z/OS Version 1 Release 2

SDSF for Release 2

SDSF New Functions

- ⚠ Improve Log Title Line
- ⚠ Remove *PROCESS statements
- ⚠ Single quote on print panel
- ⚠ UNIT support on print panel
- ⚠ Restructure UCLIN Jobs
- ⚠ Add report class to DA
- ⚠ Make Enclaves visible to operators
- ⚠ SDSF display multiple system affinities/affinity
- ⚠ SDSF/RMFshould capture enclave SRBs for DB2

SDSF New Functions

△ Maintaining filter lists between SDSF sessions

△ Improve performance of SDSF with OPERLOG

  ➤ SDSF addresses but does not satisfy this
     requirement

△ **FIN APAR PQ41542 -** SDSF fixes a problem with "SJ"
   when it is issued against a job that has USER=&xxxxx
   on the JOB card

Primary Option Menu

```
  Display  Filter  View  Print  Options  Help
 ------------------------------------------------------------------------------
 HQX7705 ----------------  SDSF PRIMARY OPTION MENU  -------------------------
 COMMAND INPUT ===>                                        SCROLL ===> PAGE

 DA     Active users                    INIT  Initiators
 I      Input queue                     PR    Printers
 O      Output queue                    PUN   Punches
 H      Held output queue               RDR   Readers
 ST     Status of jobs                  LINE  Lines
                                        NODE  Nodes
 LOG    System log                      SO    Spool offload
 SR     System requests                 SP    Spool volumes
 MAS    Members in the MAS
 JC     Job classes                     ULOG  User session log
 SE     Scheduling environments
 RES    WLM resources
 ENC    Enclaves
 PS     Processes


 END    Exit SDSF


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```

Sysplex-wide Display of Lines

```
   Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
 SDSF LINE DISPLAY  (ALL)                              LINE 1-9 (9)
 COMMAND INPUT ===>                                        SCROLL ===> PAGE
 ACTION=//-Block,=-Repeat,+-Extend,C-Cancel,D-Display,E-Restart,I-Interrupt,
 ACTION=P-Stop,Q-Quiesce,S-Start
 NP   DEVICE       Status   Unit  Node     SysName  SysID JESN JESLevel JobName
      LINE1        DRAINED  SNA            SC64     SC64  JES2 z/OS 1.2
      LINE2        DRAINED  SNA            SC64     SC64  JES2 z/OS 1.2
      LINE3        DRAINED  SNA            SC64     SC64  JES2 z/OS 1.2
      LINE4        DRAINED  SNA            SC65     SC65  JES2 z/OS 1.2
      LINE5        DRAINED  SNA            SC65     SC65  JES2 z/OS 1.2
      LINE6        DRAINED  SNA            SC65     SC65  JES2 z/OS 1.2
      LINE7        DRAINED  SNA            SC63     SC63  JES2 z/OS 1.2
      LINE8        DRAINED  SNA            SC63     SC63  JES2 z/OS 1.2
      LINE9        DRAINED  SNA            SC63     SC63  JES2 z/OS 1.2
```

Nodes Display Sysplex-wide

```
   Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
 SDSF NODE DISPLAY  (ALL)    WTSCPLX2 N1              LINE 1-24 (999)
 COMMAND INPUT ===>                                       SCROLL ===> PAGE
 ACTION=//-Block,=-Repeat,+-Extend,D-Display,S-Start
 NP   NUMBER NodeName Status                 Authority        Trans  Recv   Hold
      N1     WTSCPLX2 OWNNODE                (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N2     WTSCMXA  VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N3     WTSCPLX3 VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N4     WTSCNET  VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N5     WTSCPOK  VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N6     WTSCPLX1 VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N7     WTSC58   VIA SC63               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N8     WTSC59   VIA SC64               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N9     WTSC60   VIA SC64               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N10    WTSCICF  VIA SC64               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N11    WTSCESA  VIA SC64               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N12    WTSCSL2  VIA SC65               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N13    WTSCVMXA VIA SC65               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N14    PLPSC    VIA SC65               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N15    S390VM   VIA SC65               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N16    N16      UNCONNECTED            (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N17    WTSCPLX9 VIA SC65               (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
      N18    WTSCPLX4 UNCONNECTED            (D=Y,J=Y,N=N,S=Y) BOTH   BOTH   NONE
```

Enclave Display Panel

```
  Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
 SDSF ENCLAVE DISPLAY SC64     ALL                      LINE 0-0 (0)
 COMMAND INPUT ===>                                         SCROLL ===> PAGE
 ACTION=//-Block,=-Repeat,+-Extend,I-Info,M-Match
 NP   TOKEN          SSType Status    SrvClass Per PGN RptClass ResGroup   CPU-Time
      1800000005     DB2    ACTIVE    SYSCLASS 1   2   ACLASS   AGROUP      1432.77
      2800000104     IMS    ACTIVE    SYSCLASS 2   4   BCLASS   BGROUP        85.22
      12280000000    MQ     ACTIVE    ACLASSA  3   1   BCLASS   BGROUP       394.39
```

Spool Volume Panel - SP

```
  Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
 SDSF SPOOL DISPLAY  SC64   21%  ACT  18685 FRE  14639  LINE 1-2 (2)
 COMMAND INPUT ===>                                         SCROLL ===> PAGE
 ACTION=//-Block,=-Repeat,+-Extend,D-Display,J-JobQueue,P-Purge,S-Start,Z-Halt
 NP   VOLUME Status    TGPct TGNum TGUse Command  SAff   Ext LoTrk HiTrk TrkPerCyl
      SBOX02 ACTIVE        1  2000    15                  00  00A5  1814        15
      SBOX07 ACTIVE       24 16685  4031           ANY    01  001E  C3A4        15
```

Spool Panel for Overtype of SAff

```
 Display  Filter  View  Print  Options  Help
---------------------------------------------------------------------
SDSF SPOOL DISPLAY  SC64   39%  ACT  18685 FRE  11259  LINE 1-2 (2)
COMMAND INPUT ===>                                 SCROLL ===> PAGE
ACTION=//-B                                       eue,P-Purge,S-Start,Z-Halt
NP    VOLUME  +--------------------------------+  f  Ext LoTrk HiTrk TrkPerCyl
      SBOX02  |        Overtype Extension      |     00  00A5  1814        15
      SBOX07  |                                |     01  001E  C3A4        15
              | Column SAff                    |
              | Maximum length 5               |
              |                                |
              | Type values or use blanks to   |
              | erase values.                  |
              | ===> ANY   ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____  ____  ____  ____    |
              | ===> ____                      |
              |                                |
              |  F1=Help     F2=Split  F3=Cancel|
              |  F9=Swap   F12=Cancel           |
              +--------------------------------+
```

WLM Support

- Support adds new columns to DA

  - **CPUCrit** & **STORCrit** - to indicate whether address space is CPU or storage protected (critical)

  - RptClass - displays the report class

- Columns displayed in Goal Mode only and OS/390 R10+ systems

- Existing "**SERVER**" column adds new value "**N/A**" if address space is exempt from server management

WLM CPU and Storage Protection

```
  Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
SDSF DA IBM2  SC59    PAG   0 SIO    0 CPU 12/ 8  LINE 1-22 (62)
COMMAND INPUT ===>                                    SCROLL ===> PAGE
ACTION=//-Block,=-Repeat,+-Extend,?-JDS,A-Release,C-Cancel,D-Display,E-Restart,
ACTION=H-Hold,K-SysCancel,L-List,P-Purge,Q-Outdesc,R-Reset,S-Browse,W-Spin,
ACTION=X-Print,Z-SysForce
NP   JOBNAME  up Server   Quiesce   ECPU-Time  ECPU% CPUCrit StorCrit RptClass
     *MASTER*  NO                    2449.19  0.00 NO      NO
     PCAUTH    NO                       0.05  0.00 NO      NO
     RASP      NO                       4.57  0.00 NO      NO
     TRACE     NO                       0.05  0.00 NO      NO
     DUMPSRV   NO                       0.12  0.00 NO      NO
     XCFAS     NO                     155.45  0.00 NO      NO
     GRS       NO                       0.09  0.00 NO      NO
     SMXC      NO                      31.02  0.00 NO      NO
     SYSBMAS   NO                       4.06  0.00 NO      NO
     CONSOLE   NO                       3.39  0.00 NO      NO
     WLM       NO                     707.51  0.00 NO      NO
     OMVS      NO                      69.49  0.00 NO      NO
     JESXCF    NO                      14.08  0.00 NO      NO
     ALLOCAS   NO                       0.05  0.00 NO      NO
     SMF       NO                      14.88  0.00 NO      NO
     JES2AUX   NO                       0.04  0.00 NO      NO
     JES2      NO                    3942.42  0.00 NO      NO
```

Greater than 64K Jobs Display

```
  Display  Filter  View  Print  Options  Help
 -------------------------------------------------------------------------------
SDSF STATUS DISPLAY ALL CLASSES                        LINE 1-22 (1519)
COMMAND INPUT ===>                                    SCROLL ===> PAGE
ACTION=//-Block,=-Repeat,+-Extend,?-JDS,A-Release,C-Cancel,D-Display,E-Restart,
ACTION=H-Hold,I-Info,J-Start,L-List,O-Release,P-Purge,Q-Outdesc,S-Browse,
ACTION=W-Spin,X-Print
NP   JOBNAME  JobID    Owner    Prty Queue      C  Pos  SAff ASys Status
     IOEISMKD J0102293 RC64      10 EXECUTION   A       SC64      HOLD
     HFSRSTZ2 J0102434 RC64      10 EXECUTION   A       SC64      HOLD
     MERONIAA J0103292 MERONI    10 EXECUTION   A                 HOLD
     QM0828S  J0103895 PAOLOR8    6 EXECUTION   A            SC63
     PAOLOR7P J0103900 PAOLOR7    5 EXECUTION   A       SC63 SC63
     PAOLOR7  T0103311 PAOLOR7   15 EXECUTION           SC63 SC63
     BARTR3   T0103596 BARTR3    15 EXECUTION           SC63 SC63
     ROGERS   T0103891 ROGERS    15 EXECUTION           SC64 SC64
     PAOLOR6  T0103896 PAOLOR6   15 EXECUTION           SC63 SC63
     SYSLOG   S0102075 +MASTER+  15 EXECUTION           SC63 SC63
     RACF     S0102090 RACF      15 EXECUTION           SC63 SC63
```

Long Running Jobs Support

⚠ New column SPIN

➢ DA, I, and ST panels

➢ Indicates whether job in the job class spun

⚠ New column JESLog

➢ JC panel

➢ Shows options for job logs

Long Running Jobs Support

```
 Display  Filter  View  Print  Options  Help
-------------------------------------------------------------------------------
SDSF STATUS DISPLAY ALL CLASSES                        LINE 1-22 (1519)
COMMAND INPUT ===>                                     SCROLL ===> PAGE
ACTION=//-Block,=-Repeat,+-Extend,?-JDS,A-Release,C-Cancel,D-Display,E-Restart,
ACTION=H-Hold,I-Info,J-Start,L-List,O-Release,P-Purge,Q-Outdesc,S-Browse,
ACTION=W-Spin,X-Print
NP   JOBNAME  JobID    Owner     Prty Queue      C  Pos  SAff ASys Status
     IOEISMKD J0102293 RC64        10 EXECUTION  A        SC64      HOLD
     HFSRSTZ2 J0102434 RC64        10 EXECUTION  A        SC64      HOLD
     MERONIAA J0103292 MERONI      10 EXECUTION  A                  HOLD
     QM0828S  J0103895 PAOLOR8      6 EXECUTION  A             SC63
     PAOLOR7P J0103900 PAOLOR7      5 EXECUTION  A        SC63 SC63
     PAOLOR7  T0103311 PAOLOR7     15 EXECUTION           SC63 SC63
     BARTR3   T0103596 BARTR3      15 EXECUTION           SC63 SC63
     ROGERS   T0103891 ROGERS      15 EXECUTION           SC64 SC64
     PAOLOR6  T0103896 PAOLOR6     15 EXECUTION           SC63 SC63
     SYSLOG   S0102075 +MASTER+    15 EXECUTION           SC63 SC63
     RACF     S0102090 RACF        15 EXECUTION           SC63 SC63
```

SDSF Support for 64-bit Virtual

- ⚠ Support for MemLimit

  - ➢ New column on DA panel

  - ➢ SDSF uses scaling for binary columns that uses:
    - KB - MB - GB - TB - PB
    - 1024 is displayed as 1KB if value fits

  - ➢ SDSF allows width of column to be 10 or more

MemLimit Column on DA Display

```
 Display  Filter  View  Print  Options  Help
-------------
SDSF DA SC64                           Arrange         Row 28 to 36 of 37
COMMAND INPU   Command ===>  _
ACTION=//-Bl
ACTION=H-Hol   Select a column or block with / or // then type A (after) or
ACTION=Z-Sys   B (before) to move.  Special function keys:
NP    JOBNAME   F5/17=Refresh list  F11/23=Clear input  F6/18=Default order
      *MASTER
      PCAUTH        Column          Width    Description
      RASP      __  Quiesce           7
      TRACE     __  ECPU-Time         10
      DUMPSRV   __  ECPU%             6
      XCFAS     __  CPUCrit           7
      GRS       __  StorCrit          8
      SMXC      __  RptClass          8
      SYSBMAS   __  MemLimit          8
      SMSVSAM   __  Tran-Act          10
      CONSOLE   __  Tran-Res          10
      WLM        F1=Help     F2=Split    F3=Cancel   F5=Refresh  F6=Default
      ANTMAIN    F7=Bkwd     F8=Fwd      F9=Swap   F11=Clear    F12=Cancel
      ANTAS00
      OMVS      OMVS    OMVS          SC63              NS  FF  7200   0.00
      IEFSCHAS  IEFSCHAS              SC63              NS  FF    73   0.00
      JESXCF    JESXCF  IEFPROC       SC63              NS  FF   540   0.00
      ALLOCAS   ALLOCAS               SC63              NS  FF   302   0.00
      IOSAS     IOSAS   IEFPROC       SC63              NS  FF   47T   0.00
      IXGLOGR   IXGLOGR IEFPROC       SC63              NS  FF   13T   0.00
      SMS       SMS     IEFPROC       SC63              NS  FE   429   0.00
```

z/OS UNIX Processes Display

```
  Display  Filter  View  Print  Options  Help
--------------------------------------------------------------------------------
SDSF PROCESS DISPLAY  SC64     ALL                      LINE 1-23 (44)
COMMAND INPUT ===>                                      SCROLL ===> PAGE
ACTION=//-Block,=-Repeat,+-Extend,C-Cancel,D-Display
NP    JOBNAME  Status                        Owner    State CPU-Time        P
      BPXOINIT RUNNING                       OMVSKERN MR      9.22
      TCPIPOE  RUNNING                       TCPIPMVS 1R    405.91        655
      TCPIPOE  RUNNING                       TCPIPMVS 1R    405.91        655
      TCPIPOE  FILE SYS KERNEL WAIT          TCPIPMVS 1F    405.91        655
      TCPIPOE  FILE SYS KERNEL WAIT          TCPIPMVS 1F    405.91        655
      FWKERN   SWAPPED,OTHER KERNEL WAIT     STC      HKI     0.06        655
      TCPIPMVS RUNNING                       TCPIPMVS MR    399.39        655
      ICAPCFGS SWAPPED,OTHER KERNEL WAIT     FWKERN   HKI     0.29        655
      ICAPCFGS SWAPPED,FILE SYS KERNEL WAIT  FWKERN   HFI     0.29        655
      TCPIPMVS RUNNING                       TCPIPMVS 1R    399.39        655
      TCPIPMVS RUNNING                       TCPIPMVS 1R    399.39        655
      TCPIPMVS RUNNING                       TCPIPMVS 1R    399.39        655
      TCPIPMVS FILE SYS KERNEL WAIT          TCPIPMVS 1F    399.39        655
      ICAPSTAK OTHER KERNEL WAIT             FWKERN   HK     27.81        655
      ICAPSTAK SLEEPING                      FWKERN   HS     27.81        655
      TCPIPMVS RUNNING                       TCPIPMVS 1R    399.39        655
      FTPDMVS1 SWAPPED,FILE SYS KERNEL WAIT  TCPIPMVS 1FI    0.08        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
      MQSBCHIN RUNNING                       MQGUSER  1R     42.05        655
```

PS ACTIVE

```
  Display  Filter  View  Print  Options  Help
--------------------------------------------------------------------------------
SDSF PROCESS DISPLAY  SC64     ACTIVE                   LINE 1-20 (20)
COMMAND INPUT ===>                                      SCROLL ===> PAGE
ACTION=//-Block,=-Repeat,+-Extend,C-Cancel,D-Display
NP    JOBNAME  Status   Owner    State CPU-Time        PID      PPID  ASID AS
      BPXOINIT RUNNING  OMVSKERN MR      9.27            1         0    59  0
      TCPIPOE  RUNNING  TCPIPMVS 1R    408.17        65547         1    65  0
      TCPIPOE  RUNNING  TCPIPMVS 1R    408.17        65548         1    65  0
      TCPIPMVS RUNNING  TCPIPMVS MR    401.60        65552         1    64  0
      TCPIPMVS RUNNING  TCPIPMVS 1R    401.60        65555         1    64  0
      TCPIPMVS RUNNING  TCPIPMVS 1R    401.60        65556         1    64  0
      TCPIPMVS RUNNING  TCPIPMVS 1R    401.60        65557         1    64  0
      TCPIPMVS RUNNING  TCPIPMVS 1R    401.60        65562         1    64  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65568         1    66  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65569         1    66  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65570         1    66  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65571         1    66  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65572         1    66  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28        65573         1    66  0
      TCPIPOE  RUNNING  TCPIPMVS MR    408.17     16842761         1    65  0
      MVSNFSC5 RUNNING  STC      1R      0.51     16842762         1    54  0
      RMFGAT   RUNNING  STC      1R   4239.58     16842781         1    67  0
      ZFS      RUNNING  DFS      1R     17.30     67174403         1   251  0
      MQSBCHIN RUNNING  MQGUSER  1R     42.28     67174428         1    66  0
      MVSNFSC5 RUNNING  STC      1R      0.51     83951624         1    54  0
```

D action character on BPXOINIT

```
 Display  Filter  View  Print  Options  Help
------------------------------------------------------------------------
SDSF PROCESS DISPLAY  SC64      ACTIVE                  COMMAND ISSUED
COMMAND INPUT ===>                             SCROLL ===> PAGE
RESPONSE=SC64
 BPXO040I 18.03.49 DISPLAY OMVS 009
 OMVS     000F ACTIVE         OMVS=(2A)
 USER     JOBNAME  ASID      PID     PPID STATE   START     CT_SECS
 OMVSKERN BPXOINIT 003B        1        0 MRI   15.36.41      9.285
  LATCHWAITPID=        0 CMD=BPXPINPR
  SERVER=Init Process                  AF=    0 MF=00000 TYPE=FILE
  THREAD_ID        TCB@     PRI_JOB  USERNAME   ACC_TIME SC  STATE
  0FF4C64000000000 008EF920 OMVS                   2.762 WAT  W
  0FF4D29800000001 008EF788                         .001 VRT  Y
  0FF4F7A000000002 008ECCD8 OMVS                    .002 KIN  K
  0FF5E22800000003 008ECA30                        4.815 BND  Y
     MQSBCHIN RUNNING   MQGUSER  1R     42.34     65571       1   66  0
     MQSBCHIN RUNNING   MQGUSER  1R     42.34     65572       1   66  0
     MQSBCHIN RUNNING   MQGUSER  1R     42.34     65573       1   66  0
     TCPIPOE  RUNNING   TCPIPMVS MR    408.68  16842761       1   65  0
     MVSNFSC5 RUNNING   STC      1R      0.51  16842762       1   54  0
     RMFGAT   RUNNING   STC      1R   4245.00  16842781       1   67  0
     ZFS      RUNNING   DFS      1R     17.32  67174403       1  251  0
     MQSBCHIN RUNNING   MQGUSER  1R     42.34  67174428       1   66  0
     MVSNFSC5 RUNNING   STC      1R      0.51  83951624       1   54  0
```

Filter Enhancements

△ Allow adding or removing a filter from existing filters

△ OFF parameter is changed to disable but retain filters

  ➢ Previously, OFF caused filters to be discarded

△ Filters are saved across sessions only under ISPF

△ Filter criteria from previous releases are retained

  ➢ They are compatible with the new support

△ Filters saved with z/OS V1R2 SDSF work with lower levels of SDSF

△ on/off support not available with lower levels of SDSF

filter ? command

```
   Display  Filter  View  Print  Options  Help
 ---------
 SDSF OUT  |                        Filter          Row 1 to 7 of 25    ---------
 COMMAND   | Command ===> _____      ==> PAGE
 ACTION=/  |                                                           st,
 ACTION=P  | Type filter criteria.  Type a / in the Column or Oper
 NP  JOB   | fields for valid values. Press F11/23 to clear all
           | filter criteria.
           |
           | Filtering is  ON
           |
           | AND/OR between columns   AND  (AND/OR)
           | AND/OR within a column   OR   (AND/OR)
           |
           | Column              Oper  Value (may include * and %)
           | JOBID_____   EQ   PS*_____
           | JOBNAME_____   EQ   ROGERS*_____
           | _____   __   _____
           | _____   __   _____
           | _____   __   _____
           | _____   __   _____
           | _____   __   _____
           |
           |  F1=Help       F2=Split      F3=Cancel     F7=Backward
           |  F8=Forward    F9=Swap       F11=Clear     F12=Cancel
```