S-Drive

Advanced Configuration Guide

v1.23

Important Note

This advanced configuration guide contains advanced information about S-Drive installation/configuration. Refer to the *S-Drive Installation Guide* for basic information about S-Drive installation and *S-Drive User Guide* for more information about using S-Drive product and S-Drive API calls.

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A. Activating S-Drive using Activation Key

If you could not activate S-Drive using "**Activating S-Drive**" section in "**S-Drive Installation Guide**" you can try to activate S-Drive manually using an activation key:

1. Go to S-Drive tab. Click on the **"Pay easily with Amazon Payments"** link. You'll be redirected to a Amazon Payments website and it will require you to login to your Amazon.com account (Figure 1):

    - If you do not have an Amazon.com account, you can get a new account by typing your email address and selecting **"I am a new user."** option.
    - If you already have an Amazon.com account, type in your username, select **"I am a returning user, and my password is:"** option and type your password.
    - Then click **"Sign in using our secure server"** button.

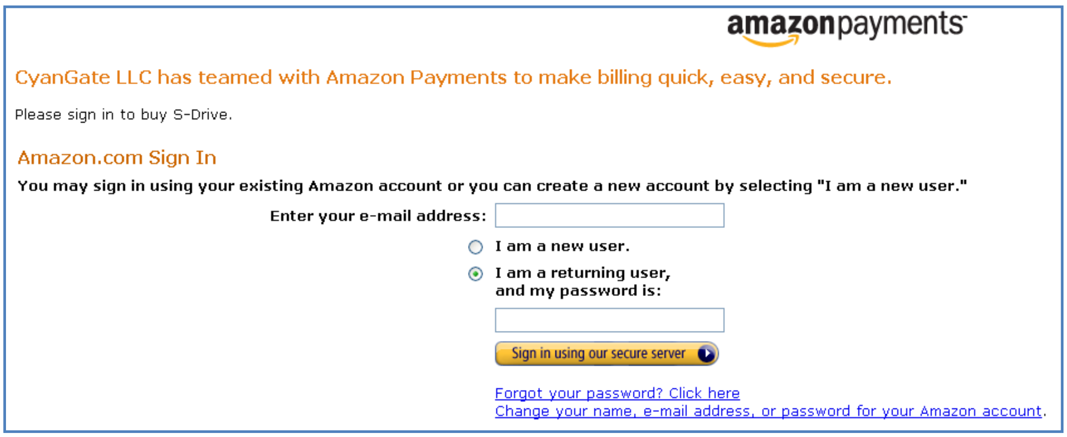


Figure 1

2. You'll enter your payment details in the next screen. Then, click **"Place your order"** to complete entering your payment information (Figure 2).

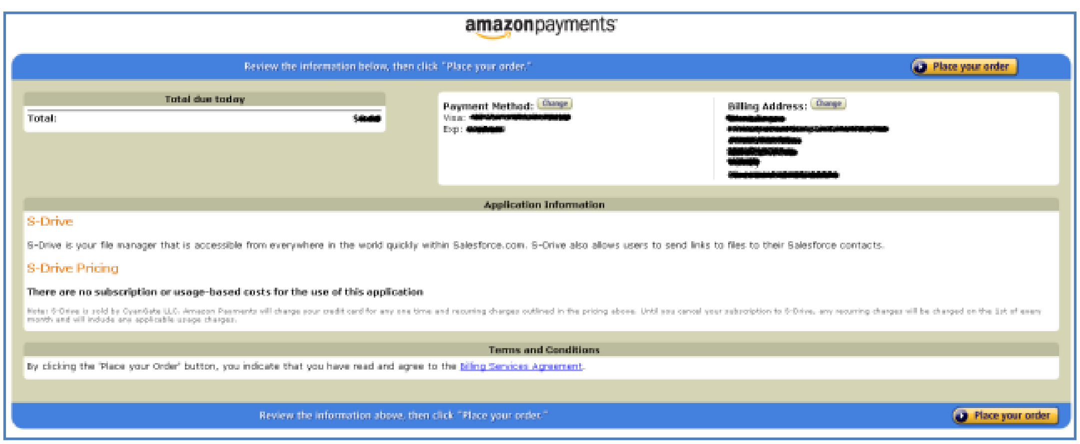


Figure 2

3. At this step, if auto-activation did not work, that means you didn't see **"Welcome to S-Drive! You have activated your product."** message and S-Drive screen (Figure 3), you can use the generated **"Activation Key"** (at the top-right corner of the page, Figure 3) to activate the S-Drive.

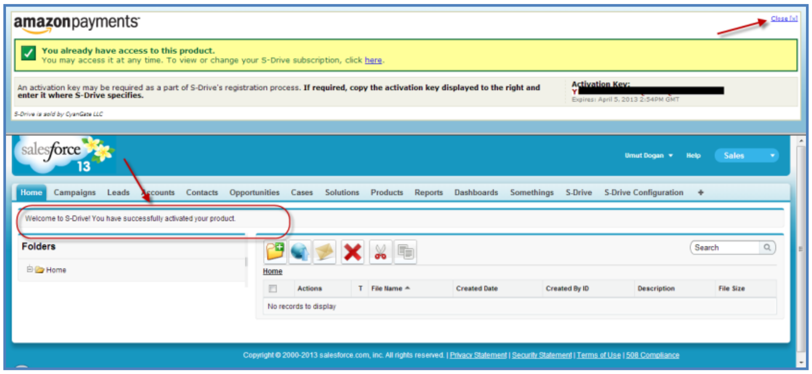


Figure 3

4. After retrieving (copying) your Activation Key, you will need to go back to the **"S-Drive Activation Page"** by clicking on the **S-Drive** tab and type in (paste) your Activation Key. Click **"Activate"** button to complete activating S-Drive (Figure 4).

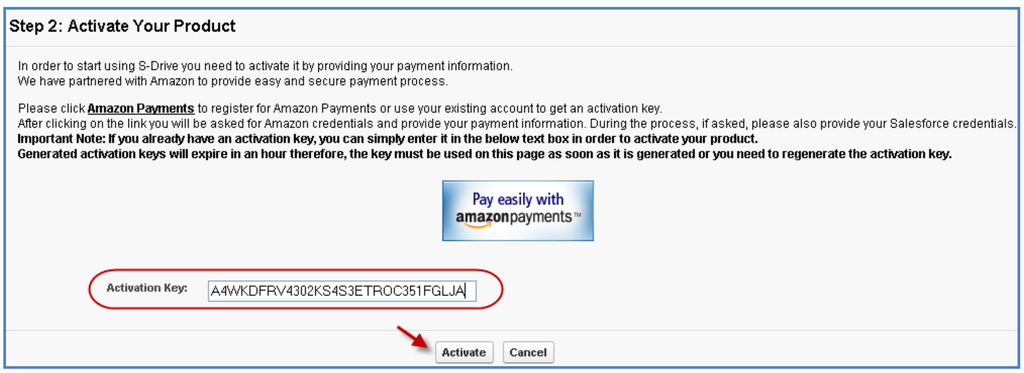


Figure 4

You'll see the below screen after completing the manual activation. It will display **"Welcome to S-Drive! You have activated your product."** at the top of the screen when you first activated S-Drive (Figure 5).

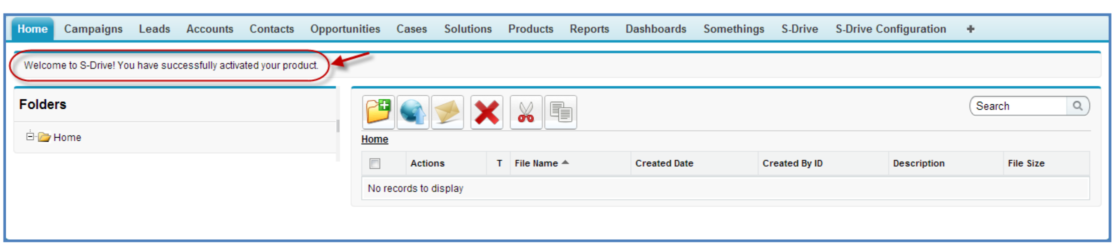


Figure 5

B. Configuring S-Drive Attachments for All Standard/Custom Objects

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

Note that Account, Case, Contact and Opportunity standard object files 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.

In this guide we will show you how to create *a* ***custom object***, *a* ***custom object file*** and a ***custom object page***.

1. Creating Custom Objects

You can use S-Drive Attachments feature on an existing standard/custom object or you can create a custom object from scratch. We have put together the instructions to create objects here for your convenience. *Having a standard/custom object or creating a custom object is mandatory to use the S-Drive Attachments feature*.

If you already have a custom object or you are planning to attach your files to a standard object, you can skip this section.

1. Go to **Setup -> App Setup -> Create -> Objects**. And click **New Custom Object** button (Figure 6).

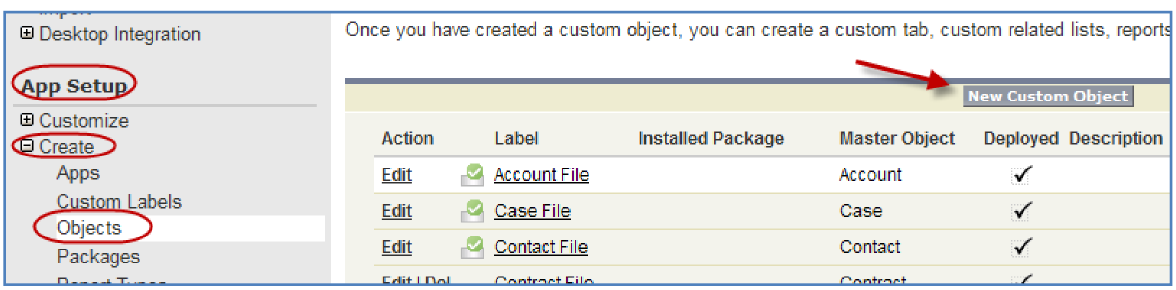


Figure 6

2. Fill in the required fields to create a new custom object. Then click **Save** button.

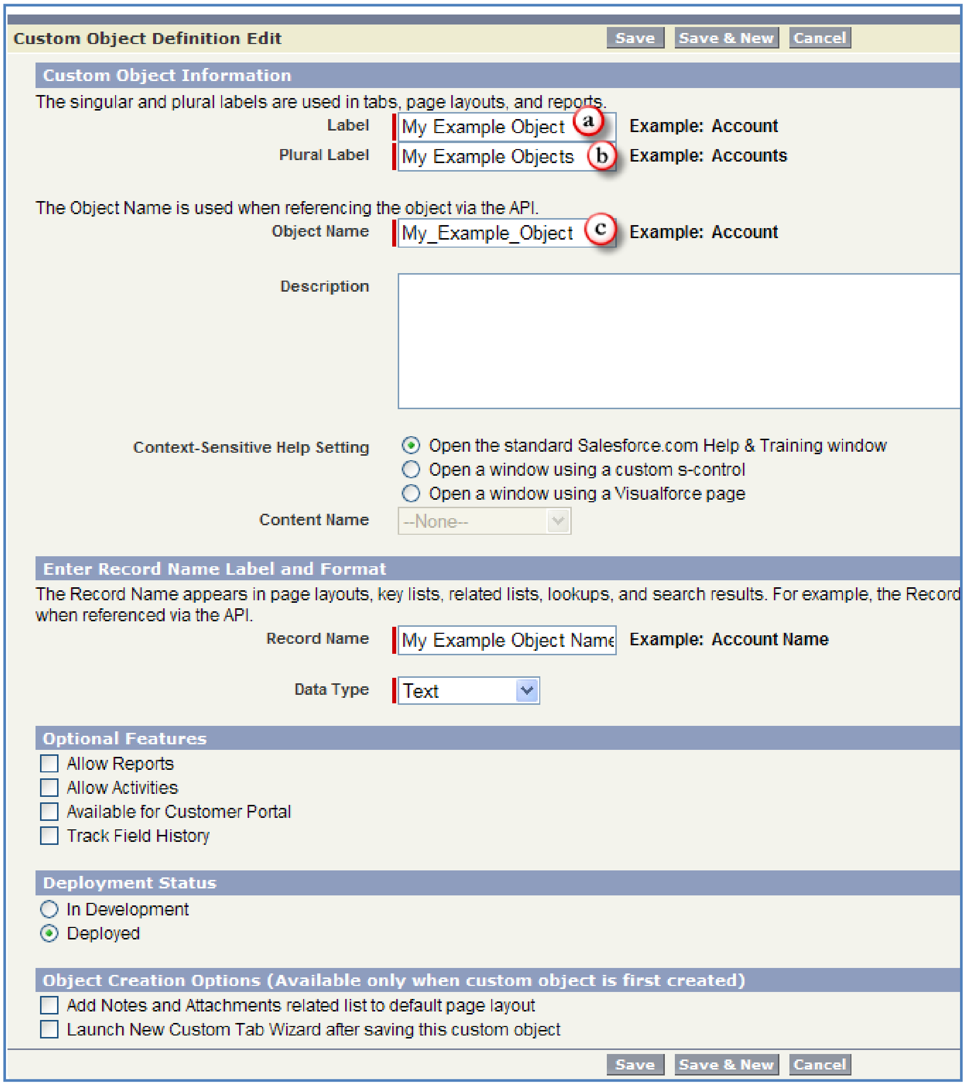


Figure 7

You will need to type in the ***Label*** (Figure 7-a) and ***Plural Label*** *(*Figure 7-*b)* fields. Then the ***Object Name*** (Figure 7-c) field is auto-populated by the system. For example, we give our object “My Example Object” label and “My Example Objects” plural label. The system automatically populated the object name field with “My_Example_Object” value.

Please, pay attention to the “Deployment Status” of your object during creation. It needs to be set as “**Deployed**” to prevent any future issues.

Important Note: *If you want to track emails sent to your contacts in Activity History of the object, you will need to check “**Allow Activities**” option from “Optional Features” section of the standard/custom object edit screen. Additionally, “**Activity History**” section should be added to the page layout to be able to see these email activity entries.*

2. Creating Custom Object Files

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

Second step is to create custom object files. In this step, we are creating the object and fields required by S-Drive to store Amazon S3 file information. Give a meaningful name to your “custom object files” object. For example, if you have a “My Example Object” object, this custom object file’s name should be “My Example Object File”. Let’s create this custom object file and its fields step by step:

1. Go to **Setup -> App Setup -> Create -> Objects**. And click **New Custom Object** button (Figure 8).

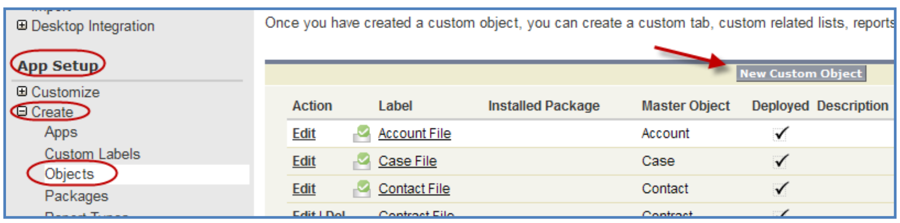


Figure 8

2. Fill in the required fields to create a new custom object. Then click **Save** button (Figure 9).

   In Figure 9-a, you need to type your custom object file label. We strongly suggest you to use a meaningful name related to your custom object name. For example if your custom object name is “My Example Object”, type “My Example Object File” into this field.

   In Figure 9-b, you need to type in the plural label. If you have typed “My Example Object File” for the label, you can type in “My Example Object Files” for the plural label.

   Figure 9-c is filled automatically by the system. Normally it converts spaces in your label name to underscores and copies it into this field. For this example, the auto-populated value is “My_Example_Object_File”.

   Figure 9-d contains record name label and format information. Append “Number” to your label name and type it here. For our example, it will be “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**” and other fields are as shown in Figure 9. Then click “Save” button to create the custom object file.

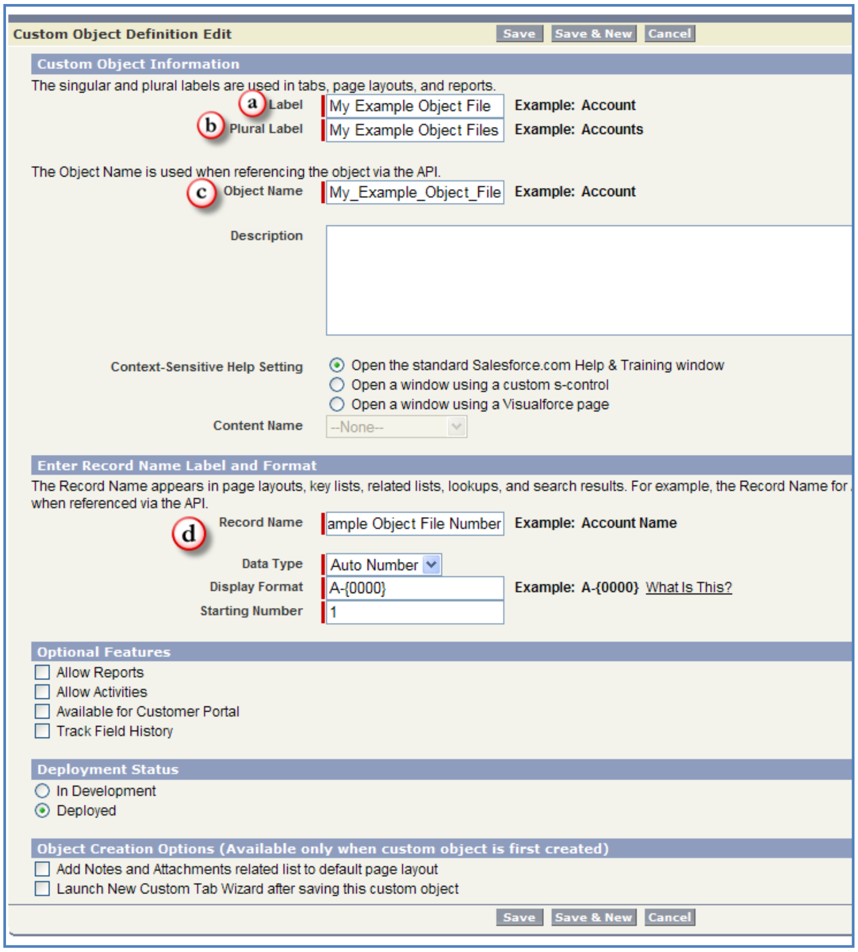


Figure 9

3. After creating the custom object file we need to create custom fields for this custom object.

   If you have clicked the Save button, you'll see "Custom Object Definition Detail" screen. Towards the middle of this screen, you should see a page block titled **"Custom Fields & Relationships"** (Figure 10). You can access this "Custom Object Definition Detail" screen any time by visiting **Setup -> App Setup -> Create -> Objects** and clicking the label of your custom object file. Click New button to start creating "custom fields and relationships". We need to create several fields and a relationship for this object. Please create these fields and relationship carefully by paying attention to the instructions provided here.

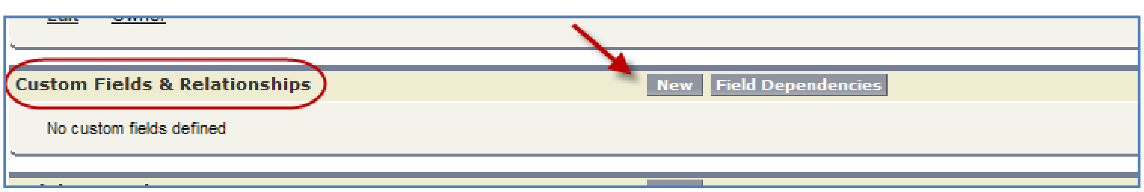


Figure 10

a) Content Type

1. Click **New** button as shown in Figure 10.
2. Select **Text** from **"***Step 1. Choose the field type"* screen (Figure 11-a) and click **Next** button.

Figure 11

3. In *"Step 2. Enter the details"* screen, type "Content Type" for the Field Label (Figure 12-a). Type "255" for the Length (Figure 12-b). Type "Content_Type" for the Field Name (Figure 12-c). Do not change other fields on this screen; keep them as shown in Figure 12. Click **Next** button.

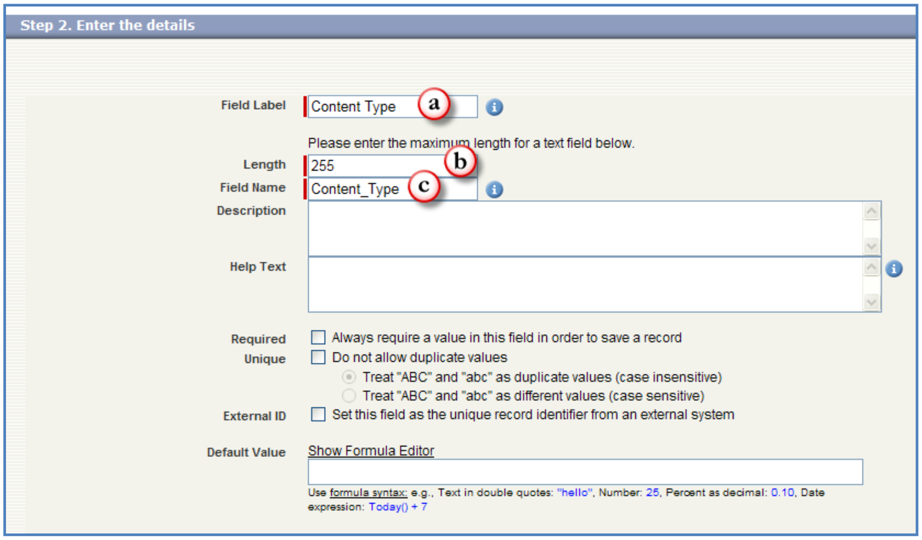


Figure 12

4. Don't change anything in *"Step 3. Establish field-level security"* screen. For all profiles "**Visible"** option should be checked and "Read-Only" options should be unchecked. (Figure 13) Click **Next** button.

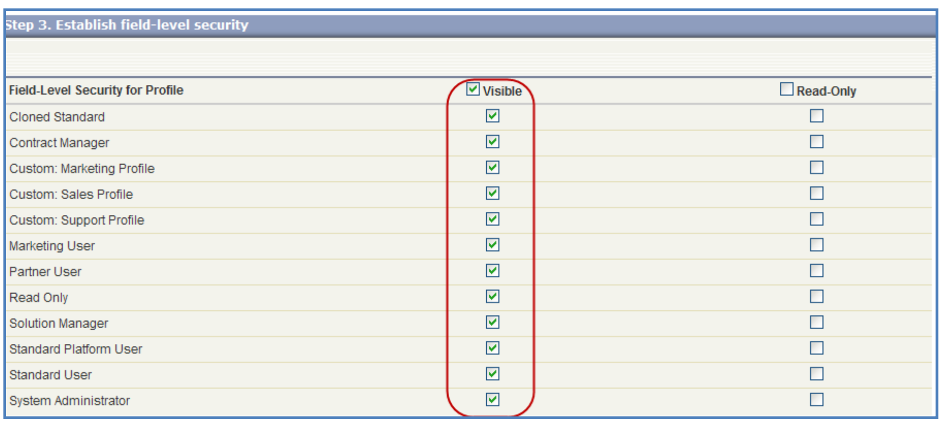


Figure 13

5. In *"Step 4. Add to page layouts"* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

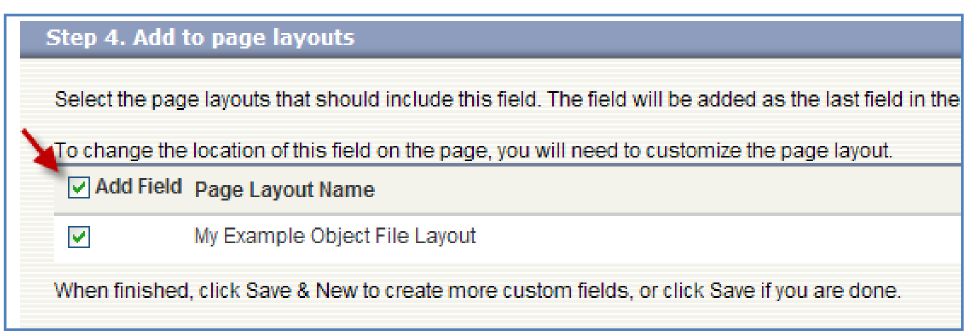


Figure 14

b) Description

1. Select **Text Area (Long)** from *"Step 1. Choose the field type"* screen (Figure 11-b) and click **Next** button.
2. In *"Step 2. Enter the details"* screen, type "Description" for the Field Label (Figure 15-a). Type "Description" for the Field Name (Figure 15-b). Do not change other fields on this screen; keep them as shown in Figure 15. Click **Next** button.

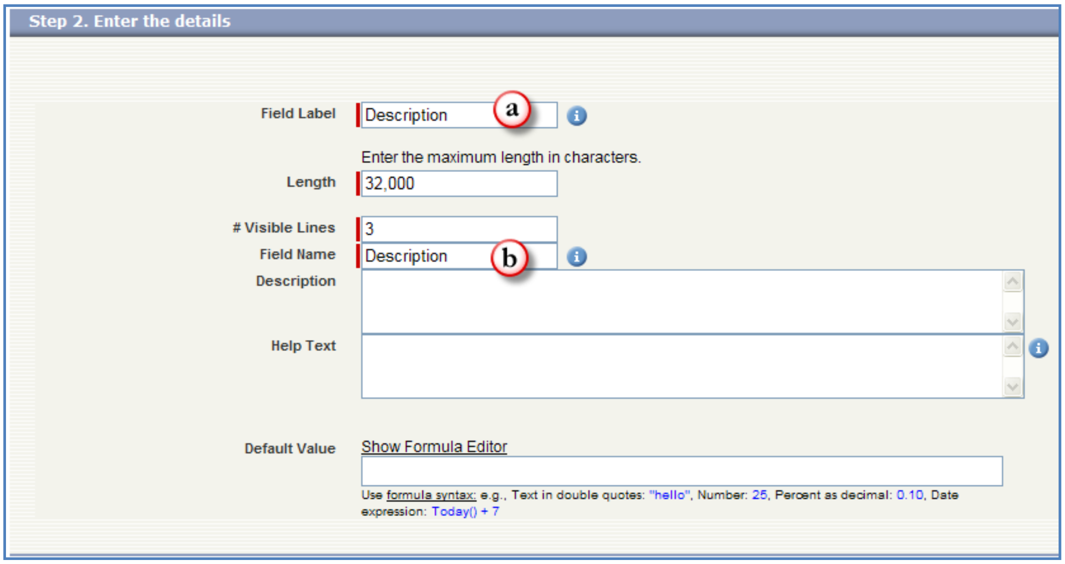


Figure 15

3. Don't change anything in *"Step 3. Establish field-level security"* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked (Figure 13). Click **Next** button.
4. In *"Step 4. Add to page layouts"* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

c) File Name

1. Select **Text** from *"Step 1. Choose the field type"* screen (Figure 11-a) and click **Next** button.
2. In *"Step 2. Enter the details"* screen, type "File Name" for the Field Label (Figure 16-a). Type "255" for the Length (Figure 16-b). Type "File_Name" for the Field Name (Figure 16-c). Do not change other fields on this screen; keep them as shown in Figure 16. Click **Next** button.

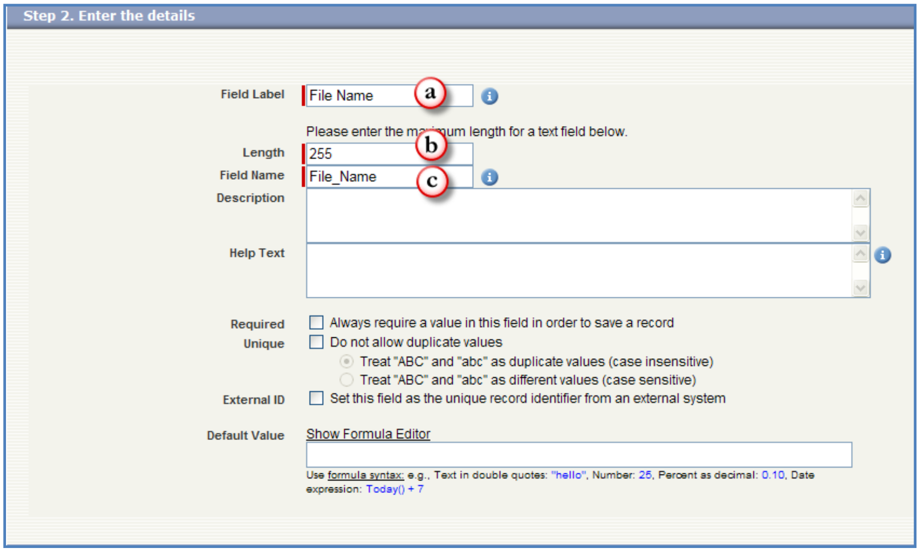


Figure 16

3. Don't change anything in "*Step 3. Establish field-level security*" screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
4. In "*Step 4. Add to page layouts*" screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

d) File Size in Bytes

1. Select **Number** from the "*Step 1. Choose the field type*" screen (Figure 11-c) and click **Next** button.
2. In "*Step 2. Enter the details*" screen, type "File Size in Bytes" for the Field Label (Figure 17-a). Type "File_Size_in_Bytes" for the Field Name (Figure 17-b). Do not change other fields on this screen; keep them as shown in Figure 17. Click **Next** button.

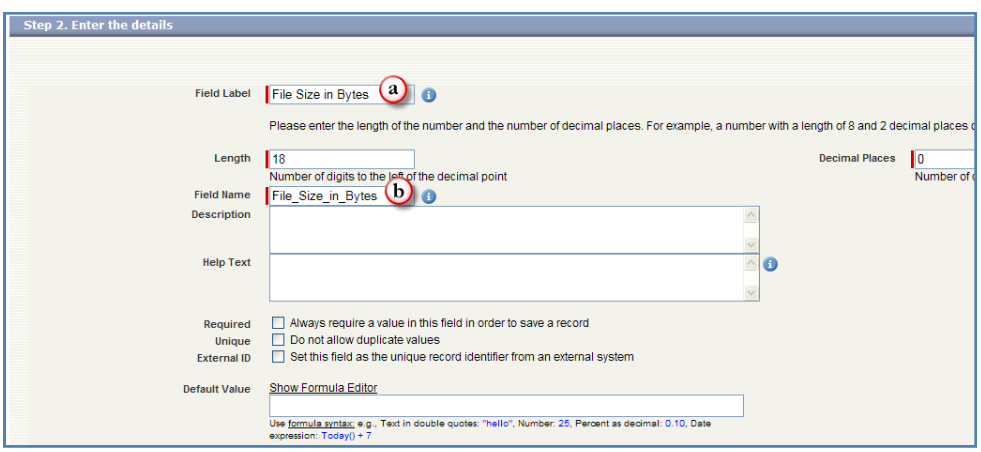


Figure 17

3. Don’t change anything in *“Step 3. Establish field-level security”* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
4. In *“Step 4. Add to page layouts”* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

e) File Size

1. Select **Formula** from the *“Step 1. Choose the field type”* screen (Figure 11-d) and click **Next** button.
2. In *Step 2. Enter the details* screen, type “File Size” for the Field Label (Figure 18Figure 17-a). Type “File_Size” for the Field Name (Figure 18Figure 17-b). Select “Text” for the Formula Return Type (Figure 18-c). Do not change other fields on this screen; keep them as shown in Figure 18. Click **Next** button.

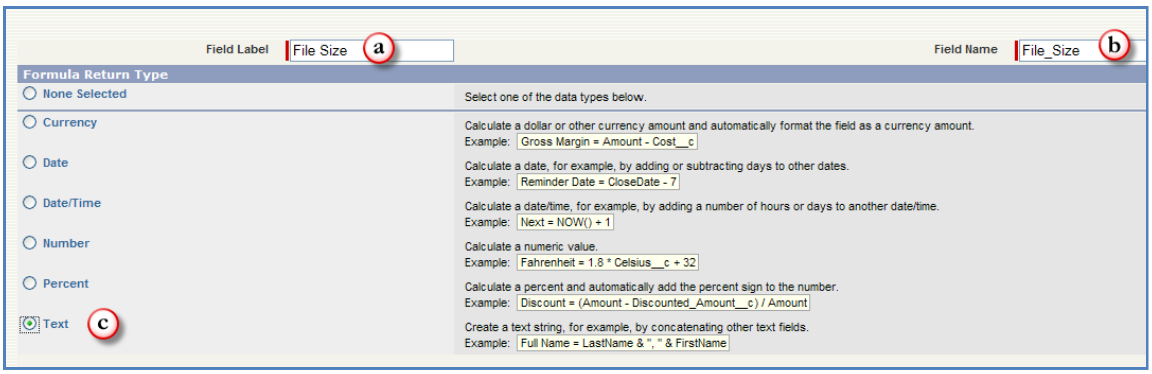


Figure 18

3. In *“Step 3. Enter formula”* screen, type the following code into the “Simple Formula” section as shown in Figure 19-a:

```
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")
```

4. Click “Check Syntax” button (Figure 19-b) to see if you have correctly typed the formula. If you have correctly typed the formula you’ll see “No syntax errors in merge fields or functions. (Compiled size: 324 characters)” message next to the “Check Syntax” button (Figure 19-c). If you have any errors, correct them and then click **Next** button to continue.

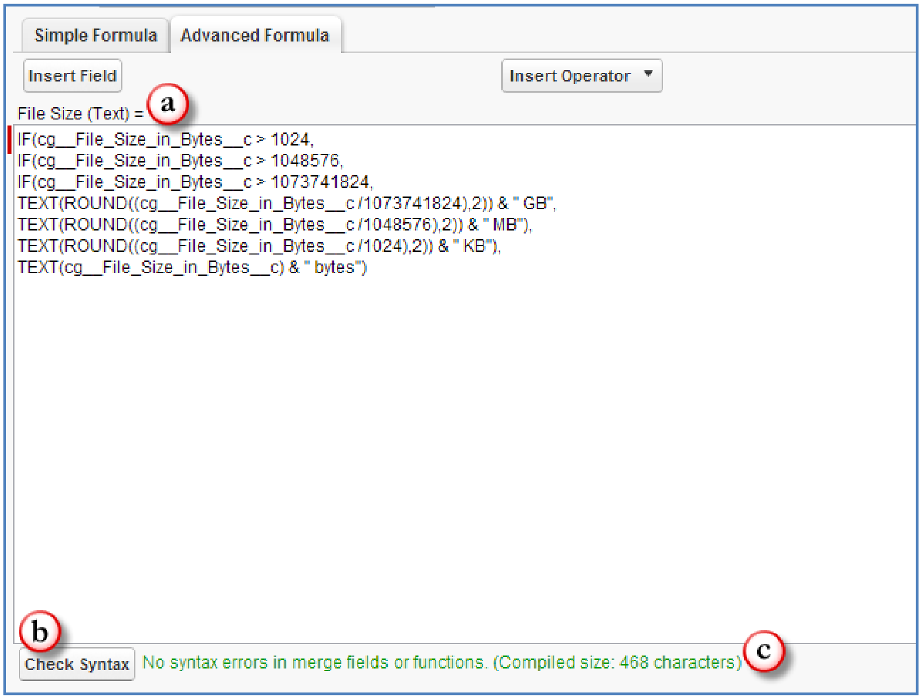


Figure 19

5. Don't change anything in "*Step 4. Establish field-level security*" screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
6. In "*Step 5. Add to page layouts*" screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

f) Parent

1. Select **Master-Detail Relationship** from "*Step 1. Choose the field type*" screen (Figure 11-e) and click **Next** button.
2. In "*Step 2. Choose the related object*" screen, select "My Example Object" from the Related To list (Figure 20). This configuration is relating two objects: My Example Object File and My Example Object. If you are relating your files object with an existing custom object or a standard object, you can select the appropriate object from the list. Click **Next** button.

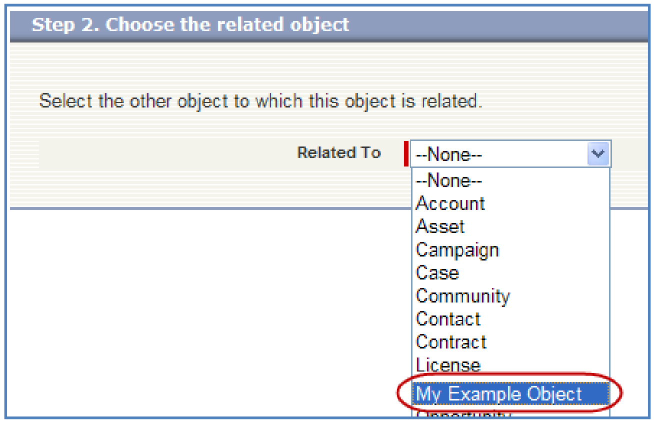


Figure 20

3. In *"Step 3. Enter the label and name for lookup field"* screen, type "Parent" for the Field Label (Figure 21-a). Type "Parent" for the Field Name (Figure 21-b). Select "Read/Write" for the Sharing Setting (Figure 21-c). Do not change other fields on this screen; keep them as shown in Figure 21. Click **Next** button.

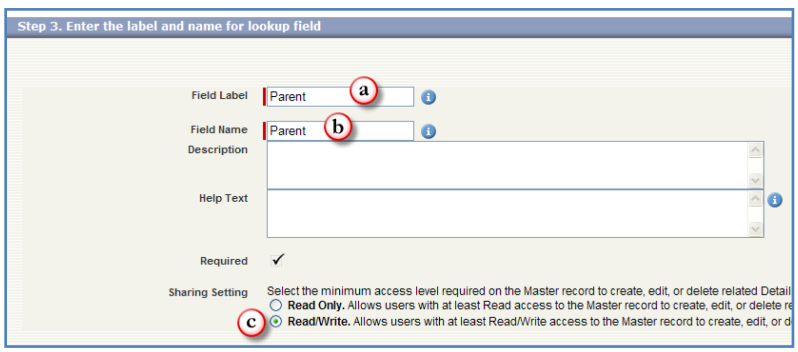


Figure 21

4. Don't change anything in *"Step 4. Establish field-level security for reference field"* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
5. In *"Step 5. Add reference fields to page layouts"* screen, check all checkboxes and click **Next** button (Figure 14).
6. In *"Step 6. Add custom related lists"* screen, check all checkboxes and click **Save & New** button to start creating other fields.

g) Parent Folder Id

1. Select **Text** from *"Step 1. Choose the field type"* screen (Figure 11-a) and click **Next** button.
2. In *"Step 2. Enter the details"* screen, type "Parent Folder Id" for the Field Label (Figure 22-a). Type "255" for the Length (Figure 22-b). Type "Parent_Folder_Id" for the Field

Name (Figure 22-c). Do not change other fields on this screen; keep them as shown in Figure 22. Click **Next** button.

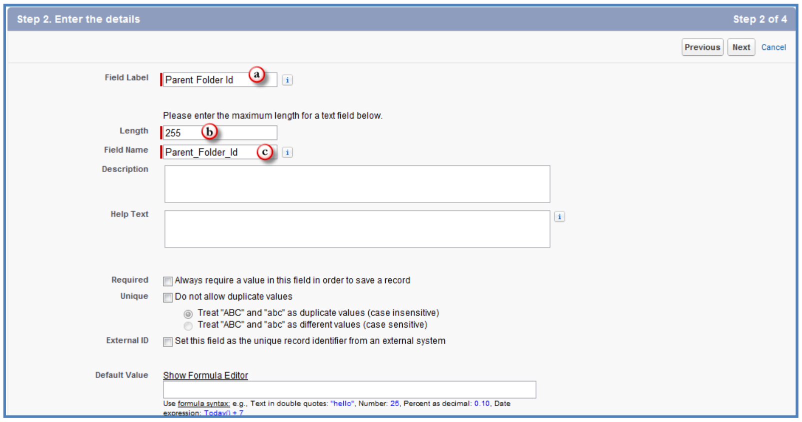


Figure 22

3. Don't change anything in *"Step 3. Establish field-level security"* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
4. In *"Step 4. Add to page layouts"* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

h) WIP

1. Select **Checkbox** from **"***Step 1. Choose the field type"* screen (Figure 11-f) and click **Next** button.
2. In *"Step 2. Enter the details"* screen, type "WIP" for the Field Label (Figure 23-a). Select "Checked" for the Default Value (Figure 23-b). Type "WIP" for the Field Name (Figure 23-c). Do not change other fields on this screen; keep them as shown in Figure 23. Click **Next** button.

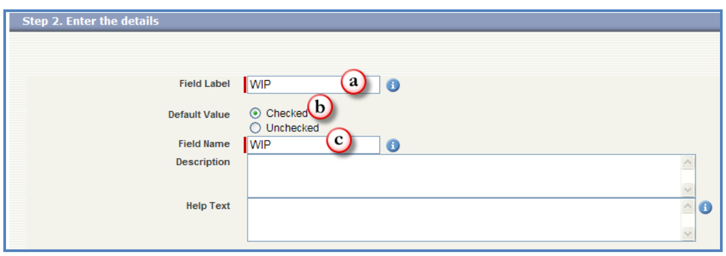


Figure 23

3. Don't change anything in *"Step 4. Establish field-level security"* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
4. In *"Step 5. Add to page layouts"* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

i) Private (Optional)

You need to create this field only if you are planning to use **privateEnabled** component property in AttachmentComponent. See 'Creating Custom Object Files Page' section for more information about usage/setting of this property.

1. Select **Checkbox** from **"***Step 1. Choose the field type"* screen (Figure 11-f) and click **Next** button.
2. In "*Step 2. Enter the details"* screen, type "Private" for the Field Label. Select "Unchecked" for the Default Value. Type "Private" for the Field Name. Do not change other fields on this screen. Click **Next** button.
3. Don't change anything in "*Step 4. Establish field-level security"* screen. For all profiles "**Visible**" option should be checked and Read-Only option should be unchecked. (Figure 13) Click **Next** button.
4. In "*Step 5. Add to page layouts"* screen check all checkboxes and click **Save & New** button to start creating other fields (Figure 14).

Notes

1. Custom Object File name (e.g. cg__My_Example_Object_File__c) must have 35 or less characters (including namespace prefix) because of Custom Settings limitation of Salesforce.com. Otherwise you won't be able to select 'fields to display' for this custom object from S-Drive Configuration screen.
2. Since S-Drive 1.17, you can add other types of custom fields to the custom object file. You can manage their visibility from "S-Drive Configuration" tab.
3. Multiline text area fields are displayed as single line text box field in upload screen. You can modify multiline text by clicking the "Edit" link in object's page after uploading the file.
4. Checkbox fields can't display default values that you set when creating the custom field.

3. (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.

We have completed creating our custom object and custom object file. 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 24). (To create triggers on standard objects go to **Setup -> App Setup -> Customize -> Standard Object Name** (e.g. Solutions) **-> Triggers**.)

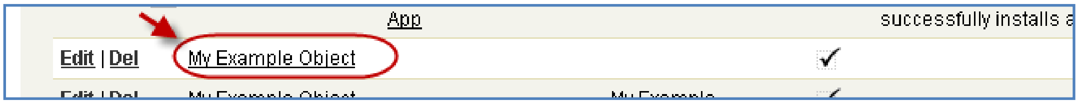


Figure 24

2. Find “Triggers” page block in the opening page. Click **New** button to create a new trigger. (Figure 25).

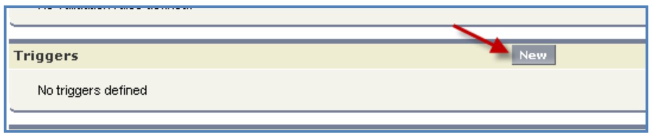


Figure 25

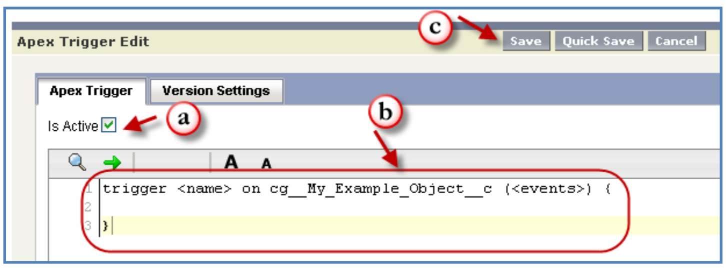


Figure 26

3. Make sure “**Is Active**” is checked in the “Apex Trigger Edit” screen (Figure 26-a). Type the trigger codes defined below, inside the code block (Figure 26-b). 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 27). Click **Save** button to create the trigger (Figure 26-c).

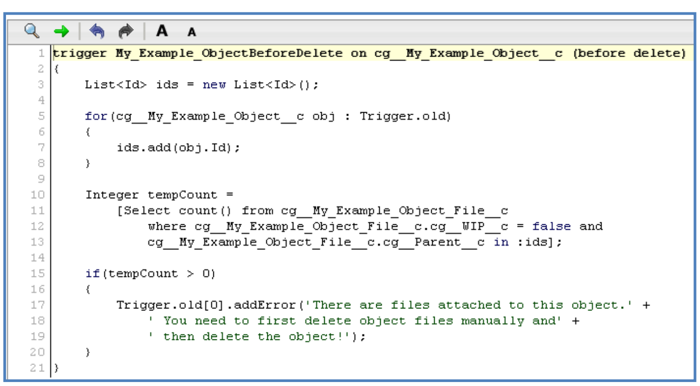


Figure 27

trigger **YourObjectName**BeforeDelete 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**.**NamespacePrefix**WIP__c = false and **YourObjectFileNameContainingNamespacePrefix**.**NamespacePrefix**Parent__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!"*

4. Creating Custom Object Files Page

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 28).

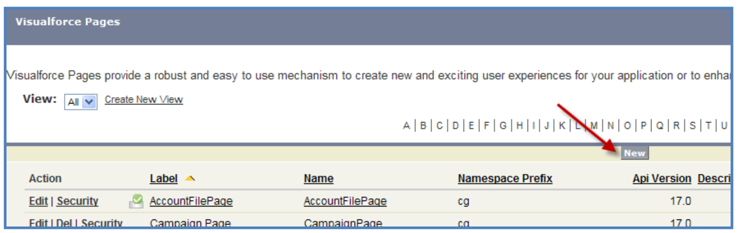


Figure 28

2. In the "**Page Edit**" screen you'll create your new page. Give an appropriate name to your page. For our example, we are going to be using "MyExamplePage". Type "MyExamplePage" inside Label field (Figure 29-a). Type "MyExamplePage" inside Name field (Figure 29-b).

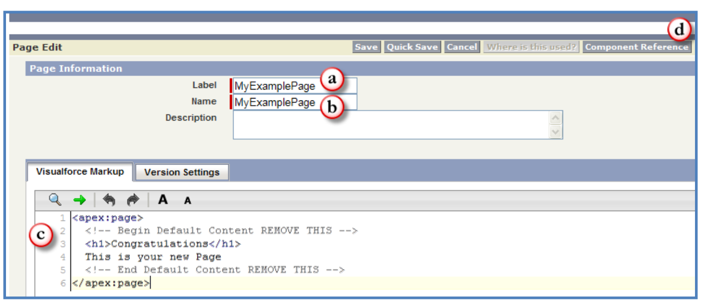


Figure 29

You need to set the "Salesforce.com API" version to 22.0 or above to use S-Drive 1.23 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 30).

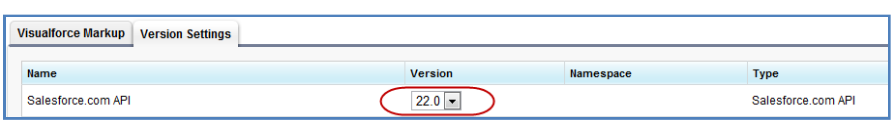


Figure 30

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"
      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"
      enableDownloadManager="true/false"
      enableFolders="true/false"
      relationshipName="Parent__r"
      pageSize="100"
      enableJavaUpload="true/false"
      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:

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 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.

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. **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".

4. **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.

5. **customObjectFileName**
   This is the name of the custom object file that we have created in previous sections. This object will be holding the information regarding the attached files. For our example, it is "My_Example_Object_File__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.

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

7. **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 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__".

8. **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__".

9. **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.

10. **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.

11. **enableDownload (optional)**
    This option is used to enable/disable "Download" link for all attachments in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Download" 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, "Download" links will be visible for each asset. Note that security and permission settings override this option.

12. **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.

13. 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.

14. 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.

15. 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.

16. 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*.

17. 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.

18. 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 31).

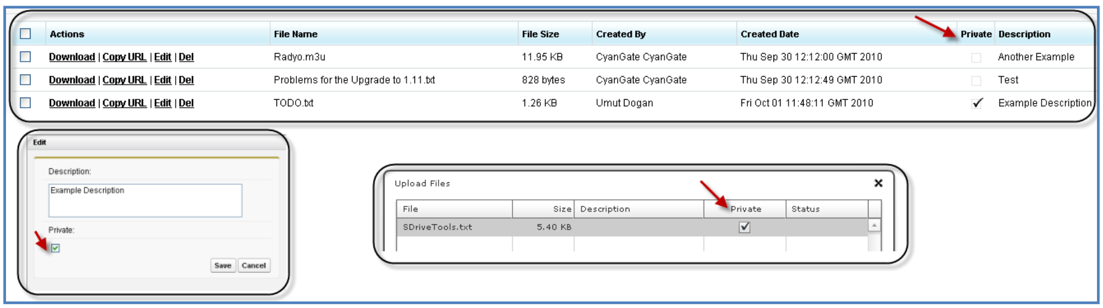


Figure 31

19. 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 without namespace prefix. This attribute is optional and leaving this empty will not order the results in any specific order. For example: "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.

20. 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 32).

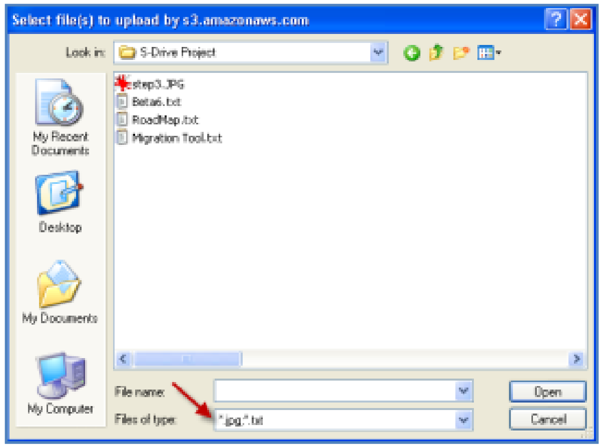


Figure 32

21. 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.

22. 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.

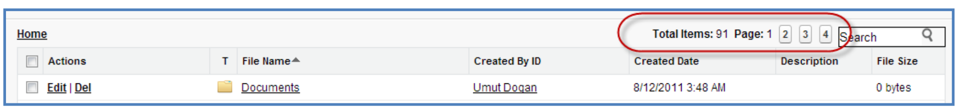
23. enableDownloadManager (optional)

This option is used to enable/disable "Download Manager" button in the page. There are two possible values for this attribute: **"true", "false"**. If "false" is set "Download Manager" 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 “false”; therefore “Download Manager” button won't be visible for each asset. Note that security and permission settings override this option.

24. **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.

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

26. **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.



27. **enableJavaUpload (optional)**
    Set this attribute to true to enable 'Java based Upload Widget' for selected S-Drive Attachment object. The default for this attribute is false. You can switch between flash and java upload types via upload screen also. This value overrides the "Default Upload Manager" configuration in "S-Drive Configuration".

28. **useUploasAsPopup (optional)**
    Set this attribute to true to enable 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 29-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 33).

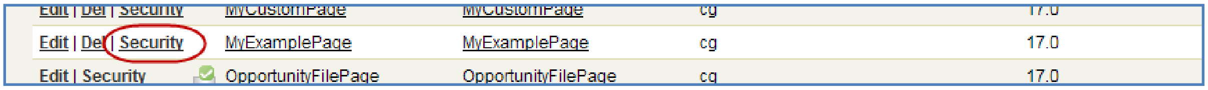


Figure 33

Move all profiles (or select based on your needs) from “Available Profiles” to “Enabled Profiles” as shown in Figure 34. If you skip this step, your users that belong to the disabled profiles will see an error page similar to Figure 35.

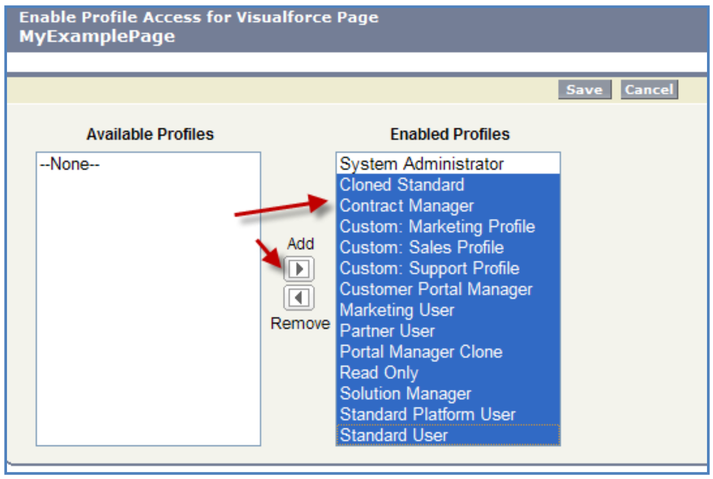


Figure 34

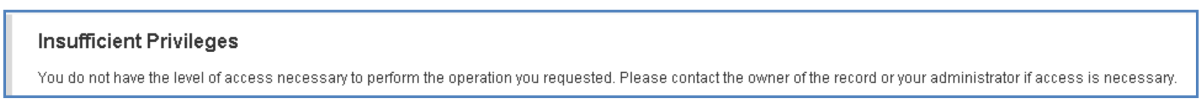


Figure 35

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.

1. 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.

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 **“Standard Buttons and Links”** page block and click **Edit** action next to the **View** label (Figure 36-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 36-b).

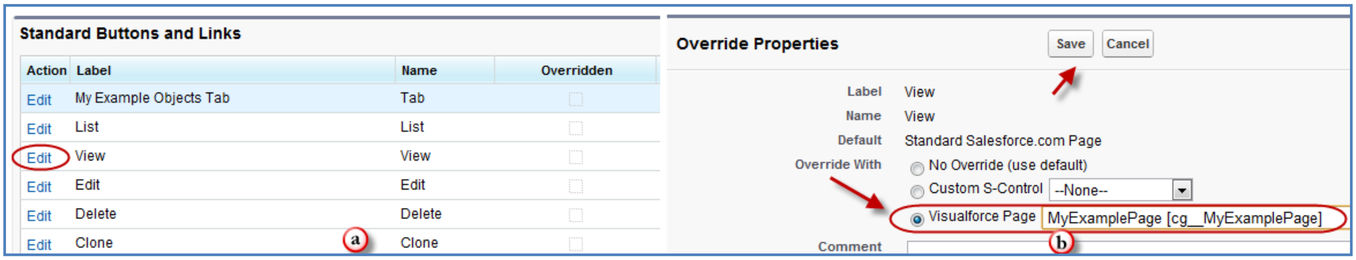


Figure 36

2. Now it will display **View** as **Overridden** in the *Standard Buttons and Links* section (Figure 37).

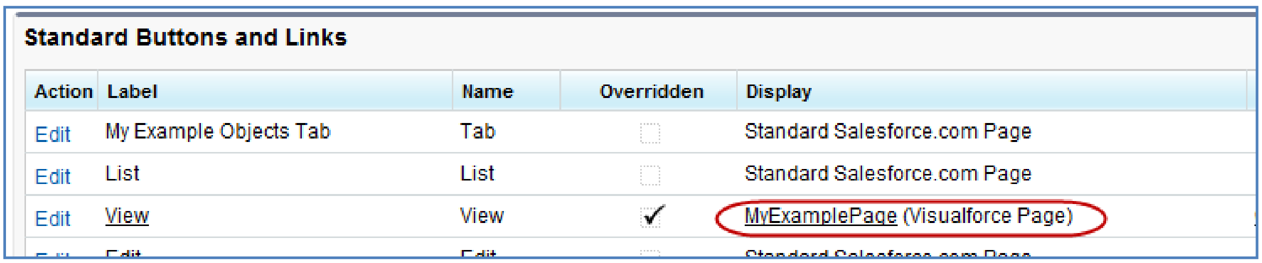


Figure 37

3. After creating a test object you should see “My Example Object Files” page block at the end of the object detail page (Figure 38). See “User Guide” for more information on how to use the buttons and functions in this page block.

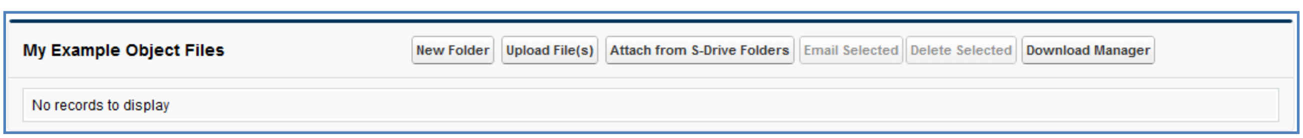


Figure 38

2. 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 39).

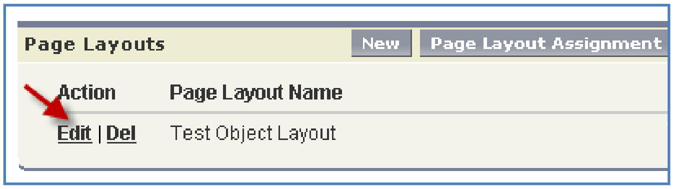


Figure 39

2. Click Fields and drag-drop a **Section** to an appropriate place in the layout (Figure 40).

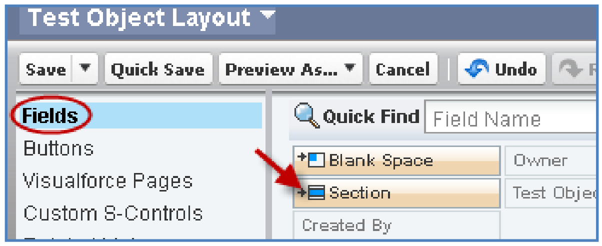


Figure 40

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 41).

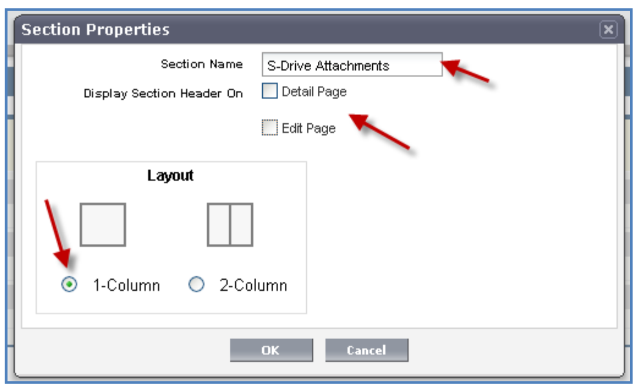


Figure 41

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 42).

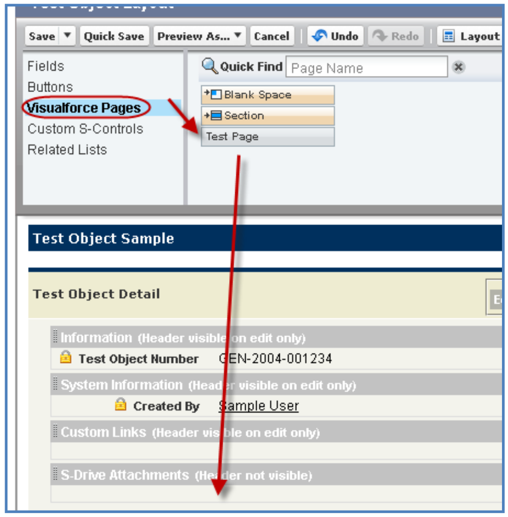


Figure 42

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 43).

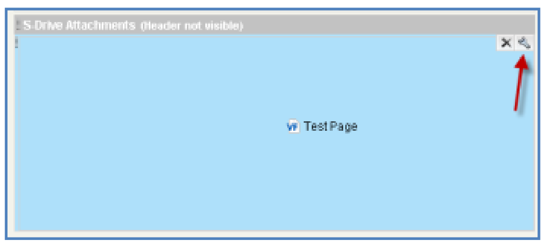


Figure 43

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 44).

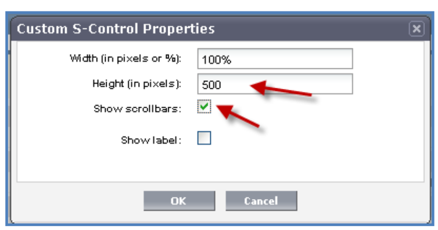
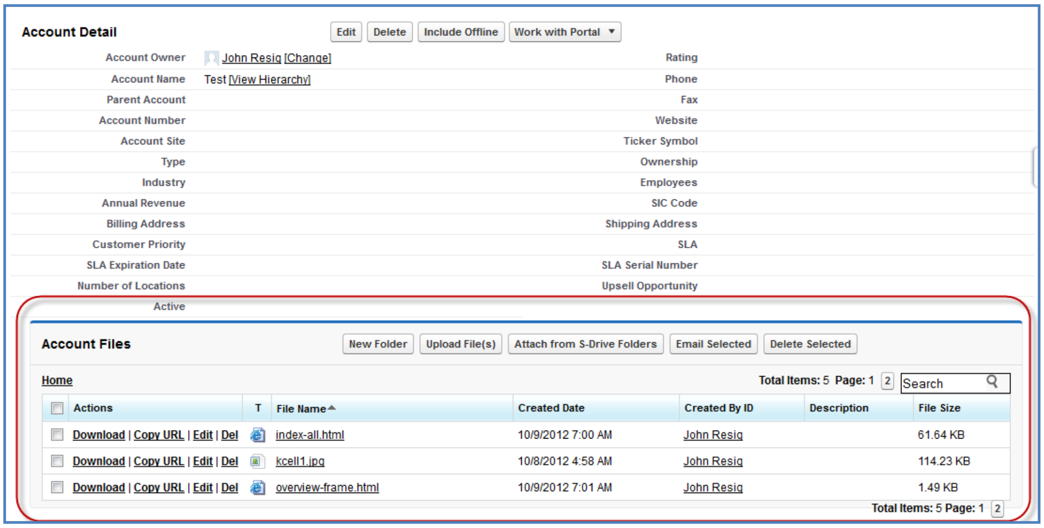


Figure 44

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 40).

9. Now if you go to your object's tab (page), you'll see the S-Drive Attachments inline in the page layout (Figure 45).

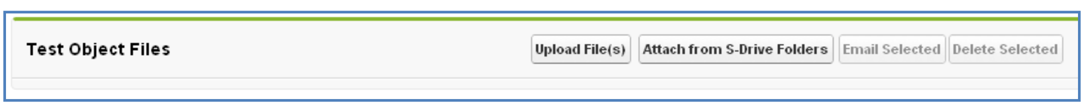


Figure 45

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

1. 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** (Figure 46).

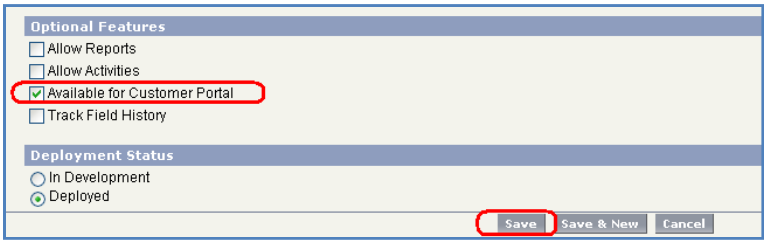


Figure 46

2. Go to **Setup -> Administration Setup -> Manage Users -> Profiles** and click **Edit** next to your currently installed Customer Portal Manager installation (Figure 47). Note that selected profile must be a cloned profile to make changes on it.

Figure 47

3. Give **Read, Create, Edit** and **Delete** access to the **Case Files** custom object by checking the appropriate checkboxes, then click **Save** (Figure 48).

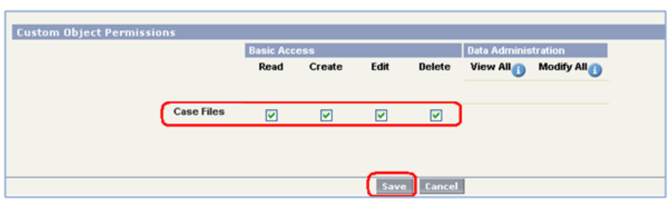


Figure 48

4. Now your customers can upload Case Files using Customer Portal.

5. *(Optional)* Remove **Submit & Add Attachments** button from new case creation screen.

    a. Go to **Setup -> App Setup -> Customize -> Cases -> Page Layouts**. Select **Edit** button next to the **Case Layout** (Figure 49).

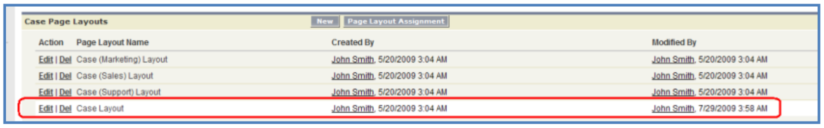


Figure 49

b. Click **Layout Properties** from the top **Case Layout** section (Figure 50).

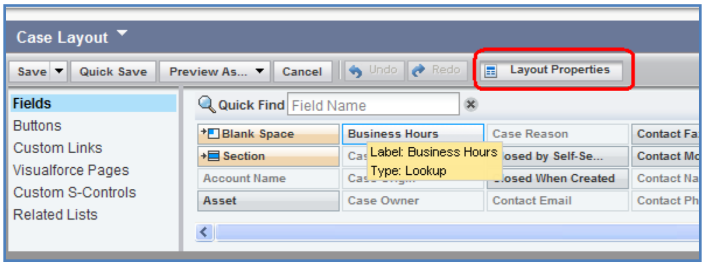


Figure 50

c. Uncheck the **Show button on Customer Portal edit page** option and click **OK** button (Figure 51).

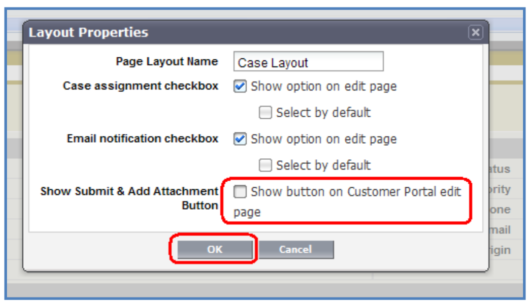


Figure 51

d. Save your changes by clicking **Save** at the top of the page (Figure 52).

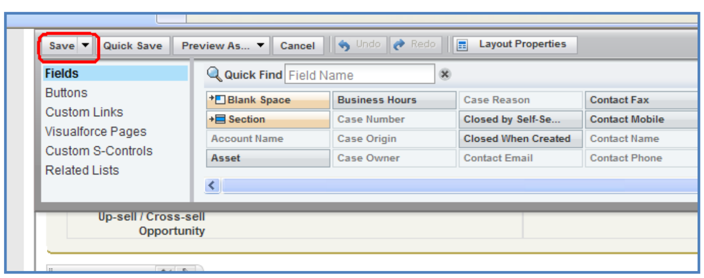


Figure 52

D. 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.

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

S-Drive Configuration screen mainly separated into three sections: S-Drive System Information, General Settings, Field Display Settings by Object Type (Figure 53).

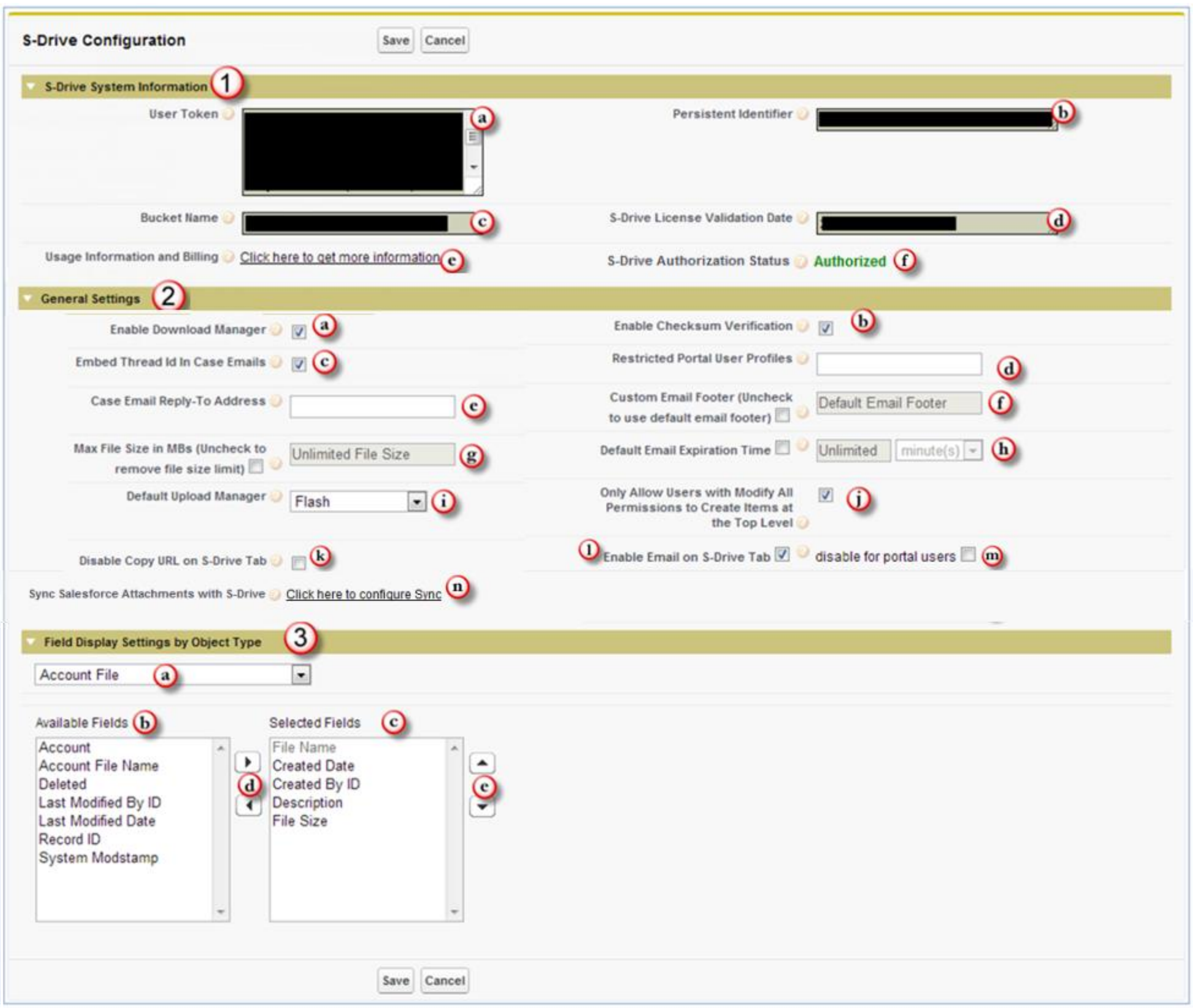


Figure 53

1. S-Drive System Information

This section contains system-wide information for S-Drive. You can see "User Token", "Bucket Name", "Persistent Identifier", "S-Drive License Validation Date", "Usage Information and Billing" and "S-Drive Authorization Status" using this section.

2. General Settings

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

a. Enable Download Manager

This configuration enables "Download Manager" for S-Drive Folders. Once "Download Manager" is enabled, a new button will be added to the "S-Drive Folders" screen (Figure 54).

Figure 54

b. Enable Checksum Verification

If you want to make sure the files downloaded using Download Manager are not corrupted, you need to enable checksum verification. This may increase the time to download files however, this option guarantees that your files are intact during downloads.

c. 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.

d. 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.

e. 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.

f. 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.”**.

g. 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 55):

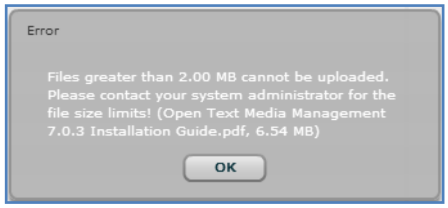


Figure 55

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.

h. 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 56). Users can always modify the email expiration time while sending the emails.

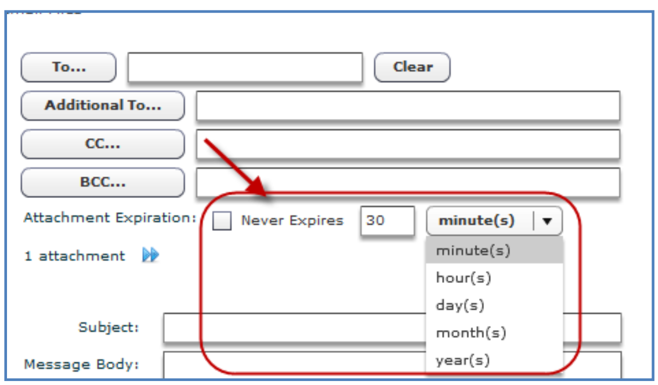


Figure 56

i. Default Upload Manager

This configuration is used to set the default upload manager for the whole organization. Possible values are **"Flash"**, **"Flash with Popup"**, **"Java"** and **"Java with Popup"** (**Error! Reference source not ound.**). Default value is "Flash". This configuration can be overridden by individual S-Drive Attachment objects using the attachment component properties **"enableJavaUpload"** and **"useUploadAsPopup"**. "Java" and "Java with Popup" are interpreted same for S-Drive Folders and opens a Java Upload Widget as popup.

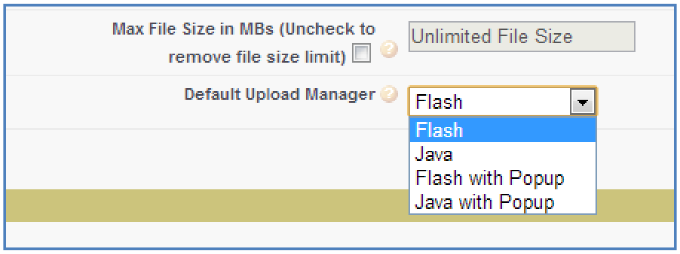


Figure 57

j. 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".

k. 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).

l. 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).

m. 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.

n. Sync Salesforce Attachments with S-Drive

This configuration is used to configure syncing Salesforce Attachments for any standard/custom object with S-Drive. After configuring Attachment Sync, new attachment will be uploaded to S-Drive automatically. You can also configure deleting the Salesforce attachments after successful configuration (Figure 58).

If you want to enable attachment sync for an object, select the "Object" from the "Synced Objects" section and select the "Object File" to be used for syncing and check "Enabled" checkbox. Please note that this list gives all the objects that is configured to be used with S-Drive. If you want to enabled Salesforce Attachments to S-Drive Attachments sync, you just need to check the related "Enabled" checkbox (Figure 58-a, Figure 58-b, Figure 58-c).

In "General Settings" section you can enable handling attachments in email messages by checking "Enable To Handle Email Attachments" (Figure 58-d). You can check "Enable To Delete Attachments After Upload" configuration, if you want to delete the Salesforce Attachments after successfully syncing to S-Drive Attachments (Figure 58-e). If you uncheck this option both Salesforce Attachments and S-Drive Attachments will be available after syncing.

You can save the configuration by clicking Save button (Figure 58-f).

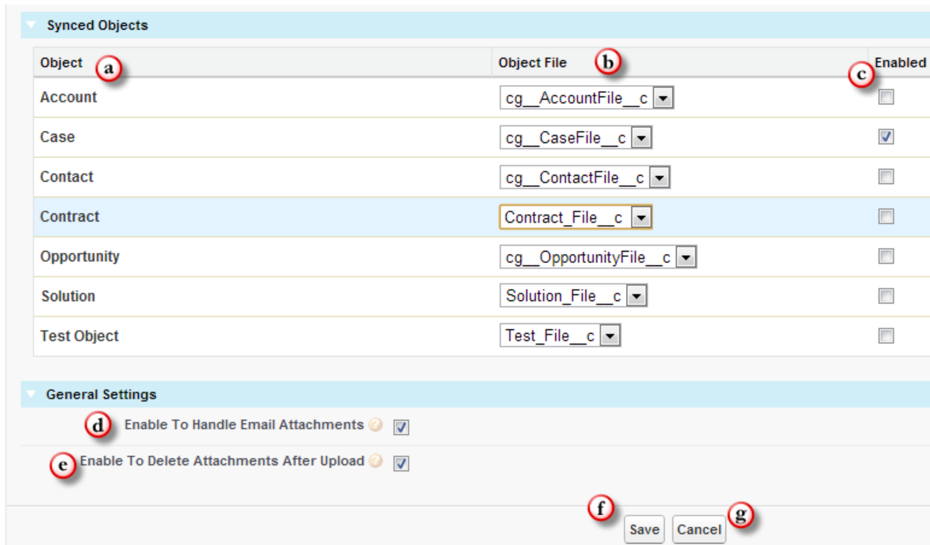


Figure 58

See "Attachment Sync" section for more details about the sync process.

3. Field Display Settings by Object Type

This section allows a system administrator to change field display settings of S-Drive Attachment objects. By default, S-Drive Attachments sections of all objects have these columns: "File Name", "Created Date", "Created By ID", File Size", "Description" (Figure 59).

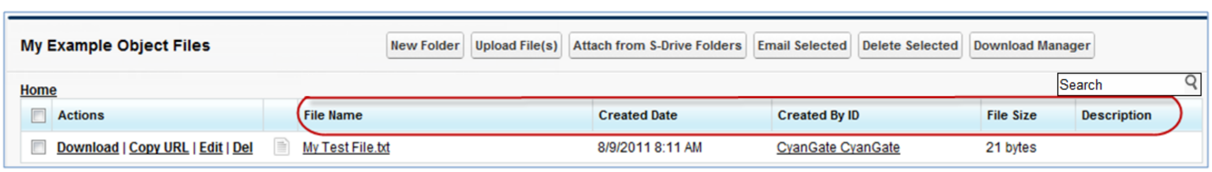


Figure 59

You can add several custom fields to the object file (See 2. Creating Custom Object Files section) and customize your attachments screen columns based on your custom fields.

To set the field display settings for an object, select the object from drop-down. Select the fields from "Available Fields" and click left arrow button to move these fields to the "Selected Fields" section. You can also change the order of the fields by using Up-Down arrows. Click "Save" button to save changes. (Figure 60). Note that you cannot change the first column of the file list, it is fixed as the "File Name" field.

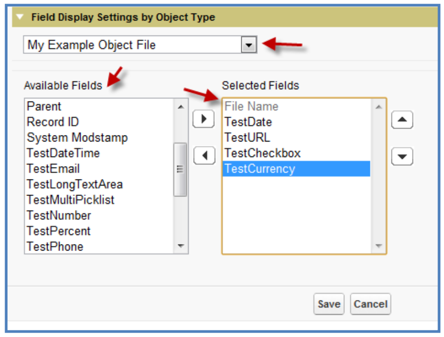


Figure 60

You should see the *"You have successfully saved configuration changes!!!"* message at the top of the S-Drive Configuration page (Figure 61).

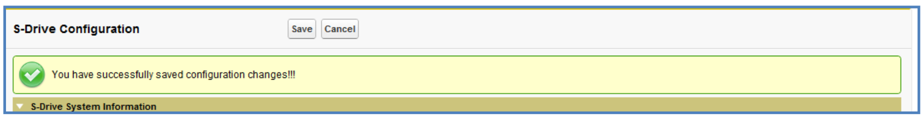


Figure 61

Now if you go to your custom object's page, you should see the displayed fields are changed (Figure 62).

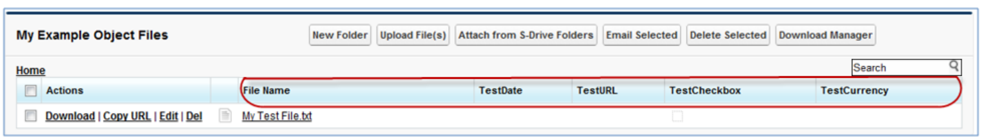


Figure 62

Widgets will be displayed based on your selection in the upload screen (Figure 63):

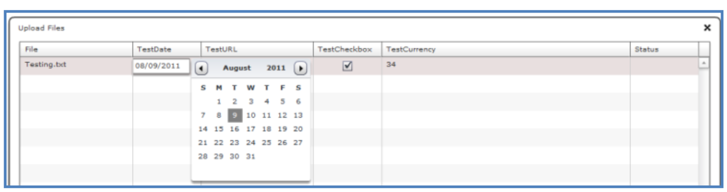


Figure 63

And if you edit the files, you will also see the correct widgets based on the types of the fields (Figure 64):

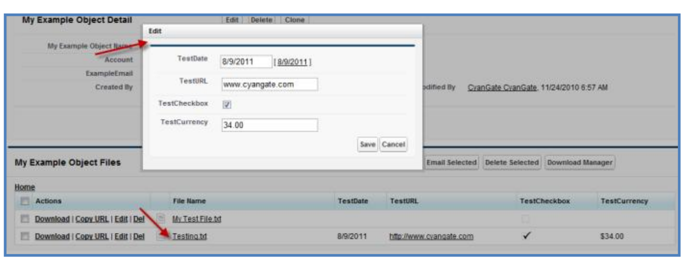


Figure 64

4. Hidden Custom Settings

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 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.

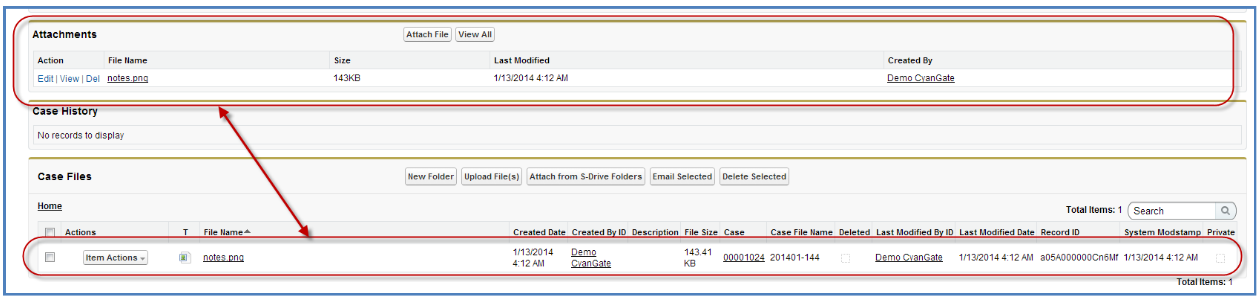
MultipartUploadPartSize: This configuration is used for Java Upload Widget to split the file to be uploaded into parts for multipart upload. Default is 5 MB. This value can be between 5 MB and 5120 MB. So if you'll upload a 50 MB file while this configuration is set to 5 MB, it'll split the uploaded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

E. Attachment Sync

See "S-Drive Configuration - > General Settings -> Sync Salesforce Attacments with S-Drive" section to setup Attachment Sync for your account.

Once you configure Attachment Sync with S-Drive, you can start using Attachment Sync features. All attachments uploaded to Salesforce will be synced with the S-Drive for the selected object. Sync is processed based on a queue, so new items will appear in S-Drive attachments in a few seconds/minutes.

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



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

This process also does not sync the previous Salesforce Attachments before the sync configuration. You can sync those attachments with S-Drive using the "Migrate" option in S-Drive Admin Tool.

F. S-Drive Reports

Since version 1.17, 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 a 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 DownloadManager Download Started: When user starts a download using "Download Manager", this type of activity is created.

4) S-Drive DownloadManager Download Completed: When user's download that is started using "Download Manager" is completed successfully, this type of activity is created.

5) S-Drive Email Sent: When user sents 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 65).

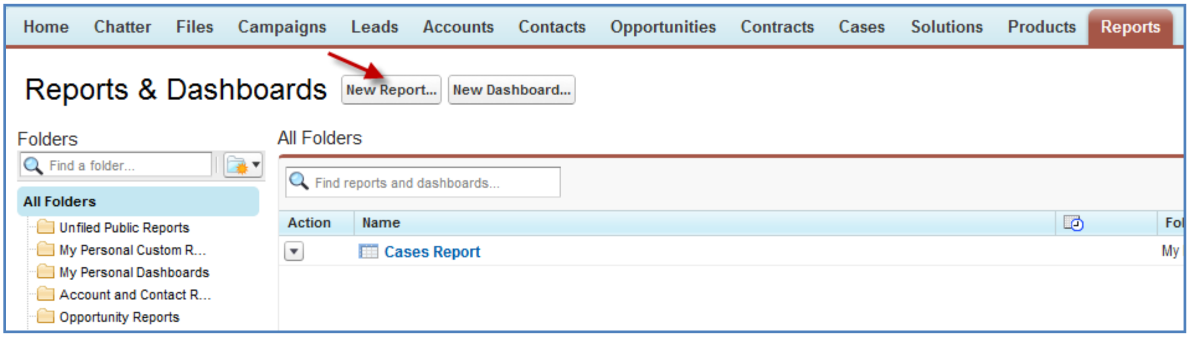


Figure 65

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 66).

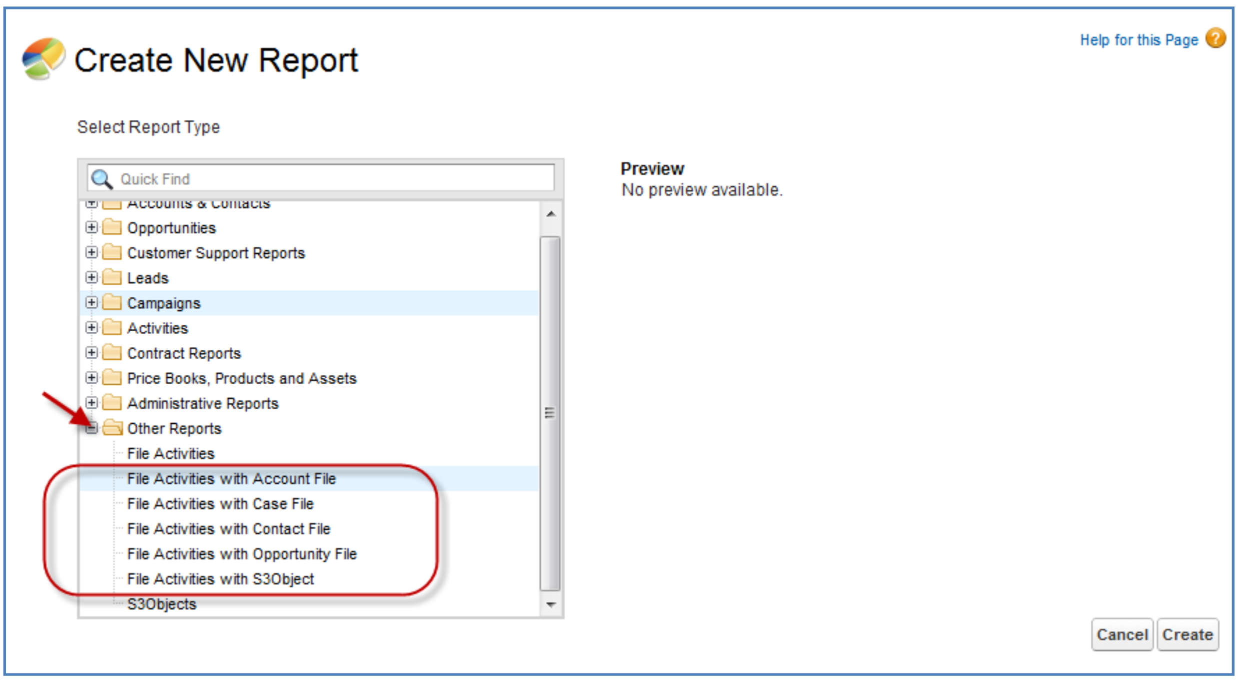


Figure 66

3. After clicking "Create" button, report creation screen will be displayed (Figure 67). 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.

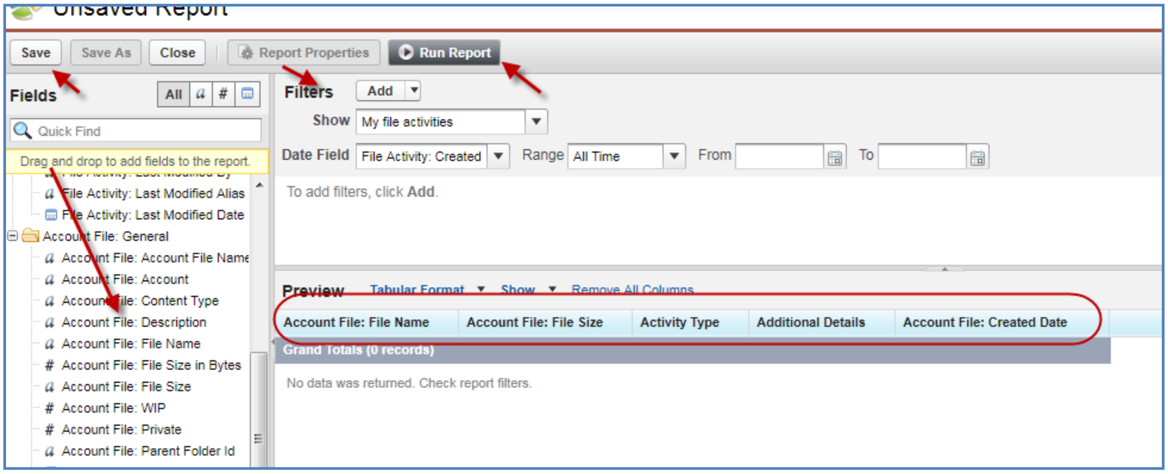


Figure 67

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 68).

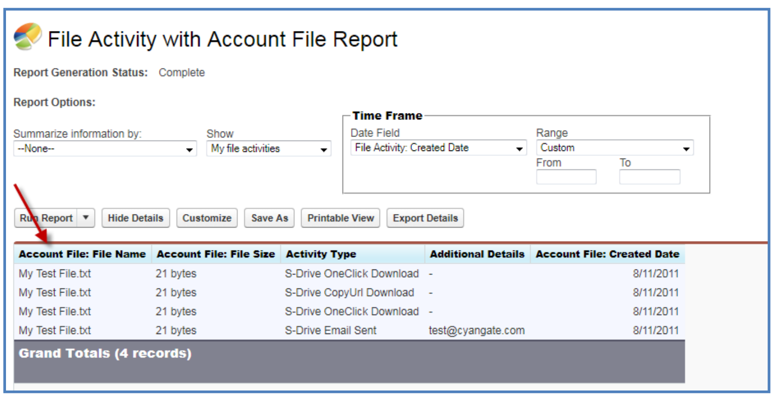


Figure 68

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.
2. On Chrome browser, "S-Drive Email Sent" activity cannot be recorded.

G. Enabling "Share" Action Menu Item for S-Drive Folders

With version 1.23, sharing individual files/folders is supported. To enable sharing for S3Objects you need to set the organization-wide defaults for S3Objects to "Private and Hierarchy enabled". Click **Setup -> Administration Setup -> Security Controls -> Sharing Settings** (Figure 69).

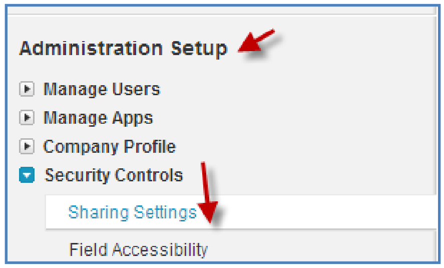


Figure 69

Then click "Edit" button. Set the S3Object's organization-wide sharing defaults to "Private" and check "Grant Access Using Hierarchies" checkbox for this object (Figure 70).

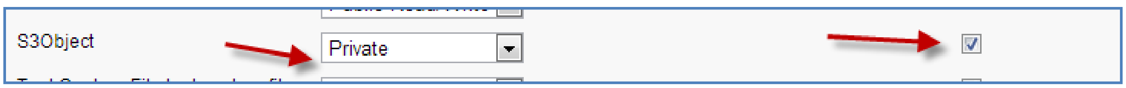


Figure 70

You can refer to the "S-Drive User Guide" for more information about the usage of the "Share" item menu action.

H. Applying Sharing Rules to S-Drive Files/Folders

In S-Drive, sharing is **fully supported for S-Drive Folders** but **not fully supported for S-Drive Attachments**. But, S-Drive is sharing-aware, meaning that it will respect the organization-wide default sharing settings and sharing rules applied on S3Objects and other standard/custom objects.

You can apply organization-wide default sharing settings and sharing rules using **Setup -> Administration Setup -> Security Controls -> Sharing Settings** menu.

There are two sharing options for S3Objects and other standard/custom objects. First option is the **"Organization-Wide Default Sharing Settings"**. And second option is **"Sharing Rules"**.

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.

1. Organization-Wide Default Sharing Settings

You will need to configure "Default Access" and "Grant Access Using Hierarchies" options for sharing (Figure 71).

There are three different levels of default access for S3Object and other standard/custom objects: **Private**, **Public Read Only** and **Public Read/Write**.

There are two possible hierarchy options: **Hierarchy Enabled** and **Hierarchy Disabled**.

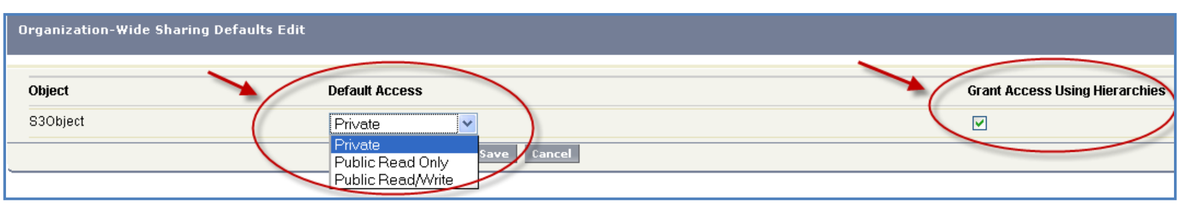


Figure 71

Let's discuss these options:

a. Private and Hierarchy Enabled

Select "**Private**" for the **Default Access** and **check** the box under **Grant Access Using Hierarchies** option.

All users in your company will be able to see their own files. Also, they will be able to see the users' files which belong to a subordinate in the hierarchy.

For example, if X's hierarchy in the system is higher than Y, X can see Y's files, but Y can't see X's files.

Also if two users have the same level in hierarchy, they can't see each other's files.

Note that these rules do not apply to System Administrators since they have access to all files in the system.

b. Private and Hierarchy Disabled

Select "**Private**" for the **Default Access** and **uncheck** the box under Grant Access Using Hierarchies option.

All users in your company will be able to see just their own files.

Note that these rules do not apply to System Administrators since they have access to all files in the system.

c. Public Read Only and Hierarchy Enabled

Select "Public Read Only" for the Default Access and check the box under Grant Access Using Hierarchies option.

All users in your company will be able to see and download all files but there are restrictions for edit, delete, cut, copy and upload.

Users who own the file and users who are above the owning user in the organizational hierarchy can edit the file names, folder names, file descriptions and folder descriptions.

Users can't upload, cut, copy files into other users' folder if there is no hierarchy exception. However users in higher level in the hierarchy can upload files into a user's folders who is at a lower position in the hierarchy.

Users can't delete files/folders of other user's and can't create sub folders under other user's folders, if there is no hierarchy exception. However users in higher level in the hierarchy can delete files/folders owned by users' at a lower position in the hierarchy.

Note that these rules do not apply to System Administrators since they have access to all files in the system.

d. Public Read Only and Hierarchy Disabled

Select "Public Read Only" for the Default Access and uncheck the box under Grant Access Using Hierarchies option.

All users in your company will be able to see and download all files but there are restrictions for edit, delete, cut, copy and upload.

Only the users who own the file can edit the file names, folder names, file descriptions and folder descriptions.

Users can't upload, cut, copy files into other users' folders.

Users can't delete files/folders owned by other users and can't create sub folders under other users' folders.

Note that these rules do not apply to System Administrators since they have access to all files in the system.

e. Public Read/Write and Hierarchy Enabled

Select "Public Read/Write" for the Default Access and check the box under Grant Access Using Hierarchies option.

This option means there are no sharing restrictions. All users in your company will be able to see, edit, delete, cut, copy, upload and download all files and folders.
Note that these rules do not apply to System Administrators since they have access to all files in the system.

f. Public Read/Write and Hierarchy Disabled

Select "Public Read/Write" for the Default Access and uncheck the box under Grant Access Using Hierarchies option.

This option means there are no sharing restrictions. All users in your company will be able to see, edit, delete, cut, copy, upload and download all files and folders.
Note that these rules do not apply to System Administrators since they have access to all files in the system.

2. Sharing Rules Settings

You can give Read Only or Read/Write access levels to S3Objects and other standard/custom objects using "S3Object Sharing Rule" menu.

Go to **Setup -> Administration Setup -> Security Controls -> Sharing Settings** menu. And scroll down to the "S3Object Sharing Rules" or “other standard/custom object Sharing Rule” section.

Click "**New**" to create a new sharing rule for S3Objects or for other standard/custom object (Figure 72).

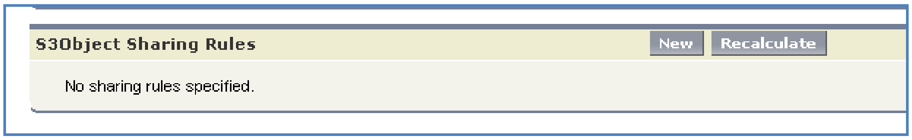


Figure 72

After clicking "**New**", a new screen will be displayed and from this screen you'll be able to set the access level of S3Objects or other standard/custom objects between roles, subordinates and groups (Figure 73).

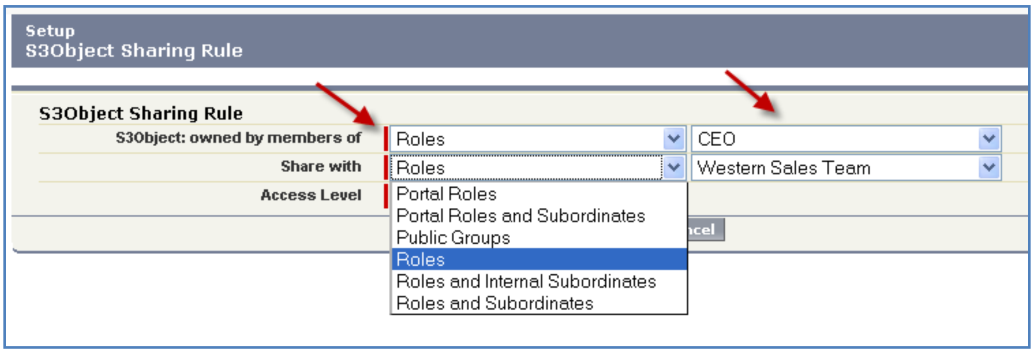


Figure 73

In the example below, we gave "*Western Sales Team users read only access to the files of CEO users*". Before this setting we set the organization-wide default sharing settings to "**Private and Hierarchy Enabled**" (Figure 74).

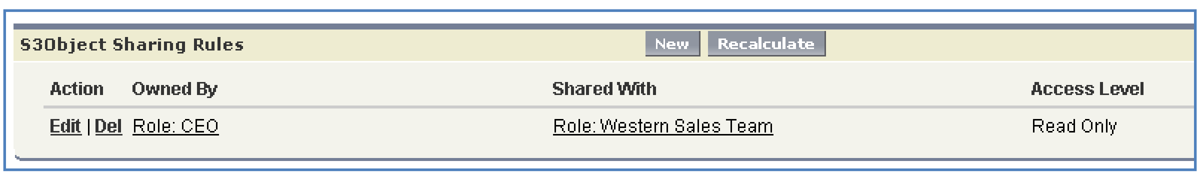


Figure 74

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.

3. Alerts for Attachments after Restricting Permissions

After restricting some of the permissions over the standard/custom objects, users will still be able to see custom object files in most cases. However, when they try to upload, edit or delete a file they will get a warning message based on their restricted permissions. Here are some of the example alert boxes your users may see:

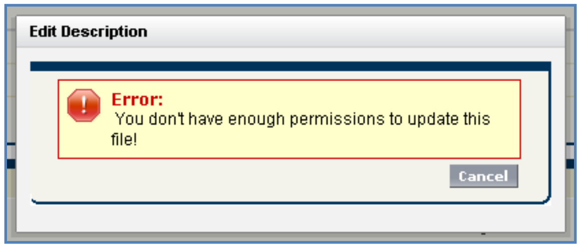


Figure 75

In Figure 75, user tries to edit an object file's description. Because his/her restriction is limited over organization-wide default sharing settings or sharing rules he sees this error message.

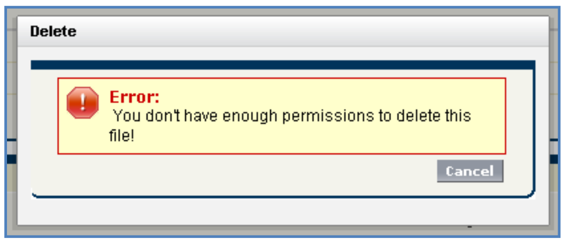


Figure 76

In Figure 76, user tries to delete an object file. Because his/her restriction is limited over organization-wide default sharing settings or sharing rules he sees this error message.

Figure 77

In Figure 77, user tries to upload an object file into an object. Because his/her restriction is limited over organization-wide default sharing settings or sharing rules, he/she sees this failure message while uploading files.

You need to adjust your organization-wide default sharing settings or sharing rules to give access to these files as explained in above sections.

I. Applying Permissions to S-Drive Files/Folders through Profiles

You can apply profile based permissions on custom object files. S-Drive supports four different access levels: *None*, *Read*, *Read + Create + Edit* and *Read + Create + Edit + Delete*. Let's learn how to enable these permissions and discuss these options in detail. For example, if you just enable "Read" feature, users belonging to that profile will just be able to download uploaded files, copy urls of these files and email selected files. They won't be able to upload a file, delete a file or edit a file's description.

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 (Figure 78).

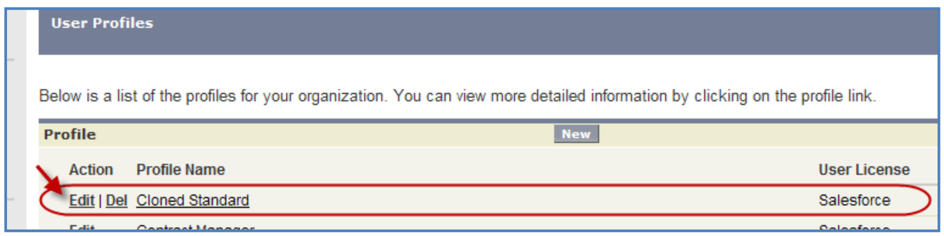


Figure 78

Note that you cannot change the standard profiles' permissions. You may need to clone them before you can edit. To clone them, click the Profile Name as seen in Figure 78 and click "**Clone**" button from new screen. You need to give a new name to your newly cloned profile and now you can edit its properties. After completing the configuration, do not forget to move the users that you want, to this profile.

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 79). 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, Delete**. We'll see examples of these access level combinations in the sub sections.

Custom Object Permissions	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
Account Files	☑	☑	☑	☑	☐	☐
Case Files	☑	☑	☑	☑	☐	☐
Contact Files	☑	☑	☑	☑	☐	☐
Contract Files	☑	☑	☑	☑	☐	☐
My Example Objects	☑	☑	☑	☑	☐	☐
My Example Object Files	☑	☑	☑	☑	☐	☐
Opportunity Files	☑	☑	☑	☑	☐	☐

Figure 79

1. Example 1: No Permission Enabled

	Read	Create	Edit	Delete
My Example Object Files	☐	☐	☐	☐

Figure 80

If you uncheck all boxes for your standard/custom object file (Figure 80), your users belonging to this profile won’t be able to see “My Example Object Files” page block. So they won’t be able to do anything with custom object files.

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

2. Example 2: Just Read Permission Enabled

If you just set “Read” and unset other permissions for your standard/custom object file (Figure 81), your selected profile users won’t be able to:

- upload files
- delete files
- edit descriptions of files

They will be able to:

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

	Read	Create	Edit	Delete
My Example Object Files	☑	☐	☐	☐

Figure 81

In “My Example Object Files” page block, Email Selected button will be enabled for selected profile’s users. Upload Files(s) and Delete Selected buttons won’t be enabled. For each file “Download File” and “Copy URL” links will be visible (Figure 82).

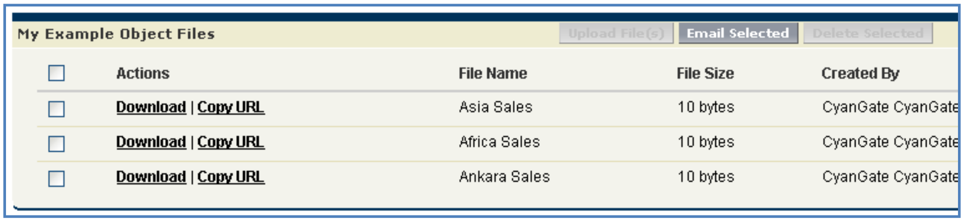


Figure 82

If there are no files uploaded by other unrestricted profile users, this profile users will see a screen similar to Figure 83.

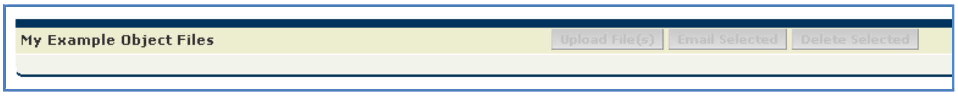


Figure 83

3. Example 3: Read, Create and Edit Permissions Enabled

If you set "Read", "Create" and "Edit" permissions and unset "Delete" permission for your standard/custom object file(Figure 84), your selected profile users won't be able to:

- delete files

They will be able to:

- upload files
- edit descriptions of files
- email selected files
- download files
- copy the URL of the files to the clipboard.

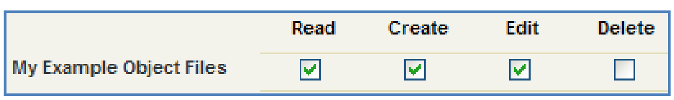


Figure 84

In My Example Object Files page block, Upload Files and Email Selected buttons will be enabled for selected profile's users. Delete Selected button won't be enabled. For each file "Download File", "Copy URL" and "Edit" links will be visible (Figure 85).

Figure 85

If there are no files uploaded, this profile users will see a screen like in Figure 86.

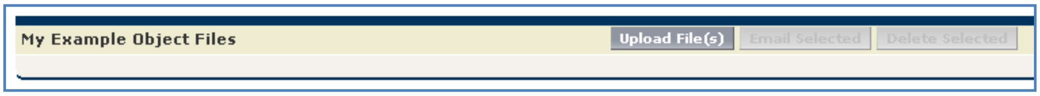


Figure 86

4. Example 4: Read, Create, Edit and Delete Permissions Enabled

If you set “Read”, “Create”, “Edit” and “Delete” permission for your standard/custom object file (Figure 87), your selected profile users will be able to:

- upload files
- edit descriptions of files
- delete single files
- delete selected files
- email selected files
- download files
- copy the URL of the files to the clipboard.

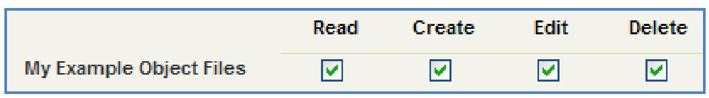


Figure 87

In “My Example Object Files” page block, Upload Files, Email Selected and Delete Selected buttons will be enabled for selected profile’s users. For each file “Download File”, “Copy URL”, “Edit” and “Delete” links will be visible (Figure 88).

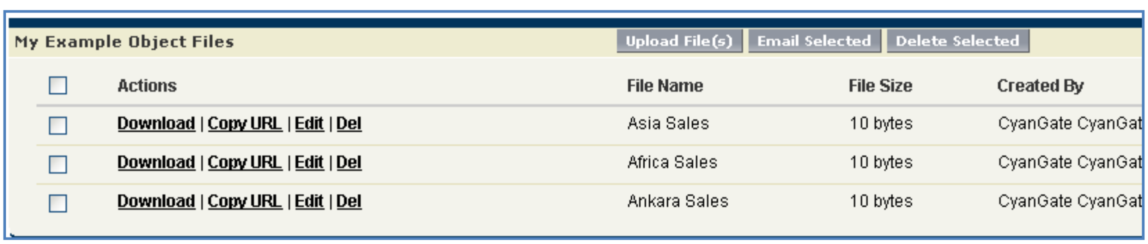


Figure 88

If there are no files uploaded, this profile’s users will see a screen similar to Figure 89.

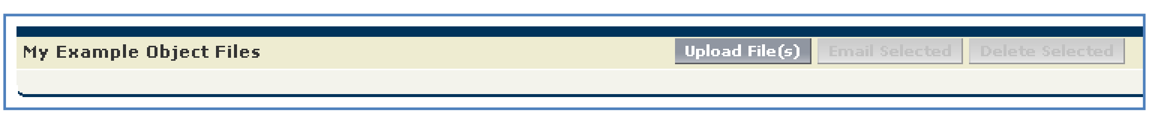


Figure 89

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.

J. 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: http://sdrive.cyangate.com/support/

2. Email: sdrive@cyangate.com

You can find up-to-date product information, documents, tutorial videos, tools in our web page: http://www.cyangate.com/products/s-drive-for-salesforce-com/