



Spool Excel

User Guide

One of the more demanded formats of the users for getting the information from the reports is Excel format.

Reporting Software
i5/iSeries/AS400

SpoolFactory has created a tool for conversion of iSeries/AS400 reports to Excel format by using of XML technology, with XML for Excel 2003 format.

Brief description of Spool Excel tool

Features of Spool Excel:

- Extraction of 10 data fields from the report
- Title in the reports, specifying row and column where it will be placed in Excel
- Description (header) of the extracted fields, allowing to specify width of Excel columns, and to include empty columns as separator
- Automatic management of numeric fields
- Generation of the resulting files in IFS or/and in traditional AS400 file system

Limitations when the tool is not registered

- If the tool is not registered, then it can process reports with a maximum of 5 pages (and a maximum of 500 records)

At the end of the document is shown an example of Excel conversion using Spool Excel.

Download and Software Installation

Spool Excel is included in the same package that Spool Converter Pro, so installing this software Spool Excel will be available.

Next is explained how to install the software in the AS400, and a way to upload the save file (downloaded from the web) from the PC to the AS400.

Important: At examples is used the name SAVFSPL317 for the name of the save file.
At download time from the web, could be available with other different name.

Software Installation

Create library SPLFACTORY

On the command line, type
CRTLIB SPLFACTORY

Create savf file SAVFSPLPDF in library SPLFACTORY

On the command line, type
CRTSAVF SPLFACTORY/SAVFSPL317

Transfer the SAVFSPL317 savf file from your PC to the iSeries library SPLFACTORY. See section at right for an explanation.

Restore the objects from the savf file to the SPLFACTORY library.

On the command line, type:
RSTOBJ OBJ(*ALL) SAVLIB(SPLFACTORY)
DEV(*SAVF) SAVF(SPLFACTORY/SAVFSPL317)
RSTLIB(SPLFACTORY)

Upload savf to the iSeries using FTP

All the objects necessary to run Spool Converter Professional are contained in the iSeries savf named SAVFSPL317

Important: the savf file can be available with other different name.

Use your PC's FTP client to send the savf file to the iSeries file SPLFACTORY/SAVFSPL317

```
ftp yoursystemname (system will ask user & pwd)
bin
cd SPLFACTORY
put SAVFSPL317
quit
```

How to use Spool Excel

We can access to the utility with SPOOLEXCEL command available in SPLFACTORY library. To identify the spooled file to process, it is required some information similar to system command CPYSPLF.

In addition, you can specify some parameters:

Title Text

It defines the title of the report in the Excel document

At Row

Specifies the row where the title must be placed

At Column

Specifies the column where the title must be placed

Empty Rows After Title

Number of separator columns between title and data

Title Alignment

It is an option for text alignment. Values: *CENTER (default), *LEFT, *RIGHT

Localize Text (Identify Record)

Text to identify the record of the report from which the data will be extracted

Localize From Pos

Initial position in the record where is located the text to localize

Localize To Pos

Final position in the record where is located the text to localize

Field Description

Text header to place in the column where the first extracted data field will be located

Locate From Pos

The initial position in the record where is located the data to extract

Locate To Pos

Final position in the record where is located the data to extract

Width of Column

Width of the Excel column where the first extracted data field will be located

Empty Previous Columns

Number of empty columns, placed as separator, previous to the data field

Width of Empty Columns

The width of the empty columns

Header Field Alignment

Option for text alignment. Values: *CENTER (default), *LEFT, *RIGHT

Force to Alphanumeric

The generator applies the type of field (numeric or alphanumeric) depending on the content of the first processed record in the report, but it could happen that the column contains numeric fields. At this case, we can oblige to the software to define the field as numeric, but is needed to keep in mind that the cells containing alphanumeric text will appear justified at left, and the cells containing numeric text will appear justified at right, so the appearance of the column could not be nice.

Right to Left text

Option only for Hebrew and Arabic languages

Field Description (2 to 10)

There is the possibility to specify until other 9 data fields.
The parameters are the same that the explained for first data field.

Char Code for #

Numeric code of # character.
Only applies to the machines having problems transferring this character

**If you get this error, please, refer to the end of this document
where is explained how to solve this problem**

Note: Extension of the IFS generated file is .xml
Excel 2003 will open the generated files as spreadsheets

Next are shown the screens of SPOOLEXCEL command

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Spooled File . . . . . _____ Name
Job name . . . . . * _____ Name, *
  User . . . . . _____ Name
  Number . . . . . _____ 000000-999999
Spool File Number . . . . . *ONLY _____ 1-999999, *ONLY, *LAST
To data base file . . . . . *NONE _____ Name, *NONE
  Library . . . . . *LIBL _____ Name, *LIBL, *CURLIB
  To member . . . . . *FIRST _____ Name, *FIRST
To IFS File . . . . . _____
  To IFS Path . . . . . _____

More...

F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag Name (Internal) . . . . .  TITLE _____ Name
  Title Text . . . . . _____

-----
  At Row . . . . . 01 _____ 01-10
  At Column . . . . . 01 _____ 01-10
  Empty Rows After Title . . . . . 01 _____ 01-10
  Title Color . . . . . *BLACK _____ Character value, *BLACK...
  Title Alignment . . . . . *LEFT _____ Character value, *CENTER...
Tag Identify Record (Internal) . . . . . RECORD _____ Name
  Text to Localize . . . . . _____
  Localize From Pos . . . . . _____ 001-198
  Localize To Pos . . . . . _____ 001-198

More...

F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for First Data (Internal) . . . DATAFIELD_   Name
Description for Data Field . . . _____
Locate Data Field From Pos . . . _____   001-198
Locate Data Field To Pos . . . _____   001-198
Width of Column . . . . . *DEF   001-300, *DEF
Empty Columns Previous . . . . . 00   00-10
Width of Empty Columns . . . . . *DEF   001-300, *DEF
Header Color . . . . . *BLACK   Character value, *BLACK...
Header Alignment . . . . . *CENTER   Character value, *CENTER...

More...

F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys

```

Intermediate screens are not shown due to are for the rest of the Field Descriptions if the fields to extract from the report.

The last screen is different due to it includes the last parameter of the command.

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for Tenth Data (Internal) . . . DATAFIELD_   Name
Description for Data Field . . . _____
Locate Data Field From Pos . . . _____   001-198
Locate Data Field To Pos . . . _____   001-198
Width of Column . . . . . *DEF   001-300, *DEF
Empty Columns Previous . . . . . 00   00-10
Width of Empty Columns . . . . . *DEF   001-300, *DEF
Header Color . . . . . *BLACK   Character value, *BLACK...
Header Alignment . . . . . *CENTER   Character value, *CENTER...
Char code for # . . . . . *DEF   000-192, *DEF

Bottom

F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys

```

Next are examples with the Output of DSPOBJD system command

Definition of the spooled file to process, and where the file has to be generated, in traditional AS400 file system, in IFS, or in both (as in this example)

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Label . . . . .
Spooled File . . . . . > QPRTOBJD      Name
Job name . . . . .      *          Name, *
  User . . . . .          _____ Name
  Number . . . . .       _____ 000000-999999
Spool File Number . . . . . *ONLY      1-999999, *ONLY, *LAST
To data base file . . . . . > TESTEXCEL  Name, *NONE
  Library . . . . .      > QGPL          Name, *LIBL, *CURLIB
  To member . . . . .    *FIRST        Name, *FIRST
To IFS File . . . . .    > TESTEXCEL
  To IFS Path . . . . .  > '/home/mypath'
  
```

Definition of the Title, at Row 2, Column 4, with 2 blanks rows after Title

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag Title (Internal) . . . . . > TITLE      Name
  Title Text . . . . .      > 'Test Report - Output of DSPOBJD Command'
-----
  At Row . . . . .          > 02          01-10
  At Column . . . . .       > 04          01-10
  Empty Rows After Title . . . . . > 02          01-10
  Title Color . . . . .     *BLACK      Character value, *BLACK...
  Title Alignment . . . . . *LEFT       Character value, *CENTER...
Tag Identify Record (Internal) > RECORD      Name
  Text to Localize . . . . . > *FILE
  Localize From Pos . . . . . > 017         001-198
  Localize To Pos . . . . .  > 021         001-198
  
```

Definition of the fields to extract (Object, Type, Attribute, Size and Description)

We have to define the initial and final (from/to) positions of the fields, and depending of the fields, we modify the width of the columns (default value is 60).
 For Object and Size, we define one empty column (with width 40) previous to those fields.

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for First Data (Internal) . . > DATAFIELD      Name
Description for Data Field . . > 'Object'
Locate Data Field From Pos . . > 002          001-198
Locate Data Field To Pos . . . > 011          001-198
Width of Column . . . . . > 080          001-300, *DEF
Empty Columns Previous . . . . > 01           00-10
Width of Empty Columns . . . . > 040          001-300, *DEF
Header Color . . . . . > *BLACK         Character value, *BLACK...
Header Alignment . . . . . > *CENTER        Character value, *CENTER...
Force to Alphabetic . . . . . > *NO           Character value, *NO, *YES
Right To Left Text . . . . . > *NO           Character value, *NO, *YES
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for Second Data (Internal) > DATAFIELD      Name
Description for Data Field . . > 'Type'
Locate Data Field From Pos . . > 017          001-198
Locate Data Field To Pos . . . > 026          001-198
Width of Column . . . . . > *DEF          001-300, *DEF
Empty Columns Previous . . . . > 00           00-10
Width of Empty Columns . . . . > *DEF          001-300, *DEF
Header Color . . . . . > *BLACK         Character value, *BLACK...
Header Alignment . . . . . > *CENTER        Character value, *CENTER...
Force to Alphabetic . . . . . > *NO           Character value, *NO, *YES
Right To Left Text . . . . . > *NO           Character value, *NO, *YES
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for Third Data (Internal) . . > DATAFIELD_ Name
  Description for Data Field . . > 'Attribute'
  Locate Data Field From Pos . . > 030           001-198
  Locate Data Field To Pos . . . > 039           001-198
  Width of Column . . . . . > *DEF           001-300, *DEF
  Empty Columns Previous . . . . > 00           00-10
  Width of Empty Columns . . . . > *DEF           001-300, *DEF
  Header Color . . . . . > *BLACK        Character value, *BLACK...
  Header Alignment . . . . . > *CENTER       Character value, *CENTER...
  Force to Alphabetic . . . . . > *NO           Character value, *NO, *YES
  Right To Left Text . . . . . > *NO           Character value, *NO, *YES
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for Fourth Data (Internal) > DATAFIELD_ Name
  Description for Data Field . . > 'Size'
  Locate Data Field From Pos . . > 050           001-198
  Locate Data Field To Pos . . . > 060           001-198
  Width of Column . . . . . > *DEF           001-300, *DEF
  Empty Columns Previous . . . . > 01           00-10
  Width of Empty Columns . . . . > 030           001-300, *DEF
  Header Color . . . . . > *BLACK        Character value, *BLACK...
  Header Alignment . . . . . > *CENTER       Character value, *CENTER...
  Force to Alphabetic . . . . . > *NO           Character value, *NO, *YES
  Right To Left Text . . . . . > *NO           Character value, *NO, *YES
  
```

```

Spool to Excel (SPOOLEXCEL)

Type choices, press Enter.

Tag for Fifth Data (Internal) . . > DATAFIELD_ Name
  Description for Data Field . . > 'Description'
  Locate Data Field From Pos . . > 066           001-198
  Locate Data Field To Pos . . . > 120           001-198
  Width of Column . . . . . > 240           001-300, *DEF
  Empty Columns Previous . . . . > 00           00-10
  Width of Empty Columns . . . . > *DEF           001-300, *DEF
  Header Color . . . . . > *BLACK        Character value, *BLACK...
  Header Alignment . . . . . > *CENTER       Character value, *CENTER...
  Force to Alphabetic . . . . . > *NO           Character value, *NO, *YES
  Right To Left Text . . . . . > *NO           Character value, *NO, *YES
  
```

Result obtained with the previous definition

Example with definition of Title, Header Fields and Column Separators

	A	B	C	D	E	F	G	H	
1									
2				Test Report - Output of DSPJOB Command					
3									
4									
5		Object	Type	Attribute		Size	Description		
6		SPFPAUT	*FILE	PF		57.344	SpoolFactory - Automatic Process Rules		
7		SPFPCHART	*FILE	PF		69.632	SpoolFactory - Data Chart		
8		SPFPDBG	*FILE	PF		28.672	SpoolFactory - Debug process		
9		SPFPFNT	*FILE	PF		278.528	SpoolFactory - Fonts		
10		SPFPIMGGAUX	*FILE	PF		782.336	SpoolFactory - Images - RGB Data - Auxiliar		
11		SPFPIMGRGB	*FILE	PF		1.728.512	SpoolFactory - Images - RGB Data		
12		SPFPLST	*FILE	PF		53.248	SpoolFactory - List of Spool in Outq		
13		SPFPOBJ	*FILE	PF		196.608	Output file for DSPJOB		
14		SPFPPDF	*FILE	PF		53.248	SpoolFactory - PDF Format - Work File		
15		SPFPPDFFMT	*FILE	PF		28.672	SpoolFactory - PDF Format - Final Result		
16		SPFPPRINT	*FILE	PRTF		4.096	Printer File		
17		SPFPPRINT2	*FILE	PRTF		4.096	SpoolFactory - Printer File for SPLSPLIT2		
18		SPFPREF	*FILE	PF		53.248	SpoolFactory - References		
19		SPFPREFFLD	*FILE	PF		28.672	SpoolFactory - Fields for Refld		
20		SPFPRESA	*FILE	PF		57.344	SpoolFactory - Result Automatic Process Rules		
21		SPFPRUL	*FILE	PF		126.976	SpoolFactory - Rules		
22		SPFPRUN	*FILE	PF		61.440	SpoolFactory - Rules Names		
23		SPFPSPLITW	*FILE	PF		53.248	SpoolFactory - Spool Split File - Work		
24		SPFP1TAG1	*FILE	PF		28.672	SpoolFactory - Html Tags Ini		
25		SPFP1TAG2	*FILE	PF		28.672	SpoolFactory - Html Tags Fin		
26		SPFPTST01	*FILE	PF		28.672	SpoolFactory - Test 01		
27		SPFPUSR	*FILE	PF		57.344	SpoolFactory - User Preferences		
28		SPFPXML	*FILE	PF		53.248	SpoolFactory - XML Format - Work File		
29		SPFPXMLFMT	*FILE	PF		28.672	SpoolFactory - XML Format - Final Result		
30									
31									
32									

Report

Results obtained varying the parameters related with colour

Title in Blue and Header Fields in Green

	A	B	C	D	E	F	G	H	
1									
2				Test Report - Output of DSPOBJD Command					
3									
4									
5		Object	Type	Attribute		Size	Description		
6		SPFPAUT	*FILE	PF		57.344	SpoolFactory - Automatic Process Rules		
7		SPFPCHART	*FILE	PF		69.632	SpoolFactory - Data Chart		
8		SPFPDBG	*FILE	PF		28.672	SpoolFactory - Debug process		
9		SPFPFNT	*FILE	PF		278.528	SpoolFactory - Fonts		
10		SPFPIMGAUX	*FILE	PF		782.336	SpoolFactory - Images - RGB Data - Auxiliar		
11		SPFPIMGRGB	*FILE	PF		1.728.512	SpoolFactory - Images - RGB Data		
12		SPFPLST	*FILE	PF		53.248	SpoolFactory - List of Spool in Outq		
13		SPFPOBJ	*FILE	PF		196.608	Output file for DSPOBJD		
14		SPFPPDF	*FILE	PF		53.248	SpoolFactory - PDF Format - Work File		
15		SPFPDFFMT	*FILE	PF		28.672	SpoolFactory - PDF Format - Final Result		
16		SPFPPRINT	*FILE	PRTF		4.096	Printer File		
17		SPFPPRINT2	*FILE	PRTF		4.096	SpoolFactory - Printer File for SPLSPLIT2		
18		SPFPREF	*FILE	PF		53.248	SpoolFactory - References		
19		SPFPREFFLD	*FILE	PF		28.672	SpoolFactory - Fields for Reflfd		
20		SPFPRESA	*FILE	PF		57.344	SpoolFactory - Result Automatic Process Rules		
21		SPFPRUL	*FILE	PF		126.976	SpoolFactory - Rules		
22		SPFPRUN	*FILE	PF		61.440	SpoolFactory - Rules Names		
23		SPFPSPLITW	*FILE	PF		53.248	SpoolFactory - Spool Split File - Work		
24		SPFPTAG1	*FILE	PF		28.672	SpoolFactory - Html Tags Ini		
25		SPFPTAG2	*FILE	PF		28.672	SpoolFactory - Html Tags Fin		
26		SPFPTEST01	*FILE	PF		28.672	SpoolFactory - Test 01		
27		SPFPUSR	*FILE	PF		57.344	SpoolFactory - User Preferences		
28		SPFPXML	*FILE	PF		53.248	SpoolFactory - XML Format - Work File		
29		SPFPXMLFMT	*FILE	PF		28.672	SpoolFactory - XML Format - Final Result		
30									
31									
32									

Report /

Title in Red and Header Fields in Blue

	A	B	C	D	E	F	G	H
1								
2				Test Report - Output of DSPOBJD Command				
3								
4								
5		Object	Type	Attribute		Size	Description	
6		SPFFAUT	*FILE	PF		57.344	SpoolFactory - Automatic Process Rules	
7		SPFFCHART	*FILE	PF		69.632	SpoolFactory - Data Chart	
8		SPFFDBG	*FILE	PF		28.672	SpoolFactory - Debug process	
9		SPFFFONT	*FILE	PF		278.528	SpoolFactory - Fonts	
10		SPFFIMGAUX	*FILE	PF		782.336	SpoolFactory - Images - RGB Data - Auxiliar	
11		SPFFIMGRGB	*FILE	PF		1.728.512	SpoolFactory - Images - RGB Data	
12		SPFFPLST	*FILE	PF		53.248	SpoolFactory - List of Spool in Outq	
13		SPFFPOBJ	*FILE	PF		196.608	Output file for DSPOBJD	
14		SPFFPDF	*FILE	PF		53.248	SpoolFactory - PDF Format - Work File	
15		SPFFPDFFMT	*FILE	PF		28.672	SpoolFactory - PDF Format - Final Result	
16		SPFFPRINT	*FILE	PRTF		4.096	Printer File	
17		SPFFPRINT2	*FILE	PRTF		4.096	SpoolFactory - Printer File for SPLSPLIT2	
18		SPFFPREF	*FILE	PF		53.248	SpoolFactory - References	
19		SPFFPREFFLD	*FILE	PF		28.672	SpoolFactory - Fields for Reflid	
20		SPFFPRESA	*FILE	PF		57.344	SpoolFactory - Result Automatic Process Rules	
21		SPFFRUL	*FILE	PF		126.976	SpoolFactory - Rules	
22		SPFFRUN	*FILE	PF		61.440	SpoolFactory - Rules Names	
23		SPFFSPLITW	*FILE	PF		53.248	SpoolFactory - Spool Split File - Work	
24		SPFFTAG1	*FILE	PF		28.672	SpoolFactory - Html Tags Ini	
25		SPFFTAG2	*FILE	PF		28.672	SpoolFactory - Html Tags Fin	
26		SPFFTEST01	*FILE	PF		28.672	SpoolFactory - Test 01	
27		SPFFUSR	*FILE	PF		57.344	SpoolFactory - User Preferences	
28		SPFFXML	*FILE	PF		53.248	SpoolFactory - XML Format - Work File	
29		SPFFXMLFMT	*FILE	PF		28.672	SpoolFactory - XML Format - Final Result	
30								
31								
32								

Title in Red and Header Fields in Blue, except Description in Red

	A	B	C	D	E	F	G	H
1								
2				Test Report - Output of DSPOBJD Command				
3								
4								
5		Object	Type	Attribute		Size	Description	
6		SPFFAUT	*FILE	PF		57.344	SpoolFactory - Automatic Process Rules	
7		SPFFCHART	*FILE	PF		69.632	SpoolFactory - Data Chart	
8		SPFFDBG	*FILE	PF		28.672	SpoolFactory - Debug process	
9		SPFFFONT	*FILE	PF		278.528	SpoolFactory - Fonts	
10		SPFFIMGAUX	*FILE	PF		782.336	SpoolFactory - Images - RGB Data - Auxiliar	
11		SPFFIMGRGB	*FILE	PF		1.728.512	SpoolFactory - Images - RGB Data	
12		SPFFPLST	*FILE	PF		53.248	SpoolFactory - List of Spool in Outq	
13		SPFFPOBJ	*FILE	PF		196.608	Output file for DSPOBJD	
14		SPFFPDF	*FILE	PF		53.248	SpoolFactory - PDF Format - Work File	
15		SPFFPDFFMT	*FILE	PF		28.672	SpoolFactory - PDF Format - Final Result	
16		SPFFPRINT	*FILE	PRTF		4.096	Printer File	
17		SPFFPRINT2	*FILE	PRTF		4.096	SpoolFactory - Printer File for SPLSPLIT2	
18		SPFFPREF	*FILE	PF		53.248	SpoolFactory - References	
19		SPFFPREFFLD	*FILE	PF		28.672	SpoolFactory - Fields for Reflid	
20		SPFFPRESA	*FILE	PF		57.344	SpoolFactory - Result Automatic Process Rules	
21		SPFFRUL	*FILE	PF		126.976	SpoolFactory - Rules	
22		SPFFRUN	*FILE	PF		61.440	SpoolFactory - Rules Names	
23		SPFFSPLITW	*FILE	PF		53.248	SpoolFactory - Spool Split File - Work	
24		SPFFTAG1	*FILE	PF		28.672	SpoolFactory - Html Tags Ini	
25		SPFFTAG2	*FILE	PF		28.672	SpoolFactory - Html Tags Fin	
26		SPFFTEST01	*FILE	PF		28.672	SpoolFactory - Test 01	
27		SPFFUSR	*FILE	PF		57.344	SpoolFactory - User Preferences	
28		SPFFXML	*FILE	PF		53.248	SpoolFactory - XML Format - Work File	
29		SPFFXMLFMT	*FILE	PF		28.672	SpoolFactory - XML Format - Final Result	
30								
31								
32								

How to solve the problem with Number Sign # character

In some machines could happen that transferring of Number Sign # character could be not correct. At this case, we would get in Excel an error similar to this:



For solving this problem, you must specify at SPOOLEXCEL command the mapping translation code for this special character.

Next is explained how to find this code:

- 1- At command line execute SPLFACPRE command, and when appears the screen, press F10 to access to special characters screen, and at this screen press F10 to generate a test spooled file. The program generates a spool file with a list of characters, each one with its corresponding code
- 2- The generated spool file must be transferred to the PC, by using CPYSPLF command or with Spool Converter Pro command SPLTXTPRO, to generate a file with the content of the spool file and transferring to PC for doing the next step
- 3- Open the transferred file with Notepad or any Windows text editor
- 4- Search the # character and its associated numeric code

With this numeric code there are two different ways to solve the problem:

- 1- Specifying it at SPOOLEXCEL command with the specific parameter for this issue
 - 2- Keeping this code in a permanent way for the software
- Executing SPLFACPRE command, at screen press F10 to access to the special characters screen, and fill the numeric code at fourth field at left table (see image)



End of Document