

DocuLink



DocuLink 
Link your relative Objects files in Salesforce

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DocuLink Introduction

Doculink is a package innovated to link the salesforce files from one object to another object which has relationship between those and by setting up the configuration in metadata. Based on metadata configuration mapping when we upload any file into the salesforce object record it creates the ContentDocumentLink records with other SObjects using LinkedEntity field as per setup of metadata configuration records.

DocuLink is a managed package app developed by **Kolvan Corporation** and available in **salesforce AppExchange**.

Features:

1. Link the uploaded file 1-n sObjects at instance of time.
2. Works for both Parent-child and child-Parent file link
3. User based controlling to allow or not allow file to link more than one object at a time.
4. DocuLink log object to capture the errors during file link process
5. Custom setting-based control of Logs to capture
6. Easy control or setup of metadata to link objects for file upload mapping.
7. No need to upload the same file into multiple objects or hierarchy records which will consume lot of file storage, because of DocuLink same file will link to multiple object records. File storage memory will be saved.

Installation Steps

A Salesforce administrator can install the DocuLink App Launcher package by following these steps:

1. Find the DocuLink app you want from the Salesforce AppExchange:
 - a. Log in to Salesforce as an Administrator.
 - b. Select the Salesforce App Launcher grid.
 - c. Select the View All link.
 - d. Select the Visit AppExchange button in the upper-right. The AppExchange dialog box opens.
 - e. Use the Search AppExchange field to find the app you want.

2. Select the **Get it Now** button. The Log in to AppExchange dialog box opens.

3. Select the Open Login Screen button. The Allow Access dialog box opens.

Important: If prompted, enter Salesforce production administrator credentials, even if you are installing in a Sandbox. You are logging into the AppExchange here, not your Salesforce organization.

4. Select the Allow button.

5. Select the **Install** Here button under the **Install in This Org** header. Or select the Install in Sandbox button to test first. The Confirm installation details dialog box opens.

6. Complete the following from the Confirm installation details dialog box:

- a. Tell us about yourself: Enter information in the required fields.
- b. I have read and agree to the terms and conditions: Check this box.
- c. Confirm and Install: Select this button. The Install dialog box opens.

7. Complete the following from the Install dialog box:

Warning: The app may need to be uninstalled and reinstalled for all users later if you select the **Install for Admins Only** or **Install for Specific Profiles** options when installing the app.

- a. Select the **Install for All Users** radio button.
- b. Select the **Install** button. The Upgrade button appears if you have an older version of the app installed. The Approve Third-Party Access dialog box opens.



Install DocuLink

By Kolvan Corporation



☐ Install for Admins Only



☒ Install for All Users



☐ Install for Specific Profiles...



You're installing a Non-Salesforce Application that is not authorized for distribution as part of Salesforce's AppExchange Partner Program. [?](#)

☒ I acknowledge that I'm installing a Non-Salesforce Application that is not authorized for distribution as part of Salesforce's AppExchange Partner Program.

Install

Cancel

App Name	Publisher	Version Name	Version Number
DocuLink	Kolvan Corporation	DocuLink 2021	1.1

8. Complete the following from the Approve Third-Party Access dialog box:

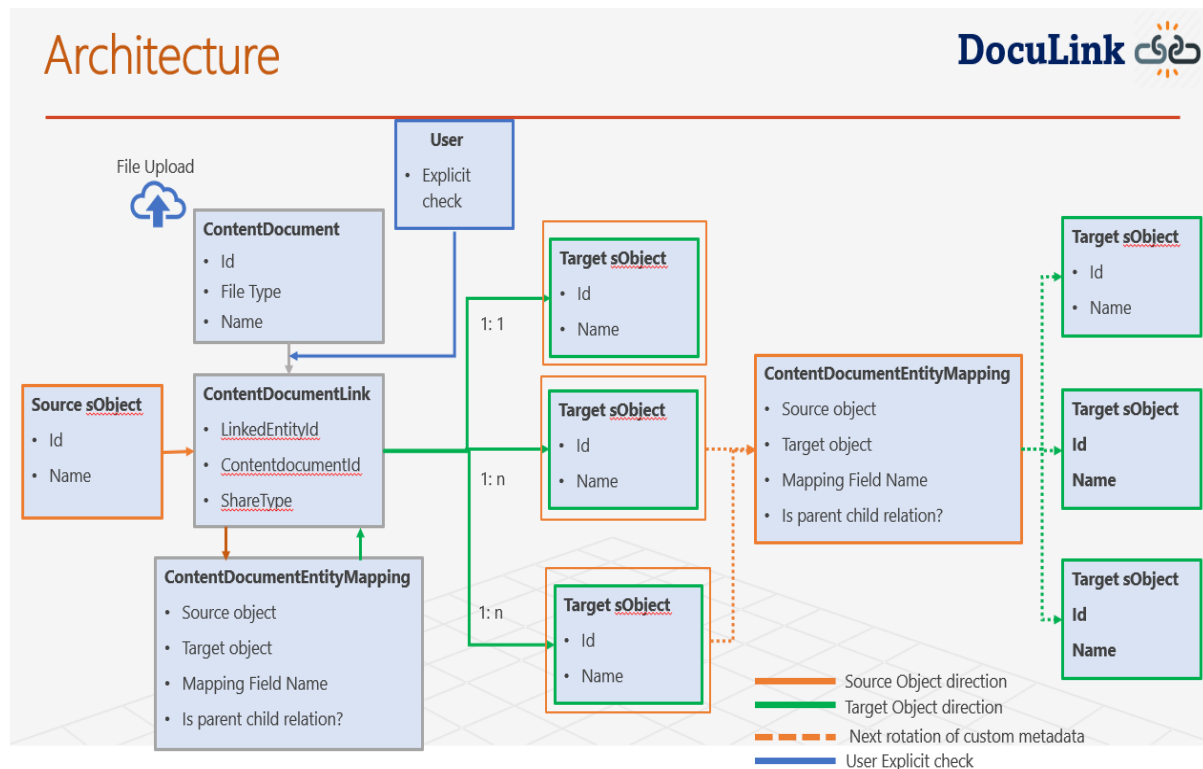
a. **Yes, grant access to these third-party web sites:** Check the box.

b. Select the **Continue** button. The Install dialog box opens, with the message: Installing and granting access to all Users...

9. Select the **Done** button when you see the message: This app is taking a long time to install. You will receive a notification email when the installation is complete.

10. Assign **Doculink User** Permission set to list of users whoever this package feature needs to be applicable.

DocuLink Functional Flow



- File link process starts from when we upload the file into any sObjects record files section, that object will be considered as Source Subject.
 - DocuLink customized trigger on ContentDocumentLink will check the EntityMapping in the Custom metadata setup and links the file to Target Subject.
 - If the Target Subject has any custom metadata record acting as Source Subject, then the same file upload will also link to respective metadata record Target Subject as shown in the above functional diagram. So, this will be a chain process.
 - This chain process applicable or works only if Target Subject is child to the Parent Subject. Example: If Quote is first source object, then chain process will go through Opportunity and to Account based on the custom meta data configuration, but it will not check back from Account to Opportunity in this chain process.
- If the file uploaded into Account as origin and have metadata of Account as Source and Target as Opportunity, then file link will happen.

Custom Metadata and Setup

ContentDocumentEntityMapping (Custom Metadata Object) created to setup the link between objects as mapping.

- Source Object: Object Api name where we upload file
- Target Object: Object Api name to which we want to Link the file
- Mapping field Name: Api name of the field in either in Source Object or Target Object with Master/Lookup relationship to Link
- Is Parent Child Relation? Checkbox = True if we want to link the file from parent to child object

- ❖ Example Metadata record configuration to Link file from Opportunity to Account (Child to Parent)

ContentDocumentEntityMapping

ContentDocumentEntityMapping Detail		Edit	Delete	Clone
Label	OpportunityToAccount			
ContentDocumentEntityMapping Name	OpportunityToAccount			
Is Parent Child Relation?	☐			
Source Object	Opportunity			
Target Object	Account			
Mapping Field Name	AccountId			

- ❖ Example Metadata record configuration to Link file from Account to Contact (Parent to Child Relation)

ContentDocumentEntityMapping

ContentDocumentEntityMapping Detail		Edit	Delete	Clone
Label	AccountToContact			
ContentDocumentEntityMapping Name	AccountToContact			
Is Parent Child Relation?	☒			
Source Object	Account			
Target Object	Contact			
Mapping Field Name	AccountID			

DocuLink Log Object and DocuLink Custom Setting

DocuLink object is implemented to capture if there are any errors due to exceptions happen during the file link process executing. It captures the exception and create the same into DocuLink object as a record which can be added as a related list into related object page layouts.

Object API:

- Apex Class Name
- Apex Method Signature
- Error Code
- Error Type
- Related Record Id
- Type

DocuLink Settings custom setting is implemented to set ON/OFF logs/trigger etc.

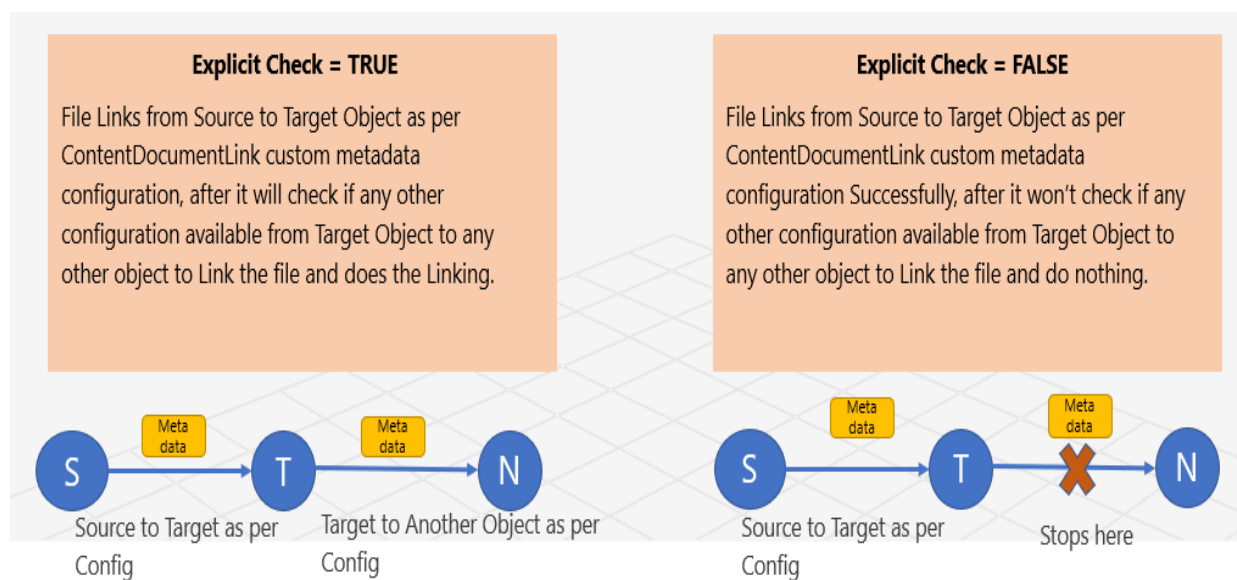
- **Create Log:** - Check Box TRUE, if need to create Logs for any exception created in DocuLink.
- **Disable Content Doc Trigger:** - Check it to turn off the DocuLink Content Document Trigger.
- **Instantiate Log:** - Check Box TRUE, it needs to initialize the Log record with values (in detail).

Permission Set & User based controlling

DocuLink User permission set is implemented to provide permissions to user to access and benefit of DocuLink Package, after providing this permission set to users DocuLink Package features will work for the specific users assigned. All the Apex, Custom Fields, Custom Objects, Custom Metadata and Custom Tab developed part of this product are added to this permission set.

User based controlling is add on feature developed part of this package to let admins/user itself decides that whether if they would like to Link the files to more than one object in DocuLink chain process of more than one object. For this we have created a custom field (DocuLink Chain – checkbox) on User object which we can check/uncheck based on need.

Note: - By default, DocuLink Chain – field is set as TRUE at field level.



List of Components

Component Name	Type	Parent Object
AccountToContact	ContentDocumentEntityMapping	
AccountToOpportunity	ContentDocumentEntityMapping	
Apex Class Name	Custom Field	DocuLink Log
Apex Method Signature	Custom Field	DocuLink Log
Callout Type	Custom Field	DocuLink Log
ContentDocHandler	Apex Class	
ContentDocHandlerTest	Apex Class	
ContentDocTrigger	Apex Trigger	Content Document Link
ContentDocumentEntityMapping	Custom Metadata Type	
ContentDocumentEntityMapping Layout	Page Layout	ContentDocumentEntity Mapping
Create Log	Custom Field	DocuLink Settings
Debug Log Layout	Page Layout	DocuLink Log
DebugLogUtility	Apex Class	
DebugLogUtilityTest	Apex Class	
Details	Custom Field	DocuLink Log
Disable Content Doc Trigger	Custom Field	DocuLink Settings
DocuLink Log	Custom Object	
DocuLink Settings	Custom Setting	
DocuLink_User	Permission Set	
DocuLinkTestDataFactory	Apex Class	
End Time	Custom Field	DocuLink Log
Error Code	Custom Field	DocuLink Log
Error Type	Custom Field	DocuLink Log
DocuLink Chain	Custom Field	User
Instantiate Log	Custom Field	DocuLink Settings
Is Parent Child Relation?	Custom Field	ContentDocumentEntity Mapping
OpportunityToAccount	ContentDocumentEntityMapping	
Related Record Id	Custom Field	DocuLink Log
Request Body	Custom Field	DocuLink Log
Request Endpoint	Custom Field	DocuLink Log
Response Body	Custom Field	DocuLink Log
Response Status Code	Custom Field	DocuLink Log
SecureUtils	Apex Class	
Source Object	Custom Field	ContentDocumentEntity Mapping
Source System	Custom Field	DocuLink Log
Start Time	Custom Field	DocuLink Log
Target Object	Custom Field	ContentDocumentEntity Mapping
Mapping Field Name	Custom Field	ContentDocumentEntity Mapping
Target System	Custom Field	DocuLink Log
Type	Custom Field	DocuLink Log

User Guide

After we successfully install the package in the org, and assign the DocuLink User permission, lets look at the steps or process below how to utilize the flavours of this product.

Admins need to setup the mapping in custom metadata as explained in previous pages.

Note: Works only in Lightning (cannot be works in classic)

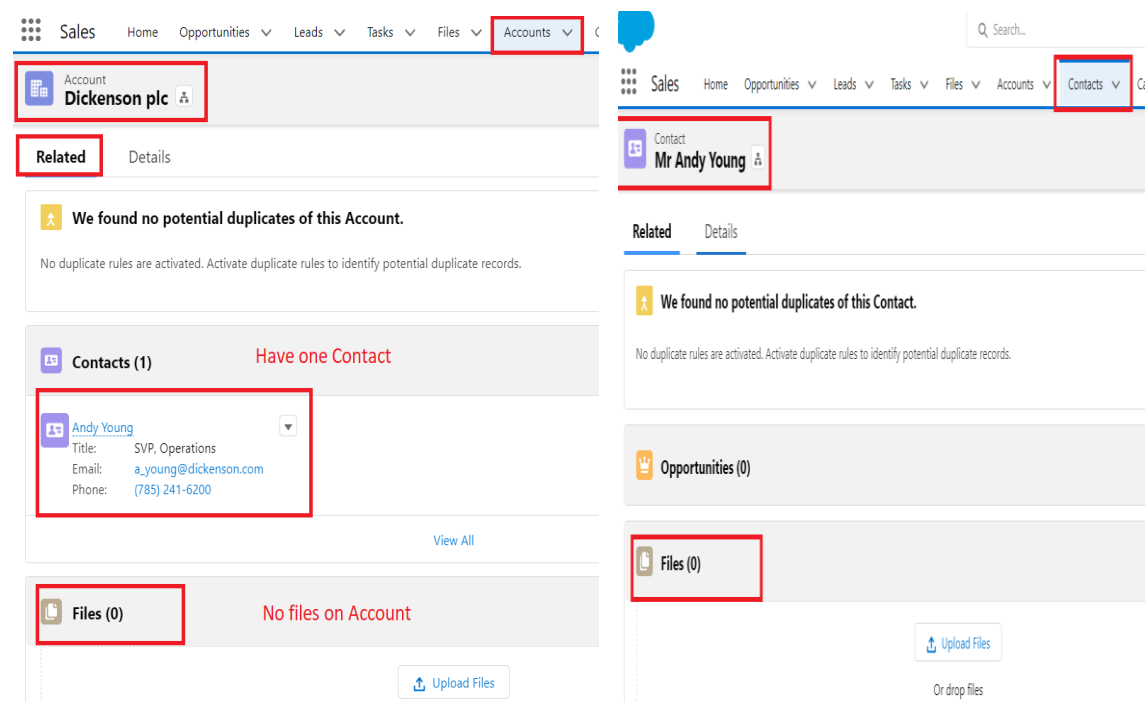
Example: Account to Contact File Link Scenario

Now we are going to upload a file on account record, and it will also links (shows) on related contacts of the same Account.

1. Let's take an account and check if you have one contact in related list, if not create it.
2. Take any format/type of file you would like to upload.
3. Go to related list of account and Files (or Notes & attachments) section and upload the file.

In Lightning whether you upload any file either in Notes & attachments or Files it will create record as ContentDocument (not in Attachments)

In the below images, we can see an account Dickenson plc has a contact Andy Young, both records do not have any file attached.



4. Now let's upload any file/document into the files of the account and see the magic. You can see the same file on the contact too. Either its one or more contacts on the account your upload file will link to all those contacts.

Important Note: if you delete the file (ContentDocument), it will get delete all ContentDocumentLink means from all the records of account and contact as in salesforce delete option at files will delete the file not the link.

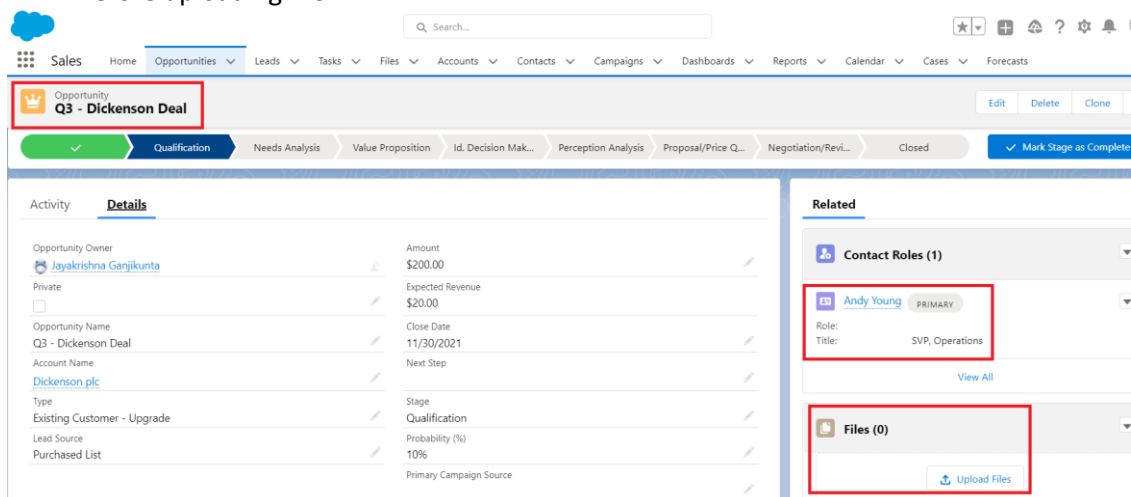
Example: Account to Contact to Opportunity File Link Scenario

Now we are going to upload a file on account record, and it will also links (shows) on related contacts of the same Account and the opportunity of the contact has. Admins will setup mapping in custom metadata.

Note: One record has link with one file only one time. That means One ContentDocumentLink will link with one EntityId only once.

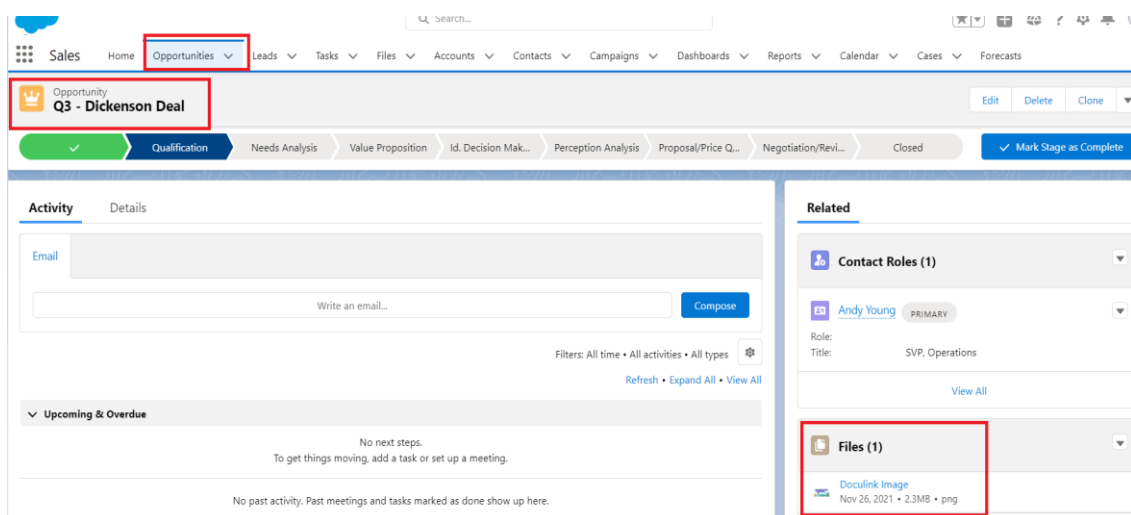
1. Let's take an account and check if you have one contact in related list, if not create it.
2. Create an Opportunity from the same contact.
3. Take any format/type of file you would like to upload.
4. Go to related list of account and Files (or Notes & attachments) section and upload the file.

Before uploading file



The screenshot shows the Kolvan CRM interface. The top navigation bar includes 'Sales', 'Home', 'Opportunities', 'Leads', 'Tasks', 'Files', 'Accounts', 'Contacts', 'Campaigns', 'Dashboards', 'Reports', 'Calendar', 'Cases', and 'Forecasts'. The main content area displays the 'Opportunity' tab for 'Q3 - Dickenson Deal'. The 'Details' section on the left lists fields such as 'Opportunity Owner', 'Amount', 'Expected Revenue', 'Close Date', 'Account Name', 'Type', 'Lead Source', and 'Purchased List'. The 'Related' section on the right shows 'Contact Roles (1)' with 'Andy Young' as the primary contact, and 'Files (0)' with an 'Upload Files' button.

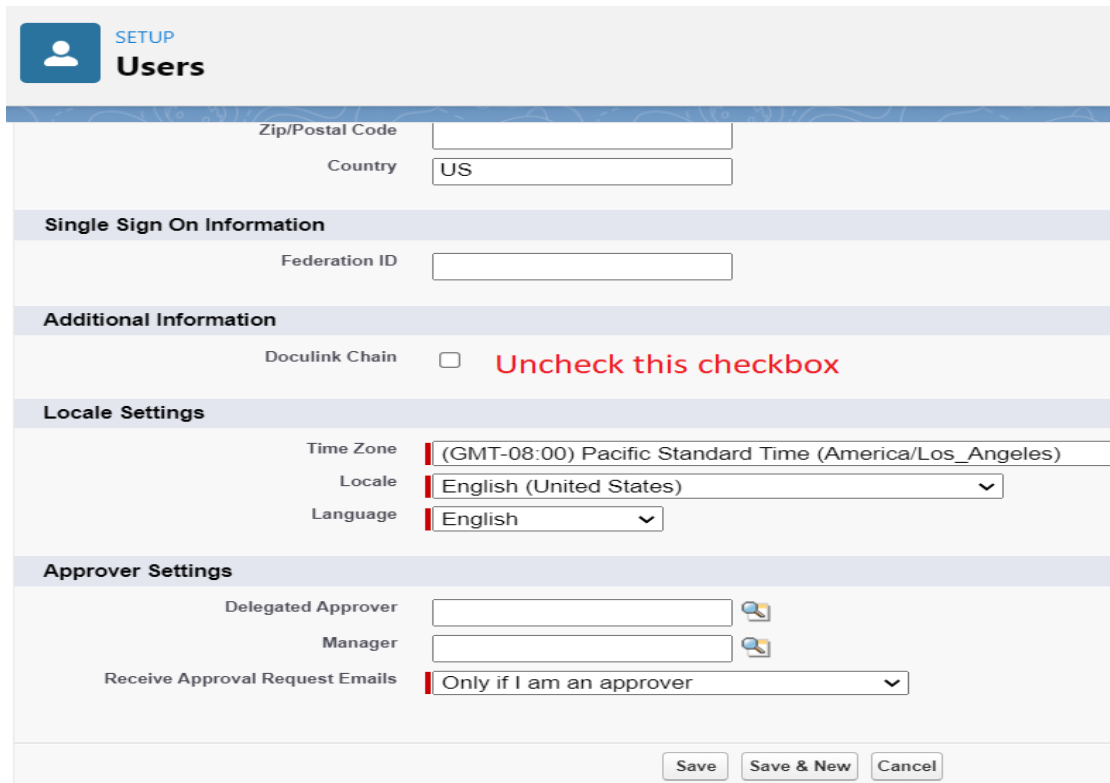
After uploading file on Account



The screenshot shows the Kolvan CRM interface after uploading a file. The top navigation bar is the same. The main content area displays the 'Opportunity' tab for 'Q3 - Dickenson Deal'. The 'Details' section on the left is the same. The 'Related' section on the right now shows 'Files (1)' with a file named 'DocuLink Image' uploaded on Nov 26, 2021, with a size of 2.3MB and a type of 'png'.

Example: Account to Contact to Opportunity File Link Scenario (DocuLink Chain)

Now in the above scenario if we don't want file to link with Opportunity to stop file link to only one level means from Account to Contact, we have to uncheck/false the field DocuLink Chain on user whoever uploading the file. By-default this checkbox is TRUE.



SETUP Users

Zip/Postal Code

Country

Single Sign On Information

Federation ID

Additional Information

DocuLink Chain ☐ **Uncheck this checkbox**

Locale Settings

Time Zone

Locale

Language

Approver Settings

Delegated Approver

Manager

Receive Approval Request Emails

Now upload one more file on same account and see if its link to Opportunity or not, it should not.

Important Note: it will link to Opportunity if you have separate custom metadata setup directly to Opportunity from Account (Account-> Opportunity), so please ensure while you are testing.

Frequently Asked Questions

1. **What will happen if we want to Link file from Account to Opportunity to Quote (as chain process) and have Doculink Chain checkbox uncheck and custom metadata configuration is not setup between Account to Quote directly.**

Answer: File link will successfully create between account to opportunity. As Doculink Chain Checkbox is false it will not further link the file after one level.

2. **What will happen if we do not give permission set to a user and that user upload the file, will the file link will work?**

Answer: Yes, while installing the package if we install for 'All Users' then the package file link feature will work even if we don't assign permission set specially for the user.

3. **Can we enhance this package code or configuration?**

Answer: You cannot be able to see/modify the customization developed part of this product package. But custom meta data records can be created as per required

Contact & Support



Kolvan Corporation is a Salesforce Consulting Partner operating from the USA, UK, and India. We are a passionate team of Certified Salesforce Architects, Developers, Consultants, Administrators who are helping businesses across the globe for clients for their sustainable Digital and CRM growth. We are providing the Salesforce Implementation, consulting, development, integration, and managed services according to the latest releases and updates in Salesforce products like Configure-Price-Quote & Billing, Sales Cloud, Service Cloud, Tableau CRM, Health Cloud, Community Cloud more.

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