S-Drive

Admin Guide

v2.7

Important Note

This admin guide contains advanced information about S-Drive installation and configuration. Refer to the *S-Drive Developer Guide* for customizing S-Drive with APIs and refer to *S-Drive User Guide* for more information on how to use S-Drive product.

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Contents

Quick Start

1. Installation

Go to "S-Drive Product Page" (https://sdriveapp.com). And click "Get S-Drive" button. Answer the questions, confirm the installation and click on "Install" button. After submitting your Salesforce.com password click Continue/Next until the UI asks you to choose security level. Click on "Grant access to all users" and click "Next" and click "Install". For detailed instructions refer to *S-Drive Installation section*.

Important Note: Upgrading pre-1.24 versions to S-Drive 2.5 requires manual migration steps. You need to contact S-Drive support to migrate your data to the latest version. If you have S-Drive 1.24 or 1.25, you can upgrade to 2.5 by following steps in S-Drive Installation section's "Upgrading S-Drive" section.

2. Displaying S-Drive Tab in Sales App

For Salesforce Classic, go to "Setup" -> "Personal Setup" -> "My Personal Information" -> "Change My Display". Click "Customize My Tabs" button. If you don't find the link, try "My Settings"-> "Display & Layout"-> "Customize My Tabs". Select "Sales" from the "Custom App" drop down box. Move "**S-Drive**" from "Available Tabs" box to "Selected Tabs". Click "Save".

For Salesforce Lightning, go to “App Launcher”, there will be a new App Card for “S-Drive”, select it. S-Drive App opens in lightning experience with 3 tabs, which are “Home”, “S-Drive” for S-Drive folders and “S-Drive Configuration” tab for configuration settings.

3. Activating S-Drive

Click on "S-Drive" tab on Salesforce Classic. If it is not activated yet, page will be redirected to S-Drive Activation page. If Remote Site Settings are configured correctly, you need to complete “Step 2: Configure Amazon S3 Credentials", "Step 3: Configure Amazon S3 Bucket Name" and "Step 4: S-Drive Authorization" sections.

- For Step 2, you must have Amazon S3 Access Key and Secret Key information to use with S-Drive.
- For Step 4, you need to create a free S-Drive account and authorize S-Drive to connect your organization at *https://portal.sdriveapp.com*

For detailed instructions refer to "S-Drive *Installation* " section.

4. Configuring Out of the Box S-Drive Attachments

For **Salesforce Classic**, S-Drive comes with preconfigured Account, Case, Contact, Opportunity attachments as overridden. If you want to use S-Drive Attachments on these objects, you can easilyenable by following these steps:

- After installing and activating S-Drive, go to "Setup" -> "App Setup" -> "Customize" -> "Accounts" (or Cases, Contacts, Opportunities) -> "Button and Links"
- Click "Edit" next to the "View" label.
- Select "Override with" as "Visualforce Page" and select the correct bundled page (AccountFilePage for Accounts, CaseFilePage for Cases, ContactFilePage for Contacts, OpportunityFilePage for Opportunities) from the dropdown and click Save.
- You should see the Account (or Case, Contact, Opportunity) Files section in your individual object pages' bottom section.

For **Salesforce Lightning**, S-Drive comes with global S-Drive component that can be used for any type of objects (Account, Case, or Custom Objects). You can easily add S-Drive Lightning component to any record page by following steps:

- On the any objects record page, (for example Account) click settings menu button ( ) on the top right. Select “Edit Page” option.
- On the left side, under “Lightning Components” section > Custom > there is “SDrive” lightning component. Drag and drop the component to the record page wherever you want.
- After component is added to record page on the right side, there will be attributes. Please fill these attributes correctly (Please check S-Drive Advanced User Guide to get detailed information).
    - *Parent Object Name*: Object name without prefix that own files (i.e. Account, MyCustomObject__c)
    - *Object Namespace Prefix*: If there is a prefix for parent object, you should put it here. (For Account it should be empty, for Custom object it

should get you org prefix. i.e. for "cg__MyCustomObject__c" it will be "cg__")
  - *File Object Name*: Object name without prefix for files. (i.e. "AccountFile__c", "MyCustomObjectFile__c")
  - *File Object Namespace Prefix*:
  - If there is a prefix for parent object, you should put it here. (For Account it should be empty, for Custom object it should get you org prefix. i.e. for "cg__MyCustomObject__c" it will be "cg__")
  - *Relationship Field Name*: For Standart objects it is "[ObjectName]__r" (i.e. Account__r, Case__r). For custom objects it is "Parent__r".
  - *Default Sort Field Name*: It can be object files any sortable field name with prefix. By default, it is "cg__File_Name__c" assuming the usage of a managed package file object (please change this to "File_Name__c" if a custom file object is being used).
- "Save" the record page using Save button on top right, then "Activate as Org Default" by clicking "Activation…" button right of it.

5. Configuring Standard/Custom Object Attachment Upload Feature

S-Drive stores all file information as Salesforce.com records on objects that represent each file on Amazon storage. In order to store file information, you can either use the S-Drive provided file objects for the Case, Contact, Lead, Account and Opportunity objects (see above item) or you can create your own. For Salesforce Classic or Lightning there is no any distinction on Object Files.

Creating Custom Object Files

This section

- Go to "Setup" -> "App Setup" -> "Create" -> "Objects". And click "New Custom Object" button. Fill in the required fields to create a new custom object (for example, named as "My Example Object File"). For "Record Name" field, type "My Example Object File Number". Select "Auto Number" as "Data Type". Type in "A-{0000}" for "Display Format" and "1" for" Starting Number"
- Check if the "Deployment Status" is set to "Deployed". Then click "Save" button to create the custom object file
- After creating custom object, create fields for that object. So, to create fields to "My Example Object File" object, click on "Custom fields & Relationships" and create the following fields: (while creating, make sure that all fields are visible to all users):

Content Type	Type = Text Length = 255
Description	Type = Text Area(Long) Length = 32,000 Visible Lines = 3
File Name	Type = Text Length = 255
File Size in Bytes	Type = Number Length = 18
Parent	Type=Master-Detail Relationship Related to = My Example Object
Parent Folder Id	Type = Text Length = 255
File Size	Type = Formula Formula Return Type = Text

Copy and paste below code to "Simple Formula" field:

```
IF(File_Size_in_Bytes__c > 1024,
IF(File_Size_in_Bytes__c > 1048576,
IF(File_Size_in_Bytes__c > 1073741824,
TEXT(ROUND((File_Size_in_Bytes__c
/1073741824),2)) & " GB",
TEXT(ROUND((File_Size_in_Bytes__c
/1048576),2)) & " MB"),
TEXT(ROUND((File_Size_in_Bytes__c
/1024),2)) & " KB"),
TEXT(File_Size_in_Bytes__c) & " bytes")
```

Click "Check Syntax" button to see if you have correctly typed the formula.

WIP	Type = Checkbox Default Value = Checked
Key	Type = Text Length = 255
Version Id	Type = Text Length = 255
Version Description	Type = Text Length = 255
Is Latest Version	Type = Checkbox Default Value = Checked
Preview Key	Type = Text Length = 255
Thumbnail Key	Type = Text Length = 255
Preview Version Id	Type = Text Length = 255
Thumbnail Version Id	Type = Text Length = 255
Private *(This field is optional)*	Type = Checkbox Default Value = Unchecked

For more information, about usage/setting of this property see "S-Drive Advanced Configuration Guide" (page 25).

Creating Before Delete Trigger for Custom Object *(Optional)*

You can find detailed information about creating "before delete trigger" in "*S-Drive Advanced Configuration Guide*" (page 17).

Creating Custom Object Files Page For Salesforce Classic

In this step we'll create custom object file's Visualforce page. This page can be used to override the object's view or it also can be used as an inline section for the object's layout. At the end of this section, use cases for both scenarios will be displayed. To create an object file page, follow these steps:

- Go to "Setup" -> "App Setup" -> "Develop"-> "Pages" and click the "New" button at the top of the page. Create a page (For example "MyExample" page). And type following code inside the page (Note that this sample is for *override* option with chatter enabled and inline is set to "true" for this reason. For *inline* option you need to remove "*apex:detail*" tag):

```
<apex:page standardController="My_Example_Object__c"
            tabStyle="My_Example_Object__c">
  <apex:detail inlineEdit="true"
               relatedList="true"
               showChatter="true"/>
  <cg:AttachmentComponent title="My Example Object Files"
        inline="true"
        customObjectName="My_Example_Object__c"
        customObjectFileName="My_Example_Object_File__c"
        objectId="{!My_Example_Object__c.Id}" />
</apex:page>
```

Remember that this is just an example. You need to set these component attributes based on your configuration. For more information about component attributes refer to "*S-Drive Advanced Configuration Guide*" (page 20)

- Now set the security for your page on other profiles. Go to "Setup" -> "App Setup" -> "Develop" -> "Pages" and click "Security" link next to your page name. Move all profiles (or select based on your needs) from "Available Profiles" to "Enabled Profiles". Now we have an object (or created our custom object), created our custom object file and custom object file page. At this point, we can override the custom object's view or we can use "S-Drive Attachments" as an inline section in the page layout:

  - Overriding the View of the Object

    Go to "Setup" -> "App Setup" -> "Create"-> "Object" and click the label of your custom object. You'll see "Object Definition Detail" screen. Scroll down and find "Standard Buttons and Links" page block and click "Edit" action next to the "View" label. Then select Visualforce Page for *Override With* section and pick "MyExampleFilePage" (the custom page you created previously for this object) from the drop-down box. Click "Save" button to complete the override. After creating a test object, you should see "My Example Object Files" page block at the end of the object detail page. See "*S-Drive User Guide*" for more information on how to use the buttons and functions in this page block.

  - Using as Inline Attachment

    To use S-Drive Attachments as inline, we need to set "inline" property to "true". That is, in the example page we have created above, *inline = "true"* must be included to use S-Drive Attachments as inline.
    Go to "Setup" -> "App Setup" -> "Create"-> "Object" and click the label of your custom object. You'll see "Object Definition Detail" screen. Scroll down and find "Page Layouts" page block and click "Edit" action next to the main layout of the object. Click "Fields" and drag-drop a Section to an appropriate place in the layout.

    After dropping the "Section", you'll see the properties screen for the dropped "Section". Type in a section name and select if you want to display section header on detail page and edit page. Also select "1-column" for the layout. Then click "OK" button. You can customize these settings based on your layout needs.

    Now, go to Visualforce Pages from the top. Select the "Custom page name" you created (e.g. TestPage) and drag it into the section that you created previously. After dropping the page into the section, click the properties icon for the page on the top-right corner of the page in the section. Keep "Width (in pixels or %)" as "100%", set "Height (in pixels)" to "500". And check "Show scrollbars" option. Click OK button. We are done with the configuration. Save the layout by clicking the "Save" button on the left-top corner of the screen.

    Now if you go to your object's tab, you'll see the S-Drive Attachments inline in the page layout.

    Tip: You can use "Inline Visualforce Expander" tool from AppExchange to display S-Drive Attachments height dynamically. Refer to the "*S-Drive Advanced Configuration Guide*" page 31 for more information.

Adding S-Drive Lightning component to Custom Object Files Record Page For Salesforce Lightning

- On the custom objects record page click settings menu button ( ) on the top right. Select "Edit Page" option.
- On the left side, under "Lightning Components" section > Custom > there is "SDrive" lightning component.

Drag and drop the component to the record page wherever you want.

- After component is added to record page on the right side, there will be attributes. Please fill these attributes correctly (Please check S-Drive Advanced User Guide to get detailed information).
  - *Parent Object Name*: Object name without prefix that own files (i.e. MyCustomObject__c)
  - *Object Namespace Prefix*: If there is a prefix for parent object, you should put it here. (i.e. for "cg__MyCustomObject__c" it will be "cg__")
  - *File Object Name*: Object name without prefix for files. (i.e. "MyCustomObjectFile__c")
  - *File Object Namespace Prefix*: If there is a prefix for the object, you should put it here. (i.e. for "cg__MyCustomObject__c" it will be "cg__")*Relationship Field Name*: For custom objects it is "Parent__r".
  - *Default Sort Field Name*: It can be object files any sortable field name with prefix. By default, it is "cg__File_Name__c" (i.e. "CreateDate", "cg__File_Type__c").
- "Save" the record page using Save button on top right, then "Activate as Org Default" by clicking "Activation…" button right of it.

6. Allowing Customer Portal Users to Upload Case Files from Customer Portal

Go to "Setup" -> "App Setup" -> "Create" -> "Objects". Click "Edit" next to the "Case File" object. Scroll down to the "Optional Features" in "Edit" page. Check "Available for Customer Portal" and click "Save".

Go to "Setup" -> "Administration Setup" -> "Manage Users" -> "Profiles" and click "Edit" next to your currently installed "Customer Portal Manager" installation. Note that selected profile must be a cloned profile to make changes on it.

Scroll to the "Custom Object Permissions" section. Give Read, Create, Edit and Delete access to the "Case Files" custom object by checking the appropriate checkboxes, then click "Save".

(Optional) To Remove Submit & Add Attachments button from new case creation screen, look at the "*S-Drive Advanced Configuration* section.

7. S-Drive Configuration

Organization administrators can use S-Drive Configuration to set organization-wide configurations and get information about S-Drive credentials, usage and billing. There is no any distinction between Salesforce Classic & Salesforce Lightning. Using S-Drive Configuration, it is possible to:

- Enable/Disable Download Manager
- Enable/Disable Checksum Verification
- Enable/Disable Copy URL and Email features in S-Drive Tab
- Embed Thread Id in Case Emails
- Specify Restricted Portal User Profiles
- Specify Case Email Reply-To Address
- Specify Custom Email Footer
- Specify Max File Size in MBs
- Specify Default Email Expiration Time
- Change Default Upload Manager
- Allow users with "Modify All" permissions to create items at the top level and disallow other users
- Change field display settings of S-Drive Attachment objects
- Configure File/Attachment Sync.
- Update Amazon Information
- Enable Versioning
- Update S-Drive Objects
- Enable Amazon S3 Transfer Acceleration
- Configure Preview and Thumbnail

You can refer to "*S-Drive Advanced Configuration Guide*" (page 35) for detailed information.

8. File/Attachment Sync

You can configure Salesforce Files/Attachments to be synced with S-Drive. Once you add a file/attachment to any configured object, file/attachment will be synced to S-Drive.

You can refer to "*S-Drive Advanced Configuration* section for detailed information.

9. S-Drive Reports

You can create "File Activity" reports for the S-Drive files. For Accounts, Cases, Contacts, Opportunities and S3Objects reports are enabled by default. For other standard/custom object files you need to create a lookup relationship under File Activity object:

- Go to "Setup" -> "App Setup" -> "Create" -> "Objects" and click the "File Activity" object name. Scroll to the "Custom Fields & Relationships" for the object and click "New" button. Choose the field type" screen, select "Lookup Relationship" and click "Next" button.
- Choose the related object screen, select "Related To" from the drop-down as your object file (e.g. My Example Object File) and click "Next" button. Keep default values for other steps and click "Save" button.

S-Drive Reports tracks following activities:

- S-Drive OneClick Download
- S-Drive CopyUrl Download
- S-Drive Zip and Download
- S-Drive Email Sent.

To create S-Drive Reports, follow these steps:

- Click "Reports" tab and then click "New Report..." button.
- Select "Other Types" from "Select Report Type" screen and find the correct File Activity for your object (e.g. 'File Activities with Account File' for 'Accounts') and click "Create" button.
- "Activity Type" and "Additional Details" fields are important for S-Drive Reports. Arrange fields for report and run/save report based on your needs.

For more information about S-Drive Reports, refer to "*S-Drive Advanced Configuration* section.

Sharing Rules and Permissions

For both Salesforce Classic & Lightning, "S-Drive Attachments" support all sharing rules similar to related objects. "S-Drive Folders" support manual sharing and it is also sharing-aware.

For more information about Sharing Rules, refer to *S-Drive Advanced Configuration* section.

You can apply object-based sharing via manual sharing. Profile based permissions are also supported on custom object files. S-Drive supports four different access levels:

- *None*
- *Read*
- *Read + Create + Edit*
- *Read + Create + Edit + Delete*

To set these profiles based on permissions go to "Setup" -> "Administration Setup" -> "Manage Users" -> "Profiles" menu. Click on the "Edit" link next to the name of the profile you want to edit. Note that you cannot change the standard profiles' permissions. You may need to clone them before you can edit. Inside the "Edit" screen of the selected profile, scroll down to the "Custom Object Permissions" section. You'll see the "Basic Access" selections for your custom object files. You will need to check/uncheck these boxes based on your needs.

For more information and examples about S-Drive Permissions refer to *S-Drive Advanced Configuration* section.

1. INTRODUCTION

Welcome to S-Drive!

1.1 Layout of this Guide

This INTRODUCTION section explains the various pieces of S-Drive.

In GETTING SET UP, we will talk about setting up the accounts you need as prerequisites to using S-Drive.

INSTALLING S-DRIVE tells you how to find S-Drive from the AppExchange.

ACTIVATING S-DRIVE walks you through setting up your AWS access and bucket, and connecting your Salesforce org though our portal.

S-DRIVE FILE AREA ON ACCOUNTS, CASES, CONTACTS, OPPORTUNITIES, LEADS shows you how to add the S-Drive file area to standard object pages so you can begin uploading and accessing files. **At this point, you are ready to use S-Drive.**

DISPLAYING “S-Drive” AND “S-Drive Configuration” TABS helps you set up these tabs for easy access.

S-DRIVE ADVANCED CONFIGURATION explains how to create an S-Drive File Object for a standard or custom object other than Accounts, Cases, etc.

S-DRIVE CONFIGURATION TAB walks you through all the things an admin can configure for the organization.

ADVANCED FEATURES gives a quick overview of S-Drive’s features beyond simply uploading and accessing files. More information can be found in the User’s Guide.

PROFILE PERMISSIONS, OWD, AND SHARING RULES talks about how S-Drive works with Salesforce’s sharing settings and profile permissions.

S-DRIVE IN SALESFORCE.COM COMMUNITIES explains how to add S-Drive to your community.

S-DRIVE SALESFORCE MOBILE APP CONFIGURATION AND USER GUIDE shows you how to set up S-Drive for Mobile.

Appendix A: S-DRIVE PORTAL gives more detail on the S-Drive portal account, including information about billing.

Appendix B: Upgrading S-Drive is where to go if you’re upgrading from an earlier version of S-Drive.

Appendix C: Troubleshooting has some troubleshooting tips.

1.2 AWS and S-Drive Portal

S-Drive provides unlimited, cost-effective file storage using Amazon S3 on Amazon Web Services (AWS). Your files are stored in the cloud and accessible in Salesforce through an easy to use interface. Salesforce organizations are connected to AWS through an S-Drive portal account. This account is also where you'll be billed for your storage use. In order to use S-Drive, you'll need an AWS account and an S-Drive Portal account. See Section 2 GETTING SET UP for more information.

1.3 S-Drive Tab

With S-Drive, you can upload files to any standard or custom object record. In addition, there is an "S-Drive Tab" where you can store files that aren't related to any specific object. This can be used for company-wide documents for example. Files on the S-Drive Tab (not associated with a standard or custom object) are stored in an object called S3Object.

1.4 S-Drive File Objects

Each custom or standard object that you want to use S-Drive with has a corresponding S-Drive File Object where the information about the files is stored. This is a custom object that has a master-detail relationship with the object the files are associated with. For example, Accounts has an associated object called AccountFiles. For Accounts, Cases, Contacts, Opportunities and Leads objects, S-Drive File Objects have already been provided as part of the S-Drive package. For other standard objects, or for your own custom objects, you can create the associated S-Drive file object through the S-Drive Configuration tab. These objects should have permissions enabled in the profiles of users using them.

1.5 Other S-Drive Objects

In addition to the S-Drive objects that hold file information, there are other S-Drive objects that relate to various features of S-Drive. These objects should have permissions enabled in the profiles of users using S-Drive.

- AttachmentSyncs
- File Activities
- MyS3Objects
- Previews
- S3Configs
- S3Objects
- SDriveCustomActions
- SQueues
- SURLS

- SURL Hits

2 GETTING SET UP

Welcome to S-Drive! S-Drive uses Amazon Web Services (AWS) to store files, and an S-Drive portal account to track usage and billing. Let's get those set up first.

2.1 Create an Amazon Web Services Account

To set up an AWS account, go to https://aws.amazon.com/ or directly to

> Note: It's very important to keep track of the login credentials for this account and to make sure they are not lost if the person who created them leaves the organization. They will be needed at times in the future when it may be necessary to update or change your bucket.

https://portal.aws.amazon.com/billing/signup#/start to create an account.

You will create a bucket later on when you configure S-Drive. There is no need to create a bucket directly in AWS and we recommend against it.

2.1.1 Access Key and Secret Key

When creating your account, you will be given an **Access Key** and **Secret Key**, which you will need later in order to activate S-Drive. If you need to find these keys again, you can go to https://aws.amazon.com/ and go to Security Credentials.

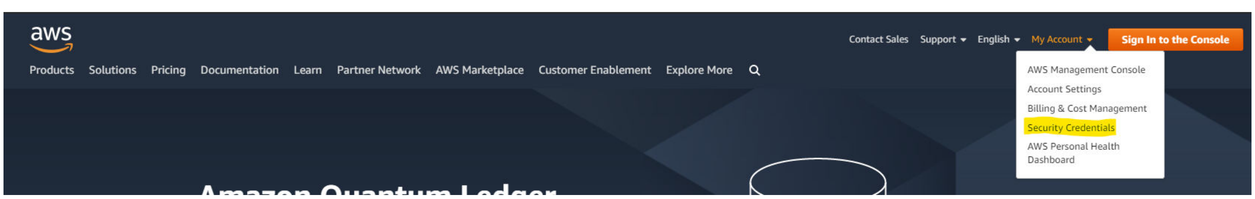


Figure 2-1

2.1.2. Identity and Access Management (IAM) Policies and Minimum Policy Example

See What is IAM for information about how to control access to your AWS resources. This is not needed for most S-Drive customers.

To apply a policy to your restricted user:

1. Sign in to AWS Management Console and click **"IAM"** from Services menu.
2. Click **"Policies"** on the dashboard and then click **"Create Policy"** button.
3. Select **"Create Your Own Policy"** on the screen.
4. Type name into **"Policy Name"** area. Copy contents of the below example and paste into **"Policy Document"** area on AWS Console. Update ***sdrivebucket*** bucket name references in policy document and click **"Create Policy"**. The purpose of this policy is to give proper access to your own Salesforce instance to be able to upload/ download files.


```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "s3:*"
            ],
            "Resource": [
                "arn:aws:s3:::sdrivebucket/*"
            ]
        },
        {
            "Effect": "Allow",
            "Action": [
                "s3:ListAllMyBuckets"
            ],
            "Resource": [
                "arn:aws:s3:::*"
            ]
        },
        {
            "Effect": "Allow",
            "Action": [
                "s3:PutBucketCORS"
            ],
            "Resource": [
                "arn:aws:s3:::sdrivebucket"
            ]
        },
        {
            "Effect": "Allow",
            "Action": [
                "s3:GetBucketLocation"
            ],
            "Resource": [
                "arn:aws:s3:::sdrivebucket"
            ]
        }
    ]
}
```

5. Click **"Users"** on the dashboard and click on your user name. Then Click **"Attach Policy"** button on the screen for the user that you use in S-Drive.

Find the policy which you created in #4 and click **"Attach Policy"** button.

2.2 Create an S-Drive Portal Account

In order to use S-Drive, you need an account on S-Drive portal. Here you will be able to see your Amazon account and payment details. Go *https://portal.sdriveapp.com*. Register for a free account, or login if you already have an account.

For more information about your Portal account, including how to register a payment method, see payment details, download invoices, connect or reconnect to organizations, change your password and more, see Appendix A: S-DRIVE PORTAL.

3 INSTALLING S-DRIVE

NOTE: If you are upgrading S-Drive from a previous version, see Appendix B: Upgrading S-Drive. Otherwise continue below.

Go to **S-Drive Website** (sdriveapp.com). Click "**Get S-Drive**" button

(Figure 3-1). The **S-Drive Product Page** on the AppExchange will be opened. Click **"Get It Now".** Follow the directions to install S-Drive in your sandbox or production org.

Figure 3-1

4 ACTIVATING S-DRIVE

After completing installation, go to S-Drive Configuration in your Salesforce instance:

- In Classic, click on the “+” and click on S-Drive Configuration
- In Lightning, click on the **“App Launcher”** ( ) menu which is on the left corner of the Salesforce page.
    - Then click on **“S-Drive: Simple Secure Storage for Salesforce Users”** app.

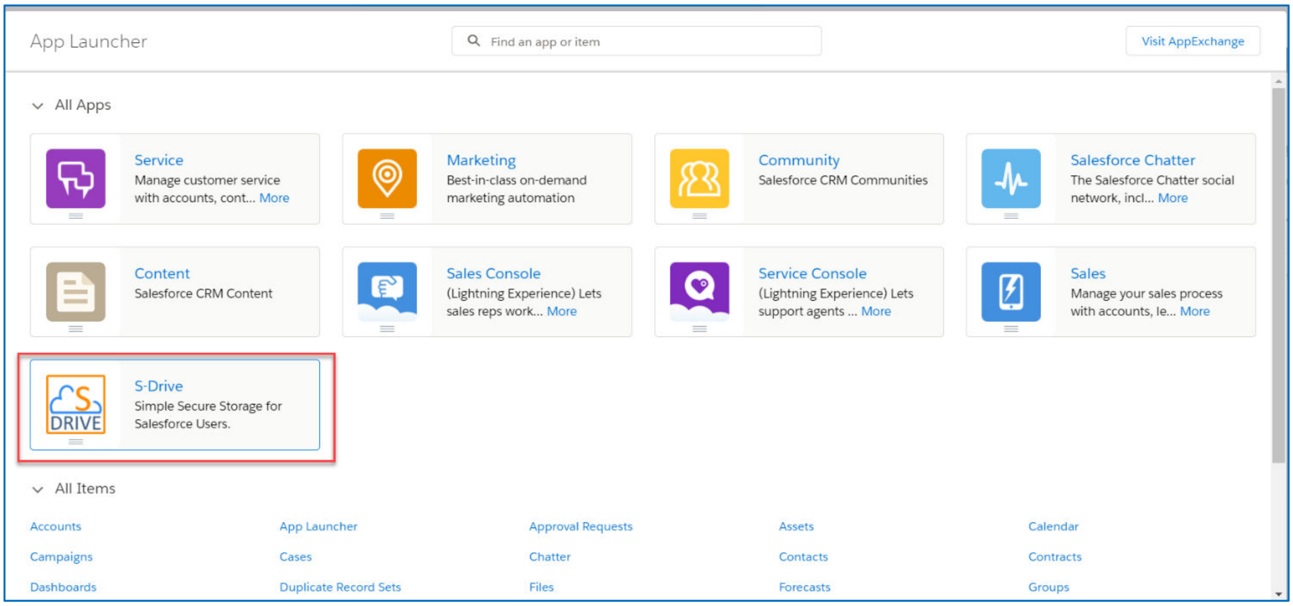


Figure 4-1

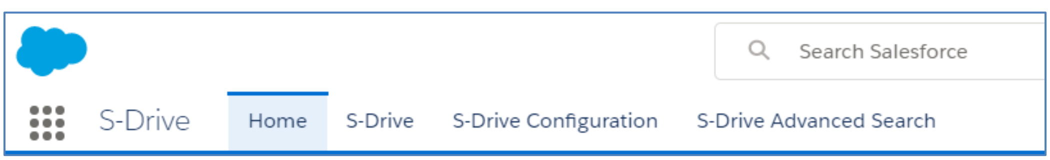


Figure 4-2

- Click on S-Drive Configuration

The S-Drive Configuration tab will take you to a list of instructions as follows:

Step 1: Configure Remote Sites: If Remote Site Settings are configured correctly, you'll see **"Your remote site settings are configured correctly"** message under the **"Step 1: Configure Remote Sites"** section (Figure 4-3). If you see an error message in Step 1, resolve the issue by following the on-screen instructions.

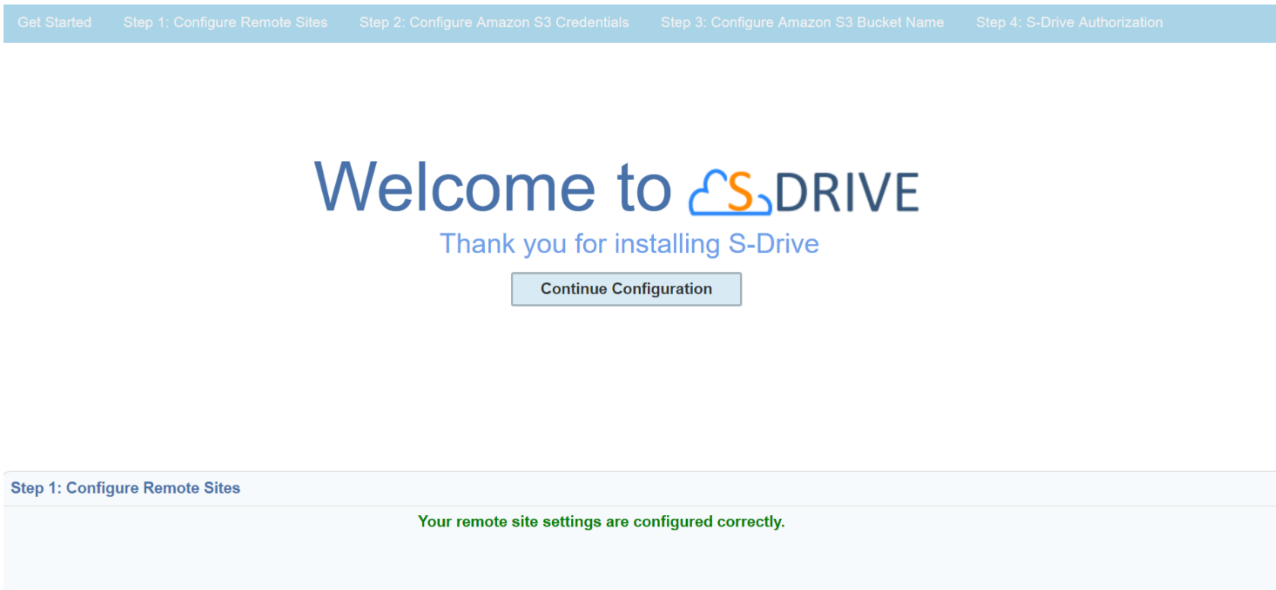


Figure 4-3

- **Step 2: Configure Amazon S3 Credentials:** This step is required to connect your Amazon S3 account with S-Drive. You need to enter a valid **"Amazon *Secret Key*"** and **"*Access Key*"**. After providing keys. If you see **"Amazon S3 Credentials are configured correctly,"** continue with **"Step 3: Configure Amazon S3 Bucket Name"**.

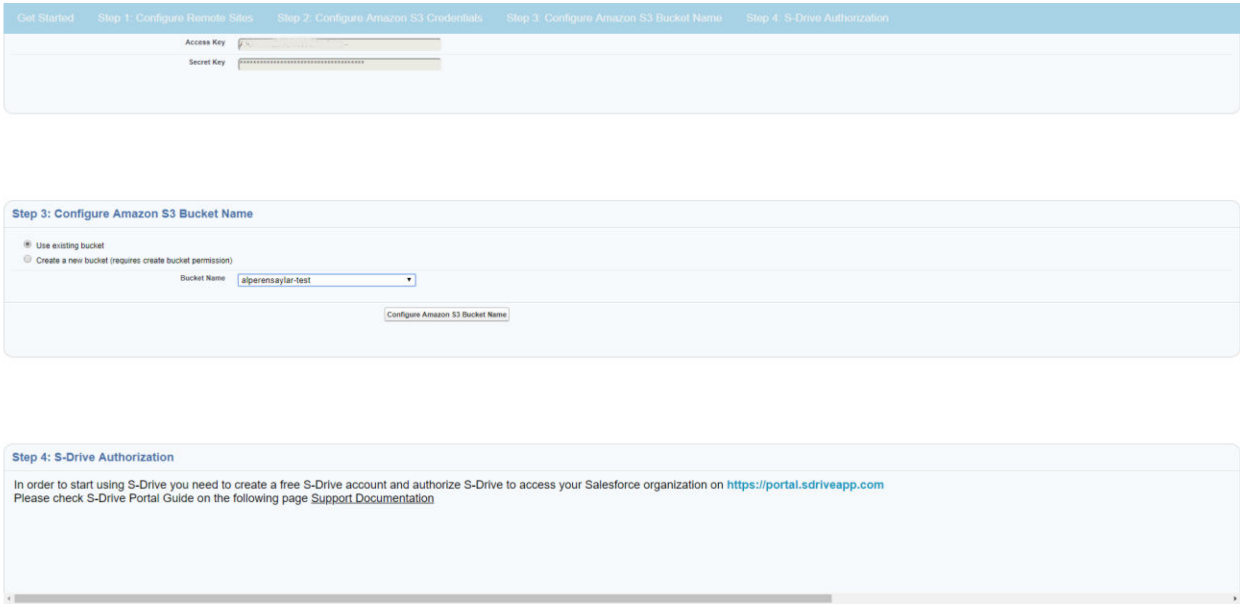


Figure 4-4

Important Note: *IAM users whom assigned individual security credentials, must have some permissions to activate and use S-Drive. The minimum policy example can be seen in section 2.1.2* Identity and Access Management (IAM) Policies and Minimum Policy Example. *Please apply this policy if you are planning to use this kind of user for the activation.*

- **Step 3: Configure Amazon S3 Bucket Name:** This is the bucket that will be used to store your files in your Amazon S3 account. Bucket name must be unique and must comply with DNS naming conventions. Bucket names cannot have capital letters or underscores.
  You can select **"*Use existing bucket*"** or **"*Create a new bucket*"** option. (Figure 4-4) We recommend creating your bucket here in the S-Drive Configuration, rather than directly in AWS.

  If you select **"*Create a new bucket*"** option you need to provide a valid bucket name and select the region name to create the bucket on this endpoint location.

  Your bucket access settings will be public by default when it is created. After it is created and you have finished the configuration process, there will be a button on the S-Drive configuration page under Authentication Settings called "**Block Bucket Public Access**" on the configuration page. Simply click the button to make your bucket private. This is recommended.

If you select **"Use existing bucket"** option you must select one of the bucket names from the list (that is retrieved from your Amazon S3 account).

Important Note: *If you are planning to use **S-Drive Versioning** feature, we strongly suggest you use a **"versioning never enabled bucket"**. To ensure versioning status of your bucket, sign in to your amazon console, find your bucket from S3 service and check bucket properties. If you selected "**Create a new bucket** " option, you can ignore this note as it will create a "versioning not enabled" bucket by default.*

Click **"*Configure Amazon S3 Bucket Name*"** button). If you see **"Amazon S3 Bucket Name is configured correctly"** message continue with **"Step 4: S-Drive Authorization"**.

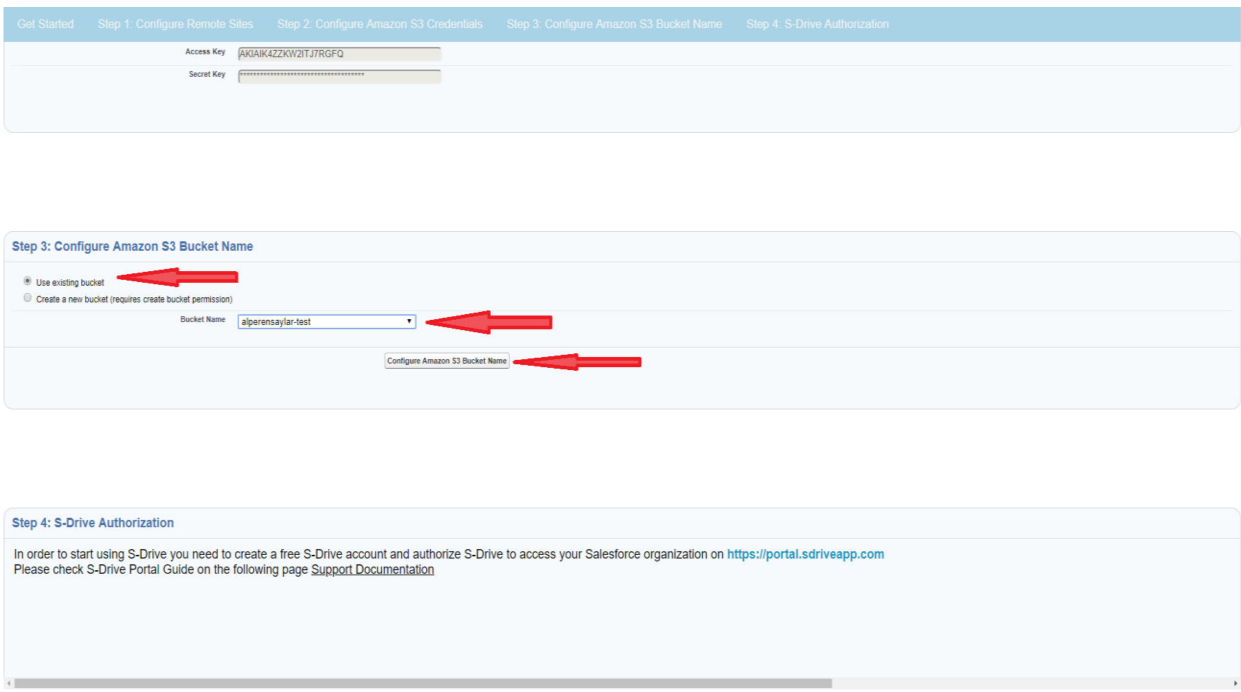


Figure 4-5

- **Step 4: S-Drive Authorization:** You need to go to *portal.sdriveapp.com* to complete this step. Go to *portal.sdriveapp.com* and login into the S-Drive portal account you created earlier. Authorize S-Drive to connect to your organization:

- Click *Connected Organizations* link on the menu (Figure 4-6). Then under "Connect Salesforce.com Organizations", click either “Production Instance” or “Sandbox Instance” based on where you installed S-Drive (Figure 4-7). This redirects the salesforce.com login page. Login, and you’ll see your organization on the list of “Connected Salesforce.com Organizations.”

Figure 4-6

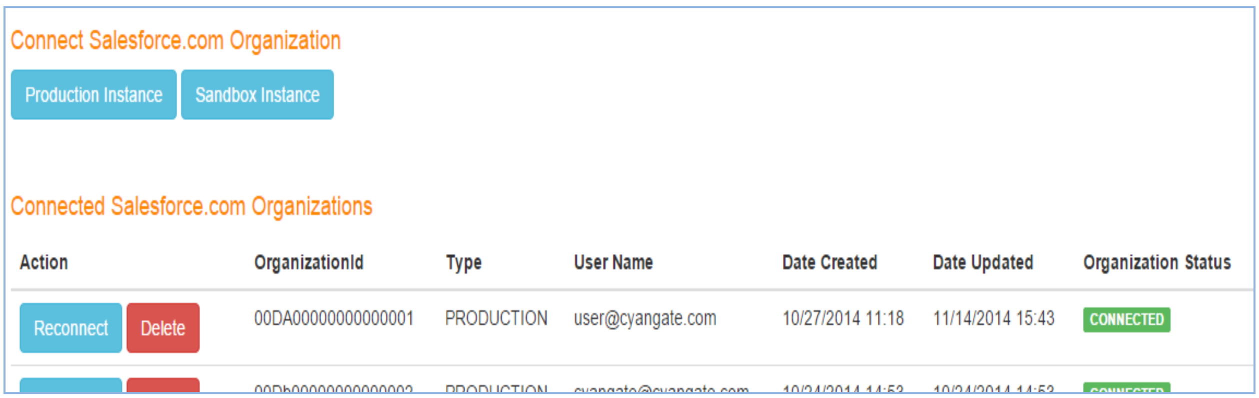


Figure 4-7

Congratulations! You are now ready to configure S-Drive to suit your needs.

5 S-DRIVE FILE AREA ON ACCOUNTS, CASES, CONTACTS, OPPORTUNITIES, LEADS

In order to start using S-Drive for Accounts, Cases, Contacts, Opportunities, and Leads, you need to have an area on the page to work with S-Drive files. The next section shows you how to set this up for Classic. Or skip to S-Drive File Area for Lightning (Accounts, Cases, Contacts, Opportunities, Leads) for Lightning.

5.1 S-Drive File Area for Classic (Accounts, Cases, Contacts, Opportunities, Leads)

For Account, **Case**, **Contact**, **Opportunity** and **Lead** standard objects, the associated S-Drive file objects and override pages for Salesforce Classic are bundled with the S-Drive installation. If you'll use S-Drive attachments for these standard objects as *override,* you can use bundled objects and/or pages where appropriate. If you are planning to use S-Drive Attachments for other standard/custom objects or as *override/inline,* please refer to the "*S-Drive Advanced Configuration Guide*" document.

"Overriding the view of the object" means that the page will be used as an override to the standard object page. In this case, 'S-Drive Attachments' will be a section at the end of the standard page layout.

1. In Salesforce Classic view, click Setup button on right top and go to **Build-> Customize -> Accounts** (or **Cases** or **Contacts** or **Opportunities** or **Leads**- the label of the object that you want to enable S-Drive Attachments for) **-> Buttons, Links, and Actions**. (Figure 5-1).

   In Lightning view, you can click Setup icon ( ) on right top and go to **Object Manager->Accounts** or **Cases** or **Contacts** or **Opportunities** or **Leads -> Buttons, Links, and Actions**.

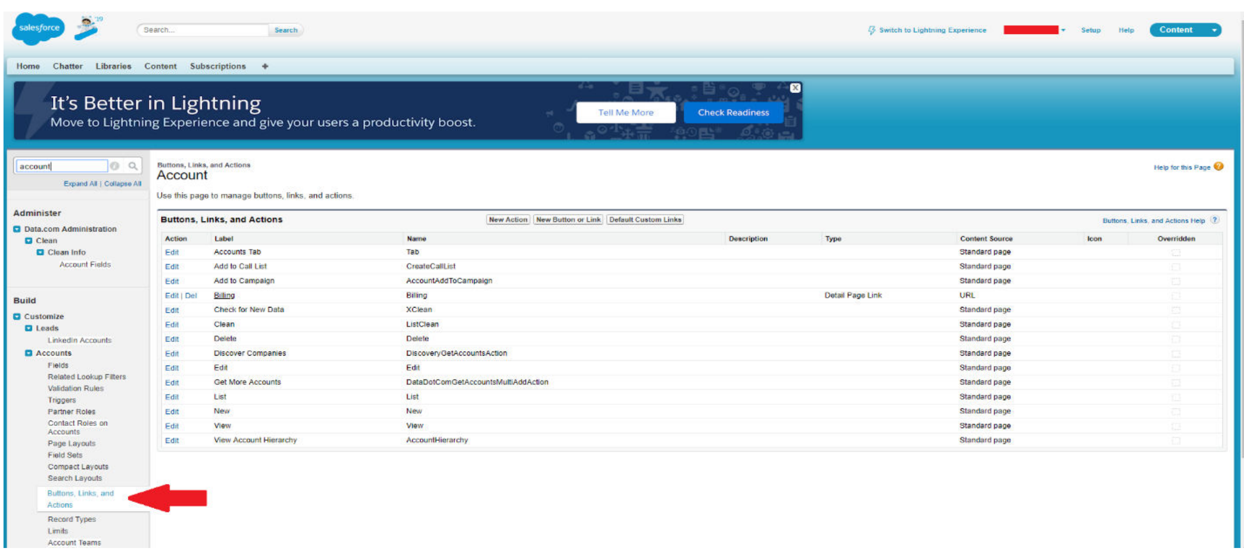


Figure 5-1

Click the **Edit** action next to the **View** label (Figure 5-2).

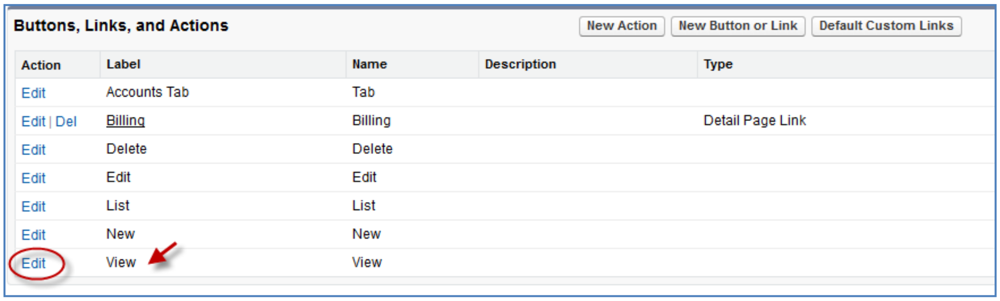


Figure 5-2

2. Then select **Visualforce Page** for *Override With* section and pick related Visualforce page (**AccountFilePage** for Accounts, **CaseFilePage** for Cases, **ContactFilePage** for Contacts, **OpportunityFilePage** for Opportunities, **LeadFilePage** for Leads) from the drop-down box. Click **Save** button to complete the override (Figure 5-3).

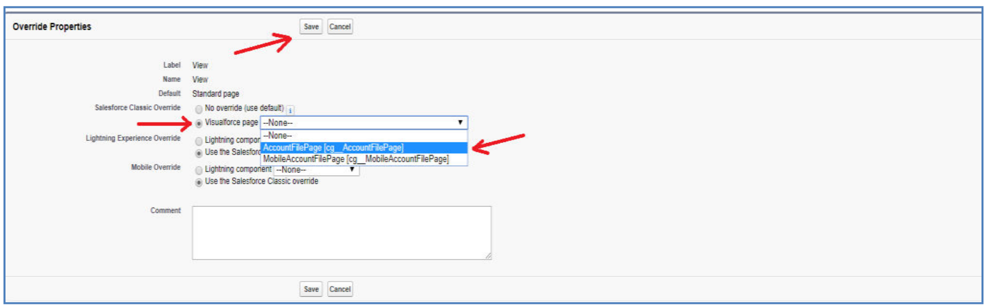


Figure 5-3

3. Now it will display **View** as **Overridden** in the *Buttons, Links, and Actions* section (Figure 5-4).

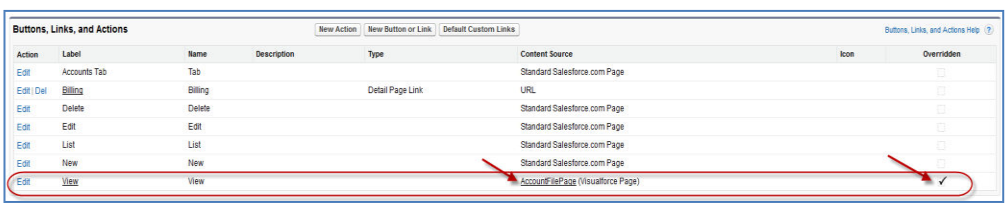


Figure 5-4

4. After creating an account object, you should see "Account Files" (similar screens for Cases, Contacts and Opportunities and Leads once you configure) page block at the end of the object detail page (Figure 5-5). *See "S-Drive User Guide" for more information on how to use the buttons and functions in this page block.*

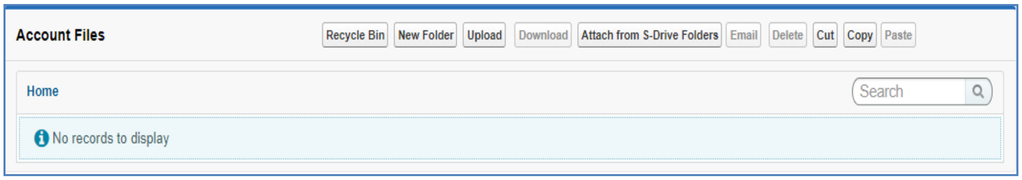

Account Files
Recycle Bin
New Folder
Upload
Download
Attach from S-Drive Folders
Email
Delete
Cut
Copy
Paste
Home
Search
No records to display

Figure 5-5

5.2 S-Drive File Area for Lightning (Accounts, Cases, Contacts, Opportunities, Leads)

To display the S-Drive file area on Lightning pages for Account, Case, Contact, Opportunity and Lead standard objects, you need to edit each of these objects' pages. We'll use the Account object as an example, but the process is the same for Case, Contact, Opportunity, and Lead.

1. To edit the Lightning page for a standard object, first choose a record for that object. For Accounts, if you don't already have an Account record, you'll need to create one (**App Launcher -> Accounts > New**). If you already have an Account, you need to open that account's record page by clicking on its name.

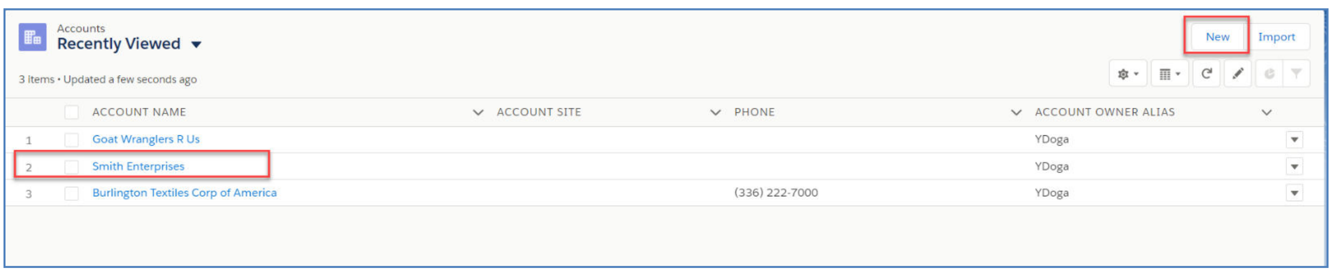


Figure 5-6

2. After clicking on the account in this page (Figure 5-6), which is "Smith Enterprises" in this example, Smith Enterprises' page will be opened. You need to click on the **"Setup"** icon ( ) on the top right corner and choose **"Edit Page"** option. If you haven't used Lightning Experience at all, click on "Create Lightning Page" instead of "Edit Page".

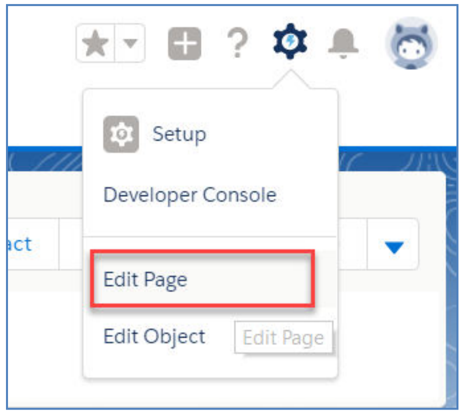


Figure 5-7

3. After clicking on "Edit Page" or "Create Lightning Page" "Lightning App Builder – New Account Page" screen will be shown. You will see **"Lightning Components"** section on the left-hand side. You need to scroll down to see the **"SDrive"** component, under **"Custom**".

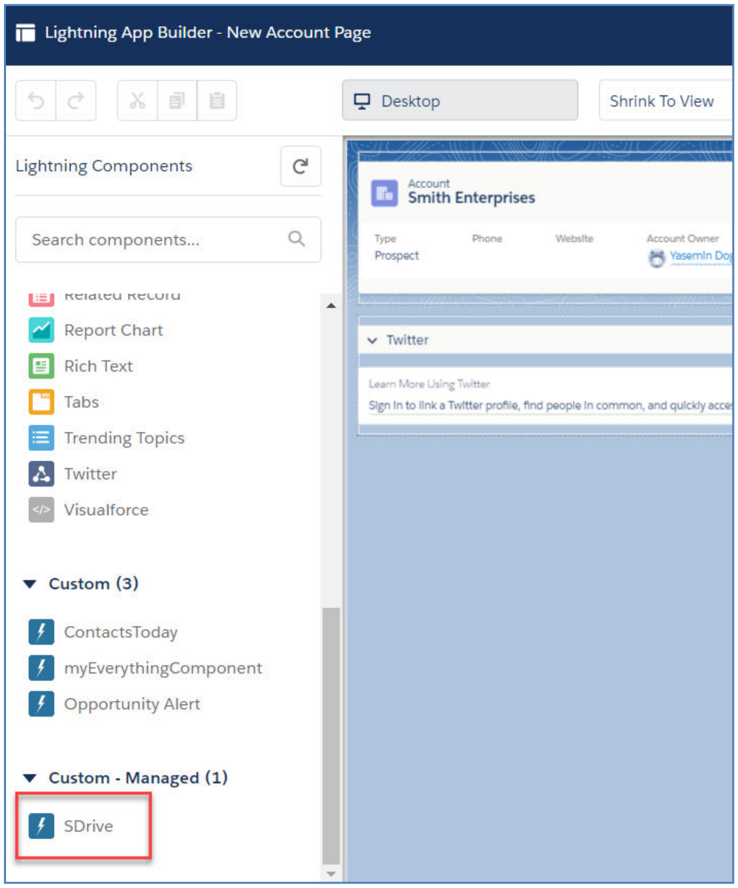


Figure 5-8

4. Grab the **SDrive** component and drag it to the right side where you see the components of the account page. Drop wherever you want the S-Drive component to be placed. **Note: if you do not see the S-Drive component, you need to implement My Domain on your Salesforce Org. My Domain is required to use this and other Salesforce features. See Salesforce Help: My Domain for more information.**

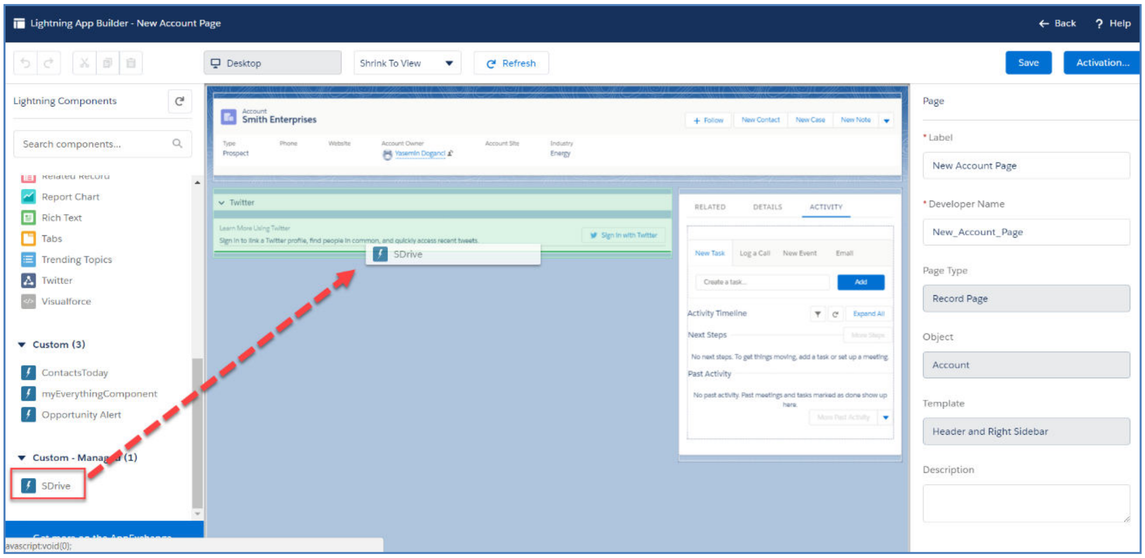


Figure 5-9

5. Edit the following required fields correctly to create the S-Drive area for Account Files (or Contacts, Cases, Opportunities, Leads)(Figure 5-10). You can also change the settings for a selection of checkboxes which include: Enable copy URL, Enable delete, Enable download, Enable edit, Enable e-mail, Enable upload, Enable folders, Enable private files, Enable Chatter, Disable Cut Copy Paste. You can scroll down to see more settings for the S-Drive Lightning component, such as showing folder tree component and breadcrumbs, which can be changed by using the toolbar menu afterwards.

6. After clicking on **“Save”** button, you need to activate the page in order to use the S-Drive component. You can click on **“Activation”** and choose **“Assign as Org Default”** or **“Assign as App Default”** from the pop-up screen, in order to view the S-Drive component. Now, you

should see “Account Files” page block at the end of the account object record page.

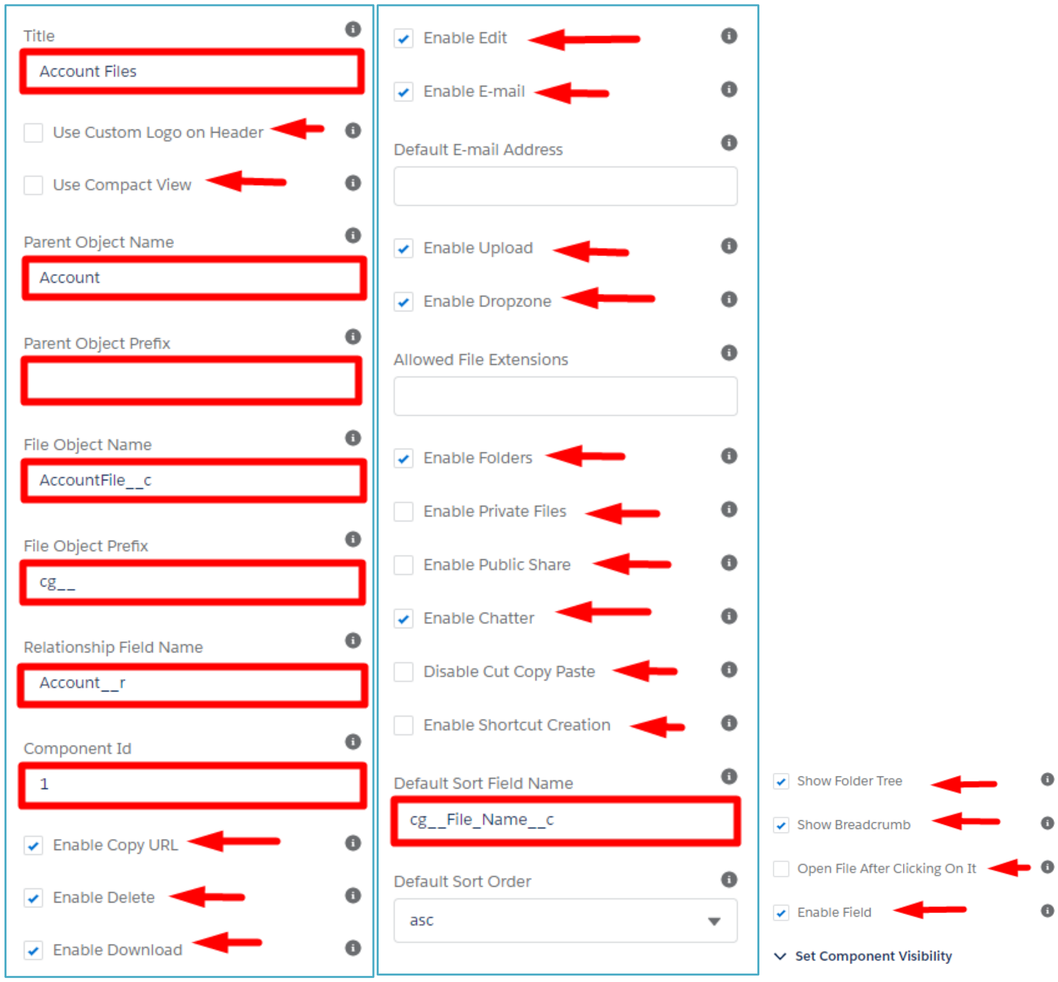


Figure 5-10

The component attributes shown in Figure 5-10 are discussed in this section in detail:

1. **Title**
   This is the title of the page block inside the object page. You can set it to “Account Files” (or Case Files, Contact Files, etc.) This field is optional and if you don’t provide a value for this field, it will be set to “S-Drive Files”.

2. **Use Custom Logo on Header**
   Checking this box will enable inserting a custom logo. In order to enable this checkbox, add your logo image to Static Resource with the name ‘SCustomLogo’ first. Note that Static Resource should be public.

3. **Use Compact View**
   Checking this box will enable a compact view of S-Drive which will help users to fit S-Drive into narrow spaces. In compact view, toolbar operations will be limited to the following: navigate to Home, upload files, download files and folders, create folders, navigate to recycle bin.

4. **Parent object name**
   This is the name of the object that the files will be attached to. For Account object, it will be "Account". For the other standard objects use Case, Contact, Opportunity or Lead.

5. **Parent object prefix**
   This is the object's namespace prefix that your Salesforce.com organization uses. For Account and other standard objects, you do not need to add an object namespace prefix so leave this field blank.

6. **File object name**
   This is the name of the custom object S-Drive uses to hold the information regarding the attached files. S-Drive comes with the custom File object associated with Account, Case, Contact, Opportunity, and Lead. The object name is "AccountFile__c" (CaseFile__c, ContactFile__c, OpportunityFile__c, or Lead_File__c)

7. **File object prefix**
   This is the file object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object file inside this organization, your file namespace prefix is the same as your organization namespace prefix. If this file object belongs to a managed package, you need to use that managed package's namespace prefix. For Account, Case, Contact, Opportunity, or Lead set it to "cg__".

8. **Relationship field name**
   Master-detail relation used for selected standard object. You need to fill it in as "Account__r" (Case__r, Contact__r, Opportunity__r, Lead__r)

9. **Component Id**
   If multiple S-Drive components are used in a page, this attribute should be set to a unique key for each component. For example: '1', 'a', etc.

10. Enable copy URL

This option is used to enable/disable “Copy URL” link in the page. If the checkbox is checked, you will be able to see the “Copy URL” link for each asset. The default value for this checkbox is checked.

11. Enable delete

This option is used to enable/disable “Delete” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Delete” link for each asset. The default value for this checkbox is checked.

12. Enable download

This option is used to enable/disable “Download” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Download” link for each asset. The default value for this checkbox is checked.

13. Enable edit

This option is used to enable/disable “Edit” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Edit” link for each asset. The default value for this checkbox is checked.

14. Enable e-mail

This option is used to enable/disable “E-Mail” option for all attachments in the page. If the checkbox is checked, you will be able to see the “E-Mail” link for each asset. The default value for this checkbox is checked.

15. Default email address

You can use this option, if you want to set a default “Additional To” email address for sending emails from your S-Drive Attachments. For example, if you select an Account S-Drive Attachment for an account and click “Email” button, “Email Files” screen will be opened and “Additional To” field will be filled with the email address you have provided here.

16. Enable upload

This option is used to enable/disable “Upload” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Upload File(s)” link for each asset. The default value for this checkbox is checked.

17. **Enable Drop Zone**
    This option is used to configure drop zone in S-Drive components. Select/deselect the checkbox to enable or disable the drop zone.

18. **Allowed file extensions**
    You can use this option if you want to limit the file types to be uploaded into selected object's S-Drive attachments. Semicolon separated list of file extensions that are allowed to be uploaded can be written here. This attribute is optional and leaving this empty will allow all kind of files to be uploaded. For example, "*.jpg, *.txt" will limit the files to be uploaded to jpg and txt files.

19. **Enable folders**
    This option is used to enable/disable folder support for S-Drive attachments in the page. If the checkbox is checked, you will be able to see the "New Folder" button. The default value for this checkbox is checked. If the box is not checked, the "New Folder" button will be removed from the toolbar section.

20. **Enable private files**
    This option is used for enabling public/private file access to the S-Drive attachments and commonly used to limit the customer portal users' access to individual files. The ability for users to configure this is determined by the main configuration settings in S-Drive Configuration Tab. If the checkbox is checked, you will see the public/private flag. Set this attribute to true by checking the checkbox, if you want to enable private/public flag. Setting the private flag on a file hides the file from customer portal users. The default value for this checkbox is unchecked.

21. **Enable Public Share**
    This option is used to configure public share in S-Drive components. Select the checkbox to see Public Share option in Actions Menu. Deselect the checkbox to disable Public Share in Actions Menu.

22. **Enable Chatter**
    This option is used for enabling/disabling Chatter for Account files. If you enable this option, you will be able to use functions such as 'Post to Chatter' and will be able to view the Chatter feed of each Account file.

23. Disable Cut Copy Paste

This option is used for enabling/disabling cut/copy-paste options. Set this attribute to true by checking the checkbox if you want to disable cut/copy-paste operations.

24. Enable Shortcut Creation

This option is used to configure Shortcut Creation in S-Drive components. Select the checkbox to see Create Shortcut button on toolbar. Deselect the checkbox to disable Create Shortcut button on toolbar.

25. Default sort field name

This option is used to order/sort S-Drive documents based on a field. You need to set the name of the field that should be used to order the list of files. For this example, it should be filled in as “cg__File_Name__c”. You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See “S-Drive Lightning User Guide” for more information about using the S-Drive attachments.*

26. Default sort order

This option is used to set the sort order direction of the S-Drive documents. There are two possible values for this attribute: “asc” or “desc”. The default value is “asc” which stands for ascending. You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See “S-Drive Lightning User Guide” for more information about using the S-Drive attachments.*

27. Files Count for A Page

This option is to set the number of files to be shown in an attachment page. The default value for this section is set to 100. If this value is set to ‘30’ and object has 91 total items, the files will be displayed in 4 pages. You can change this option from the pagination setting located under the toolbar of S-Drive attachments. *See “S-Drive Lightning User Guide” for more information about using the S-Drive attachments.*

28. Default view type

This option is to set the default view type of the file list table. There are 3 options you can choose: List, Thumbnail and Grid. You can change this option from the toolbar of S-Drive attachments and set it as default by using the settings button. *See “S-Drive Lightning User Guide” for more information about using the S-Drive attachments.*

29. Show Folder Tree

This option sets the default behavior of the folder tree component located on the left-hand side of the S-Drive attachments page. You can choose to hide or show the Folder Tree component by using the settings button on the toolbar of S-Drive attachments. *See "S-Drive Lightning User Guide" for more information about using the S-Drive attachments.*

30. Show Breadcrumb

This option sets the default behavior of the breadcrumbs located on the left-hand side of the S-Drive attachments page, above the folder tree component. You can choose to hide or show the breadcrumbs by using the settings button on the toolbar of S-Drive attachments. *See "S-Drive Lightning User Guide" for more information about using the S-Drive attachments.*

31. Open File After Clicking on It

This option is used to configure the behavior when a file is clicked on. Select the checkbox to open the file when it is clicked on. Deselect the checkbox to go to the Details view of the file.

32. Enable Field

This option is used to configure Fields button on toolbar which is used to select and display fields. Select the checkbox to enable the button on toolbar and deselect the checkbox to hide.

5.3 S-Drive Compact View Configuration

In order to use S-Drive in narrow spaces in Lightning Experience, you can use the configuration option, “Use Compact View” checkbox.

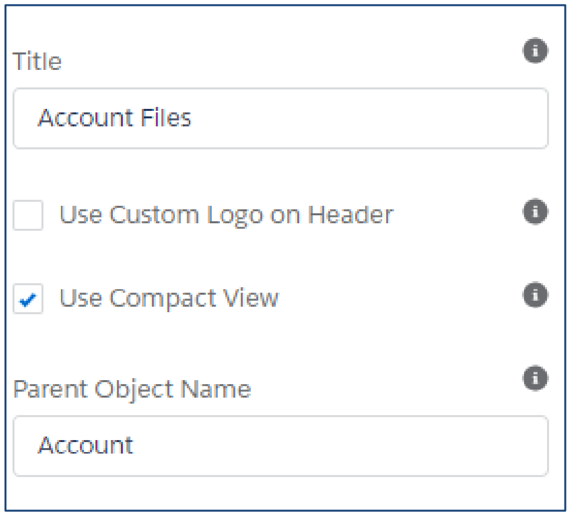


Figure 5-11

The compact view enabled S-Drive component will look like the following:

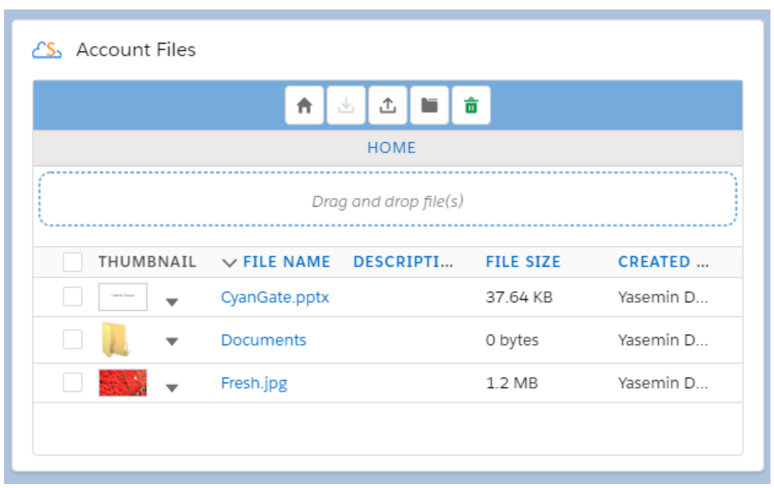


Figure 5-12

Note that the search bar is not available in compact view.

In compact view, the number of fields that are shown in the file list is limited. As you configure your fields in the S-Drive Configuration tab, the first four fields will be shown in the compact view, including the File Name field.

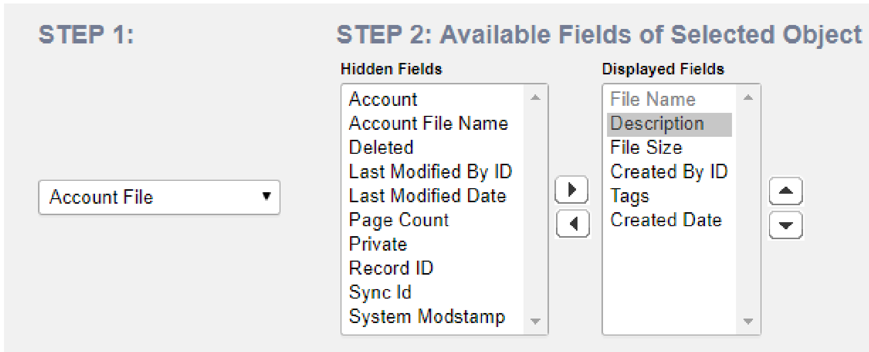


Figure 5-13

In a configuration like the figure above for Account Files, the following fields will be shown in the component: File Name, Description, File Size and Created By ID.

5.4 S-Drive Email (Beta)

The Email Lightning component allows users to write emails with attachments of files from S-Drive. You can place the email component to any lightning page with the Lightning App builder and attach files of any file object type from any record. If you have **Enhanced Emails** enabled in your org, emails sent from S-Drive email component will show up in your email Activity History.

Enabling S-Drive Email

Open the Lightning App Builder by clicking on the cog wheel at the top right corner of your Object record page and click on "Edit Page".

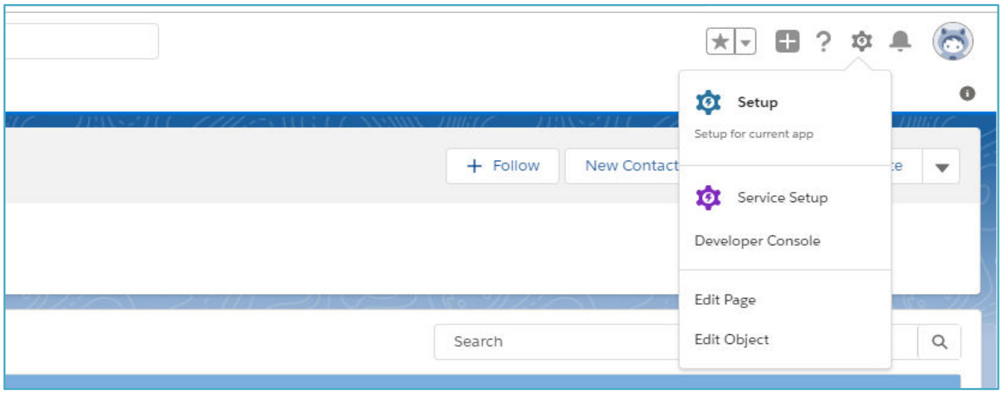


Figure 5-14

Drag and drop the S-Drive E-Mail (Beta) component from the lightning components panel to your desired location in the Lightning page editor.

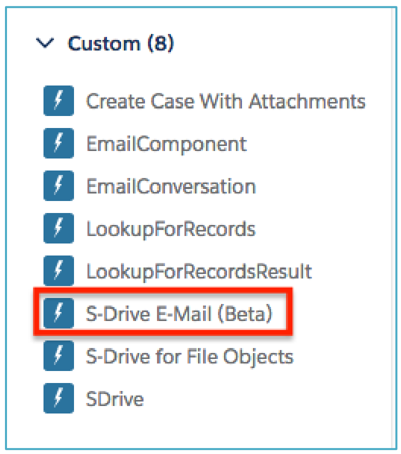


Figure 5-15

6 DISPLAYING “S-Drive” AND “S-Drive Configuration” TABS

Display the S-Drive Tab and S-Drive Configuration tab for easy access.

6.1 Classic Tabs

To display **"S-Drive"** and **"S-Drive Configuration"** tabs in your custom app (e.g. **"Sales"** app) in Classic

1. Go to User Menu on the top right corner and choose **"My Settings"** (Figure 6-1).

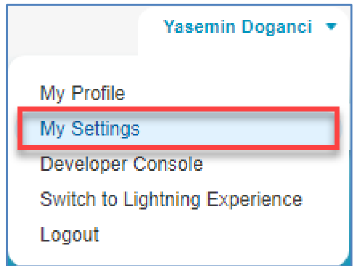


Figure 6-1

2. Under **"Display & Layout"** tab, click on **"Customize My Tabs"** button.

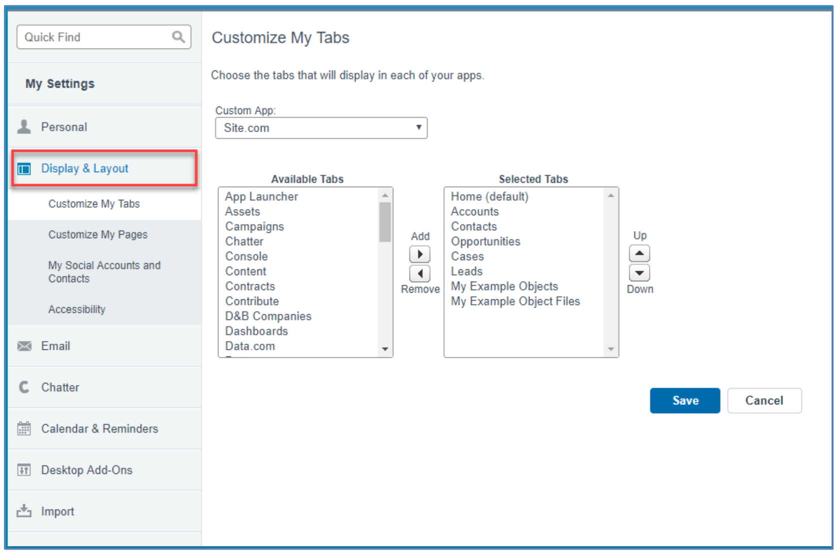


Figure 6-2

3. Select your custom app from the **"Custom App"** drop down menu (e.g. **"Sales"** app). Move **"S-Drive"** and **"S-Drive Configuration" tabs** from **"Available Tabs"** box to **"Selected Tabs"** box by selecting and clicking the right arrow as shown below. Click **"Save"** (Figure 6-3).

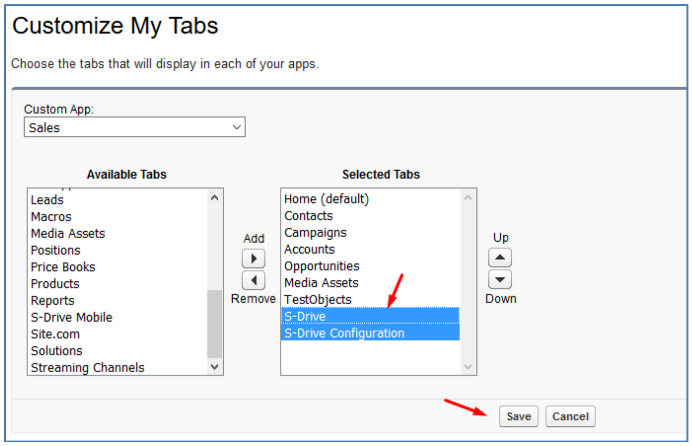


Figure 6-3

6.2 Lightning Tabs

To display “S-Drive”, “S-Drive Configuration” and “S-Drive Advanced Search” tabs in Salesforce Lightning,

1. Click on **“App Launcher”** ( ) menu which is on the left corner of the Salesforce page.
2. Click on **“S-Drive: Simple Secure Storage for Salesforce Users”** app (Figure 6-4).

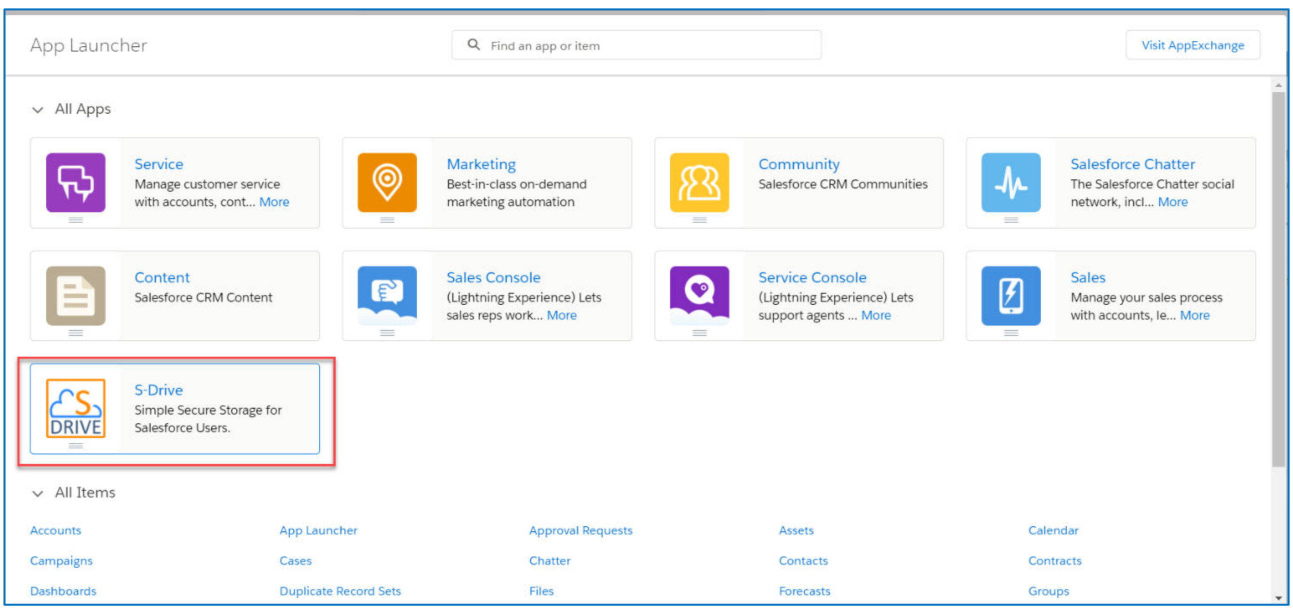


Figure 6-4

3. After clicking, you will return to your Home page in Salesforce, and you will be able to view the S-Drive related tabs on top of the page.

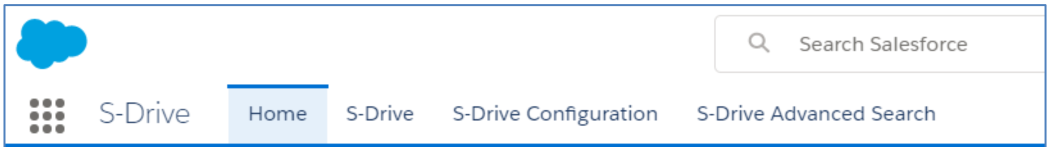


Figure 6-5

7 S-DRIVE ADVANCED CONFIGURATION

7.1 Configuring S-Drive on Standard/Custom Objects

S-Drive can be used for uploading files to standard and/or custom object without any restriction. You need to create objects and configure several settings manually to use these features.

Note that for Account, Case, Contact, Opportunity and Lead standard objects, the associated S-Drive file objects and override pages are bundled with the S-Drive installation. If you'll use S-Drive attachments for these standard objects as override, you can use bundled objects and/or pages where appropriate.

This section will guide you through how to create an S-Drive file object to go with the object you want to use S-Drive with, and a how to display the S-Drive area on your object page.

7.1.1 Creating S-Drive File Objects

Every object you want to use S-Drive with must have an associated S-Drive File object with a master-detail relationship where the file object is the detail. S-Drive can create this object for you.

> ***Note:*** *For Accounts, Cases, Contacts, Opportunities and Leads objects, S-Drive File Objects have already been provided as part of the S-Drive package. For those, you can skip to section 4: Creating Custom Object File Pages.*

For this feature to be available, you must configure remote site settings. Go to **Setup -> Security -> Remote Site Settings** and create a new remote site named anything let's say "SDriveMeta" and copy your organization domain for example as: "https://cgsdrive-dev-ed.my.salesforce.com".

To create an S-Drive file object for your custom object, go to **S-Drive Configuration -> Customization Settings** section.

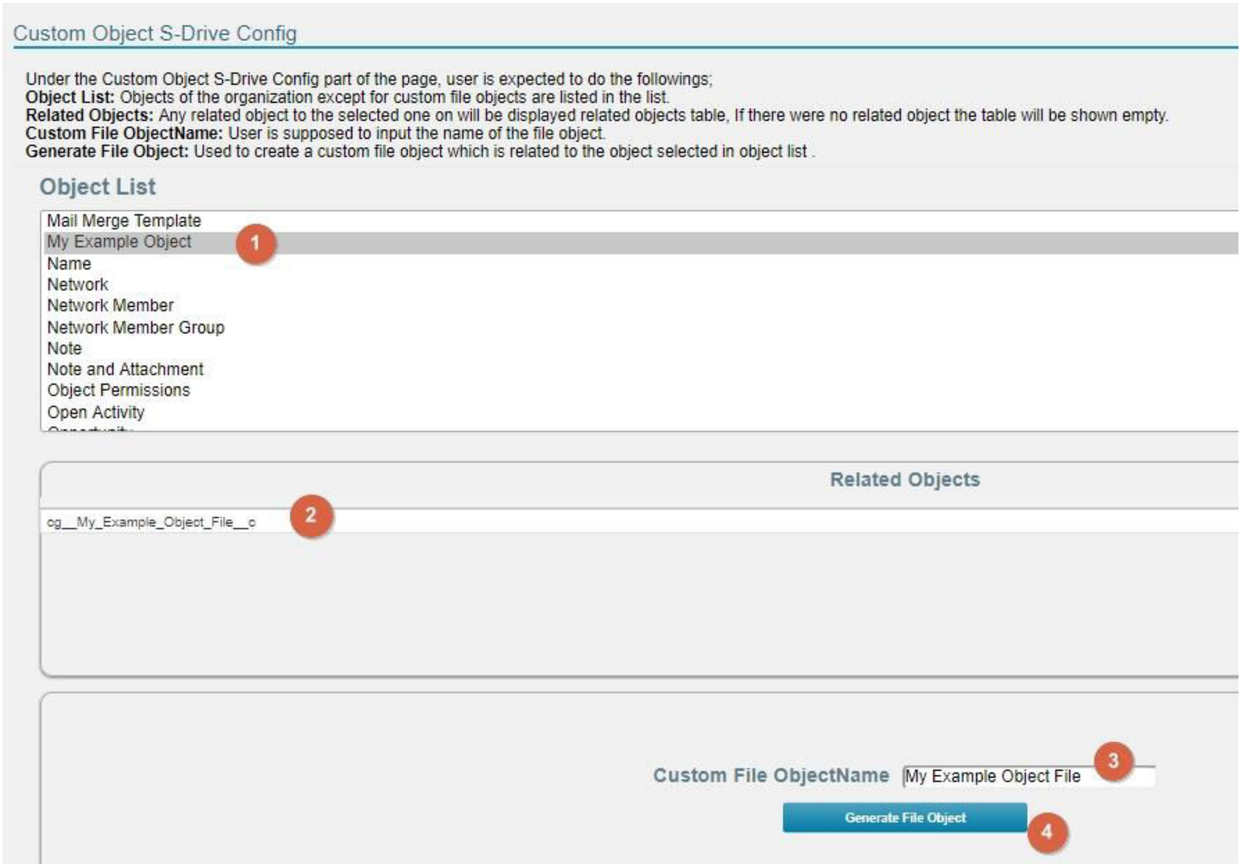


Figure 7-1

Scroll down to the Custom Object S-Drive Config part of the page and follow the steps below:

(1) "Object List": Objects of the organization except for S-Drive file objects are listed in the dropdown menu.

(2) “Related Objects”: Any related object to the selected one on (1) will be displayed here.

(3) “Custom File ObjectName”: Choose a name for the new file object that is being created.

(4) “Generate File Object”: Click here to create a custom file object which is related to the object selected in (1).

After creating the object, the user can now configure SDrive attachment with the object thanks to automatically created file object.

7.1.2 (Optional) Creating Before Delete Trigger for Custom Object

For Accounts, Cases, Contacts and Opportunities objects, these triggers have already been provided as part of the S-Drive package. You can skip "Creating Before Delete Trigger for Custom Object" section for these four standard objects and go to step 4: Creating Custom Object File Pages.

In this step we'll create a *before delete* trigger for our custom object. This trigger is used to prevent deletion of the object if it has custom object files in it. This step is an optional step, but we strongly recommend creating this trigger. The following steps will explain the creation of the trigger:

1. Go to **Setup -> App Setup -> Create -> Objects** and click the label of your custom object (Figure 7-2). (To create triggers on standard objects, go to **Setup -> App Setup -> Customize -> Standard Object Name** (e.g. Solutions) **-> Triggers**.)

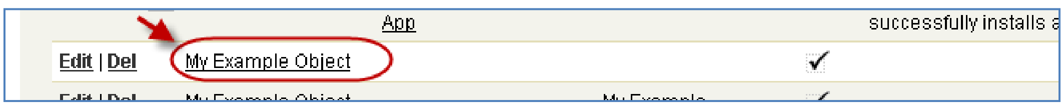


Figure 7-2

2. Find "Triggers" page block in the opening page. Click **New** button to create a new trigger. (Figure 7-3).

Figure 7-3

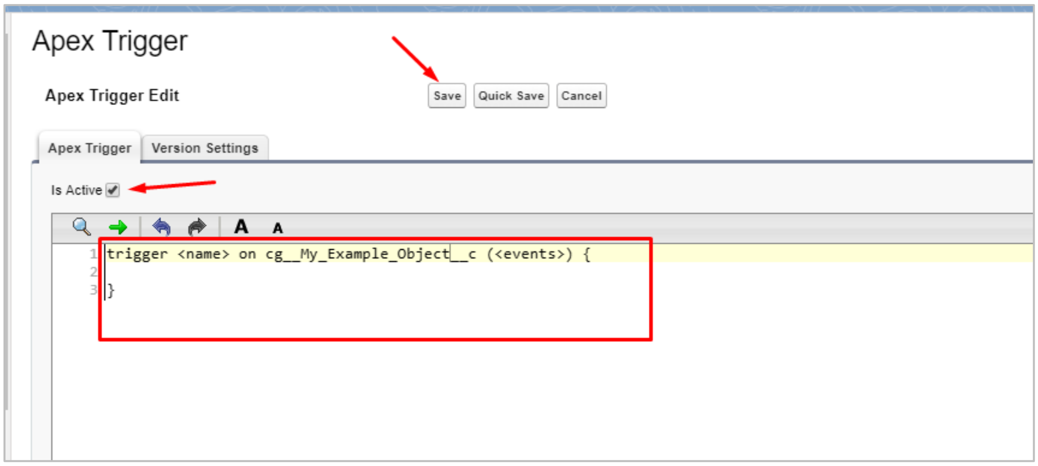


Figure 7-4

3. Make sure "**Is Active**" is checked in the "Apex Trigger Edit" screen (Figure 7-4). Type the trigger codes defined below, inside the code block (Figure 7-4). Make sure you changed the bold sections with your object name, object file name and namespace prefix. For our example object *YourObjectName* will be "My_Example_Object", *YourObjectNameContainingNamespacePrefix* will be "cg__My_Example_Object__c", NamespacePrefix will be "cg__" and YourObjectFileNameContainingNamespacePrefix will be "cg__My_Example_Object_File__c (Figure 7-5). Click **Save** button to create the trigger (Figure 7-4).

```
trigger My_Example_ObjectBeforeDelete on cg__My_Example_Object__c (before delete)
{
    List<Id> ids = new List<Id>();

    for(cg__My_Example_Object__c obj : Trigger.old)
    {
        ids.add(obj.Id);
    }

    Integer tempCount =
        [Select count() from cg__My_Example_Object_File__c
            where cg__My_Example_Object_File__c.cg__WIP__c = false and
            cg__My_Example_Object_File__c.cg__Parent__c in :ids];

    if(tempCount > 0)
    {
        Trigger.old[0].addError('There are files attached to this object.' +
            ' You need to first delete object files manually and' +
            ' then delete the object!');
    }
}
```

Figure 7-5


```
trigger YourObjectNameBeforeDelete on
YourObjectNameContainingNamespacePrefix (before delete)
{
    List<Id> ids = new List<Id>();

    for(YourObjectNameContainingNamespacePrefix obj :
Trigger.old)
    {
        ids.add(obj.Id);
    }

    Integer tempCount = [Select count() from
YourObjectFileNameContainingNamespacePrefix where
YourObjectFileNameContainingNamespacePrefix.NamespacePrefixWIP__
c = false and
YourObjectFileNameContainingNamespacePrefix.NamespacePrefixParen
t__c in:ids];

    if(tempCount > 0)
    {
         Trigger.old[0].addError('There are files attached to
object. You need to first delete files manually and then delete
the object!');
    }
}
```

Notes

If you have a sandbox environment, and if you must create a test case in order to deploy the trigger to your production organization, below is an example test class for My_Example_Object custom object.


```
@isTest
private class My_Example_Object_Test {

    static testMethod void triggerTest1()
    {
        test.starttest();

        cg__My_Example_Object__c obj = new cg__My_Example_Object__c();
        obj.Name = 'Test My Example Object';
        insert obj;

        cg__My_Example_Object_File__c aFile = new cg__My_Example_Object_File__c();
        aFile.cg__File_Name__c = 'Test File';
        aFile.cg__WIP__c = false;
        aFile.cg__Parent__c = obj.Id;
        insert aFile;

        try
        {
            delete obj;
            system.assert(false); //should never happen
        }
        catch(Exception e)
        {
            system.assert(true); //should fail
        }
        test.stoptest();
    }
}
```

After creating above test class and enabling the trigger, if you try to delete a My Example Object which contains My Example Object Files, you'll get this warning message: *"There are object files attached to this object. You need to first delete object files manually and then delete the object!"*

7.1.3 Creating Custom Object Files Page for Classic

In this fourth step we'll create custom object file's Visualforce page. This page can be used to override the object's view, or it also can be used as an inline section for the object's layout. At the end of this section, use cases for both scenarios will be displayed.

To create an object file page, follow these steps:

1. Go to **Setup -> App Setup -> Develop-> Pages** and click the **New** button at the top of the page (Figure 7-6).

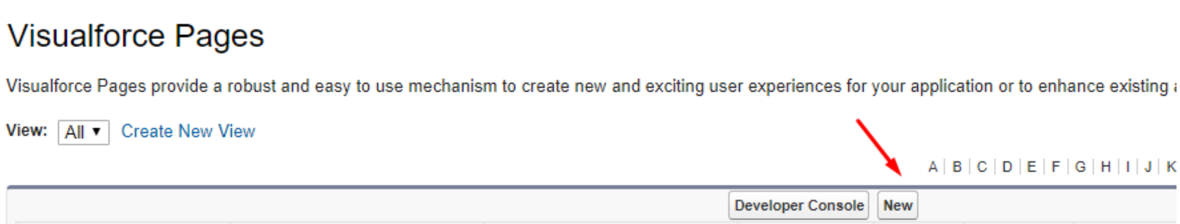


Figure 7-6

2. In the "**Page Edit**" screen you'll create your new page. Give an appropriate name to your page. For our example, we will use "MyExamplePage" name. Type "MyExamplePage" inside Label field (Figure 7-7-a). Type "MyExamplePage" inside Name field (Figure 7-7-b).

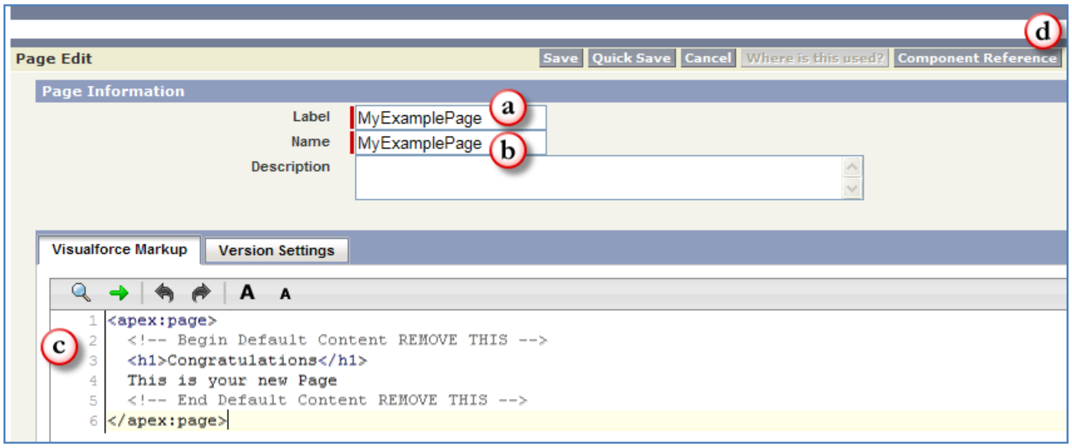


Figure 7-7

You need to set the "Salesforce.com API" version to 22.0 or above to use S-Drive 2.0 features. To set the version number click the "Version Settings" tab next to the "Visualforce Markup" tab and change the version number from drop-down (Figure 7-8).

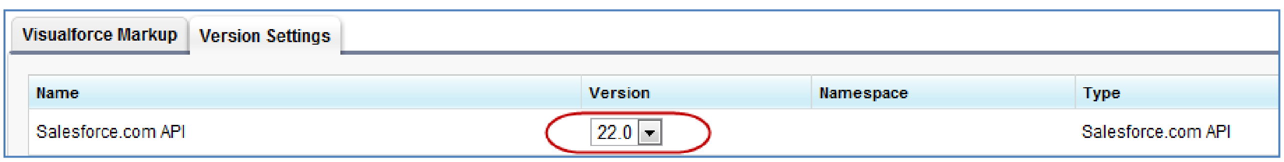


Figure 7-8

Now we need to create our page content. We will be using custom components in our page. Basically, our page skeleton will be as follows:

```
<apex:page standardController="My_Example_Object__c"
    tabStyle="My_Example_Object__c">
  <cg:AttachmentComponent
    title="My Example Object Files"
    customObjectName="My_Example_Object__c"
    customObjectFileName="My_Example_Object_File__c"
                  objectId="{!Id}"
    objectNamespacePrefix="mynamespaceprefix__"
    fileNamespacePrefix="mynamespaceprefix __"
    enableCopyURL="true/false"
    enableDelete="true/false"
    enableDownload="true/false"
```

```
        enableEdit="true/false"
        enableEmail="true/false"
        enableUpload="true/false"
        enableChatter="true/false"
        inline="true/false"
        inlineEdit="true/false"
        legacyIdSupport="true/false"
        privateEnabled="true/false"
        orderBy="File_Name__c"
        allowedFileExtensions="*.avi;*.txt"
        defaultEmailAddress="user@company.com"
        enableAttachFromSDriveFolders="true/false"
        enableFolders="true/false"
        relationshipName="Parent__r"
        pageSize="100"
        useUploadAsPopup="true/false" />
</apex:page>
```

As an example, the following will be a typical ***custom override Visualforce page with inline edits and chatter enabled***:

```
<apex:page standardController="My_Example_Object__c"
    tabStyle="My_Example_Object__c">
    <apex:detail inlineEdit="true" relatedList="true"
showChatter="true"/>
    <cg:AttachmentComponent
        title="My Example Object Files"
        inline="true"
        customObjectName="My_Example_Object__c"
        customObjectFileName="My_Example_Object_File__c"
        objectId="{!My_Example_Object__c.Id}" />
</apex:page>
```

You need to set these component attributes based on your configuration. Let's discuss these component attributes:

a) standardController

You need to set this standard controller to the object that you want to use with. For our example this is the custom object name that we created: "My_Example_Object__c". As you can see from the example we appended "__c" to the end of the name. This means this object is a custom object. You can use standard objects also. For standard objects you will not append "__c" at the end of the object name (e.g. Solution). Also, do not prepend your account's namespace prefix.

b) tabStyle

This is the tab style of the page. Normally you can set it same with standardController. That means tab style will be derived from the standard controller you chose.

c) title (optional)

This is the title of the page block inside the object page. You can set it to "Custom Object Name" Files. For our example it will be "My Example Object Files". This field is optional and if you don’t provide a value for this field, it will be set as "Attached Files".

d) customObjectName

This is the name of the custom or standard object that will be the object that the files will be attached to. For our example, it is "My_Example_Object__c". If this is a custom object you need to append "__c" to the end of the name. If this is a standard object you won’t append "__c" at the end of the object name (eg. Solution). Also do not prepend your account’s namespace prefix.

e) customObjectFileName

This is the name of the S-Drive file object that we created in previous sections. This object holds the information regarding the attached files. For our example, it is "My_Example_Object_File__c".

f) objectId

You need to pass in the "**{!Id}**" value for this attribute. This attribute is required to retrieve object id.

g) objectNamespacePrefix (optional)

This is the object’s namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object inside your organization, your object namespace prefix is same as your organization namespace prefix. If this object belongs to a managed package, you need to use that managed package’s namespace prefix. If your object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set objectNamespacePrefix as "exampleprefix__".

h) fileNamespacePrefix (optional)

This is the file object’s namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object file inside this organization, your file namespace prefix is same with your organization namespace prefix. If this file object belongs to a managed package, you need to use that managed package’s namespace prefix. If your file object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set fileNamespacePrefix as "exampleprefix__".

i) **enableCopyURL (optional)**
This option is used to enable/disable "Copy URL" link in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Copy URL" links won’t be displayed in this page. This field is optional and if you don’t provide a value for this field, it will be set as "true", therefore "Copy URL" link will be visible for each asset. Note that security and permission settings override this option.

j) **enableDelete (optional)**
This option is used to enable/disable "Del" links for all attachments in the page and "Delete Selected" button for the whole page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Del" links and "Delete Selected" button won’t be displayed in this page. This field is optional and if you don’t provide a value for this field, it will be set as "true" therefore, "Del" links and "Delete Selected" button will be visible. Note that security and permission settings override this option.

k) **enableDownload (optional)**
This option is used to enable/disable "Download", “Open” and “Zip & Download” for all attachments in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Download", “Open” and “Zip & Download” won’t be displayed in this page. This field is optional and if you don’t provide a value for this field, it will be set as "true" therefore, "Download", “Open” and “Zip & Download” links will be visible for each asset. Note that security and permission settings override this option.

l) **enableEdit (optional)**
This option is used to enable/disable "Edit" link for all attachments in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Edit" links won’t be displayed in this page. This field is optional and if you don’t provide a value for this field, it will be set as "true" therefore, "Edit" links will be visible for each asset. Note that security and permission settings override this option.

m) enableEmail (optional)

This option is used to enable/disable "Email Selected" button in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Email Selected" button won't be displayed in this page. This field is optional and if you don't provide a value for this field, it will be set as "true", therefore "Email Selected" button will be visible for each asset. Note that security and permission settings override this option.

n) enableUpload (optional)

This option is used to enable/disable "Upload File(s)" button in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Upload File(s)" button won't be displayed in this page. This field is optional and if you don't provide a value for this field, it will be set as "true", therefore "Upload File(s)" button will be visible for each asset. Note that security and permission settings override this option.

o) enableChatter (optional)

This option is used to enable/disable Chatter related activities for files. There are two possible values for this attribute: **"true", "false"**. If "false" is set, "Post to Chatter" and Chatter Feed won't be displayed in the page. This field is optional and if you don't provide a value for this field, it will be set as "true", therefore the "Post to Chatter" button and Chatter Feed in the details page will be displayed for each asset. Note that security and permission settings override this option.

p) inline (optional)

This option is used to decide if the page is used with override for the view or as a section in the page layout. There are two possible values for this attribute: **"true", "false"**. Set this attribute to "true" to use this component inside an inline Visualforce page. The default for this attribute is false. One important note about "inline" is it needs to be set to true for "*typical custom override Visualforce page with inline edits and chatter enabled*" example because of a bug related to Salesforce.com.

q) inlineEdit (optional)

This option is used to decide if the inline edit feature will be available for the other parts of the page or not. If inline option is set to true, inlineEdit option is ignored, meaning that inlineEdit feature can only be used when the view of the object is overridden. So, you cannot use this option with the use as inline attachment feature. There are two possible values for this attribute: **"true", "false"**. Set this attribute to "true" to enable the inlineEdit feature for the Visualforce page. Also note that this feature is supported for the pages with version 21.0 and above (Spring 2011). The default for this attribute is false.

There are three possible scenarios for the usage of the inlineEdit:

1- If *inline is set to true* (using inline attachment feature), *inlineEdit's value does not have any meaning* (it is ignored).
2- If *inline is set to false* (default is false, using with the override for the view of the object), and we set *inlineEdit to true*, it means *inline editing for the page elements is enabled*.
3- If *inline is set to false* (default is false, using with the override for the view of the object), and we set *inlineEdit to false*, it means *inline editing for the page elements is disabled*.

r) legacyIdSupport (optional)

This option is used for legacy id support. There are two possible values for this attribute: **"true", "false"**. Set this attribute to true to use 18-character ids. The default for this attribute is false.

s) privateEnabled (optional)

This option is used for enabling public/private file access to the S-Drive attachments and commonly used to limit the customer portal users' access to individual files. Before setting this property, you need to add a new field to your custom object file named 'Private' (See 'Creating Custom Object Files' section for more information). Set this attribute to true if you want to enable private/public flag. Setting the private flag on a file hides the file from customer portal users. There are two possible values for this attribute: **"true", "false"**. The default for this attribute is "false" except for the Case Files custom page (
Figure 7-9).

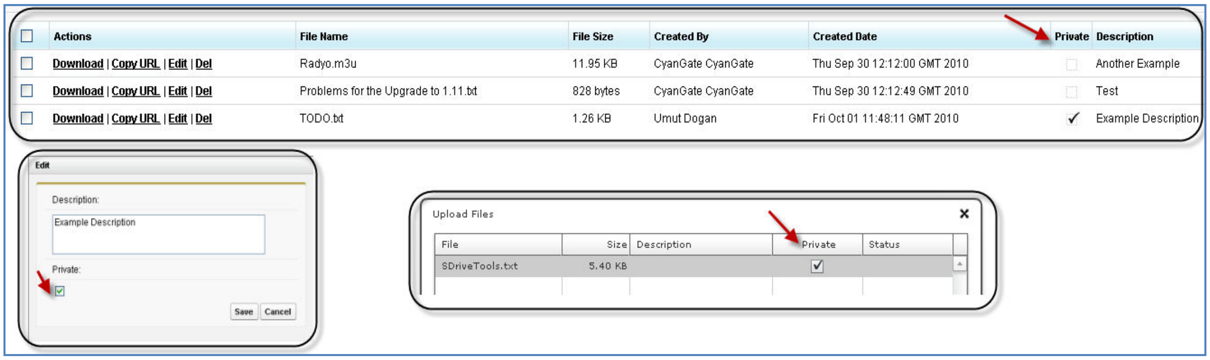


Figure 7-9

t) orderBy (optional)

This option is used to order/sort S-Drive attachments based on a field. You need to set the name of the field that should be used to order the list of files with namespace prefix. This attribute is optional and leaving this empty will not order the results in any specific order. For example: "cg__File_Name__c". With S-Drive 1.18, dynamic ordering is possible, so you can set this value to set out-of-the-box ordering and users can order items on-the-fly.

Note that Salesforce does not allow Long Text Area fields to be ordered/sorted. So, if you want to order/sort by a long text are field (e.g. Description__c), you need to change its type from ‘Long Text Area’ to ‘Text Area’. This will limit your description to be 255 characters long.

u) allowedFileExtensions (optional)

You can use this option if you want to limit the file types to be uploaded into selected object’s S-Drive attachments. Semicolon separated list of file extensions that are allowed to upload. This attribute is optional and leaving this empty will allow all kind of files to be uploaded. For example: "*.jpg;*.txt" will limit the files to be uploaded to jpg and txt files (Figure 7-10).

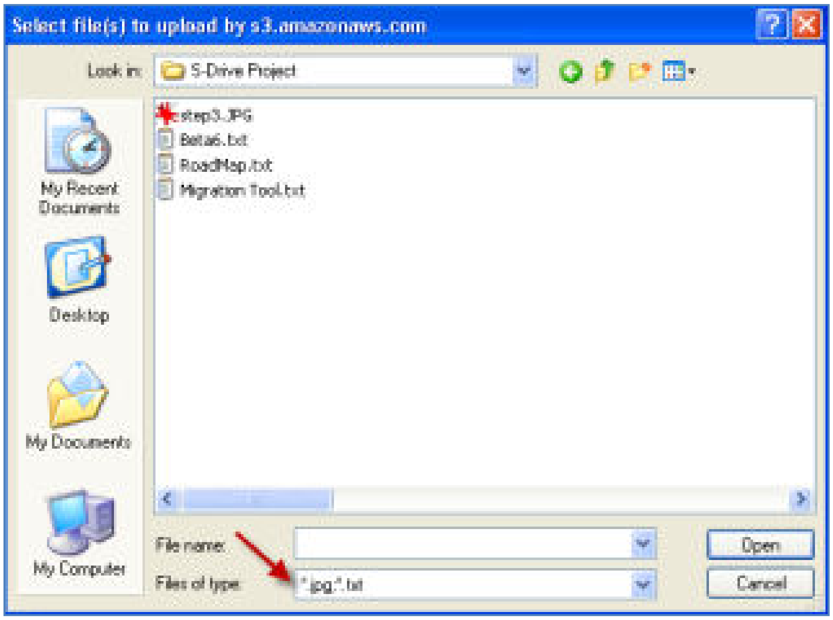


Figure 7-10

v) defaultEmailAddress (optional)

You can use this option, if you want to set a default "TO" email address for sending emails from your S-Drive Attachments. This option is automatically set for out of the box Contact, Opportunity, Case and Account S-Drive Attachments.

For example, if you select a Contact S-Drive Attachment for a contact and click "Email Selected" button, "Email Files" screen will be opened and "To…" field will be filled with the contact name as shown below:

If default email address is not found in your Salesforce Contacts, that email will be set to the "Additional To…" section of the "Email Files" page. These "To…" or "Additional To…" fields are auto-filled when "Email Files" page is loaded. You can clear them and/or select other contacts as you wish.

w) enableAttachFromSDriveFolders (optional)

This option is used to enable/disable "Attach from S-Drive Folders" button in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Attach from S-Drive Folders" button won't be displayed in this page. This field is optional and if you don’t provide a value for this field, it will be set as "true"; therefore "Attach from S-Drive Folders" button will be visible for each asset. Note that security and permission settings override this option. Also note that "Attach from S-Drive Folders" button is not visible for customer portal users, no matter what the *enableAttachFromSDriveFolders* value is.

x) enableDownloadManager (optional)

Download Manager has been deprecated. Zip & Download can be used instead of download manager. You can control it using enableDownload flag.

y) enableFolders (optional)

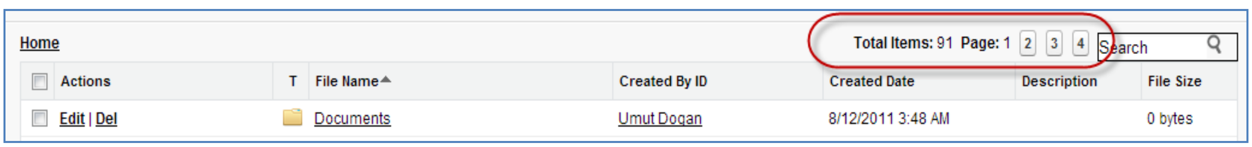
This option is used to enable/disable folders support for S-Drive Attachments. Set this attribute to false to disable folders. If you disable folders for S-Drive Attachments, "New Folder" button and breadcrumb will be removed from the buttons section. This configuration won't hide/delete currently created folders. The default for this attribute is true.

z) relationshipName (optional)

Master-detail relation used for selected standard/custom object. This attribute is optional and default value is 'Parent__r'.

aa) pageSize (optional)

Page size for pagination. Attachment items will be paginated based on this value. So, if this value is set to '30', and object has 91 total items, 4 page will be displayed. This attribute is optional and default value is 100.



bb) enableJavaUpload (optional)

Java upload has been deprecated.

Note

This setting will not work if HTML is selected for Default Upload Manager in S-Drive Configuration tab. We strongly suggest using HTML upload.

cc) useUploadAsPopup (optional)

Set this attribute to true to enable drag and drop functionality and upload widget as a popup window for selected S-Drive Attachment object. The default for this attribute is false. This value overrides the "Default Upload Manager" configuration in "S-Drive Configuration".

If you want to get more information about component attributes, you can click "**Component References**" button and find **cg:attachmentcomponent** reference from the list. (Figure 7-7-d).

After setting the page based on above component attributes, click "**Save**" button.

3. Lastly set the security for your page on other profiles. Go to **Setup -> App Setup -> Develop -> Pages** and click **Security** link next to your page name (Figure 7-11).

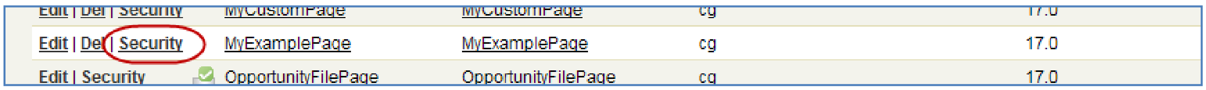


Figure 7-11

Move all profiles (or select based on your needs) from "Available Profiles" to "Enabled Profiles" as shown in Figure 7-12. If you skip this step, your users that belong to the disabled profiles will see an error page similar to Figure 7-13.

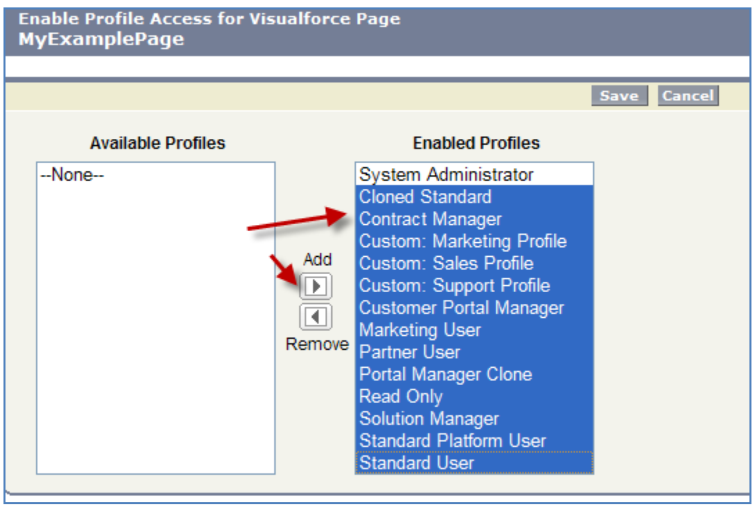


Figure 7-12

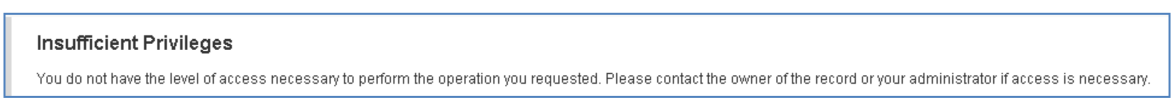


Figure 7-13

4. Now we have an object (or created our custom object), created our custom object file and custom object file page.

At this point, we can override the custom object's view or we can use S-Drive Attachments as an inline section in the page layout.

- ### *Overriding the View of the Object*

"Overriding the view of the object" means that the page will be used as an override to the standard object page. In this case, the S-Drive Attachments section will be a section at the end of the standard page layout.

5. Go to **Setup -> App Setup -> Create-> Object** and click the label of your custom object. You'll see "Object Definition Detail" screen. Scroll down and find **"Standard Buttons and Links"** page block and click **Edit** action next to the **View** label (Figure 7-14-a). Then select **Visualforce Page** for *Override With* section and pick **MyExampleFilePage** (the custom page you created previously for this object) from the drop-down box. Click **Save** button to complete the override (Figure 7-14-b).

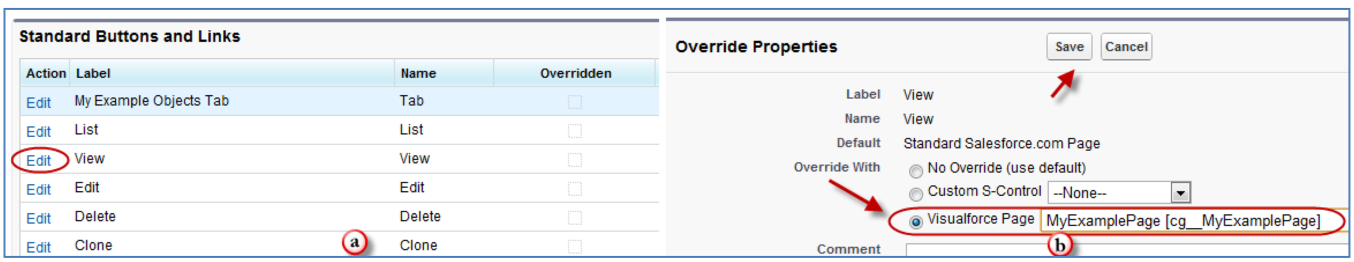


Figure 7-14

6. Now it will display **View** as **Overridden** in the *Standard Buttons and Links* section (Figure 7-15).

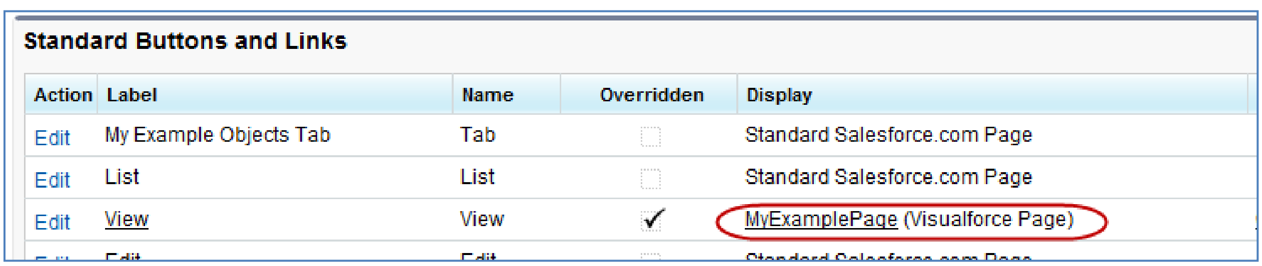


Figure 7-15

7. After creating a test object, you should see "My Example Object Files" page block at the end of the object detail page (Figure 7-16). See "User Guide" for more information on how to use the buttons and functions in this page block.

Figure 7-16

- ### *Using as Inline Attachment*

"Using as inline Attachment" means that the attachment component will be used as a section in the object's page layout. So, your customizations to the page layout won't be affected and you can append S-Drive Attachments in the page layout anywhere you would like. *Please note that "inline" component attribute for the custom page must be set to **"true"** to use the S-Drive Attachments as inline.*

1. Go to **Setup -> App Setup -> Create-> Object** and click the label of your custom object. You'll see "Object Definition Detail" screen. Scroll down and find **"Page Layouts"** page block and click **Edit** action next to the main layout of the object (Figure 7-17).

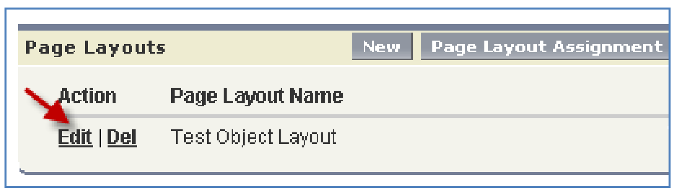


Figure 7-17

2. Click Fields and drag-drop a **Section** to an appropriate place in the layout (Figure 7-18).

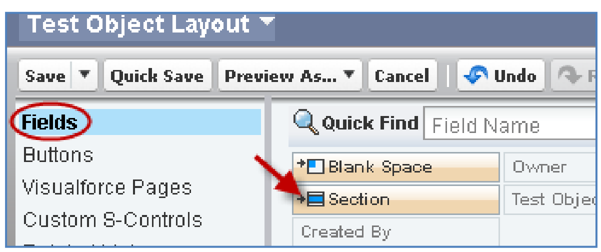


Figure 7-18

3. After dropping the "section", you'll see the properties screen for the dropped "section". Type in a section name and select if you want to display section header on *"Detail Page"* and *"Edit Page"*. Also select *"1-Column"* for the layout. Then click OK button. You can customize these settings based on your layout needs (Figure 7-19).

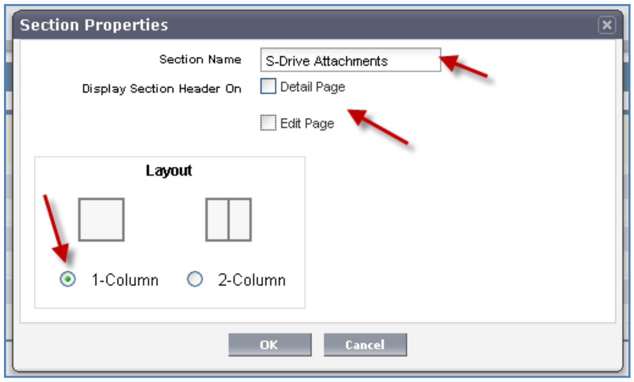


Figure 7-19

4. Now, go to **Visualforce Pages** from the top. Select the "custom page name" you created (e.g. TestPage) and drag it into the section that you created previously (Figure 7-20).

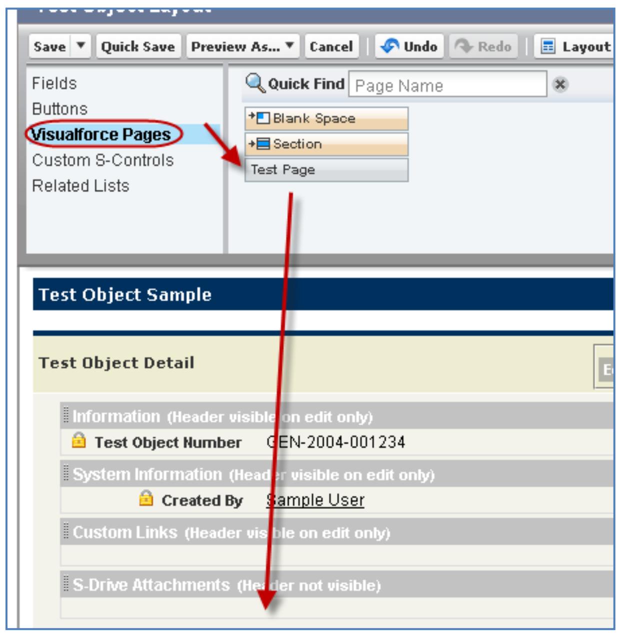


Figure 7-20

5. After dropping the page into the section, click the properties icon for the page on the top-right corner of the page in the section (Figure 7-21).

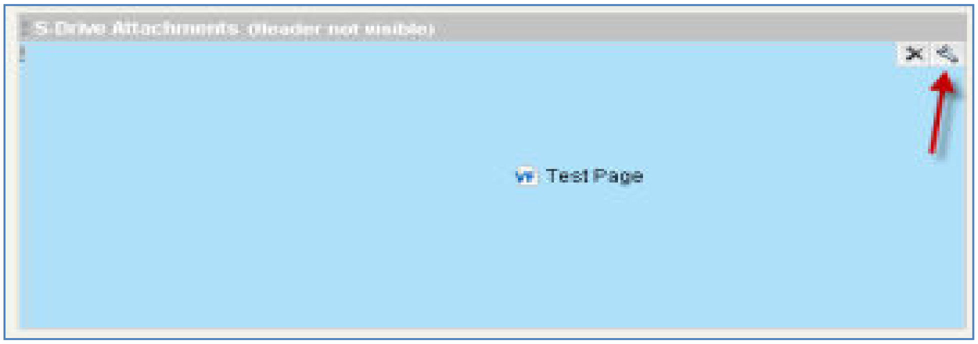


Figure 7-21

6. Keep **"Width (in pixels or %)"** as **"100%"**, set **"Height (in pixels)"** to **"500"**. And check **"Show scrollbars"** option. You can optionally check **"Show label"**. Click OK button (Figure 7-22).

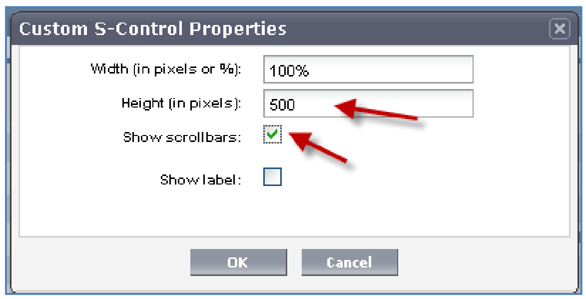
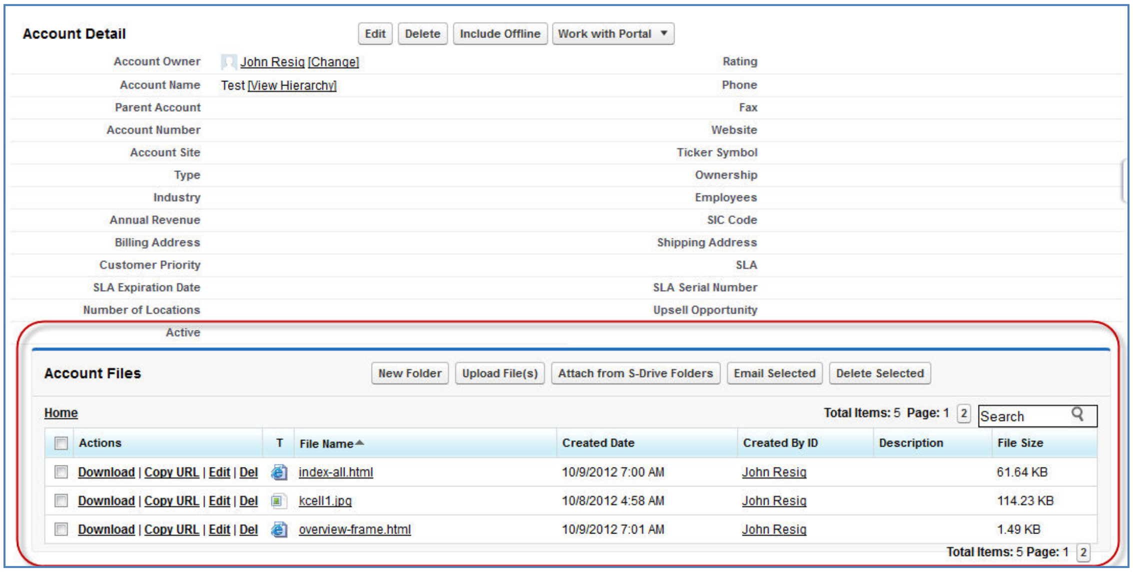


Figure 7-22

7. You can use "Inline Visualforce Expander" tool to automatically resize inline S-Drive page based on the size. So if you apply this tool to inline S-Drive Attachments page, page's height will be dynamic based on the number of items in the list. For this type of a configuration we suggest you to set the **"useUploadAsPopup"** attachment component property to set "true". You can install the "Inline Visualforce Expander" from AppExchange:
   http://appexchange.salesforce.com/listingDetail?listingId=a0N30000004cEEyEAM
   And you can download the installation/configuration document here:
   http://appexchange.salesforce.com/servlet/servlet.FileDownload?file=00P30000007KcasEAC

   Final result will be like below screen:



8. We are done with the configuration. Save the layout by clicking the "Save" button on the left-top corner of the screen (Figure 7-18).

9. Now if you go to your object's tab (page), you'll see the S-Drive Attachments inline in the page layout (Figure 7-23).

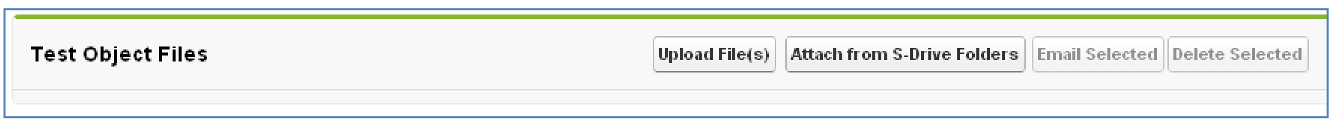


Figure 7-23

7.2 Creating Lightning Page

With 2.0 release, S-Drive is available for Lightning Experience. In this section, you can learn about creating lightning page for custom objects. To create a lightning page. This is the same process used in section 5.2 S-Drive File Area for Lightning (Accounts, Cases, Contacts, Opportunities, Leads)

1. You need to switch to Lightning Experience and open Lightning App Builder. To open it, you should open a record from your custom object (My_Example_Object__c) and

click on “Create Lightning Page” link under **Setup”** icon ( ). If you already have a Lightning Page, you should click on “Edit Page” link under c **Setup”** icon ( ). See the figure below.

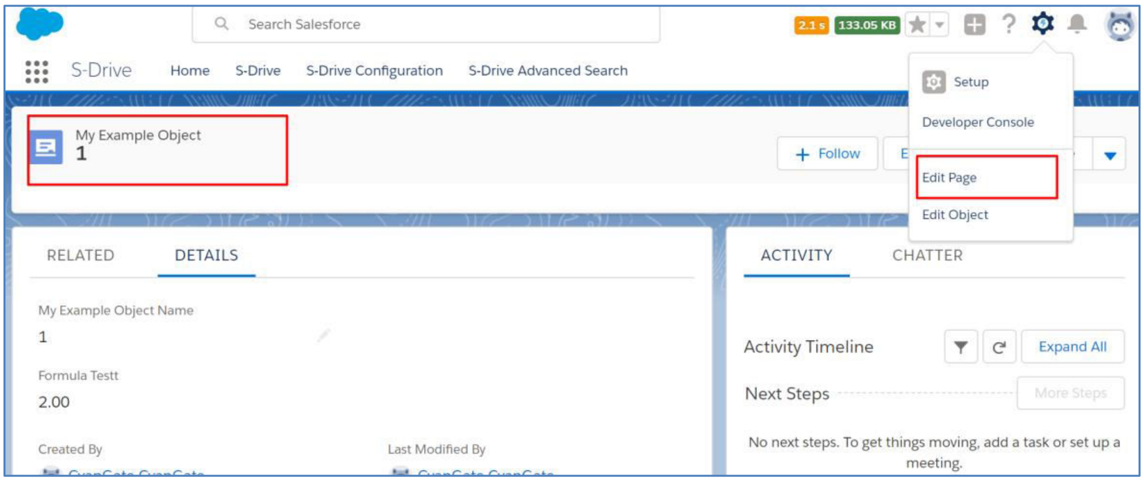


Figure 7-24

2. After clicking on “Edit Page” or “Create Page” option, “Lightning App Builder” will be shown. You will see **“Lightning Components”** section on the left-hand side. You need to scroll down to see the **“SDrive”** component, under **“Custom”**.

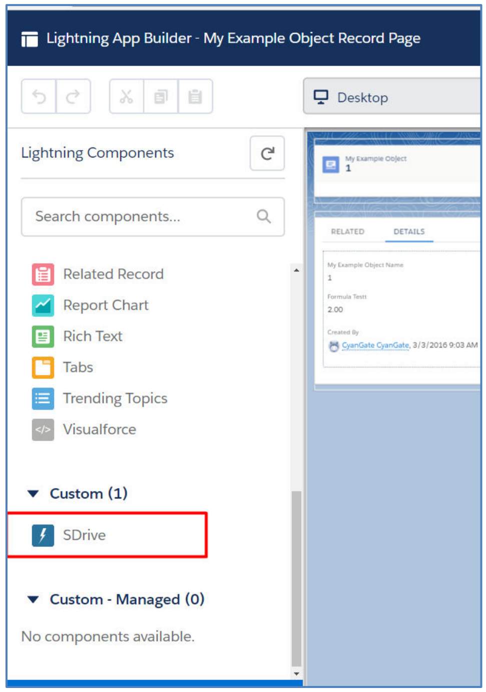


Figure 7-25

3. Grab the **S-Drive** component and drag it to the right side where you see the components of the account page. Drop wherever you want the S-Drive component to be placed.

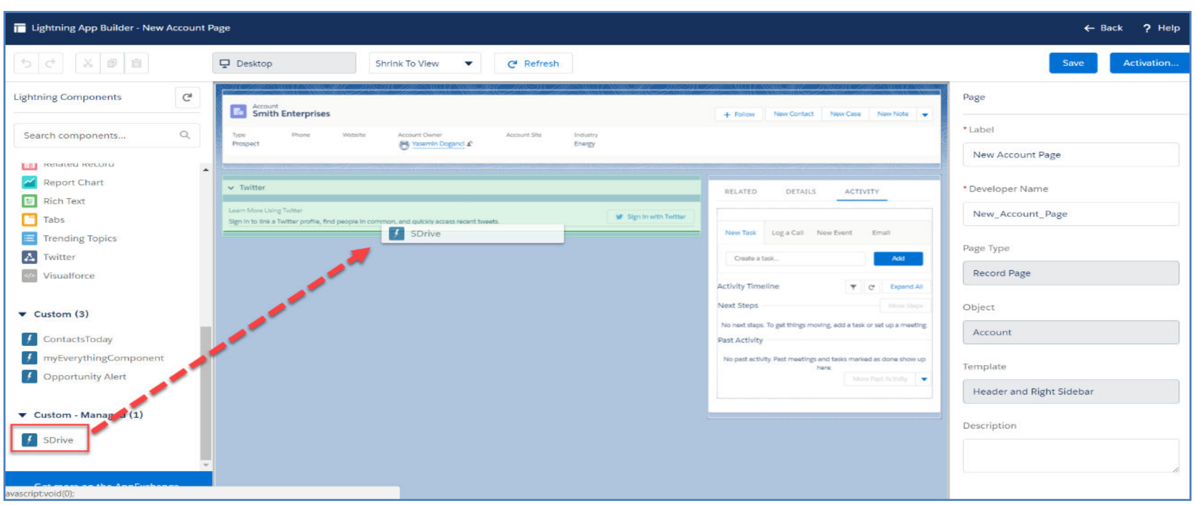


Figure 7-26

4. You need to edit the following required fields correctly, to configure S-Drive for your custom object in Lightning Experience (Figure 48). You can also change the settings from a selection of checkboxes which include: Enable copy URL, Enable delete, Enable download, Enable edit, Enable e-mail, Enable upload, Enable folders, Enable private files. You can scroll down to see more settings about the S-Drive Attachment component, such as showing folder tree component and breadcrumbs, which can be changed by using the toolbar menu afterwards.

5. After clicking on **“Save”** button, you need to activate the page to use the S-Drive component. You can click on **“Activation”** and choose **“Assign as Org Default”** or **“Assign as App Default”** from the pop-up screen, to view the attachment component. Now, you should see “My Example Object Files” block at the end of my example object record page. See "Lightning User Guide" for more information on how to use the buttons and functions in this block.

Note: If you want to enable multiple S-Drive components in one, single Lightning page, just repeat steps 3-5. But fill your “Component Id” section with another unique number. “Component Id” section is described in point (h), in the section below.

Place another S-Drive component from the Lightning Components section.

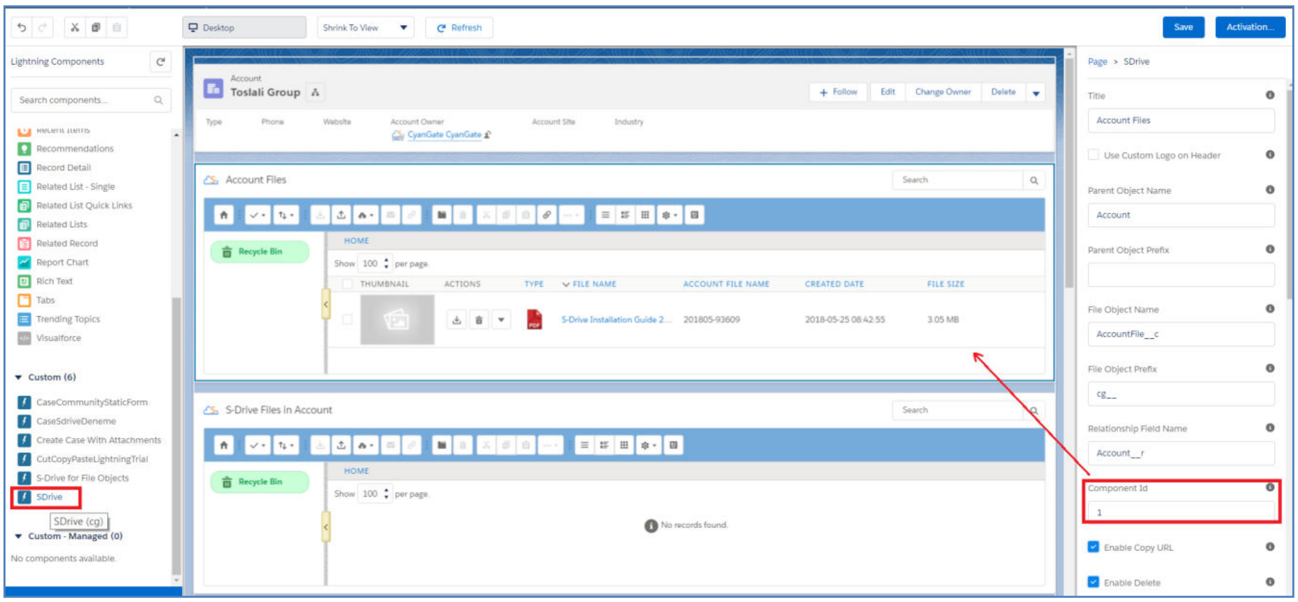


Figure 7-27

The component attributes shown in Figure 7-28 are discussed in this section below in detail:

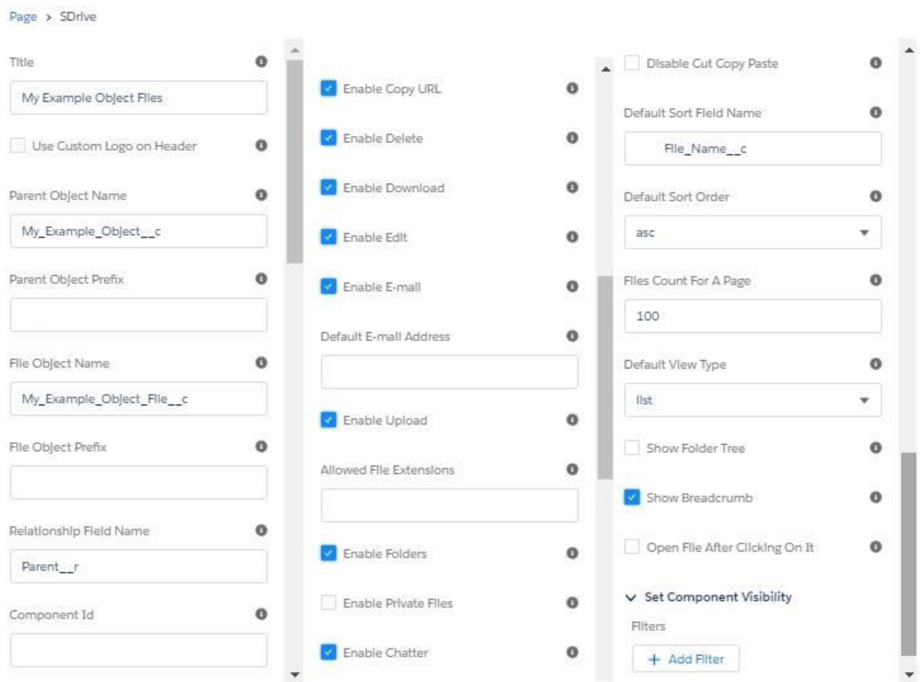


Figure 7-28

a) **Title (optional)**

This is the title of the page block inside the object page. You can set it to "My Example Object Files". This field is optional and if you don't provide a value for this field, it will be set as "S-Drive Files".

b) **Use Custom Logo on Header**

Checking this box will enable inserting a custom logo. In order to enable this checkbox, add your logo image to Static Resource with the name 'SCustomLogo' first. Note that Static Resource should be public.

c) **Parent object name**

This is the name of the custom or standard object that will be the object that the files will be attached to. For our example, it is "My_Example_Object__c". If this is a custom object you need to append "__c" to the end of the name. If this is a standard object you won't append "__c" at the end of the object name (eg. Solution). Also, do not prepend your account's namespace prefix.

d) Parent object prefix (optional)
This is the object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object inside your organization, your object namespace prefix is same with your organization namespace prefix. If this object belongs to a managed package, you need to use that managed package's namespace prefix. If your object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set objectNamespacePrefix as "exampleprefix__".

e) File object name
This is the name of the S-Drive file object that we created in previous sections. This object holds the information regarding the attached files. For our example, it is "My_Example_Object_File__c". Do not prepend your account's namespace prefix.

f) File object prefix (optional)
This is the file object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object file inside this organization, your file namespace prefix is same with your organization namespace prefix. If this file object belongs to a managed package, you need to use that managed package's namespace prefix. If your file object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set File object namespace prefix as "exampleprefix__".

g) Relationship field name
Master-detail relation used for selected standard/custom object. This attribute is optional and default value is 'Parent__r'.

h) Component Id
If multiple S-Drive components are used in a page, this attribute should be set to a unique key for each component. For example: '1', 'a', etc.

i) Enable copy URL (optional)
This option is used to enable/disable "Copy URL" link in the page. If the checkbox is checked, you will be able to see the "Copy URL" link for each asset. The default value for this checkbox is

checked.

j) **Enable delete (optional)**
This option is used to enable/disable “Delete” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Delete” link for each asset. The default value for this checkbox is checked.

k) **Enable download (optional)**
This option is used to enable/disable “Download”, “Open” and “Zip & Download” options for all attachments in the page. If the checkbox is checked, you will be able to see the “Download” link for each asset. The default value for this checkbox is checked.

l) **Enable edit (optional)**
This option is used to enable/disable “Edit” option for all attachments in the pageIf the checkbox is checked, you will be able to see the “Edit” link for each asset. The default value for this checkbox is checked.

m) **Enable e-mail (optional)**
This option is used to enable/disable “E-Mail” option for all attachments in the page. If the checkbox is checked, you will be able to see the “E-Mail” link for each asset. The default value for this checkbox is checked.

n) **Default email address (optional)**
You can use this option, if you want to set a default “Additional To” email address for sending emails from your S-Drive Attachments. For example, if you select an Account S-Drive Attachment for an account and click “Email” button, “Email Files” screen will be opened and “Additional To” field will be filled with the email address you have provided here.

o) **Enable upload (optional)**
This option is used to enable/disable “Upload” option for all attachments in the page. If the checkbox is checked, you will be able to see the “Upload File(s)” link for each asset. The default value for this checkbox is checked.

p) **Allowed file extensions (optional)**
You can use this option, if you want to limit the file types to be uploaded into selected object’s S-Drive attachments. Semicolon separated list of file extensions that are allowed to upload can be written here. This attribute is optional and leaving this empty will allow all kind of files to be

uploaded. For example, "*.jpg, *.txt" will limit the files to be uploaded to jpg and txt files.

q) **Enable folders (optional)**
This option is used to enable/disable folder support for S-Drive attachments in the page. If the checkbox is checked, you will be able to see the "New Folder" button. The default value for this checkbox is checked. If the box is not checked, the "New Folder" button will be removed from the toolbar section.

r) **Enable private files (optional)**
This option is used for enabling public/private file access to the S-Drive files and commonly used to limit the customer portal users' access to individual files. Set this attribute to true by checking the checkbox, if you want to enable private/public flag. Setting the private flag on a file hides the file from customer portal users. The default value for this checkbox is unchecked.

s) **Enable Chatter**
This option is used for enabling/disabling Chatter for Case files. If you enable this option, you will be able to use functions such as 'Post to Chatter' and will be able to view the Chatter feed of each Case file.

t) **Default sort field name (optional)**
This option is used to order/sort S-Drive attachments based on a field. You need to set the name of the field that should be used to order the list of files. For this example, it should be filled in as "cg__File_Name__c". You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

u) **Default sort order (optional)**
This option is used to set the sort order direction of the S-Drive attachments. There are two possible values for this attribute: "asc" or "desc". The default value is "asc" which stands for ascending. You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

v) **File count in a page (optional)**
This option is to set the number of files to be shown in an attachment page. The default value for this section is set to 100. If this value is set to '30' and object has 91 total items, the files will be displayed in 4 pages. You can change this option from the pagination setting located under

the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

w) Default view type (optional)

This option is to set the default view type of the file list table. There are 3 options you can choose: List, Thumbnail and Grid. You can change this option from the toolbar of S-Drive attachments, and set it as default by using the settings button. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

x) Show Folder Tree (optional)

This option sets the default behavior of the folder tree component located on the left-hand side of the S-Drive attachments page. You can choose to hide or show the Folder Tree component by using the settings button on the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

y) Show breadcrumb (optional)

This option sets the default behavior of the breadcrumbs located on the left-hand side of the S-Drive attachments page, above the folder tree component. You can choose to hide or show the breadcrumbs by using the settings button on the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

z) Open File After Clicking on It

This option sets the file behavior when it is clicked on. If you want to open a file when it is clicked on, mark this checkbox as checked. If you want to preview a file when it is clicked on, mark this checkbox as unchecked.

7.2.1 Configuring *S-Drive for File Objects* Component for Object File Record Page

Every object that uses S-Drive, whether standard or custom, has a File Object associated with it. Accounts has AccountFiles. Cases has CaseFiles, etc. When you use S-Drive on a custom object, you create a custom file object. The tab for the file object shows a list view of documents uploaded to S-Drive for that object. If you click on a record in the list view, it will show information about the document, but there's no access to the document itself. In order to be able to get to the document from the list view record, you need to edit the Lightning page to add the *S-Drive for File Objects* component. This component provides easier access to any S-Drive file or folder through the record page of the file, with **"Open in S-Drive"** button. This button redirects the user to S-Drive and opens the file or folder's detail page.

To configure your Object File Record Page with the *S-Drive for File Objects* component, go to any file object tab (Account Files, etc) and select a record.

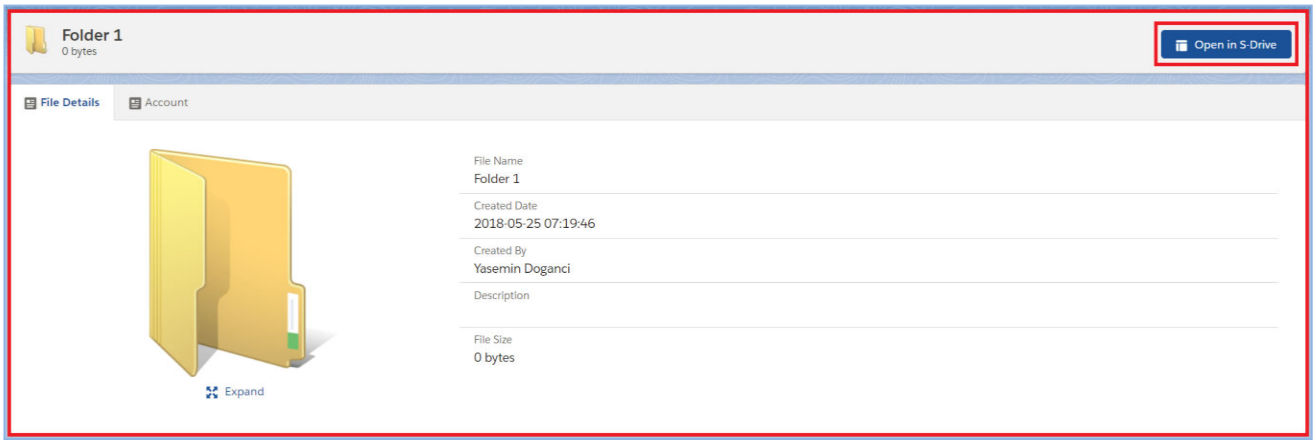


Figure 7-29

Click on **"Edit Page"** setting to see the Lightning App Builder for the Object File Record Page.

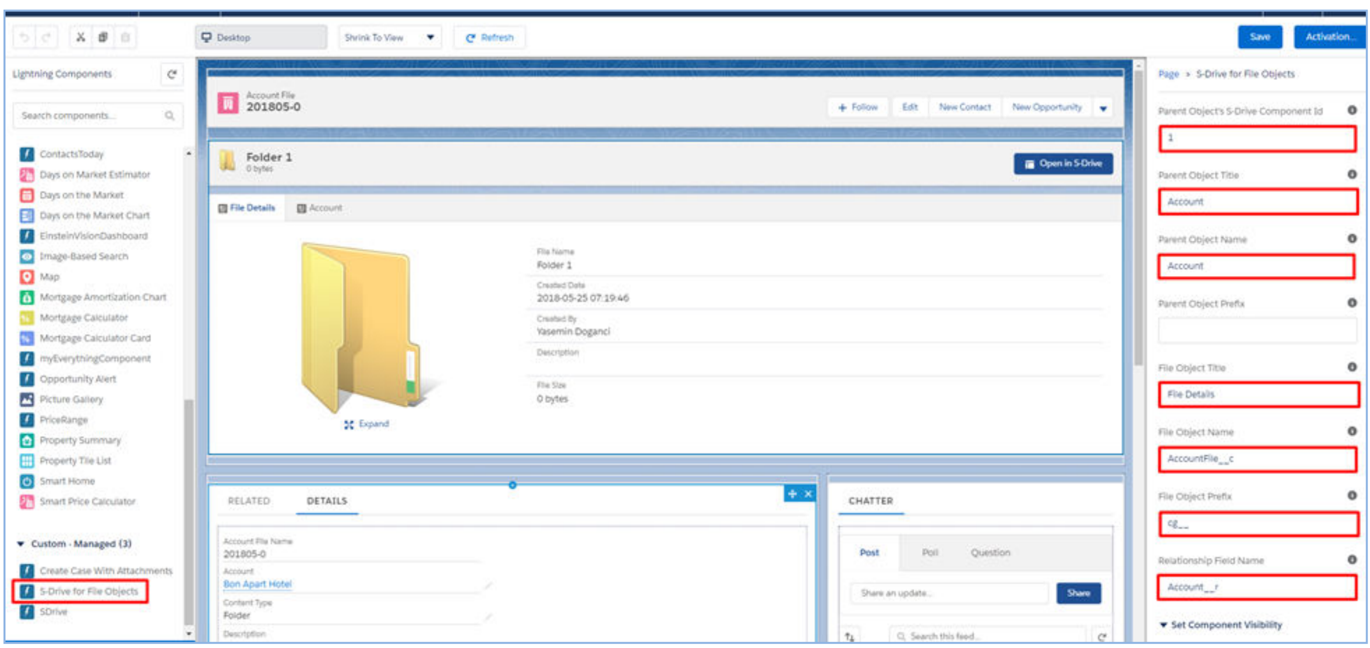


Figure 7-30

The required fields to be filled in are:

1. Parent Object's S-Drive Component Id: If S-Drive component on parent object's record page has an Id, it should be defined here for S-Drive Component to recognize. For example: If S-Drive on Account has '1' as component id, S-Drive File component should have '1' in this field.

2. Parent Object Title: Title for parent object detail tab. For example: 'Account'.

3. Parent Object Name: API Name of the custom object that the files will belong to. This object can also be one of the standard objects such as Solutions or Products. For example: 'MyObject__c' or 'Solution'.

4. Parent Object Prefix: Namespace prefix for the parent object for the attachments. This attribute is required if the object has a namespace. For example: 'cg__'

5. File Object Title: Title for file detail tab. For example: 'Account File'.

6. File Object Name: API Name of the custom object that will represent the file. This custom file object is required to include fields indicated in the installation guide of S-Drive. For example: 'MyFile__c'.

7. File Object Prefix: Namespace prefix for the file object. This attribute is required if the object has a namespace. For example: 'cg__'

8. Relationship Field Name: Master-detail relation used for selected standard/custom object. For standard objects, this is Account__r, Case__r, Contact__r, etc. For custom objects, it is 'Parent__r'.

After configuring these fields, you can use your *S-Drive For File Object's* component to reach your S-Drive files and folders with one click of a button.

7.3 Creating Custom HTML Upload Page

You can create S-Drive HTML Upload Widget Page for custom object files (cg__S3Object__c, cg__CaseFile__c, MyExampleObject__c, etc.). This page can be used to add the S-Drive HTML upload widget to the place wherever you want. So, you can upload your files to "S-Drive Folders" or "S-Drive Attachments" easily without opening object's page and clicking "Upload file(s)" button. To create a custom HTML upload page, follow these steps:

1. Go to **Setup -> App Setup -> Develop-> Pages** and click the **New** button at the top of the page (Figure 7-31).

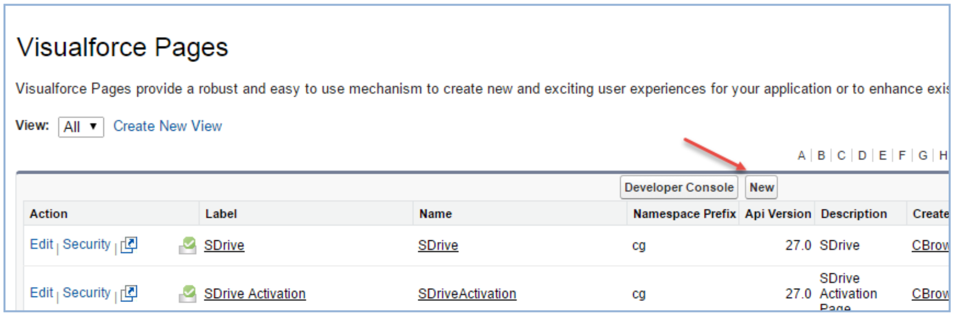


Figure 7-31

2. In the "**Page Edit**" screen you'll create your new page. Give an appropriate name to your page. For our example, we will use "MyCaseHtmlUploadPage" name. Type "MyCaseHtmlUploadPage" inside Label field (Figure 7-32-a). Type "MyCaseHtmlUploadPage" inside Name field (Figure 7-32-b).

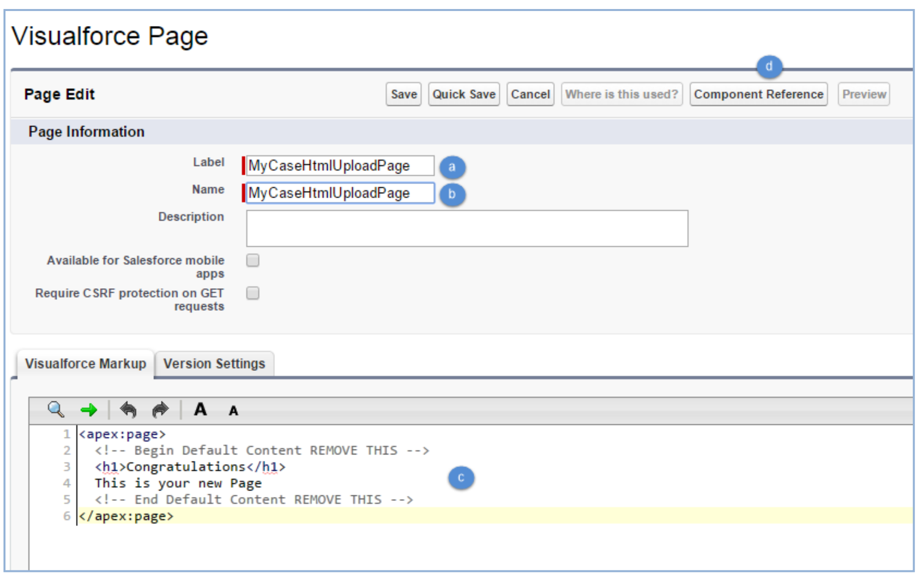


Figure 7-32

You need to set the "Salesforce.com API" version to 22.0 or above to use S-Drive 2.0 features. To set the version number click the "Version Settings" tab next to the "Visualforce Markup" tab and change the version number from drop-down (See Figure 7-8).

Now we need to create our page content. We will be using custom components in our page. Basically, our page skeleton will be as follows:

```
<apex:page standardController="Case"  tabStyle="Case">
    <cg:HtmlUploadComponent
                 objectId="{!Case.Id}"
                 customObjectFileName="CaseFile__c"
                 fileNamespacePrefix="cg__"
           relationshipName="Case__r"
           privateEnabled="true"
                  allowedFileExtensions="="*.avi;*.txt""
           isUsePopup="true/false"

  returnUrl="https://na6.salesforce.com/home/home.jsp"
                  debug="true/false"
                  currentFolderId = " a068000000xgAAEAA2"
    />
</apex:page>
```

As an example, the following will be a typical ***Visualforce page***:

```
<apex:page standardController="Case"  tabStyle="Case"
  showHeader="false" sidebar="false"
  standardStylesheets="false" applyHtmlTag="true"
  applyBodyTag="true" docType="html">
<html>
    <head>
        <meta charset="utf-8" />
        <title>
            Case Files Html Upload Page
        </title>
    </head>
<body>
    <cg:HtmlUploadComponent
            objectId="{!Case.Id}"
            customObjectFileName="CaseFile__c"
            fileNamespacePrefix="cg__"
            relationshipName="Case__r"
            privateEnabled="true"
            isUsePopup="true"
            debug="true"
```



```
      />
</body>
</html>
</apex:page>
```

You need to set these component attributes based on your configuration. Let's discuss these component attributes:

1. **standardController**
   You need to set this standard controller to the object that you want to use with. For our example this is the custom object name: "Case". As you can see from the example we do not appended "__c" to the end of the name. This means this object is a not custom object. You can use custom objects also. For custom objects you will append "__c" at the end of the object name (e.g. ExampleObject__c). Also, do not prepend your account's namespace prefix.

2. **tabStyle**
   This is the tab style of the page. Normally you can set it same with standardController. That means tab style will be derived from the standard controller you chose.

3. **customObjectFileName**
   This is the name of the custom object file that existing, or we have created in previous sections or. This object will be holding the information regarding the attached files. For our example, it is "CaseFile__c". If this is a custom object you need to append "__c" to the end of the name. Also, do not prepend your account's namespace prefix.

4. **objectId**
   You need to pass in the "**{!Id}**" value or hardcoded value for this attribute. This attribute is required to retrieve object id.

5. **fileNamespacePrefix (optional)**
   This is the file object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you created this custom object file inside this organization, your file namespace prefix is same with your organization namespace prefix. If this file object belongs to a managed package, you need to use that managed package's namespace prefix. If your file object does not belong to any namespace you do

not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set fileNamespacePrefix as "exampleprefix__".

6. **privateEnabled (optional)**
   This option is used for enabling public/private file access to the S-Drive attachments and commonly used to limit the customer portal users' access to individual files. Before setting this property, you need to add a new field to your custom object file named 'Private' (See 'Creating Custom Object Files' section for more information). Set this attribute to true if you want to enable private/public flag. Setting the private flag on a file hides the file from customer portal users. There are two possible values for this attribute: **"true", "false"**. The default for this attribute is "false" except for the Case Files custom page.

7. **allowedFileExtensions (optional)**
   You can use this option, if you want to limit the file types to be uploaded into selected object's S-Drive attachments and folders. Semicolon separated list of file extensions that are allowed to upload. This attribute is optional and leaving this empty will allow all kind of files to be uploaded. For example: "*.jpg;*.txt" will limit the files to be uploaded to jpg and txt files.

8. **relationshipName (optional)**
   Master-detail relation used for selected standard/custom object. This attribute is optional and default value is "Parent__r".

9. **currentFolderId (optional)**
   Id of the parent folder for the files to be uploaded. It is not provided by default.

10. **isUsePopup (optional)**
    Set this attribute to true if you defined useUploadAsPopup attribute to true on the AttachmentComponent. The default for this attribute is false. This value overrides the "Default Upload Manager" configuration in "S-Drive Configuration".

11. **returnUrl (optional)**
    Set this attribute to a url to be directed this return page after closing upload screen.

12. **debug (optional)**
    Set this attribute to true to enable logs debugging on bottom of upload screen. The default for this attribute is false.

Notes

You can add *&debug=true query* parameter on the URL of upload page to enable log debugging.

If you want to get more information about component attributes, you can click "**Component References**" button and find **cg:HtmlUploadComponent** reference from the list (Figure 7-32-d).

After setting the page based on above component attributes, click "**Save**" button.

Lastly set the security for your page on other profiles. Go to **Setup -> App Setup -> Develop -> Pages** and click **Security** link next to your page name (Figure 7-33).

Action	Label	Name	Namespace Prefix	Api Version	Description
Edit | Del | Security	MyCaseHtmlUploadPage	MyCaseHtmlUploadPage	cg	33.0	

Figure 7-33

Move all profiles (or select based on your needs) from "Available Profiles" to "Enabled Profiles" as shown in Figure 7-34. If you skip this step, your users that belong to the disabled profiles will see an error page like Figure 7-13.

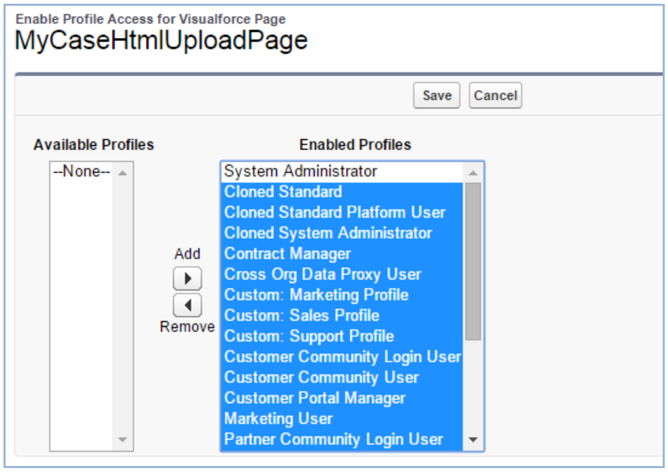


Figure 7-34

Now we have a custom HTML upload page. At this point, you can use this HTML upload page wherever you want like below figure (Figure 7-35) if you give appropriate parameters.

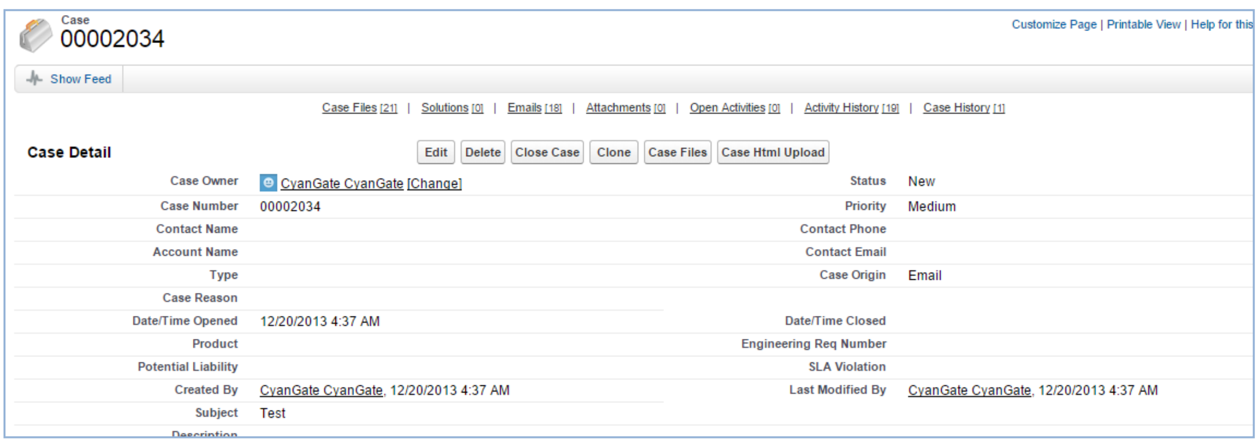


Figure 7-35

8 S-DRIVE CONFIGURATION TAB

Organization administrators can use S-Drive Configuration tab to set organization-wide configurations and get information about S-Drive credentials, usage and billing.

You can refer to **"*B. Displaying "S-Drive" and "S-Drive Configuration" Tabs*"** section of **"S-Drive Installation Guide"** to display **"S-Drive Configuration"** tab in your custom app.

S-Drive Configuration is separated into six sections: **S-DriveAuthentication Settings**, **General Settings**, **Customization Settings, Micro Services, S-Drive Documentation and Video Tutorials** (Figure 8-1).

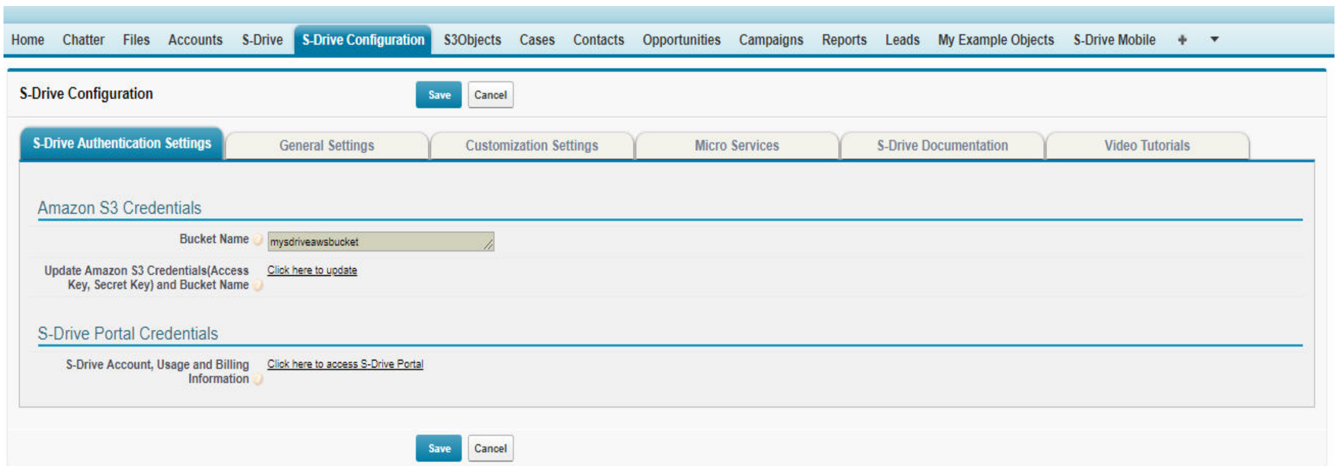


Figure 8-1

8.1 S-Drive Authentication Settings

8.1.1 Amazon S3 Credentials

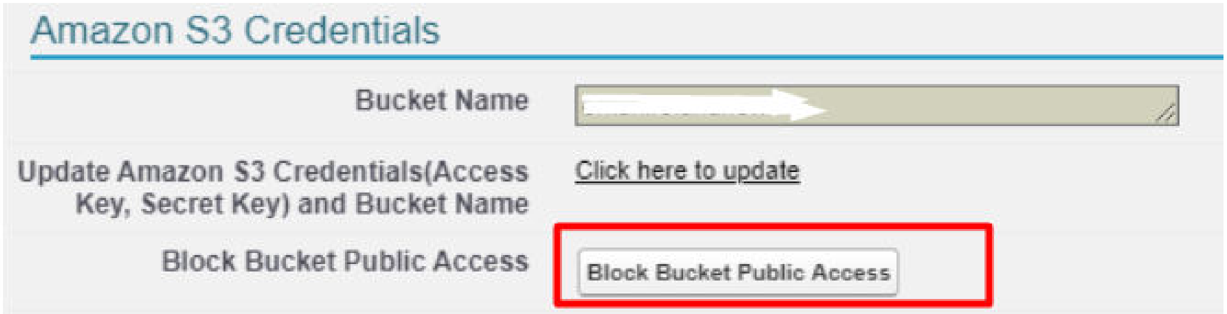


Figure 8-2

8.1.1.1 Bucket Name

Amazon bucket name used for S-Drive is displayed here.

8.1.1.2 Update Amazon S3 Credentials (Access Key, Secret Key) and Bucket Name

Users can display and update their Amazon S3 credentials and bucket name. See section **2.1.1 Access Key and Secret Key** for more details.

8.1.1.3 Block Bucket Public Access

If users created new a new S3 bucket during the first S-Drive configuration, their buckets are public by default. To change the S3 bucket access settings to private, click on this button.

8.1.2 S-Drive Portal Credentials

8.1.2.1 S-Drive Account, Usage and Billing Information

Users can access their S-Drive portal account for account, usage and billing information.

8.2 General Settings

This section allows a system administrator to change several system wide configuration options.

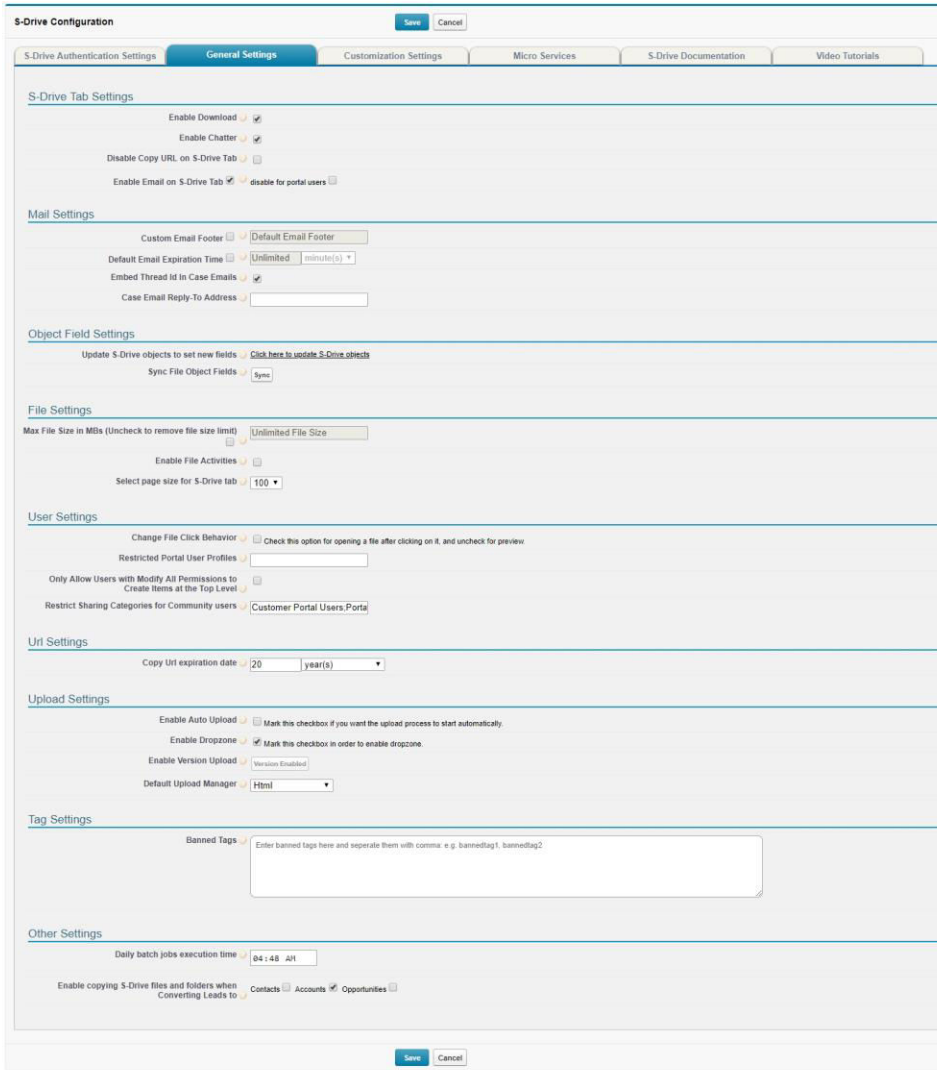


Figure 8-3

8.2.1 S-Drive Tab Settings

8.2.1.1 Enable Download

This configuration enables "Download", “Open” and “Zip & Download” for S-Drive Folders.

8.2.1.2 Enable Chatter

This configuration enables Chatter feature for S-Drive folders.

8.2.1.3 Disable Copy URL on S-Drive Tab

This configuration is used to disable Copy URL item menu action for S-Drive tab ("S-Drive Folders"). Default is enabled (unchecked).

8.2.1.4 Enable Email on S-Drive Tab

This configuration is used to enable Email feature for S-Drive tab ("S-Drive Folders"). Default is enabled (checked).

8.2.1.5 Disable for portal users

This configuration is used to disable email feature only for portal users if it is enabled for internal users. So, if it is disabled for all users ("Enable Email on S-Drive Tab" is checked), it cannot be checked/unchecked.

8.2.2 Mail Settings

8.2.2.1 Custom Email Footer

This configuration will allow a system administrator to change the system wide S-Drive Email footer. The default email footer that is added to your email messages is **"Attachment is stored online at S-Drive. To open this file, just click the link above."**

8.2.2.2 Default Email Expiration Time

This configuration will allow a system administrator to change the system wide S-Drive Default Email Expiration Time. If you do not set this value "Never Expires" is selected by default in the email screen. If you set a value, it will be displayed to all users that are using email screen (Figure 8-4). Users can always modify the email expiration time while sending the emails.

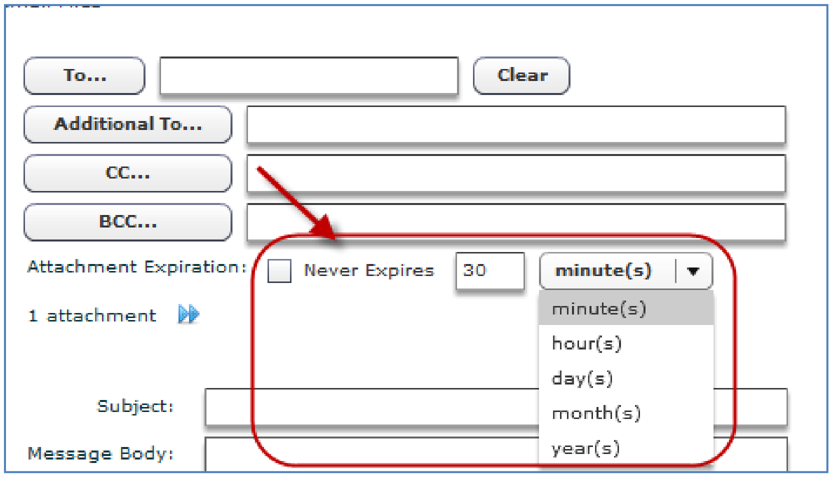


Figure 8-4

8.2.2.3 Embed Thread Id in Case Emails

By setting this configuration, it adds thread id into the email of the case file. So, replies to that e-mail message are recorded in the Activity History of the same case and attachments in the replies are saved in the same case. This configuration is useful for the organizations that are using S-Drive Email Agent.

8.2.2.4 Case Email Reply-To Address

Reply-to address for case related emails sent out via S-Drive. Usually this email address is the general support email address. This configuration is useful for the organizations that are using S-Drive Email Agent.

8.2.3 Object Field Settings

8.2.3.1 Sync File Object Fields

This button is for syncing Salesforce File Object fields for S-Drive version upgrades. Instead of creating each field on S-Drive upgrades, this button creates the missing fields for your file objects you use for S-Drive.

When upgrading to new version of SDrive, sometimes there are fields added to file objects for new feature of SDrive platforms. Instead of adding these fields manually, SDrive supports this process automatically. When upgrading to 2.x from any version, custom file objects will have the missing fields added for you just after clicking the sync button.

For this feature to be available, you must configure remote site settings.

Go to Setup -> Security -> Remote Site Settings and create a new remote site named anything let's say "SDriveMeta" and copy your organization domain for example as: "https://cgsdrive-dev-ed.my.salesforce.com".

8.2.4 Orphaned Files Settings

When a file is uploaded to S-Drive, the file is stored in your AWS S3 bucket, and a corresponding S-Drive record is created in Salesforce that contains information about that file. Sometimes the S-Drive record is accidentally deleted (such as from a list view), but the file still exists in S3. These files don't show up in S-Drive.

The **Sync Orphaned Files** feature corrects this problem by creating an S-Drive file for all files in your AWS S3 bucket that don't have a record in S-Drive.

When the button is clicked, all orphaned files are restored to the parent record at the root level.

If the parent object record Id of a file isn't found (i.e. An account of an account file), the file will be restored to S-Drive Tab.

Warning: If you have multiple orgs that share a bucket, files that belong in one org will be considered orphans in the second org and will be "restored."

8.2.5 File Settings/File Activities

8.2.5.1 Max File Size in MBs

This configuration will allow a system administrator to change the system wide behavior of max file size limit for uploads. File size limit is actually 5TB per file; however, due to Flash plug-in and browser limitations, the practical limit for file upload size via the browser is 2GBs. With this option, the user will be limited to a file size for each file. So, if you set maximum file size to "10". Users won't be able to upload files greater than 10 MBs.

You need to set this option in megabytes (MB). So if you want to limit the size to 12 MB, Max File Size option must be 12. If you want to set it to 1 gigabyte (GB), you need to set it to 1024, if you want it to be 0 byte, you need to set it to 0 etc. If you don't want to specify a file size limit, uncheck the checkbox.

If users try to upload a file greater than the limit, they will see an error message like below saying "Files greater than XYZ cannot be uploaded! (File name, File size) (Figure 8-5):

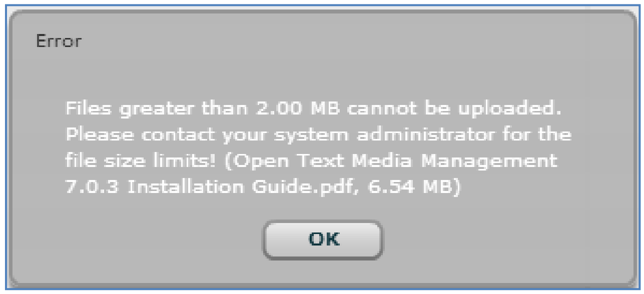


Figure 8-5

Note that this option is account-wide. So, this setting will be applied to all S-Drive Attachments and S-Drive Folders. Users won't be able to upload files greater than allowed file size limit. Also note that this won't affect previously uploaded files.

8.2.5.2 Enable File Activities

File Activities feature is a way to track the user activities on all file records in S-Drive. Actions such as Download, Open, Copy URL are stored in File Activities objects and can be easily tracked inside S-Drive or with Salesforce Reports. They can be configured for different types of activities separately for your S-Drive file objects. The user and activity time are also recorded as well as the activity type and additional details if there are any.

Note: Enabling File Activities will consume data storage on your Salesforce organization.

In "File Settings" section, see "Enable File Activities" picklists.

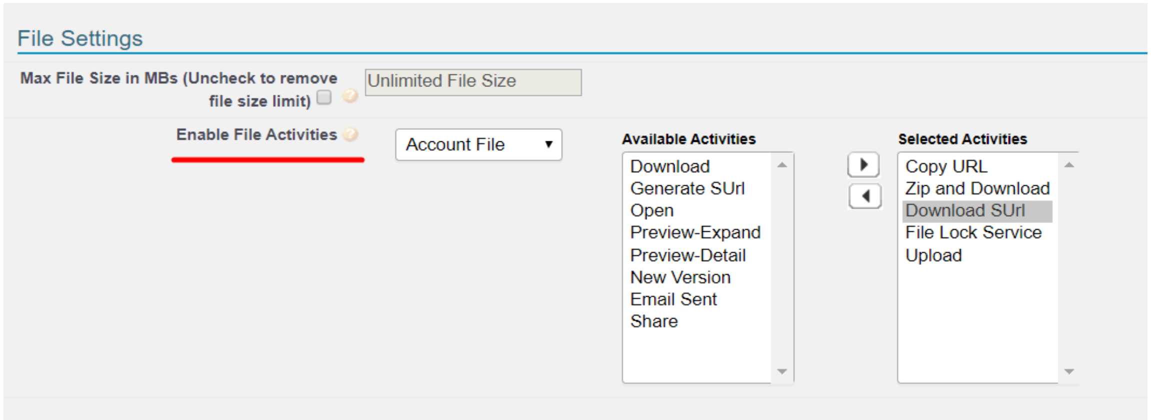


Figure 8-6

The dropdown list shows all object files for objects using S-Drive. (See Note below if your file object is not on the list.) Choose the object file to configure from the dropdown list. Then select the activities you want recorded by moving them from Available Activities to Selected Activities. Click Save at the top or bottom of the page, then repeat for other object files you wish to use File Activities on.

The list of available file activities are as follows:

- Download
- Download SUrl
- Generate SUrl
- Open
- Copy URL
- Zip and Download
- Preview-Expand
- Preview-Detail
- Upload
- New Version
- Email Sent
- File Lock Service
- Share

Note that for Custom Objects, if the file object is not present in the above picklist, please create a lookup relationship in **File Activity** object with that the desired S-Drive file object. You can create the relationship from Setup > Objects > File Activity > Scrolling to “Custom Fields & Relationships” section > Clicking on “New” button >

Select “Lookup Relationship” and select your desired file object as “Related To” from the picklist provided.

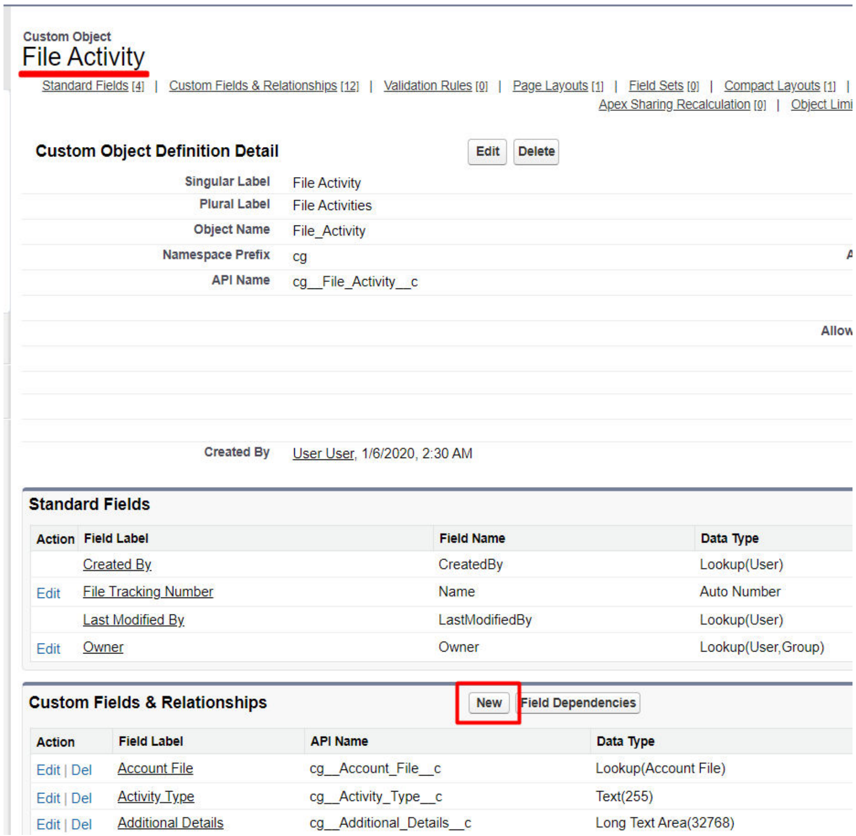


Figure 8-7

8.2.6 User Settings

8.2.6.1 Change File Click Behavior

This configuration is used to enable users to choose the action after a file is clicked on. Check the checkbox to open a file after it is clicked on, uncheck it to preview a file after it is clicked on.

8.2.6.2 Restricted Portal User Profiles

These are Salesforce.com user profiles that are specifically for portal users. User profiles can be "Standard", "Partner", "High Volume Portal", "Customer Portal User", "Customer Portal Manager" and must be separated by comma. By specifying a profile in this configuration, you can prevent access to "private" content for these profiles.

8.2.6.3 Only Allow Users with Modify All Permissions to Create Items at the Top Level

This configuration is used to only allow users with "Modify All" permissions (mostly system administrators) to create items at the top level (Home). If this is unchecked all users can create files/folder at the top-level if they have enough permissions. If this is checked standard users won't be able to see "Create Folder" and "Upload File(s)" buttons in the "Home" page of "S-Drive Folders".

8.2.6.4 Restrict Sharing Categories for Community User

You can modify the sharing rule categories that are displayed in the Share Page, for Community Users. Types can be “Customer Portal Users”, “Portal Roles”, “Portal Roles and Subordinates”, “Public Groups”, “Roles”, “Roles and Internal Subordinates”, “Roles, Internal and Portal Subordinates”, “Users” and must be separated by semicolon. An example input is: Customer Portal Users;Portal Roles

8.2.7 URL Settings

8.2.7.1 Copy URL Expiration Date

This configuration is for setting the expiration date of created URL of file. You can give static date (i. e. 3 years) or you can select 7 years document retention rule that is accessible for 7 years from the file created date.

8.2.8 Upload Settings

8.2.8.1 Enable Auto Upload

This configuration is used to enable Auto Upload files without clicking Upload button in file upload window. Check the checkbox to enable this feature.

Important Note

If there is a required field in one of your objects, auto upload will be disabled. For this setting to work properly, you must refresh all displayed fields and add the required fields to Displayed Fields from Customization Settings.

8.2.8.2 Enable Version Upload

This configuration is used to activate versioning. After enabling versioning, S-Drive will allow you to upload different versions of files. You will be able to see and manage the versions of your files. ***Please note that once versioning is enabled, you can't disable.***

8.2.8.3 Default Upload Manager

This configuration is used to set the default upload manager for the whole organization. Possible values are "**Html**", **"Html with Popup"** (Figure 8-6). Default value is "Html".

Note

Flash and Java upload has been deprecated in S-Drive with 2.0.

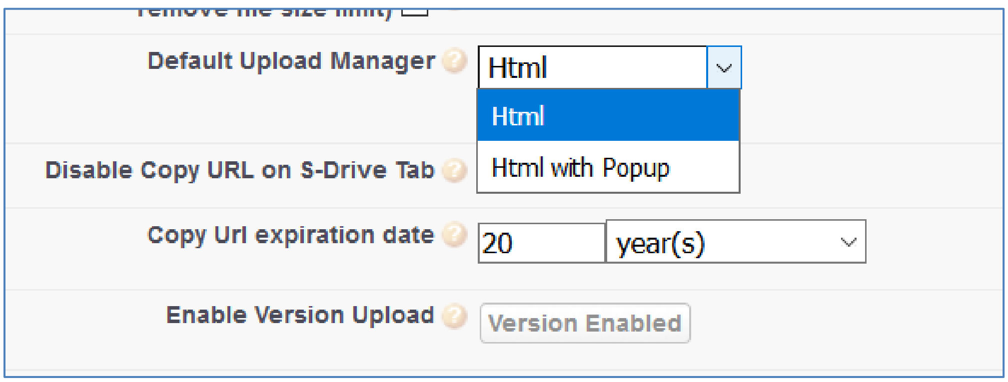


Figure 8-8

8.2.9 Tag Settings

8.2.9.1 Moving Tags from Hidden to Displayed Fields:

Go to **S-Drive Configuration>Customization Settings.**

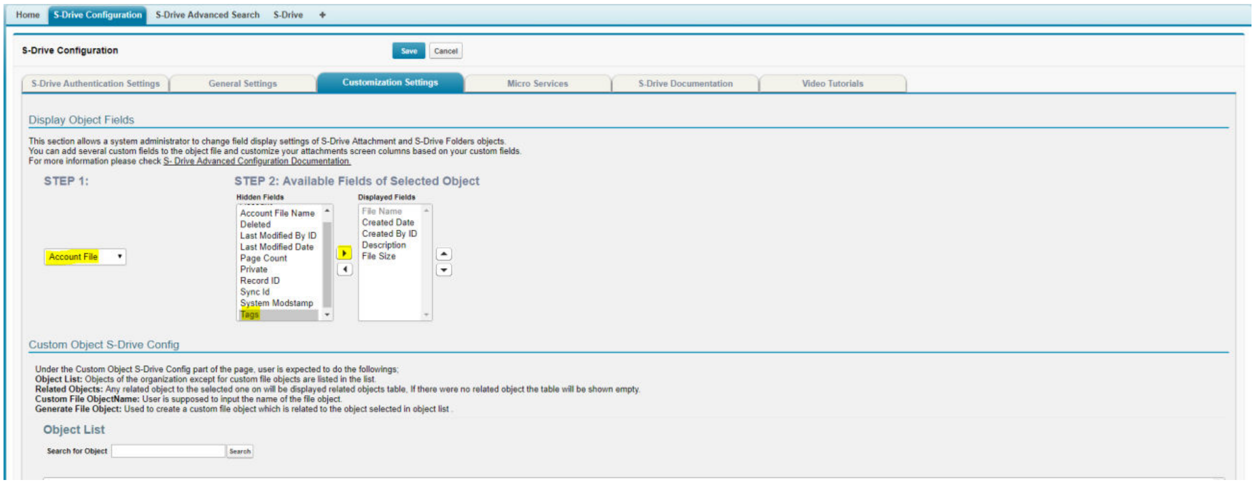


Figure 8-9

On Display Object Fields section, choose the Account File object. (or the object that you want to use Tags feature)

Move ***Tags*** field from Hidden Fields to Displayed Fields.

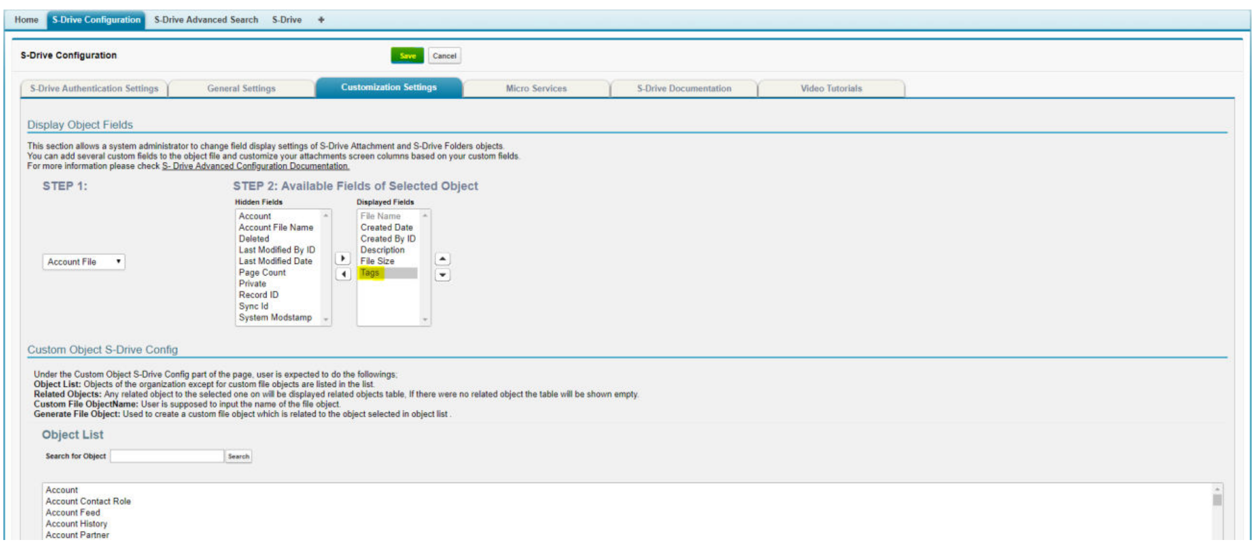


Figure 8-10

Click Save button, and you are ready to use Tags feature. See the S-Drive User's Guide for more information on using the Tags feature.

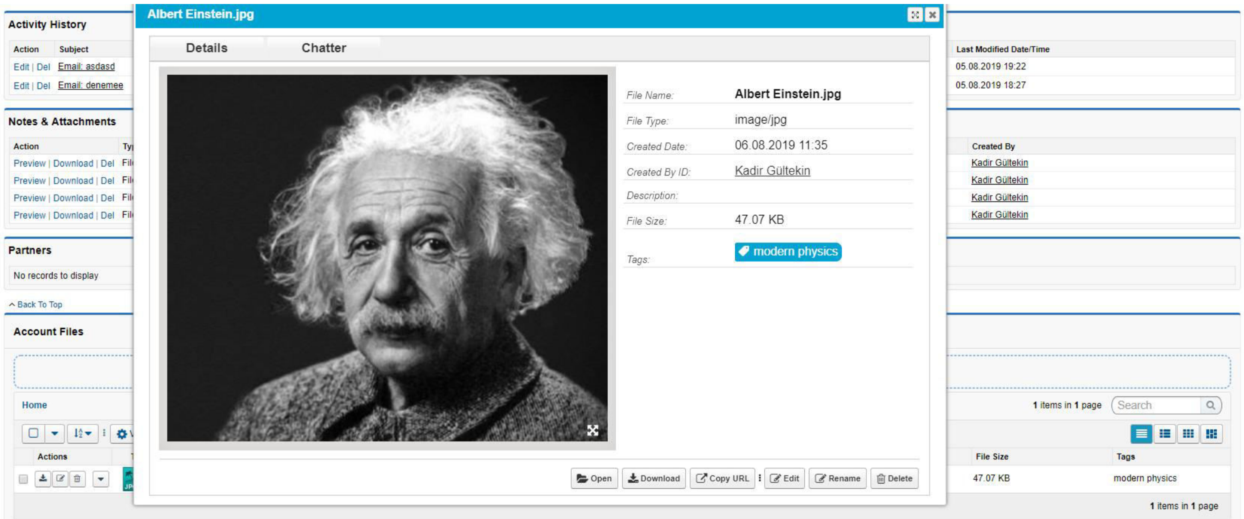


Figure 8-11

8.2.9.2 *Banned Tags:*

Enter tags here to ban them from being used to tag files and folders on S-Drive. Separate banned tags with commas as you enter them, as shown below.

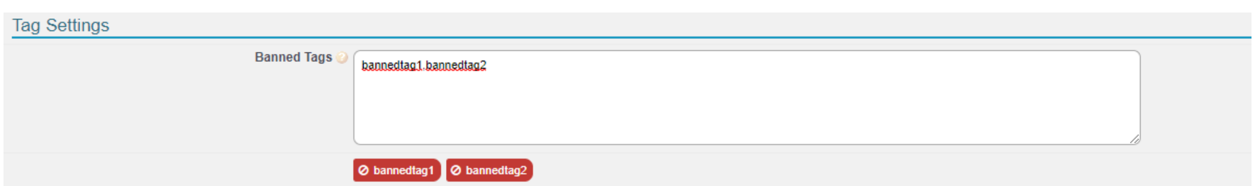


Figure 8-12

After specifying the banned tags, if a user tries to enter a banned tag they will get see a message that the tag has been banned by the system administrator as shown below.

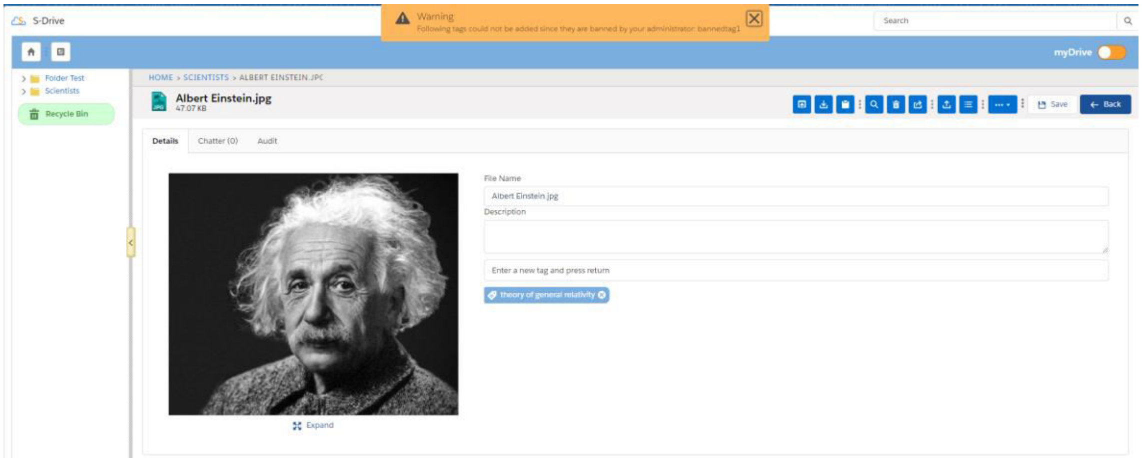


Figure 8-13

8.2.10 Other Settings

8.2.10.1 Select SQueue -Daily Batch Jobs - Execution Time

SQueue is a an S-Drive service that executes batch jobs at 00:00 automatically if there are any. You can change execution time of batch jobs in this section. Check your Salesforce system time to set this value. You can check your default system time from **Setup > Company Settings > Company Information > Default Time Zone**. Daily batch jobs execute both the deletion of previews of the files having multiple pages, and the copying of files during the lead conversion process.

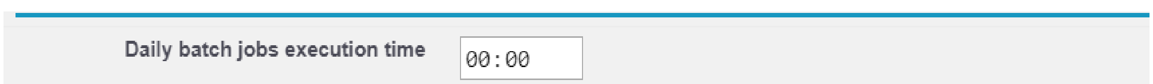


Figure 8-14

Note: If files have **shortcuts**, they will be put in the SQueue until the batch job execution time and shortcuts belonging to deleted files will be deleted when the batch job runs. However, this only occurs when the shortcuts are on file objects that have the "**Allow Search**" box checked. If "Allow Search" is not checked, the shortcuts will not be automatically deleted and they will no longer work. To find the "Allow Search" checkbox, go to Setup→Object Manager, find your file object and click Edit. It is at the bottom of the page under Search Status.

8.2.10.2 Enable Copying S-Drive Files and Folders When Converting Leads To

This configuration is used to enable users to choose where to copy S-Drive files in Leads when a lead is converted. Available options are Accounts, Contacts and Opportunities. See Section 9.3 Lead Conversion for details.

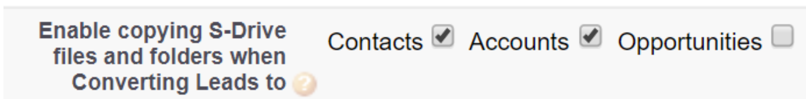


Figure 8-15

8.3 Customization Settings

In this section, you can configure your field display settings and create custom S-Drive file objects.

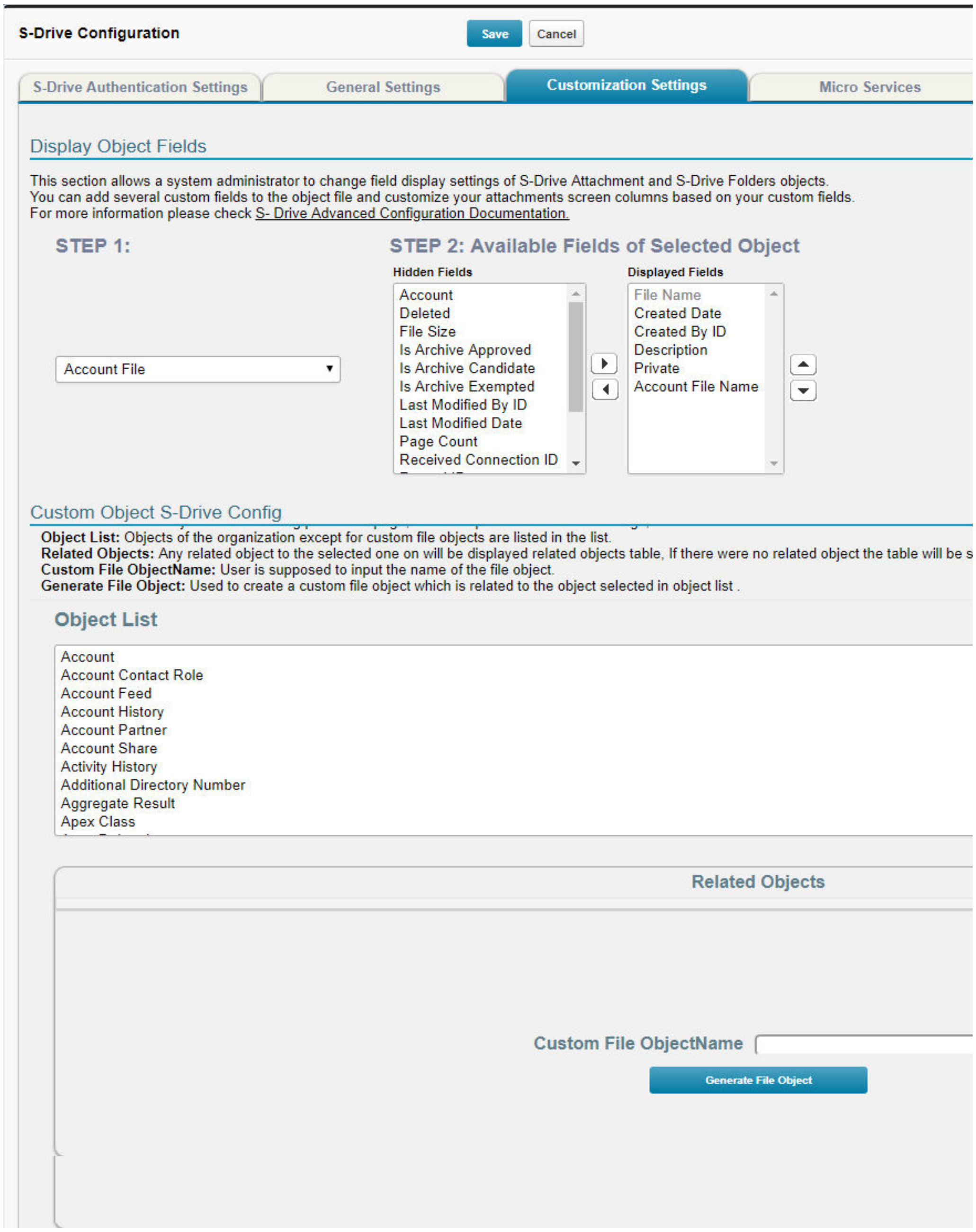


Figure 8-16

8.3.1 Display Object Fields

This section allows a system administrator to change field display settings of S-Drive Files and S-Drive Tab objects. By default, the S-Drive file areas of all objects have these columns: "File Name", "Created Date", "Created By ID", File Size", "Description" (Figure 8-15).

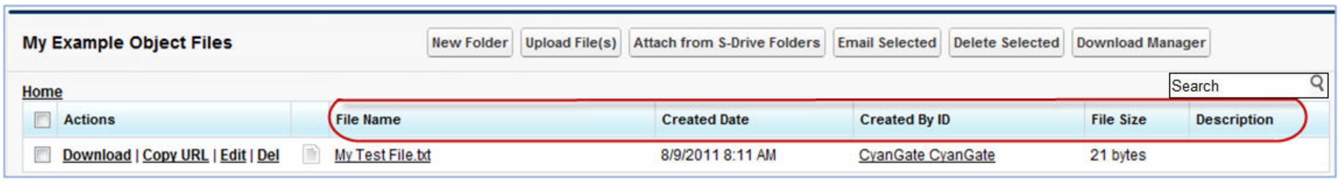


Figure 8-17

To set the field display settings for an object, select the object from drop-down. Select the fields from "Available Fields" and click right arrow button to move these fields to the "Displayed Fields" section. You can also change the order of the fields by using Up-Down arrows. Click "Save" button to save changes. (Figure 8-16). Note that you cannot change the first column of the file list, it is fixed as the "File Name" field.

<u>Note:</u> If you allow users to set files to Private, you must display the Private field here.

Note that you can configure custom fields for S-Drive Folders (S3Object) after v2.0.

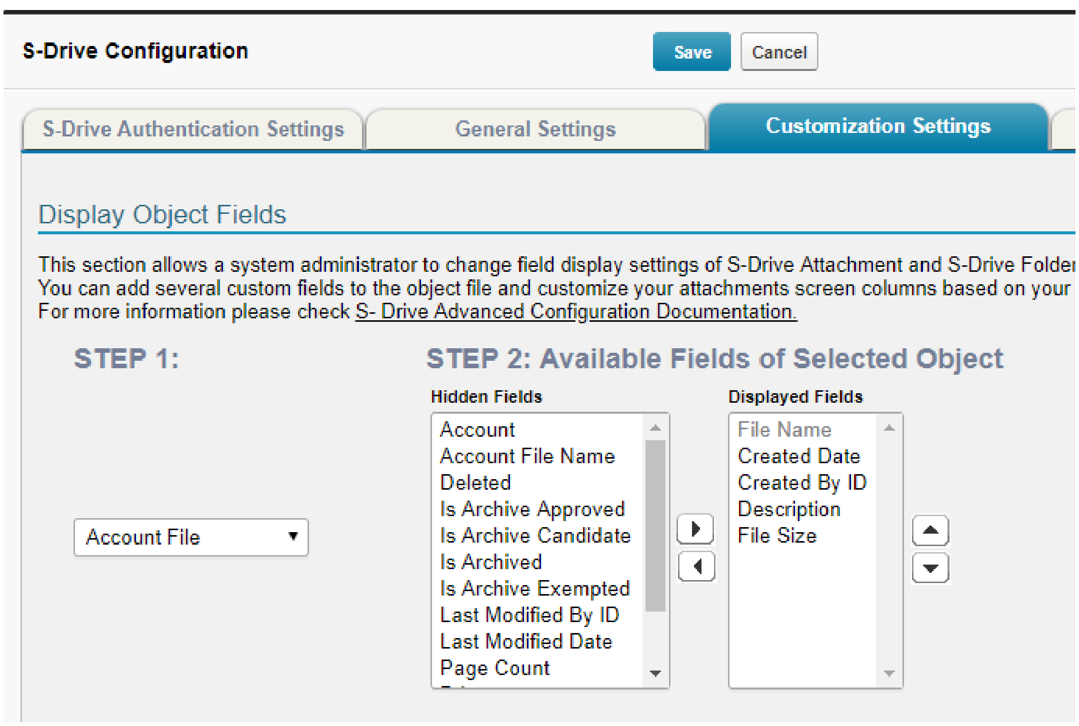


Figure 8-18

You should see the *"You have successfully saved configuration changes!!!"* message at the top of the S-Drive Configuration page (Figure 8-17).

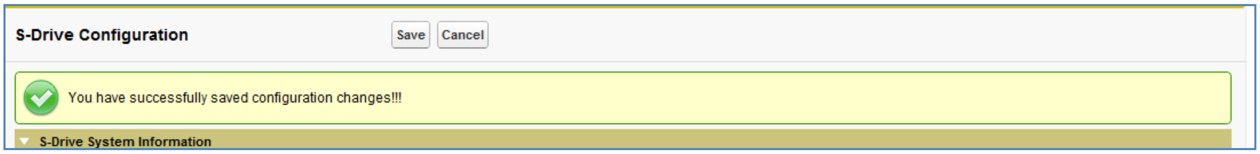


Figure 8-19

Now if you go to your custom object's page, you should see the displayed fields are changed (Figure 8-18).

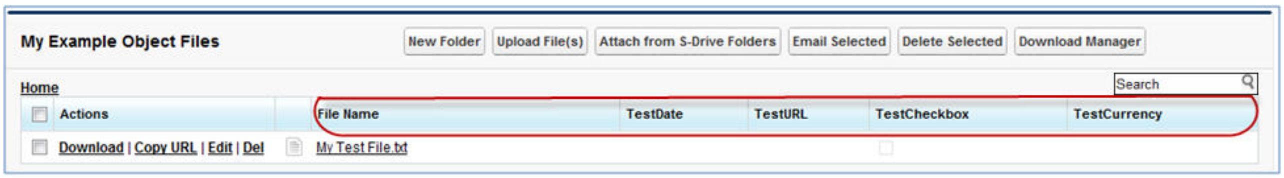


Figure 8-20

Widgets will be displayed based on your selection in the upload screen (Figure 8-19):

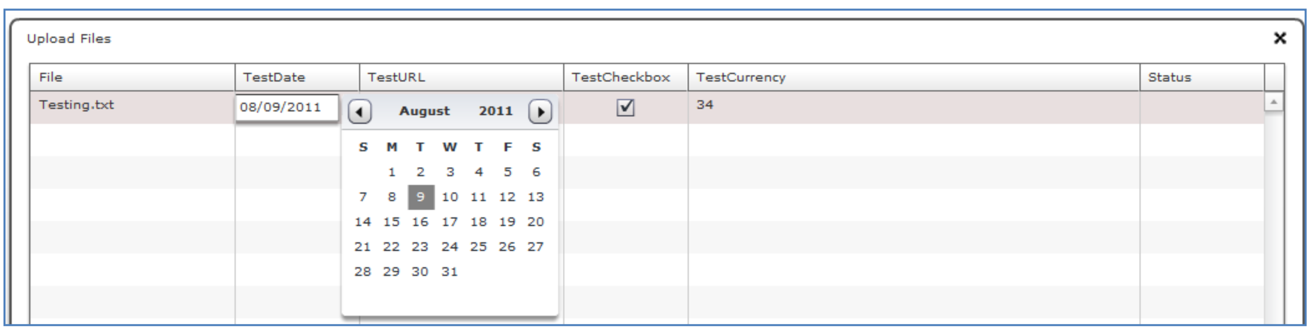


Figure 8-21

And if you edit the files, you will also see the correct widgets based on the types of the fields (Figure 8-20):

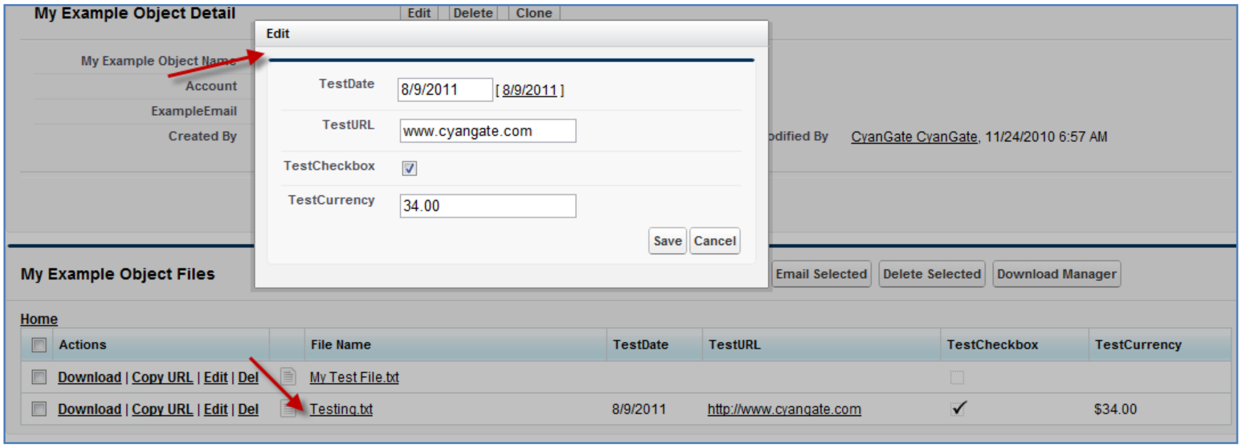


Figure 8-22

8.3.2 Custom Object S-Drive Config

This is used to generate an S-Drive file object for an object other than Account, Case, Contact, Opportunity or Lead. Those come standard with S-Drive. To use S-Drive with any other standard or custom object, you must create a corresponding S-Drive file object. This can be done here with one click.

8.4 Micro Services

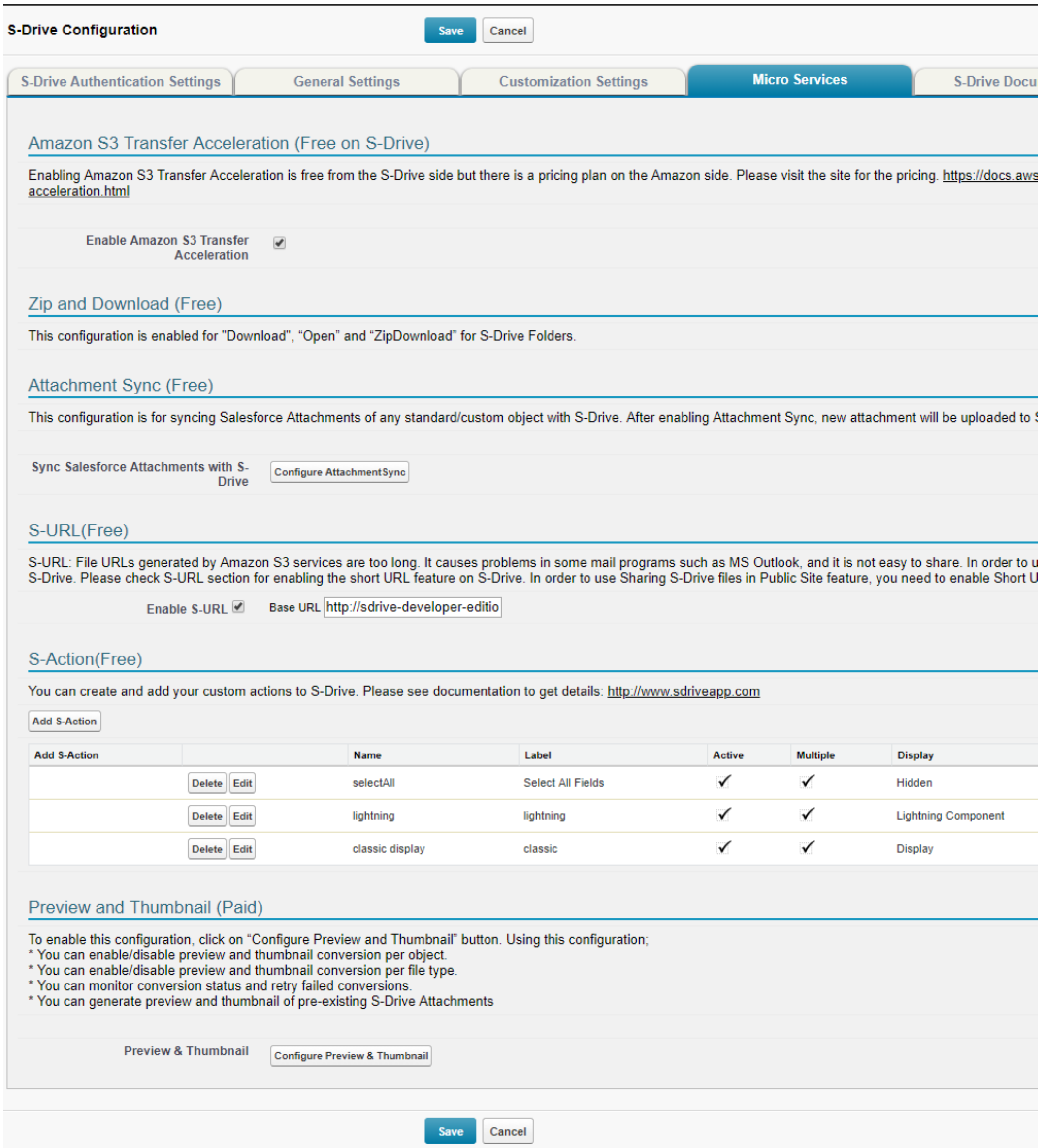


Figure 8-23

8.4.1 Enable Amazon S3 Transfer Acceleration

This configuration is used to enable/disable S3 Transfer Acceleration feature. Amazon S3 Transfer Acceleration is a faster way to move data into your Amazon S3 bucket over the internet. It is designed to maximize transfer speeds when you need to move data over long distances, for instance, across countries, or continents to your Amazon S3 Bucket. Transfer Acceleration takes advantage of Amazon CloudFront's globally distributed edge locations. As the data arrives at an edge location, data is routed to Amazon S3 over an optimized network path.

Figure 8-24

You might want to use Transfer Acceleration on a bucket for various reasons, including the following:

- You have customers that upload to a centralized bucket from all over the world.
- You transfer gigabytes to terabytes of data on a regular basis across continents.
- You underutilize the available bandwidth over the Internet when uploading to Amazon S3.

When you enable Amazon S3 Transfer Acceleration using S-Drive Configuration Tab, it will also be enabled in Amazon Web Services and you will have a new S3 bucket endpoint in the form "BUCKET_NAME.s3-accelerate.amazonaws.com". Afterwards, S-Drive starts using this endpoint for uploads and downloads. You can see the transfer acceleration at bucket properties, and you can enable/suspend S3 Transfer acceleration using AWS Management Console. But whatever the status is your acceleration endpoint in your bucket, it must be the same in S-Drive. We recommend you, enable/suspend acceleration endpoint only using S-Drive. To see this bucket property, click on S3 service and then click on your bucket name from AWS Console and click on "Properties" tab at top right corner (Figure 8-23).

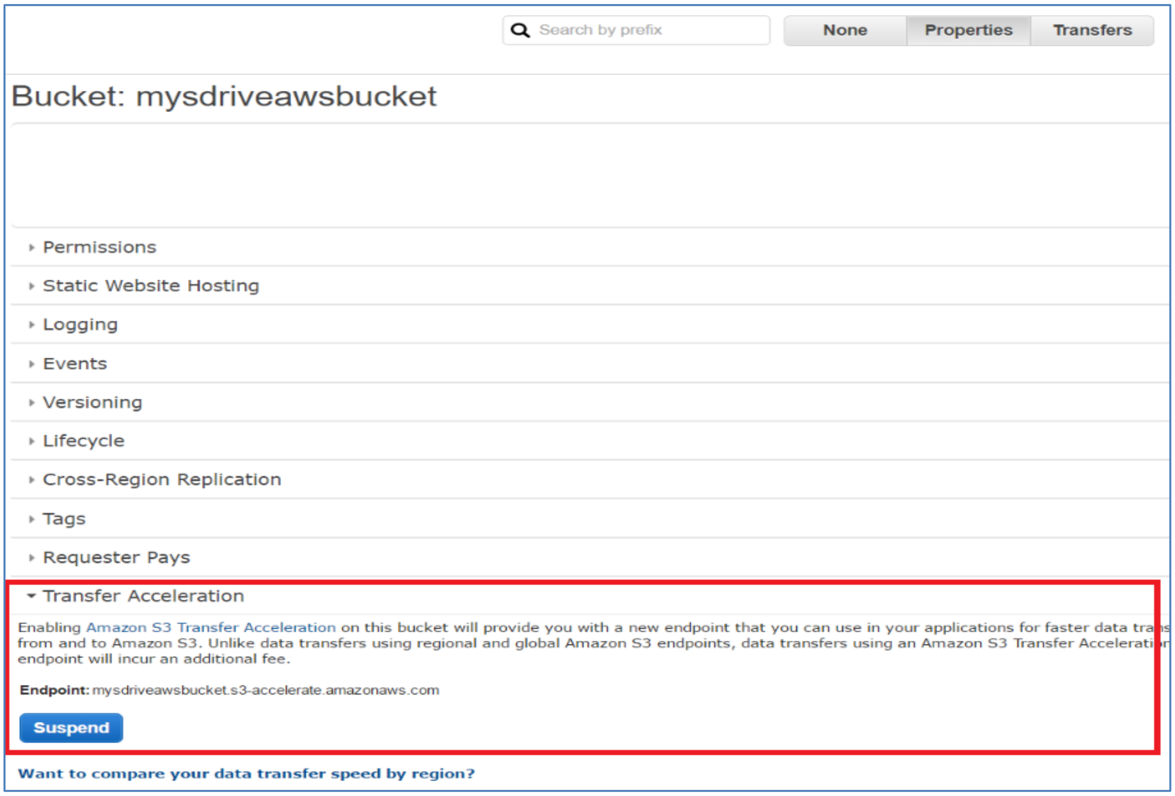


Figure 8-25

Notes

When using Transfer Acceleration, additional charges may apply for transfer where Transfer Acceleration can potentially improve performance. For more information about pricing, see Amazon S3 Pricing. S-Drive won't charge you for this service.

Only HTML Upload Manager supports Amazon S3 Transfer Acceleration. When you enable acceleration endpoint, it will be used for both downloads and uploads in S-Drive. To learn more about S3 Transfer Acceleration, please visit here.

8.4.2 Zip and Download

This configuration is enabled to Download and Open files. Multiple files can be selected and downloaded by Zip Download functionality.

8.4.3 File/Attachment Sync

File/Attachment Sync takes files that are uploaded to Salesforce Files or Salesforce Attachments and syncs them with S-Drive for the selected object. Sync is processed based on a queue, so new items will appear in S-Drive in a few seconds/minutes.

After configuring File/Attachment Sync, new file/attachment will be uploaded to S-Drive automatically. You can also configure deleting the Salesforce files/attachments after successful configuration.

To sync file/attachments to S-Drive, click the “configure sync” button. You will see a message that it is processing objects. This is processing that is done in order to display next configuration screen shown below.

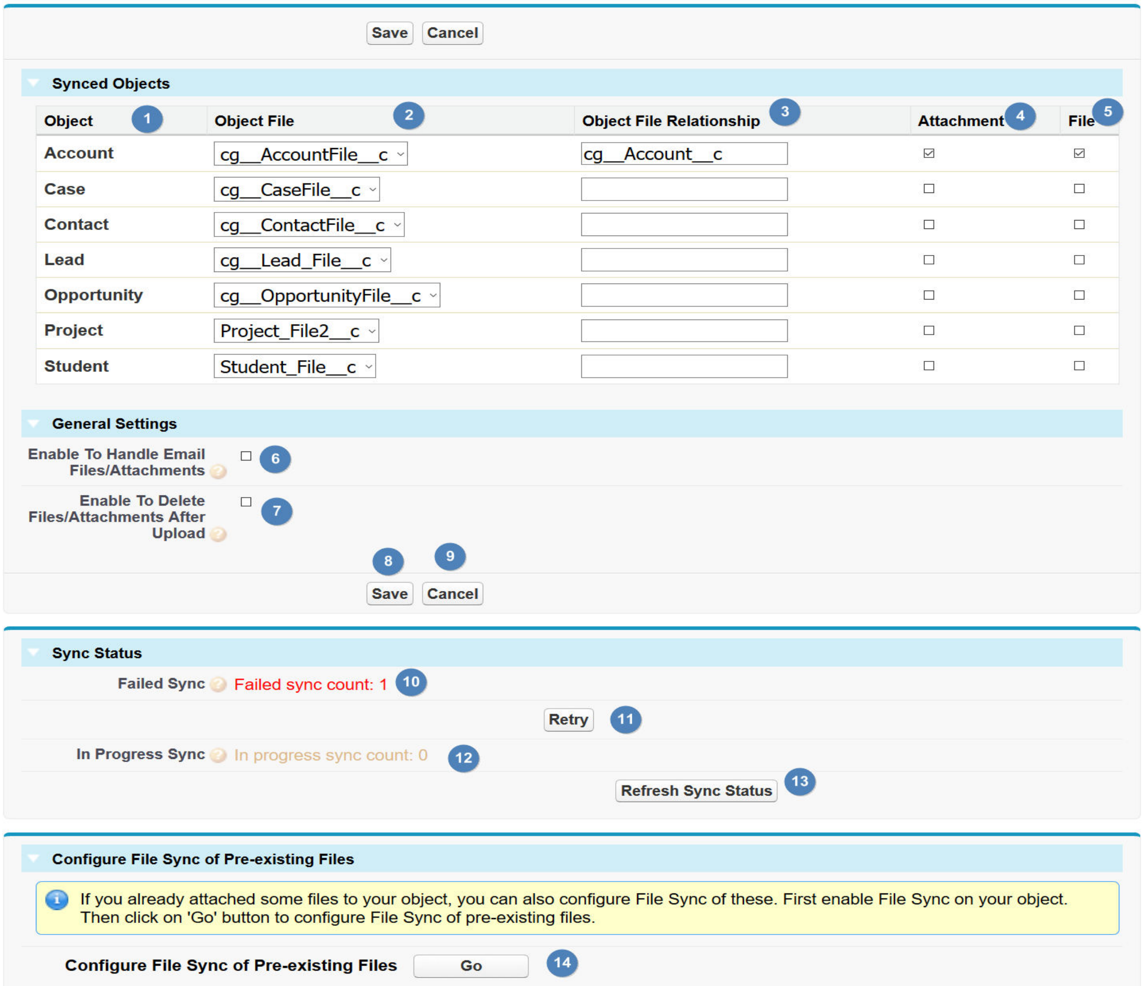


Figure 8-26

For each Object **(1)** for which you want to sync files or attachments, select the S-Drive file object you want to use for syncing from the dropdown list **(2)**. There will usually only be one choice.

In the Object File Relationship field **(3)**, enter the API name of the field that relates to the parent object. For the S-Drive File Objects that come bundled with S-Drive, these will be cg__Account__c, cg__Case__c, cg__Contact__c, cg__Lead__c, cg__Opportunity__c. For S-Drive file objects created through S-Drive Configuration Customization Settings (those that didn't come standard with S-Drive), it will be Parent__c.

Check the checkboxes **(4)** and/or **(5)** to indicate whether you want to sync files, attachments, or both.

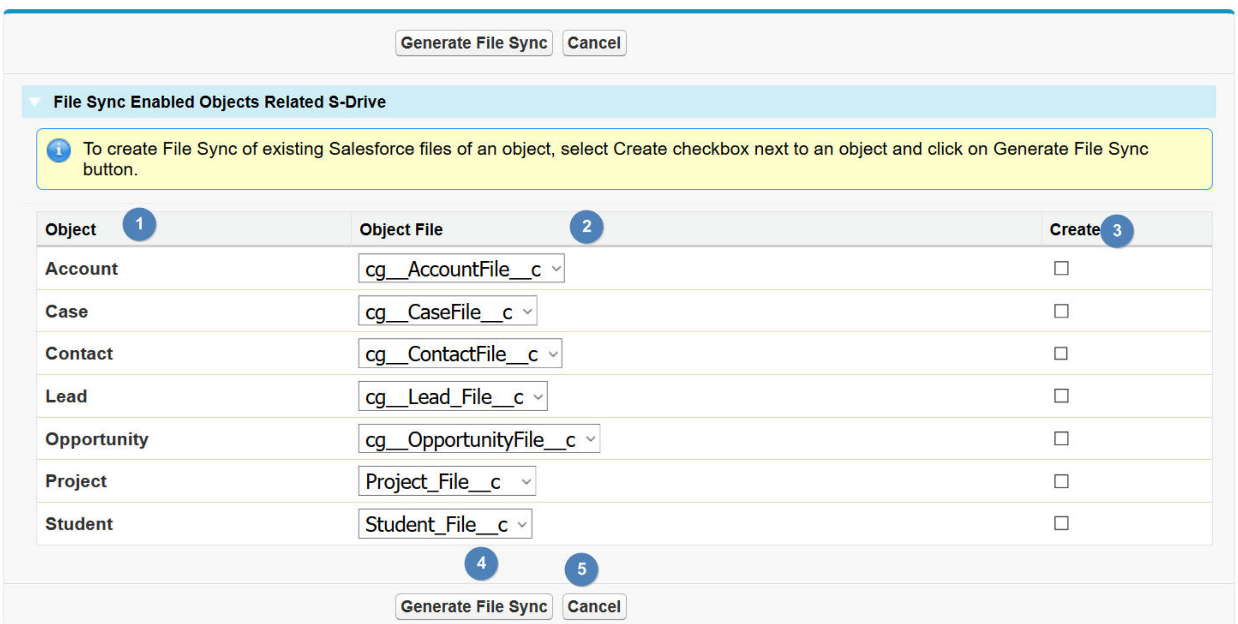
Click Save.

In "General Settings" section you can enable handling files/attachments in email messages by checking "Enable to Handle Email Files/Attachments" **(6)**. You can check "Enable to Delete Files/Attachments After Upload" configuration, if you want to delete the Salesforce Files/Attachments after successfully syncing to S-Drive**(7)**. If you uncheck this option, both Salesforce Files/Attachments and S-Drive will be available after syncing.

Click Save **(8).**

In "Sync Status" section**,** you can see failed sync job **(10)** and progressing sync job **(12)** counts and can click to retry failed jobs **(11)**. After clicking this button, you can see updated sync status You can refresh the failed and progressing file/attachment sync count status by clicking "Refresh Sync Status" **(13)** button.

In "Configure File Sync of Pre-existing Files" section, you can sync older Salesforce Files with SDrive. If you want to enable pre-existing Salesforce file sync for an object, you just need to select the "Object File", fill the "Object File Relationship" field and check the related "File" checkbox. You can go to the configuration page by clicking "Go" button **(14).** This takes you to the screen below.



If you want to sync pre-existing Salesforce Files for an object, Look for the desired object in the Object section **(1)** and select the "Object File"**(2)** to be used for syncing. Check "Create" **(3)** checkbox. Click "Generate File Sync" button **(4).**

You can inspect individual "AttachmentSync" objects to see more details and see "File/Attachment Sync" section of this document for more details about the sync process.

8.4.4 S- URL (Short URL)

File URLs generated by Amazon S3 services are too long. They cause problems in some mail programs such as MS Outlook, and are not easy to share. These long URL links also expire in 7 days. To use a shortened URL, which can last 20 years (or be configured to expire sooner) you can use the **S-URL feature** of S-Drive. Once configured, using the "copy URL" action on a file will generate a short URL.

S-URL is also needed to use the Public Share feature (available in Lightning only), which can be used to share files with users outside of Salesforce.

Public Share & S-URL features can be used separately but they have the same configuration. They use **force.com Sites** to create short URLs with your brand name. You may need to buy *force.com Sites license* to use this feature. (To get more information please visit https://developer.salesforce.com/page/Sites)

To set up S-URL and use Sharing S-Drive files in Public Site feature (configured from the S-Drive Lightning component), see section 9.1 How to Activate Public Share Link & S-URL in Your Organization for instructions on setting up your public share site. Once enabled, check the checkbox on to enable S-URL and copy the url of your site into the box as shown in section 9.1.3.

For doing a custom branding on your public share site, please see S-Drive Developer Guide.

See section 9.1 How to Activate Public Share Link & S-URL in Your Organization for instructions on setting up your public share site.

8.4.5 S-Action

This configuration enables users to create and add custom actions to S-Drive. Please refer to **S-Actions (Custom Actions)** for detailed configuration.

8.4.6 Preview and Thumbnail

You can find this configuration under General Settings section in S-Drive Configuration Tab. To open this configuration, click on "Configure Preview & Thumbnail" button (Figure 174). Using this configuration;

- You can enable/disable preview and thumbnail conversion per object.

- You can enable/disable preview and thumbnail conversion per file type.
- You can monitor conversion status and retry failed conversions.
- You can generate preview and thumbnail of pre-existing S-Drive Attachments.

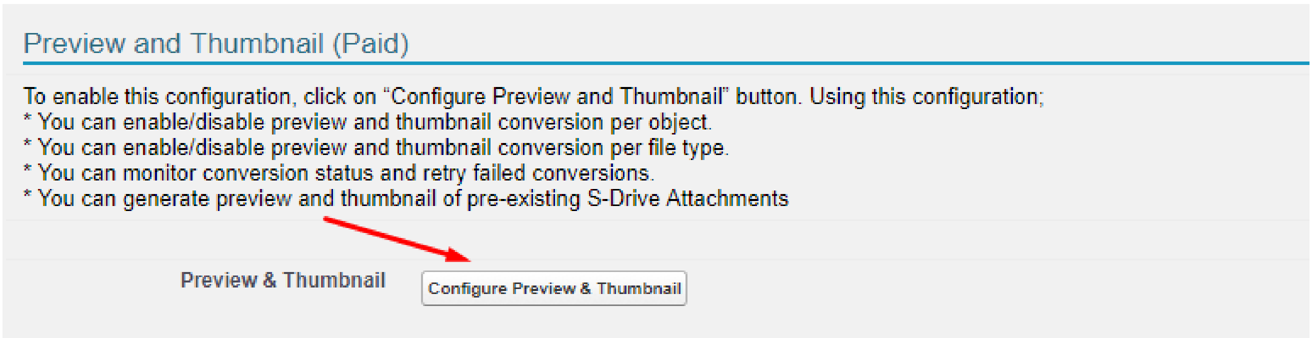


Figure 8-27

Enable Preview and Thumbnail Per Object Related S-Drive

After a successful file upload, S-Drive can generate preview and thumbnail of your file, if this feature is enabled on your object and file types are configured. To enable preview and thumbnail on your object, you should click on the enabled checkbox next to the object and save it (Figure 8-26). To disable it, you should uncheck the enabled checkbox and save it. Preview and Thumbnail conversion will not be performed, and your file types configuration will be ignored, if object is not preview and thumbnail enabled.

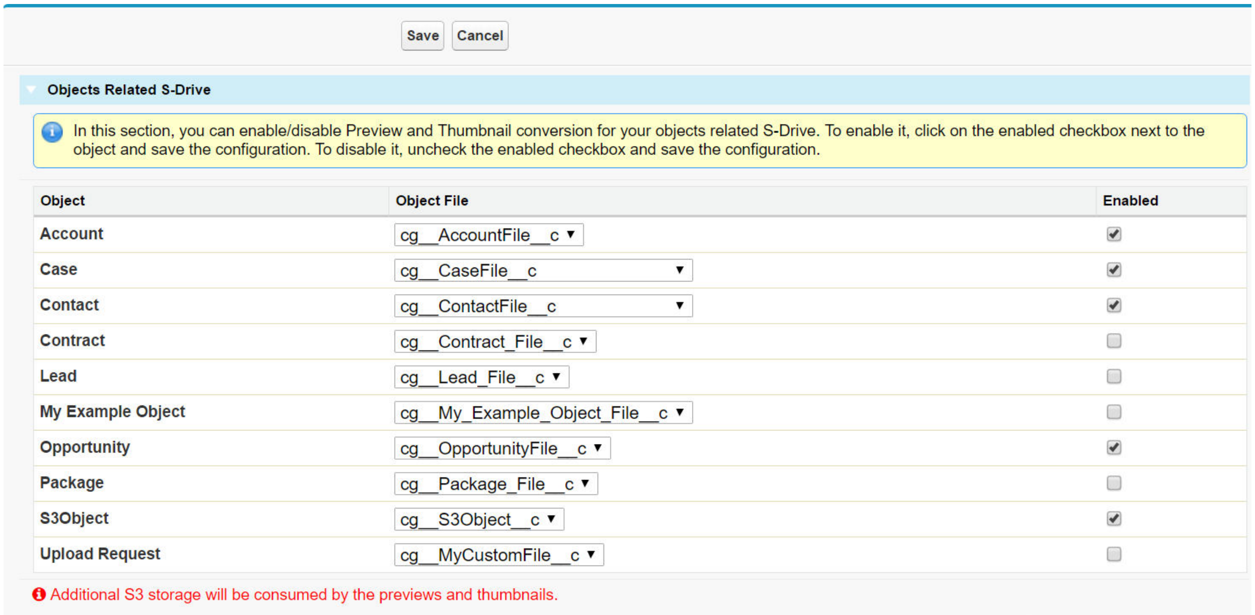

Save
Cancel
Objects Related S-Drive
In this section, you can enable/disable Preview and Thumbnail conversion for your objects related S-Drive. To enable it, click on the enabled checkbox next to the object and save the configuration. To disable it, uncheck the enabled checkbox and save the configuration.
Object
Object File
Enabled
Account
cg__AccountFile__c
Case
cg__CaseFile__c
Contact
cg__ContactFile__c
Contract
cg__Contract_File__c
Lead
cg__Lead_File__c
My Example Object
cg__My_Example_Object_File__c
Opportunity
cg__OpportunityFile__c
Package
cg__Package_File__c
S3Object
cg__S3Object__c
Upload Request
cg__MyCustomFile__c
Additional S3 storage will be consumed by the previews and thumbnails.

Figure 8-28

Enable Preview and Thumbnail Per File Type

You can choose which file types will be allowed for preview and thumbnail conversion on your objects related S-Drive. To enable a file type, select your object from **“Object Types”** select list and move desired file type from **“Conversion Available File Types”** box to **“Conversion Allowed File Types”**. Then save configuration before changing the object type. To disable a file type, move desired file type from **“Conversion Allowed File Types”** box to **“Conversion Available File Types”**. Then save configuration (Figure 8-27).

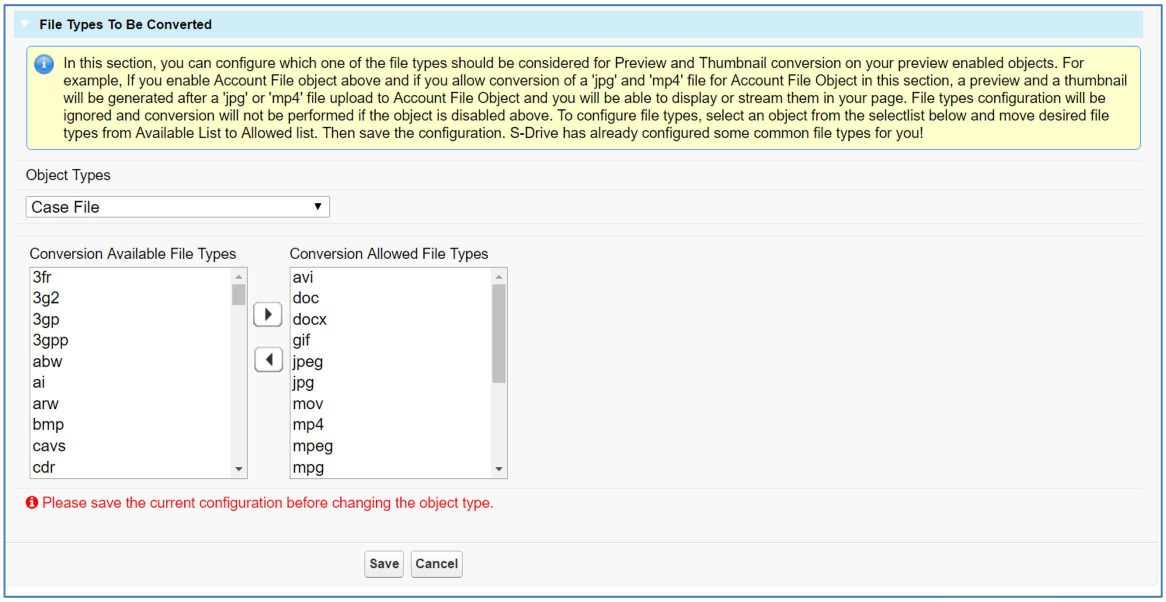


Figure 8-29

“Conversion Available File Type” is a file type that S-Drive can generate its preview and thumbnail but needs your permission to perform conversion. That is why you should allow the file type by adding it to **“Conversion Allowed File Types”** box. S-Drive has already pre-configured some common file types for you. If you preview and thumbnail enable an object and do not configure a file type for it (accept the defaults), “avi, doc, docx, gif, jpeg, jpg, mov, mp4, mpeg, mpg, pdf, png, ppt, pptx, psd, wmv, xls, xlsx” types will be auto enabled. You can allow more file types or disallow some of them.

Let’s say you have enabled “Case File” object for preview and thumbnail conversion and also enabled “jpg” and “mp4” types for Case File. If you upload a “jpg” file to Case File object, you will be able to display it’s preview and thumbnail. If you upload an “mp4” file to Case File, you will be able to stream it. In this case, no conversion will be performed for any other (not allowed) file type even if your object is preview and thumbnail enabled.

Monitor Conversion Status

In this section, you can monitor status of your preview and thumbnail conversions and retry failed ones (Figure 8-28). For more information, you can create “Preview” object tab and check related records.

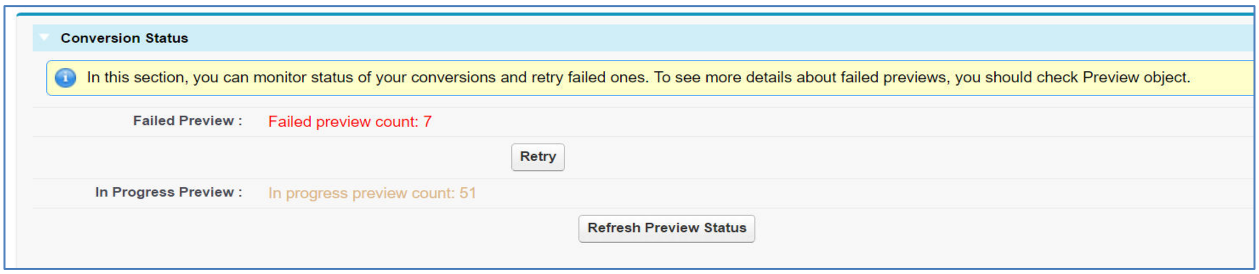


Figure 8-30

Generate Preview and Thumbnail of Pre-existing S-Drive Attachment

If you already have attachments in S-Drive before preview and thumbnail feature released, then you can bulk generate preview and thumbnail of your pre-existing attachments. First, you must preview and thumbnail enable your object and configure file types for it, then you should click on the “Go” button in “Generate Preview and Thumbnail of Pre-existing Attachment” section (Figure 8-29).

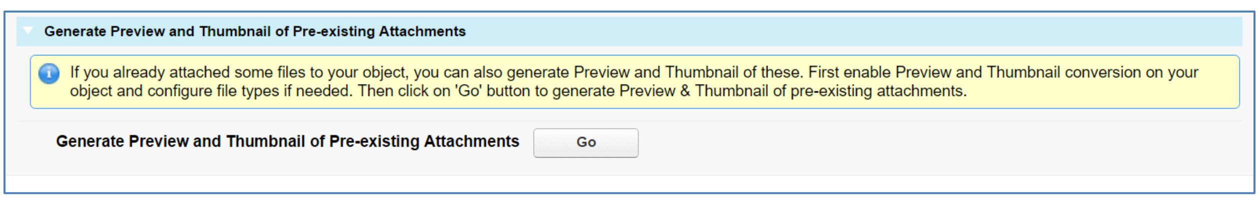


Figure 8-31

Then a visual force page will be loaded. In this page, you should select “Create” checkbox next your object and then you should click on “Generate P&T” button (Figure 8-30). This will invoke a batch job and S-Drive’s preview and thumbnail service will start conversion.

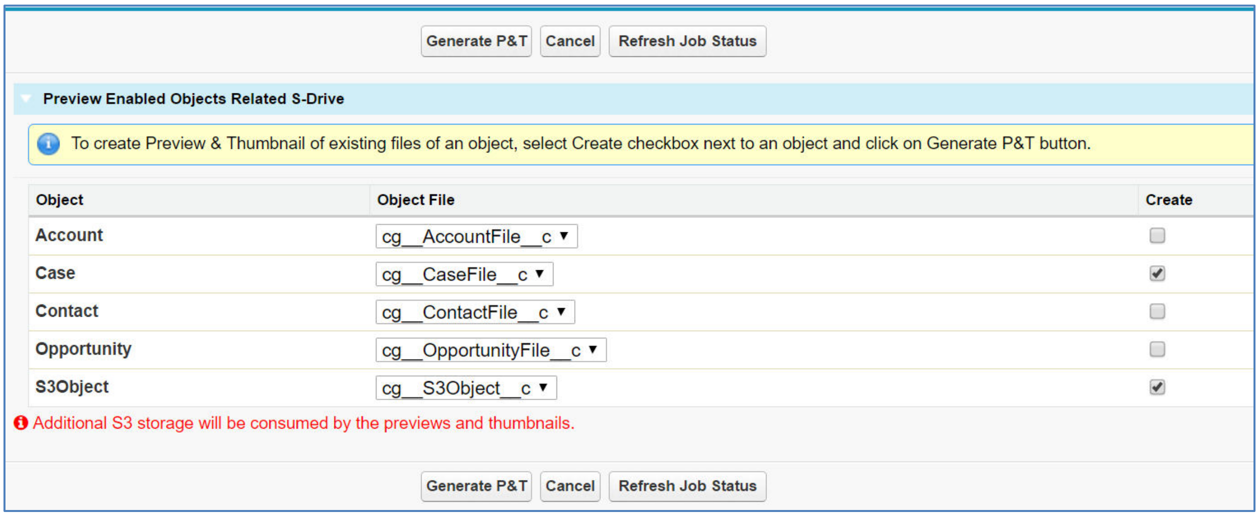


Figure 8-32

There two main requirements to generate preview and thumbnail of a file.

- Object must be preview and thumbnail enabled.
- Type of attached file must be allowed for conversion on your object.

Important Note: Additional AWS S3 storage will be consumed by the previews and thumbnails. Also, you can check conversion pricing at https://www.sdriveapp.com/pricing/. Once S-Drive 2.0 installed into your organization, S-Drive Folders (S3Object) will be auto enabled for preview and thumbnail conversion of upcoming “avi, doc, docx, gif, jpeg, jpg, mov, mp4, mpeg, mpg, pdf, png, ppt, pptx, psd, wmv, xls, xlsx” file types. You can change this configuration if you want to.

8.4.7 Records Management

Records Management (RM) is a micro service offered by S-Drive at $500/month. The usage is prorated and rounded up to the nearest hour. With RM, you can apply retention policies to your files, have file check-in & check-out functionality, and put your files under legal hold.

To enable Records Management, check “Enable Records Management” and click OK on the pop-up message.

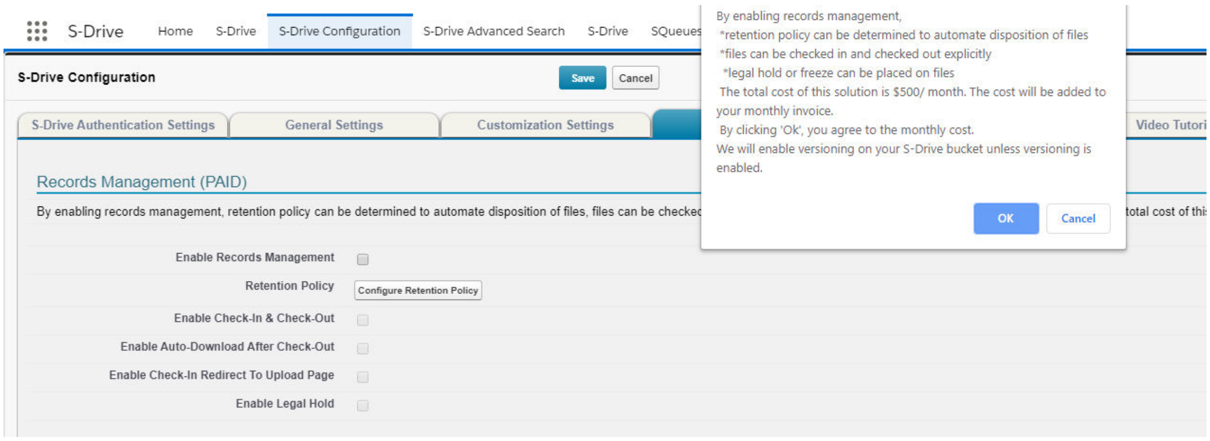


Figure 8-33

This will enable the checkboxes for Check-in & Check-Out and Legal Hold.

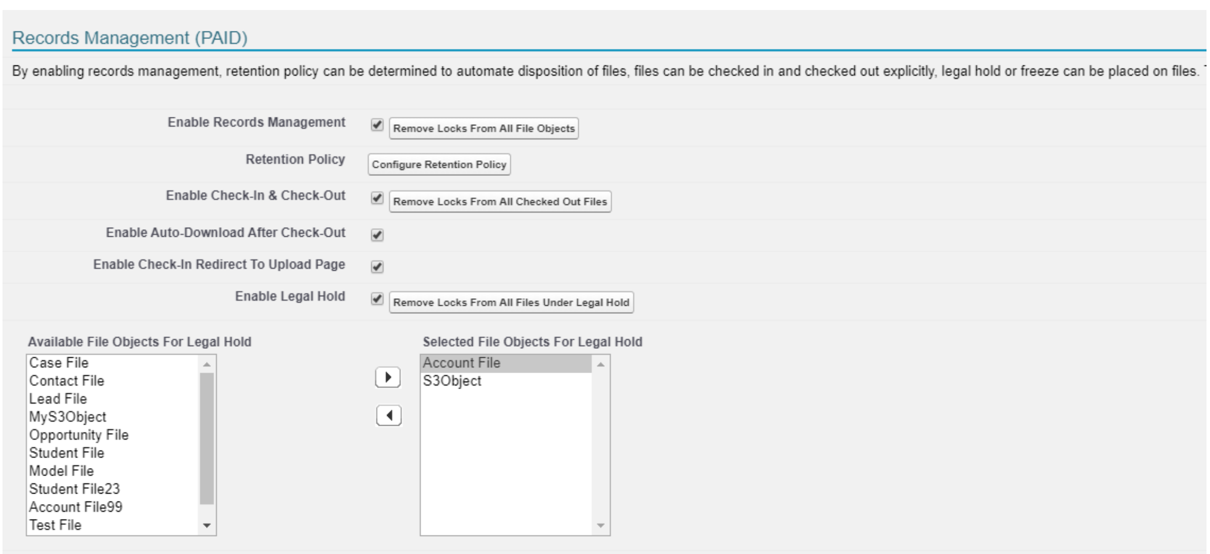


Figure 8-34

If you would like to disable RM after enabling it, and have files locked either through Check-Out or Legal Hold, you can click “Remove Locks From All File Objects” button. As the name suggests, clicking this button removes locks of any kind (whether checked out or on legal hold) from all file objects. After that, you can uncheck the “Enable Records Management” checkbox and click “Save” to disable the feature. Please note that if you try to save this configuration while having checked-out files, or files under legal hold, you’ll see an error message.

8.4.7.1 Retention Policy

Retention Policy is a feature under the Records Management micro service. Retention policies cause files that meet the configured criteria to be deleted from S-Drive storage at the specified time. Retention policies delete all existing versions of files covered in the policy. “Configure Retention Policy” button is clicked to manage retention polices. That will bring you to this screen.

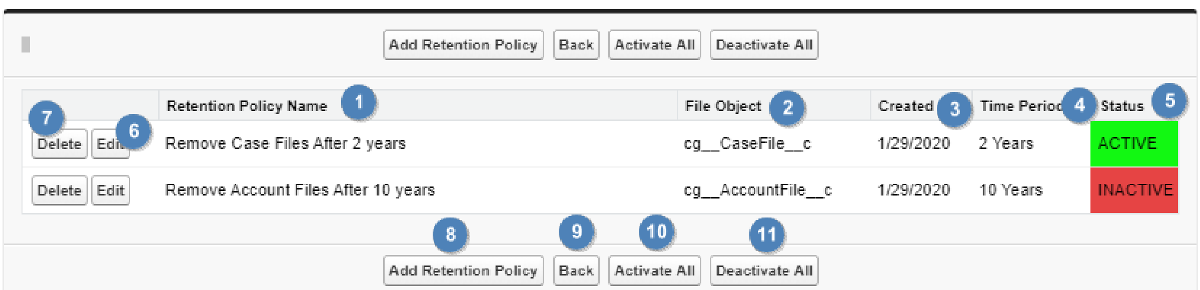


Figure 8-35

Here, you can manage your retention policies. Retention Policy Name **(1)**, related file object **(2)**, policy created date **(3)**, time period **(4)** and policy status **(5)** are listed on the page. You can edit **(6)**, delete **(7)** or create a new retention policy **(8)**. If you want to go back to the S-Drive Configuration page, click Back **(9)** button. You can active all your retention policies **(10)** or deactivate them **(11)**. To activate or inactivate a single policy, click “edit” next to the policy and change the status at the bottom of the edit window.

You can create new retention policy by clicking “Add Retention Policy” button **(8)**.

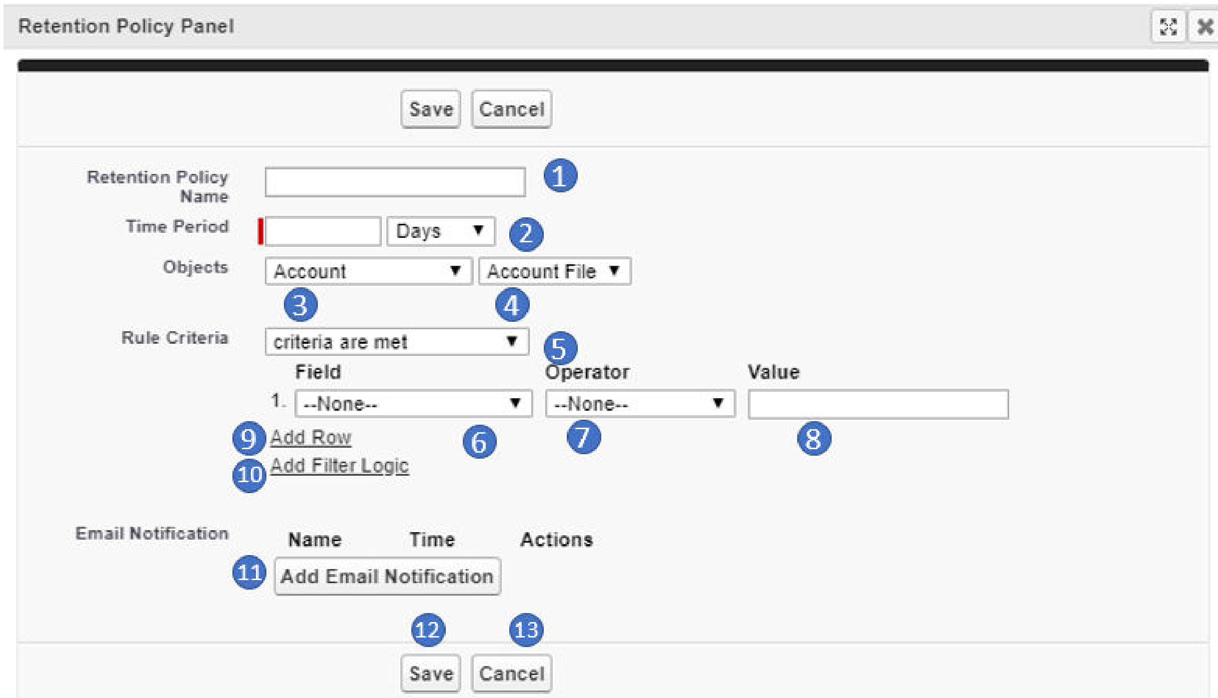


Figure 8-36

In “Retention Policy Panel” section, you can enter a name for retention policy **(1)**, specify the amount of time in days, months, or years you need to retain the file, beginning from the file created date **(2).** You should select your standard or custom object **(3)** and S-Drive file object **(4)**. You can pick “criteria are met” or “formula evaluated to true” options **(5)**. If “criteria are met” option is picked, you should select S-Drive file object fields **(6)**, select any of operator such as: equals, not equals, starts with, contains, less than, etc. **(7)** and populate criteria value **(8)**. (Note: if you go to the list view of the file object, such as AccountFiles, and display the field you want to use for criteria, you will see exactly what to put in the Value field. For example, for content type, you’ll see image/png, application/pdf, etc.) You can add more criteria by clicking “Add Row” **(9)** and change filter logic by clicking “Add Filter Logic” **(10)**. Default logic is AND, but you can change filter logic to include AND and OR combinations, such as (1 AND 2) OR 3. If “formula evaluated to true” option is picked, you should define a formula, for example; cg__File_Size_In_Bytes__c > 7000. You can send email notification by clicking “Add Email Notification” button **(11)**. Click “Save” button **(12)** to create the new retention policy or “Cancel” **(13)** to leave without saving.

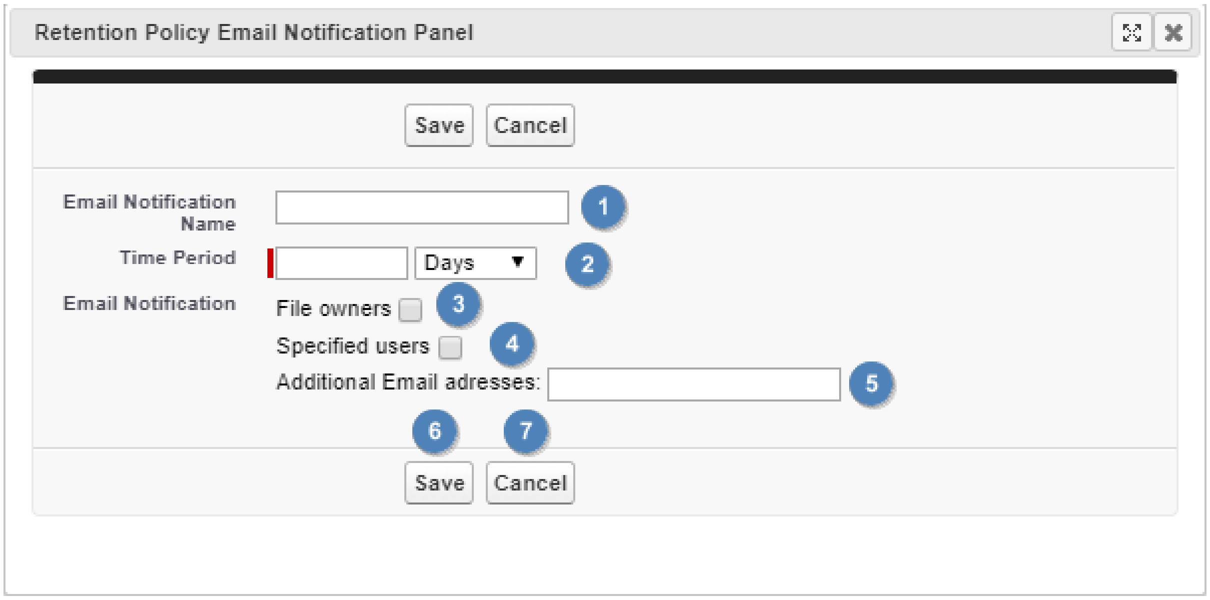


Figure 8-37

In "Retention Policy Email Notification Panel" (if you've clicked Add Email Notification on the Retention Policy Panel), you can enter a name for email notification **(1)**, specify the amount of time before deletion you want the notification sent, **(2).** You can send email notification to file owners **(3)**, specified user by selecting user list (which displays once the Specified users checkbox is checked **(4)**) or custom email address **(5)**. You can create new retention policy email notification by clicking "Save" button **(6)**. You can cancel email notification or go back to "Retention Policy Panel" section **(7)**.

8.4.7.2 Check-In & Check-Out

Check-In & Check-Out is a feature under the Records Management micro service. Using this feature, you can "check-out" a file, effectively preventing others from deleting or modifying the file, and when you're finished with the document, "check-in" the file. This feature can be enabled/disabled from the S-Drive Configuration page.

Check-In & Check-Out comes with 2 sub configurations:

- If you would like to have your browser auto-download the file once "Check-Out" button is clicked, "Enable Auto-Download After Check-Out" as well.
- If you would like to have a pop-up window that asks "Would you like to upload a new version to this file" once "Check-In" button is clicked, "Enable Check-In Redirect To Upload Page" as well.

If you would like to disable Check-In & Check-Out after enabling it, and currently have files checked out (locked), you can click “Remove Locks From All Checked Out Files” button. As the name suggests, clicking this button checks in (unlocks) every checked-out file. After that, you can uncheck the “Enable Check-In & Check-Out” checkbox and click “Save” to disable the feature. Please note that if you try to save this configuration while having checked-out files, you’ll see an error message.

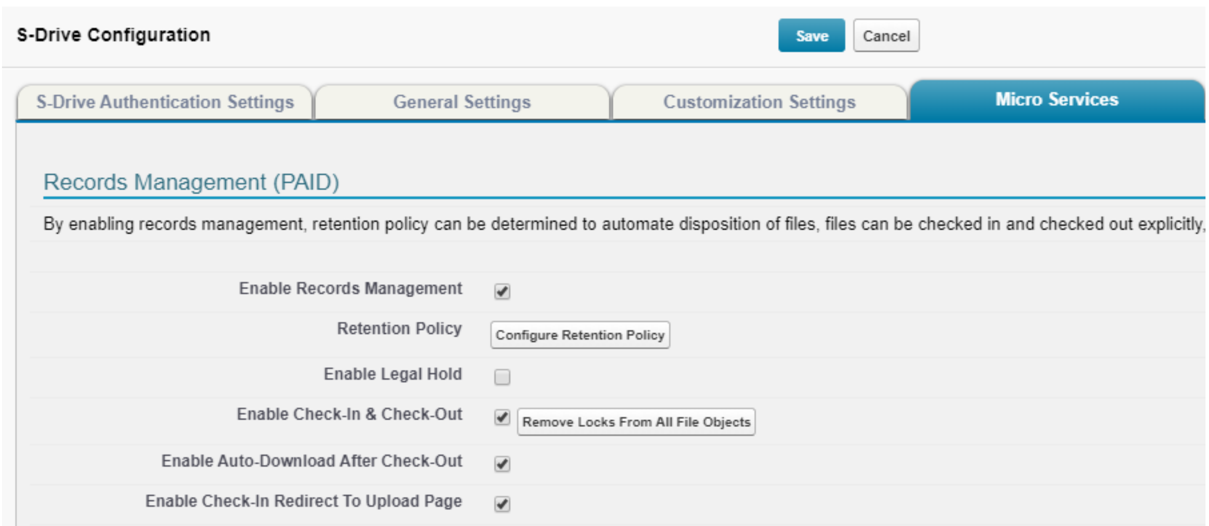


Figure 8-38

Please note that in order to enable Check-In & Check-Out, “Records Management” needs to be enabled beforehand. Records Management solution costs $500/month but it is prorated.

Once Check-in and Check-out is enabled, you will see options for check-in/check-out in the action menu for your files. See the S-Drive User’s Guide for more information.

8.4.7.3 Remove Lock Permission

Check-In & Check-Out feature incorporates a custom permission called “RemoveLockPermission” that must be created as follow:

- Go to Setup→Custom Permissions and click new
- Fill in the fields as shown and click Save

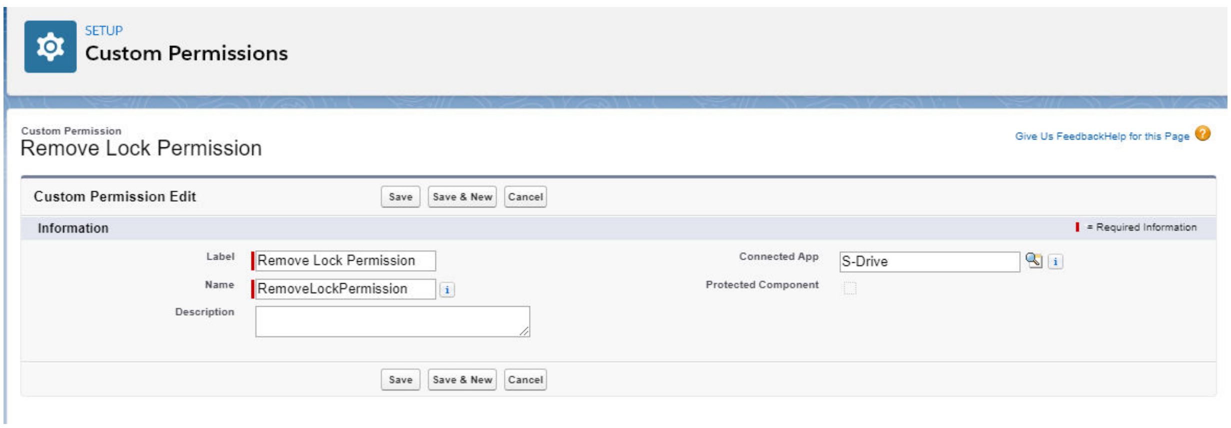


Figure 8-39

You can either add this permission to a permission set of your organization (which is then assigned to users/profiles) or enable it for a specific profile.

If a user has this permission, or if user is a System Administrator, locks can be removed by the user, independent of who put the lock in the first place. Otherwise, only the person who checked-out a file can check-in. Additionally, Legal Hold functionality is only available to holders of this custom permission and System Administrators.

8.4.7.4 Legal Hold

Legal Hold functionality allows users with Remove Lock Permission (see above) to put files under legal hold, preventing others from deleting or modifying the file. Legal Hold is like check-in & check-out, the differences being

- Only certain users with the specified permission can put files under legal hold, or remove files from legal hold

- File objects available for legal hold must be explicitly selected from the configuration menu (see Figure 8-32)
- Legal Hold is hierarchically above Check-In & Check-Out, i.e., a file under legal hold can't be checked-out but a checked-out file can be put under legal hold.
- Files that are on Legal Hold will NOT be deleted at the end of a retention period unless criteria (Lock State equals legalHold) is set to include them in deletion.

If you would like to disable Legal Hold after enabling it, and currently have files on Legal Hold, you can click "Remove Locks From All Files Under Legal Hold" button. As the name suggests, clicking this button removes all files from legal hold. After that, you can uncheck the "Enable Legal Hold" checkbox and click "Save" to disable the feature. Please note that if you try to save this configuration while having files under legal hold, you'll see an error message.

Please note that in order to enable Legal Hold, "Records Management" needs to be enabled beforehand. Records Management solution costs $500/month but it is prorated.

Once Legal Hold is enabled, you will see options for Put Legal Hold/Remove Legal Hold in the action menu for your files. See the S-Drive User's Guide for more information.

8.5 S-Drive Documentation

This section includes a set of detailed user documentation for S-Drive configuration and usage. Each document has different focus; therefore one might need to select carefully to look for detailed information.

8.6 Video Tutorials

This section includes a set of videos related to S-Drive configuration with Amazon, Salesforce and setting up the features of S-Drive. Users can benefit these videos when they need help to activate and use S-Drive on their Salesforce organizations.

9 ADVANCED FEATURES

9.1 How to Activate Public Share Link & S-URL in Your Organization

Public Share & S-URL features can be used separately but they have the same configuration.

S-URL: File URLs generated by Amazon S3 services are too long. It causes problems in some mail programs such as MS Outlook, and it is not easy to share. In order to use a shortened URL, you can use **S-URL feature** of S-Drive.

Public Share: You can share your files & folders to public users. You can set password, IP Range, Expire dates and so on. This feature is available in Lightning only.

Public Share & S-URL uses **force.com Sites** to create short URL with your brand name. You may need to buy *force.com Sites license* to use this feature. (To get more information please visit https://developer.salesforce.com/page/Sites)

9.1.1 Create A Force.com Site

In order to create a Force.com site, you need to navigate to **Setup > User Interface > Sites and Domains > Sites**. In this page, you can create a new site using the **New** button.

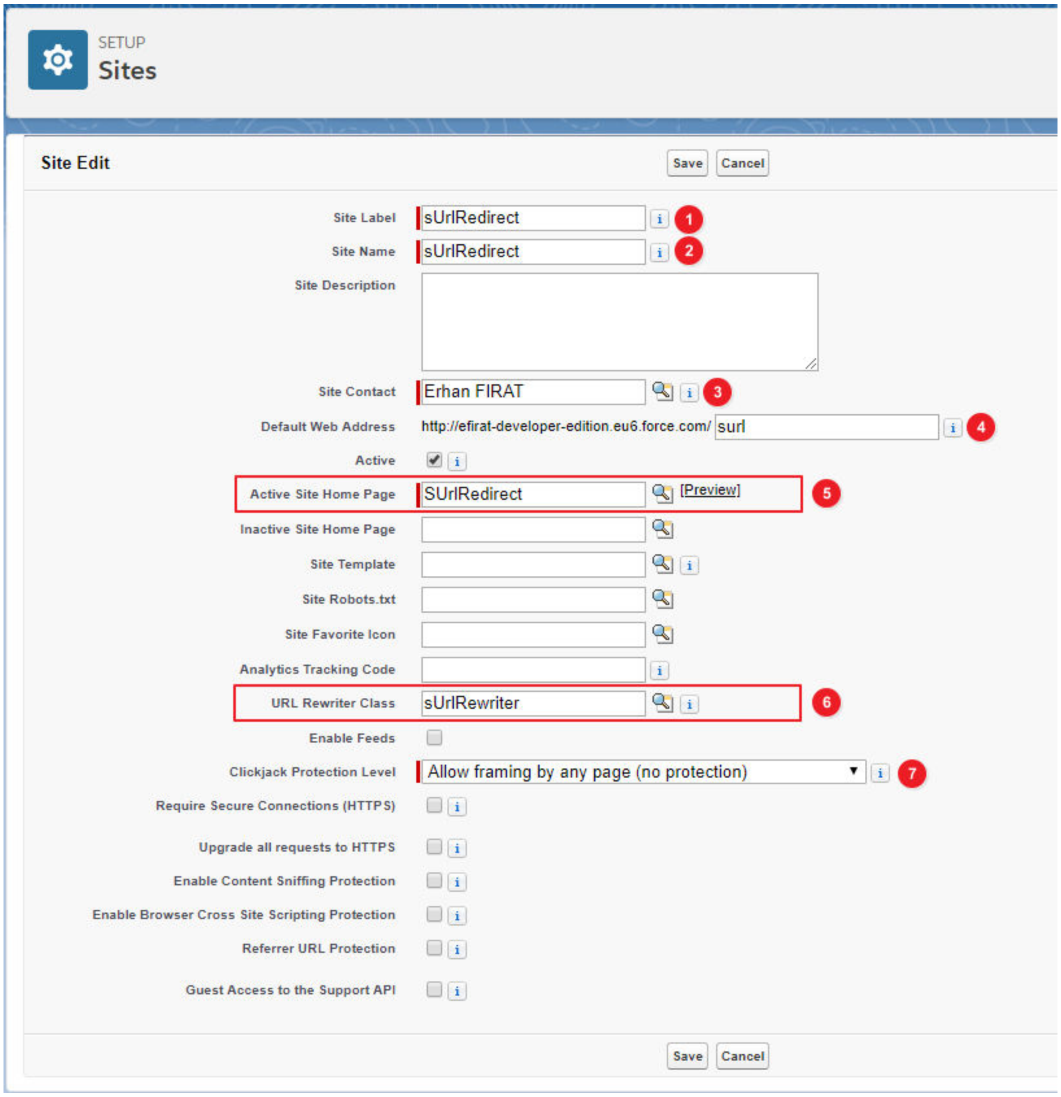


Figure 9-1

1. **Site Label:** This is the label of your site. You can name it any way you want.
2. **Site Name:** This is the name of your site. You can name it any way you want.
3. **Site Contact:** This is the name of the site contact. You can choose any user from the lookup.
4. **Default Web Address:** This is the default web address that you will be using for your S-URLs. You can fill in the input box the way you want.
5. **Active Site Home Page**: Click on lookup and search for **SUrlRedirect**. Click on SUrlRedirect to choose and close the lookup page.

6. **URL Rewrite Class**: Click on lookup and search for **SURLRewriter** (Figure 9-1-6). Click on SURLRewriter to choose and close the lookup page.
7. **Clickjack Protection Level:** You can choose any protection level from this option.

Once you configure these fields, click on **“Save”** button at the bottom of the page.

9.1.2 Configuring the Public Access Settings of your Site

Once you create your site you should also make some configurations. From **Setup** go to the **Sites** section again and find your site. Click on the site name to open the site detail page. Click on **Public Access Settings** in this page.

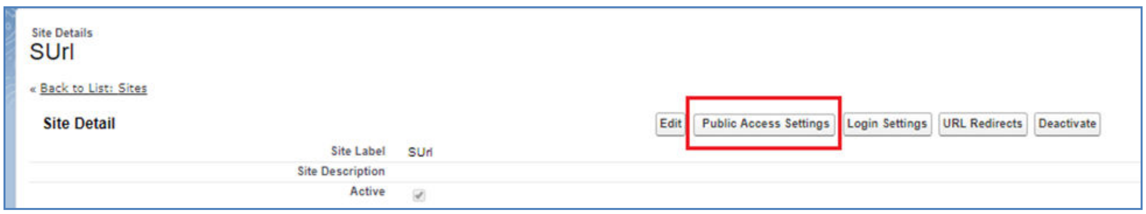


Figure 9-2

There are 3 important sections in the Public Access Settings Page.

1. **Enabled Apex Class Access:** Click on **Edit** button when you navigate to this section by scrolling down. A new page will be opened**. In this page choose all classes with prefix “cg” and add them to Enabled Apex Classes**.

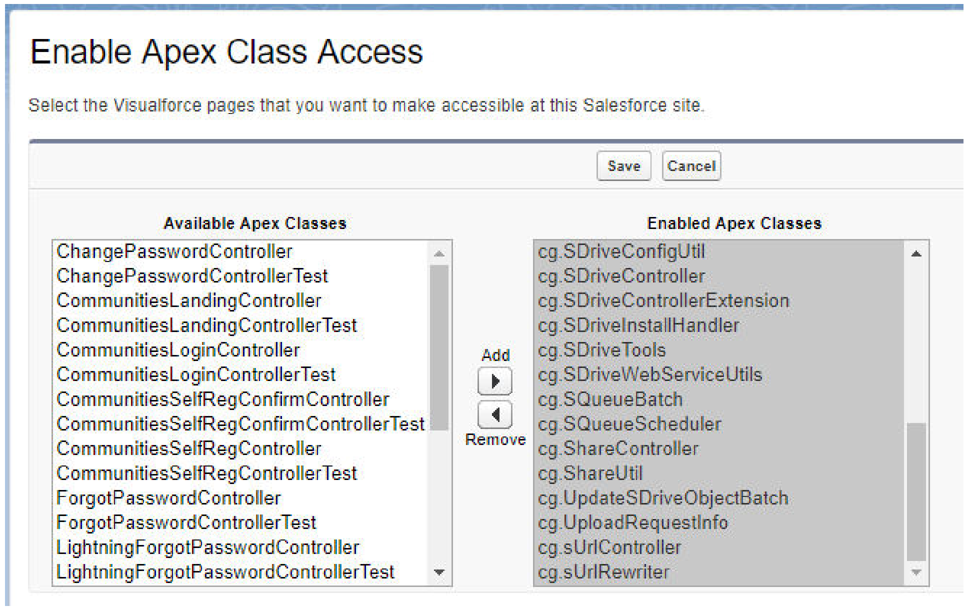


Figure 9-3

Once you add them to the enabled apex classes list, click Save button.

2. **Enabled Visualforce Page Access:** Click on **Edit** button when you navigate to this section by scrolling down. A new page will be opened**. In this page choose cg.EmailPage, cg.HtmlUploadPage, cg.SDrive, cg.SUrlRedirect, cg.UploadPage visualforce pages and add it to the Enabled Visualforce Pages list.**

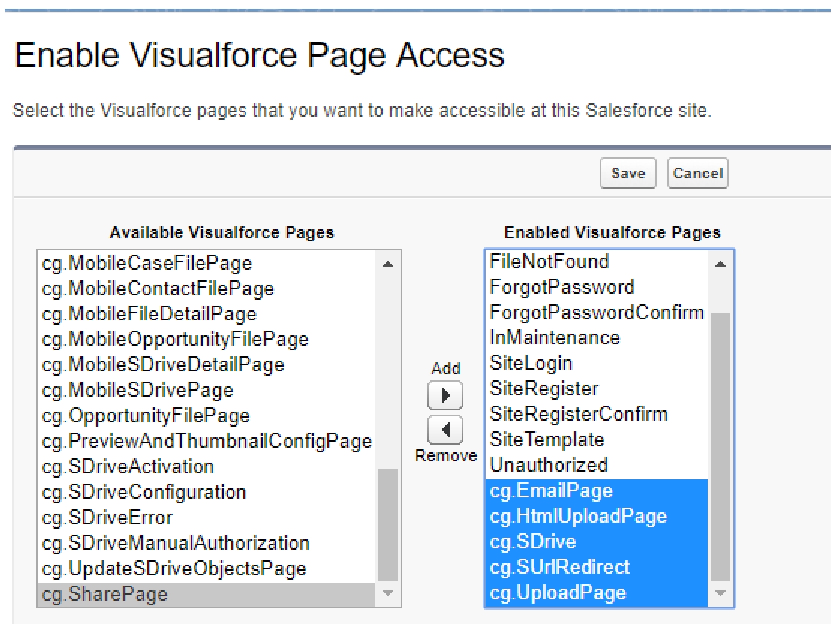


Figure 9-4

Once you add the Visualforce page to the enabled list, click **Save** button.

3. **Custom Object Permissions:** For editing the Custom Object Permissions, click on the "**Edit**" button at the top of the page.

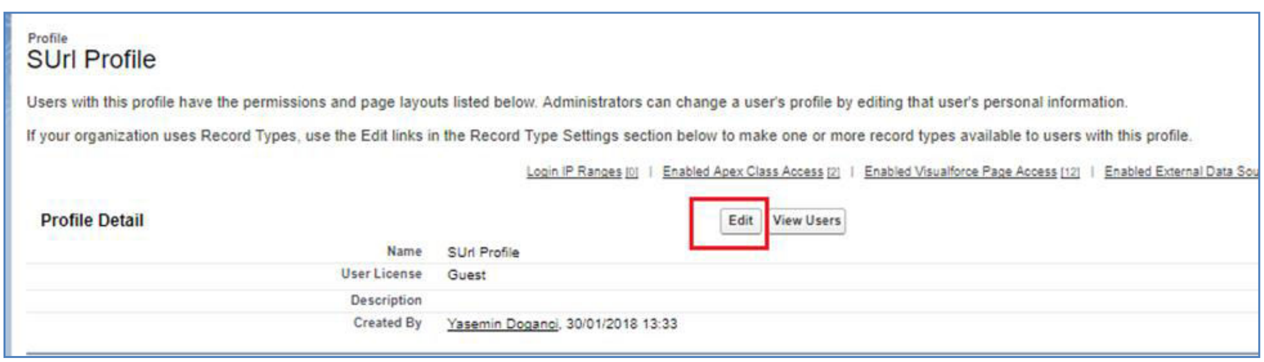


Figure 9-5

Scroll down to the Standard Object Permissions section and enable Basic Access for SUrls and SUrl Hits objects.

If you want to share an object's files, please first give permission for its parent object. For example, if you want to share Account Files, you should also give permission to Account object.

Choose objects you want to share publicly.

Scroll down to the Custom Object Permissions section and enable Basic Access for SUrls and Surl Hits objects.

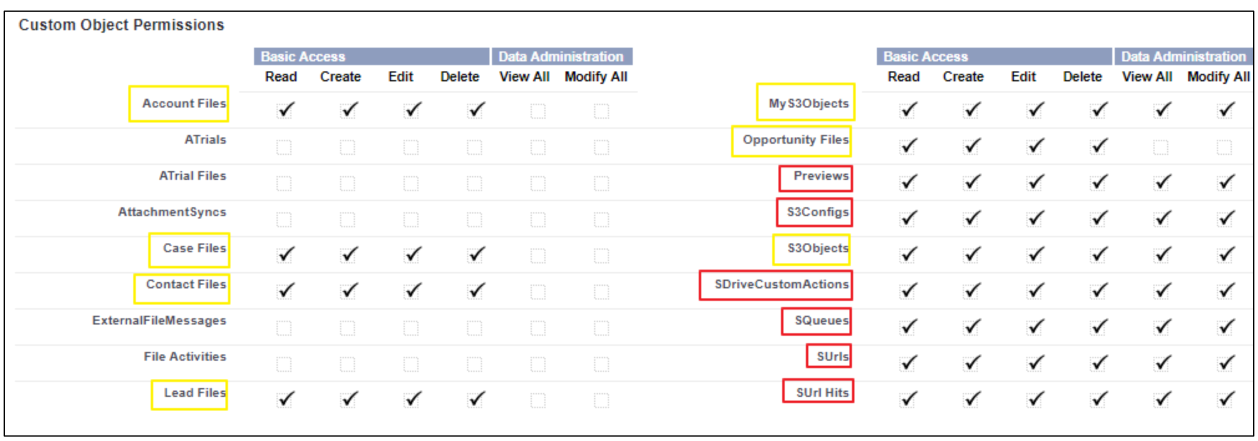


Figure 9-6

In the Figure 9-6, red lined objects must be selected. Yellow lined objects are selectable file objects. You should choose object that you plan to share publicly. Don't forgot that, if you plan to share Account Files, permissions should be set Account Files and Account object.

If you would like to track file activities, such as downloads, also choose permissions for the File Activities object.

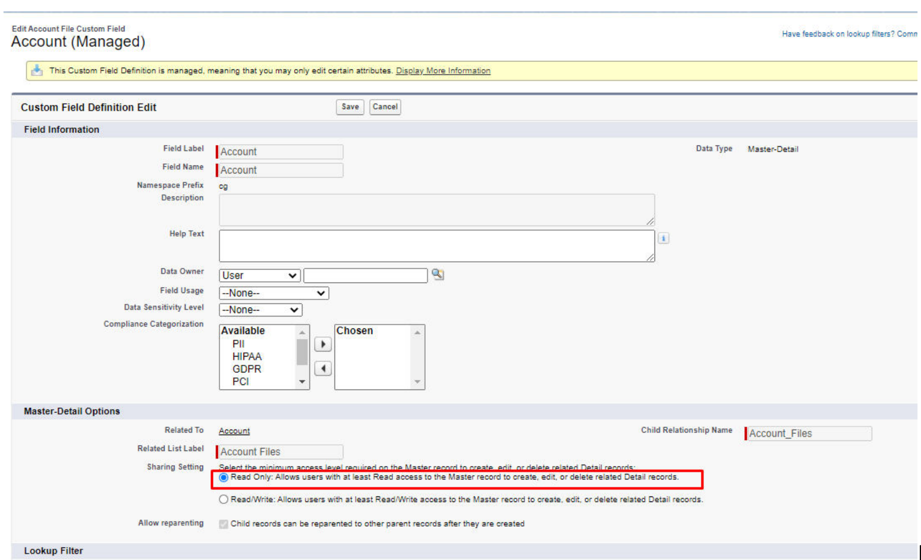
S3Object refers to files on Sdrive Tab, MyS3Object refers to files on MyDrive.

Once you give the access, click on "Save" button at the top of the page.

9.1.3 Sharing Settings

With Salesforce Summer '20, there were changes to Guest User security, which affected our Public Share feature. Changes need to be made in profiles and sharing rules to make Public Share work.

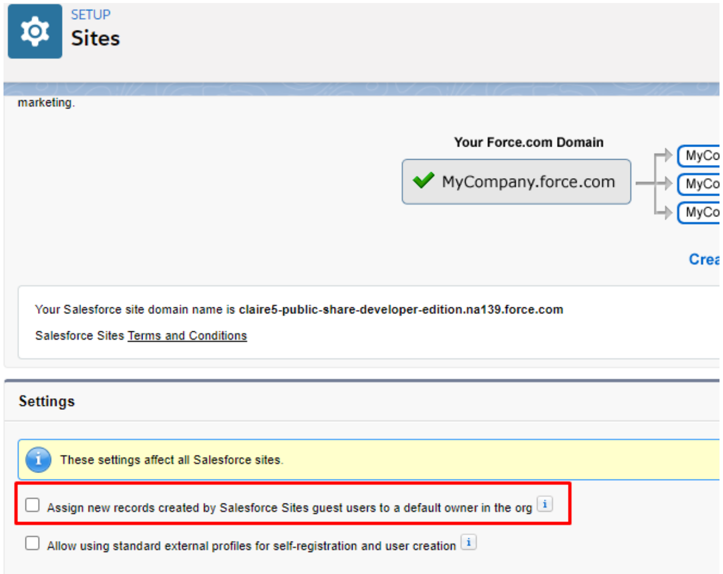
- In Setup→Sharing Settings, make sure the box for Secure Guest User Access is checked.
- **For a file object with a master-detail relationship to the parent** (i.e. AccountFile and Account)
    - In Setup, go to the file object you want to use Public Share with (for example AccountFile.) Edit the Account field (or whatever field is the master-detail field) and change the sharing setting radio button to read only.



    - In Setup→Sharing Settings, go to the sharing rules section.

    - For the parent object (ex: Account), create a sharing rule to share all Accounts (in this example) with Guest User (only Read access is allowed.) Use criteria that is always true, such as CreatedById is not equal to null.
    - For the surl object, create a sharing rule to share all sUrls with Guest User. Use criteria that is always true, such as CreatedById is not equal to null.
    - If the file object has a lookup relationship to the parent, then on the file object, create a sharing rule to share all with the Guest User. Use criteria that is always true, such as CreatedById is not equal to null.

- In the Guest User Profile (Go to Setup→Sites, click on Site Label for your public share site, click on Public Access Settings button).
    - Make sure there is read access on the parent object (ex: Account)
    - Make sure there is read access on surl.
    - Make sure the file object (ex: AccountFile) has the permissions you want—read for read/download access or read/create/edit for uploading or editing metadata.
    - In order for Guest Users to upload, you must share a folder for them to upload into.
- On the public share Site page (Setup→Sites), make sure the box for Assign new records created by Salesforce Sites guest users to a default owner in the org is **unchecked. This box may not appear at all in your org, depending on when your org was created.**



9.1.4 S-Drive Configuration

When you create the force.com site with these configurations, navigate to S-Drive Configuration page. Check the “Enable Short URL” checkbox and write the URL of your site to the “Base URL” input box.

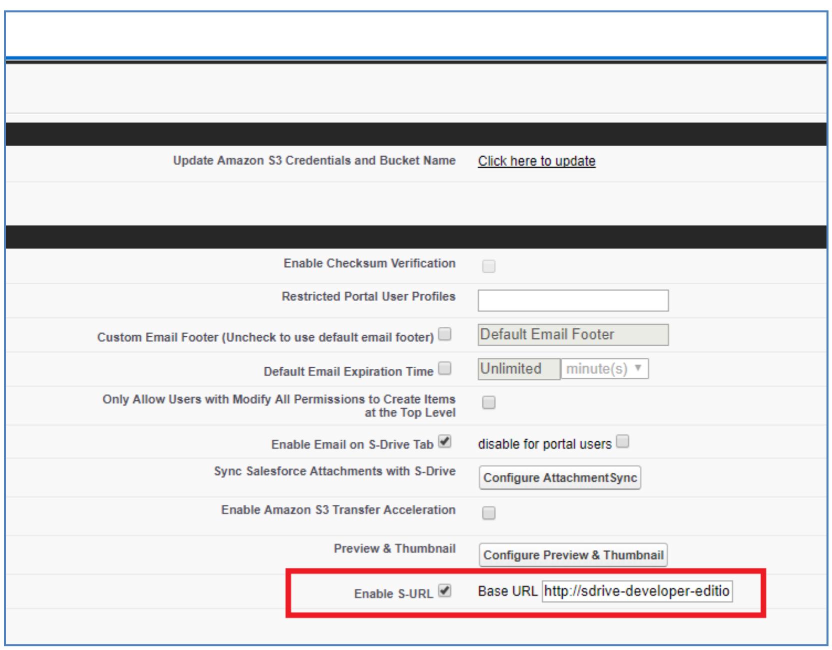


Figure 9-7

9.1.5 Checking File Audits

After these configurations, you will be able to use short URLs and also the “Audit” tab in “Details” page of files and folders will be available. In this page there are different fields of information such as Short URL, Created Date, Expiration Date, Hit and Download counts, and Total Hit Count.

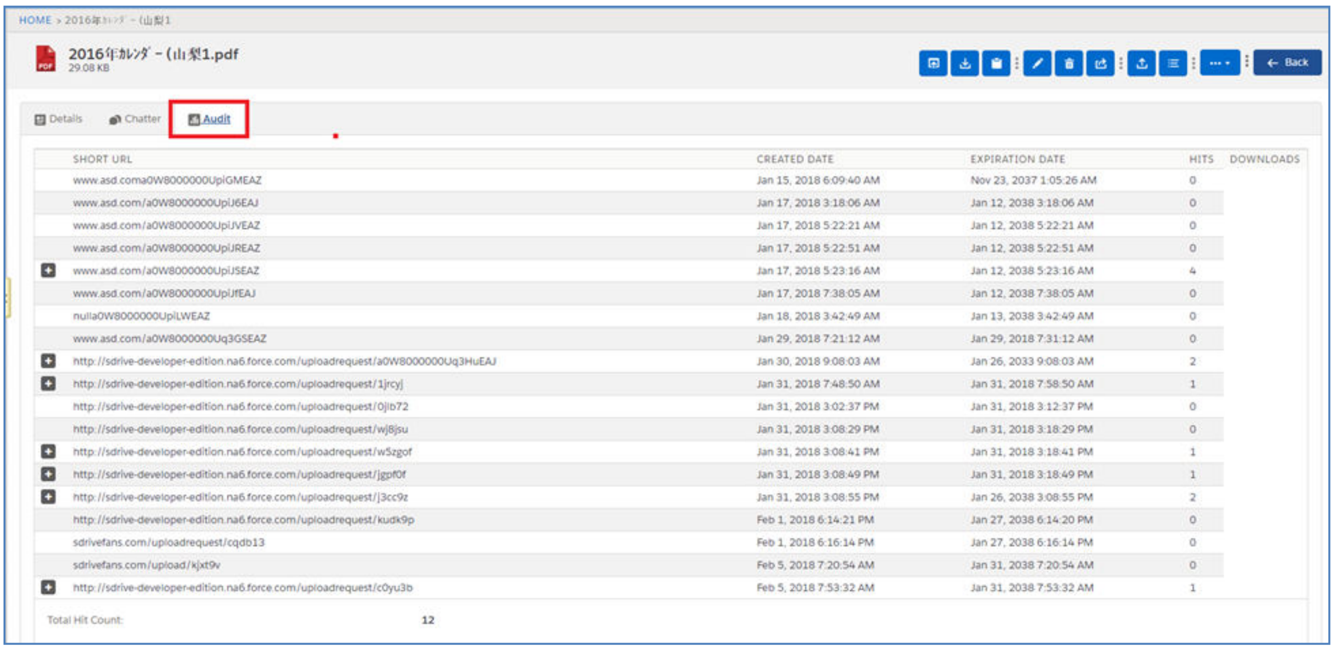


Figure 9-9

9.2 S-Actions (Custom Actions)

S-Actions is the exciting new S-Drive feature released on version 2.1. Customers can develop their custom codes on VF Pages, Lightning Components or Static Resources Scripts and these code blocks can be embedded to S-Drive component as S-Action.

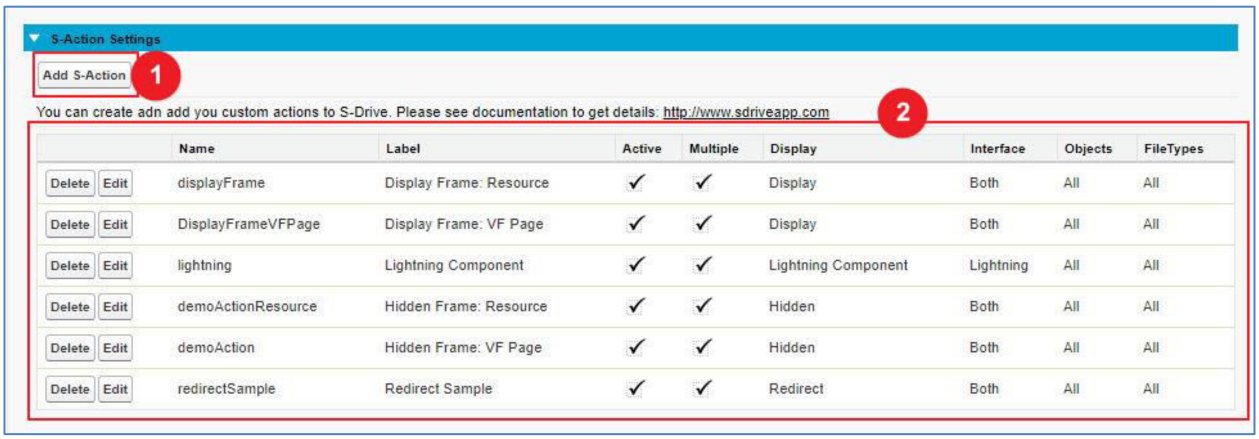
S-Drive identifies your VF Pages, Static Resource Scripts or Lightning Component via S-Action definitions. S-Drive can import your custom action code blocks to S-Drive component in 4 different types which are ***Hidden, Display, Redirect*** or ***Lightning Component***.

According to your S-Action definition, it is added on related objects Action Menus (

) and Toolbar S-Actions button () as an option.

When a custom action is selected from menu, S-Drive runs your code blocks sending selected files id list with action name as parameters. After action is done, S-Drive inform users about action status.

Let's add a new S-Action by clicking Add S-Action button on Figure 9-10-1



	Name	Label	Active	Multiple	Display	Interface	Objects	FileTypes
Delete Edit	displayFrame	Display Frame: Resource	✓	✓	Display	Both	All	All
Delete Edit	DisplayFrameVFPage	Display Frame: VF Page	✓	✓	Display	Both	All	All
Delete Edit	lightning	Lightning Component	✓	✓	Lightning Component	Lightning	All	All
Delete Edit	demoActionResource	Hidden Frame: Resource	✓	✓	Hidden	Both	All	All
Delete Edit	demoAction	Hidden Frame: VF Page	✓	✓	Hidden	Both	All	All
Delete Edit	redirectSample	Redirect Sample	✓	✓	Redirect	Both	All	All

Figure 9-10

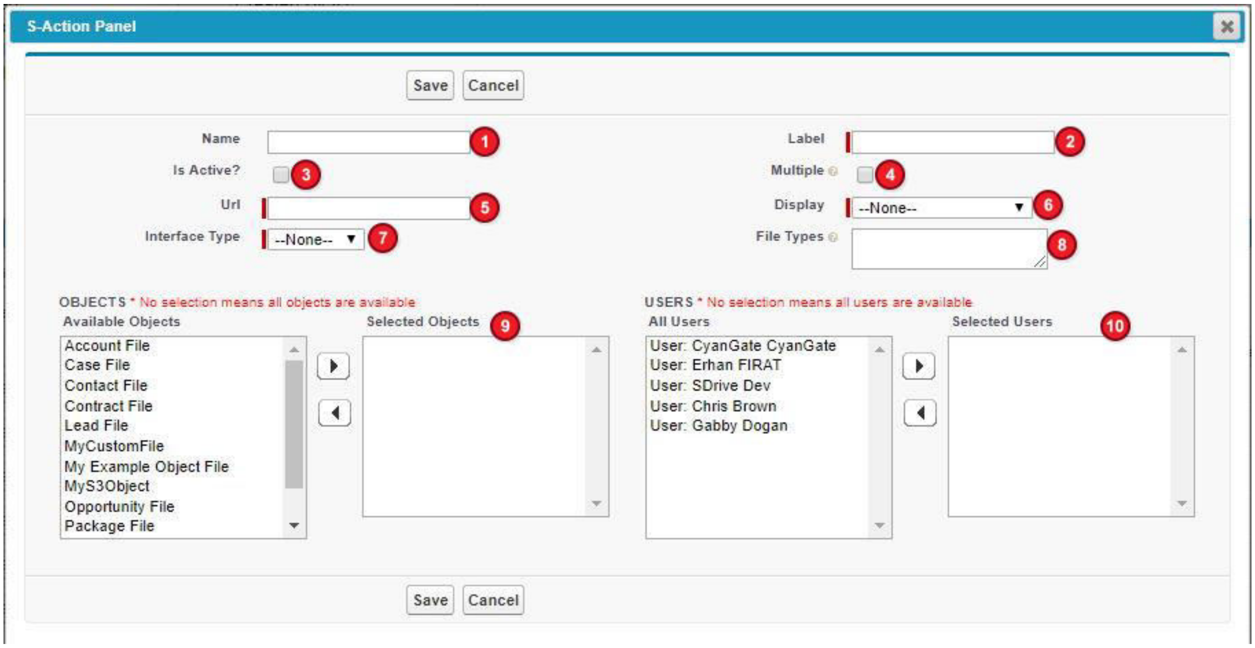


Figure 9-11

1. Name

Your custom action name should be action definition without space and special characters (i.e. “deployToWebsite”). This will be sent to the Action code blocks as a URL parameter.

2. Label

Label will be listed on “Action Menu” and Toolbar S-Actions menu button. (i.e. “Deploy To Website”)

3. Is Active

This Boolean field holds S-Action is currently active or not. If it is set to unchecked, it won’t be listed on Actions menu.

4. Multiple

This Boolean flag determines whether the action is for multiple files or not. If it is just for single files, it will not be listed in Toolbar S-Actions menu button.

5. URL

This field holds URL information of you VF pages, Static Resource Scripts, Lightning Component name or URL to Redirect. For;

- **VF Pages**: "/apex/[YourPrefix__YourVFPageName]" i.e. "/apex/cg__CustomActionSampleVF". If your organization does not have any prefix, please write "c__" prefix on it i.e. "/apex/c__CustomActionSampleVF".
- **Static Resource Scripts**: "/resource/[ResourceName]/[ScriptFile]". i.e. "/resource/cg__caDeployFrame/caDeployFrame.html"
  If your organization does not have any prefix, please write "c__" prefix on it i.e. "/resource/c__caDeployFrame/caDeployFrame.html".
- **Lightning Component**: "[YourOrganizationPrefix]:[YourComponentName]" i.e. "cg:MyCustomActionComponent".
  If your organization does not have any prefix, please write "c" prefix on it i.e. "c:MyCustomActionComponent".
- **URL to Redirect**: It is simple web URL of your service. i.e. "https://cgsdrive-dev-ed.lightning.force.com/one/one.app"

NOTE! For VF Pages, Static Resource Scripts and URL Redirect options, selected file Ids and action name are sent as URL parameters. For example, if you have *deploy* action on VF page, and URL is set to "*/apex/cg__deployPage*". On action fire, URL will be similar to this example: "/apex/cg__ deployPage?**actionName**=deplotToWebsite&**119ields**=a038000000mqyR6AAI,a038000000sx1QDAAY".

6. Display

There are four display types bond to script type and behavior of S-Action. You can set an action work on background with nothing to display except for informational toaster message, or you can embed your custom action scripts within Iframe.

a) Hidden Frame

On this type of S-Actions, your VF Pages or Static Resources can be embedded to S-Drive Component as a hidden Iframe. This type of S-Actions is suit for running on background process without any feedback of users. For example, you want to upload selected files to your personal website by one click. After you write your apex code and VF page, just select files on the list and click your custom action on the toolbar. And it will work on background to complete process, after completed it will inform user by a toaster message.

S-ACTION URL: When a hidden type action is clicked this URL will be created:
[YOUR_S-ACTION_URL] + ?actionName=**[S-ActionName]**&componentId=1&119ields=**[selectedFile1Id, selectedFile2Id]**
"/apex/uploadToServer?actionName=uploadToServer&componentId=1&119ields=0018000001UeY2TAAV,0018000001UeR44EEY"

b) Displayed Frame

For this one VF Page is shown on the component main screen within Iframe (Figure 9-12 – 1). After S-Action is done, you can give information to users by postmessage method (Figure 9-12 – 2). You can close Iframe by using Back button (Figure 9-12 – 3).

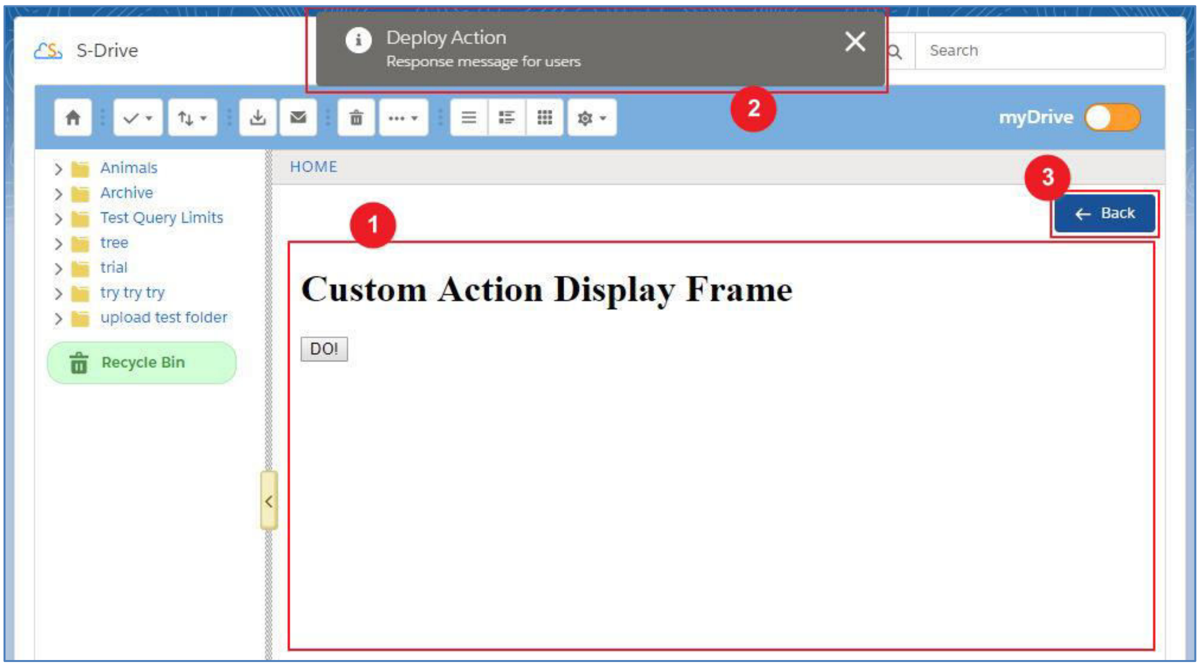


Figure 9-11

S-ACTION URL: When a hidden type action is clicked this URL will be created:
[YOUR_S-ACTION_URL] + ?fileIds=**[selectedFile1Id, selectedFile2Id]**&actionName=**[S-ActionName]**
"/apex/uploadToServer?fileIds=0018000001UeY2TAAV,0018000001UeR44EEY&actionName=uploadToServer"

VISUALFORCE PAGE SAMPLE:

```
<apex:page controller="CustomActionSampleController" >
    <apex:form >
        <apex:actionFunction name="updateFilesAF"
action="{!updateFiles}" rerender="actionResults"
oncomplete="updateFilesFinished();" />
    </apex:form>

    <apex:outputPanel id="actionResults">
        <script>
        function updateFilesFinished() {
            var result = {
                process: 'S-Action',  // Required field to show
toaster
                actionName: '{!actionName}',
                componentId: '{!componentId}',
                type: '{!actionResult}',  // ['error', 'warning',
'success', 'info']
                title: 'Select All Action',
                message: '{!actionMessage}',
                refresh: true // refresh file list on S-Drive
            };
            var resultStr = JSON.stringify(result);
            parent.postMessage(resultStr, "*");
        }
        </script>
    </apex:outputPanel>

    <apex:outputPanel rendered="{!actionName == 'updateFiles'}">
        <script>
        updateFilesAF();
        </script>
    </apex:outputPanel>
</apex:page>
```


CONTROLLER:

```
public class CustomActionSampleController {
    public String actionName {get;set;}
    public List<String> fileIds {get;set;}
    public String componentId {get;set;}
    public String actionResult {get;set;}
    public String actionMessage {get;set;}

    public CustomActionSampleController(){
        actionName =
ApexPages.currentPage().getParameters().get('actionName');
        componentId =
ApexPages.currentPage().getParameters().get('componentId');
        fileIds = new List<String>();
        String fileIdsStr =
ApexPages.currentPage().getParameters().get('fileIds');

        if (!String.isEmpty(fileIdsStr))
            fileIds = fileIdsStr.split(',');
    }

    public PageReference updateFiles() {
        actionMessage = '';
        if (fileIds.size() >= 1 ) {
            String queryStr = 'SELECT id, cg__File_Name__c,
cg__Description__c FROM cg__AccountFile__c WHERE id = :fileIds';
            List<cg__AccountFile__c> files =
Database.query(queryStr);

            for (cg__AccountFile__c file: files)
                file.cg__Description__c = 'S-Action';

            try {
                update files;
                actionResult = 'Success';
                actionMessage = 'Files are updated
successfully!';
            }
            catch (Exception e) {
                actionResult = 'Error';
                actionMessage = e.getMessage();
            }
        }
        return null;
    }

}
```


As you can see, after CustomActionSampleController instantiated, we get parameters from page URL. On VF Page output panel renders if action name is right, and it executes the Action Function named “updateFilesAF”. After action is completed, “actionResults” panel is re-rendered to inform S-Drive component on parent page via parent.postMessage(). S-Drive component catches message and do necessary reaction.

c) Redirect

In this option, you can redirect users to given URL in a new tab with parameters *123ields* and *actionName*.
URL will be: **[YOUR_S-ACTION_URL]** + ?fileIds=**[selectedFile1Id, selectedFile2Id]**&actionName=**[S-ActionName]**
i.e. https://cgsdrive-dev-ed--cg.na6.visual.force.com/apex/TestSActionPage?**actionName**=redirectSample&**fileIds**=a038000000mqyR6AAI,a038000000sx1QDAAY,a038000000sx1iEAAQ

d) Lightning Component

You can also embed your custom Lightning Component into S-Drive by S-Actions. Please be sure you map your S-Action URL correctly for Lightning Component (Please see URL Section).

For lightning component FileIds and ActionName parameters are sent to component as component attribute. Here is an S-Action Lightning Component sample:

```
<aura:component access="global" >
    <aura:attribute name="fileIds" type="String[]"
access="global" />
    <aura:attribute name="actionName" type="String"
access="global" />
```

NOTE! Make sure your Lightning component and *123ields* & *actionName* attributes are set to **access=”global”.**

7. Interface Type

You can select your custom action interface type here. It can be just for *Salesforce Classic*, it can be just for *Lightning* or it can be for *both* interface types of Salesforce. Note that on 2.2.8 release all S-

Action types are available in Lightning. Additionally, hidden type action is available in Classic Attachment Component.

8. File Types

You can limit your S-Action to work defined file types only. If leave this field empty, it means action is available for all file types and Folders. If you write file extensions comma separated, it will be shown only these file types. i.e. if you put “jpg,png,gif,folder”, the action will be listed only these file types’ action menu. As you can see on the example, you can define folders as “folder” text.

9. Objects

You can limit your S-Action to work with only selected file object types. If you leave this field empty, it will mean the action is available for all object types.

On the left box, named *Available Object*, you can see all file objects that is related to S-Drive component. For example, if you got an action which is only for Case File, you should move Case File option to the right box named *Selected Objects*. Please see Figure 9-13.

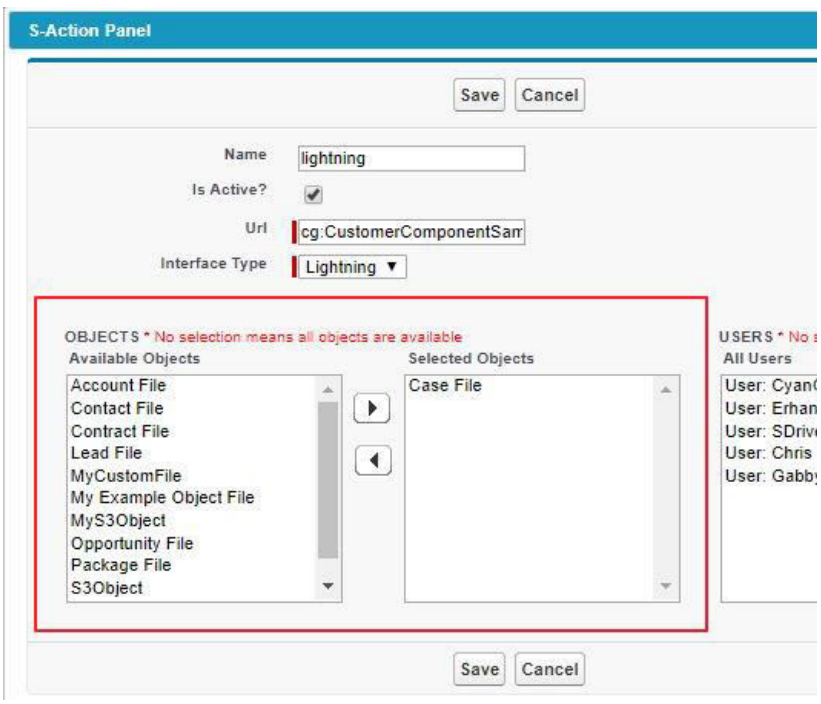


Figure 9-13

10. Users

You can limit your S-Action to work for only some users. Empty list means action is available for all users. For example, if you got a Web site manager, and you want to give deploy action permission only for her/him. Then, you should select the user on the *All Users* list and you should move User to the *Selected Users* list. Please see Figure 9-14.

Figure 9-14

9.3 Lead Conversion

This section explains how to enable/disable copying files that are attached to a Lead, to Accounts / Contacts / Opportunities.

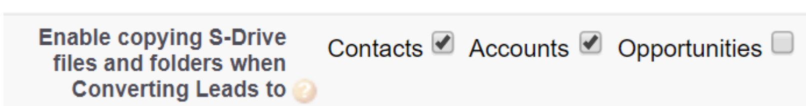


Figure 9-15

If you want to copy the files in one of your leads to converted contact, account or opportunity, all you have to do is to check the required checkboxes in S-Drive Configuration page, shown in Figure 9-15. (Also refer to section 8.2.9.2 Enable Copying S-Drive Files and Folders When Converting Leads To). Checking these boxes will activate a trigger called ConvertLead on Lead object.

ConvertLead trigger works for copying files from **cg__Lead_File__c** object to **cg__AccountFile__c**, **cg__ContactFile__c**, and **cg__OpportunityFile__c** based on your selection. If you enabled S-Drive for Leads, Accounts, Contacts or Opportunities by using your own custom file objects, this trigger will not be able to move your files from the lead to converted contact / account / opportunity.

You will be able to see your folders immediately after the conversion process, but for being able to see the files, you need to execute batch-jobs. *For more information on daily batch-jobs and SQueue, please see 'Select SQueue – daily batch jobs – execute time' section.* The conversion of lead files is handled with SQueue, and when the queue is executed, the files will be copied to the converted contact / account / opportunity, and you will be able to display your files.

9.4 Hidden Custom Settings

9.4.1 SDriveConfig

This section explains the hidden custom settings that are not exposed to the end users via "S-Drive Configuration" page. You can manage these configuration objects via **Setup -> App Setup -> Develop -> Custom Settings** menu. Then you can click **"Manage"** next to the **"SDriveConfig"** label and add these custom settings with appropriate values.

MultipartUploadThresholdSize: This configuration is used for HTML Upload and Java Upload Widget to decide normal upload or multipart upload based on the file size. Default is 5 MB. So, files above 5 MB (or configured value) will be uploaded via multipart upload mechanism, below 5 MB (or configured value) will be uploaded via normal upload mechanism that is used same way in Flash Upload Widget.

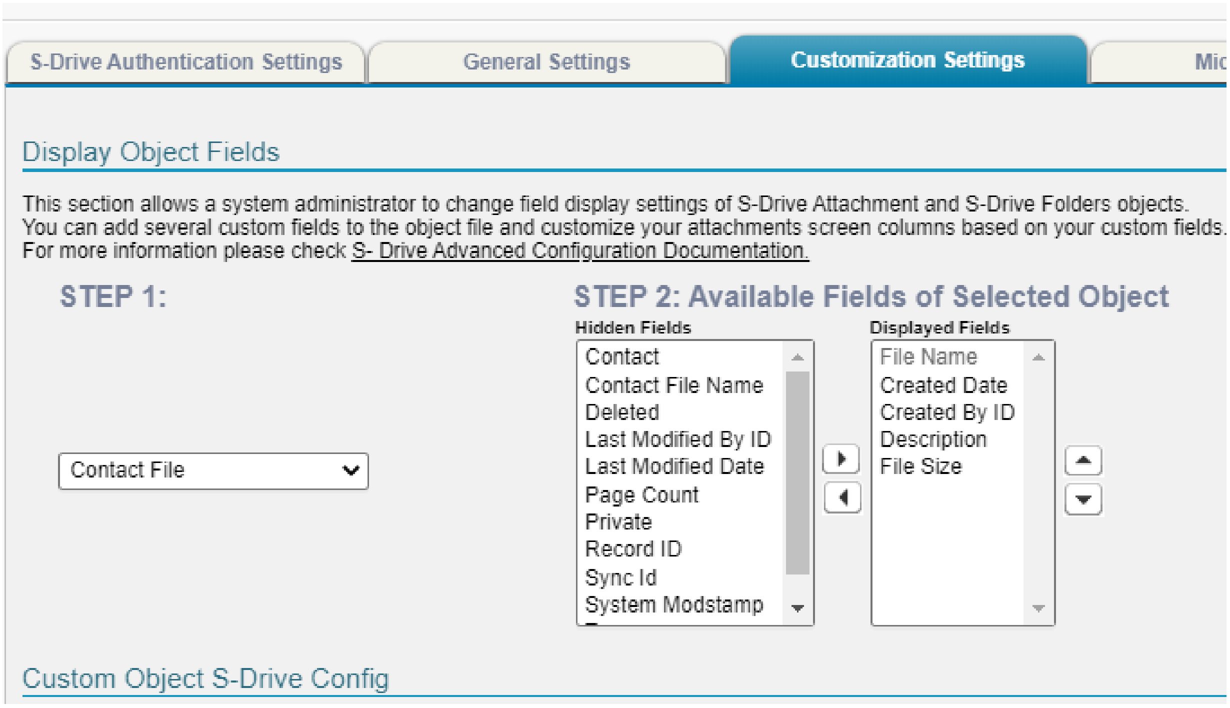
MultipartUploadPartSize: This configuration is used for HTML Upload and Java Upload Widget to split the file to be uploaded into parts for multipart upload. Default is 5 MB. This value can be between 5 MB and 5120 MB. So, if you'll upload a 50 MB file while this configuration is set to 5 MB, it'll split the uploaded file into 10 parts while uploading.

CustomPopupMessage: This configuration is used for HTML Upload to customize the default message in it. If you do not add this configuration, "*Drag files here or click Add (+) button to select files for upload.*" message is displayed by default.

9.4.2 ViewSettings

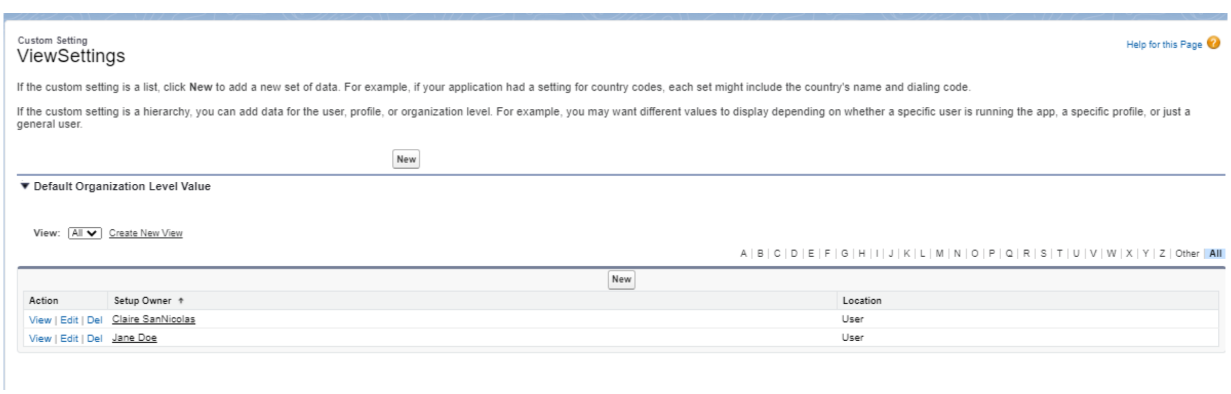
Custom Settings can be used to show different views of the S-Drive component to different users.

By default, the columns shown in S-Drive for both Classic and Lightning come from the S-Drive Configuration page/Customization Settings tab as shown here.

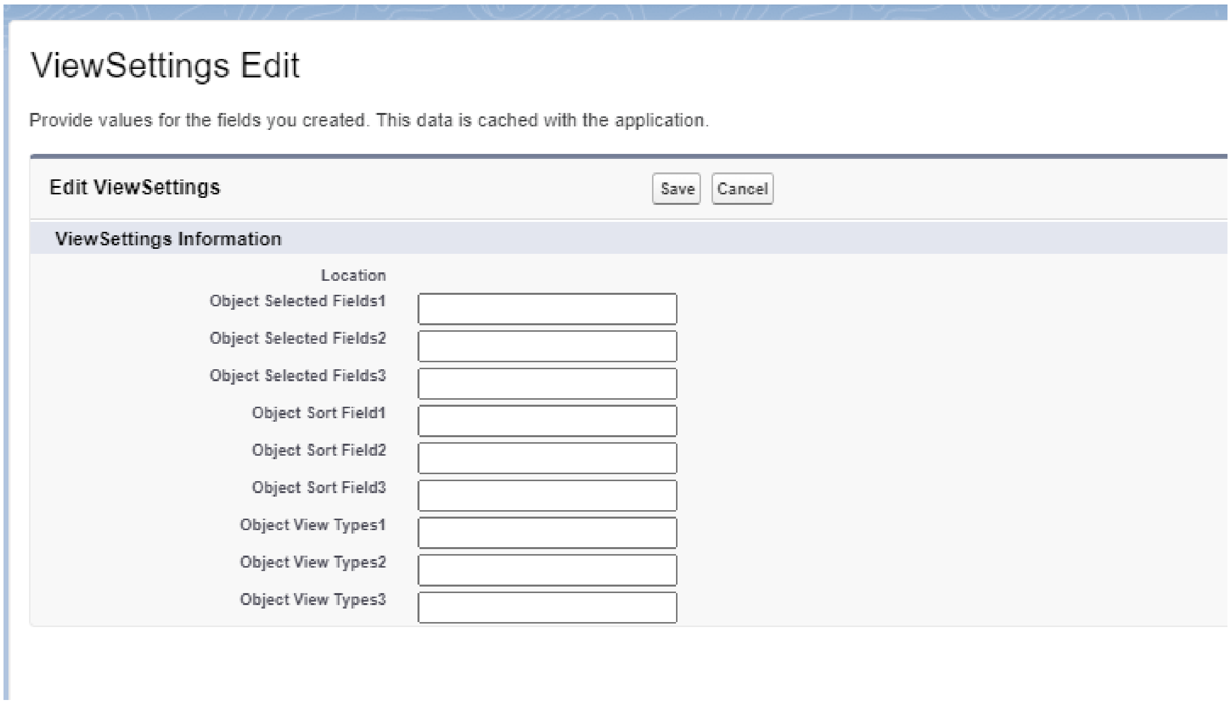


If the system admin changes these fields from the original default, S-Drive stores those in Custom Settings→**SDriveConfig**, click manage and look for FS_cg__ContactFile__c or whichever object you want to check.

If a **user** changes the fields shown using the **Fields button** on the S-Drive Lightning Component, and clicks "save" (rather than "apply") then a new **ViewSettings** (Custom Settings→ViewSettings |Manage) will be created for that User. To go back to the defaults, delete the custom setting for the user.



Different views for different users or profiles can also manually be created here by the system admin by clicking New.



The format for these fields is Object1:field1;field2;field3,Object2:field1;field2,Object3:etc

Note:

- there is a colon (:) after an object
- semi-colons (;) separate fields
- a comma (,) separates the first object field group from the next object.
- If you run out of room to type in the first box, continue in the second box and so on
- Object Selected Fields is for setting which fields/columns are displayed in the component
    - cg__S3Object__c:cg__File_Name__c;CreatedDate;CreatedById;cg__Description__c;cg__Tags__c,cg__AccountFile__c:cg__File_Name__c;cg__Tags__c;cg__Content_Type__c
- Object Sort Field is for setting which field to sort on. The format is as follows:
    - cg__S3Object__c:CreatedDate:asc,cg__AccountFile__c:CreatedDate:desc
- Object View Type is for setting the view—list, thumbnail or grid. The format is as follows:
    - cg__AccountFile__c:grid,cg__S3Object__c:thumbnail,cg__CaseFile__c:thumbnail

9.5 External Files

First, enable Files Connect, and let users access related external data sources Let Users and Administrators Access Files Connect Data Sources. For cloud-based data sources, create an authentication provider, and then define the source. Now users can access and share external files via the Files tab and feed, and search for them right alongside their Salesforce content.

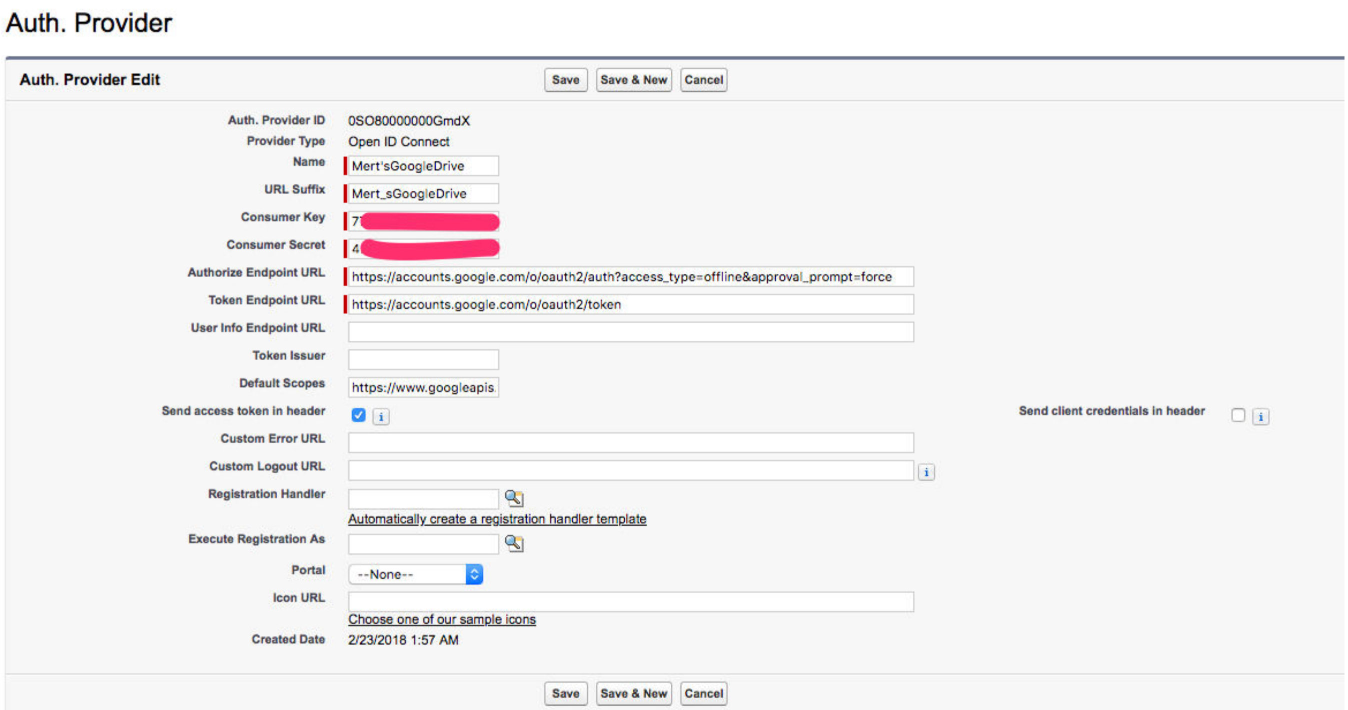


Figure 9-16

Detailed explanation on how to configure files connect with external storage platforms and synchronize with salesforce is given in the following link;

https://help.salesforce.com/articleView?id=admin_files_connect_overview.htm&type=5

After configuring the data sources and objects, user is expected to create a new workflow rule for external outbound message trigger. That is, go to setup-> workflow rules, and select new button. And select object as ExternalFileMessage given the figure below. (Figure 9-17).

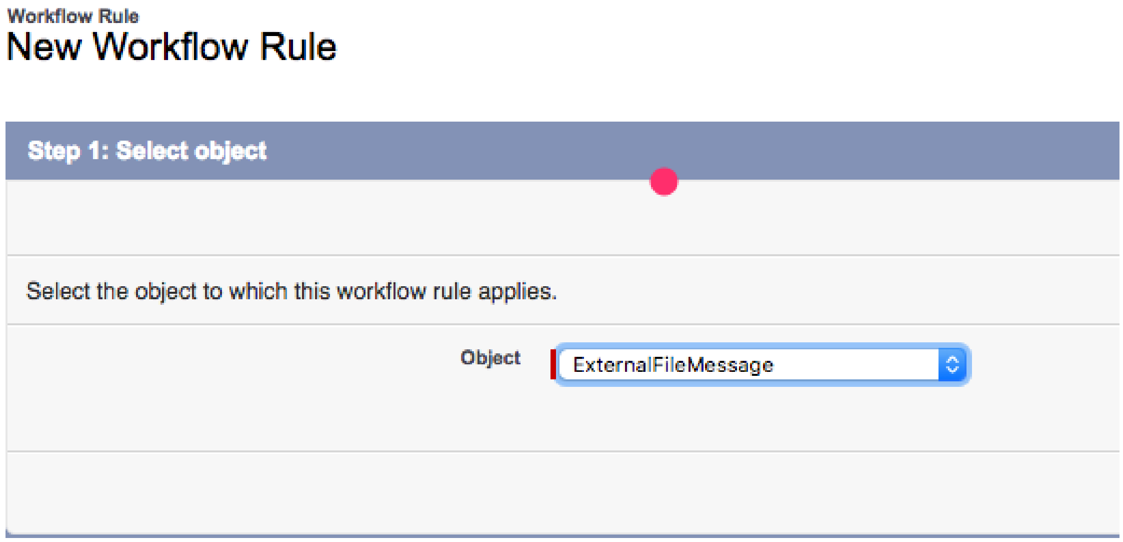


Figure 9-17

When save is clicked, user is now able to configure workflow, and supposed to fill the fields as given in the following figure. (Figure 9-18)

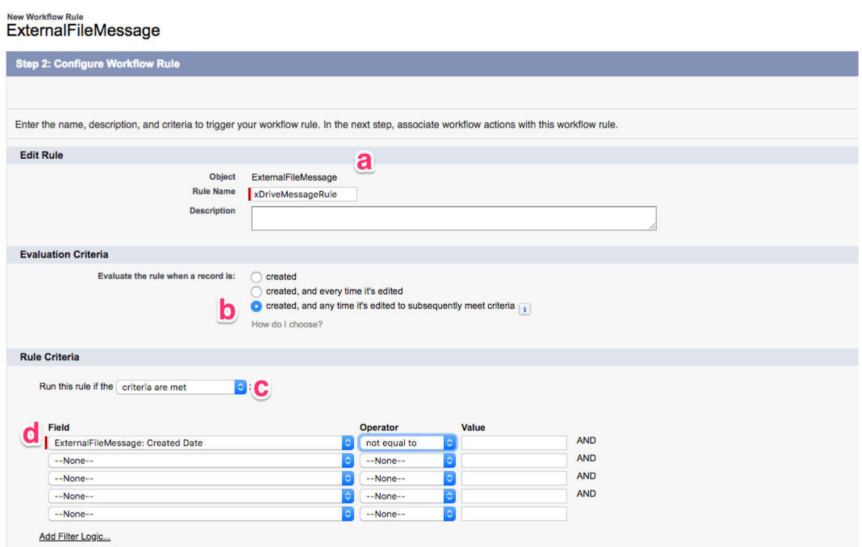


Figure 9-18

(a) “RuleName” : can be chosen anything but unique name for this defining rule.

(b) “Evaluation Criteria”: expected to be chosen as created.

(c) “Run the rule if the” : criteria are met

(d) “Field – Operator - Value”: field is chosen as Created Date, and operator is ‘not equal to’ and value is set to blank.

In the next page user is expected to add workflow action to this rule.

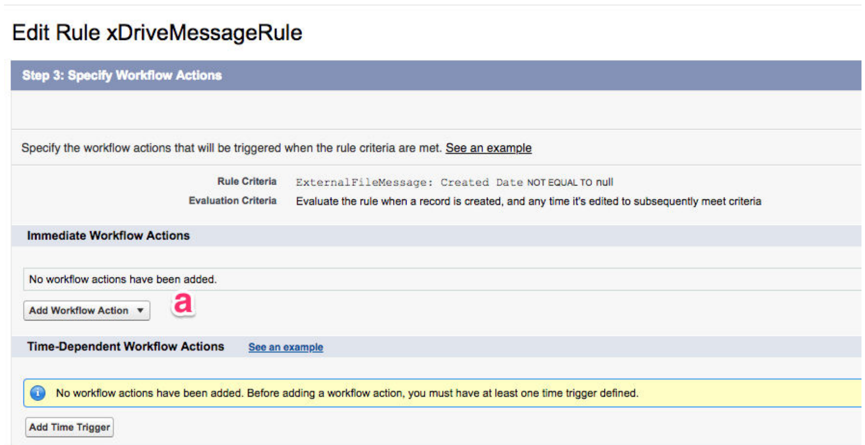


Figure 9-19

(a) “Immediate Workflow Actions”: Add workflow action is chosen as new outbound message

The new Outbound message should be configured as in the following figure.

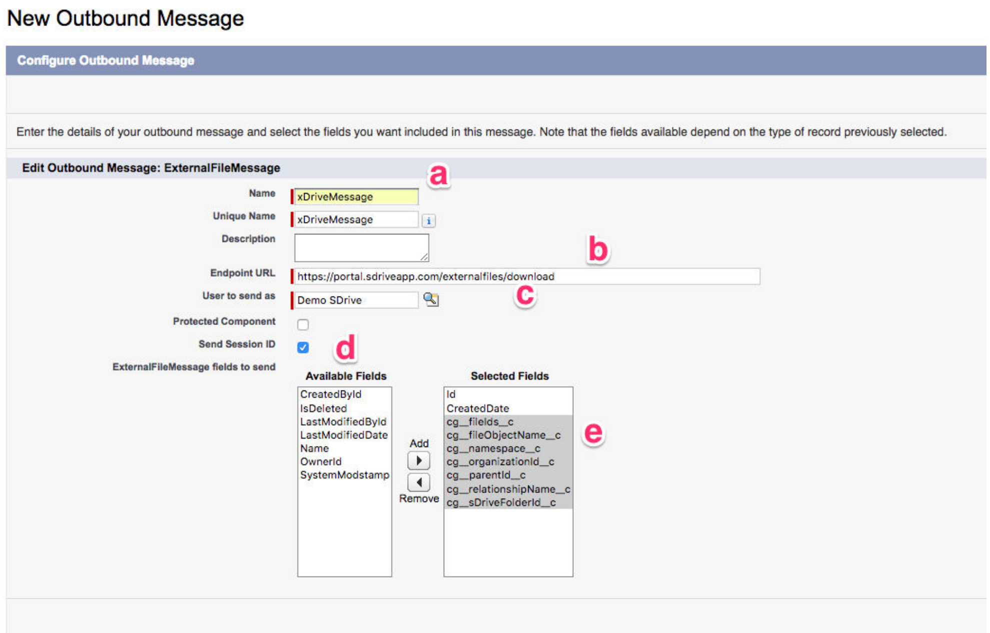


Figure 9-20

(a) "Name": Unique name for the outbound message

(b) "Endpoint URL": should be given as https://portal.sdriveapp.com/externalfiles/download

(c) "User to send as": should be chosen as system admin

(d) "Send Session Id": should be checked

(e) "Fields to Send": Created Date, and all the fields start with prefix cg__ should be chosen

And finally, user is expected to activate this workflow rule as given in the following figure. (Figure 9-21)

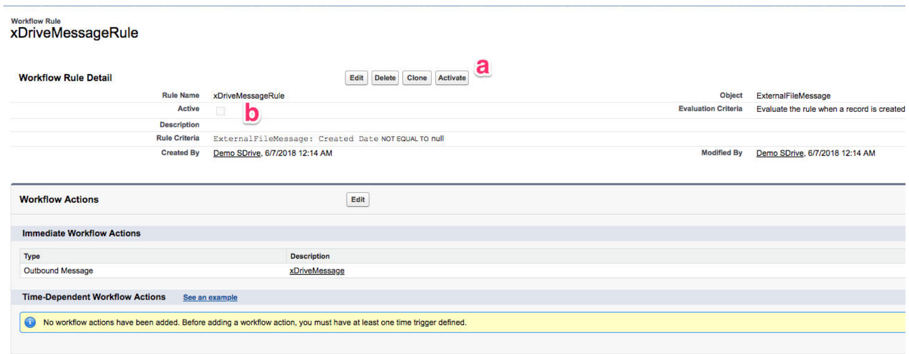


Figure 9-21

By clicking the button Activate as given in (a), user should observe the Active checkbox to be checked in given (b).

After configuration, before starting the process, user is expected to go to FILES tab and activate files connect by clicking on according cloud storage platform and authenticating.

9.6 File /Attachment Sync

File/Attachment Sync takes files that are uploaded to Salesforce Files or Salesforce Attachments and syncs them with S-Drive for the selected object. Sync is processed based on a queue, so new items will appear in S-Drive in a few seconds/minutes.

Once you configure File/Attachment Sync with S-Drive, you can start using File/Attachment Sync features. See section 8.4.3 File/Attachment Sync to configure this feature.

Below is an example screenshot after user uploads an attachment to the Attachments section of the Cases. Attachment is uploaded into the S-Drive immediately.

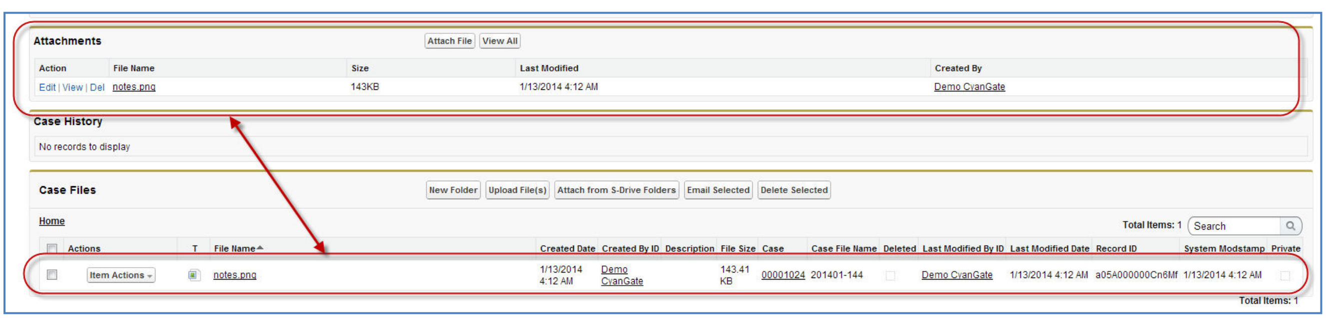


Figure 9-22

Below is an example screenshot after user uploads a File to the Files section of the Accounts. It creates into the S-Drive.

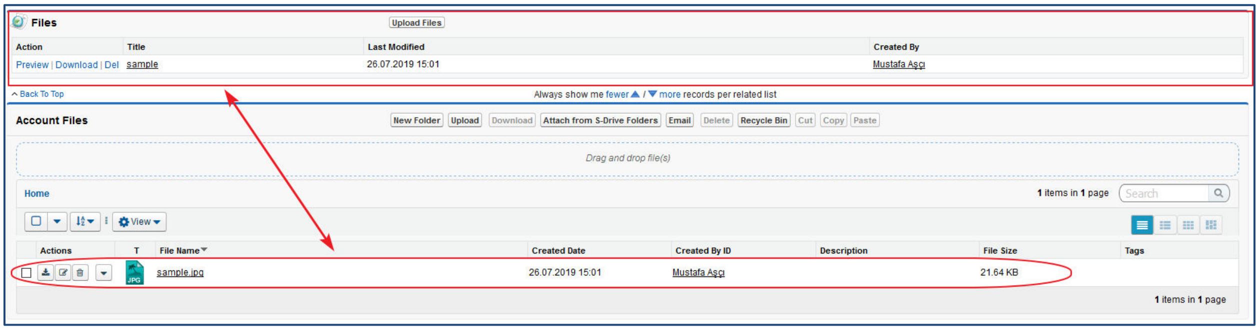


Figure 9-23

You should also note that sync operation only happens once the file is uploaded to the Salesforce Files/Attachments section. Deletion or updates to the Salesforce File/Attachment do not delete or update the synced item in S-Drive section. Sync is triggered only with addition of a new Salesforce File/Attachment. Sync is only one way, so any changes to the S-Drive are not reflected to Salesforce File/Attachment. After sync'ing, those files/attachments are two distinct objects.

This process also does not sync the previously created Salesforce Files/Attachments before the sync configuration. You can sync those files with S-Drive navigating to "**S-Drive Configuration - > Micro Services -> Sync Salesforce Files/Attachments with S-Drive** -> **Configure File Sync of Pre-existing Files"** section. See section 8.4.3 File/Attachment Sync for details.

Be sure to configure the outbound message user correctly:

Check Setup>outbound Messages for the following 3 items and check the "User to send as"

- AttachmentSync
- FileSync Callout
- Preview Callout

The "user to send as" profile must have **Customize Application** permission and **Send Outbound Messages** permission.

9.7 S-Drive Reports

You can create File Activity reports for the S-Drive files. For Accounts, Cases, Contacts, Opportunities and S3Objects reports are enabled by default. For other standard/custom object files you need to create a lookup relationship under File Activity object:

Go to **Setup -> App Setup -> Create -> Objects** and click the **"File Activity"** object name. Scroll to the **"Custom Fields & Relationships"** for the object and click **"New"** button. In **"Step 1. Choose the field type"** screen, select **"Lookup Relationship"** and click **"Next"** button. In **"Step 2. Choose the related object"** screen, select **"Related To"** from the drop-down as your object file (e.g. My Example Object File) and click **"Next"** button. Keep default values for other steps and click **"Save"** button in the last step.

The following file activities are recorded by S-Drive and can be displayed in standard Salesforce.com reports:

1) S-Drive OneClick Download: When user clicks the file name or **"Download"** link in the S-Drive, the activity is saved with "S-Drive OneClick Download" type. This activity does not necessarily mean that the file has been completely downloaded to a user's desktop, instead user has clicked on the "Download" link and the download has been initiated. Since the "One-Click" downloads are handled by the browser, completion of the downloads cannot be tracked.

2) S-Drive CopyUrl Download: When user clicks **"Copy URL"** link in the S-Drive, the activity is saved with "S-Drive CopyUrl Download" type. This activity does not necessarily mean that the URL has been used to download a file, instead a URL has been created by a user.

3) S-Drive Zip & Download: When user starts a download using "Zip & Download", this type of activity is created.

4) S-Drive Email Sent: When user sent an email with attachments using S-Drive, this type of activity is created for each attachment. The comma separated recipients of the email are also stored in the "Additional Details" field of the File Activity.

To create S-Drive Reports, follow these instructions:

1. Click "Reports" tab and click "New Report..." button in the tab (Figure 9-24).

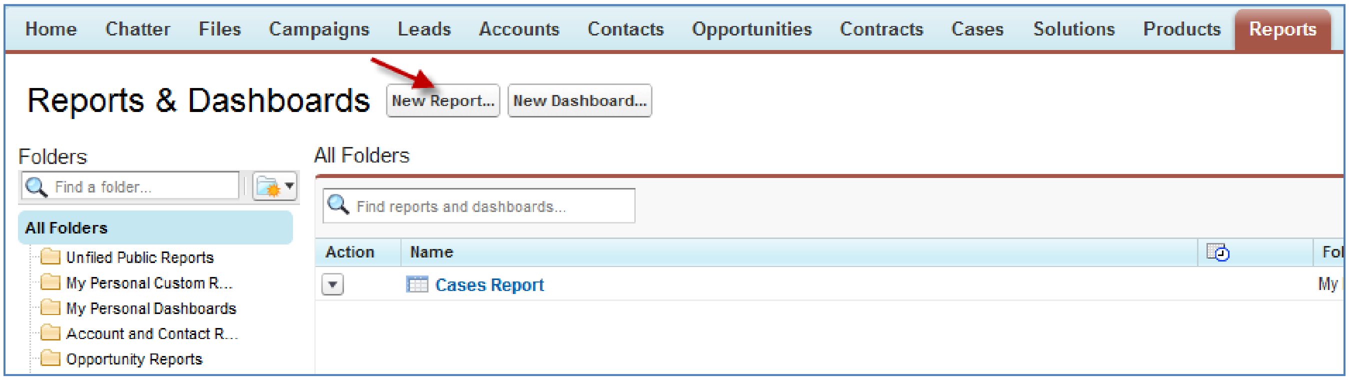


Figure 9-24

2. In the "Create New Report" screen, "Select Report Type" needs to be selected as "Other Reports". Scroll to the "File Activities" section of the "Select Report Type" and select the report type that you want to create. For example, if you want to get the report for Account Files you need to select "File Activities with Account File" from the list and click "Create" button. (Figure 9-25).

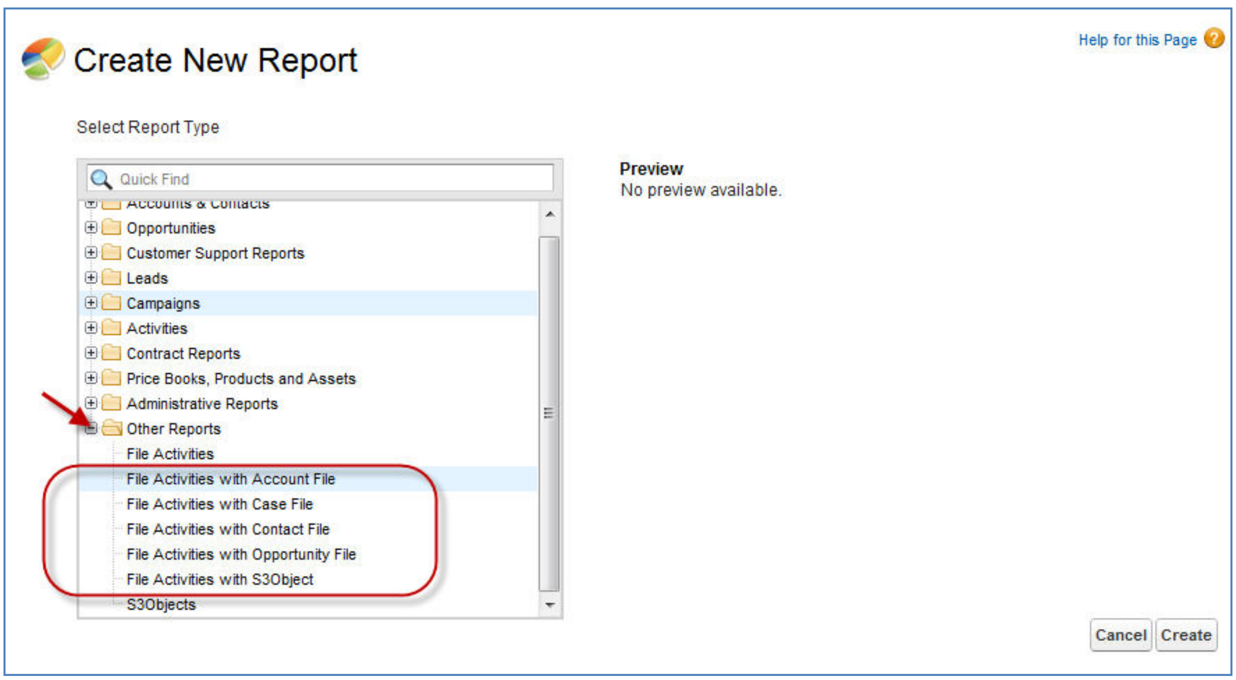


Figure 9-25

3. After clicking "Create" button, report creation screen will be displayed (Figure 9-26). You can drag and drop the fields that you want in your report. For example, in the below screenshot it is displaying Account File Name, Account File Size, Activity Type, Additional Details and Created Date

columns. You can filter the results using the "Filters" section. To run the report using the actual data, you can click "Run Report" button or you can save the report for future use by clicking "Save" button. Please refer to the Salesforce.com documents about "Reports" for detailed information related to report creation.

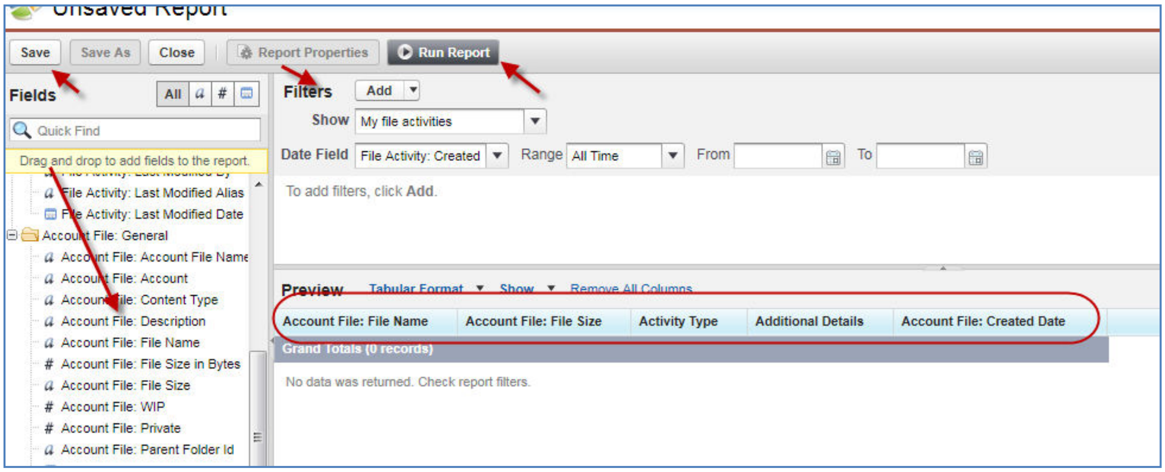


Figure 9-26

In "S-Drive Reports", two fields are important: "Activity Type" and "Additional Details". Activity types are explained at the beginning of this section. "Additional Details" field is important for the "S-Drive Email Sent" activity type and it stores the recipients of the email sent. You can get the details of the email by checking the contact's (or object's) Activity History.

Here is an example report for the Account Files (Figure 9-27).

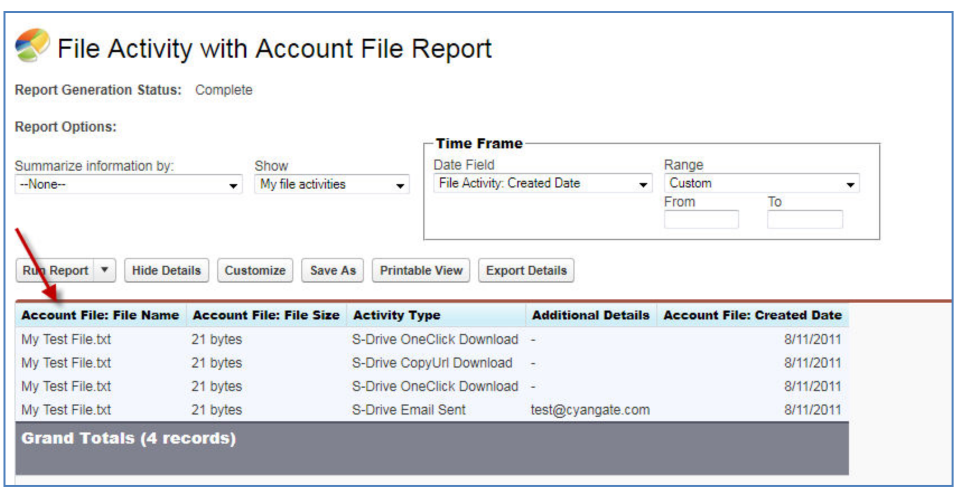


Figure 9-27

Notes

1. S-Drive Reports can only be run only for the actual files on the system. Deleted files are not included in the reports. Also changes to the files are reflected to the files. This is because objects are kept as references in the system and if that reference is updated/deleted, reference changes.

9.8 Email "S-Drive Folder" Files from an Object using a Custom Button

Note: This feature can be enabled by using "Attach from S-Drive Folders" button on any S-Drive object. Refer to "Emailing Files" section of S-Drive User Guide.

Instructions for Case Files are provided below, but you can follow the same instructions for Accounts, Contacts, Opportunities or other standard/custom objects:

.1. Navigate to **Setup -> Customize -> Cases -> Buttons, Links and Actions**. Click **New Button or Link** button.

.2. Fill in **Label** and **Name** fields, select **Display Type**, **Behavior** and **Content Source** areas as in the figure below then type **window.open('apex/cg__Sdrive?objectId={!Case.Id}')** into the formula area. If you would like to open S-Drive page as inline and without header, type **window.open('apex/cg__Sdrive?objectId={!Case.Id}&inline=1')** instead (Figure 9-28).

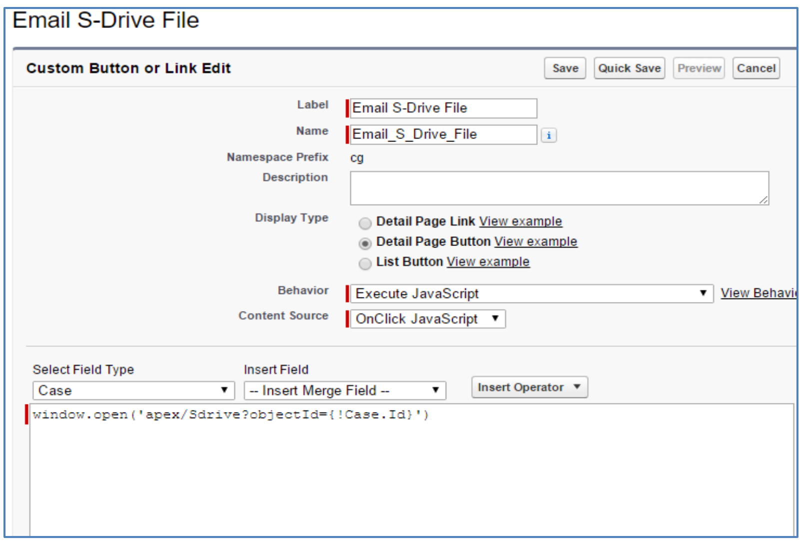


Figure 9-28

.3. Click **Save** button.

.4. Make sure that you have added the custom button into Case page layout. You can’t see the "Email S-Drive File" custom button on Case page, if you do not add to the Case object’s page layout.

.5. Open a case record and click on the custom button (Figure 9-29).

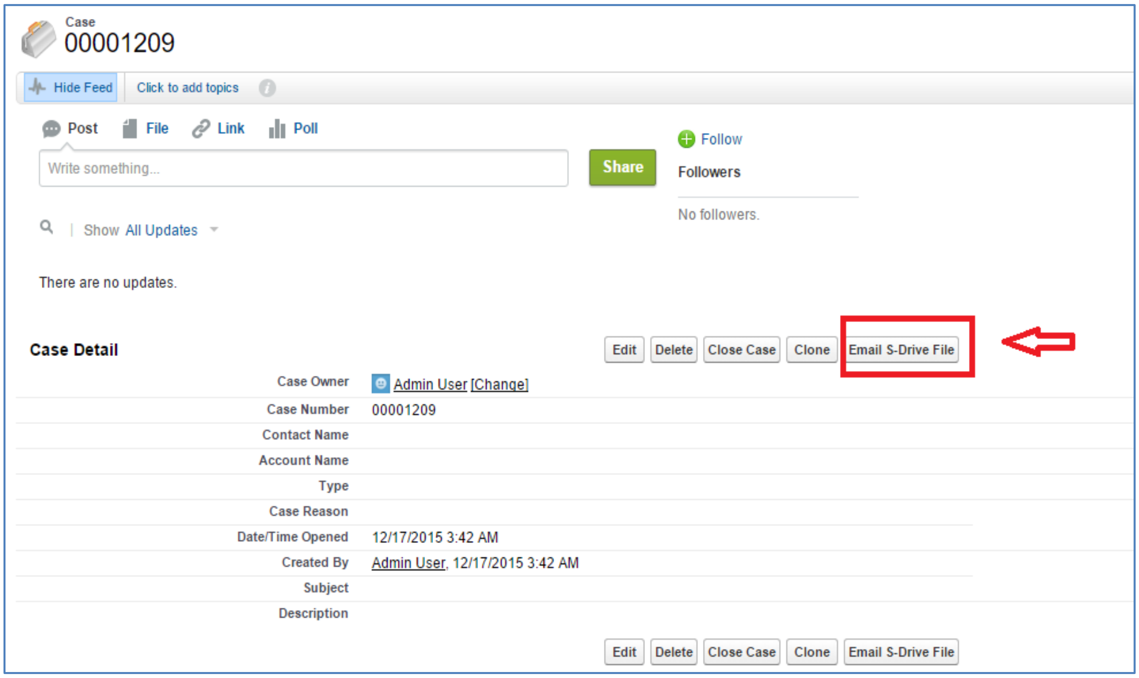


Figure 9-29

.6. Select files to send as an email and click Email button (Figure 9-30).

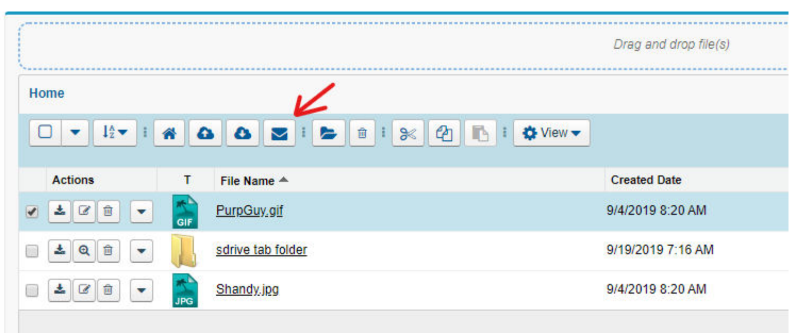


Figure 9-30

.7. You can see that "Related to" field is populated with related Case (Figure 9-31). Fill in the other fields and click **Send** button.

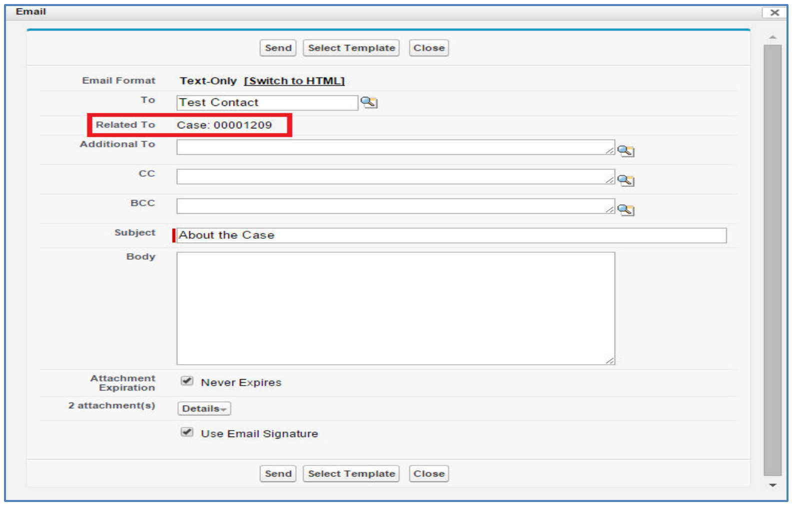


Figure 9-31

.8. You can follow the same instructions for other objects. If you would like to create a custom button on Account, apply all the instructions for Account object and type "objectId={!Account.Id}" into formula area, instead of "objectId={!Case.Id}" while creating a custom button on Account. For any object, type "objectId={!ApiNameOfAnyObject.Id}" into formula area.

10 PROFILE PERMISSIONS, OWD, AND SHARING RULES

S-Drive is sharing-aware, meaning that it will respect the organization-wide default (OWD) sharing settings and sharing rules applied on S3Objects (files uploaded to the S-Drive Tab) and other S-Drive file objects. Account Files, Case Files, Contact Files and Opportunity Files are set to "Controlled by Parent" in the OWD and cannot be changed. S3Ojbects and Lead Files can be set to Private, Public Read Only, or Public Read/Write.

Additionally, for S3Objects (files on the S-Drive Tab), you can manually share files and folders using the "share option" on the dropdown action menu.

Notes

S-Drive does not remove the buttons and menus from the user interface based on restrictions. This is due to the limitations of Salesforce.com APIs. All restrictions are enforced while users are attempting different operations. For example, if a user tries to delete a file where the user has read only access, the user will be able to click on the "Delete" button for that file, however user will not be able to delete the file and a warning message will indicate that the user does not have sufficient privileges to delete that file.

10.1 Profile settings for S-Drive Objects

You can apply profile-based permissions on S-Drive custom object files. S-Drive supports four different access levels:

- None
- Read
- Read + Create + Edit and
- Read + Create + Edit + Delete

To set these profile-based permissions go to **Setup** and find **Profile**s, and edit the profile you want to change.

Note that you cannot change the standard profiles' permissions. You may need to clone them before you can edit.

Inside the Edit screen of the selected profile, scroll down to the "**Custom Object Permissions**" section. You'll see the "**Basic Access**" selections for your custom object files. You will need to check/uncheck these boxes based on your needs (Figure 10-1). Note that again you can edit "Custom Object Permissions" for just "Custom Profiles". You may need to *clone* your standard profile to be able to edit a profile. Refer to the Salesforce.com documentation for more information.

There are four access levels: **Read**, **Create**, **Edit**, and **Delete**.

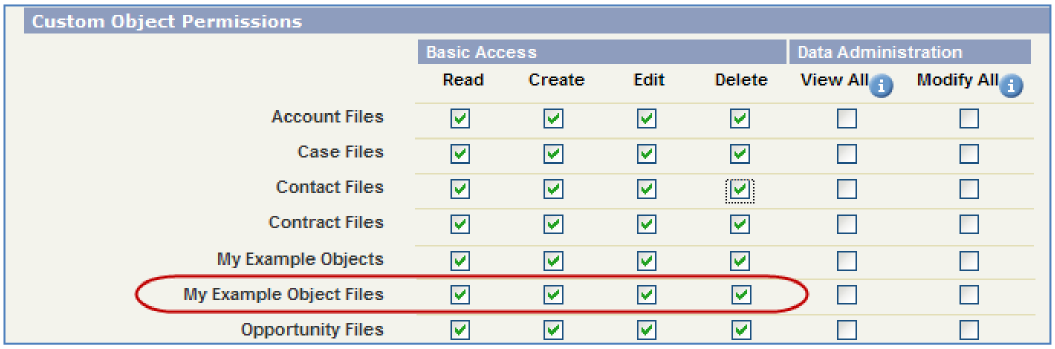


Figure 10-1

10.1.1 S-Drive File Object Permissions

10.1.1.1 No Permissions Enabled

If you uncheck all boxes for your standard/custom object file, your users belonging to this profile won't be able to see the S-Drive file area at all, so they won't be able to do anything with custom object files.

Note: "No Permission Enabled" is not supported for S3Objects custom object.

10.1.1.2 Just Read Permission Enabled

Allows users to

- Email files
- Download files
- copy URL of file to clipboard

Does not allow users to

- upload files
- delete files
- edit description of files

10.1.1.3 Read, Create and Edit Permissions Enabled

Allows users to

- Email files
- Download files
- copy URL of file to clipboard
- upload files
- edit descriptions of files

Does not allow users to

- delete files

10.1.1.4 Read, Create, Edit and Delete Permissions Enabled

Allows users to

- Email files
- Download files
- copy URL of file to clipboard
- upload files
- edit descriptions of files
- delete files

10.1.1.5 Permission Combinations That Are Not Supported for Attachment Files

Permission combinations other than above examples are not supported by S-Drive and we strongly recommend you not to use unsupported permission combinations.

10.1.2 Other S-Drive Object Permissions

In order to access all of S-Drive's features, enable permissions for the following objects:

- AttachmentSyncs
- File Activities
- MyS3Objects
- Previews
- S3Configs
- S3Objects

- SDriveCustomActions
- SQueues
- SURLS
- SURL Hits

10.2 Organization-Wide Default Sharing Settings

To set Organization-Wide Defaults, go to Sharing Settings in Setup.

Organization-wide defaults and “Grant Access using Hierarchies” work for S-Drive objects the same as for any other object. If Grant Access Using Hierarchies is enabled, users have full access to files and folders owned by users in roles below them in the hierarchy, including the ability to upload files to folders of users below them and create sub-folders for users below them.

The following table shows what users can do with other users' files and folders in S-Drive, not considering role hierarchies. If hierarchies is enabled, users can access files and folders of users in roles below them in the hierarchy as if they owned the files/folders themselves.

Permission	See	Download	Edit	Delete	Cut	Copy	Upload	Create Folders
Private	x							
Public Read Only	x	x						
Public Read/Write	x	x	x	x	x	x	x	x

10.3 Sharing Rules Settings

You can give Read Only or Read/Write access levels to S3Objects by creating Sharing Rules. S-Drive file objects are controlled by parent with the exception of Lead Files.

Go to **Sharing Settings** in **Setup** and scroll down to the "S3Object Sharing Rules" to create a new rule.

Note that sharing rules can only be used to grant wider access to data, not to restrict access.

Sharing Rules for S3Object or other standard/custom objects are not supported for "Public Read/Write and Hierarchy Enabled", because this is the widest access option to the data.

Setting data access to the widest and trying to restrict is not supported by Salesforce.com.

So, first you need to restrict data access using "organization-wide default sharing settings". Then, you can apply sharing rules to S3Objects or other standard/custom objects.

10.4 Manual Sharing with Action Menu Share option

Manual sharing is supported for files uploaded to the S-Drive Tab only—those files not associated with a standard or custom object. If the OWD for S3Objects (representing the S-Drive Tab files) is set to Private, then the “Share” action menu time will be available for a selected file or folder. (Figure 10-2)

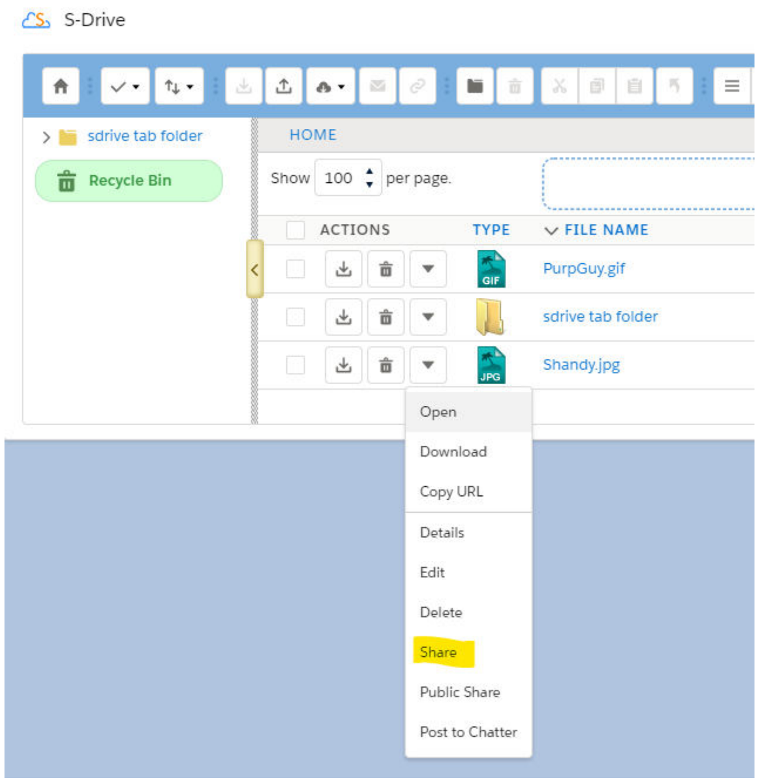


Figure 10-2

11 S-DRIVE IN SALESFORCE.COM COMMUNITIES

11.1. Enabling Communities for Your Organization

Click Setup -> App Setup -> Customize -> Communities -> Settings (Figure 11-1).

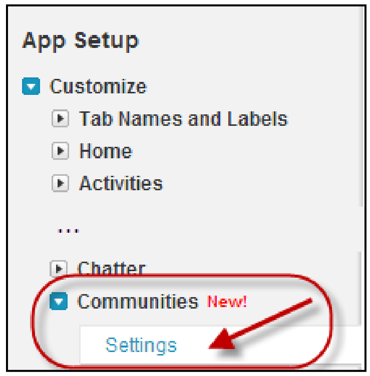


Figure 11-1

In the "Communities" page, first check "Enable Communities" checkbox. Then type a unique domain name that will be used in all your communities. Note that this name can't be changed after you save it. Click "Check Availability" button and if "Success" message is shown click "Save" button (Figure 11-2).

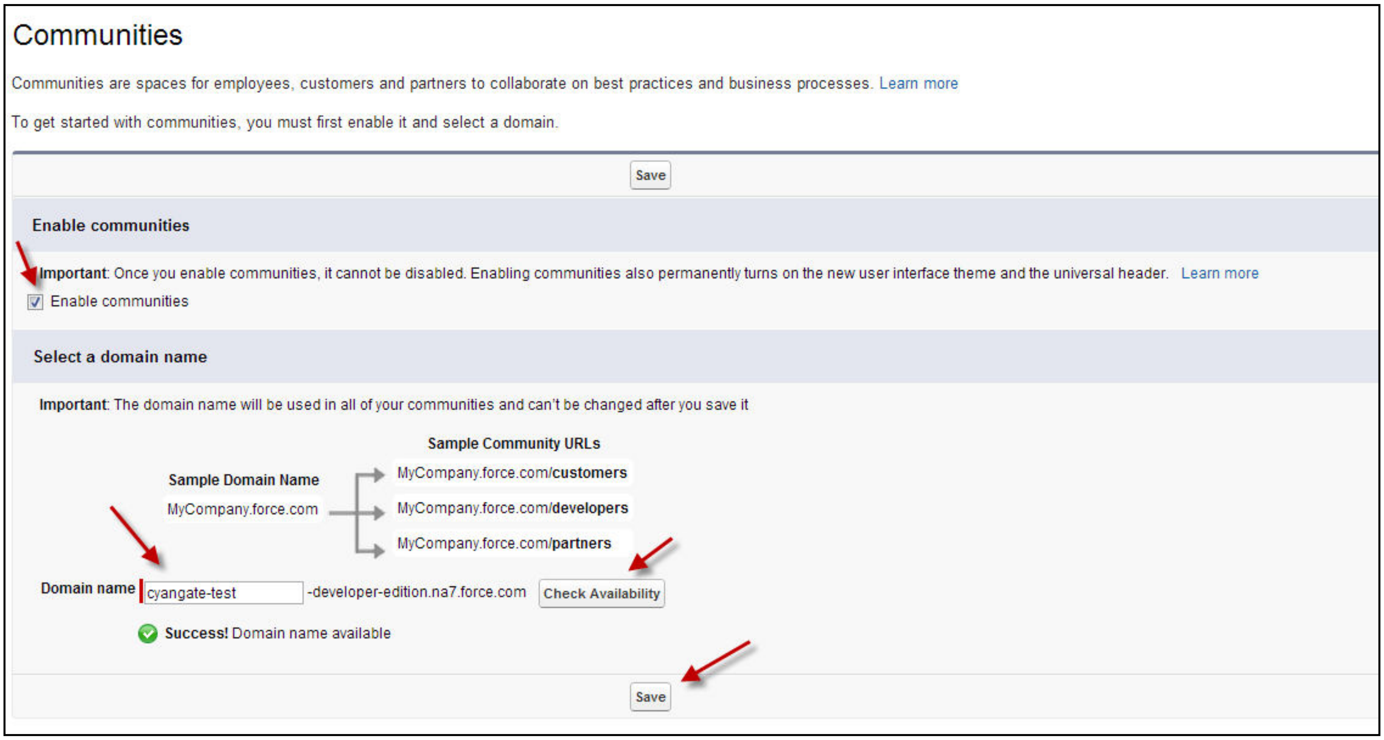

Communities
Communities are spaces for employees, customers and partners to collaborate on best practices and business processes. Learn more
To get started with communities, you must first enable it and select a domain.
Save
Enable communities
Important: Once you enable communities, it cannot be disabled. Enabling communities also permanently turns on the new user interface theme and the universal header. Learn more
Enable communities
Select a domain name
Important: The domain name will be used in all of your communities and can't be changed after you save it
Sample Community URLs
Sample Domain Name
MyCompany.force.com
MyCompany.force.com/customers
MyCompany.force.com/developers
MyCompany.force.com/partners
Domain name
cyangate-test
-developer-edition.na7.force.com
Check Availability
Success! Domain name available
Save

Figure 11-2

11.2. Creating a New Community

Once you enable Communities for your organization, you can create new communities (Figure 11-3). You can click "New Community" button to create a new community.

Figure 11-3

Type in the details of the new community and click "Create" button (Figure 11-4).

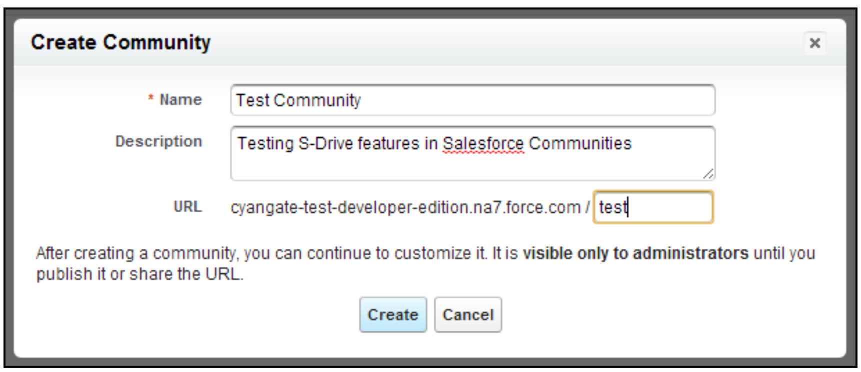


Figure 11-4

Once you click the "Create" button community will be created in a few seconds (Figure 11-5).

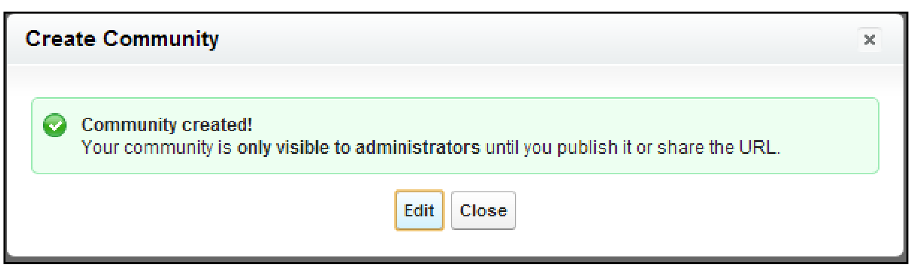


Figure 11-5

11.3. Configuring S-Drive for Community

After creating the community click the "Builder” link to configure the newly created community (Figure 11-6).

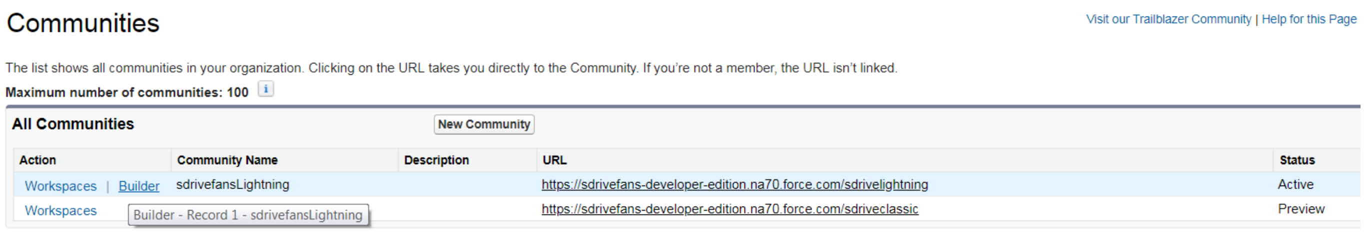


Figure 11-6

Click "Tabs"

11.4. Configuring S-Drive Lightning Component for Lightning Communities

Salesforce offers a Community Builder comes with rich, responsive templates (E.g Napili) for communities targeted at customer support scenarios. You can follow the steps below configure S-Drive Lightning Component for Lightning based communities.

1- Navigate to Setup→ All Communities → Manage.

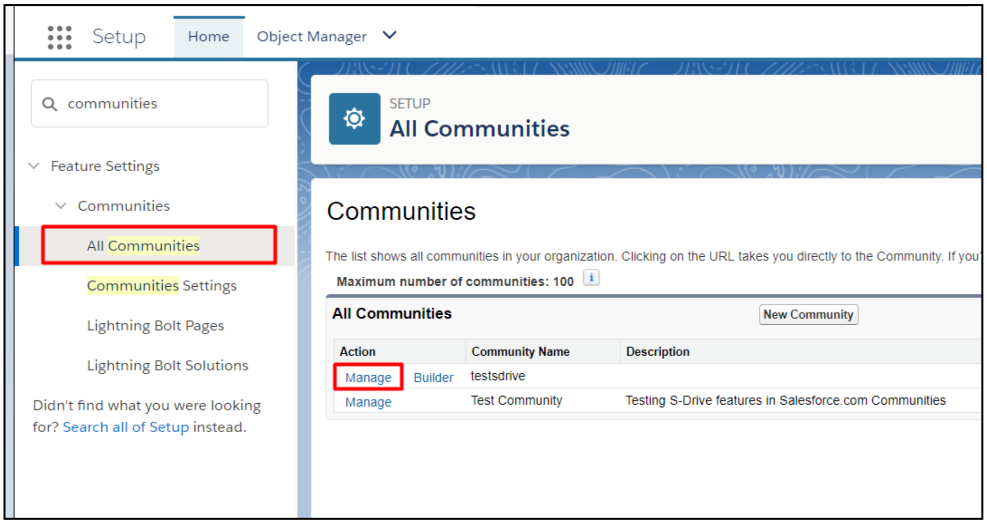


Figure 11-7

2- You can select your lightning compatible template from Administration→ Settings.

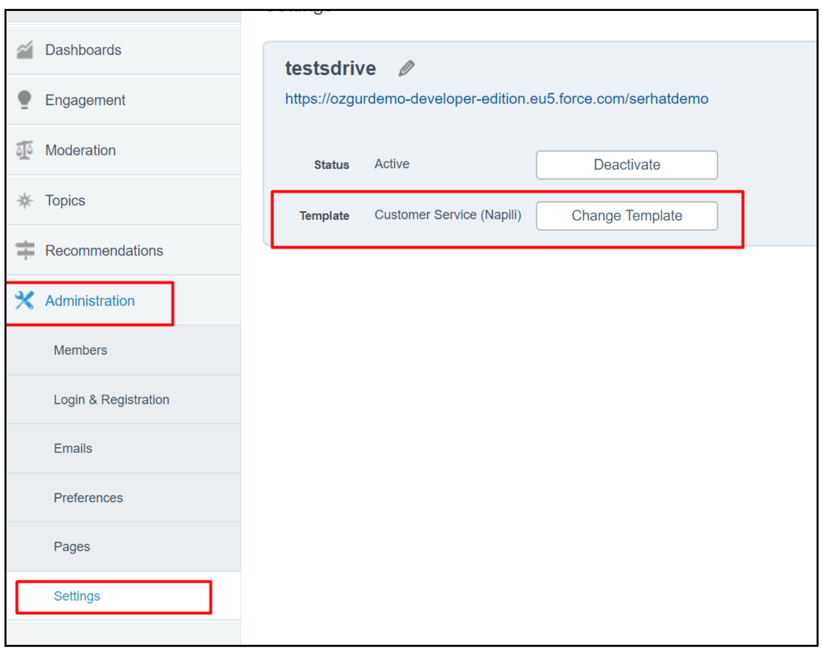


Figure 11-8

3- Navigate to Setup→All Communities→Builder.

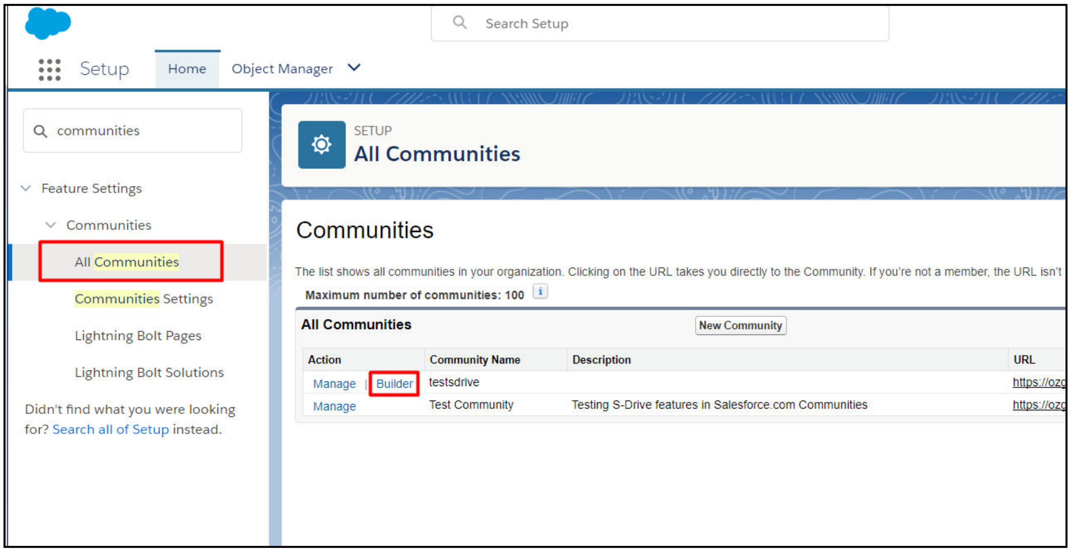


Figure 11-9

4- Select a page to add S-Drive component.

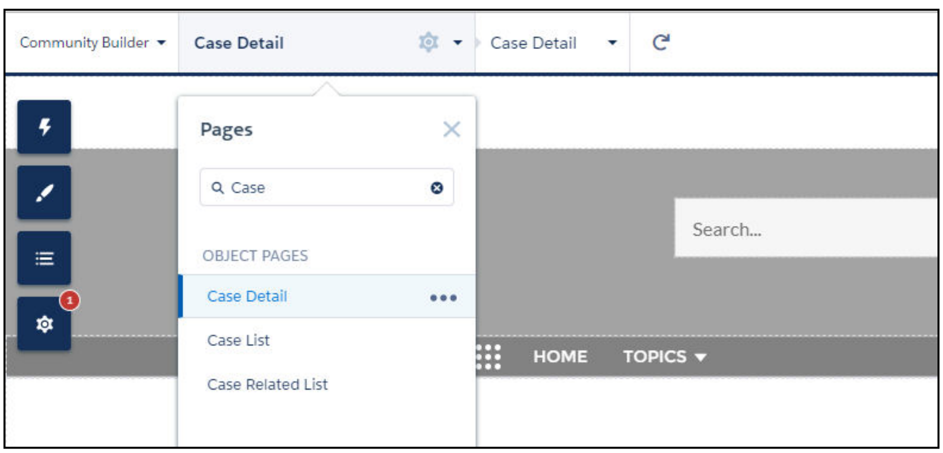


Figure 11-10

5- Open Components menu, scroll down and locate S-Drive Lightning Component. (Figure 11-11)

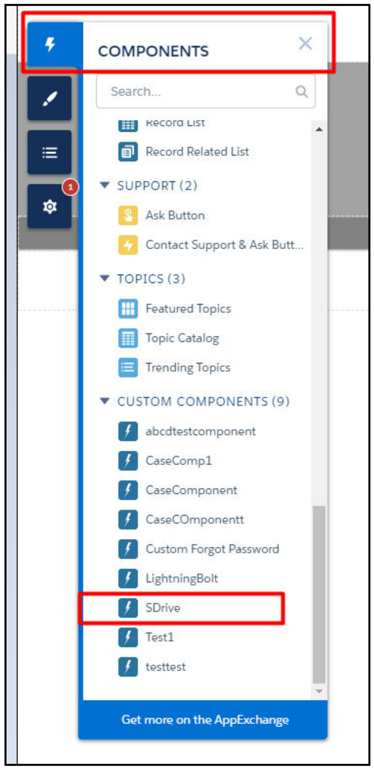


Figure 11-11

6- Drag & Drop S-Drive Lightning Component to your page.

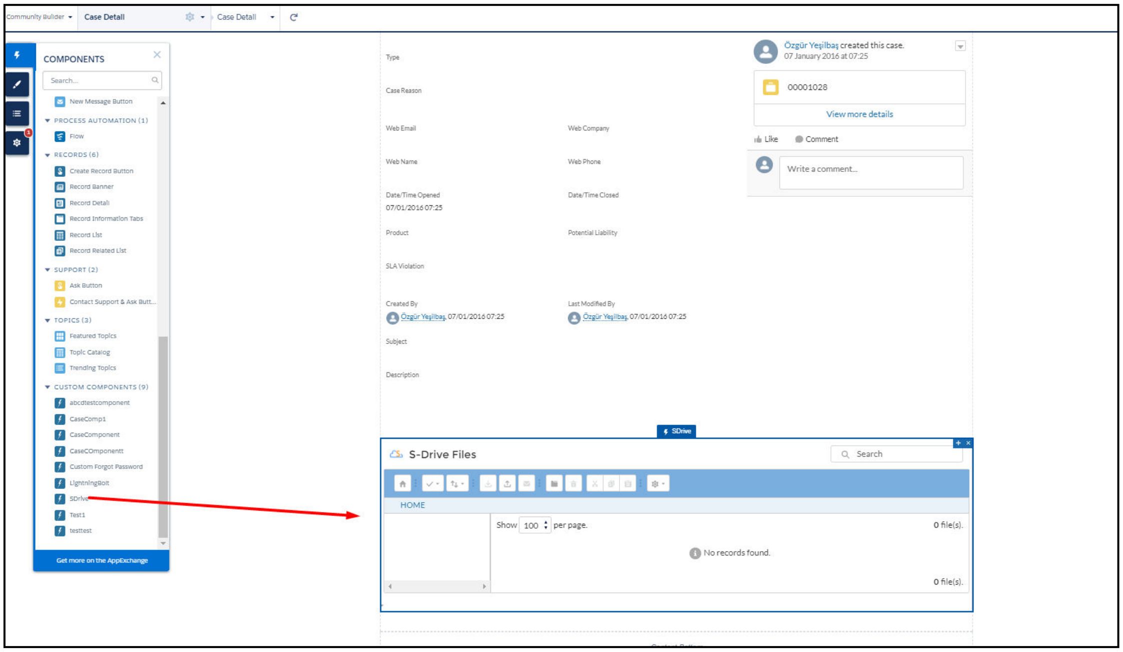


Figure 11-12

7- Click on the component in the page and then start filling component attributes.

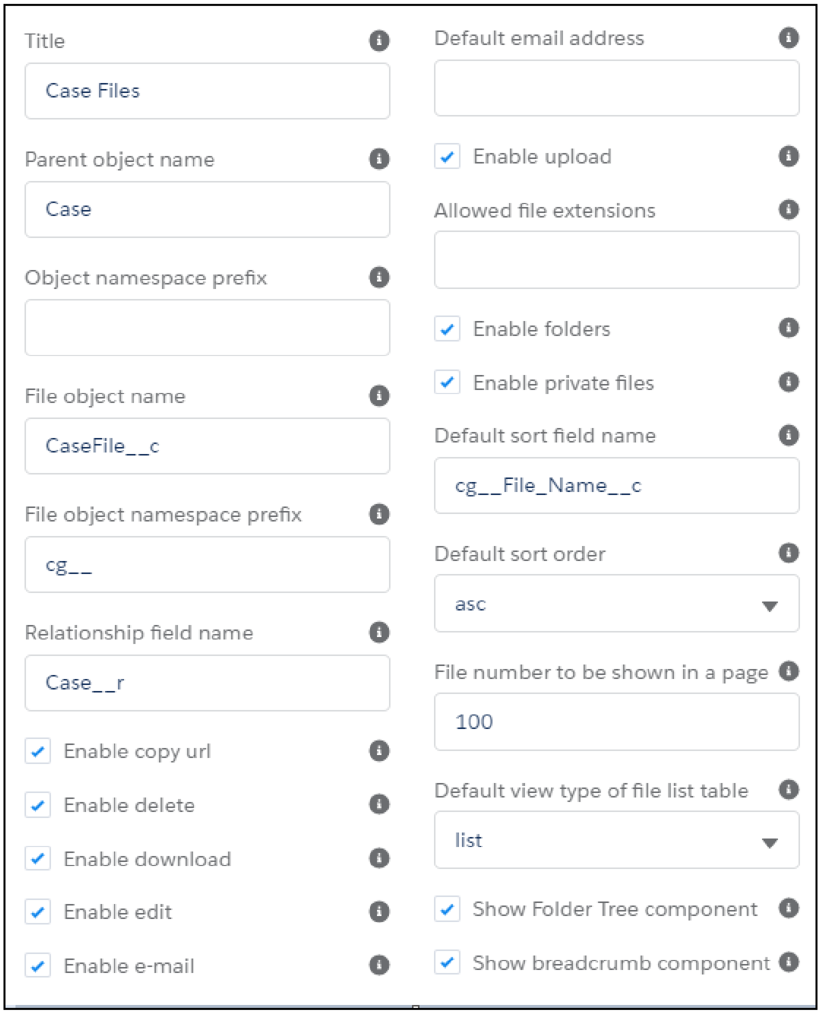


Figure 11-13

The component attributes are explained below;

1. **Title (optional)**

   This is the title of the page block inside the object page. You can set it to “My Example Object Files”. This field is optional and if you don’t provide a value for this field, it will be set as “S-Drive Files”.

2. **Parent object name**

   This is the name of the custom or standard object that will be the object that the files will be attached to.
   For Case Files: Parent Object name = Case.
   For Account Files: Parent object name = Account.
   For Contact Files: Parent Object name = Contact.
   For Opportunity Files: Parent object name = Opportunity.
   For Other Standard Object Files: Parent object name = Name of your standard object (E.g. Lead)
   For Custom Object Files: Parent object name = API Name of your custom object (E.g. My_Example_Object__c)
   If you are adding S-Drive Tab (S3Object) to the communities, Parent object name will be empty.

3. **Object namespace prefix (optional)**

   This is the object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you have a custom object inside your organization, your object namespace prefix is same with your organization namespace prefix. If this object belongs to a managed package, you need to use that managed package's namespace prefix. If your object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to manually set objectNamespacePrefix as "exampleprefix__".

   For Case, Account, Opportunity, Contact and other standard objects this attribute will be empty.
   For Custom Objects, this attribute will be set as your organization prefix.

4. **File object name**

   This is the name of your object file. This object will be holding the information regarding the attached files. For our example, it is "My_Example_Object_File__c" or "CaseFile__c".

   For Case: File object name = CaseFile__c.
   For Account: File object name = AccountFile__c.
   For Contact: File object name = ContactFile__c.
   For Opportunity: File object name = OpportunityFile__c.
   For Custom Object: File object name is your custom object file API Name (E.g. My_Example_Object_File__c).

If you are adding S-Drive tab (S3Object) to the communities, file object name will be "S3Object__c"

5. **File object namespace prefix (optional)**
This is the file object's namespace prefix that your Salesforce.com organization uses. If your organization has a namespace prefix and you have a custom object file inside this organization, your file namespace prefix is same with your organization namespace prefix. If this file object belongs to a managed package, you need to use that managed package's namespace prefix. If your file object does not belong to any namespace you do not need to set this attribute. If your namespace prefix is "exampleprefix" you need to set File object namespace prefix as "exampleprefix__".

   For Case Files, Account Files, Opportunity Files, Contact Files and S3Object (S-Drive Tab) this attribute will be set as "cg__"
   For Custom Object Files, this attribute will be the name of your organization prefix.

6. **Relationship field name**
Master-detail relation used for selected standard/custom object. This attribute is optional and default value is 'Parent__r'.

7. **Enable copy URL (optional)**
This option is used to enable/disable "Copy URL" link in the page. There are two possible values for this attribute: "true" or "false". If the checkbox is checked, this means that the value is set to true, and you will be able to see the "Copy URL" link for each asset. The default value for this checkbox is checked.

8. **Enable delete (optional)**
This option is used to enable/disable "Delete" option for all attachments in the page. There are two possible values for this attribute: "true" or "false". If the checkbox is checked, this means that the value is set to true, and you will be able to see the "Delete" link for each asset. The default value for this checkbox is checked. Note: Deleted files are put in the recycle bin. The recycle bin is not automatically emptied.

9. **Enable download (optional)**
This option is used to enable/disable "Download", "Open" and "Zip & Download" options for all attachments in the page. There are two possible values for this attribute: "true" or "false". If the checkbox is checked, this means that the value is set to true, and you will be able to see

the “Download” link for each asset. The default value for this checkbox is checked.

10. **Enable edit (optional)**
    This option is used to enable/disable “Edit” option for all attachments in the page. There are two possible values for this attribute: “true” or “false”. If the checkbox is checked, this means that the value is set to true, and you will be able to see the “Edit” link for each asset. The default value for this checkbox is checked.

11. **Enable e-mail (optional)**
    This option is used to enable/disable “E-Mail” option for all attachments in the page. There are two possible values for this attribute: “true” or “false”. If the checkbox is checked, this means that the value is set to true, and you will be able to see the “E-Mail” link for each asset. The default value for this checkbox is checked.

12. **Default email address (optional)**
    You can use this option, if you want to set a default “Additional To” email address for sending emails from your S-Drive Attachments. For example, if you select an Account S-Drive Attachment for an account and click “Email” button, “Email Files” screen will be opened and “Additional To” field will be filled with the email address you have provided here.

13. **Enable upload (optional)**
    This option is used to enable/disable “Upload” option for all attachments in the page. There are two possible values for this attribute: “true” or “false”. If the checkbox is checked, this means that the value is set to true, and you will be able to see the “Upload File(s)” link for each asset. The default value for this checkbox is checked.

14. **Allowed file extensions (optional)**
    You can use this option, if you want to limit the file types to be uploaded into selected object’s S-Drive attachments. Semicolon separated list of file extensions that are allowed to upload can be written here. This attribute is optional and leaving this empty will allow all kind of files to be uploaded. For example, “*.jpg, *.txt” will limit the files to be uploaded to jpg and txt files.

15. **Enable folders (optional)**
    This option is used to enable/disable folder support for S-Drive attachments in the page. There are two possible values for this attribute: “true” or “false”. If the checkbox is checked, this means that the value is set to true, and you will be able to see the “New Folder” button. The default value for this checkbox is checked. If the box is not checked, the “New Folder” button

will be removed from the toolbar section.

16. **Enable private files (optional)**
    This option is used for enabling public/private file access to the S-Drive attachments and commonly used to limit the customer portal users' access to individual files. Set this attribute to true by checking the checkbox, if you want to enable private/public flag. Setting the private flag on a file hides the file from customer portal users. The default value for this checkbox is unchecked.

17. **Default sort field name (optional)**
    This option is used to order/sort S-Drive attachments based on a field. You need to set the name of the field that should be used to order the list of files. For this example, it should be filled in as "cg__File_Name__c". You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

18. **Default sort order (optional)**
    This option is used to set the sort order direction of the S-Drive attachments. There are two possible values for this attribute: "asc" or "desc". The default value is "asc" which stands for ascending. You can change this option from the settings button located at the toolbar of S-Drive attachments anytime. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

19. **File number to be shown in a page (optional)**
    This option is to set the number of files to be shown in an attachment page. The default value for this section is set to 100. If this value is set to '30' and object has 91 total items, the files will be displayed in 4 pages. You can change this option from the pagination setting located under the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

20. **Default view type of file list table (optional)**
    This option is to set the default view type of the file list table. There are 3 options you can choose: List, Thumbnail and Grid. You can change this option from the toolbar of S-Drive attachments, and set it as default by using the settings button. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

21. **Show Folder Tree component (optional)**
    This option sets the default behavior of the folder tree component located on the left-hand side of the S-Drive attachments page. You can choose to hide or show the Folder Tree component by using the settings button on the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments.*

22. **Show breadcrumb component (optional)**
    This option sets the default behavior of the breadcrumbs located on the left-hand side of the S-Drive attachments page, above the folder tree component. You can choose to hide or show the breadcrumbs by using the settings button on the toolbar of S-Drive attachments. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments*

23. **Enable Chatter (optional)**
    This option helps users to collaborate with each other using the native Chatter app. Once enabled, in order to leverage Chatter, on the Actions menu of a file, a user can click on Post to Chatter. Alternatively, on the Details page of a file, there is Chatter tab. *See S-Drive Lightning User Guide for more information about using the S-Drive attachments*

8- Once configuration is complete, you can publish your changes from top right corner. (Figure 11-14)

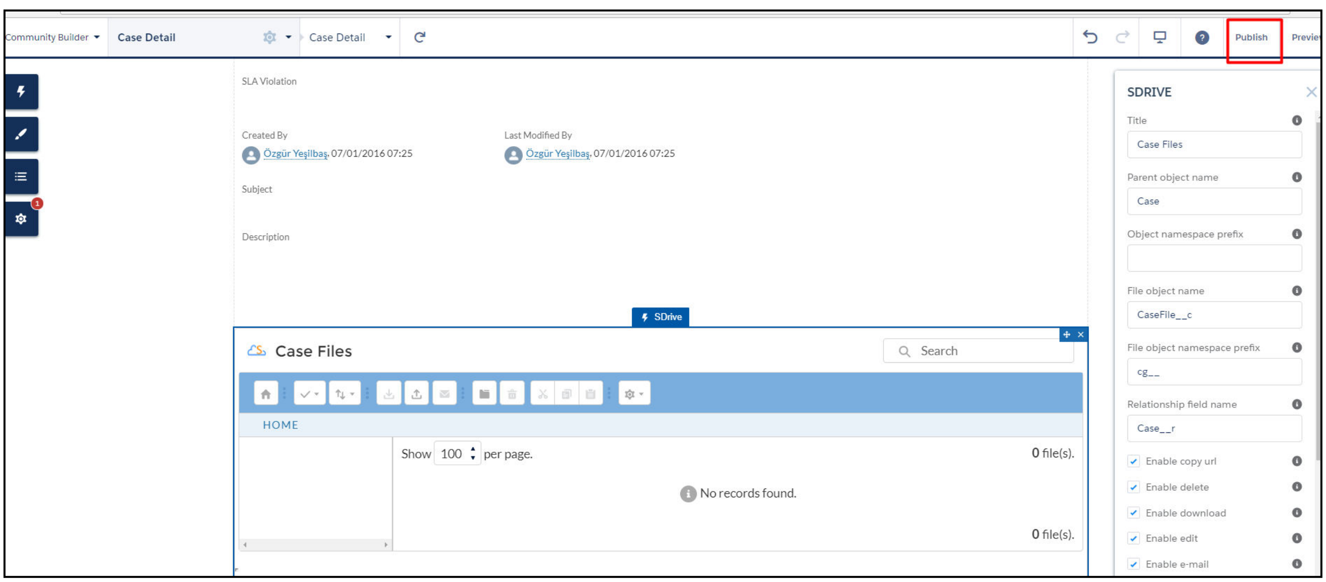


Figure 11-14

11.5. S-Drive Toolbar Color Configuration for Lightning

You can configure the toolbar color of S-Drive in *Salesforce Communities*. In order to reach communities, you should go to *Setup/Communities/All Communities* and select the community where you want to change the toolbar color of S-Drive.

From community page, you should go to *Builder* section.

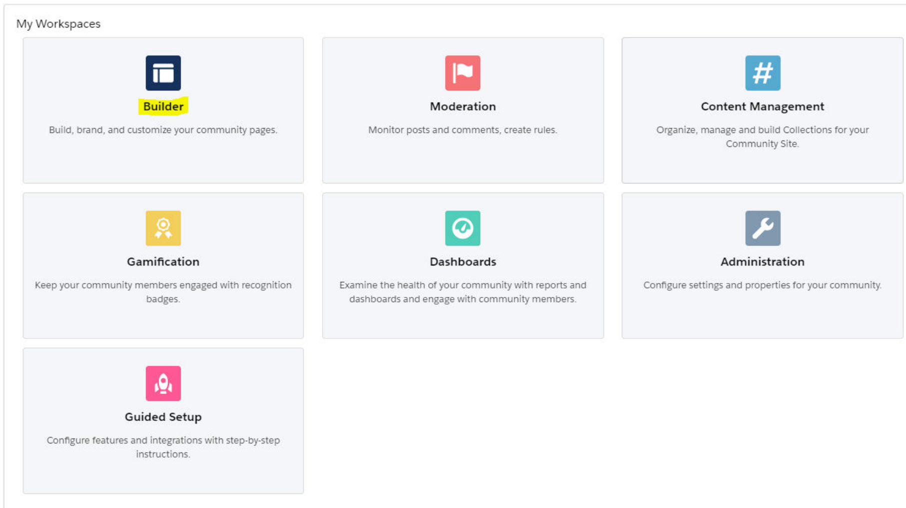


Figure 11-15

From *Builder*, you should click to *Theme* button.

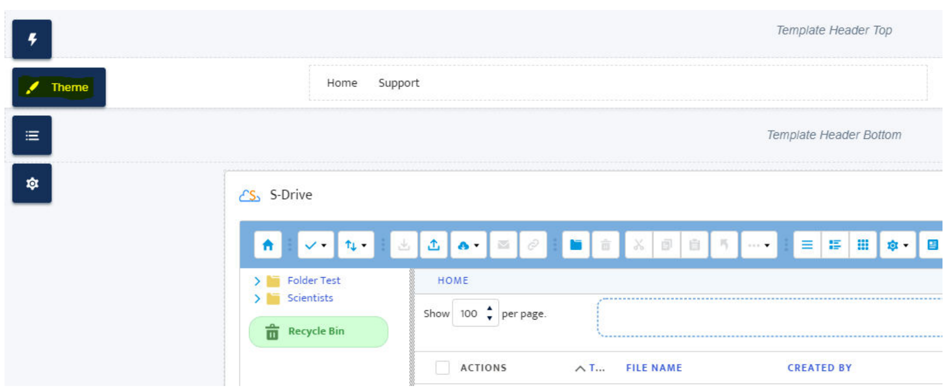


Figure 11-16

After clicking the Theme button, you should click the arrow button at the top right and click Edit CSS there.

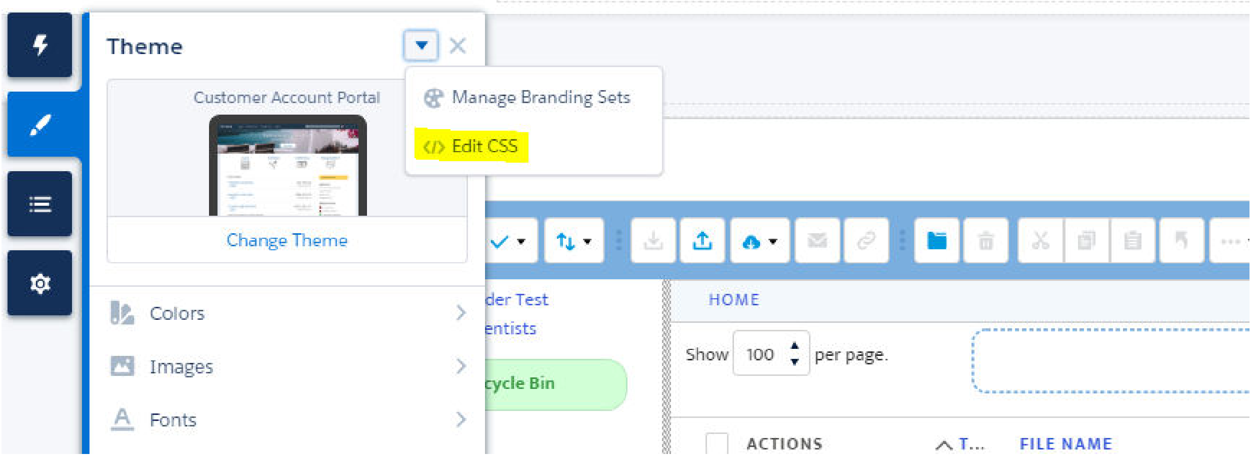


Figure 11-17

Then you should come into this page.

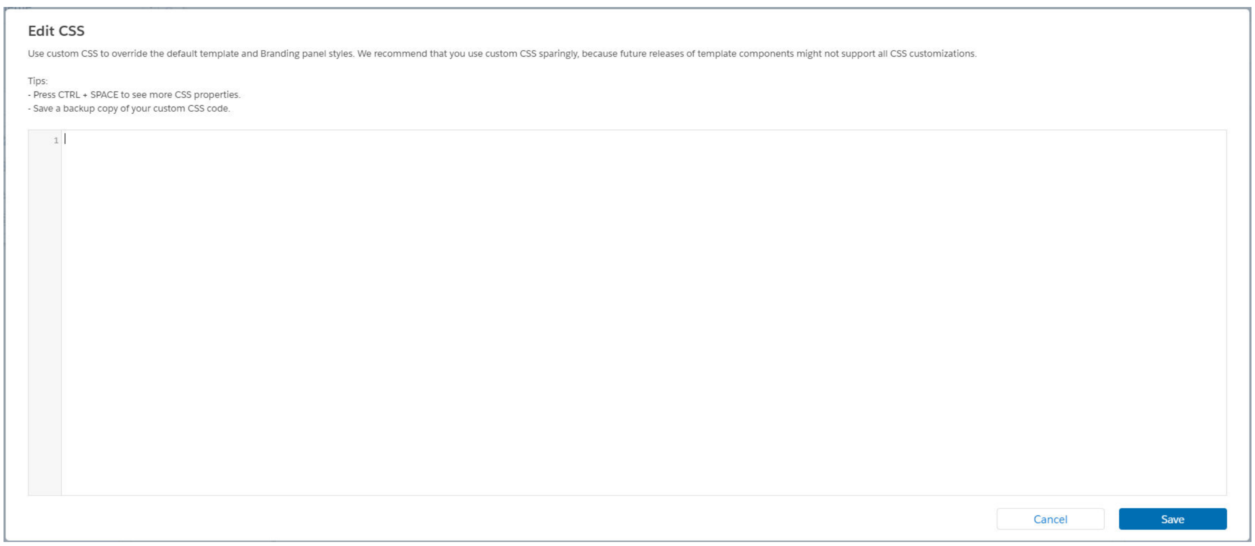


Figure 11-18

In this section, you can change the S-Drive toolbar color as you wish. You can use *Color Name*, *Hex Color Code*, or *RGB Color Code* to change the toolbar color. For instance, if you want to add *Color Name* to change the toolbar color as light coral, you should write:

.slds-grid.community-toolbar {background: lightcoral}

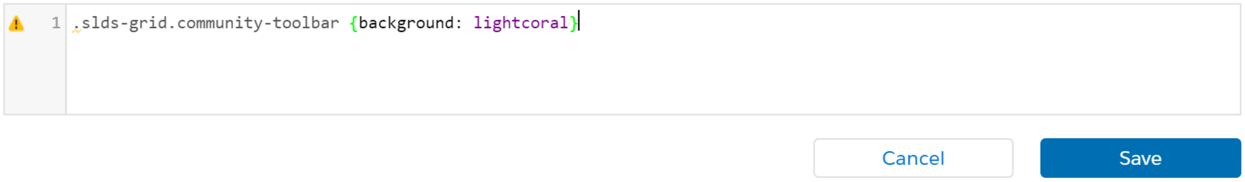


Figure 11-19

After clicking the save button at bottom right, you should see the change immediately.

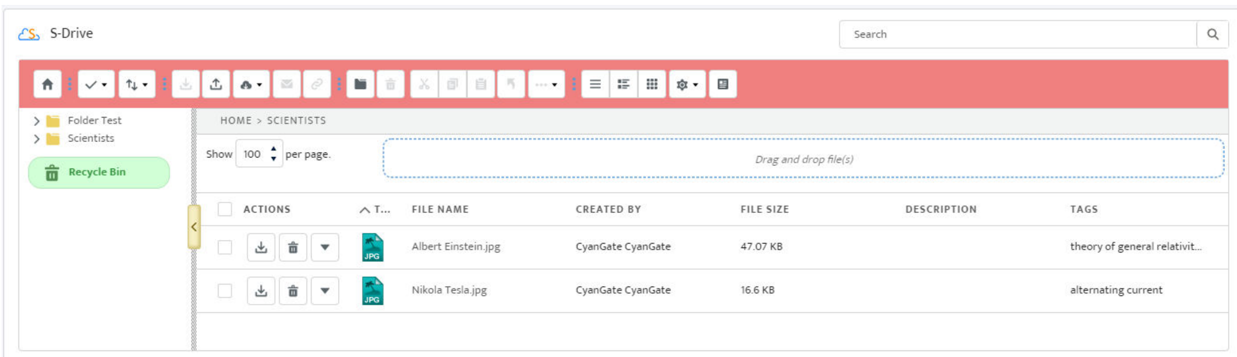


Figure 11-20

Secondly, if you want to change the toolbar color by using a *Hex Color Code* that is a green like color, you should write it as:

.slds-grid.community-toolbar {background: #0C9F27}

Figure 11-21

After clicking the save button at bottom right, you should see the change in the toolbar.

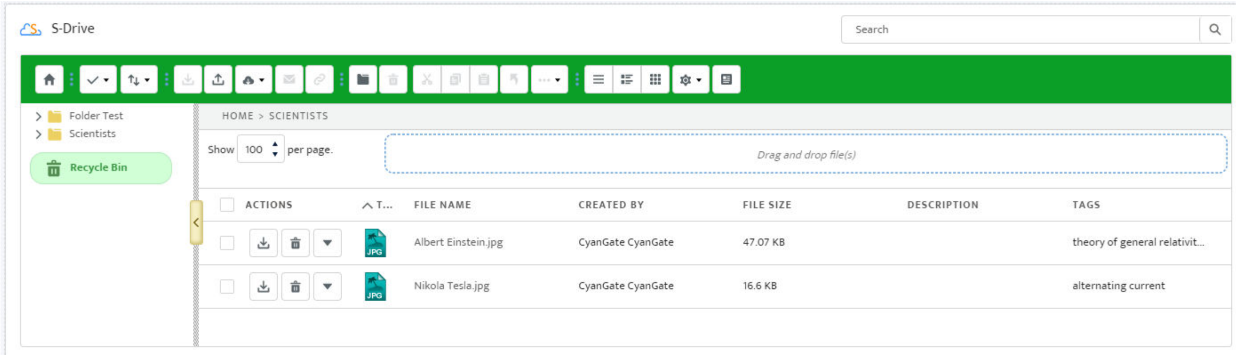


Figure 11-22

Finally, if you want to change the toolbar color by using the *RGB Color Code* that is a purple like color, you should write it as:

.slds-grid.community-toolbar {background: rgb(79, 18, 140)}

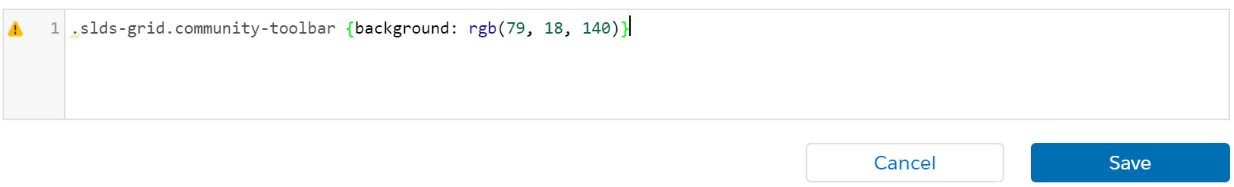


Figure 11-23

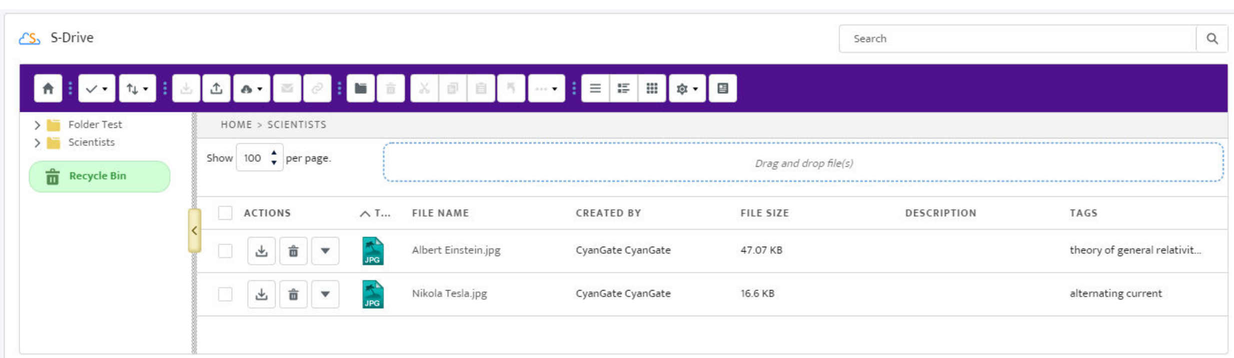


Figure 11-24

11.6. Security Settings

To enable profiles for selected community, use the "Members" section in the "Community Settings" page.

Based on the profile of the community user, users can have different permissions in S-Drive.

If you try to access the community with no permissions, you'll see "You do not have permissions to access S-Drive data!" error when you click the "S-Drive" tab (Figure 11-25).

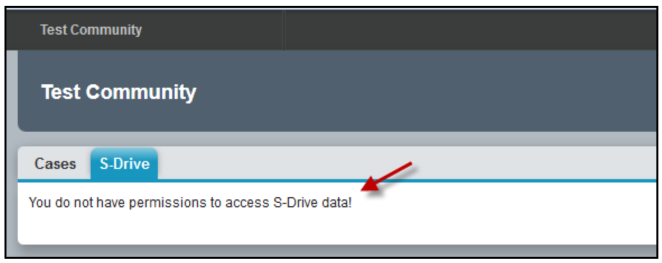


Figure 11-25

If you just enable "read" feature, community users will just be able to download or email uploaded files by internal users. They won't be able to upload a file, delete a file, create a folder or edit an item's description. Also note that visibility of the files list, buttons and menu items are affected via sharing and S-Drive Configuration.

To set these permissions edit the selected profile using the Administration Setup -> Manage Users -> Profiles menu. Click on the name of the profile you want to edit (Figure 11-26).

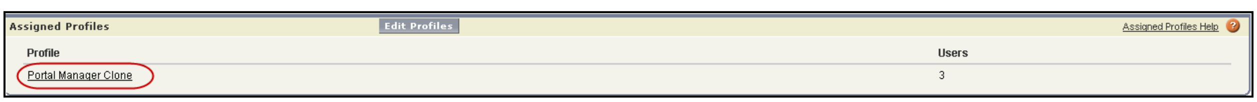


Figure 11-26

In the new window click Edit button to edit the user permissions (Figure 11-27).

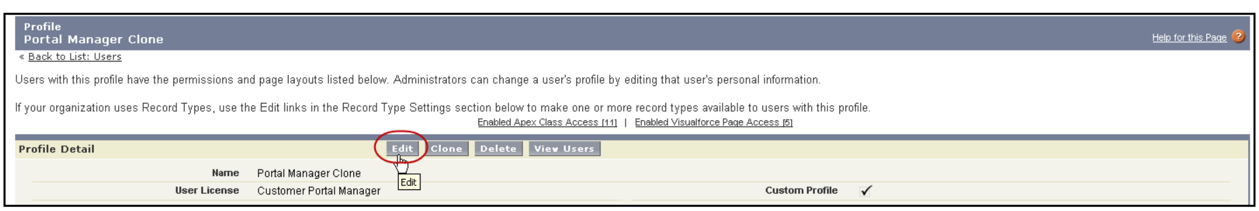


Figure 11-27

Scroll down to the "**Custom Object Permissions**" section. You'll see the "**Basic Access**" selections for "**S3Objects**" custom object (or if you're working on S-Drive Attachments like Cases, Accounts, custom objects etc. you need to edit the custom object file's permissions). You will need to check/uncheck these boxes based on your needs (Figure 11-28). Note that you can edit “Custom Object Permissions” for just “Custom Profiles”. You may need to *clone* your standard profile to be able to edit a community profile. Refer to the Salesforce.com documentation for more information.

There are four access levels: **Read, Create, Edit, and Delete**. We’ll see examples of these access level combinations in the subsections.

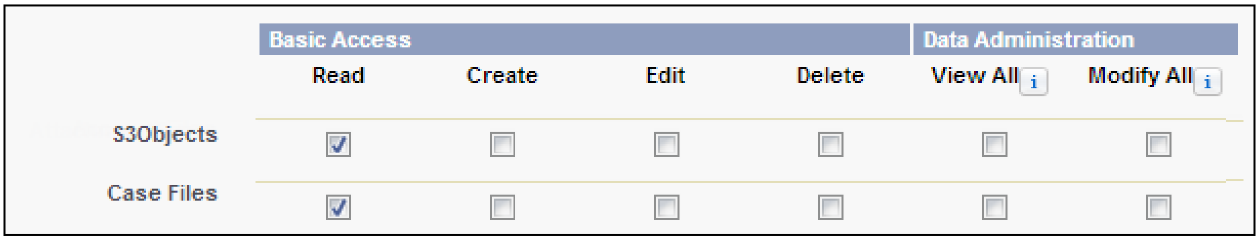


Figure 11-28

You can set access levels for customers using communities. *We strongly suggest you to just set the “Read” access to the community users for data security.*

A. Example 1: Just Read Permission Enabled

If you just set “Read” and unset other permissions for selected custom object (here S3Object) (Figure 11-28), your community users won’t be able to:

- upload files
- create folders
- delete files/folders
- edit descriptions of files/folders
- cut/copy files
- rename files/folders.

They will be able to:

- browse folders
- download files
- email files
- copy the URL of the file to the clipboard.

In the S-Drive screen, "Email" and "Download File(s)" buttons will be displayed (if Download Manager is enabled) for community users and for each file "Download" and "Copy URL" item menu actions will be visible. "Item Actions" menu will be hidden for folders (Figure 11-29).

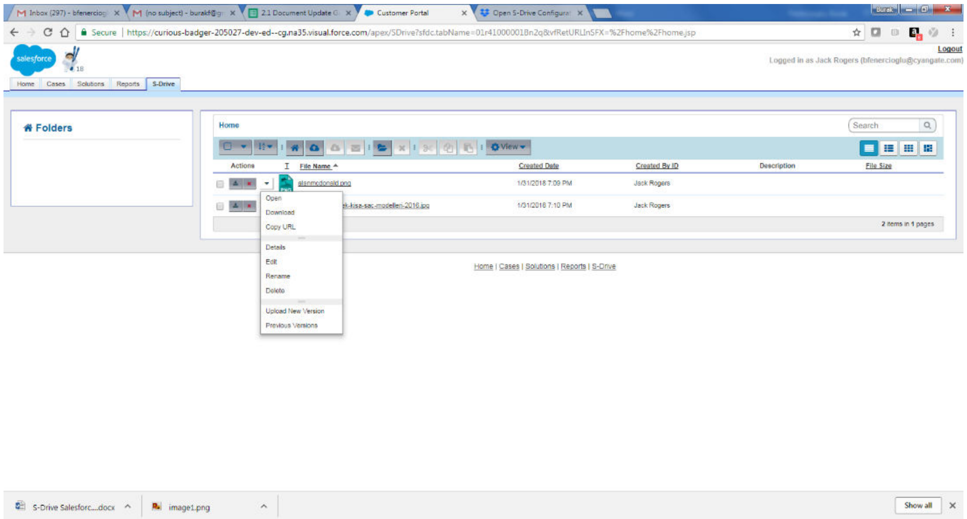


Figure 11-29

B. *Example 2: Read, Create and Edit Permissions Enabled*

If you set Read, Create, Edit permissions and unset Delete permission for selected custom object (here S3Object) (Figure 11-30), your community users won't be able to:

- delete files/folders
- cut/copy files.

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
S3Objects	☑	☑	☑	☐	☐	☐
Case Files	☑	☑	☑	☐	☐	☐

Figure 11-30

They will be able to:

- upload files
- create folders
- browse folders

- download files
- rename files/folders
- edit descriptions of files/folders
- email files
- copy the URL of the file to the clipboard.

In the S-Drive screen, "New Folder", "Upload File(s)", "Email" and "Download File(s)" (if Download Manager is enabled) buttons will be displayed for community users and for each file “Download”, “Edit”, “Rename” and “Copy URL” action menu items will be visible. "Edit" and "Rename" action menu items will be visible for folders (Figure 11-31). Also note that visibility of the buttons and menu items are affected via sharing and S-Drive Configuration.

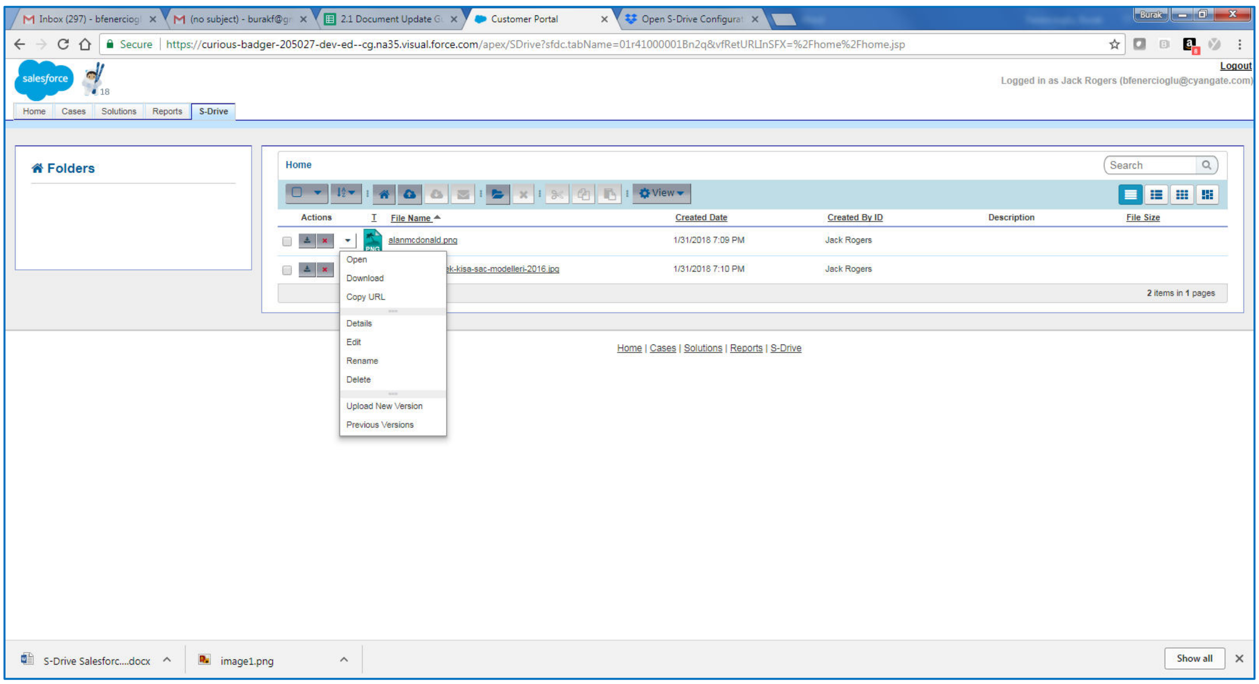


Figure 11-31

C. *Example 3: Read, Create, Edit and Delete Permissions Enabled*

If you set Read, Create, Edit, Delete permissions for selected custom object (here S3Object) (Figure 11-32), your community users will be able to:

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
S3Objects	☑	☑	☑	☑	☐	☐
Case Files	☑	☑	☑	☑	☐	☐

Figure 11-32

- upload files
- create folders
- browse folders
- download files
- delete files/folders
- edit descriptions of files/folders
- cut/copy files
- rename files/folders
- email files
- copy the URL of the file to the clipboard.

In the S-Drive screen, "New Folder", "Upload File(s)", "Email", "Download File(s)" (if Download Manager is enabled), "Cut", "Copy", "Paste" and "Delete File(s)" buttons will be displayed for community users and for each file “Download”, “Edit”, “Copy URL”, “Rename” and “Delete” item menu actions will be visible. "Edit", "Rename" and "Delete" action menu items will be visible for folders (Figure 11-33). Also note that visibility of the buttons and menu items are affected via sharing and S-Drive Configuration.

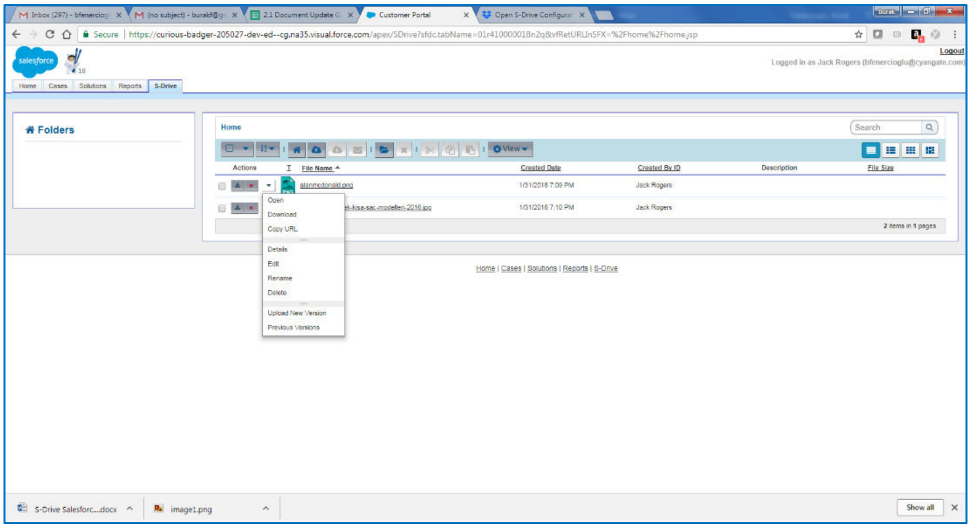


Figure 11-33

D. *Permission Combinations That Are Not Supported*

Permission combinations other than above examples are not supported by S-Drive and we strongly recommend you not to use unsupported permission combinations.

E. *Other Issues*

If you get an "INVALID FIELD" error message like below while uploading a file after giving required permissions, you may need to check the "Field Accessibility" settings for the selected profile under Administration Setup -> Security Controls -> Field Accessibility menu:

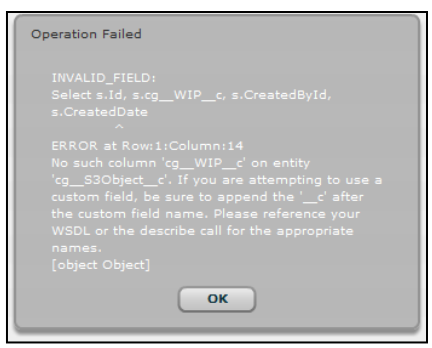


Figure 11-34

"Hidden" fields for the selected custom object (here S3Object) needs to be set as "Visible" from this menu.

12. S-DRIVE SALESFORCE MOBILE APP CONFIGURATION AND USER GUIDE

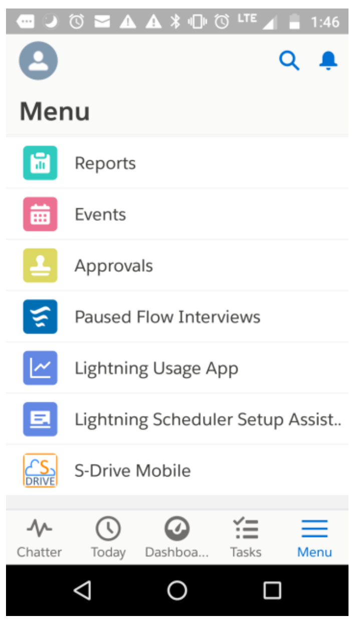
You can configure the Salesforce Mobile app to show the S-Drive tab as well as showing files on Accounts and other objects.

12.1 For S-Drive Tab (S3Object)

In order to display S-Drive Tab on Salesforce Mobile App Navigation Menu, add the S-Drive Mobile Tab to Salesforce Mobile App Navigation Menu.

- Go to Setup and type "Salesforce Navigation" in the quick find box and click on it
- Add S-Drive Mobile Tab from the Available section to the Selected section.
- Click Save

You can now see S-Drive Mobile on Salesforce Mobile App navigation menu



Tap on S-Drive Mobile to see your S-Drive Tab files.

12.2 For S-Drive on objects

To view S-Drive in the mobile app on objects such as Accounts, Cases, etc, you'll need to edit the object's Lightning page, add the S-Drive Lightning component and configure its form factor for phone. The steps are as follows and are done from within Salesforce on your desktop (not from the Mobile app.)

- Edit the Lightning page for the object where you want to configure S-Drive for mobile.
  - Either go to the Object through Setup and go to Lightning Record pages and edit the page
  - Or go to a record for the object (for example, go to an Account) and click the gear wheel and Edit Page.
- From the list of components on the left side, drag the **S-Drive Lightning component** and drop it on the page.
- Configure the component as you would normally do, but check the box for "Use Compact View". (For how to configure the component, see section 5.2 S-Drive File Area for Lightning (Accounts, Cases, Contacts, Opportunities, Leads) or section 7.2 Creating Lightning Page for custom objects.)
- Under "Set Component Visibility" at the bottom of the configuration, choose "Add Filter."
- Under Filter Type, choose Device.
- Configure it for **Form Factor Equals Phone**
- Click Save

Note:

- You probably already have an S-Drive component on your page. Set the form factor for that one to **Form Factor Equals Desktop**.
- If you'd like S-Drive to show in Compact View on your Desktop, you can configure just one S-Drive component. The component will show in both Desktop and Phone by default.

13. S-DRIVE SUPPORT

You can contact S-Drive Support team for any questions or problems that you couldn't solve using S-Drive documents:

1. Open a Ticket at Support Site: sdriveapp.com/support
2. Send an Email: sdrive@sdriveapp.com

You can find up-to-date product information, documents, tutorial videos, tools in our web page: www.sdriveapp.com

A Appendix A: S-DRIVE PORTAL

A.1. S-Drive Account

In order to use S-Drive, you should create a free S-Drive account on S-Drive portal. Here you will be able to see your Amazon account and payment details.

A.1.1. Login or Register

- Go *https://portal.sdriveapp.com*. Register for a free account, or login if you already have an account.

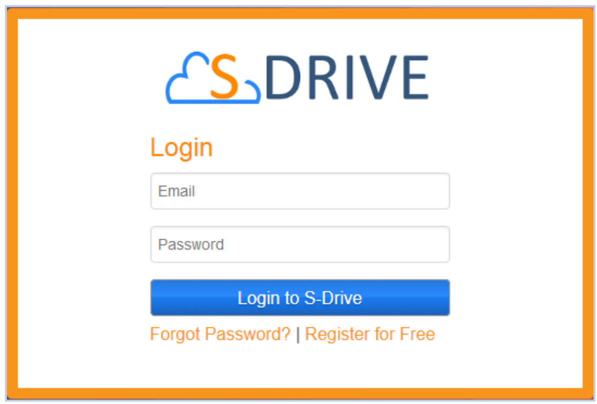


Figure A-1

A.1.2. Update S-Drive Account Information or Password

- Click *Account* link on menu (Figure A-2) to update your account information (Figure A-3) or change your password (Figure A-4).

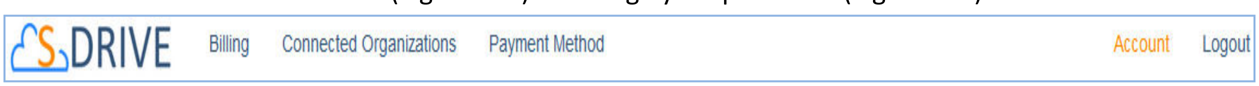


Figure A-2

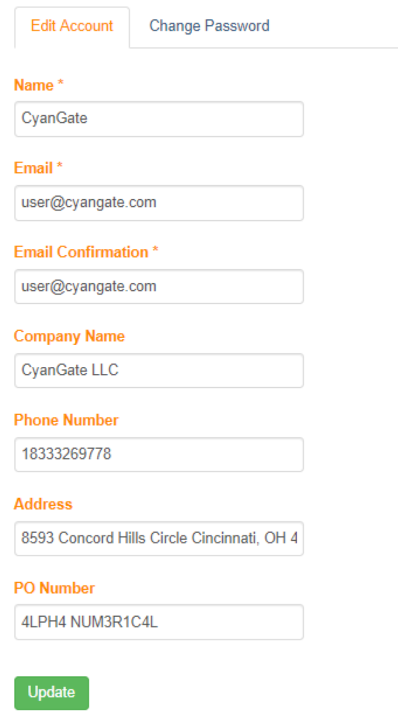


Figure A-3

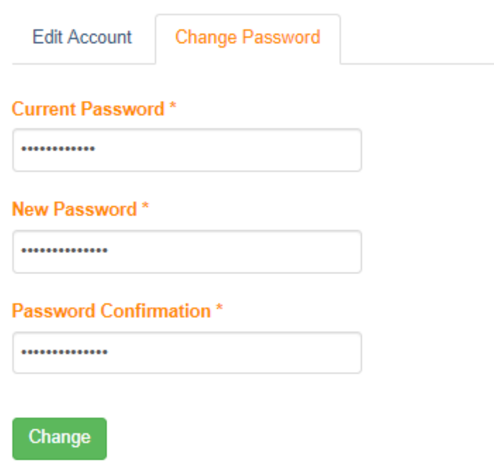


Figure A-4

A.2. Connected Organizations

In order to use S-Drive, you must connect your Salesforce.com organization to S-Drive.

Note

* You can connect your organization if you use 1.24 or higher version of S-Drive and if you have enough privileges to make OAuth authorization.

A.2.1. Connect Salesforce.com Organization

- Click *Connected Organizations* link on the menu (Figure A-5). You see "Connect Salesforce.com Organizations" and "Connected Salesforce.com Organizations" sections (Figure A-6).

Figure A-5

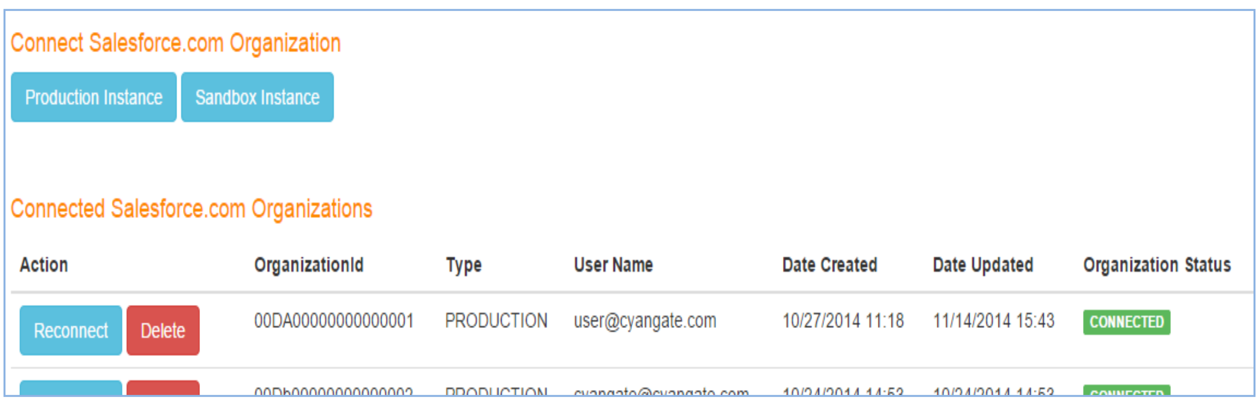


Figure A-6

- To connect an organization, click "Production Instance" button if your organization will be leveraging S-Drive in production environment. Alternatively, click "Sandbox Instance" button if your organization is leveraging S-Drive in sandbox environment (Figure A-7). It redirects the salesforce.com login page. You should login with your organization's account.

- Click 'Allow' button for S-Drive to have permission to connect the app

- You should now see your organization(s) on "Connected Salesforce.com Organizations " section (Figure A-7).

Connected Salesforce.com Organizations

Action	OrganizationId	Type	User Name	Date Created	Date Updated	Organization Status
Reconnect Delete	00DA00000000000001	PRODUCTION	user@cyangate.com	10/27/2014 11:18	11/14/2014 15:43	CONNECTED
Reconnect Delete	00Db00000000000002	PRODUCTION	cyangate@cyangate.com	10/24/2014 14:53	10/24/2014 14:53	CONNECTED
Reconnect Delete	00DL00000000000003	SANDBOX	testuser@cyangate.com	11/02/2014 11:32	11/13/2014 17:38	CONNECTED

Figure A-7

- If you see your organization in *DISCONNECTED status* (Figure A-8), you should connect your organization again by clicking "Connect" button OR to reconnect, click on "Production Instance"/ "Sandbox Instance" button (Figure A-6). You can also reconnect your *CONNECTED status* organization by clicking "Reconnect" button (Figure A-7).

Connect Delete	00Db00000000000002	PRODUCTION	cyangate@cyangate.com	10/24/2014 14:53	10/24/2014 14:53	DISCONNECTED

Figure A-8

A.2.2. Remove Salesforce.com Organization from S-Drive Account

- Click "Delete" button (Figure A-8). But, beware that you are responsible with deleted organization's usage costs until different account is connected from this organization.

A.3. Amazon Payment

Add an Amazon payment method if your S-Drive trial has expired. S-Drive is always free in Sandboxes.

A.3.1. Register Payment Method

- Click *Payment Method* link on menu (Figure A-9).

Figure A-9

- Click *Login with Amazon* button on "Amazon Payment" section (Figure A-10).

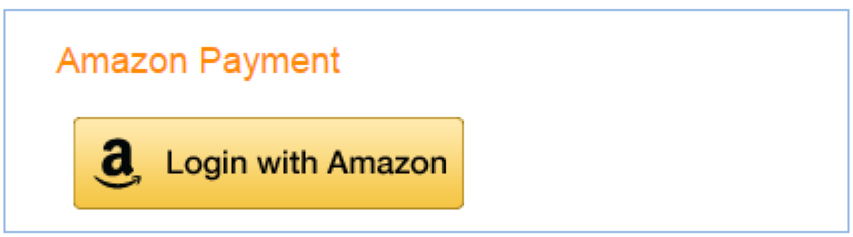


Figure A-10

- It opens *Amazon.com Sign-in* page (Figure A-11). You should login with your Amazon account.

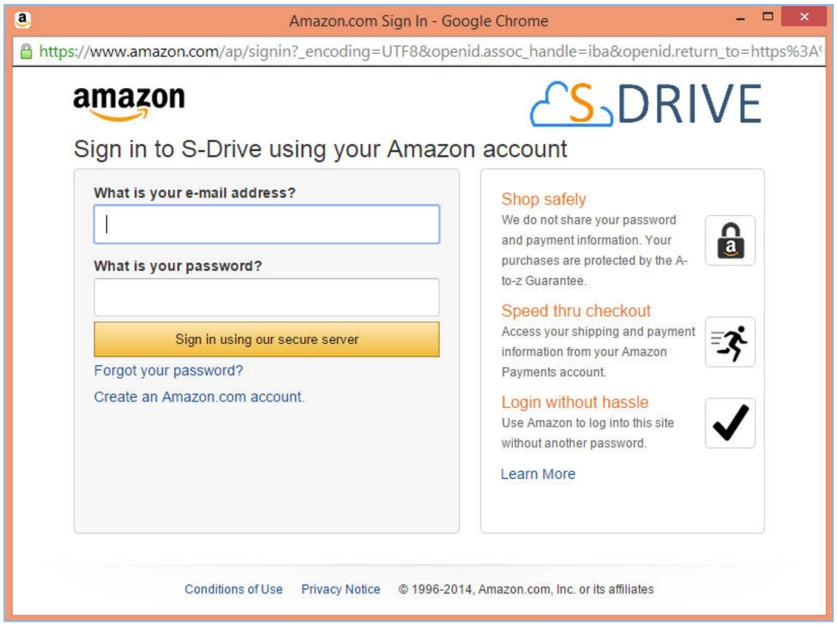


Figure A-11

After login, select a *Payment Method*, then check the consent box and click the "Approve" button (**Figure A-12**).

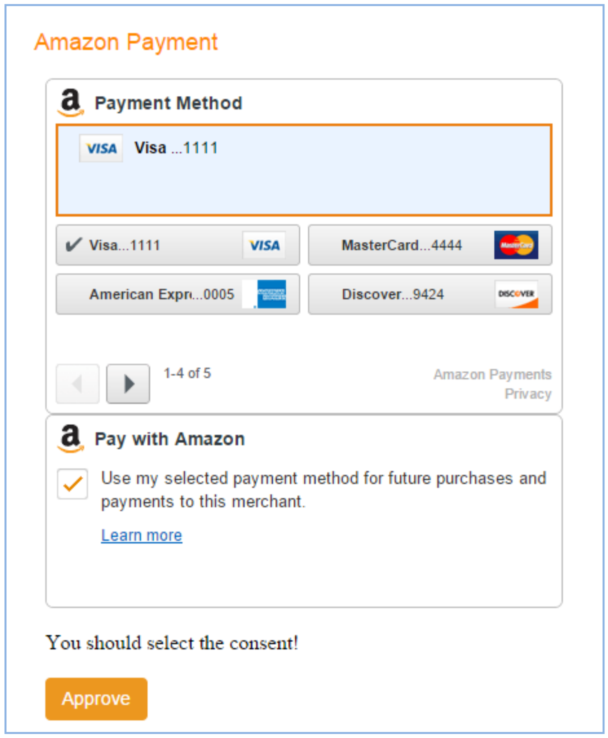


Figure A-12

- After you complete the payment method registration, you see billing details related to Amazon account on "Billing Details" section (Figure A-13).

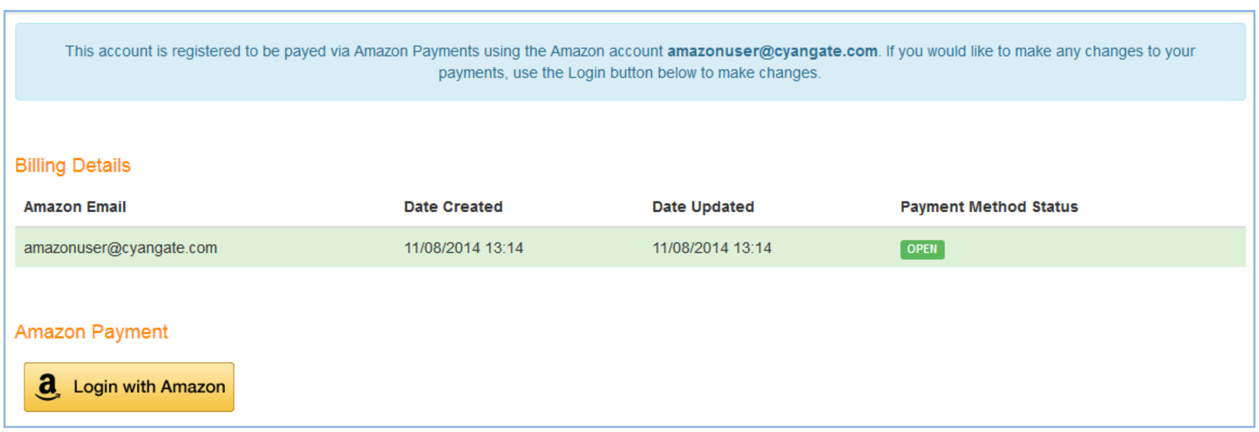


Figure A-13

- If you see *CLOSED payment* method status (Figure A-14), you should update your payment method again by clicking "Login with Amazon" button. You can also change or update your method by clicking "Login with Amazon" button.

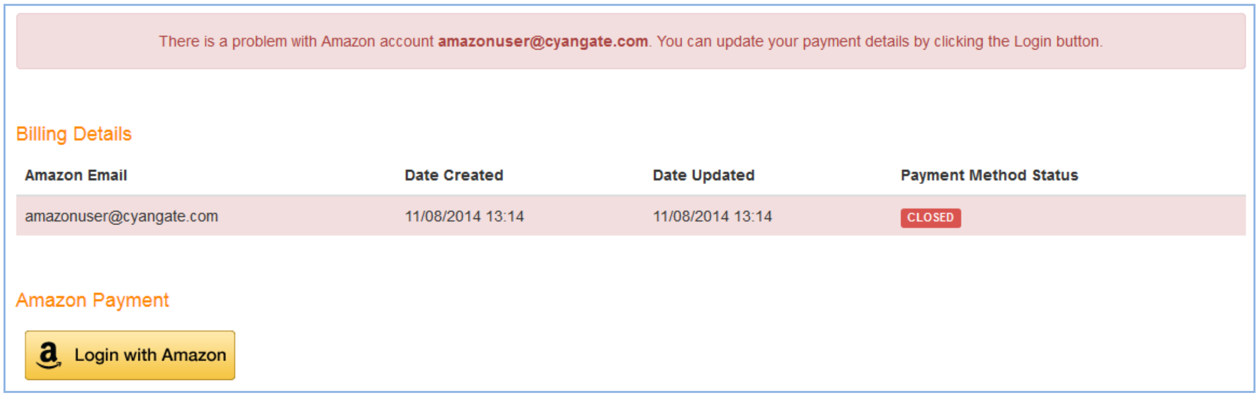


Figure A-14

A.4. Billing

You can see payment details and your organizations' usages and cost for the current month on "Billing" tab.

A.4.1. Payment Details

Click *Billing* link on menu (Figure A-15). You see "Current Usage" (Figure A-16) and "Payment History" sections (Figure A-17).

Figure A-15

Current Usage

OrganizationId	Type	Organization Status	Current Total Usage	Current Timed Usage*	Current Month Cost	Preview Generation Count	Preview Cost	Total
00D80000000Iq5qEAA	PRODUCTION	CONNECTED	2.216800 GB	1.000647 GB-Month	$0.01	0	$0.0	$0.01
00D0Y000001KFkcUAG	PRODUCTION	CONNECTED	1.030524 GB	0.465170 GB-Month	$0.00	0	$0.0	$0.0
00D0Y000001iwkJUAQ	PRODUCTION	CONNECTED	0.000000 GB	0.000000 GB-Month	$0.00	0	$0.0	$0.0
00D0Y000001dQRhUAM	PRODUCTION	CONNECTED	0.029071 GB	0.013123 GB-Month	$0.00	0	$0.0	$0.0
00D80000000ThiTEAS	PRODUCTION	CONNECTED	0.001045 GB	0.000468 GB-Month	$0.00	0	$0.0	$0.0
00D0Y000002FEpDUAW	PRODUCTION	CONNECTED	0.000185 GB	0.000083 GB-Month	$0.00	0	$0.0	$0.0
00D58000000JXjnEAG	PRODUCTION	CONNECTED	0.000655 GB	0.000296 GB-Month	$0.00	0	$0.0	$0.0
00D800000012avGEAQ	PRODUCTION	CONNECTED	4.480871 GB	2.022624 GB-Month	$10.23	0	$0.0	$10.23

Figure A-16

- Under "Current Usage", you can see your organization's usage and cost for the current month.
- The "Preview Generation Count" column shows your organization's Preview Generation Count for the current month.
- The "Preview Generation Cost" column shows your organization's Preview Generation Cost for the current month.

To see payment details for previous months, select a month from "Payment History" select list (Figure A-17).

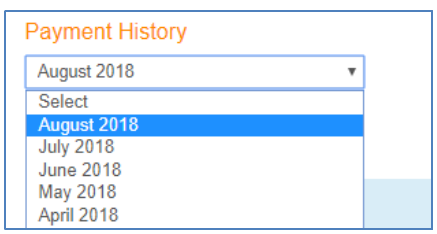


Figure A-17

- You can see the details of your payments on "Payment Details" section (Figure A-18). You can see billing cycle, payment status, your organizations' billable usages and usage amounts. You can also download PDF invoices using the “Download Invoice” button (see section A.4.2 Downloading Invoices for details.)

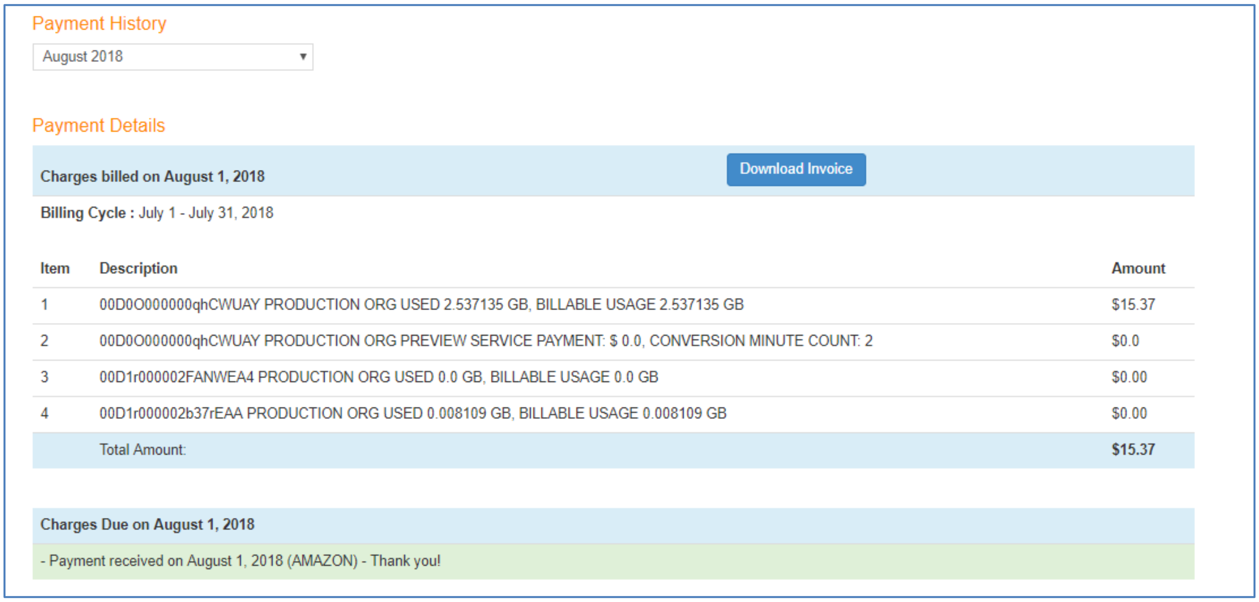


Figure A-18

- If there are active organizations and the total amount is not zero, if your organization has been charged, a "Payment received" message is displayed (Figure A-18). If your organization has not been charged yet, "Payment processing" message is displayed (Figure A-19).

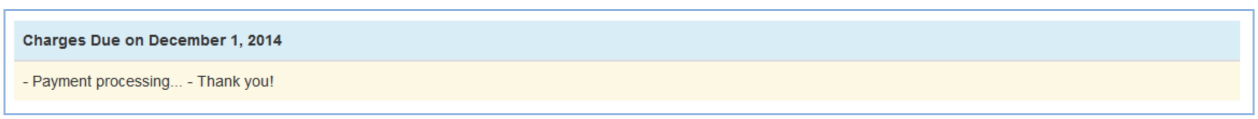


Figure A-19

- If there are no active organizations on the billing cycle, there will be no payment cost and you see "No payment required" message (Figure A-20).

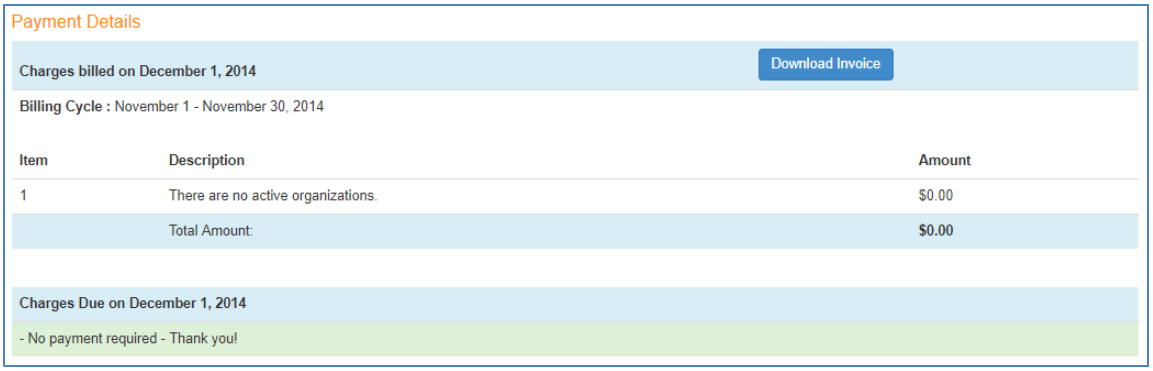


Figure A-20

A.4.2. Downloading Invoices

You can download invoices using the “Download Invoice” button which is displayed in the top row of “Payment Details” page (Figure A-20), every time you select a new month from the “Payment History” menu.

For example, if you’ve selected “August 2018” from the “Payment History” menu and click the “Download Invoice” button, an invoice for your usages in the billing cycle July 1-July 31, 2018 will be downloaded automatically by your browser.

Your billing information (*name, company, address, PO number*) will be the same as your account information, which you can change using the “Edit Account” tab (see A.1.2 Update S-Drive Account Information or Password).
If you download an invoice for an already-closed payment, your invoice will come with a “PAID” stamp on the top-right corner.

CyanGate

CyanGate LLC
8593 Concord Hills Cir
Cincinnati, OH 45243 US
(703) 485-3884
sales@cyangate.com
http://www.cyangate.com

PAID

Invoice

BILL TO
CyanGate
CyanGate LLC
8593 Concord Hills Circle Cincinnati, OH 45243

INVOICE # b50e5f8-20180801
DATE 08/01/2018
DUE DATE 08/01/2018
TERMS Due Upon Receipt

PO NUMBER
4LPH4 NUM3R1C4L

ACTIVITY	QTY	RATE	AMOUNT
S-Drive Service 00D0O000000qhCWUAY PRODUCTION ORG USED 2.537135 GB, BILLABLE USAGE 2.537135 GB	1	15.37	15.37
S-Drive Service 00D0O000000qhCWUAY PRODUCTION ORG PREVIEW SERVICE PAYMENT: $ 0.0, CONVERSION MINUTE COUNT: 2	1	0.00	0.00
S-Drive Service 00D1r000002FANWEA4 PRODUCTION ORG USED 0.0 GB, BILLABLE USAGE 0.0 GB	1	0.00	0.00
S-Drive Service 00D1r000002b37rEAA PRODUCTION ORG USED 0.008109 GB, BILLABLE USAGE 0.008109 GB	1	0.00	0.00

TOTAL CHARGES	**USD 15.37**
AMOUNT PAID	**USD 15.37**
BALANCE DUE	**USD 0.00**

Experts in Media Management

Figure A-21

A.4.3. Pricing

S-Drive pricing is based on usage and preview generation count (Figure A-23) and it is calculated by Cyangate at the beginning of the next month and charged from your payment method. S-Drive pricing is tiered and as your usage increases, the cost per usage will decrease significantly (Figure A-22).

Price of S-Drive Usage	Pricing Tiers
$10.00 per GB-Month	First 5 GB-Month
$5.00 per GB-Month	Greater than 5 GB-Month through 25 GB-Month
$2.50 per GB-Month	Greater than 25 GB-Month through 100 GB-Month
$1.25 per GB-Month	Greater than 100 GB-Month through 1000 GB-Month
$0.50 per GB-Month	Greater than 1000 GB-Month

Figure A-22

Preview & Thumbnail Pricing (v1.28+)

With S-Drive 1.28, thumbnails and previews can be generated. Calculation is done based on the number of conversions used while generating the thumbnail and previews.

100 conversions are free for each month!

Preview & Thumbnail Sample Pricing Table *

File Count	Conversion Count	Price	Total Price
50	100	$0.00	$0.00
500	1000	$0.05	$45.00
2500	5000	$0.04	$205.00
5,000	10,000	$0.03	$355.00
25,000	50,000	$0.02	$1,155.00
50,000	100,000	$0.01	$1,655.00

Figure A-23

- First 1 GB storage and bandwidth usage is FREE every month.
- After creating an S-Drive account, you can use S-Drive on Salesforce.com organizations free of charge for 15 days.

- You can use S-Drive on Sandbox Salesforce.com organizations free of charge.

A.5. Troubleshooting Tips

- Could not login because of locked S-Drive account.
  - Your S-Drive account has been locked because of too many invalid attempts. You can reactivate your account by resetting your password.
- Could not login because of inactive S-Drive account.
  - Check your email address to activate your S-Drive account.

- Forgot S-Drive account password.
  - Reset your S-Drive account password.
- 15 day trial has expired for S-Drive usage.
  - Add your Amazon payment details. See "**Register Payment Method**" section of this document.

- See DISCONNECTED *status* on "Connected Organizations" or "Billing" page.
  - You may revoke the S-Drive connected app or uninstall the S-Drive package. You can connect this organization. See "**Connect Salesforce.com Organization**" section of this document.

- See CONNECTED status organization on "Connected Organizations" or "Billing" page, although uninstall the S-Drive package or revoke the S-Drive connected app.
  - Your organization status will be *DISCONNECTED*, after next time we try to connect your Salesforce.com organization to calculate hourly S-Drive usage.

- Could not see *DELETED* organization on "Connected Organizations" or "Billing" page.
  - You could not see *DELETED* organization. But this organization belongs your S-Drive account until another S-Drive organization connect this. Also, you can reconnect this organization. See "**Connect Salesforce.com Organization**" section of this document.

- Could not use S-Drive, although there is a *CONNECTED* status organization.
  - You may uninstall the S-Drive package or revoke the S-Drive connected app.

- Can use S-Drive, although there is a *DISCONNECTED* status organization.
  - You can continue to use S-Drive max more 6 hours, after revoke the S-Drive connected app. After this, you could not use S-Drive.

- Non-admin user could not make "OAuth Authorization-Connect Organization”.
  - Only administrator user who has modify all data permission can make "OAuth Authorization-Connect Organization".

- Could not complete "OAuth Authorization-Connect Organization" because of necessity for installing latest version (1.24 or later) of S-Drive package.
  - You must install 1.24 or later versioned S-Drive package.

- Could not complete "OAuth Authorization-Connect Organization" because of there is an organization which already authorized with different S-Drive account.
  - You could not connect other S-Drive account' organization until this account delete the organization.

- Could not see *Connect Salesforce.com Organization* section and *Connect-Reconnect-Delete* buttons on "Connected Organizations" page.
  - If your Amazon payment detail is *CLOSED* status, you could not connect your organization. Update your Amazon payment details to continue use S-Drive. See "**Register Payment Method**" section of this document.

- Could not make "OAuth Authorization-Connect Organization” for other organization shortly after authorizing one organization.
  - Clear your browser cookies and session, then retry make "OAuth Authorization-Connect Organization".

- Get an email from us related *AMAZON ACCOUNT issue.*
  - We could not charge you for S-Drive usage because of you did not add your Amazon payment detail. Add your Amazon payment details. See "**Register Payment Method**" section of this document.

- 15 days’ trial has expired for S-Drive usage.
  - Add your Amazon payment details. See "**Register Payment Method**" section of this document.

- Get an email from us related *INVALID PAY MENT METHOD* issue.
    - We could not charge you for S-Drive usage because of Invalid Payment Method issue. Update your Amazon payment details to continue use S-Drive. See "**Register Payment Method**" section of this document.

- Get an email from us related *CLOSED AMAZON PAYMENT* issue.
    - We could not charge you for S-Drive usage because of *CLOSED* status Amazon payment method related Invalid Payment Method issue. Update your Amazon payment details to continue use S-Drive. See "**Register Payment Method**" section of this document.

- See CLOSED *status* Amazon payment detail on "Payment Method" page.
    - The Amazon billing detail turned to *CLOSED* because of INVALID PAYMENT METHOD issue. Update your Amazon payment details to continue use S-Drive. See "**Register Payment Method**" section of this document.

- Could not use S-Drive, although update Amazon payment details for Payment Method and see *OPEN status*.
    - Because of there is uncompleted payment charge due to *INVALID PAYMENT METHOD* issue, you can continue to use S-Drive after payment charge is completed.

- See "Payment processing..." message on Billing Details section of "Billing" page.
    - We have not charge you yet for S-Drive usage.

- See "Session Expired" message on portal.sdriveapp.com page.
    - Because of your session has expired, you should login again.

- See error messages on Login, Reset Password, Register, Connected Organizations, Payment Method, Account pages.
    - Try your operation. If you got error message again, please contact to us.

- See “You did not register a S-Drive account. Please register for free, then configure S-Drive connectivity for this organization at https://portal.sdriveapp.com" message on Salesforce.com account.
    - Create a free S-Drive account or use your existing S-Drive account, then connect your organization to S-Drive. See "**Register**” and "**Connect Salesforce.com**" sections of this document.

- See “*You did not configure S-Drive connectivity for this organization. Please configure S-Drive connectivity for this organization at https://portal.sdriveapp.com*" message on Salesforce.com account.
    - Connect your organization to S-Drive. See "**Connect Salesforce.com**" section of this document.

- See “*There is a problem with your S-Drive connectivity with this organization. Please check your account, organization status and reconnect this organization at http://portal.sdriveapp.com*" message on Salesforce.com account.
    - Reconnect your organization to S-Drive. See "**Connect Salesforce.com**" section of this document.

- See “*Your trial has expired. Please add your payment details at https://portal.sdriveapp.com* " message on Salesforce.com account.
    - Add your Amazon payment details. See "**Register Payment Method**" section of this document.

- See “*There is a problem with your payment method. Please update your payment details at https://portal.sdriveapp.com*" message on Salesforce.com account.
    - Update your Amazon payment details to continue use S-Drive. See "**Register Payment Method**" section of this document.

B Appendix B: Upgrading S-Drive

Follow these instructions to upgrade to the latest version of S-Drive

1. Install the latest version of S-Drive
2. If you have custom objects from your previous S-Drive version, there are fields that must be added to the associated S-Drive File Objects. (For example, if you have a custom object called Software that is using S-Drive, there's related object called SoftwareFile that must be updated.) S-Drive can do this automatically:

   - Open S-Drive Configuration tab.
   - On the General Settings tab, scroll down to Object Field Settings.
   - Click on the Sync button. This will add fields to your S-Drive File Objects that are needed in the upgraded version.

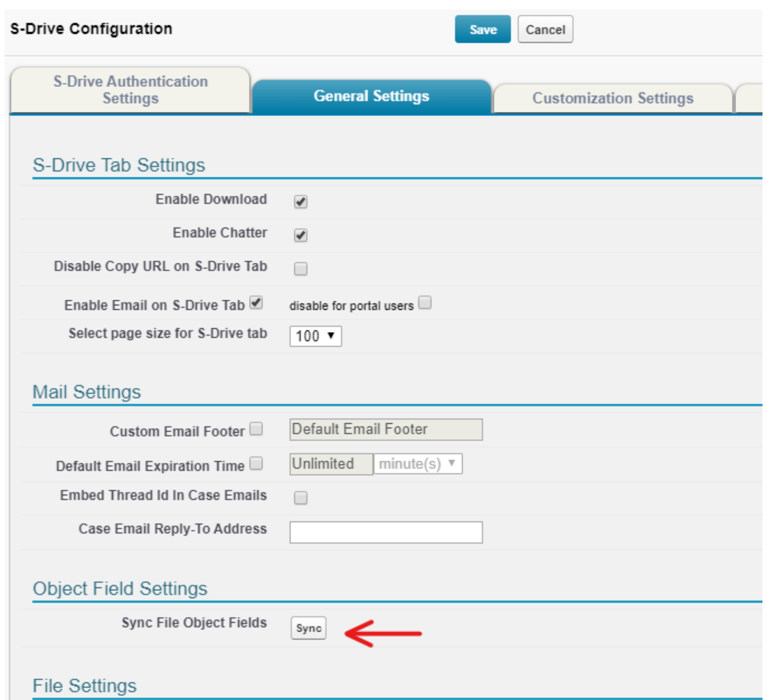


Figure B-1

3. Once the Object sync is done, go to each of your custom file objects and check that all the fields have been added correctly. If any are missing, add them manually as described in the table below. You can ignore these steps for CaseFiles, AccountFiles, ContactFiles, OpportunityFiles and S3Object):

- Go to Setup and navigate to your S-Drive File Object's fields and relationships. Be sure to check the S-drive File Object, not your custom object. (Staying with the example above, check the SoftwareFile object, not the Software object.)
- If any of the following fields are missing, create them manually.
  Note: In each step you should check Visible checkbox for all Field-Level Security for Profile fields.

Field Label	**Field Name**	**Data Type**
Text(255)	Content Type	cg__Content_Type__c
Long Text Area(32000)	Description	cg__Description__c
Text(255)	File Name	cg__File_Name__c
Formula (Text)	File Size	cg__File_Size__c
Number(18, 0)	File Size in Bytes	cg__File_Size_in_Bytes__c
Checkbox	Is Deleted	cg__Is_Deleted__c
Checkbox	Is Latest Version	cg__Is_Latest_Version__c
Checkbox	Is Parent Deleted	cg__Is_Parent_Deleted__c
Text(255)	Key	cg__Key__c
Number(18, 0)	Page Count	cg__Page_Count__c
Master-Detail(CustomObjectName)	Parent	cg__Parent__c
Text(255)	Parent Folder Id	cg__Parent_Folder_Id__c
Text(255)	Preview Key	cg__Preview_Key__c
Text(255)	Preview Version Id	cg__Preview_Version_Id__c
Checkbox	Private	cg__Private__c
Text(255)	Shortcut	cg__Shortcut__c
Text(255)	Sync Id	cg__Sync_Id__c
Long Text Area(4096)	Tags	cg__Tags__c
Text(255)	Thumbnail Key	cg__Thumbnail_Key__c
Text(255)	Thumbnail Version Id	cg__Thumbnail_Version_Id__c
Text(255)	Version Description	cg__Version_Description__c
Text(255)	Version Id	cg__Version_Id__c
Checkbox	WIP	cg__WIP__c

If you would like to use S-Drive Versioning feature, open S-Drive Configuration tab and click Enable Versioning button to activate version upload feature.
Important Note: If you enable versioning you can't disable it later.

Note that Preview & Thumbnail feature will be auto enabled for S-Drive Folders (S3Object), and Preview & Thumbnail will be generated for your future uploads to S-Drive Folders in 2.1. You can disable this feature from S-Drive Configuration Tab. You can also check Preview & Thumbnail conversion pricing here.

Amazon Region and Remote Site Settings

After switching to Signature Version 4, your AWS S3 bucket region is now required information for S-Drive to work. If you are upgrading to any S-Drive version after 2.5.1 for the first time, it is highly advised to configure your Amazon Credentials and your S3 bucket again. If this is not done it is likely you will get an error when using S-Drive.

Enhanced Email and Lightning Email Component

If you cannot install S-Drive and the message from Salesforce regards to Enhanced Email being disabled, please go to Setup > EnhancedEmail > Enable from Salesforce Lightning Experience.

C Appendix C: Troubleshooting

- [Problem] I'm getting ***"Failed: Unauthorized endpoint, please check Setup->Security->Remote site settings. endpoint = https://s3.amazonaws.com/?......."*** error.
  [Solution] You forgot to set or deleted Remote Site Settings. Go to Setup -> Security -> Remote Site Settings and add this site: ***https://s3.amazonaws.com***

- [Problem] My mail message contains ***"????"*** for some language-specific characters in email clients (Outlook, Thunderbird etc.).
  [Solution] Go to **Setup -> Personal Setup -> My Personal Information -> Personal Information**. Edit **User Detail** and set **Email Encoding** to **Unicode (UTF-8)**.

- [Problem] Salesforce sharing is not working.
  [Solution] Sharing is **only** supported for **S-Drive Folders**. Both, S-Drive Folders and S-Drive Attachments are sharing-aware that means they will respect the sharing rules applied on S-Drive objects.

- [Problem] Percent character (%) is replaced with an underscore character (_) while downloading.
  [Solution] This is a technical limitation.

- [Problem] Some special characters (e.g. ğ, ş, ı) can't be typed into text fields on Apple Macintosh.
  [Solution] This is a limitation related to Flash Player's Macintosh version. This issue will be addressed in later releases.

- [Problem] Special characters in file names are URL encoded for Firefox browser.
  [Solution] This is a limitation of Firefox.

- [Problem] If a sub folder is deleted parent folder's (+) sign stays there until clicked Home and refreshed.
  [Solution] You need to refresh the S-Drive tab.

- [Problem] If folder has no sub folders, tree's folder icon is closed whether we click on it or not. [Solution] This is only a visual problem and it will not affect the operation of the application.

- [Problem] S-Drive tab for Lightning Experience is not visible after installation.
    - [Solution] Go to Setup->Profiles->Edit Your Profile->Tab Settings and then set S-Drive Tab to “Default On”. This issue occurs if you install S-Drive 2.5 before deploying my domain. This is a known issue of Salesforce. You can visit this link for further information.

