Definition Forms Manager

Code: SISTRA-GSTFRM

DOCUMENT CONTROL SHEET

DOCUMENT / FILE

Title: Definition Manager Forms	File Name / s:**SISTRA-GESTORFORMULARIO.doc**
Code: **SISTRA-GSTFRM**	Software: **Word**
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Version: **2**	

RECORD OF CHANGES

Version	Pages	Reason for change
1	10	Document Creation
2	10	Save unfinished form

DISTRIBUTION OF DOCUMENT

Name	Staff

DOCUMENT CONTROL

PREPARATION	REVISED / APPROVED		ACCEPTED	ACCEPTED
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Complete with the name, signature and date   *Customers only*

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1. Introduction

The purpose of this document is to show how a new form manager, alternative to FORMS, can be defined in processing platform.
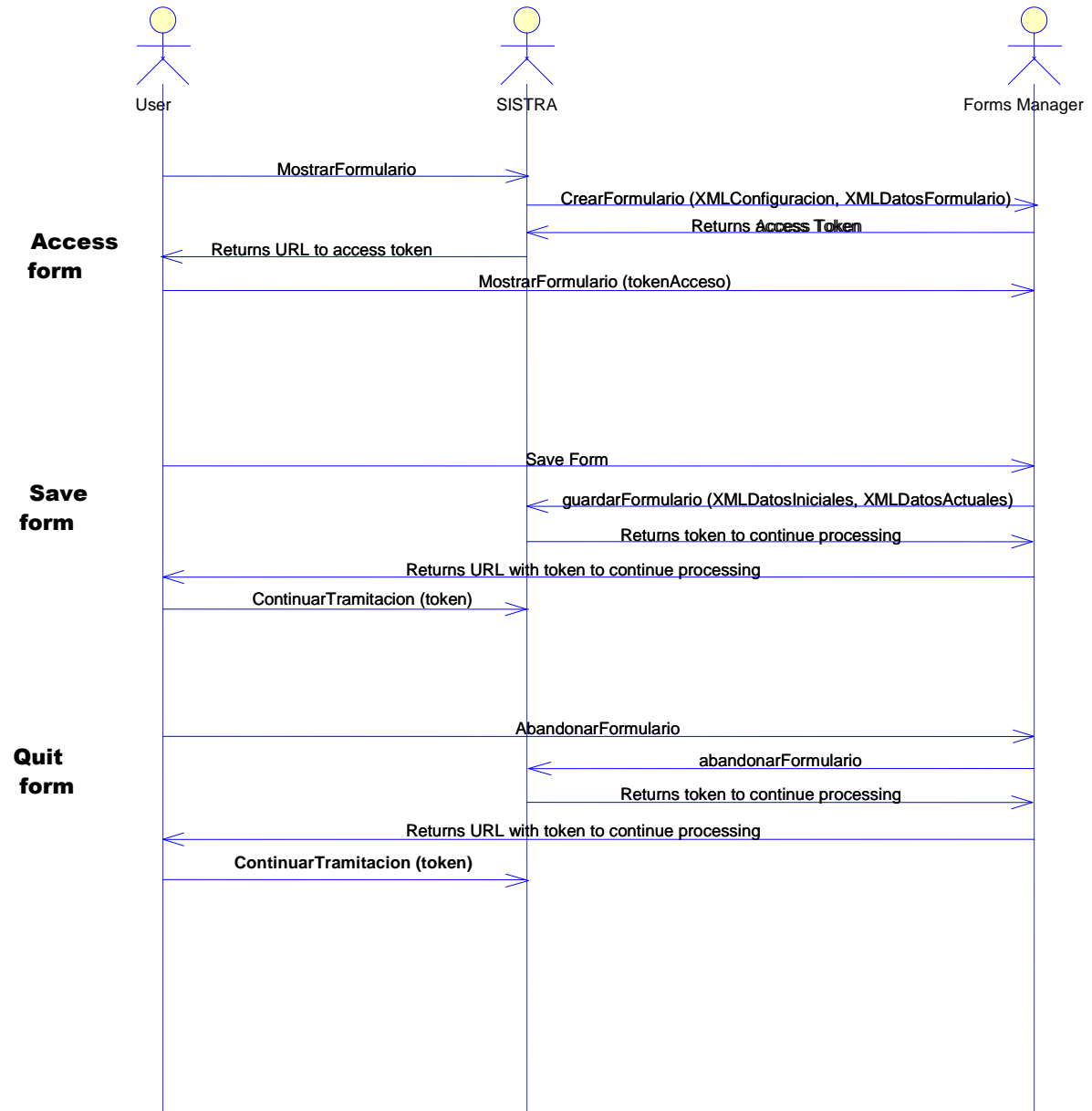
2. SISTRA - Form manager communication protocol

2.1. Operations

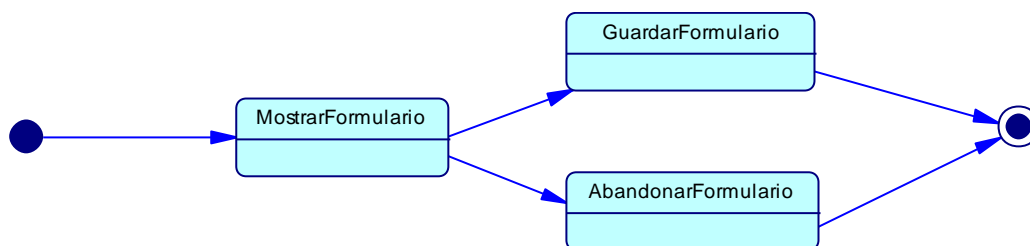Transactions between processing system (SISTRA) and form manager are:

- MostrarFormulario:

    1. User asks Sistra to display a form.

    2. Sistra passes to form manager: actual form data and a configuration XML to define communication parameters and special form properties

    3. Form manager receives these parameters and it returns a form access token to Sistra.

    4. Sistra redirects user request to form manager indicating access token.

- GuardarFormulario:

    1. User asks form manager to save the form.

    2. Form manager communicates to Sistra that form will be saved indicating initial data and data to save. Optionally, it can be set in form configuration if uncompleted form can be saved.

    3. Sistra receives parameters and it returns an access token to resume processing.

    4. Form manager redirects user request to Sistra indicating token.

- AbandonarFormulario:

    1. User asks form manager to quit form without saving data.

    2. Form manager communicates Sistra that form will be quit.

    3. Sistra returns an access token to resume processing.

    4. Form manager redirects user request to Sistra indicating token

2.2. Operation sequence

User   SISTRA   Forms Manager

Access form

MostrarFormulario

CrearFormulario (XMLConfiguracion, XMLDatosFormulario)

Returns Access Token

Returns URL to access token

MostrarFormulario (tokenAcceso)

Save form

Save Form

guardarFormulario (XMLDatosIniciales, XMLDatosActuales)

Returns token to continue processing

Returns URL with token to continue processing

ContinuarTramitacion (token)

Quit form

AbandonarFormulario

abandonarFormulario

Returns token to continue processing

Returns URL with token to continue processing

ContinuarTramitacion (token)

2.3. Operation flow

MostrarFormulario

GuardarFormulario

AbandonarFormulario

2.4. XML Configuration

In SISTRA form display operation, it passes to form manager a configuration XML with parameters for communication and form configuration.

It is not mandatory that manager uses all configuration options offered by this XML, but only needed ones can be used.

This XML schema is as follows:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs: schema xmlns: xs="Http://www.w3.org/2001/XMLSchema" elementFormDefault="Qualified">

        <! - Configuration ->
        <xs: element name="Configuration">
            <xs: complexType>
                <xs: sequence>
                        <xs: element Inventory="Data"/>
                        <xs: element Inventory="Properties"/>
                        <xs: element Inventory="Blockade"/>
                </xs: sequence>
            </xs: complexType>
        </xs: element>

        <! - Configuracion.datos ->
        <xs: element name="Data">
            <xs: complexType>
                <xs: sequence>
                        <xs: element Inventory="Language"/>
                        <xs: element Inventory="Model"/>
                        <xs: element Inventory="Version"/>
                        <xs: element Inventory="CodigoPerfil" minOccurs="0"/>
                        <xs: element Inventory="Layout" minOccurs="0"/>
                        <xs: element Inventory="GuardarSinTerminar" minOccurs="0"/>
                        <xs: element Inventory="UrlSisTraOK"/>
                        <xs: element Inventory="UrlRedireccionOK"/>
                        <xs: element Inventory="UrlSisTraCancel"/>
                        <xs: element Inventory="UrlRedireccionCancel"/>
                        <xs: element Inventory="UrlSisTraMantenimientoSesion"/>
                        <xs: element Inventory="NomParamXMLDatosIni"/>
                        <xs: element Inventory="NomParamXMLDatosFin"/>
                        <xs: element Inventory="NomParamXMLSinTerminar"/>
                        <xs: element Inventory="NomParamTokenRetorno"/>
                </xs: sequence>
            </xs: complexType>
        </xs: element>
        <xs: element name="Language" type="Xs: string"/>
        <xs: element name="Model" type="Xs: string"/>
        <xs: element name="Layout" type="Xs: string"/>
        <xs: element name="GuardarSinTerminar" type="Xs: string"/>
        <xs: element name="NomParamTokenRetorno" type="Xs: string"/>
        <xs: element name="NomParamXMLDatosFin" type="Xs: string"/>
        <xs: element name="NomParamXMLDatosIni" type="Xs: string"/>
        <xs: element name="NomParamXMLSinTerminar" type="Xs: string"/>
        <xs: element name="UrlRedireccionCancel" type="Xs: string"/>
        <xs: element name="UrlRedireccionOK" type="Xs: string"/>
        <xs: element name="UrlSisTraCancel" type="Xs: string"/>
        <xs: element name="UrlSisTraOK" type="Xs: string"/>
        <xs: element name="UrlSisTraMantenimientoSesion" type="Xs: string"/>



        <xs: element name="Version" type="Xs: int"/>
        <xs: element name="CodigoPerfil" type="Xs: string"/>


        <! - Configuracion.propiedades ->
        <xs: element name="Properties">
            <xs: complexType>
                <xs: sequence>
                        <xs: element Inventory="Property" maxOccurs="Unbounded"/>
```

```xml
                    </xs: sequence>
              </xs: complexType>
        </xs: element>
        <xs: element name="Property">
              <xs: complexType>
                    <xs: sequence>
                          <xs: element Inventory="Name"/>
                          <xs: element Inventory="Value"/>
                    </xs: sequence>
              </xs: complexType>
        </xs: element>
        <xs: element name="Name" type="Xs: string"/>
        <xs: element name="Value" type="Xs: string"/>

        <! - Configuracion.bloqueo ->
        <xs: element name="Blockade">
              <xs: complexType>
                    <xs: sequence minOccurs="0">
                          <xs: element Inventory="Xpath" maxOccurs="Unbounded"/>
                    </xs: sequence>
              </xs: complexType>
        </xs: element>
        <xs: element name="Xpath" type="Xs: string"/>

</xs: schema>
```

An example of such XML is:

```xml
<?xml version="1.0" encoding="UTF-8" standalone="Yes"?>
<configuration>
      <data>
            <language>this is</language>
            <model>887</model>
            <version>One</version>
            <codigoPerfil>CAIB_AZUL</codigoPerfil>
            <layout>CAIB</layout>
            <urlSisTraOK>http://rsanz-
port.indra.es:8080/sistrafront/recepcionFormulario?gstfrm=MTE5NjI0MzM0NTU4NQ==&
Amp;Instance_ID = e18cf10b88f07d591170ef496dcdff06</urlSisTraOK>

      <urlRedireccionOK>/sistrafront/protected/continuarTramitacion.do?gstfrm=MTE5NjI0MzM0NTU
4NQ==& Amp;Instance_ID = e18cf10b88f07d591170ef496dcdff06</urlRedireccionOK>
            <urlSisTraCancel>http://rsanz-
port.indra.es:8080/sistrafront/cancelarForm?gstfrm=MTE5NjI0MzM0NTU4NQ==& Amp;Instance_ID =
e18cf10b88f07d591170ef496dcdff06</urlSisTraCancel>

      <urlRedireccionCancel>/sistrafront/protected/continuarFormCancelacion.do?gstfrm=MTE5NjI
0MzM0NTU4NQ==& Amp;Instance_ID = e18cf10b88f07d591170ef496dcdff06</urlRedireccionCancel>
      <urlSisTraMantenimientoSesion>/ Sistrafront / protected / mantenimientoSesionForm?
Instance_ID = e18cf10b88f07d591170ef496dcdff06</urlSisTraMantenimientoSesion >
            <nomParamXMLDatosIni>xmlInicial</nomParamXMLDatosIni>
            <nomParamXMLDatosFin>xmlFinal</nomParamXMLDatosFin>
            <nomParamTokenRetorno>TOKEN</nomParamTokenRetorno>
      </data>
      <properties>
      <property> <name>application</name> <value>Processing Assistant</value> </property>
      <property> <name>user</name> <value>Rafael Sanz Villanueva</value> </property>
      <property> <name>processed</name> <value>TEST_REP</value> </property>
      <property> <name>form</name> <value>DATA REPRESENTATION</value> </property>
      </properties>
      <blockade>
            <Xpath> / FORM / DATOSPERSONALES / NIF</ Xpath>
            <Xpath> / FORM / DATOSPERSONALES / NAME</ Xpath>
      </ Lock
</configuration>
```

The meaning of the fields is as follows:

- DATA:

  - Idioma: processing language so that form manager shows the form in the same language.

  - Modelo/Version: Form model/version. It allows form manager to manage more than one form

  - CodigoPerfil/Layout: It specifies a processing system customization to form manager.

  - guardarSinTerminar: It indicates if an uncompleted form can be saved (S / N).

  - urlSistraOK: Url to be invoked by form manager to pass form data to save to sistra (initial data and final data). It should add these parameters to this url. Parameters name is given by fields: nomParamXMLDatosIni and nomParamXMLDatosIni.

  - urlRedireccionOK: Once Sistra token is obtained, form manager must invoke this url adding this token as parameter. The name of this parameter is given by field nomParamTokenRetorno.

  - urlSisTraCancel: Url to be invoked by form manager to tell Sistra the form is canceled. Sistra returns a token for resuming processing.

  - urlRedireccionCancel: Once token from Sistra is obtained, form manager must invoke this url adding this token as parameter. This parameter name is given by field nomParamTokenRetorno

  - urlSisTraMantenimientoSesion: url to be invoked periodically from external manager screens to maintain Sistra session active. This invocation can be implemented, f.i. with an ajax call while loading each manager page or with a javascript timeout function every few minutes.

- PROPERTIES:

  A number of properties are passed to form manager in this section: sistra application name, user name, process name and form name in sistra.

- LOCK:

  This section tells to form manager fields that could be blocked.

2.5. XML data

XML is used to point out form data. XML format must follow these rules:

- Encoding should be UTF-8.

- XML root must be 'FORMULARIO'.

- A unique XPATH should exist for each form field.

- For dropdown fields, description will be used as node value and element code in an attribute called 'indice'.

- if a form field doesn't appear in XML, it means that its value is empty.

An example of valid XML is next:

```xml
<? Xml version = "1.0" encoding = "UTF-8"?>
<FORM>
   <DATOSPERSONALES>
      <NIF> 33456299Q </ NIF>
      <NAME> Rafael </ NAME>
      <NAME1> Sanz </ NAME1>
      <Surname2> Villanueva </ Surname2>
   </ DATOSPERSONALES>
   <DATOSSOLICITUD>
      <TYPE index = "T2"> Type 2 </ TYPE>
      <DETAIL> Sample custom form </ DETAIL>
   </ DATOSSOLICITUD>
</ FORM>
```
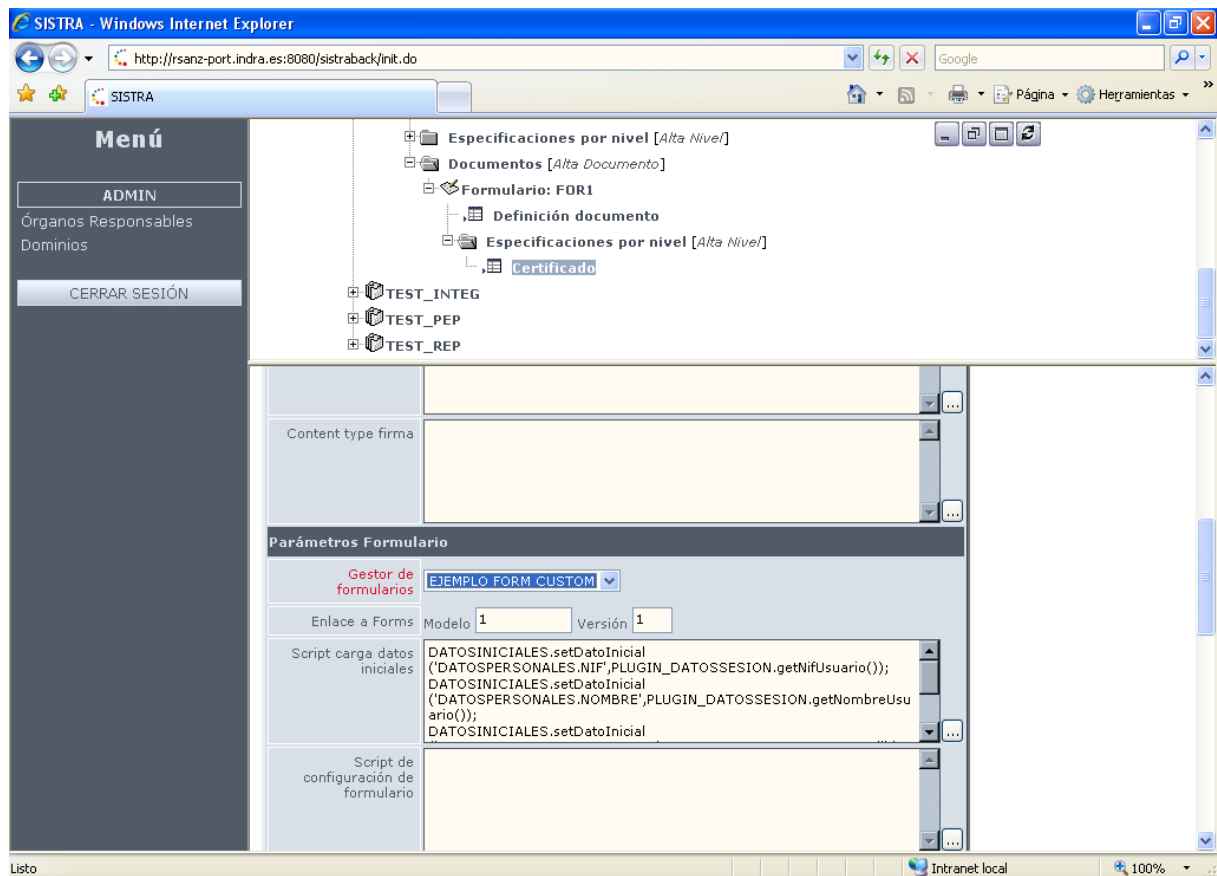
3. Form manager definition

The definition of a new form manager is configured in sistraback Form managers section. An identifier and access urls will be indicated when a form manager is added.

Form manager to use can be chosen when defining a form in SistraBack:

4. Project example

An eclipse project with basic implementation of a form manager is provided to be used as a base for these manager implementations.