

DYNAMIC DCs XTP – USER GUIDE

Are you having problems with going through the rigid process migrating your form's data connections to a new site? Worry no more and start adding this XTP to your forms!

The Dynamic DCs XTP is designed to help you with updating your form's data connections, and dynamically to point them to your new site, while avoiding the tedious process of having to manually updating each data connection at the data connection wizard.

SUPPORTED DATA TYPE CONNECTIONS:

- Submit to Library
- SharePoint List mappings via qRules' SubmitToSharePointList command
- Library query
- List query
- GetUserProfileByName

Forms may have one or more of these data type connections mentioned above, except for the GetUserProfileByName, which is often used only once.

REQUIREMENTS

This guide assumes we are working on a SharePoint Online environment with Office 365 and requires the following elements:

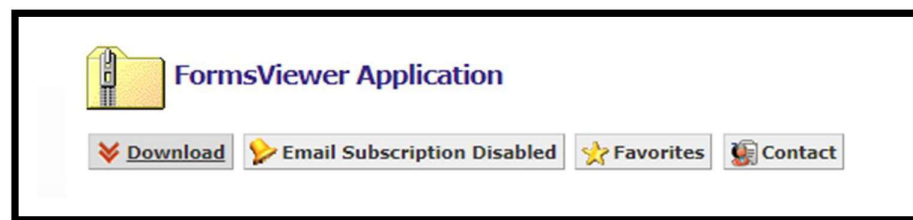
- [FormsViewer](#)
- InfoPath
- [qRules](#) (pre-installed in FormsViewer)

FORMSVIEWER

This guide assumes that you already have [FormsViewer](#) installed on your SharePoint O365 Environment. Kindly skip this section if you already have the FormsViewer app installed.

To install FormsViewer, download the App along with the guide from the link provided below:

http://www.infopathdev.com/files/folders/formsviewer_v11/entry104513.aspx



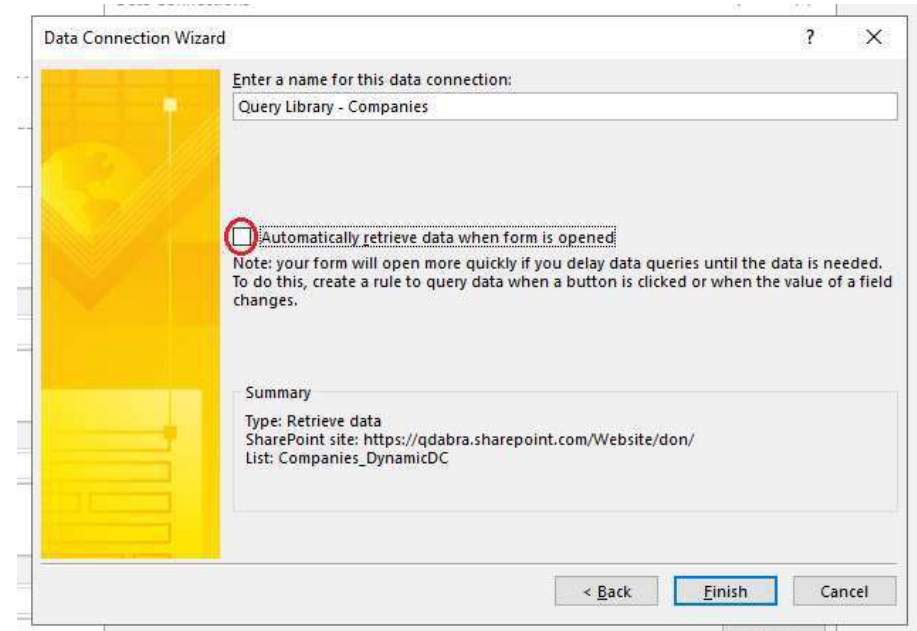
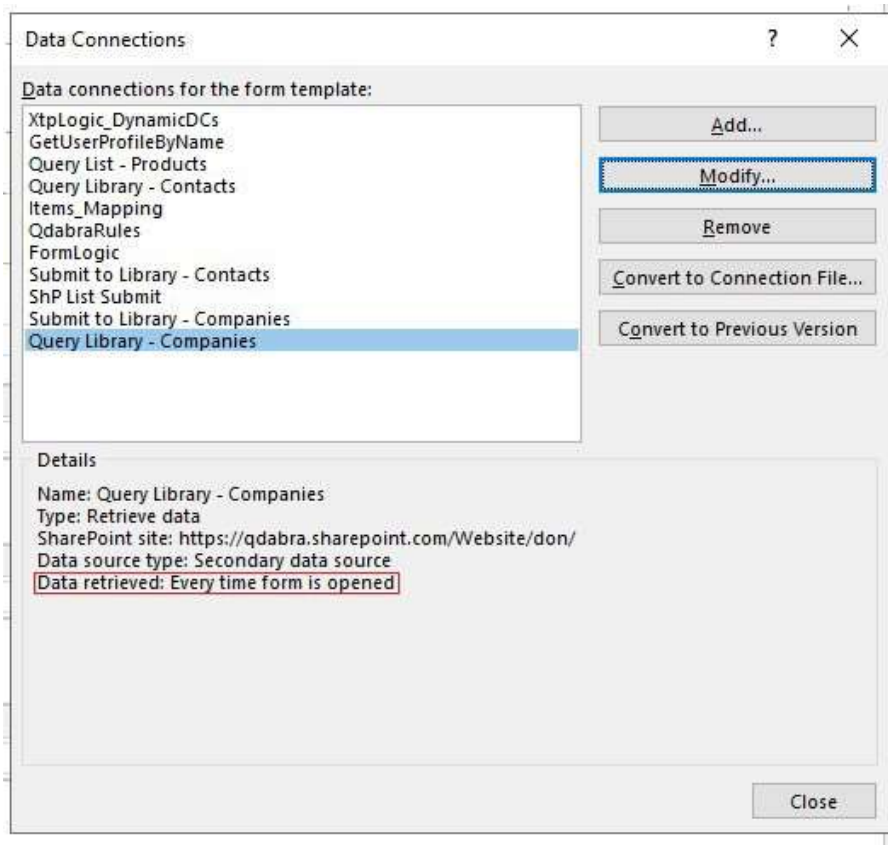
PRELIMINARY ACTIONS – FORM PREPARATIONS

On-Load Data Connections

The DynamicDCs XTP supports data connections which run after the form has finished loading. However, forms with data connections which run "Every time the form is opened" will have to be updated and configured to run at the *QdabraRules/@finishedLoading* node.

At the data connection wizard, modify the data connections (supported by the XTP):

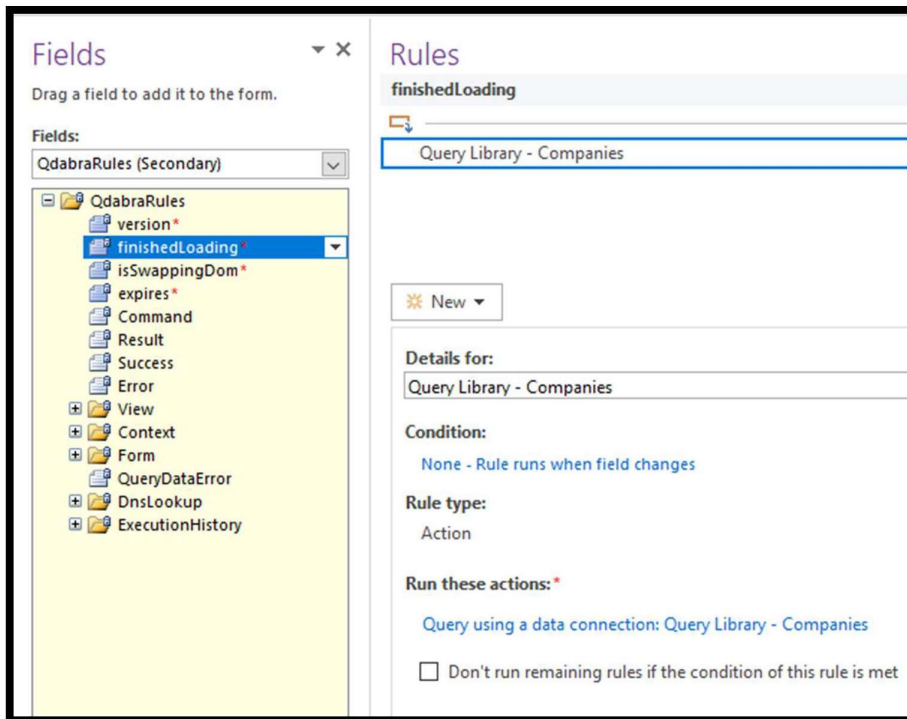
At the final page of the data connection wizard, **untick** the checkbox for the **Automatically retrieve data when form is opened** option.



Click **Finish** and close all windows.

Skip through all the pages until you reach the last page.

At the **QdabraRules/@finishedLoading** node, add an action rule which queries the above modified data connection.



Perform the same steps for the rest of the data connections affected.

Library and List Migration

This guide assumes that the new migration site already contains the Libraries and Lists – where both libraries and lists are the exact duplicates of the libraries and lists from the old site.

Having a column with a different data type, a missing column, or a column with a different column name would cause issues and return errors when querying or submitting to a library or list.

To create an exact copy of a library or list, kindly refer to this Microsoft article on creating and uploading list templates:

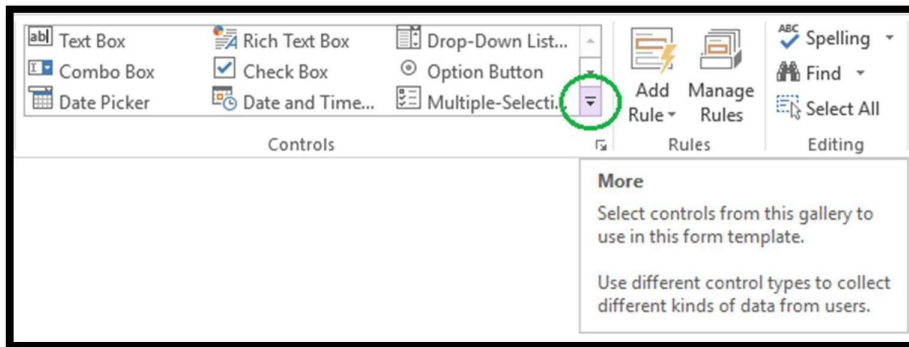
<https://support.office.com/en-us/article/manage-list-templates-c3884ad1-bc49-44b8-b3d6-3bc6a01eb393>

Feel free to skip this section if you've already done so.

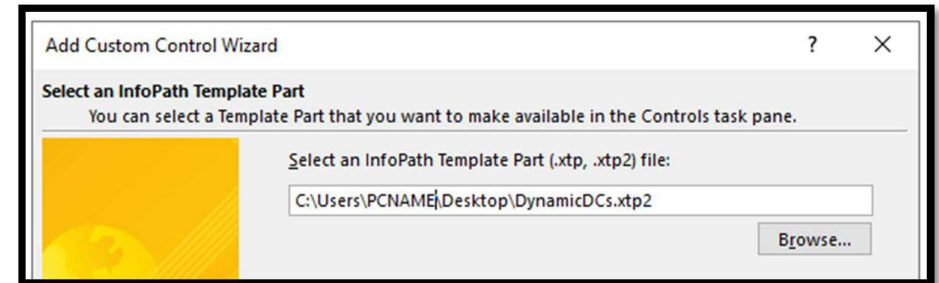
ADDING THE DYNAMIC DCs XTP

Steps:

1. Open your InfoPath Form
2. Under the *Home* Tab, expand the **Controls** section

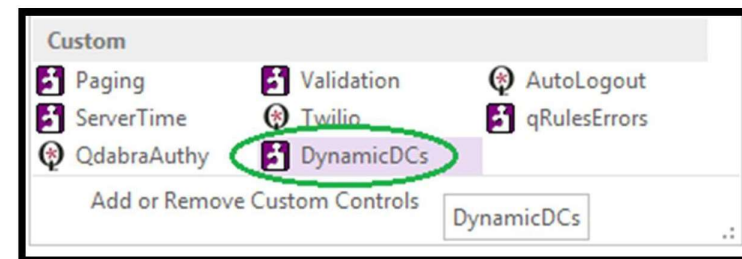


3. Click **Add or Remove Custom Controls**
4. Click **Add**
5. Select Template Part
6. Click Next
7. At the next page, click **Browse** and locate the **DynamicDCs.xtp2** file



8. Click **Finish** and close the Custom Control Wizard.

The DynamicDCs XTP should now be available at the Custom Controls section:

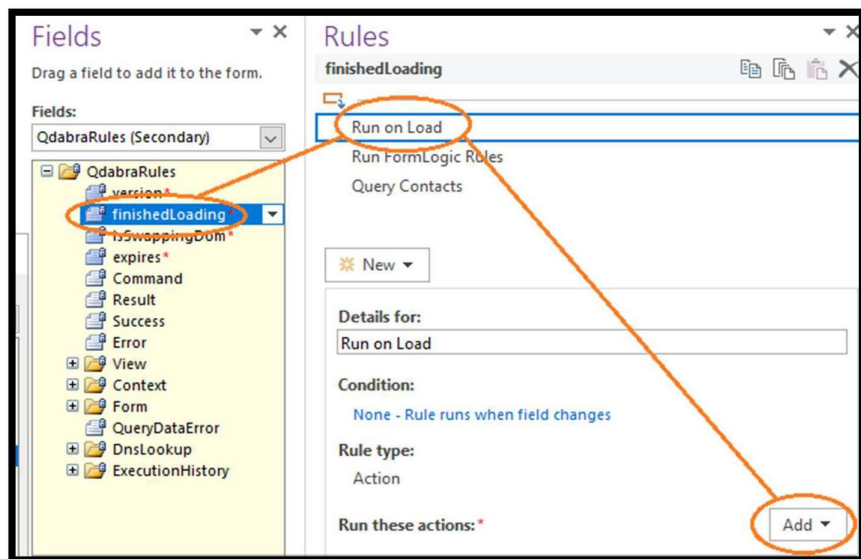


Configuring the qRules logic

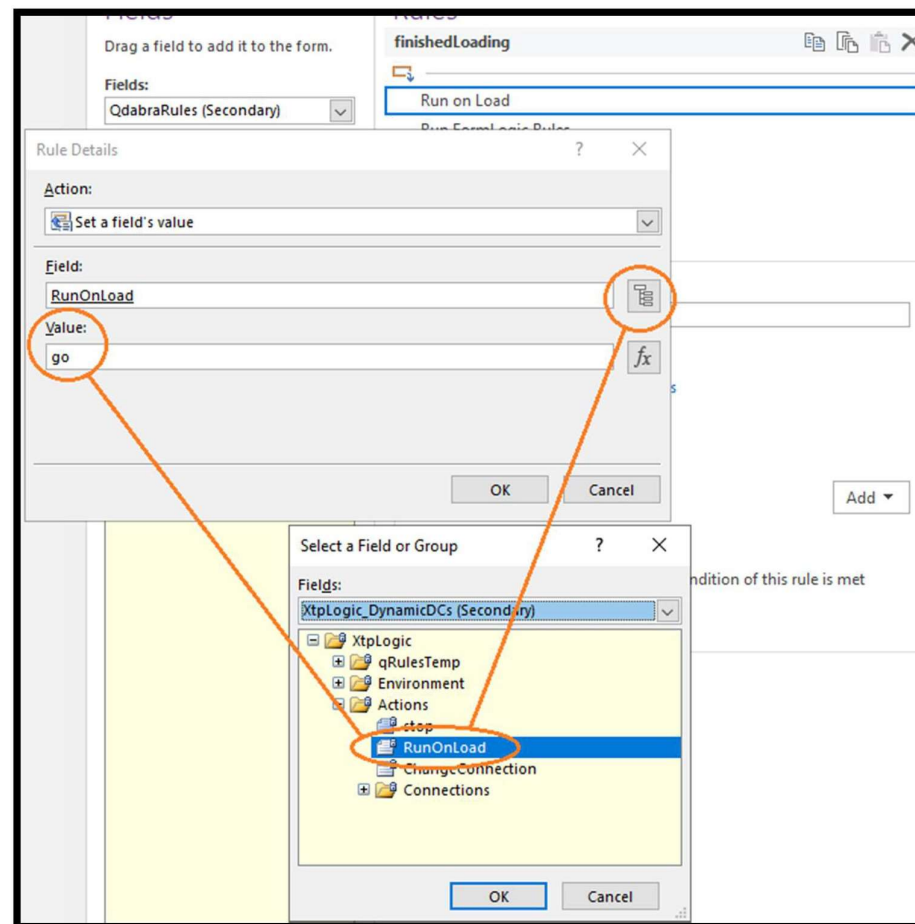
This section assumes that your form already has qRules injected. Inject qRules if you haven't done so; otherwise, proceed with the action steps below.

Steps:

1. At the *QdabraRules'* **finishedLoading** node, add a rule and give it an appropriate label such as *Run on Load* (be sure that this rule should run first before anything else).
2. Click the **Add** button to add an action.



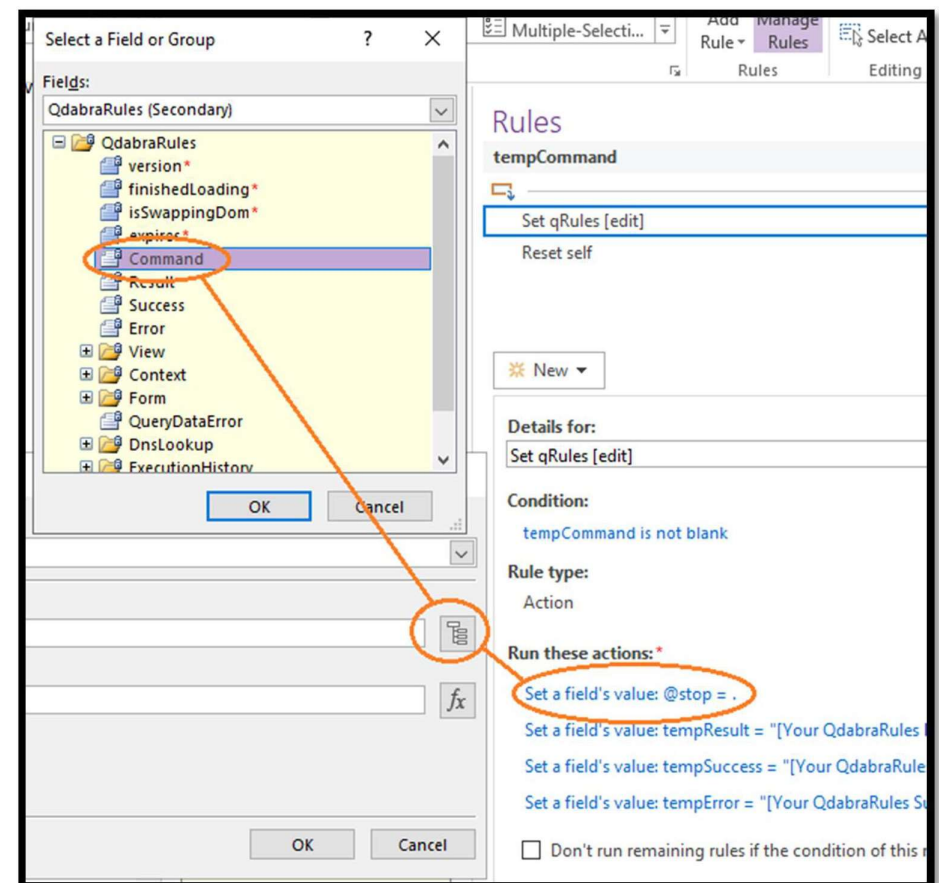
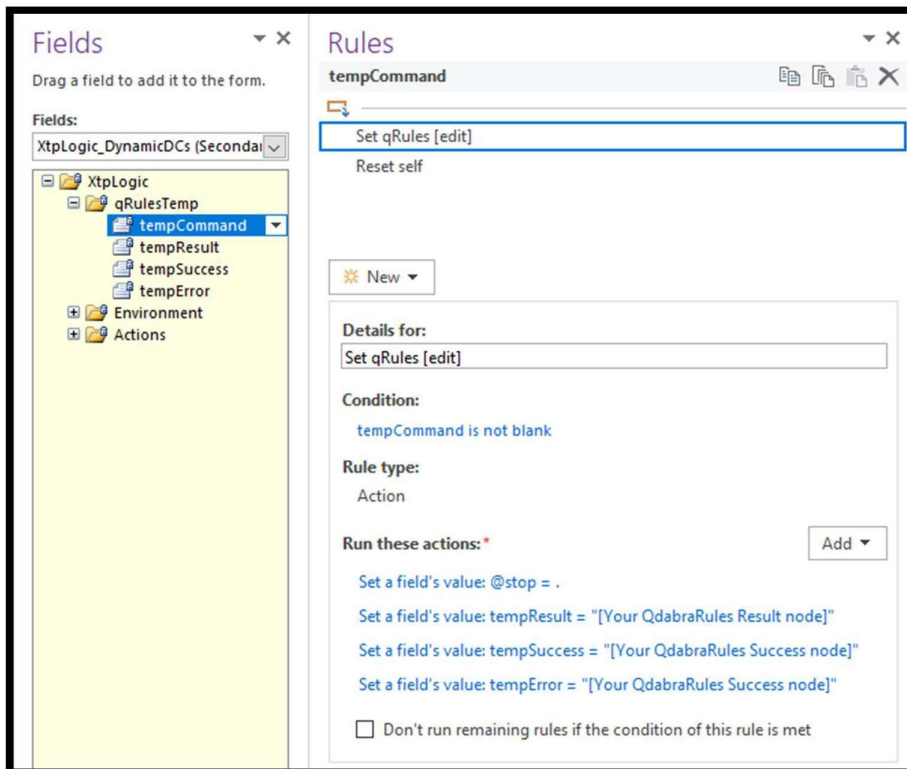
3. For the Target field, select the **RunOnLoad** node located under the *Actions* group of the *XtpLogic_DynamicsDCs* data source.



4. Set the field's value to the value **go**.

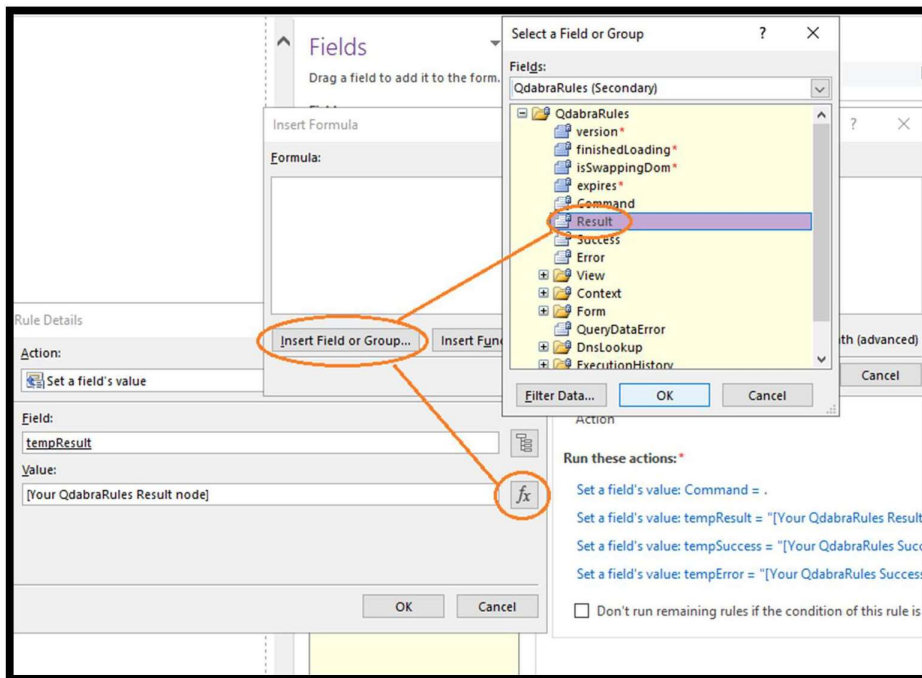
- Expand the **qRulesTemp** section and click the rule named '**Set qRules [edit]**' located in the **XtpLogic_DynamicDCs** data source **/XtpLogic/qRulesTemp/tempCommand** node.

- Select the first action and point this to the **QdabraRules' Command** node.



7. Set the next action's value to the *QdabraRules*' **Result** node.

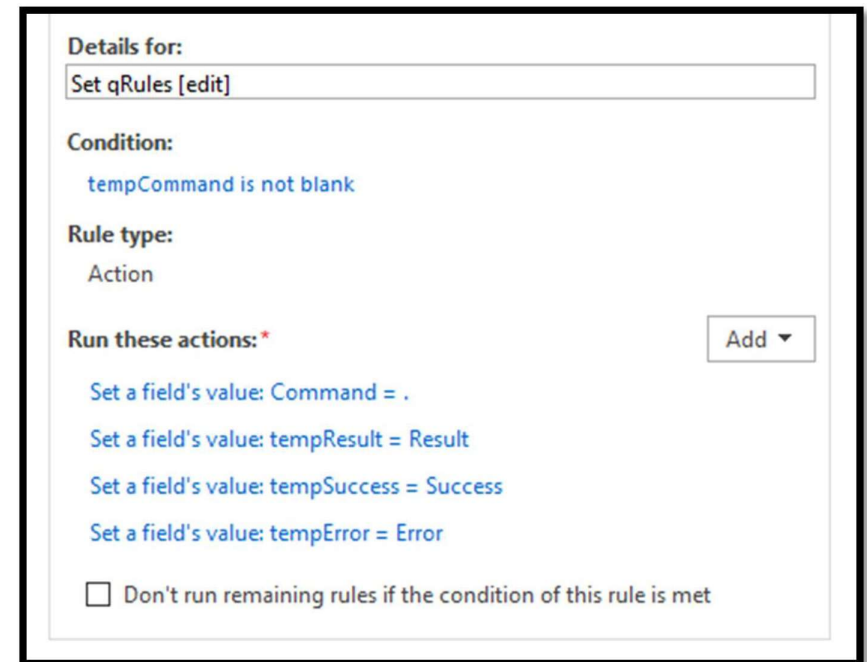
a. Click the second action



- b. Click the **fx** button to open the Formula box
- c. Click Insert Field or Group...
- d. Select the Result node from the QdabraRules secondary data source
- e. Click OK twice to close the windows

8. Perform the same procedure for the next two actions (*tempSuccess* and *tempError*) and be sure to point the fields the respective **Success** and **Error** nodes from the QdabraRules data connection.

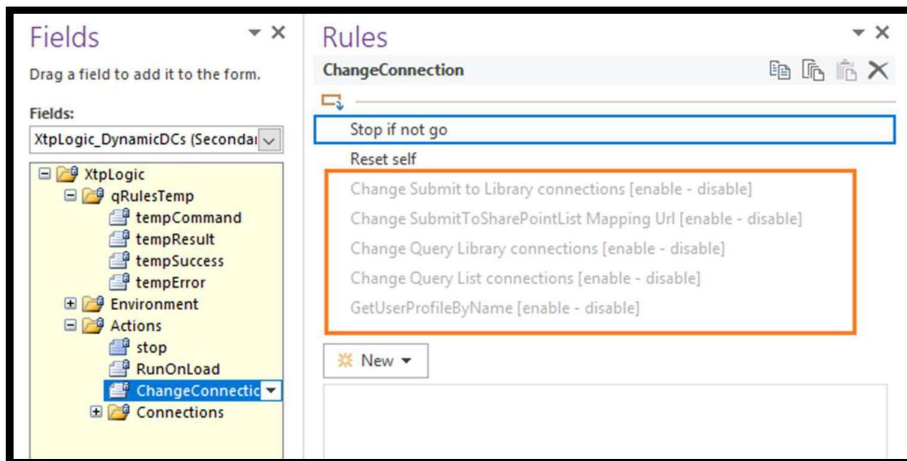
Here's how your action rules should look like:



Enabling / Disabling the Dynamic Data Connections logic

Since your form may or may not need to use all five of the data connections listed, an option to enable or disable the logic for each data connection type is provided.

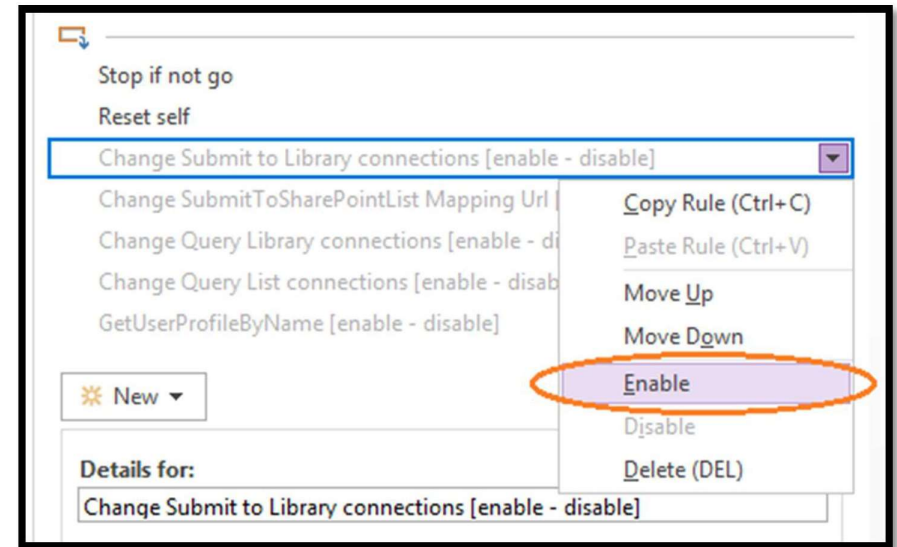
Under the **XtpLogic_DynamicDCs** data source, proceed to *XtpLogic > Actions > Connection* node, notice the last five rules labeled with '[enable - disable]'.



Notice that the last five rules are all disabled by default.

These rules trigger the logic for updating the target data connections to point to the new site where FormsViewer is installed.

To enable the data connection update logic needed by your form, simply right click on the *Action rule* and click **Enable**.



Identifying which data connection to enable or disable is self-explanatory.

If you wish to disable the logic, perform the same steps above and instead, select **Disable**.

How to modify the data connections and point them to the desired Library or List

In this section, we will specify the data connection names and the target libraries and/or lists.

Since the DynamicDCs XTP is capable of determining the current site location where FormsViewer is installed or where your form will be deployed to, specifying the URL is optional for Libraries and Lists located on a site other than the current site location.

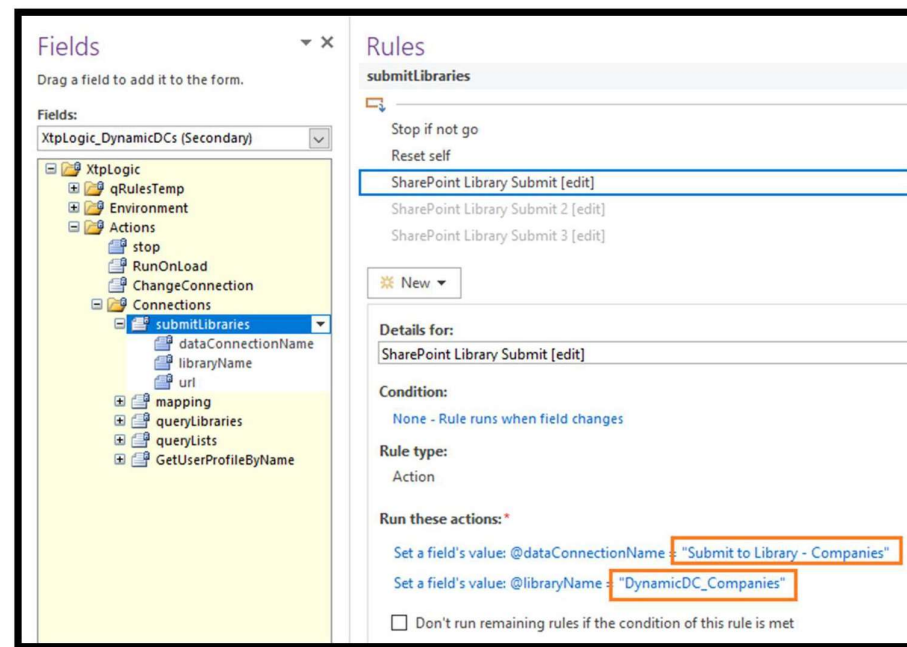
To make things easier, it is best to lay everything out on an Excel sheet and write down the Data Connection names, Library or List Name, and URL.

Determine the type of data connection such as Submit to Library, SubmitToSharePointList Mapping, Query Library or List – your data connection list should look similar to this:

Data Connection Name	Library or List Name	Type	URL
Submit to Library - Companies	DynamicDC_Companies	Submit to SharePoint Library	<a href="https://sharepoint.com/<Training>">https://sharepoint.com/<Training>
Submit to Library - Contacts	DynamicDC_Contacts	Submit to SharePoint Library	<a href="https://sharepoint.com/<Training>/<Subsite>">https://sharepoint.com/<Training>/<Subsite>
Items_Mapping	DynamicDC_Products	SubmitToSharePointList Mapping	<a href="https://sharepoint.com/<Training>">https://sharepoint.com/<Training>
Query Library - Companies	DynamicDC_Companies	Query Library	<a href="https://sharepoint.com/<Training>">https://sharepoint.com/<Training>
Query Library - Contacts	DynamicDC_Contacts	Query Library	<a href="https://sharepoint.com/<Training>/<Subsite>">https://sharepoint.com/<Training>/<Subsite>
Query List - Products	DynamicDC_Products	Query List	<a href="https://sharepoint.com/<Training>">https://sharepoint.com/<Training>

SUBMIT TO LIBRARY DATA CONNECTIONS

1. Proceed to *XtpLogic > Actions > Connections* group of the of the **XtpLogic_DynamicDCs** data source
2. Click on the **submitLibraries** node.
3. Select the first '**SharePoint Library Submit [edit]**' rule.
4. For the first action, modify '**[Enter Submit Data Connection Name]**' with the name of the desired Submit to Library data connection you wish to modify.
5. For the section action, modify '**[Enter Library Name]**' to the actual name of the SharePoint Library you are submitting to.



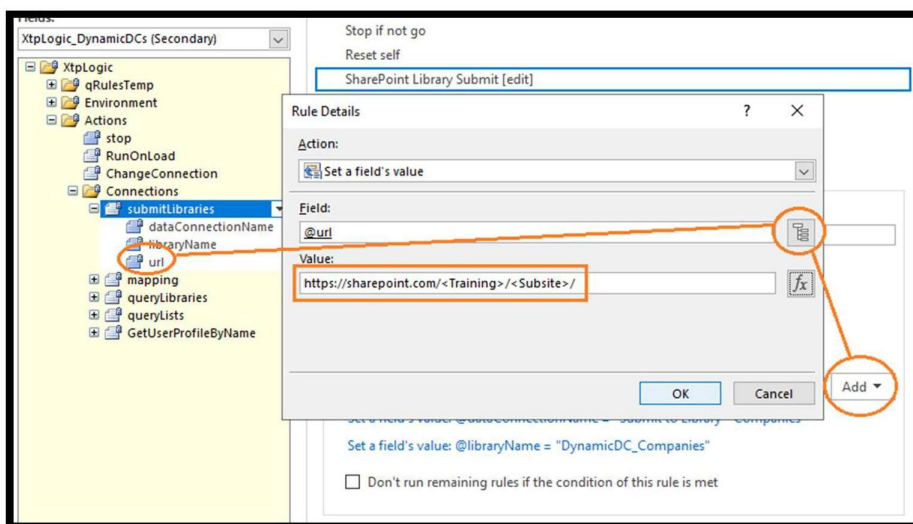
The screenshot displays the configuration interface for the 'submitLibraries' rule. The left pane shows the 'Fields' section with a tree view containing 'XtpLogic', 'qRulesTemp', 'Environment', 'Actions', and 'Connections'. The 'Connections' folder is expanded, showing 'submitLibraries' with sub-items: 'dataConnectionName', 'libraryName', 'url', 'mapping', 'queryLibraries', 'queryLists', and 'getUserProfileByName'. The right pane shows the 'Rules' section with a list of rules: 'Stop if not go', 'Reset self', 'SharePoint Library Submit [edit]', 'SharePoint Library Submit 2 [edit]', and 'SharePoint Library Submit 3 [edit]'. The 'SharePoint Library Submit [edit]' rule is selected. Below the rule list, the 'Details for:' section shows the rule name. The 'Condition:' section is set to 'None - Rule runs when field changes'. The 'Rule type:' is set to 'Action'. The 'Run these actions:' section contains two actions: 'Set a field's value: @dataConnectionName: "Submit to Library - Companies"' and 'Set a field's value: @libraryName: "DynamicDC_Companies"'. A checkbox at the bottom indicates 'Don't run remaining rules if the condition of this rule is met'.

This should automatically redirect the data to the target library located on the site or subsite where your FormsViewer is installed.

(OPTIONAL STEPS)

However, if your target library is located on a different site or subsite:

- **Add** a third action to the rule and specify the target site or subsite **url** - you should not include the name of the library, but only the site URL where the library is located.

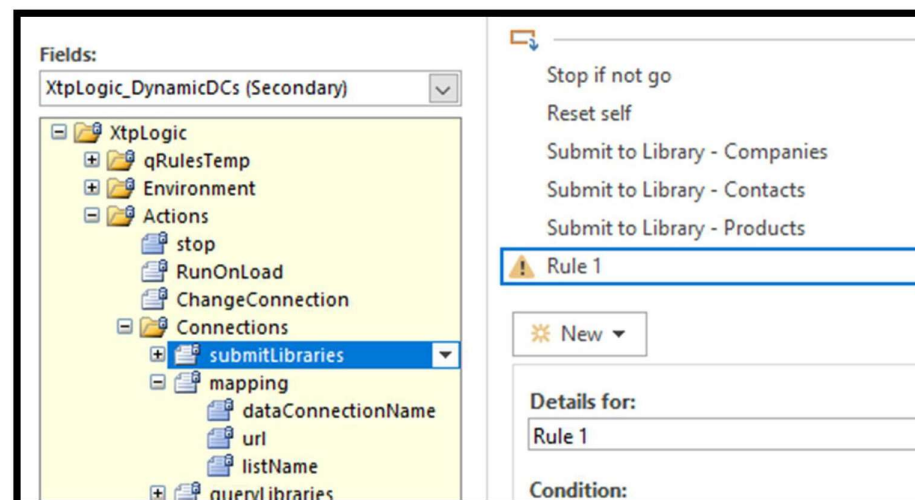


* Specifying a **URL** should be the last action performed by each action rule *

In the event that your form submits to more than one SharePoint Library:

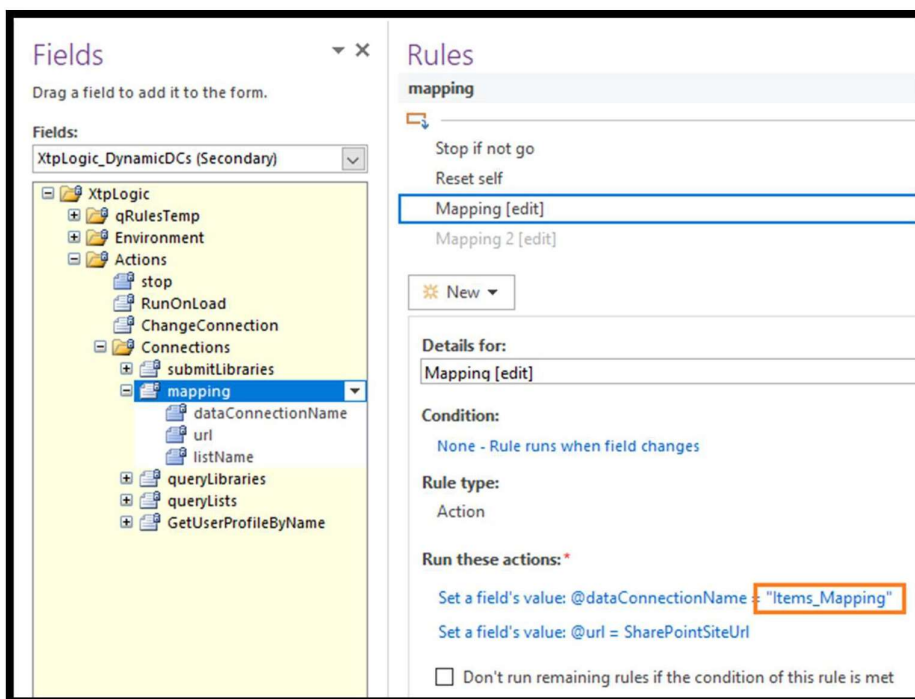
Enable the second '**SharePoint Library Submit [edit]**' rule and have it pointed to the desired library by repeating the steps above.

Copy and paste the rule to add more Submit to Library actions as needed, then specify the necessary values by repeating the steps above.



SUBMIT TO SHAREPOINT LIST MAPPINGS

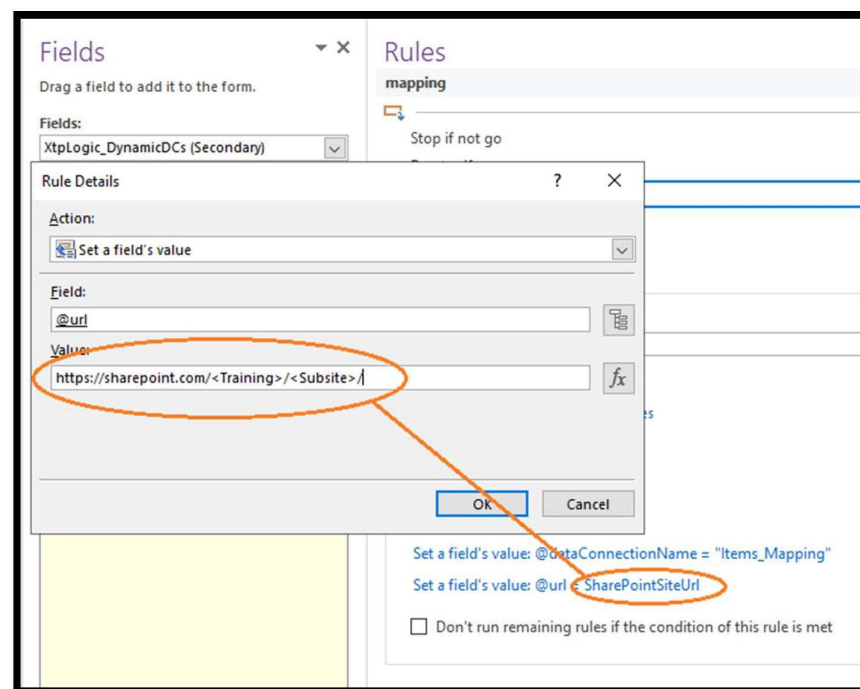
1. Proceed to *XtpLogic* > *Actions* > **Connections** group of the of the *XtpLogic_DynamicDCs* data source
2. Click on the **mapping** node.
3. Select the first '**Mapping [edit]**' rule.
4. For the first action, modify '**Mapping [edit]**' with the name of the target mapping xml data connection you wish to modify. (Most of the time, the mapping xml data connection is set to the default name mapping)



Leave the second action as is if your List is located at the same site or subsite where FormsViewer is installed.

(OPTIONAL STEPS)

If your target list is located on a different site other than the current site where the form will be deployed to, modify the second action to point to the URL or site where the target list is located - you should not include the name of the list, but only the site URL where the list is located.



In the event that your form has another mapping file:

Enable the second '**Mapping [edit]**' rule and have it pointed to the desired mapping xml data connection and SharePoint List site.

Copy and paste the rule to add more as needed, then specify the necessary values by repeating the steps above.

Notes:

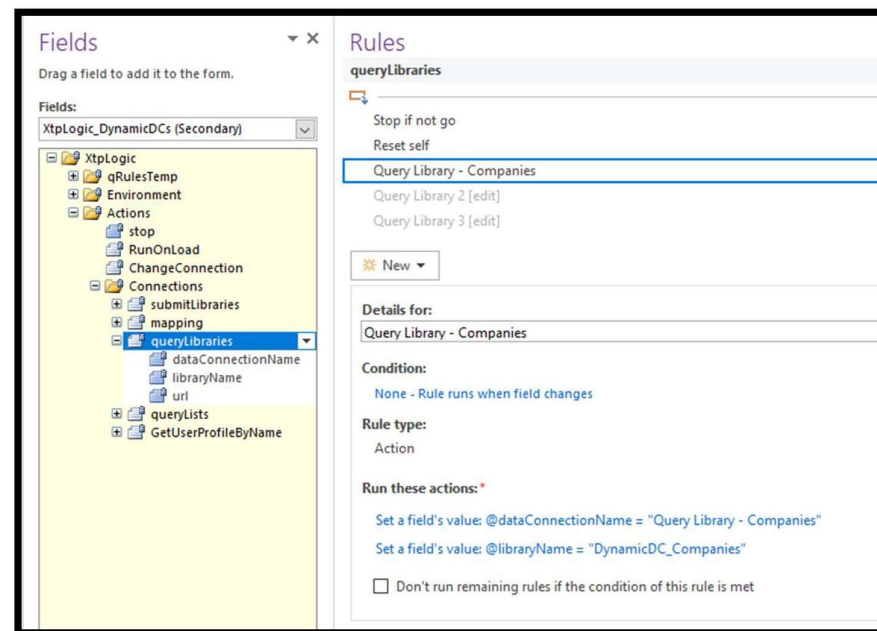
The modify change data connection logic SharePoint List mapping assumes that name of the target List still uses the same List name from your old site. Otherwise, specify the listName for the intended SharePoint List.



This action is only applicable for mappings with only one mapping for a SharePoint List. If your mapping file has more than one SharePoint List mapped, please refer to the DynamicDCs XTP PDF Guide included in the zip package.

QUERY LIBRARIES DATA CONNECTIONS

1. Proceed to **XtpLogic > Actions > Connections** group of the of the **XtpLogic_DynamicDCs** data source
2. Click on the **queryLibraries** node.
3. Select the first '**Query Library [edit]**' rule.
4. For the first action, modify '[Enter Query Library Data Connection Name]' with the name of the desired Query Library data connection you wish to modify.
5. For the section action, modify '**[Enter Library Name]**' to the actual name of the SharePoint Library you are querying from.

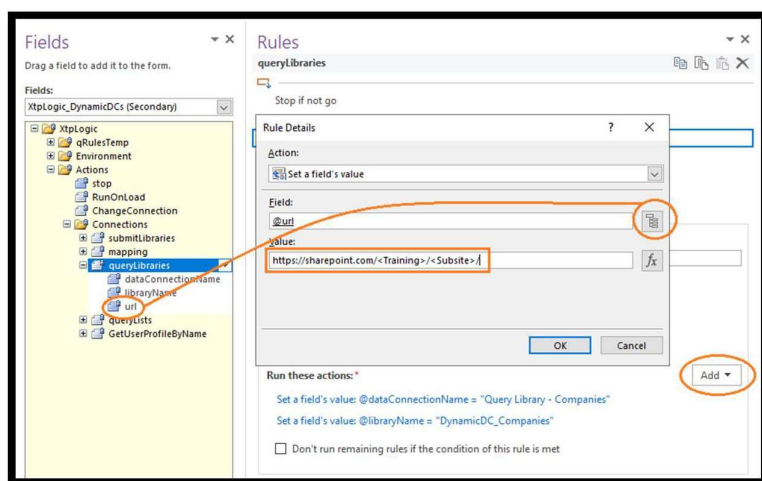


(OPTIONAL STEPS)

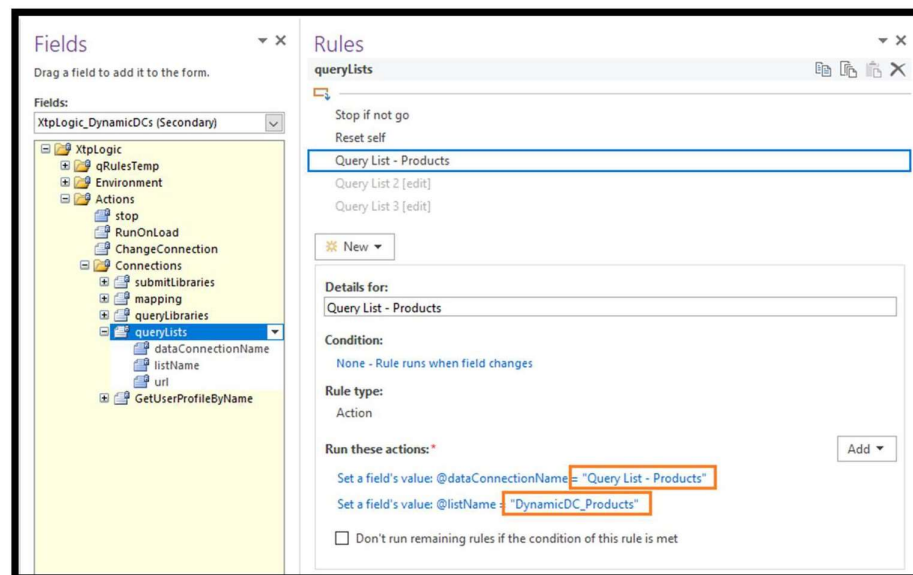
To add more *Query Library* type of data connections, enable the second '**Query Library [edit]**' rule and have it pointed to the desired library, and repeat steps above to specify the necessary values. Copy and paste the rule to add more as needed.

This should automatically redirect the data connection to the target library located on the site or subsite where your FormsViewer is installed.

If your target library is located on a different site other than the current site where the form will be deployed to, **add** a third action to the rule and specify the target site or subsite **url** - note that you should not include the name of the library, but only the site URL where the library is located.

**Query Lists Data Connections**

1. Proceed to **XtpLogic > Actions > Connections** group of the of the **XtpLogic_DynamicDCs** data source
2. Click on the **queryLists** node.
3. Select the first '**Query List [edit]**' rule.
4. For the first action, modify '**[Enter Query List Data Connection Name]**' with the name of the desired Query List data connection you wish to modify.
5. For the section action, modify '[Enter List Name]' to the actual name of the SharePoint List you are querying from.



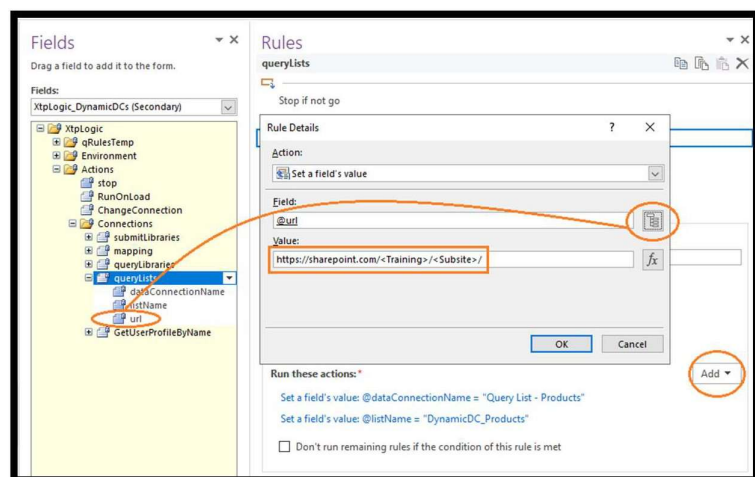
* Specifying a **URL** should be the last action performed by each action rule *

(OPTIONAL STEPS)

To add more *Query List* type of data connections, enable the second '**Query List [edit]**' rule and have it pointed to the desired list, and repeat steps above to specify the necessary values. Copy and paste the rule to add more as needed.

This should automatically redirect the data to the target list located on the site or subsite where your FormsViewer is installed.

If your target library is located on a different site other than the current site where the form will be deployed to, **add** a third action to the rule and specify the target site or subsite **url** - note that you should not include the name of the list, but only the site url where the library is located.



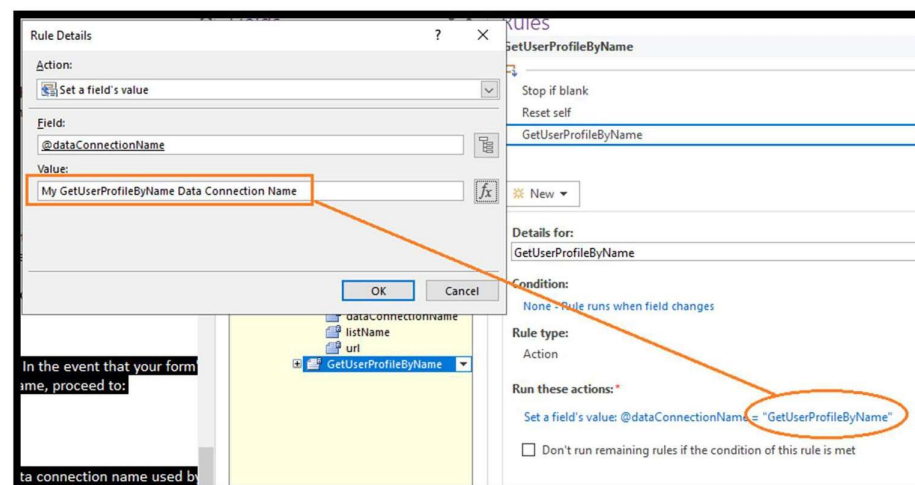
* Specifying a **URL** should be the last action performed by each action rule *

GETUSERPROFILEBYNAME

The GetUserProfileByName data connection name are often left as is. In the event that your form's GetUserProfileByName data connection uses a different data connection name, proceed to:

XtpLogic_DynamicDCs > *Actions* > *Connections* > **GetUserProfileByName**

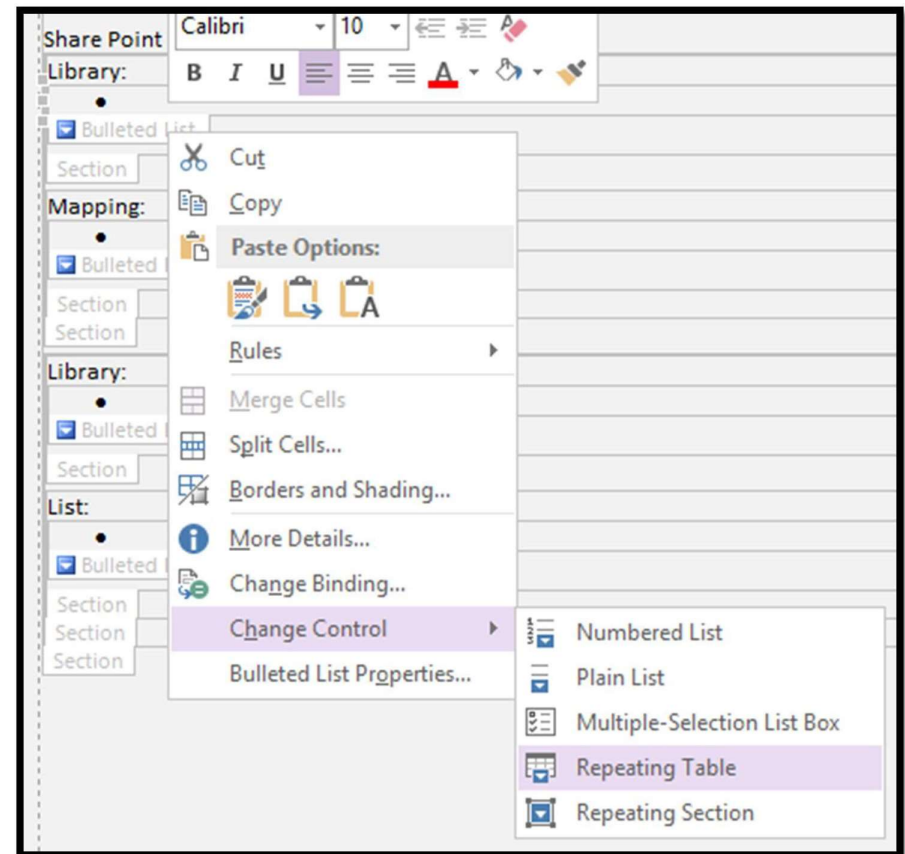
1. Locate the **GetUserProfileByName** action
2. Replace the default data connection value to the **GetUserProfileByName** data connection name used by your form.



DEBUG AND TESTING

More often than not, migrating to another site may have some errors along the way. In this section, we will lay out all the debug fields for the DynamicDCs XTP control for debug and testing purposes.

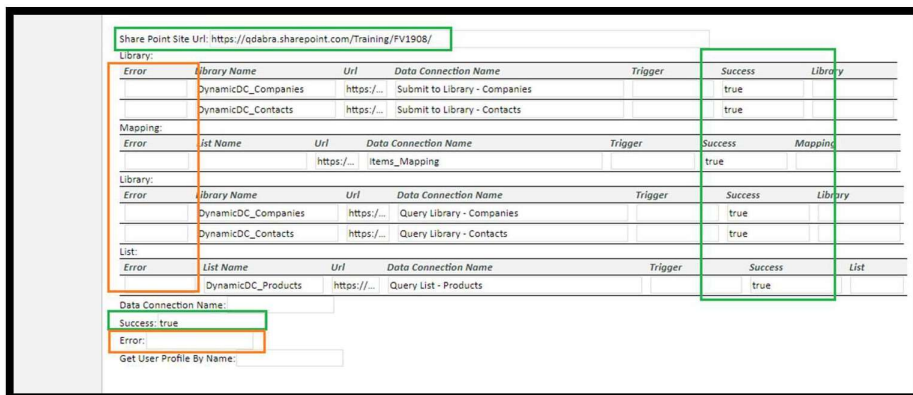
1. Proceed to *XtpLogic* > **Environment** of the *XtpLogic_DynamicDCs* data source.
2. *Right click* on Environment section, *drag* your cursor to the canvas, and select **Section with Controls**.
3. *Right click* on the bulleted List repeating sections and replace the list with a Repeating Table. Repeat this step for the rest of the Bulleted Lists.



4. Drag the *GetUserProfileByName* node under the Actions group and display the node as **Section with Controls**.

Save and upload your form to your FormsViewer site.

When done, view your form and check the DynamicDCs debug nodes to see if there are any errors on form load:



Error	Library Name	Url	Data Connection Name	Trigger	Success	Library
	DynamicDC_Companies	https://...	Submit to Library - Companies		true	
	DynamicDC_Contacts	https://...	Submit to Library - Contacts		true	

Error	List Name	Url	Data Connection Name	Trigger	Success	Mapping
		https://...	Items_Mapping		true	

Error	Library Name	Url	Data Connection Name	Trigger	Success	Library
	DynamicDC_Companies	https://...	Query Library - Companies		true	
	DynamicDC_Contacts	https://...	Query Library - Contacts		true	

Error	List Name	Url	Data Connection Name	Trigger	Success	List
	DynamicDC_Products	https://...	Query List - Products		true	

Data Connection Name:

Success: true

Error:

Get User Profile By Name:

In this sample image above, all success fields are set to true, all the error fields are blank, while the SharePoint Site URL is pointing to the site where the form has been newly deployed. Otherwise, review the errors and check the configuration settings for the data connections.

New Feature: Form Links

Generating a Form Link requires having a Form Name. If your form already has logic to generate a Form name, follow the 1st scenario, otherwise, proceed to 2nd scenario to let the Dynamic XTP's logic generate a Form Name for you using the format 20211021123456-CurrentUser.

- Scenario 1: Generating a Form Link using your form's Form Name value -
 - At your submit button, assuming that the form has already generated a Form Name, add an action rule and place it before the submit to list and library actions.
 - On this rule, add an action which sets the node `/XtpLogic/Actions/SetFormLink/@trigger` of the **XtpLogic_DynamicDCs** data source to the value of your form's Form Name.
- Scenario 2: Generating a Form Name and a Form Link
 - At your submit button, add an action rule and place it before the submit to list and library actions.
 - On this rule, add an action which sets the node `/XtpLogic/Actions/SetFormLink/@trigger` of the **XtpLogic_DynamicDCs** data source to the value 'go'.

Note/s:

There are two fields associated with this feature:

- */my:DynamicDCs/my:q_formLink*

This field holds the generated form link - you may promote this field to your Library or map it to your list so you may make use of the link for your email notifications or other usages.

- */my:DynamicDCs/my:q_formName*

This field holds the Form Name value which you may use for your Submit to Library data connections, if you have not done so yet.

Lastly, the Generate Form link logic assumes that the main library in use is the first Submit to Library action declared at the node:

*/XtpLogic/Actions/Connections/**submitLibraries***

*** **END** ***

[LAST UPDATE: 2021-11-10]



CONTACT INFORMATION

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