

HOW TO USE QUERY BUILDER

PRODUCT: DBXL v2.5 or higher
LAST UPDATED: May 31, 2016

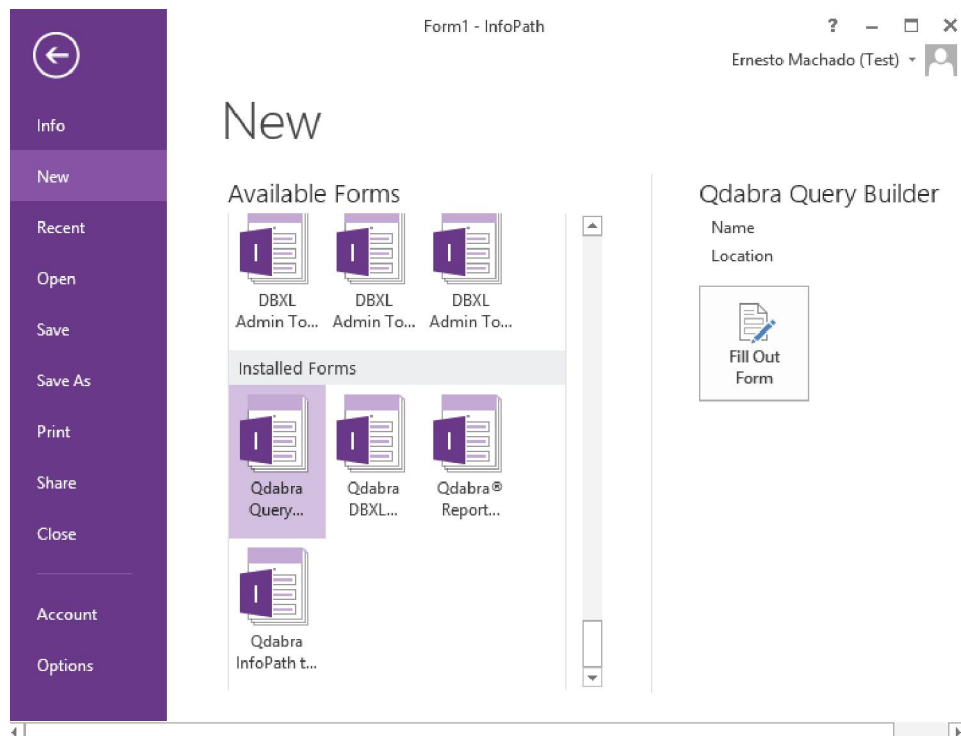
Qdabra's Query Builder Tool allows you to generate queries through an easy-to-use interface. These queries can be used with the QueryDB and QuerySharePoint web services.

To download and install QueryBuilder, please refer to this tutorial:

http://www.infopathdev.com/files/folders/other_subjects/entry81626.aspx

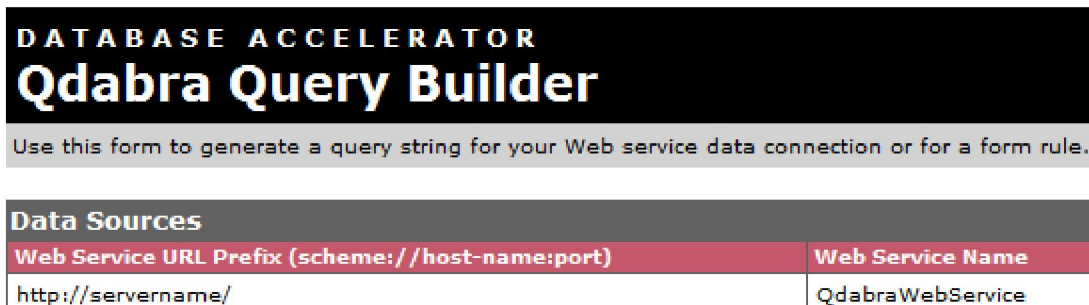
GETTING STARTED

Once installed, you'll find QueryBuilder in the Installed Forms section of the InfoPath Filler. Select it, then click **Fill Out Form**.



In the **Web Service URL Prefix** field, enter the URL to your host.

The **Web Service Name** is populated with QdabraWebService by default. You will only need to change this default value if you changed the value during installation of DBXL.



Data Sources	
Web Service URL Prefix (scheme://host-name:port)	Web Service Name
http://servername/	QdabraWebService

You then make the essential choice: Query a **SQL database** or query a **SharePoint List**. This selection, made in the **Target** column, determines the parameters you will need to provide in the rest of the form.

Finally, in the InfoPath Form Template column there's an attachment control. Use it to attach the form you're designing (the form where the query will be used).

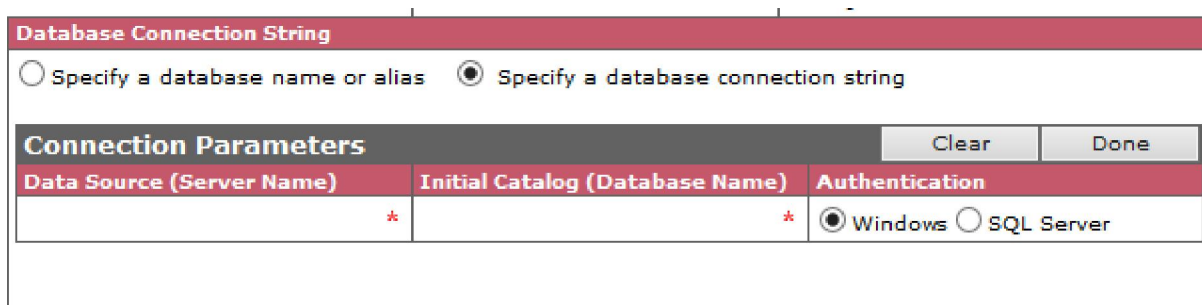
QUERYING A DATABASE

If using QueryDB, you will need to provide a database name or alias.

- If you are querying a database on the same SQL instance where DBXL was installed, uncheck "Is Alias" and enter the Database name.
- If you are querying a database on a different SQL instance, make sure **Is Alias** remains checked and enter the alias that was defined in the web.config. For more info, see the section below.

Then click **Refresh Database Schema**. This will populate the **Table Name** dropdown, where you can select the table you wish to query.

If you need Query Builder to help in building a connection string, click on "Specify a database connection string" and fill out the required fields before clicking **Done**.



Database Connection String		
☐ Specify a database name or alias ☒ Specify a database connection string		
Connection Parameters		
Data Source (Server Name)	Initial Catalog (Database Name)	Authentication
*	*	☒ Windows ☐ SQL Server



In the **Query Parameters** section you can also specify the following, if desired:

- **Max Row Count:** The number of rows that will be returned by the query
- **Distinct:** Checkbox that tells the query to select only distinct values

Adding a database alias to the DBXL web.config

In order to allow QueryDB to access a database that lies on a different server, you must add the server and database aliases to the web.config file. Look for instructions within the configuration/qdabra.dbxl/enumdb/servers and configuration/qdabra.dbxl/enumdb/databases nodes. Note that the connection string in the <server> element in web.config should not specify a specific database, only the database server. The database alias should be separately added in the database aliases node as stated above.

```
<servers>
  <server name="default" connectionString="Data Source=(LOCAL);Integrated Security=True" />
  <server name="custom" connectionString="Data Source=REMOTE_SERVER;Integrated Security=True" />
</servers>
<databases>
  <database alias="QdabraSamples" name="QdabraSamples" server="default" />
  <database alias="DB_ALIAS" name="DATABASE_NAME" server="custom" />
</databases>
```

In the screenshot above we see the server named “default”, which is the SQL instance where DBXL was installed. In addition, a second server called “custom” has been added. You must provide a valid connection string in the servers entry. Then, in the databases entry, make sure to use the correct database name, and provide an alias. Then “Is Alias” is checked in Query Builder, you’ll see that Query Builder will automatically put pound (hash) signs around it, signifying that it’s an alias (and not a database name).

Adding Multiple Connection Strings for users to the DBXL web.config

The name element of the server attribute does not need to correspond to the actual server name. It is only for reference purposes for the <database> element. The connectionString attribute determines the actual server being queried.

```
<servers>
  <server name="default" connectionString="Data Source=(LOCAL);Integrated Security=True" />
  <server name="SERVERX-USERA" connectionString="User ID=UserA;Password=pwdA;data source=SQL01"/>
  <server name="SERVERX-USERB" connectionString="User ID=UserB;Password=pwdB;data source=SQL01"/>
</servers>
```



QUERYING A SHAREPOINT LIST

If using QuerySharePoint, you will need to provide the SharePoint list URL.

Data Sources		
Web Service URL Prefix (scheme://host-name:port)	Web Service Name	Target
http://servername/	QdabraWebService	☐ SQL Database ☒ SharePoint List
InfoPath Form Template (XSN)	SharePoint List URL	
 Form1.xsn Microsoft InfoPath Form Template 4.61 KB	http://servername/site/listname	

Then click “Refresh List Schema”. In this scenario, there are no fields to fill out in the Query Parameters section.

QUERY COLUMNS

This section allows you to specify the columns that will be returned by your query. Whether you wish to query SQL or SharePoint, you’ll be able to select only the columns that need to be returned by the query.

1. Click on **Insert return column**.
2. Use the dropdown to select the column you wish to return.

Repeat to add as many columns as desired.

QUERY FILTER

This section allows you to create a filter that will be applied to the data.

1. Click on **Insert logical operator** if you wish to add more than one comparison. A dropdown will allow you to determine the logic applied to your comparisons: AND, OR, NOT.
2. Click on **Insert comparison** to create a new row for a comparison filter.
3. Use the dropdown to select the column to use in your filter.
4. For the **Value** or **Column Name** you have two options:
 - To compare against a value in your form, click the **Select Schema Node** icon. Note that this requires that an InfoPath Form be attached in the Data Sources section.
 - To compare against another column, click the **Select Database Column** icon. The taskpane will show the schema pertaining to the Database Connection String or SharePoint List URL you entered in the Data Sources section. From the taskpane you can select the desired column.



QUERY SORT

This section allows you to establish the way that your data will be sorted.

1. Click on **Insert sort column**.
2. Use the dropdown to select the column that will be used for sorting.
3. Select **Ascending** or **Descending** from the **Sort Order** dropdown.

QUERY STRINGS

Clicking the **Build Now** button will populate the four numbered boxes in the **Query Strings** section.

The first query is meant for use in the “Sample value” screen in the Data Connection Wizard. This query has an added (default) maxrows=2 parameter. This speeds up performance, allowing the form to gather the schema to be returned without retrieving hundreds of rows.

The second query is meant for use in the “value” screen in the Data Connection Wizard. It won’t contain the maxrows parameter.

The third query is meant for use in rules, i.e. a rule would set the value of the queryxml before the data connection is executed.

The fourth query is meant for use in code.

WHAT’S NEXT?

Please see the documents titled **Implement Static and Dynamic queries using QuerySharePoint** ([click here](#)) and **Implement Static and Dynamic queries using QueryDB** ([click here](#)) for full step by step examples that illustrate the Query Builder Tool’s role in the process of creating a form.



SUPPORT

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

Licensed customers can contact us via Support@Qdabra.com.

You can also use the [InfoPathDev.com](http://www.infopathdev.com) [Qdabra Product support forums](http://www.infopathdev.com) to request help from the community.

Contact Information

Qdabra Software
218 Main Street, Suite 731, Kirkland, WA 98033

Phone: 877.544.2389
Email: Support@Qdabra.com
Website: <http://www.qdabra.com>
Community: <http://www.infopathdev.com>

