



# SDSF Recent **and Future** Changes

Bill Keller  
IBM Poughkeepsie

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## Future changes

- Big EXCP counts
- PREFIX SPE
- Simpler customization without exits
- Change to software requirement in R9
- REXX

## Big EXCP Counts – DA Panel

NP	JOBNAME	EXCP-Cnt	CPU-Time
	DFHSM	163M	22926.95
	WEBW3	63M	2840.57
	DFHSM	54M	5242.0
	ZFS	32M	1499.6

EXCP count for the address space - scaled

- SDSF gets the number from RMF
- After APAR OA14340, the number can max out
  - RMF added a new field to handle larger numbers

## Big EXCP Counts – SDSF Solution

- No second EXCP-Cnt column
- Instead, scaling for EXCP-Cnt column changed from decimal to hexadecimal
  - Decimal: T, M, B (thousands, millions, billions)
  - Hex: K, M, G, T, P (kilo, mega, giga, terra, peta)

## Tip: Scaled EXCP Counts

- Use Arrange to widen column to reduce scaling

```
SDSF DA AQTS (ALL)
COMMAND INPUT ==> arr excp 10
NP JOBNAME EXCP-Cnt
   DKUTZ 1M
   CNMS 1M
   XCFAS 919T
   WALK 874T
```

```
SDSF DA AQTS (ALL)
COMMAND INPUT ==>
NP JOBNAME EXCP-Cnt
   DKUTZ 1,089,308
   CNMS 1,021,261
   XCFAS 920,670
   WALK 874,006
```

## PREFIX SPE

### PREFIX SPE

- APAR PK36698
- Addresses the change made to the PREFIX command when SDSF added support for wildcards
  - PREFIX jobname\* vs. PREFIX jobname
- Replaces the need for a common usermod

## PREFIX SPE

Installing the APAR provides a new option:

- Have SDSF add the generic character for you
  1. User enters PREFIX ABC
  2. SDSF converts it to PREFIX ABC\*
- Activate the option with initialization exit
  - UPROFLG1.UPRO1GPF

## Customization

Reduce the need for user exits

- Options in ISFPARMS to address things that now require an exit
  - For example, prefix option in the SPE
  - Will continue to provide flags for exits

## Customization

- Do you have exits?
- Do you have source modifications? Some I've heard about:
  - PREFIX – addressed by SPE
  - Suppress excessive RACF violation messages with browse
  - Let me know at **[bkeller@us.ibm.com](mailto:bkeller@us.ibm.com)**
- May be fewer source modules and macros with the next release of SDSF!

## Software Requirement

SDSF requirement for software has been tied to BCP

- BCP and SDSF at the same level
  - For example, R8 SDSF requires R8 BCP
  
- JES2 at any level supported by that BCP
  - For example, R8 BCP, R7 JES2, R8 SDSF

## Software Requirement

In the future, SDSF's requirement will be tied to JES2

- JES2 and SDSF at the same level
  - For example, R9 SDSF requiring R9 JES2
- BCP at any level that can run that JES
  - Staging JES2, examples:
    - R9 BCP, R8 JES2, R8 SDSF
    - R9 BCP, R7 JES2 & R8 SDSF or R7 SDSF

## REXX Support

### Announcement:

SDSF is being enhanced to add the capability to provide access to SDSF functions through REXX variables. The variables will be loaded with data from the SDSF panels, enabling scripts to access the data programmatically. The data can also be changed; this provides a capability similar to action characters and overtyping.

## REXX Support

- SDSF support for the REXX programming language
- Simpler and more powerful alternative to batch
  - Add logic
  - Take advantage of REXX functions
- Nearly all SDSF function and data supported
  - Includes SDSF's security and customization
- If you know SDSF, minimum learning to exploit
- Sign up for ESP to be an early exploiter!

## REXX Support Example

Access the 0 panel

Filter by owner

Locate a particular job by job name and dest

List the data sets for the job

Locate and read a particular data set

Based on the contents of the data set:

- Purge the data set
- Change the class

## Recent changes

- z/OS V1R8
- zAAPs and zIIPs
- z/OS V1R7

## **z/OS V1R8 SDSF**

- Available 9/06
- FMID HQX7730
- Requires V1R8 BCP

## z/OS V1R8: JDS Enhancements

Job Data Set (JDS) panel:

- Shows the data sets for a particular job
- Access from a job or output panel with ? action character

```

Display  Filter  View  Print  Options  Help
-----
SDSF JOB DATA SET DISPLAY - JOB BKELLERA (JOB08217)      LINE 1-4
COMMAND INPUT ==>                                         SC
PREFIX=*  DEST=(ALL)  OWNER=BKELLER*  SYSNAME=*
NP  DDNAME      StepName ProcStep DSID  Owner      C  Dest      Rec-Cnt
   JESMSG LG JES2          2  BKELLER    H  LOCAL      73
   JESJCL   JES2          3  BKELLER    H  LOCAL     797
   JESYSMSG JES2          4  BKELLER    H  LOCAL    373
   $INTTEXT JES2          5  BKELLER    A

```

## **z/OS V1R8: JDS Enhancements**

Now uses JES2 SAPI to obtain data (was PSO)

- Removes some restrictions
- Adds overtypable columns
- Adds an action character

## z/OS V1R8: JDS Enhancements

Restrictions on actions (C, H, O, P) and overtyping  
Class and Dest:

- JDS must have been accessed from H.  
➤ **Relaxed.** JDS can be accessed from H or O.
- Restriction: The data set must have been originally allocated as held and never released.  
➤ **Removed.**

## z/OS V1R8: JDS Enhancements

New action character:

- H - hold a data set, if JDS accessed from the O panel

```
SDSF JOB DATA SET DISPLAY - JOB BKELLERA (JOB08217)
COMMAND INPUT ===>
ACTION=//-Block,=-Repeat,+-Extend,C-Cancel,H-Hold,P-Purge,Q-Outdesc,
ACTION=S-Browse,V-View,X-Print
```

**New H action**

## z/OS V1R8: JDS Enhancements

More columns now overtypeable:

- CC (data set copy count)
- Forms (output form number)
- Wtr (output special writer ID or data set ID)

```

Display  Filter  View  Print  Options  Help
-----
SDSF JOB DATA SET DISPLAY - JOB BKELLERA (JOB08217)      LI
COMMAND INPUT ==>
ACTION=//-Block,=-Repeat,+-Extend,Q-Outdesc,S-Browse,V-Vi
NP  DDNAME      StepName ProcStep DSID  CC  Forms  Wtr
   JESMSG LG  JES2      2    1  STD
   JESJCL   JES2      3    1  STD

```

## z/OS V1R8: JOBID for Processes

JOBID column added to the PS (Process) panel

```

Display  Filter  View  Print  Options  Help
-----
SDSF PROCESS DISPLAY  (ALL)  ALL  LINE 1-18 (494)
COMMAND INPUT ==>  SCROLL ==> CSR
NP  JOBNAME  JobID  Status  Owner  State  CPU-Time
  BPXOINIT  SWAPPED,RUNNING  OMVS  MRI  106.34
  DFSCM  STC23647  RUNNING  DFS  1R  126.18
  CNMSAM  RUNNING  CNMSAM  HR  3.37
  CRON5  STC23939  SWAPPED,OTHER KERNEL WAIT  OMVS  1KI  13.91
  SYSLOGD6  STC23940  FILE SYS KERNEL WAIT  OMVS  1F  6.03
  ISLDEV4  STC15569  SWAPPED,FILE SYS KERNEL WAIT  ISLDEV4  1FI  1.88
  WOOLLEY  TSU15774  SWAPPED,WAITING FOR CHILD  WOOLLEY  1WI  3.32
  MVSNFSC  MSGQ RECEIVE WAIT  TCP  1A  4.85
  HZSPROC  STC24019  RUNNING  HCHECK  1R  116.33

```

**Job ID**

## **z/OS V1R8: JOBID for Processes**

JOBID column added after JOBNAME

- System programmers can reorder with field lists in ISFPARMS
- User can reorder with the ARRANGE command

## z/OS V1R8: New Column on JDS and OD

AFPParms column added to Job Data Set and Output Descriptor panels

- Access with ? and Q action characters

Names a data set that contains the parameters to be used by the AFP Print Distributor

```

Display  Filter  View  Print  Options  Help
-----
SDSF JOB DATA SET DISPLAY - JOB SDSF      (S0000004)      LINE 1-1 (1)
COMMAND INPUT ===>                          SCROLL ==
NP      DDNAME
        SDSFLOG
        AFPPARMS
        MYDATA.SET
  
```

Full column (54 characters) must be visible for overtyping

## **z/OS V1R8: New Column on JDS and OD**

AFPParms column added to the end of the field lists

- System programmers can reorder with field lists in ISFPARMS
- User can reorder with the ARRANGE command

## Support for the zAAP – V1R5 and Up



### ▪ **APAR PQ93310:**

- DA panel shows zAAP use in new columns
  - Complement CPU-Time and CPU% columns

### ▪ **APAR PK06616:**

- DA title line shows zAAP view of CPU use
  - Complements MVS and LPAR views
  - DA column shows zAAP use for the system

### • **APAR PK18215:**

- ENC panel shows zAAP use

## zAAP Columns on DA

DA	SYSA	SYSA	PAG	0	CPU/L/Z	74/	74/	54	LINE 1-8 (8)	
JOBNAME	CPU%	ECPU%	GCP-Time	zAAP-Time	zACP-Time	GCP-Use%	zAAP-Use%	Real		
T3AGNTA	0.06	0.01	45.74	47.14	44.81	0.07	0.58	44T		
T3DMGR	0.03	0.00	32.64	44.20	31.73	0.03	0.31	44T		
T3DMGRS	0.03	0.01	14.89	25.57	14.60	0.02	0.31	107T		
T3DMN	0.00	0.00	0.21	0.00	0.00	0.00	0.00	3433		
T3MQCHIN	10.87	1.51	389.65	0.00	0.00	24.86	0.00	4068		
T3MQMSTR	1.15	0.16	6.90	0.00	0.00	0.06	0.00	7789		
T3SR08A	17.55	2.43	123.15	20.28	10.61	43.33	0.23	37T		

## zAAP Columns on DA

GCP-Time	Accumulated general processor service time, in seconds (PQ93310)
zAAP-Time	Accumulated zAAP service time, in seconds (PQ93310)
zACP-Time	Accumulated general processor service time that was eligible for a zAAP, in seconds (PQ93310)
GCP-Use%	Percent of the total general processor time used by the address space in the most recent interval (not normalized) (PQ93310)
zAAP-Use%	Percent of the total zAAP time used by the address space in the most recent interval (not normalized) (PQ93310)
SzAAP%	zAAP view of CPU use for the <b>system</b> , in the most recent interval (PK06616) ➤ <b>Same for all rows</b>

## zAAP Columns on ENC

zAAP-Time Accumulated zAAP service time, in seconds (PK18215)  
zACP-Time Accumulated general processor service time  
that was eligible for a zAAP, in seconds (PK18215)

## zAAP Columns

Are displayed on DA only if:

- RMF is being used as the source of the data
  - A zAAP has been configured for a system that is within the scope of the systems being shown on the panel.
    - Note that changing the systems being shown (with the `SYSNAME` or `FILTER` commands) once the DA panel is displayed does not affect whether SDSF displays or omits the columns.
- SDSF will change to always display these columns

## zAAP on the DA Title Line: APAR PK06616

- DA title line adds a zAAP view of CPU use
  - Shown only if a zAAP is defined and RMF is being used
- To make room, SIO is removed
  - Total system Start I/O rate – SDSF calculates
- New format:

```
SDSF DA AQFT (ALL) PAG 0 CPU/L/Z 74 / 74 / 54
```

Key: MVS/ LPAR/zAAP

Values

## zAAP on the DA Title Line: APAR PK06616

Customizing the DA title line:

- Compatibility flag in the initialization user exit:  
Title line should be as before the APAR (with SIO)  
**UPRSFLG5.UPRS5DSI**
  - Future: Do this in ISFPARMS
- CPUFMT(SHORT) on the GROUP statement of ISFPARMS
  - Only the CPU value is shown

## Support for the zIIP - APAR PK18215



### ➤ DA panel shows system zIIP use

SzIIP%    zIIP view of CPU use for the **system**, in the most recent interval

➤ Same for all rows

➤ Requires RMF and presence of a zIIP – but SDSF is changing to always show them

### ■ ENC panel shows zIIP use

zIIP-Time    Accumulated zIIP time, in seconds

zICP-Time    Accumulated zIIP on CP time, in seconds

- Unlike on DA, the columns on ENC are always shown

## Help: CPU Use Fields

Detailed help on each of the CPU-use fields is available

1. Press F1 from DA, then select "Fields on the DA panel"

```
HELP: Display Active Users Panel
COMMAND INPUT ==>
```

The title line shows the following:

SDSF	DA	IPO1	IP*	PAG	0	CPU/L/Z	26/	26/	0
System ID of system you are logged on to		Systems displayed (MVS value or SYSNAME value)		Total demand paging rate		Percentage of time the CPU is busy, MVS, LPAR and zAAP views			

2. Tab to the highlighted phrase and press F1

## Help: CPU Use Fields: example

```
HELP: Display Active Users Panel -- CPU Fields   Panel 1 of 7  
COMMAND INPUT ==>
```

Title line: You may see one, two or three values depending on your configuration. If three values are shown, the label preceding the values indicates the order. All three values are obtained from RMF.

MVS view: is the first value, or the only value if just one is present. It is the best indicator of a CPU bottleneck. It is

```
    CPU-time  
    ----- * 100  
    online-time
```

LPAR view: is the second value, if present. It takes into account several states related to PR/SM. A value of \*\*\* indicates RMF Monitor I CPU Report is not active.

## Help: CPU Use Fields: example

```
HELP: Display Active Users Panel -- CPU Fields   Panel 2 of 7
COMMAND INPUT ==>
```

```
zAAP view: is the third value, if present. It is:
SUM(zAAP partition dispatch time)
----- x 100
SUM(zAAP online time)
```

It requires that a zAAP is defined and RMF is being used.

The guidelines for CPU-busy vary. For example, in a batch environment, a value of 100 may not indicate a problem. For details, see the discussion of CPU Activity in RMF Report Analysis, SC33-7991.

The values on the title line are for the system you are logged on to. CPU utilization for other systems is displayed in the SCPU% and SzAAP% columns.

## Changes for z/OS V1R7

- New panel for health checks
- New panel for JES2 resources
- Default browse action characters
- Cursor placement control
- Unconditional wait on the / command
- Support for JES2's NJE over TCP/IP

## z/OS V1R7 SDSF

- Available 9/05
- Requires V1R7 BCP
- Requires that JES2, regardless of version and release, be in z2 mode (\$ACTIVATE)
  - z/OS V1R7 JES2 requires z2 mode

## IBM Health Checker for z/OS

- Foundation to help simplify and automate verification of best practices for z/OS
- Part of the z/OS base in R7
- Support being rolled back to prior releases
- SDSF APAR PK00561
  - V1R4 SDSF PTFs: UK06680 (Japanese: UK06682)
  - V1R5 SDSF PTFs: UK06681 (Japanese: UK06683)

## SDSF Support for IBM Health Checker

- New tabular panel
  - Sysplex-capable with WebSphere MQ
  - Sort, filter, arrange support
- Shows attributes and status of the current checks
  - Last time the check ran
- Action characters to control checks
- Browse action to display check output messages
- Overtypes to change attributes

# SDSF Health Checker Panel

Display Filter View Print Options Help

---

SDSF HEALTH CHECKER DISPLAY SY1

COMMAND INPUT ==> SCROLL ==> CSR

NP NAME	CheckOwner	State	Statu
CNZ_AMRF_EVENTUAL_ACTION_M	IBMCNZ	ACTIVE(ENABLED)	EXCEP
CNZ_CONSOLE_MASTERAUTH_CMD	IBMCNZ	ACTIVE(ENABLED)	SUCCE
CNZ_CONSOLE_MSCOPE_ADD_FOU	IBMCNZ	ACTIVE(ENABLED)	EXCEP
CNZ_CONSOLE_ROUTCODE_11	IBMCNZ	ACTIVE(ENABLED)	EXCEP
CNZ_CONSOLE_ROUTCODE_12	IBMCNZ	ACTIVE(ENABLED)	SUCCE
CNZ_EMCS_INACTIVE_CONSOLES	IBMCNZ	ACTIVE(ENABLED)	SUCCE
CNZ_SYS	CNZ	ACTIVE(ENABLED)	EXCEP
CNZ_SYS	CNZ	ACTIVE(ENABLED)	SUCCE
CNZ_SYSCONS_ROUTCODE	IBMCNZ	ACTIVE(ENABLED)	EXCEP
CNZ_TASK_TABLE		ACTIVE(ENABLED)	SUCCE
CTT_LEVEL		ACTIVE(ENABLED)	SUCCE
CTT_SYNTAX_RULES	ZTTX	ACT	SUCCE
GRS_CONVERT_RESERVES	IBMGRS	ACT	V N

Check name column sized dynamically

Component

Readiness to run

Exception, success, etc.

## SDSF Health Checker panel – Action Characters

Display	E	A	Activate
-----		D	Display
SDSF HEALTH		DL	Display long
COMMAND INE		DP	Display policies
NP NAME		DPO	Display policies that are outdated, not applied
CNZ_AMF		DS	Display status
CNZ_CON		E	Refresh
CNZ_CON		H	Deactivate
CNZ_CON		P	Delete
CNZ_EM		PF	Delete force
CNZ_EM		R	Run
CNZ_SYS		S, SB, SE	Browse
CNZ_SYS		U	Remove all categories for the check
CNZ_TAS		X	Print the check output; add C (close), D (to data set), F (to file), S (sysout)
CTT_LEV			
CTT_SYM			
GRS_CON			

# SDSF Health Checker Panel - Browse

```
SDSF OUTPUT DISPLAY RSM_MEMLIMIT          LINE 0          COLUMNS 02- 81  
COMMAND INPUT ===>                          SCROLL ===> HALF
```

```
***** TOP OF DATA *****
```

```
CHECK(IBMRSR,RSM_MEMLIMIT)
```

```
START TIME: 08/09/2005 09:17:29.644085
```

```
CHECK DATE: 20041006 CHECK SEVERITY: LOW
```

```
* Low Severity Exception *
```

```
IARH109E MEMLIMIT SET TO MAXIMUM
```

Explanation: Currently, the MEMLIMIT is set to NOLIMIT.

Setting MEMLIMIT too low may cause jobs that rely on high virtual storage to fail. Setting MEMLIMIT too high may cause over-commitment of real storage resources and lead to performance degradation or system loss.

System Action: n/a

Check name

Check severity

Standard browse functions:  
Print, find, scroll...

## Health Checker Panel – Security

### SAF

- Resources in the XFACILIT, SDSF and OPERCMDS classes
  - XFACILIT:
    - Protects check objects and associated actions
    - New for R7: APAR OA10774
      - Default return code 8. If class is active, customer must define profiles in that class for the CK panel. No fallback to ISFPARMS!

## Health Checker Panel – Security

SAF resources – XFACILIT class

Function	XFACILIT Class Resource	Access
A action	HZS. <i>sysname.chkowner.chkname</i> .ACTIVATE	UPDATE
D action	HZS. <i>sysname.chkowner.chkname</i> .QUERY	READ
E action	HZS. <i>sysname.chkowner.chkname</i> .REFRESH	CONTROL
H action	HZS. <i>sysname.chkowner.chkname</i> .DEACTIVATE	UPDATE
P action	HZS. <i>sysname.chkowner.chkname</i> .DELETE	CONTROL
R action	HZS. <i>sysname.chkowner.chkname</i> .RUN	UPDATE
S, X actions	HZS. <i>sysname.chkowner.chkname</i> .MESSAGES	READ
U action, overtypes	HZS. <i>sysname.chkowner.chkname</i> .UPDATE	UPDATE

## Health Checker Panel – Security with SAF

SAF resources in addition to XFACILIT class

Function	Resource (Class)	Access
CK cmd.	ISFCMD.ODSP.HCHECKER. <i>system</i> (SDSF)	READ
Action characters	MVS.MODIFY.STC. <i>hcproc.hcstcid</i> (OPERCMDS)	UPDATE
Overtypes	ISFATTR.CHECK. <i>column</i> (SDSF) MVS.MODIFY.STC. <i>hcproc.hcstcid</i> (OPERCMDS)	UPDATE

## SDSF Support for JES2 Resources



- New tabular panel
  - Monitor and manage JES2 resources (JOEs, JQEs, etc.)
  - Displays data similar to JES2 \$JDDETAILS command
  - Sysplex-capable with WebSphere MQ
  - Sort, filter, arrange support
  - Requires z/OS V1R7 JES2

## SDSF Support for JES2 Resources

```

Display  Filter  View  Print  Options  Help
-----
SDSF RESOURCE MONITOR DISPLAY  (ALL)                LINE 1-5 (16)
COMMAND INPUT ===>                                SCROLL ===> CSR
NP RESOURCE SysId Status Limit InUse InUse% Warn% IntAvg IntHigh
  BERT      SY1      4503   113   2.50   82    112    113
  BSCB      SY1      2002    0    0.00    0     0     0
  BUFX      SY1       120    0    0.00   70     0     0
  CKVR      SY1        17    0    0.00   80     0     1
  CMBS      SY1      1000    0    0.00   80     0     0

```

D – display details in the LOG (\$D command)

Shortage indicator:  
 WARNING, if the resource is currently over the warning level  
 LIMIT, if the value for InUse is equal to the value for Limit (and InUse > 0)

## SDSF Support for JES2 Resources

```

Display  Filter  View  Print  Options  Help
-----
SDSF RESOURCE MONITOR DISPLAY (ALL)                LINE 1-5 (16)
COMMAND INPUT ===>                                SCROLL ===> CSR
NP RESOURCE SysId Status Limit InUse InUse% Warn% IntAvg IntHigh
  BERT      SY1      4503   113   2.50   82    112    113
  BSCB      SY1      2002    0   0.00    0     0     0
  BUFX      SY1       120    0   0.00   70     0     0
  CKVR      SY1        17    0   0.00   80     0     1
  CMBS      SY1      1000    0   0.00   80     0     0

```

Overtimeable

Overtimeable

Overtypes generate \$T commands that vary with the resource.

## SDSF Support for JES2 Resources

Access the panel with the RM command:

RM (ALL | *number-of-intervals*)

where:

**ALL** specifies that all intervals for the resources should be shown.  
*number-of-intervals* specifies the maximum number of intervals  
that will be shown.

RM with no parameters shows only the current interval.

## SDSF Support for JES2 Resources

```

Display  Filter  View  Print  Options  Help
-----
SDSF RESOURCE MONITOR DISPLAY  (ALL)                LINE 1-18 (4743)
COMMAND INPUT ===>                                SCROLL ===> CSR

```

NP	RESOURCE	SysId	Limit	InUse	InUse%	Warn%	IntAvg	IntHigh	Time
	BERT	AQFT	64100	2109	3.29	80	2149	2207	17:0
	BERT	AQFT	64100	2180	3.40	80	2292	2370	16:0
	BERT	AQFT	64100	2358	3.67	80	2387	2472	15:0
	BERT	AQFT	64100	2360	3.68	80	2354	2400	14:0
	BERT	AQFT	64100	2345	3.65	80	2329	2362	13:0

- This example shows one row for each interval

## Default Browse Action Character



- Default browse action
  - Browse a job by pressing Enter next to it
  - No action character required

```
SDSF STATUS DISPLAY ALL CLASSES
```

```
COMMAND INPUT ==>
```

```
NP   JOBNAME   JobID   Owner   Status
```

```
   BKELLER   TSU09321  BKELLER
```

```
—   BKELLER   JOB078
```

```
   BKELLER   TSU267
```

```
SDSF OUTPUT DISPLAY BKELLER  JOB07810
```

```
COMMAND INPUT ==>
```

```
***** TOP OF DATA *****
```

```
\INMR01      S390VM      BKELLER
```

```
12113 \INMR07      BKELLER  R17JSHP2  2
```

## Default Browse Action Character

SET BROWSE (S | SB | SE | NONE | ?)

S is SDSF's browse. This displays the Output Data Set Panel.

SB is ISPF browse.

SE is ISPF edit.

NONE specifies that no action character should be issued.

? displays the current setting.

## Default Browse Action Character

New ISFPARMS parameter (GROUP):

BROWSE (S | SB | SE | NONE)

Sets initial value

## Cursor Placement Control: Changed Command

SET CURSOR (ON|TOP|OFF|?)

**ON** return cursor to the NP column for the row

➤ **TOP** scroll the row to the top of the panel

**OFF** return cursor to the command line

**?** display the current setting

Also statement in ISFPARMS to set the initial value:

CURSOR (ON | OFF | TOP)

## Interaction of SET BROWSE and SET CURSOR

Recommend SET CURSOR TOP if a default browse action is set.

➤ Not SET CURSOR ON

Scenario w/ SET BROWSE S and SET CURSOR ON:

1. Overtyping column
2. Press Enter, cursor returns to NP column
3. Press Enter again to see the change in the column
4. SDSF browses the job!

## Unconditional Wait on / Command

After a / command, SDSF waits to display messages:

- Until the SET DELAY interval has passed
- Or the first message is received
  - Sometimes there are later msgs not displayed

With R7, SDSF adds new control over the wait:

==> ( W ) / ( *command* )

SDSF should wait until the full SET DELAY interval has elapsed before displaying any messages.

## Unconditional Wait on / Command

### Example:

```
==> /f sdsf,d
```

```
ISF304I Modify DISPLAY command accepted.
```

Only one message displayed

```
==> w/f sdsf,d
```

```
ISF304I Modify DISPLAY command accepted.
```

```
ISF312I SDSF Display
```

```
Server status: Active Default: Yes
```

```
Communications: Inactive
```

```
Parms: ISFPRM01 / SYS1.PARMLIB
```

Full set of messages displayed

## JES2 Support of NJE over TCP/IP

SDSF added columns to the Lines and Nodes panels:

Title	Description	
SocketN	Socket name	} Lines
IPAddr	IP address	
IPName	IP name	
Port	TCP/IP port number	
PortName	TCP/IP port name	
Secure	Secure socket (SSL)	
NSName	Network server name	
➤ Overtypable Unit column now accepts TCPIP		
NetSrv	Network server number - Overtypable	- Nodes

## HELP: Web Sites

Additional information about SDSF and z/OS is available on the Internet.

- SDSF home page: usage tips, presentations, as well as a wizard to help you enable the sysplex support

**<http://www.ibm.com/servers/eserver/zseries/zos/sdsf>**

Usage  
info

- Reference card:

**<http://www.ibm.com/servers/eserver/zseries/zos/sdsf/sdsfdown.html>**

- Latest edition of SDSF Operation and Customization (PDF)

**<http://publibz.boulder.ibm.com/epubs/pdf/isf4cs60.pdf>**

SAF,  
ISFPARMS

- z/OS Internet Library

**<http://www.ibm.com/servers/eserver/zseries/zos/bkserv/>**