



# How to integrate dox42 with SharePoint Lists and Libraries

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Johannes Linder

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Documentation

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## Summary

In this Document you will be given an overview how to integrate dox42 into your Microsoft SharePoint lists and libraries. This works with all SharePoint versions since 2010 and SharePoint Online.

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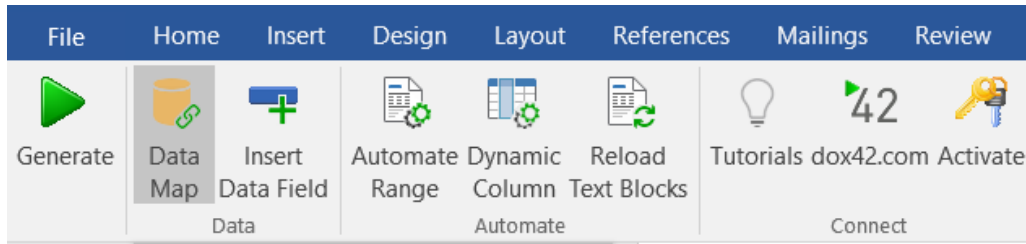
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## Document information

Version: 1.2  
Author: Johannes Linder, Christian Bauer  
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# How to connect dox42 to SharePoint

Start Word/Excel/PowerPoint, activate the dox42-Ribbon and select „Data Map”.

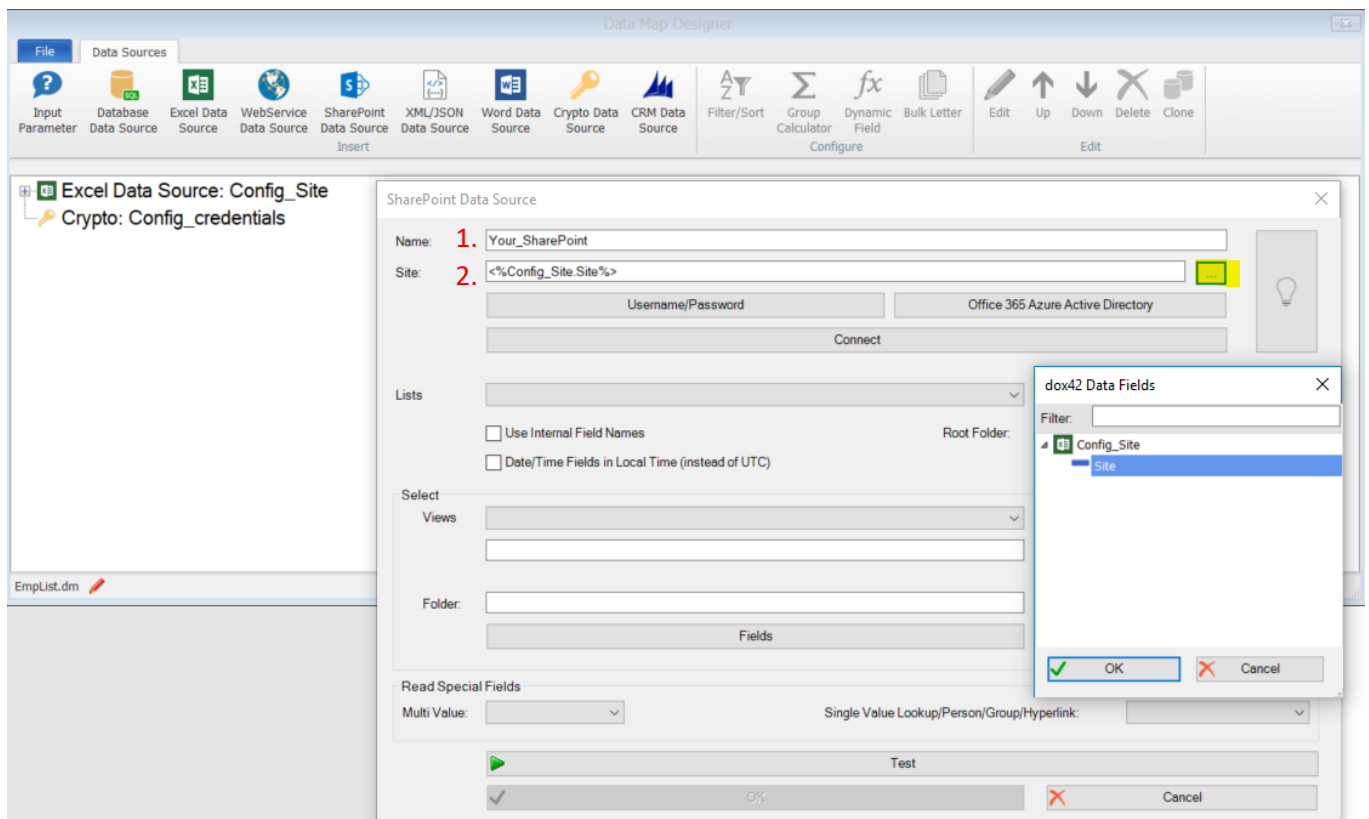


Select “SharePoint Data Source”

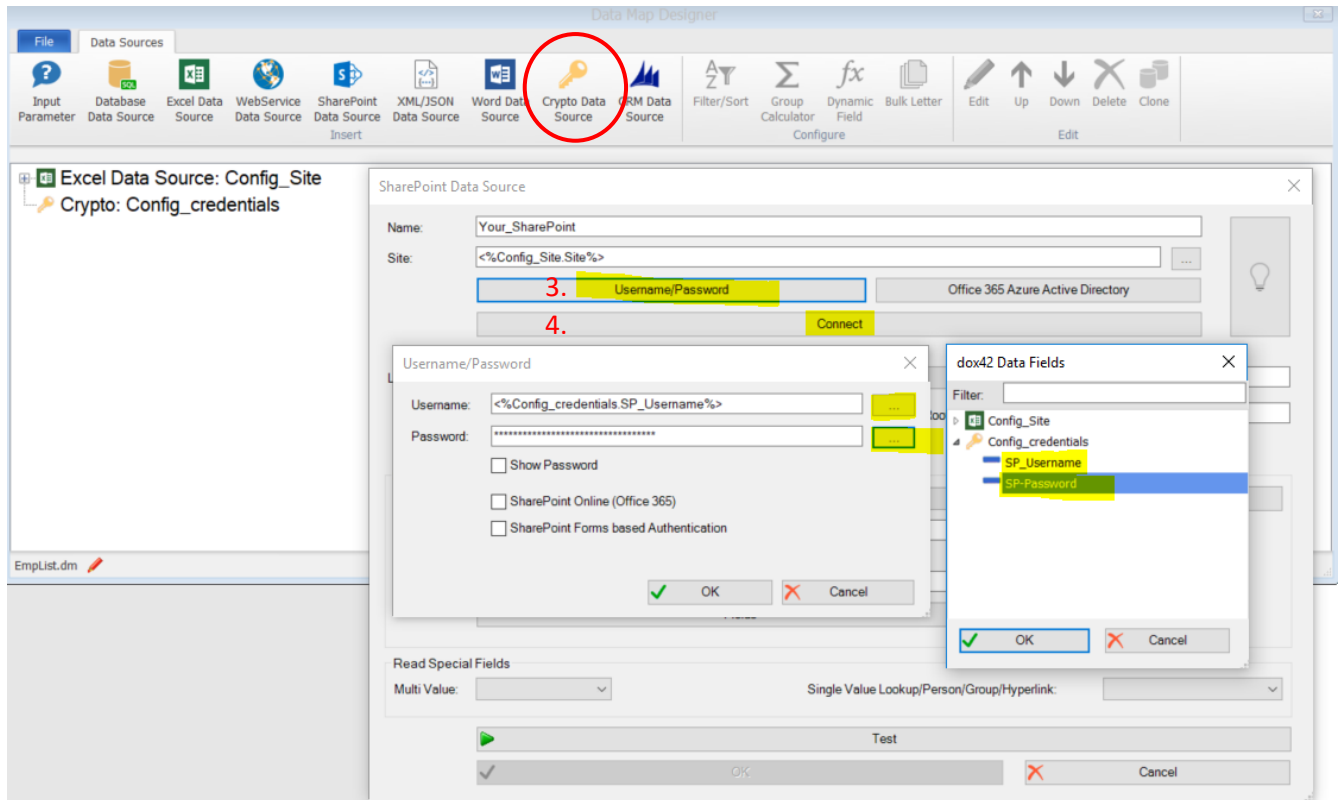


## Option 1: Login with a defined User

1. Name your SharePoint Data Source
2. Insert your SharePoint site URL or use a config file:

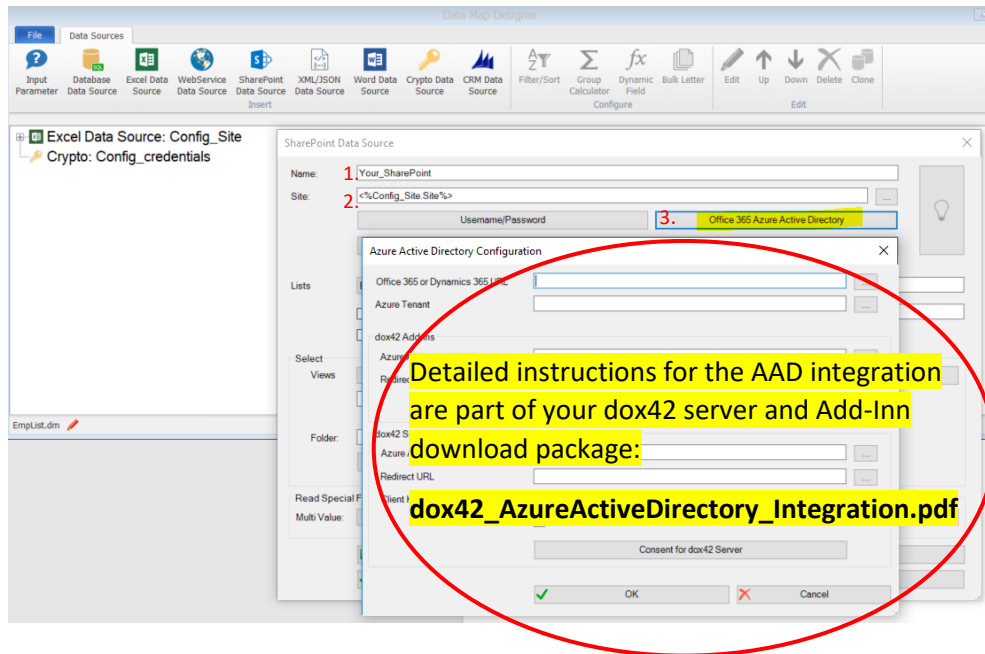


3. Insert Username and Password or better use a prepared “**Crypto Data Source**” to protect your credentials.
4. Click “**Connect**” and choose your SharePoint list which you want to connect:

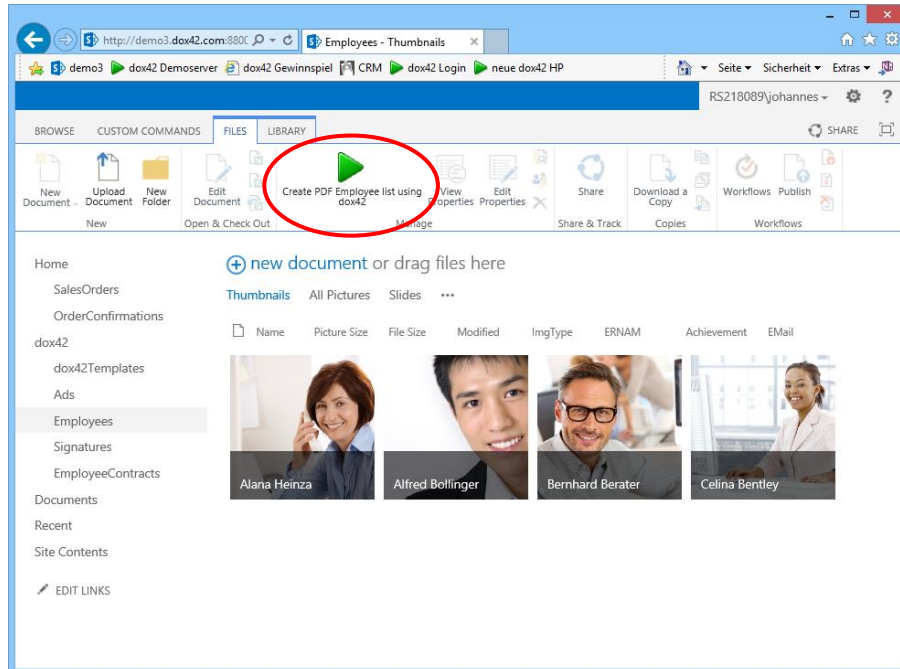


## Option 2: Login with Azure Active Directory

1. Name your SharePoint Data Source
2. Insert your SharePoint site URL or use a config file
3. Click on “Office 365 Azure Active Directory”

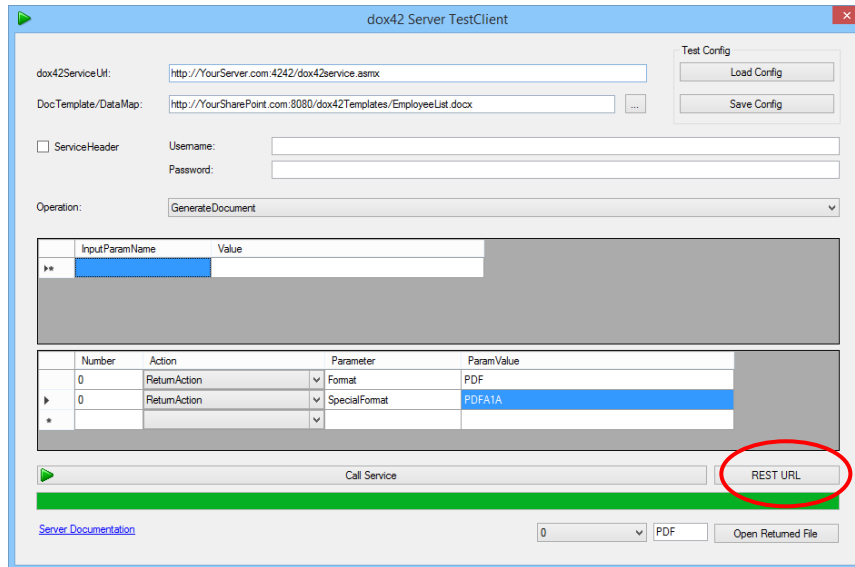


## How to call dox42 using a button in the list/library ribbon

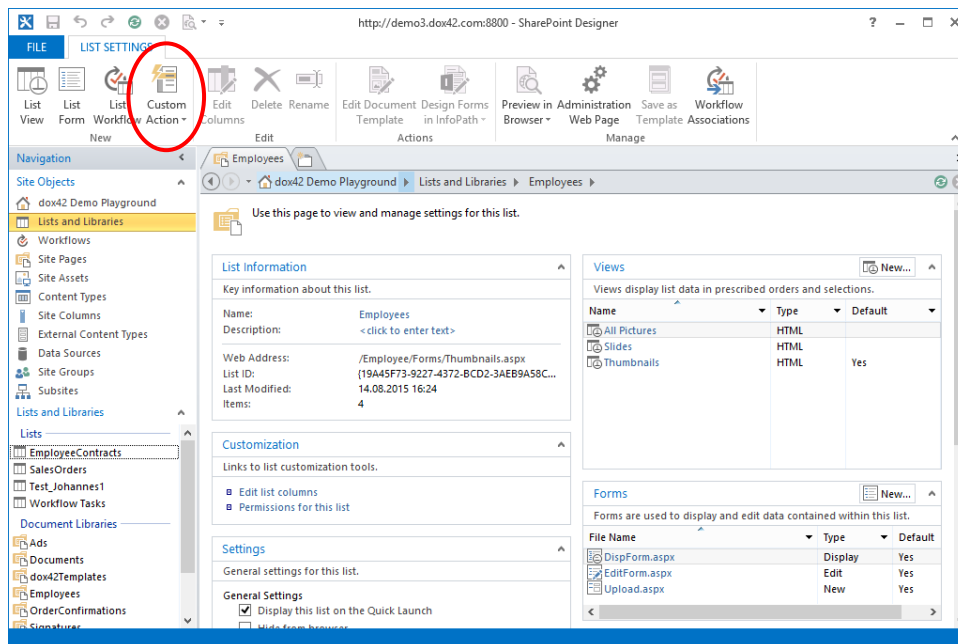


We have created a document locally that generates a list of all employees based on data from a Microsoft SharePoint list. Our goal is to generate this document directly from SharePoint using a button in the SharePoint list/library ribbon following these steps:

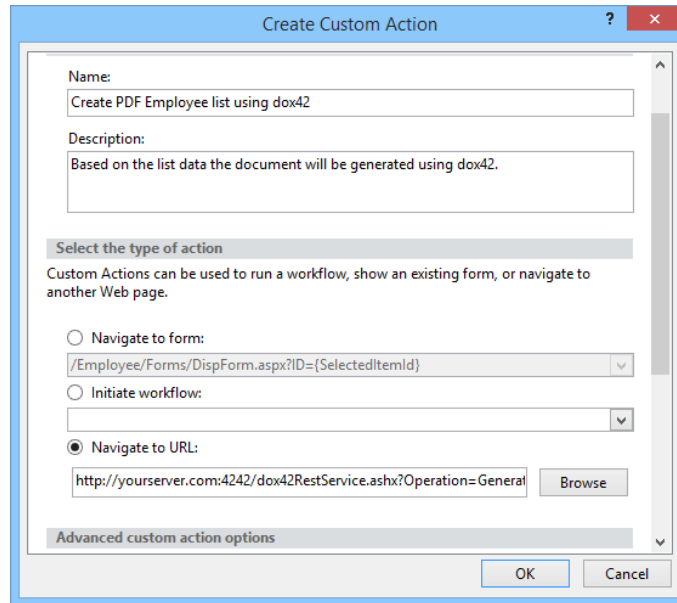
1. Upload your document template and datamap to a SharePoint document library (e.g. dox42Templates). Alternatively you can also put the document template and data map directly on your dox42 Server in the file system.
2. Create the REST link for the dox42 Return Action. Please make sure that you have installed the dox42 Server properly and that the dox42 Server is allowed to read data from SharePoint. To create the REST link please see the dox42 Server Documentation. (Hint: You can also create the REST link using the dox42 Server Client and clicking the "REST URL" Button in the bottom right corner.)



3. Open the list/library for which you want to create the button in SharePoint Designer.
4. The dox42 REST Call will be integrated using “Custom Actions”. In the “List Settings” ribbon click on “Custom Action” > “View Ribbon”. The “Create Custom Action” dialog will open up.



5. In the “Create Custom Action” dialog you can add a name and a description. In “Select the type of action” select “Navigate to URL” and use the dox42 REST Link. You can also add a button image URL in the “Advanced custom action options”.



6. The Button will now show up in the SharePoint “Files” ribbon.

## Security Advice

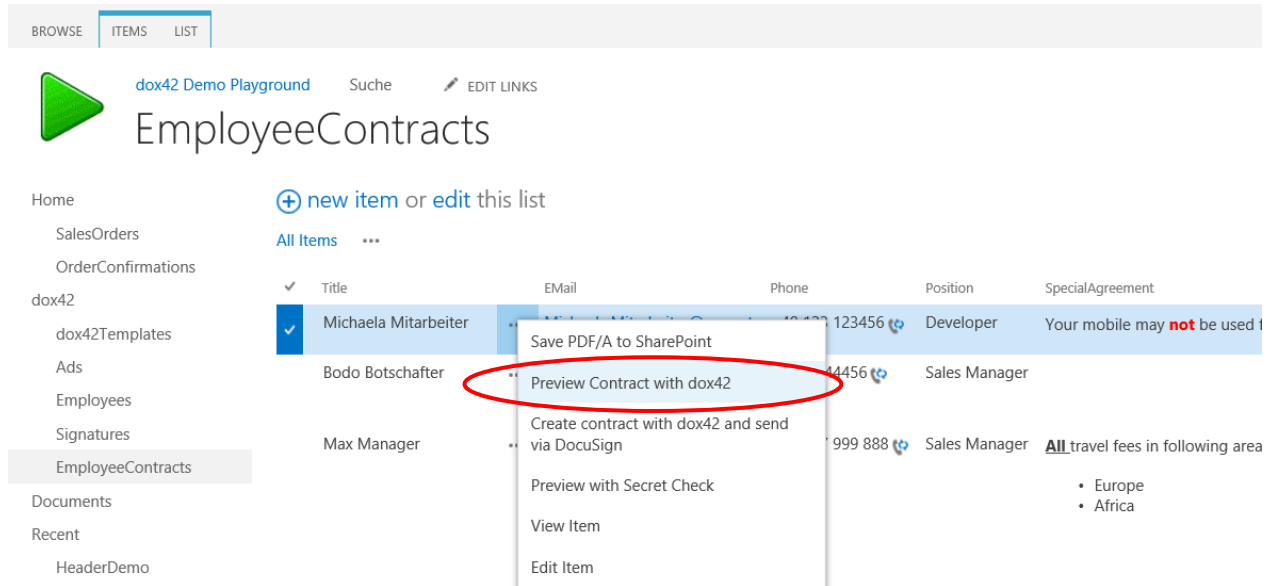
The best way to secure dox42 calls in SharePoint Online is to use dox42 Azure Active directory integration.

Please note that without configuring AAD integration the SharePoint user login, authentication and permissions are not used for the dox42 call as this REST call is simply a URL. If someone knows your dox42 Server URL, templates and input parameters, and has got permission to call the dox42 Server he/she will be able to call this or a modified URL using any browser independently from SharePoint. So if your SharePoint list contains sensitive data, be careful!

A simple way to get more security is to add an additional input parameter to your data map to send some kind of pass phrase. Check the pass phrase in your dox42 data map using a dynamic field and throw an exception if not correct. You can even make the pass phrase dynamic using some javascript in the dox42 REST link. This method is obviously not bulletproof but easy to realize and offers a reasonable level of protection.

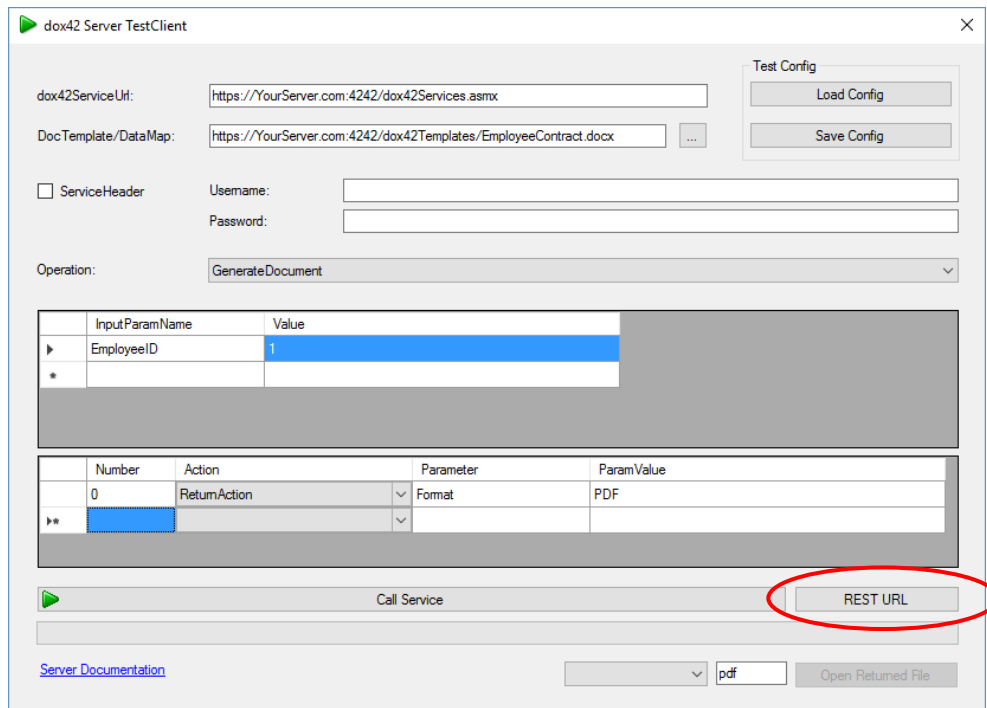


## How to call dox42 in the list/library context menu



In this sample we are going to generate a PDF SharePoint list item using a dynamic REST Link based on our selected list or library item. We are only going to use the dox42 ReturnAction.

1. Create the REST Link for the dox42 Return Action. Please make sure that you have installed the dox42 Server properly and that the dox42 Server is allowed to read data from SharePoint. To create the REST Link please see the dox42 Server Documentation. (Hint: You can also create the REST Link using the dox42 Server Client and clicking the "REST URL" Button in the bottom right corner.)



- Based on the static REST link in our sample we are going to make it dynamic for the context menu link. The static link is:

<https://yourserver.com:4242/dox42services.aspx?Operation=GenerateDocument&DocTemplate=https%3a%2f%2fyourServer.com%3a4242%2fdox42Templates%2fEmployeeContract.docx&InputParam.EmployeeID=1&ReturnAction.Format=PDF>

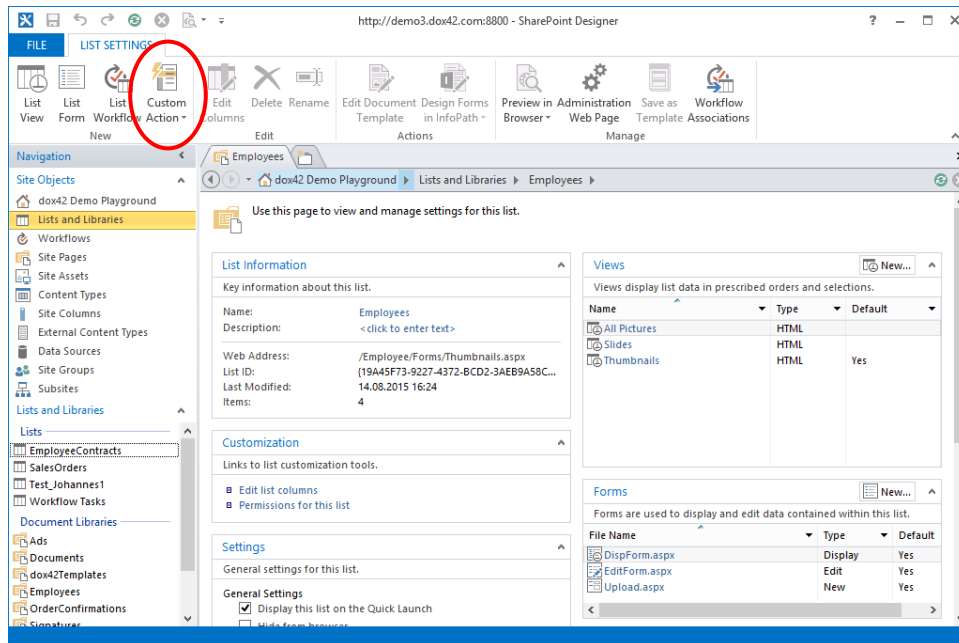
The input parameter “EmployeeID” needs to be dynamic based on the list item. We are going to use the function {ItemId}, which gets the ID of the list item:

Overall the REST Link will look as follows:

<https://yourserver.com:4242/dox42services.aspx?Operation=GenerateDocument&DocTemplate=https%3a%2f%2fyourServer.com%3a4242%2fdox42Templates%2fEmployeeContract.docx&InputParam.EmployeeID={ItemId}&ReturnAction.Format=PDF>

BTW: {ItemId} is case sensitive, be sure to use the correct casing.

- Open the list/library in SharePoint Designer.
- The next step is to integrate the dynamic link into the SharePoint context menu. The dox42 REST Call will be integrated using “Custom Actions”. In the “List Settings” ribbon click on “Custom Action” > “List Item Menu”. The “Create Custom Action” dialog will open up.



- In the “Create Custom Action” dialog you can add a name and a description. In “Select the type of action” select “Navigate to URL” and paste the dynamic dox42 REST link that we have created earlier.

Benutzerdefinierte Aktion erstellen

Namen und Beschreibung für die neue benutzerdefinierte Aktion eingeben

Name:  
Preview Contract with dox42

Beschreibung:  
Preview Contract with dox42

Aktionstyp auswählen

Mithilfe benutzerdefinierter Aktionen können Workflows ausgeführt und vorhandene Formulare angezeigt sowie zu anderen Webseiten navigiert werden.

Zu Formular navigieren:  
/Lists/EmployeeContracts/DispForm.aspx?ID={ItemId}

Workflow initiieren:

Zu URL navigieren:  
https://YourServer.com:4242/dox42RestService.ashx?Operation=Ger

- The context menu will now have the option to “Preview Contract with dox42”.

## How to call dox42 from a SharePoint Workflow

You can call the dox42 WebService from a SharePoint Workflow.

Please be sure to use SharePoint 2013 Workflow Platform as you need the “call HTTP WebService Action” which is not available in earlier versions.

- Create a Workflow Variable e.g. “dox42Request”
- Store the dox42 REST link to this Workflow Variable. You can use the String Builder to create dynamic parts of the link e.g. input parameters.
- Create a “call HTTP WebService Action” and use the Workflow Variable “dox42Request” as WebService URL

## Security Advice

To use a SharePoint Workflow with SharePoint on premises to call dox42 allows for a very simple but effective security configuration. You can restrict the access to the dox42 WebService to the IP of your SharePoint Server. That way your dox42 Server can only be called from your SharePoint Server, thus the SharePoint user permissions are enforced.

## Support

If you have any questions, please do not hesitate to contact [support@dox42.com](mailto:support@dox42.com). We are happy to help you!