

SDSF V2R4 Product Update



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Overview

- Recap of panels added in 2.2 and 2.3.
- New tabular panels
 - 14 new primary panels
 - 4 new secondary panels
- Usability enhancements
- SDSF REXX enhancements
- z/OSMF SDSF plug-in enhancements
- Installation and configuration

Recap : SDSF panels added in 2.2 and 2.3

APF Data Sets (**APF**)

Address Space Storage (**AS**)

Page Data Sets (**PAG**)

z/OS Parmlib Data Sets (**PARM**)

CF Connections (**CFC**)

CF Structures (**CFS**)

Device Activity (**DEV**)

z/OS Unix File Systems (**FS**)

Generic Tracker (**GT**)

Network Activity (**NA**)

SMS Storage Groups (**SMSG**)

Linklist Data Sets (**LNK**)

LPA List Data Sets (**LPA**)

Jobstep Information (**JS**)

JES2 Proclib Data Sets (**PROC**)

SMS Volumes (**SMSV**)

Subsystems (**SSI**)

Common Storage Remaining (**CSR**)

Virtual Storage Map (**VMAP**)

Job Modules (**JC**)

Job Tasks (**JT**)

Search Data Set Lists (**SRCH**)



NEW PRIMARY PANELS

14 New Primary Panels

- EMCS Extended Consoles
- ENQD Data Set Enqueues
- JES JES Subsystems
- JRI JES2 Resource Information
- JRJ JES2 Resource Usage By Jobname
- RMA JES2 Resource Monitor Alerts
- LPD Link Pack Directory
- OMVS z/OS Unix Options
- REPC WLM Report Classes
- RGRP WLM Resource Groups
- SRVC WLM Service Classes
- WKLD WLM Workloads
- WLM WLM Policy
- XCFM XCF Groups and Members

EMCS Panel – Extended Consoles in Sysplex

```

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
   *DICNS86  ACTIVE    NONE
   *OPLOG86  ACTIVE    OPERLOG
   *ROUTE86  ACTIVE    MVSROUTE
   *SYSLG86  ACTIVE    SYSLOG
   ROOT      INACTIVE  SDSF
   RS86      ACTIVE    SYSCONS  0      10000    80      774

```

- Sysplex wide - **SYSNAME** pattern does not apply
- Actions available:
 - display, display long, reset force, remove
- Overtypes available:
 - Auth, IntIDs, UnknIDs, Mscope, RoutCde

EMCS Panel - Columns

```

Command ==>
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  000000000000000000000000000000000000
SysName             01  RS86
SysLevel            01  z/OS 02.04.00 HBB77C0
*****
***** Bottom of data *****

```

ENQD – Data Set Enqueues

```

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 Major Req JobName
TS5485.RS86.ISPPROF SYSDSN SHR TS5485
TS5485.RS86.SPFTEMP1.CNTL SYSDSN EXC 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

```

- Shows all enqueuees for data sets on all systems in the sysplex
- Optional parameter to specify data set name mask – default is *userid.**
- Convenient variant of the ENQ command that is equivalent to **ENQ SYSDSN *** and then **FILTER** for data set name mask
- Actions available :
 - display

ENQD - Columns

Show Columns

Row 1 to 22 of 22

Command ==>

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**

JES – Known JES Subsystems

```
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 RSPLEXOG A
   JES2 JES2 YES RS88 HASP $ NO N1 RSPLEXOG A
```

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

JES - Columns

Show Columns

Row 1 to 16 of 16

Command ==> _____

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
XCFGGroup	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 *****

Background – JES2 Privileged Resources

- Before JES2 2.3, an exhaustion of certain critical resources, such as spool space, could prevent such activities as TSO LOGONs, job execution and JES2 commands.
- In JES2 2.3+, a certain amount of these resources can be reserved for privileged job consumption. This allows support staff to use the emergency JES subsystem and submit jobs or issue commands to correct any non-privileged resource shortage.
- A small percentage of SPOOL, JOEs, JQEs and BERTs are set aside for privileged jobs, STCs and TSO logons
- Emergency subsystem and privileged resources are meant for problem resolution – not high priority workloads.
- New SDSF displays for JES2 resiliency information – **JRI**, **JRJ** and **RMA**.

JRI – JES2 Resource Information

```
Display Filter View Print Options Search Help
-----
SDSF JESINFO DISPLAY RS86                               LINE 1-4 (4)
COMMAND INPUT ==>                                       SCROLL ==> HALF
PREFIX=* DEST=(ALL) OWNER=* SYSNAME=*
NP  NAME      Shortage NPrivShortage NPrivMax NPrivUse NPrivUse% NPrivExhaust N
    BERT      NO       NO              12610    418      3 NO
    JOE       NO       NO              10000    549      5 NO
    JQE       NO       NO              10000    563      6 NO
    Spool     NO       NO              16465    1348     8 NO
```

- Shows JES2 resource usage
- Similar to \$DLIMITS command

JRI - 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  BERT
Shortage     01  NO
NPrivShortage 01  NO
NPrivMax     01  12610
NPrivUse     01  418
NPrivUse%    01  3
NPrivExhaust 01  NO
NPrivWarn%   01  80
PrivSup      01  ON
ResPrivSup   01  OFF
PrivMax      01  0
PrivUse      01  0
PrivUse%     01  0
SmallEnv     01  OFF
Description  01  CB extensions
SampleTime   01  07/23/2019 08:59:25
JESName      01  JES2
SysName      01  RS86
SysLevel     01  z/OS 02.04.00 HBB77CO
***** Bottom of data *****
```

JRJ – JES2 Resource Usage By Jobname

Display Filter View Print Options Search Help									
SDSF JESINFO JOB DISPLAY RS86			COUNT	LINE 1-26 (28)					
COMMAND INPUT ==>			SCROLL ==> HALF						
PREFIX=* DEST=(ALL)			OWNER=*	SYSNAME=*					
NP	NAME	JobID	Resource	Usage	Usage%	UsageRate	NPrivMax	SampleTime	
	TS5485W	JOB04866	BERT	6	1	0.000	12610	07/23/2019	09:1
	TS5485W1	JOB04868	BERT	5	1	0.000	12610	07/23/2019	09:1
	TS5485W2	JOB04869	BERT	5	1	0.000	12610	07/23/2019	09:1
	TS5485W3	JOB04870	BERT	5	1	0.000	12610	07/23/2019	09:1
	TCPIP	STC00192	BERT	3	1	0.000	12610	07/23/2019	09:1
	TS5485	TSU00289	BERT	3	1	0.000	12610	07/23/2019	09:1
	TS5485	TSU04771	JOE	6	1	0.000	10000	07/23/2019	09:1
	TS5485	TSU04466	JOE	5	0	0.000	10000	07/23/2019	09:1
	TS5485	TSU04801	JOE	5	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04772	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04773	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04774	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04775	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04776	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485D	JOB04777	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485R	JOB04661	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS5485R	JOB04663	JOE	4	0	0.000	10000	07/23/2019	09:1
	TS7897	TSU04917	JOE	4	1	0.000	10000	07/23/2019	09:1
	TS5485	TSU00256	Spool	202	15	0.000	16465	07/23/2019	09:1
	TS5485R	JOB04663	Spool	122	5	0.000	16465	07/23/2019	09:1
	TS5485	TSU04771	Spool	92	4	0.000	16465	07/23/2019	09:1
	TS5485	TSU04801	Spool	92	4	0.000	16465	07/23/2019	09:1
	TS5485R	JOB04661	Spool	76	3	0.000	16465	07/23/2019	09:1
	TS5485	TSU04466	Spool	72	3	0.000	16465	07/23/2019	09:1
	TS7897	TSU04395	Spool	25	2	0.000	16465	07/23/2019	09:1
	TS7897	TSU04398	Spool	24	1	0.000	16465	07/23/2019	09:1

Sorted by Resource
and Count

- Shows JES resource usage by job
 - JRJ [C|COUNT|R|RATE]
- COUNT mode shows job resource usage by highest count
- RATE mode shows job resource usage by highest rate

JRJ - Columns

Show Columns

Row 1 to 11 of 11

Command ==> _____

Sort column with F5. Use Locate to position to column.

_ All values

_ Column width

Column	##	Value
NAME	01	TS5485W
JobID	01	JOB04866
Resource	01	BERT
Usage	01	6
Usage%	01	1
UsageRate	01	0.000
NPrivMax	01	12610
SampleTime	01	07/23/2019 09:14:21
JESName	01	JES2
SysName	01	RS86
SysLevel	01	z/OS 02.04.00 HBB77C0

***** Bottom of data *****

RMA – JES2 Resource Monitor Alerts

```

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%

```

- 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

RMA - 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
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 *****
```

LPD – Link Pack Directory

```
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
```

- Shows details of modules in the link pack area
 - Includes modules added by CSVDYLPA

LPD - Columns

Show Columns

Row 1 to 14 of 14

Command ==> _____

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	R586
SysLevel	01	z/OS 02.04.00 HBB77C0
.END	01	**End of List**

***** Bottom of data *****

OMVS – z/OS Unix Options (BPXO)

- Shows z/OS Unix 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

OMVS - Columns

```
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
FORKCOPY 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
MAXCPUtime 7200
MAXFILEPROC 64000
MAXFILESIZE 4294967295
MAXIOBUFUSER 2048
MAXMMAPAREA 40960
NOLIMIT
```

Overtyping numerical values

OMVS – Columns (continued)

Display Filter View Print Options Search Help			
SDSF OMVS OPTIONS R586 R586		LINE 27-52 (56)	
COMMAND INPUT ==>		SCROLL ==>	
PREFIX=**	DEST=(ALL)	OWNER=*	SYSNAME=
NP	NAME	NumericValue	Value Status
	MAXPIPEUSER	8730	
	MAXPROCSYS	400	
	MAXPROCUSER	150	
	MAXPTY	256	
	MAXQUEUEDSIGS	1000	
	MAXSHAREPAGES	131072	
	MAXTHREADS	10000	
	MAXTHREADTASKS	5000	
	MAXUIDS	200	
	MAXUSERMOUNTSYS	0	
	MAXUSERMOUNTUSER	0	
	NONEMPTYMOUNTPT		
	PARMLIB		WARN
	PROCNAME		OMVS=(RS)
	PWT		OMVS
	RESOLVER PROC		ENV
	SC_EXITTABLE		RESOLVER
	SERV_LINKLIB		
	SERV_LPALIB		
	SHRLIBMAXPAGES	4096	
	SHRLIBBRGNSIZE	67108864	
	STEPLIBLIST		
	SUPERUSER		OMVSKERN
	SWA		BELOW
	SYSCALL COUNTS		NO
	SYSPLEX		YES

OMVS – Columns (continued)

```
Display Filter View Print Options Search Help
-----
SDSF OMVS OPTIONS R586 R586 LINE 53-56 (56)
COMMAND INPUT ==> SCROLL ==>
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=
NP NAME NumericValue Value Status
TTYGROUP TTY
UMASK NONE
USERIDALIASTABLE
VERSION RP204B,N
```


REPC – WLM Report Classes

```
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
```

- Show details of the WLM report classes from the current policy

RGRP – WLM Resource Groups

```
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
```

- Shows details about WLM resource groups in the current policy

RGRP - 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 TGROUP2
Description	01 Tenant resource group 2
Policy	01 ROCKET01
MaxSU	01 1000
MemLimit	01 1GB
PolicyDescription	01 Rocket Software Policy 01
PolicyActDate	01 02/11/2020 18:59:59
CrUser	01 TS5485
CrDate	01 02/11/2020 18:58:48
UpdUser	01 TS5485
UpdDate	01 02/11/2020 18:58:48
SysName	01 RS86
SysLevel	01 <input type="text"/>
Tenant	01 YES
InclSpec	01 NO
TenantID	01 TENID2
TenantName	01 Tenant 2
SolutionID	01 Z111111-N22887C-1277E51877-NTZZZZZZ-9B62-493A-A6D0-577B48-C5
***** Bottom of data *****	

Tenant Support

SRVC – WLM Service Classes

```
_ Display Filter View Print Options Search Help
-----
SDSF SERVICE CLASSES RS86 ROCKET01 LINE 1-25 (27)
COMMAND INPUT ==> SCROLL ==> HALF
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
```

- Shows details about WLM service classes in the current policy

SRVC - Columns

```
Command ==> Show Columns Row 1 to 22 of 24
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
TransSUse    01  NO
AddrSpcSSUse 01  YES
EncSSUse     01  NO
SysHUse      01  NO
CrUser       01  PDSHAN
CrDate       01  10/08/2003 07:55:06
UpdUser      01  PDSHAN
UpdDate      01  12/17/2003 09:13:37
Policy       01  ROCKET01
```


WKLD – WLM Workload

```
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
```

- Show workloads in the current WLM policy

WKLD - 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
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 *****
```


WLM – 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                                     DateValue
    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
```

- Show details from current WLM policy

XCFM – XCF Groups and Members

```
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
COFVLFNO RS86 ACTIVE RS86 VLF NO 0
EZBTCPCS 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
```

- Lists all XCF members and groups in the sysplex
- Actions available
 - display, display all, display group

[illegible]



NEW SECONDARY PANELS

4 New Secondary Panels

- Address Space Memory Objects
 - Accessed from **DA** and **AS** displays
- Address Space DD Names
 - Accessed from **DA**, **AS**, **I**, **ST**, **NS** and **INIT** displays
- Jobclass Members
 - Accessed from **JC** display
- JES Checkpoint Information
 - Accessed from the **JES** display

JMO - Job Memory Objects

```
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_002FFFFFF 3072K 0 DEFAULT YES NO
PRIVATE 00000010_00400000 00000010_004FFFFFF 1024K 1 NONE NO NO
PRIVATE 00000010_00500000 00000010_006FFFFFF 2048K 1 NONE YES NO
PRIVATE 00000050_00000000 00000050_01DFFFFFF 30720K 1 NONE YES NO
PRIVATE 00000050_01E00000 00000050_01FFFFFF 2048K 1 DEFAULT NO NO
PRIVATE 00000050_02100000 00000050_022FFFFFF 2048K 1 DEFAULT NO NO
PRIVATE 00000050_02400000 00000050_024FFFFFF 1024K 1 DEFAULT NO NO
PRIVATE 00000050_02600000 00000050_026FFFFFF 1024K 1 DEFAULT NO NO
PRIVATE 00000050_02800000 00000050_028FFFFFF 1024K 1 DEFAULT NO NO
PRIVATE 00000050_02A00000 00000050_02AFFFFFF 1024K 1 DEFAULT NO NO
PRIVATE 00000050_02C00000 00000050_337FFFFFF 780M 1 NONE NO NO
PRIVATE 00000050_33800000 00000050_338FFFFFF 1024K 1 DEFAULT NO NO
PRIVATE 00000050_33A00000 00000050_33DFFFFFF 4096K 1 NONE NO NO
COMMON 000001EF_87900000 000001EF_87BFFFFFF 3072K 1 DEFAULT YES NO
```

- Shows all memory objects owned by a specific address space
- Accessed with the “JMO” action from **AS** or **DA** panel row

JMO - 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_002FFFFF
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 *****
```


JDD – Job DD Names

```
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
jdd TS5485 007B 2663 130 160 0.00 2520 0.00 96 0.00

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
ISPLIB 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
```

- Shows DD allocations for a specific address space

JDD – Job DD Names

- Subset of the JD information
 - TCP/IP and CF data not included
- Accessed with the JDD action from the **AS**, **DA**, **I**, **ST**, **INIT** and **NS** panel rows
- Can use **SRCH** command to locate members within the data sets shown
 - Enables easy search for member masks for ANY address space
 - Where does TSO userid IBMUSER get his ISR@PRIM panel from?
 - JDD against IBMUSER row on DA
 - SRCH ISR@PRIM
 - Where is the STC JCL for CSQ1MSTR coming from?
 - JDD against JES2 row on DA
 - SRCH CSQ1MSTR
 - ...could also use SRCH on PROC display.

JDD - 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	ISPCTLO		
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		

CKPT – JES2 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=*
NP NAME Type Primary Member Emergency ComChar Global OwnNode XCFGroup S
jc JES2 JES2 YES RS86 HASP $ NO N1 RSPLEXOG A
JES2 JES2 YES RS88 HASP $ NO N1 RSPLEXOG 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
```

- Shows JES2 checkpoint properties for a specific JES2 subsystem
- Accessed with JC action from the **JES** panel row

CKPT - Columns

Show Columns

Row 1 to 22 of 22

Command ==>

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.HASPKPT
VolSer	01	JSPG00
JESName	01	JES2
SysName	01	RS86
SysLevel	01	z/OS 02.04.00 HBB77C0
.END	01	**End of List**

JCM – Job Class Members

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

Display Filter View Print Options Search Help
-----
SDSF JOB CLASS MEMBERS RS85 CLASS K                                LINE 1-6 (6)
COMMAND INPUT ===>                                           SCROLL ===> PAGE
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
```

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

JCM - Columns

Show Columns

Row 1 to 6 of 6

Command ==> _____

Sort column with F5. Use Locate to position to column.

_ All values

_ Column width

Column	##	Value
MEMBER	01	RS85
CtlClass	01	H
MLimMax	01	20
MLimCur	01	0
SelMode	01	JS3BATCH
SysName	01	RS85

***** Bottom of data *****



MISCENLLANEOUS PANEL UPDATES

MAS – 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 RSPLEXOG 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**

```


New Columns On Existing Panels

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)

Orphaned
HVCommon

New Columns On Existing Panels (continued)

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

Spool Encryption

TIOT
monitoring

New Columns On Existing Panels (continued)

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 On Existing Panels

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 On Existing Panels (continued)

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 On Existing Panels (continued)

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



USABILITY ENHANCEMENTS

SRCH Command Enhancements

- SRCH command used to locate members on panels with lists of data sets
 - APF, LNK, LPA, PARM, PROC and now JDD
- New parameter to limit rows shown
 - All data sets searched (ALL)
 - Data sets for which member was found (F)
 - Data sets for which member was not found (NF)
- Syntax
 - SRCH member-pattern [F | NF | ALL]
- Default action can be controlled through new SET SRCH command
 - SET SRCH [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
```

SRCH Command – Only Found

```
Display Filter View Print Options Search Help
-----
SDSF PARMLIB DISPLAY R586 R586 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
```

```
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 R586 1 MCPG00 FOUND PO 27920
RSRTE.PARMLIB R586 3 R3P104 FOUND PO 27920
ROCKET.USER.PARMLIB R586 4 S1PG00 FOUND PO 27920
```

ARRANGE – Hide Columns

- Hide columns on panels using **ARRANGE** command
 - Reduces LEFT/RIGHT scrolling
 - Remember : can use “/” show action to zoom into single row
- New special column name .END
 - Marks end of visible columns
 - All columns positioned before .END will be shown on panel
 - All columns after .END will not be shown
- Examples:
 - ARR .END A SAFF (All columns after SAFF will be hidden)
 - ARR .END LAST (All columns will be shown)
 - ARR DEFAULT (Reset to supplied defaults)
 - ARR ? (Show ARRANGE pop-up dialog)

ARRANGE – Hide 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  Pos  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  Pos  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 – Hide 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
COMMAND INPU
PREFIX=** D
NP JOBNAME
MNTWTOR
MNTWTOR
TS5485W
TS5485W
TS5485W
TS5485W
PDSCOT
TS6106
TS6106
TS5485
SYSLOG
VTAM
HZSPROC
INIT
INIT
INIT

Arrange

Row 1 to 10 of 58

Command ==>> _____

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

Fixed Field Point-and-Shoot (FFPS)

- Fixed field is the leftmost column next to NP that does not move when scrolling horizontally
- FFPS designed as convenient way to access the most common secondary panel associated with the row
 - Just place cursor on fixed field and press enter (or click mouse)
 - Example : ST→JDS→Spool browse
- Fixed field rendered in TURQ when FFPS active
 - Some users interpreted this as row-highlighting
- New option on SET FFPS command
 - **SET FFPS [ON|HIDE|OFF|?]**
- SET FFPS HIDE still allows point-and-shoot action
 - Fixed field rendering conditioned on row highlighting

SET FFPS HIDE

```
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
```

FFPS attributes hidden

Rename SLASH command (/) Groups

- System command extension panel (/ pop-up)
 - Used 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 the target group does not exist
 - Command will be MOVED to new group
 - If command exists in the target group
 - Comment 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 ==> 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:      +

```

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 Display - SHORT

- 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 Display - SHORT

Display	Filter	View	Print	Options	Search	Help
SDSF LNK DISPLAY	RS86	RS86	EXT	62	LINE 1-26 (47)	
COMMAND INPUT ==> Tnk s						SCROLL ==> PAGE
PREFIX=**	DEST=(ALL)	OWNER=*	SYSNAME=			
NP	DSNAME	Seq	VolSer	BlkSize	Extent	SMS APF LRecL DSOrg
	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		
COMMAND INPUT ==>						PAGE
PREFIX=**	DEST=(ALL)	OWNER=*	SYSNAME=			
NP	DSNAME	Seq	VolSer	BlkSize	Extent	SMS APF LRecL DSOrg
	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

Extent count unavailable in
SHORT mode

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	R586			
OMMAND INPUT	==>					
REFIX=**	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			

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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

Column Formatting Changes

- Zero value low-lighting
 - Numeric values of zero are now low-lighted independently of row highlighting
 - Only occurs when panel field definition defines zero as not significant
- Automatic right justification for numeric column titles
 - Removes need to define column titles with leading blanks to force alignment is ISFPRMxx FLDENT statements :
 - `FLDENT COLUMN(CPUPR) TITLE(' CPU%')` **No longer needed**
 - Survives any **ARRANGE** command that alters the column width
- Custom properties available to restore previous behaviour

Column Formatting Changes

Display	Filter	View	Print	Options	Search	Help			

SDSF DA RS88		RS88	PAG	0	CPU	0	LINE 1-37 (65)		
COMMAND INPUT ==>							SCROLL ==>		
PREFIX=* DEST=(ALL) OWNER=* SORT=JOBNAME/A SYSNAME=									
NP	JOBNAME	Real	Paging	SIO	CPU%	ASID	ASIDX	EXCP-Cnt	CPU-Time
	MASTER	3478	0.00	0.01	0.96	1	0001	20817	390.52
	ALLOCAS	2639	0.00	0.00	0.00	22	0016	9	0.00
	ANTAS000	1591	0.00	0.00	0.00	13	0000	428	0.10
	ANTMAIN	1690	0.00	0.00	0.01	12	000C	865	5.04
	APPC	1103	0.00	0.00	0.04	104	0068	167	17.48
	ASCH	395	0.00	0.00	0.01	105	0069	71	3.75
	AXR	615	0.00	0.00	0.00	25	0019	1428	0.07
	AXR04	538	0.00	0.00	0.00	37	0025	142	0.02
	BPX0INIT	356	0.00	0.00	0.01	133	0085	19	5.84
	CATALOG	1522	0.00	0.18	0.09	40	0028	106079	39.93

QUERY AUTH

- 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,SMSG,SMSV,SO,SP,SR,SRVC,SSI,ST,SYM,
AUTH=SYS,SYSID,SYSNAME,SYSTEM,TRACE,ULOG,VMAP,WKLD,WLM,XCFM
```


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  R586                      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=HGX77C0,ISPF=7.4,RMF/DA=HSF,SERVER=YES,
SERVERNAME=SDSF,JESNAME=HASP/E, MEMBER=R586, JESTYPE=JES2, SYSNAME=R586,
SYSPLEX=RSPLEX0G, COMM=NOTAVAIL, COMMX=ENABLED, JOBID=TSU02225
      BPXO      OMVS options      OMVS
      CFC       CF Connections    Sysplex
```

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 DD names to control sectrace
 - **ISFSECTR** equivalent to `set sectrace on`
 - **ISFSECTW** equivalent to `set sectrace wtp`
- Example:
 - `alloc fi(isfsectr) dummy reus`



SDSF REXX ENHANCEMENTS

SDSF REXX – Special DD Name

- 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:
 - TSO foreground : `alloc fi(isfrxdbg) dummy reus`
 - Batch JCL : `//ISFRXDBG DD DUMMY`



ZOSMF ENHANCEMENTS

z/OSMF – 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

z/OSMF – New look

The screenshot displays the IBM z/OS Management Facility (z/OSMF) web interface. The browser address bar shows the URL: `https://rs93.rocketsoftware.com:11443/zosmf/NavigationTree.jsp`. The interface includes a left-hand navigation pane with categories like Welcome, Notifications, Workflow Editor, Workflows, Cloud Provisioning, Configuration, Consoles, Jobs and Resources (selected), Links, Performance, Problem Determination, Software, Sysplex, z/OS Classic Interfaces, z/OSMF Administration, z/OSMF Settings (expanded), and Security Assistant. The z/OSMF Settings sub-menu includes FTP Servers, Notification Settings, SDSF Settings, and Systems. 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/FI. The jobs listed include *MASTER*, PCAUTH, RASP, TRACE, DUMPSRV, XCFAS, GRS, SMSPDSE, SMSPDSE1, CONSOLE, WLM, and ANTMAIN. To the right of the table, there are 'Active Jobs Statistics' and 'System Activity Percent Busy' charts. The 'System Activity Percent Busy' chart shows LPAR at 30% and MVS/SRM at 31%. The 'Top CPU Percentages' chart shows the following values: IZUSVR1 (14.09%), SDSFAUX (5.63%), RACF (2.81%), TCPIP (2.81%), SDSF (2.81%), and TS5485 (2.81%).

JOBNAME	StepName	ProcStep	JobID	O/FI
MASTER			STC09873	+1
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

System	Percent Busy
LPAR	30%
MVS/SRM	31%

Top CPU Percentages

System	CPU Percentage
IZUSVR1	14.09%
SDSFAUX	5.63%
RACF	2.81%
TCPIP	2.81%
SDSF	2.81%
TS5485	2.81%

z/OSMF – New Look

The screenshot displays the IBM z/OS Management Facility (z/OSMF) web interface. The left sidebar shows a navigation menu with categories like 'Welcome', 'Notifications', 'Workflow Editor', 'Workflows', 'Cloud Provisioning', 'Configuration', 'Consoles', 'Jobs and Resources' (selected), 'Links', 'Performance', 'Problem Determination', 'Software', 'Sysplex', 'z/OS Classic Interfaces', 'z/OSMF Administration', 'z/OSMF Settings', and 'Security Assistant'. The main content area is titled 'SDSF (RSPLEX0H)' and shows a table of active jobs. The table has columns for JOBNAME, StepName, ProcStep, JobID, and O/FI. The job '*MASTER*' is selected. To the right, the 'Properties' panel shows details for the selected job, including General and Advanced sections.

Jobs Table:

JOBNAME Filter	StepName Filter	ProcStep Filter	JobID Filter	O/FI
<input checked="" type="checkbox"/> *MASTER*			STC09873	
<input type="checkbox"/> PCAUTH	PCAUTH			
<input type="checkbox"/> RASP	RASP			
<input type="checkbox"/> TRACE	TRACE			
<input type="checkbox"/> DUMPSRV	DUMPSRV	DUMPSRV		
<input type="checkbox"/> XCFAS	XCFAS	IEFPROC		
<input type="checkbox"/> GRS	GRS			
<input type="checkbox"/> SMSPDSE	SMSPDSE			
<input type="checkbox"/> SMSPDSE1	SMSPDSE1			
<input type="checkbox"/> CONSOLE	CONSOLE			
<input type="checkbox"/> WLM	WLM	IEFPROC		
<input type="checkbox"/> ANTMMAIN	ANTMAIN	IEFPROC		

Properties of *MASTER*

General

- ASID: 1
- ASIDX: 1
- JobCorrelator: STC09873
- JobID: *MASTER*
- JOBNAME: *MASTER*
- ProcStep: RSP93
- StepName: STC
- SysName: RS93
- 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

Migration And Coexistence Considerations

- Toleration Support
 - APARs PI97517, PH04841 and PH10440
 - Apply any time after PTFs available
- Migration Support
 - Special DD name ISFMIGDA to restore former DA implementation
 - SDSF 2.4 collects DA information in SDSFAUX rather than collecting in the SDSF user address space
 - Old-style ISFPARMS must be reassembled with 2.4 macros
 - Cannot be shared with previous levels
 - Consider moving to ISFPRMxx PARMLIB statements
- Coexistence Support
 - None (SDSF 2.4 is compatible with SDSF 2.3 and 2.2)

Installation Considerations

- 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 your PROCLIB
 - Copy ISF.SISFJCL(ISFPRM00) to your 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

Quick survey

- Are you still using ISFPARMS rather than ISFPRMxx from PARMLIB?
- Are you using the ISFUSER exit?
 - If so, are you using the “table build” exit call?
- Anyone still using the static main menu?
- Anyone using FLDLIST in ISFPRMxx to change the column title(s) ?



QUESTIONS?

Complete your session evaluations for a chance at daily prizes!

To complete, visit
www.share.org/evaluation
and see your progress on the
leaderboard!

PERSON

PROGRAM

PROJECT