# ECLIPSE/BIRT AXELOR Quick start

# Prerequisite to be completed at least once

The following operations should be performed by the developer or operator of the Axelor application in your organization.

The report templates are present in the source code : example of *PurchaseOrder.rptdesign* which is in the module *axelor-purchase* | *src/main/resources* | *reports* 



All the report templates present at the different levels of the source code can be exported and grouped into an archive file [Nom Application]-**reports.zip** using the specific gradle command: archiveReports

./gradlew archiveReports

More generally, the *./gradlew build -xtest* command generates the archive file of the complete *.war* application and the *.zip* archive file of all the report templates, in the application library */build/libs* 

. [Nom Application]**.war** [Nom Application]**-reports.zip** 

You can then unzip [*Nom Application*]-*reports.zip* in an Eclipse working directory, to be able to modify these report templates.

It is important not to modify the original report templates present in the application tree. At the same time, you have to create a directory on the server that hosts the Axelor application. In this case, this directory is located at the same level as *attachments* and *exports*, but it is not mandatory.

~/travail/axelor/data

reports exports index attachments This path must be specified in the *application.properties* file via the *reports.design.dir* property

.../..
# external directory for <u>birt rptdesign</u> (internal engine)
# if the directory does not exist or the report is not found
# then reports in <u>axelor</u> modules will be used.
# axelor.report.dir = {user.home}/travail/axelor/data/reports
reports.design.dir = {user.home}/travail/axelor/data/reports

.../...

**Note:** it is necessary to relaunch the *Tomcat/Axelor* application for the *application.properties* file to be taken into account.

# **Use of the Eclipse BIRT IDE**

The following operations do not require you to be an application developer.

For this example, we are going to make modifications to the *PurchaseOrder.rptdesign* file. Before modifying a standard report template, you must make sure that you have toured the settings possible by Axelor: *headers* and *footers* of the report concerned; *application management indicators / Configure Purchases*.



Do what I say, but don't do what I do : I will disregard the precautions I just outlined. The goal is to show some minimal changes by  $\mathcal{E}clipse / Birt$ .

# These changes do not necessarily have functional significance and can most likely be made by configuration.

These changes are as follows:

1) Show the *unit price* between Qty and Amount HT regardless of the status of the file, because in my current version it does not appear

- 2) Put a *teal* color at the *unit price*
- 3) Add a logo at the bottom of the page
- 4) Add information about the buyer

Below is the original report:

#### Bon de commande

Référence : ACH0009 Date de commande : 31/05/21 Date de livraison : 14/06/21 Statut : Validé Condition de paiement : 15 jours nets Mode de paiement : Dec. Virement

#### Adresse de facturation

12 RUE ALBERT EINSTEIN

77420 CHAMPS-SUR-MARNE FRANCE

#### MASSON SA 4 BD D'ARCOLE 31000 TOULOUSE

31000 TOULOUSI FRANCE

#### Adresse de livraison

12 RUE ALBERT EINSTEIN 77420 CHAMPS-SUR-MARNE FRANCE

Description	Qté / Unité	Montant HT	Date de réception souhaitée
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Cartouche encre laser POWDER - Ref: C.TH0850	50,00 Unité	2 700,00 EUR	
Ramette 500 Feuilles A4 Standard 80 g - Ref: P.AS8005	30,00 Unité	148,80 EUR	

Total TVA	821,76 EUR
Total TTC	4 930,56 EUR
Total TVA	821,76 EUR
Total HT	4 108,80 EUR

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BIRT is a perspective in Eclipse. To open it, use the *Window* item of the Eclipse main menu. Choose *Open Perspective*, then *Report Design*. If the *report design* does not appear directly in the *Open Perspective* window, choose *Other* ... A list of perspectives will appear. Choose the *report design*.

Open Perspective	—		×
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Eclipse will toggle to display the BIRT *report design* perspective.

### Data source

BIRT reports use a *data source* element to connect to a *database* or other *data provider*. BIRT uses a *dataset* item to retrieve data from the *data provider*. Think of the *data source* as a connection and the *dataset* as a query.

To Build a *data source*, Open the *Data Explorer* view, Select the *Data Sources* node in the tree structure, *Right-click* to open the contextual menu,

	8 Edit Data Source -	Data Source		
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To change the *data source*, Open the *Data Explorer* view, Open the *Data Sources* node, Doubleclick on the *data source*, the *data source editor* opens and you can make the necessary changes. Click OK to save your changes. Choose the *database* (here *axelor*), the *username* (here *axelor*) and the *password* 

Click on « *Test Connection* » to check that the connection is correct « *Connection Successfull* » Then do OK

Note: make sure you have the *org.postgresql.Driver* driver corresponding to your database

## Layout Editor

The central area is the *layout editor*. This is where you create your report design. The editor has four tabs: *Layout, Master Page, Script, XML Source* 

#### Layout

*Layout* : Allows you to change the design of your report.

**Properties** *View* - A standard Eclipse view that displays all the properties of a report item as a simple list.

Position yourself on the Unit Price column, then on visibility

The column is hidden according to a Boolean configuration indicator

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#### For fun, switch on *Teal* color at *unit price*.

Positioning on *Layout / Properties / General* allows you to format the different standard report elements.

Position yourself in the *Unit Price* field Choose the color *Teal.* 

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**Palette** - BIRT view which shows standard report items that you can add to your report by *drag and drop* 

Drag and drop from the Grid element to the desired destination cell

A grid that has 1 column and 3 rows



In *Data Explorer*, select the *dataset PurchaseOrderDS Drag and drop* items from the *Buyer* to the relevant cells

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You will notice that the headings internationalization method used by Axelor is not used. Because it is considered that in our case, the report template is only used in one country and this would complicate this quick start guide to use internationalization.

#### Master Page

*Master Page* - Used to format page data such as headers and footers. Open the *footer* : there are 2 columns Position yourself on the left column: its width is 15.584 cm

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Right click, then select Insert column on the left

#### Then, position yourself on the newly created column Assign a width of 3 cm

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#### *Drag and drop* from the *Image* element to the previously created cell

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*Double click* on the element transferred to the created cell. Search the image in the space where it is stored

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As mentioned previously, Axelor allows you to manage headers : this method is only used to introduce you to a BIRT functionality.

#### XML Source

#### XML Source - .rptdesign File



You can view and edit the XML source for a report template from this tab. But the modification is not recommended for beginners. The modification can possibly be carried out with caution by experts.

WRANING : At the end of the modification, do not forget to *save* the changes made with *Eclipse/Birt* 

Copy the modified XML file from *PurchaseOrder.rptdesign*, managed in the *Eclipse workspace*, into the directory of the server that hosts the Axelor application:

#### Example in our case: ~/work/axelor/data/reports

Axelor will now run the modified report template, without any other operation (no relaunching the application, etc.) : the simple copy in the directory of the server makes it possible to take into account the new report. The modification is done in live.

Hereinafter, the modified part of the report.

Adresse de facturation	Adresse de li	vraison		
12 RUE ALBERT EINSTEIN	12 RUE ALBE	ERT EINST	EIN	
77420 CHAMPS-SUR-MARNE FRANCE	77420 CHAM FRANCE	PS-SUR-M	ARNE	
Description	Qté / Unité	Prix unitaire	Montant HT	Date de réception souhaitée
Cartouche jet d'encre FLUID - Ref: C.MH0100	60,00 Unité	21,00	1 260,00 EUR	
Cartouche encre laser POWDER - Ref: C.TH0850	50,00 Unité	54,00	2 700,00 EUR	
Ramette 500 Feuilles A4 Standard 80 g - Ref: P.AS8005	30,00 Unité	4,96	148,80 EUR	
	Total HT			4 108,80 EUR
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If you are not satisfied with the modified report template, you can delete it in the *~work/axelor/data/reports* directory : then the original report template present in the sources will be executed.

#### It is magic !