

LAD: z/OS SDSFAUX

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z Systems

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Introducing SDSFAUX

This Learn Adopt Deploy (LAD) IBM® Redpaper™ publication describes the new SDSF functionality that is available through functionality program temporary fixes (PTFs). SDSFAUX is a new address space that enhances SDSF functionality to provide more system-related information to the user. This IBM Redpaper includes information to help you meet the following goals:

- ▶ Learn about the new SDSF functionality.
- ▶ Adopt the software into your environment.
- ▶ Deploy and integrate SDSFAUX into your operational environments.

New functionality

The new functionality localizes system-related information to the SDSF user, as shown in Figure 1.

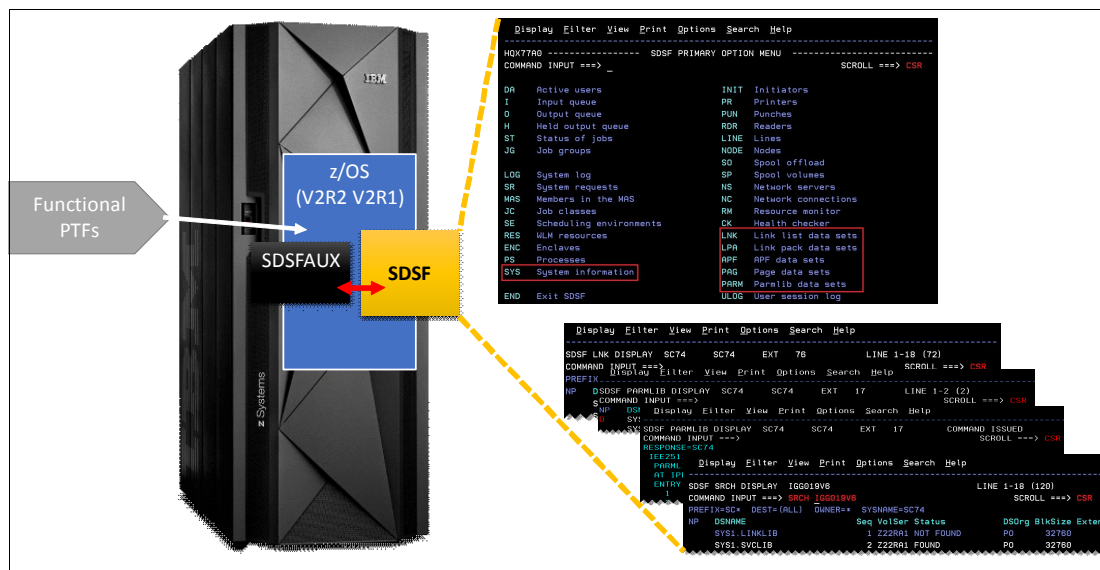


Figure 1 SDSF and SDSFAUX

SDSFAUX is a new address space. It provides more functionality to SDSF by collecting data from the system and supporting new SDSF panels. Although it is a separate address space, new enhancements appear as new options on the SDSF Primary Menu, and a new SRCH command is available.

SDSFAUX is started automatically when SDSF server address space is started. The SDSF server starts and stops the SDSFAUX address space.

Note: If the SDSFAUX address space is not active, the new options still appear on the SDSF command (but they do not work).

New SDSF Primary Menu options

The following options were added to the SDSF menu:

- ▶ LNK: Option to display information that is related the Link List data sets
- ▶ LPA: Option to display information that is related the Link Pack Area data sets
- ▶ APF: Option to display information that is related APF-authorized data sets
- ▶ PAG: Option to display information that is related the Page data sets
- ▶ PARM Option to display information that is related the parmlib data sets
- ▶ SYS: Option to display information that is related to the running system

The new options are shown in Figure 2.

```
Display Filter View Print Options Search Help
-----
HQX77A0 ----- SDSF PRIMARY OPTION MENU -----
COMMAND INPUT ==> _ SCROLL ==> CSR

DA Active users          INIT Initiators
I  Input queue          PR  Printers
O  Output queue         PUN Punches
H  Held output queue    RDR Readers
ST Status of jobs       LINE Lines
JG Job groups           NODE Nodes
                               SO  Spool offload
LOG System log          SP  Spool volumes
SR System requests      NS  Network servers
MAS Members in the MAS NC  Network connections
JC Job classes          RM  Resource monitor
SE Scheduling environments CK Health checker
RES WLM resources       LNK Link list data sets
ENC Enclaves            LPA Link pack data sets
PS Processes            APF APF data sets
SYS System information   PAG Page data sets
                               PARM Parmlib data sets
END Exit SDSF           ULOG User session log
```

Figure 2 SDSF new options

New line commands are available with each option.

An SRCH option was introduced for the LNK, LPA, APF, or PARM displays with which you can search for member names within a data set list.

New commands

In this section, we provide details about and samples of each option.

Link List option

The Link List (LNK) option displays all link list data sets that are on the system and their data set allocation information. ISPF Browse, Edit, and SRCH options are available, depending on your access authority. The LNK display is shown in Figure 3.

Display Filter View Print Options Search Help											

SDSF LNK DISPLAY SC74				SC74	EXT	76	LINE 55-72 (72)				
COMMAND INPUT ==>										SCROLL ==> CSR	
NP	DSNAME		Seq	VolSer	BlkSize	Extent	SMS	APF	LRecL	DSOrg	RecFm
	NETVIEW.CNMLINK		55	Z22RA1	32760	1	NO	YES	0	PO	U
	NETVIEW.SCMLNKN		56	Z22RA1	32760	1	NO	YES	0	PO	U
	ING.SINGMOD1		58	Z22RA1	32760	1	NO	YES	0	PO	U
	SYS1.DGTLIB		60	Z22RA1	32760	1	NO	YES	0	PO	U
	IXM.SIXMLOD1		61	Z22RA1	32760	1	NO	NO	0	PO-E	U
	EJES.SEJELINK		62	Z22RA1	32760	1	NO	NO	0	PO	U
	ELA.SELALMD		63	Z22RA1	32760	1	NO	YES	0	PO-E	U
	PLEX75.DB2V11.SDSNLINK		64	BH5ST3	32760	1	NO	YES	0	PO	U
	TWS.V8R6M0.SEQQLMD0		65	BH5ST6	32760	1	NO	YES	0	PO	U
	TWS.SC74.V8R6M0.LOAD		66	BH5ST4	32760	1	NO	YES	0	PO-E	U
	CICST42A.CICS.SDFHLINK		67	BH5C11	32760	1	NO	YES	0	PO	U
	CICST42A.CICS.SDFHEXCI		68	BH5C11	32760	1	NO	YES	0	PO	U
	CICST42A.CPSM.SEYULINK		69	BH5C11	32760	1	NO	YES	0	PO	U
	SYS1.SIATLINK		70	Z22RA1	32760	1	NO	YES	0	PO	U
	SYS1.SIATLIB		71	Z22RA1	32760	1	NO	YES	0	PO	U
	SYS1.SIATMIG		72	Z22RA1	32760	1	NO	YES	0	PO	U
	SYS1.VTAMLIB		59	Z22RA1	32760	2	NO	YES	0	PO	U
	SYS1.SISTCLIB		57	Z22RA1	32760	4	NO	YES	0	PO	U

Figure 3 LNK display

In Figure 3, you can see in the Extents column that the two data sets at the bottom of the display include secondary allocations. This inclusion might cause problems (such as program abends) if updates to programs in an LNKLIST data set are placed on a new allocated extent after LNKLIST was activated.

The command can be directed to one or more systems by using the current SDSF SYSNAME setting.

This type of information is also available on IBM z/OS® Health Checker CSV_LNKLIST_SPACE check. This display is useful to examine if there are differences to the LNKLIST, such as SetName column (not shown in Figure 3; for more information, see Table 1 on page 6), and the parmlib PROGxx member.

Figure 3 shows only a part of the columns. For more information about LNK columns headings, see Table 1 on page 6.

Link Pack Area option

The Link Pack Area (LPA) option displays the list of LPA data sets that are on the system and their data set allocation information. ISPF Browse, Edit, and Search options are available, depending on your access authority. Figure 4 shows the LPA display.

```

  Display Filter View Print Options Search Help
-----
SDSF LPA DISPLAY SC74      SC74      EXT  23      LINE 1-18 (22)
COMMAND INPUT ==>
PREFIX=*  DEST=(ALL)  OWNER=*  SYSNAME=SC74
NP  DSNNAME              Seq VolSer BlkSize Extent SMS APF LRecL DSOrg RecFm
SYS1.PLEX75.LPALIB      1 BH5CAT  32760      1 NO NO      0 PO  U
SYS1.LPALIB             2 Z22RA1  32760      1 NO YES     0 PO  U
SYS1.SORTLPA           3 Z22RA1  32760      1 NO NO      0 PO  U
SYS1.SICELPA           4 Z22RA1  32760      1 NO NO      0 PO  U
SYS1.SERBLPA           5 Z22RA1  32760      2 NO NO      0 PO  U
ISF.SISFLPA            6 Z22RA1  32760      1 NO YES     0 PO  U
ING.SINGMOD3           7 Z22RA1  32760      1 NO YES     0 PO  U
NETVIEW.SCNMLPA1       8 Z22RA1  32760      1 NO YES     0 PO  U
SDF2.V1R4M0.SDGILPA    9 Z22RA1  32760      1 NO NO      0 PO  U
REXX.SEAGLPA           10 Z22RA1  32760      1 NO NO      0 PO  U
SYS1.SIATLPA           11 Z22RA1  32760      1 NO YES     0 PO  U
EOY.SEOYLPA            12 Z22RA1  32760      1 NO NO      0 PO  U
CEE.SCEELPA            13 Z22RA1  32760      1 NO NO      0 PO  U
ISP.SISPLPA            14 Z22RA1  32760      1 NO YES     0 PO  U
TCPIP.SEZALPA          15 Z22RA1  32760      1 NO YES     0 PO  U
EQAW.SEQALPA           16 Z22RA1  32760      1 NO NO      0 PO  U
IDI.SIDIALPA           17 Z22RA1  32760      1 NO NO      0 PO  U
IDI.SIDILPA1           18 Z22RA1  32760      1 NO NO      0 PO  U

```

Figure 4 LPA display

The command can be directed to one or more systems by using the current SDSF SYSNAME setting.

Figure 4 shows only a part of the columns. For more information about LPA columns headings, see Table 1 on page 6.

Authorized Program Facility option

The Authorized Program Facility (APF) option displays the list of APF-authorized data sets that are on the system and their data set allocation information. ISPF Browse, Edit, and SRCH options are available, depending on your access authority. The APF display is shown in Figure 5 on page 5.


```

Display Filter View Print Options Search Help
-----
SDSF APF DISPLAY SC74 (ALL) EXT 246 LINE 123-139 (241)
COMMAND INPUT ==> _ SCROLL ==> CSR
PREFIX=SC* DEST=(ALL) OWNER=* SORT=DSNAME/A SYSNAME=*
NP DSNAME eq VolSer Status BlkSize Extent SMS LRecl DS
ISP.SISPLOAD 57 Z22RA1 OK 32760 1 NO 0 PO
ISP.SISPLOAD 57 Z22RA1 OK 32760 1 NO 0 PO
ISP.SISPLPA 58 Z22RA1 OK 32760 1 NO 0 PO
ISP.SISPLPA 58 Z22RA1 OK 32760 1 NO 0 PO
KARAN.PLEX75.LINKLIB 12 BH5ST4 OK 32760 1 NO 0 PO
KARAN.PLEX75.LINKLIB 12 BH5ST4 OK 32760 1 NO 0 PO
KWRES08.TESTE.ALOCAA 21 BH5T00 MISSING 0 0 NO 0
LAFITTE.APF.LOAD 59 BH5ST4 OK 32760 1 NO 0 PO
LAFITTE.APF.LOAD 59 BH5ST4 OK 32760 1 NO 0 PO
NETVIEW.CNMLINK 60 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.CNMLINK 60 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.NVULIB 65 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.NVULIB 65 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.SAQNLINK 61 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.SAQNLINK 61 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.SCNMLNKN 63 Z22RA1 OK 32760 1 NO 0 PO
NETVIEW.SCNMLNKN 63 Z22RA1 OK 32760 1 NO 0 PO

```

Figure 5 APF display

The Status column helps to identify APF data sets that are missing, not cataloged, or not available. In Figure 5, you can see that the data set KWRES08.TESTE.ALOCAA is defined as APF, but is not on volume BH5T00, which results in the MISSING status. This information is similar to the information that you can receive from the z/OS Health Checker CSV_APF_EXISTS check.

The Status might show OK-WARN, which indicates that the data set is defined as SMS-managed but is on a non-SMS volume.

APF-authorized programs must be in APF-authorized libraries, which are defined in an APF list. They also can be in the LPA or the Linklist.

Automation that is based on this panel's information can be created to monitor dynamic add changes on APF list that is not reflected on your PARMLIB PROGxx member. Alerting that loss of authority can occur if there is an emergency or maintenance initial program load (IPL).

The command can be directed to one or more systems by using the current SDSF SYSNAME setting.

Operational policies and practices can help to protect and maintain the control over authorized data sets. The APF option helps you to identify anomalies and take the appropriate measures.

Figure 5 shows only part of the columns. For more information about APF columns headings, see Table 1 on page 6.

PARM

The parmlib (PARM) option displays the list of parmlib data sets that are on the system and their data set allocation information. ISPF Browse, Edit, and Search options are available, depending on your access authority. The PARM display is shown in Figure 6 on page 6.

```

Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY SC74 (ALL) EXT 34 LINE 1-4 (4)
COMMAND INPUT ==> _ SCROLL ==> CSR
PREFIX=SC* DEST=(ALL) OWNER=* SYSNAME=*
NP DSNAME Seq VolSer BlkSize Extent SMS LRecL DSOrg RecFm CrDate
SYS1.PARMLIB 1 BH5CAT 23440 16 NO 80 PO FB 1998.016
SYS1.IBM.PARMLIB 2 Z22RA1 27920 1 NO 80 PO FB 2015.149

```

Figure 6 PARM display

The command can be directed to one or more systems by using the current SDSF SYSNAME setting.

Figure 6 shows only part of the columns. The PARM columns headings are listed in Table 1.

Table 1 Columns that are displayed with LNK LPA APF PARM options

Column heading	LNK	LPA	APF	PARM	Description
DSNAME	Y	Y	Y	Y	Data set name
Seq	Y	Y	Y	Y	Sequence number in list
VolSer	Y	Y	Y	Y	Volume serial number
Status	N	N	Y	N	Data set status
BlkSize	Y	Y	Y	Y	Block size
Extent	Y	Y	Y	Y	Number of extents
SMS	Y	Y	Y	Y	SMS indicator
APF	Y	Y	N	N	APF indicator
LRecL	Y	Y	Y	Y	Logical record length
DSOrg	Y	Y	Y	Y	Data set organization
RecFM	Y	Y	Y	Y	Record format
DefVol	N	N	Y	N	Defined volume
CrDate	Y	Y	Y	Y	Creation date
RefDate	Y	Y	Y	Y	Last referenced date
SetName	Y	N	N	N	Linklist set name
SysName	Y	Y	Y	Y	System name
SysLev	Y	Y	Y	Y	Operating system level

Page Data Set option

The Page Data Set (PAG) option displays the list of page data sets that are on the system and other information, such as page size, percent used, and status. It includes PLPA, COMMON, LOCAL, and Storage Class Memory (SCM) pages. The PAG display is shown in Figure 7.

```

Display Filter View Print Options Search Help
-----
SDSF PAG DISPLAY SC74 (ALL) LINE 1-14 (14)
COMMAND INPUT ==> SCROLL ==> CSR
PREFIX=SC* DEST=(ALL) OWNER=* SYSNAME=*
NP DSNAME Type Slots Used Use% VolSer Status VIO IOError
PAGE.SC74.PLPA PLPA 71999 20728 28 PAG740 OK NO 0
PAGE.SC74.COMMON COMMON 143999 42 0 PAG740 OK NO 0
PAGE.SC74.LOCAL1 LOCAL 1802699 0 0 PAG741 OK YES 0
PAGE.SC74.LOCAL2 LOCAL 1802699 0 0 PAG742 OK YES 0
PAGE.SC74.LOCAL3 LOCAL 1802699 0 0 PAG743 OK YES 0
PAGE.SC74.LOCAL4 LOCAL 1802699 0 0 PAG744 OK YES 0
N/A SCM 8388608 20631 0 N/A OK NO 0
PAGE.SC75.PLPA PLPA 71999 20728 28 PAG750 OK NO 0
PAGE.SC75.COMMON COMMON 143999 42 0 PAG750 OK NO 0
PAGE.SC75.LOCAL1 LOCAL 1802699 0 0 PAG751 OK YES 0
PAGE.SC75.LOCAL2 LOCAL 1802699 0 0 PAG752 OK YES 0
PAGE.SC75.LOCAL3 LOCAL 1802699 0 0 PAG753 OK YES 0
PAGE.SC75.LOCAL4 LOCAL 1802699 0 0 PAG754 OK YES 0
N/A SCM 8388608 20635 0 N/A OK NO 0

```

Figure 7 PAG display

The command can be directed to one or more systems by using the current SDSF SYSNAME setting.

Figure 7 shown only part of the columns. The PAG columns headings are listed in Table 2.

Table 2 Columns that are displayed with the PAG option

Column heading	Description
DSNAME	Page data set name
Type	Type of page data set
Slots	Number of slots defined
Used	Number of slots used
Used%	Percentage of slots in use
VolSer	Volume serial number
Status	Data set status
VIO	VIO eligibility indicator
IOError	Number of I/O errors
Sysname	System name
Syslevel	Operating system level

SRCH command

The SRCH command is available from LNK, LPA, APF, or PARM panels. By using SRCH, you can search for member names inside the data sets that are listed, as shown in Figure 8. You also can use wild characters in your search.

```

Display Filter View Print Options Search Help
-----
SDSF SRCH DISPLAY IGG019V6 LINE 1-18 (120)
COMMAND INPUT ==> SRCH IGG019V6 SCROLL ==> CSR
PREFIX=SC* DEST=(ALL) OWNER=* SYSNAME=SC74
NP DSNAME Seq VolSer Status DSOrg BlkSize Exten
SYS1.LINKLIB 1 Z22RA1 NOT FOUND PO 32760
SYS1.SVCLIB 2 Z22RA1 FOUND PO 32760
ASM.SASMMOD1 3 Z22RA1 NOT FOUND PO 32760
CBC.SCCNCMP 4 Z22RA1 NOT FOUND PO-E 32760
CBC.SCLBDLL 5 Z22RA1 NOT FOUND PO 32760
CBC.SCLBDLL2 6 Z22RA1 NOT FOUND PO-E 32760
CEE.SCEERUN 7 Z22RA1 NOT FOUND PO 32760
CEE.SCEERUN2 8 Z22RA1 NOT FOUND PO-E 32760
CICST42A.CPSM.SEYULPA 9 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFHAUTH 10 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFHEXCI 11 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFHLINK 12 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFHLOAD 13 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFHLP 14 BH5CI1 NOT FOUND PO 32760
CICST42A.CICS.SDFJAUTH 15 BH5CI1 NOT FOUND PO-E 32760
CICST42A.CPSM.SEYUAUTH 16 BH5CI1 NOT FOUND PO 32760
CICST42A.CPSM.SEYULINK 17 BH5CI1 NOT FOUND PO 32760
CSF.SCSFMODE0 18 Z22RA1 NOT FOUND PO 32760

```

Figure 8 SRCH command sample

Figure 8 shows the search result for member IGG19V6.

Note: SRCH searches only for member name; it does not search for member content.

As shown in Figure 9, an SRCH command on the PARM display panel uses a wildcard to find members that match IEAOPT*.

```

Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY SC74 SC74 EXT 17 LINE 1-2 (2)
COMMAND INPUT ==> SRCH IEAOPT* SCROLL ==> PAGE
NP DSNAME Seq VolSer BlkSize Extent SMS LRecL DSOrg RecFm CrDate
SYS1.PARMLIB 1 BH5CAT 23440 16 NO 80 PO FB 1998.016
SYS1.IBM.PARMLIB 2 Z22RA1 27920 1 NO 80 PO FB 2015.149

```

Figure 9 SRCH on PARM by using wildcard

The result of the SRCH is shown in Figure 10.

```

Display Filter View Print Options Search Help
-----
SDSF SRCH DISPLAY IEAOPT* LINE 1-2 (2)
COMMAND INPUT ==> SCROLL ==> PAGE
NP DSNAME Seq VolSer Status DSOrg BlkSize Extent SMS LRecl
SYS1.PARMLIB 1 BH5CAT FOUND P0 23440 16 NO 8
SYS1.IBM.PARMLIB 2 Z22RA1 FOUND P0 27920 1 NO 8
  
```

Figure 10 SRCH result

There are members prefixed IEAOPT in both data sets. The Status field appears where the Blksize, Extent, SMS, and LRecl fields were previously.

Note: If the SRCH was only for IEAOPT instead of IEAOPT*, the status is NOT FOUND; therefore, wild characters must be included.

SYS

When monitoring or troubleshooting a system, there are several system statistics and information that you might be interested in, including CPU and memory usage, I/O count, and IPL information. The SYS panel captures system information and provides an easy way to display LPAR-related information. The SYS display panel is shown in Figure 11.

```

Display Filter View Print Options Search Help
-----
SDSF SYS DISPLAY SC74 SC74 LINE 1-1 (1)
COMMAND INPUT ==> SCROLL ==> PAGE
NP SYSNAME SysLevel CPU% SIO Aux% CSA% SQA% ECSA% ESQA% UIC Spool%
SC74 z/OS 02.02 3 263 0 15 36 40 38 65535 10
  
```

Figure 11 SYS display

The SYS command features many columns that can be browsed by moving right. The SYS column headings are listed in Table 3.

Table 3 SYS Display Panel headings and description

Column heading	Description
SYSNAME	System name
SysLevel	Operating system level
CPU%	CPU percent busy
SIO	Start I/O rate (EXCPs per second)
Aux%	Auxiliary storage percent used
CSA%	Common storage area percent used
SQA%	System queue area percent used
ECSA%	Extended common storage area percent used
ESQA%	Extended system queue area percent used
UIC	Unreferenced interval count
Spool%	Spool percent utilization

Column heading	Description
CADS%	Common access data space percent used
PageRate	Paging rate
Real	Real storage frame count
RealAFC	Real storage available frame count below 16 MB line
Fix%	Real storage frames percent fixed
FixB%	Real storage frames percent fixed below 16 MB line
MaxASID	Maximum number of address spaces
FreeASID	Number of free address spaces
BadASID	Number of non-reusable address spaces
STC	Number of active started tasks
TSU	Number of active TSO users
Job	Number of active batch jobs
WTOR	Number of outstanding WTORs
Sysplex	Sysplex name
LPAR	LPAR name
VMUser	VM User ID
JES	Job entry subsystem number
JESNode	JES node name
SMF	SMF ID
IPLVol	IPL volume serial number
IPLUnit	PL Unit address
IPLDays	Number of days since last IPL
IPLType	Type of IPL
LoadParm	Load parameter
CVTVERID	CVT version ID associated with this system
LoadDSName	LOADxx data set name
LoadUnit	LOADx unit address
IEASYS	IEASYSxx parameters for the system
IEASYM	IEASYMxx parameters for the system
GRS	GRS mode
HWName	Hardware name
CPC	Central processor Complex node descriptor
MSU	MSU rating for processor
SysMSU	MSU rating for image

Column heading	Description
AvgMSU	4 hour rolling average for system
#CPU	Number of online CPUs
#ZAAP	Number of online zAAP processors
#ZIIP	Number of online zIIP processors
OSConfig	Operating system configuration
EDT	Eligible device table ID
NUCLST	NUCLSTxx number
IODFDSNname	IODF data set name
IODFDate	Date and time IODF last changed
CatDSName	Master catalog data set name
CatVol	Master catalog volume serial number
MLA	Multi-level alias setting for system
CatType	Master catalog type
NetID	IBM VTAM® Network ID
SSCP	VTAM SSCP ID
StatDate	Date and time statistics collected

Line commands

Each of the new functions has their own line commands and are representative of a system command. The command is run and the output is displayed on the panel. After the response is displayed, press Enter to return to the panel.

New line commands

The line commands are described and an example is shown for each of the new enhancements in the following sections. The line command 'D' appears on more than one instance, but does not always translate through to the same command. A table of the available line commands follows the examples.

If you want see a summary of the line commands that are available to the new panels, you can use the **SET ACTION** command to view a list of the available line commands. The SYS panel is shown in Figure 12. You can enter the command as shown.

```

Display Filter View Print Options Search Help
-----
SDSF SYS DISPLAY SC74 SC74 LINE 1-1 (1)
COMMAND INPUT ==> set action on SCROLL ==> CSR
NP SYSNAME SysLevel CPU% SIO Aux% CSA% SQA% ECSA% ESQA% UIC Spool%
SC74 z/OS 02.02 1 64 0 15 36 41 38 65535 10

```

Figure 12 Set action on command

The result is shown in Figure 13.

```

Display Filter View Print Options Search Help
-----
SDSF SYS DISPLAY SC74      SC74      SET COMMAND COMPLETE
COMMAND INPUT ==>          SCROLL ==> CSR
ACTION=+-Extend, //-Block, %-RunExec, --Repeat, D-DisplayIPL, DAA-DisplayAll,
ACTION=DAL-DisplayList, DCEE-DisplayLE, DD-DisplayDump, DG-DisplayGRS,
ACTION=DI-DisplayIOS, DLL-DisplayLLA, DLO-DisplayLogger, DLR-DisplayLogrec,
ACTION=DM-DisplayConfig, DMP-DisplayMPF, DO-DisplayOMVS, DP-DisplayProd,
ACTION=DSF-DisplaySMF, DSL-DisplaySlip, DSM-DisplaySMS, DSY-DisplaySymbols,
ACTION=DT-DisplayTime, DTO-DisplayTSO, DTR-DisplayTrace, DTS-DisplayTS,
ACTION=DW-DisplayWLM, DX-DisplaySysplex
NP  SYSNAME  SysLevel  CPU%      SIO Aux%  CSA%  SQA%  ECSA%  ESQA%  UIC   Spool%
SC74 z/OS 02.02   3        239    0   15   36    40    38 65535 10

```

Figure 13 Display of line commands for SYS

The available line commands are displayed above the column headings, which is a useful reference. You can switch them off by issuing a SET ACTION OFF on the command line.

LNK line commands

An example of the DN command is shown in Figure 14.

```

Display Filter View Print Options Search Help
-----
SDSF LNK DISPLAY SC74      SC74      EXT 76      SET COMMAND COMPLETE
COMMAND INPUT ==>          SCROLL ==> CSR
NP  DSNAME                               Seq VolSer BlkSize Extent SMS APF  LRecL DSOrg RecFm
DN  SYS1.PLEX75.LINKLIB                   1 BH5CAT 32760  1 NO YES  0 PO  U
    SYS1.PLEX75.MIGLIB                    2 BH5CAT 32760  1 NO NO   0 PO  U
    SYS1.PLEX75.PDSE                       3 BH5CAT 32760  1 NO NO   0 PO-E U
    SYS1.SIEALNKE                          4 Z22RA1 32760  1 NO YES  0 PO-E U
    SYS1.SIEAMIGE                          5 Z22RA1 32760  1 NO YES  0 PO-E U
    SYS1.LINKLIB                           6 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.MIGLIB                            7 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.CSSLIB                             8 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.SERBLINK                          9 Z22RA1 32760  1 NO YES  0 PO  U
    APK.SAPKMOD1                          10 Z22RA1 32760  1 NO NO   0 PO  U
    SYS1.CMDLIB                            11 Z22RA1 32760  1 NO YES  0 PO  U
    ISF.SISFLOAD                           12 Z22RA1 32760  1 NO YES  0 PO  U
    ISF.SISFLINK                           13 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.NFSLIBE                           14 Z22RA1 32760  1 NO YES  0 PO-E U
    SYS1.SHASLNKE                          15 Z22RA1 32760  1 NO YES  0 PO-E U
    SYS1.SHASMIG                           16 Z22RA1 32760  1 NO YES  0 PO  U
    ING.SINGMOD2                           17 Z22RA1 32760  1 NO YES  0 PO  U
    IGY.SIGYCOMP                           18 Z22RA1 32760  1 NO YES  0 PO-E U
    REXX.SEAGALT                           19 Z22RA1 32760  1 NO YES  0 PO  U
    REXX.SFANLMD                           20 Z22RA1 32760  1 NO NO   0 PO  U
    IBMZ.SIBMZCMP                          21 Z22RA1 32760  1 NO NO   0 PO-E U
    SYS1.DFQLIB                             22 Z22RA1 32760  1 NO YES  0 PO  U
    EOX.SEPHLOD1                           23 Z22RA1 32760  1 NO NO   0 PO  U
    SYS1.SASFPLIB                          24 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.SASFPLNK                          25 Z22RA1 32760  1 NO NO   0 PO  U
    DIT.V1R3M0.SDITMOD1                   26 Z22RA1 32760  1 NO YES  0 PO  U
    SYS1.SCBDHENU                          27 Z22RA1 32760  1 NO YES  0 PO  U

```

Figure 14 LNK DN command

The response from the DN command is shown in Figure 15.

```

Display Filter View Print Options Search Help
-----
SDSF LNK DISPLAY SC74 SC74 EXT 76 COMMAND ISSUED
COMMAND INPUT ==> SCROLL ==> CSR
RESPONSE=SC74
CSV472I 17.14.12 LNKLST DISPLAY 985
LNKLST SET LNKLST SET LNKLST SET LNKLST SET ←
LNKLST00 LNKLST01
SYS1.SIEALNKE 4 Z22RA1 32760 1 NO YES 0 PO-E U
SYS1.SIEAMIGE 5 Z22RA1 32760 1 NO YES 0 PO-E U
SYS1.LINKLIB 6 Z22RA1 32760 1 NO YES 0 PO U
SYS1.MIGLIB 7 Z22RA1 32760 1 NO YES 0 PO U
SYS1.CSSLIB 8 Z22RA1 32760 1 NO YES 0 PO U
SYS1.SERBLINK 9 Z22RA1 32760 1 NO YES 0 PO U
APK.SAPKMOD1 10 Z22RA1 32760 1 NO NO 0 PO U
SYS1.CMDLIB 11 Z22RA1 32760 1 NO YES 0 PO U
ISF.SISFLOAD 12 Z22RA1 32760 1 NO YES 0 PO U
ISF.SISFLINK 13 Z22RA1 32760 1 NO YES 0 PO U
SYS1.NFSLIBE 14 Z22RA1 32760 1 NO YES 0 PO-E U
SYS1.SHASLNKE 15 Z22RA1 32760 1 NO YES 0 PO-E U
SYS1.SHASMIG 16 Z22RA1 32760 1 NO YES 0 PO U
ING.SINGMOD2 17 Z22RA1 32760 1 NO YES 0 PO U
IGY.SIGYCOMP 18 Z22RA1 32760 1 NO YES 0 PO-E U
REXX.SEAGALT 19 Z22RA1 32760 1 NO YES 0 PO U
REXX.SFANLMD 20 Z22RA1 32760 1 NO NO 0 PO U
IBMZ.SIBMZCMP 21 Z22RA1 32760 1 NO NO 0 PO-E U
SYS1.DFQLLIB 22 Z22RA1 32760 1 NO YES 0 PO U
EOX.SEPHLOD1 23 Z22RA1 32760 1 NO NO 0 PO U
SYS1.SASFPLIB 24 Z22RA1 32760 1 NO YES 0 PO U
SYS1.SASFPLNK 25 Z22RA1 32760 1 NO NO 0 PO U
DIT.V1R3M0.SDITMOD1 26 Z22RA1 32760 1 NO YES 0 PO U
SYS1.SCBDHENU 27 Z22RA1 32760 1 NO YES 0 PO U
04/021

```

Figure 15 LNK DN response

The line commands for LNK are listed in Table 4.

Table 4 LNK line commands

Command	Description
SB	ISPF Browse
SE	ISPF Edit
D	Displays the data sets for the LNKLSTSetName
DN	Displays the name of each LNKLST set defined to the system

LPA line commands

The LPA has the SB and SE line commands available only. An example of the use of SB to browse a data set is shown in Figure 16.

Display Filter View Print Options Search Help											
SDSF LPA DISPLAY SC74 SC74 EXT 23 LINE 1-22 (22)											
COMMAND INPUT ==>											
NP	DSNAME	Seq	VolSer	BlkSize	Extent	SMS	APF	LRecL	DSOrg	RecFm	CSR
	SYS1.PLEX75.LPALIB	1	BH5CAT	32760		1	NO	NO	0	PO	U
sb	SYS1.LPALIB	2	Z22RA1	32760		1	NO	YES	0	PO	U
	SYS1.SORTLPA	3	Z22RA1	32760		1	NO	NO	0	PO	U
	SYS1.SICELPA	4	Z22RA1	32760		1	NO	NO	0	PO	U
	SYS1.SERBLPA	5	Z22RA1	32760		2	NO	NO	0	PO	U
	ISF.SISFLPA	6	Z22RA1	32760		1	NO	YES	0	PO	U
	ING.SINGMOD3	7	Z22RA1	32760		1	NO	YES	0	PO	U
	NETVIEW.SCNMLPA1	8	Z22RA1	32760		1	NO	YES	0	PO	U
	SDF2.V1R4M0.SDGILPA	9	Z22RA1	32760		1	NO	NO	0	PO	U
	REXX.SEAGLPA	10	Z22RA1	32760		1	NO	NO	0	PO	U
	SYS1.SIATLPA	11	Z22RA1	32760		1	NO	YES	0	PO	U
	EOY.SEOYLPA	12	Z22RA1	32760		1	NO	NO	0	PO	U
	CEE.SCEELPA	13	Z22RA1	32760		1	NO	NO	0	PO	U
	ISP.SISPLPA	14	Z22RA1	32760		1	NO	YES	0	PO	U
	TCPIP.SEZALPA	15	Z22RA1	32760		1	NO	YES	0	PO	U
	EQAW.SEQALPA	16	Z22RA1	32760		1	NO	NO	0	PO	U
	IDI.SIDIALPA	17	Z22RA1	32760		1	NO	NO	0	PO	U
	IDI.SIDILPA1	18	Z22RA1	32760		1	NO	NO	0	PO	U
	SYS1.SDWWDLPA	19	Z22RA1	32760		1	NO	NO	0	PO	U
	EJES.SEJELPA	20	Z22RA1	32760		1	NO	NO	0	PO	U
	CICST42A.CICS.SDFHLPA	21	BH5CI1	32760		1	NO	YES	0	PO	U
	CICST42A.CPSM.SEYULPA	22	BH5CI1	32760		1	NO	YES	0	PO	U

Figure 16 LPA SB command

The response from the SB command is shown in Figure 17.

Menu Functions Utilities Help							
BROWSE SYS1.LPALIB Row 0000001 of 0001808							
Command ==>							
Name	Prompt	Alias-of	Size	TTR	AC	AM	RM
. ACYAPCIP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPCNP			00007300	00EC05	00	31	ANY
. ACYAPCPP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPDRP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPDIP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPFLP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPMAP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPQCP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPQRP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPRGP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPRIP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPRQP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPRSP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPSLP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ACYAPSSP		ACYAPCNP	00007300	00EC05	00	31	ANY
. ADRDSOCF			000002F0	00F507	00	31	ANY
. ADRDSOCS			00000208	00F510	00	31	ANY
. ADYPRED			000015B0	001115	00	31	ANY
. AHLACFV		AHLVTAM	000005D8	003D21	00	31	ANY
. AHLDMPMD		AHLSETD	00001898	00350F	00	31	ANY
. AHLDSP		AHLTXSYS	00000830	003D33	00	31	ANY
. AHLEXT		AHLTSYSM	00000B60	003D0F	00	31	ANY
. AHLFFP		AHLFVEC	0000B6E0	010D09	00	31	ANY
. AHLFIO		AHLTSYFL	00000B18	003D06	00	31	ANY
. AHLFPCIE		AHLTSYFL	00000B18	003D06	00	31	ANY
. AHLFPI		AHLTSYFL	00000B18	003D06	00	31	ANY
. AHLFRR		AHLTSYSM	00000B60	003D0F	00	31	ANY

Figure 17 LPA SB response

The line commands for LPA are listed in Table 5.

Table 5 LPA line commands

Command	Description
SB	ISPF Browse
SE	ISPF Edit

APF line commands

An example of the D command is shown in Figure 18.

```

Display Filter View Print Options Search Help
-----
SDSF APF DISPLAY SC74 SC74 EXT 123 LINE 1-27 (120)
COMMAND INPUT ==> SCROLL ==> CSR
NP DSNAME Seq VolSer Status BlkSize Extent SMS LRecL DS
D_ SYS1.LINKLIB 1 Z22RA1 OK 32760 1 NO 0 PO
ASM.SASMMOD1 3 Z22RA1 OK 32760 1 NO 0 PO
CBC.SCCNCMP 4 Z22RA1 OK 32760 1 NO 0 PO
CBC.SCLBDLL 5 Z22RA1 OK 32760 1 NO 0 PO
CBC.SCLBDLL2 6 Z22RA1 OK 32760 1 NO 0 PO
CEE.SCEERUN 7 Z22RA1 OK 32760 1 NO 0 PO
CEE.SCEERUN2 8 Z22RA1 OK 32760 1 NO 0 PO
CICST42A.CPSM.SEYULPA 9 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFHAUTH 10 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFHEXCI 11 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFHLINK 12 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFHLOAD 13 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFHLPA 14 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CICS.SDFJAUTH 15 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CPSM.SEYUAUTH 16 BH5CI1 OK 32760 1 NO 0 PO
CICST42A.CPSM.SEYULINK 17 BH5CI1 OK 32760 1 NO 0 PO
CSF.SCSFMODE0 18 Z22RA1 OK 32760 1 NO 0 PO
DGA.SDGACICS 19 Z22RA1 OK 32760 1 NO 0 PO
DGA.SDGALINK 20 Z22RA1 OK 32760 1 NO 0 PO
DIT.V1R3M0.SDITMOD1 21 Z22RA1 OK 32760 1 NO 0 PO
DB0VT.SDSNEXIT 22 BH5DB6 OK 32760 1 YES 0 PO
DB0VT.SDSNLINK 23 BH5DB6 OK 32760 1 YES 0 PO
DB0VT.SDSNLOAD 24 BH5DB5 OK 32760 1 YES 0 PO
DB0VT.SDSNLOAD2 25 BH5DB5 OK 32760 1 YES 0 PO
DB0VT.SDXRRESL 26 BH5DB5 OK 32760 1 YES 0 PO
DB0VM.RUNLIB.LOAD 27 BH5DB5 OK 6233 1 YES 0 PO

```

Figure 18 APF D command

The response from the D command is shown in Figure 19.

```

Display Filter View Print Options Search Help
-----
SDSF APF DISPLAY SC74 SC74 EXT 123 COMMAND ISSUED
COMMAND INPUT ==> SCROLL ==> CSR
RESPONSE=SC74
CSV450I 17.34.54 PROG,APF DISPLAY 012
FORMAT=DYNAMIC
ENTRY VOLUME DSNAME
1 Z22RA1 SYS1.SVCLIB
  CBC.SCLBDLL 5 Z22RA1 OK 32760 1 NO 0 PO
  CBC.SCLBDLL2 6 Z22RA1 OK 32760 1 NO 0 PO
  CEE.SCEERUN 7 Z22RA1 OK 32760 1 NO 0 PO
  CEE.SCEERUN2 8 Z22RA1 OK 32760 1 NO 0 PO
  CICST42A.CPSM.SEYULPA 9 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFHAUTH 10 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFHEXCI 11 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFHLINK 12 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFHLOAD 13 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFHLPA 14 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CICS.SDFJAUTH 15 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CPSM.SEYUAUTH 16 BH5C11 OK 32760 1 NO 0 PO
  CICST42A.CPSM.SEYULINK 17 BH5C11 OK 32760 1 NO 0 PO
  CSF.SCSFMODE0 18 Z22RA1 OK 32760 1 NO 0 PO
  DGA.SDGACICS 19 Z22RA1 OK 32760 1 NO 0 PO
  DGA.SDGALINK 20 Z22RA1 OK 32760 1 NO 0 PO
  DIT.V1R3M0.SDITMOD1 21 Z22RA1 OK 32760 1 NO 0 PO
  DBOVT.SDSNEXIT 22 BH5DB6 OK 32760 1 YES 0 PO
  DBOVT.SDSNLINK 23 BH5DB6 OK 32760 1 YES 0 PO
  DBOVT.SDSNLOAD 24 BH5DB5 OK 32760 1 YES 0 PO
  DBOVT.SDSNLOD2 25 BH5DB5 OK 32760 1 YES 0 PO
  DBOVT.SDXRRESL 26 BH5DB5 OK 32760 1 YES 0 PO
  DBOVM.RUNLIB.LOAD 27 BH5DB5 OK 6233 1 YES 0 PO

```

Figure 19 APF D response

The line commands for APF are listed in Table 6.

Table 6 APF line commands

Command	Description
SB	ISPF Browse
SE	ISPF Edit
D	Displays all the entries for the data set name
DA	Displays all the data sets in the APF list

PARM line commands

An example of the D command is shown in Figure 20.

```

Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY SC74 SC74 EXT 17 LINE 1-2 (2)
COMMAND INPUT ==> SCROLL ==> CSR
NP DSNAME Seq VolSer BlkSize Extent SMS LRecL DS0rg RecFm CrDate
D SYS1.PARMLIB 1 BH5CAT 23440 16 NO 80 P0 FB 1998.016
SYS1.IBM.PARMLIB 2 Z22RA1 27920 1 NO 80 P0 FB 2015.149

```

Figure 20 PARM D command

The response from the D command is shown in Figure 21.

```

  Display  Filter  View  Print  Options  Search  Help
-----
SDSF PARMLIB DISPLAY SC74      SC74      EXT  17      COMMAND ISSUED
COMMAND INPUT ==>          SCROLL ==> CSR
RESPONSE=SC74
IEE251I 17.46.15 PARMLIB DISPLAY 020
PARMLIB DATA SETS SPECIFIED
AT IPL
ENTRY  FLAGS  VOLUME  DATA SET
  1      D    BH5CAT  SYS1.PARMLIB
  2      S    Z22RA1  SYS1.IBM.PARMLIB

```

Figure 21 PARM D response

The line commands for PARM are listed in Table 7.

Table 7 PARM line commands

Command	Description
SB	ISPF Browse
SE	ISPF Edit
D	Displays parmlibs and VolSers defined in the LOADxx or in MASTER JCL if no LOADxx is not found.
DE	Displays parmlibs specified in LOADxx but not found

PAG line commands

An example of the DD command is shown in Figure 22.

```

  Display  Filter  View  Print  Options  Search  Help
-----
SDSF PAG DISPLAY SC74      SC74      LINE 1-7 (7)
COMMAND INPUT ==>          SCROLL ==> CSR
NP  DSNAME      Type  Slots  Used  Use%  VolSer  Status  VIO  IOError
DD  PAGE.SC74.PLPA  PLPA  71999  20728  28  PAG740  OK    NO   0
    PAGE.SC74.COMMON COMMON 143999  42    0  PAG740  OK    NO   0
    PAGE.SC74.LOCAL1 LOCAL 1802699  0    0  PAG741  OK    YES  0
    PAGE.SC74.LOCAL2 LOCAL 1802699  0    0  PAG742  OK    YES  0
    PAGE.SC74.LOCAL3 LOCAL 1802699  0    0  PAG743  OK    YES  0
    PAGE.SC74.LOCAL4 LOCAL 1802699  0    0  PAG744  OK    YES  0
    N/A          SCM   8388608 20631  0  N/A    OK    NO   0

```

Figure 22 PAG DD command

The response from the DD command is shown in Figure 23.

```

Display Filter View Print Options Search Help
-----
SDSF PAG DISPLAY SC74      SC74      COMMAND ISSUED
COMMAND INPUT ==> _      SCROLL ==> CSR
RESPONSE=SC74
IEE200I 18.02.11 DISPLAY ASM 056
PAGEDEL COMMAND IS NOT ACTIVE
PAGE.SC74.LOCAL1 LOCAL 1802699      0      0 PAG741 OK      YES      0
PAGE.SC74.LOCAL2 LOCAL 1802699      0      0 PAG742 OK      YES      0
PAGE.SC74.LOCAL3 LOCAL 1802699      0      0 PAG743 OK      YES      0
PAGE.SC74.LOCAL4 LOCAL 1802699      0      0 PAG744 OK      YES      0
N/A      SCM      8388608      20631      0 N/A OK      NO      0

```

Figure 23 PAG DD response

The line commands for PARM are listed in Table 8.

Table 8 PAG line commands

Command	Description
D	Display the page data set details on that line.
DC	Displays the Common page data set details.
DD	Displays information about page delete commands active r inactive.
DL	Displays the Local page data sets details.
DP	Displays the PLPA page data set details.
DS	Displays Storage Class Memory (SCM) that is used for paging.

SYS line commands

DLR is entered into the NP column to display logrec information, as shown in Figure 24.

```

Display Filter View Print Options Search Help
-----
SDSF SYS DISPLAY SC74      SC74      LINE 1-1 (1)
COMMAND INPUT ==>      SCROLL ==> CSR
NP  SYSNAME SysLevel CPU%      SIO Aux% CSA% SQA% ECSA% ESQA% UIC  Spool%
DLR_ SC74      z/OS 02.02  3      72  0  15  36  40  38 65535  10

```

Figure 24 DLR command character in the NP column

The resulting display from the DLR is shown in Figure 25.

```

Display Filter View Print Options Search Help
-----
SDSF SYS DISPLAY SC74      SC74      COMMAND ISSUED
COMMAND INPUT ==>      SCROLL ==> CSR
RESPONSE=SC74
IFB090I 19.48.37 LOGREC DISPLAY 172
CURRENT MEDIUM = LOGSTREAM
MEDIUM NAME = SYSPLEX.LOGREC.ALLRECS
STATUS = CONNECTED

```

Figure 25 Result of the DLR command character

The SYS line commands are listed in Table 9.

Table 9 SYS line commands

Command	Description
SB	ISPF Browse
SE	ISPF Edit
D	IPL information
DAA	All address spaces
DAL	Address space list
DCEE	IBM Language Environment® options
DD	Dump information
DG	GRS information
DI	IOS information
DLL	LLA information
DLO	System logger information
DLR	Logrec information
DM	Configuration information
DMP	MPF information
DO	OMVS information
DSF	SMF status
DSL	Slip traps
DSM	SMS information
DSY	System symbols
DT	Time and date
DTO	TSO options
DTR	Trace options
DTS	TSO users
DW	WLM information
DX	XCF information

SDSFAUX installation

The enhancements are available through functional PTFs. Check the latest software status before installing the PTFs to ensure that you have the latest maintenance. The PTFs are listed in Table 10 on page 20.

Table 10 PTF summary by z/OS version

	z/OS V2R2	z/OS V2R1	z/OS V1.13
FMID	HQX774A0	HQX7790	HQX7780
SDSFAUX	UI90032	UI90031	UI90033 ^a
PPT	UA79546	UA79547	N/A
XCF (recommended)	UA79840	UA79842	N/A

a. For toleration only for the ISFPRMxx. The new enhancements are not available below z/OS V2R1.

Installation notes and considerations

Consider the following points regarding the installation and operational implementation:

- ▶ The SDSFAUX PTFs that are listed in Table 10 on page 20 are for z/OS V2R2 and z/OS V2R1 only. If the sysplex is sharing a z/OS V1R13, UI90033 is needed for toleration only. The V2R2 and V2R1 PTFs add new keywords to ISFPRMxx. z/OS V1R13 cannot use the new functionality; its PTF can be applied in advance for tolerance positioning purposes.
- ▶ The enhancements are for z/OS V2R1 and above. The sysplex-wide data is not displayed for systems at lower levels.
- ▶ SDSF is updated to include interactive help panels.
- ▶ A new PPT entry is required for SDSFAUX; the PPT PTFs update it.
- ▶ Because SDSFAUX uses XCF application client/server support, it is recommended that the PTFs that are detailed in the XCF also are applied.
- ▶ The following data sets might need more space or directory blocks:
 - ISF.SISFLOAD
 - ISF.AISFLOAD
 - ISF.SISFPLIB
 - ISF.AISFPLIB
- ▶ New modules, panels, and message that are prefixed with HSF rather than ISF are introduced with the PTFs. This introduction might have an implication for your company's procedures. Check whether you have any actions to perform as a result of the new prefix. As an example, you might review if your message processing procedures can accommodate any new messages.
- ▶ If SDSF ISFPRMxx member is shared with a z/OS system running version 1.13, PTF UI90033 must be installed to tolerate new added keywords. Macro-based assembler ISFPARMS module cannot be shared across different release levels of SDSF.
- ▶ The SDSFAUX had ++HOLD information that described how to activate the changes. Check the information contained in the HOLD data. You must integrate these activation tasks with any local procedures that are in place.
- ▶ The PTF updates the ISFPRMxx member; therefore, you might need to check this member if you customized it for your site.

- ▶ Sample JCL for SDSFAUX is provided in ISF.SISFJCL(SDSFAUX), as shown in Figure 26. You can copy the sample JCL to your chosen PROCLIB within the system proclib concatenation. Customize the JCL to meet your local standards if necessary. A different procedure name can be used. If you use a different name, the name you chose must be entered in the ISFPRMxx parameters.

```

BROWSE      ISF.SISFJCL(HSFSRJCL)                               Line 0000000000 (
Command ==> _____ Scroll
***** Top of Data *****
//SDSFAUX  PROC RGN=512M,MEMLIM=100G,FOLDMSG=NO
//*
//*      THIS IS A SAMPLE PROCEDURE TO START THE SDSFAUX SERVER.
//*
//*      PROPRIETARY STATEMENT =
//*
//*      5650-ZOS
//*      COPYRIGHT ROCKET SOFTWARE, INC. 2015 ALL RIGHTS RESERVED.
//*
//*      STATUS = HQX77A0
//*
//*      EXTERNAL CLASSIFICATION = OTHER
//*      END OF EXTERNAL CLASSIFICATION:
//*
//SDSFAUX  EXEC PGM=HSFSRV00,PARM='FOLDMSG(&FOLDMSG) ',
//          REGION=&RGN,TIME=NOLIMIT,MEMLIMIT=&MEMLIM
//HSFLOG   DD   SYSOUT=*
//HSFTRACE DD   SYSOUT=*
//*
***** Bottom of Data *****

```

Figure 26 SDSFAUX sample JCL

Security-related tasks

The following tasks or similar might be required, depending on your set-up:

- ▶ Define a user ID for the SDSFAUX started task. Add the profile to SAF STARTED Class. You might use the user ID that you used for the SDSF server, depending on the generic nature of your profile.
- ▶ To access SDSFAUX, the user must have READ access to the ISF.CONNECT.system resource in the SDSF class where “system” is the name of the system from which the command is issued. This ISF.CONNECT.system resource is in addition to the resources that are protecting the individual commands that are documented.
- ▶ SDSFAUX needs the SAF SDSF class to be Raclisted.
- ▶ SDSFAUX is started and stopped by the SDSF address space; therefore, the SDSF server must have access to OPERCMDS to issue the commands.
- ▶ It is suggested to control the use of the LNK, LPA, APF, PAG, PARM, PAG, and SYS commands with the ISFCMD.ODSPxxx resources.
- ▶ It is suggested to control the use of the LNK, LPA, APF, PAG, PARM, PAG, SYS, and SRCH line commands by using SAF or the CMDLEV parameter in ISFPARMS.

Operational and user considerations

Consider the following operational points:

- ▶ Because there is no affect on the z/OSMF user interface, there is no need to reimport the plug-in under z/OSMF.
- ▶ There can be only a single address space active on the system. If another SDSF server attempts to start the SDSFAUX address space, its request is rejected because SDSFAUX is active.
- ▶ To implement the new enhancements across the Sysplex, A SDSF server and SDSFAUX must be active on each system in the sysplex.
- ▶ It is suggested that automation procedures be modified to check for the availability of the SDSF server and the SDSFAUX address spaces.
- ▶ Consider the use of the SNAPSHOT command that was introduced in z/OS V2R2. The SNAPSHOT command uses the SDSF browse or edit function to display the data. You might then print the data or use the ISPF CREATE command to copy the data into a data set for subsequent processing.

Other publications

The following publications are also relevant as further information sources:

- ▶ *SDSF Operation and Customization V2R1*, SA23-2274-02
- ▶ *SDSF Operation and Customization V2R2*, SA23-2274-03

Online resource

The following IBM Publications Center website is also relevant as another information source:

<https://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>

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Thanks to the following people for their contributions to this project:

Bob Haimowitz (Development Support Team [DST], Poughkeepsie Center) for setting up and maintaining the systems, and providing valuable advice, guidance, and assistance throughout the creation of this IBM Redbooks publication.

Rich Conway (DST, Poughkeepsie Center) for setting up and maintaining the systems, and providing valuable advice, guidance, and assistance throughout the creation of this IBM Redbooks publication.

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REDP-5337-00

ISBN 0738455105

Printed in U.S.A.

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