# DOX42 D365 BC ONLINE

# DOCUMENTATION

Version 3.0



Dynamics NAV





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# 1 What is dox42 Business Central Integration?

The dox42 Business Central (BC) SaaS integration enables you to generate one or many documents directly from BC. Technically, the dox42 Server and dox42 Online is a web service with REST and SOAP interface and can therefore be integrated into almost any button, workflow, or specialist application, independently.

# 2 Requirements for dox42 Online in BC Online

The requirements to use dox42 are listed below:

- SharePoint Online
- dox42 Online server access or dox42 Server with web access
- Azure Active Directory access
- ► Installed MODUS M365 dox42 Document Automation app in Business Central (Microsoft AppSource)

Please contact info@dox42.com if any of the requirements are not met

# 3 Azure Active Directory Application for dox42 Online

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

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

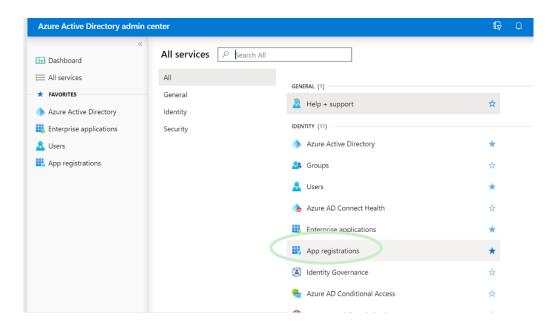
- App registrations
- Enabling required permissions



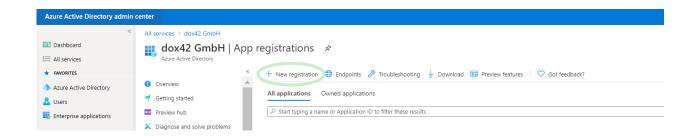
## 3.1 dox42 App registrations

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.

- 1. Open the Office 365 Admin Center
- 2. Go to -> "Admin centers" -> "Azure AD", or click here to log in immediately: <a href="https://aad.portal.azure.com">https://aad.portal.azure.com</a>
- 3. Click on "All services" -> "App registrations"

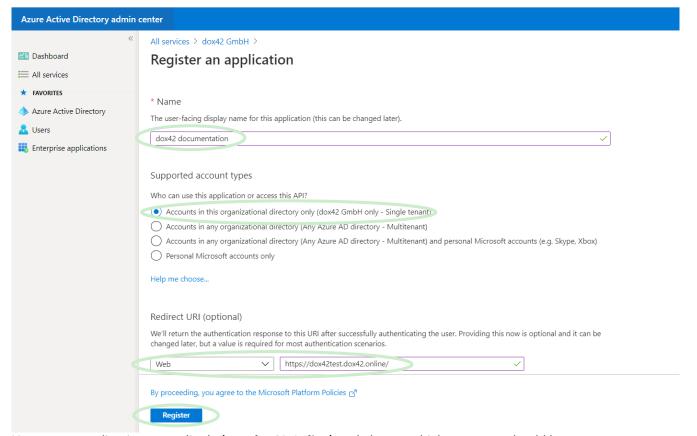


4. Click on "New Registration"





#### Now configure your dox42 application:



Name your application accordingly (e.g. dox42 Online) 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".

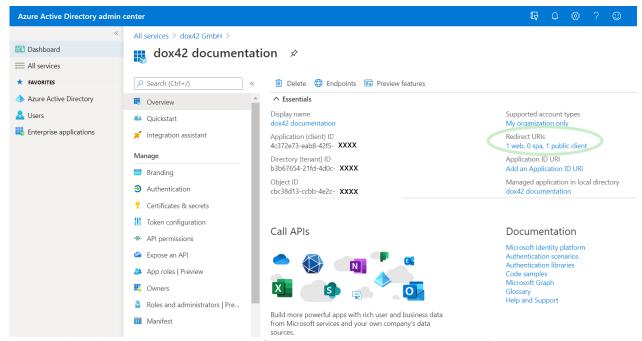
Note: In this documentation, we use the redirect URL of a dox42 Online server (SaaS): https://yourcompany.dox42.online/

Now that you have registered your application, you can copy the Application (client ID) and Directory (tenant ID) and paste it into an Excel Config file. This allows you to manage your configuration details centralized. See Chapter 5.1.1 for more information on how to set up this config file.

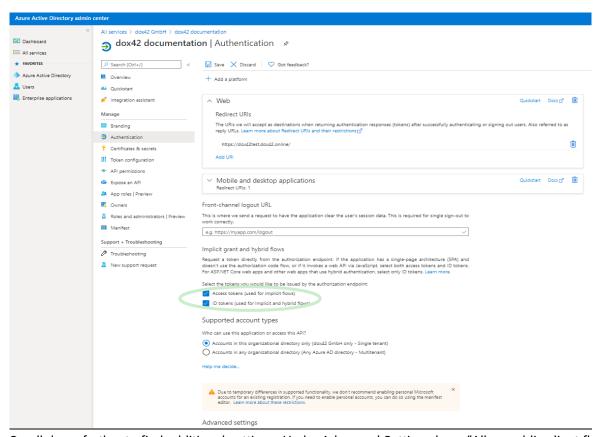


### 3.1.1 Token permissions

Next, you need to grant token permissions for your app. Within your newly added application, click on "Redirect URLs".

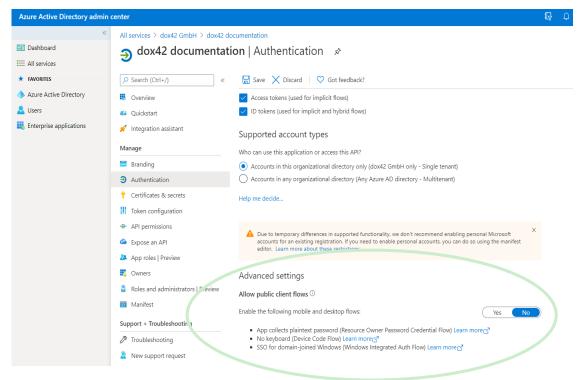


Now, on the In the Implicit grants section of the Authentication register, tick both "Access tokens" and "ID tokens":



Scroll down further to find additional settings. Under Advanced Settings keep "Allow public client flow" set on "No".





### 3.1.2 Enter redirect URLs

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

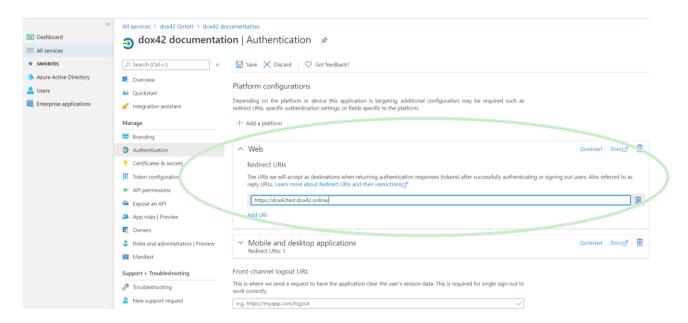
- Your dox42 Online Server URL: <u>https://yourcompany.dox42.online/</u>
  - (In our example: https://dox42test.dox42.online/)
- For Business Central Online:

https://businesscentral.dynamics.com/OAuthLanding.htm

- Any additional URLs for applications you want to call the dox42 server from, e.g.
  Dynamics 365 CE/CRM. Please add the exact URLs where the dox42 Server will be
  called from. (e.g. <a href="https://yourcompany.crm4.dynamics.com/">https://yourcompany.crm4.dynamics.com/</a>
- Your dox42 Online Management login reply URL (when set to MS authentication)
   https://yourcompany.dox42.online/maui/Home

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

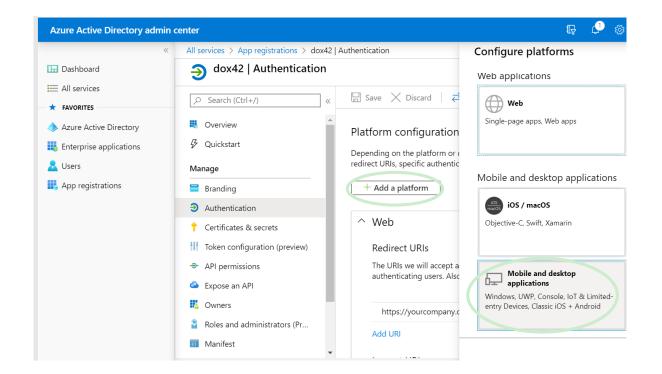




Note: You may NOT use wildcards (\*). Microsoft changed this behavior during 2018, so you may find older working App registrations using wildcards, but new App registrations will not work with wildcards.

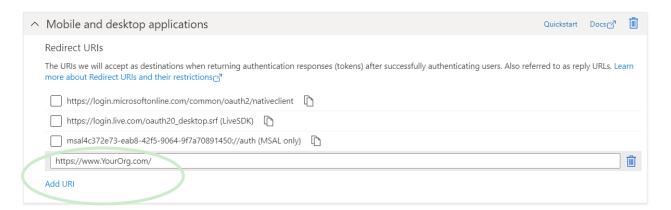
# 3.1.3 Add a mobile and desktop application for your dox42 Add-In

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".

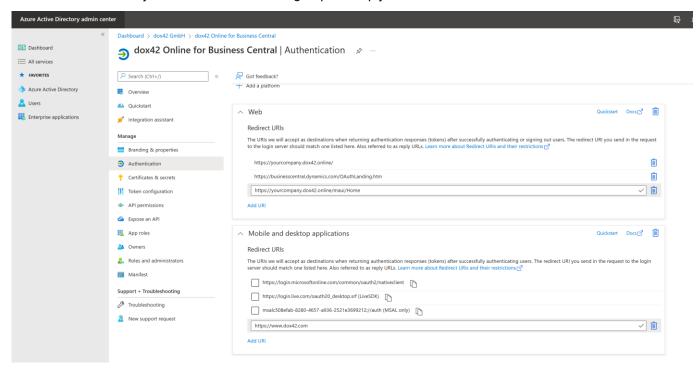




Add a custom redirect URI for your dox42 Add-in – we are using <a href="https://www.YourOrg.com">https://www.YourOrg.com</a>. Then click on "Configure".



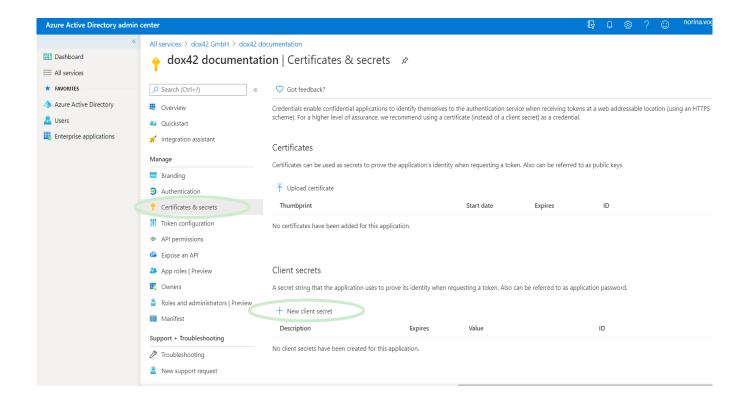
Authentication tab may look like this after adding required reply URIs:





### 3.1.4 Add a client secret

In the register "Certificates & secrets", you need to add a new client secret.

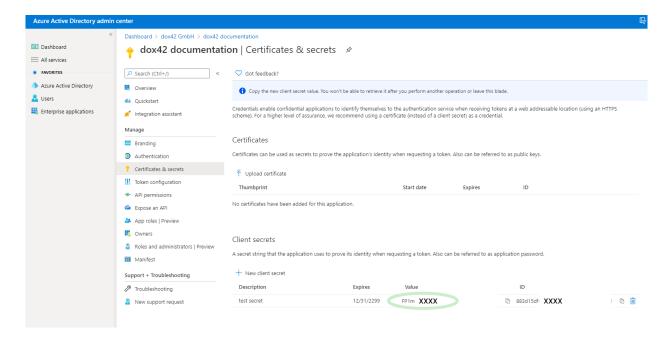


Select your required expiry date and click "Add".





Make sure to COPY the Client Key, as it will be hidden afterwards, and you will <u>not</u> be able to retrieve it again:

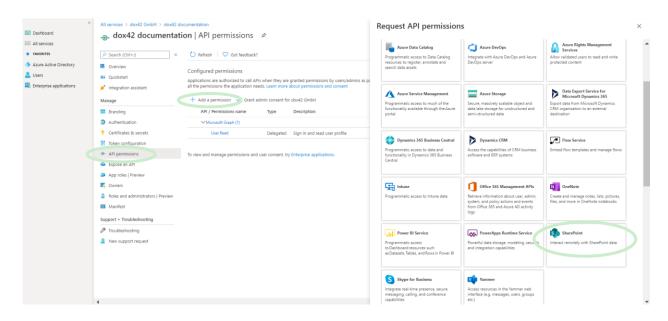


We copied the key into our Excel Config File, together with the other values of the app registration. When working with an Excel config file, we recommend encrypting the values of the client key by using the dox42 Crypto Data source.

Please see Chapter 5.1.1 to get more details on how to set up this config file.

### 3.1.5 Add API permissions

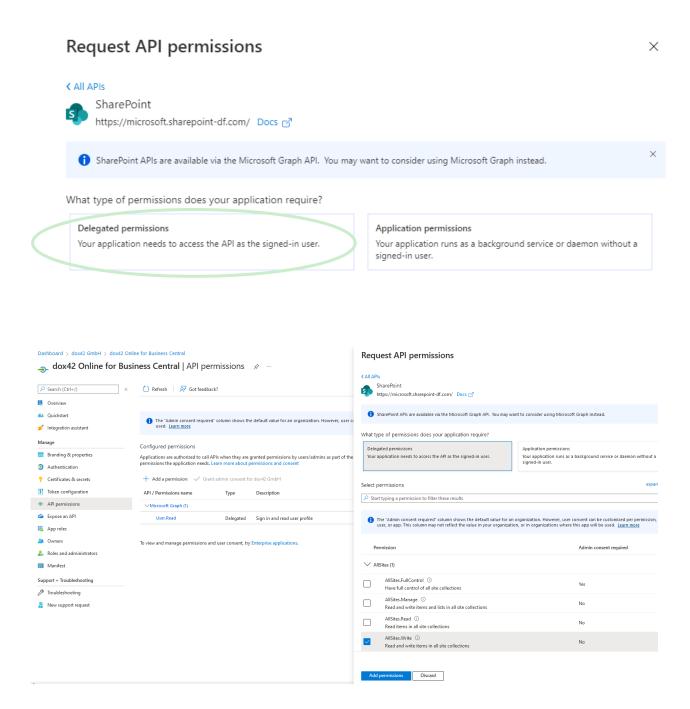
Move to the register API Permissions and click "Add a permission". You need to grant the application delegated permissions for SharePoint Online.



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

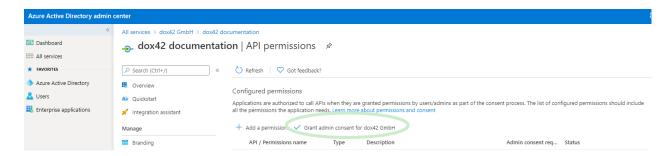


The dox42 server requires SharePoint read and write rights for a couple of output actions (SharePoint Action), therefore in this documentation we granted the following delegated SharePoint rights: (read and write in all site collections):

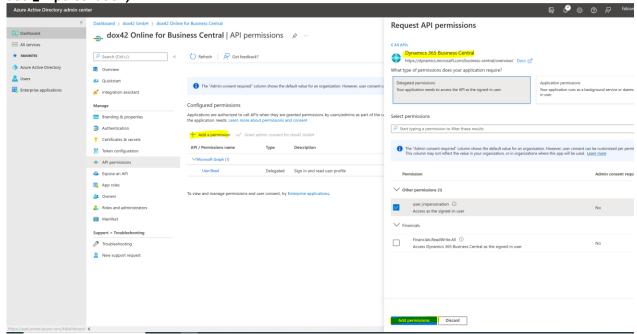


Next click on "Grant Admin Consent" for Your Company, to give your application the full permissions (Alternatively, you can also later on click on "Consent" within the dox42 Add-in AAD connection):





Now repeat these steps for Business Central permissions (Delegated permission, check user\_impersonation):



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

### 3.1.6 Further information AAD app registration

https://docs.microsoft.com/en-us/azure/active-directory/develop/quickstart-register-app

## 3.2dox42 Online Configuration

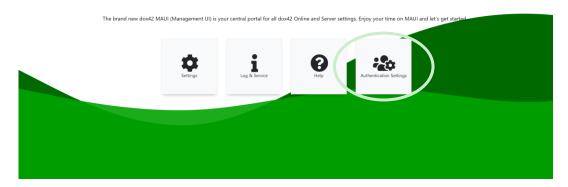
Once your set-up for your AAD app is finalized, you need to complete the configurations in your dox42 Server. If you work with dox42 Online, follow this chapter.

Please log into your dox42 Online management app with the user name **admin** and password received from dox42: (<a href="https://yourCompany.dox42.online/maui/">https://yourCompany.dox42.online/maui/</a>)

After the first login the password must be changed and you can also change your authentication method to Microsoft Authentication:



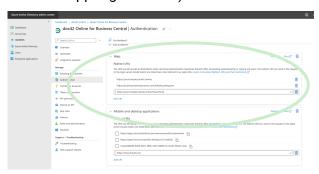


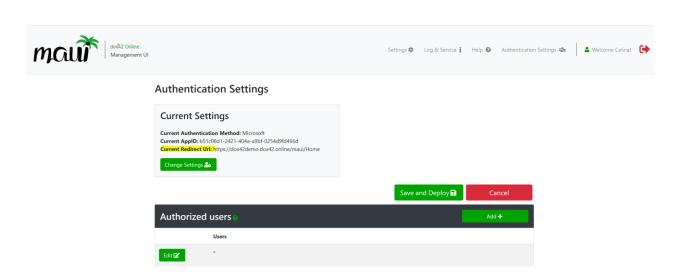


Please provide the app ID from the app registration and make sure to add the Redirect URI to your registered app as mentioned in chapter 3.1.2:

### https://yourcompany.dox42.online/maui/Home

(Please note: .../maui/Home is case sensitive and must be added like this to your AzureAD app registrations)



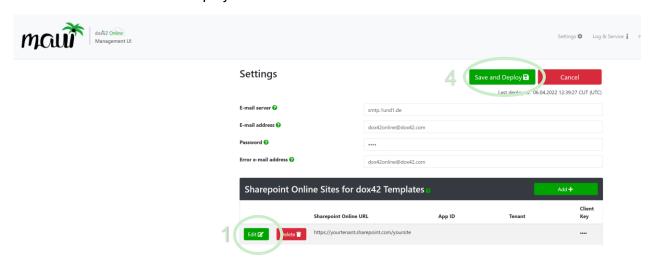


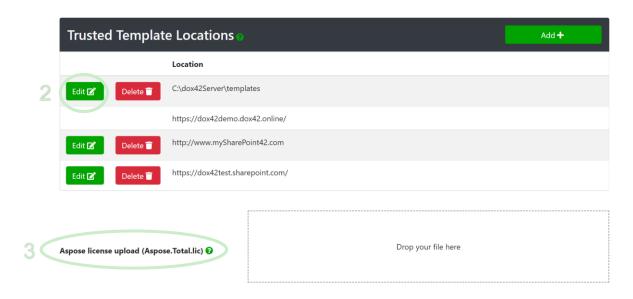
## 3.2.1 Add your AAD registration to settings

1. Click on "Add Site" and enter your SharePoint Online URL in this format: <a href="https://yourcompany.sharepoint.com/site/">https://yourcompany.sharepoint.com/site/</a> Each URL 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 3.1.4).
- 2. Configure your trusted template locations (your templates must be stored on SharePoint Online) https://yourcompany.sharepoint.com/
- 3. Upload your Aspose license (not applicable for trial installations)
- 4. Click on "Save and Deploy"





Further details can be found in dox42class of MAUI:



https://www.youtube.com/watch?v=vZBPXN\_SAe4

# 4 Modus M365 dox42 Document Automation app

Please install the dox42 Data Source app from Microsoft AppSource in your BC Online system:



 $\frac{https://appsource.microsoft.com/en-us/product/dynamics-365-business-central/PUBID.modusconsultag1587973875105|AID.modus_m365_document_automation|PAPPID.d0842d0c-e817-4cb8-94e6-3df9c8ed0f5b?exp=ubp8&tab=Overview$ 

To receive the instruction how to download the app please contact dox42: info@dox42.com

# 5 Configure Business Central Data Source in the dox42 Add-In

Please download the dox42 Enterprise Add-Ins and activate it: https://www.dox42.com/Modules/Download



Then download the Business Central module including the recent BC data source: <a href="https://www.dox42.com/Modules/Download">https://www.dox42.com/Modules/Download</a>



To download the BC module, it requires a login, please contact dox42 to receive your credentials: <a href="mailto:info@dox42.com">info@dox42.com</a>

After you have installed the dox42 Enterprise Add-Ins and you have received the keys for the dox42 Business Central Add-In from dox42 please follow these steps to configure your BC Add-In:

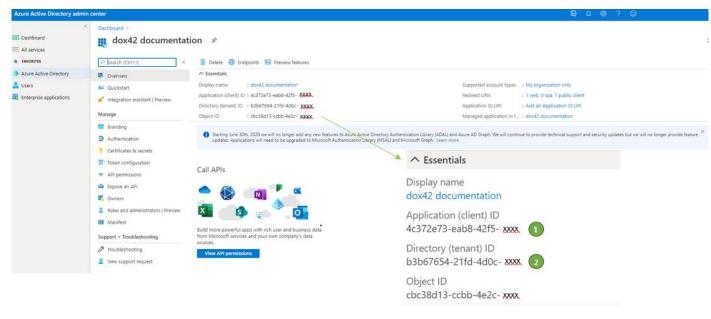
https://docs.modusconsult.de/M365DocumentAutomation/en-us/base-setup/external-addins.html

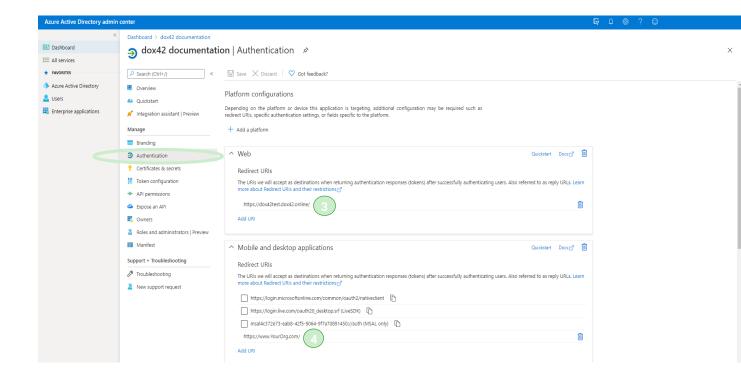
## 5.1 Configure Azure AD in dox42 Datamap Designer

The information from the AAD admin center (see Chapter 3) must be used for the AAD configuration of your BC data source in the dox42 Add-In.

Access the required data in the AAD Admin Center:







You then have two options to configure AAD in the dox42 Add-In:

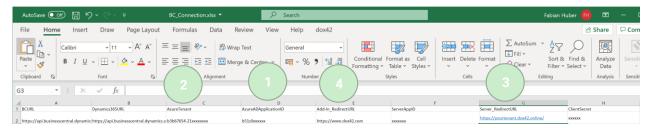
# 5.1.1 Option 1: Using an Excel config file filling in the information dynamically.

We recommend using this file to integrate all the information dynamically in your dox42 Add-In while connecting to BC 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.

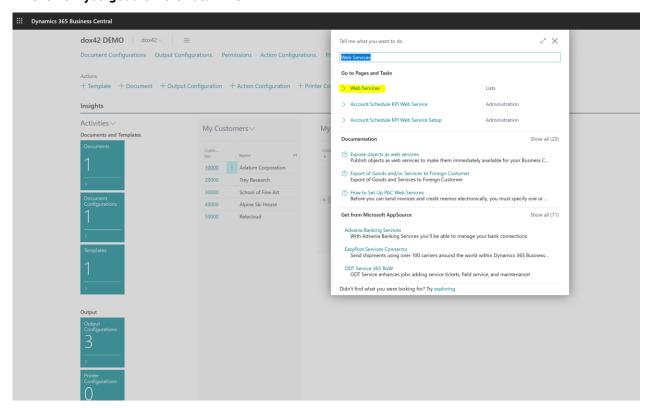
You find a sample Excel file in your BC download folder: /../BC\_Online/BC\_AAD\_Connection.xlsx

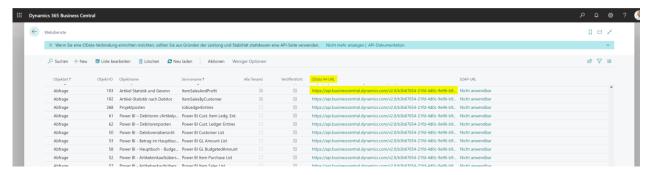


Insert the information from your AAD Admin Center into the respective fields in the config-Excel file:



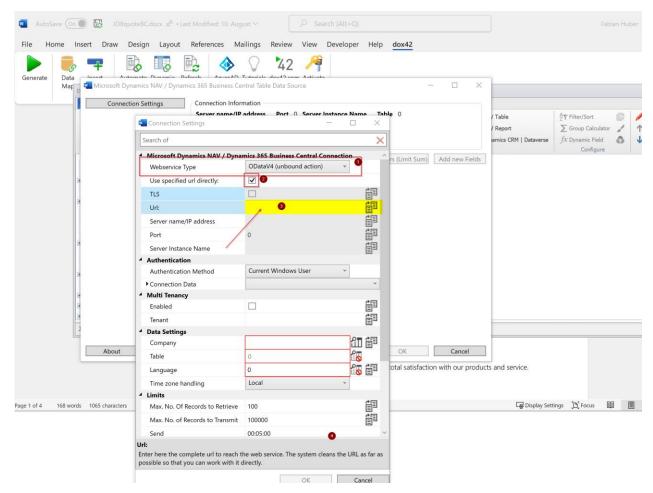
### This is how you get the BC OData V4 URL:





Paste any of the listed OData V4 URLs in your dox42 BC data source Add-In here:





After clicking on any white space, it will be converted automatically to your BC URL afterwards:

https://api.businesscentral.dynamics.com/v2.0/YourTenatID /Production/ODataV4/

#### Or using a sandbox:

https://api.businesscentral.dynamics.com/v2.0/YourTenatlD /YourSandboxName/ODataV4/

### After that, save it to your Excel config file and use it dynamically.



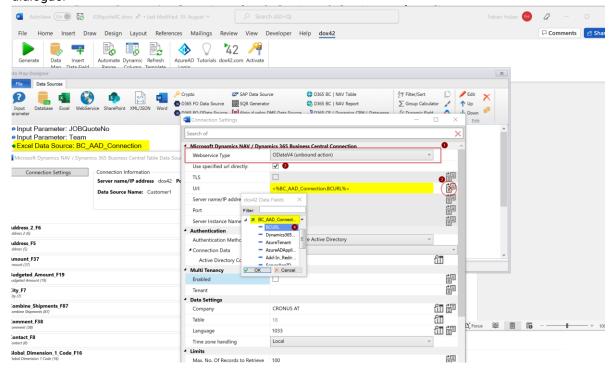
We recommend encrypting your Client Key with the dox42 Crypto Data source.

### To use the BC URL dynamically follow the next steps:

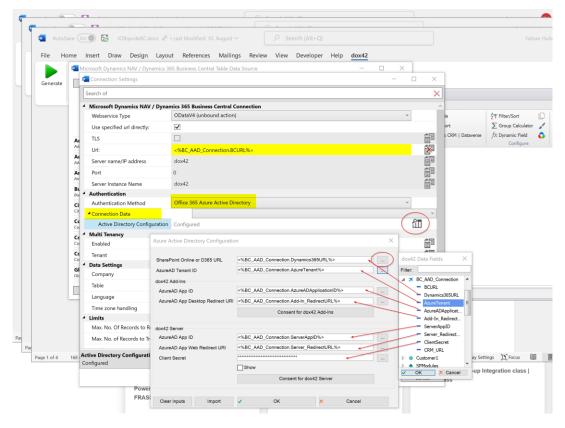
Firstly, connect your config-Excel file with the Data Map Designer. (Tutorials can be found here:  $\underline{\text{https://www.dox42.com/de/Resources}})$ 



Then you can insert the information dynamically from the Excel data fields to the AAD configuration dialogue:

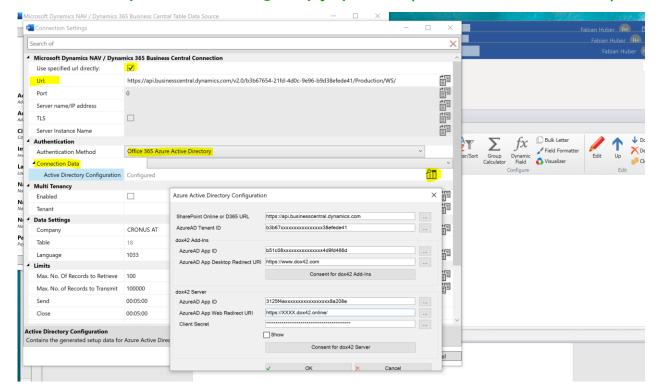


To integrate the AAD connection data please also use the Excel file:





### 5.1.2 Option 2: Using copy/paste (not recommended)



### Use the following fixed URL value for "SharePoint Online or D365 URL":

https://api.businesscentral.dynamics.com

Paste the information from the AAD portal into the respective fields within the AAD configuration in the Add-In:

Also, we recommend encrypting your Client Key with the dox42 Crypto Data source in this case shown in this video: <a href="https://www.youtube.com/watch?v=61bktqww45M">https://www.youtube.com/watch?v=61bktqww45M</a>



If you have not clicked on "Grant Admin Consent" within the AAD admin center already (see Chapter 3.1.5), please consent for both the Add-In and Server here.

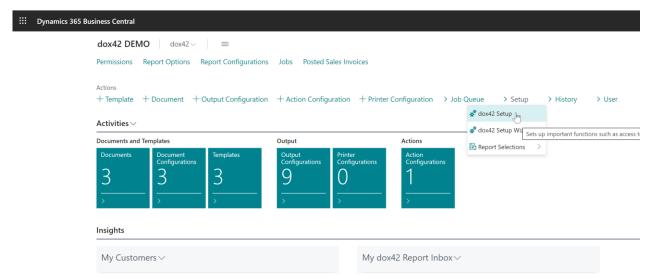


# 6 Modus M365 dox42 Document Automation BC Online configuration

### To configure your dox42 Online server with Business Central please follow the next steps:

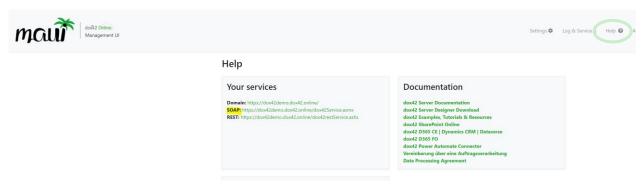
Select in Business Central under Settings -> My settings -> Role -> dox42 Administrator:

Go to Setup:



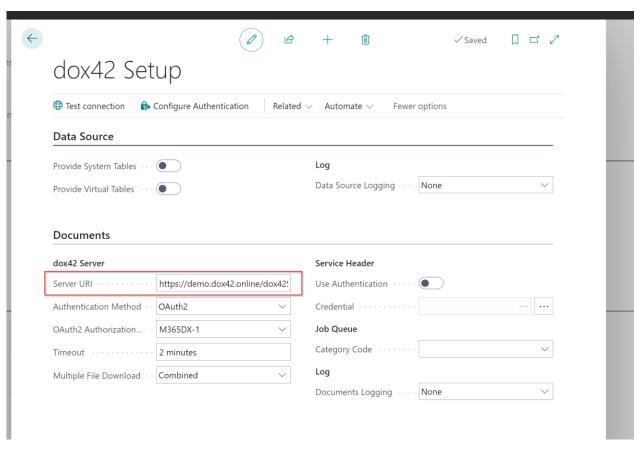
Add your dox42 Online SOAP Service URL as Server URI

You can find it here:

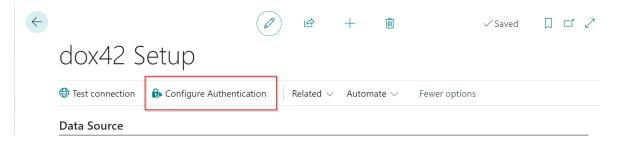


https://YOURonlineTenant.dox42.online/dox42service.asmx





### Then go to Actions -> Configure Authentication and add a new entry with your AAD information



#### Add a new OAuth2 configuration Code:



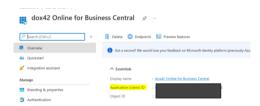
#### Then Add a new client:

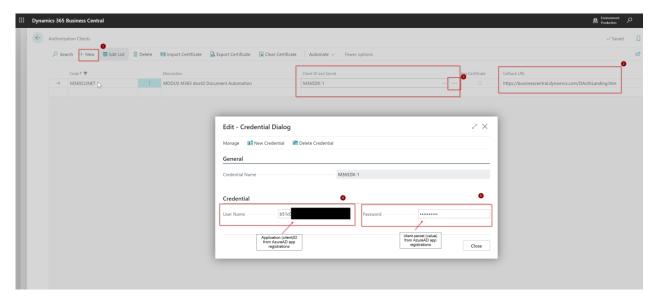


- 1. Click new
- 2. Edit Callback URL as shown: https://businesscentral.dynamics.com/OAuthLanding.htm

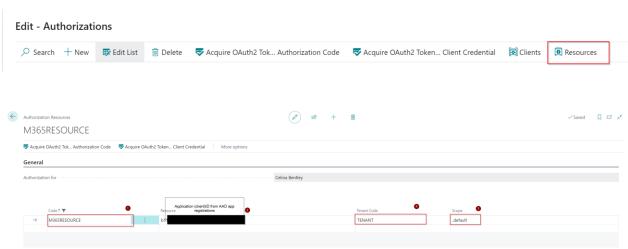


3. Add Application(client) ID (4) and client secret (5) (from App registrations AAD)





Now edit/add your resources:

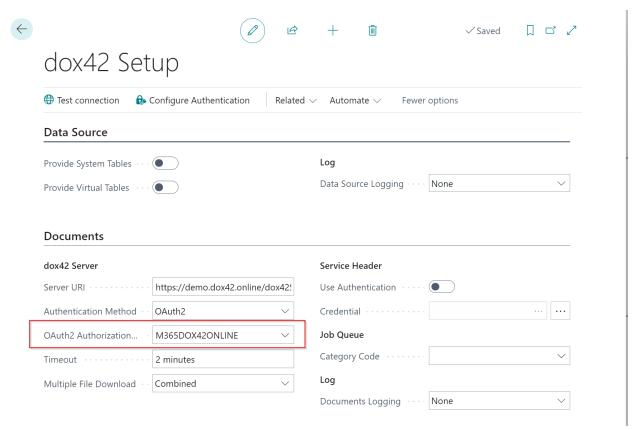


4. add your tenant code and create your own endpoint URL inserting your tenant ID <a href="https://login.microsoftonline.com/YOUR-MS-TENANT-ID/oauth2">https://login.microsoftonline.com/YOUR-MS-TENANT-ID/oauth2</a>

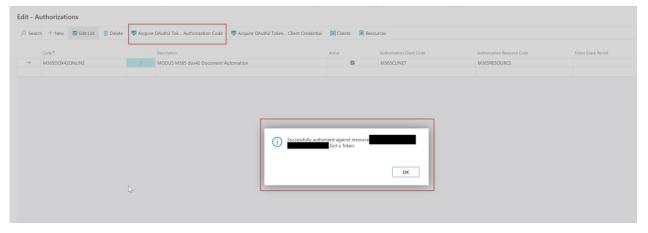


As a last step add your new created code in the dox42 setup:





Here you can test to acquire your OAuth2 token:



If you got your token, you are all setup!

## 7 Support

Visit <a href="https://www.dox42.com/Resources">https://www.dox42.com/Resources</a> to find more dox42 classes, video tutorials, upcoming webinars, documentation and much more on dox42.

Should you have any questions, please do not hesitate to contact  $\underline{support@dox42.com}$ . We are happy to

help you!

We wish you a successful implementation of dox42!