

Qdabra™ Database Accelerator

How to IPFS-enable a DBXL solution that contains Code

With DBXL v2.3 you can quickly integrate your solution with SharePoint and IPFS in order to create a browser-based solution. In this document, we will create an administrator-approved form and activate it in SharePoint Admin site.

Note that this scenario is only necessary when the form has code. If you are using a codeless InfoPath form, please see a document called [How to IPFS-enable a Codeless DBXL Solution](#).

Create an Administrator-approved form and Activate from SharePoint

1. Create and design a new form
 - a. Open InfoPath and click **Design a form template**.
 - b. Under **Design a new**, select **Form template**.
 - c. Under **Based on**, select **Blank**.
 - d. Check the check box to **Enable browser-compatible features only**, and then click **OK**.
 - e. For the purposes of this example, add three **Text Boxes** and a **Button**.
 - f. Finish designing the form, adding the necessary codes needed.
2. Declare Document Type Name in XML
 - a. Create an xml file with one node, which declares the name of the Document Type you will be using. Its contents may look like this:

```
<declaration>
<doctype name>SampleForm</doctype name>
</declaration>
```
 - b. Select **Tools > Data Connections**, and click **Add**.
 - c. Select **Create a new connection to** and select **Receive data**. Click **Next**.
 - d. Select **XML document** and click **Next**.
 - e. Click **Browse** and select the xml file that you created in step 2a.
 - f. Click **Next** twice and then click **Finish**.
3. Create a Submit data connection
 - a. Select **Tools > Data Connections** and click **Add**.
 - b. Select **Create a new connection to** and select **Submit data**. Click **Next**.
 - c. Select **To a Web service** and click **Next**.
 - d. Enter the URL to the DBXLDocumentService, usually
`http://<servername>/QdabraWebService/DBXLDocumentService.asmx`,
and click **Next**.
 - e. Select **SubmitDocument** from the list of operations and click **Next**.

- f. Double click the `tns:docTypeName` parameter and select the xml created in Step 2 from the data source dropdown.
- g. Expand the tree to display the node, select the `doctypeName` node and click **OK**.
- h. Select the `tns:xml` parameter, select the **Entire form** toggle, and check the checkbox for **Submit data as string**.
- i. Select `tns:name` parameter. Select the radio button **Field or group** in the **Parameters options** section. Click the **Modify** button to the right of the textbox. In the **Select a Field or Group** dialog box, make sure the **Main** data source is selected. Select any field from your form; this will be stored as your form name. Click **OK**.
- j. Repeat Step i for `tns:author` and `tns:description`, selecting fields in your form as appropriate.
- k. Click **Next**, and then click **Finish**.

4. Convert the data connection to UDC and approve it in SharePoint

This step is optional. The form will work from the browser and from InfoPath with or without UDC connections.

- a. Select the Web Service Submit connection created in step 3 and click **Convert**.
- b. Enter the URL to the data connection library and click **OK**. The URL may look like this:
http://<servername>/MyDataConnections/SubmitScenario3.udcx.
- c. In the **Data Connections** window, click **Close**.
- d. Open the SharePoint data connections library in Internet Explorer.
- e. Click the down arrow next to the UDC file created in step 4 and select **Approve/reject**.
- f. Select the toggle for **Approved** and click **OK**.

5. Configure the Submit button

- a. Double-click on the button added in Step 1 to open the **Button Properties**.
- b. Change the **Action** dropdown to **Submit** and click on **Submit Options**.
- c. Check the checkbox for **Allow users to submit this form** and select **Web Service** from the **Send form data to a single destination** dropdown.
- d. Make sure that the Web Service submit data connection created in step 3 is selected in the **Choose a data connection for submit** dropdown.
- e. Click **OK** twice to close the dialogs.
- f. Back in InfoPath, select **File > Save** to save the form to your local drive.

6. Publish the form to SharePoint

- a. In InfoPath, select **File > Publish**.

- b. Select the toggle for **To a SharePoint server with or without InfoPath Forms Services** and click **Next**.
 - c. Enter the URL for the SharePoint server. The SharePoint server should be in the same machine where DBXL is installed. Click **Next**.
 - d. Make sure that the checkbox for **Enable this form to be filled out by using a browser** is checked, select **Administrator-approved form template (advanced)** and click **Next**.
 - e. Specify the location on your disk to save it to and click **Next**.
 - f. Optionally, add any columns you wish to display in the library and click **Next**.
 - g. Click **Publish**, and then click **Close**.
7. Upload form template in SharePoint Admin site
 - a. Open the **SharePoint 3.0 Central Administration** tool from the Programs menu on your server. This will navigate the web browser to the administration page of your server.
 - b. Click **Application Management**.
 - c. Under **InfoPath Forms Services**, click **Manage form templates**.
 - d. In Manage Form Templates page, click **Upload form template** link
 - e. Click on browse to find your published xsn file on your disk or enter to specify the file path. Leave default options as selected.
 - f. Click **Upload**.
 - g. Click **OK** on the resulting success page.
8. Activate form to site collection
 - a. In Manage Form Templates, click the down arrow next to the form uploaded in Step 6 and select **Activate to a site collection**.
 - b. Click the **Site collection** selector menu and choose **Change Site Collection**. (Note: SharePoint almost always defaults to the *wrong* site collection the first time a form template is activated).
 - c. In the pop-up window, click the **Web Application** selector menu and choose **Change Web Application**.
 - d. Click **SharePoint - 80**, and then click the / to activate to the entire site collection. Click **OK**. The pop-up window will disappear.
 - e. Click **OK**.
9. Create new SharePoint Library and browser-enable the form from SharePoint
 - a. Navigate to Site Collection in IE
 - b. Click **Site Actions > Create**
 - c. Click **Document** or **Form** library to create new library.
 - d. Go to Document/Form Library created and click **Settings > Form Library Settings**.
 - e. Click **Advanced settings** under General Settings
 - f. Click **Yes** option button to allow management of content types
 - g. Click **Display as a Web page** to browser-enable the form and click **OK**.

- h. Back in Settings page, click **Add from existing site content types** link under Content Types.
- i. Find your administrator-deployed template name in the **Available Site Content Types** list box and click **Add**.
- j. Click **OK**.
- k. Back in Settings page, click **Change new button order and default content type** under Content Type section.
- l. Uncheck the Visible check box for Content Type 'Form' or 'Document' and click **OK**.

10. Create the new Document Type in DBXL

- a. In DBXL, click on **New Configuration**.
- a. Enter the **Document Type Name**, making sure that it matches the same name that was hardcoded into the form in step 2.
- b. Click on the file attachment control in the **InfoPath Form Template** section.
- c. In the **File Name** field of the **Attach File** window, enter the URL for the form template that was approved and used in the SharePoint library, *http://<servername>/<SharePointLibraryName>/Forms/template.xsn*, and click **Insert**.

Using the SharePoint form template helps to ensure synchronization between the form version numbers in DBXL and the SharePoint Form Library.

- b. Go to the **SharePoint** tab.
- c. Click on **Insert Mapping**.
- d. Enter SharePoint library URL created in step 9. The SharePoint server should be in the same machine where DBXL is installed.
- e. Select **Object Model**.
- f. Click **Save**, and then **OK** in the confirmation dialog.

11. Test the solution

- a. In Internet Explorer, open the SharePoint library created in step 9.
- b. Click on **New**. Fill out the form and click **Submit**.
- c. Go to the **Documents** tab in DAT and click **New**. Fill out the form in InfoPath and click **Submit**.
- d. You can also test:
 - i. From DAT, open and submit the form that was created from the browser.
 - ii. From Internet Explorer, open and submit the form that was created from DAT.

Additional notes

- The use of IPFS-enabled solutions is not supported if the installations of SharePoint and DBXL lie on different machines. This scenario involves UDC files and SSO configuration, and is not supported in DBXL v2.3. If your solution requires IPFS, we recommend installing SharePoint and DBXL on the same machine, and using the Object Model method when creating your mapping as describe in this document.
- On a cold server SharePoint submit could time out (even though it is successful). The reason is that SharePoint can take longer than 30 seconds to process a new document. As a result, the submit operation succeeds but IPFS reports to the user that it failed due to timeout. There is no way to change timeout in InfoPath without writing code.
- You could also use DBXLDocumentServiceEx.asmx. This “Ex” API differs from its “non-Ex” counterpart only in the way errors are handled. Methods defined in the “Ex” pages return a SoapException when an error occurs. This allows InfoPath’s internal mechanism to detect the error and display an error message. The “non-Ex” methods return a StatusInfo object with a Status node, of value true or false, and error messages. Calling the non-Ex methods requires form logic to check the Success indicator and handle any errors.