



Extract Files and Images from Submitted Forms

This document shows how to extract images and files from forms submitted to DBXL. After extraction, we replace the images and files with hyperlinks to reduce form file size. In addition, the hyperlinks can be consumed by a downstream line-of-business process.

Introduction.....	2
Sample forms	2
Preparation.....	3
Extracting File Attachments	5
Add the form as a document type.....	5
Create the XML-to-XML mapping.....	5
Create Database and Set Database Mapping	7
Test the form	9
Extract Image Attachments	12
Add the QdImageFile document type	12
Add the form as a document type.....	12
Create the XML-to-XML mapping.....	12
Create Database and Set Database Mapping	14
Test the form	17
Troubleshooting	19
Link does not open attached file but Infopath form	19
Support.....	20

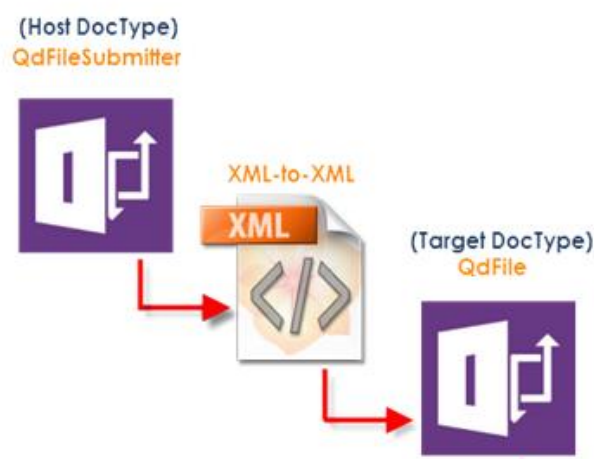


INTRODUCTION

Submitting a file or image requires the host doctype (your form) be mapped to either QdFile or QdImageFile; both of these system document types ship with DBXL. The document type depends on the file type as described in the table below.

Document Type	File Type
QdFile	Used when mapping files attached to InfoPath using File Attachment control
QdImageFile	Used when mapping picture files attached to InfoPath using File Attachment or Picture control

To map your form's XML to these doctypes requires you will use DBXL's XML-to-XML mapping. This technique lets you extract XML fragments from your 'host' doctype form and submit to a 'target' doctype form. To learn more about the XML-to-XML mapping technique check out this [link](#).



This tutorial includes two sample XSN form templates:

- QdFileSubmitter
- QdImageFileSubmitter

These forms come pre-configured with File Attachment/Picture controls and they also use the required data source for XML-to-XML. Grab the files from this package and start by following the tutorial below.

- If submitting files – follow the section “**Submit Files**”
- If submitting pictures – follow the section “**Submit Images**”

Sample forms

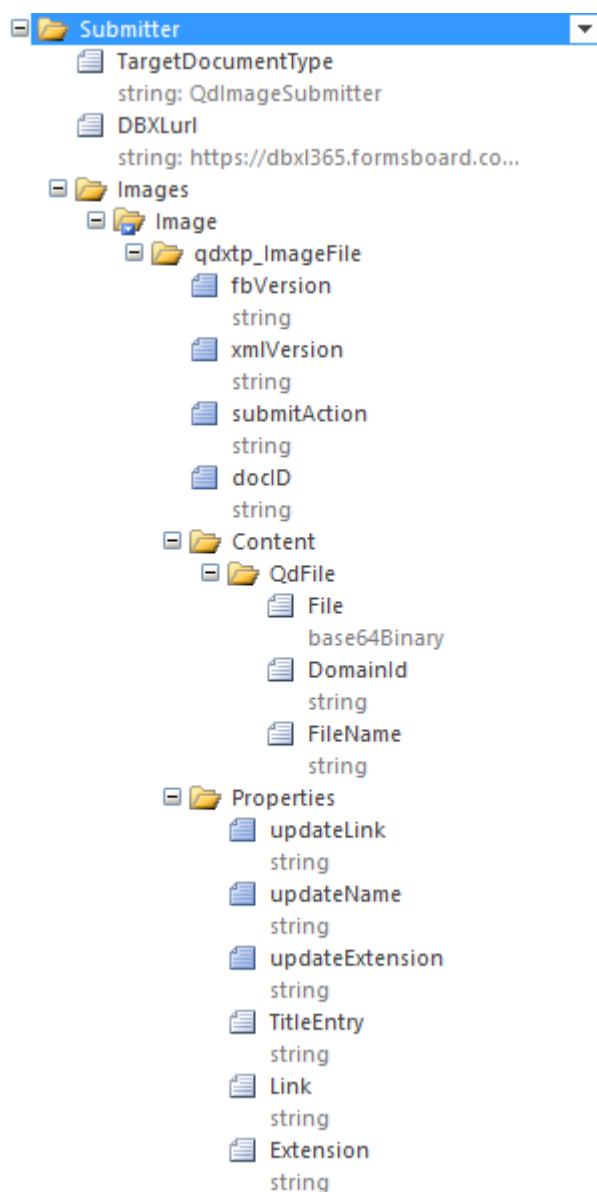
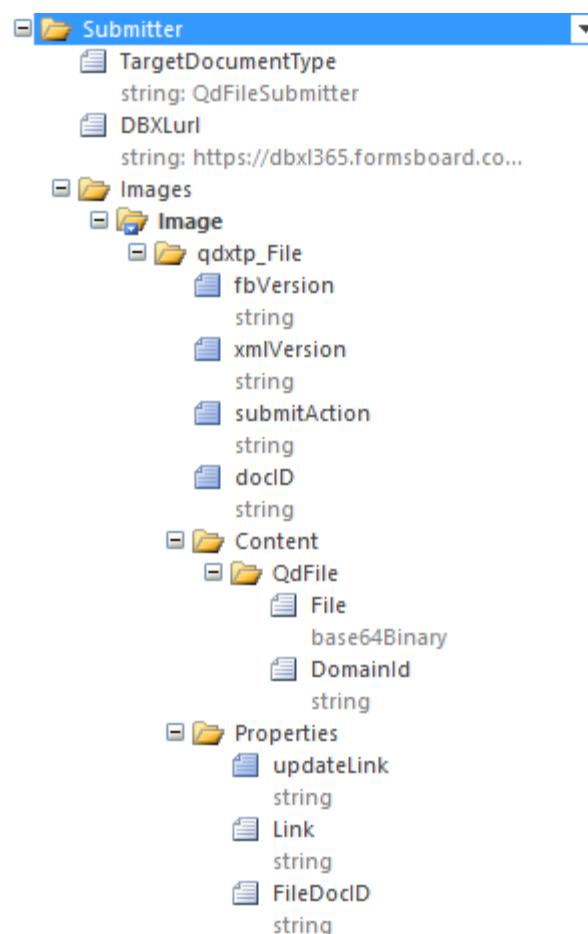
This tutorial uses the sample forms included in the package you have downloaded. If you wish to add this functionality to your own forms, simply add the following fields to your forms main data source (note: data type matters):



<http://www.qdabra.com>

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For Images:**For Files:****Preparation**

1. Open QdFileSubmitter.xsn and/or QdImageFileSubmitter.xsn in InfoPath Designer (right click in Windows explorer and choose Design).
2. Update the Data Connections
 1. Go to **Data** tab, and click Data Connection
 2. Select **DbxISubmit**, and then Modify



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3. Set the URL for DBXL Services to your DBXL instance, for example:
`https://<YourServer>/qdabrawebservice/dbxldocumentservice.asmx`
4. Click Next several times, and Close
3. Adjust default value of /my:Submitter/my:DBXLurl. For example, on our test site it is:
<https://dbxl365.formsboard.com/QdabraWebService/>
Note: make sure to have '/' at the end



EXTRACTING FILE ATTACHMENTS

Next, we will update your DBXL Admin Tool to extract file attachments from the QdFileSubmitter form.

Locate the QdFileSubmitter.xsn saved in the preparation section above.

Add the form as a document type

1. Open the DBXL Administration Tool (DAT) by going to <http://<your-server-name>/QdabraWebService/default.htm> and clicking on the first link **DBXL Administration** on the page.
2. Click **New Configuration**.
3. Attach the QdFileSubmitter.xsn form template and provide a name, such as “QdFileSubmitter”.

Qdabra DBXL
Administration Tool DocType: QdFileSubmitter

General Database Permissions Documents Statistics PDF Mapping

Document Type Details

Name: QdFileSubmitter

Solution Group: 

Description:

 Delete This DocType

InfoPath Form Template

XSN File:  [Download](#) [Upload New](#)

Form Version: 1.0.0.10
Last Modified: 8/04/2016 2:59:48
Last Modified By: DBXL3-365\dbxladmin

Form Template Properties:

URL: <https://dbxl365.formsboard.com/Qdabra>

☐ Form template is signed
☐ URN-based solution
☒ Enable Document History

4. Click **Save**, and then click **OK** in the confirmation dialog.

Create the XML-to-XML mapping

1. Go back to the Catalog view.
2. Expand System Document Types, and click **QdSubDocumentMapping** document type to edit.



System Document Types			
Name	Form Version	# Docs	Edit
DAT	2.9.2015.317	0	
QdAttachment	1.0.0.9	0	
QdCategory	1.0.0.1032	0	
QdDocumentIndexFields	1.0.0.27	51	
QdDocumentType	1.0.0.25	51	
QdDocumentTypePermissions	1.0.0.24	51	
QdDocumentTypeProperties	1.0.0.25	51	
QdDomain	1.0.0.9	0	
QdEmailFlow	1.0.0.4	307	
QdFile	1.0.0.3	179	
QdHierarchy	1.0.0.8	0	
QdImage	1.0.0.8	0	
QdMapping	1.0.0.28	51	
QdNodeNamespaces	1.0.0.20	51	
QdNotification	1.0.0.1594	0	
QdRatings	1.0.0.9	0	
QdRefIdInfo	1.0.0.17	45	
QdRender	1.0.0.7	535	
QdRenderMapping	1.0.0.67	19	
QdSharePointListMaps		58	
QdStandaloneDashboard	1.0.0.2286	0	
QdStandaloneLog	1.0.0.17	0	
QdSubDocumentMapping	1.0.0.34	2	
QdTags	1.0.0.16	0	
QdUser	1.0.0.15	0	
QueryBuilder	1.0.0.940	0	
		10	25 50 100

- Go to **Documents** tab.
- Click **New Doc.**

Administration Tool DocType: QdSubDocumentMapping

General Database Permissions **Documents** Statistics PDF Mapping

Query Documents

To limit the number of documents shown, enter a starting Doc. ID and the number of documents to show, and then click query. You can then jump forward or backward by the number of shown documents, or click Query All to show all documents. To search for a Document with a specific Ref. ID, type the ID into the field, and then click Query.

Starting Doc. ID: Range: Ref. ID:

Query Query All Next Previous

Actions on Documents

Select documents for Reshred and Delete. If rethreading more than 100 documents, please use the DBXL Migration Tool.

Reshred Delete Reshred All Delete All Refresh **New Doc**

- The mapping form will open.
- Enter File for the Mapping Name.
- Select the QdFile as the Target Document Type.
- Leave other settings and click Save.



Sub Document Mapping

Mapping Name

Please specify a name for your mapping. This mapping will be applied any time a node with the name **qdxtp_mappingName** is located in a submitted document.

File

Target Document Type

Please select the document type to which the mapped documents should be submitted.

QdFile

Namespace

Below are the namespace URI and prefix of the document type to which mapped documents will be submitted.

These should be typically populated automatically when you select a Target Document Type and should usually not be modified.

Target namespace URI	Prefix
http://schemas.microsoft.com/office/infopath/2003/myXSD/2008-08-21T22:28:06	my

Host Field Mappings

Please enter the XPath of any locations in the mapped documents to which you will map metadata values from the host document.

For example, to have the host document's DocId injected into the **/my:myFields/my:HostDocId** field of the child documents, enter **/my:myFields/my:HostDocId** for the Field Path, and select DocId for the token. The Field Path is case sensitive.

Field Path	Token
☒ Insert item	

Document Metadata Mappings

Please enter the XPath of fields in the child documents that you would like to use as the documents' **Title Author** or **Description** metadata values. The XPath should correspond to the XML and fields of the child documents, **not** the host document.

Title	
Author	
Description	

Save

Form Version: 1.0.0.34

Create Database and Set Database Mapping

Creating a mapping to a SQL database table will make passing file and image data to a downstream line of business process easier.

This section shows how to create link in SQL.

SQL SETTING

1. Open SQL Server Management Studio, and access your database server instance.
2. Go to QdabraUtility database, and create a new table 'QdImageFile'.



<http://www.qdabra.com>

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3. Create columns DocID, and FileTitle.

	Column Name	Data Type	Allow Nulls
	DocID	bigint	☐
	FileTitle	nvarchar(50)	☒
	FileLink		☒
			☐

- DocID, as bigint, and set Primary Key
- FileTitle, as nvarchar(50)

4. Also create **computed column** FileLink.

- In Column Properties panel, expand **Computed Column Specification**
- In **(formula)**, paste the following string with your site name
('https://<yourSite>/QdabraWebService/Documents/' + CONVERT ([nvarchar] (max) , [DocID]) + '/' + CONVERT ([nvarchar] (max) , [DocID]) + '.xml?cmd=file')
- Note: change https to http if your site is using http

	Column Name	Data Type	Allow Nulls
	DocID	bigint	☐
	FileTitle	nvarchar(50)	☒
	FileLink		☐
			☐

Column Properties

(General)

(Name) FileLink

Allow Nulls Yes

Data Type

Default Value or Binding

Table Designer

Collation < database default >

 **Computed Column Specification** (((('https://dbx1365.formsboard.com/QdabraWebService/Documents/' + CONVERT([nvarchar](max),[DocID]))+'')+CONV

(Formula) (((('https://dbx1365.formsboard.com/QdabraWebService/Documents/' + CONVERT([nvarchar](max),[DocID]))+'')+CONV

Is Persisted No

Condensed Data Type

5. Save changes on QdImageFile (ctrl-s or save icon)

DBXL DATABASE SETTING

1. Back to DAT, and go to the QdFileSubmitter DocType.
2. Click Database tab.
3. Set Connection String, and click Test Connection. See Getting Started document, section 'ADD DATABASE MAPPING' for more detail on Connection String.

Database Configuration

Connection String:

 Test Connection

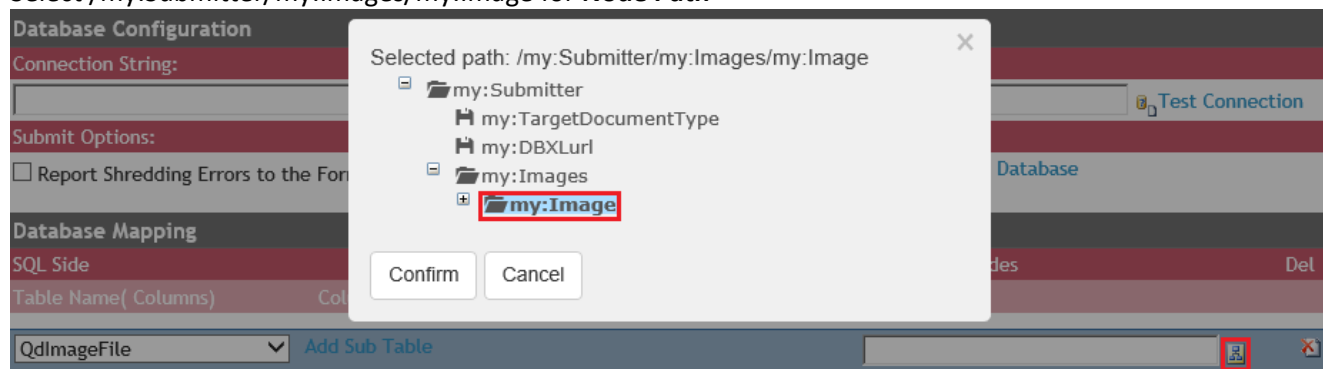
4. Click **Add Table** and select QdImageFile.

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5. Select /my:Submitter/my:Images/my:Image for **Node Path**



6. Click **Add Column**.
7. Click Add Column, and select **DocID** from Column Name dropdown.
8. DocID is an attribute and you can't select it from the popup GUI, so please copy the following string, and paste it to Node Path.
my:qdxtp_File/@my:docID
9. Now you have Database Mapping as follows:

Database Mapping				
SQL Side	Template Sides			Del
Table Name(Columns)	Column Name	Type	Key	Node Path
QdImageFile				/my:Submitter/my:Images/my:Image
	DocID	Int64	☒	my:qdxtp_ImageFile/@my:docID

10. Click Save.

Test the form

1. Back to web DAT, and select QdFileSubmitter.
2. Go to **Documents** tab.
3. In the Documents tab, click **New Doc** to open a blank form.



4. Attach a document.



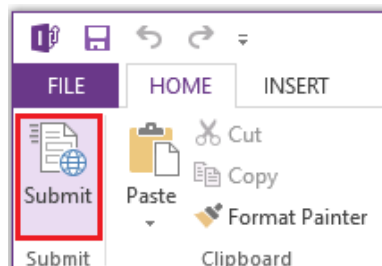
QdFile Submitter

 Sample Doc.docx
Microsoft Word Document
12.2 KB

 Insert item

Form version: 1.0.0.14

5. Click Submit.



6. Form should be submitted successfully.
7. Click Refresh, and confirm that new doc appears under Document section.

Actions on Documents

Select documents for Reshred and Delete.
 If reshreading more than 100 documents, please use the DBXL Migration Tool.

 Reshred
  Delete
  Reshred All
  Delete All
  Refresh
  New Doc

Documents

Total Documents: 3

Doc. ID	Ref. ID	Version #	Name	Author	Description	New		History
22462		1				Open	☐	History

Now let's check the result.

8. Click Open on the newly added Doc.
9. File was removed from this doc, and file Url is inserted.

QdFile Submitter

<https://dbxl365.formsboard.com/QdabraWebService/Documents/22496/22496.xml?cmd=file>

 Insert item

Form version: 1.0.0.14

10. Click the File URL, then you will see the file in browser, or you can download the file.



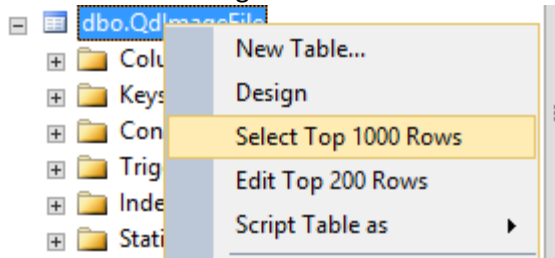
<http://www.qdabra.com>

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- If InfoPath form is opened instead of image, please go to [Troubleshooting – Link Does Not Open Attached File But InfoPath Form](#)

11. Check the database: go to SQL and see rows in the QdlmafeFile table.



12. Check FileLink in the table

Results		Messages	
	DocID	FileTitle	FileLink
1	22496	NULL	https://dbx1365.formsboard.com/QdabraWebService/Documents/22496/22496.xml?cmd=file



EXTRACT IMAGE ATTACHMENTS

Now, we'll do the same for images.

Locate the QdImageFileSubmitter.xsn saved in the preparation section above.

Add the QdImageFile document type

1. Open the DBXL Administration Tool (DAT) by going to <http://<your-server-name>/QdabraWebService/default.htm> and clicking on the first link **DBXL Administration** on the page.
2. Click **New Configuration**.
3. Attach the QdImageFile.xsn form template and provide the name, "QdImageFile".
4. Click **Save**, and then click **OK** in the confirmation dialog.

Add the form as a document type

1. Click **New Configuration**.
2. Attach the QdFileSubmitter.xsn form template and provide a name, such as "QdImageSubmitter".

Qdabra DBXL
Administration Tool DocType: QdImageSubmitter

General Database Permissions Documents Statistics PDF Mapping

Document Type Details

Name: QdImageSubmitter

Solution Group: 

 Delete This DocType

InfoPath Form Template

XSN File:  Download  Upload New

Form Version: 1.0.0.11
Last Modified: 8/04/2016 2:22:15
Last Modified By: DBXL3-365\dbxladmin

Form Template Properties:

URL: https://dbxl365.formsboard.c

☐ Form template is signed
☐ URN-based solution
☒ Enable Document History

3. Click **Save**, and then click **OK** in the confirmation dialog.

Create the XML-to-XML mapping

1. Go back to the Catalog view.
2. Expand **System Document Types**, find the **QdSubDocumentMapping** document type and click it.



System Document Types			
Name	Form Version	# Docs	Edit
DAT	2.9.2015.317	0	
QdAttachment	1.0.0.9	0	
QdCategory	1.0.0.1032	0	
QdDocumentIndexFields	1.0.0.27	51	
QdDocumentType	1.0.0.25	51	
QdDocumentTypePermissions	1.0.0.24	51	
QdDocumentTypeProperties	1.0.0.25	51	
QdDomain	1.0.0.9	0	
QdEmailFlow	1.0.0.4	307	
QdFile	1.0.0.3	179	
QdHierarchy	1.0.0.8	0	
QdImage	1.0.0.8	0	
QdMapping	1.0.0.28	51	
QdNodeNamespaces	1.0.0.20	51	
QdNotification	1.0.0.1594	0	
QdRatings	1.0.0.9	0	
QdRefIdInfo	1.0.0.17	45	
QdRender	1.0.0.7	535	
QdRenderMapping	1.0.0.67	19	
QdSharePointListMaps		58	
QdStandaloneDashboard	1.0.0.2286	0	
QdStandaloneLog	1.0.0.17	0	
QdSubDocumentMapping	1.0.0.34	2	
QdTags	1.0.0.16	0	
QdUser	1.0.0.15	0	
QueryBuilder	1.0.0.940	0	
		10	25 50 100

- Go to **Documents** tab.
- Click **New Doc.**

Administration Tool DocType: QdSubDocumentMapping

General Database Permissions **Documents** Statistics PDF Mapping

Query Documents

To limit the number of documents shown, enter a starting Doc. ID and the number of documents to show, and then click query. You can then jump forward or backward by the number of shown documents, or click Query All to show all documents. To search for a Document with a specific Ref. ID, type the ID into the field, and then click Query.

Starting Doc. ID: Range: Ref. ID:

Actions on Documents

Select documents for Reshred and Delete. If rethreading more than 100 documents, please use the DBXL Migration Tool.

- The mapping form will open.
- The mapping form will open.
- Enter **ImageFile** for the Mapping Name.
- Select the **QdImageFile** as the Target Document Type.
- Under **Document Metadata Mappings**, enter /my:QdFile/my:FileName for the **Title** field.
- Leave other settings and click Save.



Sub Document Mapping

Mapping Name

Please specify a name for your mapping. This mapping will be applied any time a node with the name **qdxtp_mappingName** is located in a submitted document.

Target Document Type

Please select the document type to which the mapped documents should be submitted.

Namespace

Below are the namespace URI and prefix of the document type to which mapped documents will be submitted.

These should be typically populated automatically when you select a Target Document Type and should usually not be modified.

Target namespace URI

Prefix

Host Field Mappings

Please enter the XPath of any locations in the mapped documents to which you will map metadata values from the host document.

For example, to have the host document's DocId injected into the **/my:myFields/my:HostDocId** field of the child documents, enter **/my:myFields/my:HostDocId** for the Field Path, and select DocId for the token. The Field Path is case sensitive.

	Field Path	Token
☒ Insert item		

Document Metadata Mappings

Please enter the XPath of fields in the child documents that you would like to use as the documents' **Title** **Author** or **Description** metadata values. The XPaths should correspond to the XML and fields of the child documents, **not** the host document.

Title	/my:QdFile/my:FileName
Author	
Description	

Form Version: 1.0.0.34

Create Database and Set Database Mapping

Creating a mapping to a SQL database table will make passing file and image data to a downstream line of business process easier.

This section shows how to replace images with links.

SQL SETTING

- Open SQL Server Management Studio, and access your database server instance.
- Go to QdabraUtility database, and create a new table 'QdImageFile'.



<http://www.qdabra.com>

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8. Create columns DocID, and FileTitle.

	Column Name	Data Type	Allow Nulls
	DocID	bigint	☐
	FileTitle	nvarchar(50)	☒
	FileLink		☒
			☐

- DocID, as bigint, and set Primary Key
- FileTitle, as nvarchar(50)

9. Also create **computed column** FileLink.

- In Column Properties panel, expand **Computed Column Specification**
- In **(formula)**, paste the following string with your site name
('https://<yourSite>/QdabraWebService/Documents/' + CONVERT ([nvarchar] (max) , [DocID]) + '/' + CONVERT ([nvarchar] (max) , [DocID]) + '.xml?cmd=file')
- Note: change https to http if your site is using http

	Column Name	Data Type	Allow Nulls
	DocID	bigint	☐
	FileTitle	nvarchar(50)	☒
	FileLink		☐
			☐

Column Properties

(General)

(Name) FileLink

Allow Nulls Yes

Data Type

Default Value or Binding

Table Designer

Collation < database default >

 **Computed Column Specification** (((('https://dbx1365.formsboard.com/QdabraWebService/Documents/' + CONVERT([nvarchar](max),[DocID])) + '/') + CONV

(Formula) (((('https://dbx1365.formsboard.com/QdabraWebService/Documents/' + CONVERT([nvarchar](max),[DocID])) + '/') + CONV

Is Persisted No

Condensed Data Type

10. Save changes on QdImageFile (ctrl-s or save icon)

DBXL DATABASE SETTING

- Back to DAT, and go to the QdImageSubmitter DocType.
- Click Database tab.
- Set Connection String, and click Test Connection. See Getting Started document, section 'ADD DATABASE MAPPING' for more detail on Connection String.

Database Configuration

Connection String:

 Test Connection

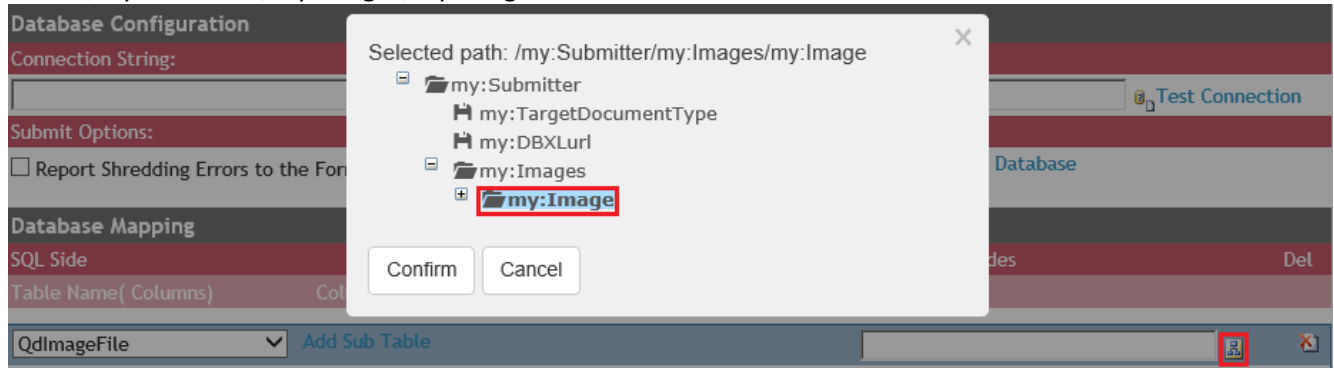
14. Click **Add Table** and select QdImageFile.

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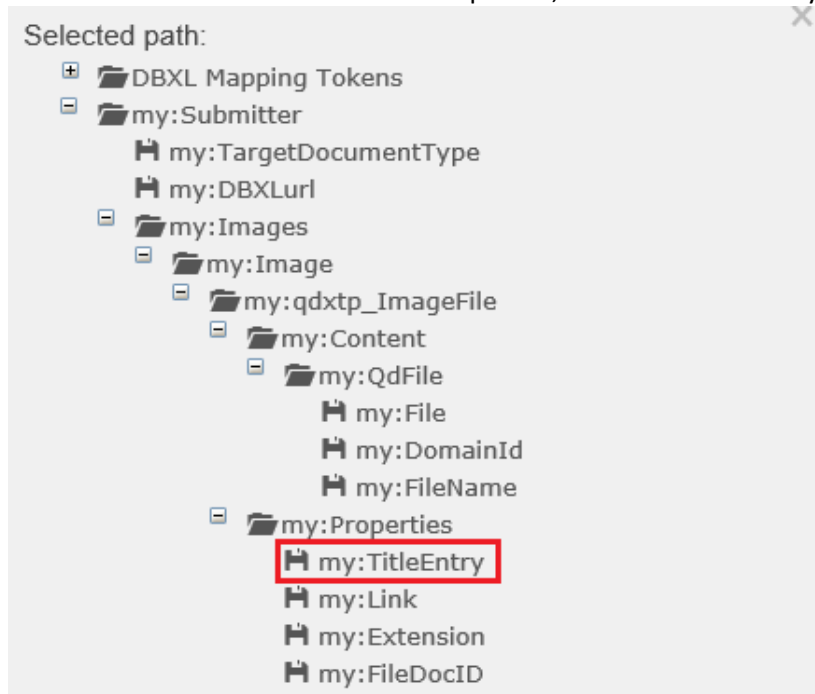
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15. Select /my:Submitter/my:Images/my:Image for **Node Path**



16. Click **Add Column**.

17. Select FileTitle from Column Name dropdown, then select TitleEntry for Template Node Path



18. Then Template Note Path should be

my:qdxtp_ImageFile/my:Properties/my:TitleEntry

19. Click Add Column, and select **DocID** from Column Name dropdown.

20. DocID is an attribute and you can't select it from the popup GUI, so please copy the following string, and paste it to Node Path.

my:qdxtp_ImageFile/@my:docID



21. Now you have Database Mapping as follows:

Database Mapping					
SQL Side			Template Sides		Del
Table Name(Columns)	Column Name	Type	Key	Node Path	
QdImageFile	Add Sub Table			/my:Submitter/my:Images/my:Image	
	FileTitle	String	☐	my:qdxtp_ImageFile/my:Properties/m	
	DocID	Int64	☒	my:qdxtp_ImageFile/@my:docID	
	Add Column				

22. Click Save.

Test the form

13. Back to web DAT, and select **QdImageSubmitter**.
14. Go to **Documents** tab
15. In the Documents tab, click **New Doc** to open a blank form.



16. Click **Open** when prompted.
17. Attach a picture, and enter a title. Then click Submit



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18. Form should be submitted successfully.
19. Click Refresh, and confirm that new doc appears under Document section.

Actions on Documents

Select documents for Reshred and Delete.
If rethreading more than 100 documents, please use the DBXL Migration Tool.

 Reshred
  Delete
  Reshred All
  Delete All
  Refresh
  New Doc

Documents

Total Documents: 3

Doc. ID	Ref. ID	Version #	Name	Author	Description	Now	History
22462		1				Open	History

Now let's check the result.

20. Click Open on the newly added Doc.
21. Image file was removed from this doc, and Image Url is inserted. The image you can see here is linked image.

QdImageFile Submitter

Title: Webinar image

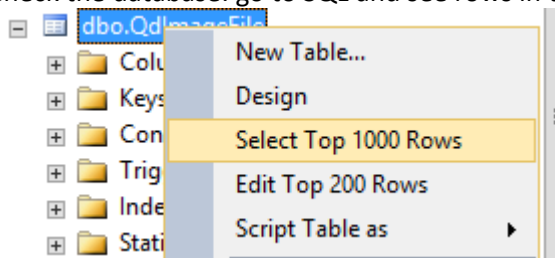
Image Url: <https://dbxl365.formsboard.com/QdabraWebService/Documents/22469/22469.xml?cmd=file>



Insert item

Form version: 1.0.0.32

22. Click the Image URL, then you will see the image in browser.
 - If InfoPath form is opened instead of image, please go to [Troubleshooting – Link Does Not Open Attached File But InfoPath Form](#)
23. Check the database: go to SQL and see rows in the QdImageFile table.



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24. Check FileTitle and FileLink in the table

	DocID	FileTitle	FileLink
1	22465	mai5	https://dbxl365.formsboard.com/QdabraWebService/Documents/22465/22465.xml?cmd=file
2	22467	Menu	https://dbxl365.formsboard.com/QdabraWebService/Documents/22467/22467.xml?cmd=file
3	22469	Webinar image	https://dbxl365.formsboard.com/QdabraWebService/Documents/22469/22469.xml?cmd=file

TROUBLESHOOTING

Link does not open attached file but Infopath form

Issue: link for the attached file opens InfoPath form instead of image or attached file.

Reason: Generated link should have “?cmd=file” at the end of url, and handling of this may not defined.

Fix:

1. Open SQL Server Management Studio, and open QdabraDBXL database.
2. Locate dbo.QdQueryProcessing table
3. Add a row
 - DocumentType: DocID of target DocType, such as QdImageFile

You can get DocID of QdImageFile on DAT. See Form Template Properties, and get number after ID.

URL: <https://<YourSite>/QdabraWebService/Forms/ID/22401/template.xsn>

InfoPath Form Template	
XSN File: Download Upload New Form Version: 1.0.0.4 Last Modified: 8/04/2016 5:30:52 Last Modified By: DBXL3-365\dbxladmin	Form Template Properties: URL: https://dbxl365.formsboard.com/QdabraWebService/Forms/ID/22401/template.xsn ☐ Form template is signed ☐ URN-based solution ☒ Enable Document History

- QueryStringArg: file
- XPath: /my:QdFile/my:File
- PayloadType: 1

Object Explorer		DBXL3-365\SQLEXP...dQueryProcessing		DBXL3-365\SQLEXP...stImageExtraction	
DocumentType	QueryStringArg	XPath	PayloadType	DateModified	ContentName...
1	template	/my:myFields/my:Template/my:TemplateFile	1	<Binary data>	NULL
93	file	//*[@local-name()='File']	1	<Binary data>	NULL
161	basexml	/my:QdRenderMapping/my:XmlGen/my:BaseXml	1	<Binary data>	NULL
22401	file	/my:QdFile/my:File	1	<Binary data>	NULL
*	NULL	NULL	NULL	NULL	NULL



<http://www.qdabra.com>

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SUPPORT

The InfoPathDev.com community has [Product support forums](#) where Qdabra's products can be discussed. This is a good place to contact other users of Qdabra's products. Qdabra's support staff also monitors this forum to identify issues and respond.

If you have questions about the information in this document, please contact us via Support@Qdabra.com for assistance. To learn more about Qdabra support, please visit [our website](#).



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