

## Use of PDF Form on Spagic

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## 1 Document Goal

The goal of this document is to provide you the information necessary to use on PDF Form on Spagic3.3 or later versions.

The use and configuration of Scribus is outside the goal of this document.

## 2 Versions History

Version/Release n° :	1.0	Date	04/05/2011
Description	First release (English version)		
Version/Release n° :	Date		
Description			

## 3 PDF Form design

There are several design tools for PDF Form, we used Scribus as PDF Form designer.

### 3.1 Scribus

Scribus is an Open Source program that supports professional publishing features, such as color separations, CMYK and Spot Color support, ICC color management, and versatile PDF creation.

You can download it from <http://wiki.scribus.net/canvas/Download>. At now the latest stable version of scribus is 1.3.3.14.

With the PDF Form release we provided also a Scribus project template for a PDF Form document. The template document is called TemplateHumanTaskPDFForm.sla.

### 3.2 Necessary Fields

If you decide to use a PDF Form design tool different from Scribus or to create a brand new project there are a few fields you must include in your form in order to use Spagic Human Task features.

In your form you must include:

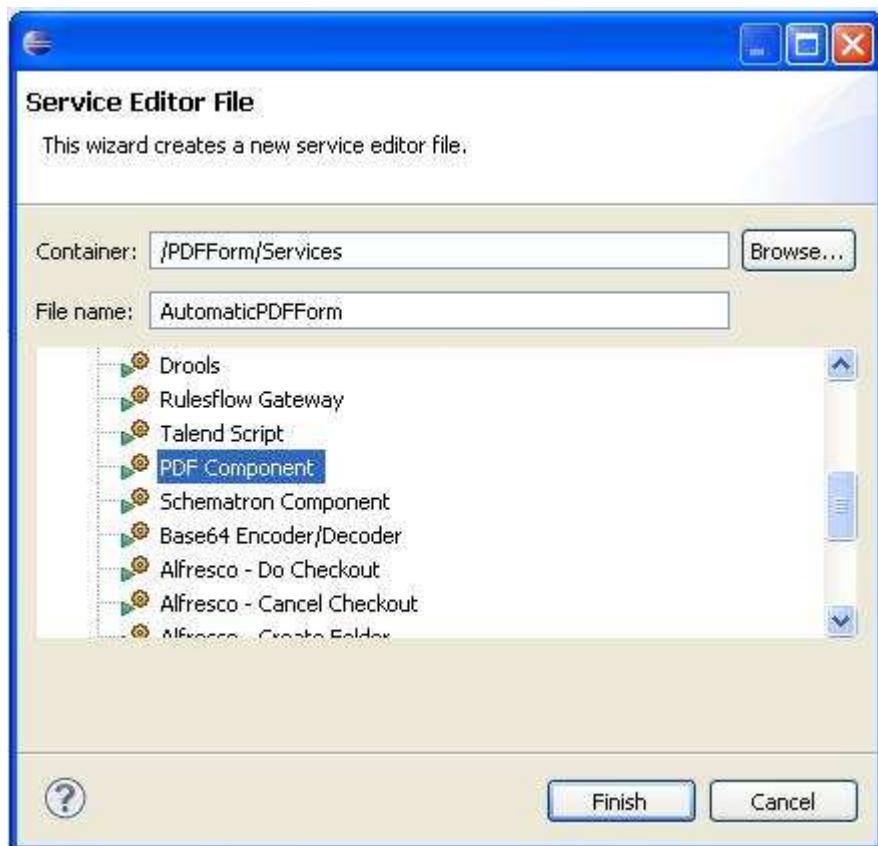
- A button with id/name: **saveButton**, URL: <http://localhost:9092/PDF/> and Submit Format: **FDF**.
- A button with id/name: **completeButton**, URL: <http://localhost:9092/PDF/> and Submit Format: **FDF**.
- A Text field with id/name: **processInstanceId** and visibility: **hidden**.
- A Text field with id/name: **taskInstanceId** and visibility: **hidden**.

## 4 Spagic Studio

There are two different PDF form components you can choose within Spagic Studio: the human task and the automatic one. Both of them supports automatic fields filling from XML\_MESSAGE.

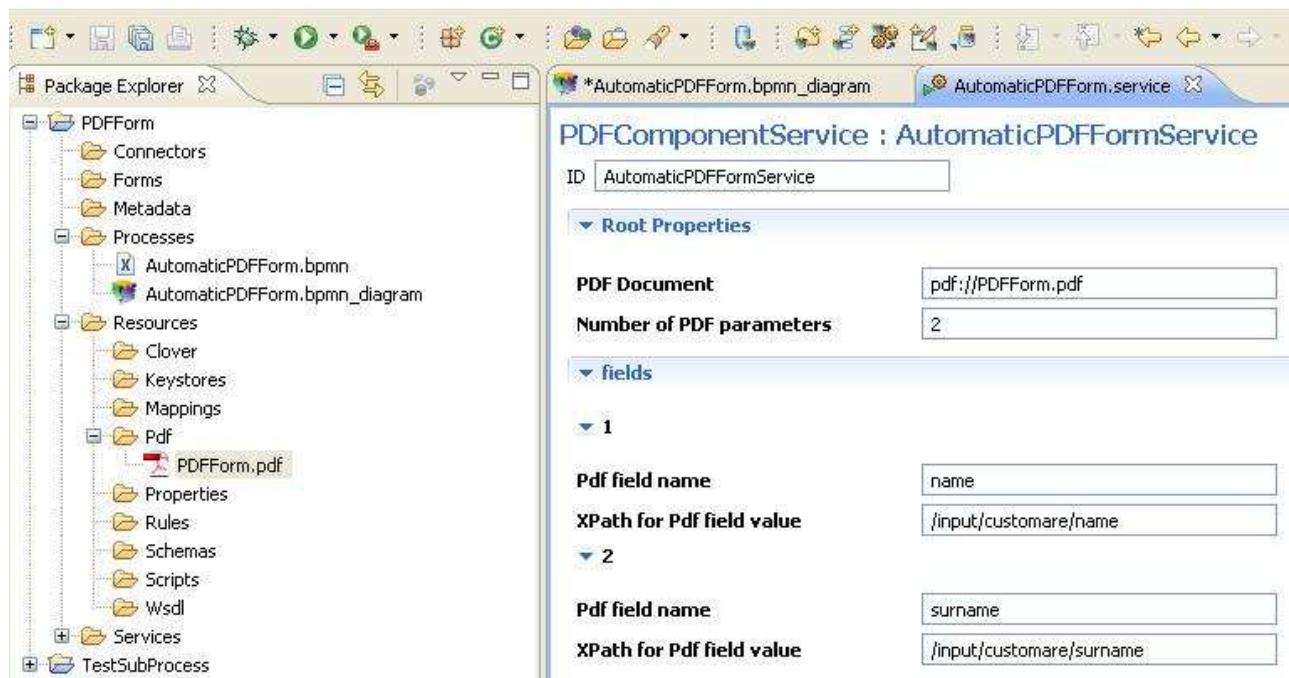
### 4.1 Automatic Task PDF Component

In order to use Automatic Task PDF form component you must create a new PDF Component available under Services list.



Once created the new service you can configure it with the Service Editor. You must specify the PDF document to fill; you can associate it with the drag&drop feature.

You can also specify the number of fields you wants to fill from XML\_MESSAGE. Once you change the value in the **Number of PDF Parameters** field you will see two new text areas appear for each field you specify. For each field you must set the text area id (inside the PDF Form) you wants to fill and the XML\_MESSAGE xpath expression to retrieve the value to use for the fill process.



The screenshot shows the Spagic IDE interface. On the left, the Package Explorer tree view contains nodes for PDFForm, Processes (with AutomaticPDFForm.bpmn and AutomaticPDFForm.bpmn\_diagram selected), Resources (including Clover, Keystores, Mappings, Pdf, Properties, Rules, Schemas, Scripts, and Wsdl), and Services. On the right, the main workspace displays the configuration for the PDFComponentService under the AutomaticPDFFormService. The configuration includes:

- ID: AutomaticPDFFormService
- Root Properties:
  - PDF Document: pdf://PDFForm.pdf
  - Number of PDF parameters: 2
- fields:
  - 1:
    - Pdf field name: name
    - XPath for Pdf field value: /input/customare/name
  - 2:
    - Pdf field name: surname
    - XPath for Pdf field value: /input/customare/surname

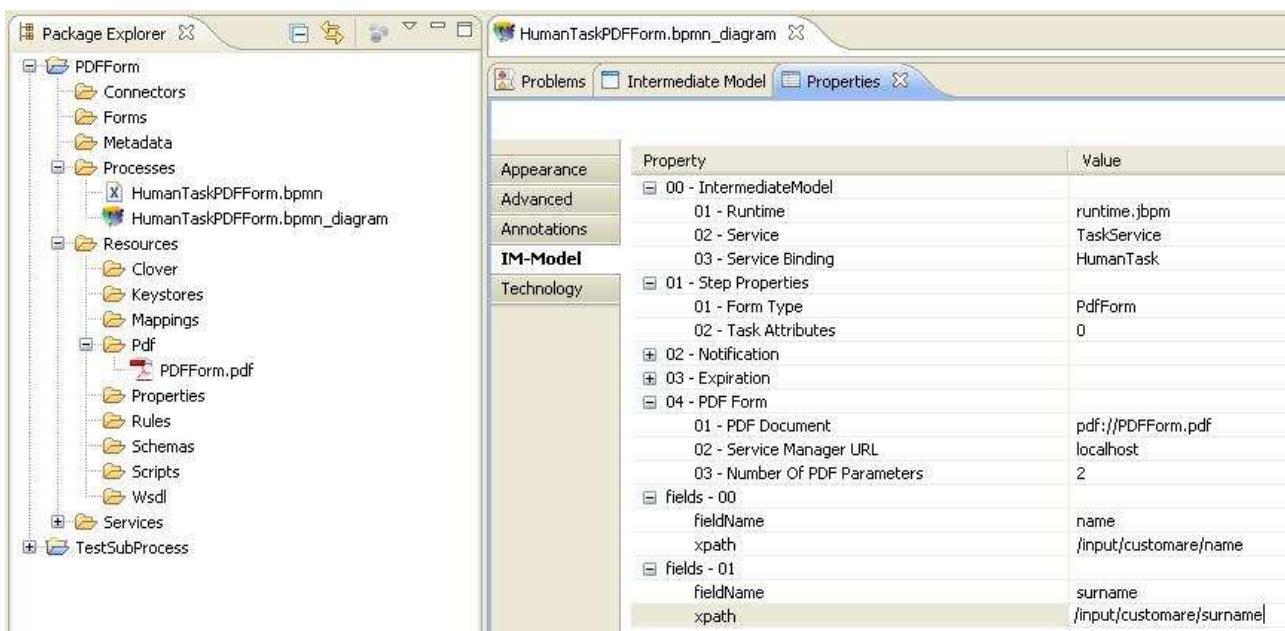
The Automatic Task PDF Component will fill the various fields you specified in the component and add the filled PDF as Attachment of the process instance.

You can retrieve it using the Spagic Console.

## 4.2 Human Task PDF Component

In order to use Human Task PDF Component you must create the table **form\_data** as explained in the following Spagic MetaDB section.

From Intermediate Model tab choose a Human Task Service and configure it as shown in the picture below. You must choose PDFForm as Form Type. In the new PDF Form section (04) appeared you must set the PDF name, the url of the machine where you installed the Spagic Service Manager and the number of fields you wants to fill in the PDF Form.



Once you change the value in the **Number of PDF Parameters** field you will see two new text areas appear for each field you specify. For each field you must set the text area id (inside the PDF Form) you wants to fill and the XML\_MESSAGE xpath expression to retrieve the value to use for the fill process.

## 5 QueryAPI and PdfObject

If you use the Human Task PDF Form you must execute it with QueryAPI methods. QueryAPI provides three methods to interact with a PDF Form:

1. `getPDF(processInstanceId, taskInstanceId);`
2. `getPdfField(fieldName, processInstanceId, taskInstanceId);`
3. `getAllPdfFields(processInstanceId, taskInstanceId);`

The first method returns a PdfObject that allows you to save the PDF document in a specific path in your filesystem or to obtain its datahandler :

```

PdfObject pdf = queryAPI.getPDF(processInstanceId, taskInstanceId);
pdf.save("C:/temp/FilledOrder.pdf");
DataHandler dh = pdf.getDataHandler("FilledOrder.pdf");
  
```

The second method returns the value of the specified PDF Form field:

```
String value = queryAPI.getPdfField("name", processInstanceId,  
taskInstanceId);
```

The third method returns a map of all the text fields of the PDF Document:

```
Map<String, String> fields = queryAPI.getAllPdfFields(processInstanceId,  
taskInstanceId);
```

In order to **Complete** the Human task and let the process to proceed it's execution you must use the `queryAPI.getPDF()` method, save the `PDFObject` obtained and click on the **COMPLETE** button placed inside the PDF Document.

## 6 Spagic MetaDB

If you use the Human Task you must create the table `form_data` into your Spagic metadb. In order to create it use the `spagic-metadb` initialisation/alter scripts provided within `spagic-metadb-version.zip` file.