:14:11

Performance Facilities (Feature A)                        Used    Time Stamp
  Access Statistics Recording .............................  No
  Dynamic BLDL ............................................  No
  Program Fetch Optimization ..............................  No
  FastStow Facility .......................................  No

Auditing Facilities (Feature B)                           Used    Time Stamp
  Member Control Information Recording ....................  No
  Member Update and Access Audit Trails (SMF) .............  No
  Member Level Update Security ............................  No
  Member Level Access Security ............................  No
  Library Integrity (Enqueue Checking) ....................  No
  Library Integrity (Enqueue Performed) ...................  Yes    02/18/2015 at 14:14:45
  Source to Executable Information Recording ..............  Yes    07/10/2015 at 03:14:07
  Member Locking ..........................................  No

Comparison Facilities (Feature B)                         Used    Time Stamp
  Member  Comparison and Update Control ...................  Yes    07/10/2015 at 03:14:10
  Library Comparison ......................................  Yes    04/08/2015 at 09:53:53
  Remote  Data Comparison .................................  Yes    07/10/2015 at 03:14:10
```

PDSMURPT – SUMMARY (📎)

- PDSMAN Facilities Usage Summary report

```
FastCopy IEBCOPY Replacement Facility (Feature C)         Used    Time Stamp
   IEBCOPY and FastCopy Operations ...........................  Yes     07/10/2015 at 12:44:55
   Library Selection Extensions ..............................  Yes     07/10/2015 at 03:14:00
   Member  Selection Extensions ..............................  Yes     07/10/2015 at 03:14:00
   Library Space Management Extensions .......................  Yes     05/12/2015 at 12:25:45
   Directory Space Management Extensions .....................  Yes     07/10/2015 at 03:14:00
   EDITDIR Member-Related Extensions .........................  Yes     07/10/2015 at 03:14:00
   Other Extensions ..........................................  Yes     07/10/2015 at 03:14:04

Library Space Reuse Facility (Feature C)                  Used    Time Stamp
   Library Space Reuse Facility ..............................  No
   FastStow Facility .........................................  No

Member Archiving Facilities (Feature D)                   Used    Time Stamp
   Last Reference Date Recording .............................  No
   Member Purging ............................................  No
   Member Archiving and Backup System ........................  No

Member Recovery Facilities (Feature D)                    Used    Time Stamp
   Multiple Member Versions ..................................  No
   Library  Member  Journaling ...............................  No

EZYEDIT ISPF Productivity Platform (Feature E)            Used    Time Stamp
   EZYEDIT Displays ..........................................  Yes     07/10/2015 at 12:44:55
   EZYEDIT Other Functions ...................................  Yes     07/10/2015 at 09:11:29
```

PDSMURPT – SUMMARY (📎)

- PDSMAN Facilities Usage Summary report

```
Productivity Tool Facilities (Feature E)              Used    Time Stamp
   String Scan and Replace Utility ...........................  Yes    07/10/2015 at 10:59:51
   Library Space Monitoring ..................................  No
   Directory Space Monitoring ................................  No
   Duplicate Member Reporting ................................  Yes    07/10/2015 at 03:14:08
   Descriptive Member Titles .................................  Yes    07/10/2015 at 03:14:08
   TSO Command Processors ....................................  Yes    04/30/2015 at 10:18:07
   Other Productivity Tools ..................................  Yes    07/10/2015 at 03:14:08

Partitioned Resource Monitoring Facility              Used    Time Stamp
   Partitioned Resource Status Monitored .....................  No
   Partitioned Resource Status Viewed ........................  No

PDSMAN Subtasks and Services Usage                    Used    Time Stamp
   PDSMMCPU - Cross-System Communications Subtask ............  Yes    07/10/2015 at 12:45:05
   PDSMLMON - LLA Monitoring Subtask .........................  Yes    07/05/2015 at 00:52:14
   PDSMPMON - Partitioned Resource Monitoring Subtask ........  Yes    07/05/2015 at 00:52:09
   PDSMLRDR - Last Reference Date Recording Subtask ..........  Yes    07/05/2015 at 00:52:10
   PDSMQMDB - Database Queue Manager Subtask .................  Yes    07/05/2015 at 00:52:11
   PDSMDB   - Database Server Address Space ..................  Yes    07/10/2015 at 12:42:15
   PDSMHCHK - PDSMAN Health Check Services ...................  Yes    07/05/2015 at 00:52:16
   PDSMPUSE - PDSMAN Usage Statistics Recording .............. Yes    07/05/2015 at 00:52:09
```

PDSMURPT – ARCHUSE (📎)

- Archiving and Recovery Facilities Usage report

```
Report Name     : Archiving and Recovery Facilities Usage (ARCHUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Last Reference Date Recording Facility Usage           Count   Pct.   Rate/day   Time Stamp
  Last Reference Dates Recorded for Program Objects ..........    0    n/a       0.00
  Last Reference Dates Recorded for All Other Members .......     0    n/a       0.00
  ------------------------------------------------------    --------   ----
  TOTAL Last Reference Dates Recorded .......................     0    n/a

Last Reference Date Recording Request Processing       Count   Pct.   Rate/day   Time Stamp
  Handled by Accessing Task .....................................    0    n/a       0.00
  Handled by Database Manager (Program Objects) ..............     0    n/a       0.00
  Handled by PDSMAN Address Space ...........................     0    n/a       0.00
  ------------------------------------------------------    --------   ----
  TOTAL Last Reference Date Recording Requests ..............     0    n/a

LRDR Requests Processed by the PDSMAN Address Space    Count   Pct.   Rate/day   Time Stamp
  Last Reference Date Request Successful .....................     0    n/a       0.00
  Last Reference Date Request Bypassed .......................     0    n/a       0.00
  Last Reference Date Request In Error .......................     0    n/a       0.00
  ------------------------------------------------------    --------   ----
  TOTAL LRDR Requests Processed by the Address Space .........     0    n/a
```

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PDSMURPT – ARCHUSE (📎)

- Archiving and Recovery Facilities Usage report

```
Members Purged Based on Last Reference Date               Count   Pct.   Rate/day   Time Stamp
   Members Purged using PDSM02 ...............................     0    n/a      0.00
   Members Purged using FastCopy .............................     0    n/a      0.00
   ----------------------------------------------------------  --------  ----
   TOTAL Members Purged Based on Last Reference Date ..........     0    n/a

LLA Updates Related to Last Reference Date Recording      Count   Pct.   Rate/day   Time Stamp
   LLA Update Performed ......................................     0    n/a      0.00
   LLA Update Not Performed ..................................     0    n/a      0.00
   ----------------------------------------------------------  --------  ----
   TOTAL LLA Updates Related to Last Reference Dates ..........     0    n/a

Multiple Member Version Support Facility Usage            Count   Pct.   Rate/day   Time Stamp
   Multiple Member Version Created ...........................     0     0%      0.00
   Multiple Member Version Utility (PDSM32) Executions .......     4   100%      0.01   07/08/2014 at 23:29:44
   ----------------------------------------------------------  --------  ----
   TOTAL Multiple Member Version Support Operations ..........     4   100%

Library Member Journaling Facilities Usage               Count   Pct.   Rate/day   Time Stamp
   Current  Member Version Recovery Journal Operations .......     0    n/a      0.00
   Previous Member Version Recovery Journal Operations .......     0    n/a      0.00
   ----------------------------------------------------------  --------  ----
   TOTAL Member Journaling Operations ........................     0    n/a

Member Capture Utility (PDSM03) Usage                    Count   Pct.   Rate/day   Time Stamp
   Executions to Capture Members for Archiving ...............     0    n/a      0.00
   Executions to Capture Members for Recovery ................     0    n/a      0.00
   ----------------------------------------------------------  --------  ----
   TOTAL Member Capture Utility (PDSM03) Usage ...............     0    n/a
```

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PDSMURPT – ARCHUSE (📎)

- Archiving and Recovery Facilities Usage report

```
Archiving and Recovery-Related Utility Program Usage          Count   Pct.   Rate/day   Time Stamp
 Library Maintenance Utility               (PDSM02) .......       0    0%      0.00
 Member  Capture Utility                   (PDSM03) .......       0    0%      0.00
 Backup  Maintenance Utility               (PDSM04) .......       0    0%      0.00
 Library Member Restore Utility            (PDSM05) .......       0    0%      0.00
 Backup  File Maintenance Utility          (PDSM05DR) .....       0    0%      0.00
 Maintenance Control Facility              (PDSM06) .......       0    0%      0.00
 Report Last Reference Date Information     (PDSM07) .......    7,080  >99%    18.87     07/10/2015 at 03:14:11
 Update Member Control Information          (PDSM12) .......       0    0%      0.00
 Update Member Control Information User Exit (PDSM12EX) .....      0    0%      0.00
 Multiple Member Version Utility           (PDSM32) .......       4   < 1%     0.01     07/08/2014 at 23:29:44
 Database Maintenance and Reporting Utility (PDSM38) .......       0    0%      0.00
 ------------------------------------------------------------   --------  ----
 TOTAL Archiving and Recovery-Related Utility Usage .........   7,084   100%
```

PDSMURPT – AUDUSE (📎)

- Auditing Facilities Usage report

```
Report Name     : Auditing Facilities Usage (AUDUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Member Control Information Recording Facility Usage         Count   Pct.   Rate/day   Time Stamp
  Member Control Information Recorded - Source ...............    0    n/a      0.00
  Member Control Information Recorded - Load .................    0    n/a      0.00
  -----------------------------------------------------------  --------  ----
  TOTAL Member Control Information Recording Operations ......    0    n/a

Member Update and Access Audit Trail Facility Usage         Count   Pct.   Rate/day   Time Stamp
  Update Audit Trail Records Written to SMF ..................    0    n/a      0.00
  Access Audit Trail Records Written to SMF ..................    0    n/a      0.00
  -----------------------------------------------------------  --------  ----
  TOTAL  Audit Trail Records Written to SMF ..................    0    n/a

Member Level Update Security Facility Usage                 Count   Pct.   Rate/day   Time Stamp
  Member Updates Allowed ....................................    0    n/a      0.00
  Member Updates Allowed with Warning Message ...............    0    n/a      0.00
  Member Updates Prevented ..................................    0    n/a      0.00
  -----------------------------------------------------------  --------  ----
  TOTAL Member Updates Eligible for Securing ................    0    n/a
```

PDSMURPT – AUDUSE (📎)

- Auditing Facilities Usage report

```
Member Level Access Security Facility Usage            Count   Pct.   Rate/day   Time Stamp
   Member Accesses Allowed ......................           0   n/a       0.00
   Member Accesses Allowed with Warning Message ...         0   n/a       0.00
   Member Accesses Prevented ....................           0   n/a       0.00
   ------------------------------------------------    --------  ----
   TOTAL Member Accesses Eligible for Securing ...         0   n/a

Library Integrity Facility Enqueue Checking Results    Count   Pct.   Rate/day   Time Stamp
   No Action Taken (Update Properly Protected) ...         0   n/a       0.00
   Warning Message Issued .......................         0   n/a       0.00
   Warning Message Issued and Job Terminated ....         0   n/a       0.00
   ------------------------------------------------    --------  ----
   TOTAL Enqueue Checks Performed ...............         0   n/a

Library Integrity Facility Enqueues Performed          Count   Pct.   Rate/day   Time Stamp
   Enqueues Performed for IEBCOPY or related utilities ...  0   n/a       0.00
   Enqueues Performed for other utility programs .....      0   n/a       0.00
   ------------------------------------------------    --------  ----
   TOTAL Library Integrity Facility Enqueues ....         0   n/a

Source-to-Executable Version Information Recording Usage  Count        Rate/day   Time Stamp
   PDSMAN Source Version Stamped in Object .......         0           0.00
   PDSMAN Source Version Reported (PDSM28) .......     1,124           2.99       07/10/2015 at 03:14:03

Member Locking Facility Usage                          Count   Time Stamp
   Rules Defining Mixed Libraries ...............         0
   Member Set to PROD Status (PROD Command Usage) .      0
   Member Set to TEST Status (TEST Command Usage) .      0
```

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PDSMURPT – AUDUSE (📎)

- Auditing Facilities Usage report

```
Auditing-Related Utility Program Usage                    Count      Rate/day   Time Stamp
  Report Audit Information from SMF          (PDSM17) ......      0       0.00
  Report Source to Executable Cross References (PDSM28) ......  1,124      2.99    07/10/2015 at 03:14:03
  Report Member Control Information          (PDSM07) ......  7,080     18.87    07/10/2015 at 03:14:11
  Update Member Control Information          (PDSM12) ......      0       0.00
  Update Member Control Information User Exit (PDSM12EX) ....      0       0.00
  $UTILITY Program Front-End Operations      (PDSM01) ......      0       0.00
```

PDSMURPT – COMMUSE (📎)

- PDSMAN Common Services and Facilities Usage report

```
Report Name     : PDSMAN Common Services and Facilities Usage (COMMUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Note:    53 data records excluded due to insufficient level

PDSMAN Address Space Information                    Count       Rate/day   Time Stamp
  Operator Commands Received ..................    0            0.00
  Reinitializations Performed ................     0            0.00

PDSMAN Subtasks and Services Usage        (1 Initializations)   Count   Pct.   Rate/day   Time Stamp
  PDSMMCPU - Cross-System Communications Subtask ............     1     100%     0.00      07/10/2015 at 11:53:39
  PDSMLMON - LLA Monitoring Subtask .........................     1     100%     0.00      07/05/2015 at 21:24:37
  PDSMPMON - Partitioned Resource Monitoring Subtask ........     1     100%     0.00      07/05/2015 at 21:24:34
  PDSMLRDR - Last Reference Date Recording Subtask ..........     1     100%     0.00      07/05/2015 at 21:24:35
  PDSMQMDB - Database Queue Manager Subtask .................     1     100%     0.00      07/05/2015 at 21:24:35
  PDSMDB   - Database Server Address Space ..................     1     100%     0.00      07/10/2015 at 11:49:41
  PDSMHCHK - PDSMAN Health Check Services ...................     1     100%     0.00      07/05/2015 at 21:24:40
  PDSMPUSE - PDSMAN Usage Statistics Recording ..............     1     100%     0.00      07/05/2015 at 21:24:34

Address Space and Subtask Cycle Counts             Count        Rate/day   Time Stamp
  PDSMMCPU - Cross-System Communications Subtask ............   34,574       92.18     07/10/2015 at 11:53:39
  PDSMLMON - LLA Monitoring Subtask .........................   2313228    6,167.54    07/10/2015 at 11:53:39
  PDSMPMON - Partitioned Resource Monitoring Subtask ........   2313493    6,168.24    07/10/2015 at 11:53:31
  PDSMLRDR - Last Reference Date Recording Subtask ..........   34,576       92.18     07/10/2015 at 11:53:31
  PDSMQMDB - Database Queue Manager Subtask .................   3239530    8,637.25    07/10/2015 at 11:53:31
  PDSMDB   - Database Server Address Space ..................   109,465     291.85     07/10/2015 at 11:49:41
```

PDSMURPT – COMMUSE (📎)

- PDSMAN Common Services and Facilities Usage report

```
Cross-System Communications Cycle Statistics          Count   Pct.   Rate/day   Time Stamp
   Process  - Work Performed ...................   10,640    31%     28.36   07/10/2015 at 11:53:11
   FastPath - Work Not Required ...............   23,934    69%     63.81   07/10/2015 at 11:53:39
   ------------------------------------------   --------     0%      0.00
   TOTAL Cross-System Communications Cycles ...   34,574   100%

Cross-System Communications Letter Statistics         Count   Pct.   Rate/day   Time Stamp
   Incoming - Letters Received from Remote Systems ...   22,716    50%     60.56   07/10/2015 at 11:53:11
   Outgoing - Letters Sent to Other Remote Systems ...   22,713    50%     60.55   07/10/2015 at 11:53:11
   ------------------------------------------   --------   ----
   TOTAL Cross-System Communications Letters .....   45,429   100%

Cross-System Communications Other Information         Count
   Average Number of Communicating Systems ......    4.00
   Average Number of Cross-System Data Sets .....  136.00

PDSMAN Database Server Usage Counts                   Count   Pct.   Rate/day   Time Stamp
   Member-Related Recording .....................      11   100%      0.02   05/18/2015 at 15:13:56
   ------------------------------------------   --------   ----
   TOTAL PDSMAN Database Server Usage ..........      11   100%

PDSMAN Database Operations                            Count   Pct.   Rate/day   Time Stamp
   Server Access Operations .....................    1,518     1%      4.04   07/10/2015 at 11:41:50
   Server Update Operations .....................  107,969    99%    287.86   07/10/2015 at 11:49:41
   Direct Access Operations .....................        0     0%      0.00
   Direct Update Operations .....................        0     0%      0.00
   ------------------------------------------   --------   ----
   TOTAL PDSMAN Database Operations ............  109,487   100%
```

PDSMURPT – COMMUSE (📎)

- PDSMAN Common Services and Facilities Usage report

```
PDSMAN Health Checks Performed                         Count   Pct.   Rate/day   Time Stamp
   Health Check Successful ...................................    553   100%      1.47    07/10/2015 at 11:24:41
   Health Check Exception ....................................      0    0%      0.00
   ------------------------------------------------------    --------   ----
   TOTAL PDSMAN Health Checks Performed ......................    553   100%
```

PDSMURPT – COMPUSE (📎)

- Comparison Facilities Usage report

```
Report Name      : Comparison Facilities Usage (COMPUSE)
Time Period      : Start of Usage Data  To Current Date/Time
Data Sources     : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule   : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Comparison Facilities Usage Summary                        Count   Pct.   Rate/day   Time Stamp
  Member Compare and Update Control Facility (PDSM33) ........  1,327   54%      3.53   07/10/2015 at 03:14:10
  Library Compare Facility          (PDSM36) ........     25    1%      0.06   06/09/2015 at 18:13:09
  Remote Data Compare Facility      (PDSM37) ........  1,124   45%      2.99   07/10/2015 at 03:14:10
  ------------------------------------------------------------  --------  ----
  TOTAL Comparison Facilities Usage .........................  2,476  100%

Member Compare and Update Control Facility Usage           Count          Rate/day   Time Stamp
  Total Executions .........................................  1,327           3.53   07/10/2015 at 03:14:10
  Compare and Diff Operations ..............................  1,310           3.49   07/10/2015 at 03:14:10
  Update Control (Change File) Operations ..................      0           0.00

Library Compare Facility (PDSM36) Usage                    Count   Pct.   Rate/day   Time Stamp
  Total Executions .........................................     25   100%     0.06   06/09/2015 at 18:13:09
  Subsequent Calls to Member Comparison (PDSM33) ...........     11    44%     0.02   10/05/2014 at 18:46:57

Remote Data Comparison Facility (PDSM37) Usage             Count          Rate/day   Time Stamp
  Total Executions .........................................  1,124           2.99   07/10/2015 at 03:14:10
  Generate Operations (Generate or GenComp) ................  2,248           5.99   07/10/2015 at 03:14:10
  Compare  Operations (Compare  or GenComp) ................  1,124           2.99   07/10/2015 at 03:14:10
```

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PDSMURPT – DATAPER (📎)

- Usage Statistics Recording Data Period Information report

```
Report Name     : Usage Statistics Recording Data Period Information (DATAPER)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365


Recording Data Periods for System DV21
  System  Start Date/Time       End Date/Time          Duration     Data Source  Location     Lvl  Comments
  ------  --------------------  --------------------  -----------   -----------  -----------  ---  ------------------------------
  DV21    06/28/2014  21:27:47  07/05/2014  21:02:57   6.23:35:10   CheckPoint   Database      2
  DV21    07/05/2014  21:40:55  07/12/2014  21:16:46   6.23:35:51   Historical   Database      2
  DV21    07/12/2014  21:53:54  07/19/2014  21:08:05   6.23:14:11   Historical   Database      2
  DV21    07/19/2014  22:06:56  07/26/2014  21:15:34   6.23:08:38   Historical   Database      2
  DV21    07/26/2014  21:48:31  08/02/2014  21:02:09   6.23:13:38   Historical   Database      2
  DV21    08/02/2014  21:44:24  08/09/2014  21:11:48   6.23:27:24   Historical   Database      2
  DV21    08/09/2014  21:35:44  08/09/2014  22:15:19     00:39:35   Historical   Database      2
  DV21    08/09/2014  22:40:19  08/16/2014  21:00:26   6.22:20:07   CheckPoint   Database      2
  DV21    08/16/2014  21:37:38  08/16/2014  22:17:29     00:39:51   Historical   Database      2
  DV21    08/16/2014  22:35:48  08/23/2014  21:01:34   6.22:25:46   Historical   Database      2
  DV21    08/23/2014  21:26:49  08/30/2014  21:01:37   6.23:34:48   Historical   Database      2
  DV21    08/30/2014  21:58:31  09/06/2014  21:08:11   6.23:09:40   Historical   Database      2
  DV21    09/06/2014  21:38:09  09/13/2014  21:04:22   6.23:26:13   Historical   Database      2
  DV21    09/13/2014  21:45:18  09/20/2014  21:03:03   6.23:17:45   Historical   Database      2
  DV21    09/20/2014  21:35:12  09/27/2014  21:05:29   6.23:30:17   CheckPoint   Database      2
  DV21    09/27/2014  21:56:41  10/11/2014  21:01:12  13.23:04:31   Historical   Database      2
  DV21    10/11/2014  21:33:55  10/18/2014  21:01:28   6.23:27:33   Historical   Database      2
  DV21    10/18/2014  21:22:56  10/25/2014  23:05:25   7.01:42:29   Historical   Database      2
  DV21    10/25/2014  23:32:02  11/02/2014  00:03:22   7.00:31:20   Historical   Database      2
  DV21    11/02/2014  01:25:59  11/09/2014  00:47:39   6.23:21:40   Historical   Database      2
  DV21    11/09/2014  02:11:40  11/15/2014  21:08:45   6.18:57:05   Historical   Database      2
```

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PDSMURPT – DATAPER (📎)

- Usage Statistics Recording Data Period Information report

```
DV21    11/15/2014  21:42:12   11/22/2014  21:03:06    6.23:20:54  Historical   Database      2
DV21    11/22/2014  21:53:34   11/29/2014  21:01:21    6.23:07:47  Historical   Database      2
DV21    11/29/2014  21:30:57   12/06/2014  21:14:51    6.23:43:54  Historical   Database      2
DV21    12/06/2014  21:30:47   12/06/2014  22:05:55      00:35:08  Historical   Database      2
DV21    12/06/2014  22:24:08   12/13/2014  21:01:18    6.22:37:10  Historical   Database      2
DV21    12/13/2014  21:47:30   01/10/2015  21:03:16   27.23:15:46  Historical   Database      2
DV21    01/10/2015  21:45:59   01/17/2015  23:11:51    7.01:25:52  Historical   Database      2
DV21    01/17/2015  23:48:14   01/24/2015  21:27:53    6.21:39:39  Historical   Database      2
DV21    01/24/2015  22:50:02   01/31/2015  21:01:15    6.22:11:13  Historical   Database      2
DV21    01/31/2015  21:19:57   02/07/2015  21:01:23    6.23:41:26  Historical   Database      2
DV21    02/07/2015  21:26:57   02/14/2015  21:00:18    6.23:33:21  Historical   Database      2
DV21    02/14/2015  22:05:56   02/21/2015  21:04:02    6.22:58:06  Historical   Database      2
DV21    02/21/2015  21:29:17   03/07/2015  23:25:17   14.01:56:00  Historical   Database      2
DV21    03/07/2015  23:49:24   03/14/2015  21:14:41    6.21:25:17  Historical   Database      2
DV21    03/14/2015  22:07:05   03/21/2015  21:01:34    6.22:54:29  Historical   Database      2
DV21    03/21/2015  21:58:07   03/21/2015  23:25:06      01:26:59  Historical   Database      2
DV21    03/21/2015  23:59:58   03/28/2015  21:06:52    6.21:06:54  Historical   Database      2
DV21    03/28/2015  21:42:21   04/04/2015  21:07:36    6.23:25:15  Historical   Database      2
DV21    04/04/2015  21:30:34   04/18/2015  21:13:59   13.23:43:25  Historical   Database      2
DV21    04/18/2015  21:50:14   04/18/2015  22:45:16      00:55:02  Historical   Database      2
DV21    04/18/2015  22:46:36   04/19/2015  01:03:28      02:16:52  Historical   Database      2
DV21    04/19/2015  01:15:05   04/25/2015  21:01:07    6.19:46:02  Historical   Database      2
DV21    04/25/2015  21:17:20   05/02/2015  21:45:53    7.00:28:33  Historical   Database      2
DV21    05/02/2015  22:25:02   05/09/2015  21:11:47    6.22:46:45  Historical   Database      2
DV21    05/09/2015  22:33:55   05/16/2015  21:05:28    6.22:31:33  Historical   Database      2
DV21    05/16/2015  21:35:46   05/23/2015  21:01:04    6.23:25:18  Historical   Database      2
DV21    05/23/2015  21:29:35   05/30/2015  21:21:52    6.23:52:17  Historical   Database      2
DV21    05/30/2015  21:57:53   06/06/2015  21:04:44    6.23:06:51  Historical   Database      2
DV21    06/06/2015  21:31:27   06/13/2015  21:01:18    6.23:29:51  Historical   Database      2
DV21    06/13/2015  21:29:08   06/20/2015  20:14:08    6.22:45:00  Historical   Database      2
```

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PDSMURPT – DATAPER (📎)

- Usage Statistics Recording Data Period Information report

```
DV21     06/20/2015  23:19:08    06/27/2015  20:23:29     6.21:04:21  Historical   Database        2
DV21     06/27/2015  22:58:37    07/04/2015  21:02:16     6.22:03:39  Historical   Database        2
DV21     07/04/2015  21:24:34    07/10/2015  12:05:43     5.14:41:09  Active       In Storage      2
```

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PDSMURPT – EZYUSE (📎)

- EZYEDIT ISPF Productivity Platform Usage report

```
Report Name     : EZYEDIT ISPF Productivity Platform Usage (EZYUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

EZYEDIT ISPF Productivity Platform Display Usage          Count    Pct.    Rate/day    Time Stamp
  Selection Panel ...........................................  143,478    31%     382.52    07/10/2015 at 12:09:16
  Data Set List Display .....................................  151,083    32%     402.80    07/10/2015 at 12:10:54
  Member List Display .......................................  169,414    36%     451.67    07/10/2015 at 12:10:57
  Personal List Display .....................................       86   < 1%       0.22    07/07/2015 at 05:38:50
  Allocation Display ........................................       45   < 1%       0.11    06/23/2015 at 10:22:29
  Volume Information Display ................................    1,305   < 1%       3.47    07/10/2015 at 03:14:12
  User Command Alias Display ................................       30   < 1%       0.07    06/30/2015 at 03:02:47
  Linklist Sets Display .....................................       63   < 1%       0.16    06/26/2015 at 13:44:42
  LLALIST Display ...........................................        4   < 1%       0.01    06/12/2015 at 07:21:55
  ------------------------------------------------------------  --------   ----
  TOTAL EZYEDIT ISPF Productivity Platform Display Usage .....  465,508   100%

EZYEDIT ISPF Productivity Platform Other Function Usage    Count            Rate/day    Time Stamp
  EZYEDIT In Batch Executions ...............................    1,519              4.04    07/10/2015 at 03:14:11
  EZYEDIT Command Shell Usage ...............................       68              0.18    07/07/2015 at 06:44:51
  External Objects Processed ................................       15              0.03    07/01/2015 at 09:41:06
  User Commands Processed ...................................   23,575             62.85    07/10/2015 at 11:51:53
  ISPF Command Table Updates ................................        0              0.00
```

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PDSMURPT – FCOUSE (📎)

- FastCopy Facility Usage report

```
Report Name     : FastCopy Facility Usage (FCOUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

IEBCOPY Executions by Caller                             Count    Pct.   Rate/day   Time Stamp
   IEBCOPY Executions from SMP/E ..............................    2,679    1%      7.14   07/02/2015 at 11:07:55
   IEBCOPY Executions from ISPF ...............................   18,531   10%     49.40   07/10/2015 at 12:13:18
   IEBCOPY Executions from Batch, TSO or other sources .......  168,634   89%    449.59   07/10/2015 at 12:02:26
   -------------------------------------------------------   --------   ----
   TOTAL IEBCOPY Executions by Caller .......................  189,844  100%

IEBCOPY Executions by Name                               Count    Pct.   Rate/day   Time Stamp
   IEBCOPY Executions as IEBCOPY .............................  183,462   97%    489.12   07/10/2015 at 12:13:18
   IEBCOPY Executions as BSTCOPY .............................    6,382    3%     17.01   07/10/2015 at 11:55:04
   -------------------------------------------------------   --------   ----      0.00
   TOTAL IEBCOPY Executions by Name .........................  189,844  100%

Individual IEBCOPY Operations                            Count    Pct.   Rate/day   Time Stamp
   IEBCOPY Operations Handled by FastCopy ...................  202,279   99%    539.29   07/10/2015 at 12:13:18
   IEBCOPY Operations Handled by IEBCOPY ....................    2,956    1%      7.88   07/10/2015 at 03:13:55
   -------------------------------------------------------   --------   ----
   TOTAL  Individual IEBCOPY Operations .....................  205,235  100%
```

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PDSMURPT – FCOUSE (📎)

- FastCopy Facility Usage report

```
Functions Performed                                      Count   Pct.  Rate/day  Time Stamp
  Compress  - Library Compress       (IEBCOPY/FastCopy) .......   44,221   20%   117.89  07/10/2015 at 10:11:15
  Copy      - Library/Member Copy    (IEBCOPY/FastCopy) .......  157,761   73%   420.60  07/10/2015 at 12:13:18
  CopyMod   - Member CopyMod         (IEBCOPY/FastCopy) .......    3,274    2%     8.72  07/10/2015 at 10:50:04
  AlterMod  - Member AlterMod        (IEBCOPY/FastCopy) .......        0    0%     0.00
  Move      - Library/Member Move         (FastCopy) .......        51  < 1%     0.13  06/04/2015 at 12:51:43
  Validate  - Library Validation          (FastCopy) .......         4  < 1%     0.01  05/18/2015 at 10:11:43
  Empty     - Library Empty / Space Release (FastCopy) .......       39  < 1%     0.10  07/06/2015 at 17:28:40
  EmptyO    - Library Empty               (FastCopy) .......     8,416    4%    22.43  07/10/2015 at 03:13:55
  Release   - Library Space Release       (FastCopy) .......         3  < 1%     0.00  05/26/2015 at 09:29:41
  AlterDir  - Directory Size Alteration   (FastCopy) .......     1,133    1%     3.02  07/10/2015 at 03:13:57
  EditDir   - Member  Rename/Delete/Rename (FastCopy) .......     1,144    1%     3.05  07/10/2015 at 03:13:57
  Recover   - Member  Recovery            (FastCopy) .......        19  < 1%     0.05  07/02/2015 at 15:26:09
  XCompress - Extended Compress Function  (FastCopy) .......         0    0%     0.00
  VolComp   - Volume Compress Function    (FastCopy) .......     1,125    1%     2.99  07/10/2015 at 03:13:57
  ------------------------------------------------------- --------  ----
  TOTAL Functions Processed ...............................  217,190  100%

Library Selection Extensions Usage                       Count   Pct.  Rate/day  Time Stamp
  Data Set Pattern Specified ...............................        0    0%     0.00
  Dynamic  Allocation Specified (INDSN/OUTDSN) ...............    1,125  100%     2.99  07/10/2015 at 03:13:56
  ------------------------------------------------------- --------  ----
  TOTAL Library Selection Extensions Usage ..................    1,125  100%

Member Selection Extensions Usage                        Count   Pct.  Rate/day  Time Stamp
  Member Pattern Specified .................................    4,021  100%    10.72  07/10/2015 at 03:13:56
  Member Selected/Excluded by Changed Date ...................        0    0%     0.00
  Member Selected/Excluded by Last Referenced Date ...........        0    0%     0.00
  ------------------------------------------------------- --------  ----
  TOTAL Member Selection Extensions Usage ..................    4,021  100%
```

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PDSMURPT – FCOUSE (📎)

- FastCopy Facility Usage report

```
Library Space Management Extensions Usage                Count   Pct.   Rate/day   Time Stamp
   Empty     Function Performed ...............................    39    93%      0.10     07/06/2015 at 17:28:40
   Release   Function Performed ...............................     3     7%      0.00     05/26/2015 at 09:29:41
   RLSE      Operation Performed (XCompress/VolCompress) .......     0     0%      0.00
   SETSPACE  Operation Performed (Compress/XCompress) ..........     0     0%      0.00
   ----------------------------------------------------------  --------  ----
   TOTAL Library Space Management Extensions Usage ...........     42   100%

Directory Space Management Extensions Usage              Count   Pct.   Rate/day   Time Stamp
   AlterDir Function Performed ...............................  1,133    78%      3.02     07/10/2015 at 03:13:57
   FreeDir  Operation Performed ..............................      0     0%      0.00
   SetDirBlks% Operation Performed ...........................      0     0%      0.00
   Directory Auto Expansion Performed ........................    320    22%      0.85     07/09/2015 at 01:00:27
   ----------------------------------------------------------  --------  ----
   TOTAL Directory Space Management Extensions Usage .........  1,453   100%

Member-Related Extensions Usage                          Count   Pct.   Rate/day   Time Stamp
   EditDir Rename Operation Performed ........................      1   < 1%      0.00     05/18/2015 at 09:20:23
   EditDir Delete Operation Performed ........................  1,137   >99%      3.03     07/10/2015 at 03:13:57
   EditDir Retain Operation Performed ........................      1   < 1%      0.00     05/26/2015 at 12:53:23
   ----------------------------------------------------------  --------  ----
   TOTAL Member-Related Extensions Usage .....................  1,139   100%

Other Extensions Usage                                   Count          Rate/day   Time Stamp
   Library Reset (Emptied) Before Copy/Move ..................  2,258            6.02     07/10/2015 at 03:14:01
```

PDSMURPT – LLAEUSE (📎)

- LLA Extensions Facility Usage report

```
Report Name     : LLA Extensions Facility Usage (LLAEUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Updates to LLA-Managed Libraries                            Count   Pct.    Rate/day   Time Stamp
  Updates to Individual Members ............................. 12,201   99%      32.52   07/09/2015 at 17:03:07
  Updates to Entire Libraries ...............................    166    1%       0.44   07/03/2015 at 13:16:42
  ----------------------------------------------------------- --------  ----
  TOTAL Updates to LLA-Managed Libraries ...................  12,367  100%

LLA Auto-Update Facility Actions                            Count   Pct.    Rate/day   Time Stamp
  No Action Taken ...........................................      0    0%       0.00
  Message Issued (if needed) ................................      0    0%       0.00
  LLA Updated by PDSMAN .....................................      0    0%       0.00
  LLA Updated by PDSMAN and Message Issued ..................    984  100%       2.62   06/25/2015 at 08:59:17
  ----------------------------------------------------------- --------  ----
  TOTAL LLA Auto-Update Facility Actions ...................    984  100%

LLA Updates Related to Last Reference Date Recording        Count   Pct.    Rate/day   Time Stamp
  LLA Update Performed ......................................      0   n/a       0.00
  LLA Update Not Performed ..................................      0   n/a       0.00
  ----------------------------------------------------------- --------  ----
  TOTAL LLA Updates Related to Last Reference Date Recording)     0   n/a
```

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PDSMURPT – LLAEUSE (🔗)

- LLA Extensions Facility Usage report

```
LLA Synchronization Management (LSM) Facility Results        Count   Pct.   Rate/day   Time Stamp
  Library In-Sync  - No Notification ........................     0    n/a      0.00
  Library In-Sync  - Message Issued ........................     0    n/a      0.00
  Library Out-Sync - No Notification or Action ..............     0    n/a      0.00
  Library Out-Sync - Message Issued ........................     0    n/a      0.00
  Library Out-Sync - Resynchronized ........................     0    n/a      0.00
  Library Out-Sync - Resynchronized and Message Issued .......     0    n/a      0.00
  --------------------------------------------------------- -------- ----
  TOTAL LLA Synchronization Management Checks ...............     0    n/a

Extended LLA Operator Commands (ELOCs) Processed (by Type)   Count   Pct.   Rate/day   Time Stamp
  Add Library to LLA Management        (ADD) ..................     0    n/a      0.00
  Remove Library from LLA Management  (REMOVE) ...............     0    n/a      0.00
  Update Library Information in LLA    (UPDATE) ...............     0    n/a      0.00
  Set LLA Management Mode to Freeze    (FREEZE) ...............     0    n/a      0.00
  Set LLA Management Mode to NoFreeze (NOFREEZE) .............     0    n/a      0.00
  Request Library Status Information   (QUERY) ................     0    n/a      0.00
  --------------------------------------------------------- -------- ----
  TOTAL Extended LLA Operator Commands Processed .............     0    n/a

Extended LLA Operator Command (ELOC) Communication          Count   Pct.   Rate/day   Time Stamp
  ELOCs on this system ALSO sent to other systems ...........     0    n/a      0.00
  ELOCs on this system NOT  sent to other systems ...........     0    n/a      0.00
  ELOCs received from other systems .........................     0    n/a      0.00
  --------------------------------------------------------- -------- ----
  TOTAL Extended LLA Operator Commands Processed .............     0    n/a
```

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PDSMURPT – LLAEUSE (📎)

- ## LLA Extensions Facility Usage report

```
LLA Monitoring Facility (LMON) Changes Detected          Count   Pct.   Rate/day   Time Stamp
   Add     - Library Added to LLA Management ..................    131    20%      0.34   07/07/2015 at 10:52:32
   Remove  - Library Removed from LLA Management ..............    115    18%      0.30   03/22/2015 at 21:01:33
   Update  - LLA Management Mode Changed .....................      4     1%      0.01   10/06/2014 at 16:24:59
   Update  - LLA Cache Information Updated ....................    338    52%      0.90   07/09/2015 at 17:03:34
   Update  - Private Library in NoFreeze Mode Updated .........     57     9%      0.15   09/16/2014 at 12:49:33
   ------------------------------------------------------------   --------   ----
   TOTAL LLA Monitoring Facility Changes Detected .............    645   100%

LLA Monitoring Facility (LMON) Message Activity          Count   Pct.   Rate/day   Time Stamp
   Message Issued ...........................................    137    21%      0.36   07/07/2015 at 10:52:32
   Message Not Issued .......................................    505    78%      1.34   07/09/2015 at 17:03:34
   Message Not Issued - Private Library in NoFreeze Mode ......      3   < 1%      0.00   10/06/2014 at 16:14:42
   ------------------------------------------------------------   --------   ----
   TOTAL LLA Monitoring Facility Message Activity ............    645   100%

LLA Extensions Facility Summary                          Count          Rate/day   Time Stamp
   Updates to LLA-Managed Libraries .........................  12,367           32.97   07/09/2015 at 17:03:07
   LLA Auto-Update Facility Actions (Messages or Updates) .....    984            2.62   06/25/2015 at 08:59:17
   LLA Updates Performed for Last Reference Date Recording ....      0            0.00
   LLA Synchronization Management Checks .....................      0            0.00
   Extended LLA Operator Commands Processed ..................      0            0.00
   LLA Monitoring Facility Changes Detected ..................    645            1.71   07/09/2015 at 17:03:34
   LLA Monitoring Facility Messages Issued ...................    137            0.36   07/07/2015 at 10:52:32
   LLA Not Managing the System Linklist Warnings .............      0            0.00
   LLA Extensions Batch Interface (PDSM35) Usage .............  1,145            3.05   07/10/2015 at 03:14:11
   LLA Monitoring Subtask Cycles ............................. 2313347        6,167.54   07/10/2015 at 12:21:27
```

PDSMURPT – LSMUSE (📎)

- Library Space Management Usage report

```
Report Name     : Library Space Management Usage (LSMUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

PDS Library Updates Eligible for Space Reuse            Count   Pct.   Rate/day   Time Stamp
  Library Space Reuse Was Attempted .........................      0     0%       0.00
  Library Space Reuse Not Attempted .........................  35075670  100%    >100,000
  -------------------------------------------------------------  --------  ----
  TOTAL PDS Library Updates Eligible for Space Reuse .........  35075670  100%

Library Space Reuse Operations                          Count   Pct.   Rate/day   Time Stamp
  Space Successfully Reused .................................      0    n/a       0.00
  Space Recorded for Future Use ............................      0    n/a       0.00
  -------------------------------------------------------------  --------  ----
  TOTAL Library Space Reuse Operations ....................      0    n/a

Library Space Reuse Administration                      Count          Rate/day   Time Stamp
  LSR Space Map Member (Re)Created .........................      0              0.00

Library Space Monitoring Facility (SPMON) Usage         Count   Pct.   Rate/day   Time Stamp
  Total Checks Performed ...................................      0    n/a       0.00
  Errors Detected .........................................      0    n/a       0.00

Directory Space Monitoring Facility (DBMON) Usage       Count   Pct.   Rate/day   Time Stamp
  Total Checks Performed ...................................      0    n/a       0.00
  Warnings Detected .......................................      0    n/a       0.00
  Errors Detected .........................................      0    n/a       0.00
  Messages Issued .........................................      0    n/a       0.00
```

PDSMURPT – LSMUSE (📎)

- Library Space Management Usage report

```
Library Space Management Extensions Usage              Count   Pct.   Rate/day   Time Stamp
   Empty    Function Performed ...............................     39    93%       0.10   07/06/2015 at 17:28:40
   Release  Function Performed ...............................      3     7%       0.00   05/26/2015 at 09:29:41
   RLSE     Operation Performed    (Compress/XCompress) .......      0     0%       0.00
   SETSPACE Operation Performed (XCompress/VolCompress) .......      0     0%       0.00
   -------------------------------------------------------   --------   ----
   TOTAL Library Space Management Extensions Usage ...........     42    100%

Directory Space Management Extensions Usage            Count   Pct.   Rate/day   Time Stamp
   AlterDir Function Performed ...............................   1,133    78%       3.02   07/10/2015 at 03:13:57
   FreeDir  Operation Performed ..............................      0     0%       0.00
   SetDirBlks% Operation Performed ...........................      0     0%       0.00
   Directory Auto Expansion Performed ........................    320    22%       0.85   07/09/2015 at 01:00:27
   -------------------------------------------------------   --------   ----
   TOTAL Directory Space Management Extensions Usage .........   1,453   100%
```

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PDSMURPT – PERFUSE (📎)

- Performance Facilities Usage report

```
Report Name    : Performance Facilities Usage (PERFUSE)
Time Period    : Start of Usage Data  To Current Date/Time
Data Sources   : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Note:    53 data records excluded due to insufficient level

Access Statistics Recording Facility      (1 Initializations)   Count   Pct.   LibCount   Time Stamp
  LPA      Recording Specified ..............................      0      0%
  LinkList Recording Specified ..............................      0      0%      0.00
  JOBLIB   Recording Specified ..............................      0      0%      0.00
  Private  Recording Specified ..............................      0      0%      0.00

Dynamic BLDL Facility Usage               (1 Initializations)   Count   Pct.   LibCount   Time Stamp
  LinkList Dynamic BLDL Specified ...........................      0      0%      0.00
  STEPLIB  Dynamic BLDL Specified ...........................      0      0%      0.00
  Private  Dynamic BLDL Specified ...........................      0      0%      0.00

Program Fetch Optimization Usage          (1 Initializations)   Count   Pct.   LibCount   Time Stamp
  Program Fetch Optimization OPT=Y Specified .................      0      0%      0.00
  Program Fetch Optimization OPT=L Specified .................      0      0%      0.00

FastStow Facility Usage                                         Count          Rate/day   Time Stamp
  PDS STOW Operations with FastStow Specified ................      0             0.00
```

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- Partitioned Resource Monitoring Facility Usage report

```
Report Name     : Partitioned Resource Monitoring Facility Usage (PMONUSE)
Time Period     : Start of Usage Data  To Current Date/Time
Data Sources    : Active Data, Historical Data (Database)
Selected Systems: DV22
$USESTATS Rule  : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Partitioned Resource Monitoring Usage at a Glance         Count   Pct.    Rate/day   Time Stamp
  Incoming  Resource State Messages ..........................     0   n/a        0.00
  Processed Resource State Messages (Any Status) .............     0   n/a        0.00
  Processed Resource State Messages (Non-Normal Status) ......     0   n/a        0.00
  Monitoring Actions Taken ...................................     0   n/a        0.00
  Monitoring Information Viewing Usage .......................     0   n/a        0.00
  Monitoring Batch Utility Usage .............................     0   n/a        0.00
  Monitoring Subtask Cycles ..................................  2314434 n/a    6,168.68   07/10/2015 at 13:40:42

Resource State Messages Processed (by Severity)          Incoming  Processed  Proc%
  CRITICAL  - Critical Error Reported .......................     0         0    n/a
  ERROR     - Error Reported ................................     0         0    n/a
  WARNING   - Warning Reported ..............................     0         0    n/a
  NORMAL    - Normal Status .................................     0         0    n/a
  ------------------------------------------------------------  --------  --------  ----
  TOTAL Resource State Messages Processed (by Severity) ......     0         0    n/a
```

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PDSMURPT – PMONUSE (📎)

- Partitioned Resource Monitoring Facility Usage report

```
Resource State Messages Processed (by Class)                 Incoming  Processed  Proc%
   VALIDATE   - PDS Library Validation .........................      0         0    n/a
   SPACEMON   - Library Space Monitoring ........................      0         0    n/a
   DBMON      - Directory Space Monitoring .....................      0         0    n/a
   LLASYNCH   - LLA Synchronization .............................      0         0    n/a
   LLAMANAGE  - LLA Management ...................................      0         0    n/a
   PDSMAN     - PDSMAN Functions/Services .......................      0         0    n/a
   Unknown    - Unknown Class Reported .........................      0         0    n/a
   ----------------------------------------------------------   --------  --------  ----
   TOTAL Resource State Messages Processed (by Class) .........      0         0    n/a

Actions Taken for Processed Resource State Messages          Count    Pct.   Rate/day   Time Stamp
   Resource Information Table Updated .........................      0    n/a      0.00
   Resource Message Log Updated ...............................      0    n/a      0.00
   SMF History Record Written .................................      0    n/a      0.00
   Sent to Other PDSMAN System ................................      0    n/a      0.00
   Sent to CA OPS/MVS Generic Event API .......................      0    n/a      0.00
   ----------------------------------------------------------   --------  ----
   TOTAL Actions Taken for Processed RSMs ....................      0    n/a

Partitioned Resource Monitoring Information Viewing          Count    Pct.   Rate/day   Time Stamp
   PRM-View Resource Information Display Usage ................      0    n/a      0.00
   PRM-View Resource Message Log Display Usage ...............      0    n/a      0.00
 PRM-View Resource History Display Usage ....................      0    n/a      0.00
   CA Vantage GMI Display Usage ...............................      0    n/a      0.00
   ----------------------------------------------------------   --------  ----
   TOTAL Partitioned Resource Monitoring Information Viewing ..      0    n/a
```

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PDSMURPT – PTUSE (📎)

- Productivity Tools Facility Usage report

```
Report Name      : Productivity Tools Facility Usage (PTUSE)
Time Period      : Start of Usage Data  To Current Date/Time
Data Sources     : Active Data, Historical Data (Database)
Selected Systems: DV21
$USESTATS Rule   : $USESTATS RECORD=Y HISTORY=Y RETAINHIST=0365

Productivity Tools Usage Summary                      Count   Pct.   Rate/day   Time Stamp
  String Scan and Replace       (PDSM18) ...........  229,122  93%    610.83    07/10/2015 at 12:38:40
  Library Space Monitoring      (SPMON)  ...........        0   0%      0.00
  Directory Space Monitoring    (DBMON)  ...........        0   0%      0.00
  Descriptive Member Titles     (PDSM23) ...........    3,392   1%      9.04    07/10/2015 at 03:14:04
  Duplicate Member Reporting    (PDSM27) ...........    1,125 < 1%      2.99    07/10/2015 at 03:14:06
  Library Empty and Space Release (PDSM10) .........   10,737   4%     28.62    07/10/2015 at 03:14:01
  Library Map and Analysis      (PDSM13) ...........    1,132 < 1%      3.01    07/10/2015 at 03:14:04
  PDSMAN Command Processor       (PDSM19) ...........        2 < 1%      0.00    06/24/2015 at 15:02:46
  Control Statement Generator   (PDSM20) ...........        0   0%      0.00
  Member Contents List          (PDSM08) ...........      278 < 1%      0.74    07/09/2015 at 10:47:58
  Executable Program Analysis   (PDSM22) ...........    1,398   1%      3.72    07/10/2015 at 03:14:04
  Procedure Library Analysis    (PDSM24) ...........      210 < 1%      0.55    07/08/2015 at 13:40:54
  Member Size Analysis          (PDSM25) ...........        0   0%      0.00
  Load Library Reblocking       (PDSM29) ...........        0   0%      0.00
  PDSFETCH Command Processor     (PDSM30) ...........        0   0%      0.00
  PDSCOPY Command Processor      (PDSM14) ...........        1 < 1%      0.00    08/01/2014 at 09:43:09
  Compression Scheduling        (PDSM11) ...........        0   0%      0.00
  Member Format Conversion      (PDSM09) ...........        0   0%      0.00
  Copy/Include Facility         (PDSM21) ...........        0   0%      0.00
  ---------------------------------------------------- --------  ----
  TOTAL Productivity Tool Usage .....................  247,397  100%
```

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PDSMURPT – PTUSE (📎)

- Productivity Tools Facility Usage report

```
Library Space Monitoring Facility (SPMON) Usage          Count   Pct.   Rate/day   Time Stamp
   Total Checks Performed ......................................    0    n/a     0.00
   Errors Detected ............................................    0    n/a     0.00

Directory Space Monitoring Facility (DBMON) Usage        Count   Pct.   Rate/day   Time Stamp
   Total Checks Performed ......................................    0    n/a     0.00
   Warnings Detected .........................................    0    n/a     0.00
   Errors Detected ............................................    0    n/a     0.00
   Messages Issued ...........................................    0    n/a     0.00

String Scan and Replace Facility (PDSM18) Usage          Count          Rate/day   Time Stamp
   Total Executions .........................................  229,122        610.83   07/10/2015 at 12:38:40
   Scan Operations ..........................................  168,650        449.61   07/10/2015 at 12:38:40
   Replace Operations .......................................  1864473      4,970.62   07/10/2015 at 11:09:47

Library Map and Analysis Facility (PDSM13) Usage         Count          Rate/day   Time Stamp
   Total Executions .........................................    1,132          3.01   07/10/2015 at 03:14:04
   Library Map, Analysis or Validation Operations ............    1,127          3.00   07/10/2015 at 03:14:04
   Library Space Reuse Related Operations ...................        0          0.00
```

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Links

Complete your session evaluations online at www.SHARE.org/Orlando-Eval

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PDSMAN

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

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Other

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

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Conclusion

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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

Complete your session evaluations online at www.SHARE.org/Orlando-Eval

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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

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Any questions or comments please contact

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