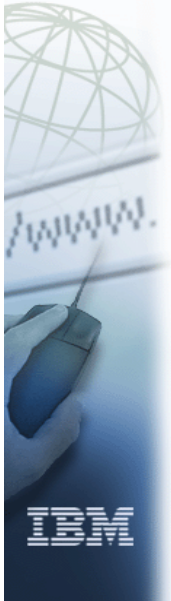


ibm.com



e-business



SDSF V1R12



Redbooks

International Technical Support Organization

© Copyright IBM Corp. 2010. All rights reserved.

Trademarks



eNetwork	DFSMS/MVS	IMS	RMF
geoManager	DFSMSdfp	IMS/ESA	RS/6000
AD/Cycle	DFSMSdss	IP PrintWay	S/390
ADSTAR	DFSMSshsm	IPDS	S/390 Parallel Enterprise Server
AFP	DFSMSrmm	Language Environment	SecureWay
APL2	DFSORT	Multiprise	StorWatch
APPN	Enterprise System 3090	MQSeries	Sysplex Timer
BookManger	Enterprise System 4381	MVS/ESA	System/390
BookMaster	Enterprise System 9000	Network Station	System REXX
C/370	ES/3090	NetSpool	SystemView
CallPath	ES/4381	OfficeVision/MVS	SOM
CICS	ES/9000	Open Class	SOMobjects
CICS/ESA	ESA/390	OpenEdition	SP
CICS/MVS	ESCON	OS/2	VisualAge
CICSPlex	First Failure Support Technology	OS/390	VisualGen
COBOL/370	FLowMark	Parallel Sysplex	VisualLift
DataPropagator	FFST	Print Services Facility	VTAM
DisplayWrite	GDDM	PrintWay	WebSphere
DB2	ImagePlus	ProductPac	3090
DB2 Universal Database	Intelligent Miner	PR/SM	3890/XP
DFSMS	IBM	QMFr	z/OS
	IBM System z	RACF	z/OS.e

Domino (Lotus Development Corporation)
 DFS (Transarc Corporation)
 Java (Sun Microsystems, Inc.)
 Lotus (Lotus Development Corporation)

Tivoli (Tivoli Systems Inc.)
 Tivoli Management Framework
 (Tivoli Systems Inc.)
 Tivoli Manger (Tivoli Systems Inc.)

UNIX (X/Open Company Limited)
 Windows (Microsoft Corporation)
 Windows NT (Microsoft Corporation)



© Copyright IBM Corp. 2010. All rights reserved.

SDSF Enhancements V1R12



- Health Checker history panel
- Enhancements to INIT panel
- Additional JES3 support (PR panel)
- Search help support
- REXX log support
- SDSF data available through JAVA



© Copyright IBM Corp. 2010. All rights reserved.

SDSF Installation with z/OS V1R12



- z/OS V1R12 SDSF packaging is similar to R11:
 - SDSF base FMID HQX7770
 - Contains common code and JES3 support
 - SDSF JES2 feature FMID JJE777S
 - Contains JES2 support
 - JES2 installations must install both HQX7770 and JJE777S
 - By default no assemblies are done at SMP/E APPLY time



© Copyright IBM Corp. 2010. All rights reserved.

Migration & Coexistence Considerations



- ❑ **Sharing SDSF V1R12 server parms with lower releases of SDSF**
 - For this function, if you are sharing ISFPRMxx with SDSF V1R10 and/or V1R11 systems you must install the toleration PTFs associated with APAR PK86390
 - For SDSF V1R10, you must install PTF UK90017 and if running SDSF with JES2 you must also install PTF UK90022
 - For SDSF V1R11 you must install PTF UK90018 and if running SDSF with JES2 you must also install PTF UK90023



© Copyright IBM Corp. 2010. All rights reserved.

Migration & Coexistence Considerations



- ❑ **Displaying printers from a JES2 V1R12 system on lower releases**
 - Same APARs required to correctly display Status and Work-Selection columns
 - JES2 compatibility APAR(s) in z/OS V1R11 data gathering code, when in a mixed MAS with z/OS V1R11 and z/OS V1R12
 - **OA31703 and all prerequisites**



© Copyright IBM Corp. 2010. All rights reserved.

SDSF and Health Checker



- ❑ The IBM Health Checker provides an option for saving Health Checks to a logstream for historical purposes
 - SDSF could only present the user with the current status of health checks via the SDSF Health Checker display
- ❑ With V1R12, a new action on the SDSF Health Checker display enabled a user to view the history of a health check which has the benefit for users to easily view the history and details of health check runs



© Copyright IBM Corp. 2010. All rights reserved.

Defining Health Checker Logstream



- ❑ Define a coupling facility and log stream structure definition in the LOGR policy using the administrative data utility, IXCMIAPU - or a DASD-only logstream

```
DEFINE STRUCTURE NAME(HZS_HEALTHCHKLOG)
LOGSNUM(1)
MAXBUFSIZE(65532)
AVGBUFSIZE(1024)
DEFINE LOGSTREAM NAME(HZS.HEALTH.CHECKER.HISTORY)
DESCRIPTION(HEALTH_CHECK_RPT)
STRUCTNAME(HZS_HEALTHCHKLOG)
STG_DUPLEX(NO)
LS_DATACLAS(NO_LS_DATACLAS)
LS_MGMTCLAS(NO_LS_MGMTCLAS)
LS_STORCLAS(NO_LS_STORCLAS)
LS_SIZE(4096)
AUTODELETE(YES)
RETPD(14)
HIGHOFFLOAD(80)
LOWOFFLOAD(0)
DIAG(NO)
```



© Copyright IBM Corp. 2010. All rights reserved.

Health Checker CK Panel



- To activate the logstream, issue:
 - F HZSPROC,LOGGER=ON,LOGSTREAMNAME=HZS.HEALTH.CHECKER.HISTORY
- CK panel is enhanced in z/OS V1R12 to include the name of the log stream the Health Checker is connected to and uses to collect health check history

```
Display Filter View Print Options Search Help
-----
SDSF HEALTH CHECKER DISPLAY SC74 LINE 1-24 (158)
COMMAND INPUT ===> SCROLL ===> HALF
PREFIX=SYSLOG DEST=(ALL) OWNER=* SYSNAME=SC74
NP NAME CheckOwner State Status
ASM_LOCAL_SLOT_USAGE IBMASM ACTIVE(ENABLED) SUCCES
ASM_NUMBER_LOCAL_DATASETS IBMASM ACTIVE(ENABLED) SUCCES
ASM_PAGE_ADD IBMASM ACTIVE(ENABLED) SUCCES
ASM_PLPA_COMMON_SIZE IBMASM ACTIVE(ENABLED) EXCEPT
ASM_PLPA_COMMON_USAGE IBMASM ACTIVE(ENABLED) SUCCES
```



© Copyright IBM Corp. 2010. All rights reserved.

Health Checker CK Panel



- The Health Check History (CKH) panel support is invoked as follows:
 - The new L (ListHistory) action on the SDSF Health Checker display

```
Display Filter View Print Options Search Help
-----
SDSF HEALTH CHECKER DISPLAY SC74 LINE 1-24 (158)
COMMAND INPUT ===> SCROLL ===> HALF
PREFIX=SYSLOG DEST=(ALL) OWNER=* SYSNAME=SC74
NP NAME LogStream
ASM_LOCAL_SLOT_USAGE HZS.HEALTH.CHECKER.HISTORY
ASM_NUMBER_LOCAL_DATASETS HZS.HEALTH.CHECKER.HISTORY
ASM_PAGE_ADD HZS.HEALTH.CHECKER.HISTORY
ASM_PLPA_COMMON_SIZE HZS.HEALTH.CHECKER.HISTORY
L ASM_PLPA_COMMON_USAGE HZS.HEALTH.CHECKER.HISTORY
```



© Copyright IBM Corp. 2010. All rights reserved.

SET CKLIM Command on CKH Panel



- ❑ By default, SDSF collects last 10 iterations of a check
 - User can override using new SET CKLIM command
 - Minimum number of checks can be 1 to 999,999

```

Display Filter View Print Options Search Help
-----
SDSF CK HISTORY  ASM_PLPA_COMMON_USAGE                LINE 1-10 (10)
COMMAND INPUT ===> SET CKLIM 5                        SCROLL ===> HALF
PREFIX=SYSLOG  DEST=(ALL)  OWNER=*  SYSNAME=SC74
NP      COUNT      CheckOwner      Status      Result Diag1  Diag2
      244      IBMASM      SUCCESSFUL      0 00000000 00000000
      243      IBMASM      SUCCESSFUL      0 00000000 00000000
      242      IBMASM      SUCCESSFUL      0 00000000 00000000
      241      IBMASM      SUCCESSFUL      0 00000000 00000000
      240      IBMASM      SUCCESSFUL      0 00000000 00000000
      239      IBMASM      SUCCESSFUL      0 00000000 00000000
      238      IBMASM      SUCCESSFUL      0 00000000 00000000
      237      IBMASM      SUCCESSFUL      0 00000000 00000000
      236      IBMASM      SUCCESSFUL      0 00000000 00000000
      235      IBMASM      SUCCESSFUL      0 00000000 00000000
    
```



© Copyright IBM Corp. 2010. All rights reserved.

SDSF INIT Panel



```

Display Filter View Print Options Search Help
-----
SDSF INITIATOR DISPLAY  SC74                          Cursor not on choice
COMMAND INPUT ===>                                         SCROLL ===> HALF
PREFIX=SYSLOG  DEST=(ALL)  OWNER=*  SYSNAME=SC74
NP      ID Status      Classes JobName  Stepname ProcStep JobID  C ASID ASID
      1 INACTIVE      ABCDEFG1
      2 INACTIVE      AB
      3 INACTIVE      ABC
      4 INACTIVE      ABC
      5 INACTIVE      ABC
      6 INACTIVE      ABC
      7 DRAINED      A
      8 DRAINED      A
      9 DRAINED      JX
     10 DRAINED      A
WLM ACTIVE                PELEG14                JOB07286 L 78 004E
    
```



© Copyright IBM Corp. 2010. All rights reserved.

SDSF INIT Panel - z/OS V1R12



- ❑ SDSF INIT panel no longer requires use of WebSphere MQ to display sysplex-wide initiator information
- ❑ SDSF uses JES SSI function code 82 to obtain initiator information from all members in the MAS or JES-plex
- ❑ Only initiators running on z/OS V1R12 and up displayed
- ❑ New fields are added to the INIT panel to include information about WLM-managed initiators

SrvClass - Service class of the active job for a JES-managed initiator, or service class the initiator is running for a WLM-managed initiator

Mode - Initiator Mode, either JES or WLM

Group - Group name (WLM, JES2 or JES3 group name)

ResType - Resource Type



© Copyright IBM Corp. 2010. All rights reserved.

SDSF INIT Panel (F11 scroll)



```
Display Filter View Print Options Search Help
-----
SDSF INITIATOR DISPLAY SC74                               LINE 1-10 (10)
COMMAND INPUT ==>                                       SCROLL ==> HALF
PREFIX=SYSLOG DEST=(ALL) OWNER=* SYSNAME=SC74
NP      ID  SysName  SysID  JESN  JESLevel  SecLabel  SrvClass  Mode  Group  ResType
  1    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  2    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  3    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  4    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  5    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  6    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  7    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  8    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
  9    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
 10    SC74   SC74   JES2  z/OS1.12                JES  JES2   INIT
WLM   SC74   SC74   JES2  z/OS1.12                DFLT_MG  WLM  WLM   INIT
```



© Copyright IBM Corp. 2010. All rights reserved.

Enhancements to INIT Panel



- ❑ INIT panel now uses SSI 82 to obtain initiator information
 - JES2 presents information for initiators - all MAS members
 - Across the SSI, without SDSF Sysplex Communication active, if all MAS members are at z/OS V1R12 or higher
 - WLM initiators can be displayed
 - INIT ALL – displays all initiators
 - INIT JES – displays JES initiators
 - INIT WLM – displays WLM initiators
 - Default is ALL
 - Command.INIT.DefaultJESManaged custom property can be specified to make default JES, as in prior releases



© Copyright IBM Corp. 2010. All rights reserved.

New Action Characters - PR Panel



- ❑ PR panel now uses SSI 83 to obtain printer information
 - JES2 can present information about printers on all members across the SSI, without SDSF Sysplex Communication active
 - All MAS members must be at z/OS V1R11 or higher
 - Printers can now be displayed under JES3
 - New columns and overtypes for both JES2 and JES3
- ❑ Printers on all MAS members are accessible via `SYSDNAME` command even if SDSF Sysplex Communication is not active
 - All members must be a z11 or higher
- ❑ Fixed field (device name) increased to 10 characters
 - Rnnnnn.PRn for high remotes rather than RnnnnnPn



© Copyright IBM Corp. 2010. All rights reserved.

JES3 Action Character Support



- ❑ Currently displays local printers only
 - LCL/RMT options on PR command disallowed
 - Device number ranges disallowed
 - Sysname column always points to global
- ❑ FSASysNm is system where FSS printer is running if on a local
- ❑ Many overtypeable characteristics can be specified on *START, *RESTART, or *CALL,WTR commands
- ❑ Overtypes of these characteristics require an action character of E, S, or X
 - “ACTION REQUIRED” error message if not specified



© Copyright IBM Corp. 2010. All rights reserved.

New SEARCH Command



- ❑ Starting with SDSF in z/OS V1R12, it is possible to search the SDSF help from any panel using the new SEARCH command
- ❑ The syntax of the SEARCH command follows:
 - SEARCH phrase
 - Where phrase is one to four words. If you omit phrase, SEARCH displays the Search pop-up, on which you can type the search phrase
 - To search for the complete phrase, enclose it in single quotation marks



© Copyright IBM Corp. 2010. All rights reserved.

SEARCH Command - SEARCH ZIIP



```
Search Help                               Row 1 to 15 of 24
Command ==>

Search for: ZIIP                           Show titles

Select a search result to display the help panel.
zIIP-Time Accumulated zIIP service time, in seconds (RMF)
zIIP-NTime Normalized zIIP service time, in seconds (RMF)
zIIP-Use% Percent of the total zIIP time used by the address
zIIP-Time Accumulated zIIP service time, in seconds
zIIP-NTime Normalized zIIP service time, in seconds
zIIP-Time Accumulated zIIP time, in seconds
zIIP-NTime Normalized zIIP time, in seconds
SzIIP% zIIP view of CPU use for the system, in the
was eligible for a zIIP, in seconds (RMF)
GCPU-Use%, zAAP-Use and zIIP-Use% columns: Values are
general CPU, zAAP or zIIP time used by the job
general CPU, zAAP or zIIP time used by all jobs
zIIP-Time and zICP-Time are not normalized.
zIIP-Time source field is R791TSUP
zIIP-NTime is normalized to the slower CP, to facilitate
F1=Help          F3=Cancel          F7=Backward      F8=Forward      F12=Cancel
```



© Copyright IBM Corp. 2010. All rights reserved.

SYSLOG Access via REXX



- [Access to SYSLOG through SDSF/REXX](#)
 - Applies to both JES2 and JES3
- [New ISFLOG SDSF/REXX command to access SYSLOG](#)
 - Simplified scanning of syslogs using SDSF/REXX execs
 - Eliminate need to allocate each syslog separately and read them
 - Allocate syslog for reading by a utility such as EXECIO
 - Read syslog records into REXX stem variables
 - [Select records based on time and date](#)



© Copyright IBM Corp. 2010. All rights reserved.

Installation Considerations



- ❑ z/OS V1R12 SDSF packaging is similar to R11
 - SDSF base FMID HQX7770
 - Contains common code and JES3 support
- ❑ SDSF JES2 feature FMID JJE777S
 - Contains JES2 support
 - JES2 installations must install both HQX7770 and JJE777S
- ❑ By default no assemblies are done at SMP/E APPLY time



© Copyright IBM Corp. 2010. All rights reserved.

Migration and Coexistence



- ❑ Sharing SDSF 1.2 Server Parms with lower releases of SDSF
 - For this function, if you are sharing ISFPRMxx with SDSF V1R10 and/or V1R11 systems you must install the toleration PTFs associated with APAR PK86390
 - For SDSF V1R10, you must install PTF UK90017 and if running SDSF with JES2 you must also install PTF UK90022
 - For SDSF V1R11 you must install PTF UK90018 and if running SDSF with JES2 you must also install PTF UK90023



© Copyright IBM Corp. 2010. All rights reserved.

Coexistence With Earlier Releases



- ❑ If you share ISFPRMxx parmlib member with SDSF V1R10 or V1R11 systems the toleration PTFs associated with APAR PK86390 have to be applied:
 - For SDSF V1R10, apply PTF UK90017
 - If running SDSF with JES2, also apply PTF UK90022
 - For SDSF V1R11 apply PTF UK90018. If running SDSF with JES2, also apply PTF UK90023



© Copyright IBM Corp. 2010. All rights reserved.

Migration Actions after first IPL V1R12



- ❑ Set a default for the Initiators panel
 - SDSF displays WLM initiators along with JES-managed initiators on the Initiator (INIT) panel
 - Change the default, update the ISFPRMxx parmlib member
- ❑ Set the format of device names on Printers panel
 - SDSF displays printer names in longer format
 - To change the default to shorter names, update the ISFPRMxx parmlib member
- ❑ Set the view of OPERLOG
 - SDSF displays only active log data for OPERLOG
 - To change the default to also display inactive log data, update the ISFPRMxx parmlib member



© Copyright IBM Corp. 2010. All rights reserved.