

# z/OS 2.4 IBM Education Assistant (IEA)

Solution (Epic) Name: SDSF

Element(s)/Component(s): SDSF



# Agenda

- Trademarks
- Session Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Migration & Coexistence Considerations
- Installation
- Session Summary
- Appendix

# Trademarks

- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.
- Additional Trademarks:
  - None.

# Session Objectives

- New tabular panels in SDSF V2R4 (**16 !!**)
- Usability enhancements in SDSF V2R4
- z/OSMF SDSF plug-in usability enhancements
- Installation and Configuration
- Documentation and Help

# Overview

- Who (Audience)
  - System programmers, operators, administrators, general users
- What (Solution)
  - Systems management
- Wow (Benefit / Value, Need Addressed)
  - Simplify management of the system
  - Improve user experience

# Usage & Invocation

- Several ways to invoke SDSF
  - ISPF dialog
  - TSO command
  - SDSF batch (no longer being enhanced, use REXX instead)
  - SDSF/REXX (including sysrexx)
  - SDSF/Java
  - z/OSMF SDSF plug-in

# SDSF New Tabular Panels

New primary and secondary tabular displays

# New Tabular Panels

- EMCS – Extended Consoles
- OMVS – USS options
- LPD – Link Pack Directory
- XCFM – Members and Groups
- JES – JES subsystems
- RMA – Resource monitor alerts
- ENQD – Enq by data set name
- WLM – WLM policy information
- SRVC – WLM service classes
- REPC – WLM report classes
- RGRP – WLM resource groups
- WKLD – WLM workloads



# New Secondary Panels

- Job memory objects (secondary from DA and AS)
- Job DD names (secondary from DA, AS, I, ST, NS, and INIT)
- Job class members (secondary from JC)
- JES checkpoint information (secondary from JES)

# EMCS Panel

- Shows all extended consoles in the sysplex
  - Sysplex wide - SYSNAME pattern does not apply
- Actions available: display, display long, reset force, remove
- Overtypes available: Auth, IntIDs, UnknIDs, Mscope, RoutCde

```
Display Filter View Print Options Search Help
-----
SDSF EMCS DISPLAY RS86 LINE 33-39 (39)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,///-Block,%-RunExec,=-Repeat,D-Display,DL-DisplayLong,
ACTION=E-ResetForce,P-Remove
NP NAME Status Key JobName JobID QDepth QLimit QAlert% DSPSize
*AXT0486 ACTIVE SYSREXX AXR04 STC01368 0 10000 100 54
*DICN586 ACTIVE NONE 0 10000 100 774
*OPLOG86 ACTIVE OPERLOG 0 50000 100 774
*ROUTE86 ACTIVE MVSROUTE 0 2B 100 774
*SYSLG86 ACTIVE SYSLOG 0 50000 100 774
ROOT INACTIVE SDSF 0 0 0
RS86 ACTIVE SYSCONS 0 10000 80 774
```

# EMCS Panel Columns

```
Command ==> Show Columns Row 1 to 22 of 27
Sort column with F5. Use Locate to position to column.
- All values      - Column width
Column           ##  Value
NAME             01  *AXROA86
Status           01  ACTIVE
Key              01  SYSREXX
QDepth           01  0
QLimit           01  10000
QAlert%          01  100
DSPSizeK         01  540
DSPMaxK          01  2097152
ASID             01  26
ASIDX            01  001A
TermID           01  AXREMCS
Auth             01  MASTER
Level            01  NB
ConsID           01  02000013
CmdSys           01  RS86
DOM              01  NONE
HC               01  NO
Auto             01  NO
IntIDs           01  NO
UnknIDs          01  NO
PD               01  NO
SysCons          01  NO

-----
Command ==> Show Columns Row 23 to 27 of 27
Sort column with F5. Use Locate to position to column.
- All values      - Column width
Column           ##  Value
MScope           01  *ALL
RoutCde          01  NONE
RoutCdeX         01  00000000000000000000000000000000
SysName          01  RS86
SysLevel         01  z/OS 02.04.00 HBB77C0
***** Bottom of data *****
```

**Tip:** Use / action character to display the Show columns pop-up

# OMVS Options Panel

- Shows Unix System Services (USS) options in effect
  - Access with the BPXO command
    - Conflict with OMVS command which means O panel classes MVS
- Use SYSNAME pattern to limit rows
- Actions available: display OMVS options, set nolimit
- Overtypes available: any numeric property

```
Display Filter View Print Options Search Help
-----
SDSF OMVS OPTIONS  RS86      (ALL)                                LINE 5-29 (56)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX==*  DEST=(ALL)  OWNER=*  SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat,DO-DisplayOMVS,N-NoLimit
NP      NAME      NumericValue Value      Status      Sy
      BRLM SERVER      N/A      RS
      FORKCOPY      COPY      RS
      IPCMSGNIDS      500      RS
      IPCMSGBYTES      2147483647      RS
```

# OMVS Panel Properties

```
Display Filter View Print Options Search Help
-----
SDSF OMVS OPTIONS RS86 RS86 LINE 1-26 (56)
COMMAND INPUT ==> SCROLL ==> PAG
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=
NP NAME NumericValue Value Status
ALROOT
ASID 0010
AUTHPGMLIST NONE
AUTOCVT OFF
BRLM SERVER N/A
FORPCOPY COPY
IPCMSGNIDS 500
IPCMSGQBYTES 2147483647
IPCMSGQMNUM 10000
IPCSEMNIDS 500
IPCSEMNOPS 25
IPCSEMNSEMS 1000
IPCshmMPAGES 25600
IPCshmNIDS 500
IPCshmNSEGS 500
IPCshmSPAGES 262144
KERNELSTACKS ABOVE
LIMMSG NONE
LOSTMSG ON
MAXASSIZE 1073741824
MAXCORESIZE 4194304
MAXCPUPTIME 7200
MAXFILEPROC 64000
MAXFILESIZE 4294967295
MAXIOBUFUSER 2048
MAXMMAPAREA 40960
```

NOLIMIT

Numeric value means  
"NOLIMIT"

# OMVS Panel Properties ...

```
Display Filter View Print Options Search Help
-----
SDSF OMVS OPTIONS RS86 RS86 LINE 27-52 (56)
COMMAND INPUT ==> SCROLL ==>
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=
NP NAME NumericValue Value Status
MAXPIPEUSER 8730
MAXPROCSYS 400
MAXPROCUSER 150
MAXPTYS 256
MAXQUEUEDSIGS 1000
MAXSHAREPAGES 131072
MAXTHREADS 10000
MAXTHREADTASKS 5000
MAXUIDS 200
MAXUSERMOUNTSYS 0
MAXUSERMOUNTUSER 0
NONEMPTYMOUNTPT WARN
PARMLIB OMVS=(RS)
PROCNAME OMVS
PWT ENV
RESOLVER PROC RESOLVER
SC_EXITTABLE
SERV_LINKLIB
SERV_LPALIB
SHRLIBMAXPAGES 4096
SHRLIBBRGNSIZE 67108864
STEPLIBLIST
SUPERUSER OMVSKERN
SWA BELOW
SYSCALL COUNTS NO
SYSPLEX YES
```

# OMVS Panel Properties ...

```
  Display  Filter  View  Print  Options  Search  Help
-----
SDSF OMVS OPTIONS  RS86      RS86      LINE 53-56 (56)
COMMAND INPUT ==>          SCROLL ==>
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=
NP  NAME      NumericValue Value      Status
    TTYGROUP
    UMASK
    USERIDALIASTABLE
    VERSION      RP204B,N
```

# Link Pack Directory (LPD) Panel

- Shows details of modules in the link pack area
- Use SYSNAME pattern to limit rows

```
Display Filter View Print Options Search Help
-----
SDSF LPD DISPLAY RS86 (ALL) LINE 322-346 (2329)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat
NP MODNAME Major EPA LoadPt Location Mod
COFMSRB1 00000000_06BC46B0 00000000_06BC46B0 EXTENDED-PLPA 000
CSFINLPA 00000000_1056B000 00000000_1056B000 EXTENDED-CSA 000
CSFINLP2 00000000_00C28690 00000000_00C28690 CSA 000
CSFMGARC 00000000_1194B4F0 00000000_1194B4F0 EXTENDED-CSA 000
CSFMGTRC 00000000_11220608 00000000_11220608 EXTENDED-CSA 000
CSFMIQIH 00000000_119685F8 00000000_119685F8 EXTENDED-CSA 000
CSRBALUA CSRBBLSR 00000000_03839000 EXTENDED-PLPA 000
```



# LPD Panel Columns

```
Command ==> Show Columns Row 1 to 14 of 14
Sort column with F5. Use Locate to position to column.
/ All values      - Column width
Column          ##  Value
MODNAME         01  ACYAPCIP
Major           01  ACYAPCNP
EPA             01  00000000_03337000
LoadPt          01
Location        01  EXTENDED-PLPA
ModLen          01  00000000
Type            01  PLPA
AC              01  0
AM              01  31
APF             01  YES
Seq             01  2280
SysName         01  RS86
SysLevel        01  z/OS 02.04.00 HBB77C0
.END            01  **End of List**
***** Bottom of data *****
```

# XCF Members and Groups (XCFM) Panel

- Lists all XCF members and groups active in the sysplex
  - Sysplex wide - SYSNAME pattern does not apply
- Actions available: display, display all, display group

```
  Display  Filter  View  Print  Options  Search  Help
-----
SDSF XCF MEMBERS DISPLAY RS86 LINE 1-24 (96)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat,D-Display,DA-DisplayAll,
ACTION=DG-DisplayGroup
NP  NAME      Member      Status  SysName  JobName  Stalled  Sends  Rece
   COFVLFO RS86      ACTIVE  RS86     VLF      NO        0
   EZBTCPC RS86TCPIP ACTIVE  RS86     TCPIP    NO        0
   HSFIXC   HSF@RS86  ACTIVE  RS86     SDSFAUX  NO        0
   IGG0CAS  IGG0CAS1RS86 ACTIVE  RS86     CATALOG  NO        0
   IGG0CAS  IGG0CAS1RS87 FAILED  RS87     CATALOG  NO        0
   IOEZFS   RS86      ACTIVE  RS86     ZFS      NO        0
   ISTCFS01 RS86SSCPROCKNET1 ACTIVE  RS86     VTAM     NO        0
   ISTXCF   RS86SSCPROCKNET1 ACTIVE  RS86     VTAM     NO        0
   IXCLO002 M693      ACTIVE  RS86     GRS      NO        0
   MXXDSG2C MXI@RS86  ACTIVE  RS86     MXIMAST  NO        0
   N1       MSCBUFF$RS85 FAILED  RS85     JESXCF   NO        0
```

# XCFM Columns

[illegible]

# JES Subsystems Panel

- Lists all known JES2 and JES3 subsystems in the sysplex
  - Use SYSNAME pattern to limit rows
- Actions available: display, display checkpoint

```
Display Filter View Print Options Search Help
-----
SDSF JES DISPLAY RS86 (ALL) LINE 1-2 (2)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat,D-Display,JC-CheckPoint
NP NAME Type Primary Member Emergency ComChar Global OwnNode XCFGroup S
JES2 JES2 YES RS86 HASP $ NO N1 RSPLEX0G A
JES2 JES2 YES RS88 HASP $ NO N1 RSPLEX0G A
```

# JES Subsystems Columns

```
Command ===> Show Columns Row 1 to 16 of 16
Sort column with F5. Use Locate to position to column.
/ All values      - Column width
Column           ##  Value
NAME             01  JES2
Type             01  JES2
Primary          01  YES
Member           01  RS86
Emergency        01  HASP
ComChar          01  $
Global           01  NO
OwnNode          01  N1
XCFGroup         01  RSPLEX0G
Status           01  ACTIVE
Service          01  0
Version          01  z/OS 2.4
SSCT             01  00C29670
SysName          01  RS86
SysLevel         01  z/OS 02.04.00 HBB77C0
.END             01  **End of List**
***** Bottom of data *****
```

# Resource Monitor Alerts (RMA) Panel

- Shows outstanding JES2 alerts, notices, and track messages
  - Use SYSNAME pattern to limit rows
- Actions available: monitor, monitor details, monitor history, monitor state, monitor status

```
Display Filter View Print Options Search Help
-----
SDSF RESOURCE ALERTS (ALL) LINE 1-4 (4)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat,J-Monitor,JD-MonitorDetails,
ACTION=JH-MonitorHistory,JJ-MonitorState,JS-MonitorStatus
NP TYPE Member MessageLine1
NOTICE RS86 $HASP9250 RESOURCE JOES UTILIZATION IS AT 6.72%
NOTICE RS86 $HASP9250 RESOURCE JQES UTILIZATION IS AT 5.66%
NOTICE RS88 $HASP9250 RESOURCE JOES UTILIZATION IS AT 6.72%
NOTICE RS88 $HASP9250 RESOURCE JQES UTILIZATION IS AT 5.66%
```

# Resource Monitor Alerts Columns

```
Command ==> Show Columns Row 1 to 12 of 12
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column          ##  Value
TYPE            01  NOTICE
Member          01  RS86
MessageLine1    01  $HASP9250 RESOURCE JOES UTILIZATION IS AT 12.61%
MessageLine2    01
MessageLine3    01
MessageLine4    01
MessageTime     01
Critical        01  NO
JESN            01  JES2
SysName         01  RS86
SysLevel        01  z/OS 02.04.00 HBB77C0
.END            01  **End of List**
***** Bottom of data *****
```

# ENQ by Data Sets (ENQD) Panel

- Shows all enqueues for a data set on all systems in the sysplex
  - Variant of the ENQ panel
    - Equivalent to ENQ SYSDSN \* followed by FILTER for data set name
- Actions available: display

```
Display Filter View Print Options Search Help
-----
SDSF ENQ DISPLAY RS86          DATASET TS5485*          LINE 1-8 (8)
COMMAND INPUT ===>          SCROLL ===> HALF
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,--Repeat,D-Display
NP      MINOR
        TS5485.RS86.ISPPROF          Major      Req JobName
        TS5485.RS86.SPFTEMP1.CNTL    SYSDSN     SHR TS5485
        TS5485.RS86.SPFTEMP2.WORK    SYSDSN     EXC TS5485
        TS5485.RS86.SPFTEMP1.LIST    SYSDSN     EXC TS5485
        TS5485.RS86.SPFTEMP0.CNTL    SYSDSN     EXC TS5485
        TS5485.RS86.SPFTEMP2.CNTL    SYSDSN     EXC TS5485
        TS5485.RS86.SPFTEMP1.WORK    SYSDSN     EXC TS5485
        TS5485.RS86.SPFTEMP2.LIST    SYSDSN     EXC TS5485
```



# ENQD Columns

Command ==> _____			Show Columns	Row 1 to 22 of 22
Sort column with F5. Use Locate to position to column.				
/ All values		_ Column width		
Column	##	Value		
MINOR	01	TS5485.RS86.ISPPROF		
Major	01	SYSDSN		
Req	01	SHR		
JobName	01	TS5485		
ASID	01	117		
ASIDX	01	0075		
Level	01	ENQ		
SMC	01	NO		
Scope	01	SYSTEMS		
Status	01	OWN		
Owners	01	1		
Waiters	01	0		
WaitExc	01	0		
WaitShr	01	0		
Unit	01			
UserData	01			
ReqTime	01	03/04/2019 10:49:42		
EnqToken	01	C5D5D8E301000000000000050001C9CA000D5C56FD3B560B200		
		0000000C5C0003		
RNameLong	01	TS5485.RS86.ISPPROF		
SysName	01	RS86		
.END	01	**End of List**		

# WLM Policy (WLM) Panel

- Shows details from the current WLM policy

```
Display Filter View Print Options Search Help
-----
SDSF WLM POLICY DISPLAY RS86 ROCKET01 LINE 1-10 (10)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat
NP NAME Value DateValu
    ACTIVE POLICY ROCKET01
    POLICY DESCRIPTION Rocket Software Policy 01
    ACTIVATION SYSTEM RS88
    ACTIVATION USERID PDSCOT
    ACTIVATION DATE 06/21/20
    SERVICE DEFINITION Rocket01
    SERVICE DEFINITION DESC Rocket Policy 01
    INSTALLATION SYSTEM RS88
    INSTALLATION USERID PDSCOT
    INSTALLATION DATE 06/21/20
```

# WLM Panel Columns

```

                                     Show Columns                               Row 1 to 4 of 4
Command ==> _____
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column           ##  Value
NAME             01  ACTIVE POLICY
Value            01  ROCKET01
DateValue        01
.END             01  **End of List**
***** Bottom of data *****

```

# WLM Service Classes (SRVC) Panel

- Shows details about all service classes from the current WLM policy

```

  _ Display  Filter  View  Print  Options  Search  Help
-----
SDSF SERVICE CLASSES  RS86      ROCKET01      LINE 1-25 (27)
COMMAND INPUT ==>
PREFIX=**  DEST=(ALL)  OWNER=*   SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat
NP  NAME      ResGroup  Per  Description      Duration  Imp  CPUCri
   ASCH              1  APPC Transactions      2  NO
   BATCH              1  Batch Work              2  NO
   CICS               1  CICS                    4  NO
   DAEMON             1  USS DAEMON              2  NO
   DB2                1  DB2                     1  NO
   DB2SERV            1  DB2 Servers             4  NO
   DB2STPRO           1  DB2 Stored procedures   3  NO
   DDF               1  DB2 Distributed Transactions 4  NO

```

# SRVC Panel Columns

```
Command ==> Show Columns Row 1 to 22 of 26
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column           ##  Value
NAME             01  BATCH
ResGroup         01
Per              01  1
Description      01  Batch Work
Duration         01
Imp             01  2
CPUCrit          01  NO
StorProt        01  NO
IOPrio          01  NORMAL
HonorPrio       01  DEFAULT
MaxPer          01  1
WorkLoad        01  BATCH
Goal            01  Execution velocity of 50
TransSSUse      01  NO
AddrSpcSSUse    01  YES
EncSSUse        01  NO
SysHUse         01  NO
EWLMKey         01  0
EWLMName        01
CrUser          01  PDSHAN
CrDate          01  10/08/2003 07:55:06
UpdUser         01  PDSHAN
```

```
Command ==> Show Columns Row 23 to 26 of 26
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column           ##  Value
UpdDate          01  12/17/2003 09:13:37
Policy           01  ROCKET01
PolicyDescription 01  Rocket Software Policy 01
.END             01  **End of List**
***** Bottom of data *****
```

# WLM Report Classes (REPC) Panel

- Shows details about all report classes from the current WLM policy

```
Display Filter View Print Options Search Help
-----
SDSF REPORT CLASS DISPLAY RS86 ROCKET01 LINE 1-8 (8)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat
NP NAME Description Policy PolicyDescription
CICSRPT CICS Report Group ROCKET01 Rocket Software Policy
DB2SQ DB2 Sysplex Queries ROCKET01 Rocket Software Policy
DDF DB2 Distributed Transactions ROCKET01 Rocket Software Policy
IWEB Web Server Transactions ROCKET01 Rocket Software Policy
LSFM Lan Server for MVS ROCKET01 Rocket Software Policy
MONITORS System Monitors ROCKET01 Rocket Software Policy
OMVS OpenEdition MVS/UNIX ROCKET01 Rocket Software Policy
SOM System Object Model ROCKET01 Rocket Software Policy
```

# REPC Panel Columns

```

                                     Show Columns                               Row 1 to 12 of 12
Command ==> _____
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column           ##  Value
NAME             01  CICS RPT
Description      01  CICS Report Group
Policy           01  ROCKET01
PolicyDescription 01  Rocket Software Policy 01
PolicyActDate    01  06/21/2018 10:13:46
CrUser           01  PDSHAN
CrDate           01  09/05/2006 09:09:00
UpdUser          01  PDSHAN
UpdDate          01  09/05/2006 09:09:00
SysName          01  RS86
SysLevel         01  z/OS 02.04.00 HBB77C0
.END             01  **End of List**
***** Bottom of data *****

```

# WLM Resource Groups (RGRP) Panel

- Shows details about all resource groups from the current WLM policy

```

  Display Filter View Print Options Search Help
-----
SDSF RESGROUP DISPLAY RS86 ROCKET01 LINE 1-2 (2)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,--Repeat
NP  NAME      Description      Policy      MinSU      MaxSU      MinLP
    KILLIT     Logical Swapout for Non-Swap  ROCKET01      1
    TSTRGRP1   TEST resource group for SDSF  ROCKET01      1  10000

```



# RGRP Panel Columns

```

Command ==> _____ Show Columns Row 1 to 19 of 19
Sort column with F5. Use Locate to position to column.

/ All values      _ Column width

Column      ##  Value
NAME        01  TSTRGRP1
Description  01  TEST resource group for SDSF
Policy       01  ROCKET01
MinSU        01  1
MaxSU        01  10000
MinLPAR%     01
MaxLPAR%     01
MinCPU%      01
MaxCPU%      01
MemLimit     01
PolicyDescription  01  Rocket Software Policy 01
PolicyActDate  01  06/21/2018 10:13:46
CrUser       01  PDSCOT
CrDate       01  07/27/2017 12:02:32
UpdUser      01  PDSCOT
UpdDate      01  05/14/2018 10:06:30
SysName      01  RS86
SysLevel     01  z/OS 02.04.00 HBB77C0
.END         01  **End of List**
***** Bottom of data *****

```

# WLM Workloads (WKLD) Panel

- Shows details about all workloads from the current WLM policy

```

  Display Filter View Print Options Search Help
-----
SDSF WORKLOAD DISPLAY RS86 ROCKET01 LINE 1-13 (13)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
ACTION=+-Extend,/-Show,//-Block,%-RunExec,=-Repeat
NP  NAME      Description      Policy      PolicyDescription
   ASCH      APPC              ROCKET01    Rocket Software Policy
   BATCH     Batch Workload     ROCKET01    Rocket Software Policy
   CICS      CICS              ROCKET01    Rocket Software Policy
   DB2       DB2 Work          ROCKET01    Rocket Software Policy
   DB2SERV   DB2 Servers       ROCKET01    Rocket Software Policy
   DDF       Distributed DB2    ROCKET01    Rocket Software Policy
   IMS       IMS              ROCKET01    Rocket Software Policy
   IWEB      HTTP Server, Fast Resp Cache Acc ROCKET01    Rocket Software Policy
   SOAKER    Bottom of the Barrel ROCKET01    Rocket Software Policy
   STC       Started Tasks      ROCKET01    Rocket Software Policy
   SYSTEM    THE SYSTEM WORKLOAD ROCKET01    Rocket Software Policy

```

# WKLD Panel Columns

```

                                     Show Columns                               Row 1 to 12 of 12
Command ==> _____
Sort column with F5. Use Locate to position to column.
/ All values      _ Column width
Column           ##  Value
NAME             01  ASCH
Description       01  APPC
Policy           01  ROCKET01
PolicyDescription 01  Rocket Software Policy 01
PolicyActDate     01  06/21/2018 10:13:46
CrUser           01  PDSHAN
CrDate           01  04/30/2007 12:17:29
UpdUser          01  PDSHAN
UpdDate          01  04/30/2007 12:17:29
SysName          01  RS86
SysLevel         01  z/OS 02.04.00 HBB77C0
.END             01  **End of List**
***** Bottom of data *****
```

# Job Memory Objects (JMO) Panel

- Shows all memory objects allocated for an address space
  - Accessed with JMO action from DA and AS panels

Display Filter View Print Options Search Help

-----

SDSF DA RS86

(ALL)

PAG 0 CPU 8

LINE 31-56 (128)

COMMAND INPUT ==>

SCROLL ==> HALF

PREFIX=\*\*

DEST=(ALL)

OWNER=\*

SYSNAME=\*

NP

JOBNAME

StepName

ProcStep

JobID

Owner

C

Pos

DP

Real

Paging

SIO

jmo

HZR

HZR

IEFPROC

NS

FE

365

0.00

0.00

JES2

JES2

IEFPROC

NS

FE

9840

0.00

0.00

VLF

VLF

VLF

NS

FE

3531

0.00

0.00

Display Filter View Print Options Search Help

-----

SDSF MEMOBJ RS86

ASID 0022 JES2

LINE 1-15 (15)

COMMAND INPUT ==>

SCROLL ==> HALF

PREFIX=\*\*

DEST=(ALL)

OWNER=\*

SYSNAME=\*

NP

TYPE

Start-Address

End-Address

Size

Key

Guard

FProt

Sh

PRIVATE

00000010\_00000000

00000010\_002FFFFFFF

3072K

0

DEFAULT

YES

NO

PRIVATE

00000010\_00400000

00000010\_004FFFFFFF

1024K

1

NONE

NO

NO

PRIVATE

00000010\_00500000

00000010\_006FFFFFFF

2048K

1

NONE

YES

NO

PRIVATE

00000050\_00000000

00000050\_01DFFFFFFF

30720K

1

NONE

YES

NO

PRIVATE

00000050\_01E00000

00000050\_01FFFFFFF

2048K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02100000

00000050\_022FFFFFFF

2048K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02400000

00000050\_024FFFFFFF

1024K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02600000

00000050\_026FFFFFFF

1024K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02800000

00000050\_028FFFFFFF

1024K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02A00000

00000050\_02AFFFFFFF

1024K

1

DEFAULT

NO

NO

PRIVATE

00000050\_02C00000

00000050\_0337FFFFF

780M

1

NONE

NO

NO

PRIVATE

00000050\_33800000

00000050\_338FFFFFFF

1024K

1

DEFAULT

NO

NO

PRIVATE

00000050\_33A00000

00000050\_33DFFFFFFF

4096K

1

NONE

NO

NO

COMMON

000001EF\_87900000

000001EF\_87BFFFFFFF

3072K

1

DEFAULT

YES

NO

# JMO Panel Columns

```
Command ==> Show Columns Row 1 to 18 of 18
Sort column with F5. Use Locate to position to column.
/ All values      - Column width
Column           ##  Value
TYPE             01  PRIVATE
Start-Address    01  00000010_00000000
End-Address      01  00000010_002FFFFFF
Size            01  3145728
Key              01  0
Guard           01  DEFAULT
FProt           01  YES
Shared          01  NO
Large           01  NO
CrDate          01
PgmRetAddr      01
JobName         01  JES2
JobID           01
ASID            01  34
ASIDX           01  0022
SysName         01  RS86
SysLevel        01  z/OS 02.04.00 HBB77C0
.END            01  **End of List**
***** Bottom of data *****
```

# Job DD Name (JDDN) Panel

- Shows data set allocations for a job
  - Subset of Job Device panel but no TCPIP or CF rows are shown
- Accessed with JDD action character from DA, AS, I, ST, INIT, and NS panels
- Use SRCH command to locate members within the data sets shown

# Job DD Name (JDDN) Panel

Display Filter View Print Options Search Help

SDSF AS DISPLAY RS86 RS86 LINE 63-65 (65)

COMMAND INPUT ==> SCROLL ==> HALF

PREFIX=\*\* DEST=(ALL) OWNER=\* SYSNAME=

NP	JOBNAME	ASIDX	Real	Fixed	CSA	CSA%	ECSA	ECSA%	SQA	SQA%
	SDSFKJ	0078	1355	126	0	0.00	635616	0.35	0	0.00
	SDSFAUX	0079	2603	183	0	0.00	7136	0.00	64	0.00
	TS5485	007B	2663	130	160	0.00	2520	0.00	96	0.00

jdd

Display Filter View Print Options Search Help

SDSF JOB DDNAME RS86 ASID 007B TS5485 TSU01475 LINE 1-26 (37)

COMMAND INPUT ==> SCROLL ==> HALF

PREFIX=\*\* DEST=(ALL) OWNER=\* SYSNAME=

NP	DDNAME	Seq	Status	DataSetName
	ISPCTL0	1	ALLOC	TS5485.RS86.SPFTEMP0.CNTL
	ISPCTL1	1	ALLOC	TS5485.RS86.SPFTEMP1.CNTL
	ISPCTL2	1	ALLOC	TS5485.RS86.SPFTEMP2.CNTL
	ISPLOG	1	OPEN	TS5485.TS5485.TSU01475.D0000103.?
	ISPLST1	1	ALLOC	TS5485.RS86.SPFTEMP1.LIST
	ISPLST2	1	ALLOC	TS5485.RS86.SPFTEMP2.LIST
	ISPMLIB	1	OPEN	ISP.SISPMENU
	ISPPLIB	1	OPEN	RSRTE.LIBDEF.ISPPLIB
	ISPPLIB	2	OPEN	ROCKET.USER.SPFPLIB
	ISPPLIB	3	OPEN	ISP.SISPPENU
	ISPPROF	1	OPEN	TS5485.RS86.ISPPROF
	ISPSLIB	1	OPEN	ISP.SISPSLIB
	ISPSLIB	2	OPEN	ISP.SISPSENU
	ISPTABL	1	ALLOC	TS5485.RS86.ISPPROF
	ISPTLIB	1	OPEN	ISP.SISPTENU
	ISPTLIB	2	OPEN	RSRTE.LIBDEF.ISPTLIB
	ISPWRK1	1	ALLOC	TS5485.RS86.SPFTEMP1.WORK
	ISPWRK2	1	ALLOC	TS5485.RS86.SPFTEMP2.WORK

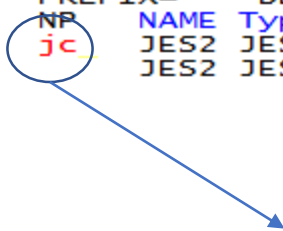
# JDDN Panel Columns

Command ==> _____			Show Columns	Row 1 to 22 of 23
Sort column with F5. Use Locate to position to column.				
/ All values		- Column width		
Column	##	Value		
DDNAME	01	ISPCTL0		
Seq	01	1		
Status	01	ALLOC		
DataSetName	01	TS5485.RS86.SPFTEMPO.CNTL		
VolSer	01	TSPG00		
Unit	01	649A		
UnitCt	01	1		
RecFm	01	FB		
LRecl	01	80		
BlkSize	01	23440		
Disp1	01	NEW		
Disp2	01	DELETE		
Disp3	01			
EXCP-Cnt	01			
Open	01			
DSOrg	01	PS		
SMS	01	YES		
ConnectTime	01	0.000		
AvgConnTime	01	0.000		
APF	01			
SysName	01	RS86		
SysLevel	01	z/OS 02.04.00 HBB77C0		



# JES2 Checkpoint (CKPT) Panel

- Shows checkpoint properties being used by JES
- Accessed with JC action character from JES panel



The diagram illustrates the process of accessing the JES2 Checkpoint panel from the JES panel. A blue circle highlights the 'jc' action character in the JES panel's command input line. An arrow points from this circle to the JES2 Checkpoint panel, indicating that entering 'jc' triggers the display of the checkpoint information.

Display Filter View Print Options Search Help										
-----										
SDSF JES DISPLAY RS86 (ALL) LINE 1-2 (2)										
COMMAND INPUT ==> SCROLL ==> HALF										
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*										
NP	NAME	Type	Primary	Member	Emergency	ComChar	Global	OwnNode	XCFGGroup	S
jc	JES2	JES2	YES	RS86	HASP	\$	NO	N1	RSPLEX0G	A
	JES2	JES2	YES	RS88	HASP	\$	NO	N1	RSPLEX0G	A

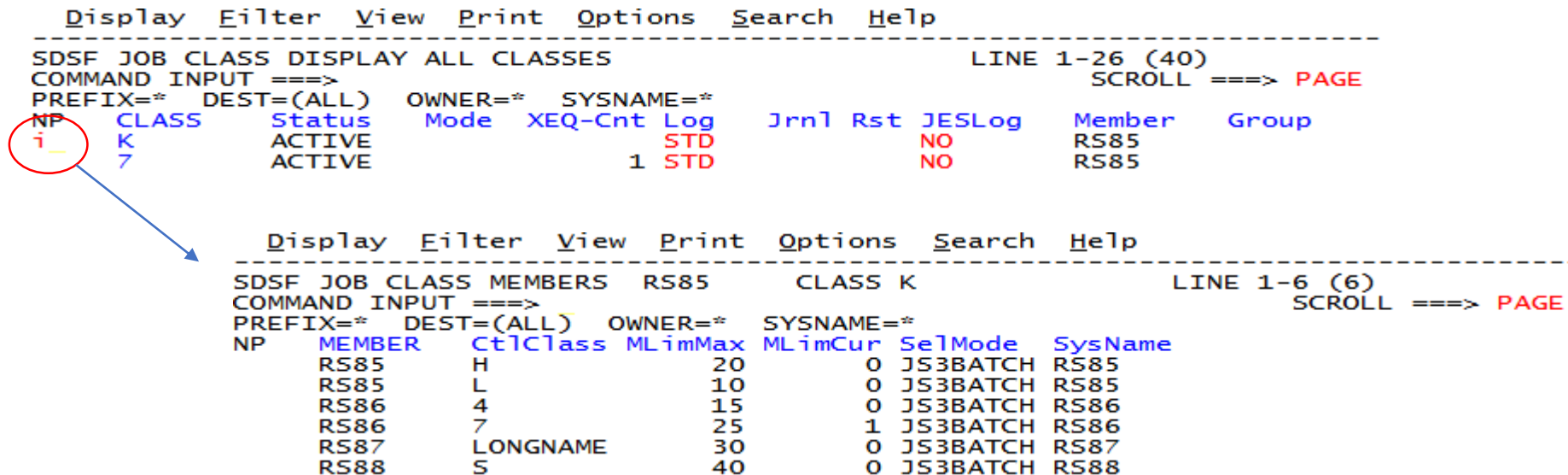
Display Filter View Print Options Search Help										
-----										
SDSF JES CHECKPOINT RS86 JESNAME JES2 LINE 1-4 (4)										
COMMAND INPUT ==> SCROLL ==> HALF										
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*										
NP	NAME	Capacity	Cap%	CapUsed	CapPage	InUse	CF	Mode	Duplex	Volatile
	CKPT1	14696448	32	4808704	3588	YES	NO	DUPLEX	ON	NO
	CKPT2	14696448	32	4808704	3588	YES	NO	DUPLEX	ON	NO
	NEWCKPT1	0	0	0	0	NO	NO	DUPLEX	ON	NO
	NEWCKPT2	0	0	0	0	NO	NO	DUPLEX	ON	NO

# JES Checkpoint Panel Columns

Command ==> _____			Show Columns	Row 1 to 22 of 22
Sort column with F5. Use Locate to position to column.				
/ All values		- Column width		
Column	##	Value		
NAME	01	CKPT1		
Capacity	01	14696448		
Cap%	01	32		
CapUsed	01	4808704		
CapPage	01	3588		
InUse	01	YES		
CF	01	NO		
Mode	01	DUPLEX		
Duplex	01	ON		
Volatile	01	NO		
OpVerify	01	NO		
Size	01	16999200		
Size%	01	100		
SizeUsed	01	16999200		
SizeTrk	01	300		
StrName	01			
DataSetName	01	RSPLEX0G.HASPCKPT		
VolSer	01	JSPG00		
JESName	01	JES2		
SysName	01	RS86		
SysLevel	01	z/OS 02.04.00 HBB77C0		
.END	01	**End of List**		

# Job Class Members (JCM) panel

- Shows members associated with a class (JES3 only)
- Accessed with the I action character from the JC panel



The diagram illustrates the transition from the Job Class Display panel to the Job Class Members panel. In the first panel, the 'I' action character is circled in red, and a blue arrow points to the second panel.

**Job Class Display Panel:**

Display	Filter	View	Print	Options	Search	Help
SDSF JOB CLASS DISPLAY ALL CLASSES						
LINE 1-26 (40)						
COMMAND INPUT ==>						
PREFIX=* DEST=(ALL) OWNER=* SYSNAME=*						
NP	CLASS	Status	Mode	XEQ-Cnt	Log	Jrn1 Rst JESLog Member Group
i	K	ACTIVE			STD	NO RS85
	7	ACTIVE		1	STD	NO RS85

**Job Class Members Panel:**

Display	Filter	View	Print	Options	Search	Help
SDSF JOB CLASS MEMBERS RS85 CLASS K						
LINE 1-6 (6)						
COMMAND INPUT ==>						
PREFIX=* DEST=(ALL) OWNER=* SYSNAME=*						
NP	MEMBER	CtlClass	MLimMax	MLimCur	SelMode	SysName
	RS85	H	20	0	JS3BATCH	RS85
	RS85	L	10	0	JS3BATCH	RS85
	RS86	4	15	0	JS3BATCH	RS86
	RS86	7	25	1	JS3BATCH	RS86
	RS87	LONGNAME	30	0	JS3BATCH	RS87
	RS88	S	40	0	JS3BATCH	RS88

# Miscellaneous Panel Updates

New columns and actions on existing panels

# New Columns

Panel	Column Name	Column Title	Description
CDE	CDATTR3	Attr3	CSVINFO attribute byte 3
CDE	CDATTR4	Attr4	CSVINFO attribute byte 4
CSR	HVCOM	HVComUsed	64-bit common not released (bytes)
DA	ESRBTIME	ESRB-Time	Enclave CPU time
DA	CPULIMIT	CPU-Limit	CPU time limit
DA	REUS	Reus	Reusable address space (yes or no)
DA	SYSLEVEL	SysLevel	Level of the operating system
H	JOBCRDATE	JobCrDate	Job creation date (JES2 only)
I	JOBCRDATE	JobCrDate	Job creation date (JES2 only)
JC	SYSNAME	SysName	System name for member (JES3 only)
JC	SELMODE	SelMode	Selection mode name (JES3 only)

# New Columns

Panel	Column Name	Column Title	Description
JDD	APF	APF	APF indicator for loadlibs (yes or no)
JDS	COMPRESS	Compressed	Compression status (yes or no)
JDS	ENCRYPT	Encrypted	Encryption status (yes or no)
JDS	KEYLABEL	KeyLabel	Keylabel for encryption
JS	TIOTHWM	TIOTHWM	High water mark for TIOT entries used (bytes)
JS	TIOTUSED	TIOTUsed	Current TIOT space used for entries (bytes)
JS	TIOTAVAIL	TIOTAvail	Size of TIOT available for entries (bytes)
MAS	CKPTLEV	CkptLevel	JES2 checkpoint level (\$activate level)
MAS	ALERT	Alert-Types	Types of alert messages outstanding (JES2 only)
O	JOBCRDATE	JobCrDate	Job creation date (JES2 only)
PAG	UNIT	Unit	Data set unit address

# New Columns

Panel	Column Name	Column Title	Description
PAG	DEVNAME	DevName	Data set device name
PAG	CUNAME	CUName	Data set control unit name
PAG	SUBCHAN	SubChanSet	Data set subchannel set
PS	ZIIPTIME	zIIP-Time	System and user compute time on zIIP
PS	RUID	RUID	Process real user ID
PS	EUID	EUID	Process effective user ID
RM	SCOPE	Scope	Resource scope (local or JESPLEX)
ST	JOBCRDATE	JobCrDate	Job creation date (JES2 only)
SYS	JESTYPE	JESType	JES type for primary JES (JES2 or JES3)

# New Actions

Panel	Action Character	Description
APF	SV	ISPF view
AS	JMO	Display memory objects owned by the job. Access JMO panel.
AS	N	Display enqueues
CK	SV	ISPF view
CKH	SV	ISPF view
DA	JMO	Display memory objects owned by the job. Access JMO panel.
DA	SV	ISPF view
H	SV	ISPF view
I	SV	ISPF view
JC	I	Member information. Access Job Class Members panel. (JES3 only)
JDS	SV	ISPF view



# New Actions

Panel	Action Character	Description
JG	SV	ISPF view
J0	SV	ISPF view
LNK	SV	ISPF view
LPA	SV	ISPF view
O	SV	ISPF view
OD	SV	ISPF view
PARM	SV	ISPF view
PROC	SB	ISPF browse data set
PROC	SE	ISPF edit data set
PROC	SV	ISPF view data set
SRCH	SV	ISPF view

# New Actions

Panel	Action Character	Description
ST	SV	ISPF view
STEP	SV	ISPF view

# MAS Panel Critical Notice Indicator

- MAS panel title line shows “CRIT” when critical notice outstanding

```
Display Filter View Print Options Search Help
-----
SDSF RESOURCE ALERTS RS86 LINE 1-1 (1)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP TYPE Member MessageLine1
NOTICE RS86 $HASP9159 JES2 EXECUTION PROCESSING STOPPED ($PXEQ)
```

```
Display Filter View Print Options Search Help
-----
SDSF MAS DISPLAY RS86 RSPLEX0G 65% CRIT LINE 1-6 (6)
COMMAND INPUT ==> SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP NAME Status SID PrevCkpt Hold ActHold Dormancy ActDorm SyncT
RS85 DRAINED 1 0.00 0 0 (0,0) 0
RS86 ACTIVE,PXEQ 2 0.93 20 20 (100,500) 500 1
RS87 DRAINED 3 0.00 0 0 (0,0) 0
RS88 ACTIVE 4 0.08 20 20 (100,500) 500 1
```

```
Column ## Value
Boss 01 YES
Command 01 $PXEQ
Start-Type 01 QUICK
Start-Date-Time 01 03/04/2019 10:48:14
CkptLevel 01 Z22
Alert-Types 01 CRITICAL-NOTICE
.END 01 **End of List**
```

# SDSF Usability Enhancements

New capabilities in the SDSF client

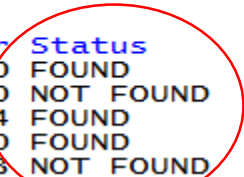
# SRCH Command Enhancements

- SRCH command used to locate members
  - APF, JDDN (Job DDName), LNK, LPA, PARM, PROC, SRCH
- New parameters added to limit rows shown
  - All data sets searched (default)
  - Data sets for which the member was found
  - Data sets for which the member was not found
- Default action can be controlled through new SET SRCH command
- Syntax
  - SRCH *member-pattern* [F | NF | ALL]

# SRCH Command (All)

```
Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY RS86 RS86 EXT 33 LINE 1-5 (5)
COMMAND INPUT ==> srch isfprm* SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME Seq VolSer BlkSize Extent SMS LRecL DSOrg RecFm Cr
   RSPLEXOG.PARMLIB.ZOS204 1 MCPG00 27920 1 NO 80 PO FB 20
   RSPLEXOG.PARMLIB 2 MCPG00 27920 14 NO 80 PO FB 20
   RSRTE.PARMLIB 3 R3P104 27920 1 YES 80 PO FB 20
   ROCKET.USER.PARMLIB 4 S1PG00 27920 16 YES 80 PO FB 20
   SYS1.PARMLIB 5 RP204B 27920 1 NO 80 PO FB 20
```

```
Display Filter View Print Options Search Help
-----
SDSF SRCH DISPLAY ISFPRM* ALL LINE 1-5 (5)
COMMAND INPUT ==> SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME SysName Seq VolSer Status DSOrg BlkSize
   RSPLEXOG.PARMLIB.ZOS204 RS86 1 MCPG00 FOUND PO 27920
   RSPLEXOG.PARMLIB RS86 2 MCPG00 NOT FOUND PO 27920
   RSRTE.PARMLIB RS86 3 R3P104 FOUND PO 27920
   ROCKET.USER.PARMLIB RS86 4 S1PG00 FOUND PO 27920
   SYS1.PARMLIB RS86 5 RP204B NOT FOUND PO 27920
```



Results from all data sets shown

# SRCH Command (Only Found)

```
Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY RS86 RS86 EXT 33 LINE 1-5 (5)
COMMAND INPUT ==> srch isfprm* f SCROLL ==> PAGE
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME Seq VolSer BlkSize Extent SMS LRecL DSOrg RecFm Cr
   RSPLEXOG.PARMLIB.ZOS204 1 MCPG00 27920 1 NO 80 PO FB 20
   RSPLEXOG.PARMLIB 2 MCPG00 27920 14 NO 80 PO FB 20
   RSRTE.PARMLIB 3 R3P104 27920 1 YES 80 PO FB 20
   ROCKET.USER.PARMLIB 4 S1PG00 27920 16 YES 80 PO FB 20
   SYS1.PARMLIB 5 RP204B 27920 1 NO 80 PO FB 20
```

Use F  
parameter

```
Display Filter View Print Options Search Help
-----
SDSF SRCH DISPLAY ISFPRM* FOUND LINE 1-3 (3)
COMMAND INPUT ==> SCROLL ==> PAGE
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME SysName Seq VolSer Status DSOrg BlkSize
   RSPLEXOG.PARMLIB.ZOS204 RS86 1 MCPG00 FOUND PO 27920
   RSRTE.PARMLIB RS86 3 R3P104 FOUND PO 27920
   ROCKET.USER.PARMLIB RS86 4 S1PG00 FOUND PO 27920
```

**Tip:** Change default with SET SRCH  
command, e.g. SET SRCH F

# SRCH Command (Only Not Found)

```
Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY RS86 RS86 EXT 33 LINE 1-5 (5)
COMMAND INPUT ==> srch isfprm* nf SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME Seq VolSer BlkSize Extent SMS LRecL DSOrg RecFm Cr
   RSPLEXOG.PARMLIB.ZOS204 1 MCPG00 27920 1 NO 80 PO FB 20
   RSPLEXOG.PARMLIB 2 MCPG00 27920 14 NO 80 PO FB 20
   RSRTE.PARMLIB 3 R3P104 27920 1 YES 80 PO FB 20
   ROCKET.USER.PARMLIB 4 S1PG00 27920 16 YES 80 PO FB 20
   SYS1.PARMLIB 5 RP204B 27920 1 NO 80 PO FB 20
```

```
Display Filter View Print Options Search Help
-----
SDSF SRCH DISPLAY ISFPRM* NOT FOUND LINE 1-2 (2)
COMMAND INPUT ==> SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP DSNNAME SysName Seq VolSer Status DSOrg BlkSize Extent
   RSPLEXOG.PARMLIB RS86 2 MCPG00 NOT FOUND PO 27920 14
   SYS1.PARMLIB RS86 5 RP204B NOT FOUND PO 27920 1
```



# ARRANGE hidden columns

- Hide columns on tabular panels using ARRANGE command
  - Reduces left/right scrolling
  - Use / action to show columns in pop-up
- New special column name .END
  - Marks end of visible columns
  - All columns up to .END will be shown on panel
- Examples:
  - **arr .end a saff** (All columns after SAff will be hidden)
  - **arr .end last** (All columns will be visible)
  - **arr default** (resets to default column arrangement)
  - **arr ?** (to display arrange pop-up)

# Arrange Hidden Columns

Display Filter View Print Options Search Help									
-----									
SDSF STATUS DISPLAY ALL CLASSES					LINE 1-26 (1032)				
COMMAND INPUT ==> arr .end a saff					SCROLL ==> PAGE				
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=									
NP	JOBNAME	JobID	Owner	Prty Queue	C	Pos	Saff	ASys Status	
	MNTWTOR	JOB00665	SUBJCL	9 EXECUTION	A		RS87		
	MNTWTOR	JOB01664	SUBJCL	9 EXECUTION	A		RS87		
	TS5485W	JOB04866	TS5485	9 EXECUTION	7	1	RS86		
	TS5485W1	JOB04868	TS5485	9 EXECUTION	7	2	RS86		
	TS5485W2	JOB04869	TS5485	9 EXECUTION	7	3	RS86		
	TS5485W3	JOB04870	TS5485	9 EXECUTION	7	4	RS86		
	TS5485W	JOB01289	TS5485	9 EXECUTION	7	5	RS88		

Display Filter View Print Options Search Help									
-----									
SDSF STATUS DISPLAY ALL CLASSES					LINE 1-26 (1032)				
COMMAND INPUT ==>					SCROLL ==> PAGE				
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=									
NP	JOBNAME	JobID	Owner	Prty Queue	C	Pos	Saff		
	MNTWTOR	JOB00665	SUBJCL	9 EXECUTION	A		RS87		
	MNTWTOR	JOB01664	SUBJCL	9 EXECUTION	A		RS87		
	TS5485W	JOB04866	TS5485	9 EXECUTION	7	1	RS86		
	TS5485W1	JOB04868	TS5485	9 EXECUTION	7	2	RS86		
	TS5485W2	JOB04869	TS5485	9 EXECUTION	7	3	RS86		
	TS5485W3	JOB04870	TS5485	9 EXECUTION	7	4	RS86		
	TS5485W	JOB01289	TS5485	9 EXECUTION	7	5	RS88		

Columns hidden

# Arrange Hidden Columns (Pop-Up)

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (1143)
COMMAND INPUT ==> arr ?                        SCROLL ==> PAGE
PREFIX==* DEST=(ALL) OWNER=* SYSNAME=
NP JOBNAME JobID Owner Prty Queue C Pos SAff
MNTWTOR JOB00665 SUBJCL 9 EXECUTION A RS87
MNTWTOR JOB01664 SUBJCL 9 EXECUTION A RS87
TS5485W JOB04866 TS5485 9 EXECUTION 7 1 RS86
```

```
Display Filter View Print Options Search Help
-----
SDSF STATUS                                     Arrange          Row 1 to 10 of 58
COMMAND INPU                                Command ==>
PREFIX==* D
NP JOBNAME
MNTWTOR
MNTWTOR
TS5485W
TS5485W
TS5485W
TS5485W
TS5485W
PDSCOT
TS6106
TS6106
TS5485
SYSLOG
VTAM
HZSPROC
INIT
INIT
INIT


To move a column, select with / (// for a block), then type A
(after) or B (before). Special function keys:
F5/17=Refresh list F11/23=Clear input F6/18=Default order

NP width          Current width: 4

Column          Width  Description
JobID            8
Owner            8
Prty             4
Queue           10
C                1
Pos              5
SAff             5
.END             4  **End of List**
ASys             4
Status          17
```

# Arrange Hidden Columns (Pop-Up) ...

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES          LINE 1-26 (1143)
COMMAND INPUT ==>                        SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys
    MNTWTOR  JOB00665 SUBJCL   9 EXECUTION  A   R587
    MNTWTOR  JOB01664 SUBJCL   9 EXECUTION  A   R587
    TS5485W  JOB04866 TS5485   9 EXECUTION  7   1  R586
    TS5485W1 JOB04868 TS5485   9 EXECUTION  7   2  R586
    TS5485W2 JOB04869 TS5485   9 EXECUTION  7   3  R586
```



# Hide Fixed Field Point-and-Shoot

- Fixed field point-and-shoot convenient way to access secondary panels
  - Point-and-shoot on fixed field to access the associated secondary panel
  - For example, ST->JDS->output data set (browse)
- Fixed field rendered in turquoise when FFPS enabled
  - Some users interpreted this as row highlighting
- New option on SET FFPS command
  - **SET FFPS [ON|HIDE|OFF|?]**
- SET FFPS HIDE enables fixed field for point-and-shoot
  - Fixed field will not be conditioned turquoise
  - Conditioned same as row highlighting

# Fixed field point-and-shoot

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

LINE 1-26 (1032)

COMMAND INPUT ==> set ffps hide

SCROLL ==> PAGE

PREFIX=\*\* DEST=(ALL) OWNER=\* SYSNAME=

NP

JOBNAME	JobID	Owner	PrtY	Queue	C	Pos	SAff
MNTWTOR	JOB00665	SUBJCL	9	EXECUTION	A		RS87
MNTWTOR	JOB01664	SUBJCL	9	EXECUTION	A		RS87
TS5485W	JOB04866	TS5485	9	EXECUTION	7	1	RS86
TS5485W1	JOB04868	TS5485	9	EXECUTION	7	2	RS86
TS5485W2	JOB04869	TS5485	9	EXECUTION	7	3	RS86
TS5485W3	JOB04870	TS5485	9	EXECUTION	7	4	RS86
TS5485W	JOB01289	TS5485	9	EXECUTION	7	5	RS88

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

SET COMMAND COMPLETE

COMMAND INPUT ==>

SCROLL ==> PAGE

PREFIX=\*\* DEST=(ALL) OWNER=\* SYSNAME=

NP

JOBNAME	JobID	Owner	PrtY	Queue	C	Pos	SAff
MNTWTOR	JOB00665	SUBJCL	9	EXECUTION	A		RS87
MNTWTOR	JOB01664	SUBJCL	9	EXECUTION	A		RS87
TS5485W	JOB04866	TS5485	9	EXECUTION	7	1	RS86
TS5485W1	JOB04868	TS5485	9	EXECUTION	7	2	RS86
TS5485W2	JOB04869	TS5485	9	EXECUTION	7	3	RS86
TS5485W3	JOB04870	TS5485	9	EXECUTION	7	4	RS86
TS5485W	JOB01289	TS5485	9	EXECUTION	7	5	RS88

Fixed field is still enabled for point-and-shoot  
but attribute not conditioned

# Rename slash command groups

- System command extension panel (/ command popup)
  - Use to classify and display slash command groups
- Once command is grouped
  - Command can be deleted
  - Command can be added to another group
- Now can rename one command group to another
  - If command does not exist in the target group or target group does not exist
    - Command will be moved to new group
  - If command exists in the target group
    - Comment will be appended to the target command
    - Source command will be removed from the old group

# Rename Slash Command Groups

```
Display Filter View Print Options Search Help
-----
SDSF MENU V2R4M0      RSPLEX0G RS86      LINE 1-26 (63)
COMMAND INPUT ==> /      SCROLL ==> PA
PR
NP |
   | Edit Options Help
   | -----
   |                               System Command Extension
   |
   | ==> _____
   | ==> _____
   |                               STORELIMIT
   | Comment _____
   | Group _____ Show * _____ (F4 for list)
   |                                     More: +
   | => D PROG,LPALST
   | => D PROG,LNKLST
   | => V E000,CONSOLE
   |
   | -----
   | Edit Options Help
   | -----
   | 1. Clear...
   | 2. Rename group...
   | -----
   | ==>
   | Comment _____
   |                               STORELIMIT
```



# Rename Slash Command Groups

```
Display Filter View Print Options Search Help
-----
SDSF MENU V2R4M0      RSPLEX0G  RS86          LINE 1-26 (63)
COMMAND INPUT ==> /          SCROLL ==> PAG
PR
NP | Edit Options Help
   |-----
   | 2 1. Clear...          em Command Extension
   | 2. Rename group...
   |-----
   | ==>
   |
   | Comment                                STORELIMIT
```

```
Display Filter View Print Options Search Help
-----
SDSF MENU V2R4M0      RSPLEX0G  RS86          LINE 1-26 (63)
COMMAND INPUT ==> /          SCROLL ==> PAGE
PR
NP | Edit Options Help
   |-----
   |      Rename Slash Command Group
   |-----
   | = Type the old and new group names.
   | =
   | C Old group name . . . . _____
   |   New group name . . . . _____
   | G
   |   F1=Help  F4=Prompt  F12=Cancel
   |-----
   | =
   | => D PROG,LNKLST
   |
   | STORELIMIT
   | (F4 for list)
   | More:      +
```

# New ISPF View Action

- All panels implementing ISPF edit and browse (SE and SB) now support ISPF view
  - SV action character
  - Very similar to ISPF edit
- ISPF view also supported on SNAP command
  - SNAP [S|SB|SE|SV]
  - Control default using SET SNAP command

# Data Set Short Mode

- Data set attributes shown on APF, LNK, LPA, PARM, and PROC panels
  - Obtained through catalog lookup and reading the VTOC
  - Can be time consuming based on number of data sets shown
- New S | SHORT parameter added to command
  - APF [S|SHORT]
  - LNK [S|SHORT]
  - LPA [S|SHORT]
  - PARM [S|SHORT]
  - PROC [S|SHORT]
- Columns not retrieved in short mode:
  - VolSer, Status, BlkSize, Extent, SMS, LRecL, DSOrg, RecFm, CrDate, RefDate

# Data Set Short Mode

```
Display Filter View Print Options Search Help
-----
SDSF LNK DISPLAY RS86      RS86      EXT      62      LINE 1-26 (47)
COMMAND INPUT ==> 1nk s      SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP  DSNNAME
    SYS1.LINKLIB      1 RP204B      32760      1 NO YES      0 PO
    SYS1.MIGLIB      2 RP204B      32760      1 NO YES      0 PO
    SYS1.CSSLIB      3 RP204B      32760      1 NO YES      0 PO
    SYS1.SIEALNKE    4 RP204B      32760      1 NO NO      0 PO-E
    SYS1.SIEAMIGE    5 RP204B      32760      1 NO NO      0 PO-E
```

```
Display Filter View Print Options Search Help
-----
SDSF LNK DISPLAY RS86      RS86      *EXT      0      LINE 1-26 (47)
COMMAND INPUT ==>          SCROLL ==> PAGE
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP  DSNNAME
    SYS1.LINKLIB      1              0      0      NO      0
    SYS1.MIGLIB      2              0      0      NO      0
    SYS1.CSSLIB      3              0      0      NO      0
    SYS1.SIEALNKE    4              0      0      NO      0
    SYS1.SIEAMIGE    5              0      0      NO      0
```

Asterisk indicates extent  
count not valid

# ABOUT command

- Copyright notice no longer shown on entry to SDSF
- Use new ABOUT command to display copyright notice

```
Display  Filter  View  Print  Options  Search  Help
-----
DSF MENU V2R4M0      RSPLEX0G  RS86
OMMAND INPUT ==>
PREFIX=**  DEST=(ALL) OWNER=*  SORT=NAME/A  S
P  NAME      Description      Group
  APF        APF data sets      System
  AS         Address space memory  Jobs
  BPXO       OMVS options        OMVS
  CFC        CF Connections      Sysplex
  CFS        CF Structures        Sysplex
  CK         Health checker       System
  CSR        Common storage remaining Memory
  DA         Active users         Jobs
  DEV        Device activity      Devices
```

```
11 1. Extended help...
   2. Keys help...
   3. Help Index...
   4. Tutorial...
   5. Book...
   6. Web sites...
   7. REXX generation
   8. REXX examples
   9. REXX help...
  10. Columns help...
  11. About...
```

```
-----
PAGE
```

# Query Auth command

- Query Auth command lists all commands for which user is authorized
  - Typically used in SDSF/REXX execs to determine available functionality
- Now includes slash command
  - Previously omitted because slash could be authorized based on SAF or in non-SAF case by command level (cmdlev)

```
Display Filter View Print Options Search Help
-----
SDSF MENU V2R4M0      RSPLEX0G  RS86                LINE 1-26 (63)
COMMAND INPUT ==>> query auth                      SCROLL ==>> PAGE
AUTH=ABEND,ACTION,APF,AS,BPX0,CFC,CFS,CK,CSR,DA,DEST,DEV,DIAG,DYNX,EMCS,ENC,
AUTH=ENQ,ENQC,ENQD,FINDLIM,FS,GT,H,I,INIT,INPUT,JC,JG,JP,JO,LINES,LNK,LOG,LPA,
AUTH=LPD,MAS,NA,NC,NODES,NS,O,OWNER,PAG,PAGE,PARM,PR,PREFIX,PROC,PS,PUN,RDR,
AUTH=REPC,RES,RGRP,RM,RMA,RSYS,SE,SLASH,SMMSG,SMSV,SO,SP,SR,SRVC,SSI,ST,SYM,
AUTH=SYS,SYSID,SYSNAME,SYSTEM,TRACE,ULOG,VMAP,WKLD,WLM,XCFM
```

# New Special DD Names

- SDSF security trace (sectrace) is a diagnostic aid used to assist in defining security profiles
  - Sectrace writes messages to ULOG or as WTP
  - Controlled with SET SECTRACE command or through invocation options on SDSF command
  - In SDSF/REXX, typically the script is modified to add the isfsectrace special variable
- New special ddnames to control sectrace
  - **ISFSECTR** – equivalent to set sectrace on
  - **ISFSECTW** – equivalent to set sectrace wtp
- Example:
  - alloc fi(isfsectr) dummy reus

# Column formatting changes

- Low lighting of columns with zero value independently of row highlighting
  - Values considered significant are not low lighted
- Automatic right justification of column titles for numeric fields
  - Removes need to define column titles with leading blanks to force alignment
- Custom properties provided to restore previous behavior



# WHO Command

- New emergency subsystem indicator when user is logged in to emergency JES2 subsystem
  - Also shown on JES panel Emergency column

```
Display Filter View Print Options Search Help
-----
SDSF MENU V2R4M0      RSPLEX0G  RS86                LINE 1-26 (63)
COMMAND INPUT ==>          SCROLL ==> PAGE
USERID=TS5485,PROC=ROCKPROC,TERMINAL=S86TCP02,GRPINDEX=1,GRPNAME=ISFSPROG,
MVS=z/OS 02.04.00,JES=z/OS 2.4,SDSF=HQX77C0,ISPF=7.4,RMF/DA=HSF,SERVER=YES,
SERVERNAME=SDSF,JESNAME=HASP/E,MEMBER=RS86,JESTYPE=JES2,SYSNAME=RS86,
SYSPLEX=RSPLEX0G,COMM=NOTAVAIL,COMMX=ENABLED,JOBID=TSU02225
BPX0      OMVS options      OMVS
CFC       CF Connections    Sysplex
```

# SDSF/REXX

## Enhancements

# SDSF/REXX Special DDName

- Debugging SDSF/REXX execs may include
  - Adding verbose option to SDSF commands (e.g. ISFEXEC and ISFACT)
  - Printing isfmsg2 stem variable
  - Displaying WHO command response
  - This usually means updating the exec
- New special ddname **ISFRXDBG** will do this without need for modifying the exec
  - alloc fi(isfrxdbg) dummy reus -or-
  - //ISFRXDBG DD DUMMY in a batch job

# z/OSMF SDSF Plug-In

## Plug-In Updates

# z/OSMF SDSF Plug-In

- Usability improvements
  - Reduced scrolling
  - Apply/Cancel/Refresh buttons moved to menu bar
  - Header lines consolidated to reclaim window space
- Panel graphics moved to tab next to property sheet

# SDSF Plug-In

The screenshot displays the IBM z/OS Management Facility (ZOSMF) interface. The left navigation pane shows the 'Jobs and Resources' section expanded, with 'SDSF' selected. The main content area is titled 'SDSF (RSPLEX0H)' and contains a table of active jobs. A red circle highlights the 'Refresh' button in the top right of the table. Another red circle highlights the 'Active Jobs Statistics' section on the right, which includes a bar chart for 'System Activity Percent Busy' and a bar chart for 'Top CPU Percentages'.

JOBNAME	StepName	ProcStep	JobID	FI
*MASTER*			STC09873	
PCAUTH	PCAUTH			
RASP	RASP			
TRACE	TRACE			
DUMPSRV	DUMPSRV	DUMPSRV		
XCFAS	XCFAS	IEFPROC		
GRS	GRS			
SMSPDSE	SMSPDSE			
SMSPDSE1	SMSPDSE1			
CONSOLE	CONSOLE			
WLM	WLM	IEFPROC		
ANTMAIN	ANTMAIN	IEFPROC		

**System Activity Percent Busy**

Component	Percentage
LPAR	30%
MVS/SRM	31%

**Top CPU Percentages**

Component	Percentage
IZUSVR1	14.09%
SDSFAUX	5.63%
RACF	2.81%
TCPIP	2.81%
SDSF	2.81%
TS5485	2.81%

# SDSF Plug-In

The screenshot shows the IBM z/OS Management Facility (zOSMF) interface. The left sidebar contains a navigation tree with categories like Welcome, Notifications, Workflow Editor, Workflows, Cloud Provisioning, Configuration, Consoles, Jobs and Resources (highlighted), Links, Performance, Problem Determination, Software, Sysplex, z/OS Classic Interfaces, z/OSMF Administration, z/OSMF Settings (expanded), and Security Assistant. The z/OSMF Settings section includes FTP Servers, Notification Settings, SDFS Settings, and Systems. A 'Refresh' button is located at the bottom of this sidebar.

The main content area is titled 'SDSF (RSPLEX0H)' and has tabs for 'Overview' and 'Active Jobs'. The 'Active Jobs' tab is selected, showing a table of active jobs. The table has columns for JOBNAME, StepName, ProcStep, JobID, and O. The first row, '\*MASTER\*', is selected. The table shows various jobs including PCAUTH, RASP, TRACE, DUMPSRV, XCFAS, GRS, SMSPDSE, SMSPDSE1, CONSOLE, WLM, and ANTMAIN.

On the right side, the 'Properties' panel is open for the selected '\*MASTER\*' job. It shows a list of properties under 'General' and 'Advanced' sections. The 'Edit properties' button is circled in red. The 'Properties' panel also includes a search bar and a 'Type to filter properties' input field.

JOBNAME	StepName	ProcStep	JobID	O
*MASTER*			STC09873	
PCAUTH	PCAUTH			
RASP	RASP			
TRACE	TRACE			
DUMPSRV	DUMPSRV	DUMPSRV		
XCFAS	XCFAS	IEFPROC		
GRS	GRS			
SMSPDSE	SMSPDSE			
SMSPDSE1	SMSPDSE1			
CONSOLE	CONSOLE			
WLM	WLM	IEFPROC		
ANTMAIN	ANTMAIN	IEFPROC		

Total: 67 Selected: 1

Properties of '\*MASTER\*' | Properties are more current than table data.

**General**

- ASID: 1
- ASIDX: 1
- JobCorrelator: STC09873
- JobID: STC09873
- JOBNAME: \*MASTER\*
- ProcStep: STC
- StepName: RS93
- SysName: STC
- Type: STC

**Advanced**

- MemLimit: 17179869180GB
- Pos: NS
- Quiesce: [input field]
- Server: NO
- Spin: NO
- StorCrit: NO
- SysLevel: z/OS 02.04.00 HBB77C0

**Attributes**

- Reus: NO

# Installation and Configuration

Installation considerations



# Interactions & Dependencies

- To exploit this item, all systems in the Plex must be at the new z/OS level: No
- Software Dependencies
  - None.
- Hardware Dependencies
  - None.
- Exploiters
  - None

# Migration & Coexistence Considerations

- Toleration support (for V2R2 and V2R3)
  - APARs PI97517 and PH04841
  - Apply at any time when APARs/PTFs are available
- Migration support
  - Special ddname ISFSMIGDA to restore prior implementation of DA panel
  - If you are using old style ISFPARMS, you must reassemble using V2R4 macros.
    - ISFPARMS cannot be shared with prior levels
- Coexistence support
  - None (SDSF V2R4 is compatible with SDSF V2R2 and SDSF V2R3)

# Installation

- New function requires SDSF and SDSFAUX address spaces
  - If you are not starting the SDSF address space, **DO IT NOW !!!**
  - **Please re-read the bullet above!**
- If you are using old style ISFPARMS (assembler macros), please convert to ISFPRMxx
  - Run utility ISFACP to create an ISFPRMxx from your ISFPARMS
  - If you are not using ISFPRMxx, please convert and **DO IT NOW !!!**
  - **Please re-read the bullet above!**

# Installation Reminders

- If you are not starting SDSF address space
  - Copy ISF.SISFJCL(SDSF) and ISF.SISFJCL(SDSFAUX) to proclib
  - Copy ISF.SISFJCL(ISFPRM00) to parmlib
  - Add “S SDSF” to COMMNDxx
- SDSF class must be raclisted
- User must be authorized to connect to SDSF
  - Read access to ISF.CONNECT.*system* in SDSF class
  - Connection failures are tolerated but no new function will be available
    - Some existing panels have been migrated to use SDSFAUX

# SDSFAUX Usage

- Panels now requiring SDSF server (and SDSFAUX)
  - CK, CKH, DA, ENC, PS, RM
- DA migration mode
  - Fallback to prior implementation provided for DA panel in event of unforeseen issues
    - Temporary
  - Allocate special DD name **ISFMIGDA**
    - alloc fi(isfmigda) dummy reus
    - //ISFMIGDA DD DUMMY
  - Generic tracker event created

# ISFPARMS

- Use ISFPRMxx instead of old style ISFPARMS
  - Since SDSF server required, ISFPRMxx always processed
  - ISFPARMS can be error prone and implements a subset of ISFPRMxx
    - Assembled with wrong macros, running down level, etc.
    - Not being enhanced
    - Cannot be shared

# Session Summary

- Reviewed new function in SDSF V2R4
  - Easier to use !!
  - New panels !!
- Everyone will be starting the SDSF address space !!

# Appendix

## Documentation



# Documentation

- SDSF Operation and Customization (SA24-2274)
- SDSF User's Guide (SC27-9028)
- SDSF REXXHELP command
  - Contains SDSF/REXX usage, syntax, and examples
- SDSF RGEN command
  - Generates starter SDSF/REXX execs and examples
- SDSF Javadoc
  - Contains SDSF/Java documentation
  - Download from `/usr/lpp/java/classes/isfjcallDoc.jar`

# Documentation

- SDSF SEARCH command
  - Searches SDSF help system for word or phrase
- SDSF HELP command (PF1)
  - Context sensitive help

# “What’s New” in SDSF

- See “What’s New” in SDSF help for complete list of changes

```
Display  Filter  View  Print  Options  Search  Help
-----
HELP: SDSF -- Table of Contents
COMMAND INPUT ===> _
Select a topic by number, or press Enter to view topics in sequence.
1 - What's new
2 - Job and process panels
3 - Device and resource panels
4 - Workload panels
5 - System information panels
6 - JES resource panels
7 - Search and scroll commands
8 - Filter commands
9 - View commands
10 - Printing data
11 - Options commands
12 - Other commands
13 - SDSF command
14 - Help commands
15 - Action bar
16 - PF keys and keylists
17 - Action characters
18 - Overtypable fields
19 - JES and MVS commands
20 - Point-and-shoot
21 - Special ddnames
22 - Online library
23 - Server commands
99 - SDSF messages
SEARCH - Search help (ISPF only)  REXXHelp - SDSF REXX (ISPF only)
```

# “What’s New” in SDSF

```
Display Filter View Print Options Search Help
HELP: What's New in SDSF
COMMAND INPUT ==> 99_

Select a topic or press Enter to view them in sequence.

1 - System information panels (EMCS,OMVS,LPD,XCFM,ENQD,JES,CKPT)
2 - Resource panels (JCM,REPC,RGRP,RMA,SRVC,WKLD,WLM,JRI,JRJ)
3 - Job detail panels (JMO and JDD)
4 - New SRCH command options
5 - Rename system command groups
6 - Arrange hidden columns
7 - ISPF view support
8 - New and changed columns on tabular panels
9 - Other enhancements and changes

99 - Enhancements in previous releases
```

```
Display Filter View Print Options Search Help
HELP: What Was New in Previous Releases
COMMAND INPUT ==> _

Select a release by number.

1 - z/OS Version 2 Release 3
2 - z/OS Version 2 Release 2
3 - z/OS Version 2 Release 1
4 - z/OS Version 1 Release 13
5 - z/OS Version 1 Release 12
6 - z/OS Version 1 Release 11
7 - z/OS Version 1 Release 10
8 - z/OS Version 1 Release 9
9 - z/OS Version 1 Release 8
10 - z/OS Version 1 Release 7
```

# SDSF V2R4

## Questions ?

SDSF V2R4

*Thank You !*