



## SET UP MANUAL

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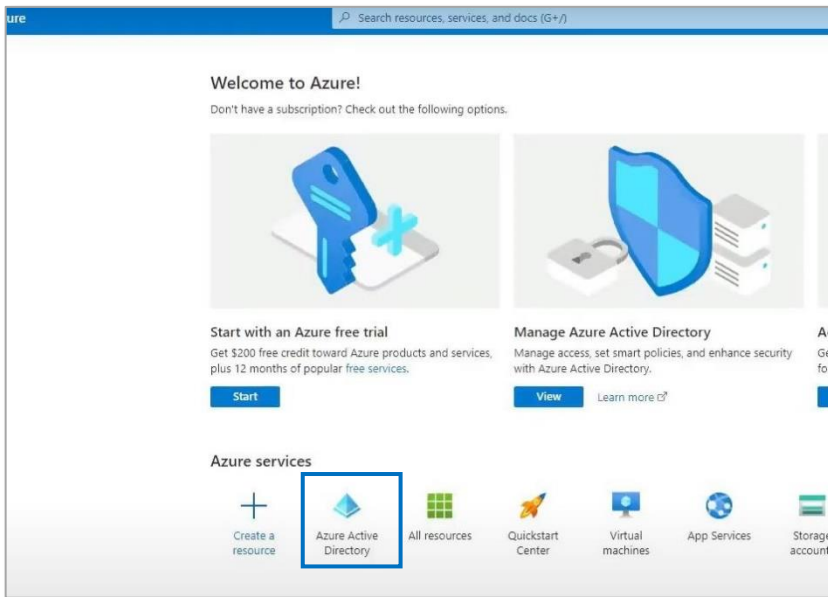


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## 1. Connect Salesforce and Microsoft 365 (Azure AD)

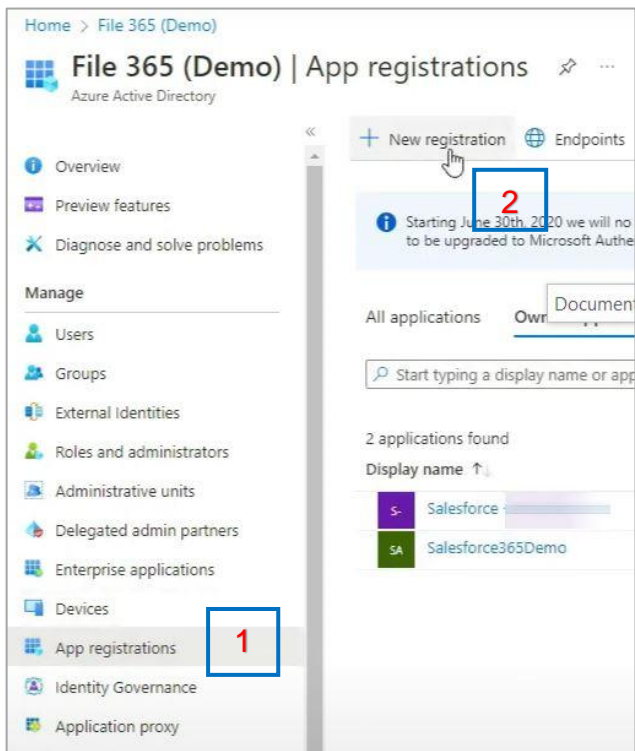
For File 365 to work, a link between Salesforce and Microsoft 365 (Azure AD) must be setup. You can use the technology and features that are built-in the Salesforce platform to authorize File 365 to access the files in SharePoint in a secure way.



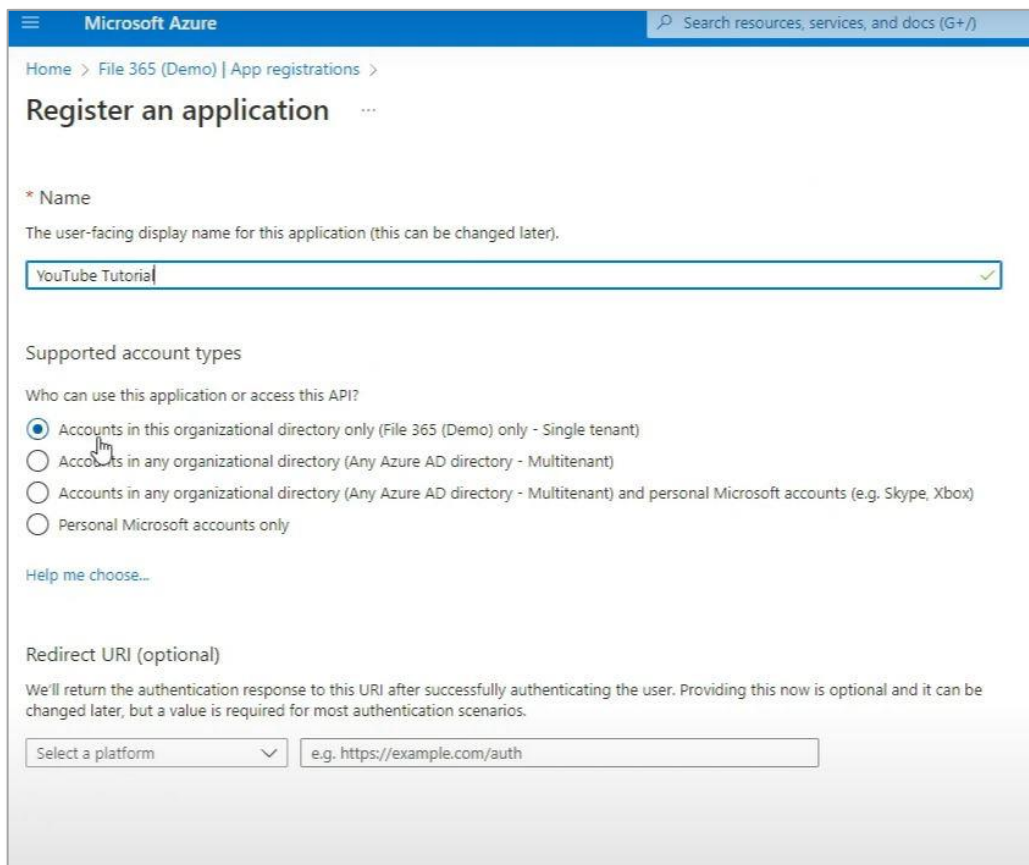
### 1.1 Configure in Azure AD: Application Registration (1)

First, we must register the application in your Azure tenant and assign the required API Permissions. To do this, login to your Azure Portal as an administrator and select the Azure Active Directory Service.

You can find it by clicking “All Services” and search for “Azure Active Directory” in the search box.

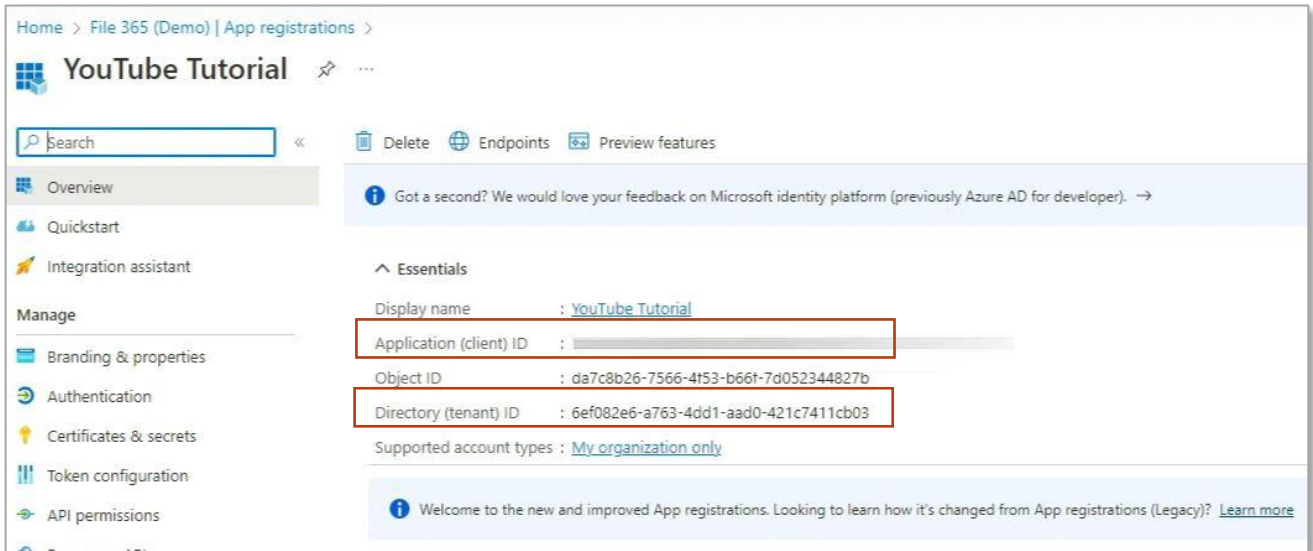


In the left menu, go to the “App registration” [1] section and click “New Registration” [2]



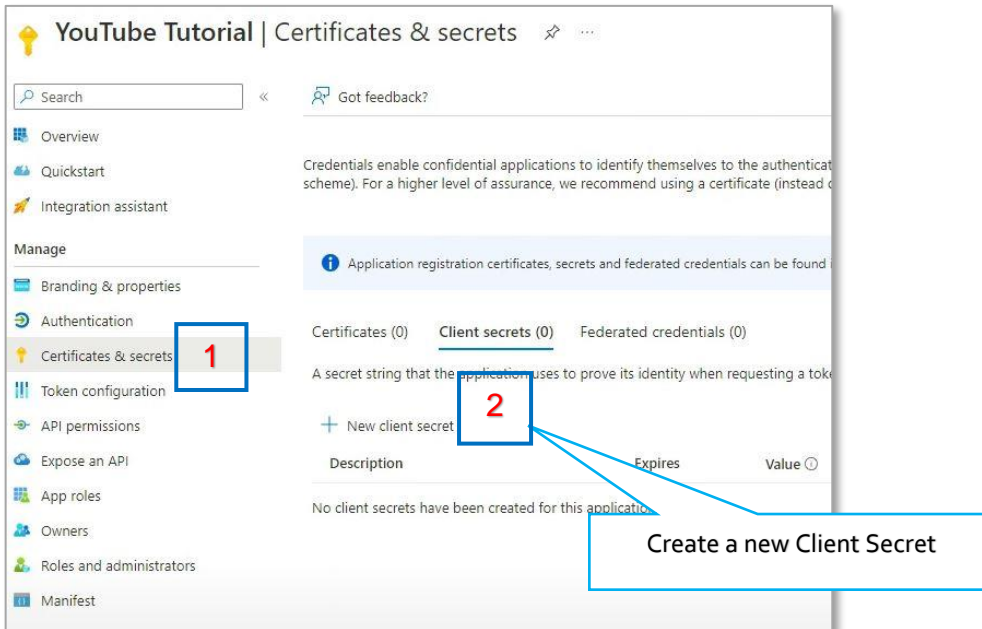


Type a name so you know where the application is in use. Here we will use: “YouTube Tutorial” and select “Accounts in this organizational directory only” in the supported account types section. Leave the Redirect URI blank for now, we’ll fill that later. Click **Register** to create the application, the application page opens.

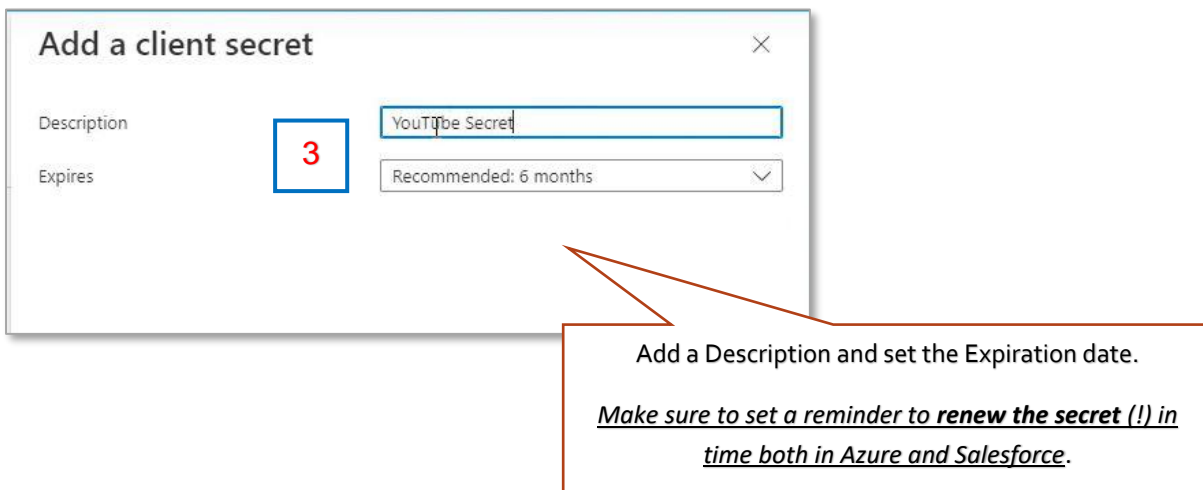


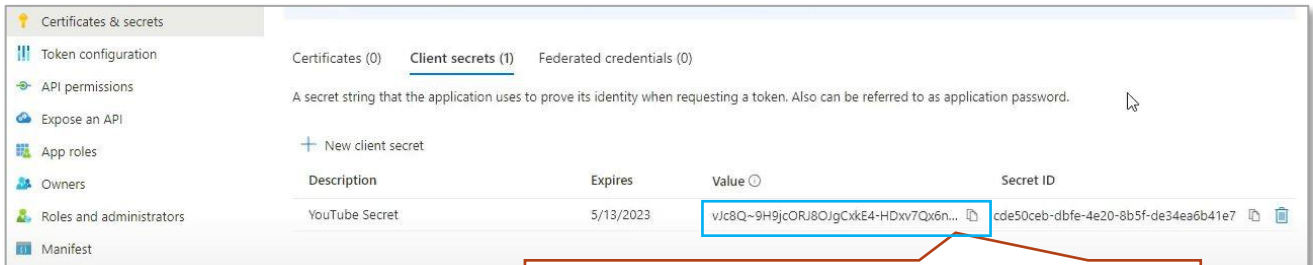
On top of the application page, you can find the Application and Tenant Ids. Take note of these as we need them to create the Authentication Provider in Salesforce. But before we go to Salesforce, we need to set up the application further.

Go to the **Certificates & secrets** section [1], and click **New client secret** [2]  
Create a new client secret. This is the secret Salesforce will use in the authorization flow.



Add a Description, and set the Expiration date. **Do not forget to set a reminder for yourself to renew the secret both in Azure and Salesforce.** Please note that if the client secret is expired, you will get an authentication (401) error. Finish by clicking Add on bottom of the page.

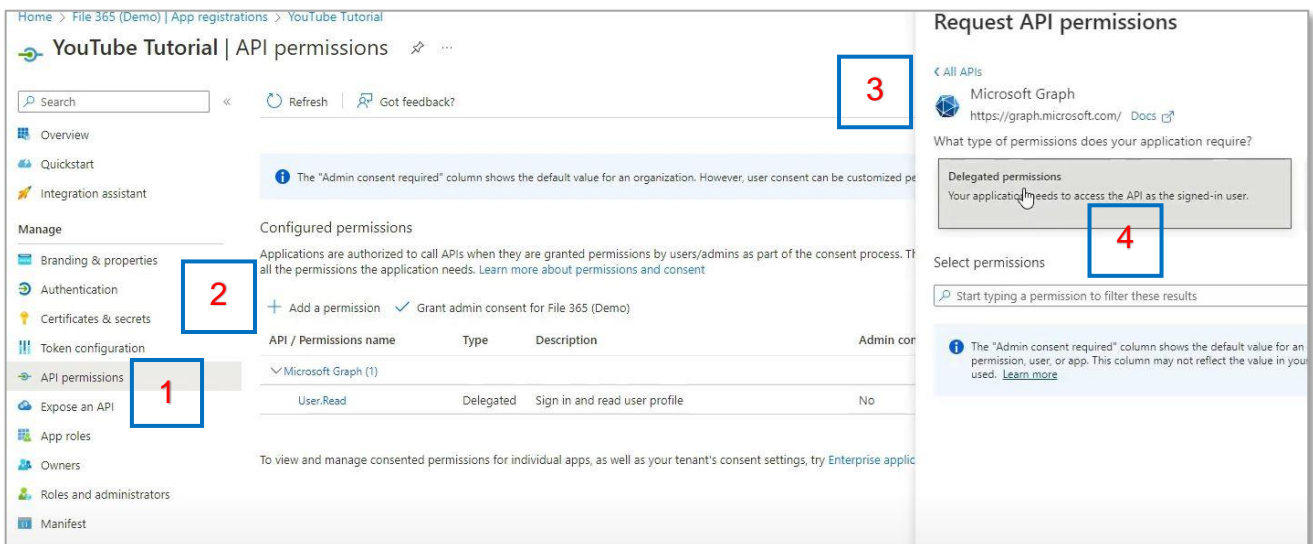


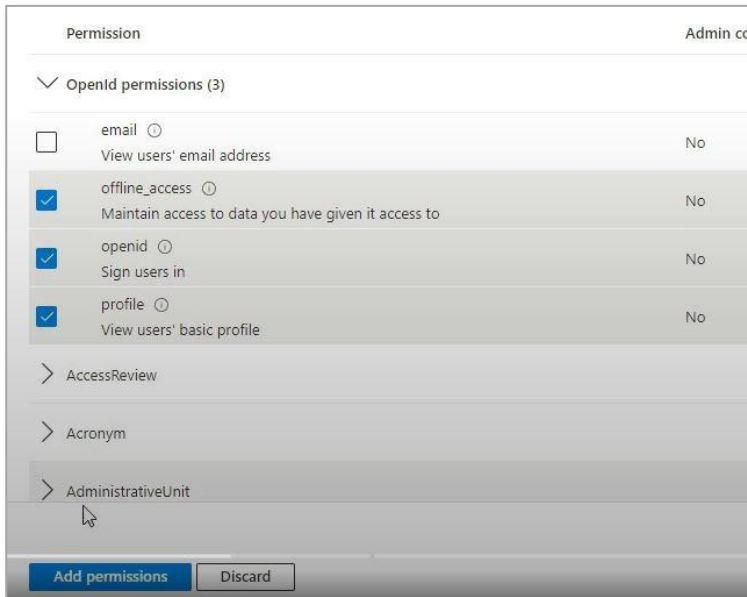


**Be sure to copy and note down the Value of the Client Secret as it will not be visible afterwards !**

The secret will be generated by the Azure portal. **Be sure to copy the value of the generated secret and store it at a safe location**, we will need this information later when creating an Authentication Provider in Salesforce (see par. 1.2).

Now we need configure the API permissions required by the application. Go to the **API permissions [1]** section. Click **Add a Permission [2]**, Microsoft graph [3], and Delegated permissions [4].

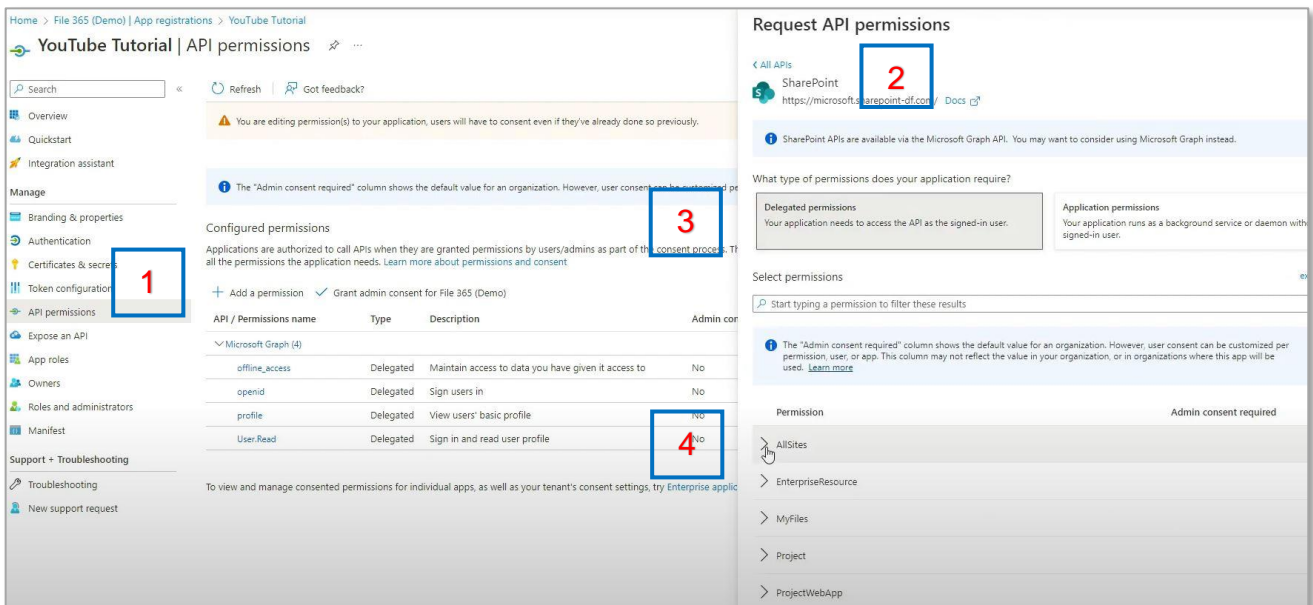




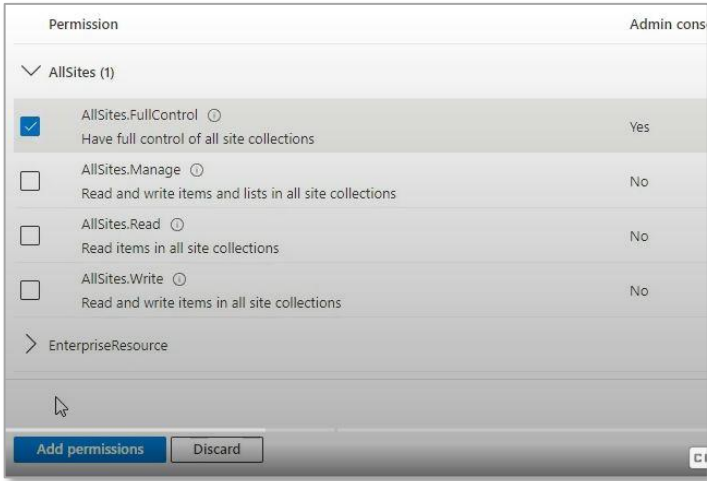
After clicking delegated permissions, under Openid permissions, select the following: **Offline\_access, openid and profile.**

Click **Add permissions.**

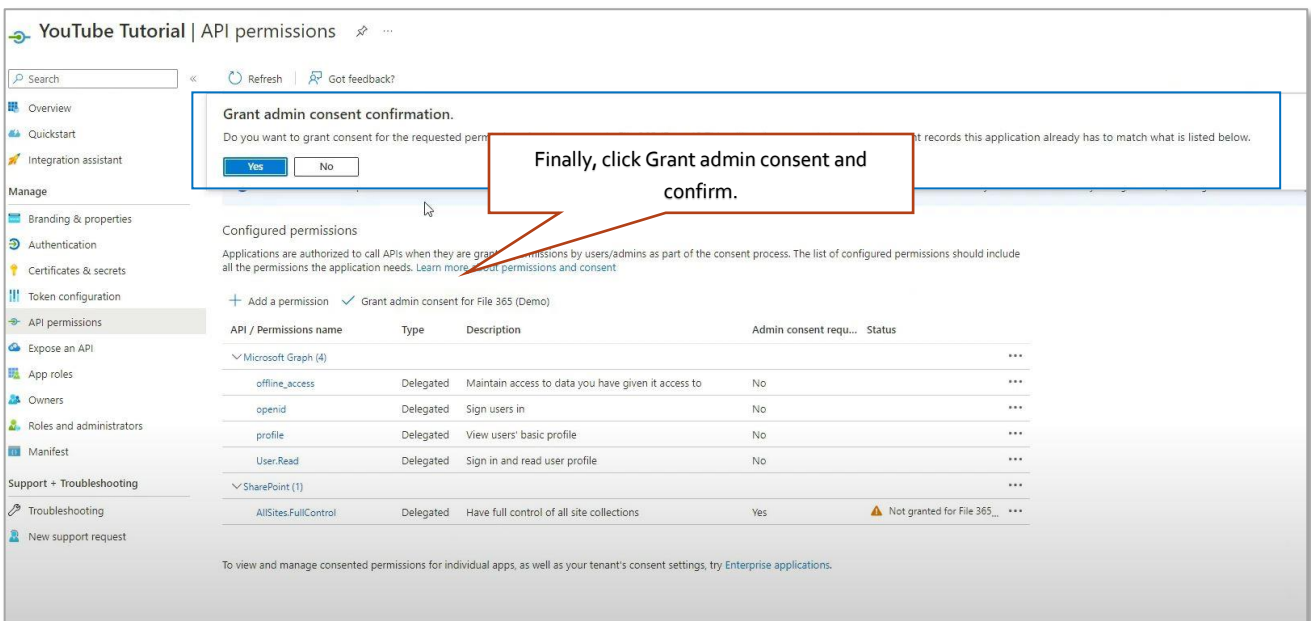
Do the same but then go to SharePoint's delegate permissions: Click **Add a Permission [1]**, Click **SharePoint [2]**, and **Delegated permissions [3]**. After clicking Delegated permissions, expand the **AllSites menu [4]**:







Select **AllSites.FullControl** and Click **Add permissions**. Now, after confirming the configured permissions, click **Grant admin consent** for File 365 (Demo) and confirm in the pop up.





After you have granted admin consent, the permission section should look like this:

Configured permissions

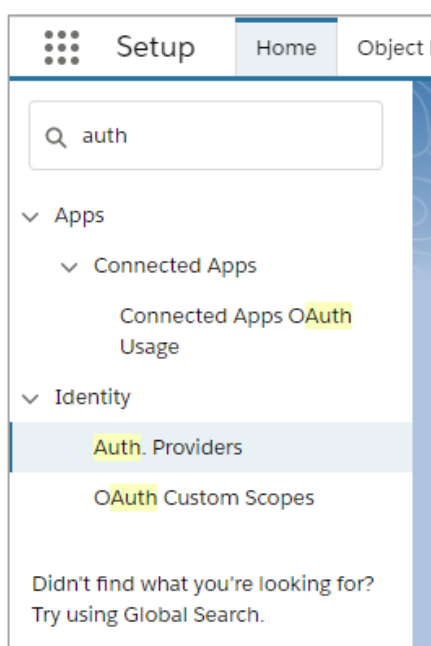
Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of configured permissions should include all the permissions the application needs. [Learn more about permissions and consent](#)

+ Add a permission    ✓ Grant admin consent for File 365 (Demo)

API / Permissions name	Type	Description	Admin consent requ...	Status
▼ Microsoft Graph (4) ...				
offline_access	Delegated	Maintain access to data you have given it access to	No	✓ Granted for File 365 (De... ...
openid	Delegated	Sign users in	No	✓ Granted for File 365 (De... ...
profile	Delegated	View users' basic profile	No	✓ Granted for File 365 (De... ...
User.Read	Delegated	Sign in and read user profile	No	✓ Granted for File 365 (De... ...
▼ SharePoint (1) ...				
AllSites.FullControl	Delegated	Have full control of all site collections	Yes	✓ Granted for File 365 (De... ...

To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try [Enterprise applications](#).

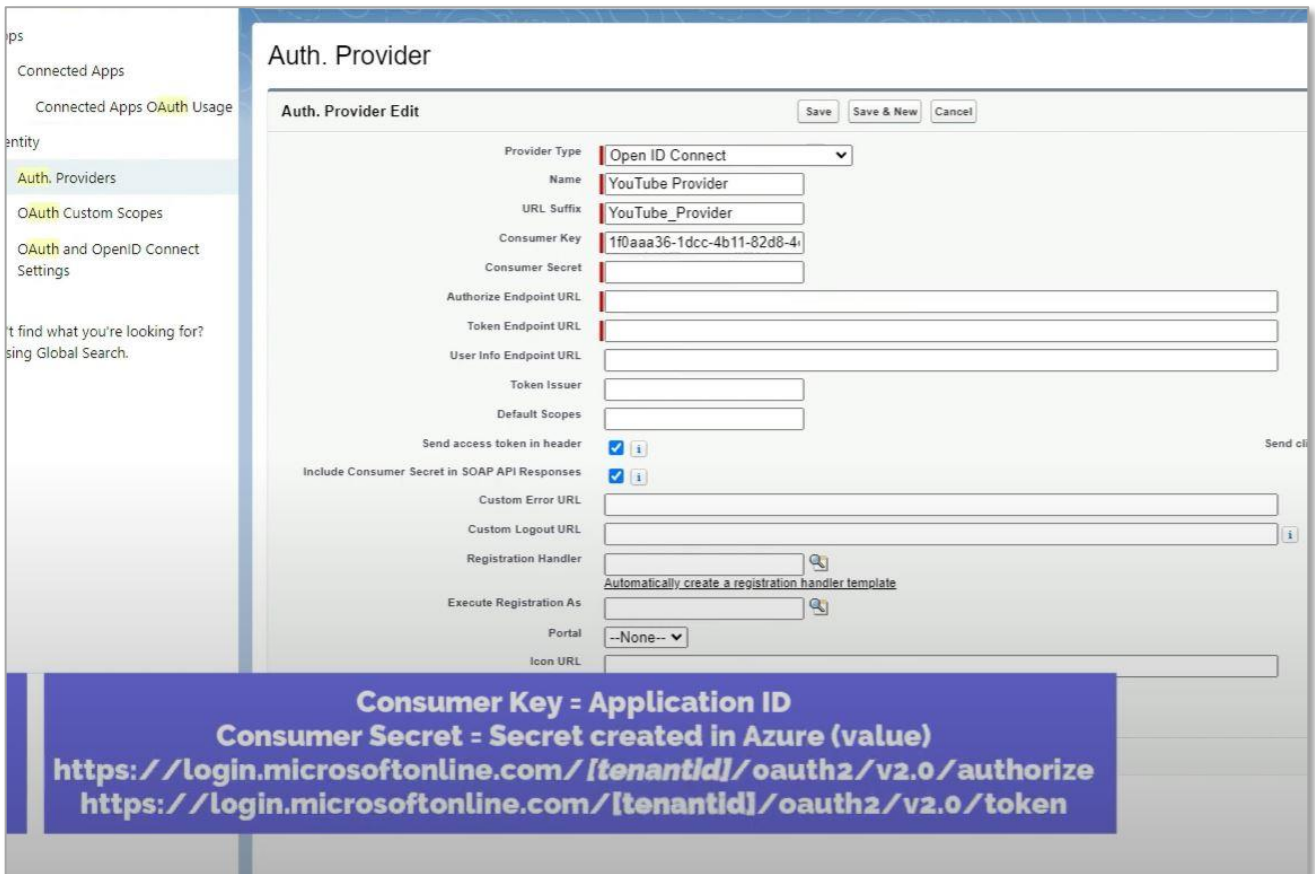
You have now successfully registered the application in your Azure tenant and assigned all the required API Permissions.



### 1.2 Configure in Salesforce: Authentication Provider

Now login to Salesforce as an administrator and open Setup. Find the "Auth. Providers" in the Identity section.

Add a new Auth. Provider with Provider Type **Open ID Connect**. Choose a name and a URL Suffix.



**Consumer Key = Application ID**  
**Consumer Secret = Secret created in Azure (value)**  
[https://login.microsoftonline.com/\[tenantid\]/oauth2/v2.0/authorize](https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/authorize)  
[https://login.microsoftonline.com/\[tenantid\]/oauth2/v2.0/token](https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/token)

Next, fill in the Consumer Key and Consumer Secret other required fields by following the instructions below. For the Authorize Endpoint URL and the Token Endpoint URL, copy the URL and replace **[tenantid]** by the tenant ID of your Azure tenant. Lastly, define the default Scopes as “openid offline\_access”.

<b>Consumer Key</b>	Use the <b>Application ID</b> of the registered application in Azure
<b>Consumer Secret</b>	Use the <b>Value of the Secret created in Azure</b> for the application (not the ID)
<b>Authorize Endpoint URL</b>	<a href="https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/authorize">https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/authorize</a> *
<b>Token Endpoint URL</b>	<a href="https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/token">https://login.microsoftonline.com/[tenantid]/oauth2/v2.0/token</a> *
<b>Default Scopes</b>	openid offline_access
<b>*Replace [tenantid] in the URL by the tenant Id of your Azure tenant. You can find this on the Application Registration Overview page</b>	



When you click save, the Auth. Provider page opens. Copy the “Callback URL” in the “Salesforce Configuration” section near the bottom of the page. We need to enter that URL in the Azure Application registration (see par. 1.3).

### Auth. Provider

**Auth. Provider Detail** Edit Delete Clone

Auth. Provider ID	0SO7Q000000Hyjk
Provider Type	Open ID Connect
Name	YouTube Provider
URL Suffix	YouTube_Provider
Consumer Key	1f0aaa36-1dcc-4b11-82d8-4c9654078f88
Consumer Secret	<a href="#">Click to reveal</a>
Authorize Endpoint URL	https://login.microsoftonline.com/6ef082e6-a763-4dd1-aad0-421c7411cb03/oauth2/v2.0/authorize
Token Endpoint URL	https://login.microsoftonline.com/6ef082e6-a763-4dd1-aad0-421c7411cb03/oauth2/v2.0/token
User Info Endpoint URL	
Token Issuer	
Default Scopes	openid offline_access
Send access token in header	<input checked="" type="checkbox"/> <span>i</span> <span>Send client</span>
Include Consumer Secret in SOAP API Responses	<input checked="" type="checkbox"/> <span>i</span>
Custom Error URL	
Custom Logout URL	
Registration Handler	
Execute Registration As	
Portal	
Icon URL	

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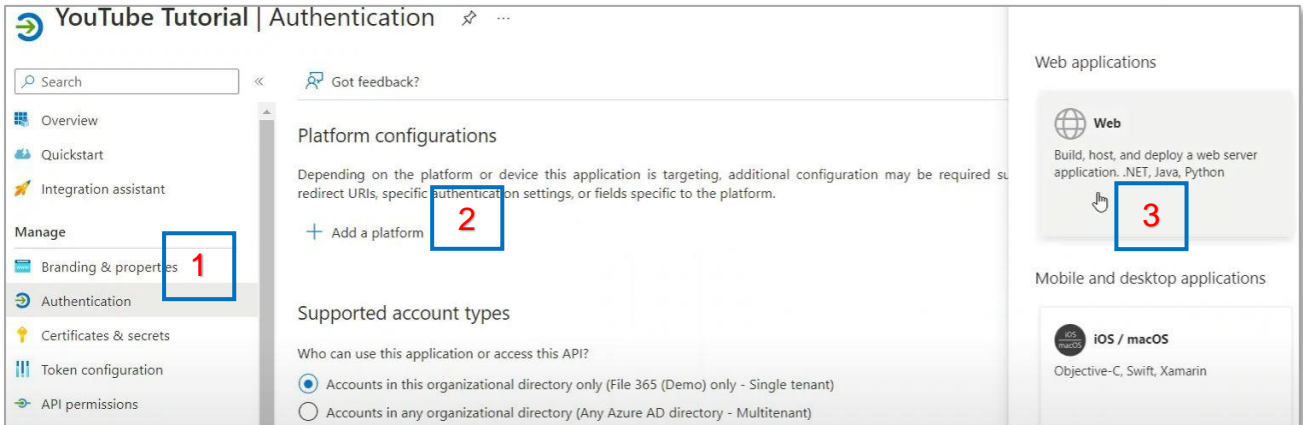
**Salesforce Configuration**

Test-Only Initialization URL	https://file365-bo-dev-ed.my.salesforce.com/services/auth/test/YouTube_Provider
OAuth-Only Initialization URL	https://file365-bo-dev-ed.my.salesforce.com/services/auth/oauth/YouTube_Provider
Callback URL	<a href="https://file365-bo-dev-ed.my.salesforce.com/services/auth/callback/YouTube_Provider">https://file365-bo-dev-ed.my.salesforce.com/services/auth/callback/YouTube_Provider</a>
Single Logout URL	https://file365-bo-dev-ed.my.salesforce.com/services/auth/rp/oidc/logout

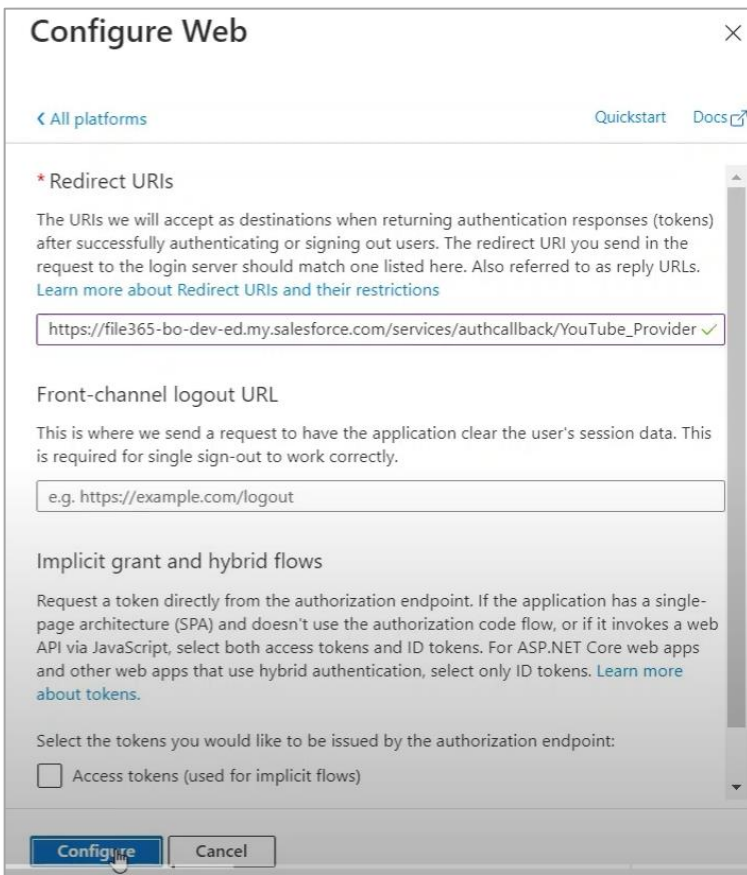
Edit Delete Clone

### 1.3 Configure in Azure AD: Application registration (2): Add Redirect URL

Open the Application Registration you just created in Azure AD. Go to the Authentication section [1] and click “Add Platform [2] and choose Web [3].



In the Web configuration, add the Callback URL you copied from the Salesforce Auth. Provider page in the Redirect URI field. Leave other options blank and click “Configure”. The Azure AD Application Registration is now complete.

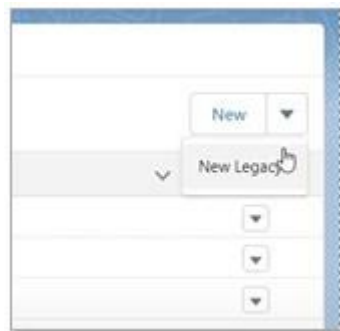
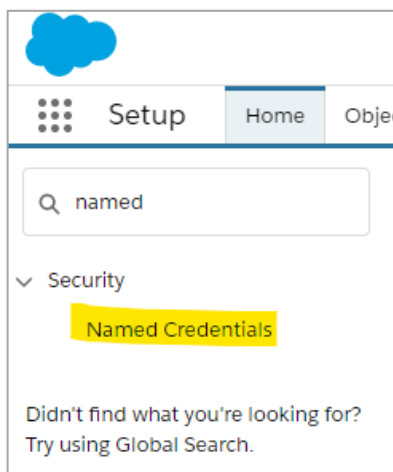


add the Callback URL you copied from the Salesforce Auth. Provider page



## 1.4 Configure in Salesforce: Named Credential

Now go back to Salesforce Setup and find the “Named Credential” section in the Quick menu. Use the dropdown arrow on the right and click New Legacy.



### 1.4.1. Named Credential Identity Type

Before creating a Named Credential, you need to decide what Identity type to use. You can choose Per User or Named Principal.

#### 1.4.1a. Named Principal

Using Named Principal authentication and authorization means File 365 will connect to SharePoint with the same account for all Salesforce users. This means all connections to SharePoint will be made from a single account. All Audit trails would log this account instead of the user that performed the actions that File 365 executes for them.

#### 1.4.1b Per user

Using per user authentication and authorization means File 365 will connect to SharePoint impersonating each user individually. What does this mean? Every action performed by File 365 in SharePoint will be done (from a SharePoint point of view) with the actual SharePoint user linked to their account.

For example. When a user uploads a document into Salesforce and File 365 is configured to move that document to SharePoint, the upload into SharePoint is done by impersonating the user that uploaded that document to Salesforce. Audit trails in SharePoint will show the actual username, instead of a service account.

If you choose the Per User Identity type, an extra step is required, which means that every user will have to authorize Salesforce to use their SharePoint credentials. How to do this is explained in the File 365 User Instructions (paragraph 1.1.)



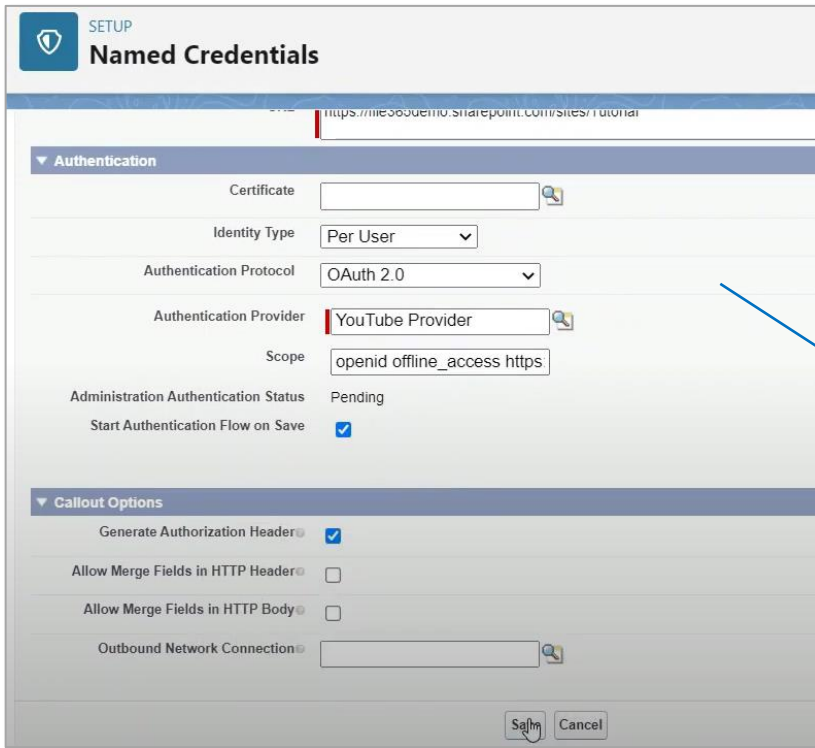
### 1.4.2. Create Named Credential

Add a new Legacy Credential by clicking on the arrow next to 'New' and click New Legacy.

Provide a label and name for this credential. Choose a name that you and your users will recognize as your SharePoint environment. For File 365 you will create a named credential for each SharePoint site collection. The URL is the root path of your site collection. So, for example for the default Site Collection this would be: <https://tenantname.sharepoint.com> where "tenantname" is the name of your tenant.

The screenshot shows the 'Named Credentials' setup page. At the top, there is a 'SETUP' tab and a shield icon. The main heading is 'Named Credentials'. Below this, the title 'New Named Credential' is displayed, followed by the instruction: 'Specify the callout endpoint's URL and the authentication settings that are required for Salesforce to make callouts to the remote system.' The form contains several fields: 'Label' and 'Name' both set to 'Youtube\_credentials'; 'URL' set to 'https://file365demo.sharepoint.com/sites/Tutorial'; and an 'Authentication' section with 'Certificate' empty, 'Identity Type' set to 'Anonymous', and 'Authentication Protocol' set to 'No Authentication'. 'Save' and 'Cancel' buttons are located at the top of the form area.

Set the following values in the Authentication section:



**Named Credentials**

URL: <https://miesocdemo.sharepoint.com/sites/tutorial>

**Authentication**

Certificate:

Identity Type: **Per User**

Authentication Protocol: **OAuth 2.0**

Authentication Provider: **YouTube Provider**

Scope: **openid offline\_access https**

Administration Authentication Status: Pending

Start Authentication Flow on Save:

**Callout Options**

Generate Authorization Header:

Allow Merge Fields in HTTP Header:

Allow Merge Fields in HTTP Body:

Outbound Network Connection:

Buttons: Save, Cancel

<b>Identity Type*</b>	Per User or Named Principal
<b>Authentication Protocol</b>	OAuth 2.0
<b>Authentication Provider</b>	Select the Auth. Provider you just created
<b>Scope **</b>	openid offline_access <b>[URL]</b> /AllSites.FullControl
<b>Start Authentication Flow on Save</b>	Check the box to start the authentication flow on save
* Identity Type : Choose Per User authentication or Named Principal (service account) for access to SharePoint (see par. 1.4.1 )	
**Scope: Replace <b>[URL]</b> in the Scope field by the URL to the root site collection of your own SharePoint Online tenant: <a href="https://tenant.sharepoint.com">https://tenant.sharepoint.com</a> e.g. <a href="https://[companyname].sharepoint.com">https://[companyname].sharepoint.com</a>	

Leave other fields default. When you click Save, Salesforce will redirect to a Microsoft Authorization page to authorize Salesforce to use the application. If needed, login with your Microsoft administrator account to approve the authorization.





## 2. Multiple tenants and SharePoint Site locations

### 2.1 Multiple SharePoint Sites

You can configure File 365 to use more than one SharePoint Site Collection (See Configuration section how to set this up). You will need to create a separate Salesforce Named Credential entry for each Site Collection you want to use. Each Named Credential should point to the root of a site collection.

### 2.2 Multiple Azure AD Tenants

You can also connect to multiple Azure AD tenants to use SharePoint locations in different tenants as the location to upload documents. To do this you will need to create a Microsoft Azure AD Application Registration and Salesforce Auth. Provider for all tenants you want to connect. A Salesforce Named Credential should be created for each SharePoint Site Collection to access.

### 2.3 Single Sign On (SSO) based on Microsoft authentication

The file preview functionality in File 365 works by displaying a page from Microsoft SharePoint in the browser (using an iframe). For this to work properly, the user should be logged into Azure AD with their credentials in their browser session. The most easy and convenient way to accomplish this, is to setup Single Sign On in Salesforce to allow users to login with their Microsoft Work account.

The configuration of this SSO setup is out-of-scope for this document. Read all about it in <https://docs.microsoft.com/en-us/azure/active-directory/saas-apps/salesforce-tutorial>.

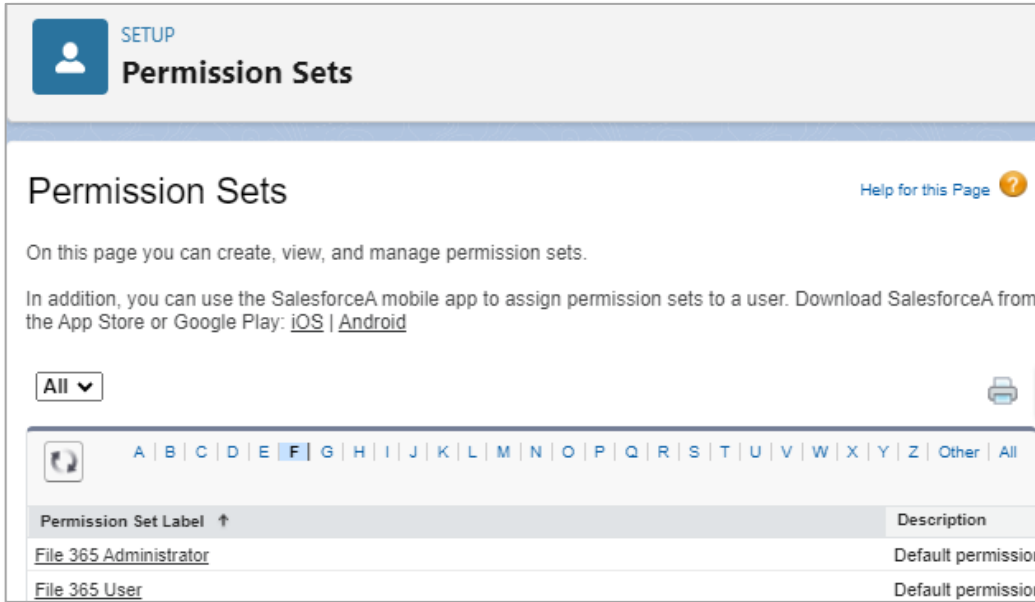
## 3. File 365 User permissions and licenses

### 3.1 License

First assign all users and administrator a license for the Package via the “Installed Package” section in Salesforce Setup by clicking Manage License next to the File 365 package.

### 3.2 Permission sets for Users and Administrators

File 365 creates two distinct Permission Sets on installation. One for users and one for administrators. All users that should be able to use File 365 features should be assigned the “File 365 User” permission set. All these users should also have access to the created Named Credential(s). Create a permission set for the Named Credentials.



We recommend to create a permission set group for all File 365 users. Add the File 365 User permission set and the permission set you just created for the Named Credential. Assign users to the permission set group.

Administrators that should be able to configure and troubleshoot File 365 should be assigned the “File 365 Administrator” permission set in addition to the above permission sets.

### 3.3 Authentication Settings for External Systems

If you configured the Named Credential to use *Per User* authentication, you should now connect your user credential to the Named Credential previously we created. See [Authenticate User to SharePoint](#) (*User Instructions* paragraph 1.1).



## 4. Set up SharePoint Location: Sites and Folders

### 4.1 SharePoint Location

File 365 works by linking files in a pre-defined folder location in SharePoint to a Salesforce record. Files uploaded to the Salesforce record are moved to this location, leaving only a reference record to the file in Salesforce, called “File 365”. For files placed into this SharePoint location reference will be automatically created in Salesforce, making it available to users in the context of the corresponding Salesforce record.

### 4.2 Types of File 365 Object Location

The location in SharePoint can be a SharePoint site or SharePoint folder. Creating a SharePoint site per record offers the advantages of better oversight and easier security management. Otherwise one may opt for creating folders per Record. The “Site per Record type” can be used in combination with a third configuration type : “Folder per Related Record in Site”, to store files of related child records in subfolders of parent site.

By using scripting and site templates in SharePoint you can create sites with a standard layout and predefined rights. Contact your SharePoint administrator for more information.

### 4.3 Create a File 365 SObject Location

As File 365 Administrator, you control the location where files attached to Salesforce objects will be placed within SharePoint. This configuration is done by creating one or more “File 365 SObject Location” record(s). How to create an object location will be explained hereafter. After you have created an SObject Location, make sure to deploy the Apex Trigger and Apex Testclass for this object, see paragraph 4.7

Create at least one “File 365 SObject Location”. Open the “File 365 Administrator” Salesforce App and select the tab “File 365 SObject Locations”. Click New to add a new configuration record. First select the type of SObject Location: **Folder per record**, **Site per Record** or **Folder per related Record in Site**.

New File 365 Object Location

File 365 Object Location Type

\*Type

-- None --

-- None --

Folder per Record

Site per Record

Folder per Related Record in Site



## 4.4 File 365 Object Location type (1) : Folder per Record

### 4.4.1 Salesforce Object Settings : Single or All

After selecting the type [in this case Folder per record], we will define the Salesforce Object and the SharePoint settings

You can choose to select a **single** Salesforce Object to define the settings for each object one by one. Or you can select “**All (wildcard)**” to apply the setting to more than one Object. We will come back to this setting in paragraph 4.4.4.

### 4.4.2 Single Object : Salesforce Object settings

If you choose a Single Object type, first select the object you want to connect. You can select any standard or custom object. Next, you need to choose the “Subfolder Field”. This is the field that will be used to create and identify the subfolder for each Salesforce record. This subfolder name needs to be unique, so only Unique or Autogenerated fields are listed to choose from. We recommend to use the Id field or to create a custom field that is unique and recognizable, as this will be the name of the SharePoint folder.

**(a) Salesforce Object Settings (Single object)**

- Salesforce Object:  
Select from dropdown: any single object
- Subfolder

**(b) SharePoint Settings (Single object)**

- Office 365 Named Credential  
Choose the Named Credential as previously created
- Site [Select from dropdown]  
You can link to multiple site and document libraries
- Document Library [Select from dropdown]  
Documents
- Content type for Record folder  
Select “Folder” if no custom content types are set up
- Content type for uploaded files  
Choose “Document” if no custom content types are set up
- Document Library Base Folder

**(c) Options**

- Synchronize Content for PDFs  
Check this box to allow PDF files to be synchronized back to Salesforce. See User Instructions, paragraph 7.1



#### 4.4.3 Single Object : SharePoint Settings

To specify the SharePoint location, first choose the Named Credential to use. You should select (one of) the Named Credentials you created during setup. Now the existing Sites on the SharePoint Site Collection are loaded so you can choose the root- or subsite to use. After selecting the site the existing Document Libraries are loaded, choose the one to use.

If you are using custom content types in the Document Library, you can select those in the Content Type selections. If not, just select Folder and Document respectively as the Content Types to use.

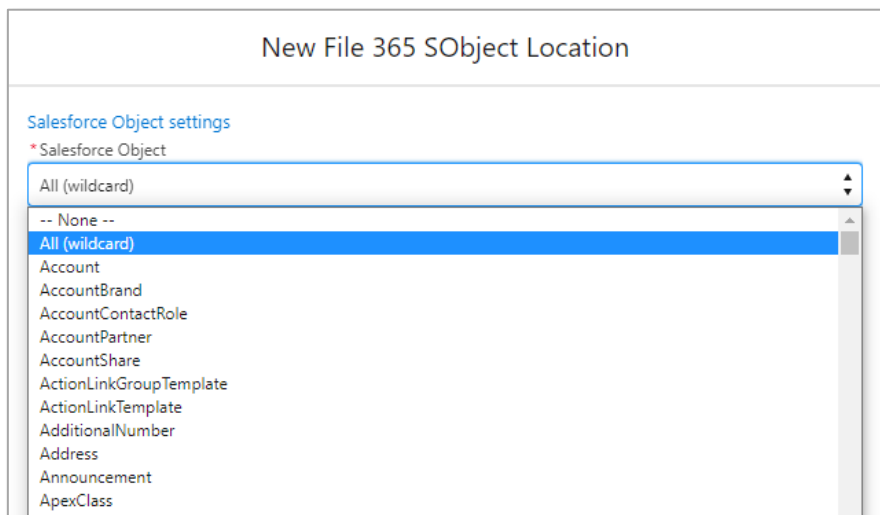
In the last field you can specify an existing SharePoint folder as the base location. File 365 will use that base folder to start building its own tree.

#### 4.4.4 All (wildcard) settings

Instead of creating an SObject Location for each Salesforce object separately, you have an option to direct all files for multiple Salesforce Objects to the same SharePoint location. For this, you need to select the option “All (wildcard)” in the Salesforce Object settings.

This is essentially a fallback option, allowing you to specify one SharePoint location for multiple Salesforce Objects.

The All (wildcard) option is at the top of the dropdown list under Salesforce Object.



#### Salesforce Object Settings for wildcard

Note: When you create an Object location with All (wildcard) setting, you are *not* able to choose an identifier for the subfolder field, the **Record Id** must be used.

New File 365 Object Location

File 365 Object Location Type

\* Type  
Folder per Record

Salesforce Object settings

\* Salesforce Object  
All (wildcard)

Subfolder Field  
Record Id

Sharepoint settings

\* Office 365 Named Credential  
File 365 Demo Sharepoint

\* Site  
Communication Site (Root Web)

\* Document library  
Documents

\* Content type for SObject folders (Wildcard only)  
Folder

\* Content type for Record folder  
Folder

\* Content type for uploaded files  
Document

Document Library Base Folder  
/Salesforce Files/ Choose folder

Options  
Synchronize Content for PDFs

Cancel Save

**Salesforce Settings (Wildcard)**

When you choose All (wildcard), you are not able to choose an identifier for the subfolder field, the Record Id must be used

**SharePoint Settings (Wildcard)**

Same as under Salesforce single object, except:

Content type for SObject (not available for single object)  
[Select] Documents

Document Library Base Folder

Choose the SharePoint base folder where you want the files to be stored.

#### 4.4.5 SharePoint Folder structure : single object vs wildcard setting

On the selected SharePoint folder a subfolder will be created with the Label of the Salesforce Object. In this *object* subfolder, another level of subfolders will be created with the name set to unique identifier of the Salesforce *Record*. The difference in structure between a single Salesforce object and the “wild card” setting, is illustrated by the following examples:

**Example 1: Single Salesforce Object**

You selected the Account object as Salesforce Object and an existing unique field “Account Code” as Subfolder Field.

The selected SharePoint Settings are the site collection <https://company.sharepoint.com> and the default “Documents” Document Library. You created a pre-created [SharePoint] folder “**Account Files**” in the Document Library.

If you now add a file “**contract.pdf**” to an Account Record with Account Code “**DS-05401**”, the file will be moved to the SharePoint Location:



Site: <https://company.sharepoint.com>  
Document Library: Documents  
File location: **/Account Files/DS-05401/contract.pdf**

**Example 2: All (wildcard) Salesforce Object Setting**

You selected the Account object as Salesforce Object. The Record Id will be used for the Subfolder field. The selected SharePoint Settings are the site collection <https://company.sharepoint.com> and the default “Documents” Document Library. You pre-created a [SharePoint] folder “**Salesforce Files**” in the Document Library.

If you now add a file “**contract.pdf**” to an Account Record with Record Id “**0015528a4328665AAA**”, the file will be moved to the SharePoint Location:

Site: <https://company.sharepoint.com>  
Document Library: Documents  
File location: **/Salesforce Files/Account/ 0015528a4328665AAA/contract.pdf**

**4.5 File 365 Object location type (2): Site per record**

Instead of storing all files associated to object records in one SharePoint folder, it is possible to store all files of one record in a separate SharePoint site. For this we created the Object location type Site per Record.

After selecting this type, fill out the Salesforce Object settings as described in the image below. Note that certain fields are needed for the creation of the SharePoint Site. We recommend to contact your SharePoint Administrator. Site Locale Field and Site WebTemplate are required fields; these field has to be created on the object first in order to be selected here.

Edit File 365 Object Location for Account

File 365 Object Location Type

\* Type

Site per Record

Salesforce Object settings

\* Salesforce Object

Account

\* Site Url Field

Account ID

Site Title Field

Account Name

\* Site Locale Field

SharePoint Locale

\* Site WebTemplate Field

SharePoint Web Template

Site DesignId Field

-- None --

Site WebTemplateExtensionId Field

-- None --

Site Join HubSite Field

-- None --

Sharepoint settings

- (a) **Salesforce object Settings (Site per Record)**
- Salesforce object\*  
Select a salesforce object
  - Site URL field\*  
Choose a unique Salesforce field to use as site URL (f.e. Account ID)
  - Site Title Field\*  
Choose the name to identify the site, such as Account Name

- The following fields are needed for the creation of the SharePoint Site, please contact your SharePoint Administrator*
- Site Locale Field \*\*
  - Site WebTemplate Field \*\*
  - Site DesignId Field
  - SiteWebTemplateExtensionId Field
  - Site Join Hubsite Field

Sharepoint settings

\* Office 365 Named Credential (Site Creation)

File 365 Demo Sharepoint

\* Site Base Url

/sites/

Enable configuration for current object

\* Office 365 Named Credential

File 365 Demo Sharepoint

\* Document Library Name

Documents

Document Library Base Folder

Account Documents

Options

Synchronize Content for PDFs

Cancel Save

- (b) **SharePoint settings (Site per Record)**
- Office 365 Named Credential  
Choose the Named Credential as previously created
  - Site Base URL  
/sites/ [ Select either /sites/ or /teams]
  - Enable configuration for current object \*  
Leave as is [checked]
  - Office 365 Named Credential  
Choose the Named Credential as previously created
  - Documents Library Name  
Documents
  - Documents Library Base Folder  
This is the name of the folder that will be created for this object.

- (c) **Options**
- Synchronize Content for PDFs, see paragraph 10.6





#### 4.6 File 365 Object location type (3): Folder per related Record in Site

After setting up an Object location of the type Site per Record, it is possible to store files of related child records in subfolders of the parent site. To do this we must choose the Folder per related Record in Site. In this way, we can store related Opportunity files, Contract files or Case files in the parent Account site.

After choosing the **Folder per Related Record in Site** type, configure the Salesforce and SharePoint settings as follows:

New File 365 Object Location

File 365 Object Location Type

\* Type  
Folder per Related Record in Site

\* Parent Object Location (Type: Site per Record)  
Account

Salesforce Object settings

\* Salesforce Child Relation  
Opportunities

\* Subfolder Field  
Opportunity Code

Sharepoint settings

\* Office 365 Named Credential  
File 365 Demo Sharepoint

\* Document Library Name  
Documents

Document Library Base Folder  
Opportunity Documents

Options

Synchronize Content for PDFs

Cancel Save

#### File 365 Object Location Type (*Folder per Related Record in Site*)

- Parent Object Location

Select the parent object [Account]

#### Salesforce Object settings

- Salesforce Child Relation

Select the Child object [f.e. Opportunities]

- Subfolder Field

Choose a unique field to identify the record [e.g. Oppty Code, Case Nr]

#### SharePoint settings

Same as for Site Per Record, except:

- Document Library Base Folder

This is the name of the folder that will be created for this child object in the SharePoint site

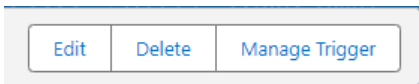
Click save to save the settings. The notation for this kind of Object Location is **Parentobject.Childobject**. So in the above example the created Object Location record is **Account.Opportunities**.

#### 4.7 File 365 Object location: Deployment of necessary Apex Triggers

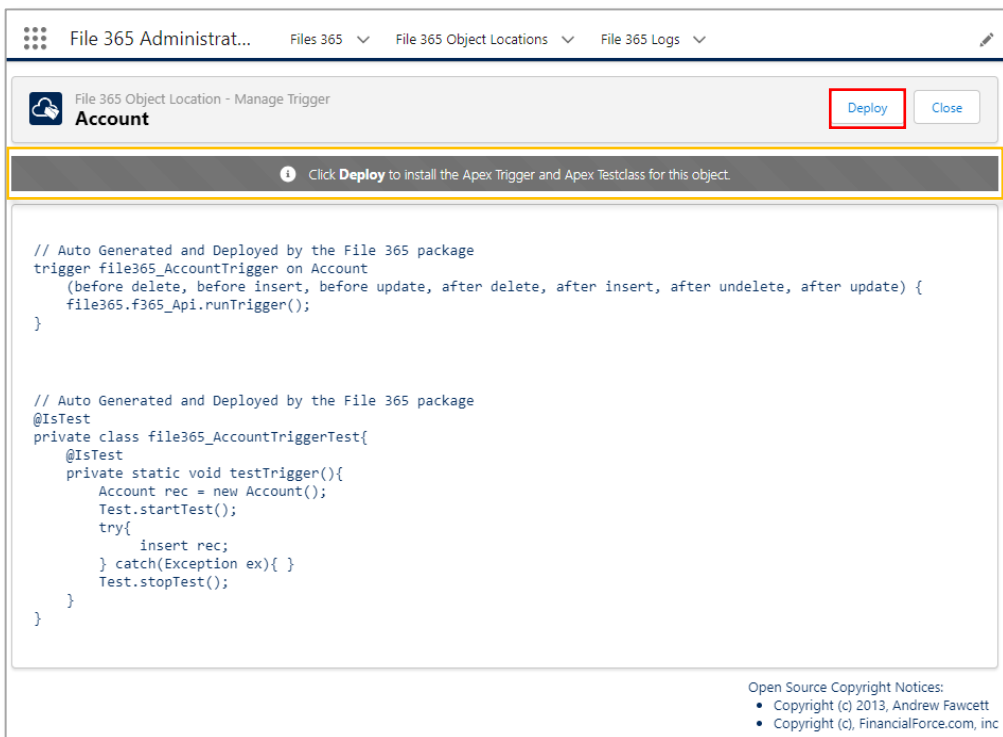
After the creation of a File 365 Object Location, it is necessary to deploy an Apex Trigger for every object that you configured with File 365. These triggers are necessary for advanced functionalities, such as merging records and renaming files and folders. Make sure you deploy the Apex Trigger for all Object Locations. (Note: This section only applies to File 365 version 4.7.4 and higher. If you use a lower version no further action is required and you can continue using File 365.)



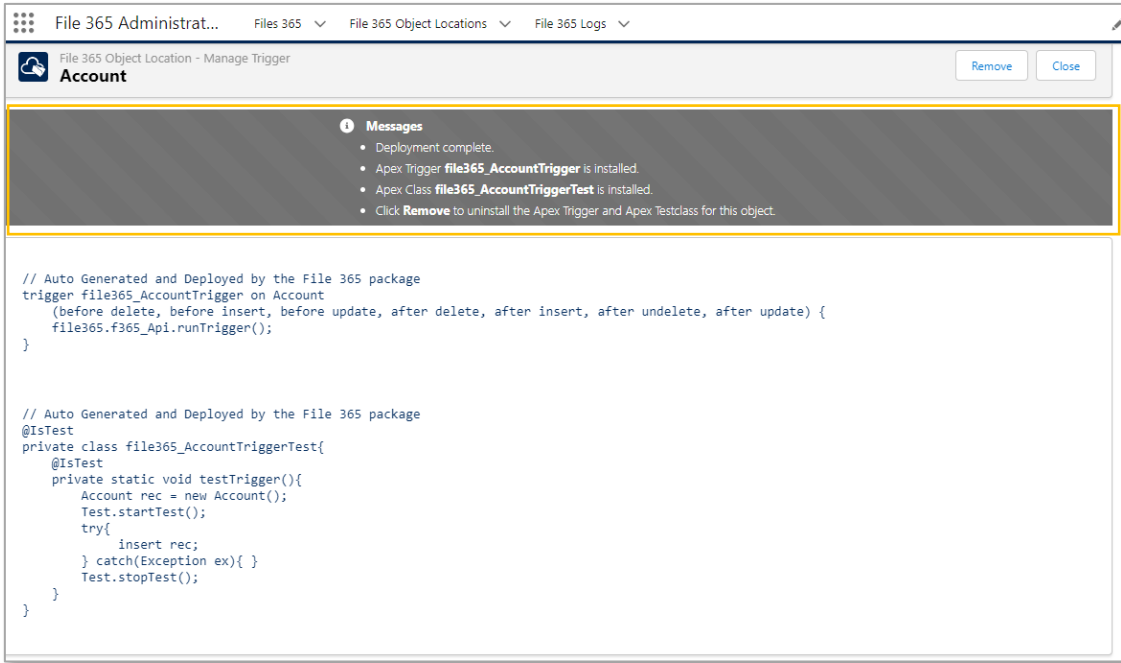
Installing the Apex Trigger can be done in a few simple steps. From the File 365 Object location you just created, click on the **Manage Trigger** button in the menu on the top right.



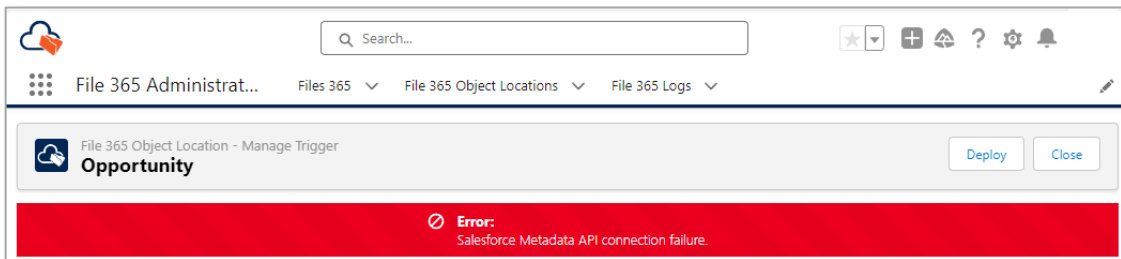
In the pop-up screen, click on the button **Deploy** to install the Apex Trigger and Apex Test class for this object.



After clicking on Deploy, you will see a message that the Deployment is complete and the Apex Trigger and Apex Test class has been installed. If necessary, the Apex Trigger and Test Class can be uninstalled with the button **Remove**.



Finally, deploying triggers can only be done by a user who has File 365 administrator permission. If you try to deploy as a user you will see the following error message.



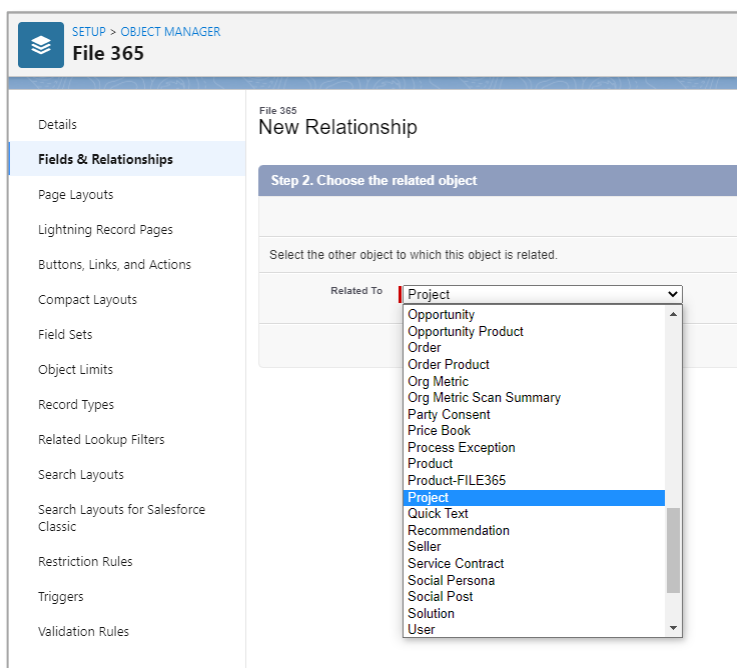


## 5. Set up File 365 in the User Interface

For each file in SharePoint a File 365 record will be created. To link the File 365 record to your Salesforce Objects, a lookup relation must be added to the File 365 record. Even if you specify the “All (wildcard)” option, you must add a lookup relationship to the File 365 object for all the Salesforce objects you want to use with File 365. Only for those objects that are linked to the File 365 object, File 365 will be active.

### 5.1. Create a File 365 Lookup Field

Go to Salesforce Setup and select the Object Manager. Search for the Object “File 365” ( API: file365\_\_f365\_File365\_\_c) and open the settings for that object. Go to “Fields & Relationships” and click **New** to add a new relationship.



Select Lookup Relationship and select Next. Choose the Object\* to create the lookup relation to. This is the same Object as selected before in the “New File 365 SObject Location” screen. Set a custom label, name and child relationship name if needed.

You can leave other settings default and click Next. In the next screen select all profiles needing access to this relationship. On the next screen, where you can add the field to existing Page layouts, you should deselect all layouts and click Next.

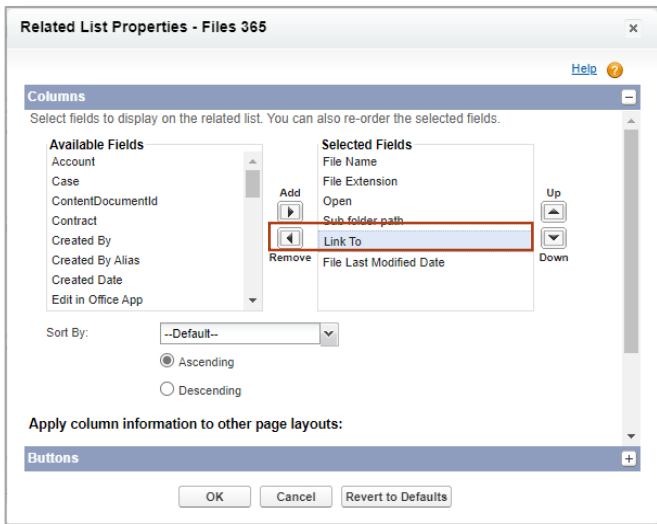
The last step is to add a “Files 365” related list to the existing layouts of your chosen object. Check all layouts where you want to see the related File 365 records and click Save.

### 5.2: Modify Page Layouts and Lightning Record Page

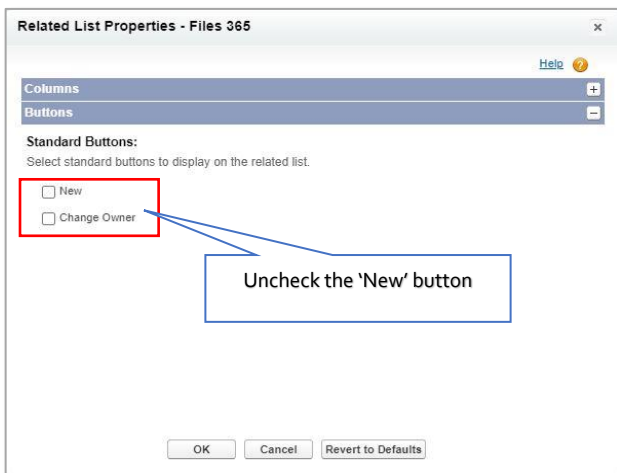
To use all features of File 365, ensure you add the following components specified below on the page layout(s) and Lightning Record pages as described in this section.

### 5.2.1 Page layout : Add and configure File 365 Related List

Add the File 365 Related List to the Page layout of the concerned object. When you created the lookup relationship as described above, you added the related list already on the last step of the field creation wizard.



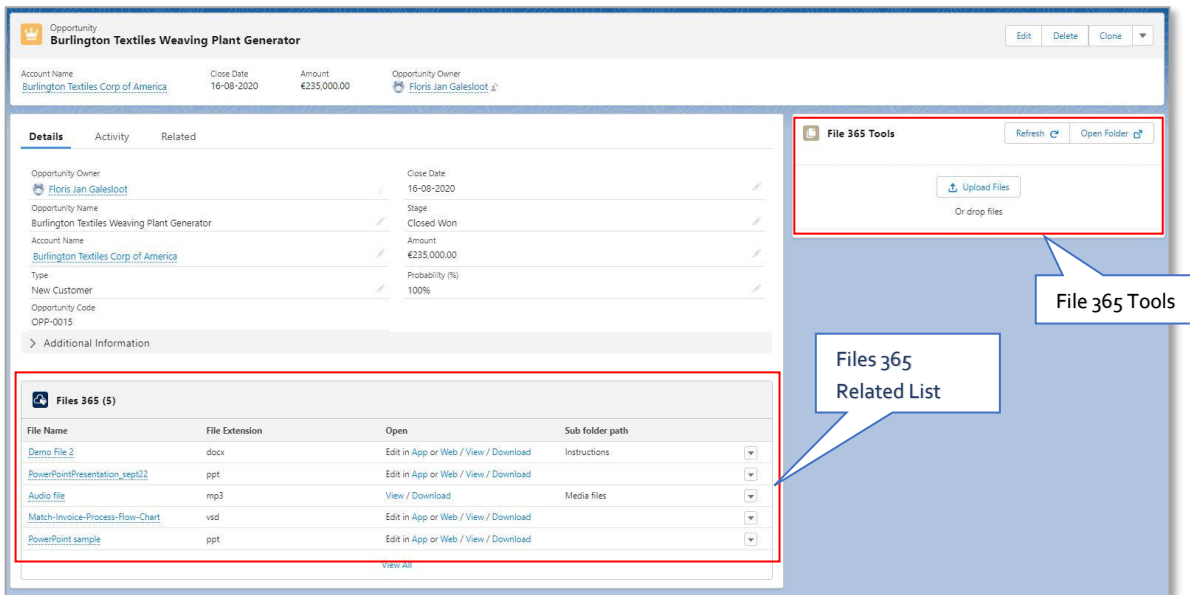
By default, in the File 365 related lists shows the Columns **File Name, File Extension, Open, Subfolder Path, Link To** and **File Last Modified Date**. As with all related lists, the administrator can configure which fields are shown in the File 365 related List. We recommend to remove the 'Link To' field, as the related list is already on the page layout of the affiliated record.



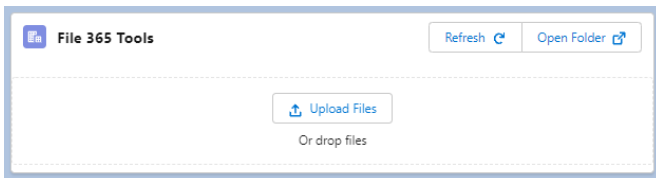
Always uncheck the “New” and Change Owner buttons from the File 365 related list. These should not be used by users.

### 5.2.2 Lightning Record page: Add the File 365 Related List component, File 365 Toolbox

You need to add two lightning components to the record page of the object you have configured to use File 365. First you need to add a **File 365 Related list component**. You can either show the Files 365 Related list in the Related Tab (in this case you do not need to do anything) or choose to add Single Related list component from the lightning components menu. Select File 365 as the related list you want to show in the lightning component.



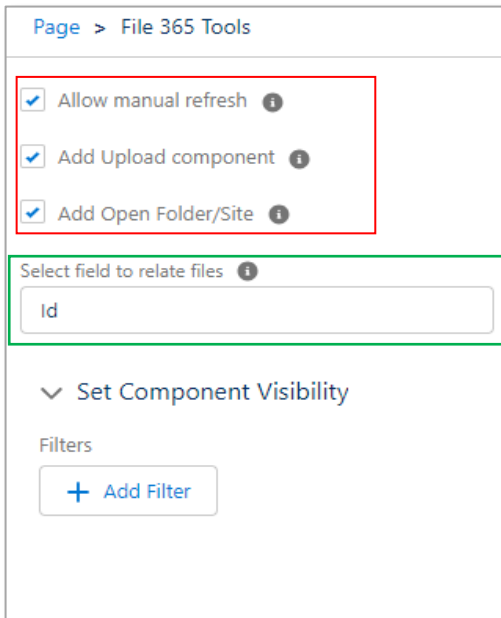
Second, add the **File 365 Tools** lightning component to your Lightning Record Pages for all the objects you configured.



The toolbox has three buttons. The **Upload Files**, the **Refresh** and the **Open Folder** button.

The **Upload Files** button allows the user to upload files to the related SharePoint folder. Uploading works also by using File Drag-and-drop to the toolbox.

The **Open folder** button opens the active record folder in SharePoint in a new browser tab, this is available by default. With the **Refresh** button you can refresh the file 365 related list after uploading files in Salesforce. Clicking this button will get all information from SharePoint linked to the record opened and create or update File 365 records accordingly.



After adding the Toolbox component to the lightning record page in the settings of the Toolbox component, you need to tick the checkboxes for Manual Refresh, the Upload, and Add Open Folder/Site component to show these buttons.

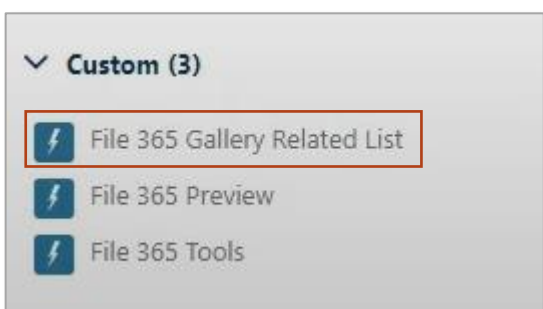
### Select Field to relate Files

Default setting is **Id** for relating files to the record you are viewing. Alternative is to use a master-detail or look-up field to relate the file to a related record. (This property supports using an expression to define its custom label. The correct format is `{!$Label.customLabelName}`.)

If you want to show both the files related to the active record as well as files of a related record (the parent record f.e.), you need to add the toolbox *twice* and configure the 'Select Field to relate Files' accordingly. Note that adding an extra toolbox is only necessary if you use the **standard** File 365 Related list. As the **File 365 Gallery Related List** component (see paragraph 5.2.3) features an upload button, the **Select Field to relate Files** can be configured in the settings of the File 365 Gallery Component itself. As should be clear, you do need to add the Gallery Component twice to show the two different sets of files.

### 5.2.3 Lightning Record page: File 365 Gallery Related List

To preview multiple related files in one glance, we have added a new type of Related List: the **File 365 Gallery Related List**. To use this, drag the 'File 365 Gallery Related List' from the Custom Lightning components list onto the lightning record page.



File Gallery Related List component features all three buttons of the File 365 Toolbox (Upload Files, Refresh and Open Folder), so adding the toolbox to the record page is unnecessary if you use this type of Related list.

Page > File 365 Gallery Related List

Allow manual refresh ⓘ  
 Add Upload component ⓘ  
 Add Open Folder/Site ⓘ

Custom title ⓘ

Select field to relate files ⓘ

Display type ⓘ

Set Component Visibility  
 Filters

Optionally, change this field to show records of a related record instead of the active record.

Choose display type: Detailed, Minimal or Thumbnail

After adding the File 365 Gallery component, click on the component to show the component details in the right side bar.

Tick the checkboxes for Manual Refresh, the Upload, and Add Open Folder/Site component to show these buttons.

Optionally, add a custom title.

As explained in the previous paragraph, the Field 'Select field to relate files' is used to determine which related files will be shown. Default for this field is **Id** to show the files of the active record. Optionally, a second File 365 Gallery Related List component can be added to the record page to show files of a *related* record instead of the active record, for example to show Account

files on the Opportunity record. To do this, change the field name in '**Select field to relate files**' to the field name (developer name) of the lookup field, in this case "AccountId". (For detailed information how to set this up, view the [File 365 Gallery](#) tutorial).

SETUP > OBJECT MANAGER

### Opportunity

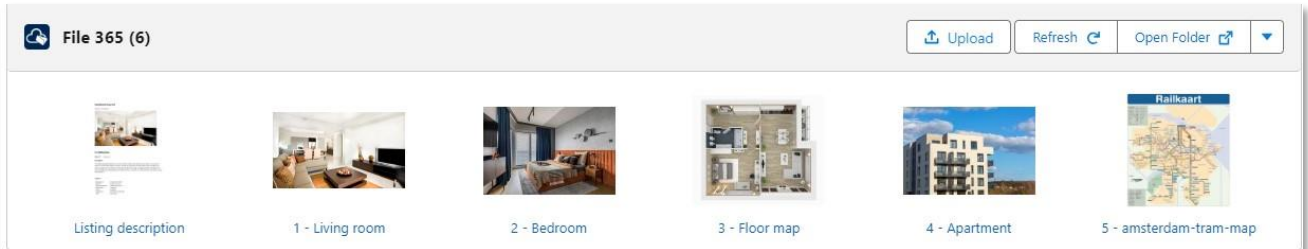
Fields & Relationships		
21 Items, Sorted by Field Label		
FIELD LABEL	FIELD NAME	DATA TYPE
Account Name	AccountId	Lookup(Account)
Amount	Amount	Currency(16, 2)
Close Date	CloseDate	Date

Choose a Display type to show more or less file details: Detailed, Minimal and Thumbnail. **Minimal** only shows a thumbnail. **Thumbnail** only shows the thumbnail and file name. With the **Detailed** type you can show File name, and additionally, File extension, Last Modified Date & SharePoint links.

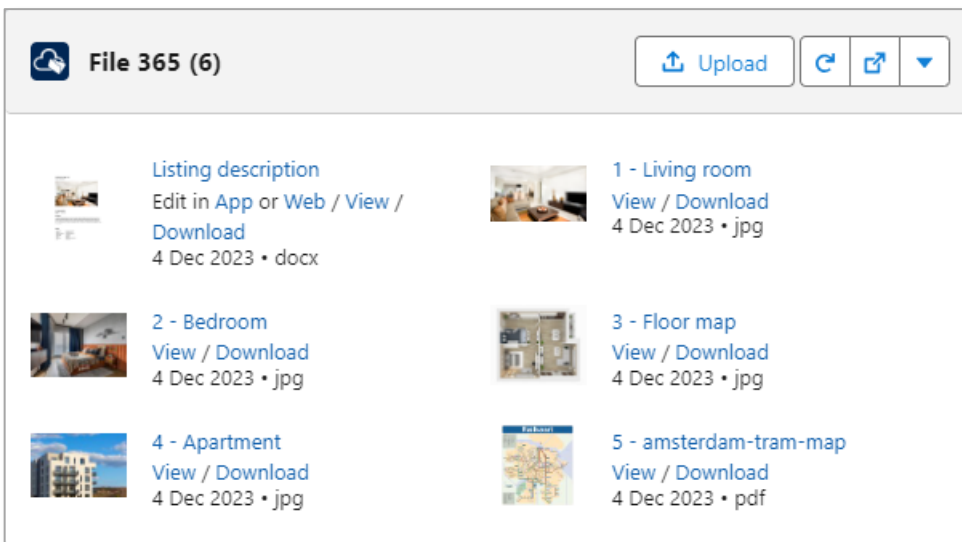




## File Gallery with Thumbnail display settings



## File Gallery with Detailed display settings



## 6. File 365 Document Templates

Optionally, you can create Document Templates on an Object Location to make standard documents immediately available for users upon creation of a new record, for example a new contract. These document templates can then be used by the users as starting point for further editing.

As always File 365 will store the file in SharePoint and only leave a reference file in Salesforce, but the file can be opened/edited immediately in Salesforce by clicking on a link to open the file in SharePoint.

### 6.1 Set up File 365 Document Templates

Document templates can be configured only by a user with File 365 administrator permission in the File 365 Administration app.



The first step is to create a File 365 Document Template Record. Go to the File 365 Object Location tab. Select the Object Location of the object for which you want to make the Document Template available. Click the dropdown arrow on in the File 365 Documents Template at the top right and click “New” .



In the New File 365 Document Template screen fill out the necessary fields:

- Template Name:** Template Name is the only required field.
- Subfolder path:** If templates should be created in a subfolder fill in the [Subfolder Path field](#).
- Filter Field Name, Filter Value** Optionally specify a Filter Field Name and Filter Value to determine if the document template should be available for all records. If no Filter is specified, the template is applied to all records
- File 365 Object Location** This field will be prefilled.

Click **Save** to save the Document Template record.



File 365 Documents Template  
**IT Support Contract**

File 365 SObject Location: [Account.Contracts](#) | Filter Field Name: | Filter Value: | Last Modified By: [Vloeiend IT Support](#), 15-09-2022 15:42

Template Name: IT Support Contract | File 365 SObject Location: [Account.Contracts](#)

Filter Field Name: | Filter Value: | Created By: [Vloeiend IT Support](#), 15-09-2022 15:42 | Last Modified By: [Vloeiend IT Support](#), 15-09-2022 15:42

**Files (0)** | Add Files

Upload Files | Or drop files

Add here your template file

The second step is to upload the template files. In the created Document Template record, upload or add by drag-and-drop the desired files from your work station to the File 365 toolbox. After upload you should see the files.

File 365 Documents Template  
**IT Support Contract**

File 365 SObject Location: [Account.Contracts](#) | Filter Field Name: | Filter Value: | Last Modified By: [Vloeiend IT Support](#), 07-09-2022 15:49

Template Name: IT Support Contract | File 365 SObject Location: [Account.Contracts](#)

Filter Field Name: | Filter Value: | Created By: [Vloeiend IT Support](#), 07-09-2022 15:44 | Last Modified By: [Vloeiend IT Support](#), 07-09-2022 15:49

**Files (1)** | Add Files

Template IT SUPPORT CONTRACT  
8 Sep 2022 • 16KB • docx

View All

The process can be repeated if you wish to make different templates, depending on the Filter Field, available for the chosen object.

By default File 365 only creates the document templates and subfolders after the first file is uploaded or the user clicks the Open Folder button in the File 365 Toolbox or Gallery List. This prevents the creation of large numbers of empty folders or unused template documents.

Contact our support team if you need to customize the behavior of the template document Apex Triggers.

*Note that there will be a short time interval between the creation of the Salesforce record and the moment template can be seen in SharePoint or as a File 365 file. This may take up to 2 minutes.*



Contract 00000109

Account Name: United Oil & Gas, Singapore | Status: Draft | Contract Start Date: 01-10-2022 | Contract End Date: 31-12-2022 | Contract Term (months): 3

**Related** Details

**Contract History (1)**

Date	Field	Value	Original Value	New Value
15-09-2022 15:54	Created.	Demo User		

**Files 365 (1)**

File Name	File Extension	Open	Sub folder path
Template IT SUPPORT CONTRACT	docx	Edit in App or Web / View / Download	

**File 365 Tools** Refresh Open Folder Upload Files

This is a new contract record

Click **Open Folder** and the template will be created in the background.

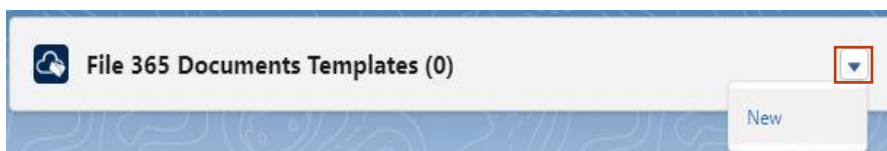
If you still don't see the file after a few minutes, click Refresh. **Edit in App** to start editing.

You only need to click Open Folder the first time after creating a new record. The next time, you can access the template directly from Salesforce from the File 365 Related List. Open and edit the document with one click.

## 6.2 Automatically create subfolders with the Subfolder Path

To organize record files in a consistent way, File 365 can be configured to automatically create standard subfolders in the main folder for each record of the concerned object. To do this you need to create a document template on the File 365 Object location.

In the File 365 Administration app, go to the File 365 Object Location tab. Select the Object Location of the object for which you want to create a Document Template. Click the dropdown arrow in the File 365 Documents Template at the top right and click "New".



In the New File 365 Document Template screen, fill out the necessary fields. Fill in Template Name and Subfolder Path. The Object Location is prefilled. Optionally specify a Filter Field Name and Filter Value to determine if the document template should be available for all records. If no Filter is specified, the template is applied to all records.



New File 365 Documents Template

\* = Required Information

Information

*Template Name	<input type="text" value="Documents"/>	Subfolder Path	<input type="text" value="Documents"/>
Filter Field Name	<input type="text"/>	* File 365 Object Location	<input type="text" value="Case"/>
Filter Value	<input type="text"/>		

Click Save to save the Document Template record.

It is possible to create different levels of subfolders by using the forward slash as a separator in the Subfolder Path field. For example in the above example, Documents/2023 will create two folders at once for each new case record.

Edit Documents 2023

\* = Required Information

*Template Name	<input type="text" value="Documents 2023"/>	Subfolder Path	<input type="text" value="Documents/2023"/>
Filter Field Name	<input type="text"/>	* File 365 Object Location	<input type="text" value="Case"/>
Filter Value	<input type="text"/>		

Created By Vloeiend IT Support, 13-11-2023 13:40      Last Modified By Vloeiend IT Support, 13-11-2023 13:40

Several document templates can be added to the same File 365 object location to create a hierarchical folder structure.



File 365 Object Locations > Case  
**File 365 Documents Templates** New

3 items • Updated a few seconds ago ⚙️ ↻ ⏴

	<input type="checkbox"/> Template N... ↑	Subfolder Path	Filter Field ...	Filter Value	
1	<input type="checkbox"/> Documents 2022	Documents/2022			⏴
2	<input type="checkbox"/> Documents 2023	Documents/2023			⏴
3	<input type="checkbox"/> Meeting notes	Documents/2023/MeetingNotes			⏴

The specified subfolder will be created only for a newly created records. After creating the record, the user has to upload a file or click **Open Folder** in the File 365 component of the new record and the process will be started. *Note that there will be a short time interval between the creation of the Salesforce record and the moment subfolder or subfolders can be seen in SharePoint. This may take up to 2 minutes. To speed up the process, refresh the page in SharePoint.*

After files have been uploaded to the record (either via Salesforce or SharePoint), the subfolder path will be shown in the File 365 Related list under the Subfolder Path column.

Case  
**Customer Case**

**Files 365 (5)**

File Name	File Extension	Open	Subfolder Path	
<a href="#">Report 2022-10-01</a>	docx	Edit in <a href="#">App</a> or <a href="#">Web</a> / <a href="#">View...</a>	Documents/2022/Reports	⏴
<a href="#">Report 2022-11-01</a>	docx	Edit in <a href="#">App</a> or <a href="#">Web</a> / <a href="#">View...</a>	Documents/2022/Reports	⏴
<a href="#">Report 2022-12-01</a>	docx	Edit in <a href="#">App</a> or <a href="#">Web</a> / <a href="#">View...</a>	Documents/2022/Reports	⏴
<a href="#">solar_panel</a>	jpg	<a href="#">View</a> / <a href="#">Download</a>	Documents/2023	⏴
<a href="#">Planning</a>	xlsx	Edit in <a href="#">App</a> or <a href="#">Web</a> / <a href="#">View...</a>	Documents	⏴

[View All](#)



## 7. File 365 Administration App

### 7.1 File 365 Status

When a record is configured for File 365, a File 365 record will be created immediately after the upload of the document to Salesforce. In the background an asynchronous process will process the file (upload to SharePoint) according to the settings you specified.

When the file is not uploaded yet to SharePoint, the File 365 record has the status “Queued”. In the File 365 Administration App you can select a List View that will display all File 365 records queued for upload to SharePoint.

When an error occurs during upload, the status changes to “Error”. For those record there also is a List view in the File 365 Administration App. When you have fixed the error (or simply want to try the upload again), click the Retry button.

*Note: When clicking Retry as administrator and using the Named Credential identity type per user, the file will be uploaded to SharePoint using your credentials instead of the users’ own credentials.*

### 7.2 General Application log

When an error occurs in the File 365 application, those errors will be logged in the File 365 Log Object. You can view those logs on the File 365 Administration App.

### 7.3 Resolving Errors

If you cannot resolve an error yourself, please contact our support team by using the [Support](#) form on our website or send an email to [support@vloeiend.it](mailto:support@vloeiend.it).

## User Instructions

After successfully installing File 365, please consult the [File 365 User Instructions](#) for further information.



## Appendix A

### SharePoint supported languages, culture names and locale IDs

Language Name	Culture Name	Locale ID
Arabic	ar-sa	1025
Bulgarian	bg-bg	1026
Catalan	ca-es	1027
Croatian	hr-hr	1050
Czech	cs-cz	1029
Danish	da-dk	1030
Dutch	nl-nl	1043
English	en-us	1033
Estonian	et-ee	1061
Finnish	fi-fi	1035
French	fr-fr	1036
German	de-de	1031
Greek	el-gr	1032
Hebrew	he-il	1037
Hindi	hi-in	1081
Hungarian	hu-hu	1038
Italian	it-it	1040
Japanese	ja-jp	1041
Kazakh	kk-kz	1087
Korean	ko-kr	1042
Latvian	lv-lv	1062
Lithuanian	lt-lt	1063
Norwegian (Bokmål)	nb-no	1044
Polish	pl-pl	1045
Portuguese (Brazil)	pt-br	1046
Portuguese (Portugal)	pt-pt	2070
Romanian	ro-ro	1048
Russian	ru-ru	1049
Serbian (Latin)	sr-latn-cs	2074
Slovak	sk-sk	1051
Slovenian	sl-si	1060
Spanish	es-es	3082
Swedish	sv-se	1053
Thai	th-th	1054
Turkish	tr-tr	1055
Ukrainian	uk-ua	1058

### SharePoint Online Site Template ID

Template ID	Title	Description / Additional Info
STS#3	Team site (no Office 365 group)	A site with no connection to an Office 365 Group.