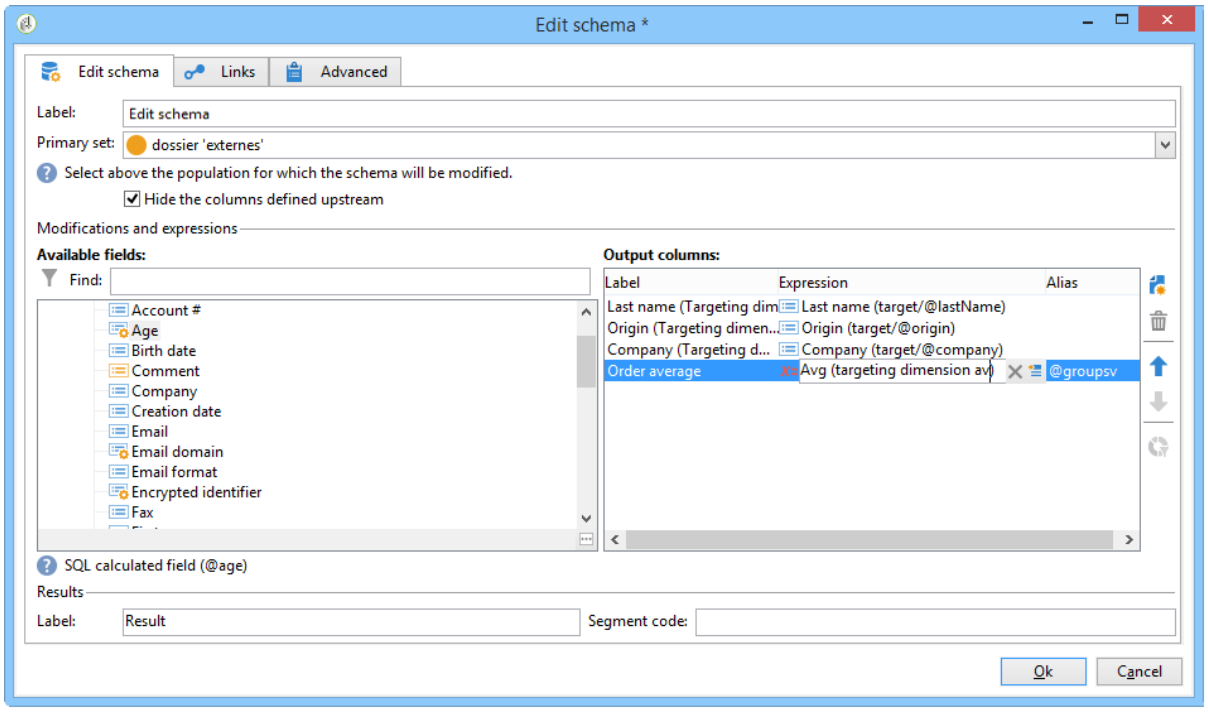
Module 2: Customization

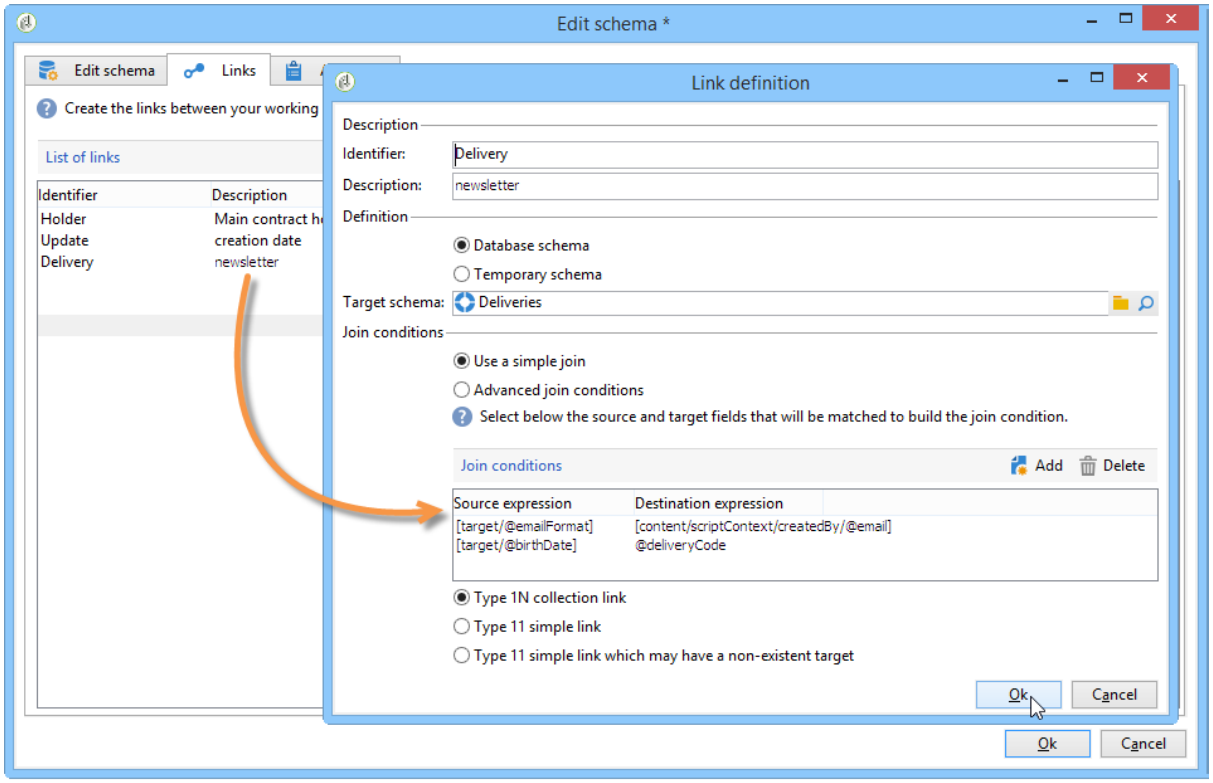
2.1 Edit schema

Data can be transformed, normalized and, if necessary, enriched in the workflow using the **Edit schema** activity. It is generally used to normalize the data structure: you can rename the output columns or modify their content, by calculating the average values of a field or aggregate for example.

This activity does not change the data in the work table, it changes only its schema, i.e. the logical view of the data.



You can also create joins with other worktables, via the **Links** tab.



The lower section lets you configure the list of joining conditions, i.e. the criteria used for reconciling the data from the two tables.

2.2 Extend a schema

IMPORTANT

Some built-in schemas must not be extended: mainly those for which the following settings are defined:
dataSource="file" and **mappingType="xmlFile"**.
The following schemas must not be extended: **xtk:entityBackupNew**, **xtk:entityBackupOriginal**, **xtk:entityOriginal**, **xtk:form**, **xtk:srcSchema**, **ncm:publishing**, **nl:monitoring**, **nms:calendar**, **nms:remoteTracking**, **nms:userAgentRules**, **xtk:builder**, **xtk:connections**, **xtk:dbInit**, **xtk:funcList**, **xtk:fusion**, **xtk:jst**, **xtk:navtree**, **xtk:queryDef**, **xtk:resourceMenu**, **xtk:schema**, **xtk:scriptContext**, **xtk:session**, **xtk:sqlSchema**, **xtk:strings**.
This list is not exhaustive.

There are two methods for extending an existing schema:

1. Modifying the source schema directly.
2. Creating another schema with the same name but a different namespace. The advantage is that you can extend a table without needing to modify the original schema.

The root element of the schema must contain the **extendedSchema** attribute with the name of the schema to be extended as its value.

An extension schema does not have its own schema: the schema generated from the source schema will be filled in with the fields of the extension schema.

IMPORTANT

You are not allowed to modify the built-in schemas of the application, but rather the schema extension mechanism. Otherwise, modified schemas will not be updated at the time of future upgrades of the application. This can lead to malfunctions in the use of Adobe Campaign.

Example: extension of the **nms:recipient** schema.

```
<srcSchema extendedSchema="nms:recipient" name="recipient" namespace="cus">
  <element name="recipient">
    <attribute name="code" label="Branch code" type="long"/>
  </element>
</srcSchema>
```

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The **nms:recipient** extended schema is filled in with the field populated in the extension schema:

```
<schema dependingSchemas="cus:recipient" name="recipient" namespace="nms">
  ...
  <attribute belongsTo="cus:recipient" label="Branch code" name="code"
sqlname="iCode" type="long"/>
  ...
</schema>
```

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The **dependingSchemas** attribute on the root element of the schema references the dependencies on the extension schemas.

The **belongsTo** attribute on the field fills in the schema where it is declared.

IMPORTANT

For the modifications to be taken into account, you need to regenerate schemas. For more on this, refer to this page.
If the modifications impact the structure of the database, you need to run an update. For more on this, refer to this page.

2.3 Customize your instance

Learn how to **Customize your Campaign instance**.

CAUTION

Adobe Campaign customization is reserved to expert users only.

Create new data fields and schemas

Adobe Campaign makes use of Data Schemas to:

- Define how data objects within the application are tied to underlying database tables
- Define links between the different data objects within the Campaign application
- Define and describe the individual fields included in each object

For example, to add a field to an existing table, such as the recipient table (nms:recipient), you have to extend that schema.

Two table extension modes are available:

- Through the interface, by using the **New field** assistant

  Learn how to quickly add a new field in Campaign in Campaign Classic v7 documentation

- Programmatically, by extending the schema. Learn how to extend an existing schema in this section.

You can also create new tables in the Campaign database and extend the built-in datamodel.

To add an entirely new type of data that does not exist out-of-the-box in Adobe Campaign (a table of contracts for example) you can create a custom schema directly. For more on this, refer to this example.

Related topics

Example of schema edition in Campaign Classic v7 documentation

Use Case: link a field to an existing reference table in Campaign Classic v7 documentation

Modify the input forms

Campaign input forms can be adapted to adapt to your implementation. You can add or remove form fields by modifying the XML content.

Learn how to modify an existing input form or create a new form in this section.

Customize dashboards

The Adobe Campaign interface uses many Web applications to access, manage, and interact with recipients, deliveries, campaigns, stocks, etc. They are seen in the interface in the form of dashboards with only one page.

The built-in Web applications are stored in the **Administration** > **Configuration** > **Web applications** folder of the Explorer.

Learn how to create an overview page in Campaign in Campaign Classic v7 documentation

Customize lists and create filters

Campaign lists come with pre-defined filters to facilitate navigation and data vizualisation.

When you navigate in the Adobe Campaign Explorer tree, the data contained in the database is displayed in lists. You can filter these lists, run searches, add information, filter and sort data.

Learn how to configure lists and save a list configuration in this page.

You can apply filter on these lists to display only the data needed by the operator. Then actions can then be executed on the filtered data. Filter configuration lets you select data from a list dynamically. If the data is modified, the filtered data is updated.

Learn more about filtering options in this page.

2.4 Use case: select seed addresses on criteria

In the framework of a delivery or a campaign, the **Edit the dynamic condition…** link lets you choose seed addresses based on specific selection criteria.

In this use case, the site **My online library** would like to personalize its newsletters according to its clients' literary tastes.

In conjunction with the purchasing department, the user in charge of deliveries has created a newsletter for subscribers that have purchased police novels.

To share the final result of their collaboration with them, the delivery manager decides to add their colleagues from the purchasing department to the delivery as seed addresses. Using a dynamic condition lets you save time on configuring and updating addresses.

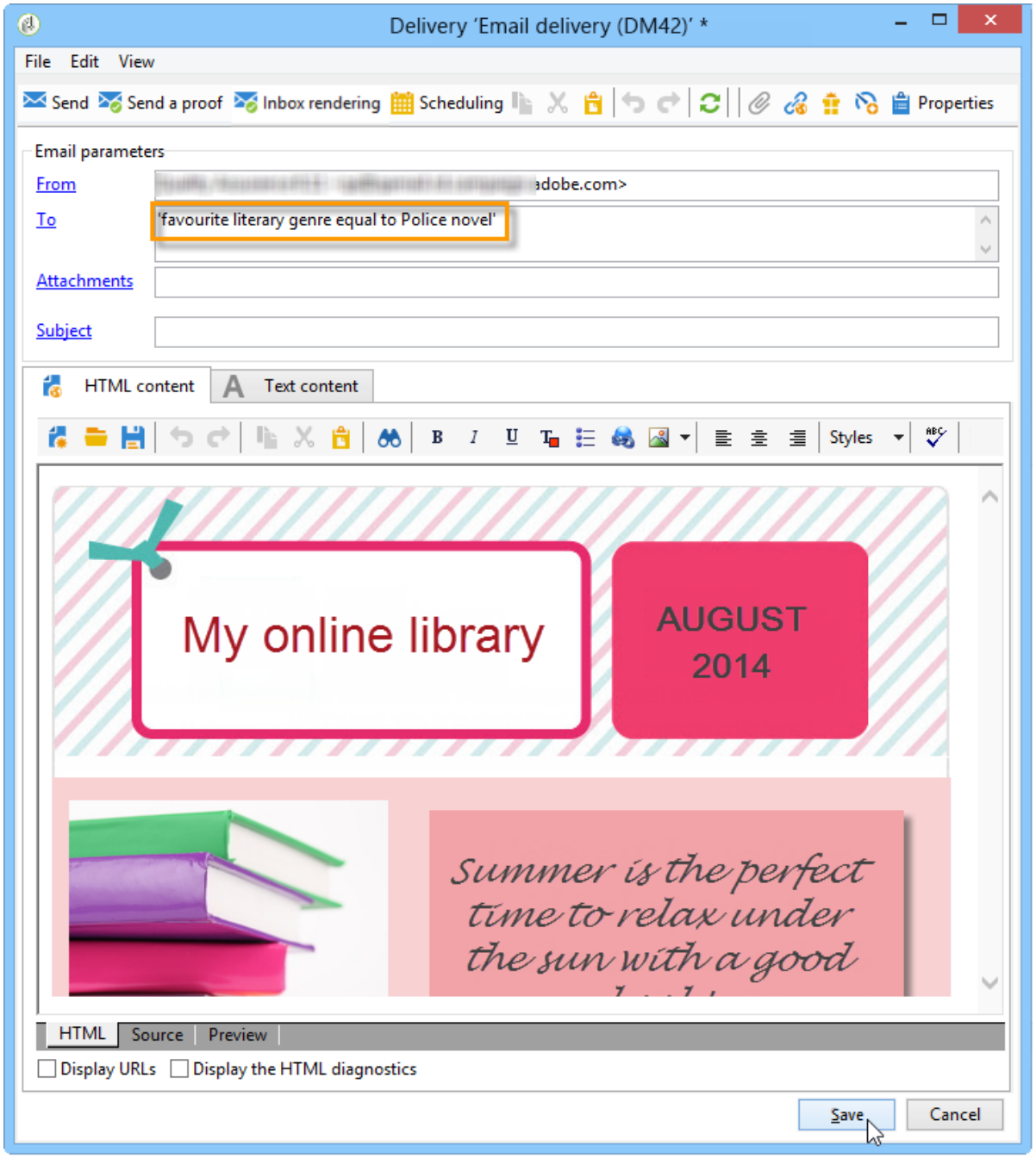
To use the dynamic condition, you must have:

- a delivery ready to be sent,
- seed addresses that have a common value. This value can be a field that already exists in Adobe Campaign. In this example, the seed addresses share the "Purchasing" value in the "Department" field, which is not present in the application by default.

Step 1 - Create a delivery

The steps for creating a delivery are detailed in the Create an email delivery section.

In this example, the delivery manager has created the newsletter and selected the recipients.



Step 2 - Create a common value

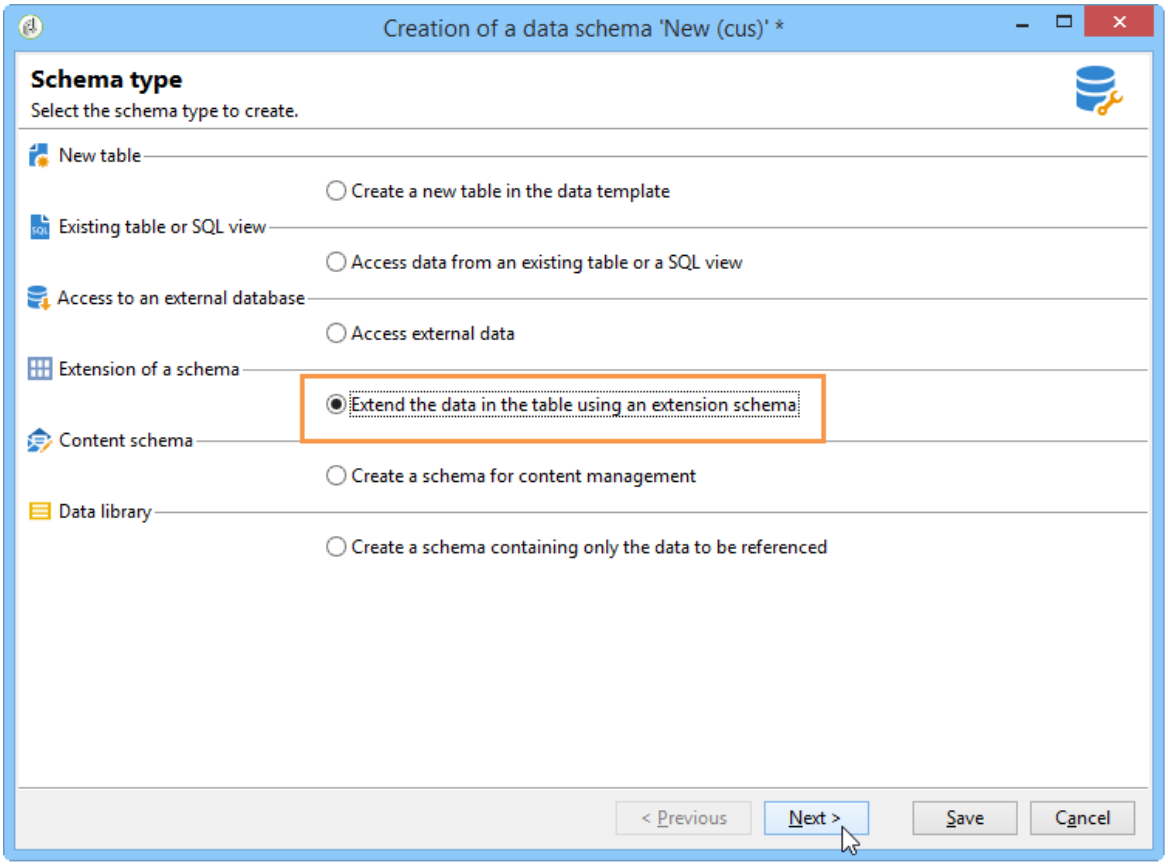
To create a common value like the one in our example (Purchasing department), you must first extend the **data schema** of your seed addresses and edit the associated input form.

Extend the data schema

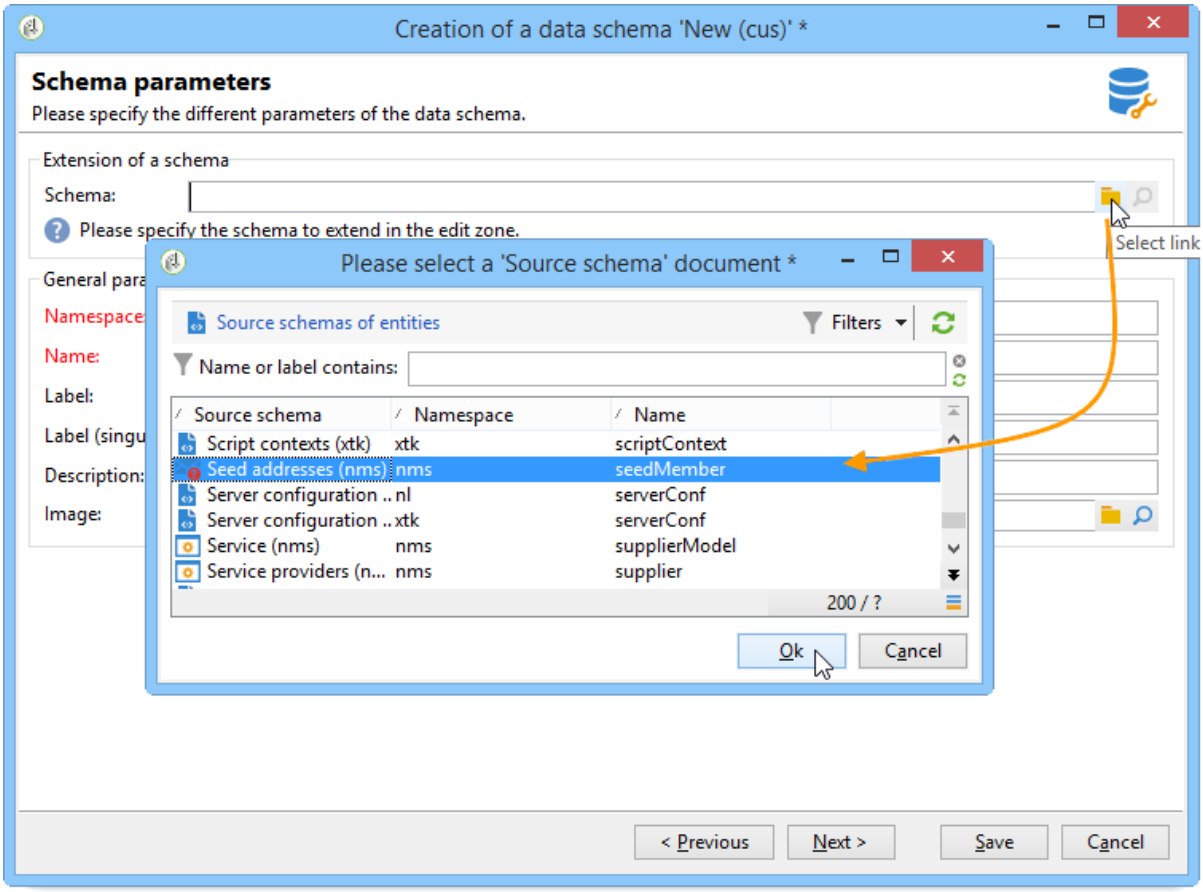
For further details on schema extensions, refer to this section.

1. In the **Administration > Configuration > Data schemas** node, click the **New** icon.

2. In the **Creation of a data schema** window, select the **Extension of a schema** option and click **Next**.



3. Select the **Seed addresses** source schema, enter **doc** as the **Namespace** and click **Ok**.



4. Click **Save**.
5. In the schema editing window, copy the lines below and paste them in the area indicated in the screenshot.

```
<element name="common">
<element label="Recipient" name="custom_nms_recipient">
<attribute label="Department" length="80" name="workField" template="nms:recipient:recipient/@company"
type="string" userEnum="workField"/>
</element>
</element>
```

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```
<srcSchema created="2017-01-13 08:58:03.022Z" desc="Seed to insert in the export files"
           extendedSchema="cus:seedMember" img="nms:unknownad.png" label="Seed addresses"
           labelSingular="Seed to insert in the export files " lastModified="2017-01-13 08:58:03.022Z"
           mappingType="sql" name="seedMember" namespace="cus" xtkschema="xtk:srcSchema">
  <createdBy _cs="Administrator (admin)"/>
  <modifiedBy _cs="Administrator (admin)"/>
  <element name="common">
    <element label="Recipient" name="custom_nms_recipient">
      <attribute label="Service" length="80" name="workField" template="nms:recipient:recipient/@company"
                 type="string" userEnum="workField"/>
    </element>
  </element>

  <element desc="Seed to insert in the export files" img="nms:unknownad.png" label="Seed addresses"
           labelSingular="Seed to insert in the export files " name="seedMember"/>
</srcSchema>
```

Then copy the following lines and paste them under the **Seed to insert in the export files** element.

```
<element aggregate="doc:seedMember:common">
</element>
```

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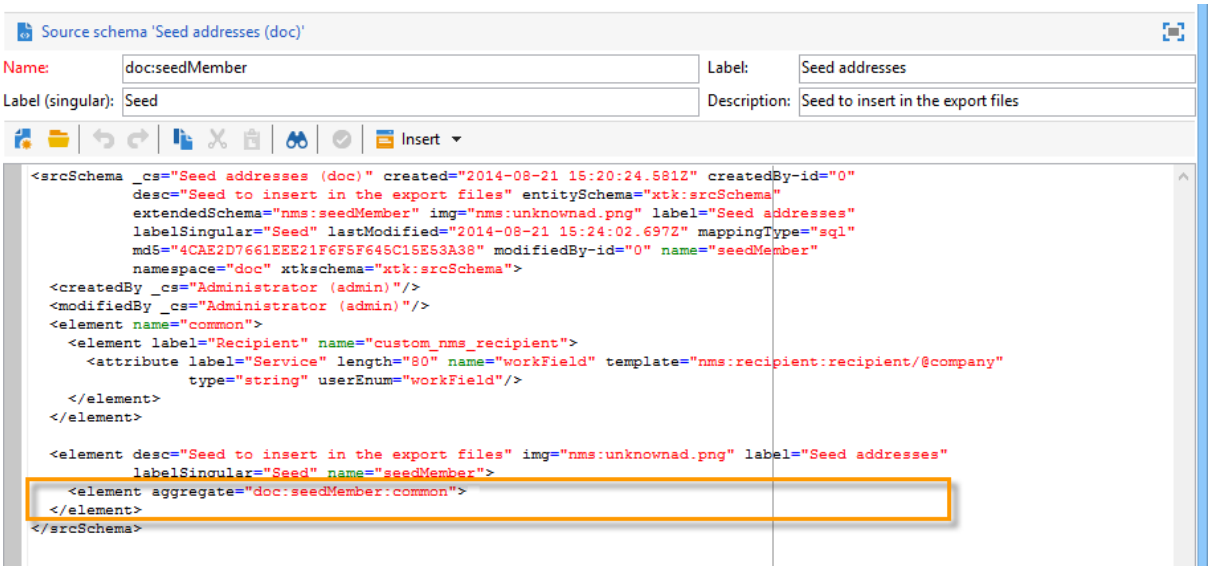
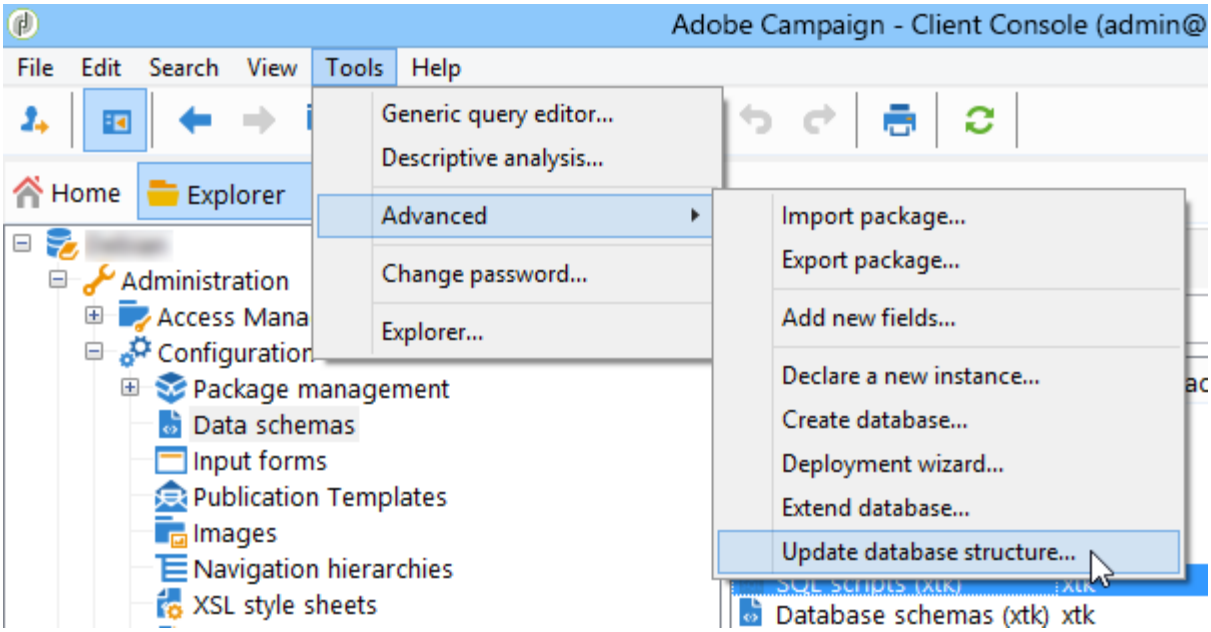
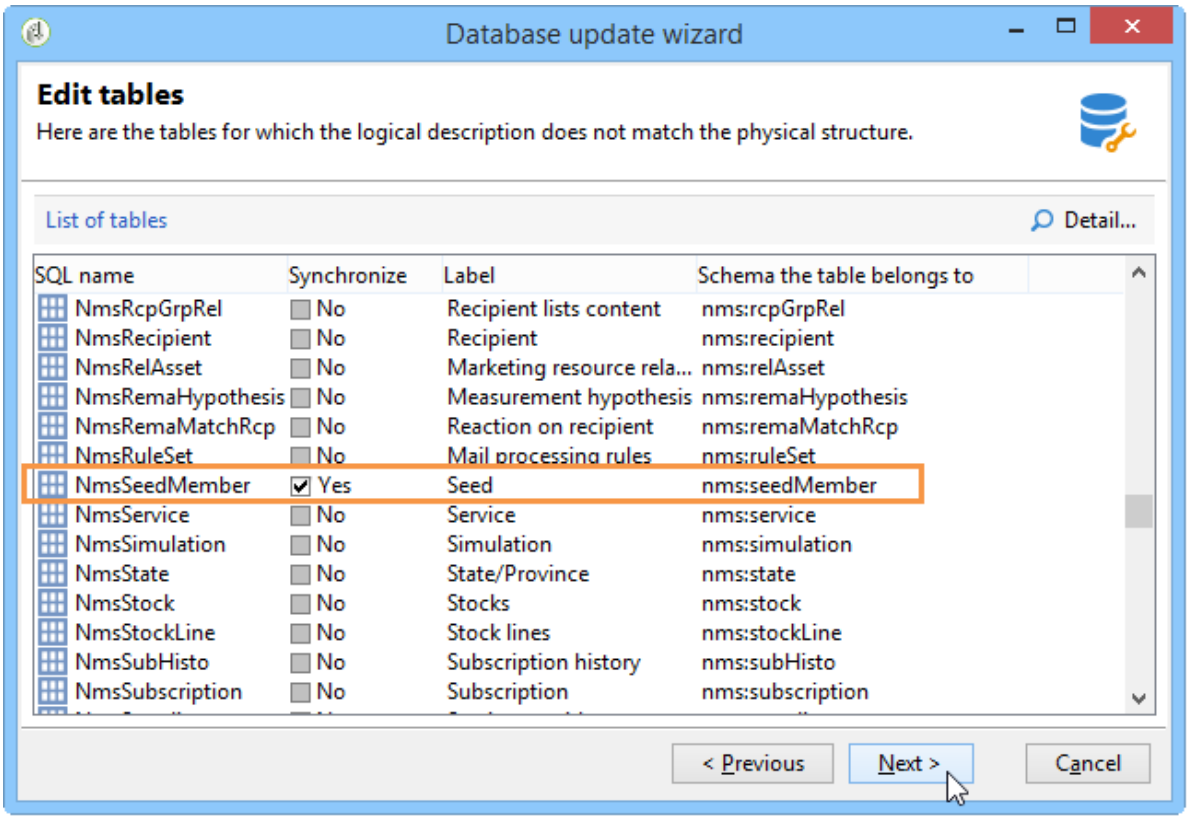


In this case, you are specifying that a new enumeration named **Department** has been created in the seed address table, and it is based on the standard **@company** enumeration template (labeled under the name **Company** in the seed address form).

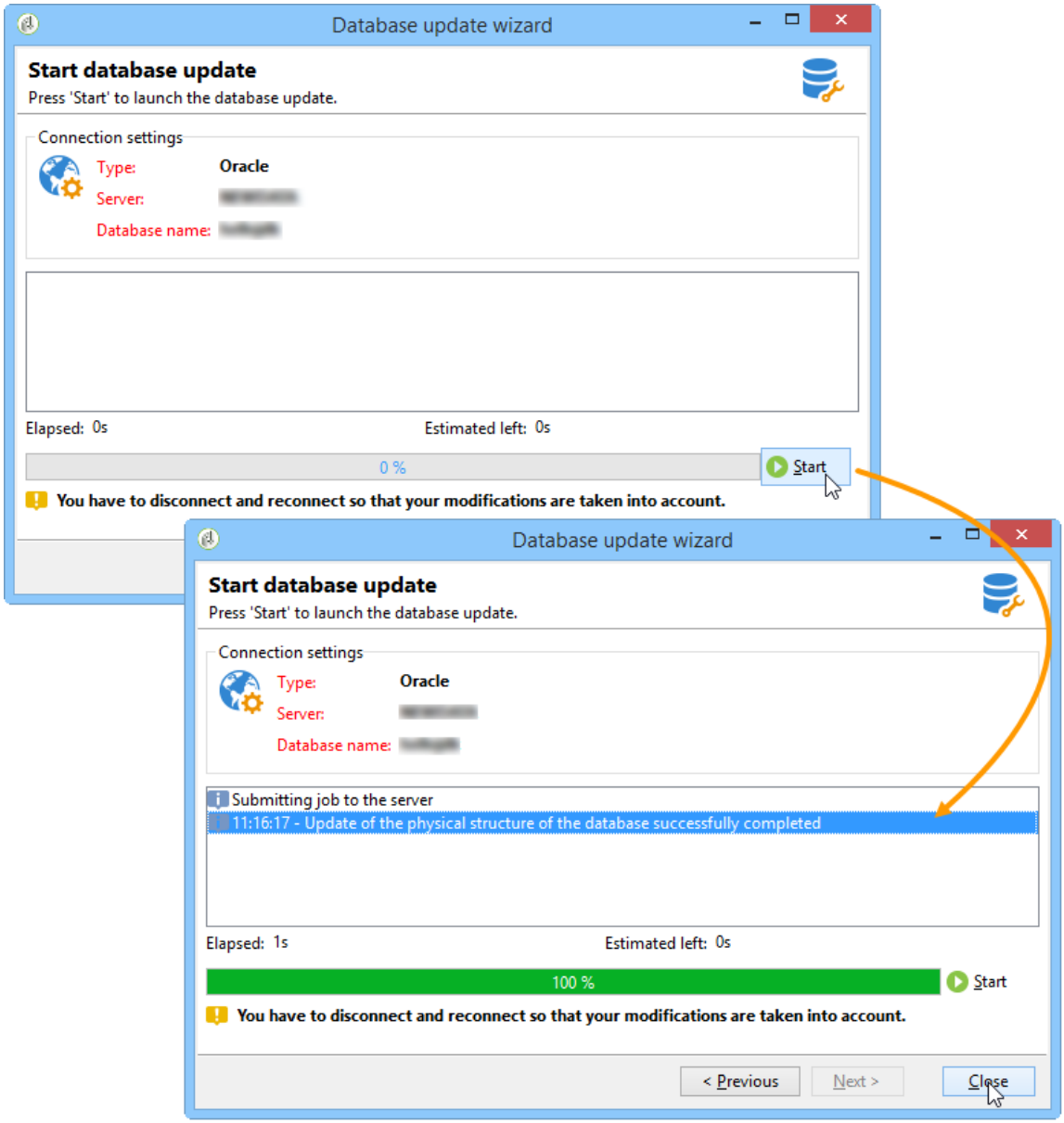
12. Click **Save**.
13. In the **Tools > Advanced** menu, select the **Update database structure** option.



14. When the update wizard is displayed, click the **Next** button to access the Edit tables window: changes carried out in the seed address data schema require a structure update.



15. Follow the wizard until you come to the page to run the update. Click the **Start** button.



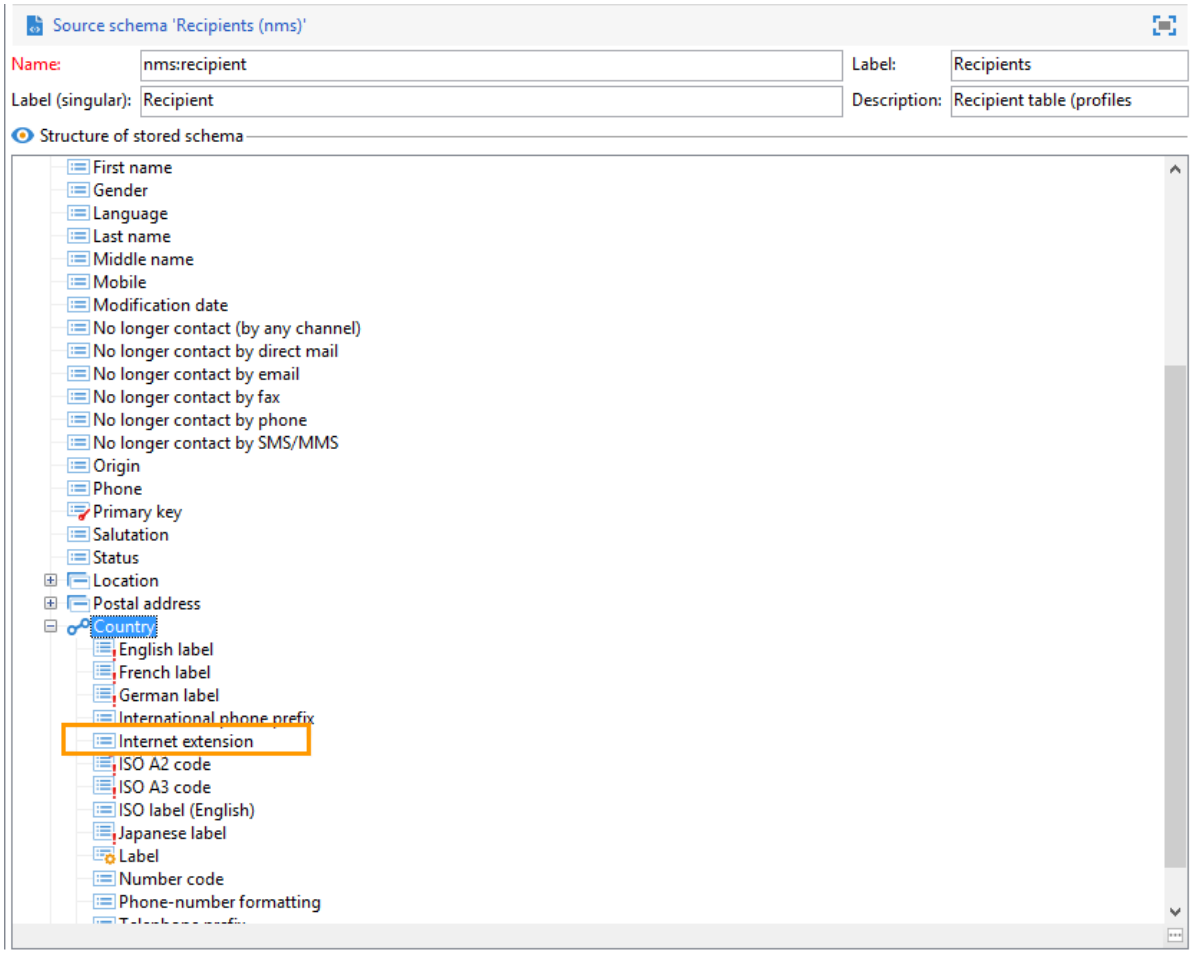
Once the update has finished, you can close the wizard.

16. Disconnect then reconnect to Adobe Campaign. The changes made in the seed address data schema are now effective. In order for them to be visible from the seed address screen, you must update the associated **Input form**. Refer to the Update the input form section.

Extend the data schema from a linked table

The seed addresses data schema can use values from a table linked to the recipient data schema - Recipient (nms).

For example, the user would like to integrate the **Internet Extension** found in the **Country** table that is linked to the recipients schema.



They therefore must extend the seed addresses data schema as detailed in the section. However, the lines of code to integrate at **step 4** are as follows:

```
<element name="country">
    <attribute label="Internet Extension" length="2" name="iana" type="string"/>
    <attribute label="Country ISO" length="2" name="countryIsoA2" type="string"/>
  </element>
```

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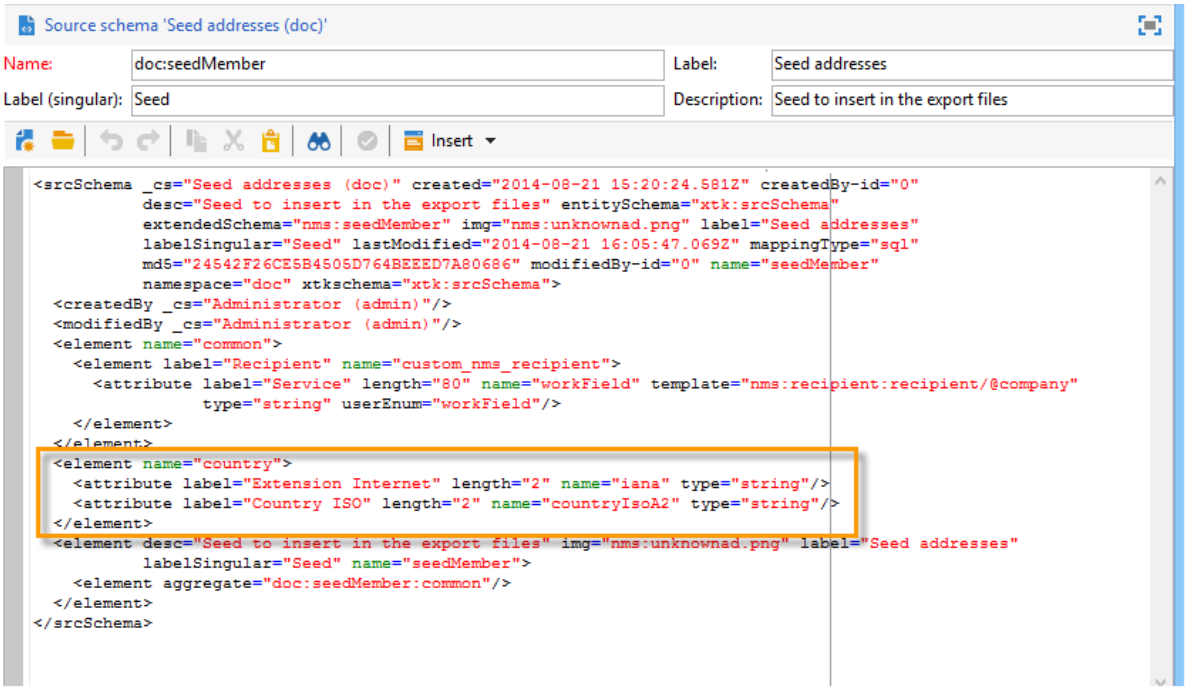


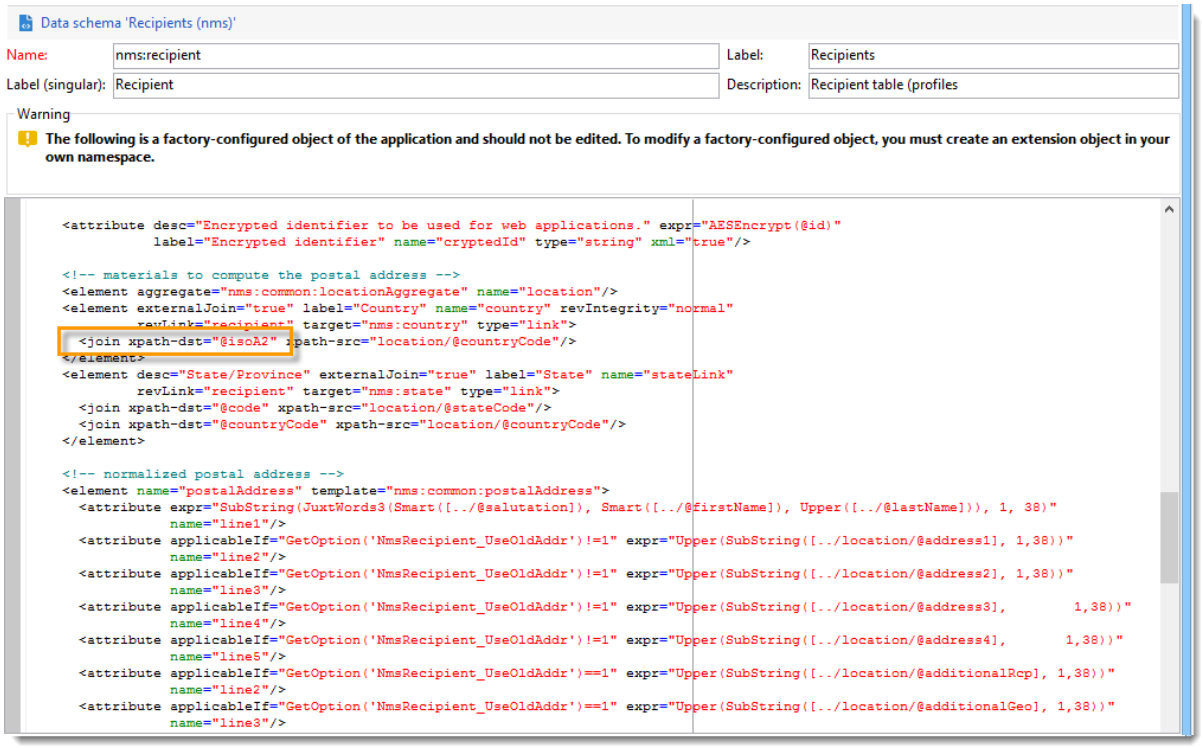
They indicate:

- that the user wants to create a new element named **Internet Extension**,
- that this element comes from the **Country** table.

CAUTION

In the linked table name, you must specify the **xpath-dst** of said linked table.

This can be found in the **Country** element in the recipients table.

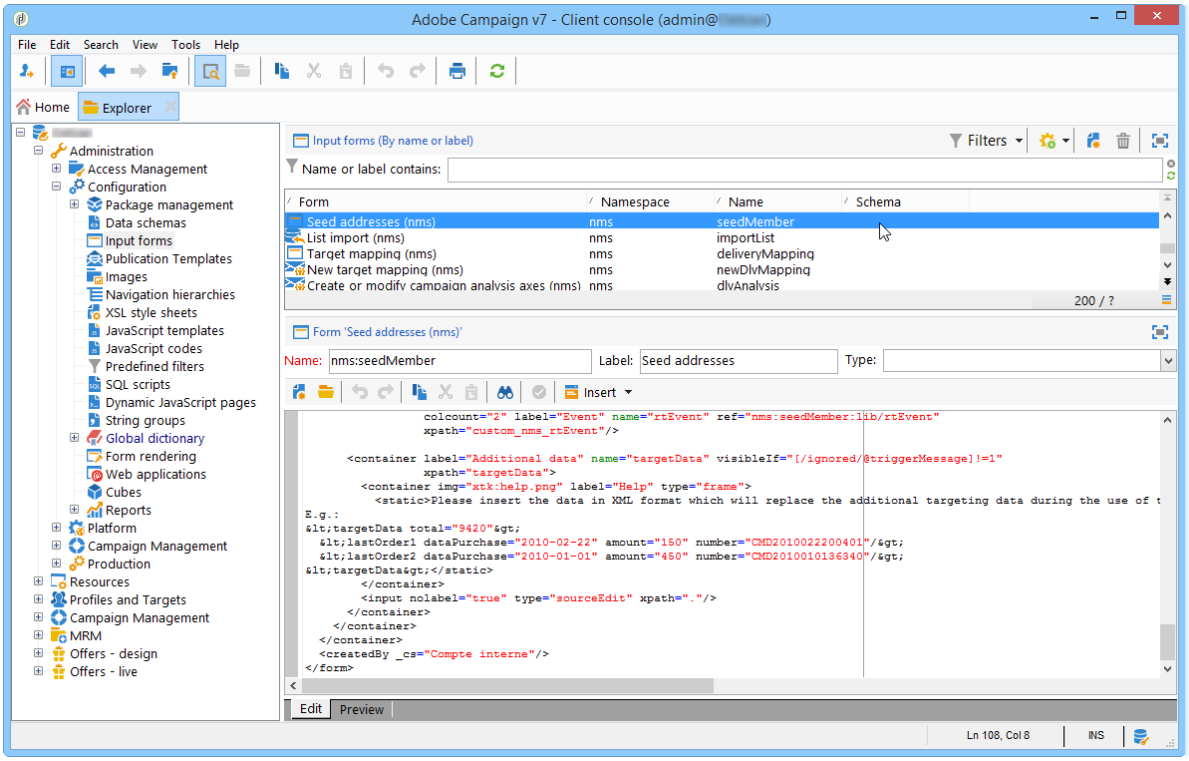


The user can then follow from **step 5** of the section, and update the **Input form** of the seed addresses.

Refer to the Update the input form section.

Update the input form

1. In the **Administration > Configuration > Input forms** node, find the seed addresses input form.



2. Edit the form and insert the following line in the **Recipient** container.

```
<input xpath="@workField"/>
```

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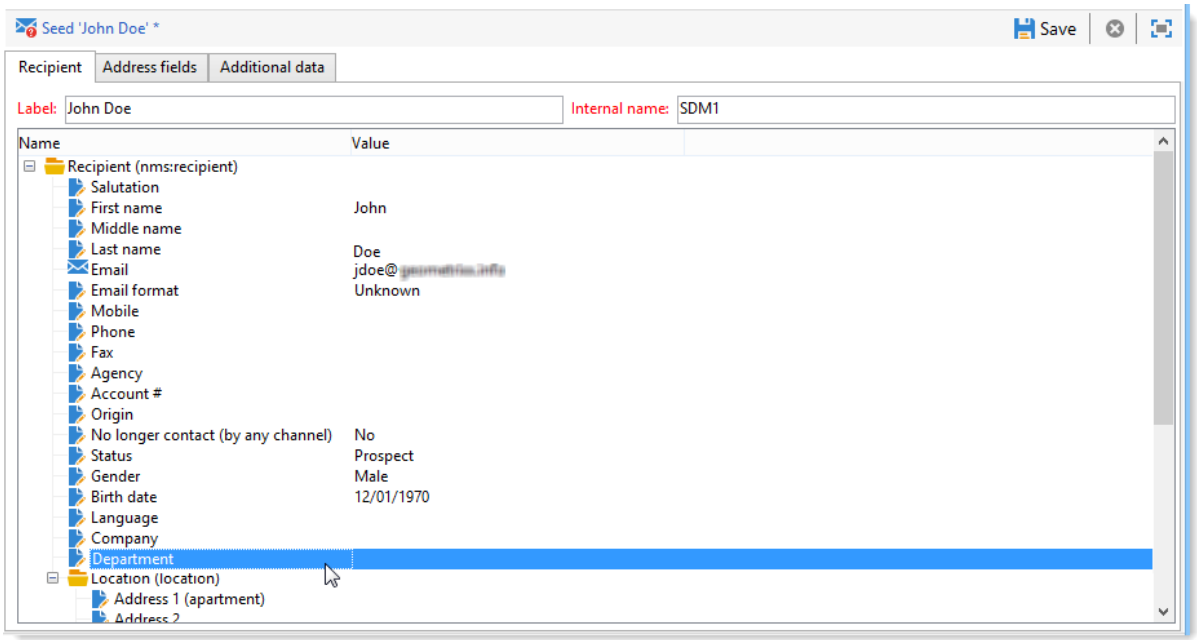
```
<container name="root" setOriginalAsDefault="true"> <!-- container only for factorization in the delivery -->
  <container type="notebook">

    <container colcount="2" label="Recipient" name="recipient" visibleIf="[/ignored/@triggerMessage]!=1">
      <input exprDefault="[custom_nms_recipient/@lastName]+' '+[custom_nms_recipient/@firstName]"
             xpath="@label"/>
      <input xpath="@internalName"/>
      <input colspan="2" editable="true" nolabel="true" type="treeEdit">
        <container label="Recipient (nms:recipient)" xpath="custom_nms_recipient">
          <input xpath="@salutation"/>
          <input xpath="@firstName"/>
          <input xpath="@middleName"/>
          <input xpath="@lastName"/>
          <input img="nms:sendemail.png" xpath="@email"/>
          <input xpath="@emailFormat"/>
          <input xpath="@mobilePhone"/>
          <input xpath="@phone"/>
          <input xpath="@fax"/>
          <input applicableIf="hasPackage('nms:centralLocal')" xpath="@agency"/>
          <input xpath="@account"/>
          <input xpath="@origin"/>
          <input xpath="@blackList"/>
          <input xpath="@status"/>
          <input xpath="@gender"/>
          <input xpath="@birthDate"/>
          <input xpath="@language"/>
          <input xpath="@company"/>
          <input xpath="@workField">
          <container label="Location (location)" xpath="location">
            <input xpath="@address1"/>
            <input xpath="@address2"/>
            <input xpath="@address3"/>
            <input xpath="@address4"/>
            <input xpath="@zipCode"/>
            <input xpath="@city"/>
            <input xpath="@stateCode"/>
            <input xpath="@countryCode"/>
          </container>
        </container>
        <container label="Subscription (nms:subscription)" xpath="custom_nms_subscription">
          <input xpath="@created"/>
          <container label="Service (service)" xpath="service">
```

4. Save your changes.
5. Open a seed address. The **Department** field appears in the **Recipient** table.

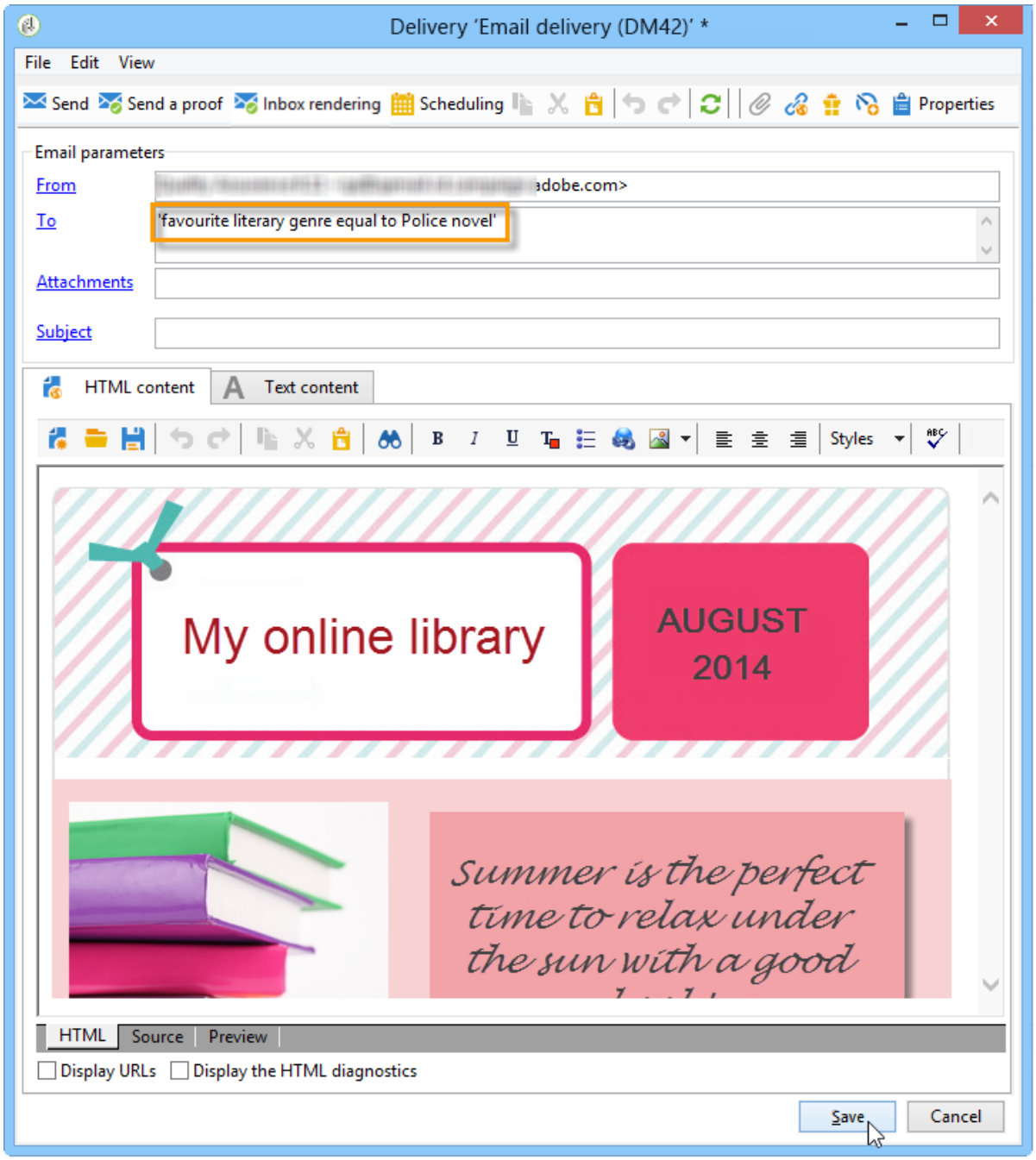


6. Edit the seed addresses that you want to use for the delivery and enter **Purchasing** as the value in the **Department** field.

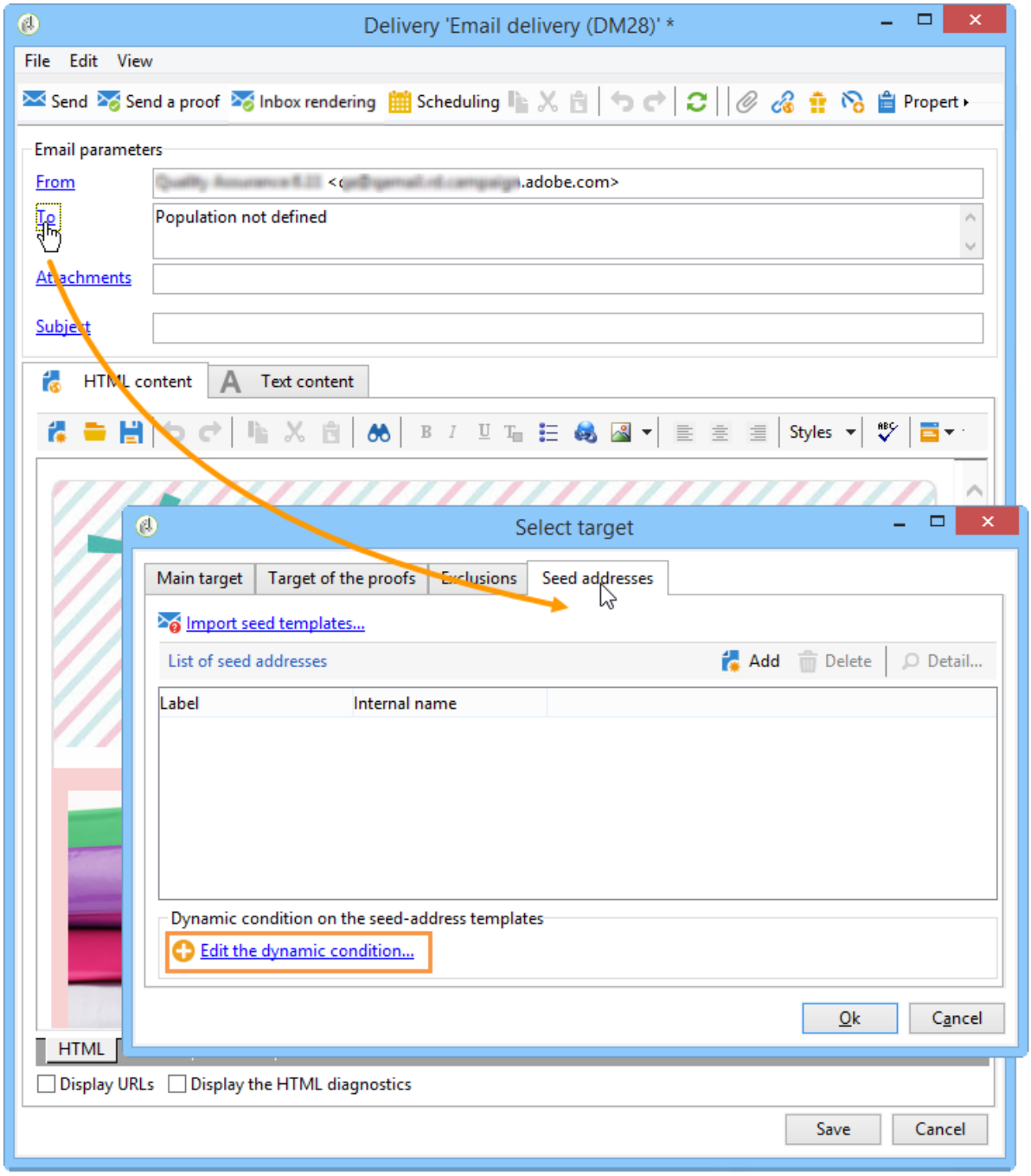
Step 3 - Define the condition

You can now specify the dynamic condition of the seed addresses for the delivery. To do this:

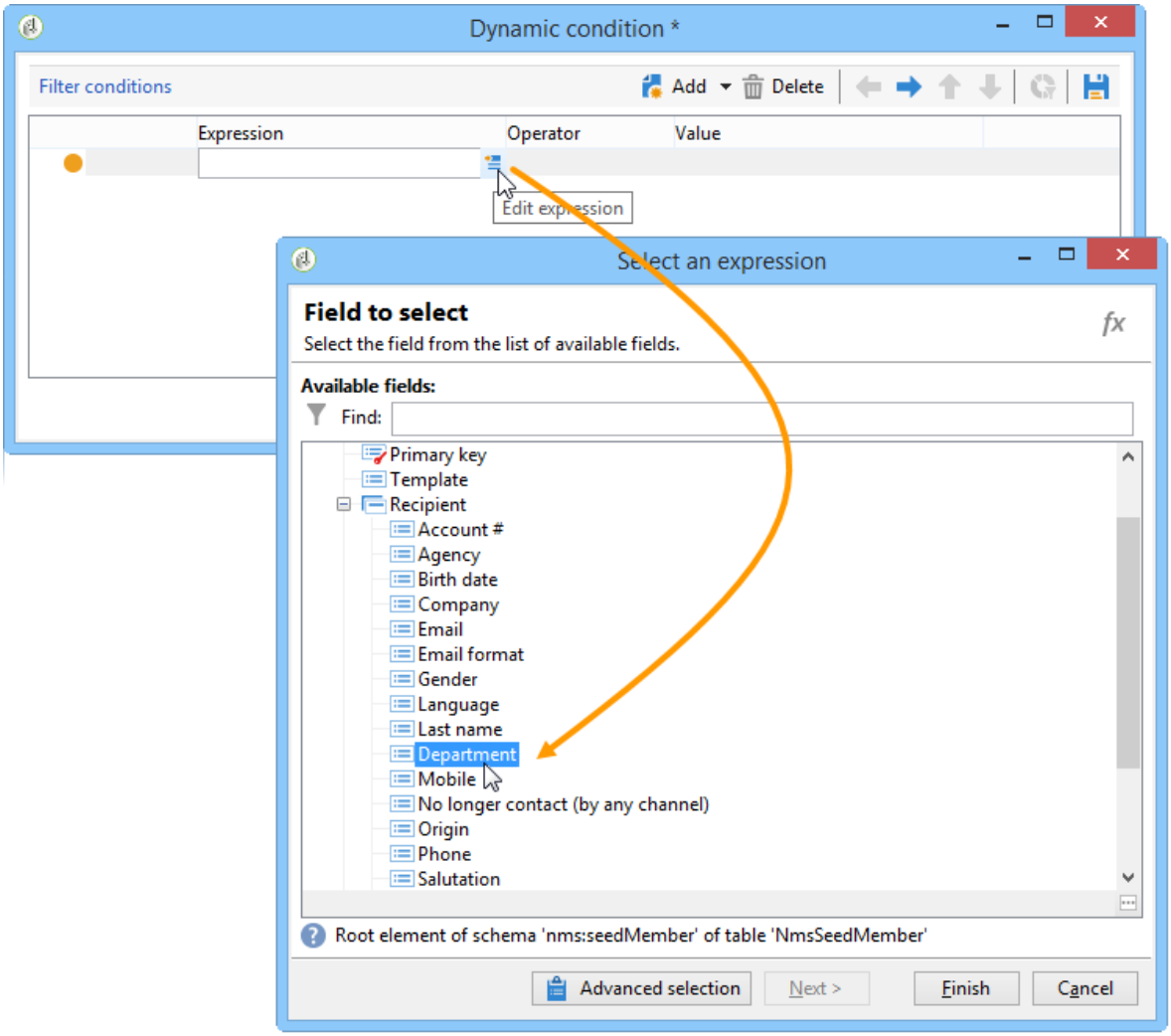
1. Open a delivery.



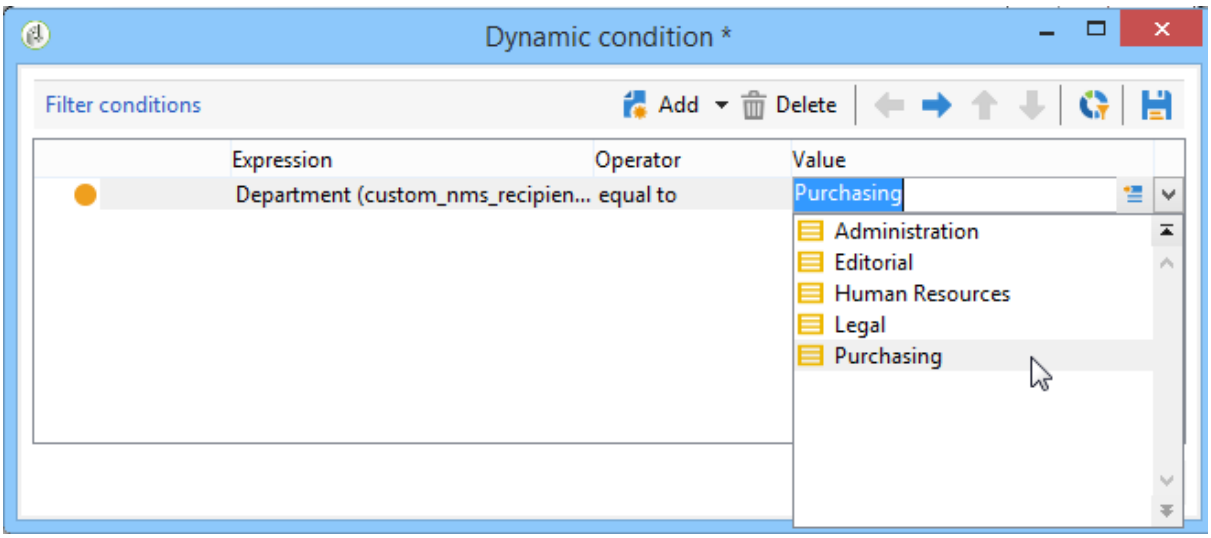
2. Click the **To** link then the **Seed addresses** tab to access the **Edit the dynamic condition…** link.



3. Select the expression that lets you choose the seed addresses you want. Here the user selects the **Department (@workField)** expression.



4. Select the value you would like. In this example the user selects the **Purchasing** department from the drop-down list of values.

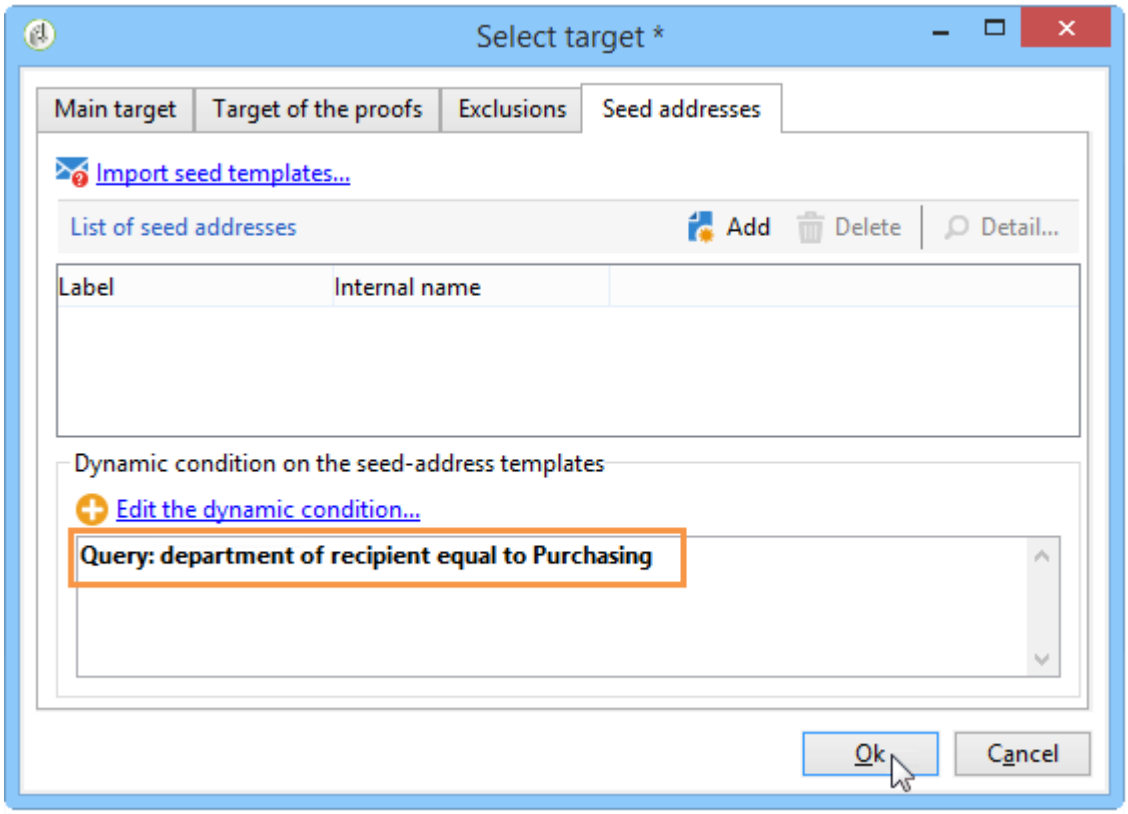


NOTE

The schema extension created earlier comes from the **recipient** schema. The values displayed on the screen above come from an enumeration of the **recipient** schema.

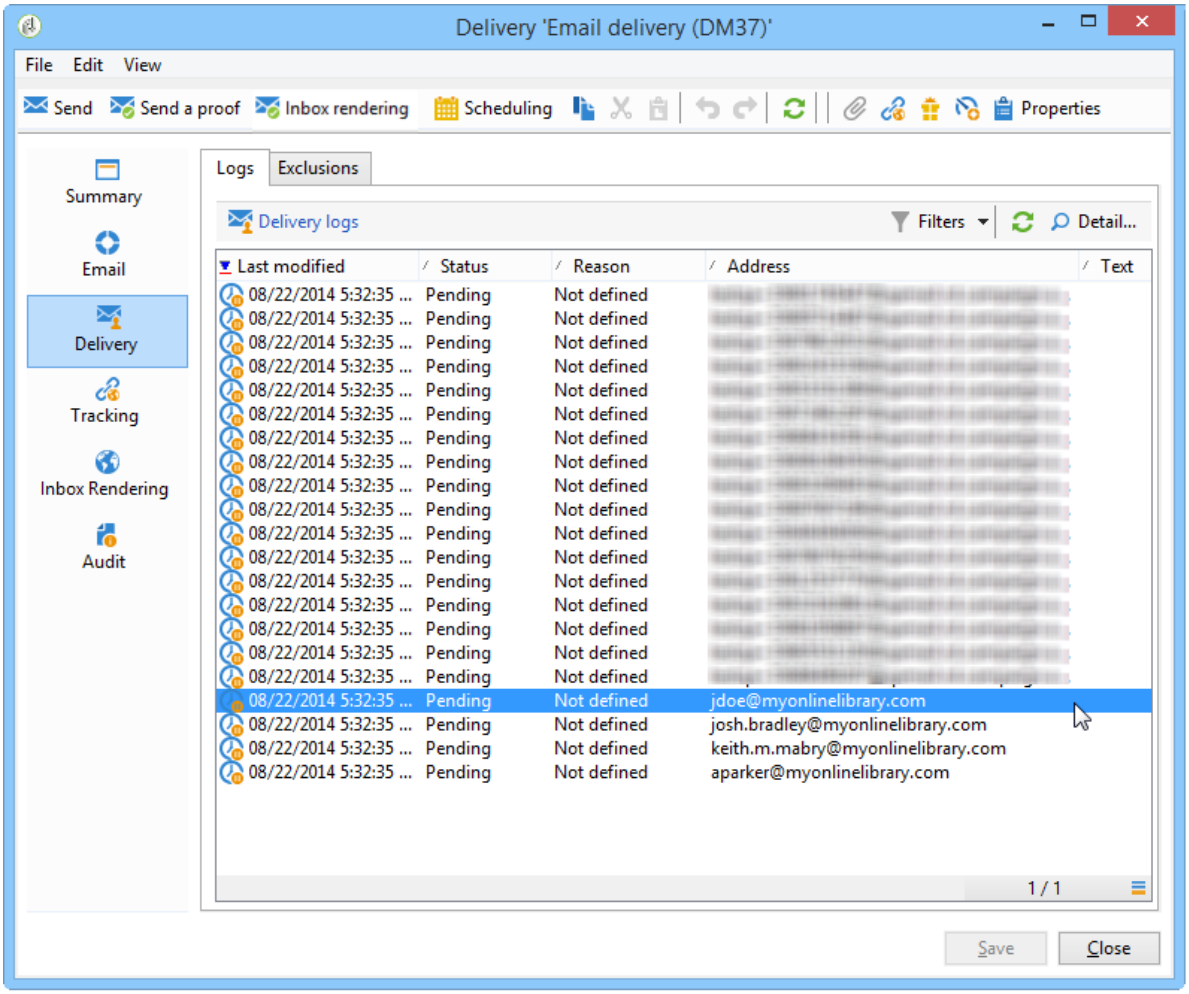
5. Click **Ok**.

   The query is displayed in the **Select target** window.



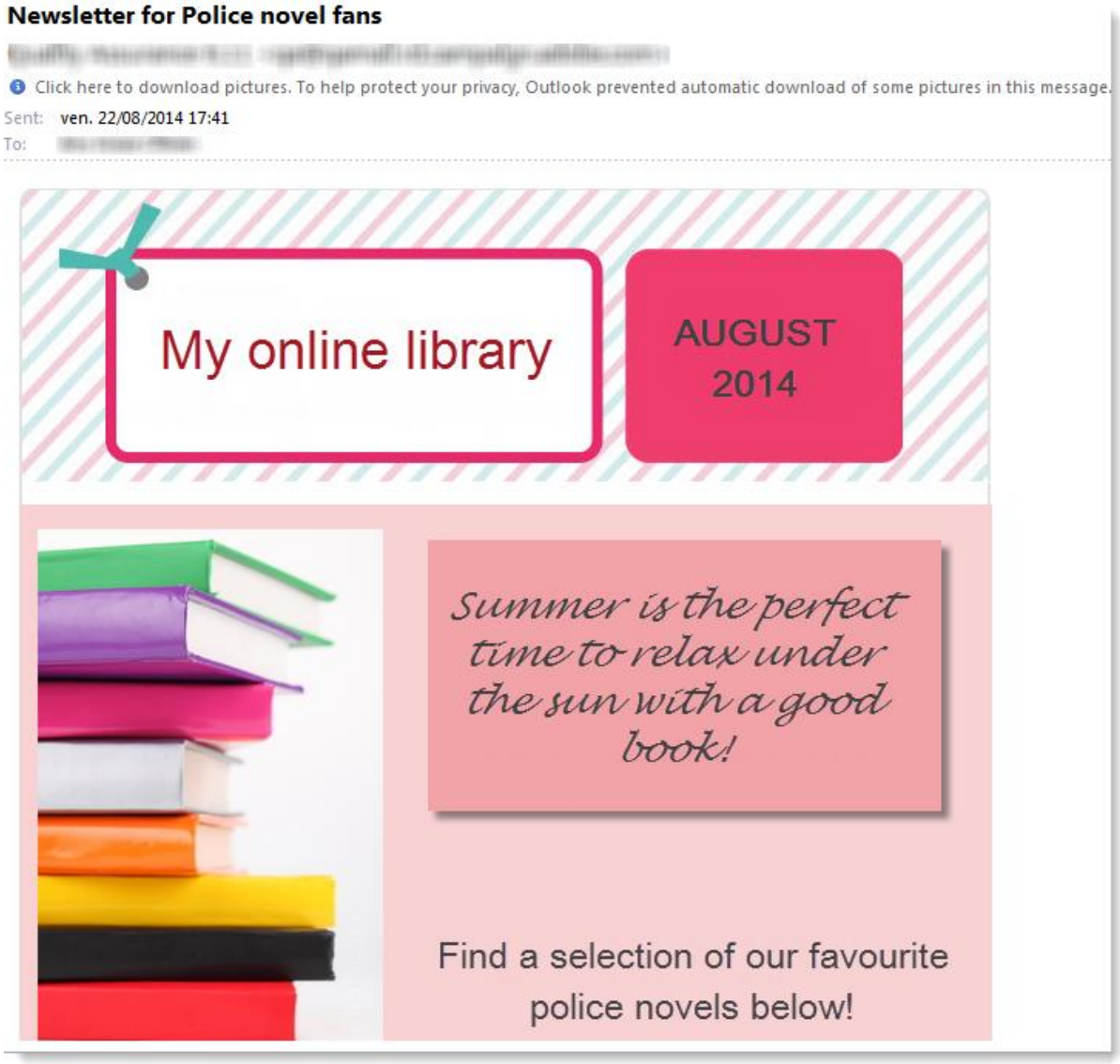
6. Click **Ok** to approve the query.
7. Analyze your delivery then click on the **Delivery** tab to access the delivery logs.

   The seed addresses of the purchasing department are displayed as pending delivery, just like those of the recipients or other seed addresses.



8. Click the **Send** button to start the delivery.

   The members of the purchasing department make up part of your seed addresses that will receive the delivery in their email inbox.



2.5 About opt-in and opt-out in Campaign

Opt-out results in a profile no longer being targeted by any delivery or by deliveries from a specific channel.

To give profiles the ability to opt in or opt out, you have to create a dedicated landing page. For more on this, refer to Setting up opt-in and opt-out landing pages.

Profiles can also be opted in or out manually by an operator. For more on this, refer to Managing opt-in and opt-out from a profile.

Opt-out profiles are automatically excluded during the delivery analysis in order to speed up deliveries (the error rate has a significant effect on delivery speed).

NOTE

Opt-out applies to **Profiles**, as opposed to quarantine which is linked to an **email address** or **phone number**. Opting out a profile will therefore exclude from deliveries all the addresses linked to it. However, if a user has two profiles in the database, this user will still be targeted by deliveries as only one of their profiles is opted out. To make sure all their addresses are excluded, add them to the quarantined addresses. For more on this, refer to this page.

For more on services subscriptions, refer to this page.