



How to use the ExtractAttachments feature in the DBXL Migration Tool

Using the DBXL Migration Tool you can extract attachments from your InfoPath forms. There are two scenarios explained in this document: the first involves SharePoint only, and the second involves DBXL.

PRE-REQUISITES

- This document assumes that you have installed the DBXL Migration Tool. For information or to download this product, please refer to our [documentation](#). If you have previously installed the Migration Tool, please ensure that your version of the Migration Tool is 2.5.4028.10650 or higher. You can check the version in the tool's footer: `Version: 2.6.4357.18930`
- Place the **FPRPC.dll** and **Qdabra.SharePoint.Utilities.dll** files in the Migration Tool installation folder (where the tool was installed, typically *C:\Program Files (x86)\Qdabra Software\Qdabra DBXL Migration Tool* for 64 bit operating systems and *C:\Program Files\Qdabra Software\Qdabra DBXL Migration Tool* for 32 bit operating systems).
- Place the **ExtractSharePointAttachments.xml** file in the **Scenarios** subdirectory of the Migration Tool installation folder.

SUPPORT

If you have questions about the information in this document, please contact us for assistance.

Licensed customers can contact us via Support@Qdabra.com. Alternatively, please use the InfoPathDev.com [Qdabra Product support forums](#) to request help.



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EXTRACT ATTACHMENTS FROM SHAREPOINT

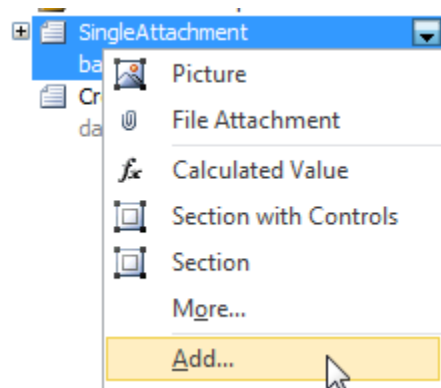
In this first scenario, we have an InfoPath form library in SharePoint. The form template has an attachment field, and numerous forms have been submitted. Each of these forms has an attachment, and we wish to extract these attachments to a separate location.

UPDATE YOUR INFOPATH TEMPLATE

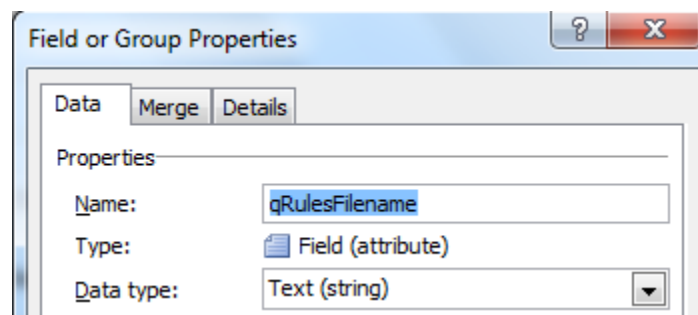
This plugin will add new attributes to the XML documents (forms) it modifies, to store data about the files that it saves out (specifically, the files' names, and the URL to which they were saved).

This means that you will need to slightly modify your InfoPath template's schema to recognize the new attributes, as follows:

1. Open your InfoPath template in Design mode and access the data source taskpane.
2. Right-click your file attachment fields in the data source, and select **Add**.

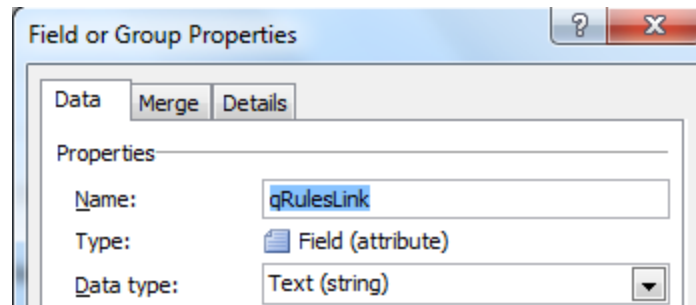


3. Create a new string **attribute** with the name **qRulesFilename** (be careful of capitalization).



4. Repeat steps 2 and 3 with the same file attachment field to create an attribute with the name **qRulesLink** (be careful of capitalization).





5. If you have any other file attachment fields you plan to export, do the following for all of them:
 - a. Right-click the newly created **qRulesFilename** attribute and select **Reference**.
 - b. In the dialog that opens, select the next attachment field you want to add the attribute to and click **OK**.
 - c. Repeat steps a and b for the **qRulesLink** attribute.
6. (Recommended) Add conditional formatting to your File Attachment or Picture controls to hide them when their corresponding qRulesLink attribute is not blank.

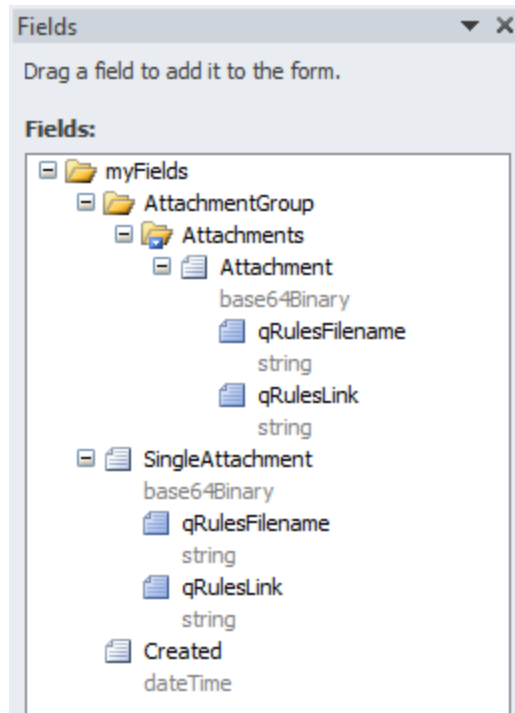


The screenshot shows the 'Rules' window in SharePoint. At the top, there's a tab labeled 'myFields'. Below it, a list of rules is shown, with 'Hide' selected. A 'New' button is visible. The 'Details for: Hide' section shows the condition: 'qRulesFilename is not blank and qRulesLink is not blank'. The rule type is 'Formatting'. The formatting options include bold, italic, underline, text color, background color, and link. The current formatting is '(hidden)'. At the bottom, there are two checkboxes: 'Hide this control' (checked) and 'Don't allow users to insert or delete this control' (unchecked).

7. (Recommended) Add hyperlinks or picture controls bound to the qRulesLink attributes, and conditionally hide these when the qRulesLink attribute is blank.
8. Republish your template to SharePoint.

The zip package you have downloaded contains a sample form (WebinarSampleForm.xsn) with the steps above already completed.





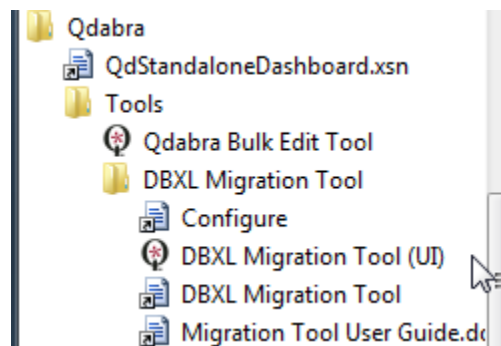
USING THE MIGRATION TOOL

Remember: The steps below assume that you already have:

- A form library
- Forms (documents) submitted to that form library
- Attachments included in the submitted forms.

Follow these steps to extract the attachments.

1. Start the Migration Tool UI from the Start Menu.



2. Select the Custom tab.
3. Select **ExtractSharePointAttachments.xml** from the **Scenario path** dropdown box.

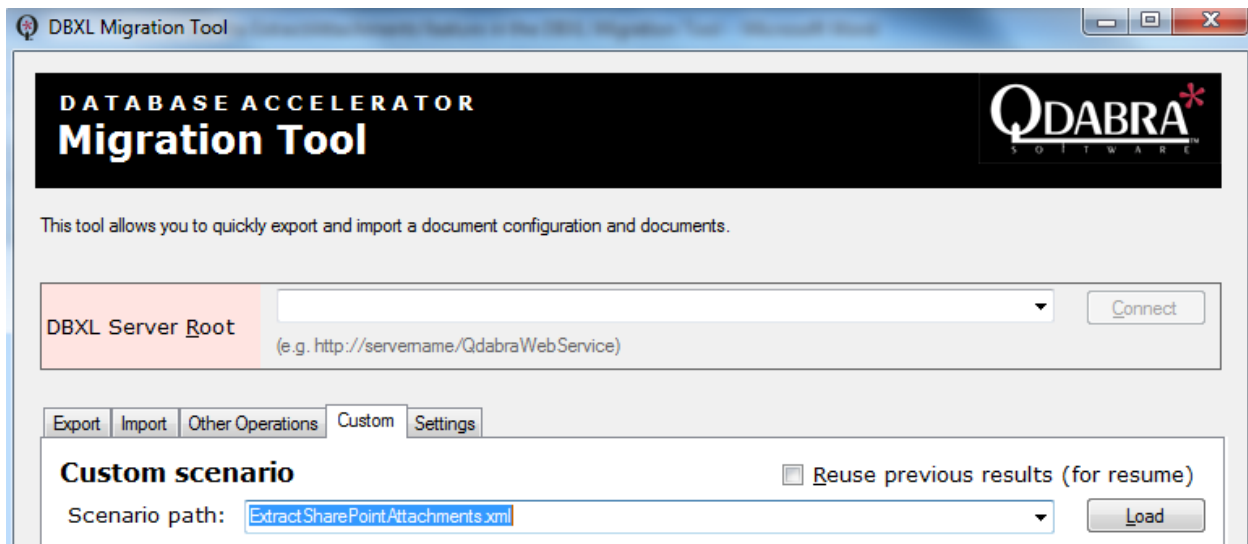


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- Click the **Load** button.



- Select the Scenario you wish to run (see descriptions in the next section).
- Enter any necessary variable values as indicated in the scenario descriptions below.

Note: Do NOT use a trailing slash for the URLs.

- Click **Run**.
- Observe the Run results in the log pane at the bottom of the tool.
 - You may wish to copy these to a text editor to observe more closely, or to save a record of them. You can also check **Write Logs to Disk** before clicking **Run**, and use the **Show Log Files** button to display the logs once the tool is finished.
 - If desired, click the **Save variables** button to save your parameter values for future use.

In the logs, you may find a message similar to this one:

```
2012-01-13 11:39:14 Executing action ExtractAttachments...
2012-01-13 11:39:14 Retrieving document at 'https://shp.formsboard.com/WebinarFormLibrary/2012-01-13T06_27_19.xml'
2012-01-13 11:39:18 Exporting file to 'https://shp.formsboard.com/Shared Documents/2012011311391814599_007.gif'
2012-01-13 11:39:22 Resaving original form to https://shp.formsboard.com/WebinarFormLibrary/2012-01-13T06_27_19.xml.
```

Verify the result:

- Check that the attachment was correctly exported to the locations indicated in the log. (e.g. in the case of the log above, it would be https://shp.formsboard.com/Shared Documents/2012011311391814599_007.gif)
- Check that the xml form now has NO ATTACHMENT and instead has the url to the attachment:



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SCENARIO 1: Single Attachment

After extracting, the attachment field above will be emptied and the values below filled out:

Filename:

007.gif

Link:

https://shp.formsboard.com/Shared Documents/2012011311391814599_007.gif

Here is an example of the hyperlink you could create:

[007.gif](#)

SCENARIOS

- ExtractAttachments
 - Saves attachments from all documents in a SharePoint document library to a SharePoint list, and replaces them with links in the original documents.
 - Required parameters
 - sourceLibraryUrl – The url of the SharePoint library where the XML documents are stored
 - attachmentDestinationUrl – The url of the SharePoint list where the attachments should be saved
 - attachmentXPath – An XPath indicating the location of attachments within the XML documents
 - Optional parameters
 - attachmentSubfolderFormat – If specified, an XPath string indicating a subdirectory of the document library where each attachment is stored. This XPath is evaluated relative to each attachment's node in the XML document and may utilize standard XPath 1.0 formulas and the special XPath variables detailed below.
 - viewName – If specified, the name of a view belonging to the source list. Only documents belonging to the specified view will be processed.
- ExtractAttachmentsUseListFile
 - Saves attachments from certain documents in a SharePoint document library to a SharePoint list, as specified in an external file, and replaces them with links in the original documents.
 - Required parameters
 - sourceLibraryUrl, attachmentDestinationUrl, attachmentXPath – See descriptions above.
 - documentListFileLocation – The path (relative to the tool's execution folder) to an XML file listing all of the documents to process.
 - Optional parameters
 - attachmentSubfolderFormat – See description above.
 - Note: The viewName parameter is ignored in this scenario.
 - The file indicated for documentListFileLocation should be an XML file of a format like the one produced by the ExportDocumentList scenario:

<LibraryDocuments>

<Form path="http://server/library/form name.xml" />



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```

<Form id="14" />
<Form path="http://server/library/form name2.xml" />
</LibraryDocuments>

```

- The document should consist of an outer <LibraryDocuments> node, containing one or more <Form> nodes. Each <Form> node should contain either a path or id attribute indicating a form's URL or ID. If both path and id are specified for a given form, the path value will be given precedence. Any other attributes or elements will be ignored.
- ExportDocumentList
 - Exports a list of all documents in a SharePoint document library, with their URL, ID, and modified date.
 - Required parameters
 - documentListFileLocation – A file path (e.g. FileList.xml) relative to the tool's execution folder where the list will be exported.
 - allowListExportOverwrite – When false, will prevent the tool from overwriting a document list file if it is already present at the location indicated by documentListFileLocation. When true, will allow the file to be overwritten.
 - Optional parameters
 - viewName – If specified, only documents from the specified view will be enumerated.
- Special XPath variables
 - The following XPath variables may be used in the attachmentSubfolderFormat parameter of the ExtractAttachments and ExtractAttachmentsUseListFile scenarios:
 - \$sourceFileName – The filename of the XML document from which the attachment is being saved.
 - \$fileName – The filename of the attachment being saved.
 - \$fileExtension – The file extension of the attachment being saved.
 - \$fileSize – The size (in bytes) of the attachment being saved.

BONUS

1. The included sample XSN (WebinarSampleForm.xsn) includes an example for extracting repeating attachments.
2. You can extract multiple xpaths by using the pipe symbol (|) between the xpaths. For example, to extract both attachment fields in the included sample XSN, the AttachmentXPath variable will need to be:

/my:myFields/my:AttachmentGroup/my:Attachments/my:Attachment | /my:myFields/my:SingleAttachment

3. The process also works if the following happens:
 - Submit a form with attachments.
 - Run the tool to extract the attachments.
 - Modify the form to add a new attachment.
 - Re run the tool.
 - RESULT: Only the new attachment is extracted!



EXTRACT ATTACHMENTS FROM DBXL FORMS

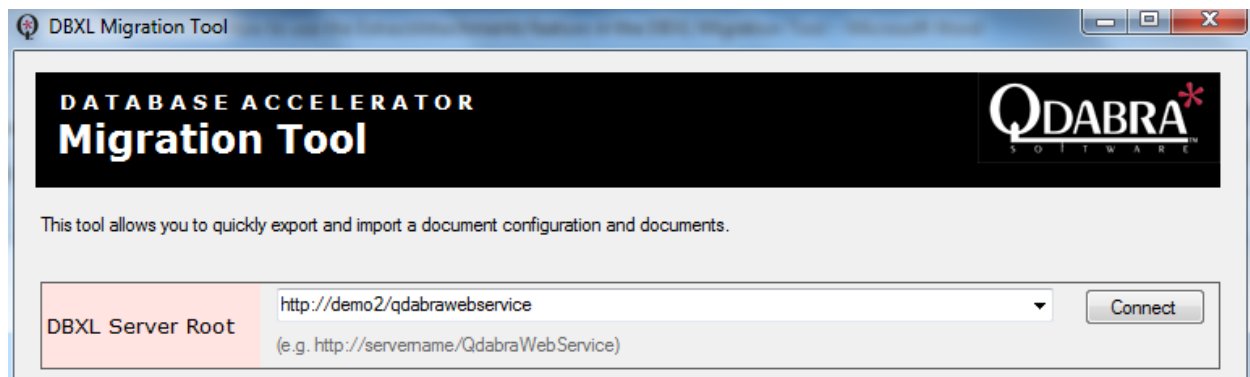
A process similar to the one above can be used for forms stored in DBXL.

Pre-requisites:

- These steps assume you have installed DBXL. To obtain a trial version of DBXL, please visit Qdabra.com.
- Similar to the steps above (for the SharePoint scenario), you will need to update your template to have **qRulesFilename** and **qRulesLink** (case sensitive) attributes on your attachment field(s). Just modify the template and update the doctype in DBXL.
 - Note: If InfoPath displays an error when you try to open the modified documents, you may need to open the template itself from DBXL to get it to update.
- These steps also assume that you have already submitted documents to the DBXL document type, and that these documents have attachments in them. For details on how to achieve this, please see the Getting Started document.

Follow these steps:

1. Open the DBXL Migration Tool.
2. Enter the DBXL Url and click **Connect**.



3. Go to the **Custom** tab
4. Select **Migrate.xml** and click **Load**.



5. Select **ExtractDbxlDocAttachments**.
6. Enter the following variables:
 - a. **sourceDocType** – You can either use the doctype name, or ## followed by the doctype ID



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DATABASE ACCELERATOR Administration Tool



Document Type: AttachmentsExtractTest

Save
 Save As...
 Catalog

General
Database
Permissions
SharePoint
Documents
Taxonomy Tree

Document Type Details

Name	Solution Group
AttachmentsExtractTest	
Description	
Last Modified By	
AUTONOMYSYSTEMS\ErnestoM	

InfoPath Form Template

XSN File	Form Template Properties
 DBXLSampleForm.xsn Microsoft InfoPath Form Template 5.62 KB Open	Form Version: 1.0.0.11 Last Modified: 1/13/2012 11:55:40 AM ☐ Form template is signed ☐ URN-based solution
URL to Form Template	
http://DEMO2/QdabraWebService/Forms/ID/2011template.xsn	

- b. **xPath** – Enter the XPath to where your attachment field(s) are.
- If there's more than one location, you can join them with a pipe, e.g.:
 /my:myFields/my:attachment1 | /my:myFields/my:attachment2

Export Import Other Operations Custom Settings

Custom scenario

☐ Reuse previous results (for resume)

Scenario path: Migrate.xml
Load

Scenario runs:

ImportDocuments
 ExportCatBase
 ImportCatBase
 ExportFullDoctype
 ImportFullDoctype
 ExportFullCatBase
 ImportFullCatBase
 ExportKB
 ImportKB
 TransformDocuments
 ExportDomain
 ImportDomain
 ChangeDomainConnectionStrings
 SetDocumentTypeIcon
ExtractDbxDocAttachments

Scenario variables:

Variable	Value
sourceDocType	AttachmentsExtract Test
destDocType	0
transformFilePath	Scenarios\qForm-to-qForm-mini.xsl
domainId	
domainName	
customRemapPath	
xPath	/my:myFields/my:attachment

Save variables

7. Click **Run**.



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The tool will process the documents and describe its process in the log pane. You will see individual documents get processed like this:

2012-01-13 12:15:08 Retrieving document with ID 202.

2012-01-13 12:15:11 Saved file '012.gif' with DocId 204.

2012-01-13 12:15:11 Resaving original document to DBXL.

If you check your existing DBXL documents, you'll see that the attachment field is now blank, and the qRulesLink and qRulesFileName fields contain values.

Attachment

 Click here to attach a file

Q Rules Filename:

012.gif

Q Rules Link:

<http://demo2/qdabrawebservice/Documents/205/205.xml?cmd=file>

Of course, you can modify your canvas to display this as a clickable link, and also to hide the attachment field once the qRulesLink and qRulesFileName are populated.

You can open the qRulesLink in Internet Explorer to verify that it will open the attachment.

