SharePoint Security Sync

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User Manual

Content

Introduction

SharePoint Security Sync is a comprehensive solution for integrating Microsoft Dynamics 365 and Power Apps with SharePoint for document management. It provides seamless integration between two systems and syncs security privileges from Dynamics 365 to Sharepoint, thereby ensuring secure and reliable access to confidential documents stored in SharePoint.

Salient Features:

- Real time sync of security permission
- Replicate Association and Dissociation of security role to/from a user/team in Dynamics 365 CRM with SharePoint
- Replicate sharing of record with another user/team in Dynamics 365 CRM with SharePoint
- Assign record to another user/team in Dynamics 365 CRM and reflect it in SharePoint simultaneously
- Add/Remove members to/from team in Dynamics 365 CRM and replicate it in SharePoint simultaneously
- Sync deletion of security role in Dynamics 365 CRM with SharePoint
- Supports all types of entities
- Multiple files and folders can be dragged and dropped at one time to SharePoint
- Single as well as multiple files or folders can be uploaded
- Users can download documents from SharePoint
- Email with file's link or file as attachment can be sent
- Files/Folders can be renamed
- Bulk copy/move Note/Email/Sales Literature Attachments to SharePoint
- Sharable links of files/folders can be created which can also be copied for external use
- Deep search can be done for the entered keyword
- Access control of user actions on Attach2Dynamics
- Delete files from SharePoint
- View files before downloading
- Support for configuring multiple SharePoint connectors
- Support for single sign-on
- Support for setting default from, to, cc and bcc for an email using Email Configuration
- Support for hierarchy structure to store attachments/documents in SharePoint

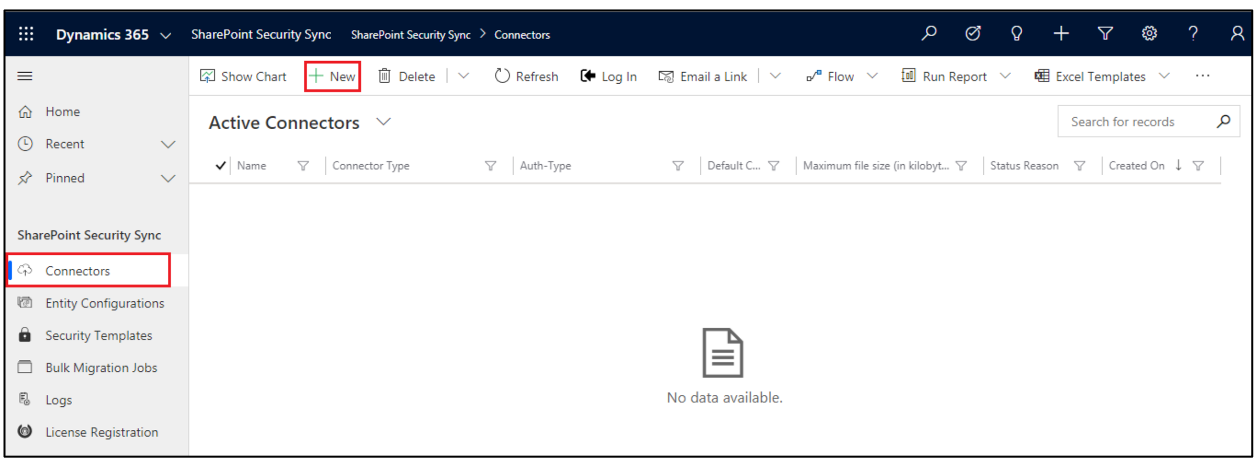
Available for:
Microsoft Dynamics 365 CRM: Microsoft Dynamics 365 v9.x and above.
Deployment: On-Premises with IFD and Dynamics 365 Online
SharePoint: Online

Disclaimer: *In the process of synchronizing security between CRM and SharePoint, the app breaks the inheritance of permission on the folder in SharePoint. If you ever wish to restore the original state of security on the folder, it needs to be done manually and* ***Inogic does not take any responsibility for recovering it to the original state****. It is highly recommended that you create backups and restore points, test the system in a test enviornment and take backup of original systems before moving it to the production enviornment.*

Configuring Connectors

In SharePoint Security Sync the user can configure multiple connectors for SharePoint. For example: The user can create multiple connectors such as SharePoint_1, SharePoint_2, SharePoint_3, etc. for SharePoint.

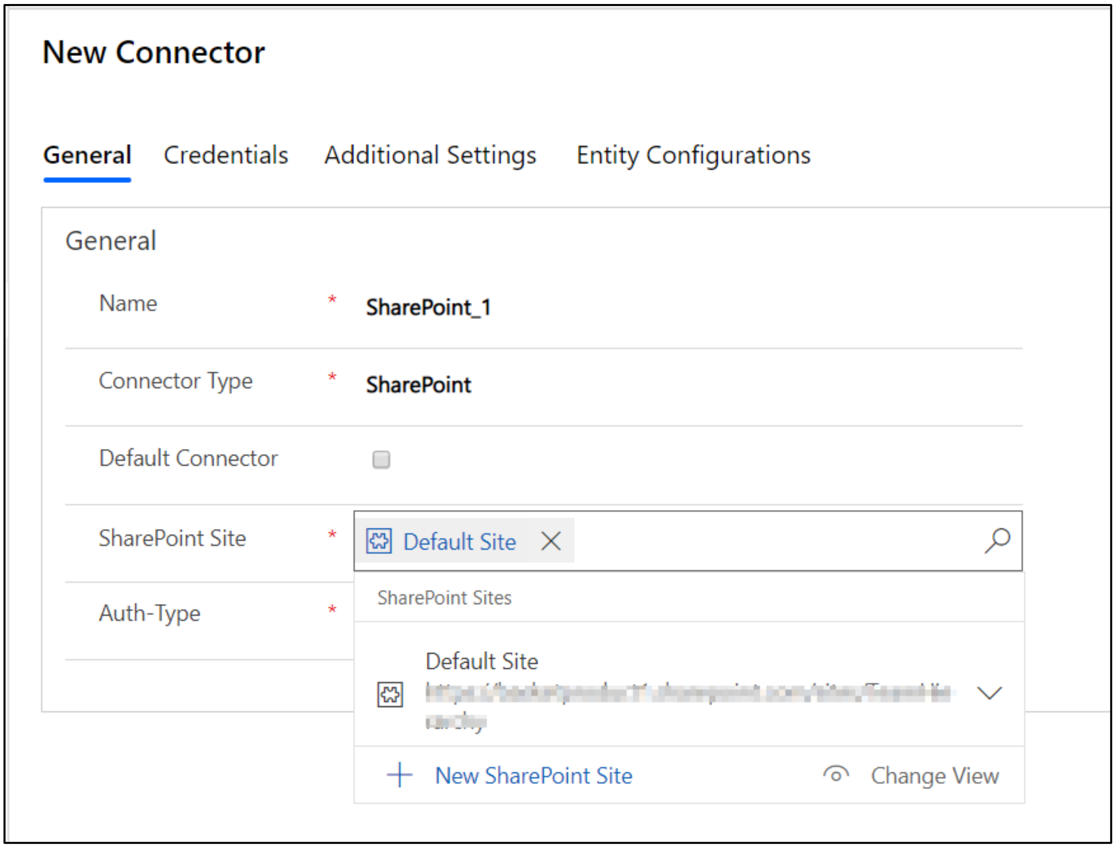
To achieve this, navigate to **SharePoint Security Sync** App and then click **'Connectors'** Entity. Next, click **'New'** to create a new '**Connector**.'



Configuring SharePoint Connector

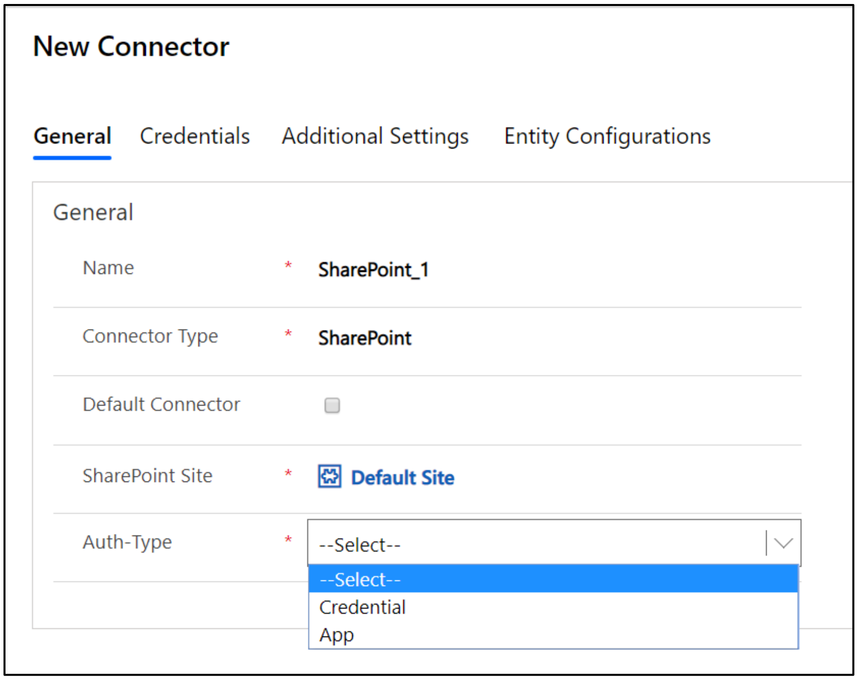
a) **Name:** Give name to the connector
Connector Type: Choose **SharePoint** from the drop-down.
Default Connector: If required, enable the checkbox to set SharePoint_1 as default connector.

b) **SharePoint Site:** It is the location of SharePoint, where files and folders will be stored. Select the valid SharePoint site here.

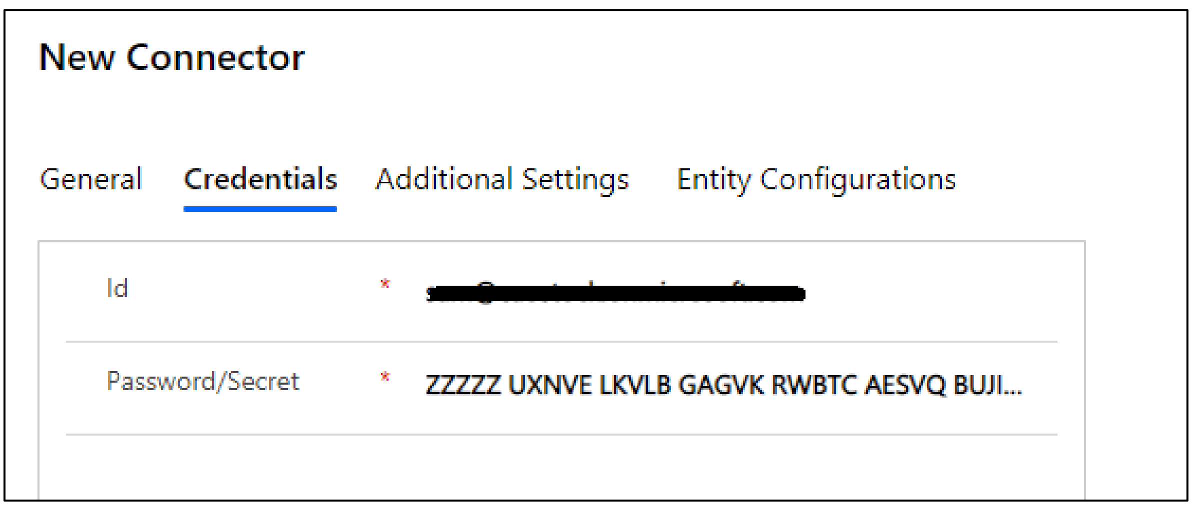


Note: User cannot reuse the same SharePoint site for each new connector.

c) **Auth-Type:** The Auth-Type is of two types, **Credential** and **App.**

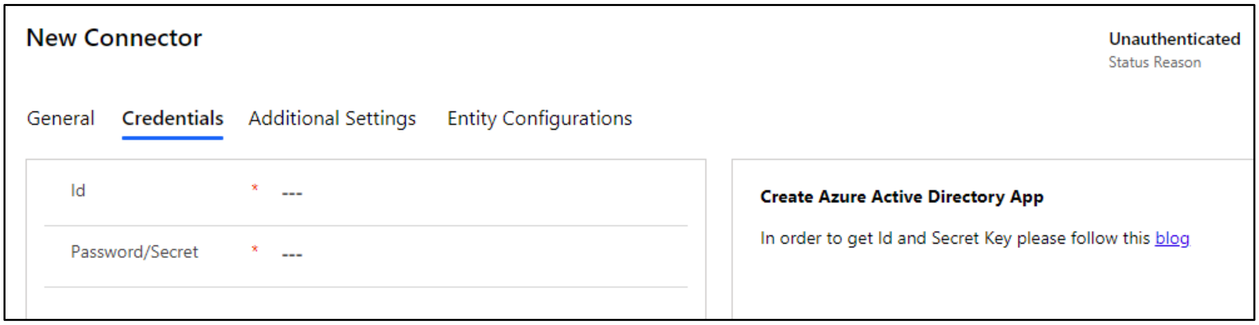


1. **Credential:** This indicates that Authentication with the connector is done through Credential i.e. id and password. It is mandatory to enter credentials in order to create a new Connector. For authentication through credentials, for any attachment action, the name of user appears who has authenticated the Connector. Enter value for **Id** and **Password/Secret**. Next authenticate the credentials.



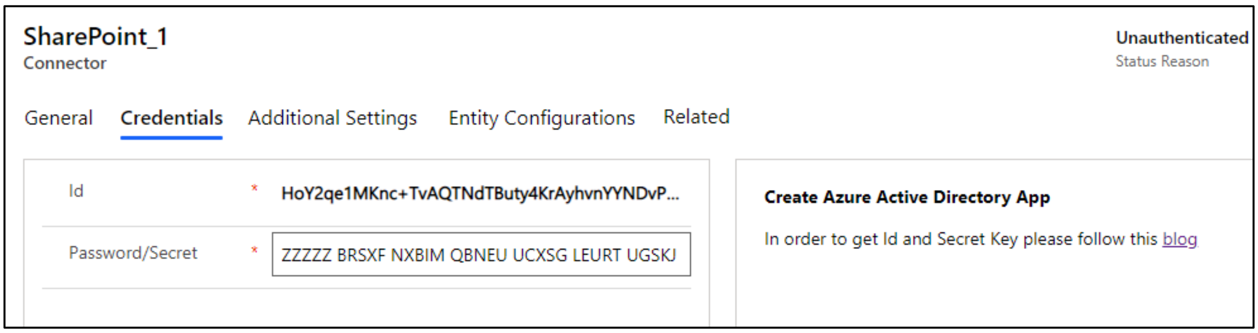
Note: Id and Password for SharePoint: *In the **Id** field enter your username and in **Password/Secret** field enter password. It can be your normal Dynamics 365 CRM credentials.*

2. **App:** This is to provide authentication with App. In App authentication, if any action is performed then the name of logged-in user appears.



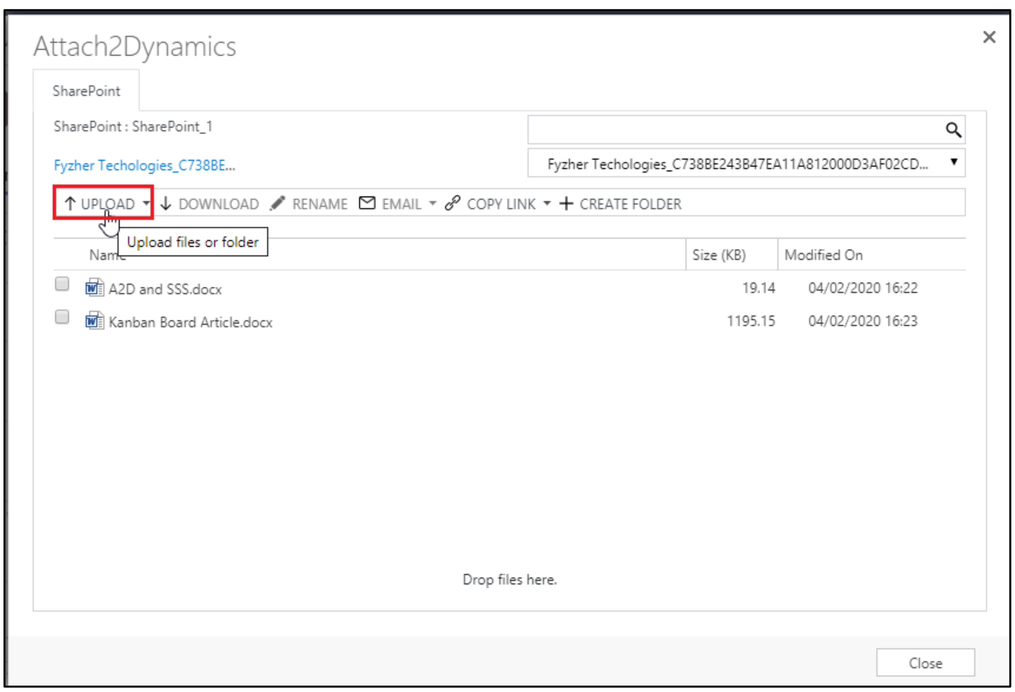
In order to know how to generate Id and Password/Secret for App click here.

After you have generated the Id and Password enter them in the fields provided.

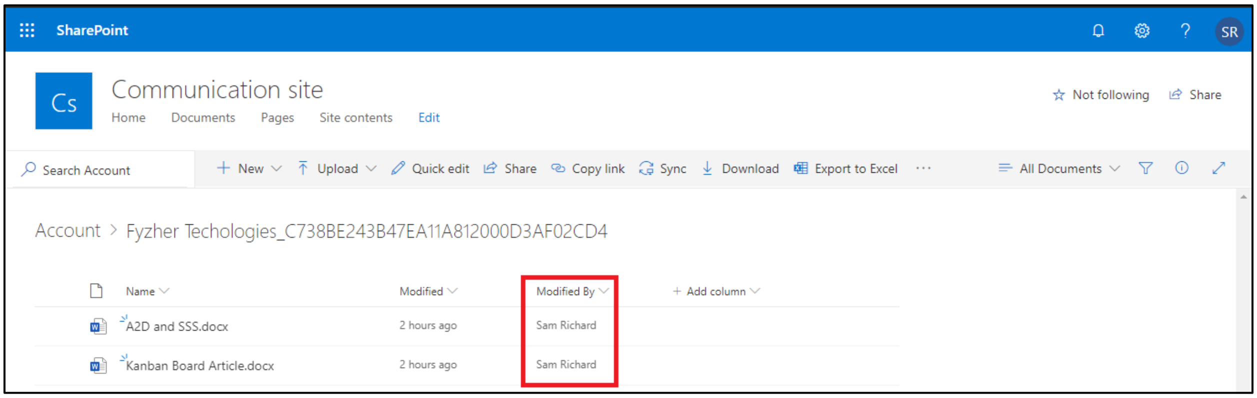


Now if any logged in user uploads or performs any attachment action on files in SharePoint, their name will appear for the action.

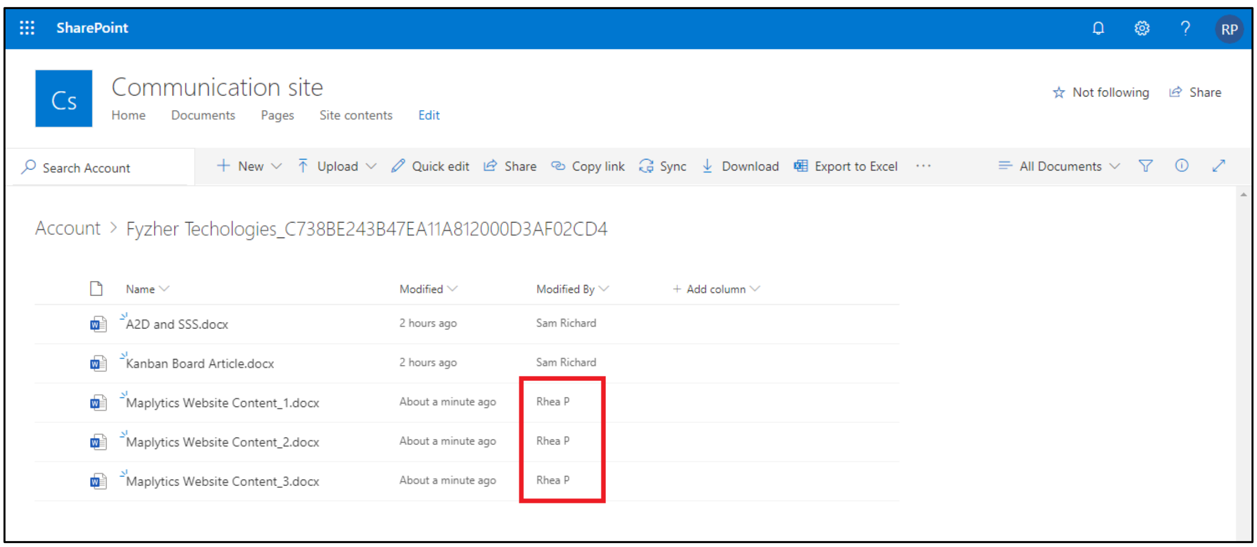
Let's upload few files and see how it works.



Here the name of the admin appears when they are logged in and have uploaded the file.



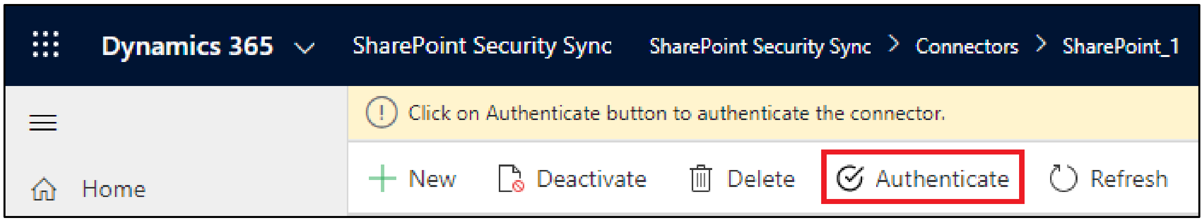
Now let's take another use-case when a user, who is not an admin uploads a file. Rhea is a Sales Manager who does not have admin rights. Now she uploads the files while being logged in, and her name appears as the user uploading the file.



Authenticate

After the Connector record is created the connector credentials need to be authenticated.

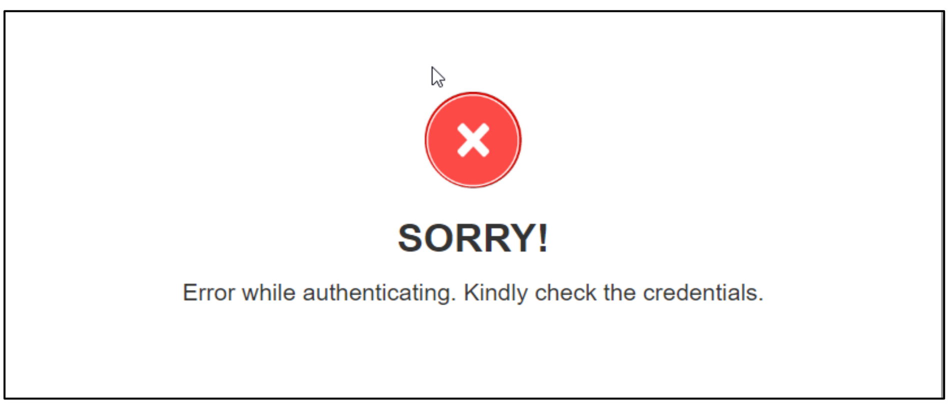
To authenticate the connector, **Authenticate** button is provided on the command bar. This button is visible only to users with SharePoint Security Sync Administrator role.



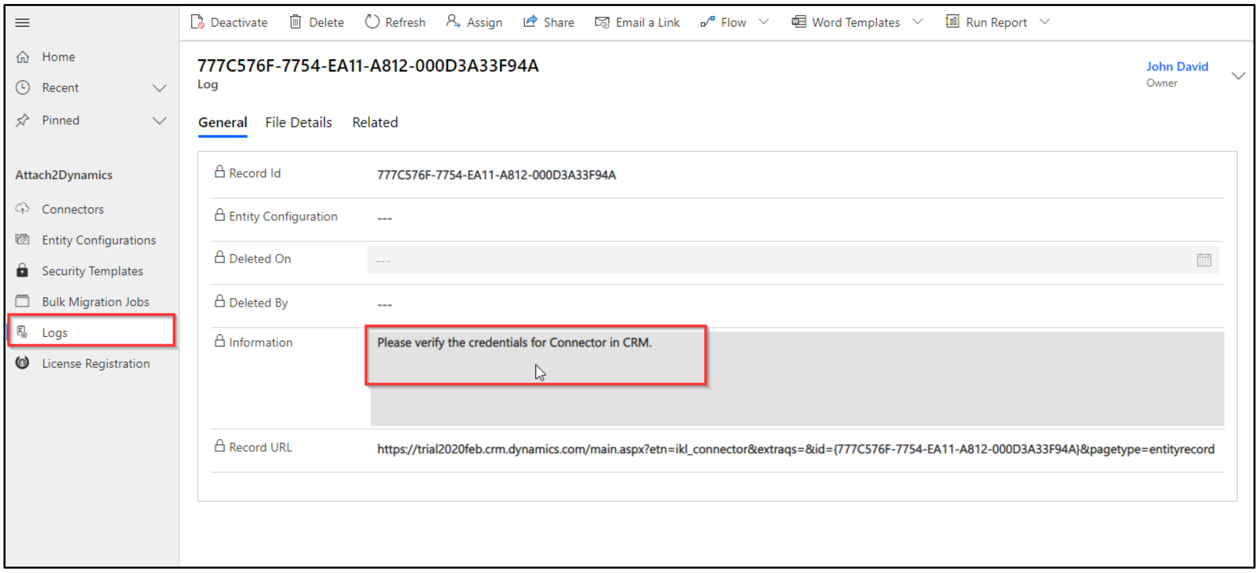
After the Connector is Authenticated, create Entity Configuration record.

If Connector is authenticated successfully, the following success pop up will appear:

If Connector authentication fails, then the following error pop up will appear:



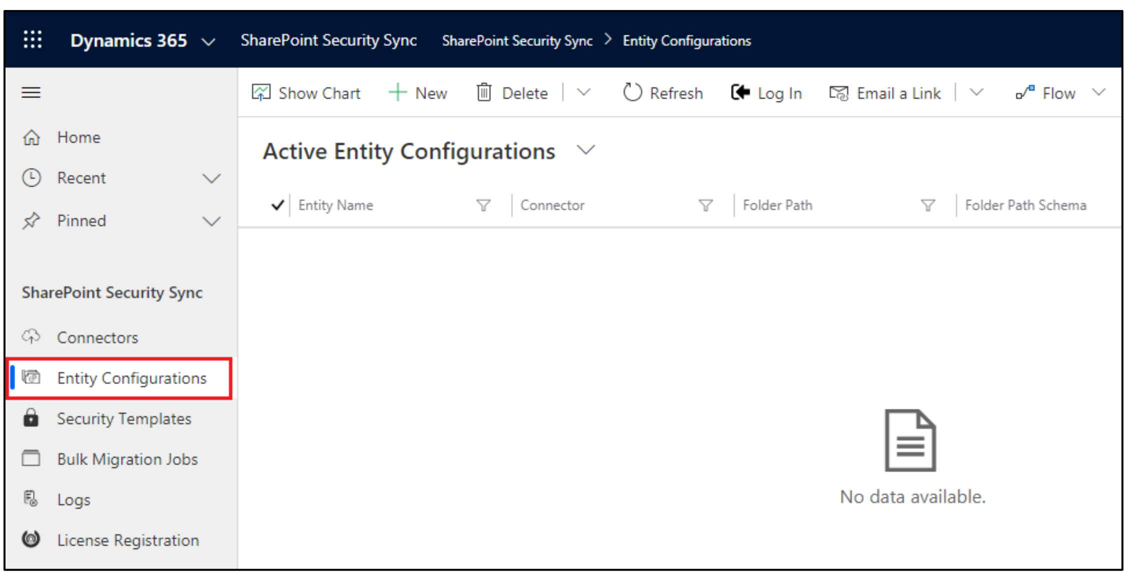
And to see the what exactly the error is, navigate to **'Logs Entity'**, check the error and retry the authentication.



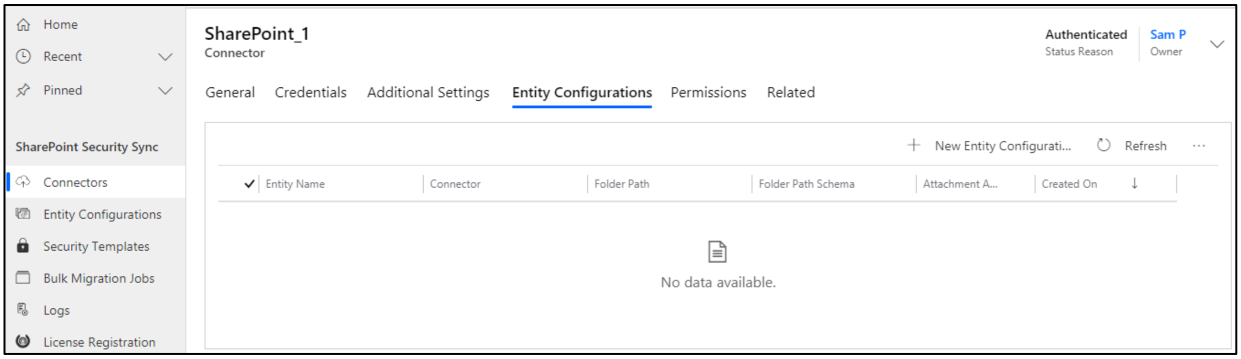
Entity Configuration

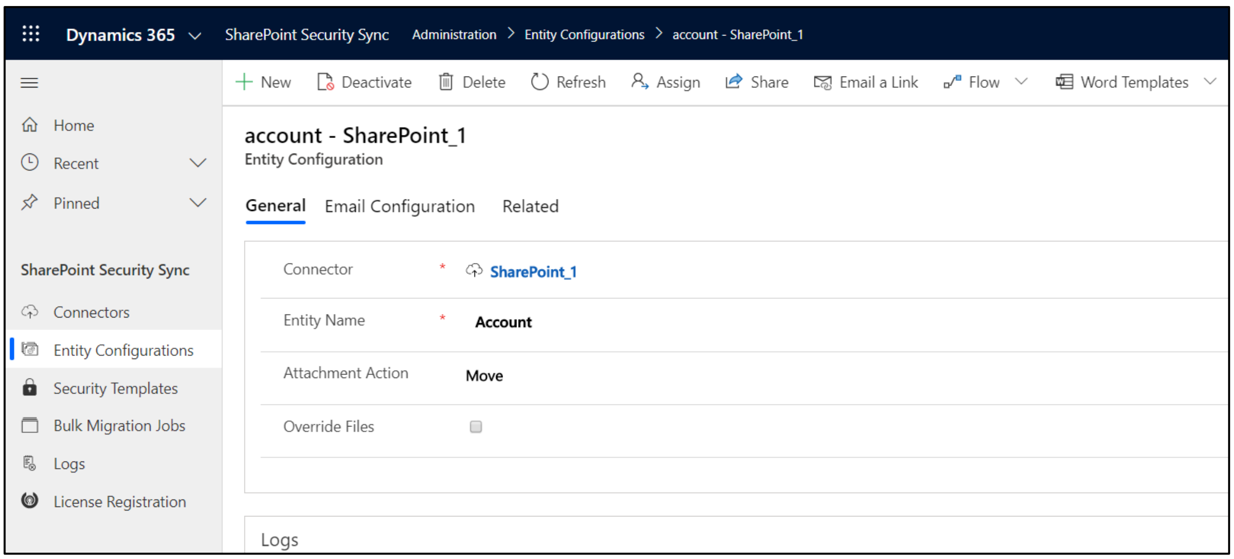
Disclaimer: *In order to synchronize security for {EntityName} in SharePoint, we'd have to break the inheritance of permission for the record folder within the respective Document Library in SharePoint. If ever you wish to restore the original state, it needs to be done manually and* ***Inogic does not take any responsibility of restoring it to the original state.***

For **'Entity Configuration'** go to **SharePoint Security Sync → Entity Configuration.**



Entity Configurations can be created from the Connector form too, just click on Entity Configuration Tab on Connector page and click on **"+ New "** button.





General:

a) **Connector:** Select the Connector for which you want to configure the Entity.

b) **Entity Name:** Mention the Entity for which you are configuring.

c) **Attachment Action:** You can either **Copy** or **Move** the attachment.

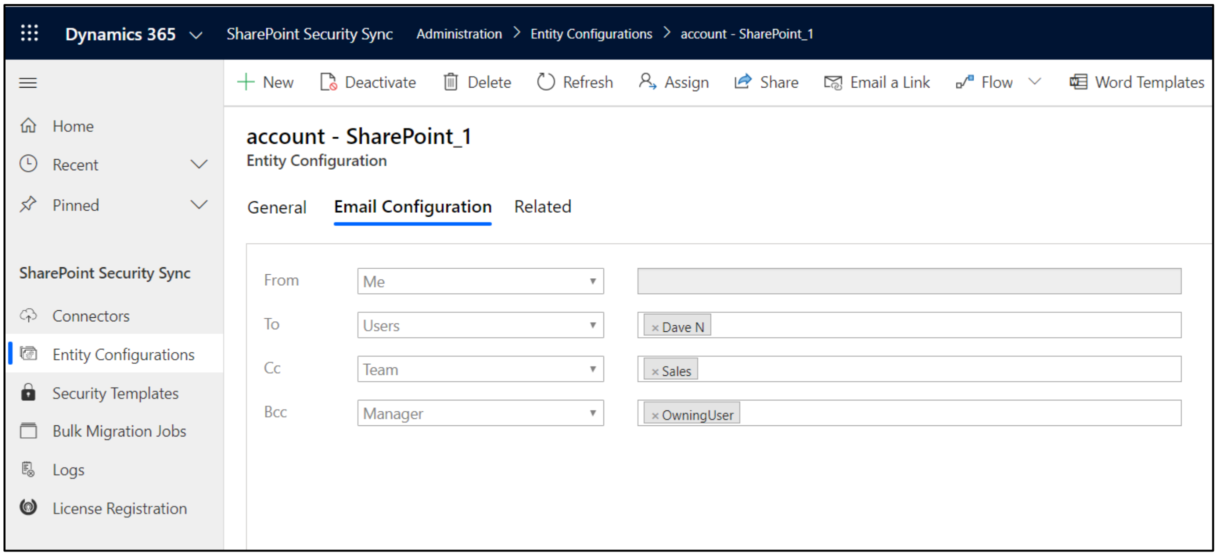
   i) **Copy:** If you Select **Copy,** the attachment will be copied to SharePoint and its cloud storage path will be stored against the record.

   ii) **Move:** If you Select **Move,** the attachment will be moved/migrated to SharePoint and its cloud storage path will be stored against the record.

d) **Override files:** If checked, means trying to upload file with same name will be overridden. If unchecked, then a new file with number appended is created and uploaded in SharePoint.

Email Configuration:

The next is Email Configuration tab. With this tab you can send the documents as attachments/links through email to the required recipients. You can set this tab as shown in below screenshot.



- From – The sender i.e. the person who sends the email
- To – Recipient i.e. the person to whom the email is to be sent
- CC – Carbon Copy i.e. the person to whom a copy of the email information is to be sent
- BCC – Blind Carbon Copy i.e. the person you have kept in the loop and do not want the other recipients to see that particular contact
- Types of Email addresses to select from:
  a. Users – If you select Users then all the CRM users present in the environment will be enlisted while selecting the data.
  b. Queue – If you select Queue then all the queues present in the environment will be enlisted while selecting the data.
  c. Team – If you select Team then all the teams created in the environment will be enlisted while selecting the data.
  d. Dynamics – E.g. If you have selected quote as an entity then all the lookup fields on quote which are allowed to send email will be enlisted while selecting the data.
  e. Manager – E.g. If you have selected quote as an entity then, all the system-user lookup fields on quote entity will be enlisted while selecting the data, and recipient would be the manager of the selected data.

Note:

1) *To use SharePoint Security Sync functionalities on an **Entity** it is mandatory that you create an **Entity Configuration** record for the same.*
2) *Attachment Actions can be enabled only for one entity with one Connector.*
3) *Connector and Entity Configuration are editable if user has SharePoint Security Sync Administrator role.*

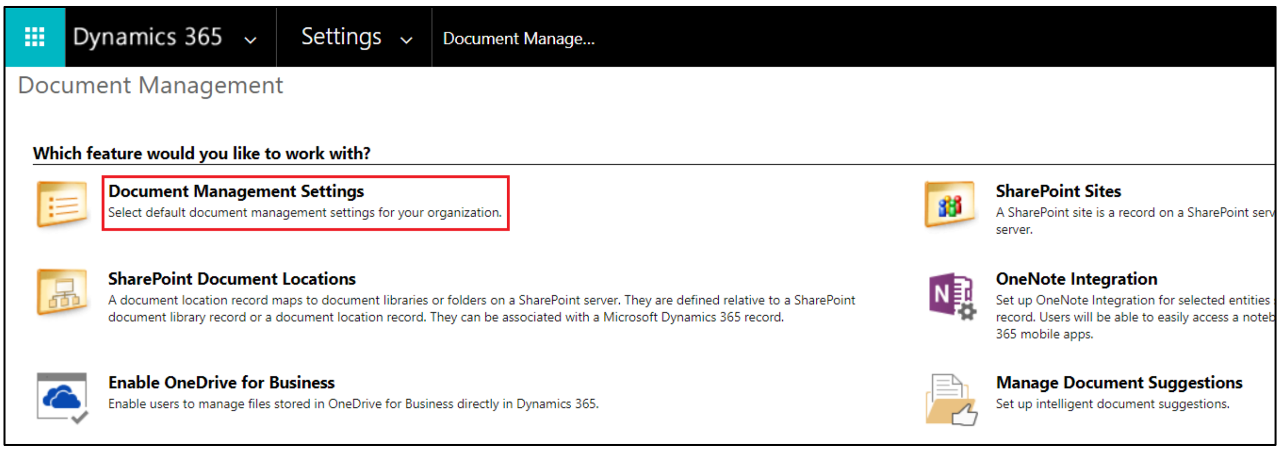
4) *SharePoint Security Sync User can only read the Connector and Entity Configuration.*
5) *The security level privileges will start syncing once after creating entity configuration the user hits the File tab or Attach2Dynamics button.*

Configuring Hierarchy Structure

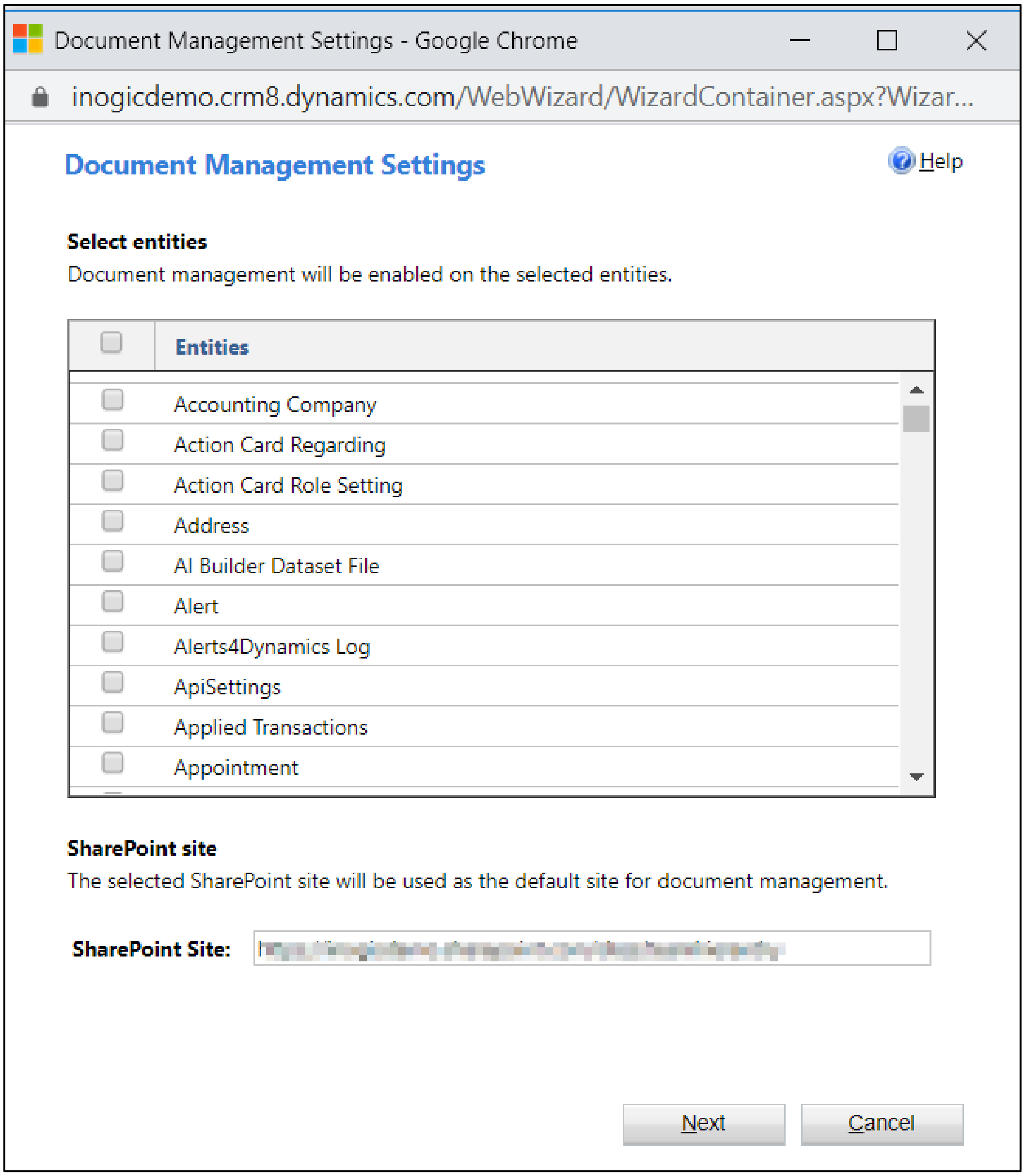
Attachments/Documents of Dynamics 365 CRM records can be stored in SharePoint sites on the basis of hierarchy.

To achieve this, follow the steps given below:

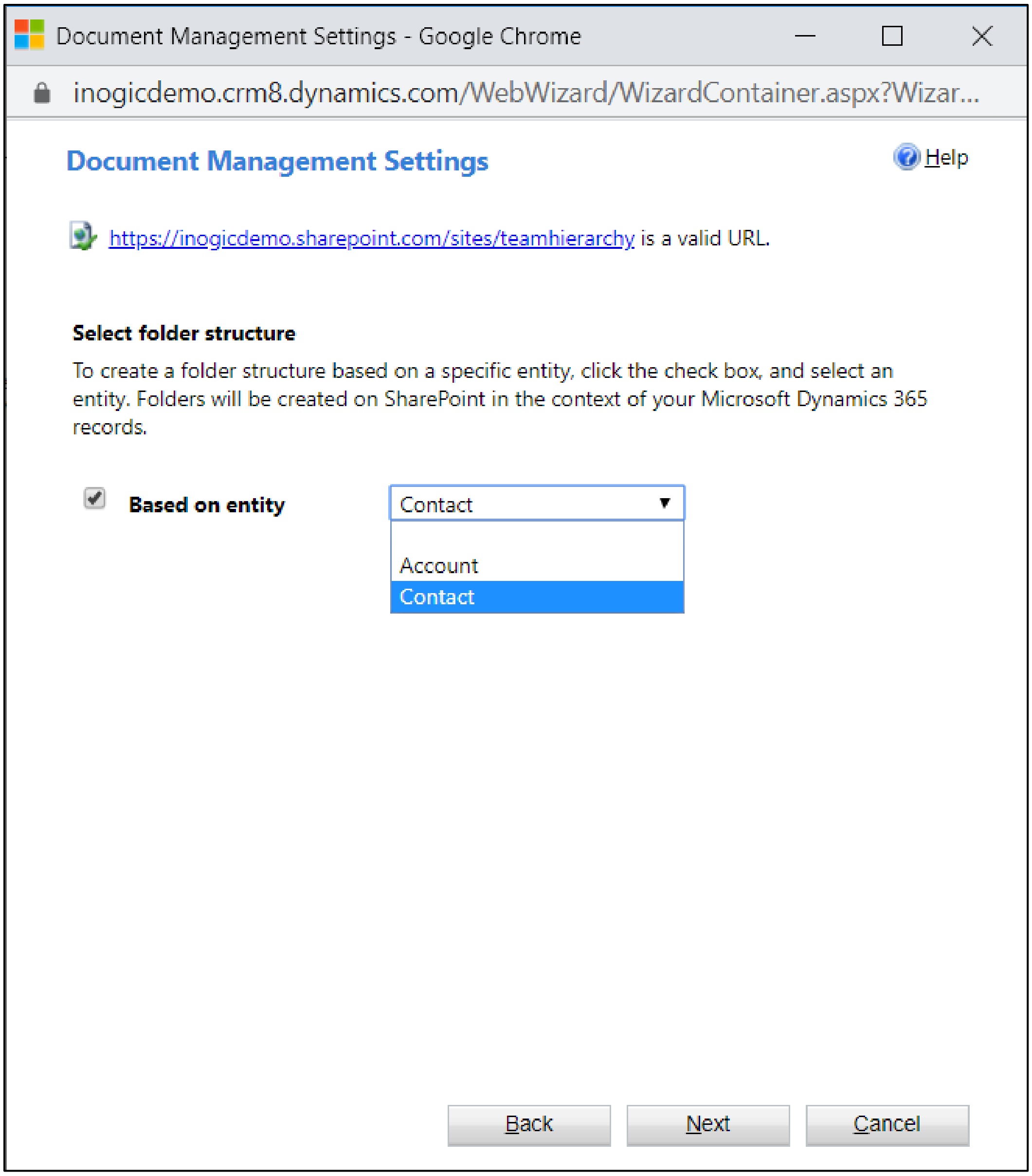
1) Go to Advanced Settings → Settings →Document Management Settings.



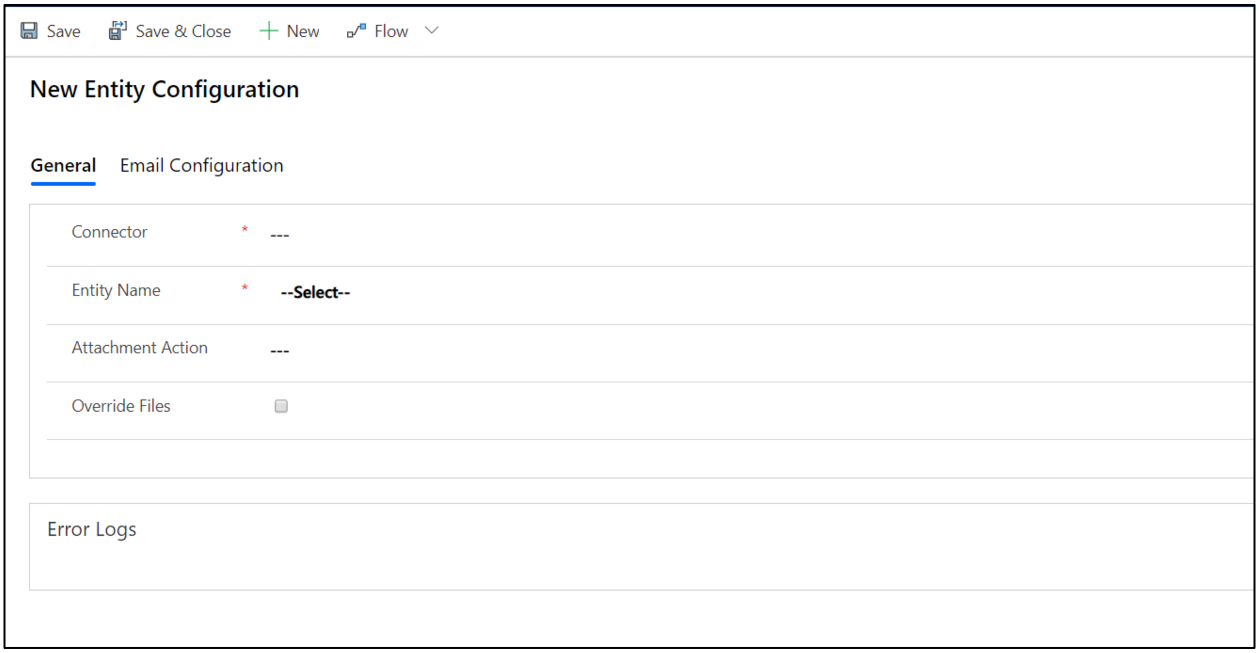
2) Select Entities → Enter the URL of respective SharePoint site.



3) Enable the Checkbox ‘Based on Entity’ → Select either of the entities, Account or Contact.

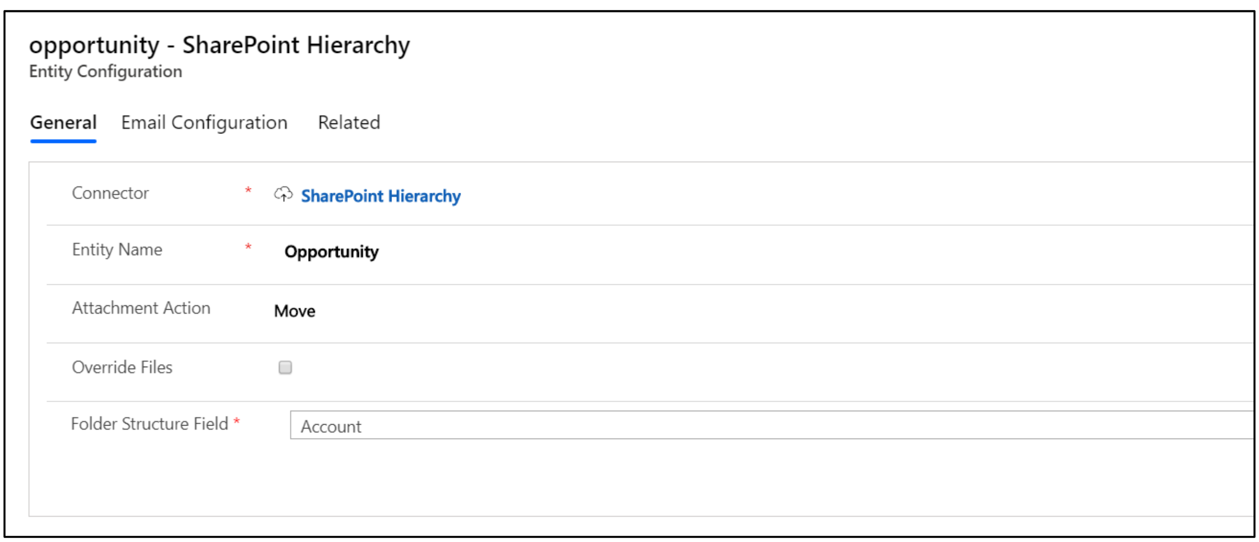


4) Next, go to Entity Configurations → Click on New.

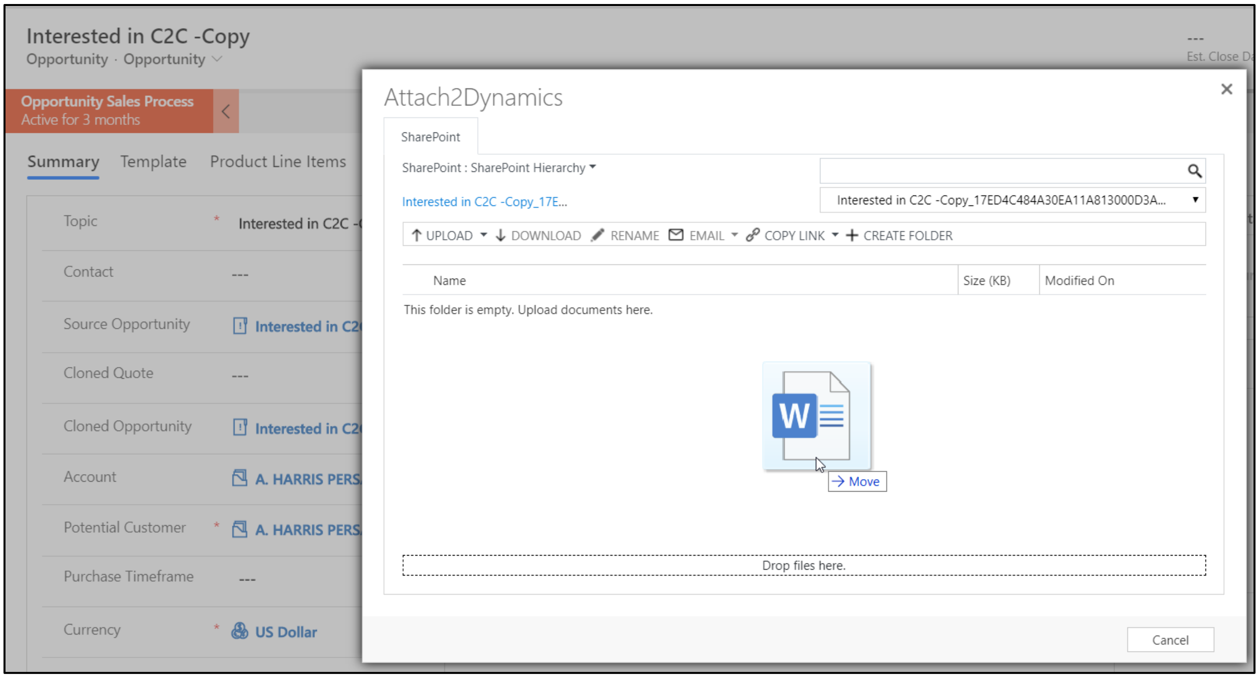


5) Populate the following fields → Click on Save.

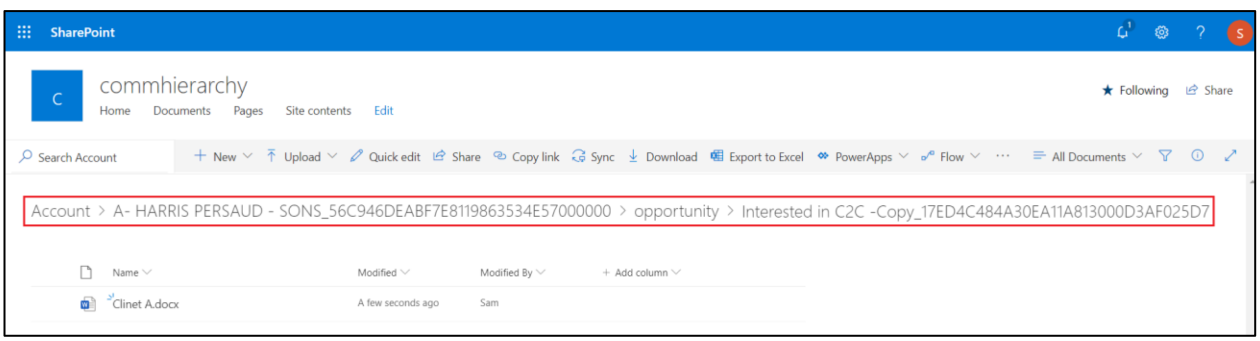
a. **Connector:** Select the connector for the particular SharePoint site
b. **Entity Name:** Select the entity.
c. **Attachment Action:** Select either move or copy
d. **Override Files:** Enable the checkbox if required
e. **Folder Structure Fields:** This field appears on selection of the entity for which hierarchy structure is configured. In this field, customized entity with Account or Contact lookups will be populated. Select either of the entities.



6) Now go to Opportunity → Select an opportunity → Click on Attach2Dynamics button → Drag and Drop required file.



7) Next, go to SharePoint site. Here, the respective file will be stored in the following manner: **Account > Account Name_guid > Opportunity > Opportunity Name_guid.**



Security Templates

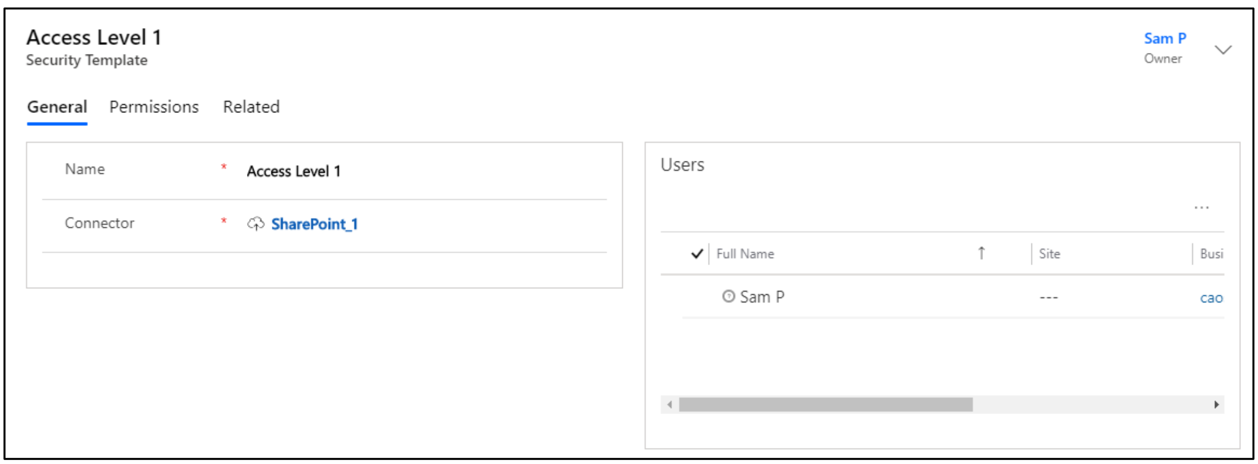
Security Templates Entity enables to control access given to the users over various features of Attach2Dynamics such as Upload, Download, Email, Copy Link, Rename etc. in SharePoint.

Note*: If two records of security template are created for the same user then the user will get highest access permission from either of the records.*

1. General

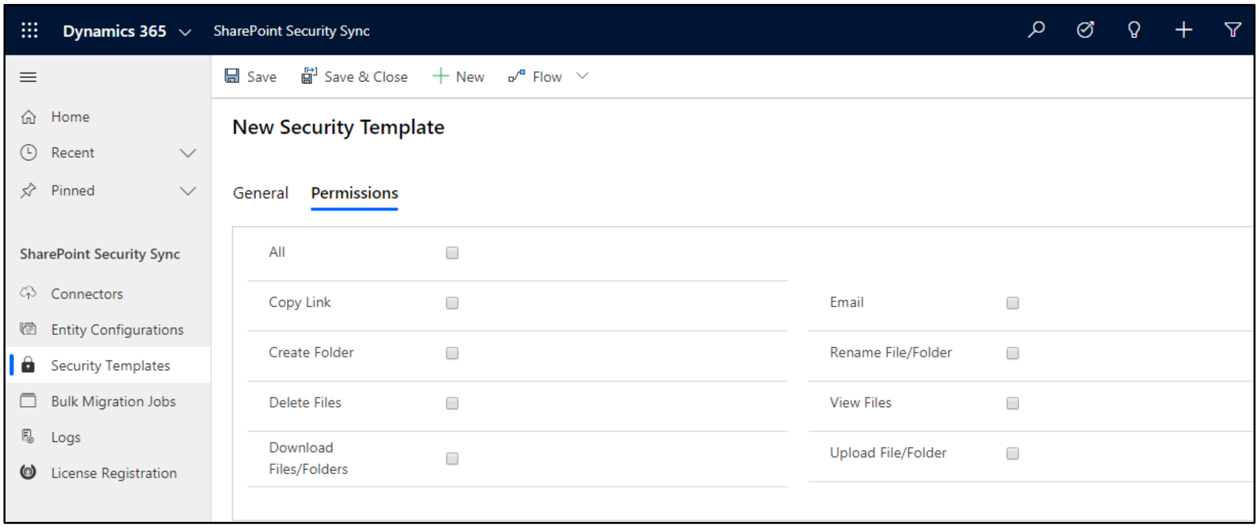
This section is where you define the name of record and the connector to SharePoint.

Populate the given fields and save the changes. After the changes are saved you need to select users to whom this security template should apply.



2. Permissions

Next tab is **Permissions** which comprises of all the Attach2Dynamics features. To provide access to Attach2Dynamics features just enable the checkbox given against each and every feature.



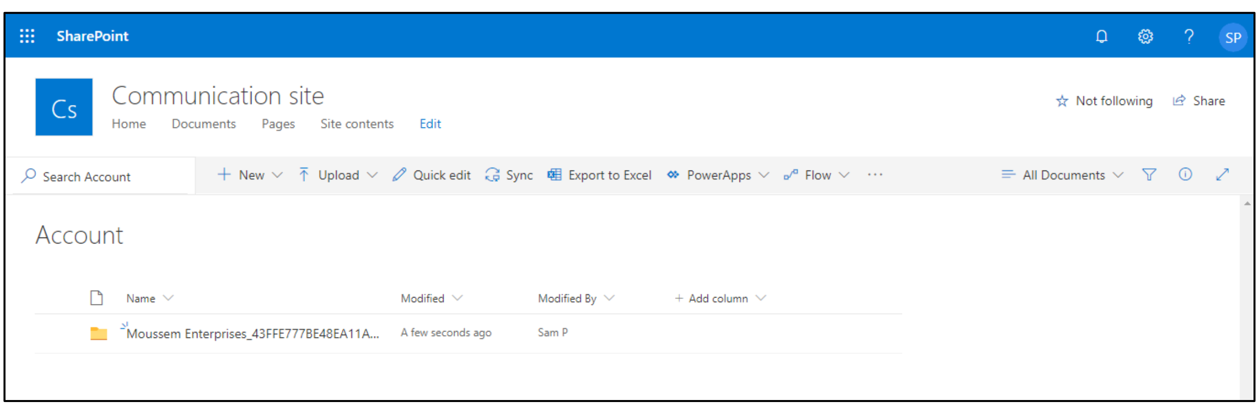
Note:

- *If no template is created for a user, then all the features would be enabled except the Delete feature.*
- *For Delete feature a Security Template is must.*
- *feature a Security Template is must.*

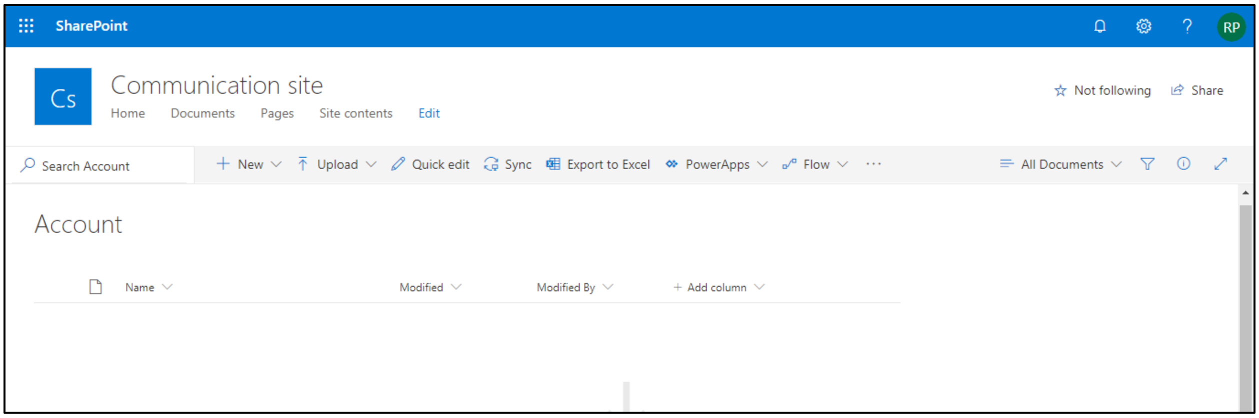
Share and Assign Record

The security role privileges are synced when a record is shared or assigned to another user. For e.g. when a User A, Sam owns a record and other User B, Rhea has only user level access, then Rhea won't be able to see the records owned by Sam in SharePoint.

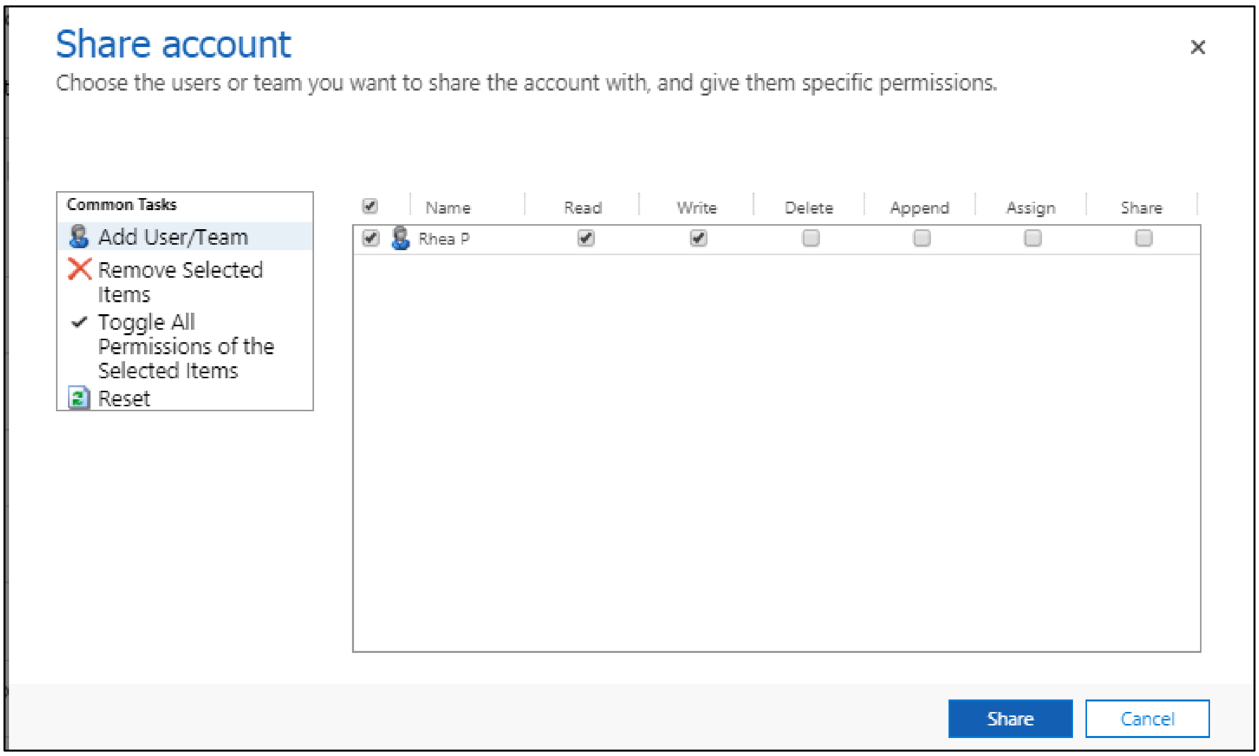
For instance, records visible to Sam are:



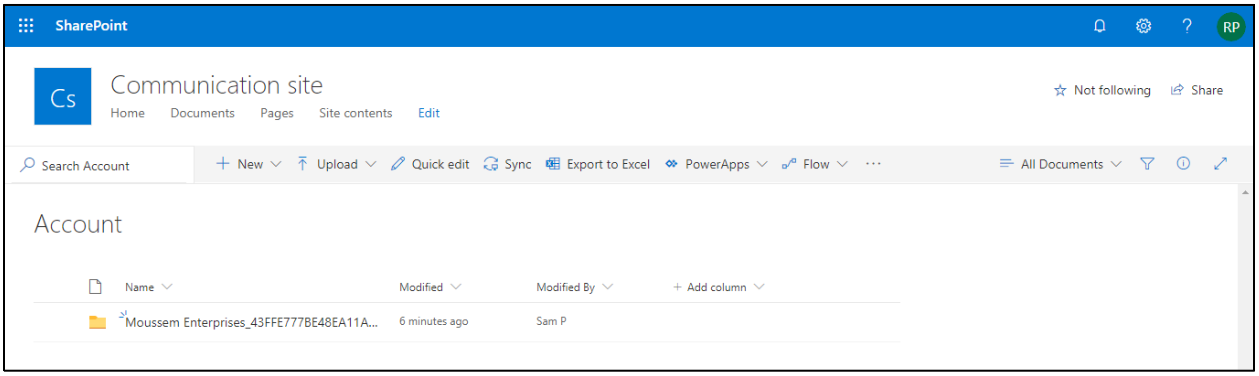
Records visible to Rhea:



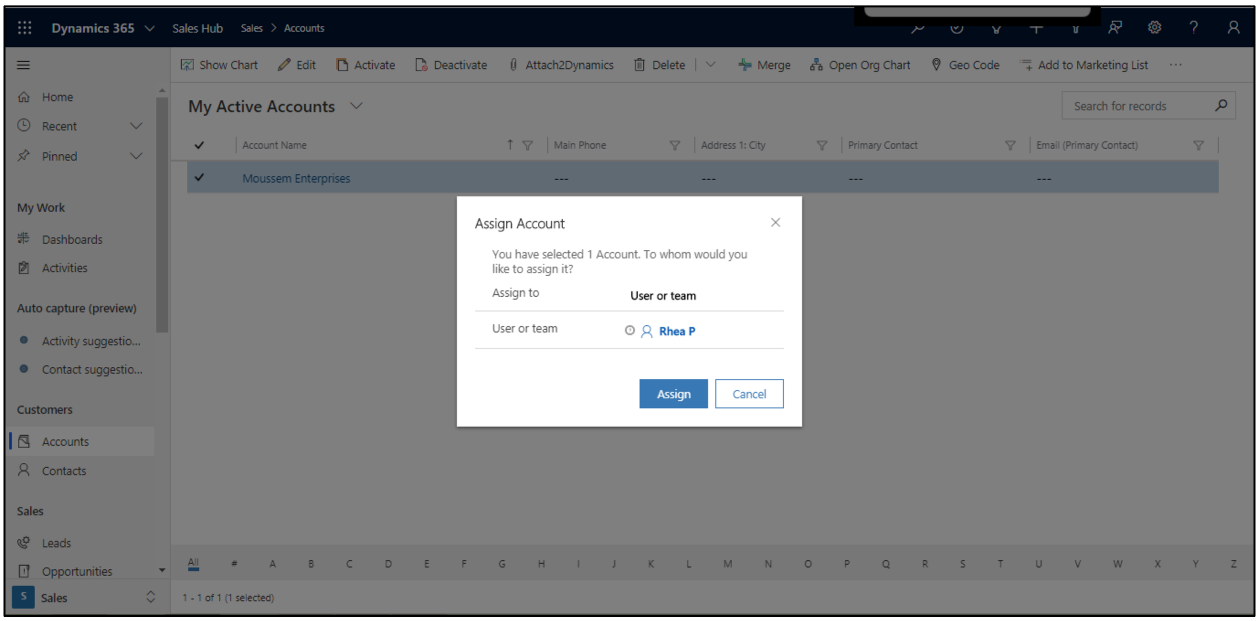
Now Sam shares the record with Rhea.



After the records are shared with Rhea she will be able to view the records owned and shared by Sam in SharePoint.

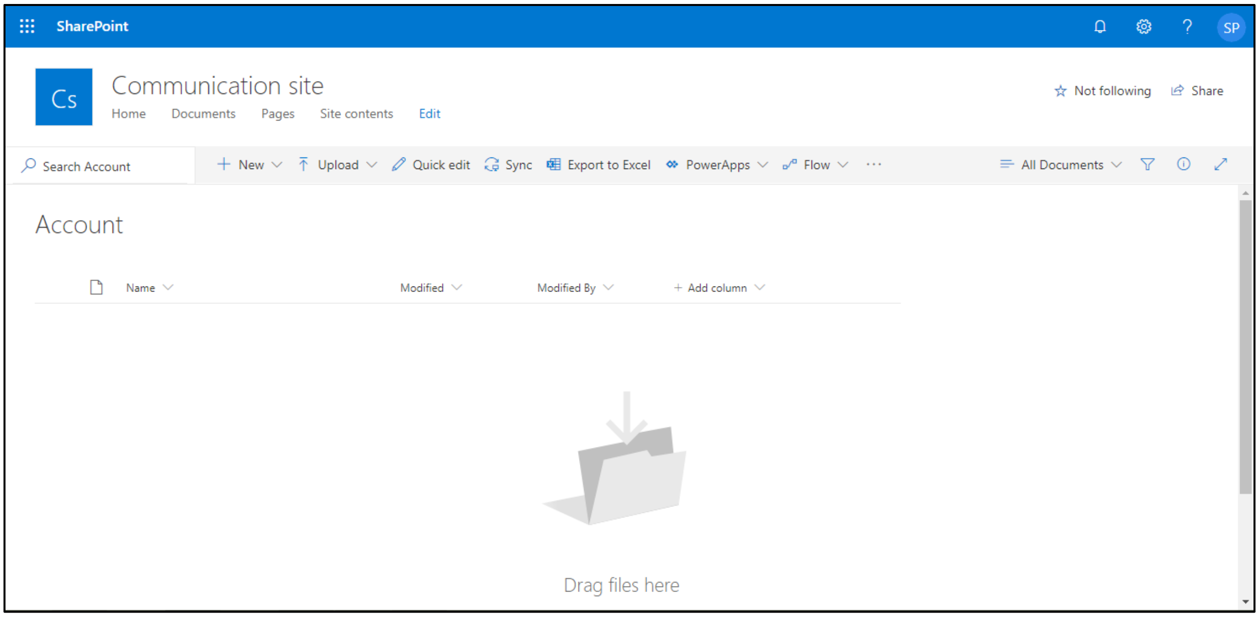


Now due to some business requirement Sam assigns the record to Rhea.

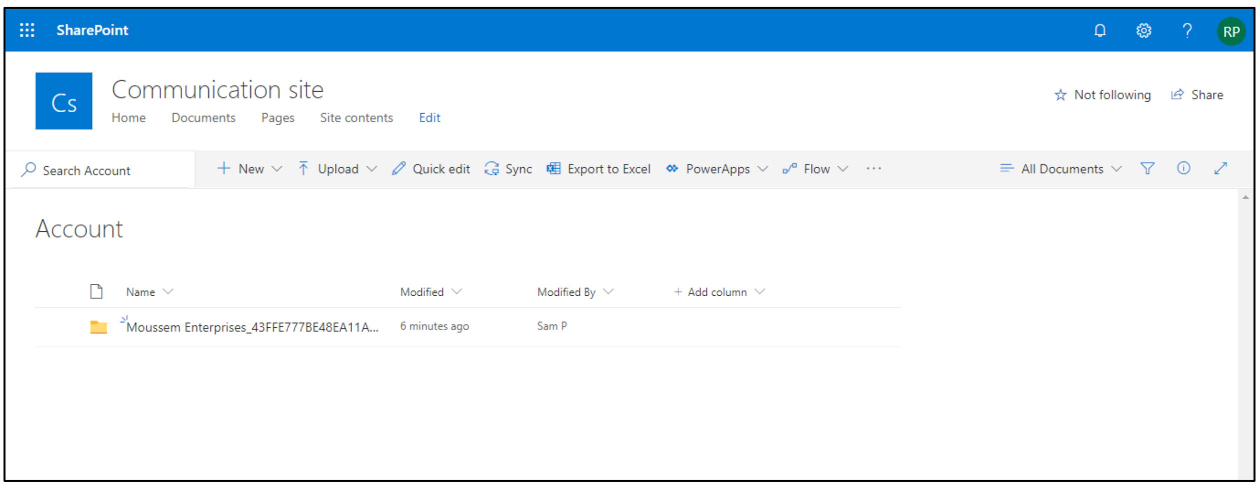


The record will not be visible to Sam anymore and will be assigned and visible to Rhea in SharePoint.

Visibility of records to Sam after record is assigned to Rhea:



Now that record is assigned to Rhea, visibility of record to her:



Modify Security Role

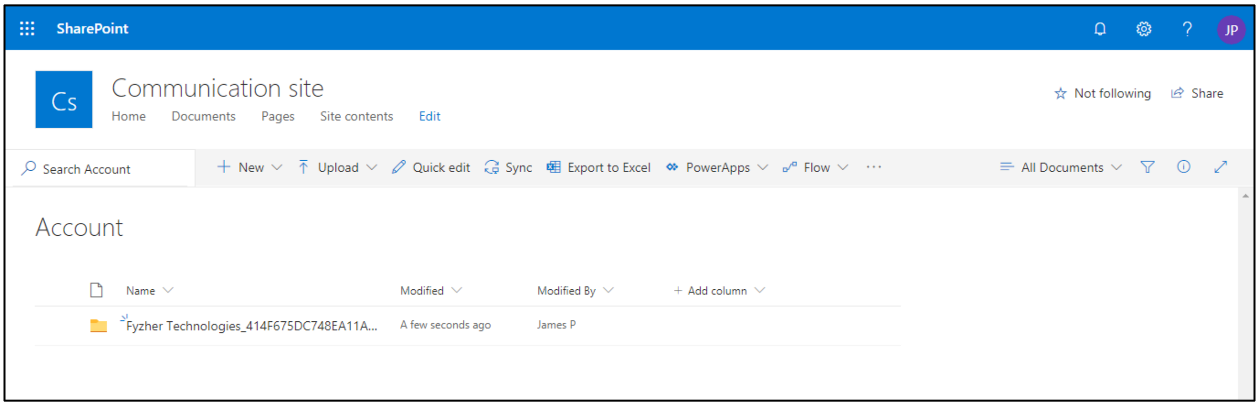
Apart from sharing and assigning records, we can also modify the security roles in Dynamics 365 which will be replicated in SharePoint. To understand this better, we have created two Business Units apart from root business unit that are: Marketing and Sales. Sales is the parent business unit of Marketing and in this example, we are working with Account entity.

Now, Sales BU has two users, James and Rhea. James is salesperson who has user level read/write access and Rhea as a Sales Manager has Business Unit read/write access.

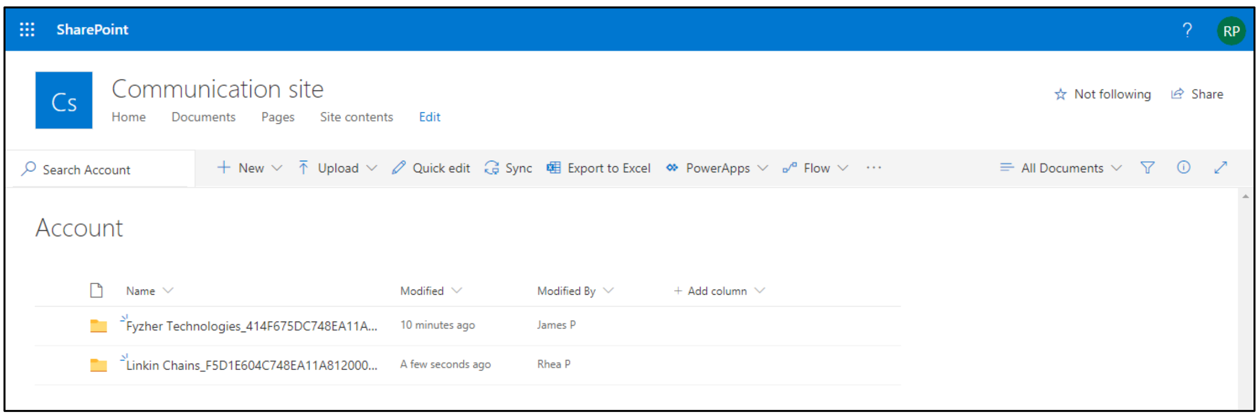
Marketing BU has one user Joe who is Marketing Manager and has organization level read/write access.

Scenario 1 Visibility:

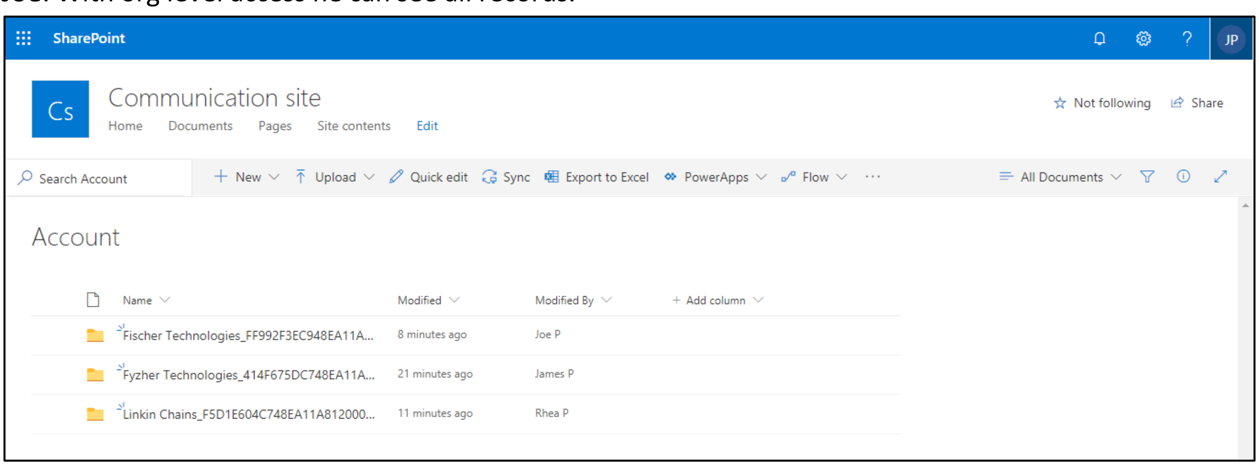
James: With user level access, he can see only his records.



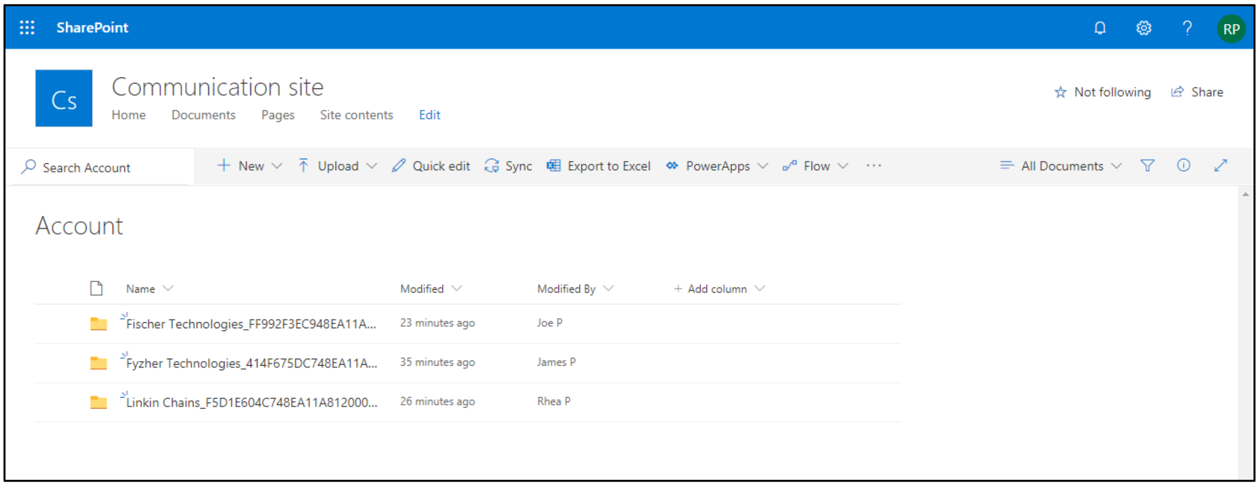
Rhea: With BU level access, she can see records of James and her own.



Joe: With org level access he can see all records.



Scenario 2 Visibility: Now we change the access level of Rhea to Parent Child Business Unit, and keep the security level access of Joe and James the same. With this Rhea will be able to see the records of both Joe and James.



Apart from these modifications the user level access comes into action even when a security role is associated/dissociated to/from a user/team or a member is added/removed from a team or security role deleted.

Bulk Migration Jobs

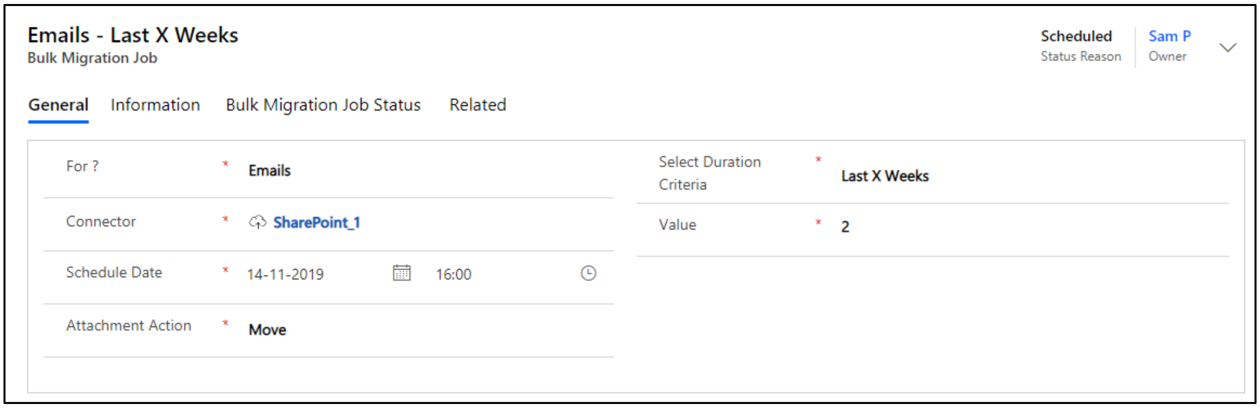
Bulk Migration Job Entity enables users to configure the bulk movement of the attachments from CRM to SharePoint and also it shows the details and status of the **migrating Emails, Notes and Sales Literature Attachments.**

Note:

- *Users are advised to do the migration during off business hours for minimum interruption as there may be bulk of data to be moved.*
- *Only the Entities where the Attachment Action is defined as Move will be considered for Bulk Migration.*

1. **General**

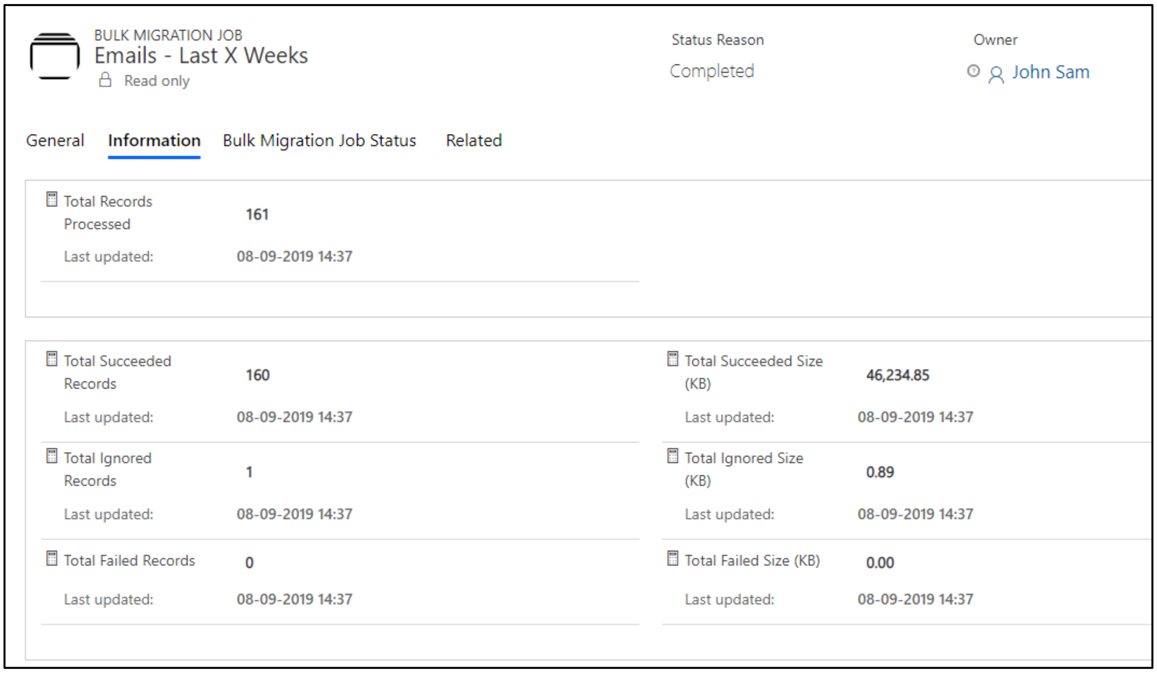
This section is where you define the period and Email/Note/Sales Literature attachment we are moving to SharePoint.



1. **For?**: This specifies whether we are doing **Bulk Migration** for **Emails**, **Notes or Sales Literature.**
2. **Connector:** In this field we specify the connector support i.e. SharePoint.
3. **Schedule Date:** Scheduled date keeps track of the date from which the migration job will start.
4. **Attachment Action:** In this field we specify the action ie. Copy or Move.
5. **Select Duration Criteria:** In this field we specify the period for which we have to migrate Note/Email Attachment/Sales Literature Attachments to SharePoint. Here, X represents Numeric Value. For e.g. Last 10 days, Last 3 weeks, etc. where the number 10 and 3 specify the Value.
   a) **Last X Days:** Specify data of how many(X) days have to be migrated to SharePoint.
   b) **Last X Weeks:** Specify data of how many(X) weeks have to migrate to SharePoint.
   c) **Last X Months:** Specifies data of how many(X) months have to be migrated to SharePoint.
   d) **Last X Years:** Specifies data of how many(X) years has to be migrated to SharePoint.
   e) **Older Than:** This moves all the Notes/Email attachments prior and inclusive of the date SharePoint.
   f) **Custom:** This specifies the period **Process From** date to **Process Till** date between which the data is to be moved to SharePoint.

Note: *The Notes and Sales Literature Attachments will be moved to their corresponding record folder and Email attachments will move to a common folder named* ***Email Attachment or Regarding Folder****.*

2. Information

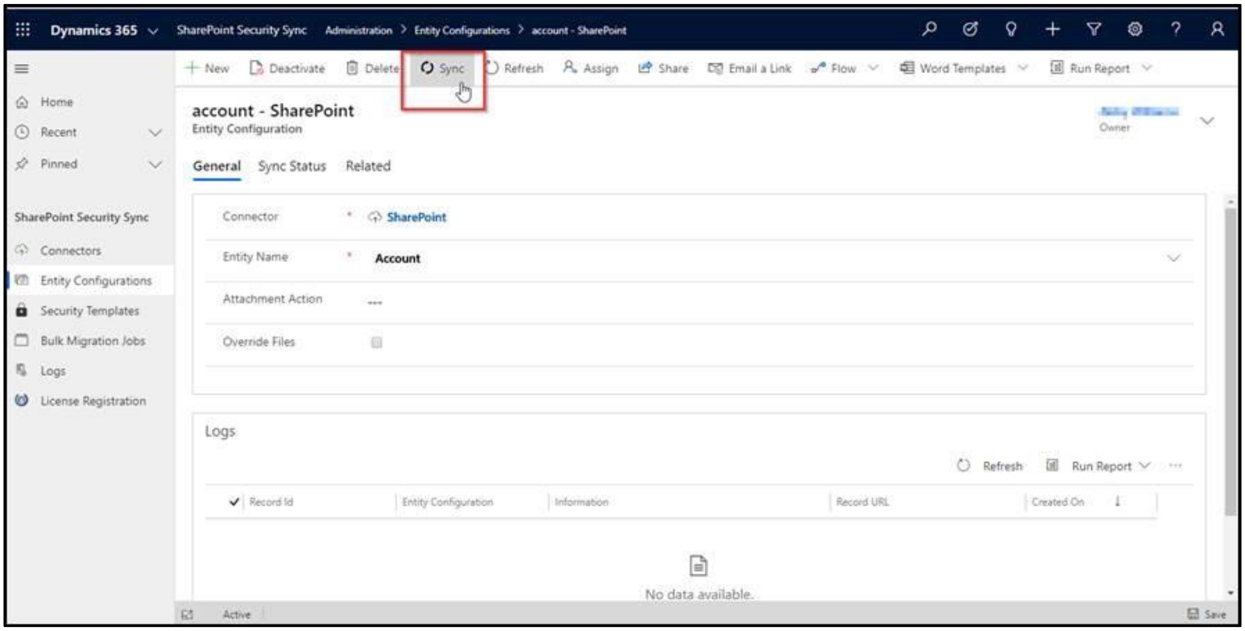


The next tab is **Information** that comprises the details of processed records.

1) **Total Records Processed:** Total number of Emails/Notes/Sales Literature attachment that are processed.
2) **Total Succeeded Records:** Total number of records that have successfully migrated to SharePoint.
3) **Total Ignored Records:** Number of records that were ignored.
4) **Total Failed Records:** Total number of records that failed in the process of migration.
5) **Total Succeeded Size (KB):** The size of records that were moved to SharePoint. This tells the Dynamics 365 CRM user how much space he has freed from the CRM.
6) **Total Ignored Size (KB):** This is the size of files that were ignored while migrating to SharePoint.
7) **Total Failed Size (KB):** Size of failed files while uploading to SharePoint.

Sync Button

Sync button is visible only if there are failed sync records. In such a case just click on the 'Sync' button to complete the syncing process.



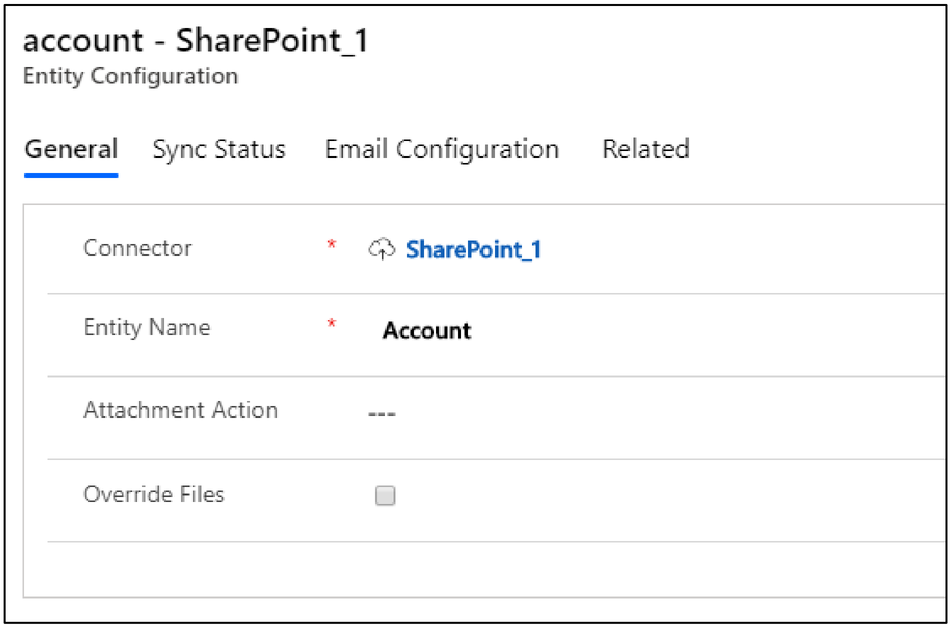
Visibility of Attach2Dynamics button

*A*ttach2Dynamics button is visible only if;

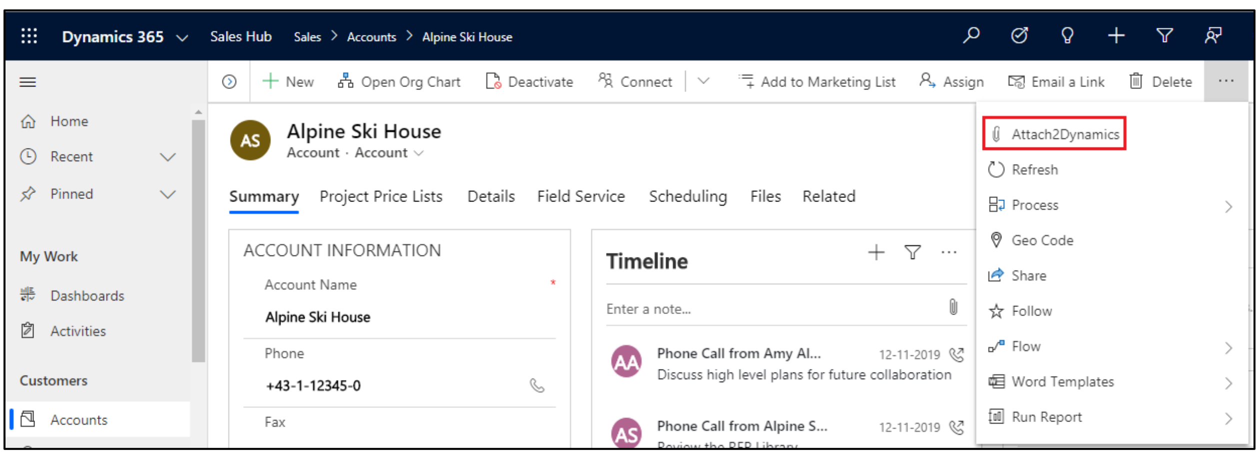
1) Logged in User is either has SharePoint Security Sync User or Administrator role
2) Entity Configuration record exists for that entity.

Use of Attach2Dynamics

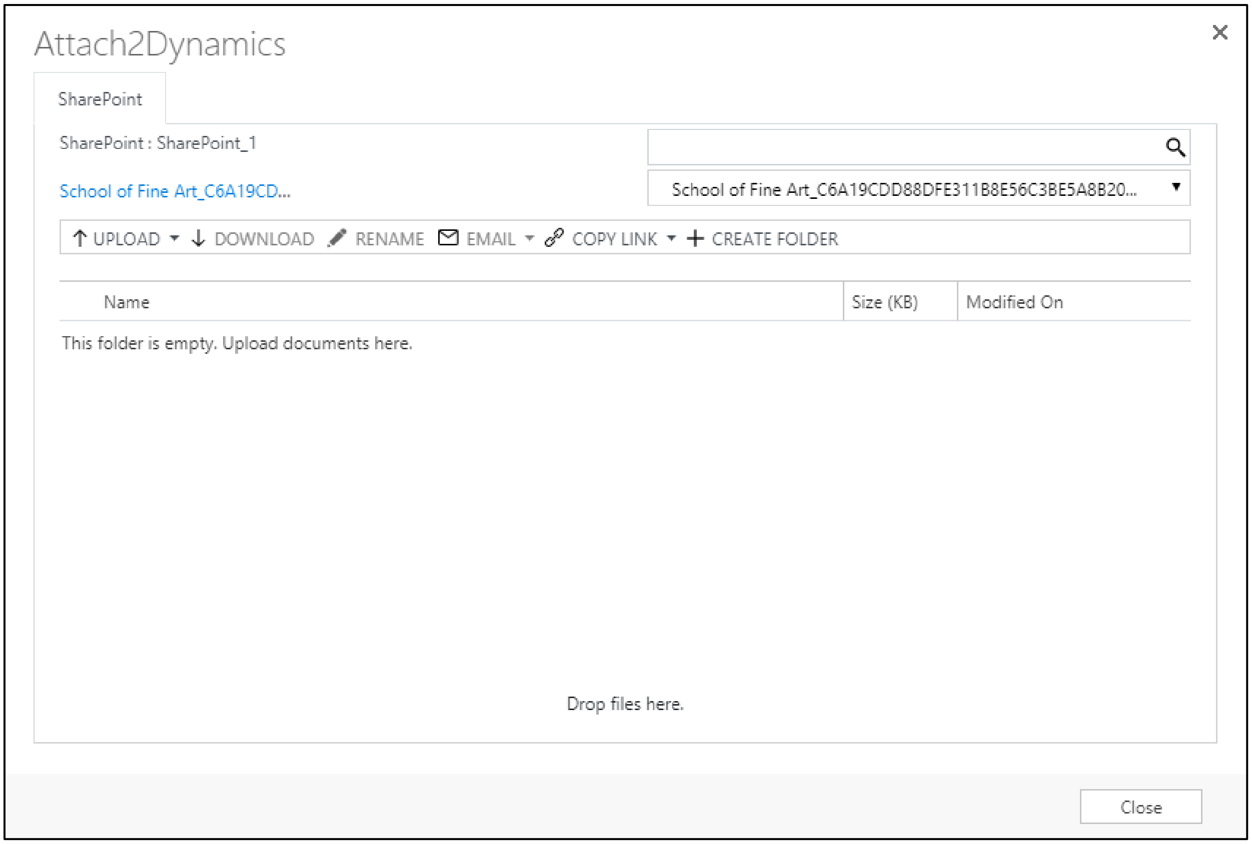
Once Entity Configuration record is created user can start using Attach2Dynamics. Let's take an example of Account entity. Suppose Entity configuration record for Account entity with SharePoint connector is created.



Attach2Dynamics button will be seen in the Command bar.



On Click of the button, Attach2Dynamics window opens.



Below are the features:

a) **Drag and Drop Files and Folders:** Users can drag and drop multiple files and folders at one time to SharePoint.
Note: Drag & Drop of files and folders is not supported in IE.

b) **Upload:** Users can upload multiple files and single folder at a time using the solution. They get user-friendly UI to see the list of files uploaded on SharePoint against the current record. Upload Folder through button is not available on IE.

c) **Download:** Users can get access to all documents of required storage system and download them. Bulk download of files is possible. Download of folder is not supported for SharePoint.

d) **Rename:** Users have the option to rename the documents by selecting the required files and folders.

e) **Copy Link:** Users can simply copy and paste the generated link for the selected document using this option when required to be sent outside the Dynamics 365 CRM.

If only **View** is selected then the document is available in read only mode whereas, if **Edit** mode is selected then the document is available for editing.

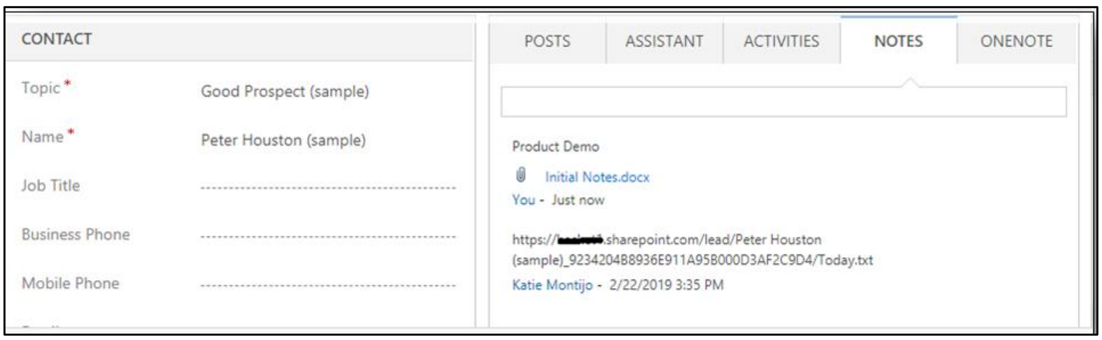
f) Create Folder: Users can create folders in SharePoint as per requirement.

g) Deep search Tab: Users can deep search for files/folders related to the entered keyword in the search tab and obtain all the documents with the search name in the enlisted file area. Deep search allows you to search for files or folders based on your current path. If you are currently in a "/A.Datum/Sample" path and if there are more folders/files inside that path, if you search for any keyword it'll scan till the last file and folder and return the result.

h) Move/Copy Dynamics 365 CRM Attachments: Users can move/copy Dynamics 365 CRM Notes Attachments/Email Attachments and Sales Literature Attachments to SharePoint.

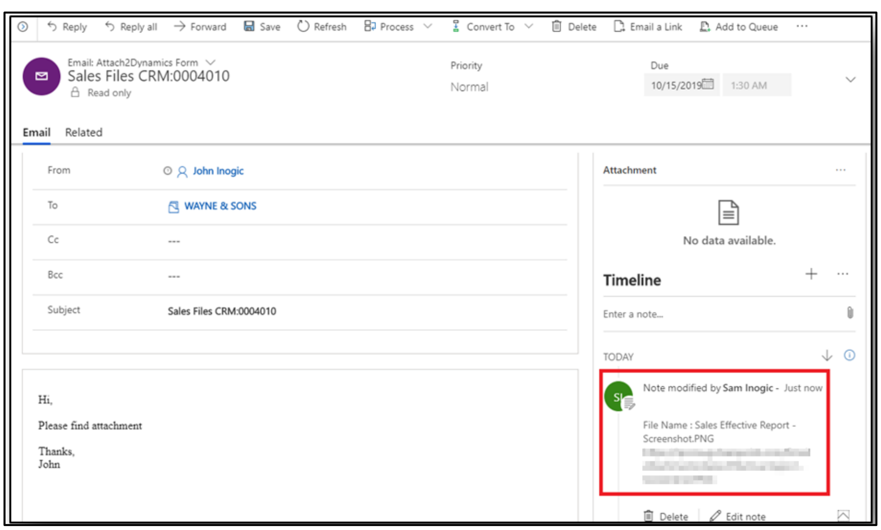
a. Notes:

If enabled, it'll move/copy the Note Attachments to the respective entity folder and leave a path in the Note Body.



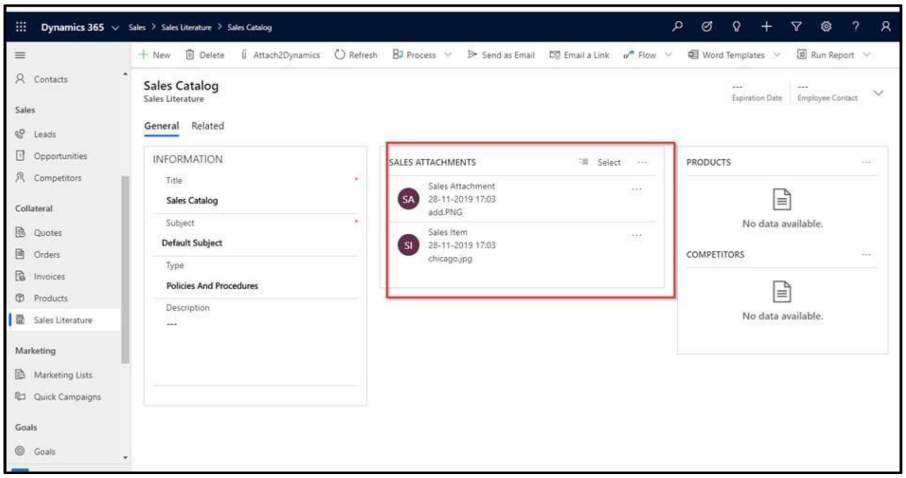
b. Email Attachments*:*

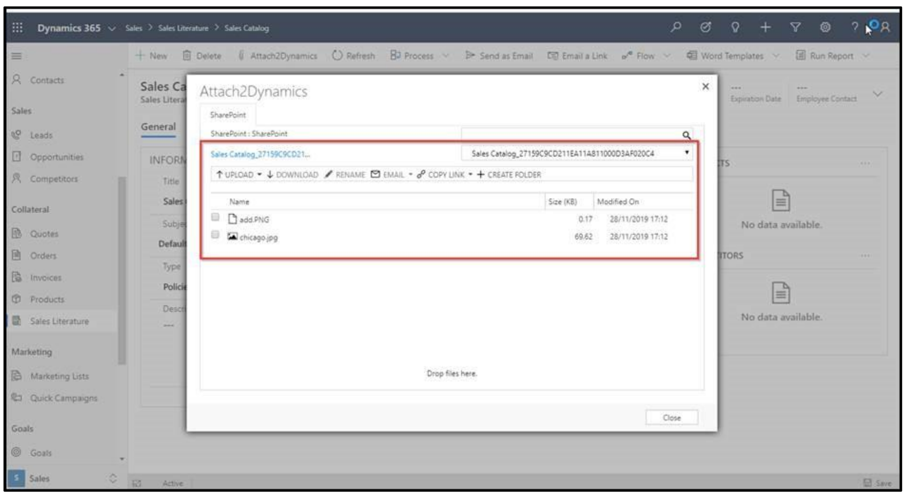
If enabled, it'll move/copy the Email Attachments to a common folder called Email Attachments or Regarding folder and leave a path in the Note Body.



c. **Sales Literature Attachments**:

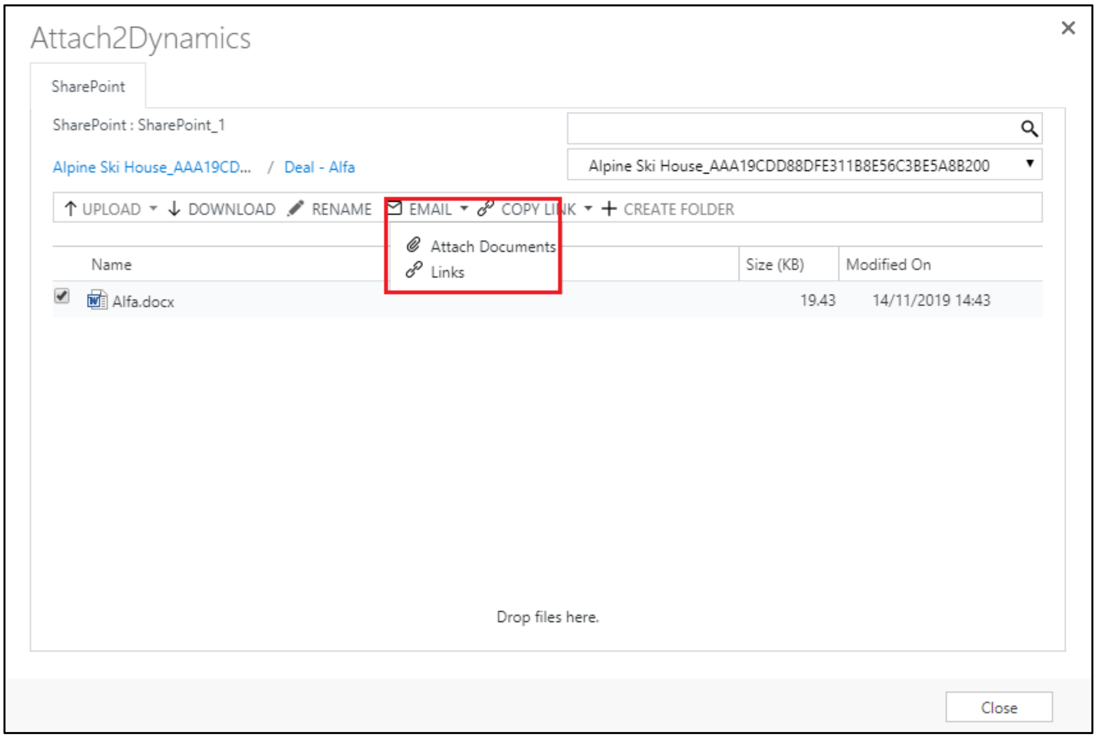
If enabled, it'll move/copy the Sales Literature Attachments to the respective Sales Literature folder.



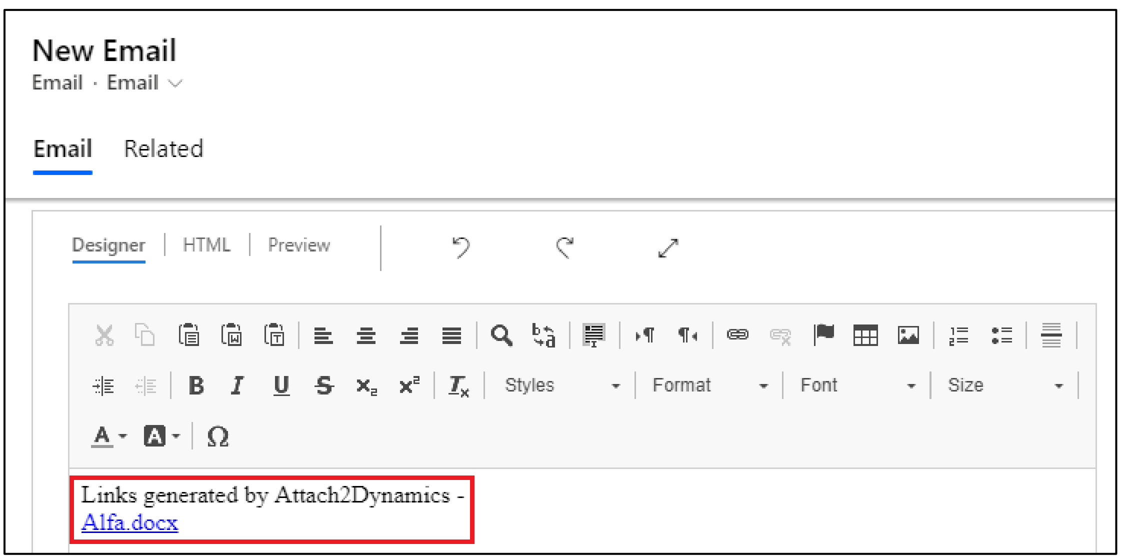


i) Document Location: For a record, we can have multiple Document Locations within SharePoint Site. With the help of Attach2Dynamics, you can select which folder (Document Location) you want to upload the file in an easy to use UI.

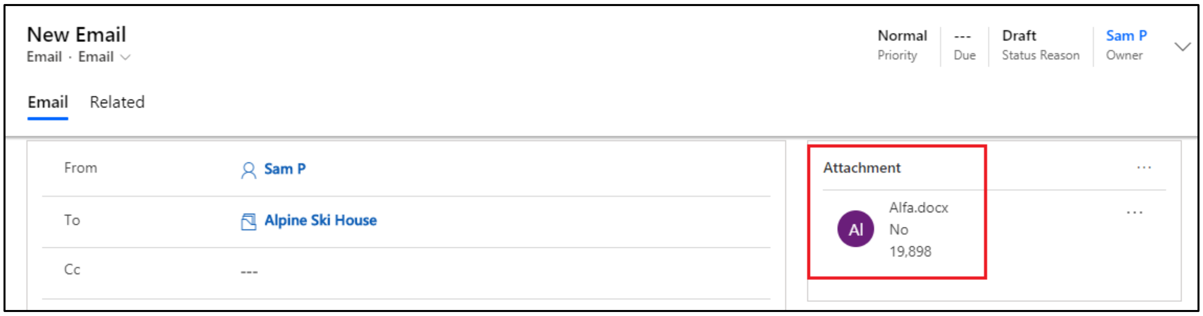
j) **Email:** Users also have an option to send an email. There are two options for this – send as Link or Attachment.



1) **Links:** On selecting this option you can insert the file's/folder's link in the email body. The below window opens on choosing the option 'Link' with link of file in email body.

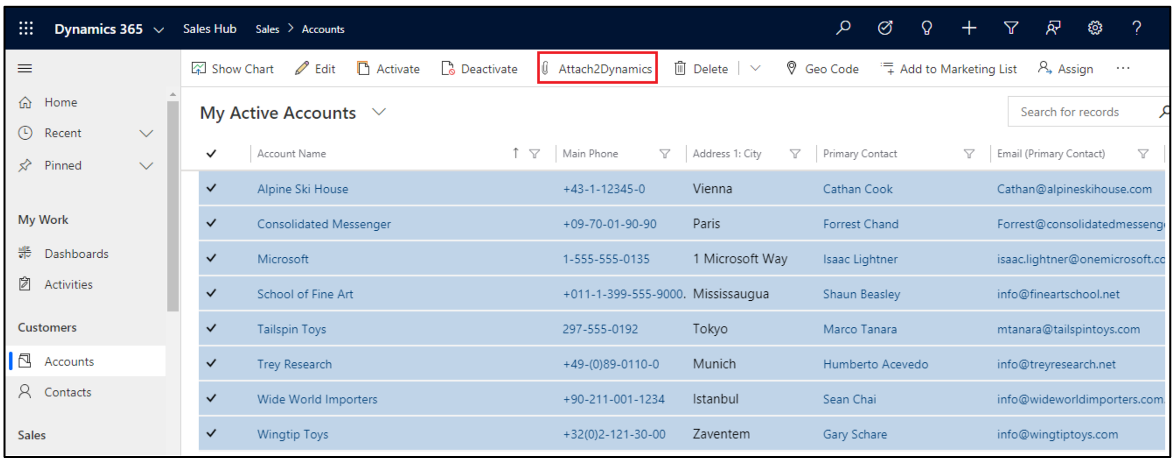


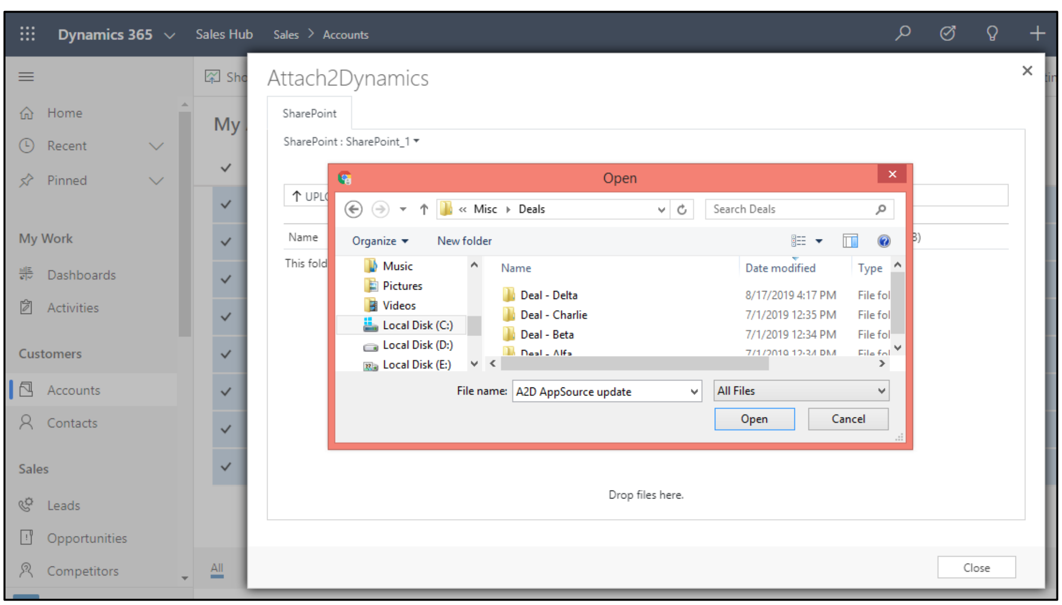
2) **Attach Documents:** On selecting this option you can attach the file itself in the email body. The below window opens with file as attachment by choosing 'Attach.'



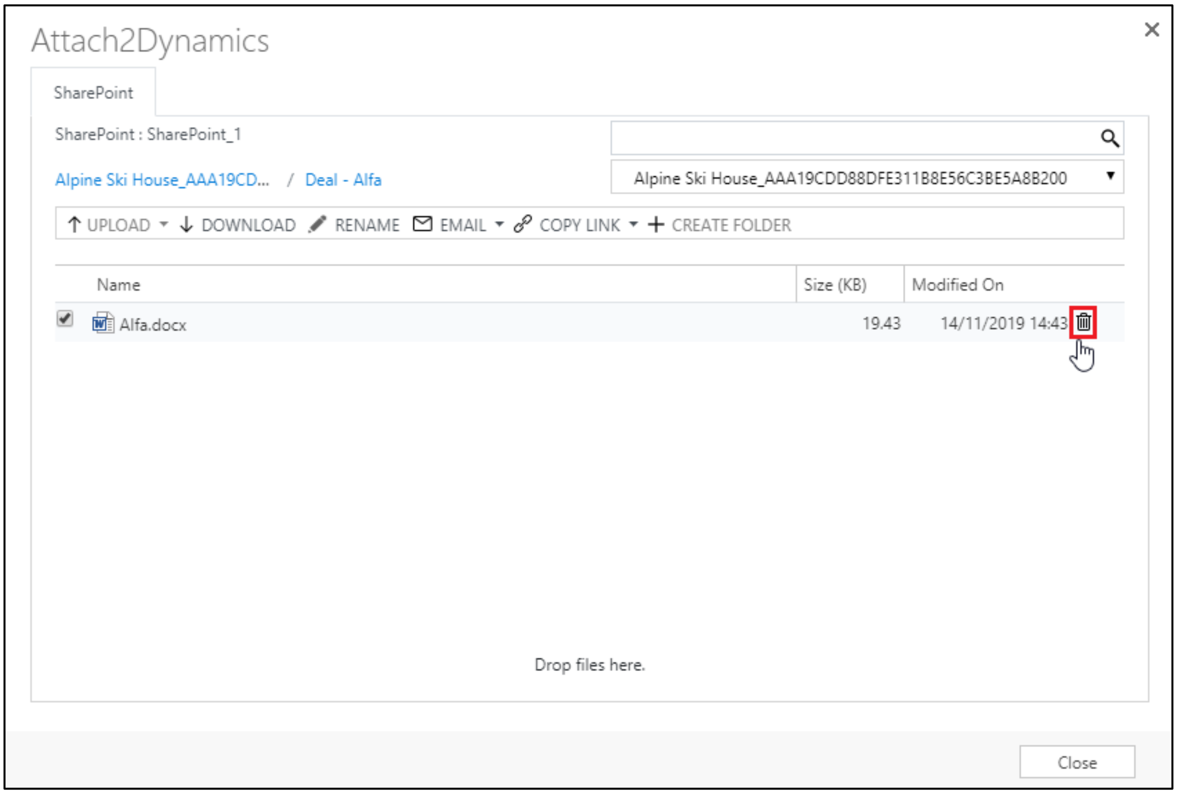
Note: Email can be sent only with files and not folders. Also, multiple files can be sent in single mail.

k) **Support for uploading files from Home Page:** Upload files from home page directly for the selected records.

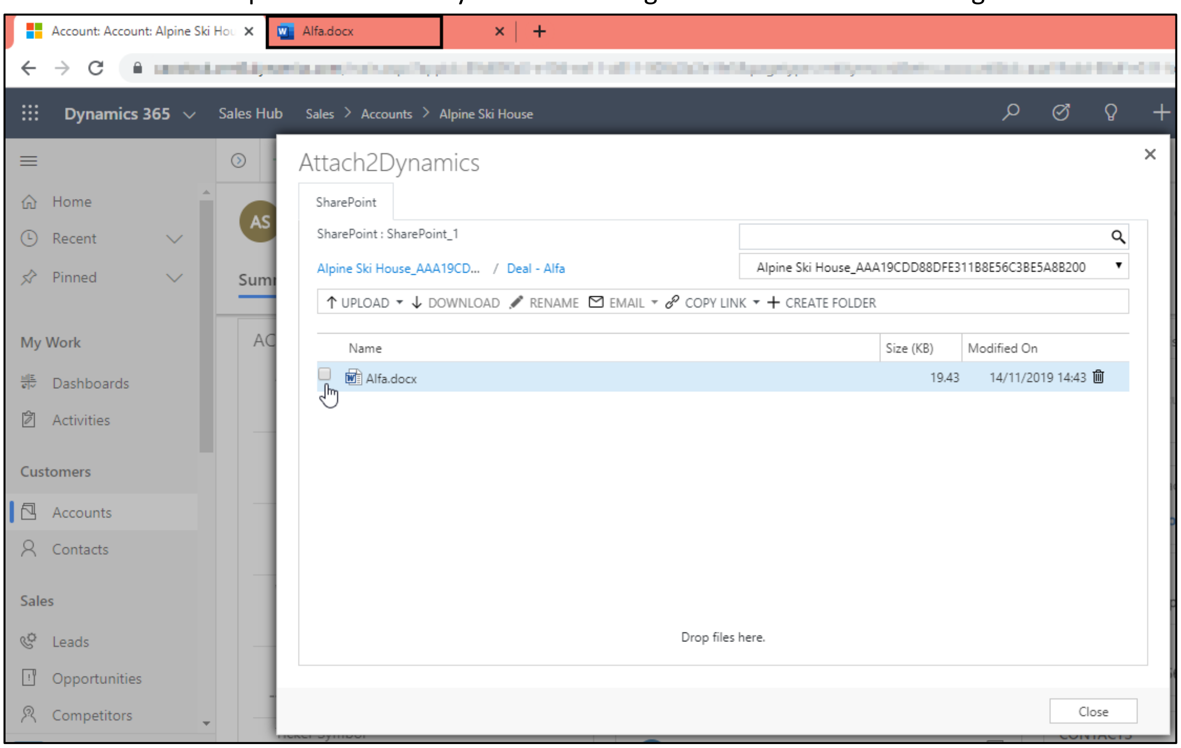




l) Delete: Users can delete files from SharePoint.



m) View Files: User can preview necessary files with a single click before downloading it.



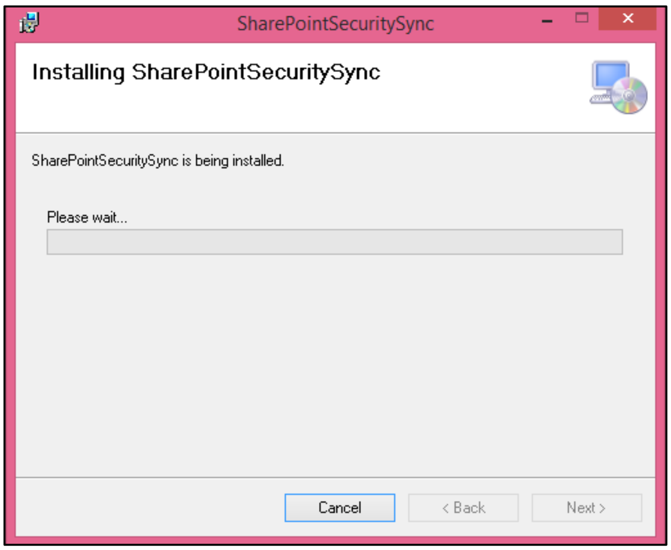
SharePoint Security Sync Tool

SharePoint Security Sync Tool enables you to sync previous records in bulk. Syncing security privileges for records in bulk is a tedious and time consuming task. In such situation SharePoint Security Sync Tool can be used to carry out this huge task. It relatively takes less time to sync records with SharePoint Security Sync Tool.

Pre-requested - .NET Framework 4.6.2 or above.

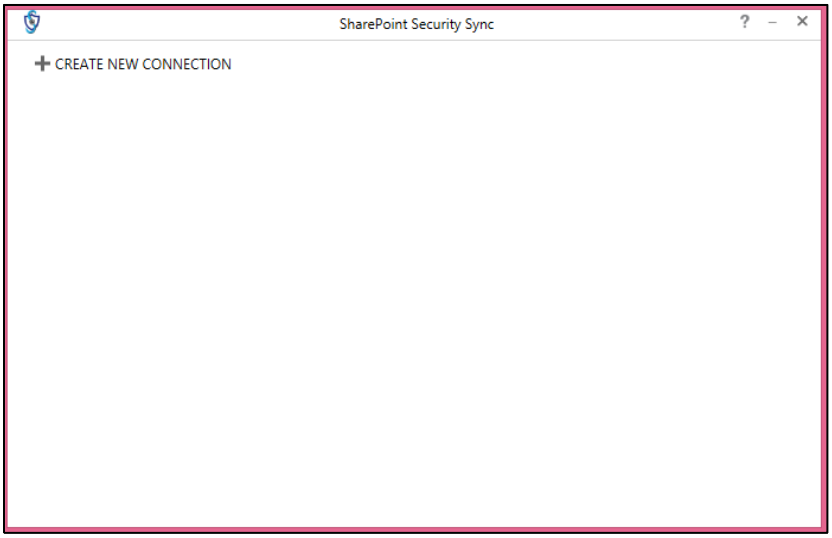
SharePoint Security Sync Tool Installation

Download and Install SharePoint Security Sync tool in your system.

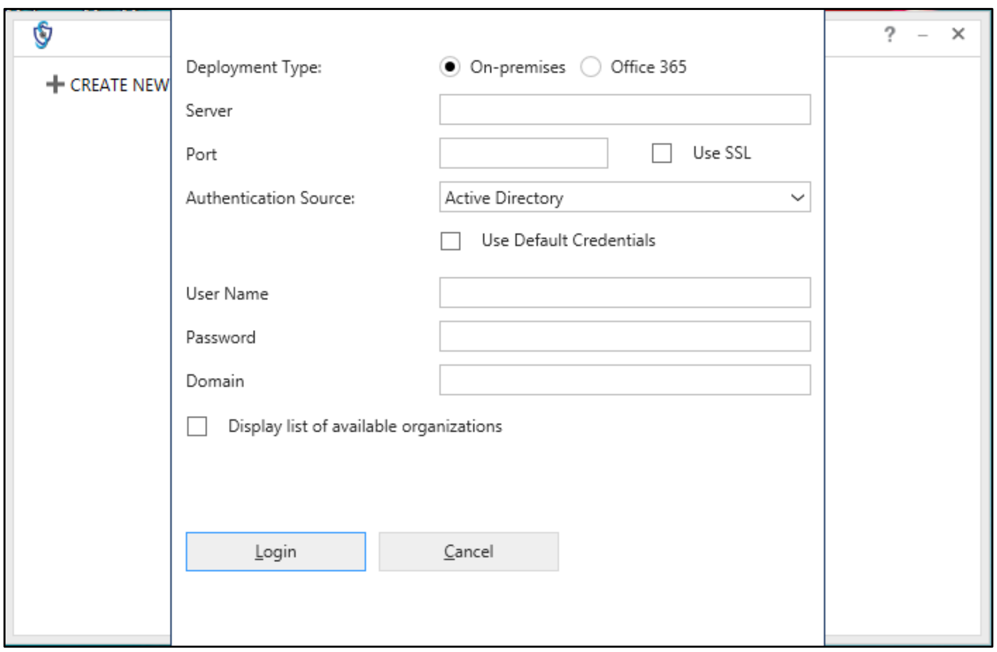


After installing SharePoint Security Sync Tool in the system, next is Configuration. To configure the tool just follow the steps given below:

- Click on the SharePoint Security Sync Tool icon to open the tool.

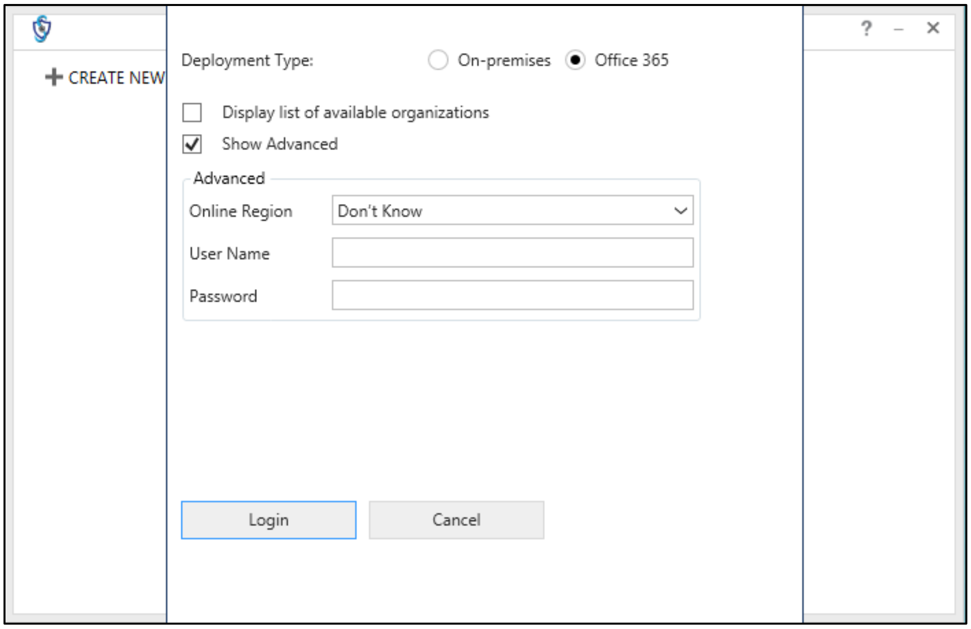


- Click on **'+ Create New Connection'**.



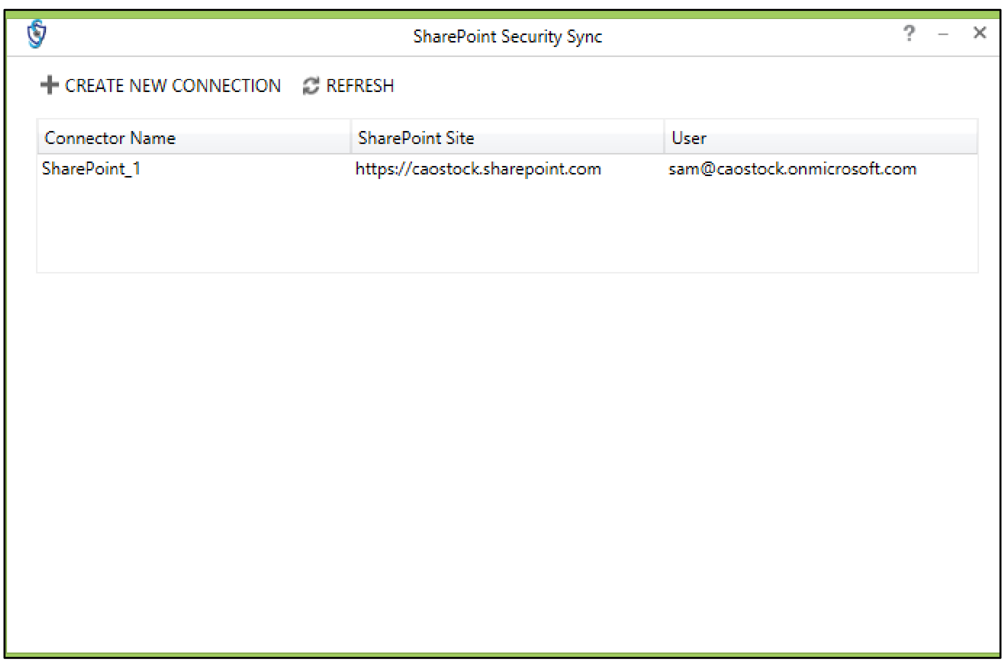
- Select deployment type as 'Office 365' and fill the following details in given fields.
  - **Display list of available organizations:** Enable the checkbox in case of multiple organizations in CRM
  - **Online Region:** Select the respective region
  - **Username:** Use the CRM username
  - **Password:** Use the CRM password

After filling all the details click on 'Login'.



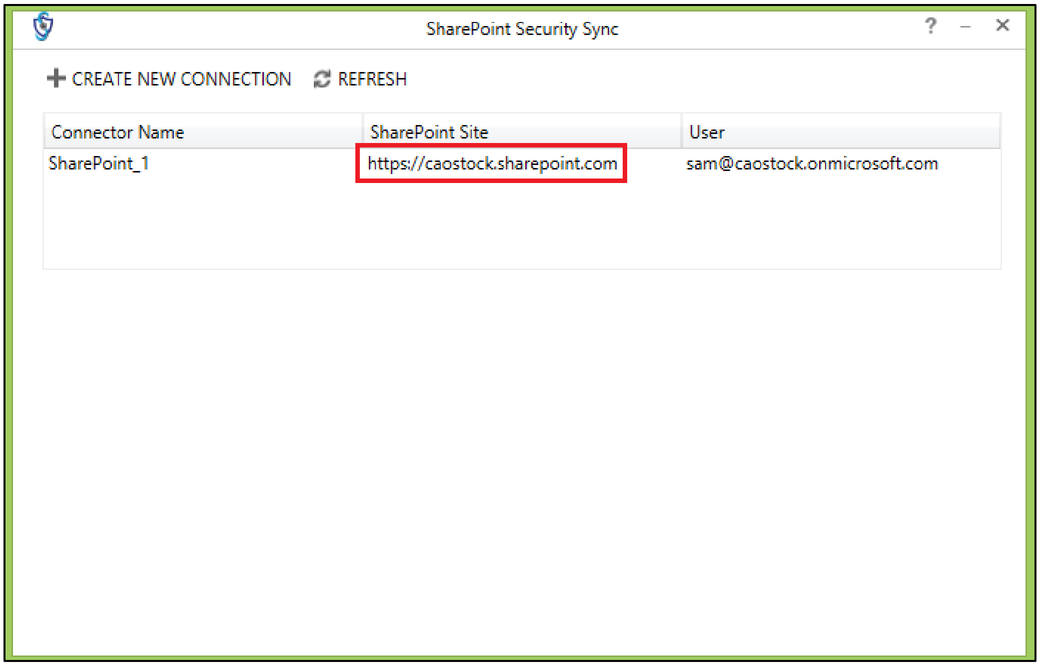
SharePoint Security Sync Tool Functions

Once logged in, you will find details of all the configured connectors. Select any one of the connectors for which you want to sync the security privileges. If more connectors are added then click on 'Refresh' button on the top to update connector details.

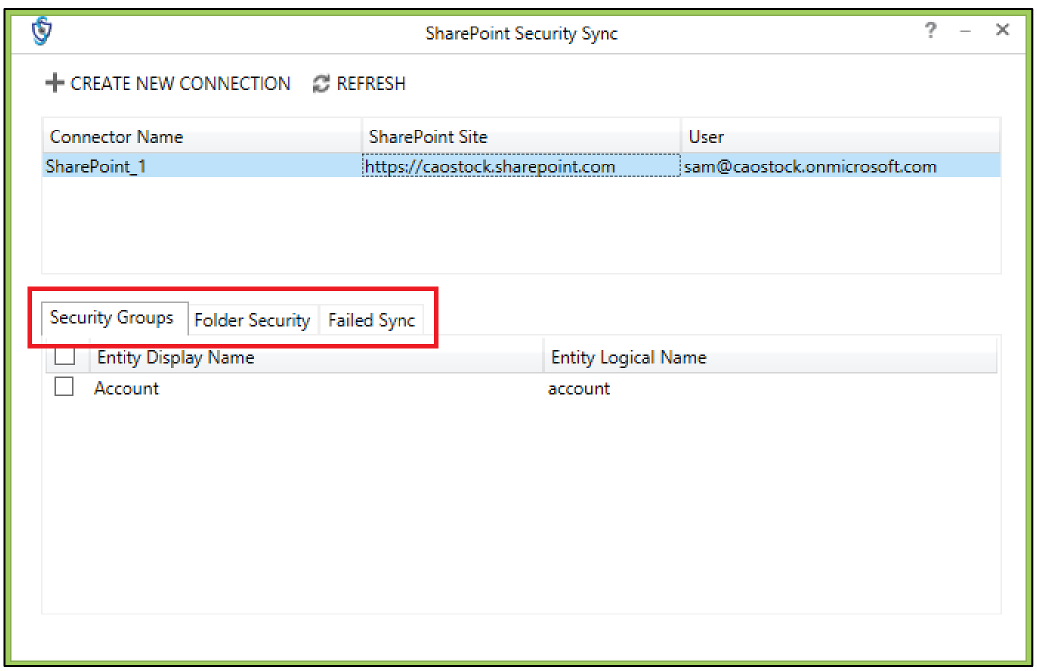


Now let's go through the different functions of SharePoint Security Sync Tool.

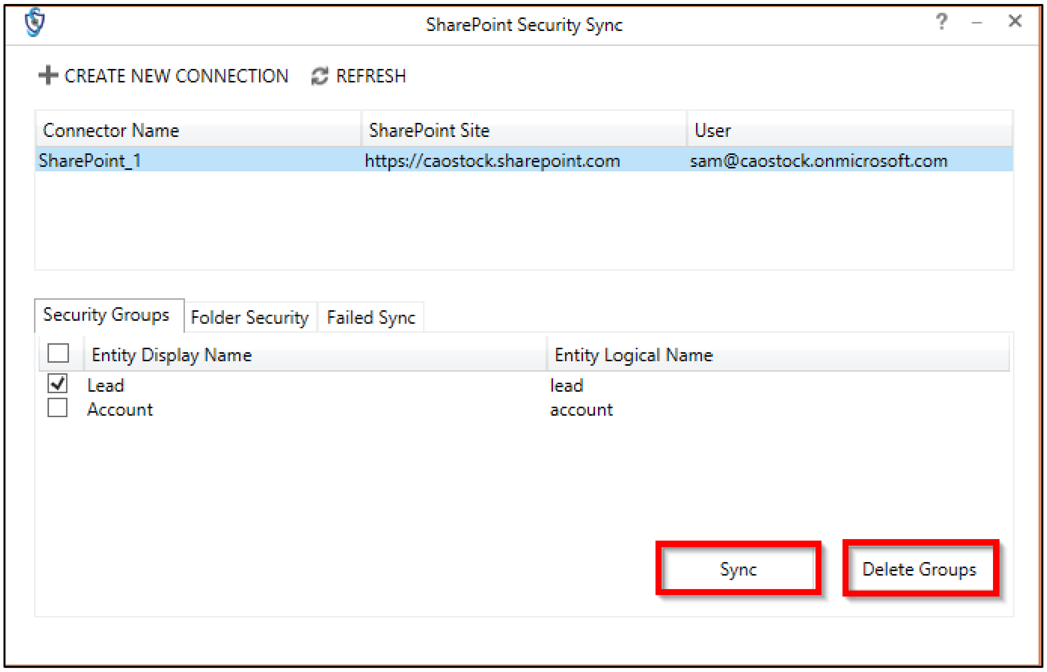
1. First click on the respective SharePoint Site.



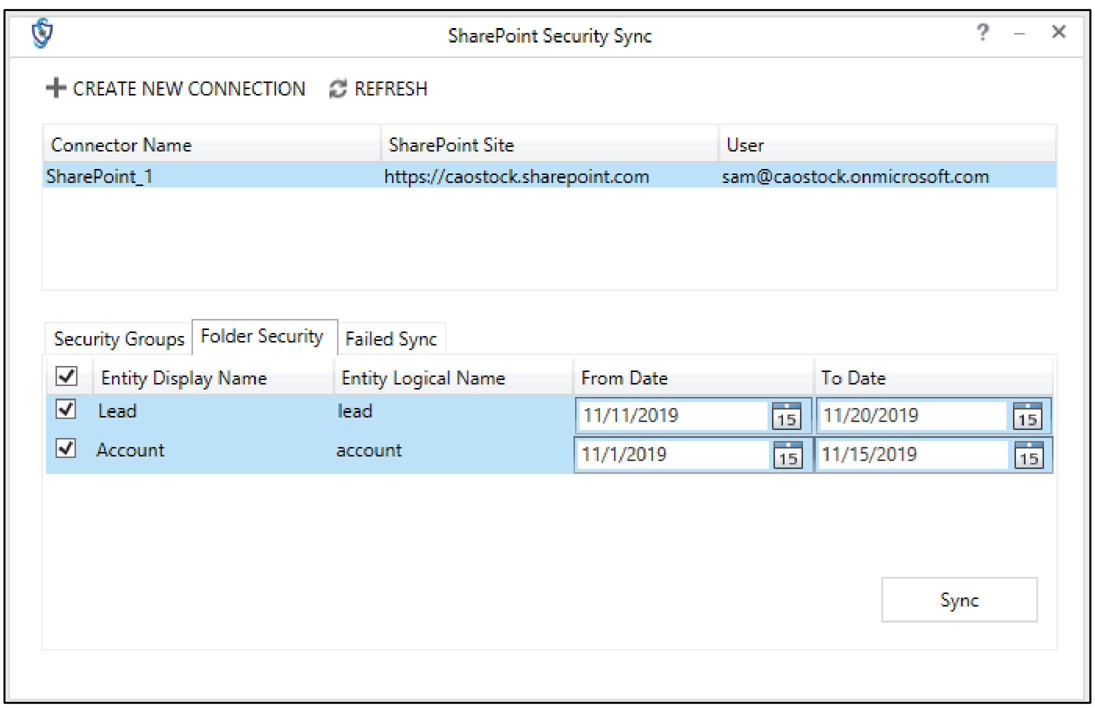
2. After clicking on respective SharePoint Site, three new tabs will be displayed – Security Groups, Folder Security and Failed Sync.



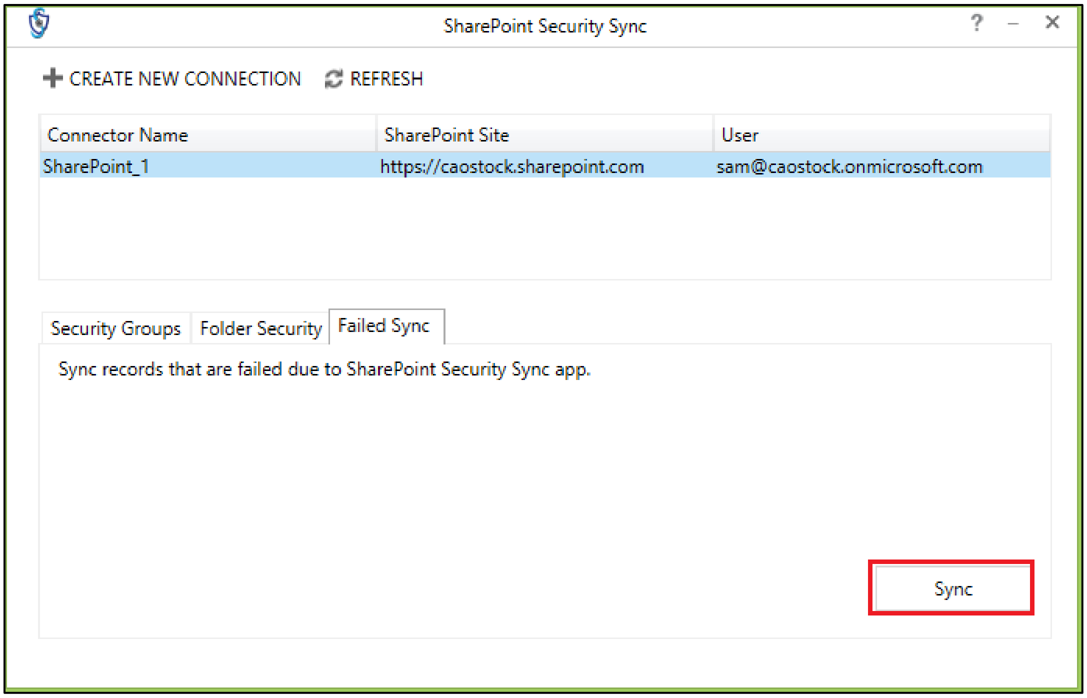
3. Now, click on first tab – Security Groups. Here, all the existing configured entities will be displayed. Select any entity. After selecting the entity, two buttons will appear – Sync and Delete Groups. Click on 'Sync' button to create groups against that entity. Click on 'Delete Groups' to delete all the existing groups against that entity.



4. Next tab is Folder Security. With this tab you can sync/assign groups for a selected period of time.



5. The last tab is Failed Sync. Click on the 'Sync' button to sync all the failed records.

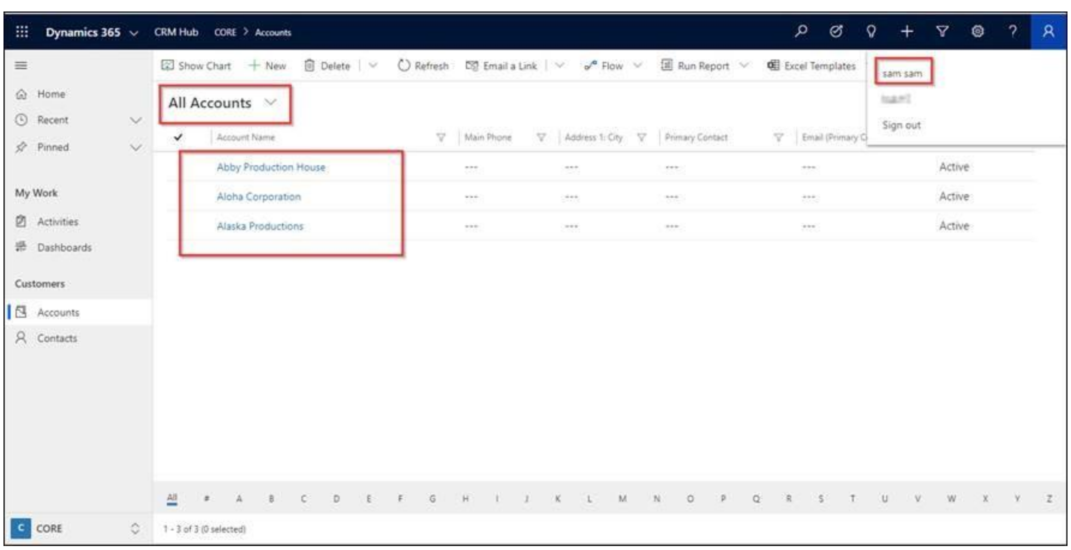


SharePoint Security Sync Use Case

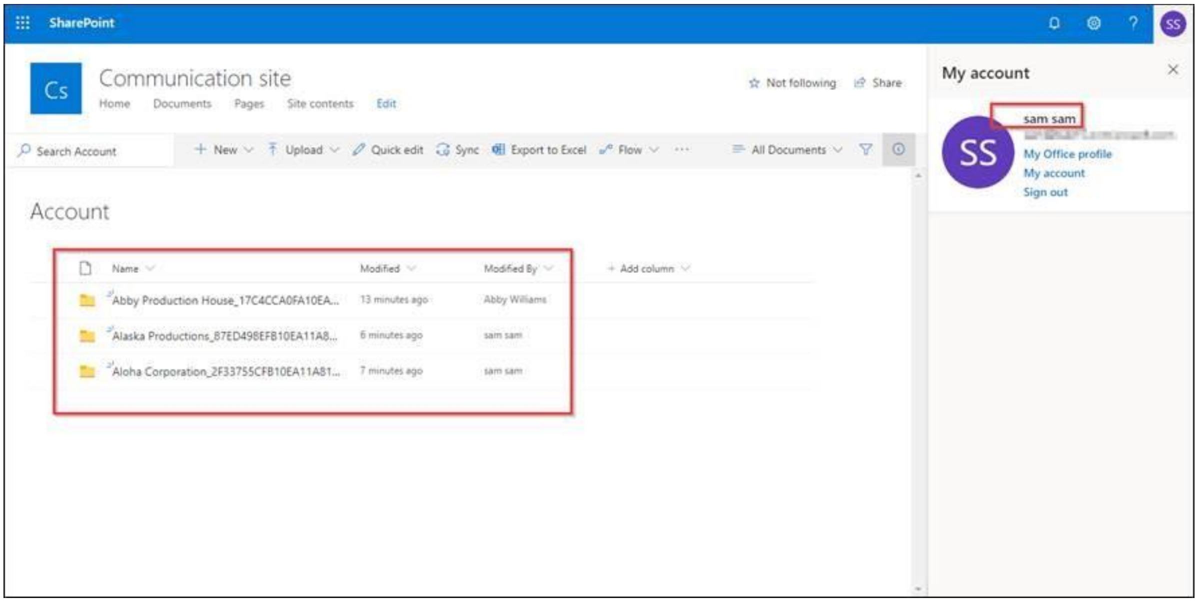
To better understand how SharePoint Security Sync works let's consider a use case.

Consider there are 2 users – User A and User B. Here, User A has organizational level access. This provides User A access to all records in both Dynamics 365 CRM and SharePoint.

Access in Dynamics 365 CRM:

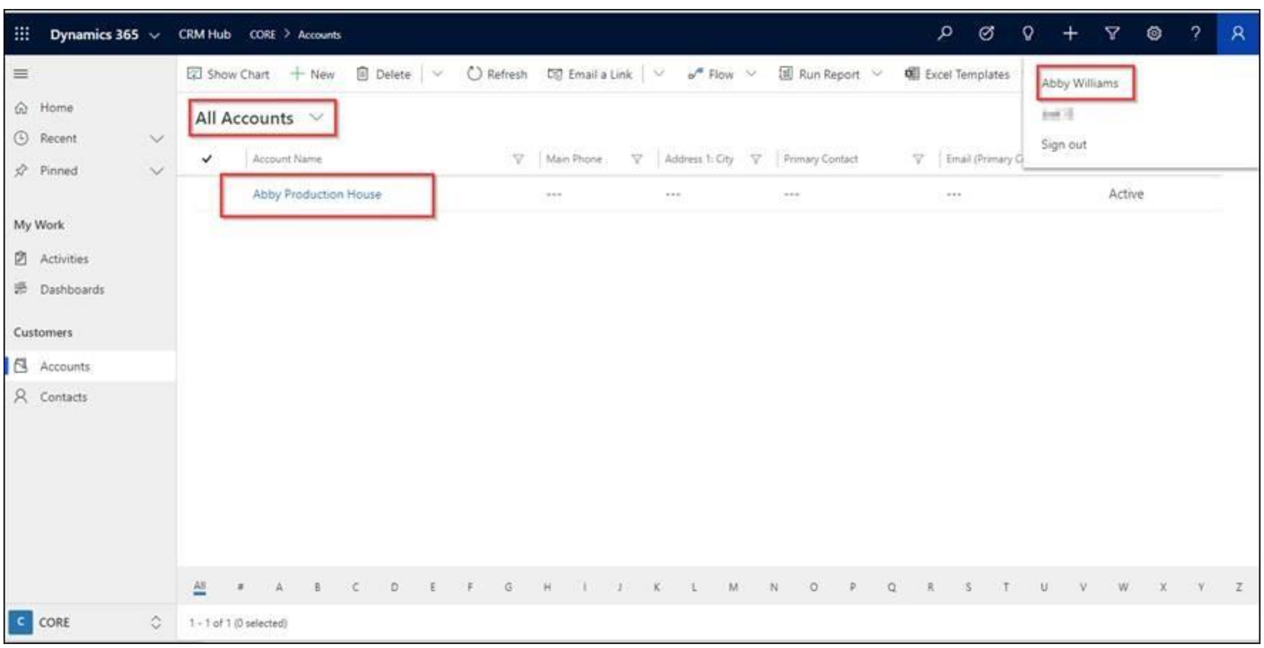


Access in SharePoint:

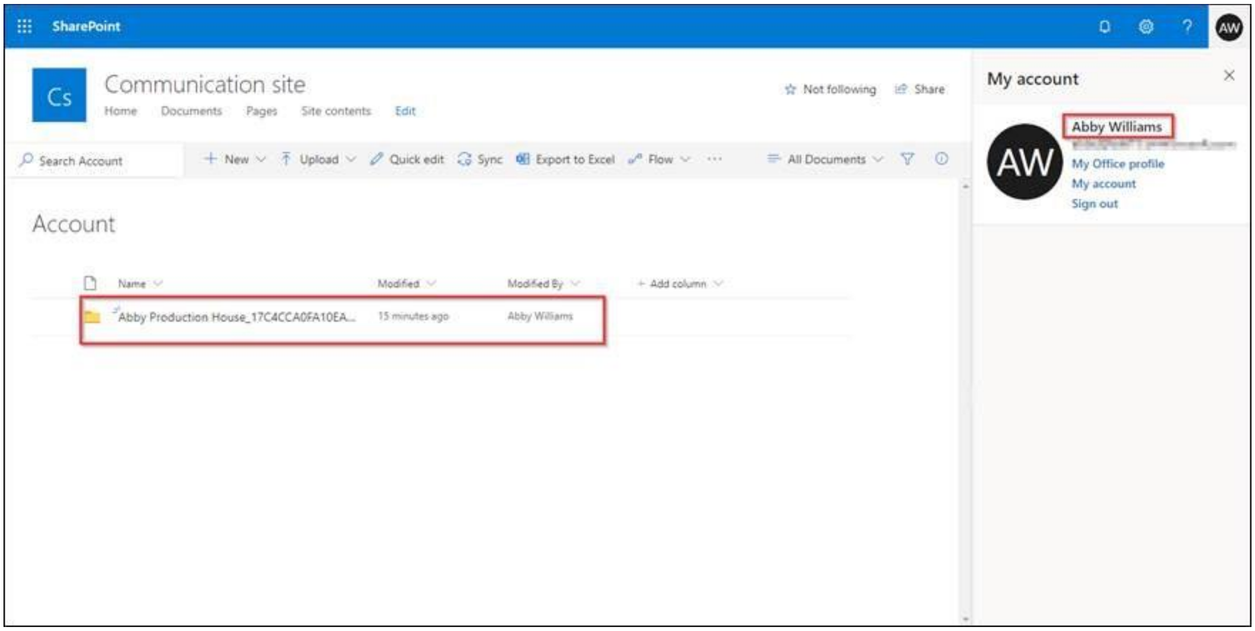


Now User B has only user level access. Here, User B will have access to only those records that are created by him/her.

Access in Dynamics 365 CRM:



Access in SharePoint:



Log

View and track any errors occurred during the functioning of SharePoint Security Sync.

Contact Us

M/S. INOGIC TECH (INDIA) PVT. LTD.

A/301, Everest Nivara InfoTech Park,

TTC Industrial Area, MIDC, Turbhe

Navi Mumbai, Maharashtra 400705

INDIA

E-mail : crm@inogic.com

Skype : crm@inogic.com

Twitter: @inogic