

# Data Exchange Framework Save Action for Experience Forms 4.0 Installation Guide

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# 1. Introduction

With Data Exchange Framework (DEF) Save Action for Experience Forms 4.0.0 you can trigger synchronization of data whenever a user submits a form.

## 1.1. Requirements

Make sure the following packages are installed before you install DEF Save Action for Experience Forms 4.0.0:

- Sitecore 9.3
- DEF 4.0.0
- Data Exchange Tenant Service 4.0.0
- DEF Tenant Web Service 4.0.0, deployed as a separate IIS site

## 1.2. Installation

To install the DEF Save Action for Experience Forms 4.0:

- On your Sitecore server, download and install the DEF Save Action for Experience Forms 4.0.0 package.

## 2. Walkthrough: Creating a custom form save action

This topic shows you an example of how to set up a custom Data Exchange Framework (DEF) save action for Experience Forms.

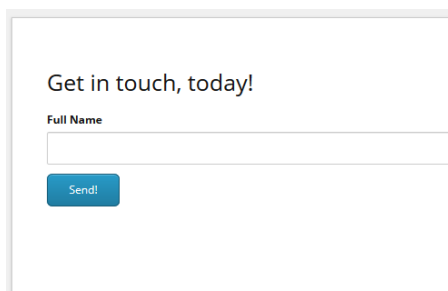
To set up a custom save action, you must:

- [Create a form](#)
- [Create a tenant](#)
- [Create value accessors](#)
- [Create a pipeline](#)
- [Create value readers](#)
- [Create a pipeline context builder](#)
- [Create a tenant service endpoint](#)
- [Configure the form.](#)

### 2.1. Create a form

When a website visitor submits a form on the website it triggers the save action. To create a form:

1. In the Sitecore Launchpad, click **Forms**. Click **Create**, and click **Blank form** to create a new form. Name it, for example, *Get in touch form*.
2. Add a single-line text field to the form and name it, for example, *Full Name*. Add a submit button.



Get in touch, today!

Full Name

Send!

3. Save the form.

## 2.2. Create a tenant

The tenant is a container for the settings that must be configured for the save action. To create a tenant:

1. Open the Content Editor and navigate to `/sitecore/system/Data Exchange`.
2. On the **Folder** tab, click **Empty Data Exchange Tenant** to create a new tenant.
3. Select the created tenant and click on the **Data Exchange SDK** tab in the top menu bar.
4. Click **Upgrade Tenant**. In the **Instruction Set** field, click the **Tenant Service** option.
5. Make a note of the tenant ID. Add the tenant ID, host, and credentials in the `<tenant service>\App_Config\ConnectionStrings.config` file, in the connection string called `Sitecore`. For example:

```
<connectionStrings>
  <add name="sitecore" connectionString="database=master;tenant id={841B0E94-4348-494D-
B32D-CA5E94F26ACC};host=my-sitecore;password=b;user name=sitecore\admin;timeout=20" />
</connectionStrings>
```

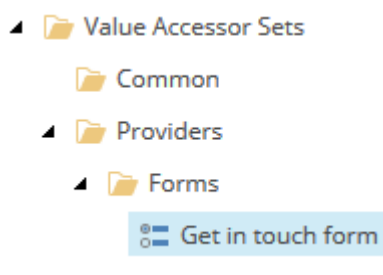
6. On your Sitecore Content Management and Marketing Automation Service servers, in the `App_Config\connectionstring.config` file, make sure you have a connection string for the tenant web service associated with the tenant. For example:

```
<xmlversion="1.0" encoding="utf-8">
<connectionStrings>
  <add name="my-tenant" connectionString="https://my-tenant.service"/>
</connectionStrings>
```

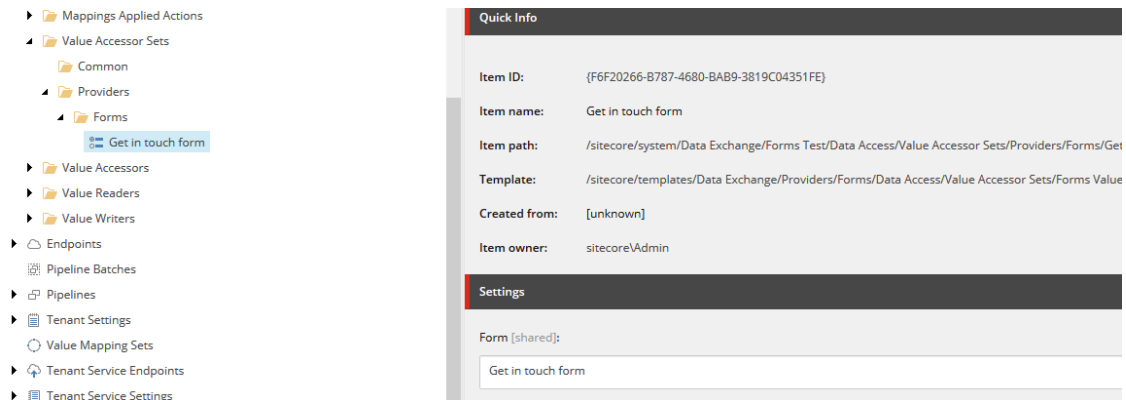
## 2.3. Create value accessors

Value accessors read the values of the fields in the form. To create the value accessors:

1. Navigate to `<tenant>/Data Access/Value Accessor Sets/Providers`. If you already have a `Forms` folder, open it. If not, on the **Folder** tab, click **Forms Value Accessor Set** to create and open the `Forms` folder.
2. In the `Forms` folder, on the **Folder** tab, click **Forms Value Accessor Set** to create a new item. Name it, for example, *Get in touch form*.



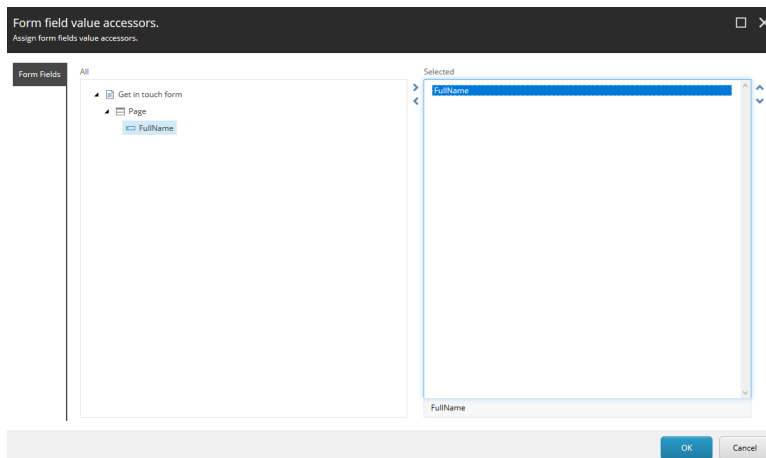
3. Select the item you created and switch to the **Content** tab. Select the form you created and save the item.



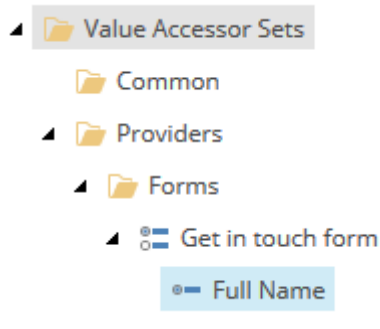
4. From top menu bar, select **Data Exchange**, and click **Add Form Fields**.



5. To create value accessors, select the form fields whose values you want to read, and click **OK**.



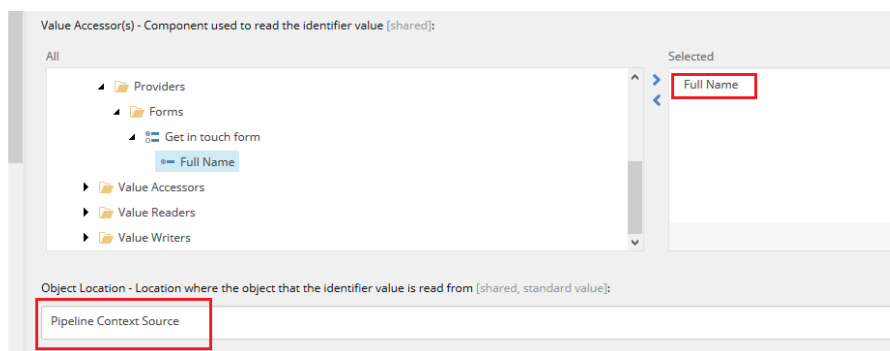
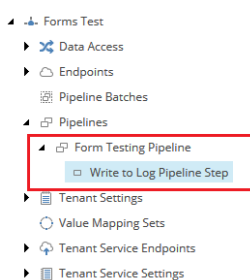
The value accessors are located under the value accessor set item.



## 2.4. Create a pipeline

To create a pipeline:

1. Navigate to <tenant>/Pipelines.
2. On the **Folder** tab, click **Pipeline** to create a pipeline. Name it, for example, *Form Testing Pipeline*.
3. On the **Folder** tab, click **Write to Log Pipeline Step** to create a new pipeline step. Name it, for example, *Write to Log Pipeline Step*.
4. Select the pipeline step and configure the **Full Name** value accessor as shown:

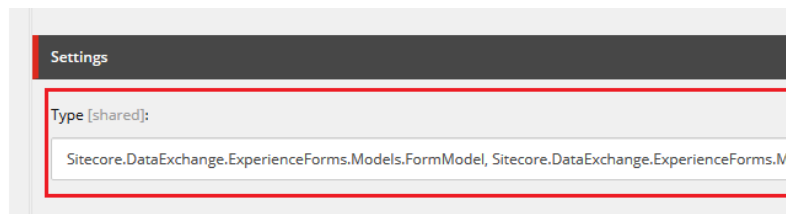
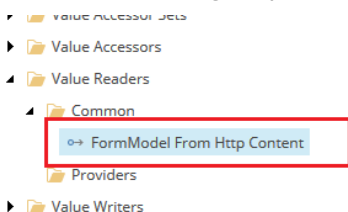


5. Save the changes.

## 2.5. Create value readers

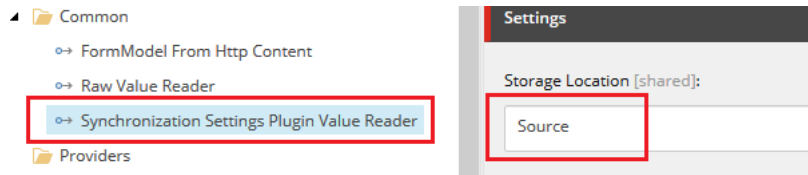
To create value readers:

1. Navigate to <tenant>/Data Access/Value Readers/Common/.
2. On the **Home** tab, click **Dot Net Object from HttpRequest Content Value Reader** to create new item. Name it, for example, *FormModel From Http Content*.
3. Set the **Type** field to *Sitecore.DataExchange.ExperienceForms.Models.FormModel*, *Sitecore.DataExchange.ExperienceForms.Models*.



4. Navigate to <tenant>/Data Access/Value Readers/Common/.
5. On the **Folder** tab, click **Raw Value Reader** to create a new item. Name it, for example, *Raw Value Reader*.
6. Navigate to <tenant>/Data Access/Value Readers/Common/.

7. On the **Folder** tab, click **Synchronization Settings Plugin Value Reader** to create a new item. Name it *Synchronization Settings Plugin Value Reader*.
8. Set the **Storage Location** to *Source*.

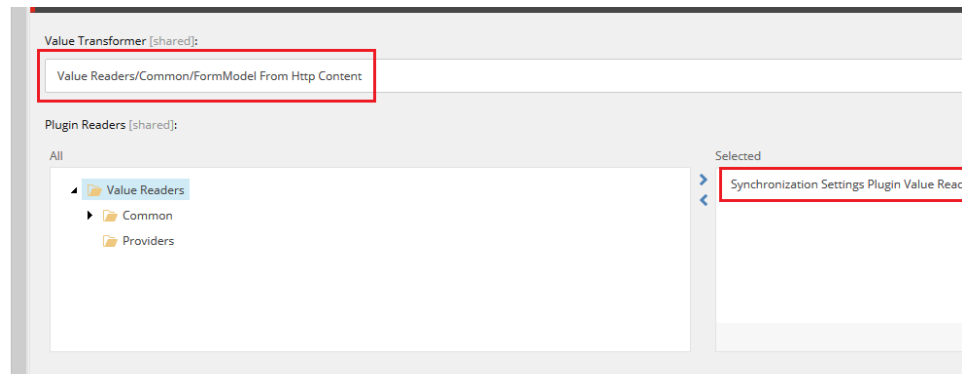
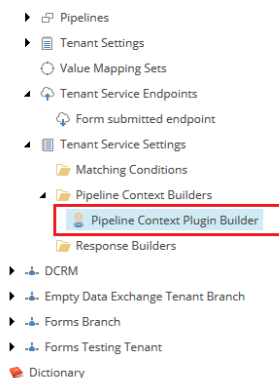


9. Save the changes.

## 2.6. Create a pipeline context builder

To create a pipeline context builder:

1. Navigate to `<tenant>/Tenant Service Settings/Pipeline Context Builders`.
2. On the **Folder** tab, click **Pipeline Context Plugin Builder** to create a new item. Name it, for example, *Pipeline Context Plugin Builder*.
3. Set the **Value Transformer** field to the http request value reader that you created in the previous step.
4. Set the **Plugin Readers** field to the synchronization settings plugin value reader that you created in the previous step.



5. Save the changes.

## 2.7. Create a tenant service endpoint

To create a tenant service endpoint:

1. Navigate to `<tenant>/Tenant Service Endpoints`.



2. On the **Folder** tab, click **Pipeline Tenant Service Endpoint** to create a new item. Call it, for example, *Form submitted endpoint*.
3. Configure the endpoint with the parameters in this table:

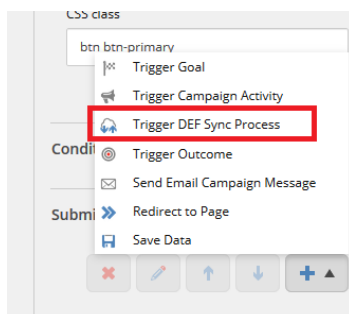
Parameter	Content
Request Value Reader	<i>Value Readers/Common/Raw Value Reader</i>
Pipeline Context Builder	<i>Pipeline Context Builders/Pipeline Context Plugin Builder</i>
Pipeline	<i>Pipelines/Form Testing Pipeline</i>

4. Select the **Enabled** checkbox. Save the changes.

## 2.8. Configure the form

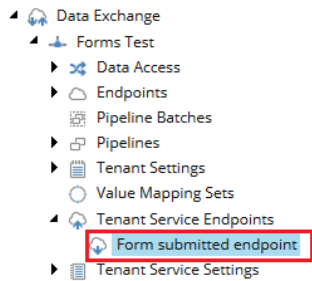
You must configure the form to trigger the tenant service endpoint when a user saves the form. To do so:

1. From Sitecore Launchpad, click **Forms** and select the form that you created.
2. Select the **Submit** button in the form. On the **General** tab, in the **Submit Actions** section, click the plus sign to open a list of actions. In the list, click **Trigger DEF Sync Process** to add a submit action.



3. In the **Select the tenant service endpoint** pop-up, in the *Data Exchange* structure, select the Tenant Service Endpoint that you want to trigger when the form is submitted. In the **Connection String Name** field, enter the connection string that points to the URL for the tenant web service.

Select the tenant service endpoint.  
Select the tenant service endpoint that should be triggered when the button is clicked.



Connection String Name

4. Attach the form to a webpage and publish it. Now, whenever a user submits the form, it triggers the tenant service endpoint to run the selected pipeline.

If you need to troubleshoot the process, check the tenant web service logs.