



SDSF Hidden Treasures

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Treasure Hunt

- General tips
- Tables
- Slash command
- Browse (next, prev, defaults, findlim)
- Operlog color and highlighting
- Using sectrace
- REXX (rgen, stems)
- Searching help system

General Tips

- ▶ Use **SET DISPLAY ON** to show current settings of your prefix and owner
- ▶ Use **SET ACTION ON | SHORT** to display valid action characters
- ▶ Use **PREFIX **** and **OWNER *userid*** to default your own jobs
 - ▶ PREFIX ** is a special case so H panel will display all jobs
- ▶ Use **SET SCREEN** to change display attributes

Display Values

- Use **SET DISPLAY ON** to show your current prefix and owner
- Saved in ISPF profile

SET DISPLAY [ON]

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                                LINE 1-26 (1370)
COMMAND INPUT ==> set display                                SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485  TSU02398 TS5485   15 EXECUTION  RS86 RS86
   BPXAS   STC02260 BPXAS   15 EXECUTION  RS86 RS86
   SYSLOG  STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM    STC02262 VTAM    15 EXECUTION  RS86 RS86
   HZSPROC STC02264 HZSPROC 15 EXECUTION  RS86 RS86
   INIT    STC02266 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02267 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02268 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02269 INIT    15 EXECUTION  RS86 RS86

```

Display Action Characters

- Use **SET ACTION ON | OFF | SHORT** to display valid action characters for panel
- Saved in ISPF profile

SET ACTION ON

Display Filter View Print Options Search Help

```
-----
SDSF HELD OUTPUT DISPLAY ALL CLASSES LINES 7,806          LINE 1-21 (84)
COMMAND INPUT ==> set action on                          SCROLL ==> HALF
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=*  FILTERS=1
ACTION=+-Extend,//-Block,%-RunExec,?-JDS,=-Repeat,A-Release,C-Cancel,H-Hold,
ACTION=JS-JobStep,L-List,LL-ListLong,O-Release,OK-ReleaseKeep,P-Purge,
ACTION=Q-OutDesc,S-Browse,Sn-BrowseLocDS,SB-ISPFBrowse,SE-ISPFedit,SJ-JCLEdit,
ACTION=X-Print,XC-PrintClose,XD-PrintDS,XDC-PrintDSClose,XF-PrintFile,
ACTION=XFC-PrintFileClose,XS-PrintSysout,XSC-PrintSysoutClose
```

NP	JOBNAME	Jobid	Owner	C	#	Recs	Date	RC
	INIT	STC02125	INIT	K	91	04/18/2017	10:35:09	CC 0000
	INIT	STC02132	INIT	K	91	04/18/2017	10:35:09	CC 0000
	INIT	STC02128	INIT	K	91	04/18/2017	10:35:09	CC 0000
	INIT	STC02129	INIT	K	91	04/18/2017	10:35:09	CC 0000 3:
	INIT	STC02135	INIT	K	91	04/18/2017	10:35:09	CC 0000 3:
	INIT	STC02131	INIT	K	91	04/18/2017	10:35:09	CC 0000 3:
	INIT	STC02127	INIT	K	91	04/18/2017	10:35:09	CC 0000 3:
	INIT	STC02126	INIT	K	91	04/18/2017	10:35:09	CC 0000 3:

Displays actions and descriptions

SET ACTION SHORT

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                                LINE 1-24 (1370)
COMMAND INPUT ==> set action short                            SCROLL ==> HALF
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=*
ACTION=+,//,%,?,,=,A,C,CA,CD,CDA,D,DL,DP,E,EC,ES,ESH,H,I,J,JD,JM,JP,JS,L,LL,O,P,
ACTION=PO,PP,Q,S,Sn,SB,SE,SJ,W,X,XC,XD,XDC,XF,XFC,XS,XSC
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485  TSU02398 TS5485   15 EXECUTION  RS86 RS86
   BPXAS   STC02260 BPXAS   15 EXECUTION  RS86 RS86
   SYSLOG  STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM    STC02262 VTAM    15 EXECUTION  RS86 RS86
   HZSPROC STC02264 HZSPROC 15 EXECUTION  RS86 RS86
   INIT    STC02266 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02267 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02268 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02269 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02270 INIT    15 EXECUTION  RS86 RS86
   INIT    STC02271 INIT    15 EXECUTION  RS86 RS86

```

Displays actions without descriptions

Tables

- Overlooked functions
 - Locate to a column
 - Arrange columns quickly
 - Fast path select
 - Tips for using filters
 - Capturing a table (SNAP)
 - Block and repeat overtypes
 - Overtyping extension
 - Running REXX exec against a row

Locate Column

- **LOCATE** | **L** *column-name*
- Used to position to a column
- Instead of left/right scrolling
- Aligns the column first just after fixed field
- Specify enough characters to uniquely name column
- If name not unique, positions to first column name that matches

Locate Column

Display Filter View Print Options Search Help

```

-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1370)
COMMAND INPUT ==> locate tgpct                               SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485  TSU02398 TS5485   15 EXECUTION  RS86 RS86
   BPXAS   STC02260 BPXAS   15 EXECUTION  RS86 RS86
   SYSLOG  STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM    STC02262 VTAM    15 EXECUTION  RS86 RS86
   HZSPROC STC02264 HZSPROC 15 EXECUTION  RS86 RS86
   INIT    STC02266 INIT    15 EXECUTION  RS86 RS86
  
```

Locate Column

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (1370)
COMMAND INPUT ==>                               SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  TGPct OrigNode ExecNode Device      Offs Max-RC  SrvCl
   TS5485   0.03 LOCAL   LOCAL
   BPXAS    0.01 LOCAL   LOCAL
   SYSLOG   0.09 LOCAL   LOCAL
   VTAM     0.01 LOCAL   LOCAL
   HZSPROC  0.01 LOCAL   LOCAL
   INIT     0.01 LOCAL   LOCAL
```

tgpct column is
positioned first

Arrange Columns

- ▶ Use arrange command to re-order columns (saved in ISPF profile)
- ▶ `arr ?` to display pop-up (most commands use `?` to display the pop-up)
- ▶ Use command for quick changes
 - ▶ **`arr column-name first`**
 - ▶ **`arr column-name last`**
 - ▶ **`arr column-name1 a column-name2`** (after)
 - ▶ **`arr column-name1 b column-name2`** (before)
 - ▶ **`arr default`** (to reset to default)
- ▶ Can also change column widths (**`arr column-name nn`**)
- ▶ Specify enough characters in column-name to make it unique

Arrange first

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1370)
COMMAND INPUT ==> arr phasename first                        SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02398 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86 RS86
  
```

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1370)
COMMAND INPUT ==>                                          SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  PhaseName  JobID  Owner  Prty Queue  C  Pos  SA  Status
   TS5485   EXECUTING  TSU02398 TS5485   15 EXECUTION  RS
   BPXAS    EXECUTING  STC02260 BPXAS    15 EXECUTION  RS
   SYSLOG   EXECUTING  STC02261 +MASTER+ 15 EXECUTION  RS
   VTAM     EXECUTING  STC02262 VTAM     15 EXECUTION  RS
  
```

Arrange after

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

LINE 1-26 (1370)

COMMAND INPUT ==> **arr max-rc a jobid**

SCROLL ==>

HALF

PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*

NP	JOBNAME	JobID	Owner	Prty	Queue	C	Pos	Saff	ASys	Status
	TS5485	TSU02398	TS5485	15	EXECUTION			RS86	RS86	
	BPXAS	STC02260	BPXAS	15	EXECUTION			RS86	RS86	
	SYSLOG	STC02261	+MASTER+	15	EXECUTION			RS86	RS86	
	VTAM	STC02262	VTAM	15	EXECUTION			RS86	RS86	

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

LINE 1-26 (1370)

COMMAND INPUT ==>

SCROLL ==> HALF

PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*

NP	JOBNAME	JobID	Max-RC	Owner	Prty	Queue	C	Pos	Saff	ASys
	TS5485	TSU02398		TS5485	15	EXECUTION			RS86	RS86
	BPXAS	STC02260		BPXAS	15	EXECUTION			RS86	RS86
	SYSLOG	STC02261		+MASTER+	15	EXECUTION			RS86	RS86
	VTAM	STC02262		VTAM	15	EXECUTION			RS86	RS86

Fast Path Select

- ▶ **SELECT | S *pattern1* [*pattern2*]**
 - ▶ Use S with no operands to reset
- ▶ Temporary filter while accessing table
- ▶ Not saved in profile or across commands
- ▶ Usually names a fixed field pattern
 - ▶ Operands vary based on panel
- ▶ Overrides prefix and owner if authorized
 - ▶ Use instead of changing your PREFIX when you want to filter jobs

Fast Path Select

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                                LINE 1-26 (1370)
COMMAND INPUT ==> s r*                                       SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  Saff  ASys Status
   TS5485   TSU02398 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86 RS86
   HZSPROC  STC02264 HZSPROC  15 EXECUTION  RS86 RS86
  
```

Filters all jobs that start with R

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                                LINE 1-21 (21)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  Saff  ASys Status
   RMF      STC02340 RMF     15 EXECUTION  RS86 RS86
   RACF     STC02368 RACF    15 EXECUTION  RS86 RS86
   RACF     STC01074 RACF     1 PRINT        3
   RMF      STC01046 RMF     1 PRINT       111
   RS86VDLY JOB01275 PDZTEAM 1 PRINT       142
  
```

Fast Path Select by Job Number

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1371)
COMMAND INPUT ==> s 2262                                     SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02399 TS5485   15 EXECUTION  RS86  RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86  RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86  RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86  RS86

```

```

Display Filter View Print Options Search Help
-----
--
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-1 (1)
COMMAND INPUT ==>                                           SCROLL ==>
HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   VTAM     STC02262 VTAM     15 EXECUTION  RS86  RS86

```

Select by job
number

Fast Path Select Override

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-5 (5)
COMMAND INPUT ==> s rmf                                       SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=TS5485 SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
   TS5485  TSU02399 TS5485   15 EXECUTION  RS86  RS86
   TS5485  TSU01260 TS5485    1 PRINT      140
   TS5485  TSU01274 TS5485    1 PRINT      141
  
```

Override owner and
select all RMF jobs

Display Filter View Print Options Search Help

```

SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-10 (10)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=TS5485 SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
   RMF      STC02340 RMF    15 EXECUTION  RS86  RS86
   RMF      STC01046 RMF     1 PRINT      111
   RMF      STC01215 RMF     1 PRINT      264
   RMF      STC01365 RMF     1 PRINT      394
  
```

Fast Path Select Operands

Panel	Operands
DA, I, O, ST, H, AS	jobname [jobid] jobname [jobnumber] jobnumber
JDS	ddname [stepname] ddname [dsid] dsid
Job Dependency	Jobname [jobid] May match JOBNAME (jobid) or DJobName (DJobID) columns
Job Device	fixedfield (dataset, crstructurename, ipaddr)
Job Group	groupname [groupid]
Job Step	stepname [procstep]

Fast Path Select Operands

Panel	Operands
CK	checkname [checkowner]
APF, LNK, LPA, PAG, PARM	datasetname
ENQ	minorname
DYNX	exitname
PROC	ddname

Filters

- ▶ Use filter command to select rows to be displayed
 - ▶ Applied after prefix, owner, dest, sysname
 - ▶ Filters are saved in ISPF profile
- ▶ Use pop-up when entering multiple filters
- ▶ Simplified command
 - ▶ Single column
 - ▶ Operator is EQ
- ▶ For example, **fil jobn bpx*** will filter jobs starting with **bpx**
 - ▶ Use enough characters to make column name unique
- ▶ Use **fil off** to turn off filtering

Filters

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (232)
COMMAND INPUT ==> fil jobn bpx*                               SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02430 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86 RS86

```

Least characters to make
column name unique and EQ
omitted

Filters

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-9 (9)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
   BPXAS    STC02260 BPXAS   15 EXECUTION  RS86 RS86
   BPXAS    STC02326 BPXAS   15 EXECUTION  RS86 RS86
   BPXAS    STC02328 BPXAS   15 EXECUTION  RS86 RS86
   BPXAS    STC02329 BPXAS   15 EXECUTION  RS86 RS86
   BPXAS    STC02392 BPXAS   15 EXECUTION  RS86 RS86
```

Only jobs passing filter
are shown

Filters

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (232)
COMMAND INPUT ==> fil off                       SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02430 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86 RS86
```

Disable filters but still
available through pop-up

Filters

Display Filter View Print Options Search Help

```
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (232)
COMMAND INPUT ==> fil ?                        SCROLL ==> HALF
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485  TSU02430 TS5485   15 EXECUTION  RS86 RS86
   BPXAS   STC02260 BPXAS   15 EXECUTION  RS86 RS86
   SYSLOG  STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
   VTAM    STC02262 VTAM    15 EXECUTION  RS86 RS86
```



Access pop-up

Filters

```

Filter                               Row 1 to 9 of 25
Command ==>
Type filter criteria. Press F4/16 in the Column or Oper
field for values, or in the Value field for system symbols.
Press F11/23 to clear all filter criteria.

Filtering is OFF

AND/OR between columns  AND  (AND/OR)
AND/OR within a column OR   (AND/OR)

Column      Oper  Value (may include * and %)
JOBNAME     EQ   BPX*
  
```

Prompt for column names or operators

Press enter to activate the prior filter

Capturing a Table

- Use SNAP command to capture a table
 - Print the table
 - Edit the table and save for another application
- SNAP formats all rows and columns of the table
 - Optionally change the editor using **SNAP S | SB | SE**
 - Change editor default **SET SNAP S | SB | SE**

Capturing a Table

Display Filter view Print Options Search Help

```
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (216)
COMMAND INPUT ==> snap                        SCROLL ==> HALF
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485  TSU02414  TS5485   15 EXECUTION  RS86  RS86
   BPXAS   STC02260  BPXAS   15 EXECUTION  RS86  RS86
   SYSLOG  STC02261  +MASTER+ 15 EXECUTION  RS86  RS86
   VTAM    STC02262  VTAM    15 EXECUTION  RS86  RS86
   HZSPROC STC02264  HZSPROC 15 EXECUTION  RS86  RS86
   INIT    STC02266  INIT    15 EXECUTION  RS86  RS86
```

Access table and enter SNAP
command

Capturing a Table

```

Display  Filter  View  Print  Options  Search  Help
-----
SDSF OUTPUT DISPLAY *SNAP                               LINE 0          COLUMNS 02- 81
COMMAND INPUT ==>                                       SCROLL ==> HALF
*****
***** TOP OF DATA *****
JOBNAME  JobID   Owner   Prty Queue   C          Pos          SAff  ASys   St
TS5485   TSU02414 TS5485   15 EXECUTION          RS86  RS86
BPXAS    STC02260 BPXAS    15 EXECUTION          RS86  RS86
SYSLOG   STC02261 +MASTER+ 15 EXECUTION          RS86  RS86
VTAM     STC02262 VTAM     15 EXECUTION          RS86  RS86
HZSPROC  STC02264 HZSPROC 15 EXECUTION          RS86  RS86
INIT     STC02266 INIT     15 EXECUTION          RS86  RS86

```

All columns and rows are formatted. You can use PRINT command to copy data set or any edit command if using SE

Block and Repeat Overtypes

- ▶ Block command (//) applies an action to multiple rows
- ▶ Repeat command (=) repeats last action against the current row
- ▶ Block and repeat work for overtypes too!
 - ▶ Enter // in NP column on first row
 - ▶ Overtyping data in column
 - ▶ Enter // in NP column on last row

Block and Repeat Overtypes

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 204-216 (216)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
//  SUBJCL   STC02401 SUBJCL   5 PRINT      C   93
    LOGWRTR  STC02403 SUBJCL   1 PRINT      C   94
    SUBRTE   STC02404 SUBJCL   1 PRINT      C   95
//  SUBIOS   JOB02405 SUBJCL   1 PRINT      A   96
    IOS050  JOB02406 SUBJCL   1 PRINT      A   97
    SUBJCL   STC02407 SUBJCL   1 PRINT      C   98
```

Overtyping the data and marking the rows in the block

Block and Repeat Overtypes

```

Display Filter View Print Options Search Help
-----
--
SDSF STATUS DISPLAY ALL CLASSES          4 COMMANDS ISSUED
COMMAND INPUT ===>                        SCROLL ===>
HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   SUBJCL   STC02401 SUBJCL   5 PRINT          93
   LOGWRTR  STC02403 SUBJCL   5 PRINT          94
   SUBRTE   STC02404 SUBJCL   5 PRINT          95
   SUBIOS   JOB02405 SUBJCL   5 PRINT         A  96
   IOS050   JOB02406 SUBJCL   1 PRINT         A  97
   SUBJCL   STC02407 SUBJCL   1 PRINT          98

```

Overtyping Extension

- Used to overtype long values
 - When value is too long for column width
 - Column must be completely visible for it to be overtyped
- Used to overtype multiple values
- Enter + in the overtypeable column
 - Must be only value in column
 - Erase any residual data for + to be recognized

Overtyping Extension

```
Display Filter view Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (216)
COMMAND INPUT ==>                               SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  Saff  ASys Status
   TS5485   TSU02414 TS5485   15 EXECUTION  +  RS86  RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86  RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86  RS86
   VTAM     STC02262 VTAM     15 EXECUTION  RS86  RS86
   HZSPROC  STC02264 HZSPROC  15 EXECUTION  RS86  RS86
```

Type + as the only character in the overtypable field

Overtime Extension

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (216)
COMMAND INPUT ==>                               SCROLL ==> HALF
PREFIX=**
NP  JOBNAM |          Overtime Extension          | Pos  SAff  ASys  Status
      TS5485 |                                         |    +   RS86
      BPXAS | Column SAff                          |   RS86  RS86
      SYSLOG | Maximum length 5                     |   RS86  RS86
      VTAM   |                                         |   RS86  RS86
      HZSPRO | Type values or use blanks to         |   RS86  RS86
      INIT   | erase values.                         |   RS86  RS86
      INIT   | ==> RS86                               |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | ==>                                     |   RS86  RS86
      INIT   | F1=Help  F12=Cancel                  |   RS86  RS86
      INIT   |                                         |   RS86  RS86
  
```

Enter multiple values
on pop-up

Running REXX against a row

- ▶ Use **%execname** action character
 - ▶ Concatenate execname to //SYSPROC or //SYSEXEC
- ▶ Exec is passed parameters including the row token
 - ▶ Use row token to derive attributes of row
- ▶ Use pop-up to specify arguments or long execname
- ▶ Use arrange command to increase size of NP column
 - ▶ Allow enough room for execname
 - ▶ Temporary change with + in NP

Running REXX Against a Row

Display Filter View Print Options Search Help

```
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-9 (9)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
%a 1 TS5485 TSU02414 TS5485 15 EXECUTION  RS86 RS86
    TSO      STC02332 ++++++++ 15 EXECUTION  RS86 RS86
    TCPIP    STC02337 TCPIP    15 EXECUTION  RS86 RS86
    TN3270   STC02376 TN3270   15 EXECUTION  RS86 RS86
```

Run exec and pass
arg

Display Filter View Print Options Search Help

```
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-9 (9)
COMMAND INPUT ==>                                           SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
% ← TS5485 TSU02414 TS5485 15 EXECUTION  RS86 RS86
    TSO      STC02332 ++++++++ 15 EXECUTION  RS86 RS86
    TCPIP    STC02337 TCPIP    15 EXECUTION  RS86 RS86
    TN3270   STC02376 TN3270   15 EXECUTION  RS86 RS86
```

Display pop-up

Running REXX Against a Row

```
REXX Exec
Command ===>
Supply the exec name and arguments, separated by blanks.
Exec      Arguments
F1=Help  F5=Generate REXX  F12=Cancel
```

Specify name and arguments

Invokes RGEN to generate exec

Increase Width of NP (Permanent)

Display Filter view Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

LINE 1-6 (6)

COMMAND INPUT ==> **arr ?**

SCROLL ==> HALF

PREFIX=* DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1

NP	JOBNAME	JobID	Owner	Prty	Queue	C	Pos	SAff	ASys
	TS5479	JOB09974	TS5479	15	EXECUTION	A			RS87
	TS5485	JOB09981	TS5485	15	EXECUTION	A			RS87
	TSO	JOB09914		15	EXECUTION	A			RS87

Access arrange
pop-up

Increase Width of NP (Permanent)

```

Arrange                               Row 1 to 10 of 40
Command ==>

To move a column, select with / (// for a block), then type A
(after) or B (before). Special function keys:
F5/17=Refresh list  F11/23=Clear input  F6/18=Default order

NP width ← Current width: 4

Column      width  Description
JobID       8
Owner       8
Prty        4
Queue       10
C           8
Pos         5
SAff        5
ASys        8
Status      17
PrtDest     18

```

Type new value

Increase Width of NP (Temporary)

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-6 (6)
COMMAND INPUT ==>                               SCROLL ==> HALF
PREFIX=* DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1
NP JOBNAME JobID Owner Prty Queue C Pos SAff ASys S
+8 TS5479 JOB09974 TS5479 15 EXECUTION A RS87
TS5485 JOB09981 TS5485 15 EXECUTION A RS87
TSO JOB09914 15 EXECUTION A RS87
```

Use + operator to
expand NP width

Increase Width of NP (Temporary)

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-6 (6)
COMMAND INPUT ==>>                            SCROLL ==>> HALF
PREFIX=* DEST=(ALL) OWNER=* SYSNAME=* FILTERS=1
NP      JOBNAME JobID  Owner  Prty Queue  C      Pos  SAff  ASys
TS5479  JOB09974 TS5479   15 EXECUTION A      RS87
TS5485  JOB09981 TS5485   15 EXECUTION A      RS87
TSO     JOB09914                15 EXECUTION A      RS87
```

Width increased to 8 characters
until panel is reaccessed or RESET

Running REXX Against a Row

```
/* REXX */  
Parse Arg pSDSFParms "(" pUserParms  
Parse var pSDSFParms pCurrentPanel pPrimaryPanel pRowToken pPrimaryCmd .  
Say "Current panel is:" pCurrentPanel  
Say "Primary panel is:" pPrimaryPanel  
primaryCmd=x2c(pPrimaryCmd) /* Restore original command and parms */  
Say "Primary command is:" primaryCmd  
Say "User arguments are:" pUserParms
```

Args passed to exec

User args passed on % action

Use row token to obtain information about row

Running REXX against a row

```
/*-----*/  
/* Determine if exec invoked under SDSF */  
/*-----*/  
rc=isfquery()  
if rc<>0 then  
  do  
    Say "*** SDSF environment does not exist, exec ending."  
    Exit 20  
  end
```

For execs that can run outside of SDSF

```
rc=isfcalls('ON')  
  
/*-----*/  
/* Initialize SDSF special variables */  
/*-----*/  
rc=isfquery("INIT")  
Say "isfprefix was set to:" isfprefix  
Say "isfowner  was set to:" isfowner  
Say "isfdest   was set to:" isfdest
```

Sets variables to match current environment

```
/*-----*/  
/* Retrieve the column values for the row being processed */  
/*-----*/  
Address SDSF "ISFGET '"primaryCmd"' TOKEN('pRowToken')" ,  
              (" verbose ")"
```

Retrieve column values for row

Slash Command

- ▶ Slash command tips
 - ▶ End your command with trailing + to continue command using pop-up
 - ▶ Enter / with no text to recall last command using pop-up
 - ▶ Use the pop-up for mixed case command text
 - ▶ Use full screen mode to enable insert mode for command text
 - ▶ Categorize your slash commands using command groups

Slash Command Extension

```
Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (1371)
COMMAND INPUT ==> /This is an incomplete command+  SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02399 TS5485   15 EXECUTION  RS86  RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86  RS86
```

Add trailing + sign to end of text

Slash Command Extension

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 1-26 (1371)
COMMAND INPUT ==> /THIS IS AN INCOMPLETE COMMAND+  SCROLL ==> HALF
PR -----
NP | Edit Options Help
   |-----
   |                               System Command Extension
   |
   | ==> THIS IS AN INCOMPLETE COMMAND
   | ==>
   |                               STORELIMIT
   | Comment
   | Group          Show *          (F4 for list)
   |                               More:  +
   | => T PROG=KB
   | => D PROG,LNKLST
   | => SETGTZ TRACKING=ON
   | => V E000,CONSOLE
   | => V E001,CONSOLE
   | => V E001,CONOLE
  
```

Command propagated to input area so it can be completed

Repeat Last Slash Command

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1371)
COMMAND INPUT ==> /$da                                       SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
   TS5485   TSU02399 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86

```

```

Display Filter View Print Options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               COMMAND ISSUED
COMMAND INPUT ==>                                           SCROLL ==> HALF
RESPONSE=RS86 $HASP612 NO ACTIVE JOBS
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys Status
   TS5485   TSU02399 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86

```

Repeat Last Slash Command

```
Display Filter View Print options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                               LINE 1-26 (1371)
COMMAND INPUT ==> /                                         SCROLL ==> HALF
PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  SAff  ASys  Status
   TS5485   TSU02399 TS5485   15 EXECUTION  RS86 RS86
   BPXAS    STC02260 BPXAS    15 EXECUTION  RS86 RS86
   SYSLOG   STC02261 +MASTER+ 15 EXECUTION  RS86 RS86
```

Enter / with no operands to
display pop-up

Repeat Last Slash Command

```

Edit Options Help
-----
System Command Extension

===> $DA
===>

Comment
Group          show *          (F4 for list)
More:          +

=> $DA
=> T PROG=KB
=> D PROG,LNKLST
=> SETGTZ TRACKING=ON
=> V E000,CONSOLE
=> V E001,CONSOLE
=> V E001,CONOLE
=> $TJ3295,NHOLD=0
=> $TJ3295,NH=0
=> $TJ3295,NH=3
=> $TJ3295,NHOLD=3
=> $TJECLDEF,JES3=(NET=PROCESS)

F5=Fullscr F6=Details F7=Up F8=Down F10=Save F11=Clear F12=Cancel

```

Last command primed
in input area

Last command added
to recent list

Slash Command Groups

- ▶ Slash command pop-up allows you to:
 - ▶ Associate a command with a group
 - ▶ Associate a comment with a command
 - ▶ Display commands based on group pattern
 - ▶ List all groups
 - ▶ Save a command without issuing it
 - ▶ Delete a single command, group of commands, or recent commands
 - ▶ View details about a command

Slash Command Groups

- To add a command to a group
 - Access slash command pop-up (/ with no operands)
 - Type command in input area
 - Enter a group name (any name provided by you)
 - Optionally enter a comment
 - Hit enter to issue the command or PF10 to save the command without issuing it
- Enter a show pattern to display commands by group in the recent list
 - Asterisk shows all commands
 - Up to 20 commands shown in recent list

Recalling Commands

- ▶ Commands are saved in recent list
 - ▶ Scroll to desired command
 - ▶ Put cursor under command
 - ▶ Hit enter to recall command to input area
- ▶ Command recalled along with group and comment
 - ▶ Comments are not shown in the recent list
 - ▶ Group not shown but listed based on show pattern

Removing Commands

- ▶ Commands are saved in the recent list
- ▶ Last command issued is moved to the top
- ▶ You can remove a single command
 - ▶ Put cursor under command
 - ▶ Hit F11 to remove it from list

Removing all recent commands

- ▶ Type the show pattern for the groups to be displayed
- ▶ Hit enter to display the recent commands
- ▶ Position cursor outside of the recent list
- ▶ Hit F11
- ▶ Select an option
 - ▶ Recent commands matching show pattern
 - ▶ All commands matching show pattern
 - ▶ Selected commands from list
- ▶ The confirmation shows the number of commands that will be processed

Using Full Screen Mode

- ▶ You can toggle the slash command pop-up between full screen and pop-up mode
- ▶ ISPF prevents insert mode from flowing to next line in pop-up mode
 - ▶ Due to attributes used to draw the pop-up frame
- ▶ Use full screen mode to enable insert mode in the text area
 - ▶ Toggle with F5
- ▶ Mode (pop-up or fullscreen) saved in ISPF profile

Using Full Screen Mode

```
-----  
Edit  Options  Help  
-----  
                          System Command Extension  
  
===> $dq  
===>  
  
Comment Display queue                                STORELIMIT  
  
Group  jes2                Show JES2                (F4 for list)  
More:      +  
  
=> $da  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
=>  
  
F5=FullScr F6=Details F7=Up F8=Down F10=Save F11=Clear F12=Cancel
```

Toggle to full screen
mode

Using Full Screen mode

```

Edit  options  Help
-----
                SDSF - System Command Extension

==> $dq

Comment
Group          Show *          (F4 for Group list)          More:  +

=> $dq
=> V E000,CONSOLE
=> T PROG=KB
=> D PROG,LNKLST
=> SETGTZ TRACKING=ON
=> V E001,CONSOLE
=> V E001,CONOLE
=> $TJ3295,NHOLD=0
=> $TJ3295,NH=0
=> $TJ3295,NH=3
=> $TJ3295,NHOLD=3
=> $TJECLDEF,JES3=(NET=PROCESS)
=> $T INPUTDEF,JES3JECL=PROCESS
=> $TINPUTDEF,JES3JCL=PROCESS
=> $DG*,JOBS
=> RO *ALL,SETGTZ TRACKING=ON
=> $ADD NETSERV(1)
=> RO *ALL,D R,L

F1=Help F5=Pop-up F6=Details F7=Up F8=Down F10=Edit F11=Clear F12=Cancel

```

Single input area
spanning two lines

Toggle to pop-up
mode

Browse Next and Prev

- Use NEXT and PREV commands to jump to next or previous data set
 - Alternative to scrolling
 - Positions to start of data set
- Tip: when browsing a job under JES2, use N 3 to position to first application data set
- Also *sn* and *s-n* action characters

Browse Next

Display Filter View Print Options Search Help

SDSF STATUS DISPLAY ALL CLASSES

LINE 214-218 (218)

COMMAND INPUT ==>

SCROLL ==> HALF

PREFIX=** DEST=(ALL) OWNER=* SYSNAME=*

NP	JOBNAME	JobID	Owner	Prty	Queue	C	Pos	SAff	ASys	Status
	VTDRS86	JOB02402	SUBJCL	1	PRINT	A	103			
	PDZTEAML	JOB02412	PDZTEAM	1	PRINT	A	104			
	OOPSLIST	JOB02413	PDZTEAM	1	PRINT	A	105			
S	TS5485R	JOB02415	TS5485	1	PRINT	A	106			
	TS5485R	JOB02416	TS5485	1	PRINT	A	107			

Browse Next

```

Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY TS5485R JOB02415 DSID      2 LINE 0      COLUMNS 02- 81
COMMAND INPUT ==> n 3  <----- SCROLL ==> HALF
***** TOP OF DATA *****
                J E S 2  J O B  L O G  --  S Y S T E M  R S 8 6  --  N O

10.24.07 JOB02415 ---- WEDNESDAY, 19 APR 2017 ----
10.24.07 JOB02415 IRR010I USERID TS5485  IS ASSIGNED TO THIS JOB.
10.24.07 JOB02415 ICH70001I TS5485  LAST ACCESS AT 07:55:42 ON WEDNESDAY, APRI
10.24.07 JOB02415 $HASP373 TS5485R  STARTED - INIT 1    - CLASS A      - SYS
10.24.08 JOB02415 $HASP375 TS5485R  ESTIMATED LINES EXCEEDED
10.24.08 JOB02415 RKTSW01I
10.24.08 JOB02415 RKTSW01I  JOBNAME  STEPNAME  PROCSTEP  STEP      RC  CPU (Total)
10.24.08 JOB02415 RKTSW01I  TS5485R  REXX                1      00  00:00:00.24
10.24.08 JOB02415 RKTSW01I  TS5485R  JOB TOTALS:                00:00:00.24
10.24.08 JOB02415 $HASP395 TS5485R  ENDED - RC=0000
----- JES2 JOB STATISTICS -----
      19 APR 2017 JOB EXECUTION DATE
           29 CARDS READ
        20,162 SYSOUT PRINT RECORDS

```

Skip 3 data sets

Browse Next

Display Filter View Print Options Search Help

```
-----  
SDSF OUTPUT DISPLAY TS5485R JOB02415 DSID 102 LINE 1 COLUMNS 02- 81  
COMMAND INPUT ==> SCROLL ==> HALF  
<ISFRT07> Arg is: ST  
<ISFRT07> isfcalls ON complete, rc=0  
<ISFRT07> isfdebug set to  
<ISFRT07> isftrace set to ISFTRACE  
<ISFRT07> isftrmask set to ISFTRMASK  
<ISFRT07> isfsectrace set to ON  
<ISFRT07> isfserver set to SDSF  
<ISFRT07> isfjesname set to ISFJESNAME
```

System data sets skipped

Browse Next Action Character

```
Display Filter view Print options Search Help
-----
SDSF STATUS DISPLAY ALL CLASSES                LINE 214-218 (218)
COMMAND INPUT ==>                               SCROLL ==> HALF
PREFIX=**  DEST=(ALL)  OWNER=*  SYSNAME=*
NP  JOBNAME  JobID  Owner  Prty Queue  C  Pos  Saff  ASys Status
    VTDRS86  JOB02402  SUBJCL    1 PRINT  A  103
    PDZTEAML JOB02412  PDZTEAM    1 PRINT  A  104
    OOPSLIST JOB02413  PDZTEAM    1 PRINT  A  105
s4  TS5485R  JOB02415  TS5485    1 PRINT  A  106
    TS5485R  JOB02416  TS5485    1 PRINT  A  107
```

Browse and skip 4 data sets

Browse Next Action Character

```
Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY TS5485R  JOB02415  DSID   102 LINE 1      COLUMNS 02- 81
COMMAND INPUT ==>>>          SCROLL ==>> HALF
<ISFRT07> Arg is: ST
<ISFRT07> isfcalls ON complete, rc=0
<ISFRT07> isfdebug set to
<ISFRT07> isftrace set to ISFTRACE
<ISFRT07> isftrmask set to ISFTRMASK
<ISFRT07> isfsectrace set to ON
<ISFRT07> isfserver set to SDSF
<ISFRT07> isfjesname set to ISFJESNAME
```

System data sets skipped

Browse Default

- ▶ Use browse default to invoke browse by placing cursor in NP area and hitting enter
 - ▶ Rather than typing S action character
- ▶ **SET BROWSE S | SB | SE | NONE**

Change FINDLIM

- ▶ Findlim controls number of records searched using find command
 - ▶ Default is 5000 records
- ▶ Hit repeat find when findlim reached to continue
- ▶ Change limit with findlim command
 - ▶ Saved in ISPF profile
- ▶ **findlim *number* | ?**
 - ▶ Number is 1000 to 99999999
- ▶ **findlim 100000**
 - ▶ Searches 100000 records before stopping

Operlog Color

- ▶ Control color in highlighting in operlog
- ▶ SET SCREEN command
- ▶ By default, messages are colorized in operlog as they were first issued
- ▶ You can change the attributes based on descriptor code

Operlog Color

```
Display Filter View Print Options Search Help
-----
HQX77A0 -----
COMMAND INPUT ==> SET SCR

DA   Active users
I    Input queue
O    Output queue
H    Held output queue
ST   Status of jobs
JG   Job groups
SYM  System symbols
LOG  System log

                Set Screen Characteristics
Select the elements that you want to customize.
2  1. Basic settings and tabular panels
   2. OPERLOG panel

F1=Help  F12=Cancel

                SP   Spool volumes
```

Operlog Color

```
Set Screen Characteristics: OPERLOG Panel

Use color and highlighting 1 1. Yes 2. No      More:      +

Type values to override the original color and highlighting.
Press F5/17 to see changes.

Descriptor code           Color   Highlight Intensity
1 - System failure
2 - Immediate action required
3 - Eventual action required
4 - System status
5 - Immediate command response
6 - Job status
7 - Task-related
8 - Out of line
9 - Operator's request
10 - Not defined
11 - Critical eventual action
12 - Important information
F1=Help F5=Refresh F6=Default F11=Cuaattr F12=Cancel
```

Using Sctrace

- ▶ Sctrace traces all security calls made by SDSF
- ▶ Messages written to ulog
- ▶ Useful when debugging permission problems
- ▶ **SET SECTRACE ON | OFF | WTP ?**

Using Sectrace

```

Display Filter View Print Options Search Help
-----
HGX77A0 ----- SDSF PRIMARY OPTION MENU -----
COMMAND INPUT ==> set sectrace                               SCROLL ==> HALF

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
JG   Job groups          NODE  Nodes
SYM  System symbols      SO    Spool offload
LOG  System log          SP    Spool volumes
SR   System requests     NS    Network servers

```

```

Display Filter View Print Options Search Help
-----
HGX77A0 ----- SDSF PRIMARY OPTION MENU -----
COMMAND INPUT ==> st                                         SCROLL ==> HALF

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

```

Using Sectrace

```
SDSF ULOG  CONSOLE TS5485                LINE 0          COLUMNS 44- 123
COMMAND INPUT ==>                          SCROLL ==> HALF
***** TOP OF DATA *****
ISF045W Unable to open table library ISFTABL, number of saved commands may be limited.
ISF050I USER=TS5485 GROUP=MXI PROC=ROCKPROC TERMINAL=S86TCP04
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF RESOURCE=ISFCMD.DSP.STATUS.JES2
ISF051I SAF Access allowed SAFRC=0 ACCESS=UPDATE CLASS=SDSF RESOURCE=ISFATTR.JOB.PRTY
ISF051I SAF Access allowed SAFRC=0 ACCESS=UPDATE CLASS=SDSF RESOURCE=ISFATTR.JOB.CLASS
ISF051I SAF Access allowed SAFRC=0 ACCESS=UPDATE CLASS=SDSF RESOURCE=ISFATTR.JOB.SYSAFF
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF RESOURCE=ISFCMD.ODSP.ULOG.JES2
```

Early Sectrace

- ▶ Use WTP option to view sectrace messages during SDSF initialization
 - ▶ Useful when diagnosing group assignment problems
- ▶ Add sectrace option to SDSF command (from option 6 or TSO ready)
 - ▶ **sdsf sectrace(wtp)**

Early Sectrace

```
READY
sdsf sectrace(wtp)
ISF050I USER=TS5485 GROUP= PROC=ROCKPROC TERMINAL=S86TCP05
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF
RESOURCE=GROUP.MXI.SD
SF
ISF050I USER=TS5485 GROUP=MXI PROC=ROCKPROC TERMINAL=S86TCP05
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF
RESOURCE=ISFCMD.FILTE
R.PREFIX
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF
RESOURCE=ISFCMD.FILTE
R.OWNER
ISF051I SAF Access allowed SAFRC=0 ACCESS=READ CLASS=SDSF
RESOURCE=ISFOPER.DEST
.JES2
```

SDSF/REXX Tips

- Generate REXX execs using RGEN
- Use nomodify option to suppress row tokens
- Use stem notation for isfact to process multiple rows
- Using verbose option to debug execs
- Use isfquery() to query environment settings
- **REXXHELP** | **REXXH** command to display REXX documentation
- **COLSHELP** | **COLSH** command to display column names valid for panel

RGEN Command

- ▶ Generates starter exec you can modify
- ▶ Select from a list of examples or generate exec based on current context
 - ▶ Generates all commands to navigate to the panel you are on
- ▶ Starter exec is generated in an ISPF temporary data set
 - ▶ *Be sure to **copy** the exec to a permanent data set prior to editing !!*
- ▶ Generated exec contains ISPF note lines for tips and hints
 - ▶ Notes are not saved to the data set being edited
 - ▶ Issue ISPF reset command to remove notes from the view

RGEN List of Examples

- ▶ Enter **rgen x** from any panel
 - ▶ Displays a pop-up with list of examples
 - ▶ Select an example
- ▶ Copy the exec and modify as needed

RGEN List of Examples

REXX Examples		Row 1 to 15 of 22
Command ==>		
Sort by type (F5) or description (F6).		
Type	Description	
Action	Cancel a job	
Action	Cancel a set of jobs	
Action	Invoke an EXEC with the % action character	
Action	List action characters	
Action	List job data sets	
Action	Modify a value for a set of jobs	
Action	Modify values for selected jobs (overtyp)	
Browse	Browse a single data set with EXECIO	
Browse	Browse a single data set with ISFBROWSE	
Browse	Browse check output	
Browse	Browse check output from check history	
Browse	Browse check output with ISFBROWSE	
Browse	Browse job output with EXECIO	
Browse	Browse job output with ISFBROWSE	
Browse	Browse job output with ISFBROWSE - groups of lines	

RGEN List of Examples

```
REXX Examples                               Row 16 to 22 of 22
Command ==>
Sort by type (F5) or description (F6).
Type      Description
Info      Issue the WHO comand
Operlog   Work with the OPERLOG
Print     Print to SYSOUT
Syslog    Find a message in the SYSLOG
Syslog    work with the SYSLOG
Tabular   Access a tabular panel and create column variables
Tabular   Access a tabular panel and create SDSFROW variable
***** Bottom of data *****
```

RGEN WHO Example

```

SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL          Columns 00001 00072
Command ==>                                         Scroll ==> HALF
***** Top of Data *****
000001 /* REXX */
000002 Arg debug
000003
==MSG>      Important: Copy this generated exec from temporary dataset
==MSG>      TS5485.RS86.SPFTEMP1.CNTL
==MSG>      and edit that copy to prevent your changes from being lost.
==MSG>
000004 /*****
000005 *
000006 * SDSF RGEN Generated Example:
000007 * Issue the WHO comand
000008 *
000009 * This exec was generated by the SDSF RGEN command on
000010 * Wednesday 2017/04/19 at 09:30:07.85.
000011 *
000012 * 5650-ZOS
000013 * SDSF level = z/OS 02.02.00 (HQX77A0)
000014 *
000015 * This sample uses function available since z/OS V1R9.
000016 *
=====
=====
000017 For more information and examples, use the SDSF REXXHELP
command. To search SDSF's help, use SEARCH search-string.

```

RGEN WHO Example

```
SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL           Columns 00001 00072
Command ==>                                         Scroll ==> HALF
000018
=NOTE= Tip: All SDSF/REXX execs must include the following statement:
000019 rc=isfcalls('ON')
000020
000021 trace o
000022
000023 if debug<>"" then /* If debug mode */
000024     verbose="VERBOSE" /* .. use SDSF verbose mode */
000025 else
000026     verbose=""
000027
000028 /*-----*/
000029 /* Issue WHO command */
000030 /*-----*/
000031 Address SDSF "ISFEXEC WHO (" verbose ") "
000032 lrc=rc
000033
000034 call msgrtn "ISFEXEC WHO"
000035 if lrc<>0 then
000036     Exit 20
000037
```

RGEN WHO Example

```
SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL           Columns 00001 00072
Command ===>                                         Scroll ===> HALF
000038 /*-----*/
000039 /* List the responses from the WHO command */
000040 /*-----*/
=NOTE= Tip: The responses from the WHO command are returned
=NOTE=      in the isfresp. stem variable.
000041 do ix=1 to isfresp.0
000042   say isfresp.ix
000043 end
000044
=NOTE= Tip: All SDSF/REXX execs must finish with the following statement:
000045 rc=isfcalls('OFF')
000046
000047 Exit 0
```

RGEN Generated Exec

- ▶ RGEN is context sensitive and generates all statements needed to access the current panel
 - ▶ Access ST panel
 - ▶ Issue ? (JDS) action character against a job
 - ▶ Select a data set on JDS to browse
 - ▶ Issue RGEN command from the output data set (browse) panel
- ▶ Result of this example is to generate statements to browse the data set

RGEN Generated Exec

```
SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL          columns 00001 00072
Command ==>>>                                     Scroll ==>> HALF
***** ***** Top of Data *****
000001 /* REXX */
000002 Arg debug
000003
000004 /*****
000005 *
000006 *   SDSF RGEN Generated EXEC
000007 *
000008 *   This exec was generated by the SDSF RGEN command on
000009 *   wednesday 2017/04/19 at 09:37:15.09.
000010 *
000011 *   5650-ZOS
000012 *   SDSF level = z/OS 02.02.00 (HGX77A0)
000013 *
000014 *   Operation =
000015 *
000016 *     - Access primary panel ST
000017 *     - Issue ? action character
000018 *     - Access secondary panel JDS
000019 *     - Invoke browse
000020 *
000021 *****/
000022
```

RGEN Generated Exec

```
SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL      Columns 00001 00072
Command ==>      Scroll ==> HALF
000023 rc=isfcalls('ON')
000024
000025 trace o
000026
000027 if debug<>"" then /* If debug mode */
000028     verbose="VERBOSE" /* .. use SDSF verbose mode */
000029 else
000030     verbose=""
000031
000032 /*-----*/
000033 /* Configure environment with special variables */
000034 /*-----*/
000035 isfprefix='**' /* Corresponds to PREFIX command */
000036 isfowner='*' /* Corresponds to OWNER command */
000037 isfsysname='*' /* Corresponds to SYSNAME command */
000038
000039 isfdest=' ' || , /* Dest name 1 */
000040         ' ' || , /* Dest name 2 */
000041         ' ' || , /* Dest name 3 */
000042         ' ' /* Dest name 4 */
000043
000044
000045 /* Access the ST panel */
000046 Address SDSF "ISFEXEC 'ST' (" verbose ")"
000047 lrc=rc
```

RGEN Generated Exec

```

SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL      Columns 00001
00072
Command =====>                                Scroll =====>
HALF
000048
000049 call msgrtn "ISFEXEC 'ST'" /* List messages */
000050 if lrc<>0 then /* If command failed */
000051   do
000052     say "*** ISFEXEC failed with rc="lrc"."
000053     exit 20
000054   end
000055
000056 call colsrtn isfrows "." sdsfcols /* List all rows and columns */
000057
000058
000059 numrows=isfrows /* Copy number of rows returned */
000060
000061 /*-----*/
000062 /* Loop for all rows returned */
000063 /*-----*/
000064 do ix=1 to numrows
000065
000066   if JNAME.ix = 'TS5485' then
000067     do
000068
000069       /* Issue the ? action for each row */
000070       Address SDSF "ISFACT 'ST' TOKEN('"TOKEN.ix"')",
000071                   "PARM(NP '?')",
000072                   "(PREFIX JDS_)"

```


RGEN Generated Exec

```

SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL          Columns 00001 00072
Command ==>>          Scroll ==>> HALF
000073      1rc=rc
000074
000075      call msgrtn "ISFACT NP('?)" /* List messages */
000076      if 1rc<>0 then
000077          do
000078              Say "*** ISFACT failed with rc="1rc"."
000079              exit 20
000080          end
000081
000082      call colsrtn isfrows2 JDS_ JDS_sdsfocls
000083
000084      isflinelim = 1000
000085
000086      /*-----*/
000087      /* Loop for all lines */
000088      /*-----*/
000089      do until isfstartlinetoken=''
000090
000091          /*-----*/
000092          /* Issue ISFBROWSE for the row identified */
000093          /* by the token variable */
000094          /*-----*/
000095          Address SDSF "ISFBROWSE 'ST' TOKEN('"JDS_TOKEN.1"')"
000096          1rc=rc

```

RGEN Generated Exec

```
SDSF EDIT      RGEN TS5485.RS86.SPFTEMP1.CNTL           Columns 00001 00072
Command ===>                                         Scroll ===> HALF
000097
000098      call msgrtn "ISFBROWSE"
000099      if lrc<>0 then /* If request failed */
000100          do
000101              say "*** ISFBROWSE failed with rc="lrc"."
000102              Exit 20
000103          end
000104
000105      isfstartlinetoken=isfnextlinetoken /* Next token */
000106
000107      do lineix=1 to isfline.0
000108          say isfline.lineix
000109      end
000110      end /* For all lines */
000111
000112      end /* If fixed field matched */
000113 end /* For all rows */
000114
000115 rc=isfcalls('OFF')
000116
000117 Exit 0
```

Using NoModify Option

- Row tokens are generated by default
- Row token used to identify the row for a subsequent action
- Suppress generation when row will not be modified (i.e. no actions will be performed)
 - Improves performance
 - Reduces storage utilization
- Address SDSF “isfexec st **(nomodify)**”
 - The **token.** stem will not be generated

Using Stem Notation for isfact

- Specifying isfact row token
 - Single row token
 - List of row tokens
 - Stem variable containing row tokens
- Stem variable useful when modifying multiple rows
 - Can be done in a single request
- Pair with isfexec
 - isfexec creates the token stem
 - isfact **token((token.))**

Using Verbose Option

- Add verbose option to list all SDSF special variables read or set
- Messages returned in the **isfmsg2** stem
 - May cause many messages to be issued
- Helpful when you expect data to be returned in a variable but not found
 - Common problem when changing stem prefix
- Address SDSF “isfexec st **(verbose)**”

Using Verbose Option

```
Address SDSF "isfexec st (verbose)"
do ix=1 to isfmsg2.0
  Say isfmsg2.ix
end
```

```
ISF147I REXX variable SDSFFILTER fetched, return code 00000001 value is ''.
ISF147I REXX variable ISFFILTER fetched, return code 00000001 value is ''.
ISF147I REXX variable SDSFFILTERMODE fetched, return code 00000001 value is
''.
ISF147I REXX variable ISFFILTERMODE fetched, return code 00000001 value is
''.
ISF147I REXX variable SDSFSORT fetched, return code 00000001 value is ''.
ISF147I REXX variable ISFSORT fetched, return code 00000001 value is ''.
ISF146I REXX variable JNAME.1 set, return code 00000001 value is 'TS5485'.
ISF146I REXX variable TOKEN.1 set, return code 00000001 value is
'6ysXMjwso5KjY
ISF146I REXX variable ROWACTIVE.1 set, return code 00000001 value is 'Y'.
ISF146I REXX variable JOBID.1 set, return code 00000001 value is 'TSU02414'.
ISF146I REXX variable OWNERID.1 set, return code 00000001 value is 'TS5485'.
ISF146I REXX variable JPRIOR.1 set, return code 00000001 value is '15'.
ISF146I REXX variable QUEUE.1 set, return code 00000001 value is 'EXECUTION'.
ISF146I REXX variable JCLASS.1 set, return code 00000001 value is ''.
ISF146I REXX variable POS.1 set, return code 00000001 value is ''.
```

Searching Help System

- Use SEARCH command to find a word or phrase in the help system
- Displays a pop-up showing all help panels that contain the word or phrase
- Select the panel

Searching Help System

```
Display Filter View Print Options Search Help
-----
HQX77A0 ----- SDSF PRIMARY OPTION MENU -----
COMMAND INPUT ==> search isfact                      SCROLL ==> HALF

DA   Active users
I   Input queue
O   Output queue
H   Held output queue
ST  Status of jobs
JG  Job groups

INIT Initiators
PR  Printers
PUN PUNCHES
RDR Readers
LINE Lines
NODE Nodes
```

Enter search term

Searching Help System

```
Command ==>>                                Search Help                                Row 1 to 16 of 71
Search for: ISFACT                                Show titles
Select a search result to display the help panel.
indicates that the row data will not be modified by ISFACT
(overtypes) allowed on a single ISFACT request.
Explanation: A row token referenced on an ISFACT request has failed
be passed unmodified to SDSF on the ISFACT command. Some of the
exists was encountered during processing of an ISFACT command.
unique was encountered during processing of an ISFACT command.
then retry the ISFACT request.
be modified was encountered during processing of an ISFACT
was encountered during processing of an ISFACT command.
on the ISFACT command:
blanks when processing an ISFACT command. The request is
Explanation: On an ISFACT command, the data to modify column
Explanation: A command, command, that is not acceptable to ISFACT
was encountered while processing an ISFACT command.
Response: Ensure that the command used on ISFACT references a
ISFEXEC or ISFACT.
```

Questions ?