

### **What are the differences between SAP Scripts and Smartforms?**

SAP Scripts are client dependent whereas Smartforms are client independent.

SAP Scripts require a driver program to display the output whereas in smartforms the form routines can be written so that it is standalone.

An integrated Form Builder helps to design Smartforms more easily than SAP Scripts

An Table Painter and Smartstyles to assist in building up the smartforms

On activation a function module is generated for Smartforms

It is possible to create a Smartform without a main window

Smartforms generates XML output which can be viewed through the web

Multiple page formats is possible in smartforms

### **How can I insert symbols in Smartforms?**

Select the Text node.

Change Editor (Click the button above Check near the Editor)

Go to menu Include->Characters->SAP Symbols

Choose the SAP symbol that you want to insert.

### **I have a smartform which works fine in DEV. After transporting it to PROD, there is no Function module generated for this smartform. As a result my program dumps in PROD?**

The Smartform that is created in the Development may not have the same name in the Production server. So it is always advised to use the Function Module SSF\_FUNCTION\_MODULE\_NAME to get the Function Module name by passing the Smartform name.

```
DATA: fm_name TYPE rs38l_fnam.
```

```
CALL FUNCTION 'SSF_FUNCTION_MODULE_NAME'  
EXPORTING  
  formname = 'ZSMARTFORM'  
IMPORTING  
  fm_name = fm_name  
EXCEPTIONS  
  no_form = 1  
  no_function_module = 2  
  OTHERS = 3.  
IF sy-subrc <> 0.  
  MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno  
  WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.  
ENDIF.
```

```
CALL FUNCTION fm_name  
EXCEPTIONS  
  formatting_error = 1  
  internal_error = 2  
  send_error = 3  
  user_canceled = 4  
  OTHERS = 5.  
IF sy-subrc <> 0.  
  MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno  
  WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.  
ENDIF.
```

How can I make the Smartforms to choose a printer name by default?  
In the CALL FUNCTION of the Smartform Function Module, set the output options parameter to set the printer name.

The output options is of the type SSFCOMPOP which contains the field TDDEST. Set the TDDEST field to your default printer name.

### **How can I make the Smartforms to display a print preview by default without displaying the popup for print parameters?**

In the SSF\_OPEN function module,  
Set the OUTPUT\_OPTIONS parameter TDDEST to your printer name.  
Set the CONTROL\_PARAMETERS and control parameters as shown below,

```
control-preview = 'X'.
control-no_open = 'X'.
control-no_close = 'X'.
control-no_dialog = 'X'.
control-device = 'PRINTER'.
control_parameters-no_dialog = 'X'.
control_parameters-no_open = 'X'.
control_parameters-no_close = 'X'.
OUTPUT_OPTIONS-TDDEST = 'PRINTER NAME'.
OUTPUT_OPTIONS-TDNOPRINT = 'X'.
```

CALL FUNCTION 'SSF\_OPEN'

EXPORTING

output\_options = output\_options

control\_parameters = control

user\_settings = ''

EXCEPTIONS

formatting\_error = 1

internal\_error = 2

send\_error = 3

user\_canceled = 4

OTHERS = 5.

IF sy-subrc <> 0.

MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno

WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.

ENDIF.

### **How can I display the total number of pages in Smartforms?**

Use SFSY-FORMPAGES to display the total number of pages in the Smartforms

& SFSY-PAGE& Current page number

& SFSY-FORMPAGE& Total number of pages in the currently formatted layout set

& SFSY-JOBPAGE& Total number of pages in the currently formatted print request

& SFSY-COPYCOUNT& Original-1, 1st copy-2

& SFSY-DATE& Date

& SFSY-TIME& Time

& SFSY-USERNAME& Username

I'm using the variable SFSY-FORMPAGES, I get a star "\*" instead of the total number of pages.

There may not be enough space in the window to display the variable, either increase the window dimensions or condense the spaces using &SFSY-FORMPAGES(C)&

### **What are the various text formatting options in Smartforms?**

& symbol(Z)& Omit Leading Zeros

& symbol(S)& Omit Leading Sign

& symbol(<)& Display Leading Sign to the Left

& symbol(>)& Display Leading Sign to the Right

& symbol(C)& Compress Spaces

& symbol(.N)& Display upto N decimal places

& symbol(T)& Omit thousands separator

& symbol(R)& Right justified  
& symbol(I)& Suppress output of the initial value

### **How can I provide a background shading to the table?**

In the Table Painter, you can specify the color and shading for the table lines.

### **Where can I provide the input parameters to the smartform?**

The input parameters for the smartform can be defined in Global Settings->Form Interface.  
The Associated Type must be defined in the ABAP Dictionary.

### **Where can I define my own global types for the smartform?**

The global types(within the smartform) can be defined in Global Settings->Global Definitions->Types  
The types defined here will be global through the entire smartform.  
Also the form routines can be defined Global Settings->Global Definitions->Form Routines

### **I have defined my own Program Lines, where I have used a global variable G\_TEXT. I get an error G\_TEXT is not defined?**

Whenever using the global variables in the Program Lines, enter the variable name in Input Parameters if you are going to use(read) the variable. If you are going to both read/write the variable value enter the same in Output Parameters.

### **I have created a table node for display. Where can I check the condition which must satisfy to display the table?**

The conditions can be defined in the Conditions tab. In smartforms all the nodes have a condition tab where you can specify the condition to be satisfied to access the node.

### **How can I define Page Protect in Smartforms?**

To define Page Protect for a node go to the Output options and check the Page Protection checkbox.

### **What is the difference between Template and Table in Smartforms?**

The Template contains a fixed number of rows and columns, where the output is fixed.  
The Table can have variable number of rows

### **Where can I define the paragraph and character format for the smartforms?**

The paragraph and character format for the smartforms can be defined in the transaction SMARTSTYLES

### **How to add watermark to smartform output?**

Go to the properties of 'PAGE', tab 'Background Picture'. Add the graphic image name here

### **Forcing a page break within table loop**

Create a loop around the table. Put a Command node before the table in the loop that forces a NEWPAGE on whatever condition you want. Then only loop through a subset of the internal table (based on the conditions in the Command node) of the elements in the Table node.

### **Font style and Font size**

Goto Transaction SMARTSTYLES.

There you can create Paragraph formats etc just like in sapscrip.

Then in your window under OUTPUT OPTIONS you include this SMARTSTYLE and use the Paragraph and character formats.

### **Line in Smartform**

Either you can use a window that takes up the width of your page and only has a height of 1 mm.

Then you put a frame around it (in window output options).

Thus you have drawn a box but it looks like a line.

Or you can just draw "\_\_\_" accross the page and play with the fonts so that it joins each UNDER\_SCORE.

### **Difference between 'forminterface' and 'global definitions' in global settings of smart forms**

The Difference is as follows.

To put it very simply:

Form Interface is where you declare what must be passed in and out of the smartform (in from the print program to the smartform and out from the smartform to the print program).

Global defs. is where you declare data to be used within the smartform on a global scope.

ie: anything you declare here can be used in any other node in the form.

### **Smartforms function module name**

Once you have activated the smartform, go to the environment -> function module name. There you can get the name of function module name.

The key thing is the program that calls it. for instance, the invoice SMARTFORM LB\_BIL\_INVOICE is ran by the program RLB\_INVOICE.

This program uses another FM to determine the name of the FM to use itself. The key thing is that when it calls this FM (using a variable to store the actual name), that the parameters match the parameters in your smartform.

Another thing to note is that the FM name will change wherever the SF is transported to.

So you need to use the FM to determine the name of the SF.

Here is the code that can be used to determine the internal name of the function module:

Code:

```
if sf_label(1) <> '/'. " need to resolve by name
move sf_label to externalname.
call function 'SSF_FUNCTION_MODULE_NAME'
exporting
formname = externalname
importing
fm_name = internalname
exceptions
no_form = 1
no_function_module = 2
others = 3.
if sy-subrc <> 0.
message 'e427'.
endif.
move internalname to sf_label.
endif.
```

It checks to see if the sf\_label starts with a '/', which is how the internal names start. if it does, the name has already been converted. If not, it calls the FM and converts the name.

You would then CALL FUNCTION sf\_label.

### **Smartforms output difference**

**Problem with Smartforms: in a certain form for two differently configured printers, there seem to be a difference in the output of characters per inch (the distance between characters which gives a layout problem - text in two lines instead of one.**

It happens when the two printers having different Printer Controls' if you go to SPAD Menu (Spool Administrator Menu) you can see the difference in the Printer Control and if you make the Printer control setting for both the printers as same. then it will be ok. and also u have to check what is the device type used for both the output devices.

### **SmartForms Output to PDF**

There is a way to download smartform in PDF format.

Please do the following:

1. Print the smartform to the spool.
2. Note the spool number.
3. Download a PDF file (Acrobat Reader) version of the spool by running Program RSTXPDF4 and entering the noted spool number.

### **SmartForm Doublesided printing question**

**Your customer wants your PO SmartForm to be able to print "Terms and Conditions" on the back side of each page. They don't want to purchase pre-printed forms with the company's logo on the front and terms & conditions on the back. Now this presents an interesting**

problem.

**Has anyone else ever had a request like this? If for example there was a 3 page PO to be printed, they want 3 pieces of paper, the front side of each to contain the PO information (page 1, 2, and 3) and the back side of each piece of paper to contain the static "Terms & Conditions" information.**

**Anyone have a clue how to force this out?**

Easy - page FRONT lists page CONTACTS as next page and CONTACTS lists FRONT as next page. Since CONTACTS does not contain a MAIN window, it will print the contacts info and then continue on to FRONT for the rest of the main items. Additionally, set print mode on FRONT to D (duplex) and set CONTACTS to 'blank' (for both resource name and print mode - this is the only way to get to the back of the page).

## Transport Smart Forms

**How does one transport SMARTFORM? SE01?**

**How do you make sure that both, the SMARTFORM & it's function module gets transported? Or does the FM with same name gets generated automatically in the transported client?**

A smartform is transported no differently than any other object. if it is assigned to a development class that is attached to a transport layer, it will be transported.

The definition is transported, and when called, the function module is regenerated.

This leads to an interesting situation. On the new machine, it is very likely the function module name will be different than the name on the source system. Make sure, before you call the function module, you resolve the external name to the internal name using the 'SSF\_FUNCTION\_MODULE\_NAME' function module.

Typically, generate the SF, then use the pattern to being in the interface. Then change the call function to use the name you get back from the above function module.

**Smartforms: protect lines in main window.**

**How to protect lines in the main window from splitting between pages?**

It was easy with SAPscript, but how to do it with SF's. For 4.7 version if you are using tables, there are two options for protection against line break:

- You can protect a line type against page break.
- You can protect several table lines against page break for output in the main area.

Protection against page break for line types

- Double-click on your table node and choose the Table tab page.
- Switch to the detail view by choosing the Details pushbutton.
- Set the Protection against page break checkbox in the table for the relevant line type. Table lines that use this line type are output on one page.

Protection against page break for several table lines

- Expand the main area of your table node in the navigation tree.
- Insert a file node for the table lines to be protected in the main area.
- If you have already created table lines in the main area, you can put the lines that you want to protect against page break under the file using Drag&Drop. Otherwise, create the table lines as subnodes of the file.
- Choose the Output Options tab page of the file node and set the Page Protection option. All table lines that are in the file with the Page Protection option set are output on one page.

In 4.6, Alternatively in a paragraph format use the Page protection attribute to determine whether or not to display a paragraph completely on one page. Mark it if you want to avoid that a paragraph is split up by a page break. If on the current page (only in the main window) there is not enough space left for the paragraph, the entire paragraph appears on the next page.

How do you debug SMARTFORMS?

**A:** insert a "Program Line" node just above, where you enter BREAK statement... You may also run SFTRACE transaction (or SMARTFORM\_TRACE in releases before 6.10) to generate a log and activate break-points when abnormal events occur.

**Q:** How do you differentiate Table and Template in Smartform?

**A:** If the Output is fixed then the Template contains a fixed number of rows and columns. Otherwise the table can have variable number of rows.

**Q:** Which functions does used to use to display a print preview by default without displaying the popup for print parameters on smartforms?

**A:** Go to Function Module "SSF\_OPEN" and set the OUTPUT\_OPTIONS parameter TDDEST to your printer name.

Example:

```
control-no_dialog = 'X'.
control-device = 'PRINTER'.
control_parameters-no_dialog = 'X'.
control_parameters-no_open = 'X'.
control_parameters-no_close = 'X'.
OUTPUT_OPTIONS-TDDEST = 'PRINTER NAME'.
OUTPUT_OPTIONS-TDNOPRINT = 'X'.
CALL FUNCTION 'SSF_OPEN'
EXPORTING
output_options = output_options
control_parameters = control
user_settings = ''
EXCEPTIONS
formatting_error = 1
internal_error = 2
send_error = 3
user_canceled = 4
OTHERS = 5.
```

**Q:** How do you transport your smart forms?

**A:** As usual as a Report by using transaction code "SE10".

### **Is it possible to migrate a SAPscript form to a Smart Form?**

Smart Forms provides a migration tool for this purpose which migrates layout and texts of a SAPscript form to a Smart Form. It does not migrate SAPscript form logic of the print program. Using Smart Forms, this logic is described by the tree structure of the Form Builder. The effort involved in migrating the form logic depends on the complexity of the print program. For more information, see the section Migrating SAPscript Forms of the Smart Forms online documentation.

### **Do we have to migrate all SAPscript forms or Smart Forms to a newer form solution?**

In general, there is no immediate need to migrate existing forms. SAPscript forms and Smart Forms can still be used and will be supported in the future. If you plan to migrate a SAPscript form or Smart Form, it is recommended that you check in each individual case whether the benefit is worth the effort involved. Depending on the use case, it may make more sense to implement the form from scratch in, for example, SAP Interactive Forms by Adobe, see also the answer to question 'How do Smart Forms and SAPscript-based forms relate to SAP's new forms solution SAP Interactive Forms by Adobe?' above.

### **How can I check if there are already standard Smart Forms for my application? What can I do if this is not the case?**

To reduce implementation time for print forms development, SAP has created a set of the most commonly used forms. These preconfigured Smart Forms are delivered with SAP Best Practices in the SAP Best Practices scenarios. Depending on your requirements, and with some minor adaptations, the preconfigured Smart Forms (SMP login necessary!) can be made ready to be used in your business.

### **What is XSF?**

SAPscript offered a Raw Data Interface (BC-RDI) to allow the use of 3rd party printing tools, that is, to pass form content (without layout information) from the SAP system to an external product. Smart Forms provides a data stream called XML for Smart Forms (XSF) for this purpose. Like RDI, XSF does not contain any layout information about a Smart Form. As an SAP Partner, you can become a certified partner for the XSF interface (BC-XSF) . Smart Forms XSF output is also the precondition for generating HTML by using an XSLT program. This program uses layout information from your form (for example, used fonts, page and window sizes) and the given XML tags of XSF to generate HTML.

### **Structure of a Form**

A form contains pages, output areas (called windows), address, graphics and text data etc. In pages we specify the page layout and other general settings for the page. Windows are the output areas in a page. There are several types of windows used in a form page.

- Main Window: Contains the main continuous data and supports page break.
- Secondary window: Output the data in a fixed size area.
- Final Window: A special type of secondary window used for output the data available only at the end of form processing
- Copies Windows: A special type of secondary window used for marking the pages as copy or original.