z/OS V2.5 IBM Education Assistant

Solution Name: SDSF

Solution Element(s): SDSF

August 2021





Agenda

- Trademarks
- Objectives
- Overview
- Usage & Invocation
- Upgrade & Coexistence Considerations
- Installation & Configuration
- Summary
- Appendix

Trademarks

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

Objectives

- Architectural changes
- New SDSF panels
 - New primary panels
 - New secondary panels
 - New columns on existing displays
- New help and search interface
- Usability enhancements
- z/OSMF SDSF plug-in changes
- Installation and configuration
- Documentation and help

Overview

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

Usage & Invocation

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

Architectural Changes

- SDSF "SVC" removed
- SDSF only uses SAF for security
 - Significant upgrade actions required if customer still uses internal SDSF security
 - New SDSF Security Migration Guide manual to document steps required
 - SC27-4942-00
 - Rexx security migration tool "ISFACR" provided with sample JCL for security reporting

New SDSF Primary Panels

Primary panels

- AD Address space diagnostics
- CFD Coupling facility datasets
- CS Common storage subpools
- LLS Link list sets
- MEM Address space memory
- PC PC routines
- SYSP System parameters
- SVC SVC routines

MEM Panel

- Shows memory for any address space or common storage
- Syntax :
 - MEM address {asid} {sysname}
 - Defaults to address = 0, asid = user address space (hex) and sysname = local system
 - Leading zeros can be omitted from address and asid
 - Underscore can be used to separate high-half and low-half of address

Examples

MEM 07FCE8

Display the memory contents at address x'07FCE8' in your own address space on the local system.

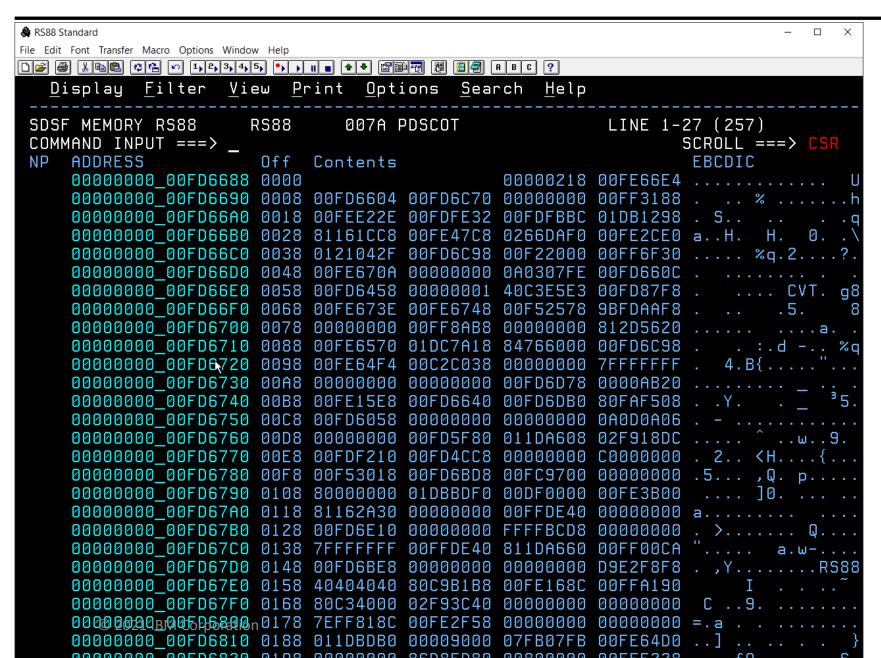
```
MEM 50 48CA000 CD
```

Display the contents of storage within a 64-bit memory object owned by ASID x'00CD' starting at address $x'00000050_0048CA000'$.

MEM 01E00EAC 00AB SYSA

Display memory contents at address x'01E00EAC' in ASID x'00AB' on remote system SYSA.

MEM Panel



Actions:

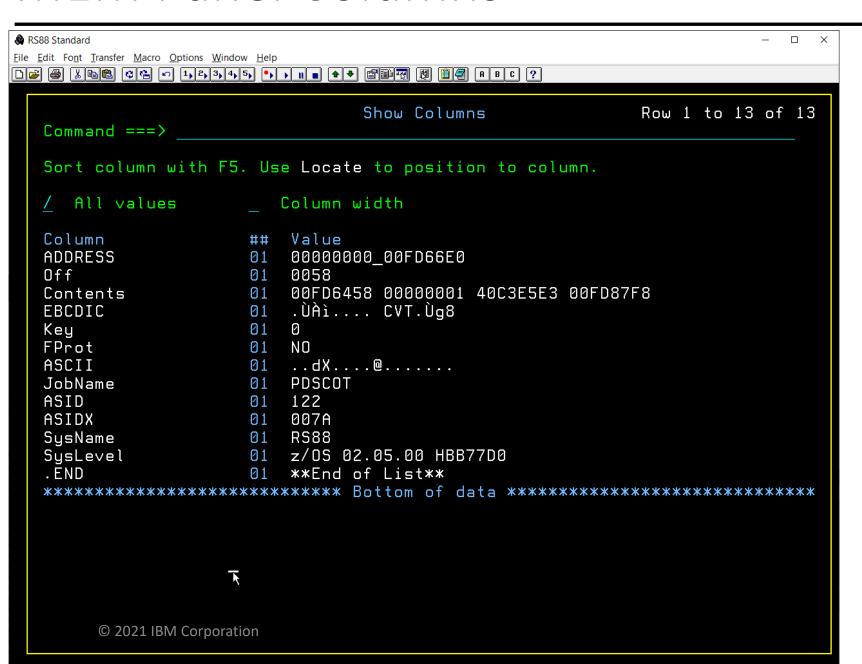
Dn Show memory at nth word of the "Contents" column (1-4) treating it as a 31bit address.

Gn Show memory at nth word of the "Contents" column (1-3) treating it as a 64bit address.

M Show memory mapped to a known structure

S Show memory starting at the value in the "Address" column

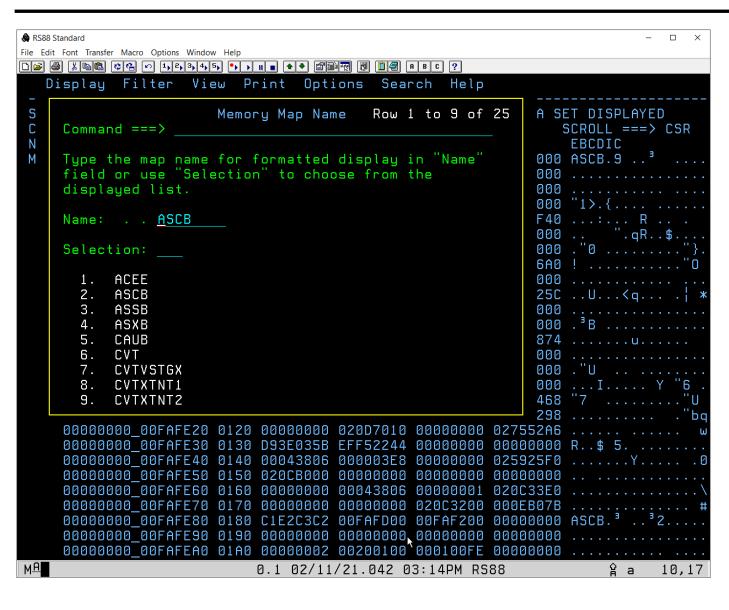
MEM Panel Columns



MEM Panel Security

- Ability to show memory for address space protected by SAF profile in SDSF class
 - ISFJOB.STORAGE.owner.jobname.sysname
 - READ access required
 - Where owner cannot be derived (e.g. some system address spaces), SDSF uses "++++++"
- When page has never been referenced, MEM might show "STORAGE SKIPPED" message and display the next valid storage contents
 - CONTROL access to ISFJOB.STORAGE.owner.jobname.sysname will allow SDSF to "touch" the target page to differentiate between unreferenced storage and unavailable storage.

MEM Showing memory in structure format



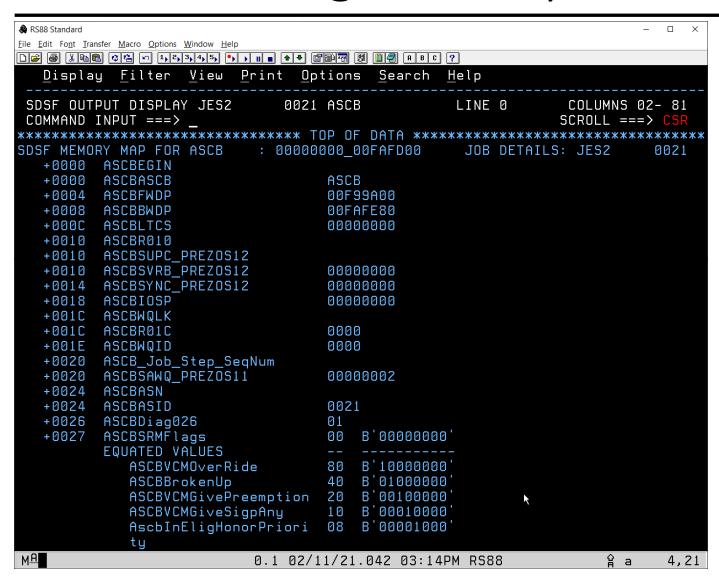
Type "M" beside row that contains the start of the candidate structure

SDSF will examine up to 16 bytes of the storage for a known eye-catcher and if found prime the default structure name in the prompt panel

SDSF prompt panel shown

Select from scrollable list and press enter

MEM Showing memory in structure format



Set PFKey to "MEMCSR"

Position your cursor over an address in the structure display and press the PFKey to invoke MEM using the address at the cursor.

AD Panel

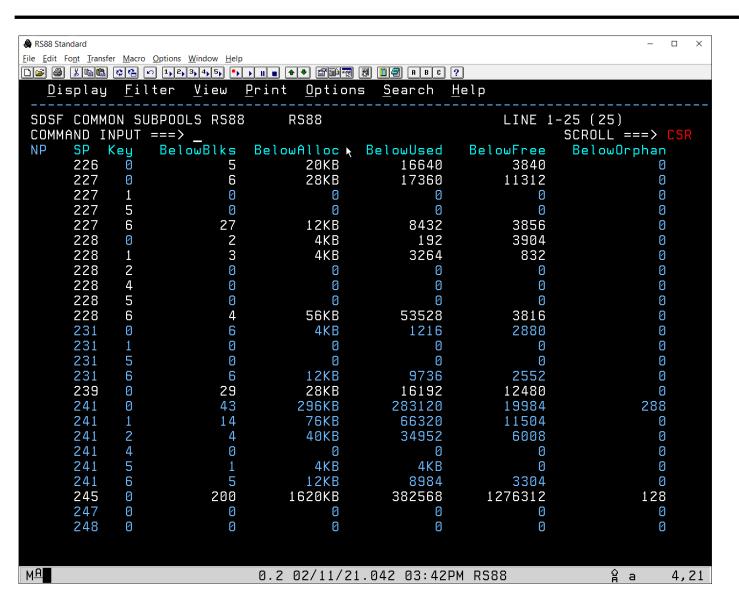
- Shows identification and diagnostic information about each active address space
- Intended as a launch pad for memory problem investigations
- Actions include storage related displays for the address space
 - Common storage usage
 - Private storage usage
 - Memory objects
- Important control block addresses for each address space shown and enabled for point-and-shoot to invoke the MEM panel

AD Panel

В																- 0
dit Font Transfer Macro	Options W	indow Help														_
3 16 0 0 6 0	n 1, 2, 3,	4, 5, •, , ₁₁	• • • • • • • • • • • • • • • • • • •	ABC?												
Display <u>F</u> il	lter <u>\</u>	/iew <u>P</u> ri	nt <u>O</u> ptio	ns <u>S</u> earch <u>H</u> elp												
SF AD DISPLA	ay RS8	38 RS	 88	1	TNF 1-56	(BB)										
THORT CHAMN	\					ROLL ===>	CSR									
EFIX=* DESI .IOBNAME	ASTDX) UWNER=: StepName	* SURI=JI ProcSten	OBNAME/A SYSNAME= JobID Owner	ASCB	ASSB	ASXB	ТСВ	OUCB	JSAB	Pos S	R Tune	ASID SSName	CVT	ECVT	Sy
MASTER	0001		1100010	STC04435 +MASTER+	00FD4F00	01DB1500	00FD5098	007FF0C8	01DB36B8	020CA3B0	NS		1 .JFS2	00FD6688	01DC7A18	RS
ALLOCAS ANTAS000	0016	ALLOCAS ANTAS000	TEEDBOC			02063000						STC STC	22	00FD6688	01DC7A18 01DC7A18	RS
	000C	ANTMAIN	IEFPROC		00FA8280	02589500	007FD000	007F8298	02070300	ааааааааа	NS	STC STC	22 13 12 74	00FD6688	01DC7A18	RS
APPC	004A	APPC	APPC		00FC8600	02120500	007FD000	<u>007F8298</u>	02043400	00000000	NS	STC	74 75	<u>00FD6688</u>	<u>01DC7A18</u>	RS
	004B 0019	ASCH AXR	ASCH IEFPROC		00FB5800	02042000 020FD000				00000000		STC STC	25		01DC7A18 01DC7A18	
AXR02	0025	AXRØ2		STC04487 +++++++	00FAF700	01F72000	007FD000	007F80E0	02045400	020D9DC0	OUT L	W STC	37 JES2	00FD6688	01DC7A18	RS
BPXOINIT CATALOG	006D 0028		BPX0INIT IEFPROC			03759000 0209E000						W STC STC	109		01DC7A18 01DC7A18	
CEA	001A	CEA	IEFPROC		00FB5680	02106000	007FD000	007F8298	0210D400	00000000	NS	STC	40 26	00FD6688	01DC7A18	RS
	000A 0053	CONSOLE CSF	CSF			02D85000 01F5C000						STC STC	10 83 JES2		01DC7A18	
CSSMTP	0053	CSSMTP	CSSMTP		00FA6D00	0372E000	007FD000	007F80E8	0372D400	02E2D120	IN	STC	116 JES2	00FD6688	01DC7A18 01DC7A18	RS
	000E	DEVMAN	IEFPROC			02C61000						STC	14	00FD6688	01DC7A18	RS
	0005 006C	DUMPSRV FTPD1	DUMPSRV	STC04592 FTPD		<u>02F83000</u> 03747400						STC W STC	5 108 JES2		01DC7A18 01DC7A18	
GRS	0007	GRS		01004002 1113	00FAB680	023AE000	007FD000	007FED90	023A92C0	0000000	NS	STC	7	00FD6688	01DC7A18	RS
	000F 0020	GTZ HZR	GTZ IEFPROC		00FB6E80	02C5E000 020CD000	007FD000	007F8298	02241400	00000000	NS	STC STC	15	00FD6688	01DC7A18 01DC7A18	RS RS
		HZSPROC		STC04439 HZSPROC	00FB6A00	021DB500	007FD000	007F80E0	021D5400	02E2F520	NS	STC	32 18 JES2		01DC7A18	
IEFSCHAS	0014	IEFSCHAS			00FCB080	02390000 02141000	007FD000	007FED90	0238F400	00000000	NS	STC	20	00FD6688	01DC7A18	RS
	0018 0017	IOSAS IXGLOGR	IEFPROC IEFPROC		00FB6280	02141000 0210F000	007FD000	007F8298	02140400	00000000	NS NS	STC STC	20 24 23		01DC7A18 01DC7A18	
JESXCF	0015	JESXCF	IEFPROC		00FB6700	0238F000	007FD000	007F8298	022CF400	аааааааа	NS	STC	21	00FD6688	01DC7A18 01DC7A18	RS
JES2 JES2AUX	0021 001F	JES2 JES2AUX	IEFPROC		00FAFD00	<u>020CB000</u> 020A0400	007FD000	007F8298	020DE400	020D1040	NS	STC STC	33 JES2 31	00FD6688	01DC7A18 01DC7A18	RS RS
		JES2MON	IEFPROC			02089000						STC	42		01DC7A18	
MNTWTOR		WTOR1	MUUGBIIKA	JOB02622 SUBJCL	00FB5080	01FFF000	007FD000	007D5C60	020E1400	020E4E20		W JOB	30 JES2	00FD6688	01DC7A18	RS
	0013 0054	MXIDMON MXIMAST	MXXSRVK4 MXXMSTK4	STC04588 MXISTC STC04499 MXISTC	00FC2A00	03774000 01F57000	007FD000	007F80E0	01F56400	020020C8 01F84040	NS NS	STC STC	19 JES2 84 JES2	00FD6688	01DC7A18 01DC7A18	RS RS
MXITCP	006E	MXITCP	MXXSRVK4	STC04589 MXISTC	<u>00FA7500</u>	<u>03772000</u>	<u>007FD000</u>	<u>007F80E0</u>	03771400	<u>020D2008</u>	NS	STC	110 JES2	<u>00FD6688</u>	<u>01DC7A18</u>	RS
	0010 006A	OMVS OSNMPD	OMVS OSNMPD	STC04601 STCUSER		021EB000 01F80500						STC	16 106 JES2		01DC7A18 01DC7A18	
PAGENT	004D	PAGENT	PAGENT	STC04493 PAGENT	00FC4580	01F6B000	007FD000	007F80E0	01F6A400	01F4B040	OUT D	W STC	77 JES2	00FD6688	01DC7A18	RS
PCAUTH	0002 0011	PCAUTH	IFFDB06		00FB3200	025C5500 021E3000	007FD000	007FED90	02560400	00000000	NS	STC	2 17	00FD6688	01DC7A18 01DC7A18	RS
PCIE PDSCOT	0011 007A	PCIE ROCKPROC	IEFPROC S88TCP22	TSU06599 PDSCOT	00F85880	02593000	007FD000	007F81H0	0374E400	01F1D000	OUT T	STC I TSU	122 JES2	00FD6688	01DC7H18	RS RS
PDSCOTA	0091	ROCKPROC	S88TCP23	TSU06718 PDSCOTA	00FA4000	02D95000	007FD000	007DE828	02E2C400	020EDDC0	IN	TSU	145 JES2	00FD6688	01DC7A18	RS
PORTMAP PRIMEPSA	0052 004F	PORTMAP		STC04603 PORTMAP STC04495 +++++++		0378E000 01F67000						W STC	82 JES2 79 JES2	00FD6688	01DC7A18	RS RS
RACF	0027	RACF	RACF	STC04598 RACF	00FAF200	020B0000	007FD000	007F8298	02149400	02046088	NS	STC	39 JES2	00FD6688	01DC7A18 01DC7A18	RS
RASP RESOLVER	0003	RASP	EZDDETNI		00FB3080	0255A000 02F7C000	<u>007FD000</u>	007FED90	02559400	00000000	NS	STC STC	3 27	<u>00FD6688</u>	01DC7A18 01DC7A18	RS
	0051	RESULVER	EZBREINI IEFPROC			01F83000						STC	81 JES2		01DC7H18	
SDSF	0085	SDSF	SDSF	STC06569 SDSF	00FA7200	03740000	007FD000	007F80E0	02122400	020C2040	NS	STC	133 JES2	00FD6688	01DC7A18	RS
	0089 001C	SDSFAUX SMF	SDSFAUX IEFPROC	STC06570 SDSF		020FB000 020EB000						STC STC	137 JES2 28	00FD6688	01DC7A18 01DC7A18	RS RS
SMS	0026	SMS	IEFPROC		00FAF380	020B2000	007FD000	007F8298	020B1400	00000000	NS	STC	38	00FD6688	01DC7A18	RS
	8000	SMSPDSE			00FAB500					00000000		STC	- 8 9		01DC7A18	
	0009 006B	SMSPDSE1 SNMPQE	SNMPQE	STC04606 SNMPQE	00FA7080	0229D000 0372C000	007FD000	007F80E0	0372B400	00000000 03767040	OUT L	STC W STC	107 JES2		01DC7A18 01DC7A18	
SYSLOGD	0072	SYSLOGD		STC04594 BPX0INIT	00FA6E80	03766000	007FD000	007CDD90	03765400	02046148	NS	STC	114 JES2	00FD6688	01DC7A18	RS
TCPIP TNF	0050 0048	TCPIP TNF	TCPIP IEFPROC	STC04496 TCPIP	<u>00FC2000</u>	01F86000 01F8B000	<u>007FD000</u>	<u>007F80E0</u>	<u>01F85400</u>	<u>01F75040</u>	NS	STC STC	80 JES2 72		01DC7A18 01DC7A18	
		TN3270		STC04562 TN3270								STC	72 78 JES2	00FD6688		

MΩ

CS Panel

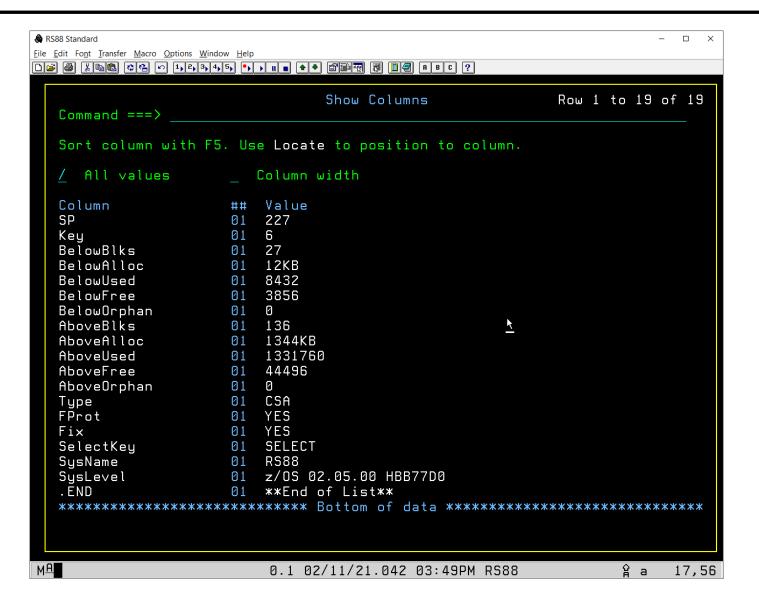


Shows the common storage subpool usage summarized by subpool number and key

Subpool attributes including
Fetch protection
Key selection
Fixed

The "L" action on the row drills down to show every block of storage in the subpool with the same key

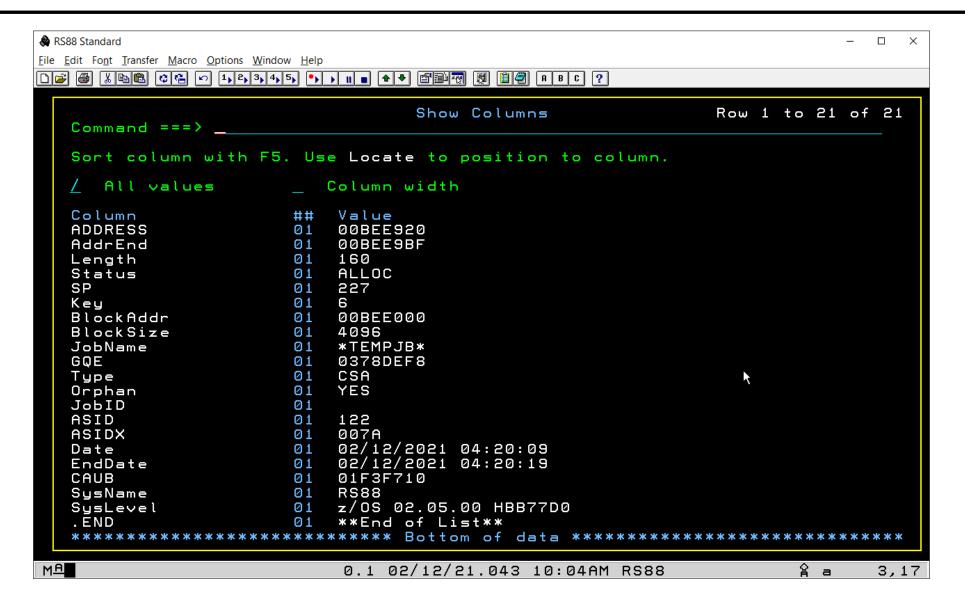
CS Panel Columns



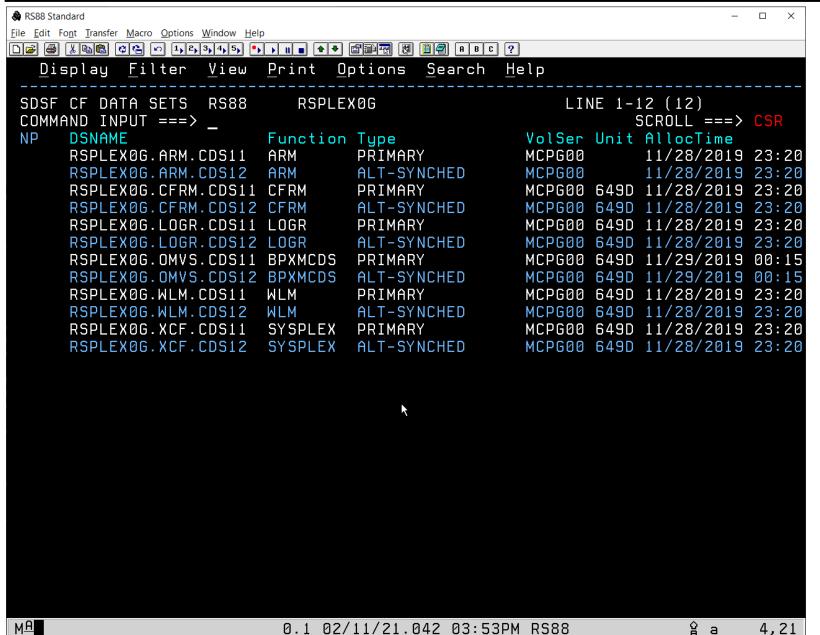
CS Panel – "L" Action

№ RS88							×
File Edit Font Iransfer Macro Options Windo		₹ 1 2 A B C ?					
<u>D</u> isplay <u>F</u> ilter <u>V</u> i							
SDSF COMMON SP227 K06 COMMAND INPUT ===>	RS88 RS88	L	NE 1-56 (163) SCROLL ===> <mark>CS</mark>				
	TIMBLE # SYSNAME =						
NP ADDRESS AddrE	nd Length Statu	us SP Key BlockAd	dr BlockSize JobName	GQE Type	Orphan JobID	ASID ASIDX Date	EndDate
00BE9000 00BE9	57 1368 FREE	227 6 00BE900	4096			//-	EndDate 021 04:42:03
00BE9558 00BE9 00BE95A0 00BE9	59F 72 ALLUC 5B7 280 FREE	C 227 6 00BE900 227 6 00BE900	4096 VIAM 4096	0375BEF8 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
00BE96B8 00BE9	SEE 72 ALLOC	C 227 6 00BF900	4096 VTAM	<u>0375BE38</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
00BE9700 00BE9	32F 560 FREE	227 6 00BE900	4096				
00BE9930 00BE9	FF 1744 ALLOC	C 227 6 00BE900	4096 VTAM	01F7CD60 CSA	NO STC04436	35 0023 02/08/2	021 04:38:03
00BEE000 00BEE 00BEE048 00BEE	147 72 ALLUL 167 32 FREE	C 227 6 00BEE00 227 6 00BEE00	4096 VTAM 4096	01F7CCD0 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
00BEE068 00BEE		C 227 6 00BEE00		0375BD30 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
00BEE140 00BEE	.97 88 FREE	227 6 00BEE00	4096				
00BEE198 00BEE	237 160 ALLOC	C 227 6 00BEE00	4096 TN3270	<u>01F5DA60</u> CSA	NO STC04562	78 004E 02/08/2	021 04:42:23
00BEE238 00BEE 00BEE2D0 00BEE	2CF 152 FREE 36F 160 ALLOC	227 6 00BEE00 C 227 6 00BEE00	4096 4096 PDSCOT	0378DAC0 CSA	NO TSUBSESS	122 007A 02/11/2	021 09.21.48
00BEE370 00BEE	0F 160 ALLOC	C 227 6 00BEE00 C 227 6 00BEE00	4096 PDSCOT 4096 TCPIP	0375BAA8 CSA	NO TSU06599 NO STC04496	80 0050 02/08/2	021 09:21:48 021 04:42:03
00BEE410 00BEE	IAF 160 ALLOC	C 227 6 AARFFAA	4096 XDCSRVE	R 01F1B658 CSA	NO STC04569	103 0067 02/08/2	021 04:38:53
00BEE4B0 00BEE	54F 160 ALLOC	C 227 6 00BEE00 C 227 6 00BEE00	4096 TSO		NO STC04492	76 004C 02/08/2	021 04:38:53 021 04:38:23
00BEE550 00BEE	DF 144 ALLOC	C 227 6 00BEE00	4096 VTAM	<u>01F7CC40</u> CSA	NO STC04436	35 0023 02/08/2	021 04:38:03
00BEE5E0 00BEE 00BEE6C0 00BEE		227 6 00BEE00 C 227 6 00BEE00		<u>01F1B7C0</u> CSA	NO TSU06718	145 0091 02/11/2	021 10:35:24
00BEE760 00BEE	33F 224 ALLOC	C 227 6 00BEE00	4096 VTAM	01F7C880 CSA	NO STC04436		021 04:38:03
00BEE840 00BEE	BBF 384 FREE	227 6 00BEE00 C 227 6 00BEE00	4096				
00BEE9C0 00BEE	19F 224 ALLOC	C 227 6 00BEE00	4096 VTAM	<u>01F7C808</u> CSA	NO STC04436	35 0023 02/08/2	021 04:38:03
00BEEAA0 00BEE 00BEEC20 00BEE		227 6 00BEE00 C 227 6 00BEE00		01F7C538 CSA	NO STC04436	35 0023 02/08/2	021 01.38.03
00BEED00 00BEE		227 6 00BEE00		<u>511 5555</u>	110 01004400	00 0020 027 007 2	221 84.88.88
00BEEE80 00BEE	FFF 384 ALLOC	C 227 6 00BFF00	A ARSE VIAM	<u>01F7C508</u> CSA	NO STC04436	35 0023 02/08/2	021 04:38:03
00BEF000 00BEF	FF 4096 ALLOC	C 227 6 00BEF00	4096 VTAM		NO STC04436	35 0023 02/08/2	021 04:38:03
0EBE6000 0EBE6 0EBE6800 0EBE6	FF 2048 ALLOC FFF 2048 FREE	C 227 6 0EBE600 227 6 0EBE600	4096 VTAM 4096	<u>021217A8</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EBE7000 0EBE7		C 227 6 0EBE700		<u>02121700</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EBE7800 0EBE7	FF 2048 FREE	227 6 ØEBE7ØØ	4096				
0EBE8000 0EBE8	FF 2048 ALLOC	C 227 6 0EBE800	4096 VTAM	<u>021216E8</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EBE8800 0EBE8 0EBE9000 0EBE9	FF 2048 FREE FF 2048 ALLOC	227 6 0EBE800 C 227 6 0EBE900	4096 4096 VTAM	01F7CD30 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EBE9800 0EBE9	FF 2048 FREE	227 6 0EBE900	4096	OTF/CD30 CSH	31004436	33 00E3 0E/08/E	DE1 04.46.03
0EBEA000 0EBE1	FFF 32768 ALLOC	C 227 6 0EBEA00	32768 VTAM	01F7C940 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EBF2000 0EBF9 0EC18000 0EC18	FF 32768 ALLOC FF 1536 ALLOC	C 227 6 0EBF200 C 227 6 0EC1800	32768 VTAM 32768 VTAM 4096 VTAM	01F7C8E0 CSA 01F7CC88 CSA	NO STC04436 NO STC04436	35 0023 02/08/2	021 04:42:03
0EC18000 0EC18	SFF 1536 ALLOC	C 227 6 0EC1800	4096 VTAM	<u>01F7CC88</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC18600 0EC18 0EC19000 0EC19	FFF 2560 FREE E5F 3680 FREE	227 6 0EC1800 227 6 0EC1900	0 4096 0 28672				
0EC19E60 0EC1F	FF 24992 ALLOC	C 227 6 0EC1900	28672 VTAM	01F7CA30 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC20000 0EC25	FF 24576 ALLOC	C 227 6 0EC2000	24576 VTAM	01F7CC58 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
ØEC26000 ØEC26	FF 2048 ALLOC	C 227 6 0EC2600	4096 VTAM	<u>01F7CC70</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC26800 0EC26 0EC27000 0EC27		227 6 0EC2600 C 227 6 0EC2700	4096 4096 VTAM	01F7CA18 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC27000 0EC27		227 6 0EC2700	4096 VIHN 4096	OIF COILO COR	NO 31C04436	33 0023 02/08/2	DEI 04.46.03
0EC28000 0EC28	FF 2048 ALLOC	C 227 6 0FC2800	4096 VTAM	01F7CBC8 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC28800	FF 2048 FREE	227 6 ØEC2800	4096				
0EC29000 0EC29	7FF 2048 ALLOC	C 227 6 0EC2900	4096 VTAM	<u>01F7CA00</u> CSA	NO STC04436	35 0023 02/08/2	021 04:42:03
0EC29800 0EC29 0EC2A000 0EC31	FF 32768 ALLOC	C 227 6 0EC2600	9 4096 9 32768 VTAM	01F7CB98 CSA	NO STC04436	35 0023 02/09/2	021 04:42:03
0EC32000 0EC39	FF 32768 ALLOC	C 227 6 0EC3200	32768 VTAM	<u>01F7CB98</u> CSA <u>01F7C9E8</u> CSA	NO STC04436 NO STC04436	35 0023 02/08/2	021 04:42:03 021 04:42:03
OEC3AQQQ IBIVECAT	FF 32768 ALLOC TOTation 32768 ALLOC FF 32768 ALLOC	C 227 6 0EC3A00	32768 VTAM	01F7CB80 CSA	NO STC04436	35 0023 02/08/2	021 04:42:03 19
0EC42000 0EC49	FF 32768 ALLOC	C 227 6 0EC4200	32768 VTAM	01F7C9D0 CSA	NO STC04436	35 0023 02/08/2 35 0023 02/08/2 35 0023 02/08/2 35 0023 02/08/2	021 04:42:03
0EC4A000 0EC51	768 ALLOC	C 227 6 0EC4A00 C 227 6 0EC5200	32768 VTAM 4096 VTAM	01F7CB20 CSA	NO STC04436 NO STC04436	35 0023 02/08/2 35 0023 02/08/2 35 0023 02/08/2 35 0023 02/08/2	021 04:42:03
0EC52000 0EC52	77 4096 ALLUU	. 227 6 0EU5200	4096 VIAM	01F7C9B8 CSA	NU SICU4436	35 0023 02/08/2	021 04:42:03

CS Panel Detail Columns



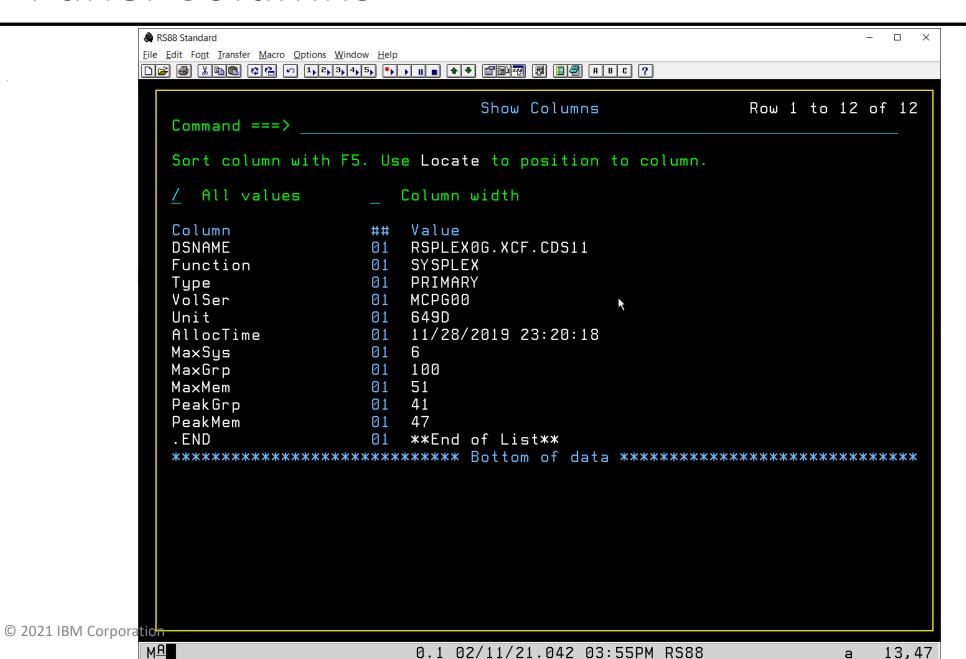
CFD Panel – Coupling facility data sets



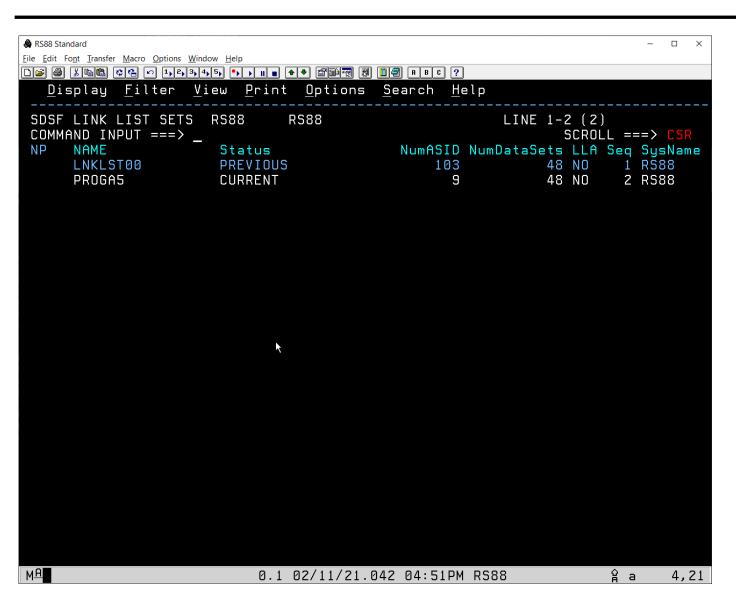
Shows coupling facility data sets

Includes allocated time and attributes

CFD Panel Columns



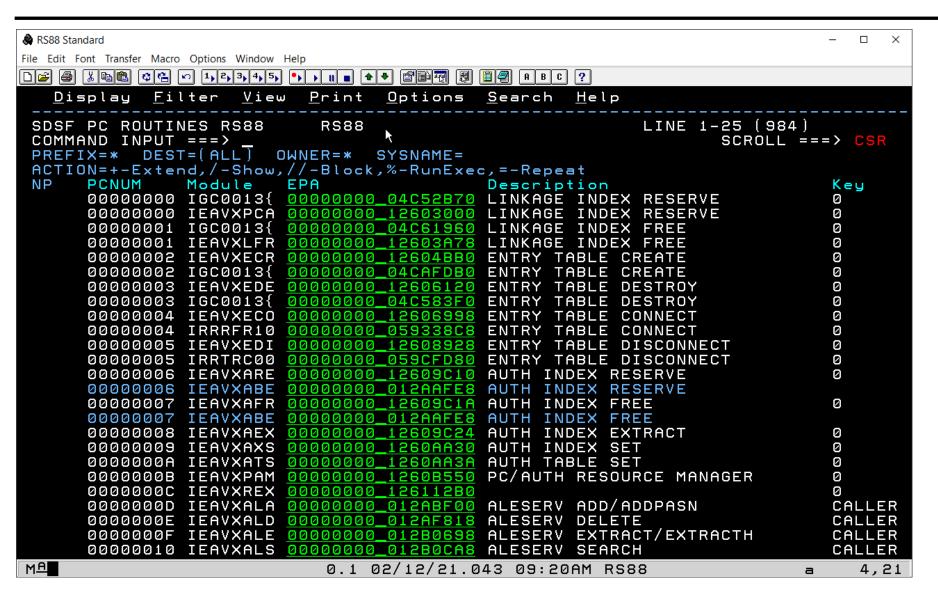
LLS Panel – Link List Sets



"L" action invokes the LNK display to show data sets in the link list set

"DU" action displays the users of the link list set

PC Panel – PC Routines

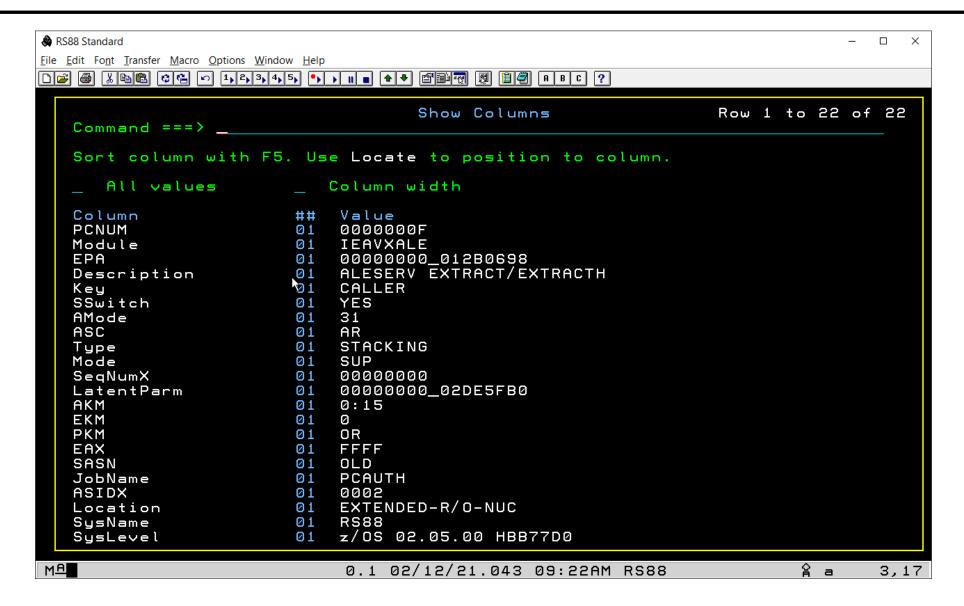


Shows PC routines associated with System linkage indexes (LX)

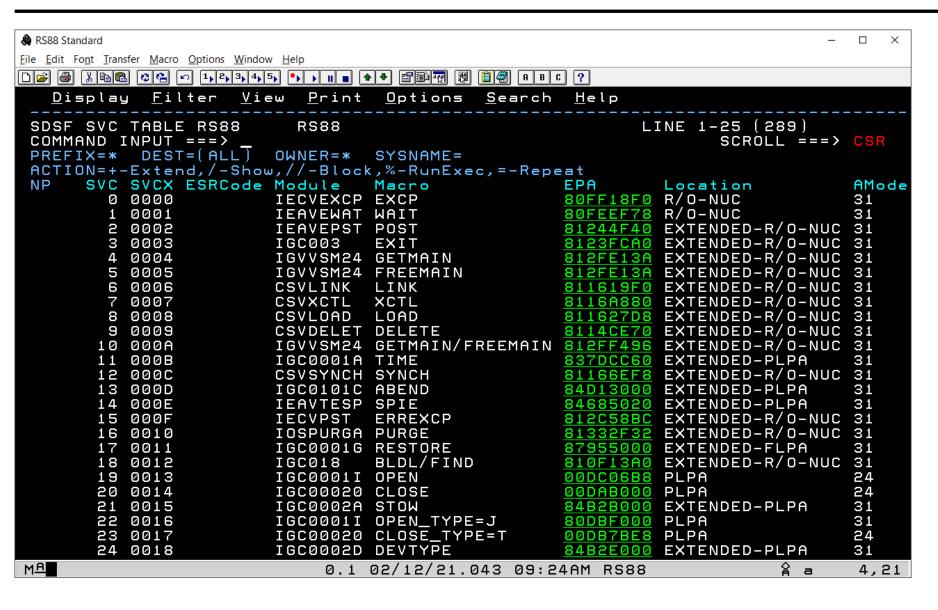
Includes descriptions of well-known PC numbers

Non-system LX PC routines are not shown

PC Panel Columns



SVC Panel – SVC routines



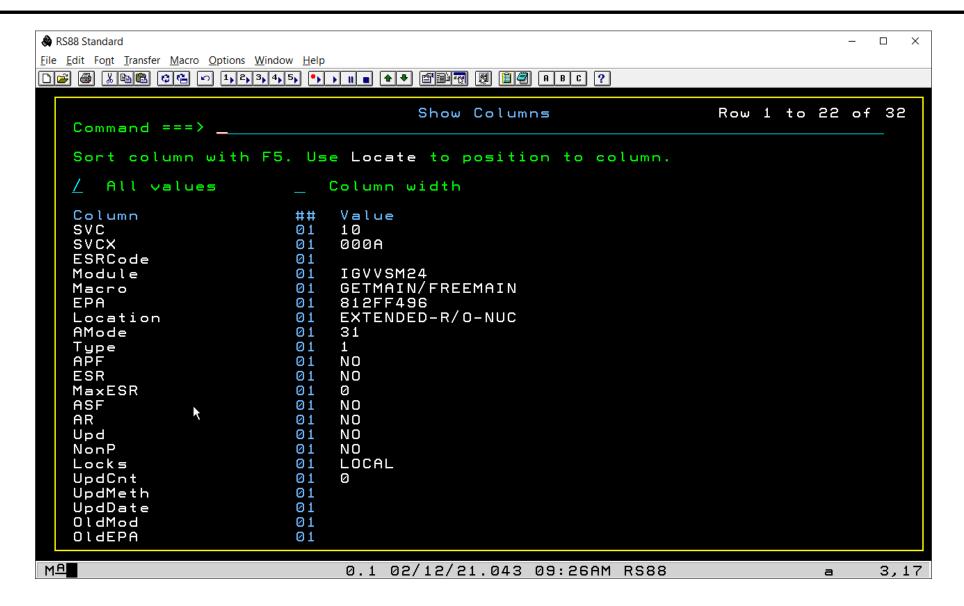
Shows SVC routines

Descriptions for well-known SVC numbers

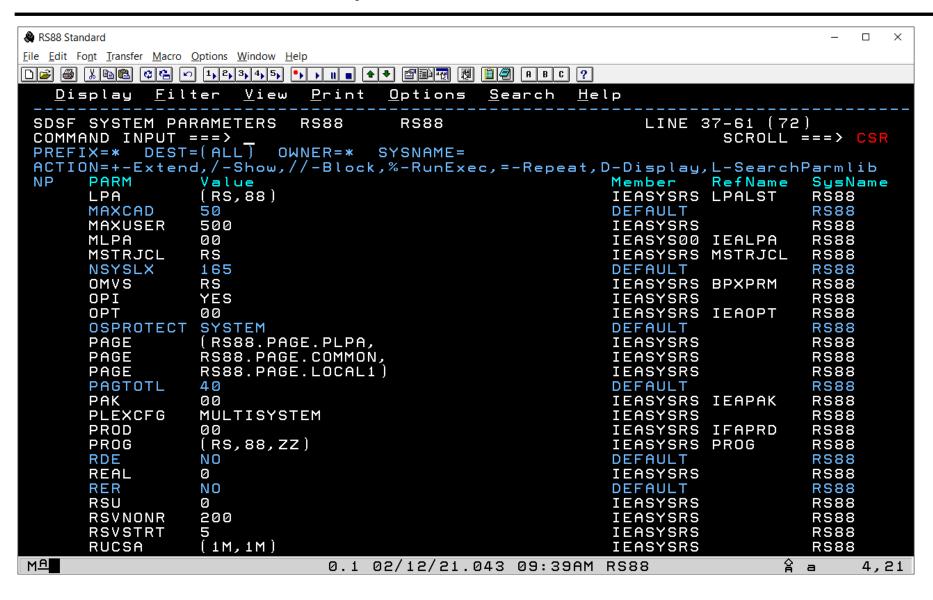
Includes entries for extended router SVCs (ESR)

Includes SVCUPDTE information

SVC Panel Columns



SYSP Panel – System Parameters



Shows system parameters used at IPL time

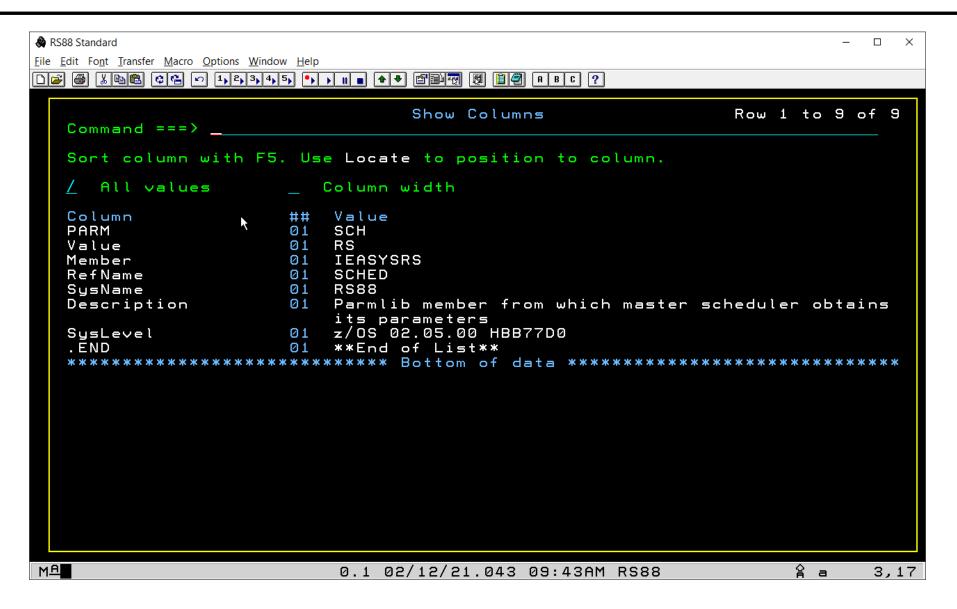
Includes source member from PARMLIB concatentation

Includes description for parameters

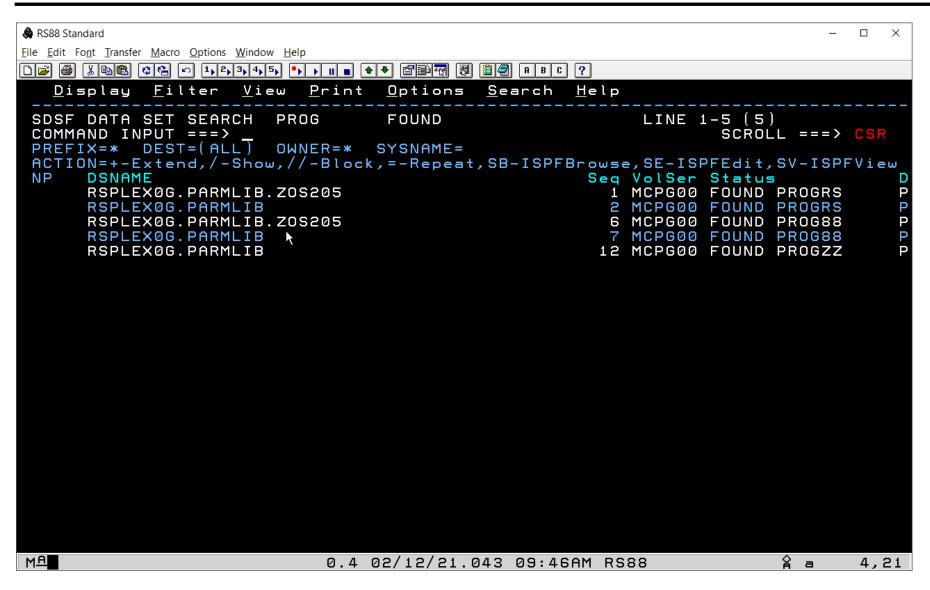
PARM column is the statement keyword from IEASYSxx

RefName is the actual data set member name root

SYSP Panel Columns



SYSP Panel – Search PARMLIB Data Sets



"L" action against row on SYSP will search PARMLIB datasets to show where the specified members are found.

This example shows the result of "L" issued against the PROG row on SYSP that had "(RS,88,ZZ)"

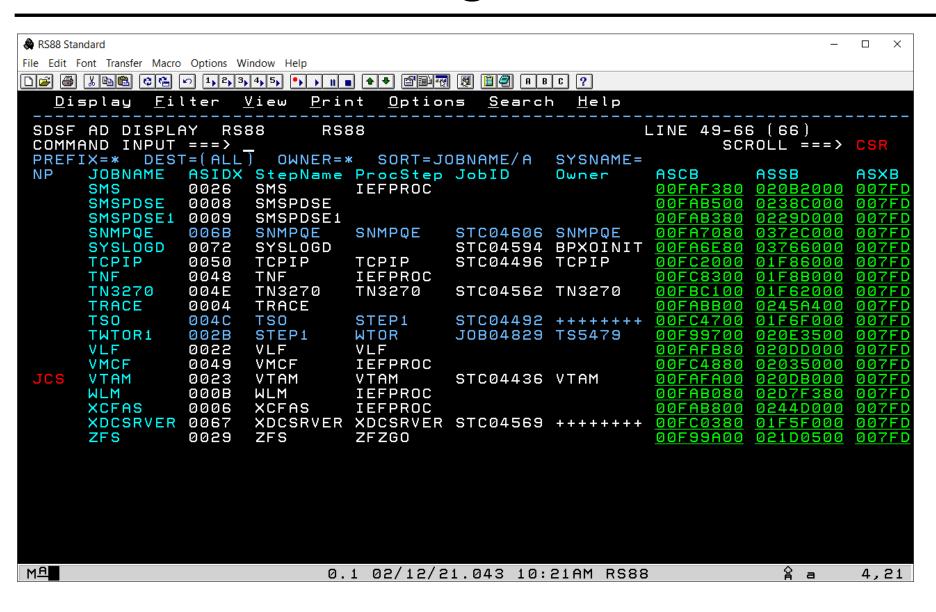
First found member of each suffix is highlighted

"Status" includes the member name

New SDSF Secondary Panels

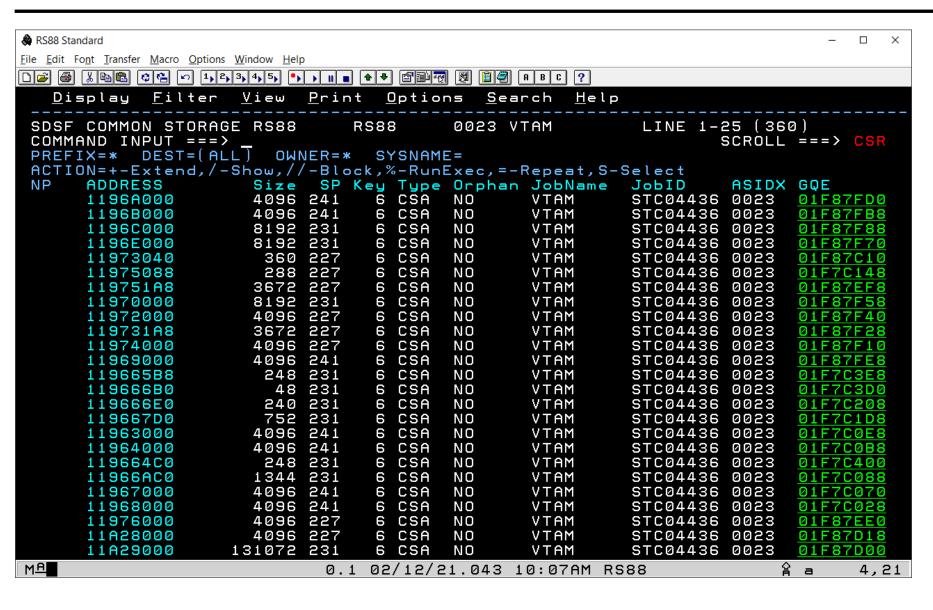
- Secondary panels are those that are only available as actions from another panel, typically as a specification in the "NP" column.
- Job common storage usage
 - Accessed from "DA", "CSR", "AS" and "AD" panels
- Job private storage subpool details
 - Accessed from "JM" panels
- Common storage subpool details
 - Accessed from "CS" panel
 - Already covered in the description of the primary panel
- Memory Structure Map
 - Accessed from "MEM" panel
 - Already covered in the description of the primary panel

Job Common Storage Launch



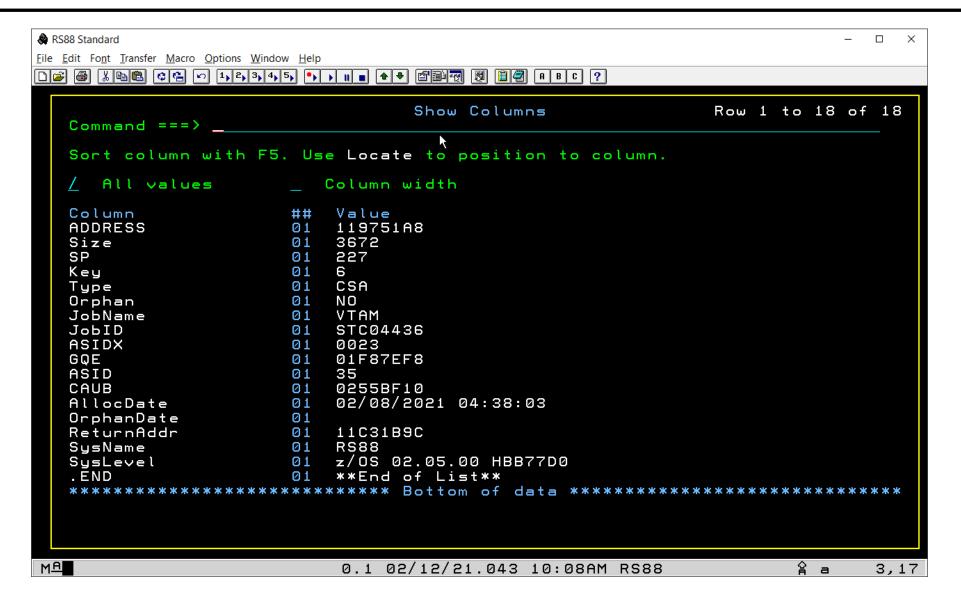
Typically accessed using the "JCS" (JobCommonStorage) action on a panel that shows an address space.

Job Common Storage Panel

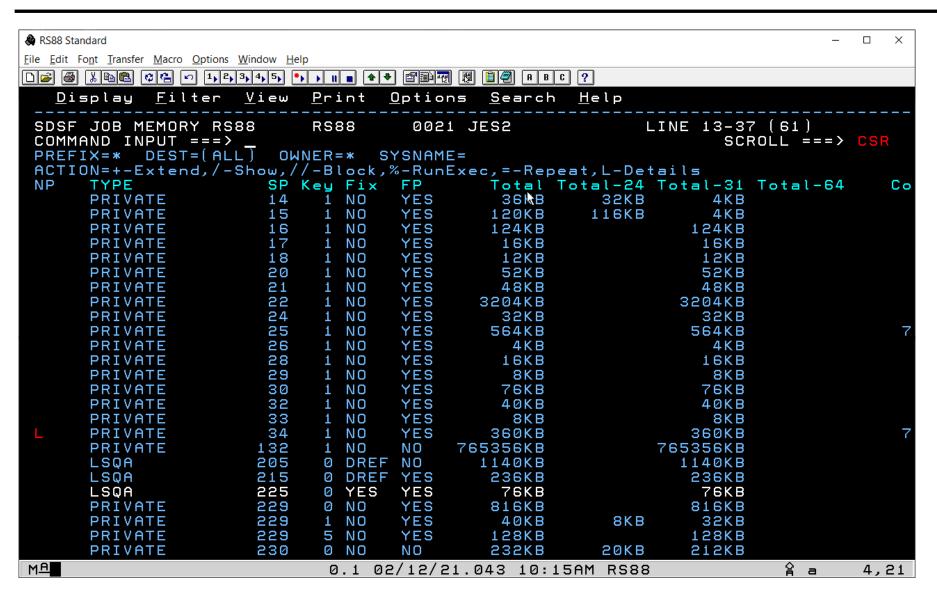


Can also be used on a row on the CSR panel to drill down to each block of orphaned common storage.

Job Common Storage Columns



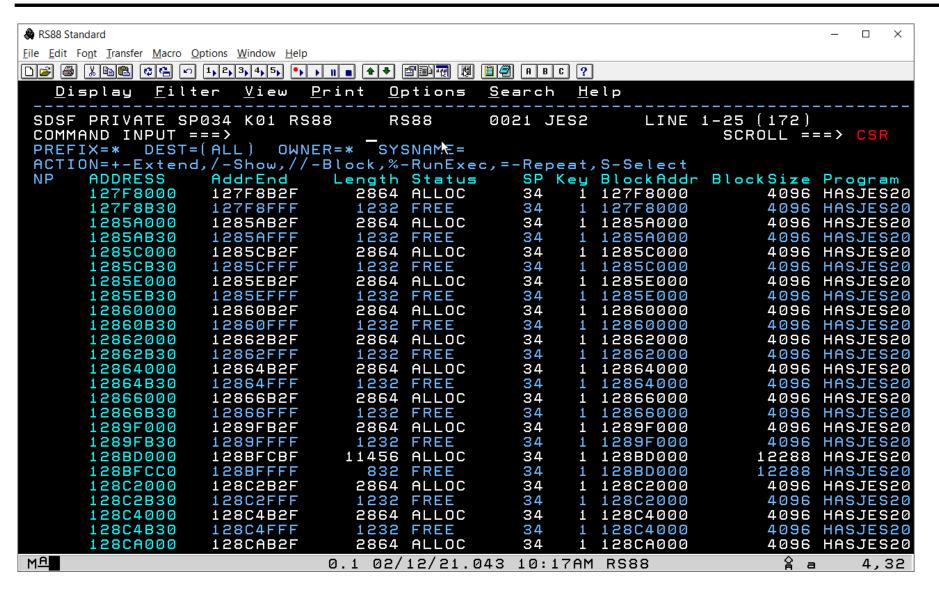
Job Private Storage Launch



Launched using the "L" action on the JM (JobMemory) panel

In this case, we are looking at subpool 34 storage in key1 for JES2

Job Private Storage Panel



Each block in the subpool+key for the ASID is shown and broken down into allocated and free blocks

Associated owning program name shown from the TCB owning the storage

Address is enabled for pointand-shoot access to the MEM panel

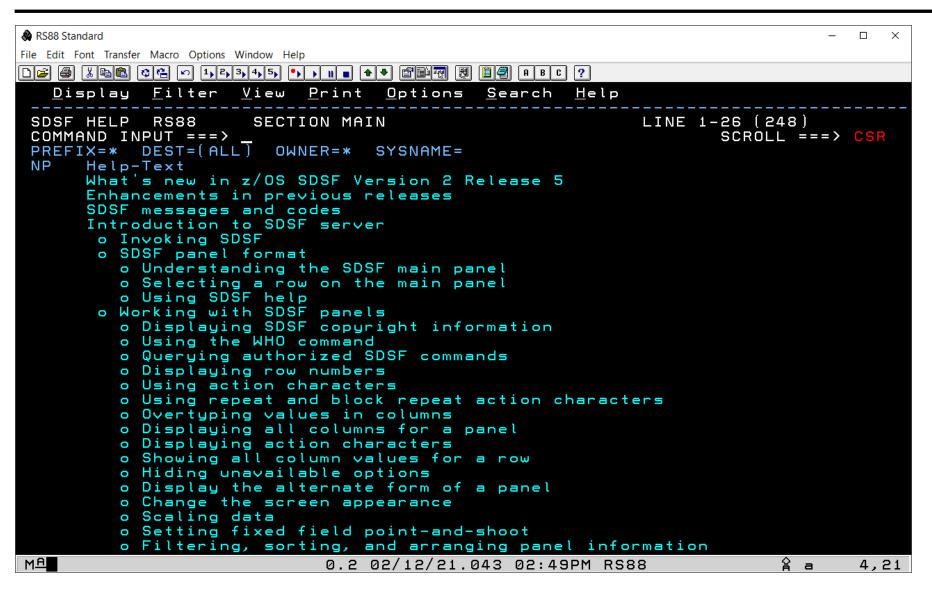
New Columns On Existing Displays

- FS (File Systems)
 - TotalSpace, UsedSpace and Used%
- SMSV (SMS Volumes)
 - UsedMb
- SMSG (SMS Storage Group)
 - UsedMb
- CK (HealthChecks)
 - RexxHLQ
- RES (WLM Resources)
 - SchedEnv and Description
- DA (Active Jobs)
 - XCFGroup and SSName
- SYS (System Information)
 - TimeZoneOfs, HCSuccess, HCSevLow, HCSevMed and HCSevHigh

New Help and Search Interface

- HELP, COLSHELP and SEARCH commands converted to display SDSF panels
 - 1000s of ISPF help panels removed
 - Help text generated from the SDSF User Guide manual
 - Help for ISPF Pop-Up panels unaffected
- HELP command syntax
 - HELP {section}
 - Defaults to panel that user is on
 - Help on main panel shows help index screen
 - If outstanding message in top RHS of SDSF screen, HELP will show section "SDSFMSGS"
- New help command ACTH
 - Shows attributes for actions on a panel
- New help command CMDH
 - Shows attributes for commands that generate tabular panels

HELP Panel

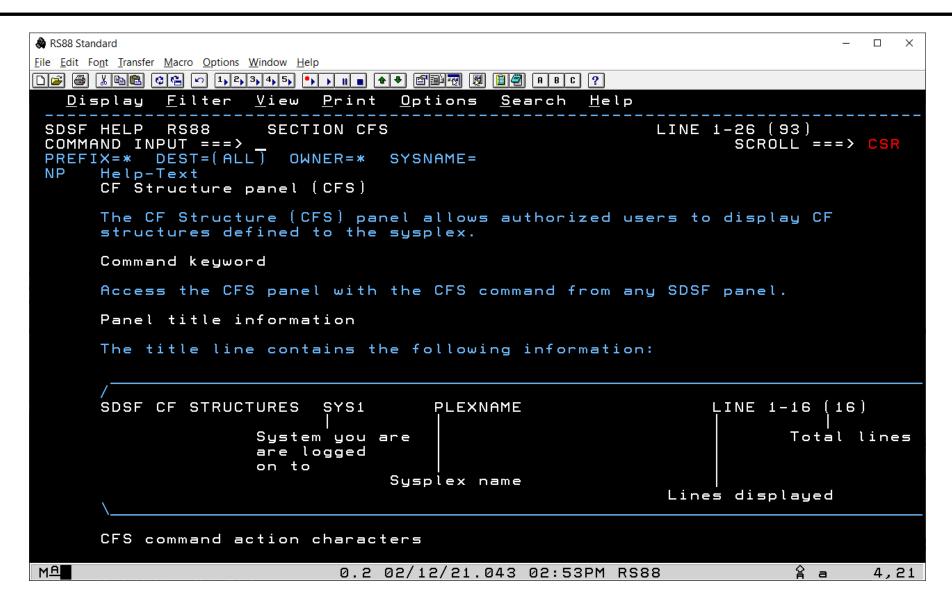


Main help index screen

Use "S" action to select required help section

Point-and-shoot enabled

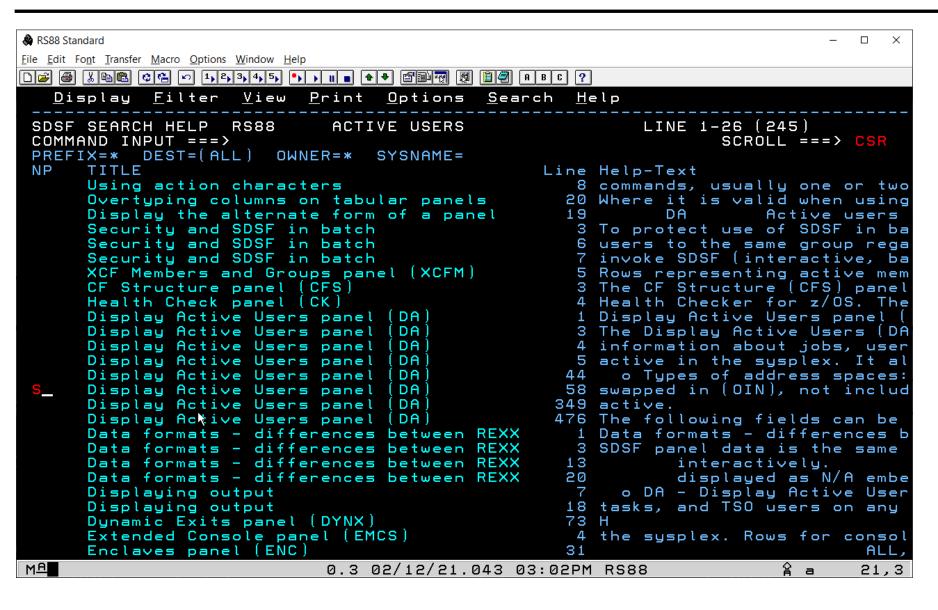
Help Panel Content



SEARCH Command

- Search the help content and build a results list that can be used to select the matching section that contains the search terms
- Syntax
 - SEARCH {term1} {term2} {term3} {term4}
 - Enclose "term" in single quotes if there are embedded blanks
 - Implicit OR assumed between terms
 - Case insensitive
- If no terms specified, then pop-up prompt panel displayed
 - ISPF only

SEARCH Command Example



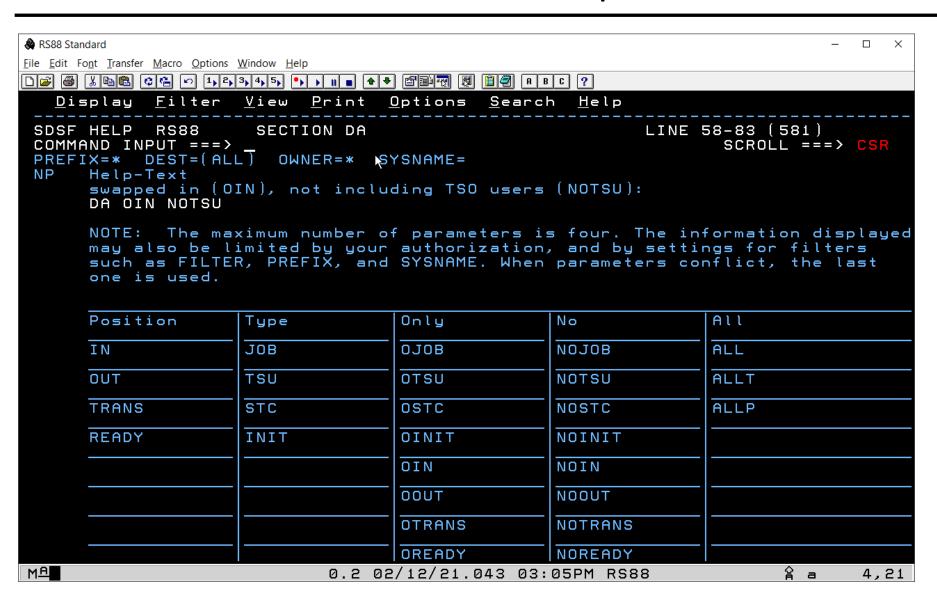
User typed "SEARCH ACTIVE USERS"

Result list as shown – notice the addition of the search terms in the panel title

User can then select the row and drill down to the specific section

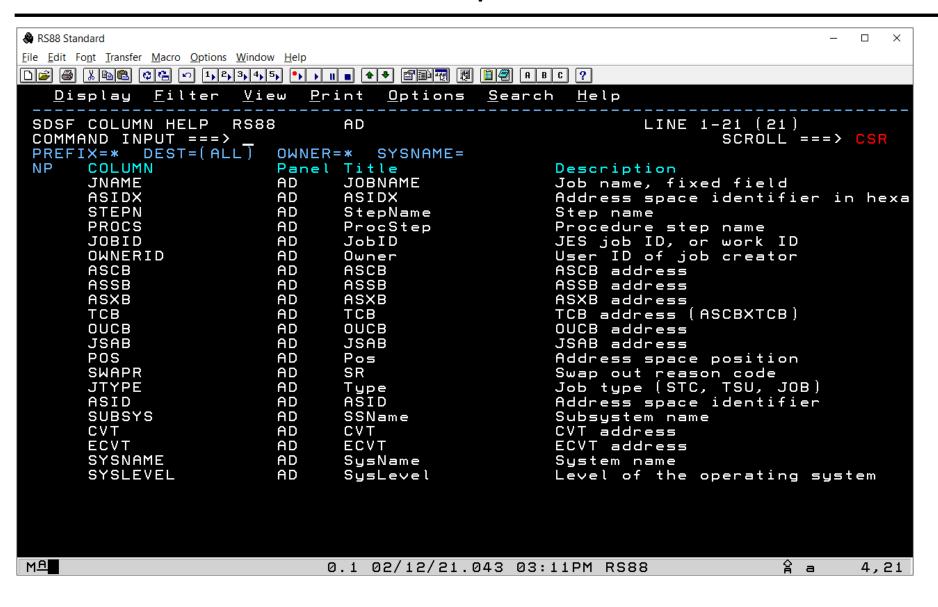
Help contents will be positioned to line number in results list (in this case 58)

SEARCH Command Example - Select



Note the starting line number

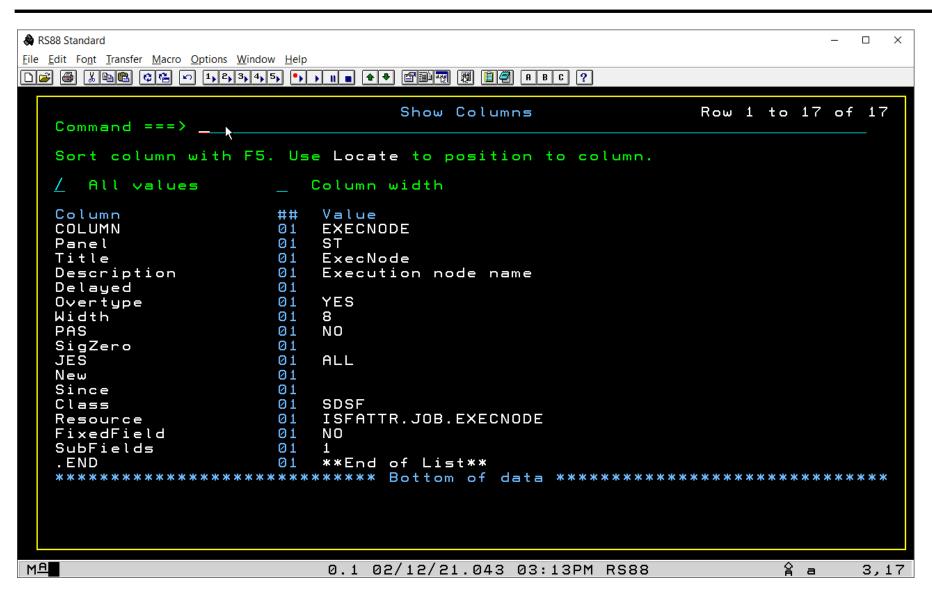
COLH – Column Help Panel



COLSHELP command (COLH) converted from ISPF table display to internal SDSF command.

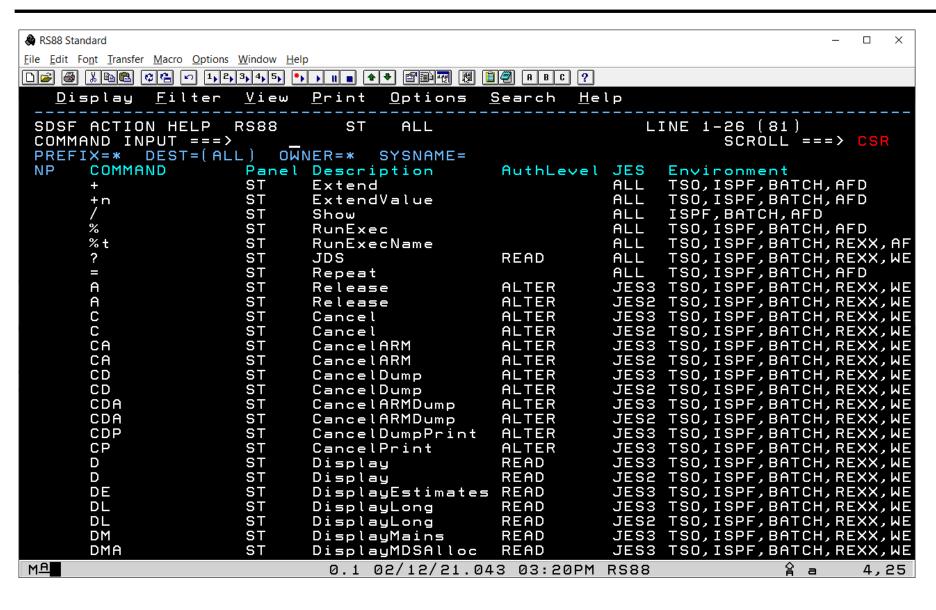
Contents derived from running product meta data

COLH Panel Columns



Attributes include if the column is valid for overtype and the SAF resource that protects it

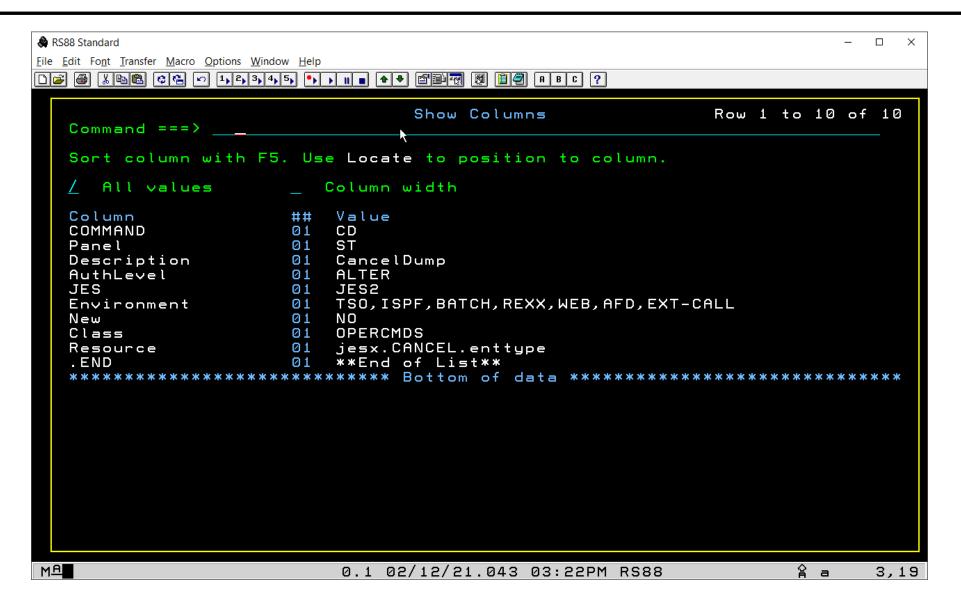
ACTH – Action Help



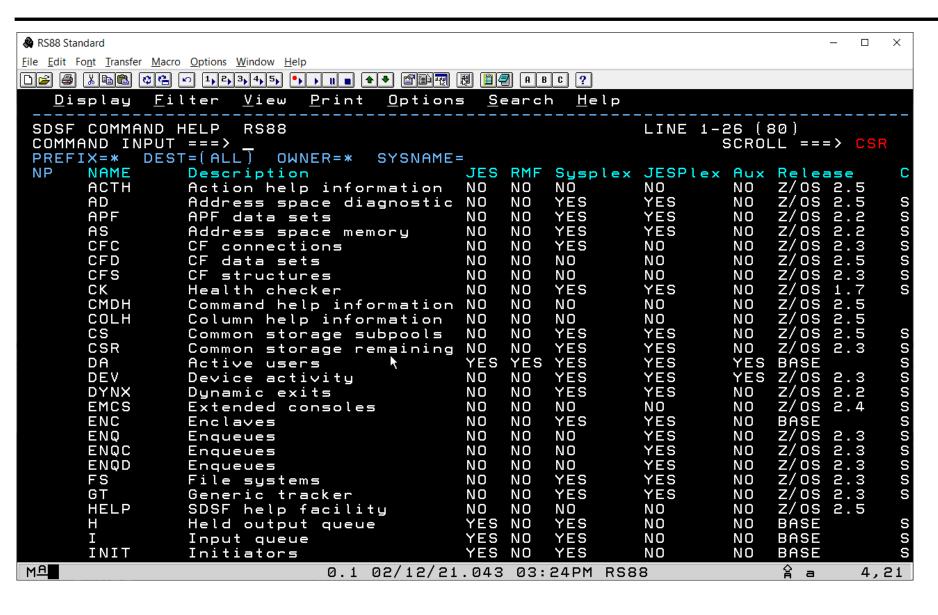
New command to show the attributes for each action on an SDSF panel

Includes valid environments, JES and security resources.

ACTH Panel Columns



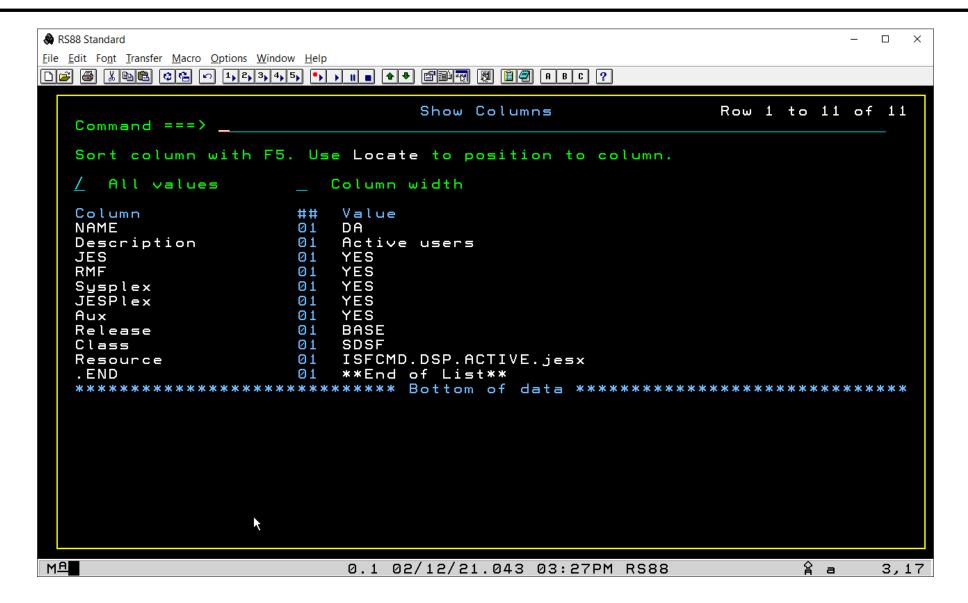
CMDH Panel



Shows attributes for SDSF commands that result in tabular panels

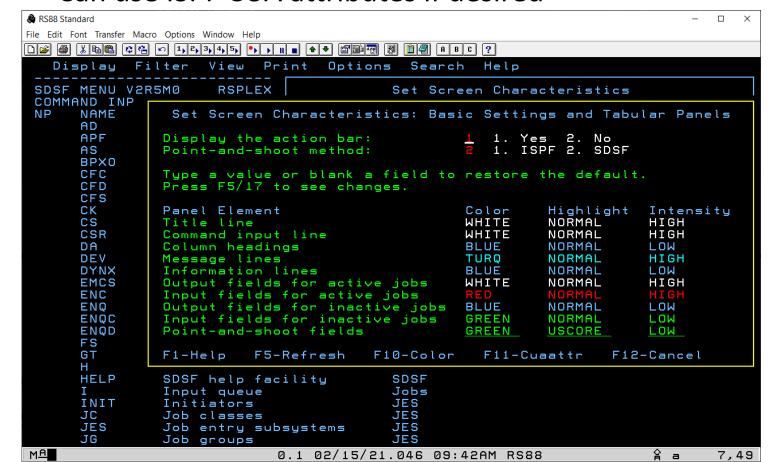
Dependencies on SDSFAUX, RMF and JES shown

CMDH Panel Columns



Useability Enhancements

- Point-and-shoot for memory addresses
 - Default green underlined attribute
 - Can be changed using SET SCREEN command
 - Can use ISPF CUA attributes if desired



Useability Enhancements

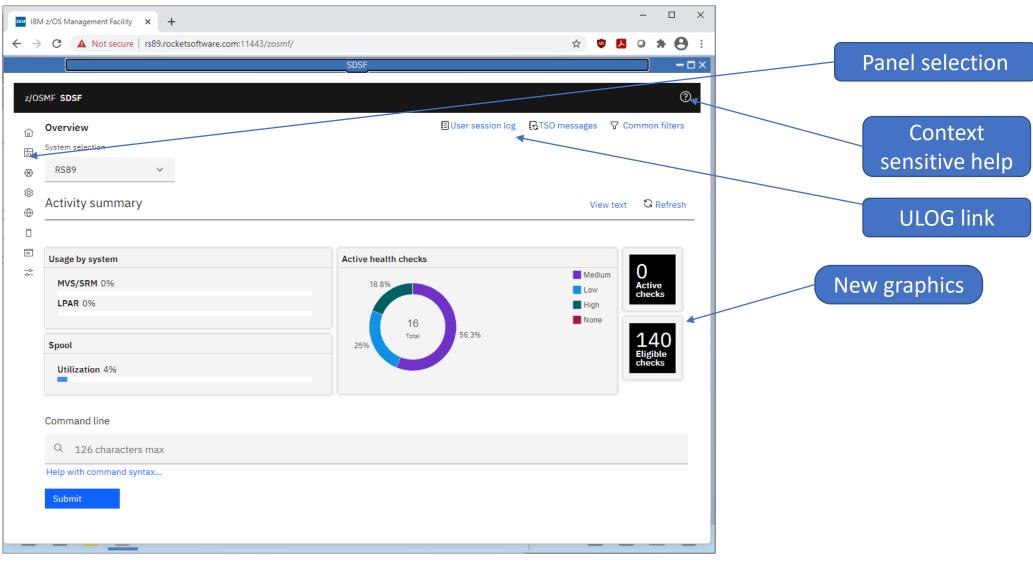
LOG Positioning

- Initial entry into LOG panel now attempts to show both outstanding WTORs and latest messages
- Previous behaviour just displayed outstanding WTORs and the user has to scroll backwards to see messages
- Wide screen z/OS operator command
 - Single line input for the slash "/" popup panel when running 34x141 or greater
 - Allows for easier manipulation of long operator commands
- All SWB fields now updatable from the JDS panel ("?")
 - The "Q" action that produced the Output Descriptors (OD) display no longer required

z/OSMF Plug-In Enhancements

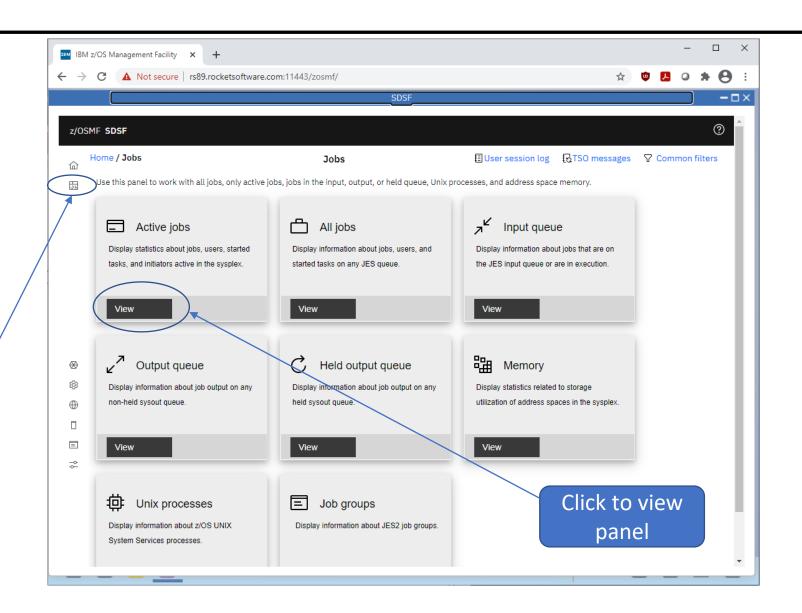
- Plug-in has been completely rewritten with new look-and-feel
- Cleaner graphics and tables
- New panels
 - Job groups
 - OMVS options
 - System parameters
 - Link list sets
 - System information
 - SMS volumes
 - File systems

z/OSMF Plug-In Enhancements



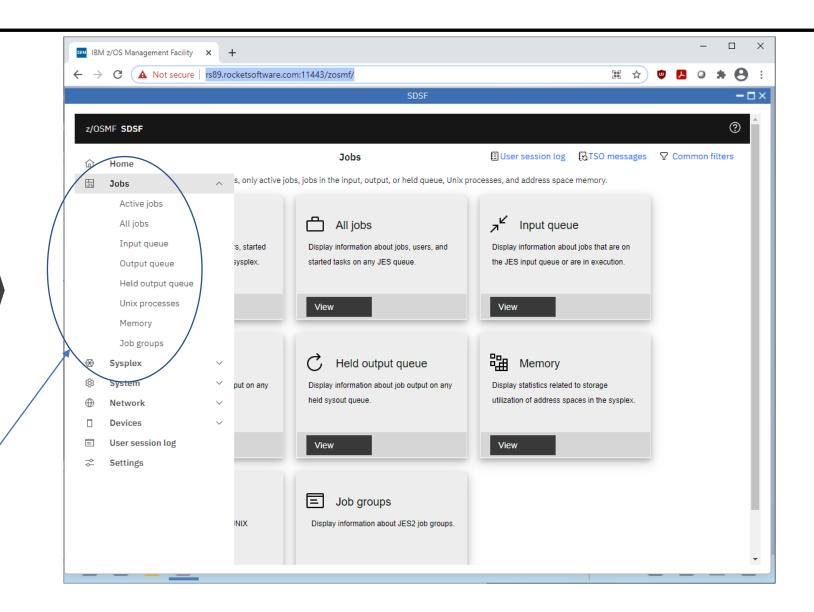
z/OSMF Plug-in Jobs View

Click Jobs icon to view the panel tiles



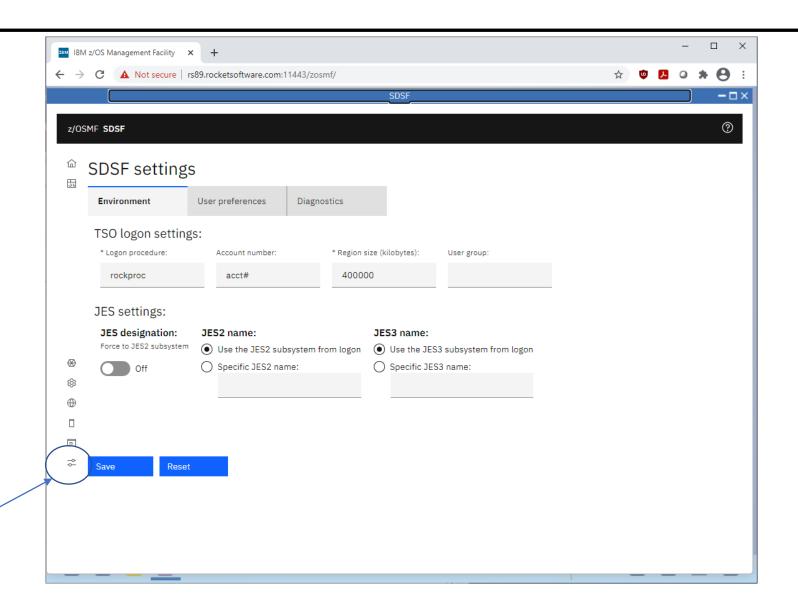
z/OSMF Plug-in icon expansion

Hover over icons to select panel directly



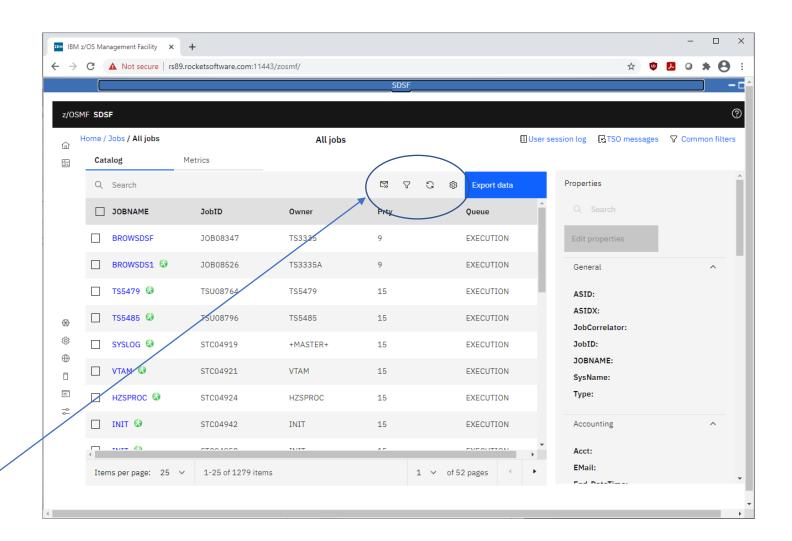
z/OSMF Plug-in Integrated Settings

Access settings through icon (separate desktop application removed)

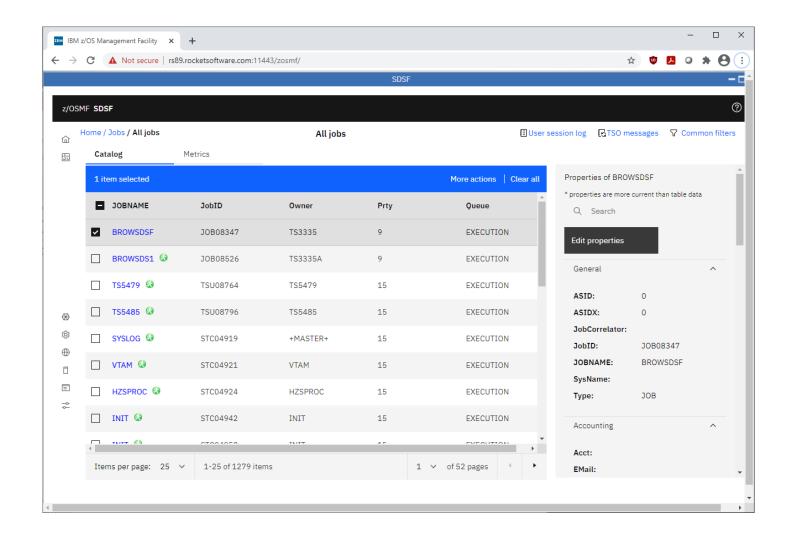


z/OSMF Plug-in Panel Layout

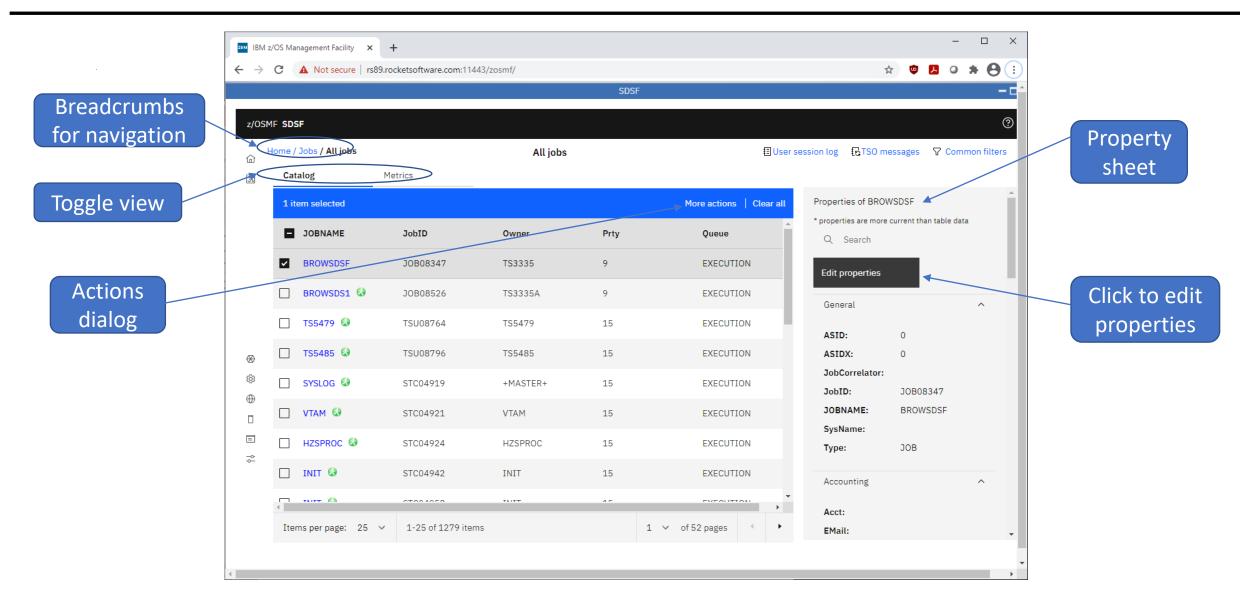
Controls (filter, settings, refresh)



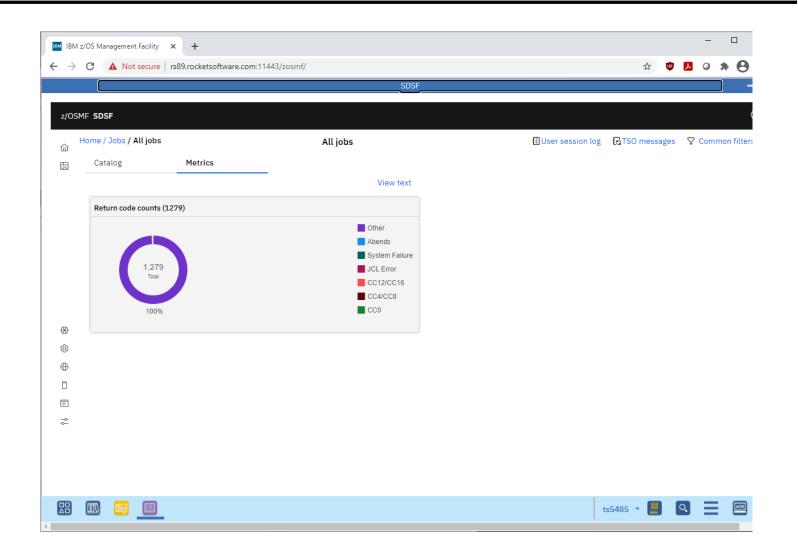
z/OSMF Plug-in Panel (Selected Row)



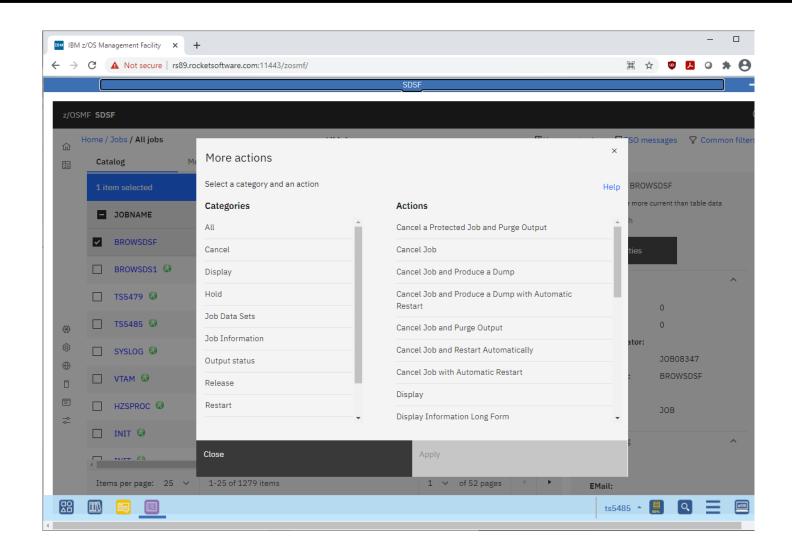
z/OSMF Plug-in Panel Layout (Selected Row)



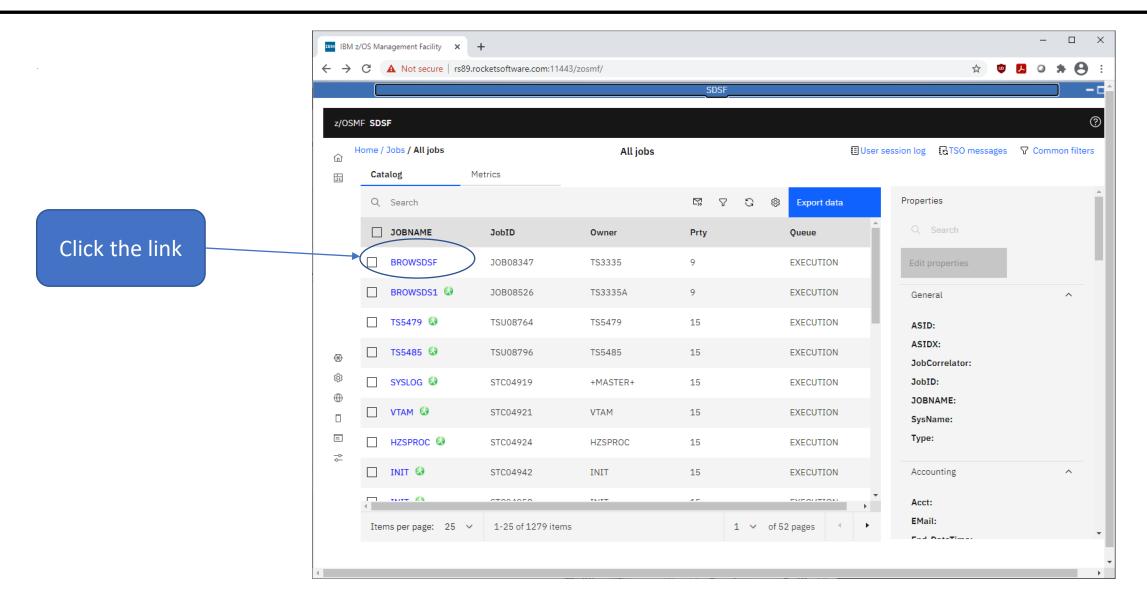
z/OSMF Plug-in Metrics



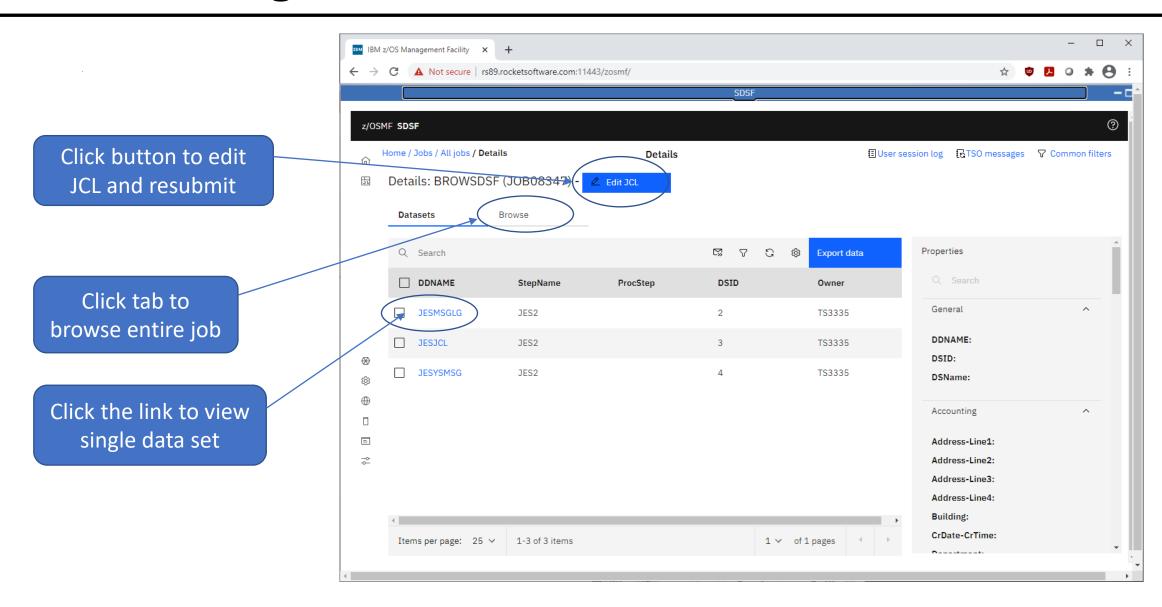
z/OSMF Plug-in Actions Dialog



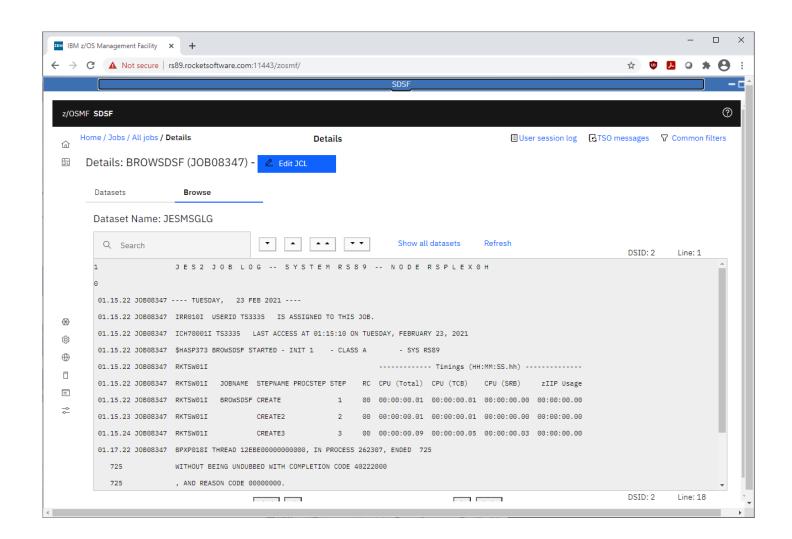
z/OSMF Plug-in Browse Panel



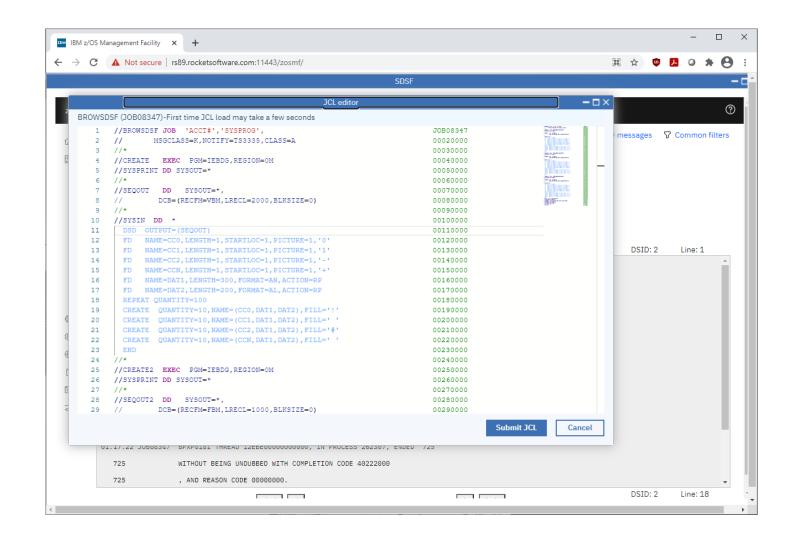
z/OSMF Plug-in Browse Panel



z/OSMF Browse Data Set



z/OSMF Plug-in JCL Editor



Upgrade & Coexistence Considerations

- Toleration APARs for 2.3 and 2.4 :
 - PH29560 can be installed at any time
 - Needed for sharing ISFPRMxx and data gatherer compatibility
- Migration considerations
 - All SDSF security is now performed by SAF
 - Legacy internal SDSF security is no longer supported
 - ISFUSER exit only invoked for INIT, TERM and PRE-SAF function codes
 - New SDSF Security Migration Guide manual
- Coexistence support
 - SDSF 2.5 is compatible with SDSF 2.3 and SDSF 2.4 in the same sysplex

Installation & Configuration

- SDSF and SDSFAUX address spaces are mandatory
 - Copy ISF.SISFJCL(SDSF) and ISF.SISFJCL(SDSFAUX) to proclib
 - Copy ISF.SISFJCL(ISFPRM00) to parmlib
 - Add "S SDSF" to COMMNDxx
- SDSF class must be RACLISTed
- Users must be authorized to CONNECT to SDSF server
 - READ access to ISF.CONNECT.sysname in the SDSF class
- ISFPRMxx AUXSAF(FAILRC4/NOFAILRC4) dictates how to treat SAF "no decision" conditions
 - FAILRC4 converts "no decision" to "access denied" this is the default
 - NOFAILRC4 converts "no decision" to "allow allowed" useful during security migration
 - Previously NOFAILRC4 would "fall back" to any internal SDSF security rules this is no longer the case

Summary

- SDSF now only uses SAF for security
 - Migration may be required
 - Migration can be performed on 2.3 and 2.4 prior to implementation of SDSF 2.5
 - Strongly recommend you migrate now
 - New SDSF Security Migration Guide manual
- New SDSF functionality
 - Lots of new panels
 - Enhanced user experience
- New z/OSMF SDSF plug-in

Appendix - Documentation

- SDSF Operation and Customization (SA24-2274)
- SDSF User's Guide (SC27-9028)
- SDSF Security Migration Guide (SC27-4942)
- SDSF REXXHELP command
 - Contains SDSF/REXX usage, syntax, and examples
- SDSF RGEN command
 - Generates starter SDSF/REXX execs and examples
- SDSF Javadoc
 - Contains SDSF/Java documentation
 - Download from /usr/lpp/java/classes/isfjcallDoc.jar
- SDSF SEARCH command
- SDSF HELP command (PF1)
 - See the "NEWIN25" section from the help index panel