

# INSTALLATION & INTEGRATION GUIDE

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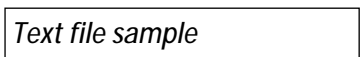


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## Typographic conventions

 <i>Text file sample</i>	Code example or file settings
 <i>i</i>	Note, information
 Chapter, Guide	Reference to another guide or chapter
<i>Example</i>	Example, variable, code extract
Keyword, label	Keyword, application label, important item

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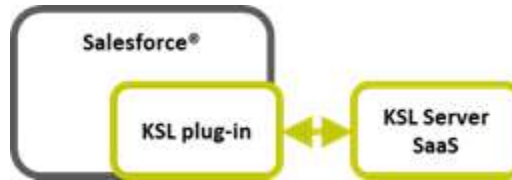
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## 1. About KSL for Salesforce®

KSL for Salesforce® is a plug-in that enables the Salesforce® solution to communicate effectively and securely with the KSL servers, to generate, edit, personalize, archive, and/or deliver documents and emails.



This plug-in provides several key functions, which are very interesting to secure document and email generation and delivery:

- On-demand creation of personalized documents and emails and their delivery, fully integrated with Salesforce objects
- Automatic production of KSL documents and emails, via the Salesforce process builder
- documents and e-mail management and archiving
- Document and e-mail template design based on shared components

### 1.1. Document and e-mails generation and delivery

#### a. Template selection by the end-user

The document or e-mail generation starts with the selection of a template in the Document and e-mail templates view.

- This view is a KSL component that appears in Salesforce®
- It is configured for different Salesforce® object (for example, opportunity and campaign)
- It presents the list of available and authorized templates in a tree structure
- These access permissions depend on the user's profile (KSL role)

#### b. ... or push-button

The targeted document or email template is directly associated with an action button available on the Salesforce® object.

Authorization to access the targeted model remains dependent on the user's profile.

#### c. Personalized document generation thanks to Salesforce® data

Each document template is set to be generated in one or two launch modes:

- Document generation in PDF (*on demand*)
- Document edition i.e. with interactive modification (*interactive*)

#### Note

KSL can generate a PDF document at the end of the interactive edition step

This interactive edition step allows the user to view and modify the document before sending it to its customer or prospect

#### d. Personalized e-mail bodies or e-mailings thanks to Salesforce® data

Each email template is characterized

- by the launch mode *mail*
- by a return mode, which is defined by the *MailReturnMode* parameter equal to 1 for sending a single email through Salesforce or 2 for creating an emailing

In the case of a single email, the HTML body is personalized by the user and inserted automatically in a Salesforce® email for a manual sending

In the case of an emailing, the HTML body of the emails is personalized by the user and KSL processes the transmission of the emails to an external email send and track service (not provided by Naelan)

### 1.2. Automatic production of documents and email KSL, via Process Builder

In the Salesforce® KSL Administration application, a dedicated configuration interface allows you to graphically define call classes of models of KSL documents, as well as their distribution method:

- obtaining a PDF document and associating it with the targeted Salesforce® object
- sending this PDF by e-mail and tracking the shipment

This KSL production and distribution process is directly called by the Salesforce #! {Corps1\_Puce}® Process Builder to be associated with a change of state in a workflow or any other automated process. It is a task started asynchronously.

The process requires no user intervention. The latter may, however, observe the sending trace or consult the document or documents produced on the Salesforce® object concerned by the automation.

### 1.3. Document versioning and archiving

#### a. Personalized documents created by KSL

- A PDF document generated on demand by KSL is automatically associated with the object that created

it, and its version is set to 1; the user can view the document in PDF format; he can send it to a validation workflow or send it by email

- A logical link to the document is created automatically in Salesforce®
- A document generated after interactive personalization is automatically linked with the object that created it, and its version is set to 1. The user can view it in PDF format, send it to a validation workflow or send it by email; he can also edit again the document and save it; in this latter case, the document version is incremented automatically by KSL. It should be noted that all PDF versions of the document remain accessible, but only the latest version of the document is editable
- Document storage is provided by the KSL solution: document are archived on KSL servers in a SaaS mode

#### b. Personalized e-mail bodies created by KSL

- The e-mail body of a single email generated after an interactive personalization, is not archived by KSL
- This e-mail body is automatically inserted into a Salesforce® e-mail that is sent and saved in the activities of the object in Salesforce®
- It can be transferred to a new recipient

#### c. Personalized e-mailings created by KSL

- E-mailings are not accessible from Salesforce® after they are created and launched.
- An task is created in the Salesforce® object for this e-mailing as soon as it is transmitted to the KSL server
- The e-mailing is sent by the KSL server to an external email send and track service asynchronously

#### d. Sending by e-mail a personalized PDF document created by KSL

- A personalized PDF document PDF can be send by e-mail
- In this case, a Salesforce® activity is created by KSL containing the message sent: the sender, the recipients, the subject and the message body written by the user and its sending time
- This activity is associated to the object used to create the document
- The attachments and especially the KSL PDF document are accessible in the Attachments view
- The documents in attachments are stored in Salesforce® and not in KSL: when sending a KSL document by e-mail, the document is archived in KSL when it is created and stored in parallel as an attachment of the e-mail in Salesforce®

#### e. Salesforce® data allowing to personalize documents and emails

- These data come from different Salesforce® objects
- They are transmitted in XML format automatically and seamlessly
- Document and email templates are based on an XSD schema corresponding to the XML data

- XSD schema and XML sample can be created by the Salesforce® administrator thanks to the KSL Administration application

#### 1.4. Document and e-mail template design based on shared components

##### a. A centralized repository containing resources shared by templates

- This repository is centralized and collaborative
- It contains all the components necessary to document and e-mail templates: text zones, groups of text zones, images, PDF appendices and style sheets
- It contains all the document and e-mail templates
- Each component (resource) is shared by the templates
- The repository management can be done from Salesforce® thanks to KSL Administration application or thanks to KSL Studio
- Each text content can be multi-brands, multilingual and / or multi-institution

##### b. Component and E-mail template design via KSL Administration

- For designing components, please refer to the KSL Office user guide
- For designing e-mail templates, please refer to the KSL Email designer user guide
- For designing document templates, refer to the information below

##### c. Document template design thanks to KSL Studio tool

- KSL Studio is a Windows specific design tool you have to install for creating your templates
- This tool also allows to manage the repository components
- This is a collaborative tool for creating simple or complex components, rules and document templates from an XSD schema in connection with the KSL centralized repository

## 2. Installing KSL Suite from Salesforce® AppExchange®

### 2.1. Technical prerequisites when installing the KSL plug-in

To install and use KSL for Salesforce®, one of the following Salesforce edition is required:

- Enterprise Edition (EE)
- Unlimited Edition (UE)
- Developer Edition(DE)
- Performance Edition
- Professional Edition (with API access option)

Note that the Essential edition (EE) is not supported, because this version does not have API access.

Other prerequisites:

Salesforce® Products	<ul style="list-style-type: none"> <li>■ Sales Cloud</li> </ul>
KSL Products	<ul style="list-style-type: none"> <li>■ KSL for Salesforce (plug-in)</li> <li>■ KSL Server</li> </ul>
KSL Environment	<ul style="list-style-type: none"> <li>■ Remote site URL</li> <li>■ Office app access URL</li> <li>■ KSL project name</li> <li>■ Public Key (oAuth2 connection)</li> <li>■ Private Key (oAuth2 connection)</li> </ul>

### 2.2. Installing from Salesforce® AppExchange®

KSL plug-in is available in AppExchange®.

To install the KSL for Salesforce® plug-in:

1. Search the KSL for Salesforce plug-in in AppExchange®
2. Click on Get It Now and follow the instructions to install KSL Suite for Salesforce®
3. Specify where you want to install the KSL for Salesforce® plug-in:
  - Click Install in production to install in a production environment.
  - Click Install in sandbox to install in a Sandbox.
4. Read and accept the terms and conditions:
  - Select I have read and agree to the terms and conditions.
  - Click Confirm and Install.



As a best practice, and to avoid access issues for end users, we recommend selecting Install for Admins Only. It enables you to use the permission set delivered in the package to grant the rights to the appropriate users.

5. Then click Install:

- You must provide System Administrator credentials to install an application from AppExchange®.
- After installing, you must configure the KSL Suite application, including integration settings for third-party applications.

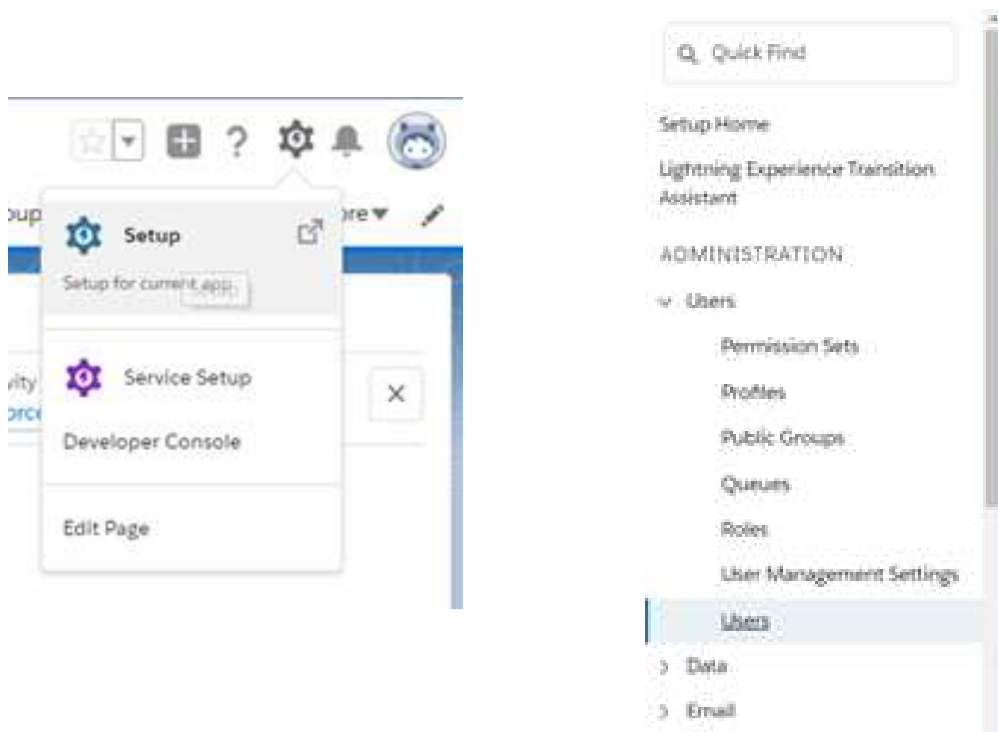
## 3. Configuring KSL for Salesforce®

### 3.1. User configuration

No user has to be created in KSL: KSL for Salesforce® relies on the users already created in Salesforce®.

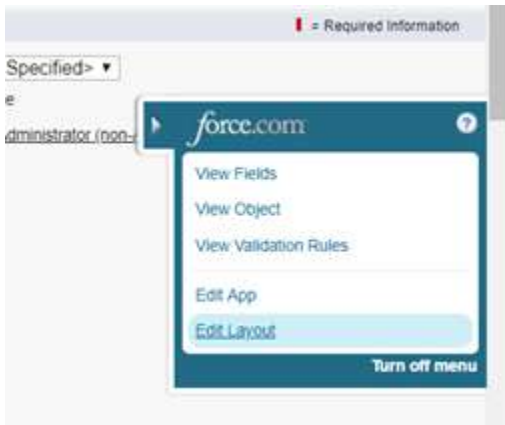
The first step in the configuration of KSL for Salesforce is to configure existing users by granting them rights on KSL For Salesforce® app.

- Grant KSL Suite role to give users rights to create, modify, generate or delete documents on KSL server.
- Select Setup to access to the user administration, then select ADMINISTRATION > Users > Users.



- Click Edit to select a user.

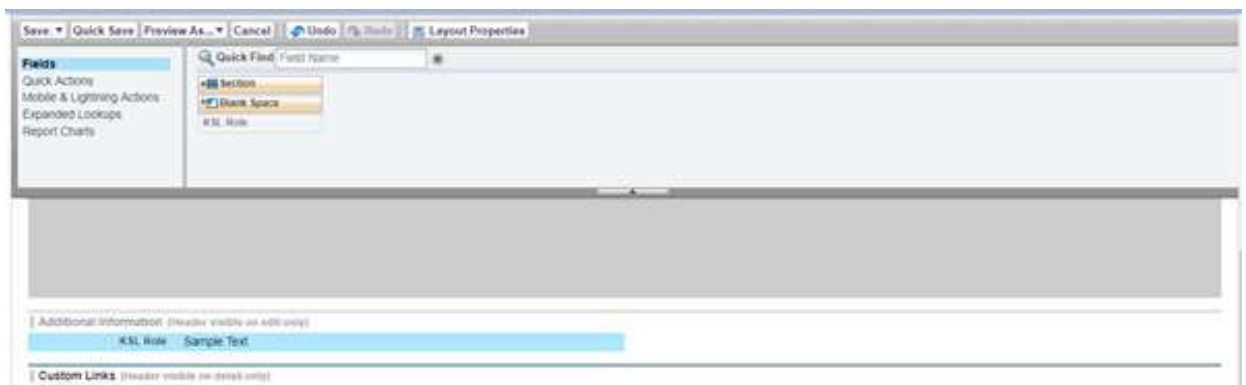
Action	Full Name ↑	Alias	Username
<a href="#">Edit</a>   <a href="#">Login</a>	BONNETON_PASCAL	PBONN	salesforce@naelan.com.testolugin
<a href="#">Edit</a> - Record 2 - BONNETON, PASCAL	Chatter	chatty.00d1100000000taeau.fim55dezpyna@chatter.salesforce.com	
<a href="#">Edit</a>	unused	unused	unused@unused.fr.testolugin
<a href="#">Edit</a>   <a href="#">Login</a>	User Admin	AUser	coa.n3nxodwywhfn.ds6imvduhyxp@naelan.com.testolugin
<a href="#">Edit</a>   <a href="#">Login</a>	Vente Corine	cvente	vente@naelan.com.testolugin



- Click on the arrow at the right of the screen and select Edit Layout. The user layout page is displayed (User Page Layouts).



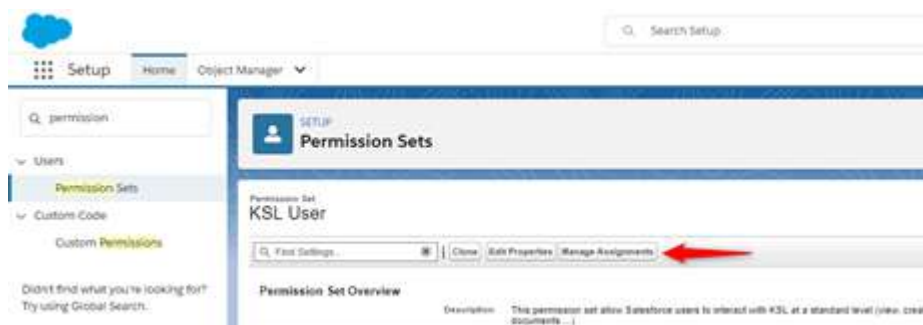
- Add the field KSL Role (KSL\_Role\_\_c) to your User Page Layout.
- Drag and drop the KSL Role available field under Additional information and Save.



- On the user's details, set the KSL Role based on the rights you want to give him; this role corresponds strictly to the group set in KSL Admin (not in KSL Administration).

The screenshot shows the 'Users' setup page in Salesforce. The 'Additional Information' section contains a dropdown menu for 'KSL Role', which is highlighted with a red arrow. Other sections include 'Mailing Address', 'Single Sign On Information', 'Locale Settings', and 'Approver Settings'.

- In Users > Permissions Sets, select KSL User, click Manage assignments, and assign it to each user that will use the KSL for Salesforce® features.
- Select KSL Admin, click Manage assignments and select each user that will use KSL for Salesforce®. These users will have access to the resource repository and will be able to generate XSD/XML data files.



*Note that KSL Admin permissions are an extension of KSL User. A user with this permission level must be a KSL User to access to the KSL plug-in features.*

## 3.2. Configuring the communication between Salesforce® and KSL servers

### a. Remote site

KSL for Salesforce® communicates with a KSL server; this server processes coming from Salesforce® requests and generates documents and emails. To allow this communication, you must declare a remote

site in Salesforce® with the remote server information.

In Setup, look for Remote Site Settings.

Create a New Remote Site:

- Remote Site Name: name of the remote site
- Namespace prefix: ksl
- Remote Site URL: (example: <https://hostname:XXX> with XXX the https port number)

### Remote Site Details

**Remote Site Detail** Edit Delete Clone

Remote Site Name: KSLServer Modified By: User User, 18/02/2019 15:52

Namespace Prefix: ksl

Remote Site URL: [Redacted] ←

Disable Protocol Security:

Description:

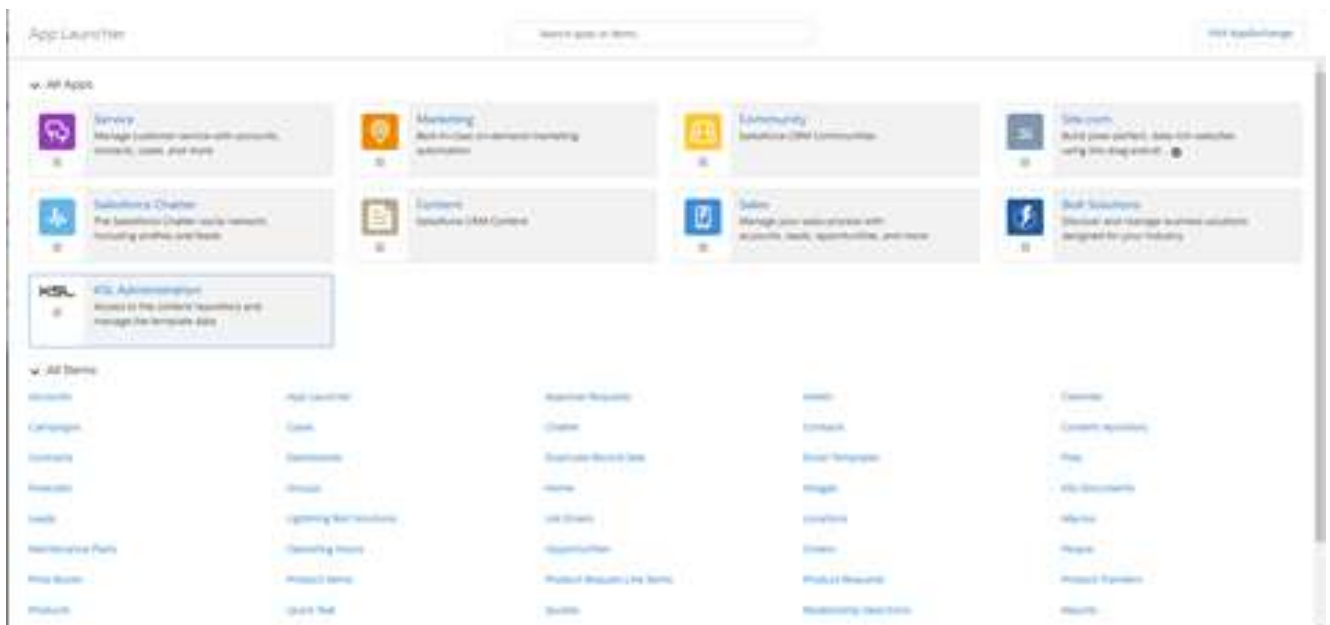
Active:

Created By: User User, 18/02/2019 15:52

Edit Delete Clone

### b. Connexion parameters

Select the application KSL Administration from the Salesforce® App Launcher menu.



Setup > Auth. Configuration

This tab allows to configure the communication between Salesforce® and KSL server :

The screenshot shows the 'Auth. Configuration' section of the 'XSD Generator' in the KSL Administration interface. The 'Setup' tab is active. The form contains the following fields:

- Information:** For security reasons, some informations are not visible.
- \* KSL Server endpoint:**
- \* KSL Project Name:**
- Token - Audience field override:**
- \* Token - Public Key:**
- \* Token - Private Key:**

A red border highlights the 'Token - Private Key' field with the text 'Complete this field.' below it. A 'Save' button is located at the bottom right of the form.

- KSL Server endpoint: URL which allows to communicate with KSL Office application ; the URL must end with the reference of KSL Office application, example: `https://host21.naelan.fr:8443/ksl_office/`
- KSL Project Name: name of the KSL project which hosts templates and resources. This project will be present on the KSL remote server, (example: `KSL_FINANCE`)
- Token - Audience field override: this field can be completed, if necessary, with the audience field defined in the KSL parameters, usually an URL (example: `https://test.salesforce.com`).
- Token - Public Key: a couple “public/private key” is necessary for oAuth2 authentication. This field contains the same public key than the one configured on the remote KSL web server. This key is used by the KSL server to control that the Salesforce configuration is authorized.
- Token - Private Key: a SHA256 256bytes private key which is used by the KSL remote server to decrypt the identification JWT token. This key is hidden after saving the settings and must be entered at each parameters update.

Additional informations are given on tools that can be used to generate public and private keys in the appendix of this document.

### c. Custom Metadata - Allowed Objects

Generating a data schema (.xsd) to create a document template refers to this interface that lists standard Salesforce® objects by default.

In Setup, look for Metadata Types.

On the Custom MetadataTypes page, on the allowed objects line, Clic on Manage records, then Edit.

## All Custom Metadata Types

[Help for this Page](#) ?

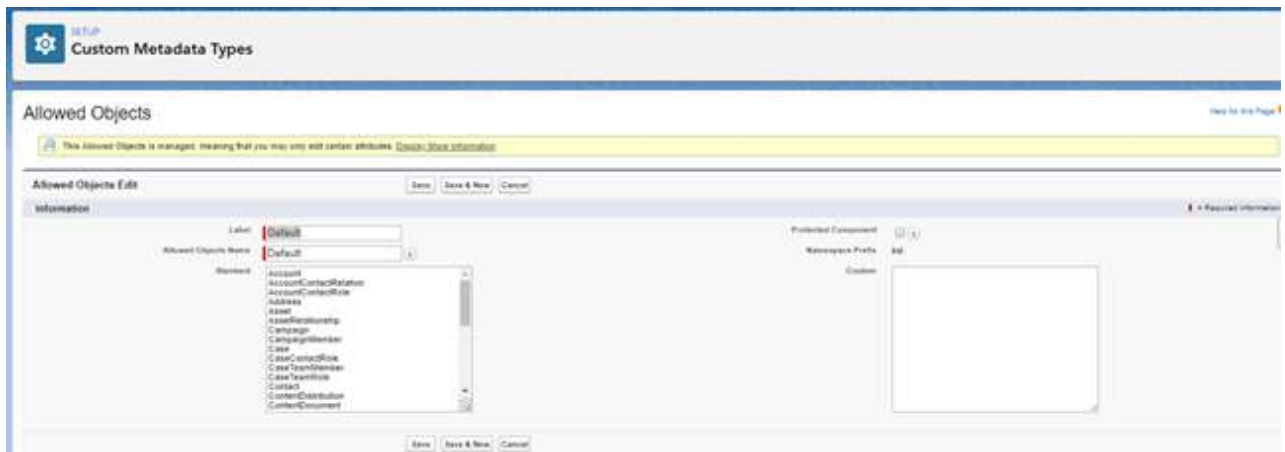
Custom metadata types enable you to create your own setup objects whose records are metadata rather than data. These are typically used to define application configurations that need to be migrated from one environment to another, or packaged and installed.

Rather than building apps from data records in custom objects or custom settings, you can create custom metadata types and add metadata records, with all the manageability that comes with metadata: package, deploy, and upgrade. Querying custom metadata records doesn't count against SOQL limits.

New Custom Metadata Type						
Action	Label	Namespace Prefix	Visibility	Api Name	Record Size	Description
<a href="#">Manage Records</a>	<a href="#">Allowed Objects</a>	ksl	Public	ksl__AllowedObjects__mdt	651	
<a href="#">Manage Records</a>	<a href="#">Auth Configuration</a>	ksl	Public	ksl__AuthConfiguration__mdt	1416	
<a href="#">Manage Records</a>	<a href="#">KidObjet Description</a>	ksl	Public	ksl__KidObjet__mdt	2181	

If you want to use a custom object, add the API of the object to the Custom field. You can also add a Salesforce® standard object to this list if it is not present in the standard list.

Separate each custom object by a carriage return.



You can find more information about the XSD Generation in the paragraph 4.1. XSD schema generator tab

### d. Custom Objects

By default, KSL For Salesforce® provides two objects linked to the Opportunity objects to enable you to create documents from opportunities. The KSL Document objects linked to the Opportunity object displays the interactive KSL document, whereas the KSL Document (PDF) object displays the PDF document stored in KSL but accessible from Salesforce®.

You can find more information about these objects in the following paragraphs: 5.2. KSL Document and 5.3. KSL Document (PDF).

## 4. Produce a KSL document on demand from a Salesforce® object

KSL allows you to produce and personalize documents and e-mail, on demand, on several processes fully integrated with Salesforce objects

These processes cover the following functions:

- production of a PDF document with immediate return of the result
- production of an interactive document, partially composed with content to be personalized. The finalized document gives rise to a PDF document. In this case, the PDF document is the subject of version.
- creation or customization of an adaptive email body for immediate sending

Whatever the document type, integration is possible in two ways:

- via an action button for quick access to a pre-targeted document model.
- via a KSL custom object which provides access to a library of document models dedicated to the current Salesforce® object.

The installation of the package provides KSL custom objects directly applicable to the Salesforce® object Opportunity. This setting can be used as an example to add the documentary production objects to any Salesforce® object.

### 4.1. Integrate a push-button

Available and actionable in the Salesforce® object, it is the ideal shortcut for obtaining the desired document or email in one click. This setting is suitable for recurring documents and emails.

#### a. In the setup, create a new button

Object Manager > *my object* > Buttons, Links and Actions > New Button or Link.



Custom Button or Link Edit

Save Quick Save Preview Cancel

Label: Commercial Response

Name: Commercial\_Response

Description:

Display Type:
   
 Detail Page Link View example
   
 Detail Page Button View example
   
 List Button View example

Behavior: Display in new window View Behavior Options

Content Source: URL

Select Field Type: Opportunity Insert Field: -- Insert Merge Field -- Insert Operator: --

Functions: -- All Function Categories --

ABS  
ADDMONTHS  
AND  
BEGINS  
BLANKVALUE  
CASE

Insert Selected Function

Check Syntax

Display type: Detail Page Button

Behavior: Display in a new window

Content source: URL

In the multiline field, use the following formula:


```
/lightning/cmp/ksl__ModelProcessorAura?c__recordId={!Opportunity.Id}&c__modelName=Attestations_RC&c__mode=generate&c__kidObjectAPIName=ksl__CommercialProposal__c&c__name=Attestations_RC
```

And update the elements:

- `c__recordId` : identifier of the target Salesforce® object, helping you with insert fields utility.
- `c__modelName` : name of the desired KSL document (= name of the KSL edition service), document or e-mail
- `c__mode` : desired launch mode: generate for a PDF on demand, edit to obtain a customizable document, email to design a responsive email. This mode must be authorized for the selected edition service
- `c__kidObjectAPIName` : API name of KidObject - allows you to target the Salesforce® object and with which fields should be created the record corresponding to the "KSL Document" (document & version).
- `c__name` : name of the desired document (spaces and accents allowed); it can be changed from the list

of fields.

- `c__emailMode`: not required, associated with email only: enter 1 for the unitary sending of a personalized e-mail (mail body) or 2 for an e-mail sent via the KSL server.

 The documentary or email production service called (`c__modelName`) must be consistent with its production mode (`c__mode`), and the advanced production mode for emails (`c__emailMode`).

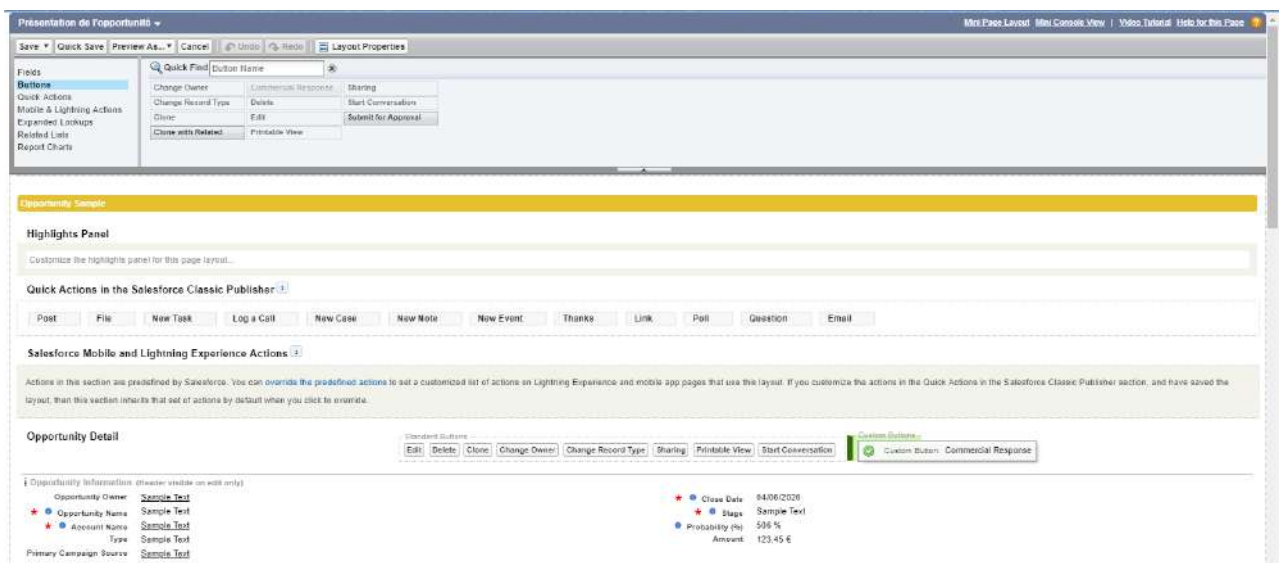
To ensure proper process, this setting must be a true copy of what has been defined in the KSL project. An e-mailing service cannot, in any case, be associated with an `emailMode` 1 (a unitary launch) for example.

Save

## b. Integrate the button into the Salesforce® object

Object Manager > *my object* > Page Layout

Click on the page layout name to add the new button.



Select the new button on the Buttons list

Drag & drop it on the object Detail, in the Custom Buttons part, after Standard Buttons.

The new button will appear into the quick actions list, on the Salesforce® object.

To make this button appear in the buttons directly accessible on the object page, you must personalize the list of "Salesforce mobile and Lightning Experience Actions" by moving the button to the desired position, at the top of the list.

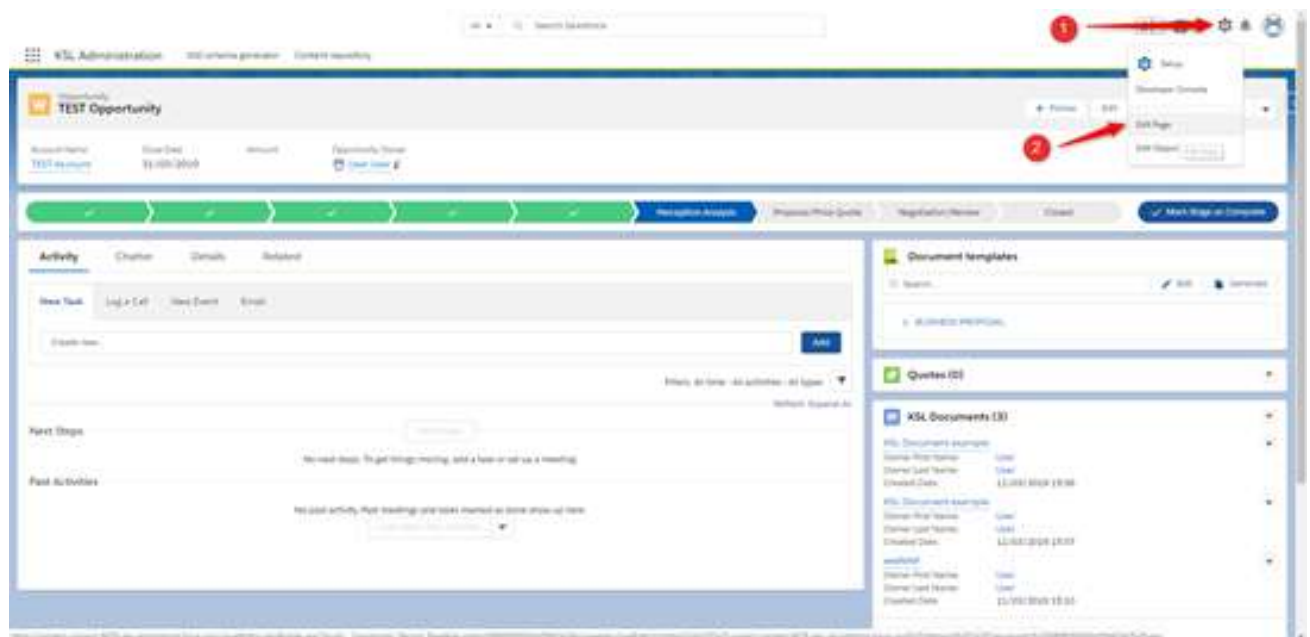
## 4.2. Integrate a library of KSL models

To be able to generate KSL Document from Salesforce® objects, you need to configure your object layout to display the KSL For Salesforce® elements.

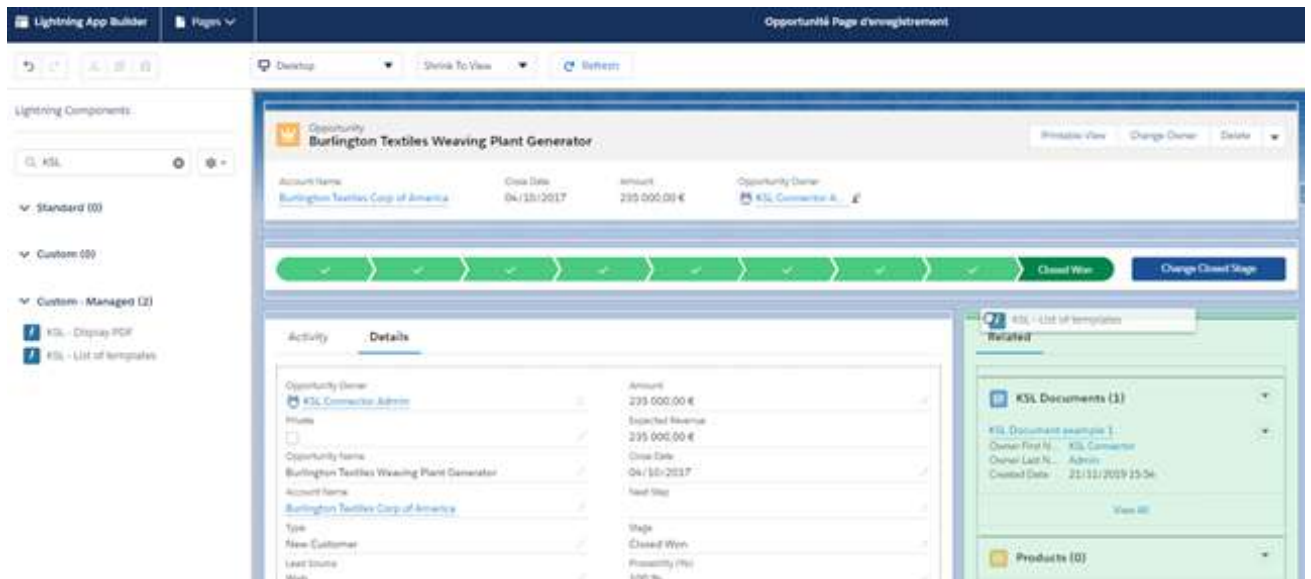
The component Document templates will display the templates available in the KSL Project configured in the custom metaData type Auth. Configuration. The user will then be able to create a KSL document based on a chosen template and its launching mode: e.g. PDF on demand generation or document interactive edition.

The following example guides you to display and configure the component on the Opportunity Object page layout. The process is the same for any standard or custom object in Salesforce.

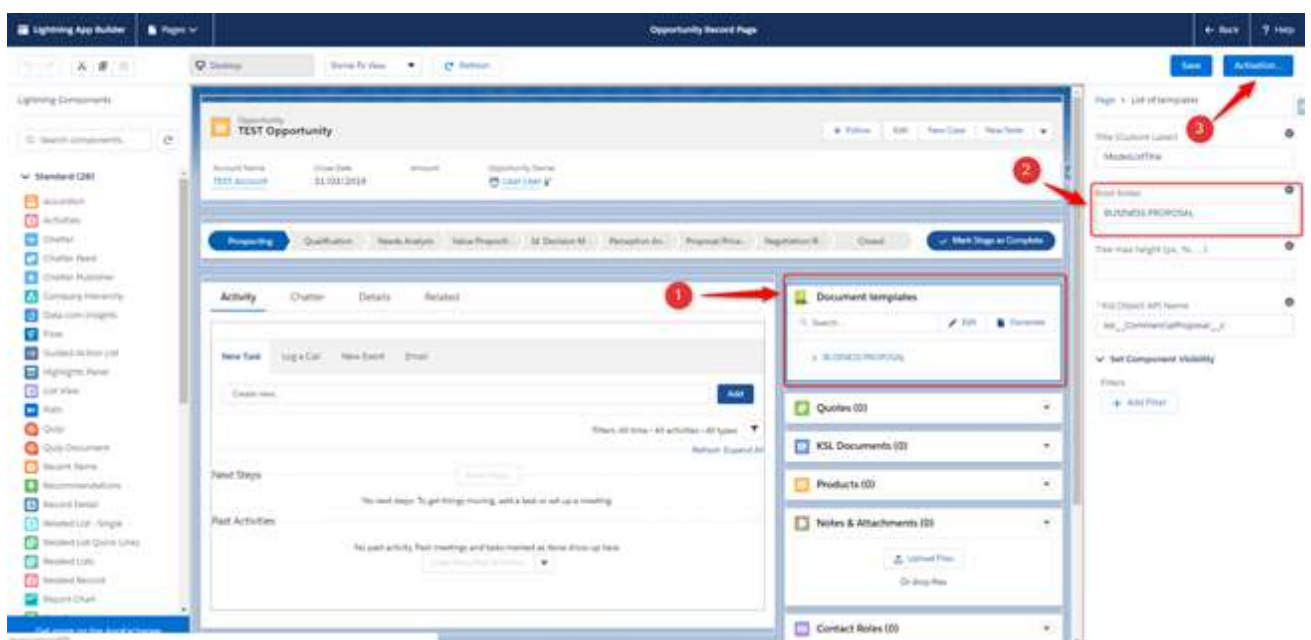
- Go to the detail page of an Opportunity (Opportunities tab), click on the setup icon and then click on Edit page.



- From the Custom Managed list (on the left), drag and drop the lightning component KSL - List of templates where you want in the page.



- In the option layout of the component (on the right), configure the following options:
  - Title: name of the component record. The entered value must be a Custom Label. The Custom Label ModelListTitle takes the object title (KSL Documents and Email) with its translations.
  - Root folder: It is possible to filter the classification tree of the KSL project where templates and resources are stored, by indicating the root node you want to display for the object. Your user must, of course, have the necessary permissions on the node and its potential branches. By default, this parameter is set to OPPORTUNITY for the Opportunity object and CAMPAIGN for the Campaign object.
  - Tree max height (optional): Maximum height of the component on the record page (pixel, percentage,...)
  - Kid Object API Name: API name of the Salesforce® object that represents the KSL Document in Salesforce®. By default, KSL For Salesforce® provides the object KSL Document (ksl\_\_CommercialProposal\_\_c) linked to the Opportunity object.

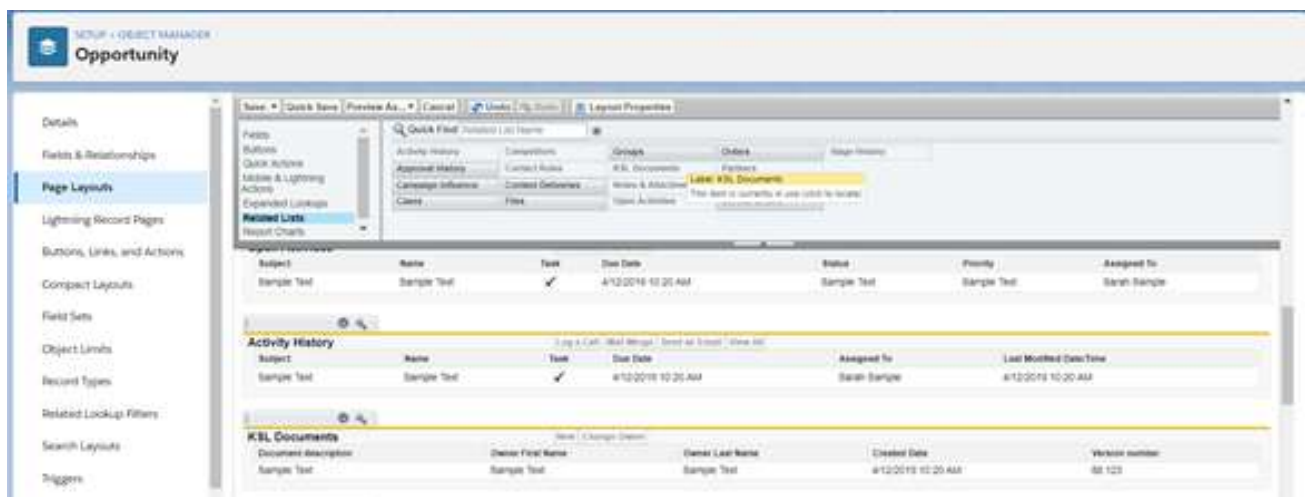


- Définir la visibilité du composant permet de conditionner l'apparition/disparition de la liste des modèles. Avec un filtre sur une étape de l'opportunité par exemple : En déposant le composant "KSL - List of templates" plusieurs fois sur la page, avec un nœud du plan de classement différent (root folder) , cela vous permet d'affiner les modèles de document accessibles et surtout opportuns sur l'étape en cours.
- Set Component Visibility condition the appearance / disappearance of the document templates. With a filter on a step of the opportunity for example: By depositing the component "KSL - List of templates" several times on the page, with a different root folder, this allows you to refine the access of the appropriate document templates on the current step.

You have to activate (Activation) the lightning page before saving (Save) before closing the window.

To add the list of the available KSL documents of the opportunity,

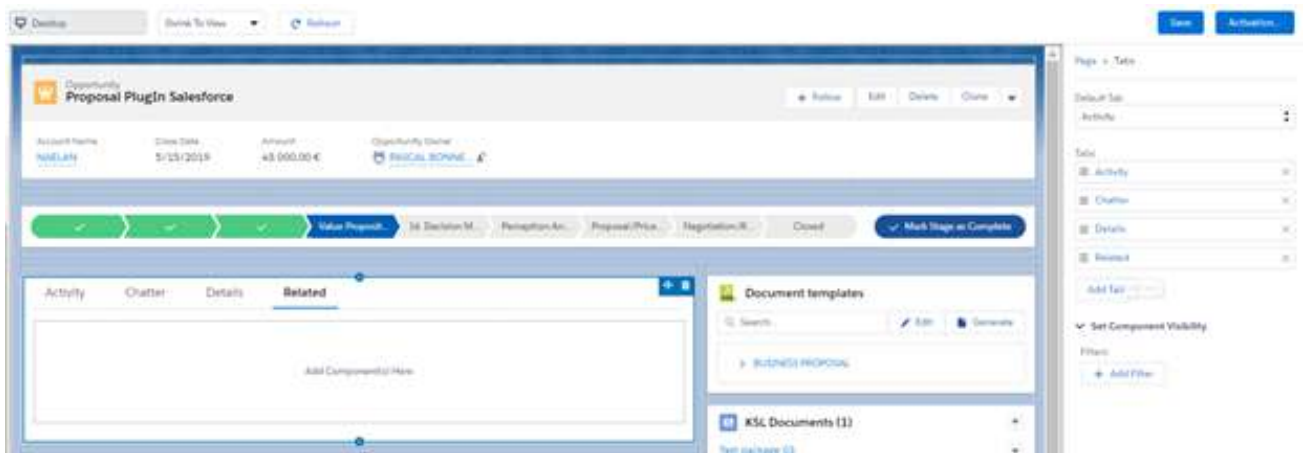
- From configuration > Setup
- Tab Object Manager > Opportunity > Page Layouts
- Click Opportunity Layout



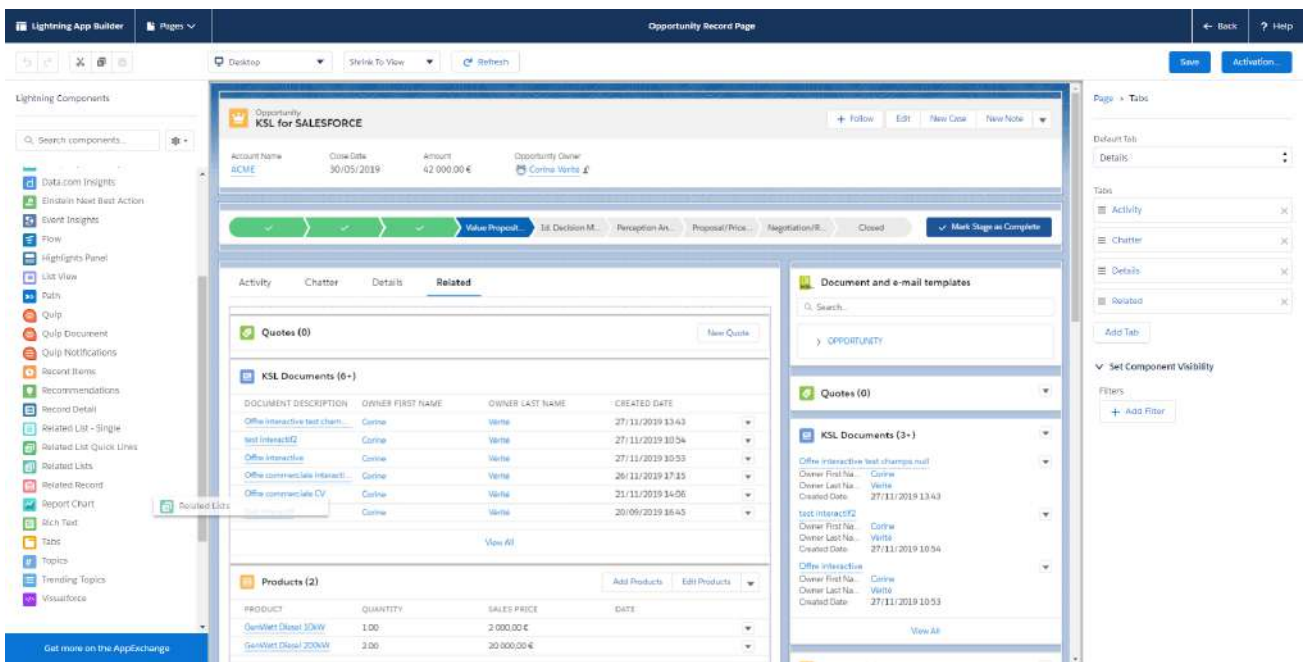
- Select Related Lists
- Select Ksl Documents and drag and drop the list at the 1<sup>st</sup> position in the existing related lists for the opportunity ; click on Save ; the list appears in the opportunity on the left side, under the list of document templates

To add the Related tab in the page body and consequently displaying the document list:

- Configuration icon, then Edit Page
- On the Tab screen area, the tab list appears on the right
- Click Add Tab; a new Detail tab is added to the list; rename the tab by clicking on Detail and select Related from the list provided. The new tab Related appears on the opportunity body.



- On the Related tab, select Related Lists from the lightning component list (available at the left of the screen), and drag and drop it in the tab body. The complete list of « related » elements, and especially the KSL documents, is available in the opportunity body. Click Save and Activation.



***i** This display can constitute a repetition with the right column; this use case will have to be detailed with the business users.*

## 5. Integrate the KSL models library into new object

### 5.1. The object creation

By default, KSL For Salesforce® proposes to create documents from the Opportunity object. But you can potentially use KSL For Salesforce® for all of your Salesforce® or custom objects. This chapter explains how to configure the application in this case.

You will need to create two custom objects for each Salesforce® object where you want to add the KSL Document templates component:

- A KSL interactive document object linked to your object; he will present the reference to the interactive KSL document - KSL Document for example.
- A KSL document version object also linked to the object; it will present the PDF versions of your interactive document - KSL Document (PDF) for example.

For the KSL interactive document object, you must create at least the two following fields:

- An external identifier text field to store the identifier of the KSL document.
- A text field to store the name of the template used for your document.
- A search relationship field related to the object from which you are producing your document.

For the KSL document version object, you must create at least the following fields:

- A master-Detail relationship field related to the custom object described above.
- An external identifier text field to store the version identifier of the KSL document.
- A numeric/integer field to store the version number of the KSL document

If you want to see the version number in the KSL interactive document object, you can add a summation summary field (COUNT) from the KSL document version object.

You are then free to add any other field to these two objects.

### 5.2. Metadata

After creating the previous object, you must declare it in the KidObject Description metadata.

- In Setup, locate the Custom MetaData Types topic
- Click Manage Records on KidObject Description to add a new record.

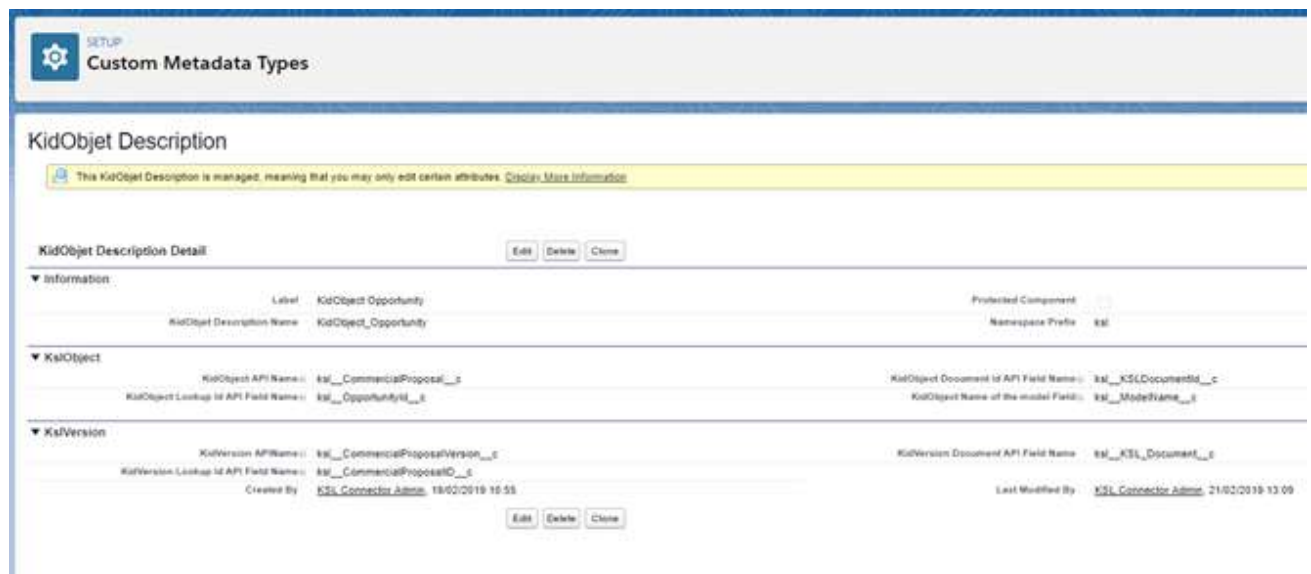
In this metadata, you will need to store the structure information of your KSL interactive document object and KSL document version, for the previously created objects.

The following information is needed:

- KidObject API Name: API name of the KSL interactive object created previously

- KidObject Lookup Id API Field Name: API field name for the search relationship of your KSL interactive document
- KidObject Document Id API Field Name: API field name that store the KSL document Id for the object KSL interactive document
- KidObject Name of the model Field: API field name that store the name of the template used to create the interactive document.
- KidVersion APIName: API field name for the KSL object previously created
- KidVersion Lookup Id API Field Name: API field name for the search relationship of your KSL object document.
- KidVersion Document API Field Name: API field name that store the PDF identifier for the KSL document object.
- KslVersion Version API Field Name : API field name that store the version number of the PDF for le KSL Document object.

You will find an example of KidObject description for KSL Document and KSL Document (PDF), which allows you to use KSL For Salesforce® on opportunities:



### 5.3. The component

After completing the previous steps, you can follow the instructions in section 3.3 The KSL components, to add the component KSL - List of templates to the object from which you want to produce KSL documents.

### 5.4. The actions

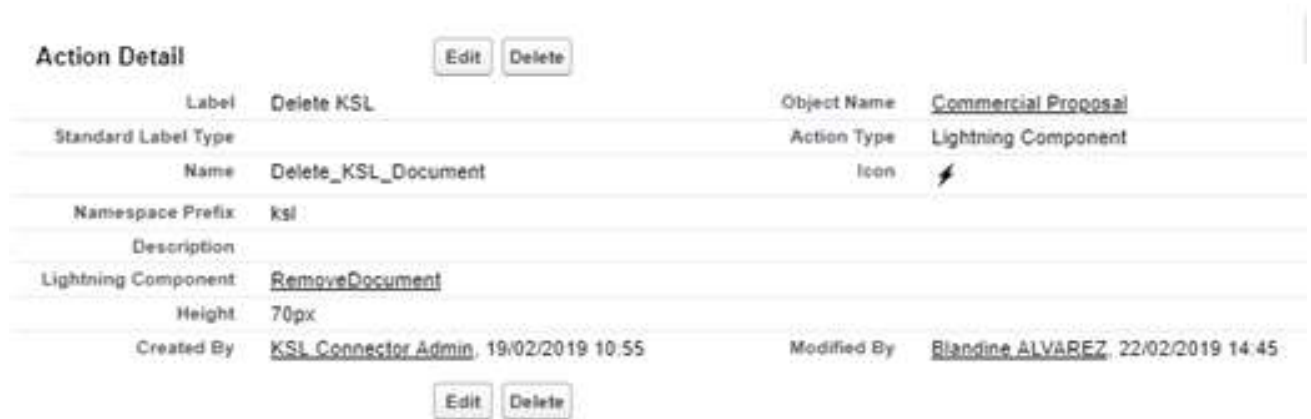
To access the Ksl For Salesforce® features on new objects, you must create the following actions:

Configuration icon > Object Manager

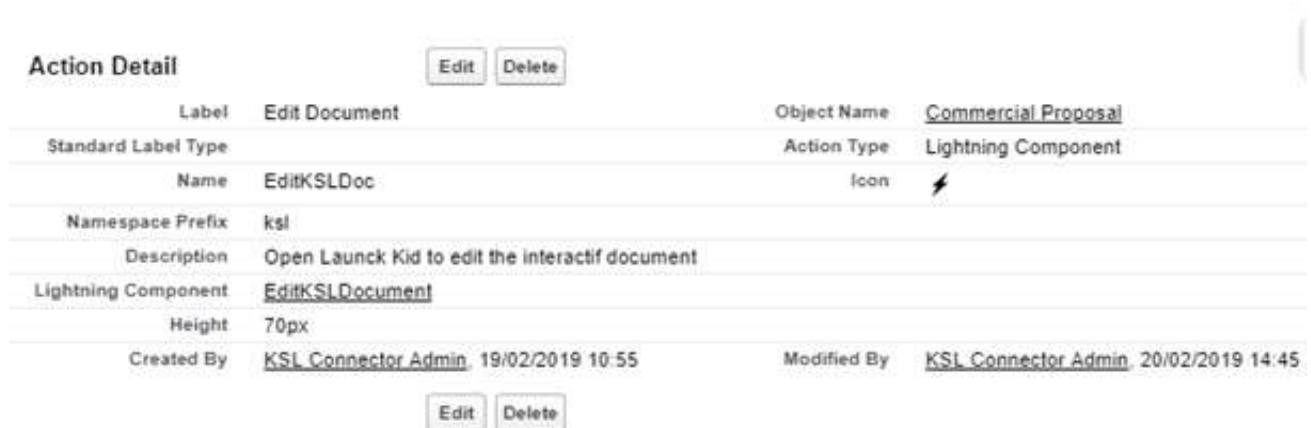


Select the KSL interactive document object mentioned above, choose Buttons, Links and Actions, then Create Action:

- Delete KSL: choose the RemoveDocument Lightning component to remove the KSL interactive document and the KSL document, as well as the Salesforce® record.



- Edit KSL: choose the EditKSLDocument lightning component to open the KSL window and customize the KSL interactive document.



- "Send by e-mail" : Choose the EmailLauncher lightning component to open the e-mail send box.



Select the KSL document object mentioned above,  
choose Buttons, Links and Actions, then Create Action:

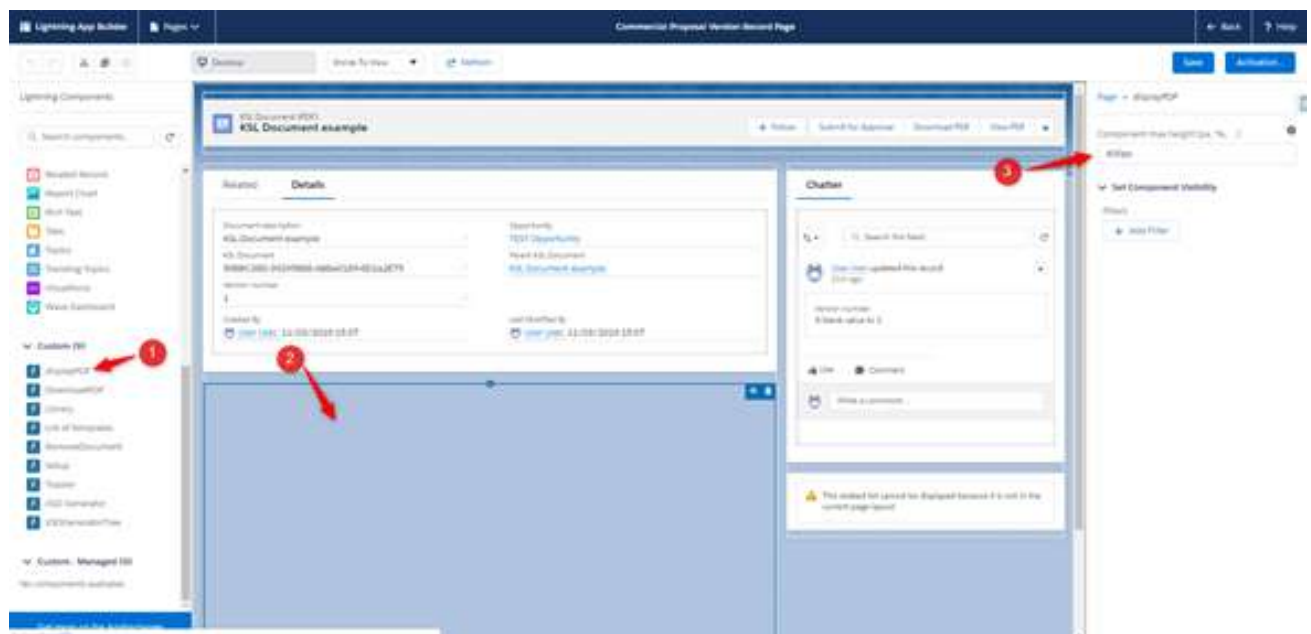
- Delete KSL: choose the RemoveDocument Lightning component to remove the KSL document and the Salesforce® record.
- View PDF: choose the ViewPDF Lightning component to open the PDF file in another browser tab.
- "Send by e-mail" : Choose the EmailLauncher lightning component to open the e-mail send box.

...and you can add the previous action to the layout of the objects.

## 5.5. The Display PDF component

KSL For Salesforce® allows you to view the PDF directly on the page of the KSL document object.

Add the displayPDF component to the presentation of the Lightning page associated to your object. You will be able to choose the height of the component in the options.



## 6. Produce a KSL document from a Salesforce® automated system

The configuration of a KSL process allows you to associate the production of a document or an e-mail with a Salesforce® automation created in the Process Builder.

This functionality, implemented in the KSL Administration part of Salesforce®, offers the user a step-by-step progression for the implementation of this configuration; the objective is to create a class that can be directly called on an action into the Process Builder.

### 6.1. Configure a KSL process

#### a. Activate the functionality

In KSL Administration > Setup > Automatic Process Settings

Position the button on Active :

- to effectively activate the execution of KSL processes in automation,
- as well as deleting the trace history.

Specify the number of days to keep traces of execution.

Record.

#### b. Configure a KSL process

In KSL Administration KSL > Automatic Process Configuration

Access to the synthetic list of KSL processes already created, which allows a quick modification of these.

This configuration will allow you to configure, step by step, the entire process chain, from the production of the document to its distribution as an attachment by e-mail.

- Nouveau allows you to create a new process.
- Importer allows you to import new configurations or modify existing configurations from a .csv file (see the Data Inspector tool available in Chrome on the right arrow, for export).

On an existing process

Click on the name of the configuration to access the details of its information:

- The Details tab gives the main identifiers of the configuration: name, linked object and API.
- The Related tab presents the lists of histories which are associated with the configuration.
- The Activity tab contains the history of changes to the configuration. All the fields are historicized,

except the owner. This tab also allows the user to send emails or save to-do items, along the lines of a memo.

Click on Edit to access the progressive setting of the automatic process.

Create a new process

### Step 1 > Basic Information

The screenshot shows a wizard titled "Create Automatic Process Configuration" with four steps: Basic Information, Document Generation, Document Sending, and Error Management. The "Basic Information" step is active. It contains three input fields: a text field for "Name" with the value "NewProposal\_Email", a dropdown for "KId Object API Name" with the value "ksl\_\_CommercialProposal\_\_c", and a dropdown for "Related Object Name" with the value "Opportunity". At the bottom, there are "Cancel" and "Next" buttons.

- Enter the name of the process, only alphanumeric, without spaces, “\_” authorized.
- Select the name of the KSL object API linked to the Salesforce® object using the list provided.
- Select the name of the object linked to the triggering of the automation (and to the composition of the document) using the list

Next allows you to validate this information and go to the next step.

### Step 2 > Document Generation

Create Automatic Process Configuration

Document Generation | Document Sending | Error Management

Document Generation Download Document  Inactive

\* Document Name ⓘ  
CommercialProposal {{{Opportunity.Name}}}

\* Template Name ⓘ  
PDF Commercial Response

Q Search...

- OPPORTUNITY
- DOCUMENTS (PDF)
  - Insurance certificate
  - PDF Commercial Response
- QUOTE PROPOSAL DOCUMENTS

Cancel Previous Next

Enter the name of the generated document; it can be made variable using the list of merge fields proposed on the right of the screen.

The screenshot shows the 'Merge Fields' configuration page. On the left, a sidebar lists 'Recipient', 'Sender', 'Organization', and 'Opportunity', with 'Opportunity' highlighted. The main content area is titled 'Merge Fields' and contains a 'Select Merge Field' section. This section has a search input field with the placeholder text 'Search Opportunity merge fields...'. Below the search field is a scrollable list of fields, each with a radio button. The fields listed are: Fiscal Year, Forecast Category, Forecast Category, Has Line Item, Last Activity, Last Modified By ID, Last Modified Date, Lead Source, Name (which is selected with a blue dot), Next Step, Opportunity ID, and Opportunity Type. At the bottom of the page, a text box displays the selected merge field code: {{{Opportunity.Name}}}.

Click on the Opportunity, then select its Name, for example. The exact format of the field to be entered in the name is available at the bottom of the list.

Select from the proposed filing plan, the model of the document you wish to produce.

Download Document: click on Active so that the document is available in the list of files associated with the detail of the document (same as appendix).

This option is necessarily active when the process is followed by an e-mail sending, which is also active, since the document is transmitted as an attachment.

In the KSL process, if the production of the document is not followed by an e-mail sending but the option is active, the document will be available in the list for later sending: a grouped sending of documents in attachments (available in My Files), from a personalized KSL email for example.

If the option is not active, the document will not be directly available in the list of annexes, but it will always be present on the object via a link to KSL.

Next validates this information and advances to the next step.

### Step 3 > Document sending

The addresses of recipients can be varied using the available merge fields.

It is possible :

- to enter an email address,
- to reference an already existing contact, in which case their thumbnail is displayed,
- to reference the owner of the object (of the opportunity) or the contact via his id, using the merge fields.

The subject of the email can also be changed.

An email template can be selected from the list of standard Salesforce® email.

If you have not selected any template, you can create the standard variable text of the email which must be triggered in the process.

Send Document by E-mail: click on Active to activate this step of sending the PDF document by E-mail in the process.

Next validates this information and proceeds to the next

## Step 4 > Error Management

Create Automatic Process Configuration

Error Management

List of additional recipients ⓘ

c.ever@naelan.com

Cancel Previous Save

List of additional recipients: complete with the contact address (e-mail or contact) to which should be addressed error messages, in addition to the object owner.

Save to validate the complete configuration of your KSL process, which can now be used in Process Builder.

## 6.2. Execute the KSL process from the Salesforce® Process Builder

Setup > Process Automation > Process Builder

The objective is to trigger an email sending when the amount of the opportunity is modified, with the updated commercial offer in attachment.

New Process

Process Name \* API Name \* ⓘ

QuotationUpdate AutomaticEmail QuotationUpdate\_AutomaticEmail

Description

Email Commercial response on quotation update

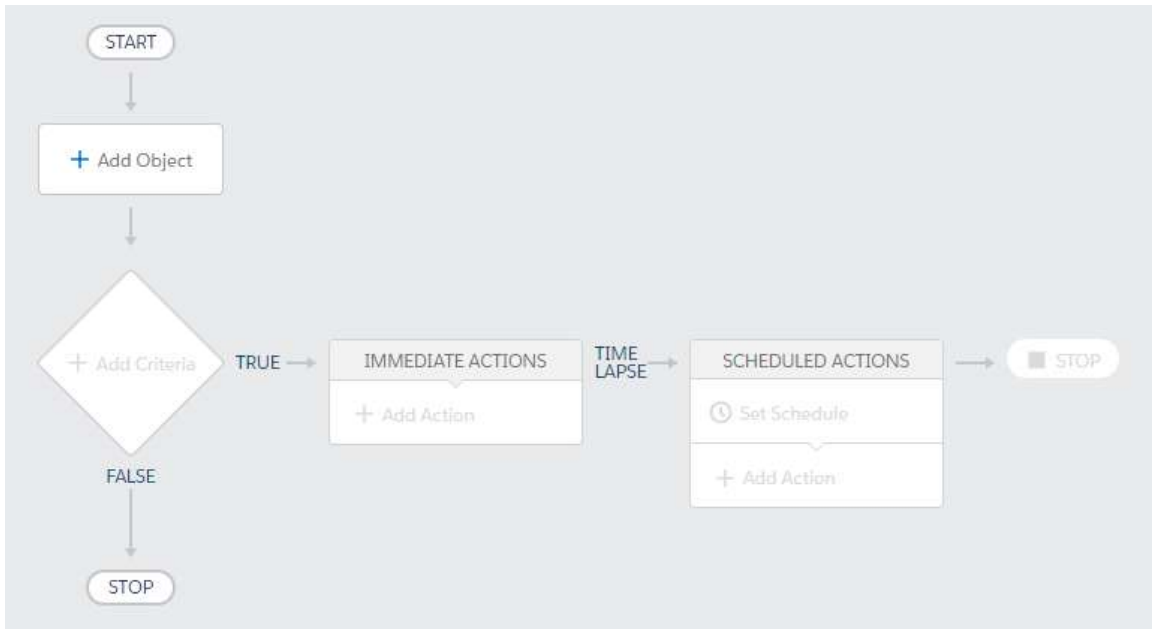
The process starts when \*

A record changes ▼

Cancel Save



- Enter the name of the process -> the name of the API is automatic.
- Enter the description.
- The process starts when... A record changes

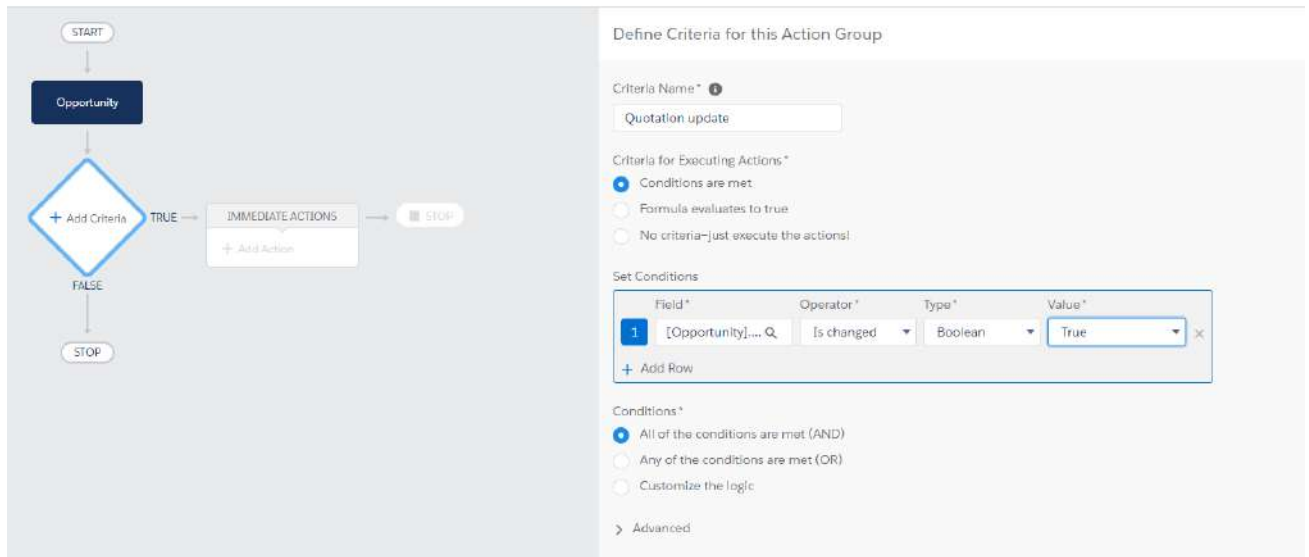


### Add Object

- Select the object.
- Indicate if the action is triggered on creation or on creation and update.

**i** If the opportunity already includes an active automation, it will be reported on this interface.

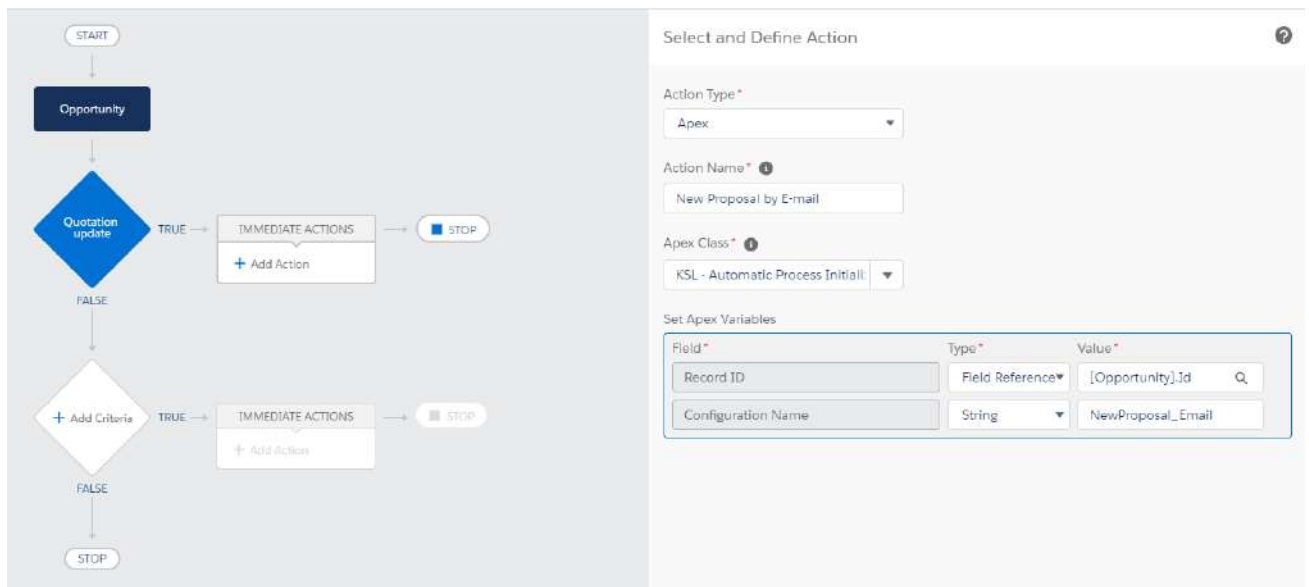
### Add Criteria



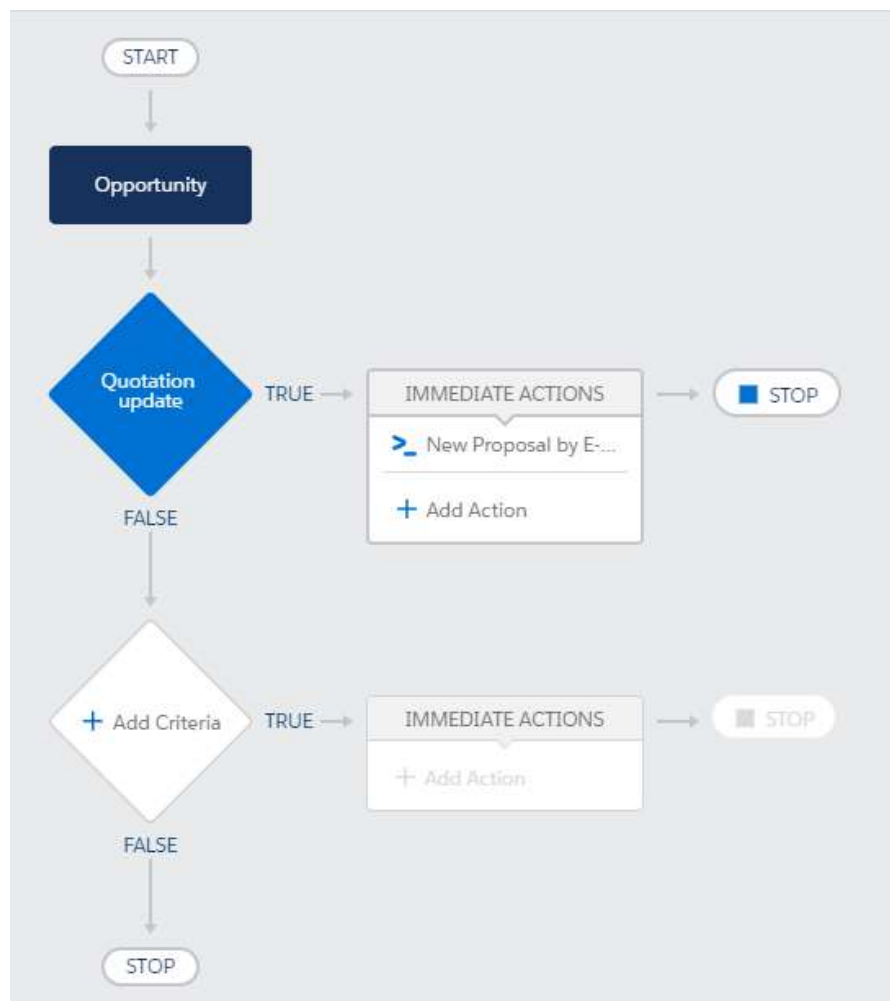
Enter:

- the name of the criterion,
- performance criteria,
- the performance condition(s)

Add Action



- Action type : Apex.
  - Apex Class : KSL – Automatic Process Initializer
- Set Apex variables :
- Record ID : identifier of the current object. Use the help provided in the field (ex : [Opportunity.Id])
  - Configuration Name : KSL process name



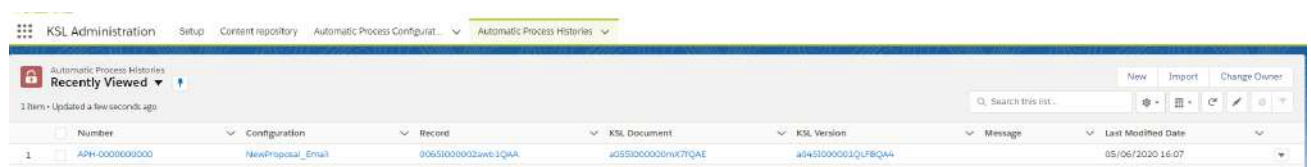
Activate the process via the blue "Activation" button.

***i** When the process has been activated, it cannot be changed; it is mandatory to create a new non-active version of this process for modification.*

The Salesforce® process can be deleted from the list of processes, by developing the process, then delete on the targeted version.

### 6.3. Control the execution log

#### KSL Administration > Automatic Process Histories



- The last histories will appear first
- The message column is populated in the event of an error

Each information is a link that refers to the details of the object: process, configuration, Salesforce object, KSL document and Version of the KSL document.

In Sales > Reports > All Reports

- Click KSL.
- Click on All Failed Automatic Process Histories.

Report: Automatic Process Histories <b>All Failed Automatic Process Histories</b>							
Total Records							
1							
	Automatic Process History: Number	Configuration	Record	KSL Document	KSL Version	Message	Cause
1	AFH-000000001	NewProposal_Email	0065f000002awb1QAA			An error occurred during the document generation	No such column: 'TradeStyle' on entity 'Account'. If you are attempting to use a custom field, be sure to append the '_c' after the custom field name. Please reference your WSDL or the describe call for the appropriate names.

For details of error messages only.

## 7. Validation workflow example

In Salesforce®, you can configure validation workflow to validate some records and especially KSL documents.

In this section, you will find a simple example of a validation workflow that you can configure for the KSL (PDF) document. For more information on validation workflow, you can read the Salesforce® documentation.

### 7.1. Creation of a queue

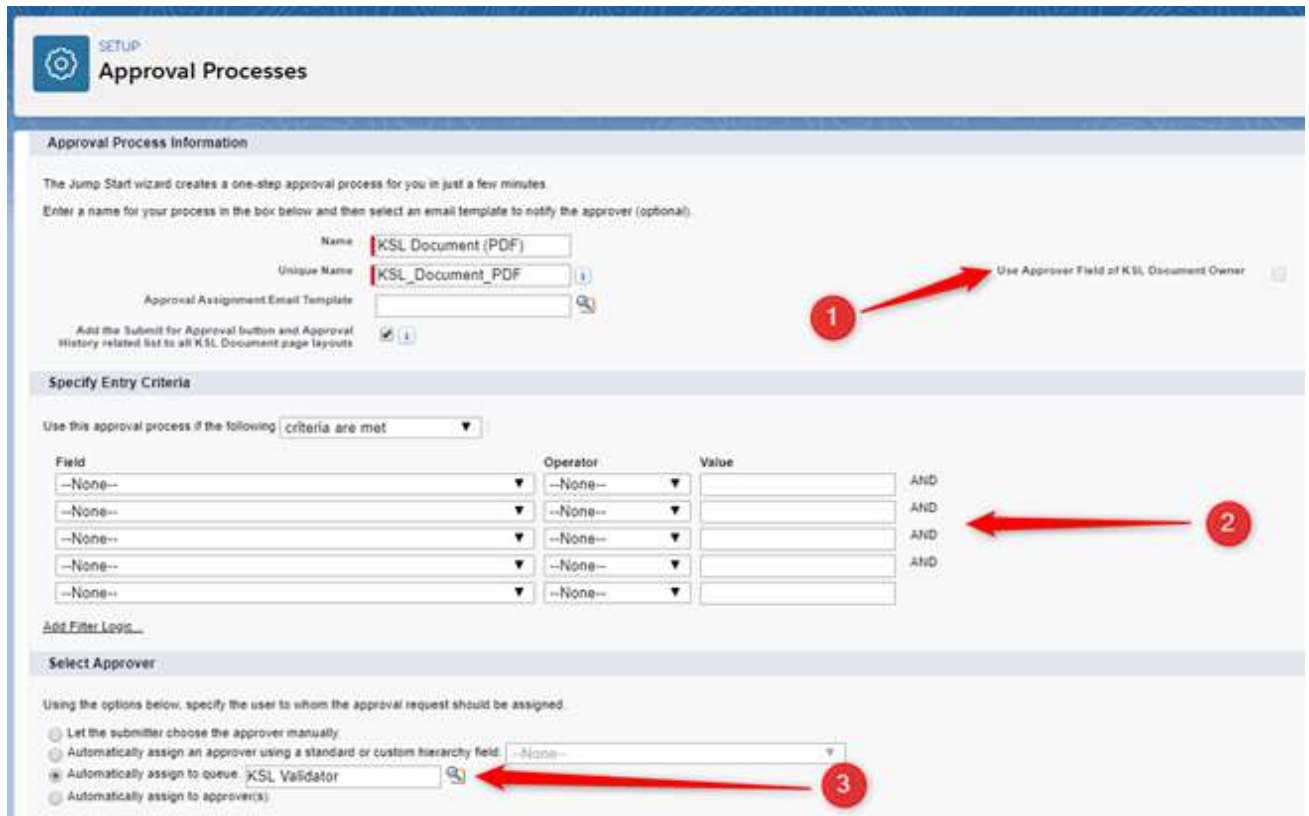
If you have multiple users assigned to validate the document, you can create a queue to manage it. In Setup, find Queues and click the button New.

The screenshot shows the 'Edit Queue' interface in Salesforce. The queue is named 'KSL Validator'. The 'Queue Name and Email Address' section includes fields for Label, Queue Name, and Queue Email. A red arrow labeled '1' points to the Queue Name field. The 'Supported Objects' section shows a list of available objects and a list of selected objects. A red arrow labeled '2' points to 'KSL Document' in the Selected Objects list.

- Choose the name of your queue
- Choose the objects that will be assigned to this queue. In our example KSL Document.
- Choose the members of the queue. These can be users, roles, or public groups.

### 7.2. The validation workflow

In Setup, search for Approval Processes. Choose the object on which you want to create your validation workflow, in this example KSL Document (PDF), and then Create New Approval Process.



- Choose the name of your validation workflow and the e-mail template to send to the approver if necessary.
- Specify whether KSL documents (PDF) are automatically transmitted to the validation workflow and the condition. Otherwise, the user may manually submit his KSL document (PDF) to the validation workflow.
- Select the approval of the KSL Document (PDF). In this example, the record is assigned to the previously created queue.

On the Approval Process (Layout) screen, you can add new approval steps and choose whether the Salesforce record (the document in the context) should be locked when it is approved or rejected.

## 8. Annexes

### 8.1. Generate public and private keys

The Public Key is the identifier of the Ksl Office web application for authorization servers; it is the clientId configured for the KSL Suite application server (web.xml of the Tomcat configuration). This key is dependent on the instance of the KSL Suite server. The public key is required for the KSL server to recognize the Salesforce® server and to allow communication.

The Private Key is the equivalent of the clientSecret, also configured for the KSL Suite application server. This key is required for recognizing the JWT token (JSON Web Token). This 32-byte (256-bit) key corresponds to the "256" of the SHA256 protocol.

#### a. Private key creation

To generate this private key, we advise you to use the online Jamiekurtz tool: <http://jwtbuilder.jamiekurtz.com> (Signed JSON Web Token part - "Generate 32-byte Key" option).

Be careful, do not click on the Create Signed JWT #button, but on the arrow and select Generate 32-byte Key.

The value of the Key field displayed is the private key that can be copied and pasted into the KSL for Salesforce® configuration.

Previous form information is not needed to generate this key.



#### b. Public key creation

To generate this public key, we advise you to use the GuidGen online tool: <https://www.guidgen.com>.

Several other ways can be used to create this key:

- From Salesforce®
- With a tool like <https://www.ssh.com/ssh/putty/windows/puttygen>
- With a tool like <http://www.unit-conversion.info/texttools/random-string-generator/>
- With command lines (e.g. openssl)



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