



dox42 D365 CE | Dynamics CRM

Documentation

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DOCUMENT DETAILS

Version: dox42 Dynamics CRM V 4.1
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1. What is dox42 D365 CE|Dynamics CRM?

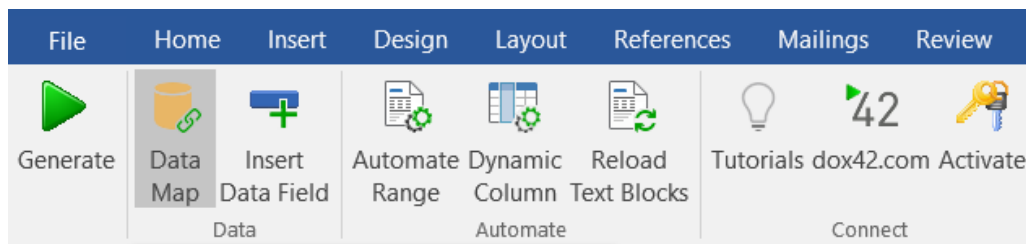
The dox42 D365 CE|CRM data source enables you to use Dynamics CRM data for document automation. Additionally, other data sources (e.g. SharePoint, XML/JSON, SQL, Webservices, Excel, etc...) can be integrated into one document at the same time.

dox42 D365 CE|CRM is an additional module for dox42. dox42 D365 CE|CRM contains a dox42 Custom Data Source, a dox42 Custom Output Action for MS Dynamics CRM/MS Dynamics 365 for Customer Engagement (D365 CE) and a dox42 solution for easy integration with your MS Dynamics CRM/CE interface.

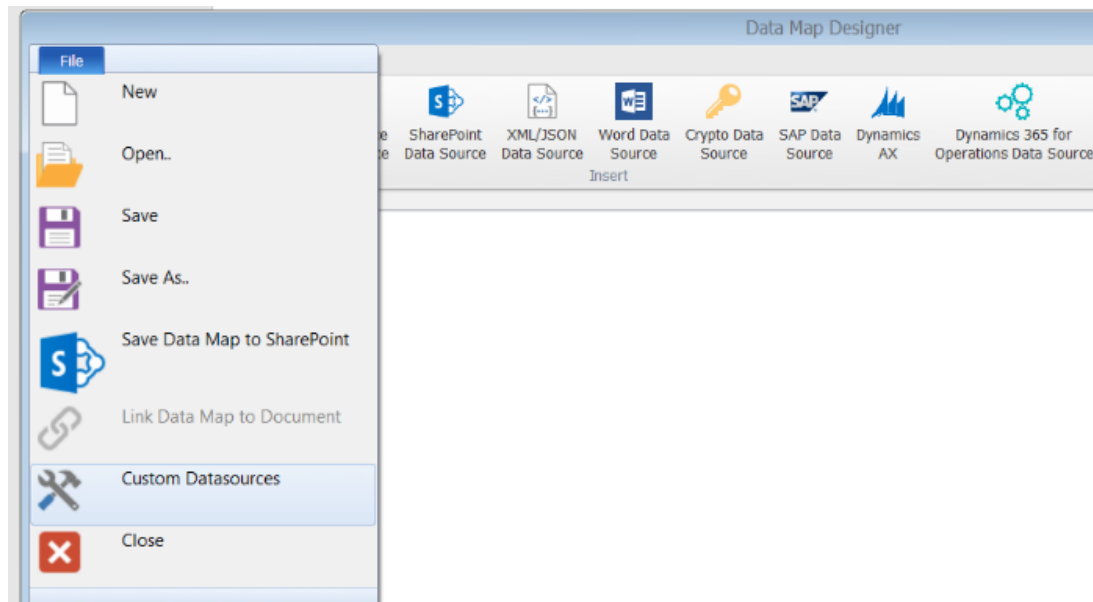
2. Installation of the dox42 Office Add-Ins

Save the dox42 D365 CE|CRM files to a fixed directory on the computer, on which you want to use dox42. To do that, just unzip the file **dox42DynamicsCRM_V*.zip**.

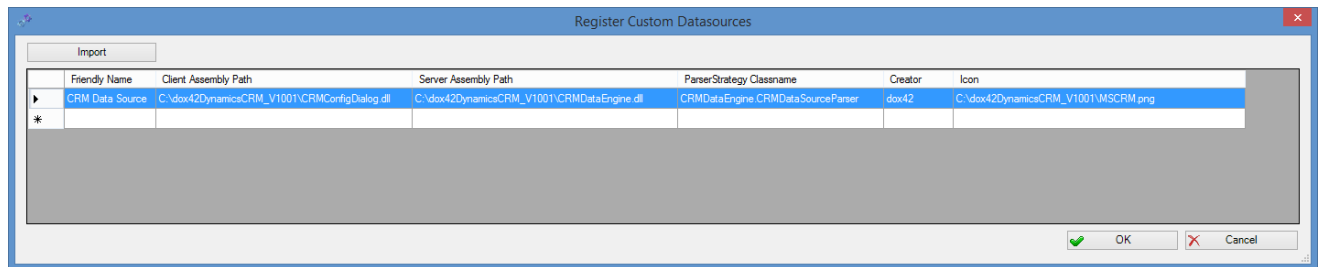
Start Word/Excel, activate the dox42-Ribbon and select „Data Map”.



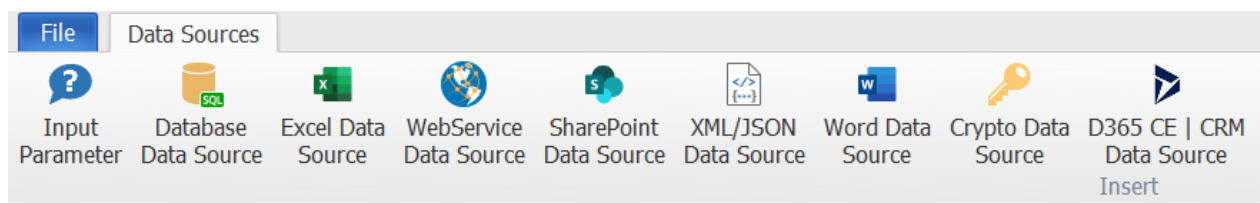
In the Data Map Designer select „Data Map”. Open the File-Menu and select „Custom Datasources”.



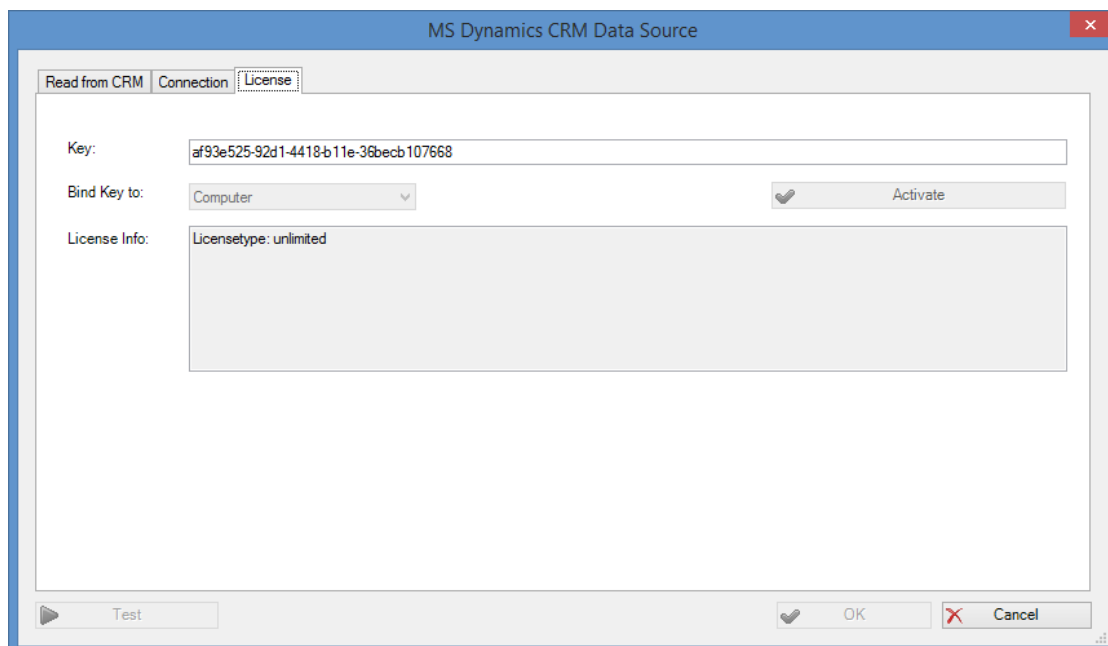
In the dialogue „**Register Custom Datasources**“, you can import the Import Configuration (**dox42DynamicsCRMImport.config**).



Now, the dox42 D365 CE | CRM Data Source is ready for use as any other dox42 data source.



Now you need to activate your license key. To do that, simply select your CRM Data Source, open the configuration dialogue and move to the register “**License**”. Insert your license key here and click “**Activate**”.



In case you get the error: Microsoft.IdentityModel could not be found, please make sure that Windows Identity Foundation is installed on your machine.

You can activate Windows Identity Foundation via the Control Panel > Turn Windows Features on or off > Tick the box at “Windows Identity Foundation 3.5”.

Also you need .NET Framework 4.5.2 or higher installed.

3. Installation of dox42 D365 CE|CRM for dox42 Server (on Premise)

In order to use dox42 D365 CE|CRM on the dox42 Server, please copy the following assemblies to the /Bin directory of your Server:

- ✓ CRMDDataEngine.dll
- ✓ CRMLicence.dll
- ✓ CRMOutputAction.dll
- ✓ Microsoft.Crm.Sdk.Proxy.dll
- ✓ Microsoft.Xrm.Sdk.dll

You need .NET Framework 4.5.2 or higher installed on the server.

Now dox42 D365 CE|CRM Data Source has to be registered in the **web.config** of your server.

```
<customDataSources>
  <add key="CRMDDataEngine.CRMDataSourceParser"
    value="CRM Data Source;c:\dox42Server\bin\CRMDDataEngine.dll;" />
</customDataSources>

<customOutputActions>
  <add key="CRMOutputAction.CRMOutputAction"
    value="CRMOutputAction; c:\dox42Server\bin\CRMOutputAction.dll;" />
</customOutputActions>
```

Furthermore, please insert the license key in the **web.config**:

```
<appSettings>
  <add key="LicenseFilePath" value="c:\dox42Server\License" />
  <add key="LicenseKey" value="..." />
  <add key="dox42CRMLicenseKey" value="..." />
  ...
</appSettings>
```

Also have a look at the dox42 Server Documentation: <http://www.dox42.com/Modules/dox42-Server>.

4. Data integration with dox42 D365 CE|CRM

4.1. Connection to MS Dynamics CRM or D365 CE

In the data map designer of your add-in, configure the connection to CRM in the register **“Connection”**. You can define data fields of any other data source for every value. This way, you could keep the configuration for example in an Excel or XML file. Of course, you can simply enter the values as well. Your username and password can be encrypted with the dox42 Crypto Data Source.

MS Dynamics CRM (Dynamics 365 Sales, CE) Data Source

Read from CRM | **Connection** | License

CRM URL: ...

Username: ...

Password: ...

Optional Settings

Impersonate User (GUID): ...

dox42 Data Fields

Filter:

- WhichQuote
- Connection
- CRM_Connection
 - Username**
 - Password
- SalesQuote_Input
- SalesQuote
- SalesQuote_Products_Orderinform...
- SalesQuote_ProductInformation
- MyOrganization
- customer

If you connect to MS CRM online (MS Dynamics 365 for Customer Engagement), then your CRM URL would look similar to: `https://<Yourcompany>.crm4.dynamics.com`

You can also connect to MS CRM 2011, 2013, 2015, 2016 on-premises.

The dox42 D365 CE|CRM Data Source will call the XRMService.

Use “Impersonate User (GUID)” together with a Service-User Username/Password to impersonate a specific user. For impersonation with the currently logged in user, use the input Parameter UserID.

You may also specify Proxy settings, these are used from the dox42 Add-In only, and ignored on the dox42 Server.

4.2. Connection to MS Dynamics CRM or D365 CE with Azure Active Directory

Instead of connecting to your D365 CE or Dynamics CRM instance with your username and password, you can connect with Azure Active Directory (see a detailed instruction on how to set up your AAD configuration in chapter 6).

4.3. Read Data from MS Dynamics CRM or Dynamics 365 for Customer Engagement

MS Dynamics CRM Data Source

Read from CRM **Connection** License

Name:

Entity:

Data Fields:

Field List Filter: ☐ Show Selected Only

Read Field?	Field	Label	Filter	Filter Value	Filter Data Field	Field Type
<input type="checkbox"/>	accountcategorycode					
<input type="checkbox"/>	accountcategorycodename					
<input type="checkbox"/>	accountclassificationcode					
<input type="checkbox"/>	accountclassificationcodename					
<input checked="" type="checkbox"/>	accountid		*		SalesQuote.customerid	
<input type="checkbox"/>	accountnumber					
<input type="checkbox"/>	accountratingcode					
<input type="checkbox"/>	accountratingcodename					
<input type="checkbox"/>	address1_addressid					
<input type="checkbox"/>	address1_addressstypecode					
<input type="checkbox"/>	address1_addressstypename					

☐ Date/Time Fields in Local Time (instead of UTC) ☐ Use Labels (dox42 3.6 or higher required)

dox42 Data Fields

Filter:

- WhichQuote
- Connection
- SalesQuote_Input
- SalesQuote
 - Customerid
 - Description
 - DiscountAmount
 - DiscountPercentage
 - EffectiveFrom
 - EffectiveTo

Press “Connect” to read the list of available entities from your CRM. Select the desired entity in the dropdown “Entity” and tick the desired fields in the list.

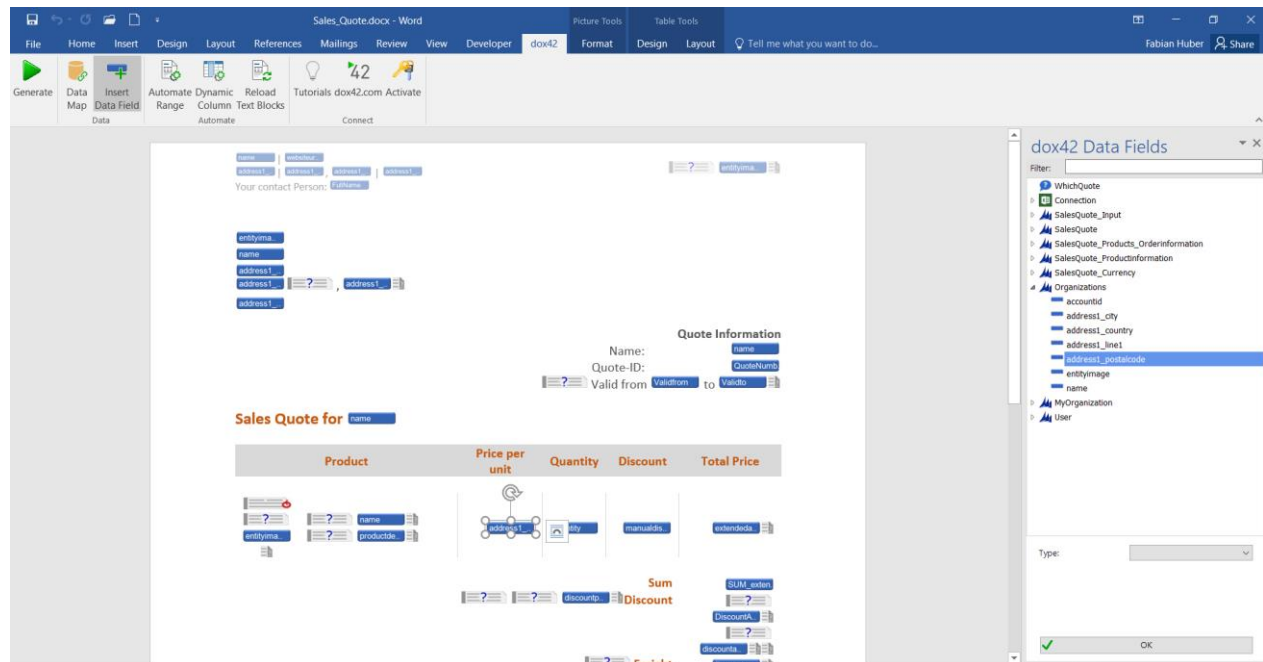
To set a filter just enter a value or choose a data field and choose the desired filter.

Dynamics CRM stores data/time fields in UTC. To transform all date/time fields to local time check “Date/Time Fields in Local Time (instead of UTC)”.

To get the CRM Labels as mouse-over tooltip in the dox42 data field explorer check “Use Labels.” You need dox42 version 3.6 or higher to use this function.

You may overwrite the labels adding you own comments. Also you can always refresh the labels and reload the fields from CRM by clicking “Refresh Labels and Fields”.

Now you can use data fields from MS Dynamics CRM like any other dox42 data fields.



4.4. How to get a full list of your fields and entities

The dox42 D365 CE|CRM Data Source reads the field and entity names from MS Dynamics CRM. As there can be differences between the field name and the display name (e.g. because of language settings) we recommend you to work with the field and entity list given from MS Dynamics CRM. To get this list of field and entity names please do the following (for MS CRM Online, MS CRM 2013 and 2015 on-premises):

1. On the navigation bar click **Microsoft Dynamics CRM > Settings**.
2. Again on the navigation bar click **Settings > Customizations > Customize the System**.
3. To get the entity name:
 1. In the new window under **Components**, expand **Entities** and from this full list click on the entity you want.
 2. The next view contains the name and the display name of the entity.
4. To get the field name:
 1. In the new window under **Components**, expand **Entities** and from this full list expand the entity you want.
 2. Click **Fields** to get the list which contains names and display names.

5. dox42 D365 CE|CRM Output Action

Using the dox42 D365 CE|CRM Output Action for your dox42 Server calls, you can save generated documents to CRM as an annotation of an entity. E.g. you can attach a generated offer-document as an annotation to the corresponding offer in CRM.

You can use the dox42 D365 CE|CRM Output Action in the same way as any other dox42 output action, which can be found in the [dox42 Server documentation](#).

dox42 Server TestClient

dox42ServiceUrl:

http://[REDACTED]/Dox42Service.asmx

DocTemplate/DataMap:

C:\VSProjects\dox42\test\CRM\SimpleTest\CRMTest.docx

...

☐ ServiceHeader

Username:

Password:

Operation:

GenerateDocument

Test Config

Load Config

Save Config

	InputParamName	Value
▶	Account	5c2[REDACTED]8
*		

	Number	Action	Parameter	ParamValue
	0	CRMOutputAction.CRMOutputAction	cmurl	<%Connection.cmurl%>
	0	CRMOutputAction.CRMOutputAction	Username	<%Connection.username%>
	0	CRMOutputAction.CRMOutputAction	Password	<%Connection.password%>
	0	CRMOutputAction.CRMOutputAction	filename	TestDoc.pdf
	0	CRMOutputAction.CRMOutputAction	entity	account
	0	CRMOutputAction.CRMOutputAction	entity_id	<%Account%>
	0	CRMOutputAction.CRMOutputAction	Subject	May the force be with you <%primContact.firstname%>!
▶	0	CRMOutputAction.CRMOutputAction	impersonate_user_guid	3[REDACTED]11
*				

▶

Call Service

REST URL

Server Documentation

▼

pdf

Open Returned File

5.1. Parameter

Parameter name	Requirement	Effect
CrmUrl	mandatory	https://yourcompany.crm4.dynamics.com
Username	optional	If you use a MS Dynamics CRM data source with Azure Active Directory in your document, you may omit the credentilas to use AAD authentication.
Password	optional	If you use a MS Dynamics CRM data source with Azure Active Directory in your document, you may omit the credentilas to use AAD authentication.
Impersonate_User_Guid	optional	To impersonate a different user. This is only possible together with Username/Password set.
Filename	mandatory	The filename of the document. The extension will define the format.
Entity	mandatory	The type of the entity you want to attach the document, e.g. account.
Entity_id	mandatory	The id of the entity you want to attach the document.
Subject	optional	You may use other data fields to create a dynamic subject (=Title), e.g.: "Offer for <%Customer.Name%>".
NoteText	optional	You may use other data fields to create a dynamic Description, e.g.: "Offer for <%Customer.Name%>".

6. Azure Active Directory Integration with D365 CE|CRM

Using dox42 with AAD and/or with **dox42 Online** (Saas), requires the following properties:

- **Application ID** > is provided after the app registration in the Microsoft Admin Center
- **Redirect URLs**
- **Tenant ID**
- **Client Secret for dox42 Server**

For the AAD integration, you have to configure a few settings in the Microsoft **admin center**, in your dox42 Server and in the dox42 Add-In Datamap Designer.

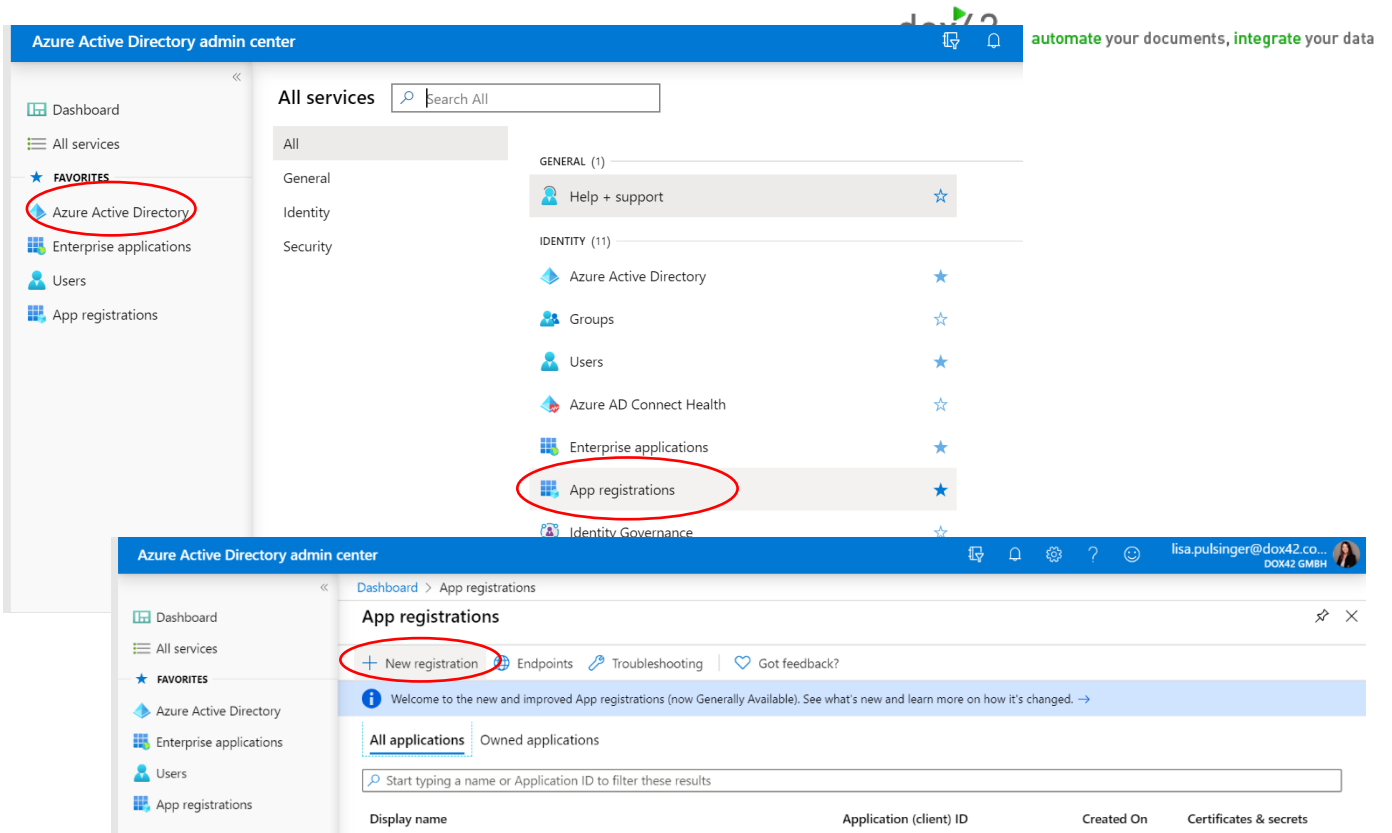
Please note: for the following steps you need (global-) Admin rights:

- App Registration
- Enabling required permissions
- Entering Redirect URL(s)
- Configuring AAD in the dox42 Add-In and **consent** the new application for the first time

6.1. dox42 App Registration

Firstly, you need to create an application in the Microsoft Azure AD admin center to set the AAD permissions for the dox42 Add-in and Server.

- Open the Office 365 Admin Center
- Go to -> **Admin centers** -> **Azure AD**, or click here in order to log in immediately:
<https://aad.portal.azure.com>
- Click on **All services** -> **App registrations**
- **Click on New Registration**



Now configure your dox42 application:

Name your application accordingly, and choose which accounts should have access to your application. Also add a Web Redirect URI containing the link to your dox42 Server instance and click on Register.

The screenshot shows the 'Register an application' form in the Azure Active Directory admin center. The form has the following fields and options:

- Name:** The user-facing display name for this application (this can be changed later). The value 'dox42' is entered and circled in red.
- Supported account types:** Who can use this application or access this API?
 - ☒ Accounts in this organizational directory only (dox42 GmbH only - Single tenant) - This option is circled in red.
 - ☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant)
 - ☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)
- Redirect URI (optional):** We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.
 - The 'Web' option is selected in the dropdown and circled in red.
 - The URL 'https://yourcompany.dox42.online/' is entered in the text box and circled in red.
- Register:** A blue button at the bottom of the form, circled in red.

Note: In this documentation, we use the redirect URL of a dox42 Online server (SaaS):

<https://yourcompany.dox42.online/>

If you are registering a **dox42 on-premise server**, use the URL of your dox42 server:

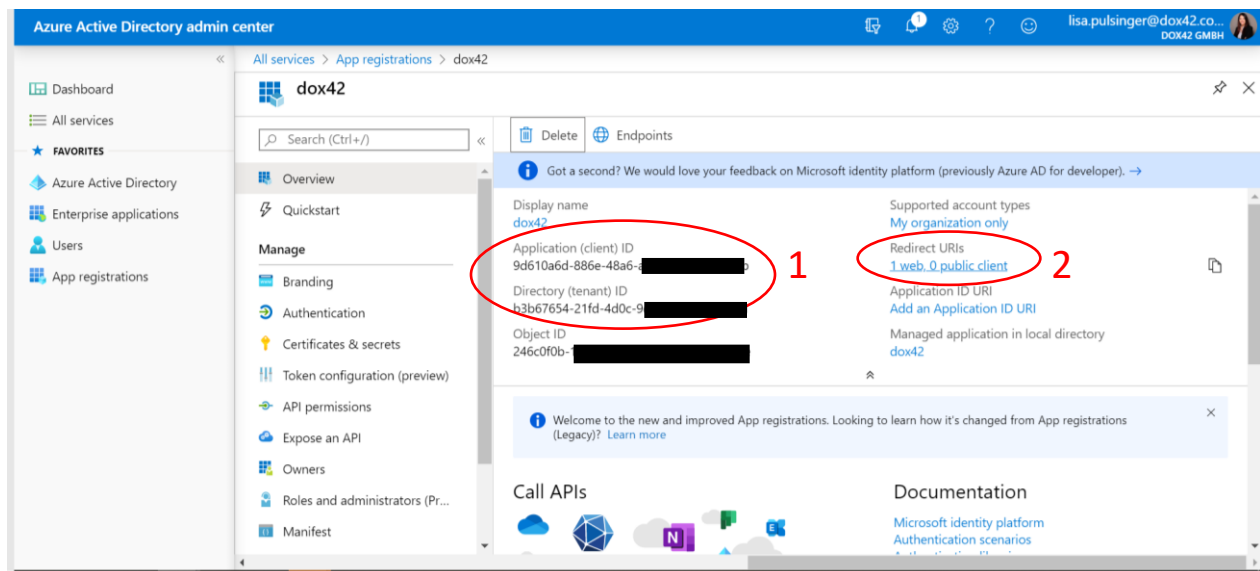
<https://yourdox42server.yourcompany.com>

Now that you have registered your application, you can copy the Application (client ID) and Directory (tenant ID) (screenshot below 1) and paste it into an Excel Config file. This allows you to manage your configuration details centralized. See Chapter 6.1.6 for more information on Config files.

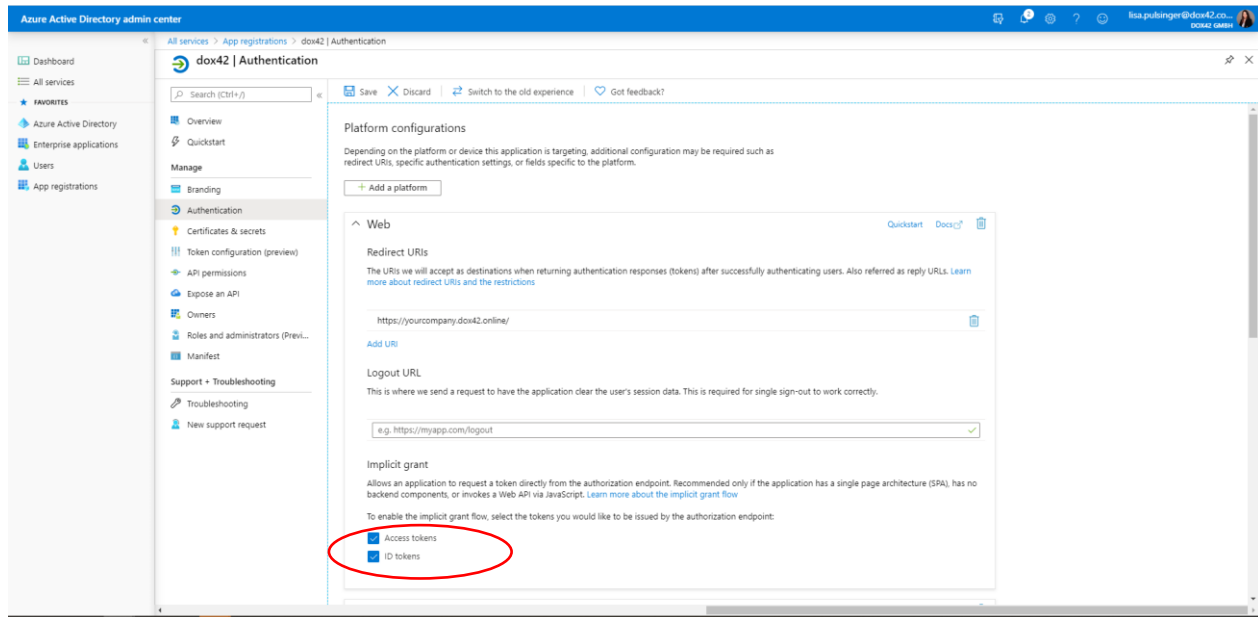
6.1.1. Token Permissions

Next, you need to grant token permissions for your app.

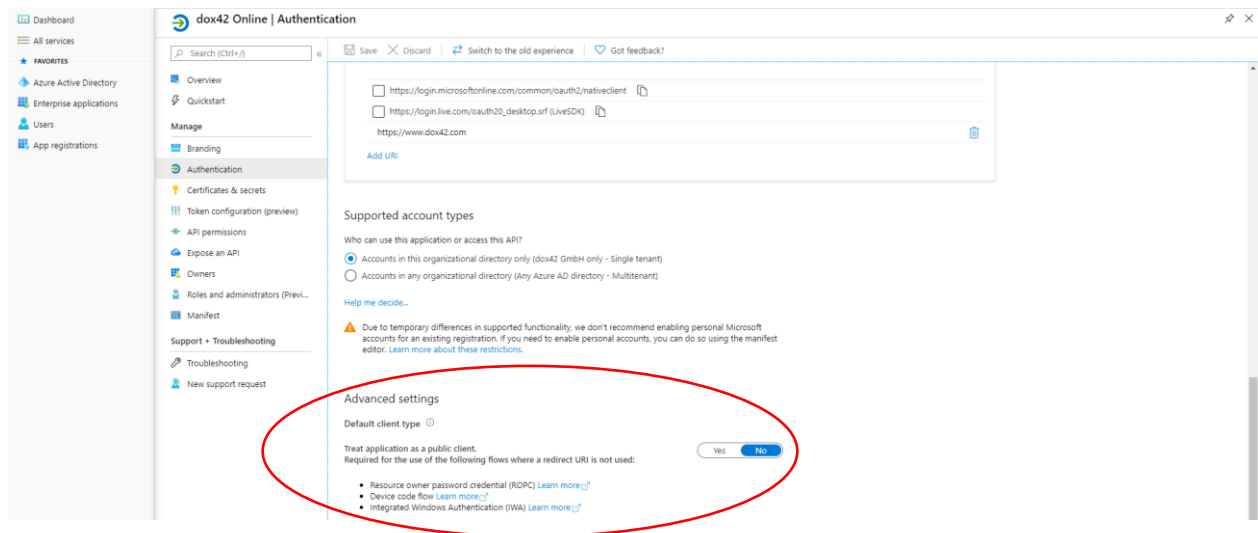
Within your newly added application, click on Redirect URIs (2).



Now, on the In the Implicit grants section of the Authentication register, tick both “Access tokens” and “ID tokens”:



Scroll down further to find additional settings. Under Advanced Settings keep “Treat application as a public client” set on No.



6.1.2. Enter Redirect URIs

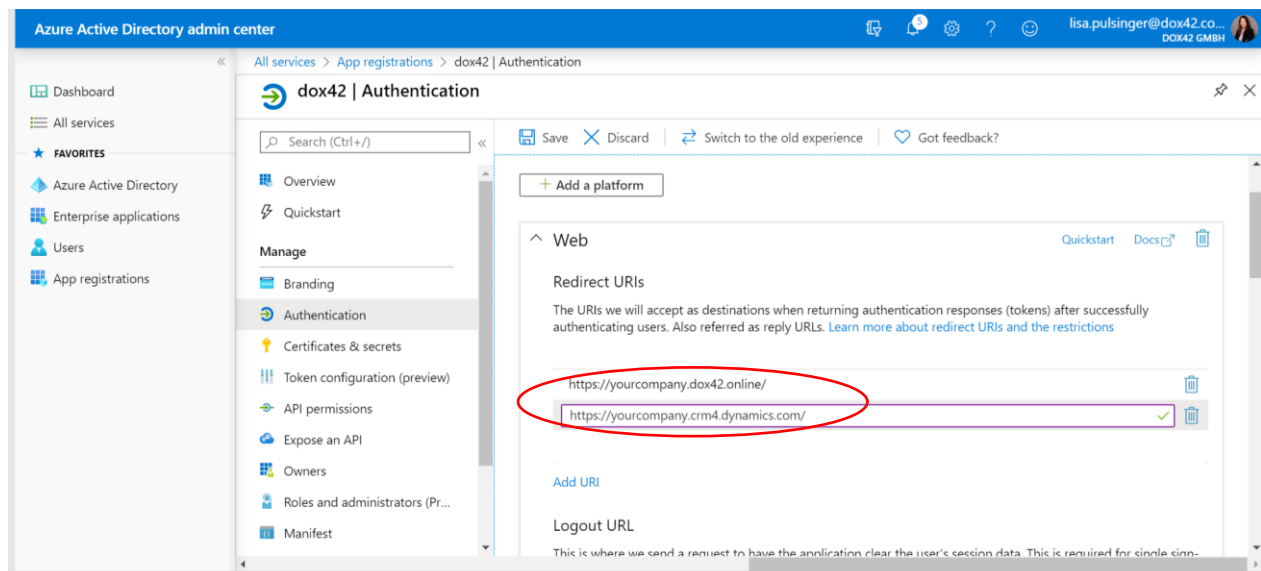
Now scroll up again to the beginning of your Authentication page. You need to add Redirect URIs next. Please specify the following:

- your dox42 online Server URL:
<https://yourcompany.dox42.online/>
- your Dynamics 365 CE URL in the following format: <https://Yourcompany.crm4.dynamics.com/>

- any additional URIs for services you want to call. Enter this re-direct URI if you are calling dox42 from MS PowerAutomate (MS Flow): <https://global.consent.azure-apim.net/redirect>

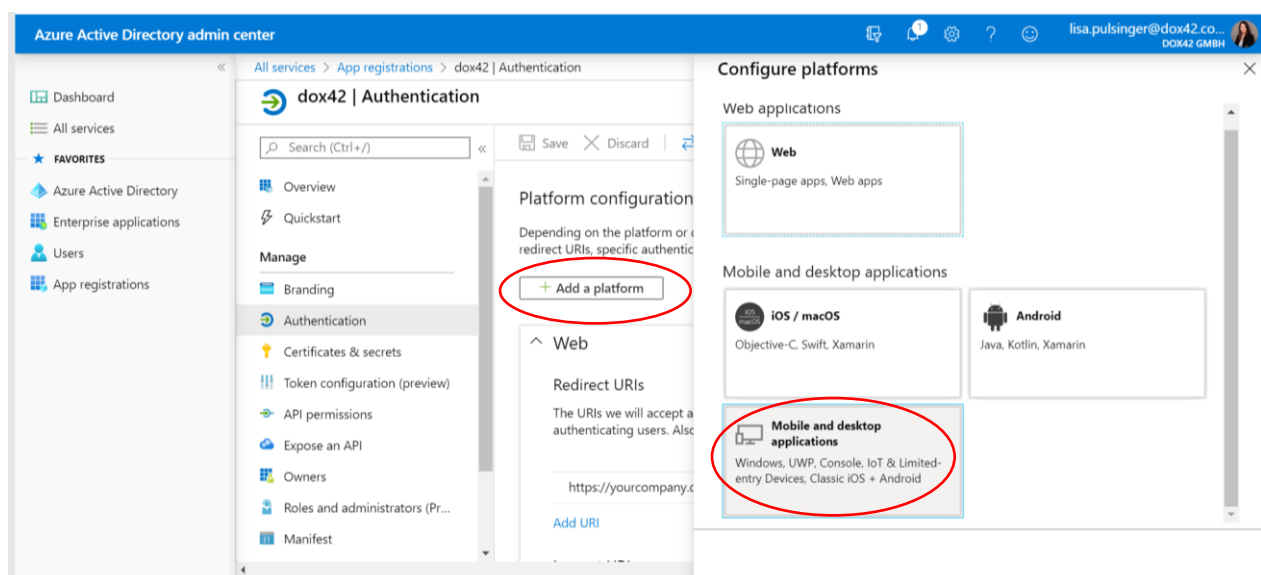
The URL that you include as the Server URI (<http://.....dox42.online/>) is the one you will need to include in the dox42 Server Configuration in the dox42 Datamap (see Chapter 6.4).

Note: You may NOT use wildcards (*). Microsoft changed this behavior during 2018, so you may find older working App registrations using wildcards, but new App registrations will not work with wildcards.

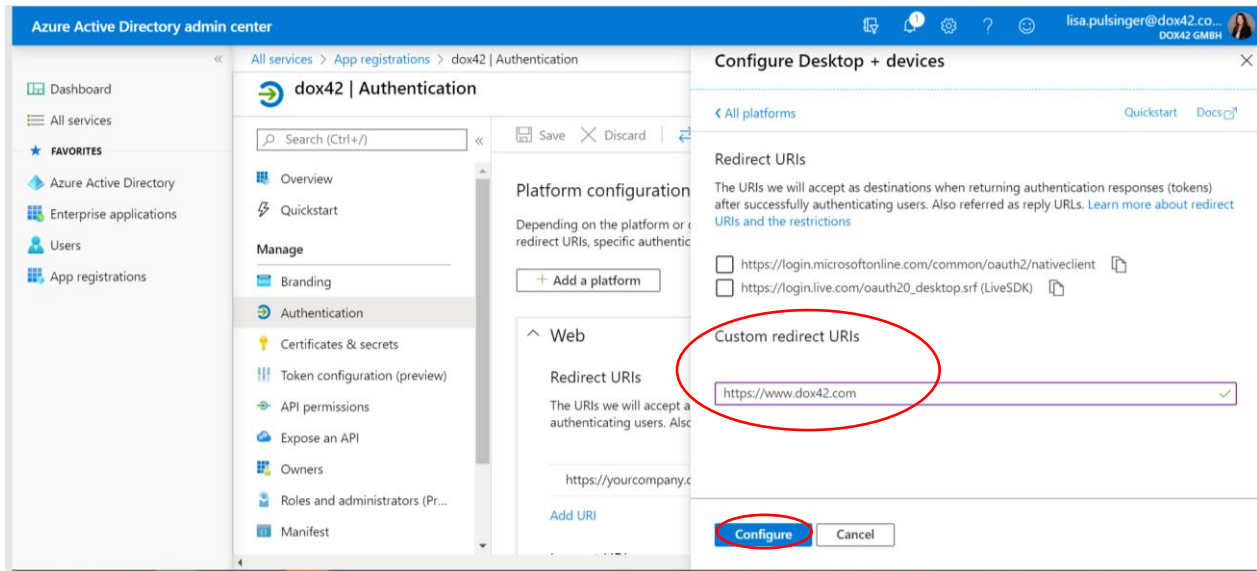


6.1.3. Add a mobile and desktop application for your dox42 Add-in

Now you need to add your dox42 Add-in as a “mobile and desktop application” to your app. On the top of the Authentication page, click on “Add a platform” and then on “Mobile and desktop application”.

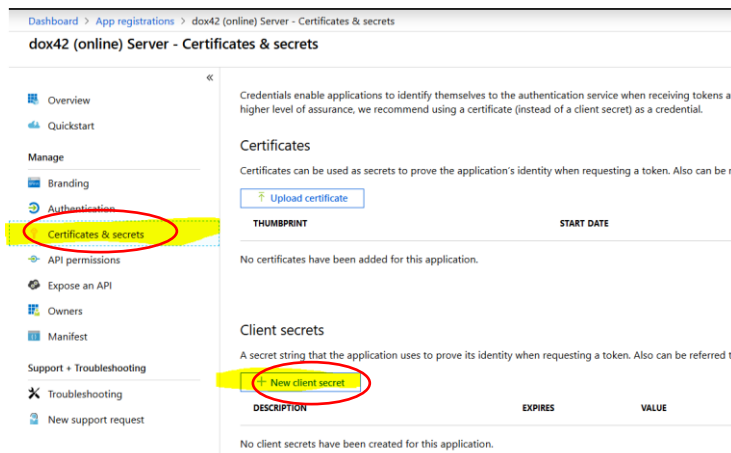


Add a Custom redirect URI for your dox42 Add-in – we are using <https://www.dox42.com>. Do not use the same redirect URI as for your web application. Then click on Configure.

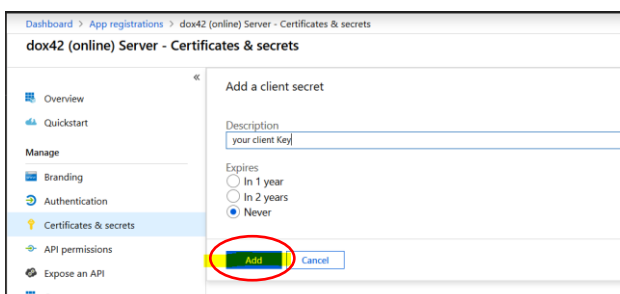


6.1.4. Add a Client Secret

In the register Certificates and Secrets, you need to add a new client secret.



Select your required expiry date (we recommend using “Never”) and click Add.



Make sure to **COPY** the ClientKey, as it will be hidden afterwards and you will not be able to retrieve it again:

dox42 (online) Server - Certificates & secrets

Copy the new client secret value. You won't be able to retrieve it after you leave this blade.

Credentials enable applications to identify themselves to the authentication service when receiving tokens at a web addressable location (using a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential).

Certificates

Certificates can be used as secrets to prove the application's identity when requesting a token. Also can be referred to as public keys.

Upload certificate

THUMBPRINT	START DATE	EXPIRES
No certificates have been added for this application.		

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

New client secret

DESCRIPTION	EXPIRES	VALUE
your client Key	12/31/2299	[REDACTED]

Copy Client Key and add it to your list with the other values (AppID, Tentant ID, etc.)

We copied the key into our Excel Config File, together with the other values of the app registration. When working with an Excel config file, we recommend to encrypt the values of the client key by using the dox42 Crypto Data source.

6.1.5. Add API Permissions

Move to the register API Permissions and click "Add a permission". You need to grant the application delegated permissions for Dynamics CRM and SharePoint Online (as your templates need to be stored on SharePoint Online, and you may be using dox42 SharePoint Output Actions).

Azure Active Directory admin center

All services > App registrations > dox42 | API permissions

dox42 | API permissions

Search (Ctrl+F) Refresh

Configured permissions

Applications are authorized to call APIs when they are granted permissions by users/admins as all the permissions the application needs. Learn more about permissions and consent

+ Add a permission Grant admin consent for dox42 GmbH

API / Permissions name	Type	Description
Microsoft Graph (1)		
User.Read	Delegated	Sign in and read user profile

Request API permissions

Select an API

Microsoft APIs APIs my organization uses My APIs

Commonly used Microsoft APIs

Microsoft Graph

Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.

Azure DevOps

Integrate with Azure DevOps and Azure DevOps server

Azure Rights Management Services

Allow validated users to read and write protected content

Azure Service Management

Programmatic access to much of the functionality available through the Azure portal

Data Export Service for Microsoft Dynamics 365

Export data from Microsoft Dynamics 365 CRM organization to an external destination

Dynamics 365 Business Central

Programmatic access to data and functionality in Dynamics 365 Business Central

Dynamics CRM

Access a wide range of CRM business software and ERP systems

Flow Service

Embed flow templates and manage flows

Intune

Programmatic access to Intune data

Office 365 Management APIs

Retrieve information about user, admin, system, and policy actions and events from Office 365 and Azure AD activity

OneNote

Create and manage notes, lists, pictures, files, and more in OneNote notebooks

Power BI Service

Programmatic access to Onboard resources such as Datasets, Tables, and Rows in Power BI

PowerApps Runtime Service

Powerful data storage, modeling, security and integration capabilities

SharePoint

Interact remotely with SharePoint data

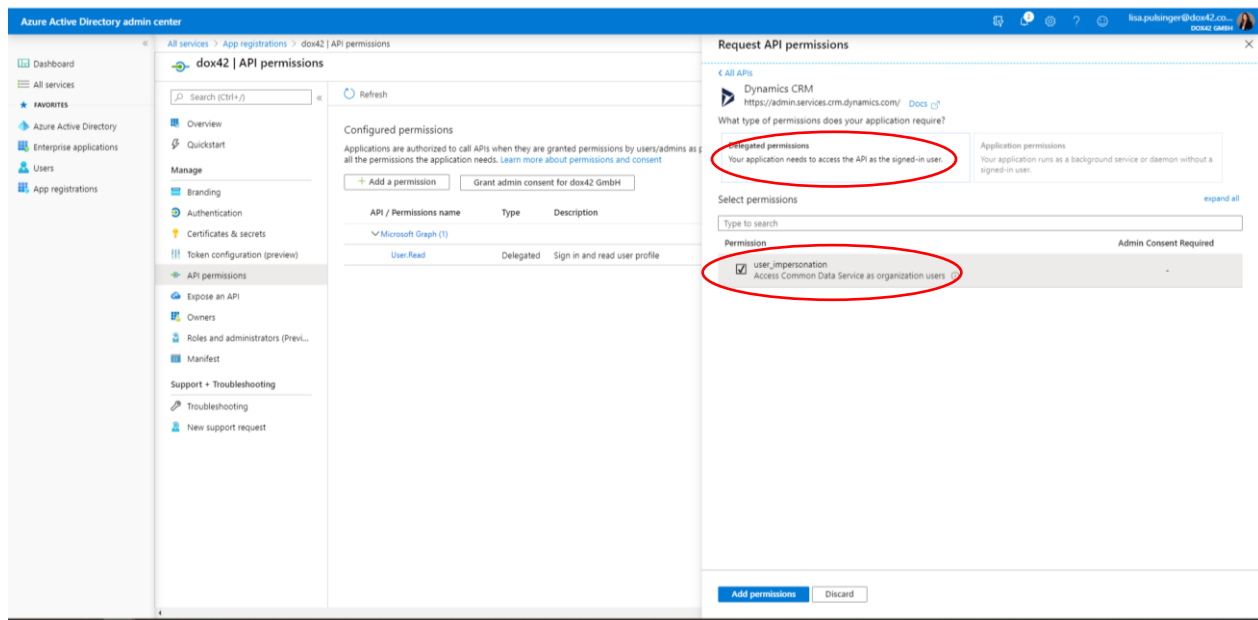
Skype for Business

Integrate real-time presence, secure messaging, calling, and conference capabilities

Yammer

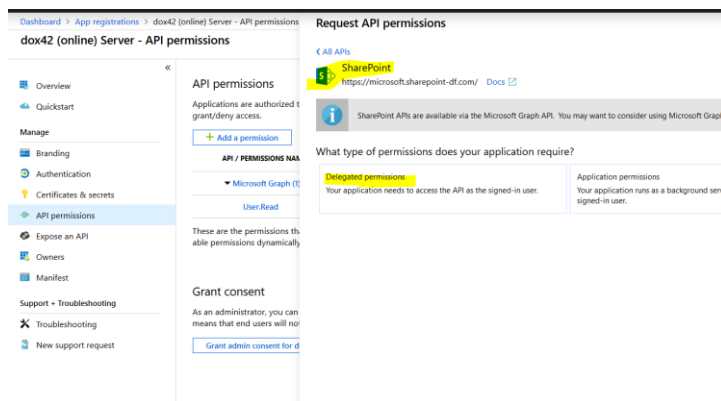
Access resources in the Yammer web interface (e.g. messages, users, groups etc.)

For Dynamics CRM you need to add Delegated user impersonation permissions.

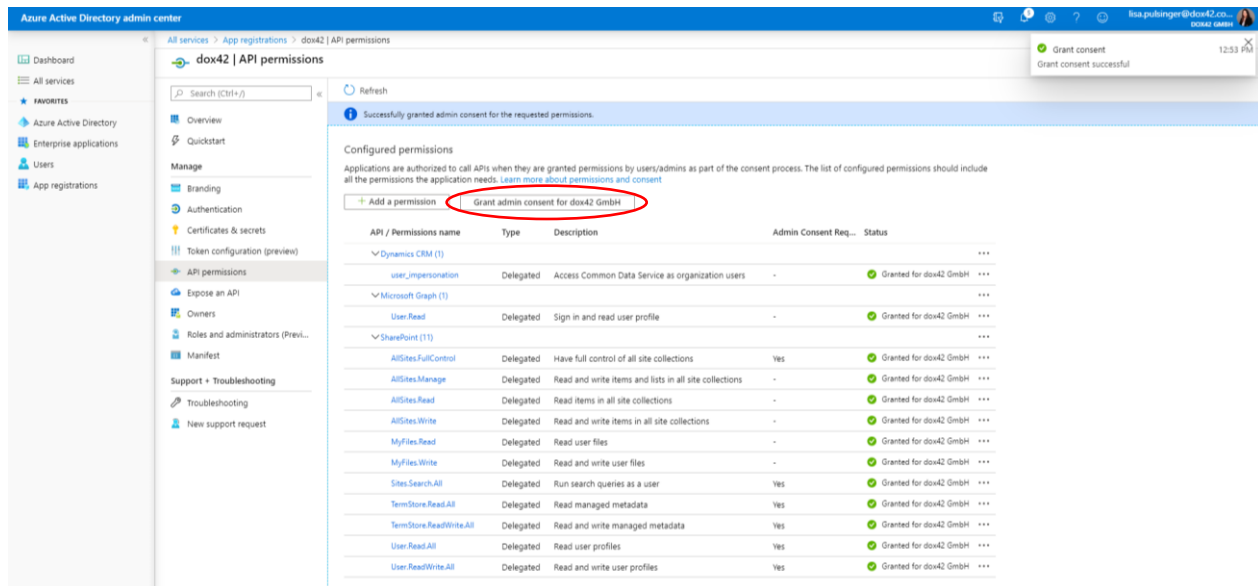


Please select the permissions according to your requirements and systems you are using dox42 with.

The dox42 server requires SharePoint read and write rights for couple of output actions! (SharePoint Save Action, writing meta data). Please grant the following delegated permissions: AllSites.Read, AllSites.Write, MyFiles.Read, MyFiles.Write.



Next click on “Grant Admin Consent” for Your Company, to give your application the full permissions (Alternatively you can also later on click on “Consent” within the dox42 Add-in AAD connection).



Your app registration is complete now, next you need to configure your dox42 Server accordingly.

6.1.6. Excel Config File

We recommend using this file to integrate all the information dynamically in your dox42 Add-In while connecting to Dynamics CRM|D365 CE using AAD. That saves a lot of time during the template design process and avoids copy & pasting. Please make sure to encrypt your Client Secret with the dox42 Crypto Data Source, before storing it there. You can find a sample of a config file in the CRM_ProductList_JSON_sampletemplate folder of your download package.

Connection - Kopier.xlsx - Excel							
https://yourcompany.dox42.online/							
1	Site	O365URL	AzureTenant_ID	Addin_AAD_AppId	Addins_Redirect	Server_AAD_AppID	Server_RedirectURL
2	https://yourcompany.sharepoint.com/yourlist/	https://yourcompany.sharepoint.com	your Tenant ID	a1ed85ba-c811-4b3d-9b0f-b9ee06a3be75	https://www.dox42.com	your AppID for the registered (online) Server	https://yourcompany.dox42.online/
							yourClientKey

6.2. Further information AAD App Registration

<https://blogs.msmvps.com/windsor/2017/03/12/walkthrough-building-a-custom-web-api-for-use-with-sharepoint-online/>

6.3. dox42 Online Configuration

Once your set-up for your AAD app is finalized, you need to complete the configurations in your dox42 Server. If you work with dox42 Online, follow this chapter. Otherwise configure your web.config as shown in chapter 6.5.

Please log into your dox42 Online management app with the user name and password received from dox42. The URL for your management app look similar to this: <https://yourcompany.dox42.online/admin>

6.3.1. Add your AAD App registration settings

1. Click on “Add Site” and enter your SharePoint sites, where you call your dox42 templates from. Please make sure to add a Slash (/) in the end of the site URL. If you call templates from various SharePoint sites, please add all of them.

Each SharePoint site needs to be added with the App ID, Tenant ID and the generated Client Secret of the App registered in the Azure AD Admin Center (see chapter 6).

2. Configure your trusted template locations. Your templates have to be stored on SharePoint Online, hence your trusted template location could be <https://yourcompany.sharepoint.com/>, or you could also specify the exact SharePoint site.
3. Upload your Aspose license (not applicable for trial installations)
4. Click on “Save” at the bottom of the page

Settings

Mail Server ⓘ

smtp.1und1.de

E-Mail address ⓘ

dox42

Password ⓘ

Error mail address ⓘ

[Redacted]

SharePoint Online Sites for dox42 Templates ⓘ

1

Add Site

Trusted Template Locations ⓘ

2

Add location

Aspose licence upload (Aspose.Total.lic) ⓘ

3

Datei auswählen

Keine ausgewählt

Upload

4

Save

Cancel

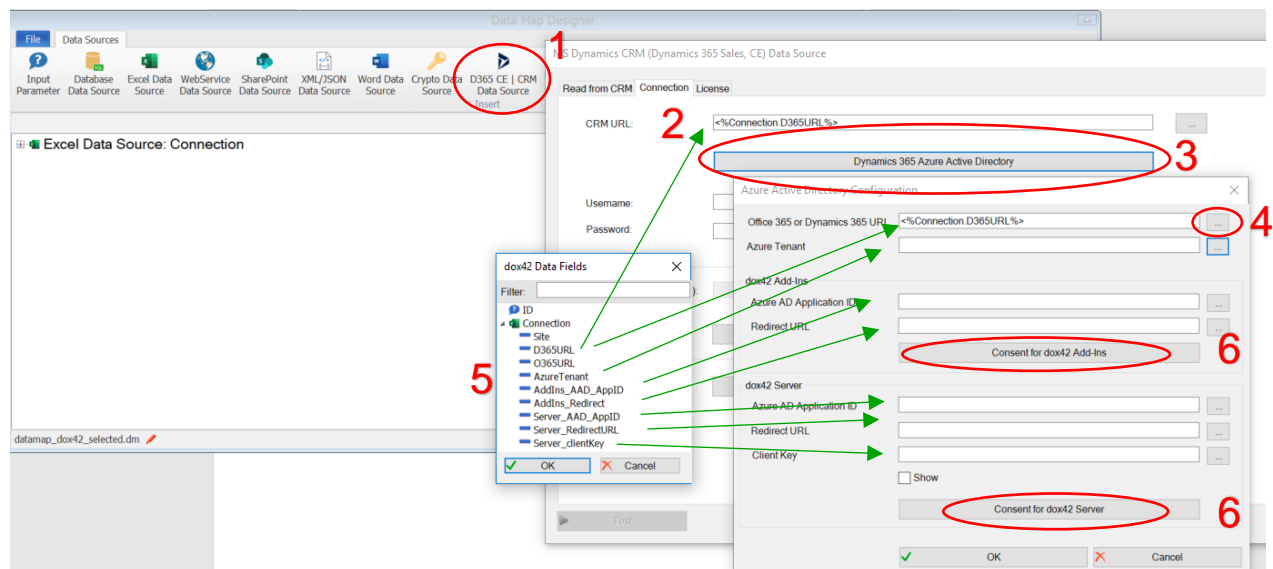
6.4. Configure Azure AD in dox42 Data Map Designer

Now you need to enter the created information in the dox42 Add-In Data Map Designer

6.4.1. Option 1: Using an Excel config file filling in the information dynamically

After connecting the Excel config file, select D365 CE|CRM data source within the Data Map Designer (1). Then fill in your CRM URL (2), Click on “Dynamics 365 Azure Active Directory” (3) and fill in the fields by clicking on “...” (4) and select them from your Excel data source as shown below (5).

After you have selected your values, click on Consent for both the Add-in and Server (6). **Dynamics admin rights are required. This step can be skipped, if you clicked on “grant permissions” within the AAD admin center already (see Chapter 6.1.5).**



6.4.2. Option 2: Using Copy Paste

After step 3 on Option 1, you also can copy the information directly into the AAD Configuration without using the Excel Config file:

We recommend to encrypt your Client Key with the dox42 Crypto Data source!

After completing the fields, don't forget to click on Consent for both the Add-in and Server. **Dynamics admin rights are required. This step can be skipped, if you clicked on "grant permissions" within the AAD admin center already (see Chapter 6.1.5).**

6.5. Configure Azure AD Access for dox42 On-Premise Server in Web.config

If you use AAD with a dox42 on-premise Server, you need to adjust the web.config of your Server.

ConfigSection:

```
<configSections>
```

```
...
```

```
    <section name="azureAD" type="dox42.Core.Utils.AzureADSectionHandler,dox42Core"/>
</configSections>
```

Azure AD Section:

```
<azureAD>
    <add resource365="https://mytenant.sharepoint.com"
          appID="..."
          tenant="..."
          clientKey="*****" />
</azureAD>
```


7. Integrating dox42 into your D365 CE or Dynamics CRM (via dox42 Solution)

dox42 has developed a solution for Dynamics CRM (D365 CE) that allows for easy integration of your dox42 calls into your CRM interface.

7.1. Input Parameter for your dox42 templates

The dox42 solution has specified **"Id"** as **standard name for the input parameter**, and pulls the GUID of your selected entity. When setting up templates, **please name your input parameter accordingly**.

If you generate a document from a **list selection with more Ids please specify "RequestBody"** as input parameter name in your template.

Per default, the dox42 solution pulls the user Id of the logged in user and the CRM environment as additional input parameters. You can use them to impersonate the CRM user in your data sources (see 4.1) and dynamically select the CRM environment you are connecting with. You can change this configuration in the dox42 client libraries of your dox42 solution.

7.2. Import the Solution

Import the dox42 Solution (Zip Folder dox42_1_Versionnumber.zip)into your Dynamics 365:

Select Solution Package Help

Select the compressed (.zip or .cab) file that contains the solution you want to import and click Next.

Choose File dox42_1_0.zip

Back Next Cancel

Choose the dox42 zip file and click next.

Solution Information

Help

! Changes applied by importing an unmanaged solution cannot be uninstalled. Do not install this solution if you want to roll back these changes.

Solution Information

Name: dox42 Client Libraries

Publisher: dox42 GmbH(dox42)

Package Type: Unmanaged

[View solution package details](#)

i By enabling this command, you consent to share your data with an external system. Data imported from external systems into Microsoft Dynamics 365 are subject to our privacy statement that can be accessed [here](#). Please consult the feature technical documentation for more information.

[Back](#)
[Import](#)
[Cancel](#)

Click Import to import the solution.

Importing Solution

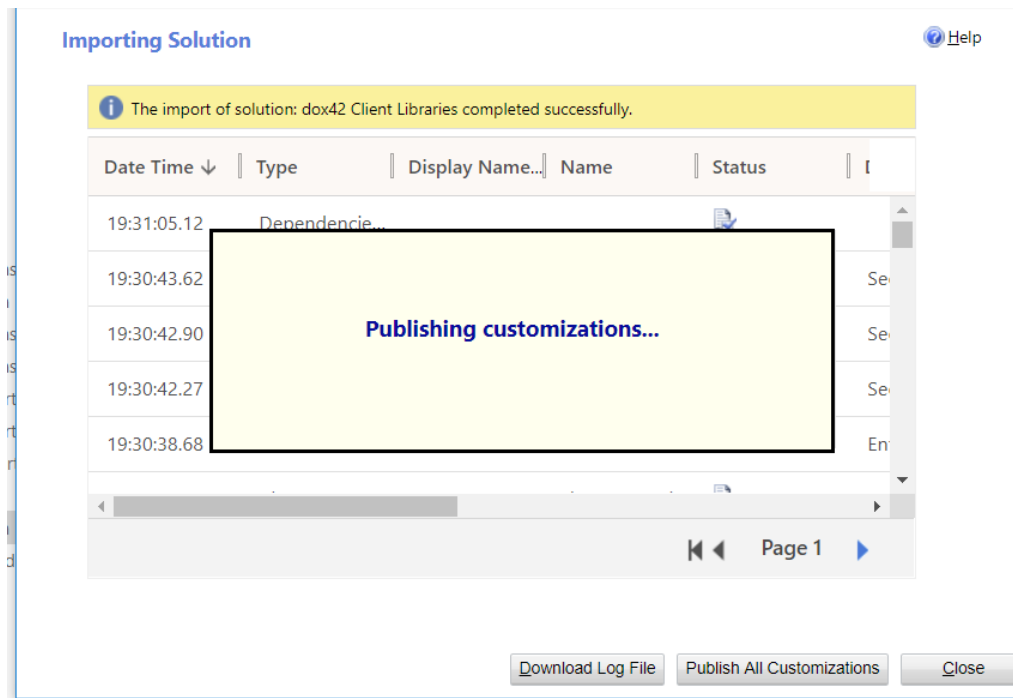
Help

i The import of solution: dox42 Client Libraries completed successfully.

Date Time ↓	Type	Display Name...	Name	Status	I
19:31:05.12	Dependencie...				
19:30:43.62	Security Role	dox42 User	dox42 User		Se
19:30:42.90	Security Role	dox42 Templ...	dox42 Templ...		Se
19:30:42.27	Security Role	dox42 Global...	dox42 Global...		Se
19:30:38.68	Chart		dox42_servic...		En

[Download Log File](#)
[Publish All Customizations](#)
[Close](#)

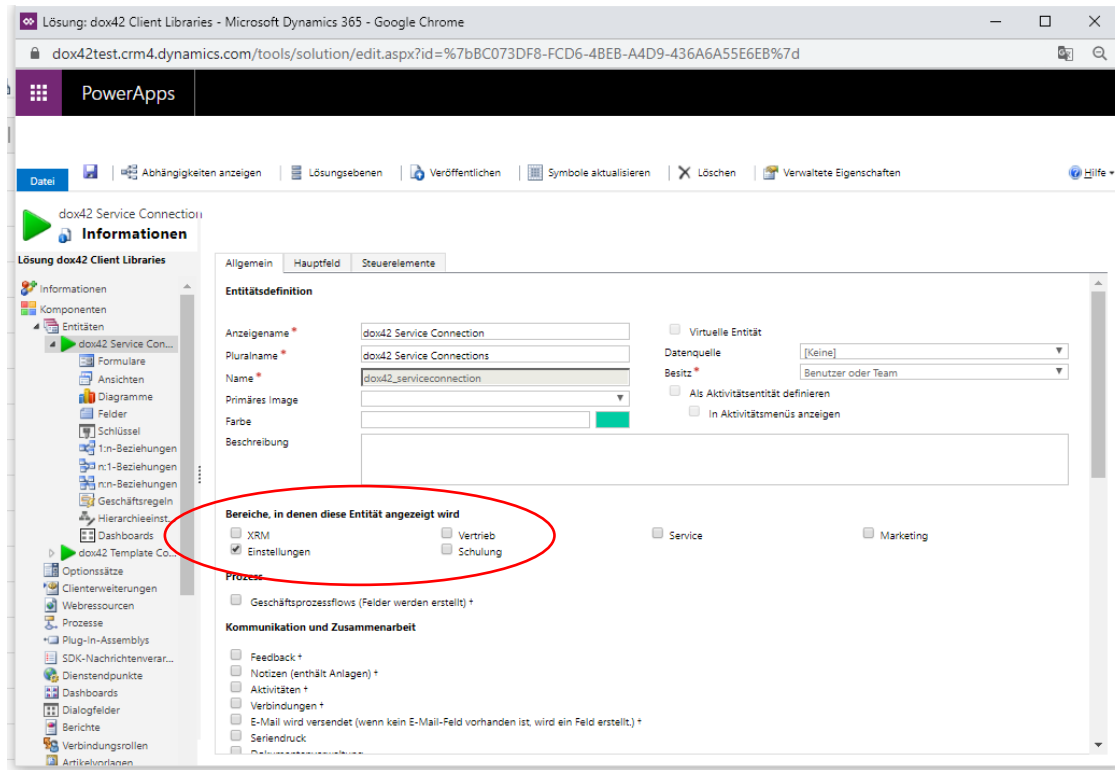
After the import is finished click "Publish All Customizations".



After the publishing has finished (the overlay “Publishing customizations...” disappears), click close to close the import wizard.

If your system is in English, your entities “dox42 Service Connection” and “dox42 Template Connection” will automatically appear in the Settings area.

If your system is in German (or any other language), please click on your entities “dox42 Service Connection” and “dox42 Template Connection” and select in which areas those entities should appear (e.g. in the Settings menu). (see German screenshot below).

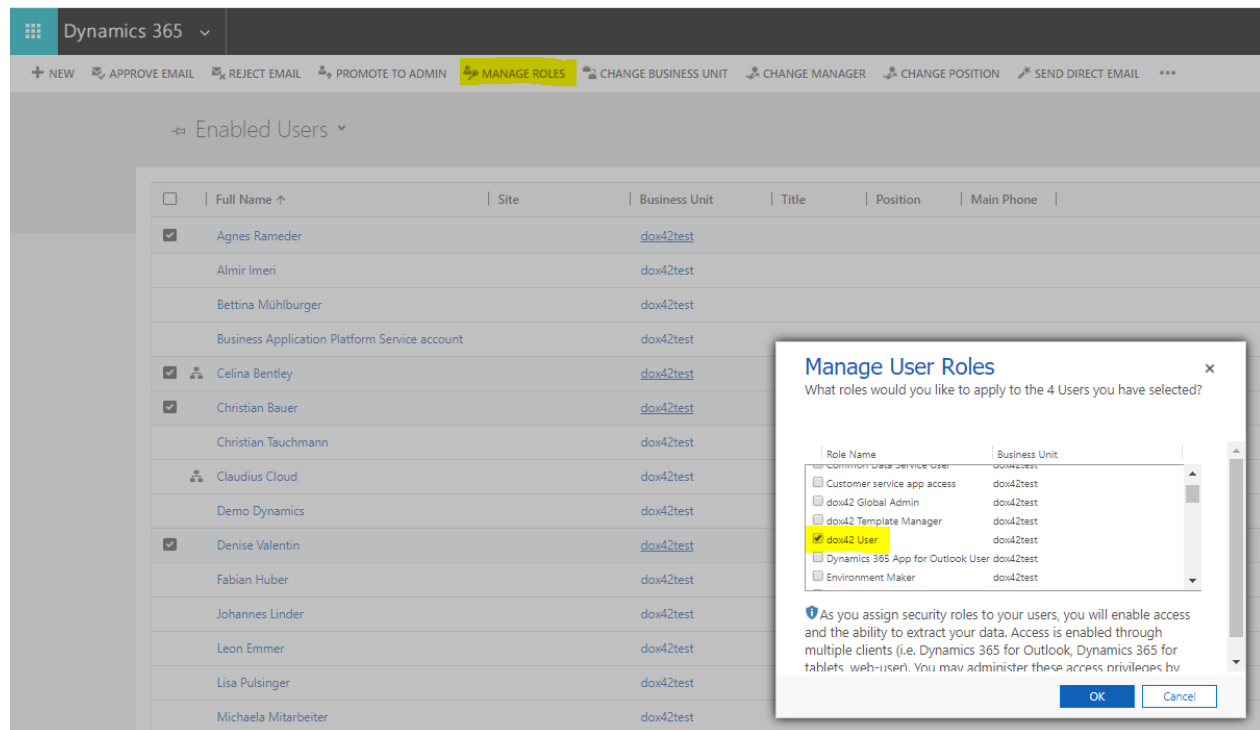


7.3. Security Roles

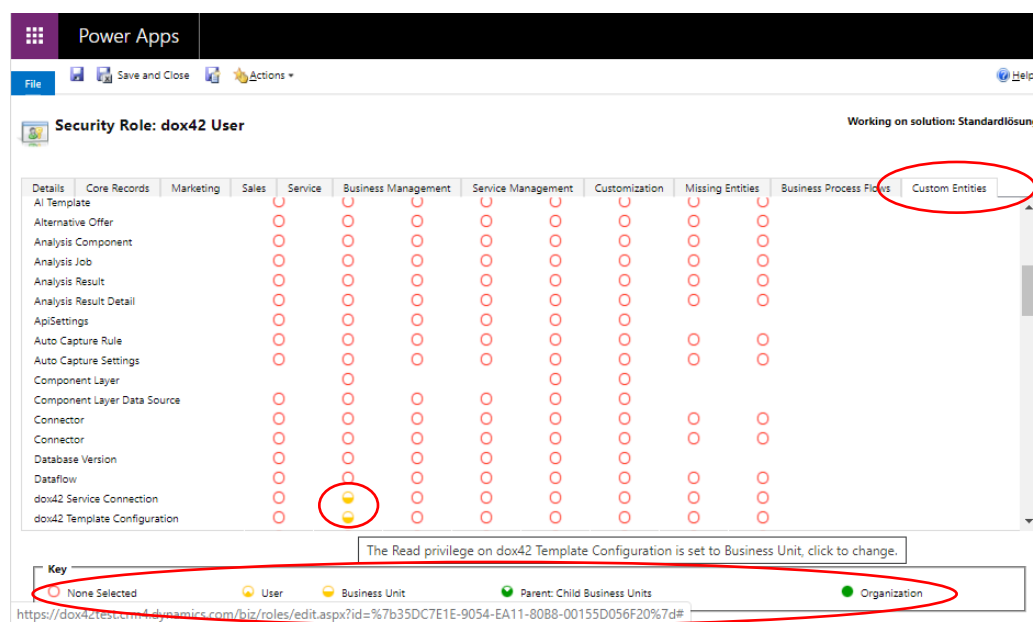
The solution also contains security roles which regulate the access to the two dox42 entities “dox42 Service Connection” and “dox42 Template Connection”. The dox42 Global Admin has full rights for both entities, whereas the dox42 template manager can edit dox42 template configurations, but can only read service connections. **The dox42 User role only has read only permissions on both entities, and needs to be assigned to all users generating documents.**

	dox42 Template Configuration	dox42_templateconfig	Entität
	dox42 Service Connection	dox42_serviceconnecti...	Entität
	dox42 Template Manager	dox42 Template Mana...	Sicherheitsrolle
	dox42 User	dox42 User	Sicherheitsrolle
	dox42 Global Admin	dox42 Global Admin	Sicherheitsrolle
	dox42_arrow32.png	dox42_arrow32.png	Webressource
	dox42_clientlib.js	dox42_clientlib.js	Webressource
	dox42_adal.js	dox42_adal.js	Webressource
	dox42_arrow16.png	dox42_arrow16.png	Webressource

Manage your security roles by switching to the menu **Settings > Security > Users**. Then select your desired users, click on Manage Roles and add the dox42 Security Roles to the users.



By default the rights for the “dox42 User” and “dox42 Template Manager” are set on business unit level. Should you require the rights to be set on organization level, please switch to Settings > Security > Security Roles, select the desired security role, move to the “Custom Entities” Tab and click a few times on the rights until they are set on the appropriate level. A green dot indicates rights on organizational level.



7.4. Adding the dox42 Server configuration to Dynamics 365

Add a new dox42 Service Connection:

Extensions

- dox42 Service Conn...
- dox42 Template Con...

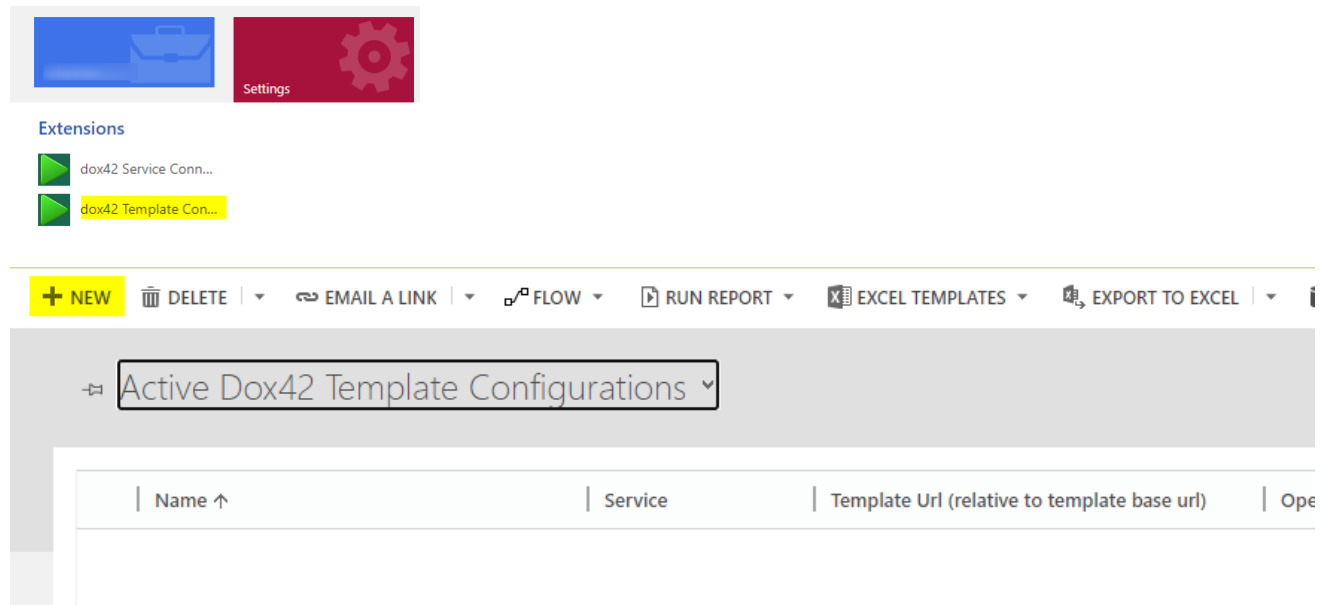
Active dox42 Service Connections

Name ↑	Server Url	Template base url																				
<p>DOX42 SERVICE CONNECTION : INFORMATION</p> <p>dox42 demo config</p> <p>General</p> <table border="1"> <tr> <td>Name *</td> <td colspan="2">dox42 demo config</td> <td>Created On</td> </tr> <tr> <td>Server Url</td> <td colspan="2">https://...dox42.online/</td> <td>Created By</td> </tr> <tr> <td>App Id (for AAD)</td> <td>0640224f-...</td> <td>Tenant Id (for AAD)</td> <td>11e6b3e1-...</td> </tr> <tr> <td>Template base url</td> <td colspan="2">http://...</td> <td>Modified On</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Modified By</td> </tr> </table> <p>dox42 Online Server</p> <p>Display name : dox42 Online Server</p> <p>Application (client) ID : 0640224f-...</p> <p>Directory (tenant) ID : 11e6b3e1-...</p> <p>Object ID : ...</p> <p>Supported account types : My organization only</p> <p>Redirect URIs : 4 web, 0 public client</p> <p>Application ID URI : Add an Application ID URI</p> <p>Managed application in ... : dox42 Online Server</p>			Name *	dox42 demo config		Created On	Server Url	https://...dox42.online/		Created By	App Id (for AAD)	0640224f-...	Tenant Id (for AAD)	11e6b3e1-...	Template base url	http://...		Modified On				Modified By
Name *	dox42 demo config		Created On																			
Server Url	https://...dox42.online/		Created By																			
App Id (for AAD)	0640224f-...	Tenant Id (for AAD)	11e6b3e1-...																			
Template base url	http://...		Modified On																			
			Modified By																			

For instructions on your dox42 app registration with AAD, please follow the steps mentioned in Chapter 6.

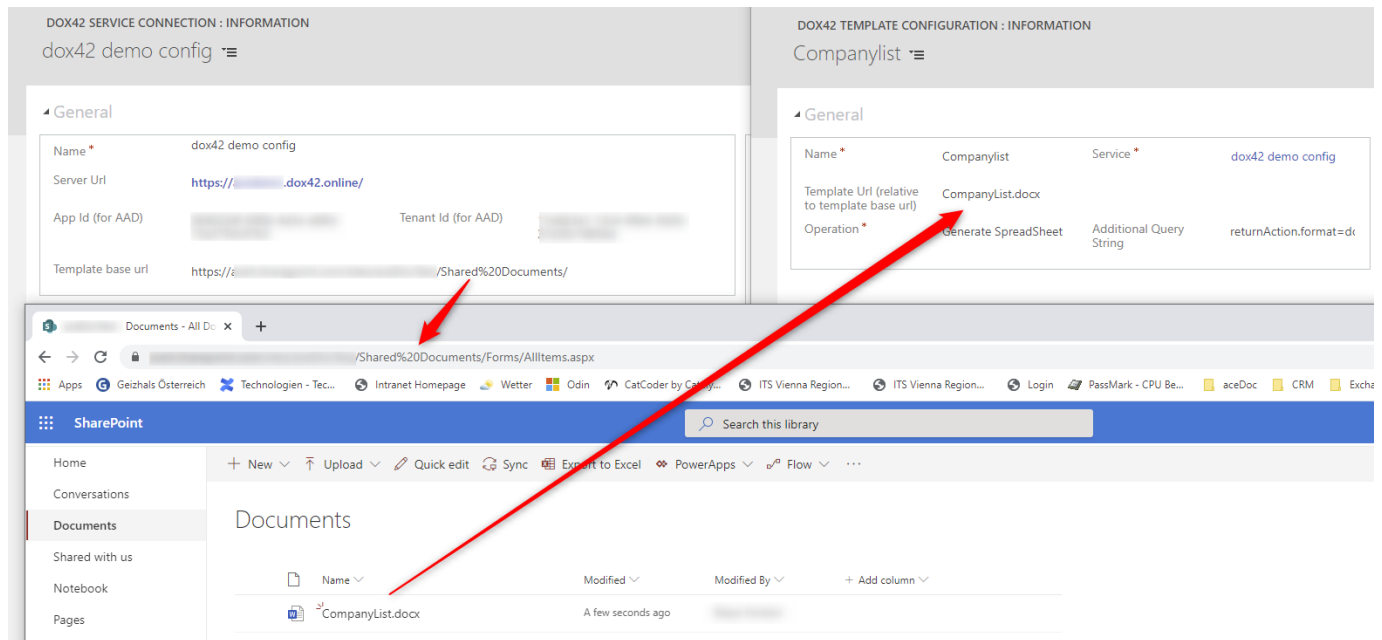
7.5. Add a template configuration to Dynamics 365

Add a new dox42 Template Configuration:



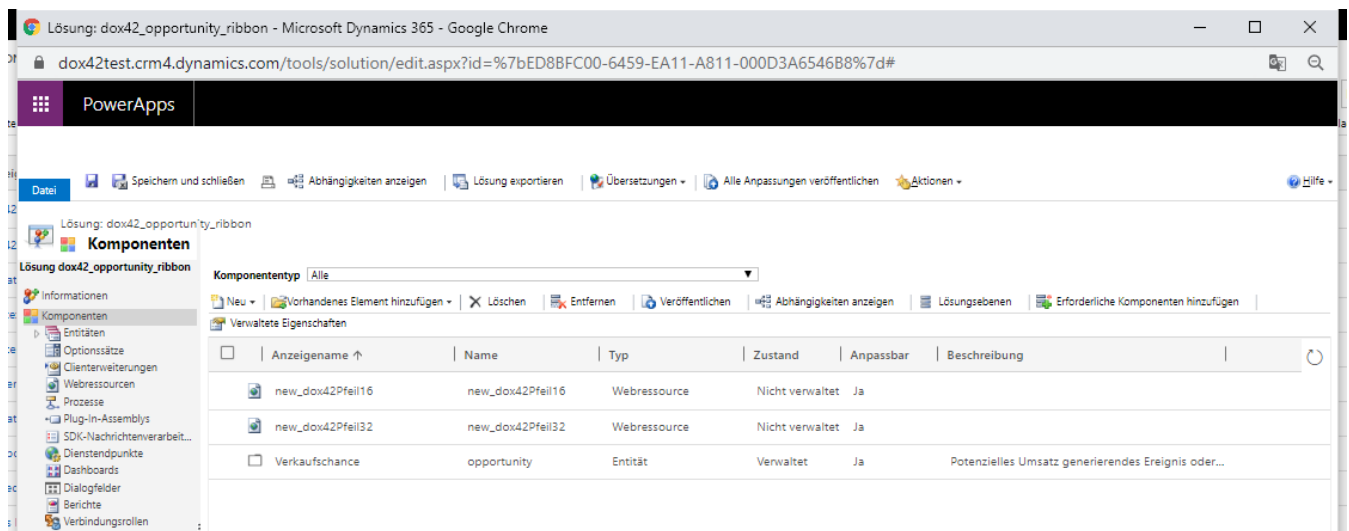
Enter the Values for your dox42 Service, Template, Http Method, Operation and Query String.

- **Name:** The name of the template configuration has to match the name you will use in the ribbon button command action (see 7.6).
- **Location of the template:** The location of the template is build out of the service connection (Template base url) and the Template Url of the template configuration. These two values are concatenated. If you are generating Excel spreadsheets, please specify the path of the data map.
- **Http Method:** Choose if your dox42 call should use the method “GET” or “POST”. If you generate a document from a list with several Ids please specify “POST”. Selecting “Auto” ensures that whenever you pass a list of Ids, the request method will be POST, otherwise GET is used automatically.
- **Operation:** Use “Generate Document” for Word templates, “Generate Slides” for PowerPoint templates and “Generate SpreadSheet” for Excel templates.
- **Additional Query String:** You need to define your dox42 Output actions here. E.g. if you want to return your document as pdf, the Additonal Query string looks like this: ReturnAction.Format=pdf. Find all dox42 parameters in the [dox42 Server documentation](#). In Chapter 5 of this documentation you can find the dox42 CRM output action for attaching documents as an annotation to an entity.



7.6. Add the Ribbon Button with Ribbon Workbench

First, set up a new solution in your Dynamics settings (Settings > Solutions > New) and add the entity to which you want to add your dox42 button. You can also upload the icons for your ribbon buttons here.

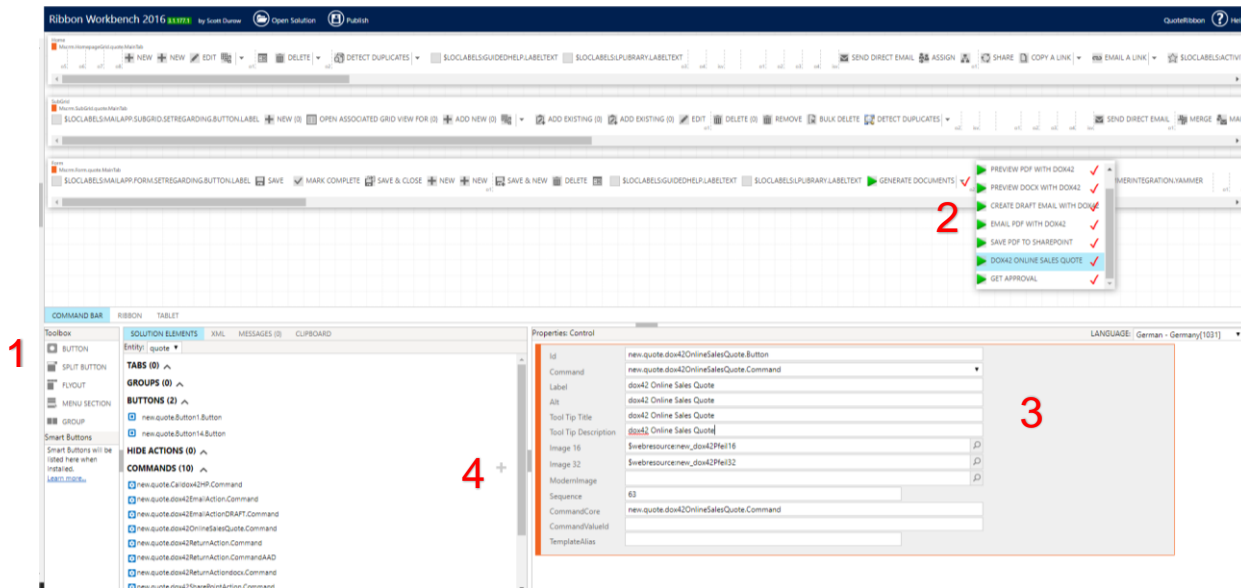


Next, open Ribbon Workbench from your Settings>Customizations page in Dynamics (You need to [install it separately](#) to your CRM.)

Open your newly added solution.

First, add a button (1) by dragging it to the desired position on your ribbon (2) and insert information like an ID, label, description and icon (3).

If you want to add a drop down button, choose “Split Button” (1) and drag it to the desired position on your ribbon (2), then drag a “Menu Section” (1) to the Split Button. Next, you drag more buttons (1) to the drop down area of your Split Button (2) and configure them as described below (3).



Next you need to add your commands to the button. Click the + sign in the menu Command Bar > Solution Elements in the lower left corner of your screen (4).

For the CommandAction define:

Id

dox42.account.CreateDocument.Command

Actions

Custom JavaScript Action

\$webresource:dox42_adal.js > isNaN

Library

\$webresource:dox42_adal.js

Function Name

isNaN

Add Parameter

Custom JavaScript Action

\$webresource:dox42_clientlib.js > generateFile

Library

\$webresource:dox42_clientlib.js

Function Name

generateFile

String Parameter

= CompanyList

Value

CompanyList

Crm Parameter

= SelectedControlSelectedItemIds

Add Parameter

The first JavaScript Action is **isNaN** from the Library **dox42_adal.js**.

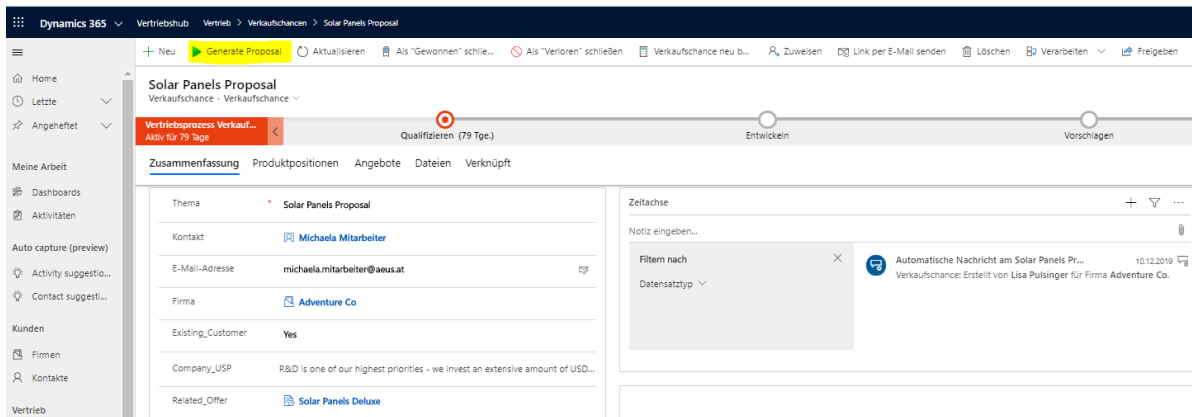
This loads the ADAL script.

The second JavaScript Actions is `generateFile` from the Library `dox42_clientlib.js`.

Pass the `name of the Template configuration` (configured as dox42 Template – see 7.5) as first parameter and the `SelectedControlSelectedItemIds (Crm Parameter)` as second parameter to the `generateFile` method.

You can continue this with as many dox42 commands as you may need. Next, publish your solution (click on Publish in the upper left corner of your Ribbon Workbench solution).

If you switch back to your CRM page, your newly added dox42 buttons will appear in the command ribbon.



7.6.1. Adding Ribbon buttons to lists

When adding dox42 buttons to lists, which allows you to select one or several items for your document generation, please use the **input parameter “RequestBody”** instead of “id” in your document template. Furthermore, you will need to add a JSON data source to your template. You can find a sample template in your download package (Folder CRM_ProductList_JSON_sampletemplate). In your dox42 template configuration in CRM, specify “Auto” or “POST” as Http Method (see Chapter 7.5).

In Ribbon workbench, instead of placing the button on the form, you need to place it on the homepageGrid.MainTab of your entity (the top ribbon displayed in your Ribbon Workbench set-up).

If you insert the button to a Classic UI CRM environment, please follow the approach described above – see 7.6. For your button to be shown in a Unified UI CRM environment, you need to add a **Display enable rule** (SelectionCountRule with a Minimum of 1) to your button command. This will have the effect that your button in Unified UI environment will be shown as soon as you select at least one item:

Properties: Command LAN

Id:

Actions

Custom Javascript Action \$webresource:dox42_adal.js > isNaN

Library: Function Name:

Custom Javascript Action \$webresource:dox42_clientlib.js > generateFile

Library: Function Name:

String Parameter = selected_products

Crm Parameter = SelectedControlSelectedItemIds

Display Rules

Optional: Use 'Add Display Rule' if you want to make the visibility dynamic.

cr511.product.EnableRule0.modern

Properties: Enable Rule

Id:

Un-customised (IsCore):

SelectionCountRule

Default: InvertResult:

AppliesTo: Minimum:

Maximum:

Again, after you publish your solution, your button will be shown in the ribbon of your selected form.

Dynamics 365 Vertriebshub Vertrieb > Produkte

Diagramm anzeigen Klonen Überarbeiten Zurückziehen **Product List**

Alle Produkte, Familien und Pakete

✓	Name	Produkt-ID	Hier
✓	Conference Chair	COCHAIR	---
	Conference Table	CONTABLE	---
	Flipchart	FLIPCHART	---
	Reception Desk	RECEPTION	---
	Potted Plant	PLANT	---
	Office Desk	OFFICEDESK	---

7.6.2. More Information on Ribbon Workbench

If you are looking for a more detailed introduction to Ribbon Workbench, please follow [this link](#).

8. Adding a dox42 Call via IFRAME to your Dynamics CE|CRM Forms

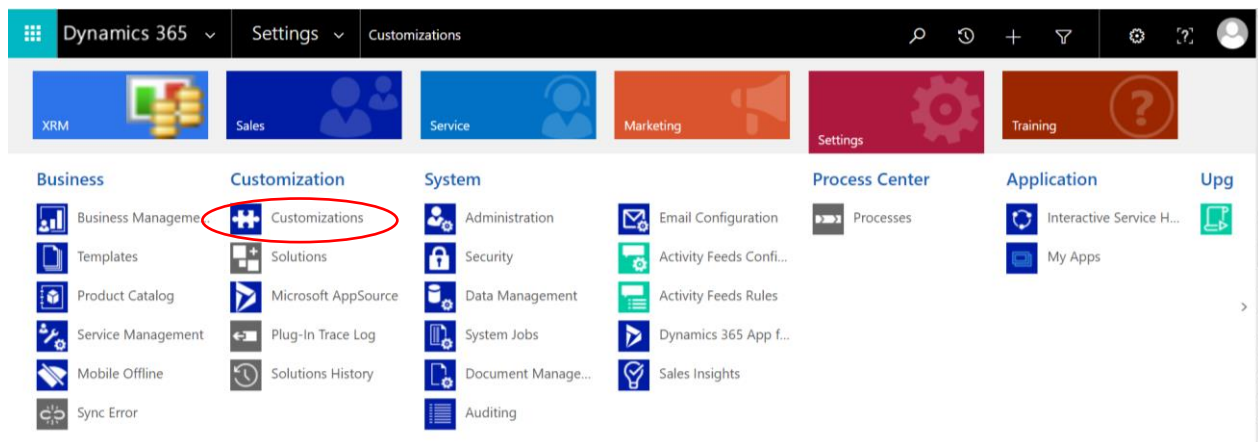
As an alternative to chapter 7 and if you wish for your dox42 calls to be added directly to an entity form, rather than via a Ribbon Workbench button in the command bar, you can integrate dox42 calls via an HTML webresource/IFRAME to your entity form.

8.1. Configure the JavaScript Interface

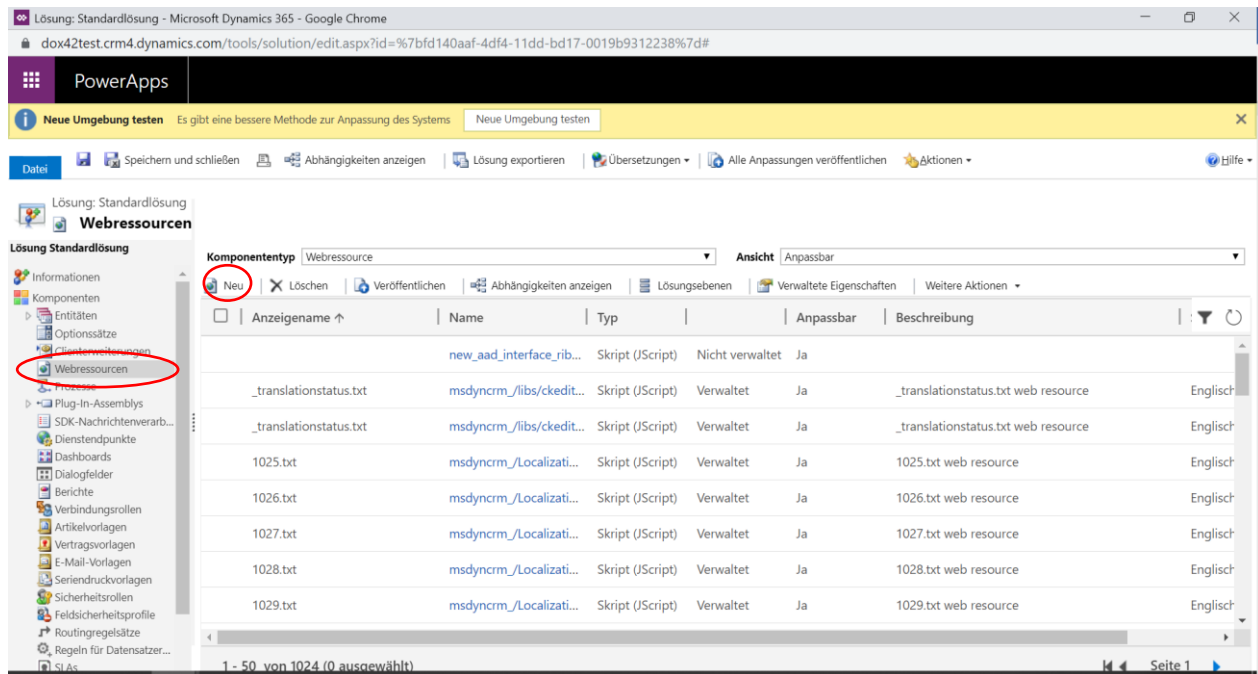
First, configure your JavaScript Interface. For this, please follow the instructions for the AzureAD_dox42_javascript_interface mentioned in the [Azure Active directory documentation](#). You can find the JavaScript in your download package.

8.2. Set up an HTML webresource for the JavaScript Interface

For this please change to Settings > Customization > Customize System.



Now a new window opens with all your custom components of your CRM. Click on the web resources button in the left context menu and after that click on New.



Now add your previously configured AzureAD_dox42_javascript_interface JS as **Type HTML** webresource.

Click the button “Text-Editor” to add your JavaScript/HTML Code.

Save and Publish your webresource.

PowerApps

SPEICHERN LÖSCHEN VORSCHAU ABHÄNGIGKEITEN ANZEI... VERÖFFENTLICHEN

Lösung: Standardlösung

Webresource: aad_Interface

Allgemein Abhängigkeiten

Allgemein

Name * new_aad_Interface

Anzeigename aad_Interface

Beschreibung

Inhalt

Typ * Webseite (HTML) Text-Editor

Sprache

Datei hochladen Datei auswählen Keine ausgewählt

URL

URL https://dox42test.crm4.dynamics.com/WebResources/new_aad_Interface

Mobiltelefon

☐ Für mobile Nutzung aktivieren

You need to copy the URL of your newly added web resource and add it as reply URL to your Azure Active Directory App Registration.

8.3. Add the web resource as IFRAME to your CRM form

Next you need to insert your web resource to your CRM page as an IFRAME using the D365 CRM form editor. First open the desired form editor, e.g. from your quote overview.

Now select the area where you would like the webresource to appear on your form, click the “Insert” ribbon in the menu bar and select IFRAME.

Now configure your IFRAME settings. For the URL please add the URL of your previously added webresource, as described in chapter 8.2.

Click OK, Save and Publish in order to have your dox42 calls appear on your form.

9. Support

Should you have any questions, please do not hesitate to contact support@dox42.com. We are happy to help you!

Good luck with dox42!