Aldata
100% Retail-Wholesale




GOLD Stock Development

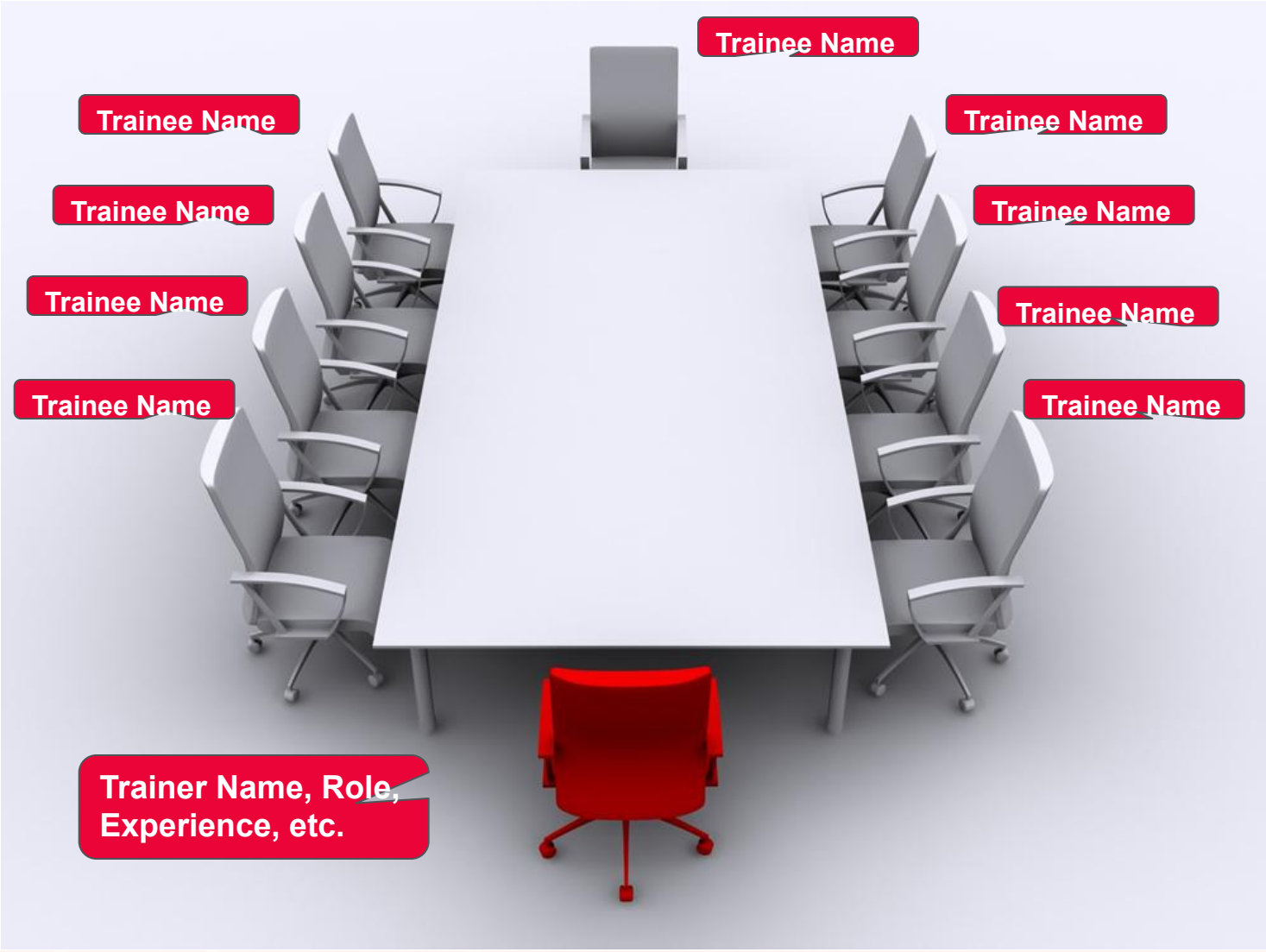
TS200

20090608

Education

Aldata Training

Group Introduction



Objectives & Benefits

- After this training :

Know

- You will understand :
  - The G.O.L.D. architecture
  - How G.O.L.D. is designed

Know-How

- You will be able to :
  - Modify existing and create new G.O.L.D. screen
  - Modify and create a new report layout
  - Create and deploy a new program
  - Insert new screens and processes into the G.O.L.D application

Pre-Requisites

Knowledge

- JAVA
- PRO*C
- SQL
- PL-SQL

Software

- ADER (mandatory)
- Report Designer (mandatory)
- Eclipse (recommended)
- Crimson /Notepad++ / Ultra edit (or other editor)

Required Material

- Graphic Framework Documentation (JavaDoc UI)

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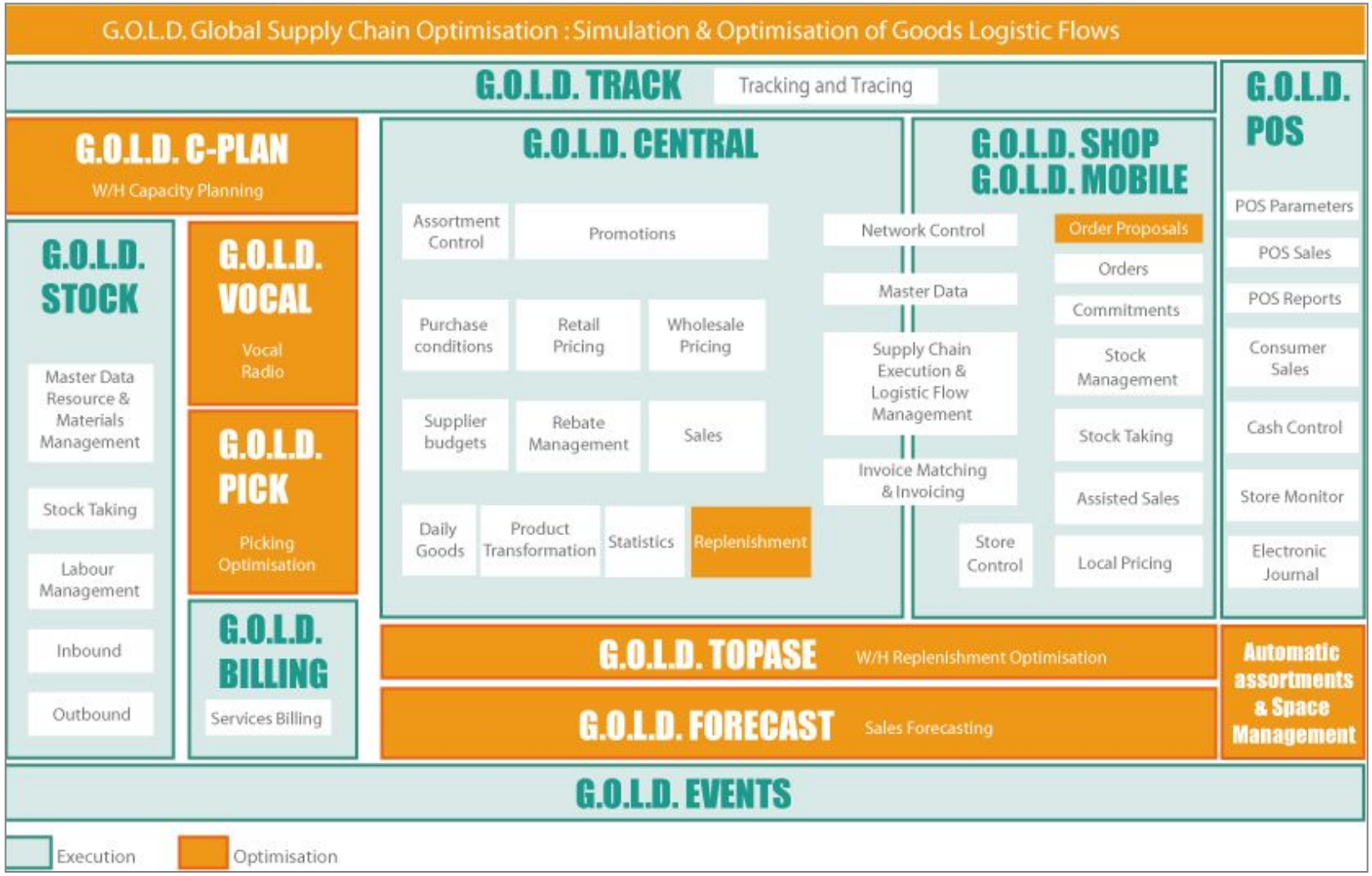
G.O.L.D. solution map : a reminder



G.O.L.D. Stock

- G.O.L.D. Stock is a set designed to control the following functions:
  - the basic data of a warehouse
  - the physical movements in a warehouse: merchandise reception, pallet addressing, storage,
  - task execution, task scheduling and launch, task preparation and performing
  - the physical organization of the merchandise storage in the warehouse
  - the follow-up and the productivity of the staff in the warehouse
  - the use of the Radio for fork-lift trucks and FLT-drivers
  - the use of the Vocal Radio for preparation clerks

- Once set up, G.O.L.D. Stock offers a warehouse the following contributions:
  1. optimization of special handlings
  2. management of merchandise flows
  3. check of the storage level
  4. safety activities of the warehouse
  5. observance of FIFO rules

Interfacing G.O.L.D.

- **Definition :**
  - G.O.L.D. can be interfaced with third party systems from which it can receive data and to which it can send data.
  - 2 types of interfaces can be defined:
    - Integration interfaces (or inbound)
    - XML-based export interfaces (or outbound)

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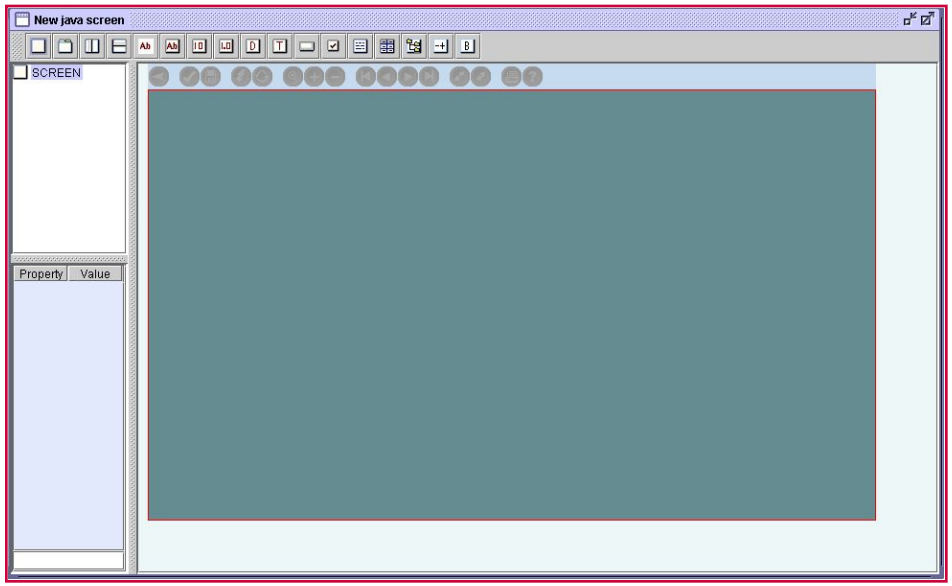
ADER

- **ADER :**
  - is a small application developed by the Aldata R&D team
  - is used to design Java screens quickly using the ALDATA Graphical Framework.
  - ADER translates your screen into Java Code

- **ADER uses the G.O.L.D. graphical library :**
  - is the core library of all Java screens in G.O.L.D.
  - 100 % full Java framework based on Java Swing Components



Eclipse

- Java integrated development environment

Java - PMSGdbArticleManager.java - Eclipse SDK

File Edit Source Refactor Navigate Search Project Run Window Help

Package... Hierarchy

ois.stockp.bean.xml.jm
ois.stockp.client
ois.stockp.client.allotis
ois.stockp.client.base
ois.stockp.client.base.
ois.stockp.client.base.
ois.stockp.client.base.
PMSGdbArticleAdr
PMSGdbArticleAttr
PMSGdbArticleMa
PMSGdbArticleSub
PMSGdbFamilleLo
PMSGdbFamilleLo
PMSGdbNomDetU
PMSGdbNomEntM
PMSGdbNomEntU
PMSGdbRetFamM
PMSGdbSousFami
PMSGstIndTracBr
PMSServiceCallBa
ois.stockp.client.base.
ois.stockp.client.base.
ois.stockp.client.base.
ois.stockp.client.base.
ois.stockp.client.base.i
ois.stockp.client.base.
ois.stockp.client.base.

PMSGdbArticleManager.java | PMSGdbFamilleLogUpdate.java

```
 *
 * @param debug    String    : "1" pour activer le mode debug, "0" sinon
 * @param visuOnly String    : "1" pour activer le mode lecture seule, "0" sinon
 * @param accesAttributs String : "0" pour afficher le bouton "Lien Article-Attri
 *                                "1" sinon
 *
 */
public PMSGdbArticleManager(String debug, String visuOnly, String accesAttributs)
{
    super(debug);

    this.boutonAttributs = accesAttributs.equals("0"); // caractere zero
    this.visuOnly = visuOnly;
    this.sDonOrd  = PMSMenuPrinc.getCodeDO();

    setTitle(getLabel(174, "Carte d'Identite ARTICLE"));

    osfLibArticle = new OISStringField();
    osfLibArticle.setFieldSize(50);
    osfLibArticle.setForcedCase(OISStringField.UPPERCASE);

    osfVarAchat = new OISStringField();
```

Problems | Javadoc | Declaration | Console | Debug

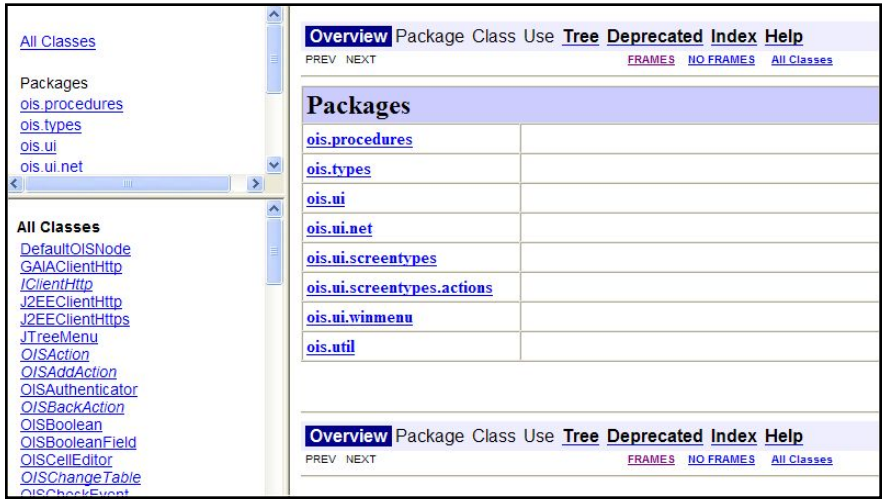
0 errors, 24 warnings, 0 infos

Description	Resource	Path	Location
Warnings (24 items)			
The assignment to variable title has no effect	VOCResultSetDial...	stock/src/java/ois/vocal/adm/client	line 64
The local variable d is never read	VOCParamAddition...	stock/src/java/ois/vocal/adm/client	line 642

Writable | Smart Insert | 108 : 6

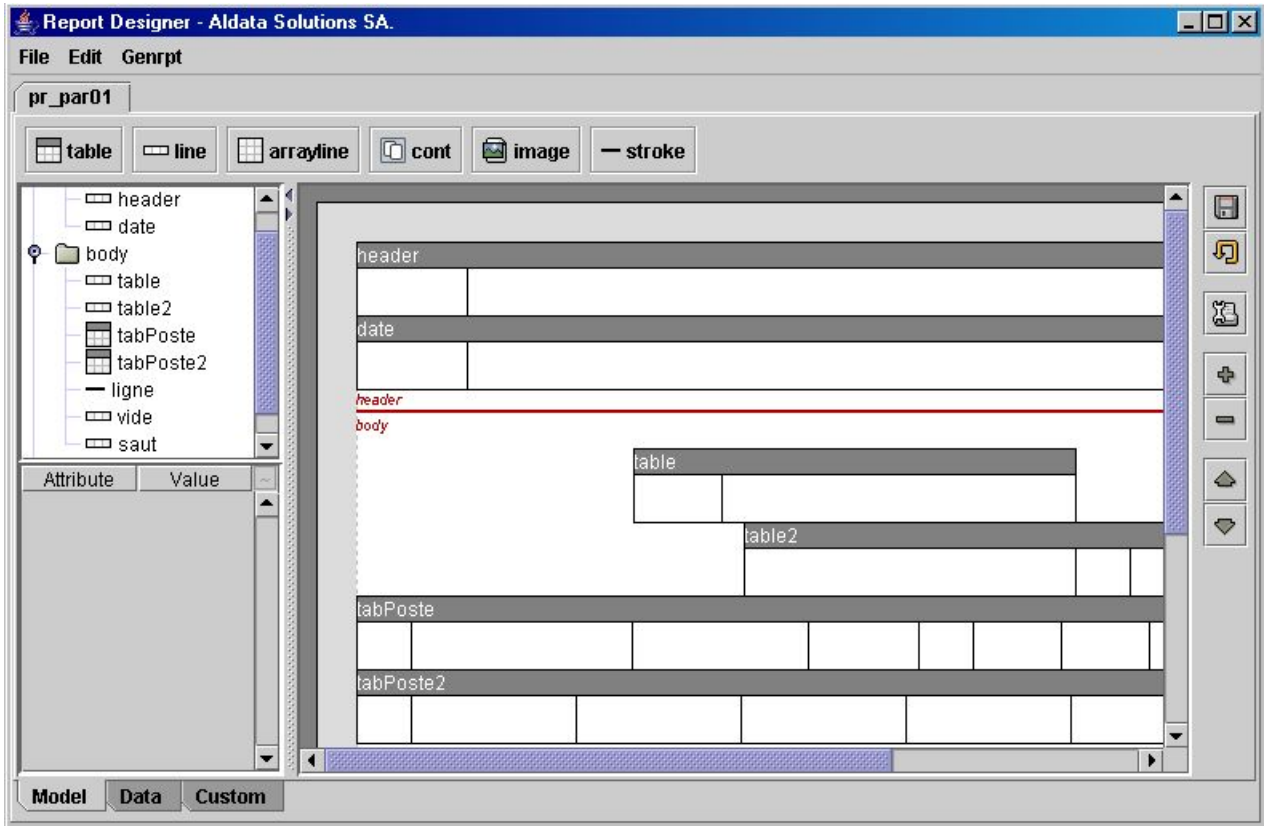
Graphic Framework Documentation

- **Graphic Framework Documentation (JavaDoc UI)**
  - is delivered in ZIP format
  - contains the rules and norms for being compatible with all G.O.L.D. standards including:
    - Programming rules
    - Ergonomic screen rules
    - Services management
    - Error management
    - Data field management



Report Designer

- **Report Designer :**
  - is a small application developed by the Aldata R&D team
  - is a 100% Java (Swing) tool used to design reports according to a preset format



EXERCISE: Set Up Your Computer

- Setup server and database connection
- Install development tools (c:\sdt\)
  - ADER
  - REPORT DESIGNER
  - Graphic Framework Documentation (JavaDoc UI)
  - Install: Crimson, WinMerge
  - Eclipse
- Setup local development environment
  - Configure Eclipse project for developing java screens

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A 3 tiers architecture

G.O.L.D. is a 3 tiers architecture solution where :

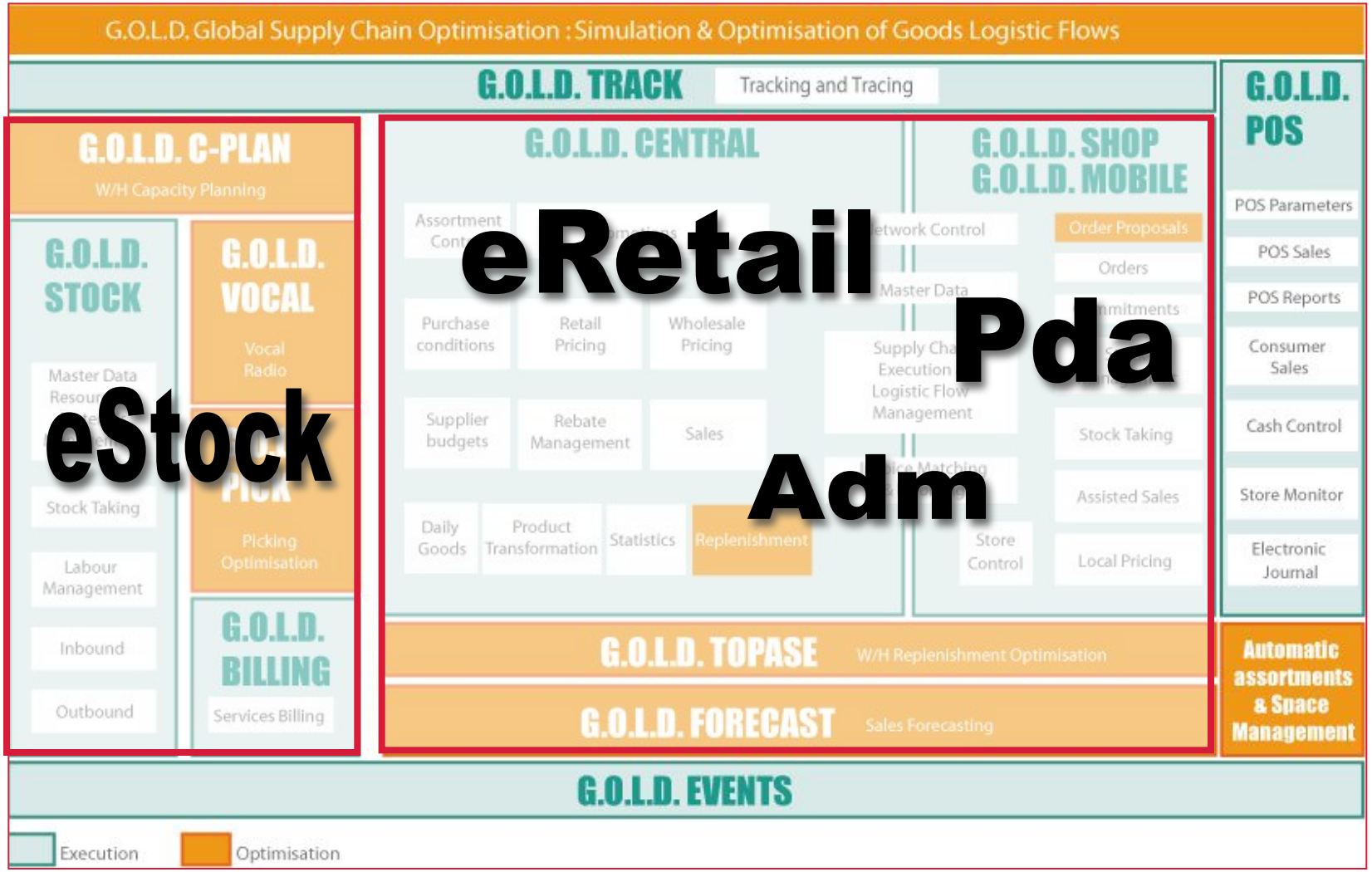
The **G.O.L.D. clients** are java-based applications used to access the screens from a PC with a simple browser. For instance

- G.O.L.D. central/shop client : eRetail
- G.O.L.D. Stock client : eStock

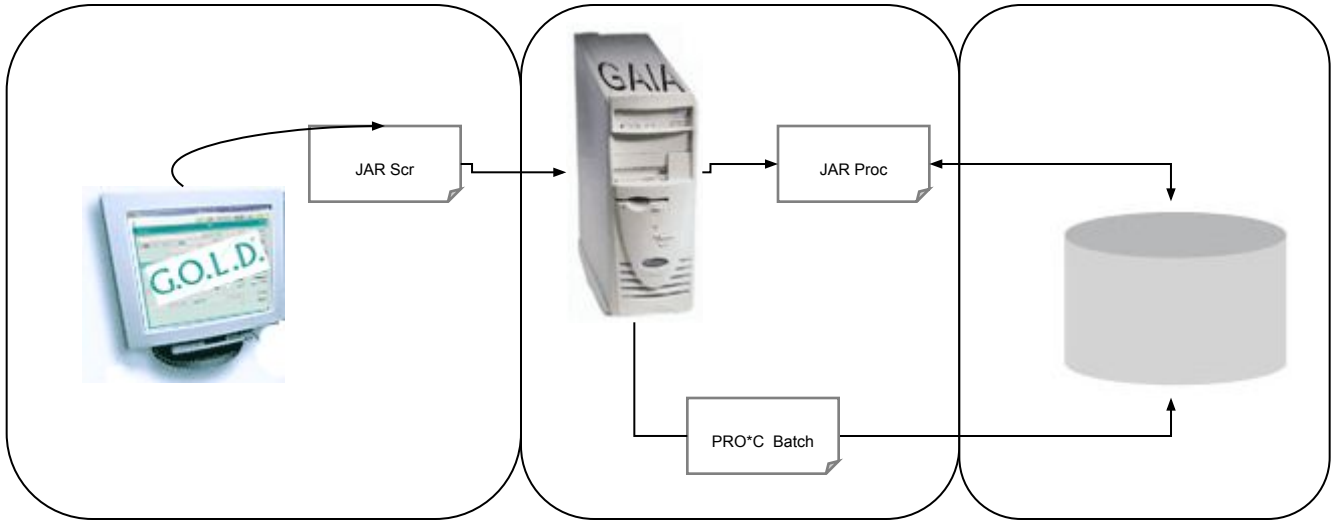
The G.O.L.D. application server **GAIA** handles the communication between the G.O.L.D. clients and the database server and hosts most of the processing.

The Oracle **database server** stores the data and part of the application logic

G.O.L.D. Modules managed



eStock Application



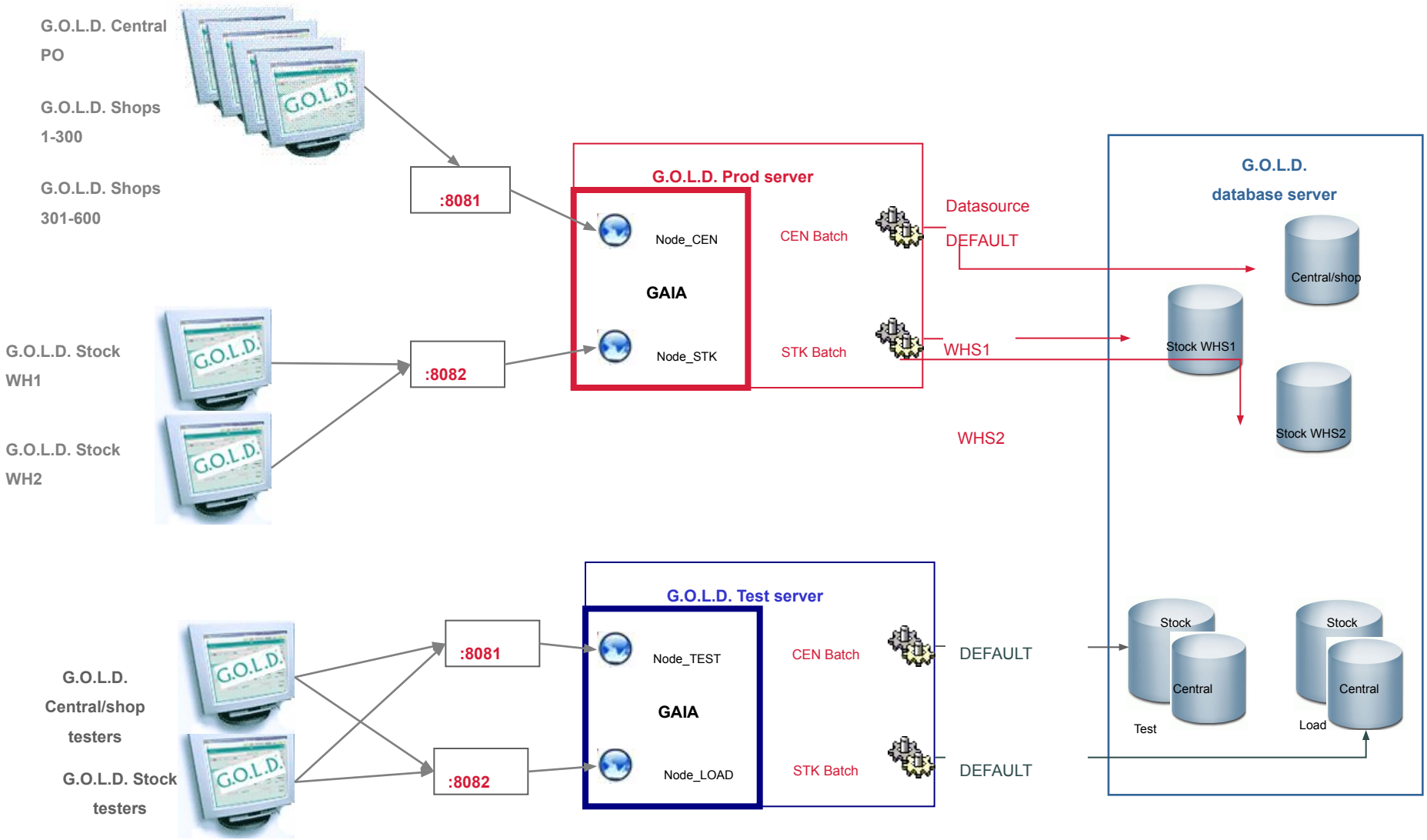
Client tier
(Java Applets)

Middleware tier
(Gaia server)

Data tier
(G.O.L.D. database)

- **Client tier:** data display, user events and controls of user interface. Java. Aldata graphical library.
- **Middleware tier:** encapsulates the applicative logic and makes it available to the client. Application framework. Communication.
- **Data tier:** responsible for the data storage and management. Oracle.

Deployment


G.O.L.D. Central PO
G.O.L.D. Shops 1-300
G.O.L.D. Shops 301-600
:8081
G.O.L.D. Prod server
Node_CEN
GAIA
Node_STK
CEN Batch
STK Batch
Datasource
DEFAULT
WHS1
WHS2
G.O.L.D. database server
Central/shop
Stock WHS1
Stock WHS2
G.O.L.D. Stock WH1
G.O.L.D. Stock WH2
:8082
G.O.L.D. Test server
Node_TEST
Node_LOAD
G.O.L.D. Central/shop testers
G.O.L.D. Stock testers
Stock
Central
Test
Load

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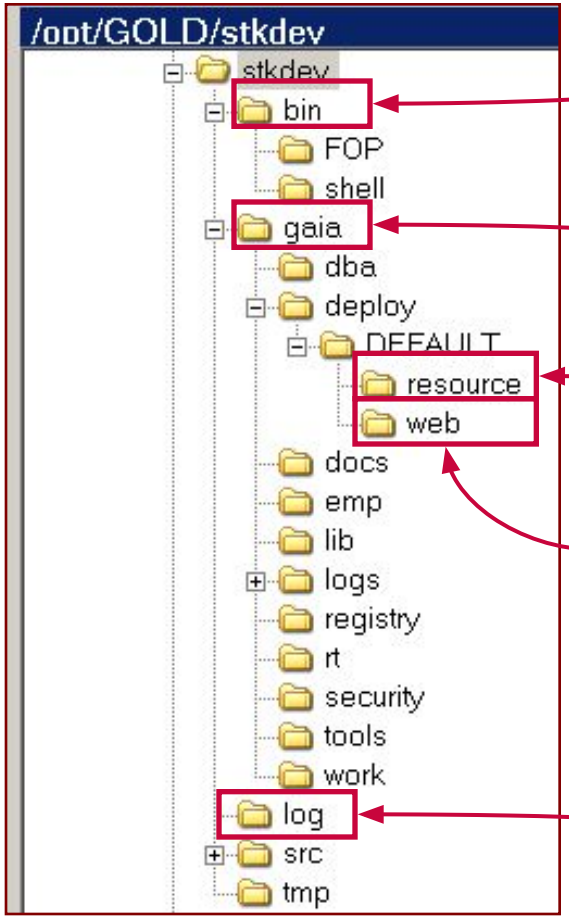
Application Structure



all batches and programs required by G.O.L.D.

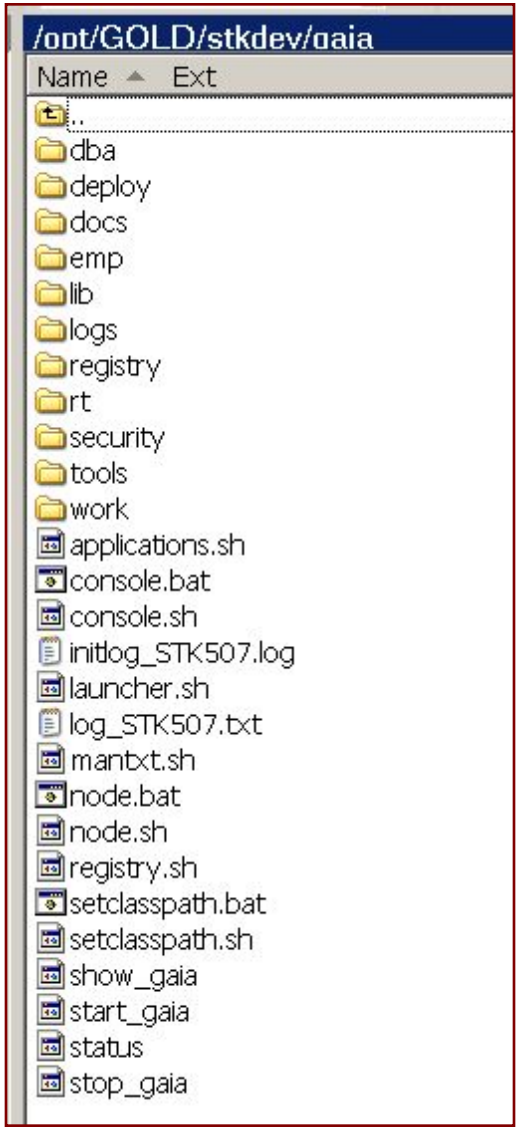
the communication framework of G.O.L.D. : G.A.I.A.

Server side

Client side

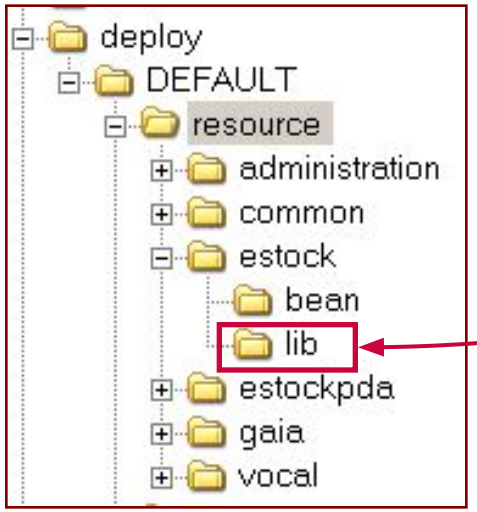
Report files, debug, error files

G.A.I.A.



\deploy	XML configuration files of G.A.I.A. default.xml Default directory for server and client installation
\logs	Log files per day, per user
\registry	Registry files
\tools	Tools used by G.A.I.A. beans
node.sh	Start GAIA node
start_gaia	
stop_gaia	
log_*.txt	

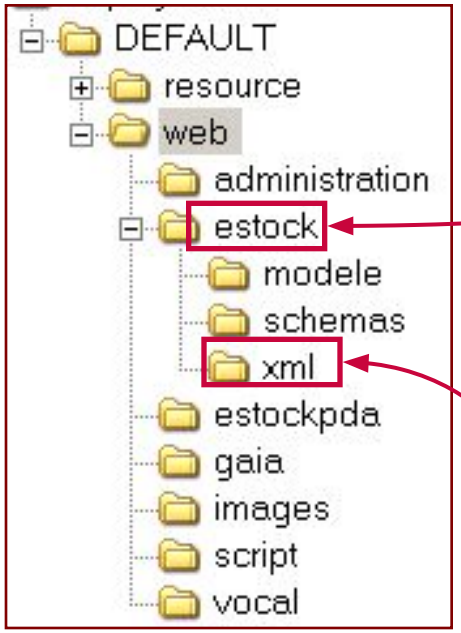
Server Side




```
ois.stockp.server.stock.promotions.jar
ois.stockp.server.supervisionprepa.jar
ois.stockp.server.tournees.affectation.jar
ois.stockp.server.tournees.jar
ois.stockp.server.tournees.parametrage.jar
ois.stockp.server.tracabilite.jar
ois.stockp.server.tracabilite.parametrage.jar
ois.stockp.server.vocal.allotimg.jar
ois.stockp.server.vocal.inventaire.jar
ois.stockp.server.vocal.jar
ois.stockp.server.vocal.picking.jar
ois.stockp.server.vocal.repartition.jar
```

\administration	server resources of G.O.L.D.® Administration
\common	server resources common to all applications
\estock	server resources of G.O.L.D.® Stock
\estockpda	server resources of G.O.L.D.® Stock PDA
\gaia	server resources of G.A.I.A.

Client Side




```
gold.jpg
gw.jar
index.html
labor.jar
login.html
ois.stockp.client.allotissement.jar
ois.stockp.client.base.administration.jar
ois.stockp.client.base.alcools.jar
ois.stockp.client.base.articles.jar
ois.stockp.client.bas
ois.stockp.client.bas
```

Report templates

\administration	G.O.L.D.® Administration WEB application (.html and .jar)
\estock	G.O.L.D.® Stock WEB application (.html and .jar)
\gaia	G.A.I.A. WEB application
\images	images of the HTML start page
\script	

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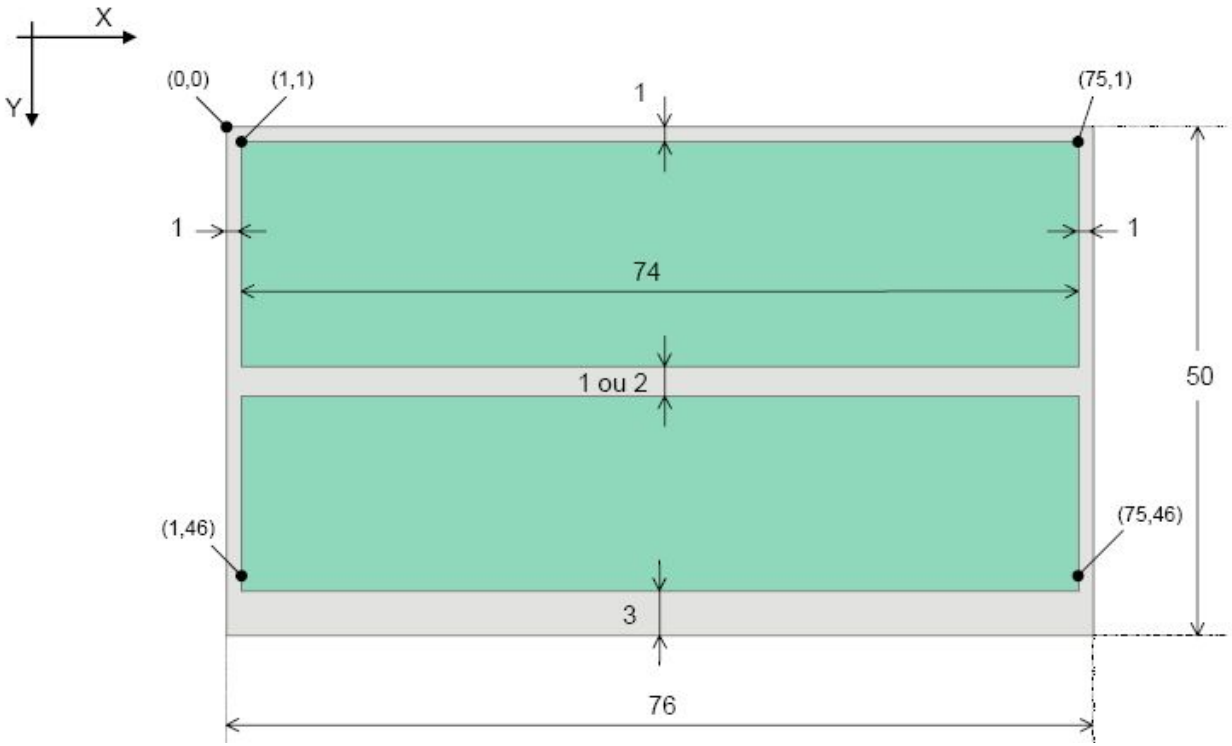
G.O.L.D. Screens

- ADER is used to create screens quickly and easily
  - while maintaining a *common look and feel*

- Following are the guidelines you must follow to design screens

Standard Screen

- **Rules :**
  - a A margin of 1 is set between the panels and the edges of the screen
  - b Between two panels, leave a margin of 2 (by default) or 1 (if lack of space).
  - c A minimum margin of 3 must be set between the panels and the edge of the lower screen, to display the menu icon.



Standard Screen : example

54 DEPOT NANTES | **Third party management** | 12345 DOSTK

a

Third party type: 1 SUPPLIER
Status:
Internal code:
Short description:
EXternal code:
Postcode:
Town/City:

b

Internal code	EXternal code	Description	Type	Postcode	Town/City	Status
16777	16777	BASF SEM	SUPPLIER	75011	PARIS	ACTIVE
17318	17318	GENERALE I	SUPPLIER		NEW YORK	ACTIVE
17478	17478	COCA COLA	SUPPLIER	59450	DUNKERQUE	ACTIVE
17608	17608	DURACELL	SUPPLIER	75006	PARIS	ACTIVE
17803	17803	EUROTEXTIL	SUPPLIER	..	..	ACTIVE
17805	17805	ASTRA CALV	SUPPLIER	75013	PARIS	ACTIVE
17907	17907	CELLIER DE	SUPPLIER	62100	BOULOGNE	ACTIVE
17933	17933	CANON PHOT	SUPPLIER	75001	PARIS	ACTIVE
18823	18823	HEINZ SARL	SUPPLIER		NEW YORK	ACTIVE
20	DEPOT 20	DEPOT 20	SUPPLIER	35000	RENNES	ACTIVE
2136	2136	FRUIT OF T	SUPPLIER	75005	PARIS	ACTIVE
21965	21965	NIVEA	SUPPLIER	75005	PARIS	ACTIVE
22899	22899	EQUIPEMENT	SUPPLIER	75007	PARIS	ACTIVE

c

Global locations

Small Screen

- **Rules :**
  - Adjust the size of the screen according to its content.
  - By default: centre.

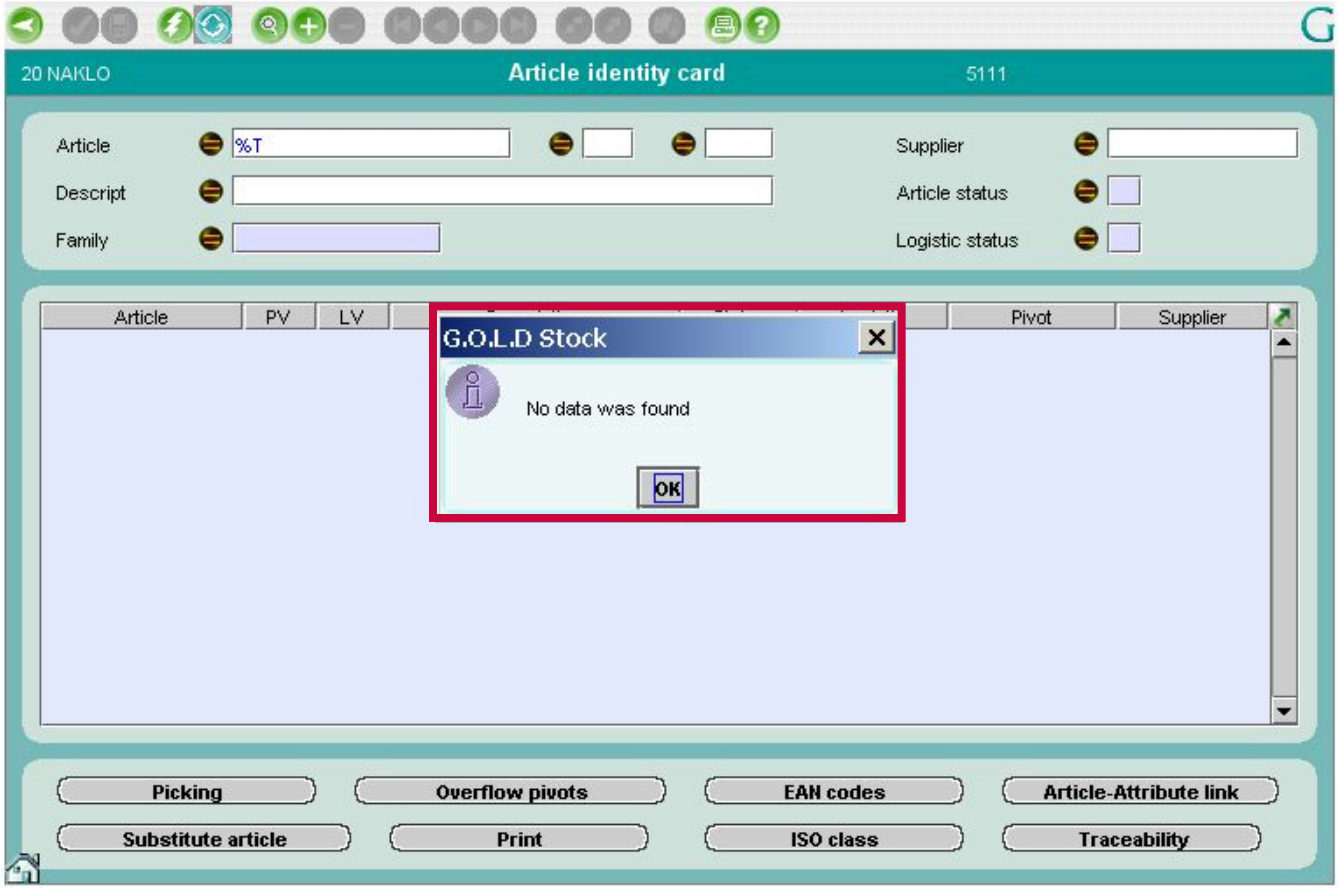
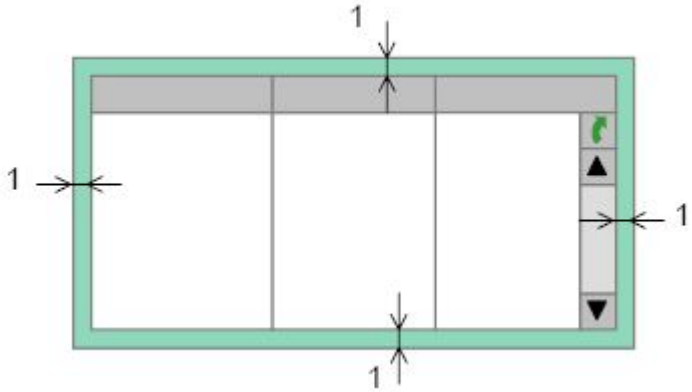


Table Layout – 1/3

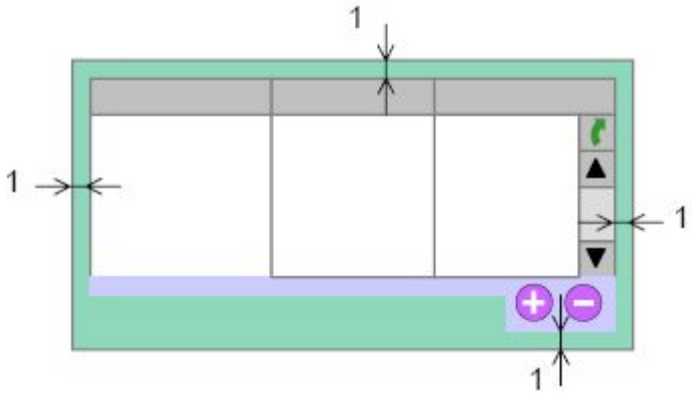
- Standard Panel



Article	PV	LV	Description	Status	Logistic	Pivot	Supplier
DNG050-003	00	000	MATIERE DANGER DLC PDS RE...	CREA LEV 3	COMPLETE		1140
DNG050-004	00	000	MATIERE DANGER DLC PDS RE...	ACTIVE	COMPLETE	54A0101904A	1140
DNG050-005	00	000	MATIERE DANGER DLC PDS RE...	CREA LEV 3	COMPLETE		1140
EMB000-600	00	000	EMBALLAGE PALETTE 80X120	CREA LEV 3	INCOMPLETE		1140
EMB000-601	00	000	EMBALLAGE PALETTE 100X120	CREA LEV 3	INCOMPLETE		1140
EMB000-602	00	000	EMBALLAGE ROLL	CREA LEV 3	INCOMPLETE		1140
EMB000-603	00	000	EMBALLAGE CONTAINER ISOT...	CREA LEV 3	INCOMPLETE		1140
EMB000-604	00	000	EMBALLAGE CASIER PLASTIQUE	CREA LEV 3	INCOMPLETE		1140
EMB000-605	00	000	EMBALLAGE BOUTEILLE 1	CREA LEV 3	INCOMPLETE		1140
EMB000-606	00	000	EMBALLAGE BOUTEILLE 2	CREA LEV 3	INCOMPLETE		1140
EMB000-607	00	000	EMBALLAGE EMBALLAGE UVC	CREA LEV 3	INCOMPLETE		1140
EMB000-608	00	000	EMBALLAGE CARTON	CREA LEV 3	INCOMPLETE		1140
PAQ01	00	000	ARTCILE GENERIQUE PAQ01	ACTIVE	COMPLETE		1140
PAQ02	00	000	ARTCILE GENERIQUE PAQ02	ACTIVE	COMPLETE		1140
PAQ03	00	000	ARTCILE GENERIQUE PAQ03	ACTIVE	COMPLETE		1140

Table Layout – 2/3

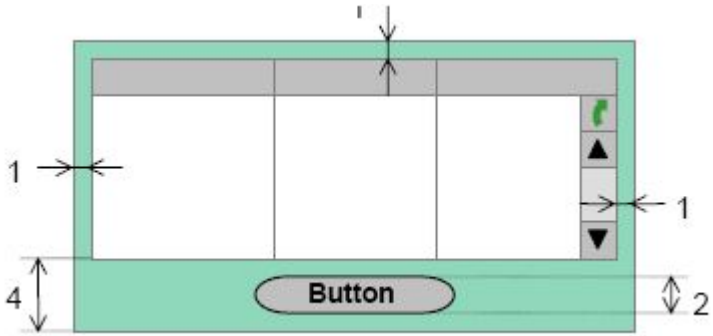
- Modifiable Panel

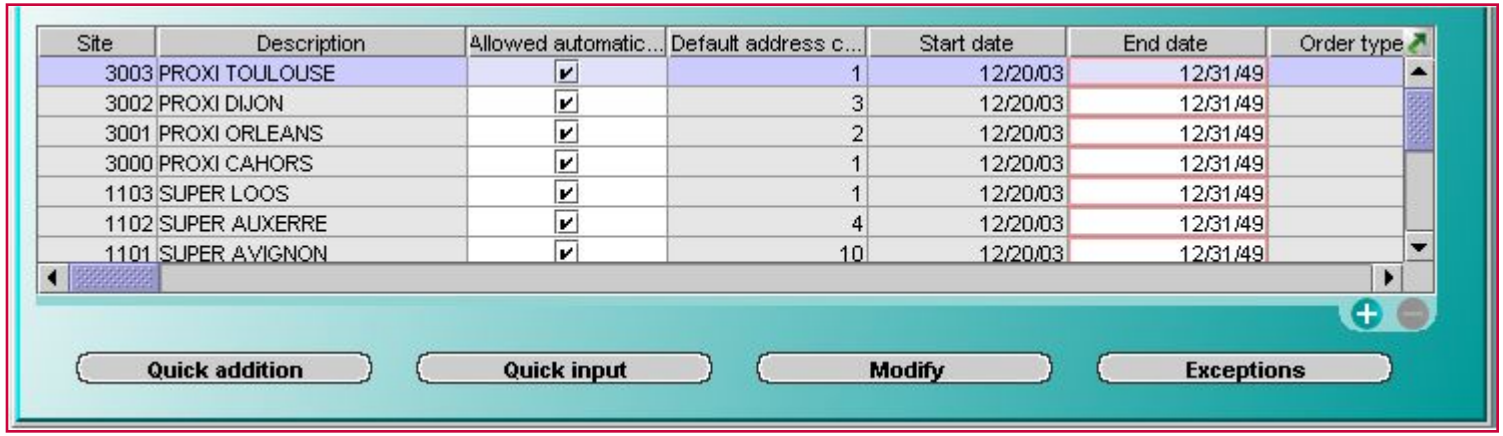


Printer name	Type	Printer type	Launching instruction	Portrait	Landscape	Depot	Depot desc.
ETI06	E	LABEL	ls>/dev/null			06	DEPOT TOULO...
ETI10	E	LABEL	ls>/dev/null			10	DEPOT BELFORT
ETI154	E	LABEL	ls>/dev/null			54	DEPOT NANTES
ETI20	E	LABEL	lp &/dev/lst			20	DEPOT RENNES
ETI36	E	LABEL	ls>/dev/null			36	DEPOT NARBO...
ETI40	E	LABEL	ls>/dev/null			40	DEPOT PARIS
ETI44	E	LABEL	ls>/dev/null			44	DEPOT LILLE
ETI54	E	LABEL	ls>/dev/null			54	DEPOT NANTES
LIST01	L	LIST	ls>/dev/null			01	DEPOT BORDE...
LIST02	L	LIST	ls>/dev/null			02	DEPOT LYON
LIST03	L	LIST	ls>/dev/null			03	DEPOT MARSE...
LIST06	L	LIST	ls>/dev/null			06	DEPOT TOULO...
LIST10	L	LIST	ls>/dev/null			10	DEPOT BELFORT
LIST154	L	LIST	ls>/dev/null			54	DEPOT NANTES
LIST20	L	LIST	ls>/dev/null			20	DEPOT RENNES
LIST36	L	LIST	ls>/dev/null			36	DEPOT NARBO...
LIST40	L	LIST	ls>/dev/null			40	DEPOT PARIS
LIST44	L	LIST	ls>/dev/null			44	DEPOT LILLE
LIST54	L	LIST	ls>/dev/null			54	DEPOT NANTES

Table Layout – 3/3

- **Button Panel** (table + button on same panel)
  - Button will be centered if unique



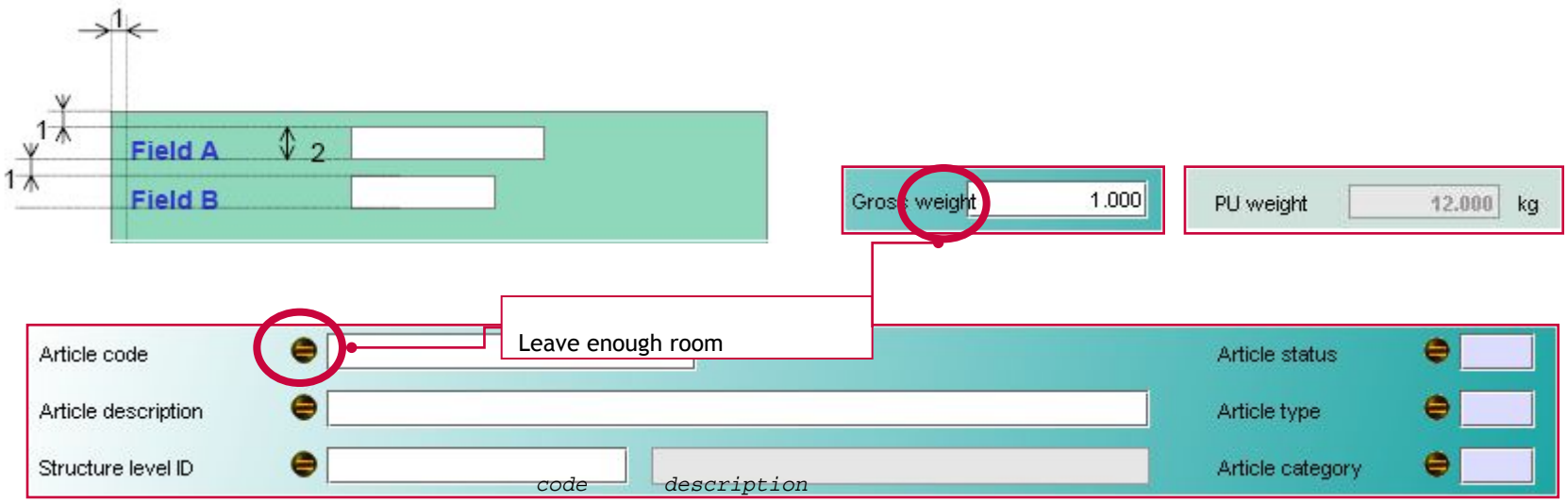


Site	Description	Allowed automatic...	Default address c...	Start date	End date	Order type
3003	PROXI TOULOUSE	✔	1	12/20/03	12/31/49	
3002	PROXI DIJON	✔	3	12/20/03	12/31/49	
3001	PROXI ORLEANS	✔	2	12/20/03	12/31/49	
3000	PROXI CAHORS	✔	1	12/20/03	12/31/49	
1103	SUPER LOOS	✔	1	12/20/03	12/31/49	
1102	SUPER AUXERRE	✔	4	12/20/03	12/31/49	
1101	SUPER AVIGNON	✔	10	12/20/03	12/31/49	

Quick addition | Quick input | Modify | Exceptions

Text Fields

- **Text Fields :**
  - Height : 2 units.
  - Plan enough space between the description and the field for the translation and for the query symbol
  - Size of a screen field = Number of characters to be displayed + 1
    - Exception: long descriptions (i.e. 40-character article description must be inserted in a zone of 35)
  - Code-description fields, must be side by side with a one-unit space
  - For values in specific units, specify the unit.



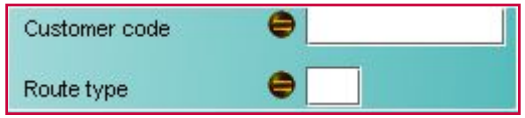
Buttons and Checkboxes

- **Buttons :**
  - Size of Panel : 4 units
  - Height : 2 units

- **Checkboxes :**
  - Check box must be on the right of the description

Field Descriptions

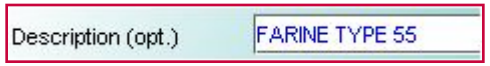
- **Descriptions :**
  - Only the first word of the description has a capital letter.



  - An abbreviation must always be followed with a dot.

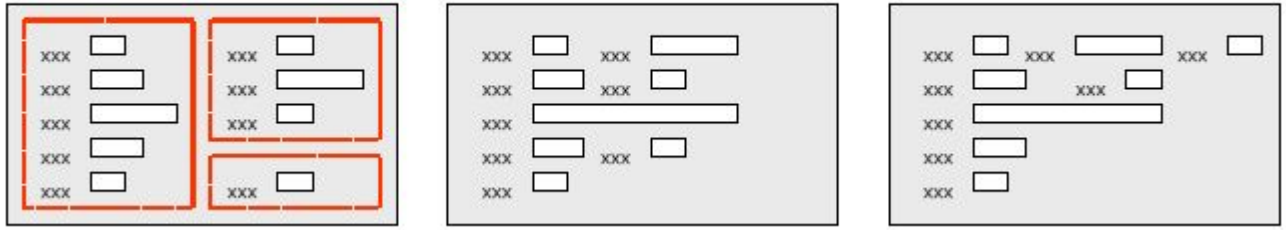
  - No accent in descriptions.

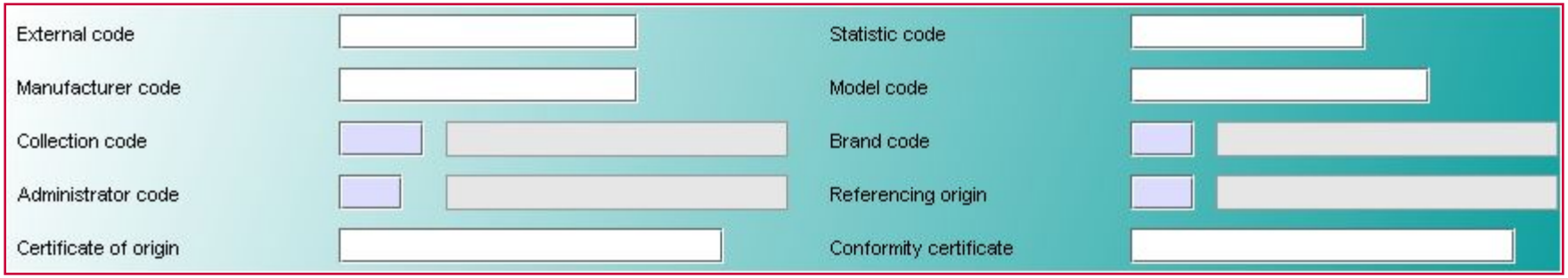
  - Possibility to use : - / ’ ( )

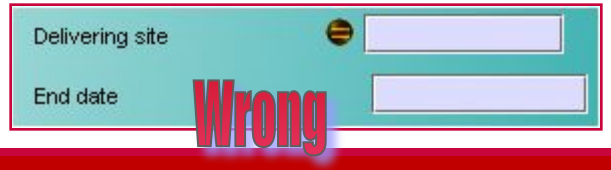


Layout

- The layout must be thought through so the tool stays user-friendly
- Fields must be vertically aligned, using panels when possible.







Scheduling screen

OISJToolbar

54 DEPOT NANTES

Scheduling

OISJEntete

Route | Order

Route

Status

Preparation date

Ship. date

Route	Status	Carrier	Prep date	Earliest T	Ship. date	Latest T	TUE cap.	Max. vol.	Max. w...	SHU	No. TU...	Volume	Weight

Route detail | Launch | Alloc./Dealloc. | Route manag.

OISJScreen

Scheduling screen

54 DEPOT NANTES | Scheduling | 12345 DOSTK

OISJTabbedPane

Route | Order

Route | Preparation date

Status | Ship. date

OISJPanel

Route	Status	Carrier	Prep date	Earliest T	Ship. date	Latest T	TUE cap.	Max. vol.	Max. w...	SHU	No. TU...	Volume	Weight

OISJPanel

Route detail | Launch | Alloc./Dealloc. | Route manag.

Scheduling screen

54 DEPOT NANTES

Scheduling

ois.stockp.client.common.preparation.PMSRprListTourneeManager

Route | Order

OISJLabel

Route

Status

Preparation date

Ship. date

OISField

Route	Status	Carrier	Prep date	Earliest T	Ship. date	Latest T	TUE cap.	Max. vol.	Max. w...	SHU	No. TU...	Volume	Weight

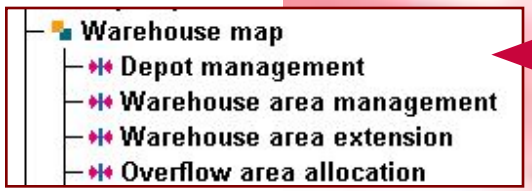
OISJTable

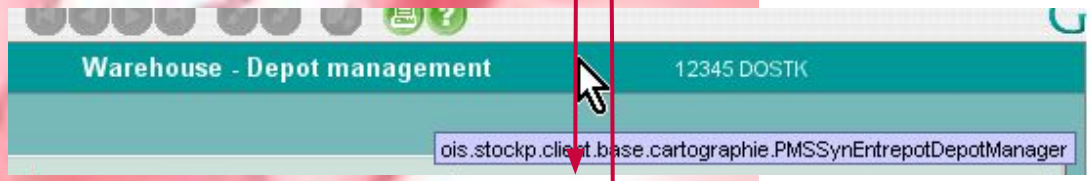
Route detail | Launch | Alloc./Dealloc. | Route manag.

OISJButton

EXERCISE: Screen Ergonomics

- TS200_GOLDStockDevelopment_Exercises - 1
  - Log into G.O.L.D.
  - Open screens and note the different types of layout
  - Open screens and review source code





Screen class name

EXERCISE: Modify screen

- TS200_GOLDStockDevelopment_Exercises - **2**
  - Add new column in the table
  - (Add query field)

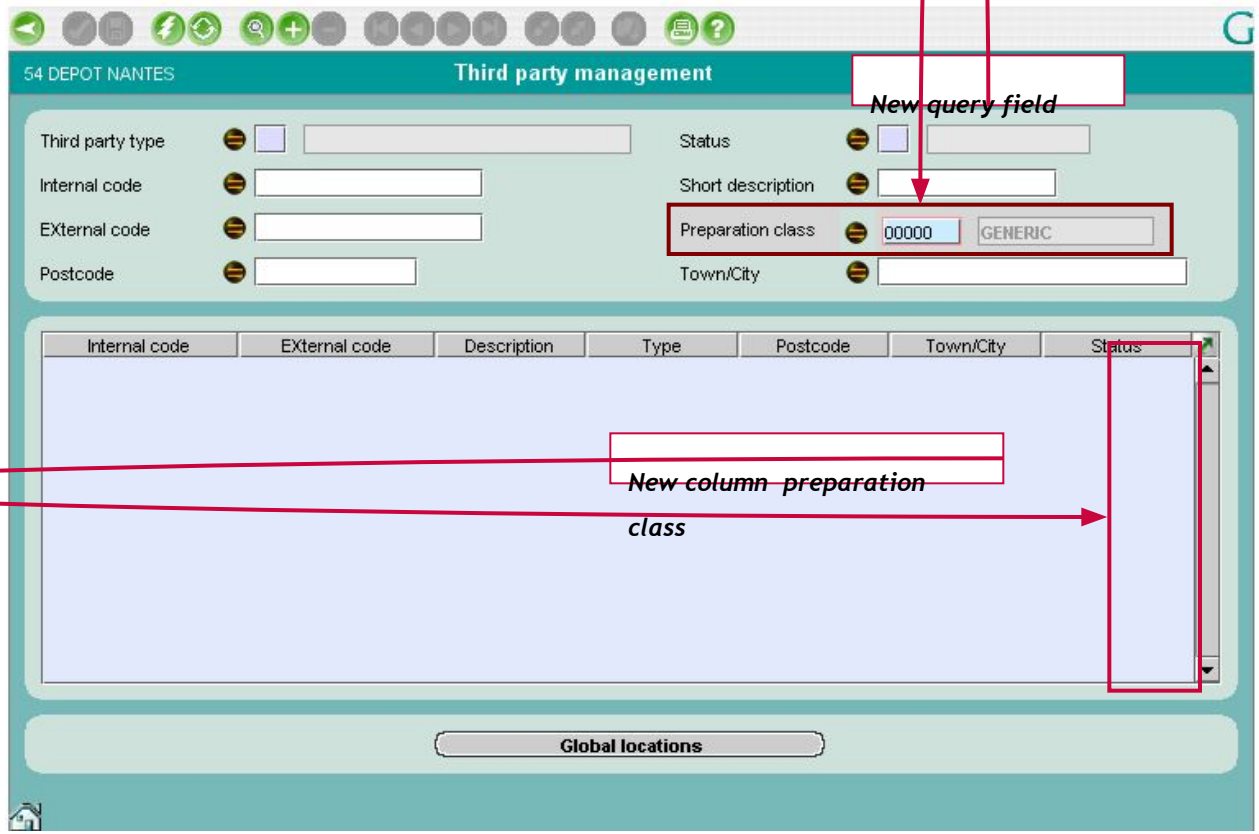
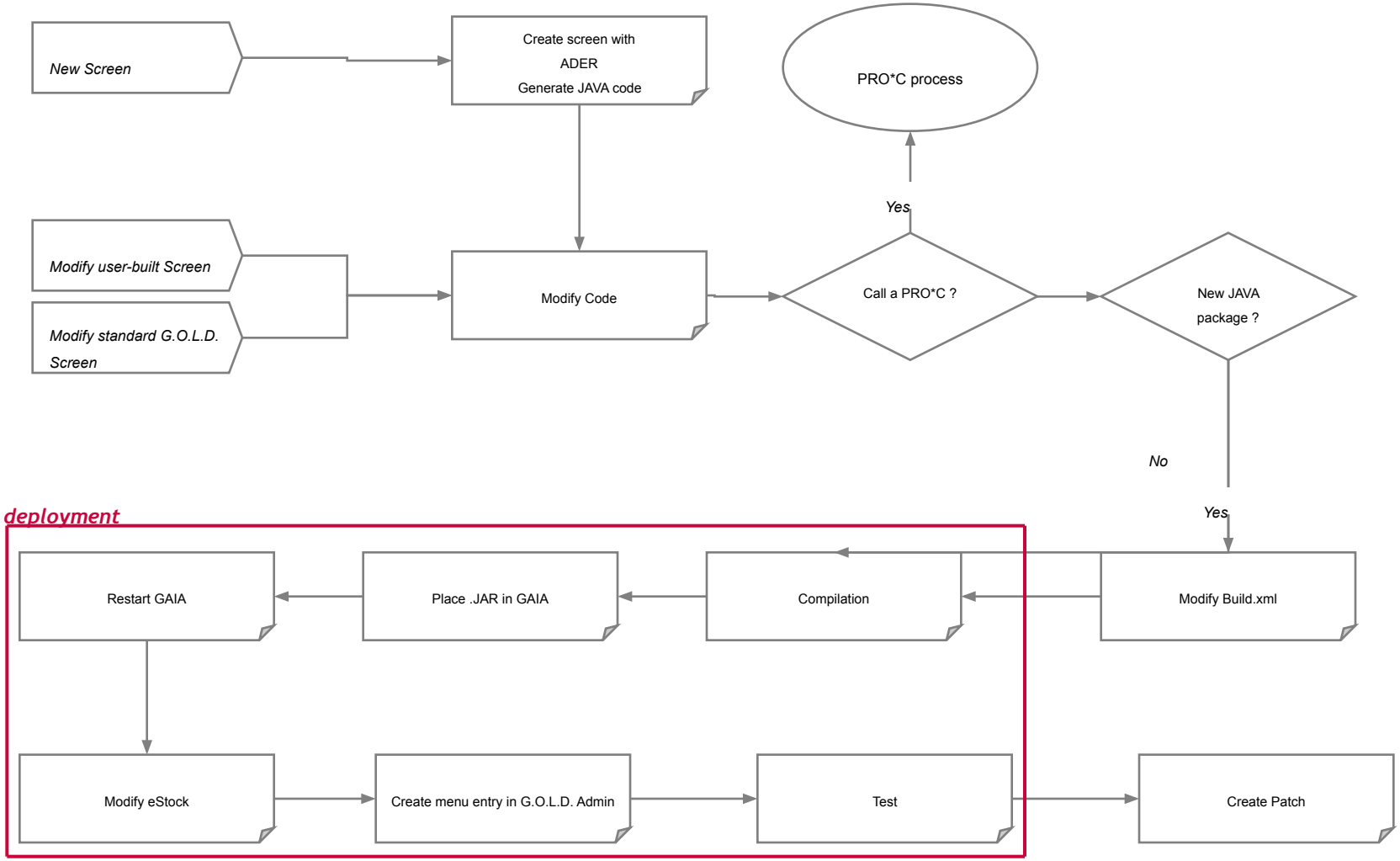


Table of content

Create a screen process

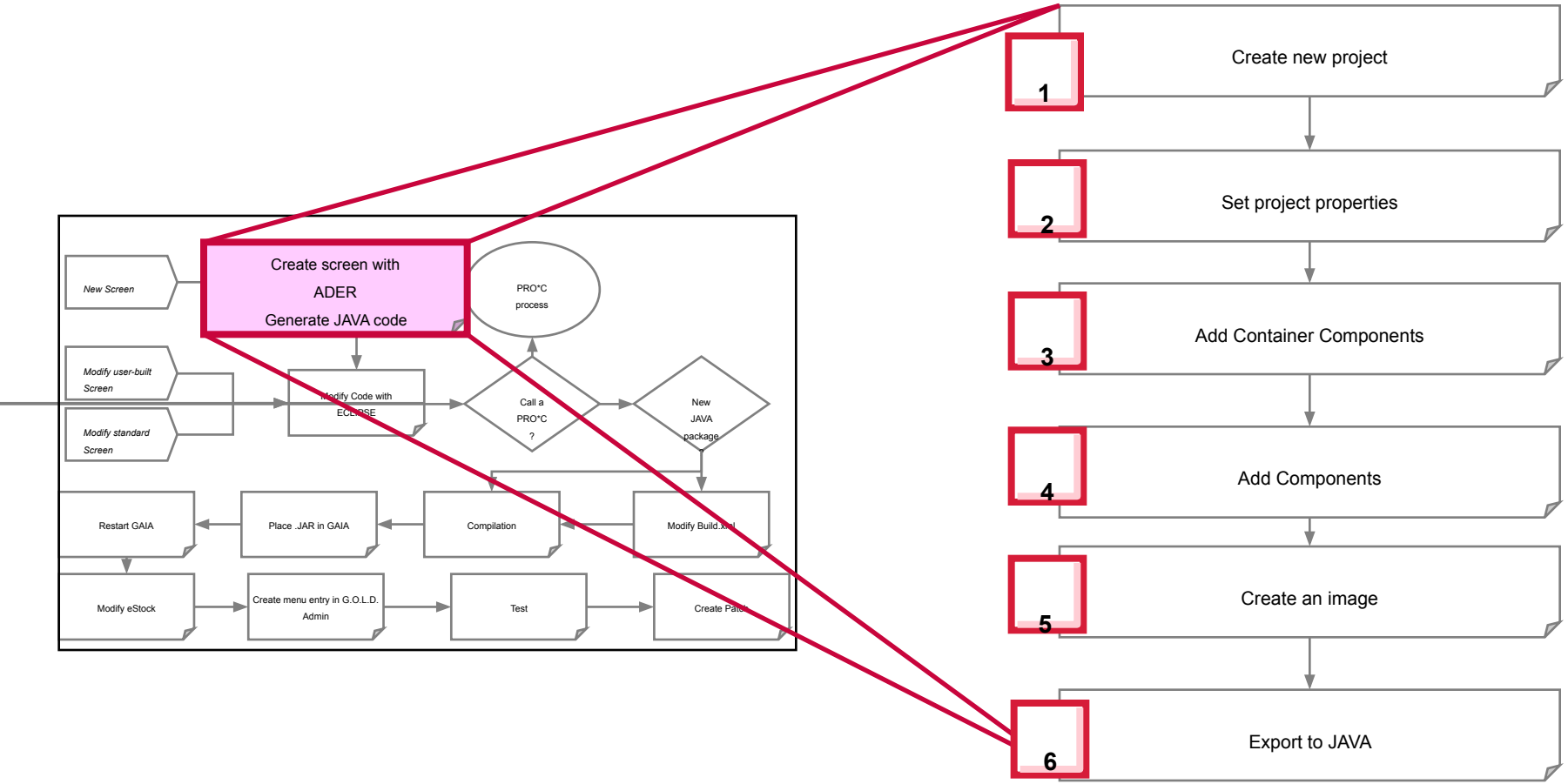


ADER

- ADER is used to create G.O.L.D. screens quickly and easily.
- Screens are developed using the basic classes provided by the JAVA graphic framework.
- The generic G.O.L.D. toolbar is provided.

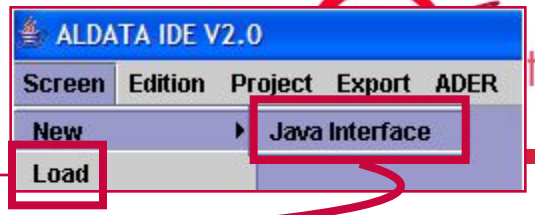
- **A few guidelines :**
  - Except for very particular cases, there must be no direct call to swing components (JAVA basic graphic class).

ADER process

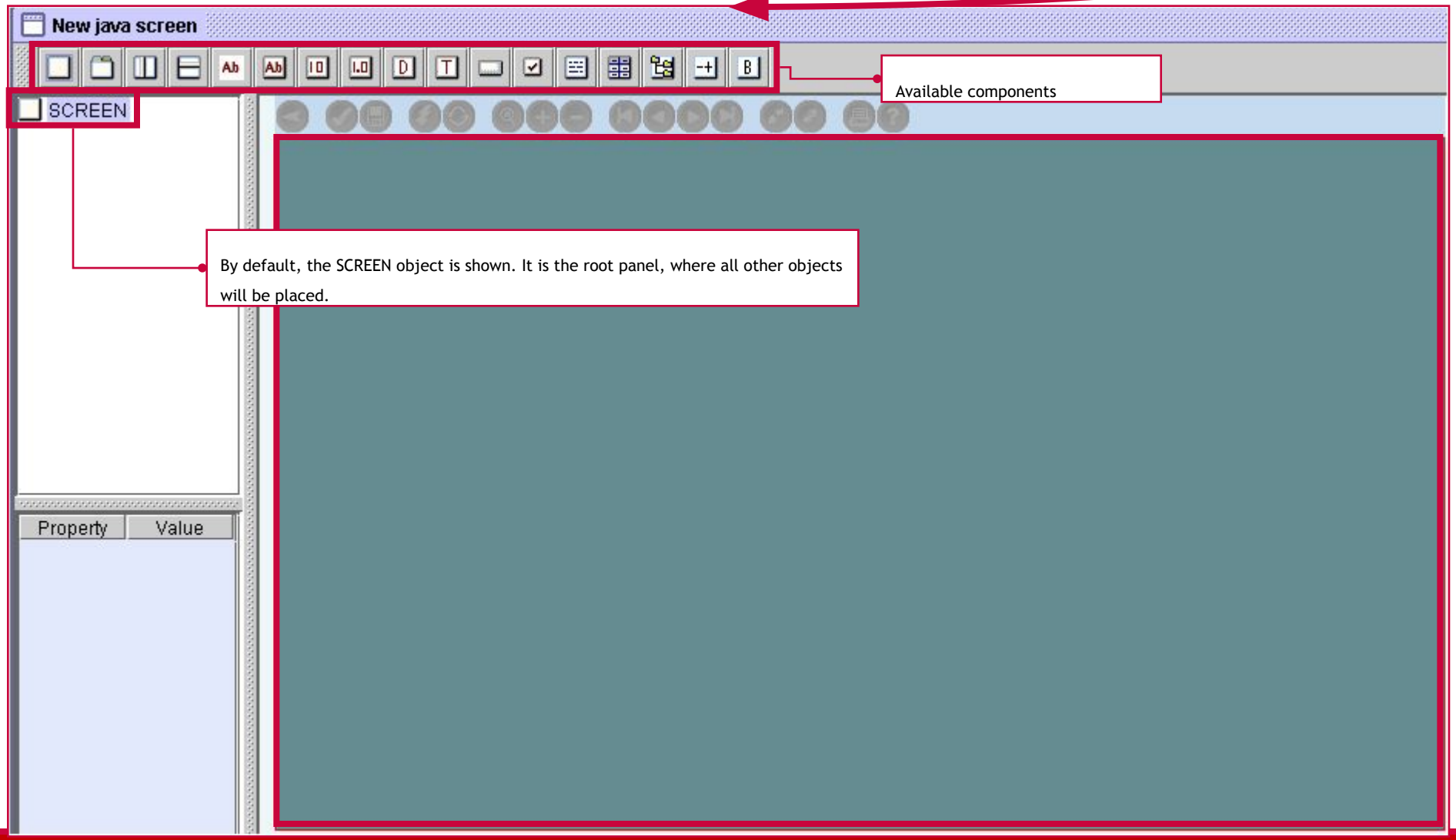


1

Create New Project



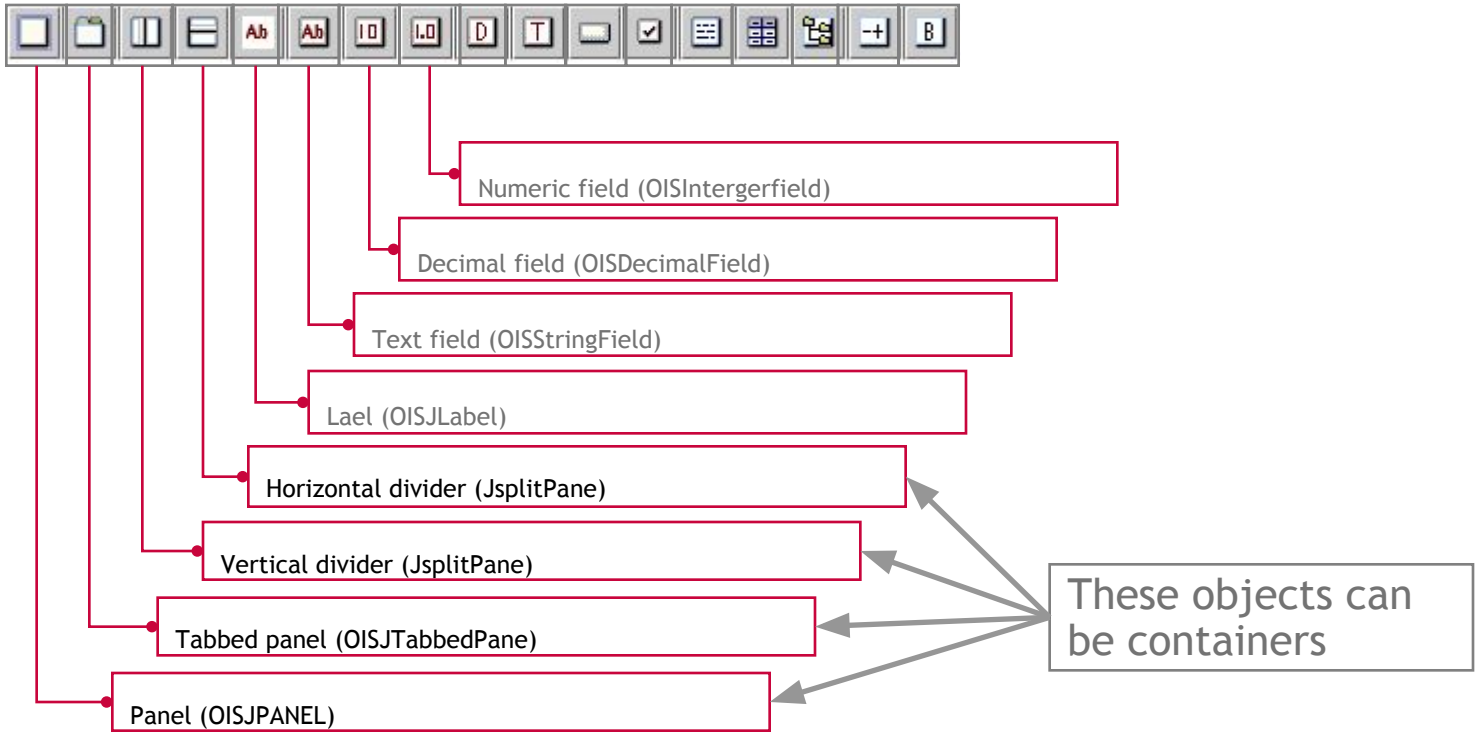
Open existing project



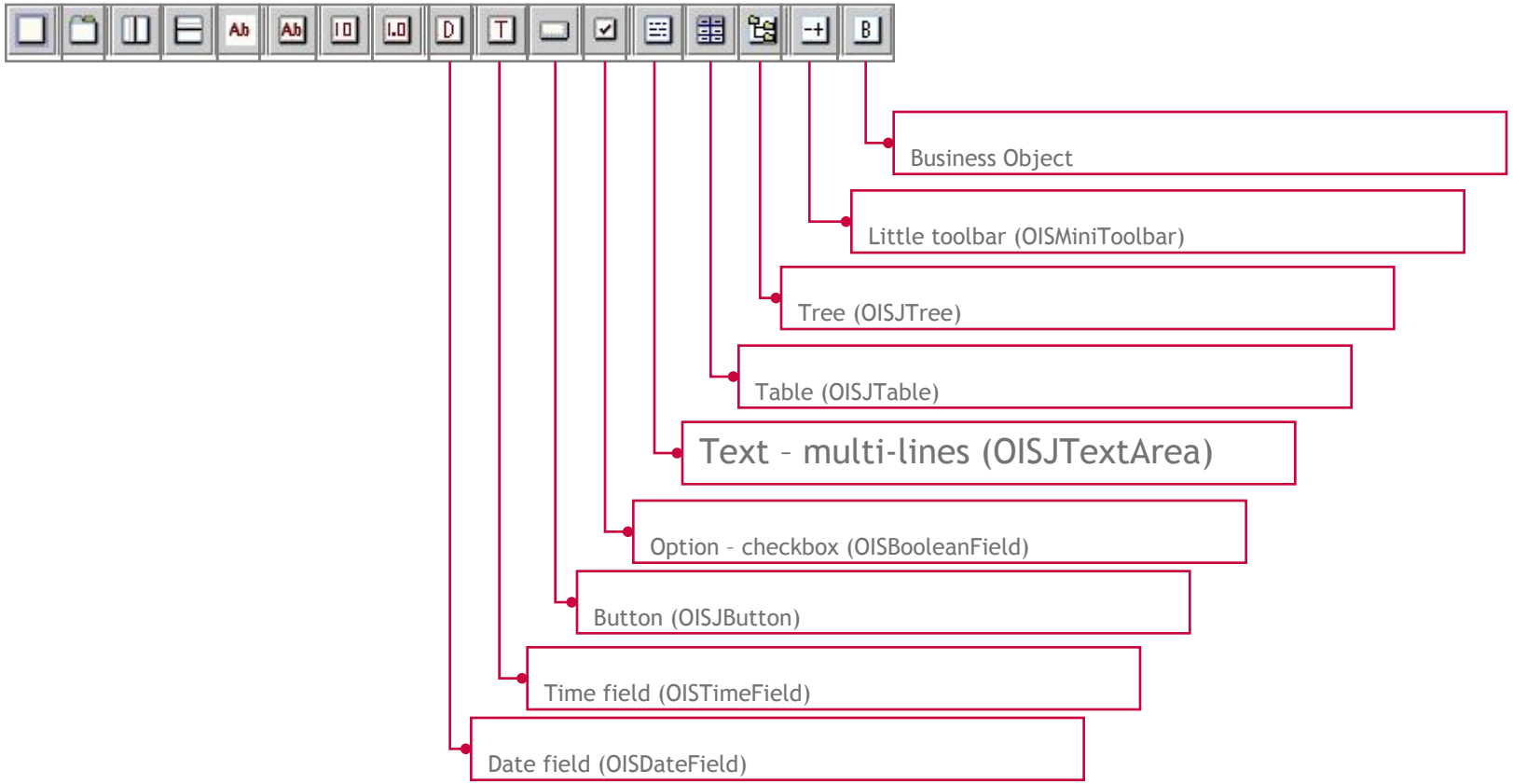
Available components

By default, the SCREEN object is shown. It is the root panel, where all other objects will be placed.

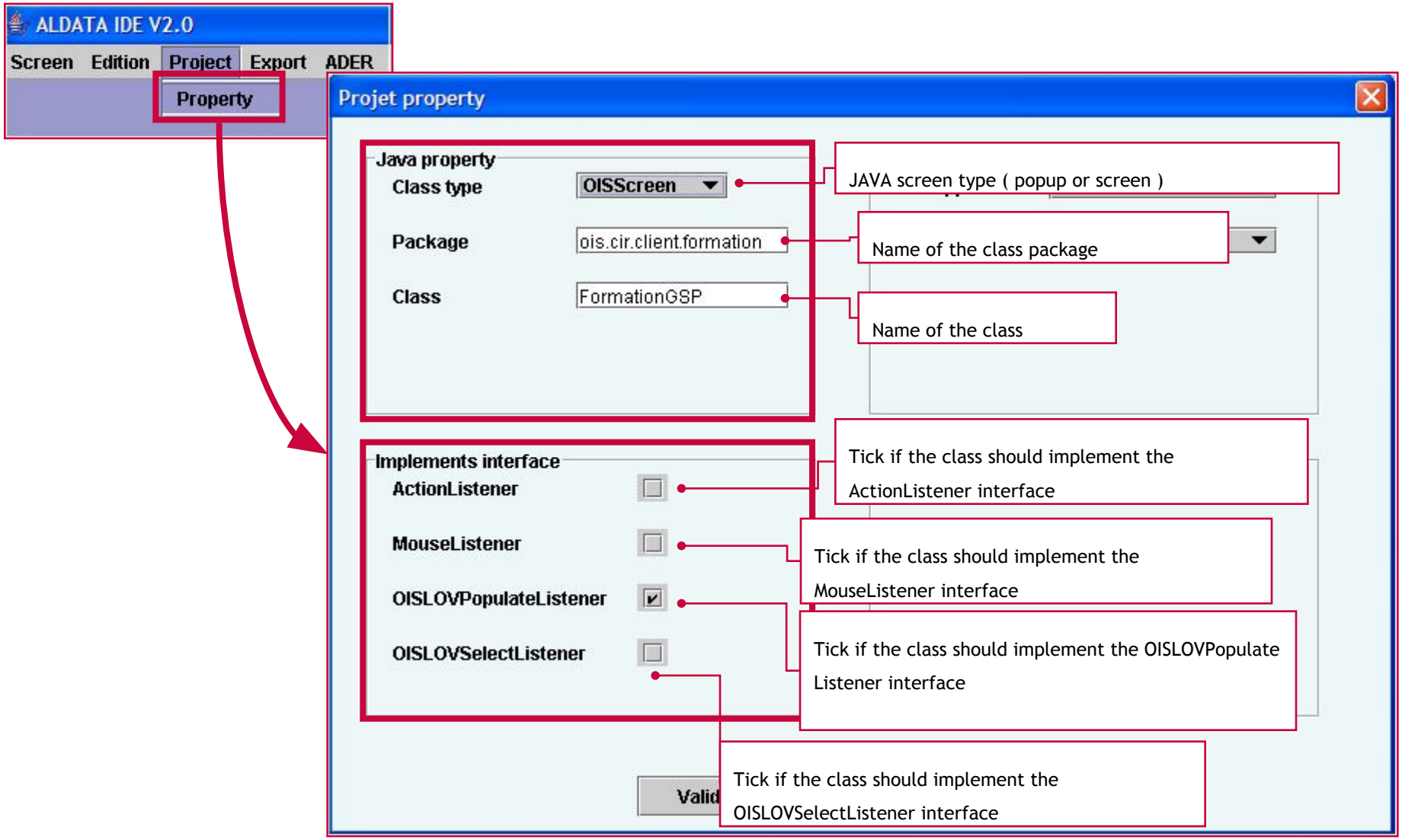
Available Components



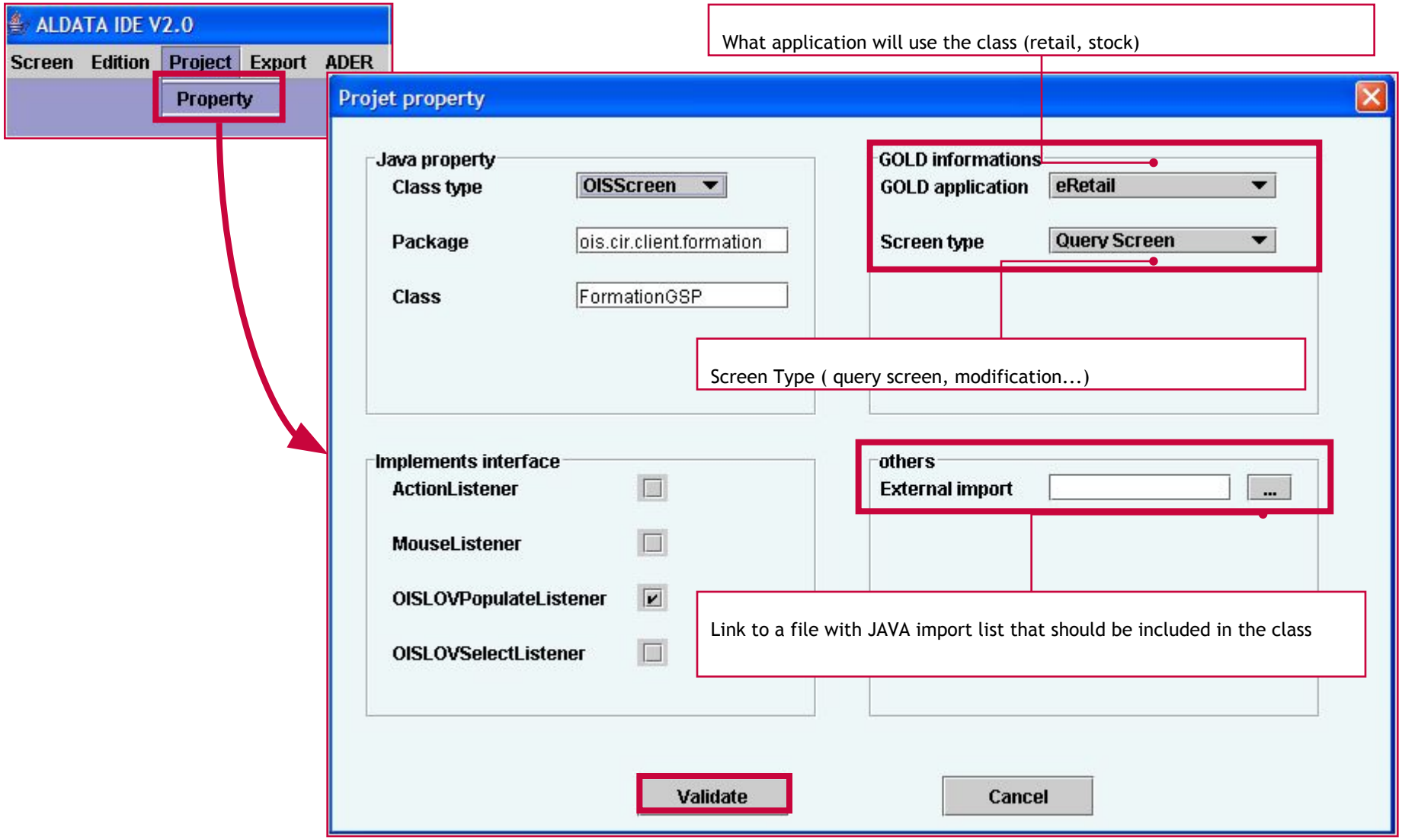
Available Components



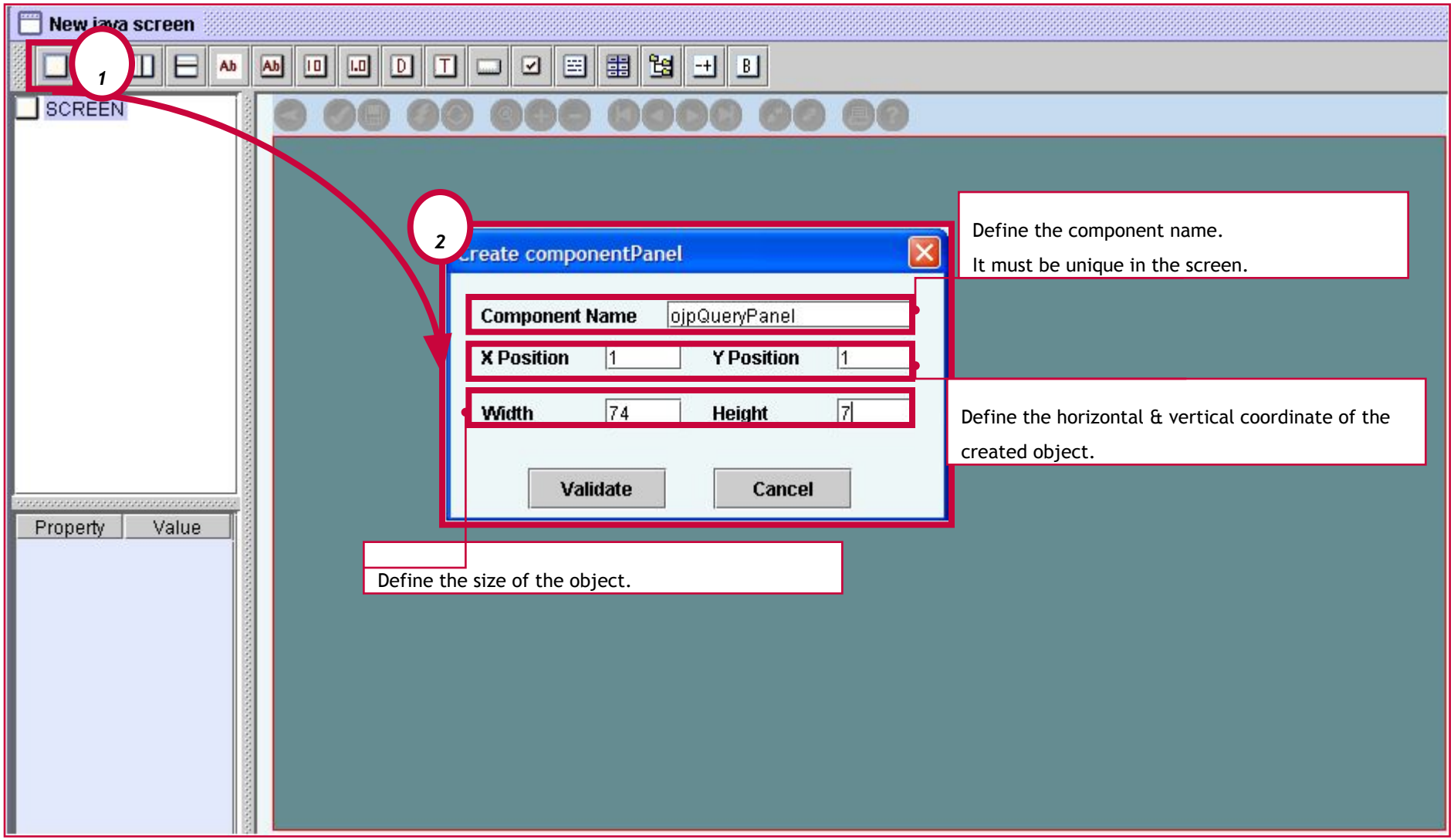
Set Project Properties – 1/2



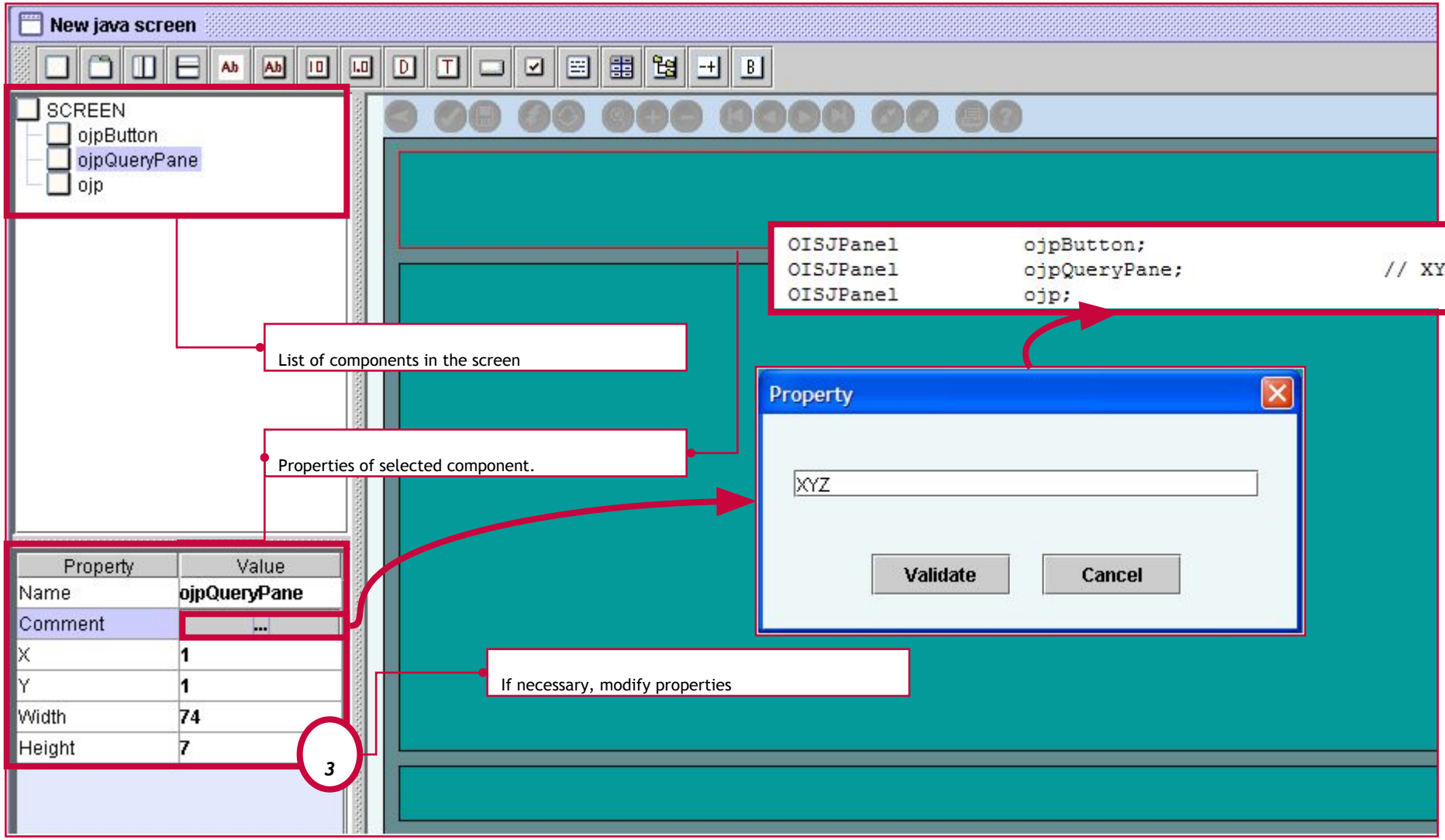
Set Project Properties – 1/2



Add Containers – 1/2



Add Containers – 2/2



Add Comments

New java screen

SCREEN
- ojpButton
- ojpQueryPane
- ojp

Property	Value
Name	ojpQueryPane
Comment	...
X	1
Y	1
Width	74
Height	7

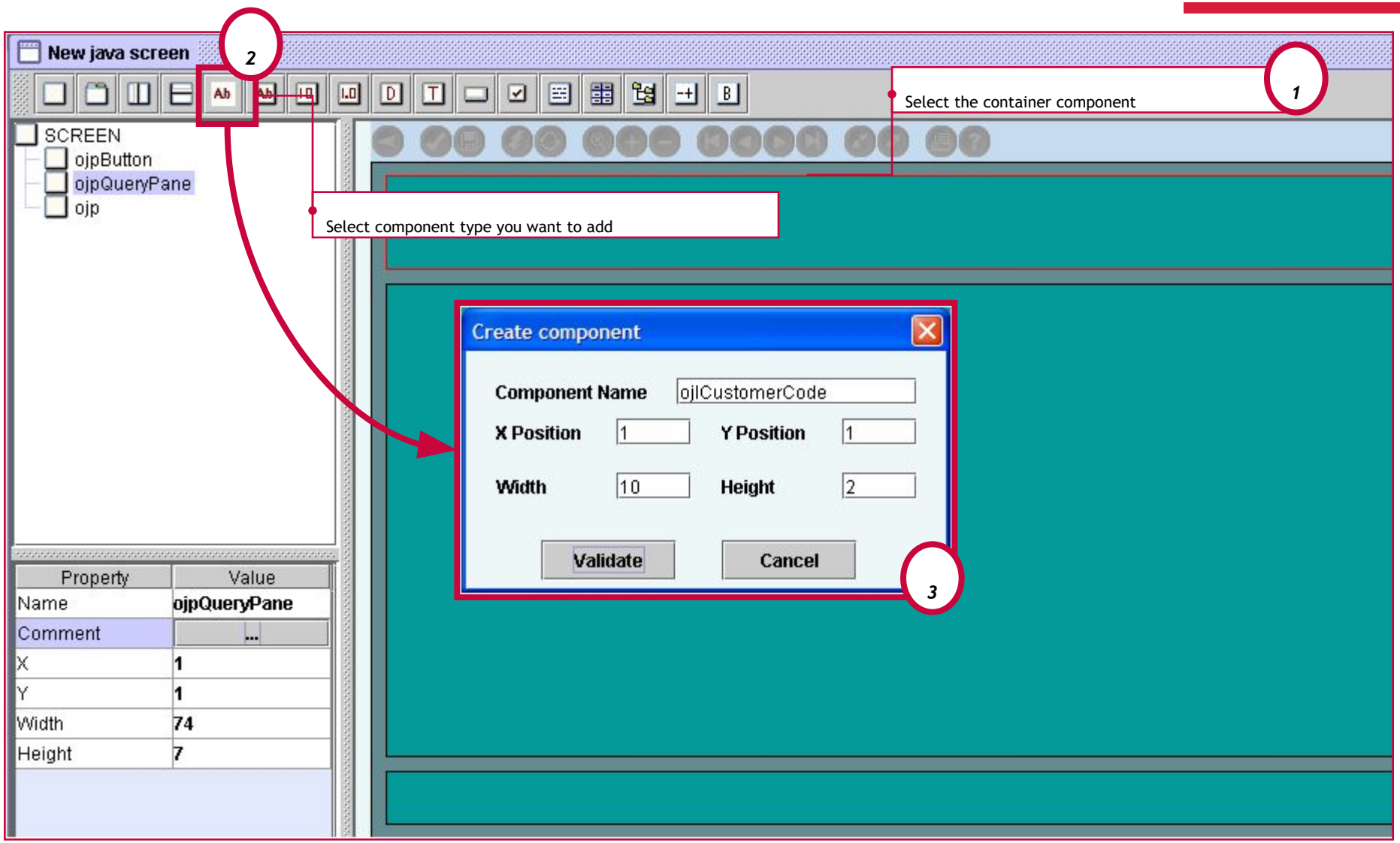
```
OISJPanel          ojpButton;
OISJPanel          ojpQueryPane;          // XYZ
OISJPanel          ojp;
```

Property

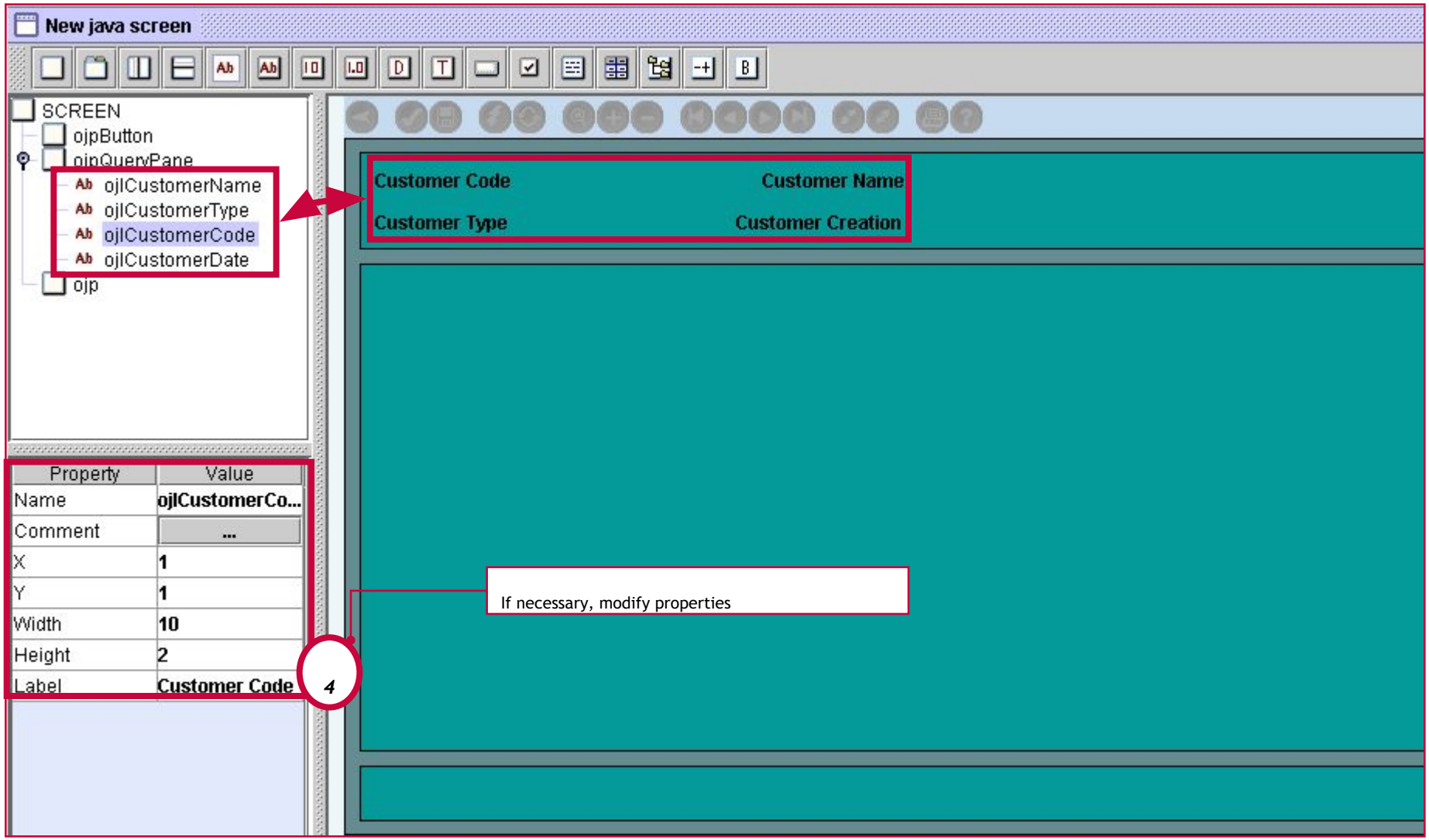
XYZ

Validate | Cancel

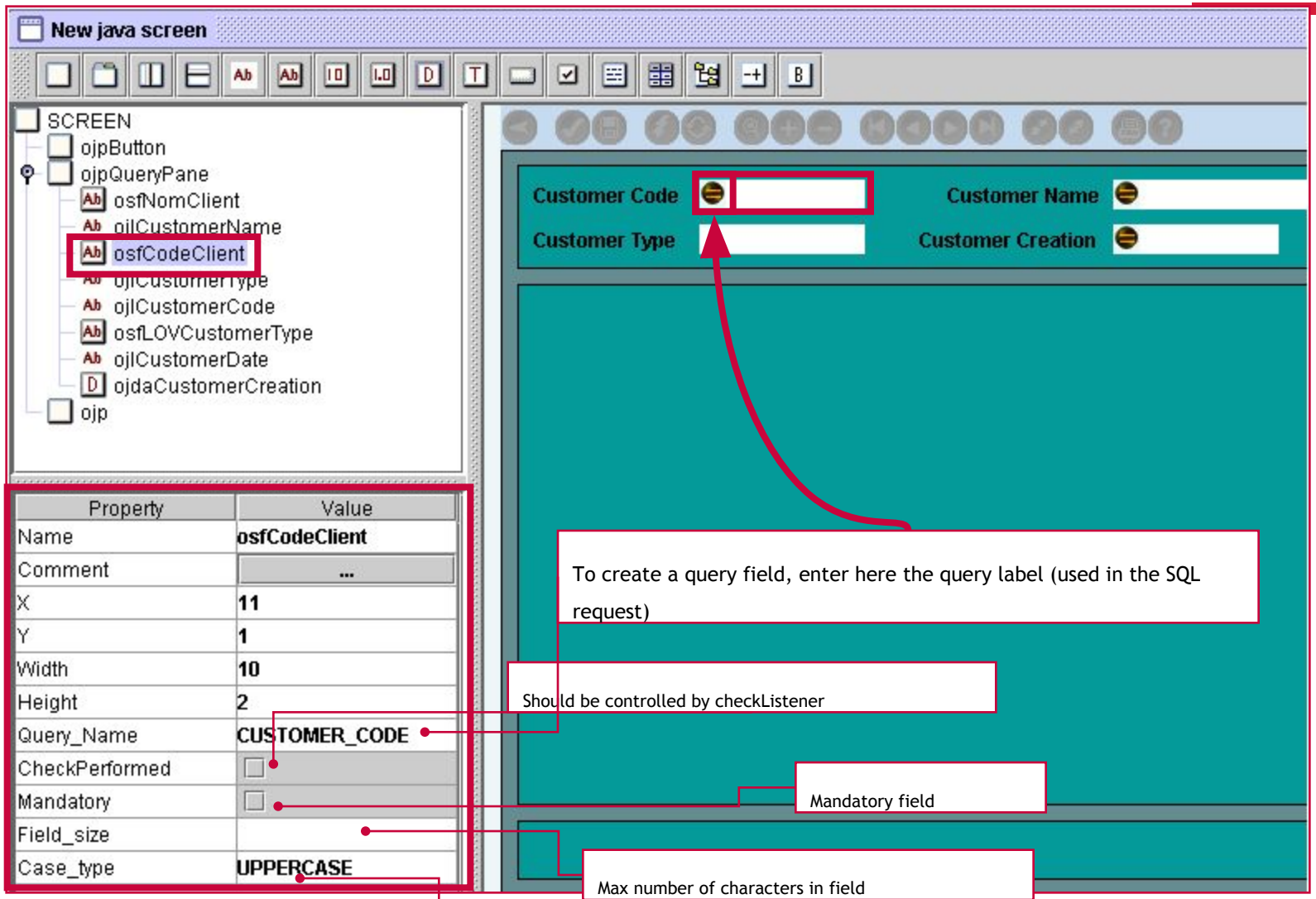
Adding components



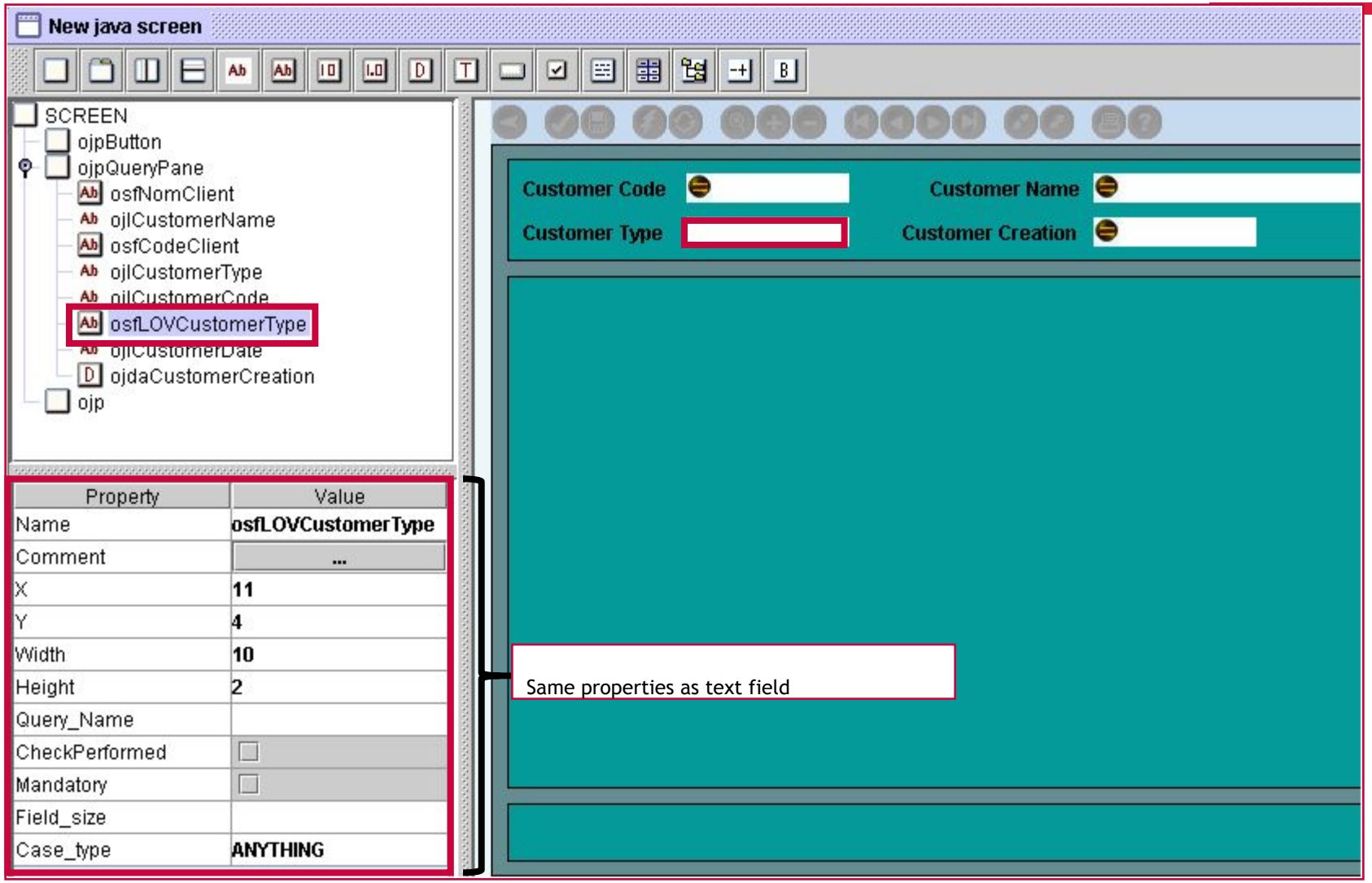
Labels


New java screen
SCREEN
ojpButton
ojpQueryPane
ojlCustomerName
ojlCustomerType
ojlCustomerCode
ojlCustomerDate
ojp
Customer Code
Customer Name
Customer Type
Customer Creation
Property
Value
Name
ojlCustomerCo...
Comment
...
X
1
Y
1
Width
10
Height
2
Label
Customer Code
4
If necessary, modify properties

Text Fields


New java screen
SCREEN
ojpButton
ojpQueryPane
osfNomClient
ojlCustomerName
osfCodeClient
ojlCustomerCode
osfLOVCustomerType
ojlCustomerDate
ojdaCustomerCreation
ojp
Customer Code
Customer Name
Customer Type
Customer Creation
Property
Value
Name
osfCodeClient
Comment
...
X
11
Y
1
Width
10
Height
2
Query_Name
CUSTOMER_CODE
CheckPerformed
Mandatory
Field_size
Case_type
UPPERCASE
To create a query field, enter here the query label (used in the SQL request)
Should be controlled by checkListener
Mandatory field
Max number of characters in field
UPPERCASE, LOWERCASE, ANYTHING

Lists of Values (LOV)



Property	Value
Name	osfLOVCustomerType
Comment	...
X	11
Y	4
Width	10
Height	2
Query_Name	
CheckPerformed	☐
Mandatory	☐
Field_size	
Case_type	ANYTHING

Date Field

New java screen

SCREEN
- ojpButton
- ojpQueryPane
  - osfNomClient
  - ojlCustomerName
  - osfCodeClient
  - ojlCustomerType
  - ojlCustomerCode
  - osfLOVCustomerType
  - ojlCustomerDate
  - ojdaCustomerCreation
- ojp

Property	Value
Name	ojdaCustomerCreation
Comment	...
X	36
Y	4
Width	10
Height	2
Query_Name	CUSTOMER_DATE
CheckPerformed	
Mandatory	

Customer Code | Customer Name
Customer Type | Customer Creation

Table

New java screen

SCREEN
- ojpButton
- ojpQueryPane
- ojp
  - ojtClient

Property	Value
Name	ojtClient
Comment	...
X	1
Y	1
Width	72
Height	33
Columns_Name	...

Customer Code | Customer Name
Customer Type | Customer Creation

Code Client	Nom Client	Type Client	Date creation

Property

Code Client;Nom Client;Type Client;Date creation

Validate | Cancel

Print report

Button

New java screen

SCREEN
- ojpButton
  - ojbEdit
- ojpQueryPane
- ojp

Property	Value
Name	ojbEdit
Comment	...
X	33
Y	1
Width	10
Height	2
Label	Print report
Action_Comma...	

Customer Code | Customer Name
Customer Type | Customer Creation

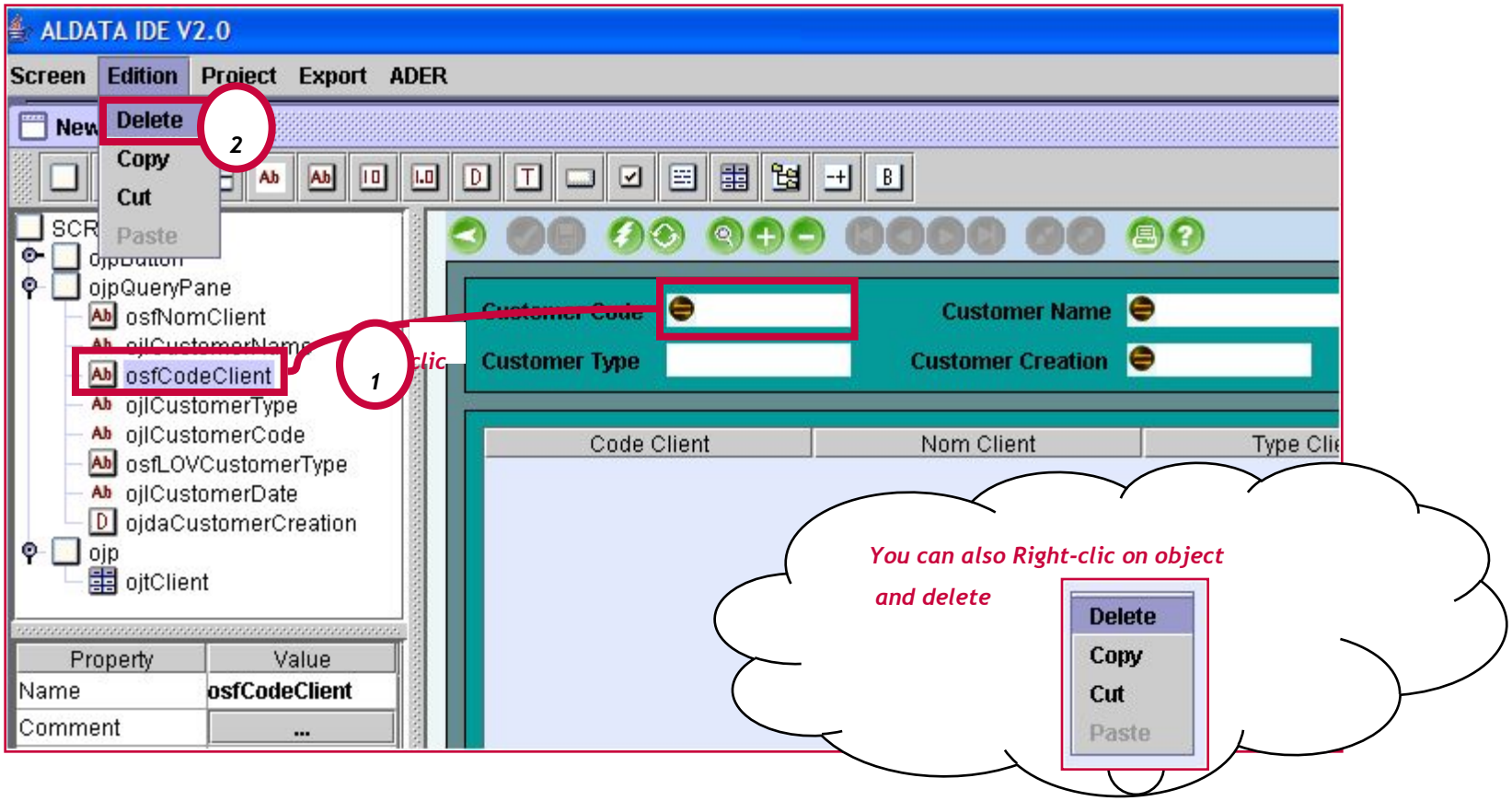
Code Client	Nom Client	Type Client

Text on Button

Button JAVA name (used by actionPerformed)

Print report

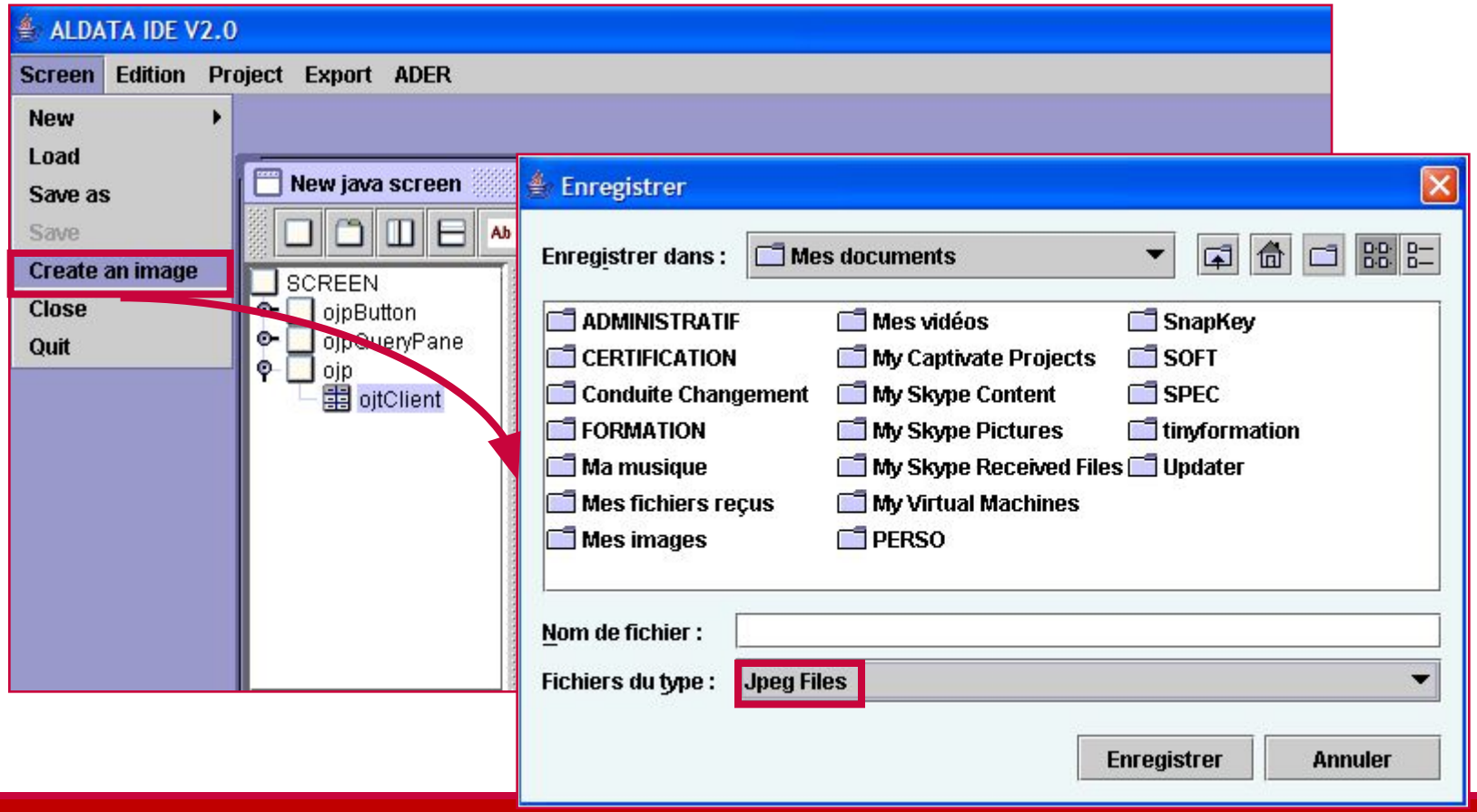
Delete a component



Create an image

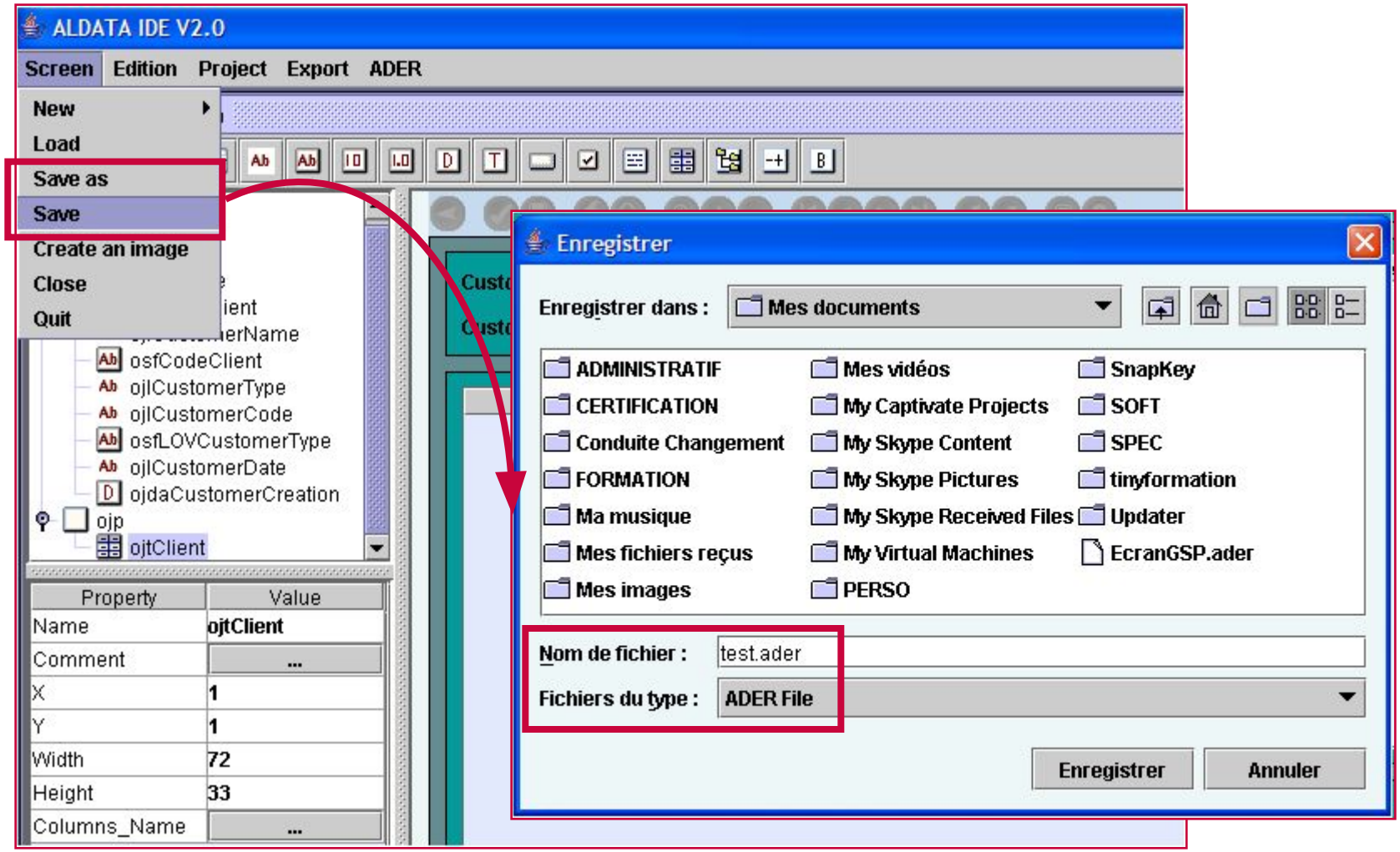
- Use ADER to print mock-up.

⚠ **Tip !** Use image to get screen validated before you export and start coding !



Save Project

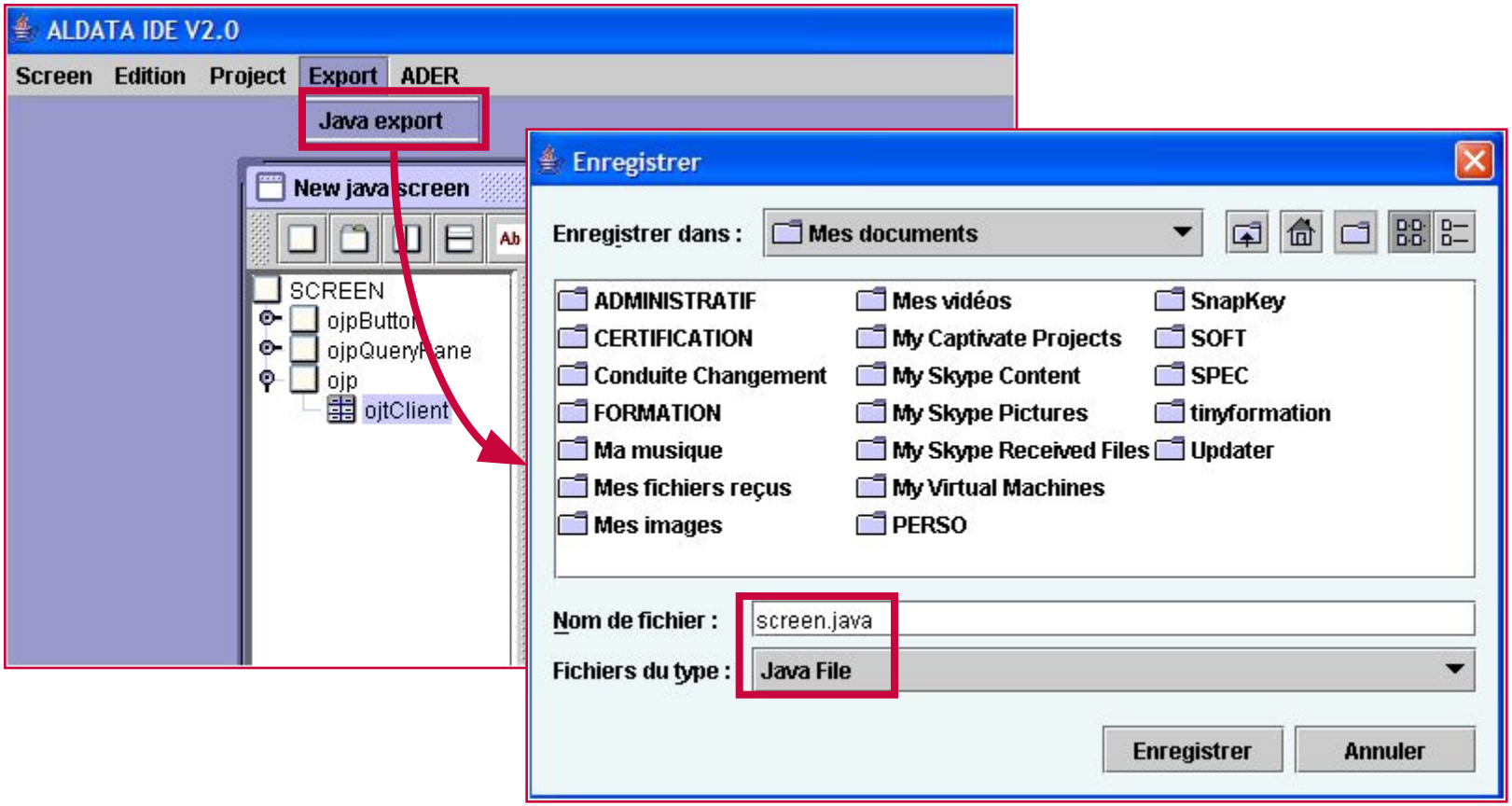
- Save project as .ADER before exporting so you can modify your screen if necessary.



JAVA Export

Project properties must be set-up before export.

- If you forgot to set them up, the properties window will pop-up when you click on export.



JAVA Export

- Export java source code to directory that match package name

Java - SDTRecOrdBrowser.java - Eclipse SDK

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer | Hierarchy

- ois.webservices.estockpda.exp
- ois.webservices.estockpda.mc
- ois.webservices.estockpda.ren
  - PMSPDARempotageUrgent
- sdt.stockp.client.receptions
  - SDTRecOrdBrowser.java
  - SDTServiceCallReceptions.j
- sdt.stockp.server.receptions
  - SDTServiceReceptions.jav
- build_Gold_Adm.xml
- build_Gold_spec.xml
- build_Gold_Stock.xml
- build_Gold_Vocal.xml
- GOLDKeystore
- JRE System Library [jdk15]
- common-session.jar
- common-term.jar
- common-webservice.jar
- common-webserviceEvent.jar
- common-webserviceGeneric.jar
- common-webserviceInjector.jar
- common-webserviceInjectorStat
- common-webserviceLogger.jar

SDTRecOrdBrowser.java | SDTServiceCallReceptions.java | SDTServiceReceptions.java

```
package sdt.stockp.client.receptions;

import java.awt.*;

public class SDTRecOrdBrowser extends PMSScreen
    implements
        ActionListener,
        OISLOVPopulateListener,
        OISQueryGroup, OISCheckListener {

    // Components Declarations
    OISJPanel        ojpButtonPanel;
    OISJPanel        ojpQueryPanel;
    OISJPanel        ojpDataPanel;
    OISJButton       ojbPrintReport;
    OISDateField         odafDateRecep;
    OISIntegerField      oifNumOR;
    OISStringField       osfSupOrder;
    OISStringField       osfRecStatus;
    OISStringField       osfRecStDesc;
    OISStringField       osfSupName;
```

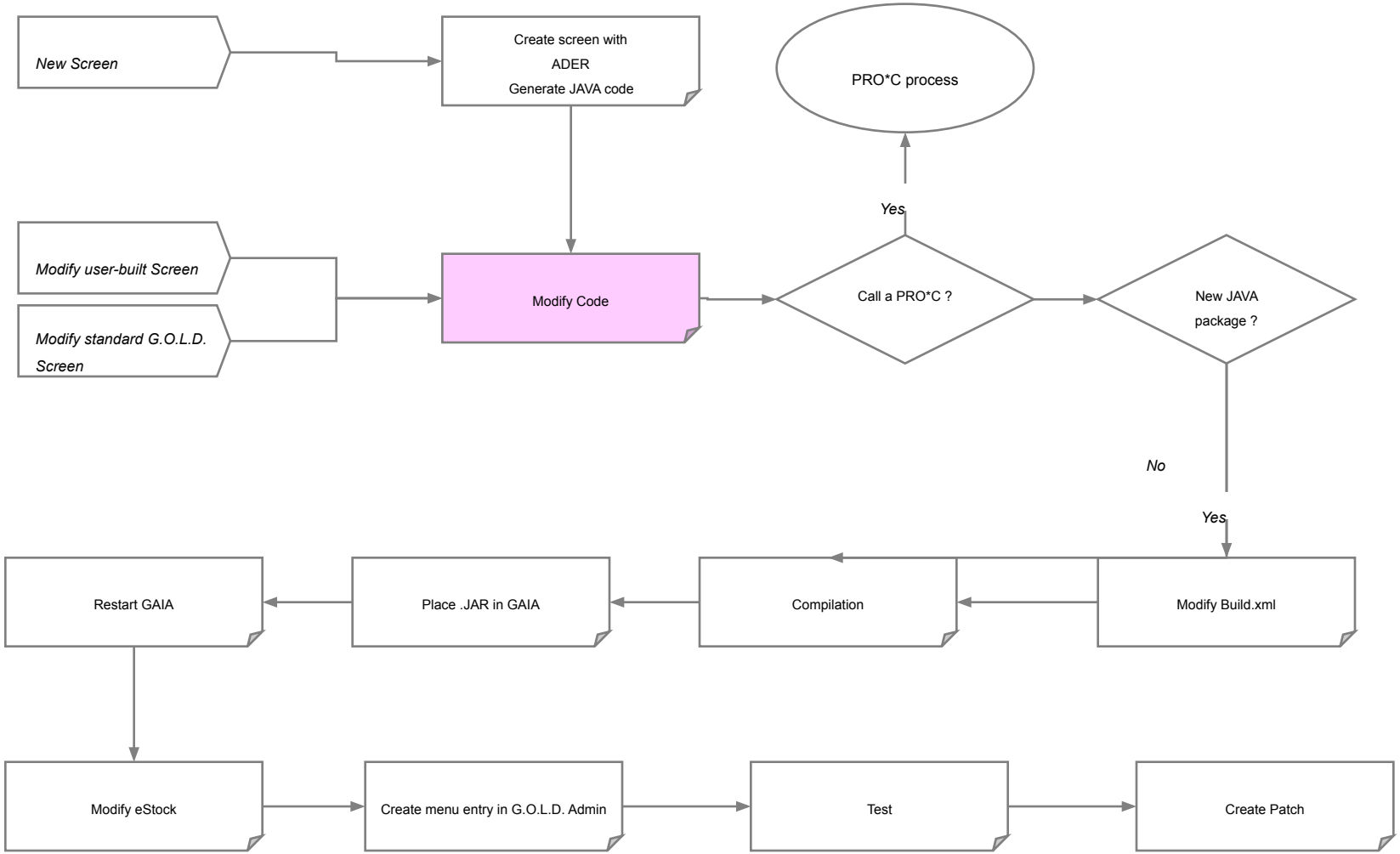
EXERCISE: Create a screen

- Open the following file for more details on this exercise

  TS200_GOLDStockDevelopment_Exercises – 3

  1. Launch Ader
  2. Set project properties
  3. Add Container Components
  4. Add Components
  5. Create an image
  6. Export to JAVA

Create a screen process



Modify Code – Implement logic

- Replace hard coded labels
  getLabel(613,"Advanced Goods Receiving Note management")

- Add constraints on enterable fileds
  addCheckListener(this);
  checkPerformed

- Add and implement LOVs
  LOVPopulate

- Implement actions on buttons
  actionPerformed

- Implement logic to load data from database
  searchAction

Modify Code – Service call

- Client
  - Java screen

```
// Execute Search
public int searchAction()
{
    HashMap param = OISTools.makeDynamicParam(ojpQueryPanel);

    sendTrace("Lancement du service tournee.getListeTourneeBase");
    ojtRecOrders.setData(SDTServiceCallReceptions.getRecOrderList(oja, param, oja.sLangueGOLD));
    if (ojtRecOrders.getData() == null)
    {
        oja.showMessage(getLabel(139, "No data found"));
    }
    return 0;
}
```

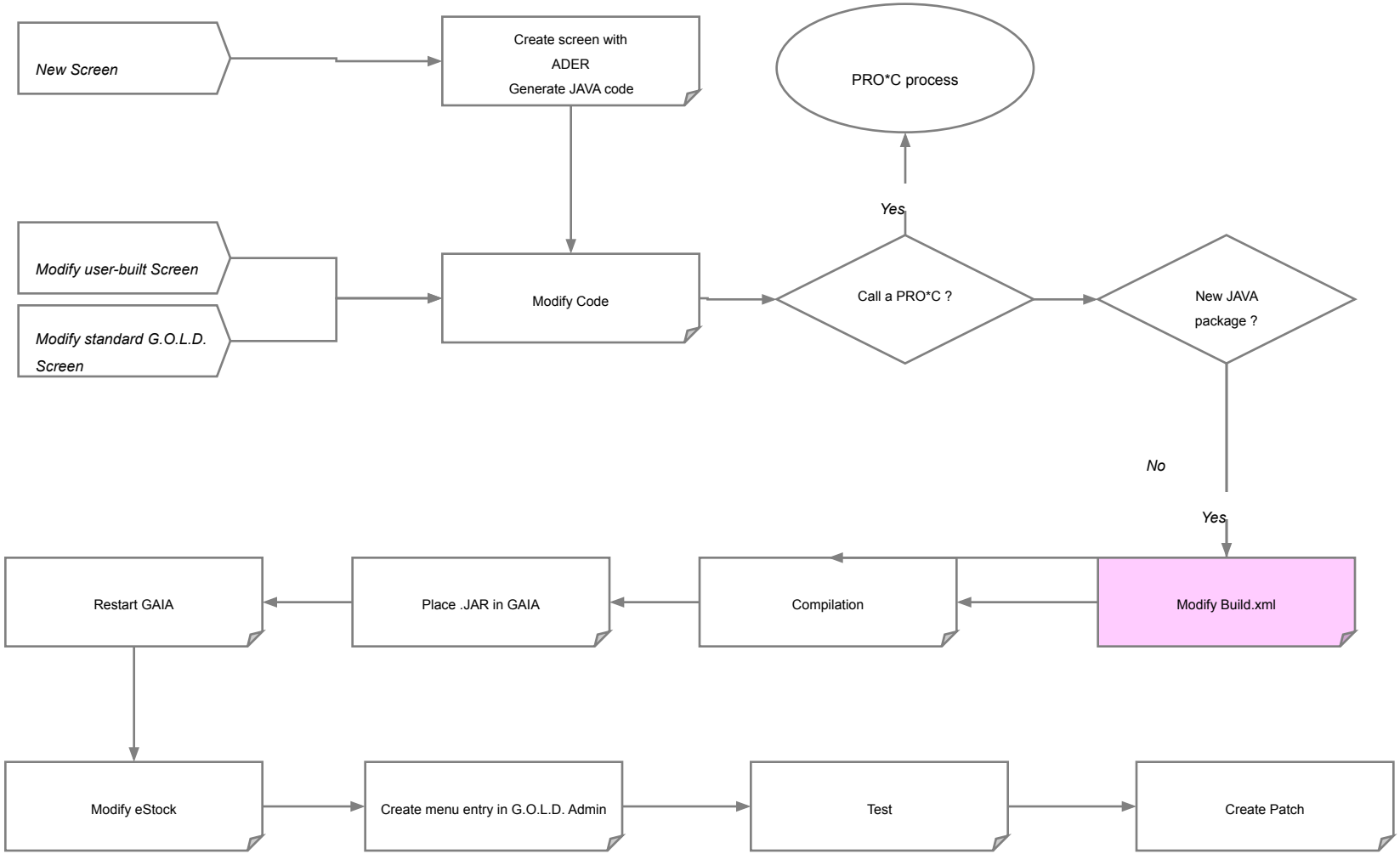
  - Service call

```
final static public Object getRecOrderList(OISJApplet oja, HashMap hmp, String sLang)
{
    return oja.getData("sdt.stockp.server.receptions.SDTServiceReceptions.getRecOrderList",
            new Object[]{hmp, sLang});
}
```

- Server

```
public class SDTServiceReceptions implements Invokable
{

    static public Object[] getRecOrderList(HashMap hmp, String sLang) throws Exception
    {
        Log.debug("getRecOrderList...");
```

Create a screen process



Build.XML structure – 1/2

- The file build.xml is used to compile JAR files

- Structure of build.xml
  - Variables

```
<!-- ================================================== -->
<!-- Path properties                                    -->
<!-- ================================================== -->
<property environment="env"/>
<property name="GaiaRoot" value="${env.GAIA_HOME}"/>
<property name="GaiaNamespace" value="${env.NAMESPACE}"/>
<property name="GoldVob" value="${env.SOURCEVOB}"/>
<property name="GoldSource" value="${GoldVob}/java"/>
<property name="ClassDirectory" value="${env.COMP_JAVA}/class"/>
<property name="GoldResource" value="${env.EGOLD_INT}/resource"/>
<property name="GoldWeb" value="${env.EGOLD_INT}/web"/>
<property name="PatchLevel" value="${env.PATCH_LEVEL}"/>
```

  - Class Path

```
<path id="GOLD_CLASSPATH">
   <pathelement location="${GaiaRoot}/lib/gas.jar"/>
   <pathelement location="${GaiaRoot}/lib/ext/api/jdom.jar"/>
   <pathelement location="${GaiaRoot}/rt/j2ee14/jmx/jmxri.jar"/>
   <pathelement location="${GaiaRoot}/rt/tomcat/servlet-api.jar"/>
   <pathelement location="${GaiaRoot}/deploy/${GaiaNamespace}/resource/common/lib/beanapi.jar"/>
   <pathelement location="${GaiaRoot}/deploy/${GaiaNamespace}/resource/common/bean/common-term.jar"/>
   <pathelement location="${GaiaRoot}/deploy/${GaiaNamespace}/resource/common/bean/common-session.jar"/>
```

Build.XML structure – 2/2

- The file build.xml is used to compile JAR files
- Structure of build.xml
  - Build Client

```
<macrodef name="build_client_jar">
   <attribute name="JarName" default=""/>
   <attribute name="IncludedClass" default=""/>
   <sequential>
      <delete file="@{JarName}" verbose="true"/>
      <jar destfile="@{JarName}"
            basedir="${ClassDirectory}"
           includes="@{IncludedClass}">
         <manifest>
            <attribute name="Patch-Level" value="${PatchLevel}"/>
         </manifest>
      </jar>
      <signjar jar="@{JarName}"
             alias="${KeyName}" storepass="${KeyPass}" keypass="${KeyPass}"
          keystore="${KeyFile}"/>
   </sequential>
</macrodef>
```

  - Sign JAR

```
<macrodef name="signature">
   <attribute name="JarName" default=""/>
   <sequential>
      <signjar jar="@{JarName}"
             alias="${KeyName}" storepass="${KeyPass}" keypass="${KeyPass}"
          keystore="${KeyFile}"/>
   </sequential>
</macrodef>
```

Modify build.xml

- Create a new <target> in build.xml when you create a new package

```
<target name="buildspec">
   <echo>Compile specific files</echo>
   <javac destdir="${ClassDirectory}" fork="yes" failonerror="no" debug="yes"
      debuglevel="lines,vars,source" memoryMaximumSize="512M"
      source="1.4" target="1.4">
      <classpath refid="GOLD_CLASSPATH"/>
      <src path="${GoldSource}/sdt"/>
   </javac>

   <echo>SDT Client jar files</echo>
   <build_client_jar JarName="${GoldWeb}/estock/sdt.client.jar"
                              IncludedClass="sdt/stockp/client/** "/>

   <echo>SDT Server jar files</echo>
   <build_server_jar JarName="${GoldResource}/estock/lib/sdt.server.jar"
                              IncludedClass="sdt/stockp/server/** "/>
</target>
```

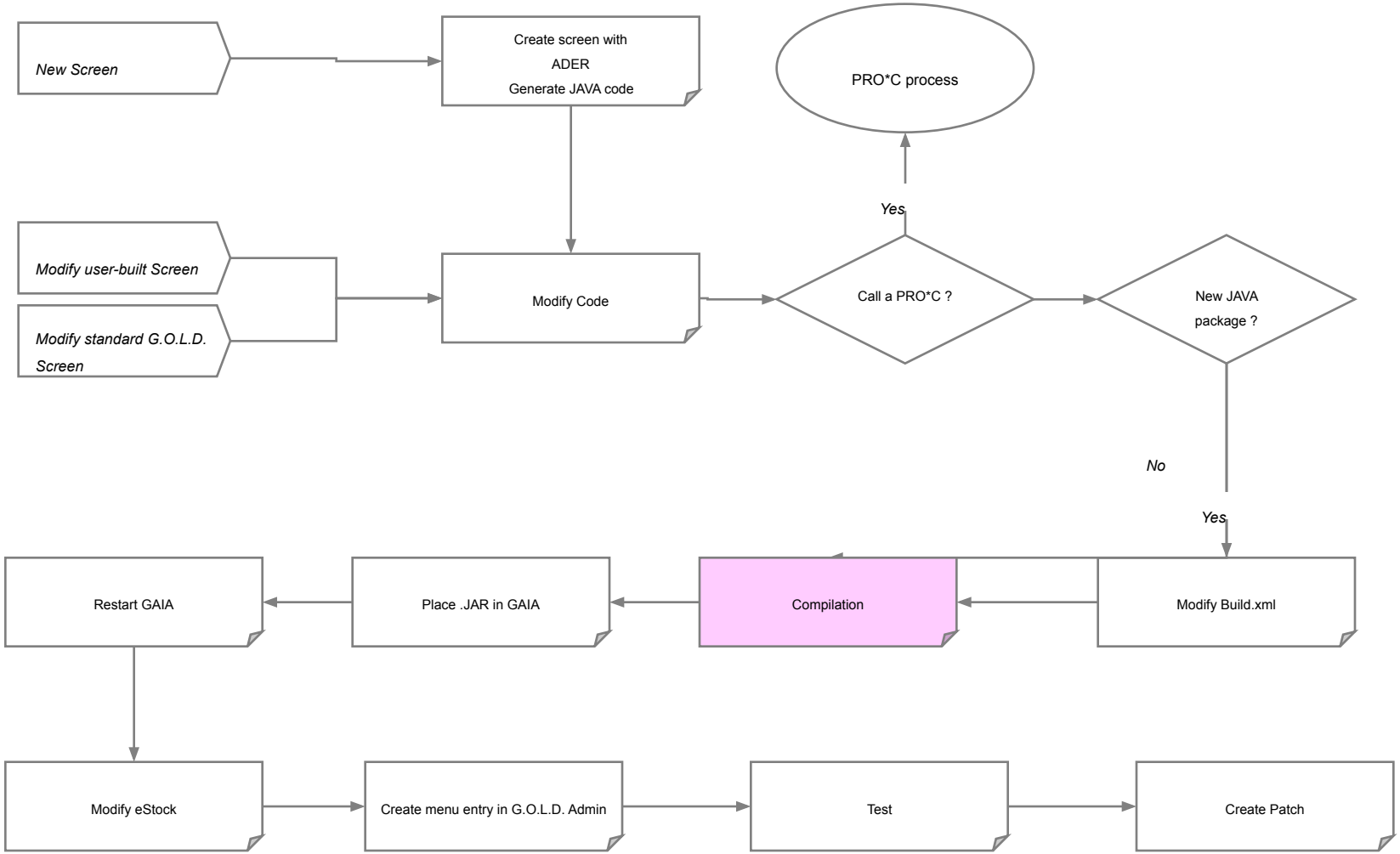
Client Side

Server Side

Note :

- JAR files (destfile) are named :
  - On client side ois.clinet.XXX.jar
  - On server Side : ois.server.XXX.jar

Create a screen process

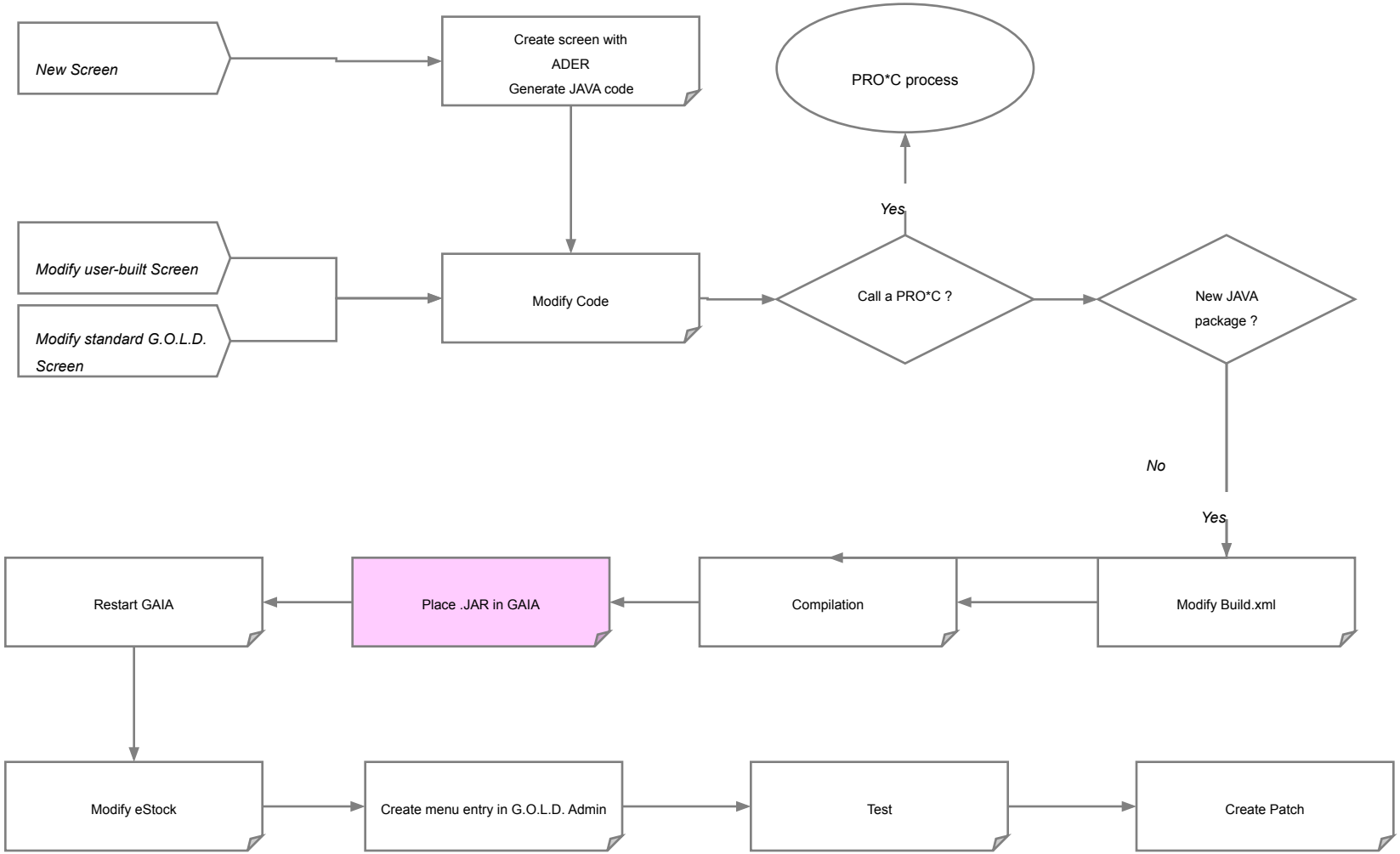


Compilation

- Connect to an Unix
- Compile (launch build.xml)
  - ant [-f buildfile] Target_Name

```
[egold@DevLinux java]$
[egold@DevLinux java]$ ant -f build_Gold_Stock.xml buildspec
Buildfile: build_Gold_Stock.xml

buildspec:
     [echo] Compile All Source files
    [javac] Compiling 3 source files to /opt/GOLD/stk507/src/java/class
     [echo] SDT Client jar files
   [delete] Deleting: /opt/GOLD/stk507/gaia/deploy/DEFAULT/web/estock/sdt.
      [jar] Building jar: /opt/GOLD/stk507/gaia/deploy/DEFAULT/web/estock/
  [signjar] Signing JAR: /opt/GOLD/stk507/gaia/deploy/DEFAULT/web/estock/s
  [signjar] Enter Passphrase for keystore:
     [echo] SDT Server jar files
   [delete] Deleting: /opt/GOLD/stk507/gaia/deploy/DEFAULT/resource/estock
      [jar] Building jar: /opt/GOLD/stk507/gaia/deploy/DEFAULT/resource/es

BUILD SUCCESSFUL
```

Create a screen process



Place .JAR files

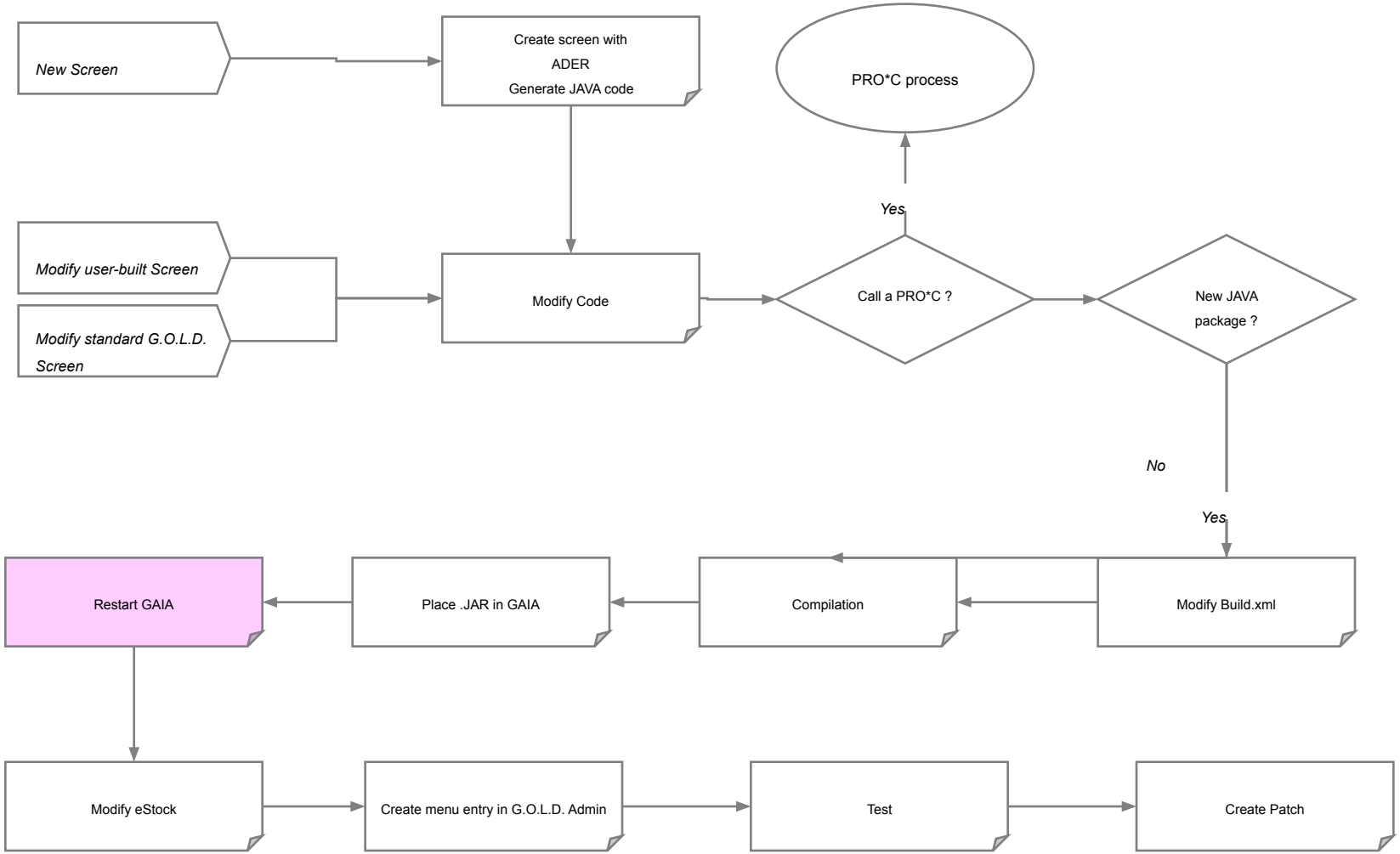
- Client Side :
  - $GOLD_HOME\gaia\deploy\DEFAULT\web\estock

ois.stockp.client.tracabilite.jar
ois.stockp.client.tracabilite.parametrage.jar
ois.stockp.client.vocal.allotimg.jar
ois.stockp.client.vocal.inventaire.jar
ois.stockp.client.vocal.jar
ois.stockp.client.vocal.picking.jar
ois.stockp.client.vocal.repartition.jar
pdf.jar
sdt.client.jar
ui.jar

- Server Side
  - $GOLD_HOME\gaia\deploy\DEFAULT\resource\estock\lib

ois.stockp.server.tournees.parametrage.jar
ois.stockp.server.tracabilite.jar
ois.stockp.server.tracabilite.parametrage.jar
ois.stockp.server.vocal.allotimg.jar
ois.stockp.server.vocal.inventaire.jar
ois.stockp.server.vocal.jar
ois.stockp.server.vocal.picking.jar
ois.stockp.server.vocal.repartition.jar
procedures.jar
sdt.server.jar

Create a screen process

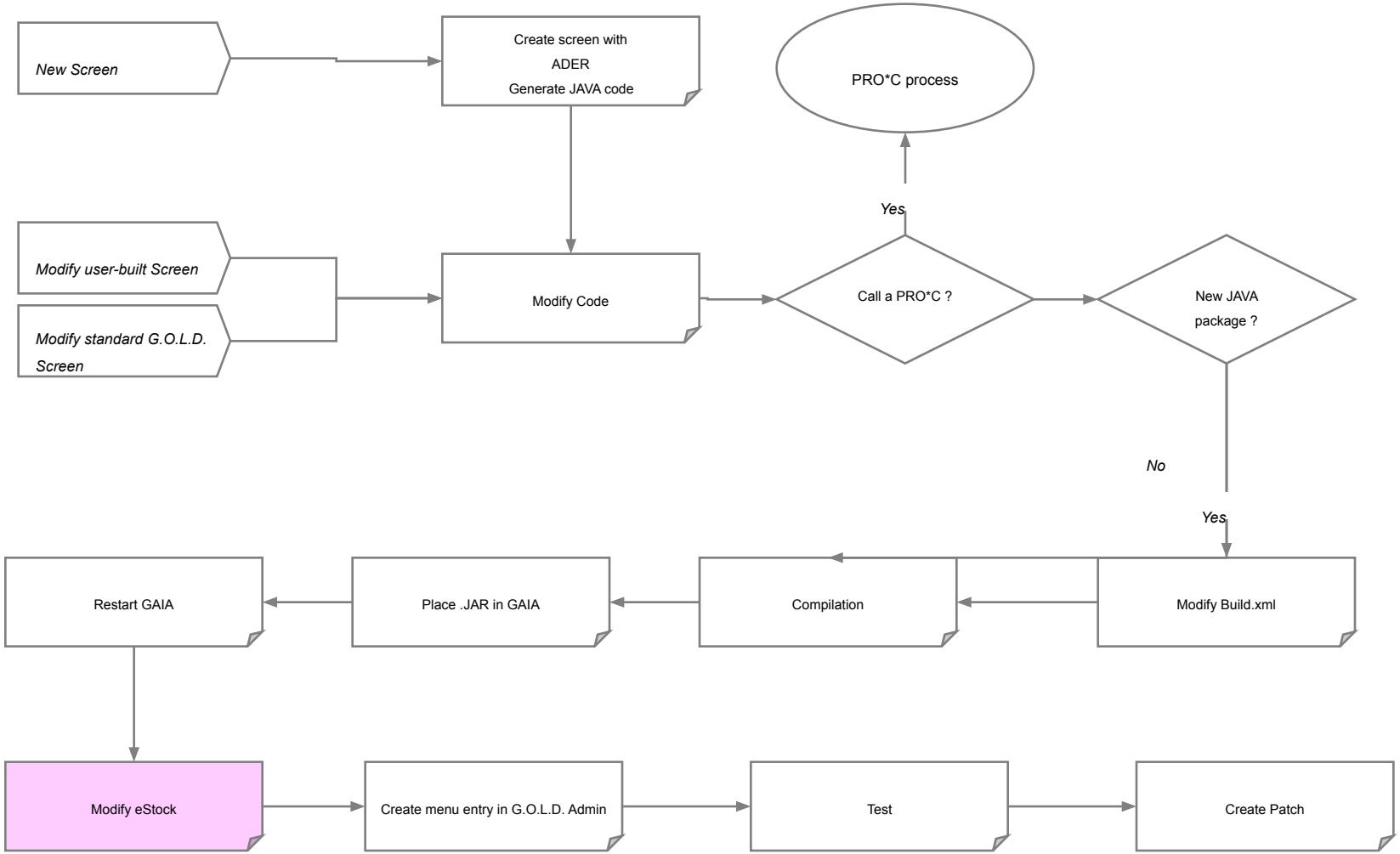


Restart GAIA

- Connect to an Unix and go to the GAIA folder with cd $GAIA_HOME
- show_gaia to check node's name
- To stop a node in GAIA :
  - stop_gaia node_name
- To start a node in GAIA :
  - start_gaia node_name

```
[egold@DevLinux stk507]$ cd $GAIA_HOME
[egold@DevLinux gaia]$ ./show_gaia
Detecting GAIA instances...
GAIA registry : <none>
GAIA launcher : <none>
GAIA is running on following node(s) :
STK507
[egold@DevLinux gaia]$ ./stop_gaia STK507
* Detected the following GAIA instance(s) : *
STK507
--- GAIA node (STK507) being stopped...
    GAIA node (STK507) stopped !
[egold@DevLinux gaia]$ ./start_gaia STK507
Using JAVA_HOME [/opt/java14]
Logs redirected to [./log_STK507.txt]
Starting GAIA Node (STK507) ...
** GAIA (STK507) is now running **
[egold@DevLinux gaia]$
```

Create a screen process



Modify estock.html

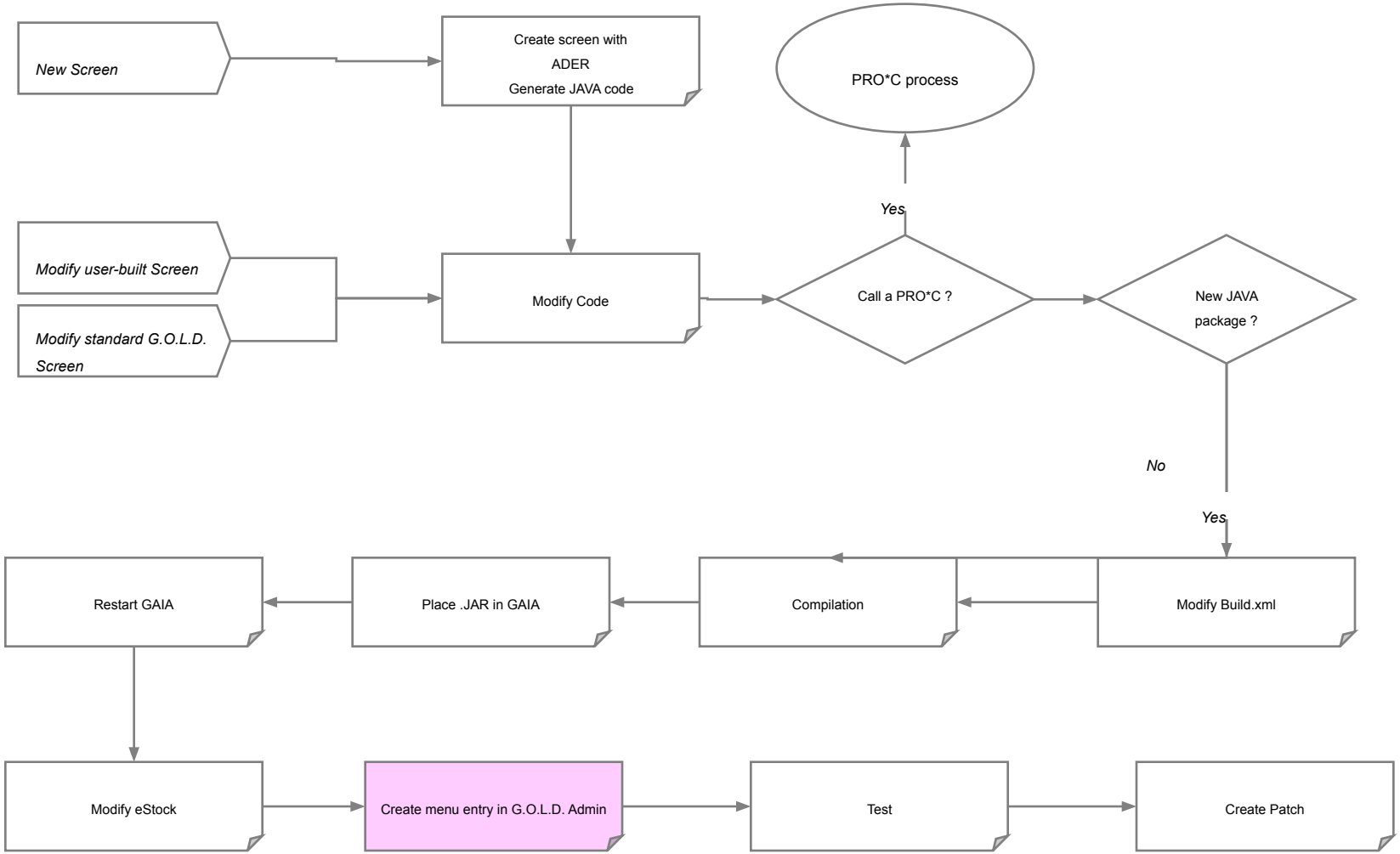
- Add .jar call to eStock.html

estock.html

```
<PARAM NAME="applicationServerDriver" VALUE="ois.ui.net.GAIAClientHttp">
<PARAM NAME="cache_option" VALUE="PLUGIN">
<PARAM NAME="cache_archive" VALUE="ui.jar
                                  , sdt.client.jar
                                  , gw.jar
                                  , ESTOCKlabelfr_FR.jar
                                  , ESTOCKlabelgb_GB.jar
                                  , estock_icons.jar
                                  , pdf.jar
                                  , ois.stockp.client.jar
                                  , ois.stockp.client.allotissement.jar
```

```
ENABLE_USER_PROPERTIES_SAVE="true"
cache_option="PLUGIN"
cache_archive="ui.jar
               , sdt.client.jar
               , gw.jar
               , ESTOCKlabelfr_FR.jar
               , ESTOCKlabelgb_GB.jar
               , estock_icons.jar
               , pdf.jar
               , ois.stockp.client.jar
               , ois.stockp.client.allotissement.jar
               , ois.stockp.client.base.jar
               , ois.stockp.client.base.administration.jar
```

Create a screen process

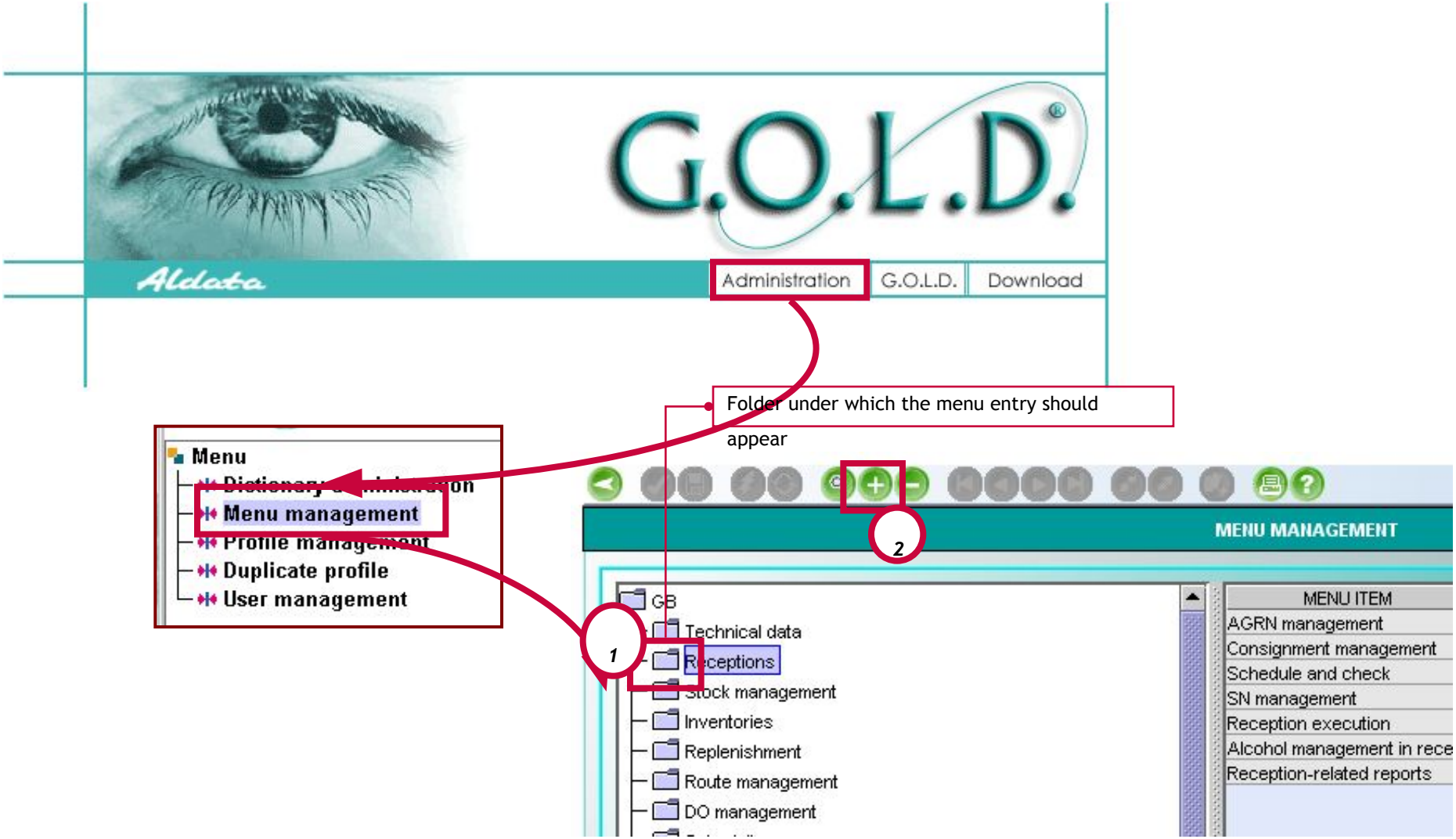


Create menu entry in G.O.L.D.

- Two ways to add menu entry :
  - Manually (see next screen)
  - SQL

```sql
INSERT INTO adm_menus
  (ameident, ameobjet, ameparent, ameseq, ameappli, amedcre, amedmaj, ameutil)
VALUES
  (52001, 'sdt.stockp.client.receptions.SDTRecOrdBrowser',
   NULL, 5201, 'ESTOCK', SYSDATE, SYSDATE, 'SCRIPT');

INSERT INTO tra_adm_menus
  (tameident, tameappli, langue, tamedesc, tamedcre, tameutil, dtraduction, etraduction)
VALUES
  (52001, 'ESTOCK', 'GB', 'SDT - RECEPTION STATEMENT', SYSDATE, 'SCRIPT', SYSDATE, 3);

INSERT INTO adm_profiles
  (aprprof, aprdesc, aprident, apracces, aprparam, aprappli, aprdcre, aprdmaj, aprutil)
  (SELECT aprprof, aprdesc, 52001, 1, '', 'ESTOCK', SYSDATE, SYSDATE, 'SCRIPT'
     FROM adm_profiles
    WHERE aprprof = 999
      AND rownum = 1);
```

Create menu entry in G.O.L.D.



Create menu entry in G.O.L.D.

G.O.L.D.® Administration-MENU ITEM CREATION

MENU ITEM CREATION 16/06/09

Identificator: 20801

Menu Item: SDT - RECEPTION STATEMENT

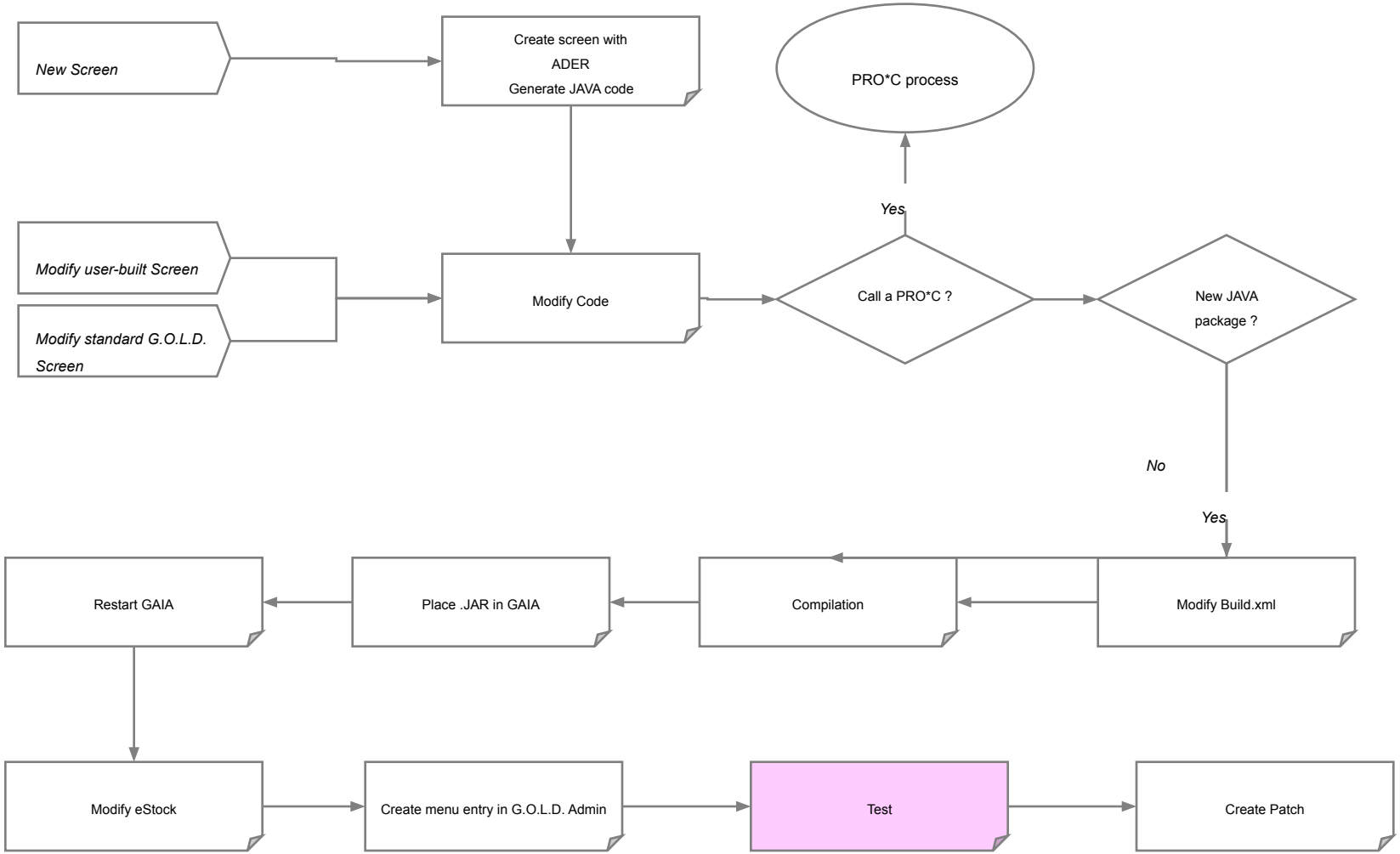
Object: sdt.stockp.client.receptions.SDTRecOrBr

Language: GB

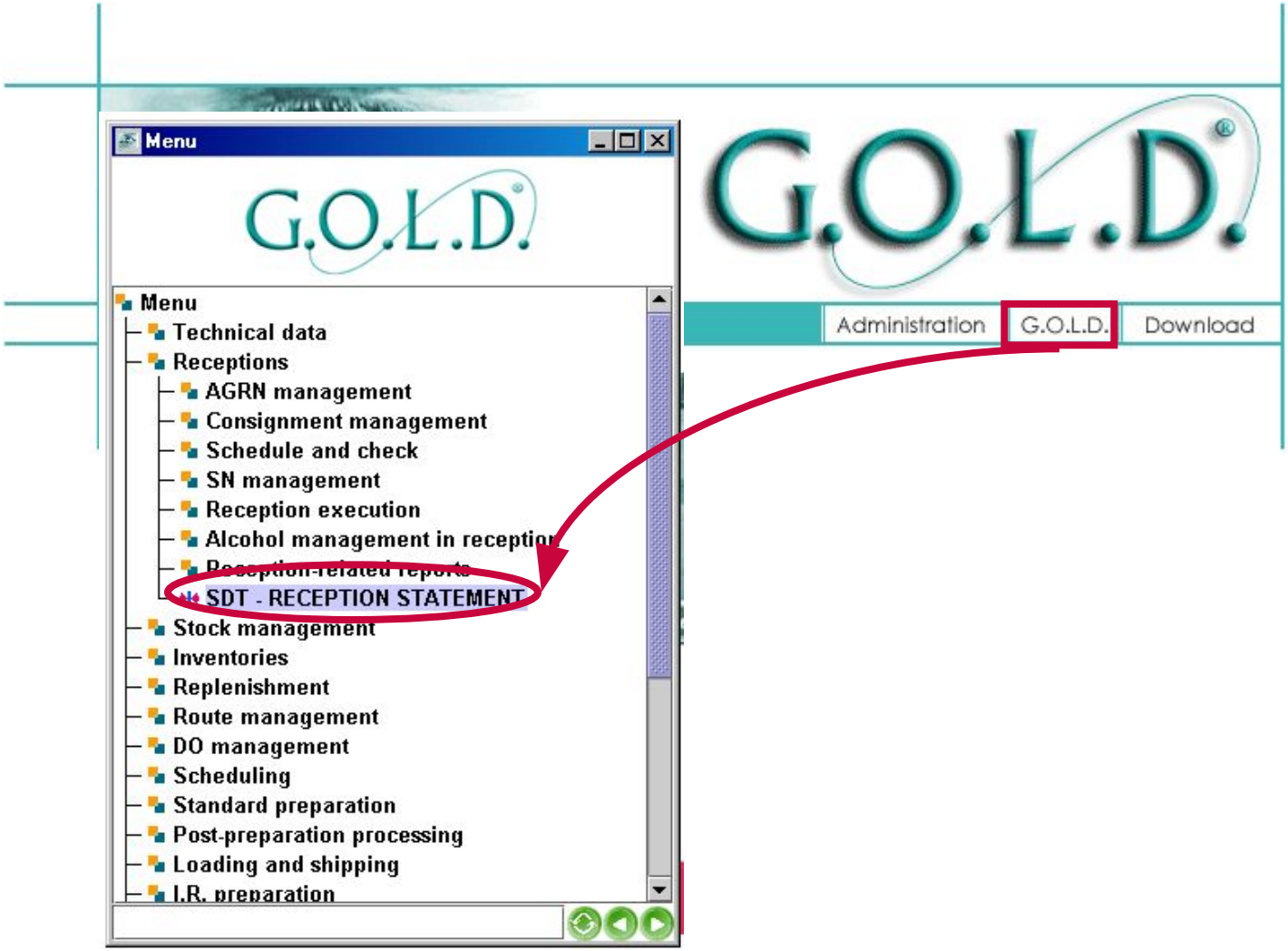
Profile	Description	Parameters	Enabled
0000	PROFILE VIDE		✔
004	Admin profile		✔
999	Admin profile		✔
USPROF	USPROF		✔

Select all | Unselect all

Create a screen process



Test in G.O.L.D.


Menu
G.O.L.D.
Menu
Technical data
Receptions
AGRN management
Consignment management
Schedule and check
SN management
Reception execution
Alcohol management in reception
Reception-related reports
SDT - RECEPTION STATEMENT
Stock management
Inventories
Replenishment
Route management
DO management
Scheduling
Standard preparation
Post-preparation processing
Loading and shipping
I.R. preparation
G.O.L.D.
Administration
G.O.L.D.
Download

Test in G.O.L.D.

54 DEPOT NANTES — **Advanced Goods Receiving Note management** — 12345 DOSTIK

AGRN no. 13862

Supplier order

Reception date

Reception status 0 YES

AGRN no.	Order	Supplier	Recep. date	AGRN type	Type desc.	Received	On Consignment
13801		01F001	06/26/08	1	SUPPLIER	YES	✔
13821		01F001	06/27/08	1	SUPPLIER	YES	✔
13822		01F001	07/07/08	1	SUPPLIER	YES	✔
13841		01F001	08/06/08	1	SUPPLIER	YES	✔

Supplier name

Address

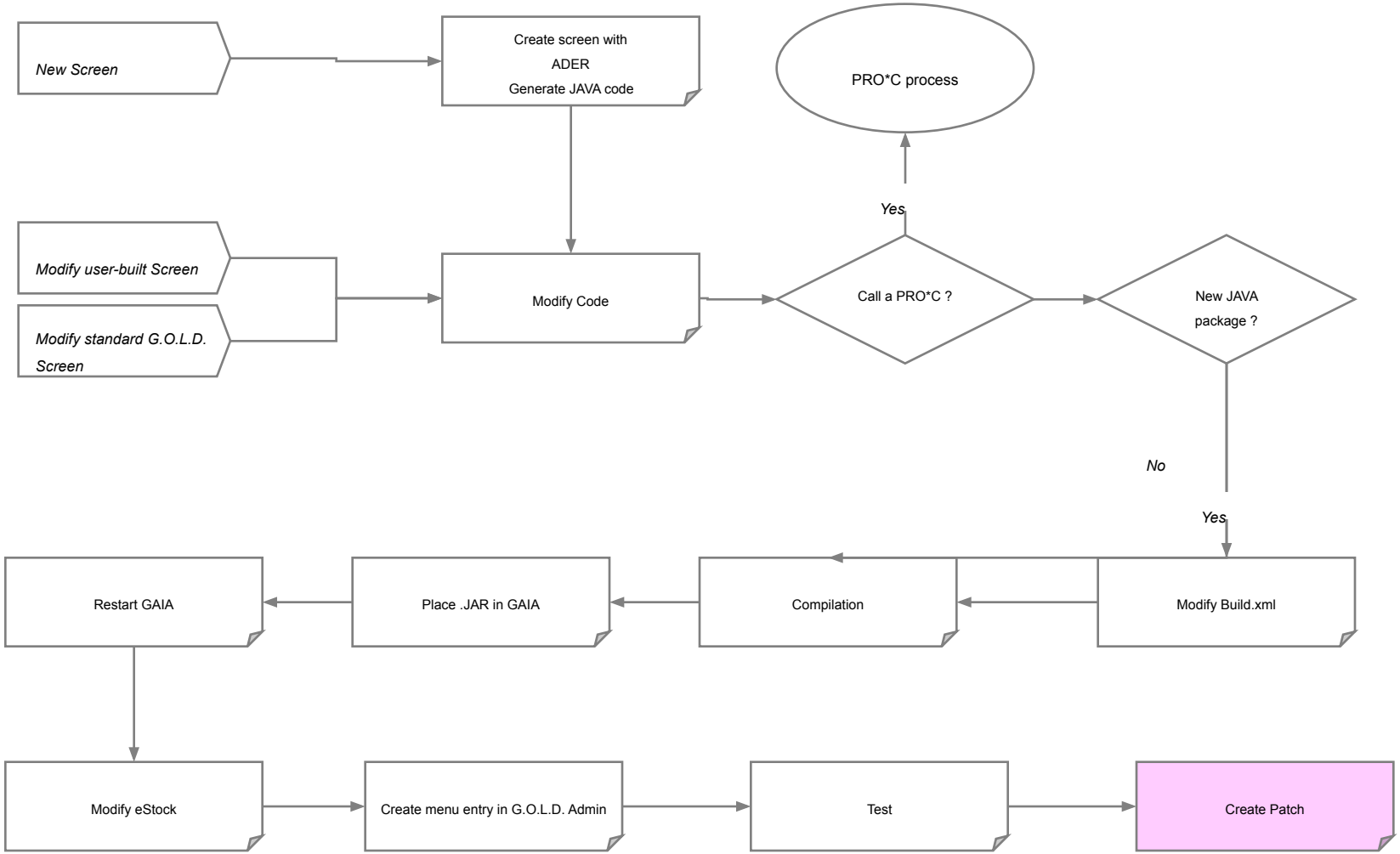
Print report

EXERCISE: Create a screen

- Open the following file for more details on this exercise:
  TS200_GOLDStockDevelopment_Exercises - 4

1. Open .java in Eclipse
2. Modify code
3. Modify build.xml, compile, deploy
4. Restart gaia
5. Modify estock.html
6. Create menu entry
7. Test

Create a screen process



Patch Content

The Patch is subdivided in following directories:

- **/sql**
  Contains SQL scripts for database modification, and also SQL scripts for creation of new parameters, messages, labels, menus entries …
  It contains also shell script for SQL scripts execution.
- **/pkg** - packages & triggers, functions …

- **/gaia** - subdirectories of binary jar files and gaia application
- **/bin** - Pro*C binaries and object files

- **/shell** - shell sources
- **/misc** - all other documents necessary for installation of pack
- **/doc** - contains all necessary documents for installation

EXERCISE: Patch Content

- According to what we have just seen, if you create a new screen for your client, what will you put in the patch ?
  - Hint : 3 files are mandatory
  - _____
  - _____
  - _____
  - *Answer on next screen*

Create Patch

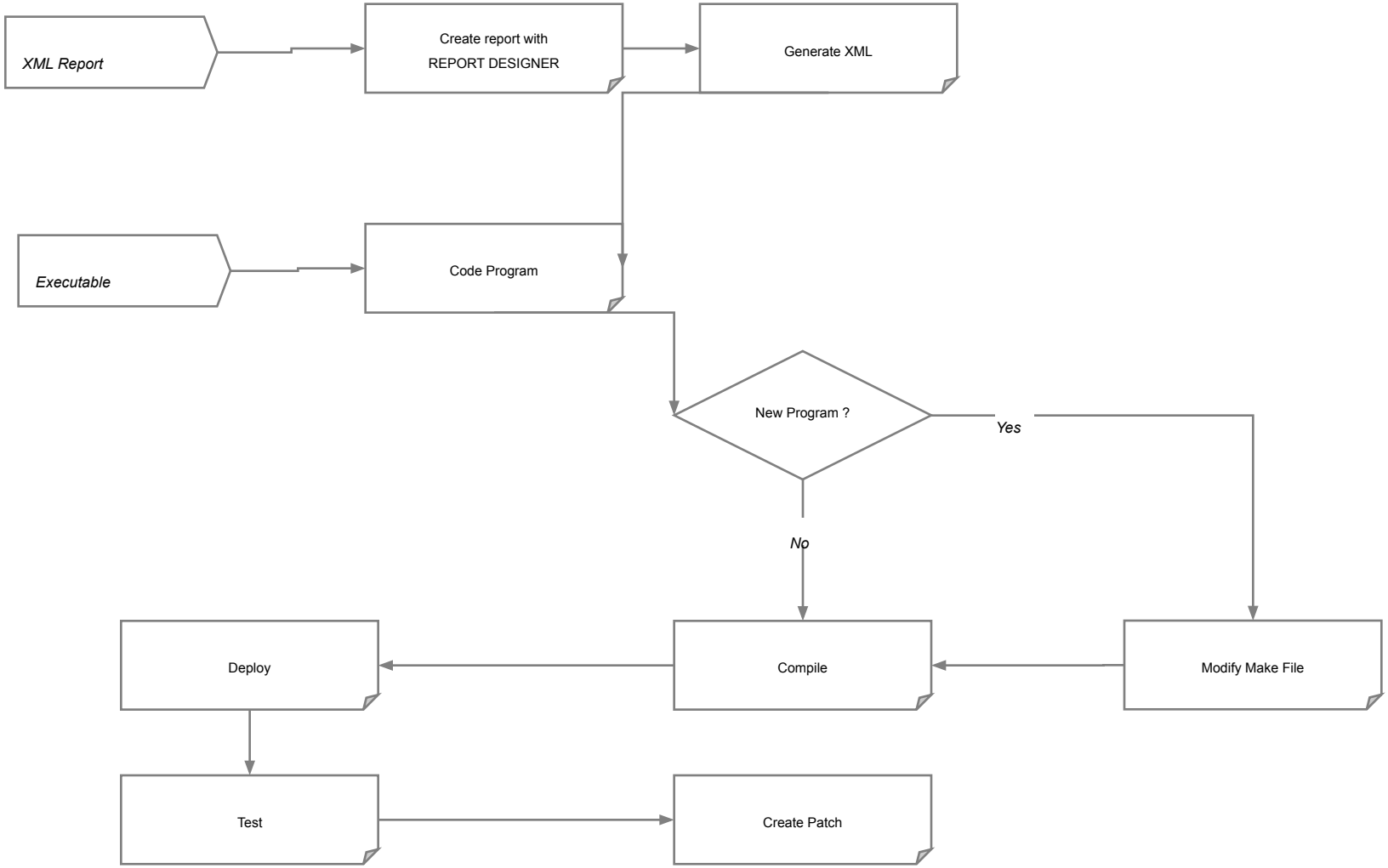
- Files you MUST add to patch after a screen was created :
  - xxx.server.yyy.jar
  - xxx.client.yyy.jar
  - estock.html

- Files you may add to patch after a screen was created :

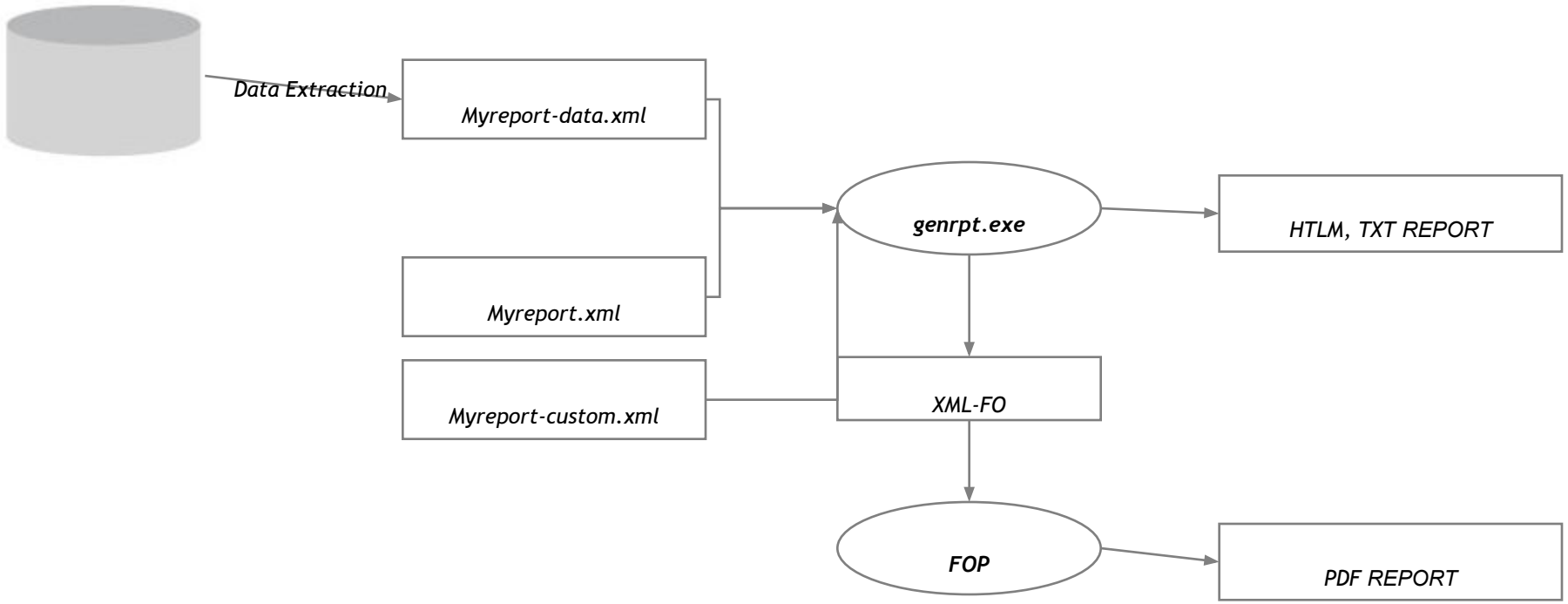
  - Script with “Descriptions/Labels” if new ones are used in report
  - Script to insert menu entry in the eStock application

Table of content

Create a program process



Report Generation



The creation of a report consists of two steps:

- Program that provides the data – (Myreport-data.xml)
- XML model for report data formatting - (Myreport.xml)

Report model

- XML language is used to describe the model.

- A model set is composed of several objects : each object is child a parent node.
- The characteristics of each object are set as attributes.

  - The name of the parent node is always: **Modeles**
  - The name of a node: **Modele**

- ***Example*** :

```
<Modeles>
  <Modele Name="Title" … />
  <Modele Name="Logo" … />
  <Modele Name="Head-line" … />
  <Modele Name="CustomerTable" … />
  <Modele Name="Subtotal" … />
</Modeles>
```

Report model templates

- Each model file contains the definition of several templates corresponding to a given report.
- There are two template types:
  - the simple template, which can be of several types (line, table …),
  - the container, which will contain several simple templates.

- The position of each template is defined in the 3 different parts of the document.
  - "Header": header of the document,
  - "Footer": footer, bottom of each page.
  - "Body": rest of the document

- Basic properties for each template:
  - **Name** : (up to 50 characters without spaces)
  - **Type** : (Line, Table, arrayline, Stroke, Image)
  - **Location** : (header, body, footer)
  - Left : (left margin).
  - Pageafter
  - Keep

Report Designer

- *Report Designer* is a ***reporting*** tool 100% Java (Swing) use to publish reports into preset formats (PDF, HTML, TXT).

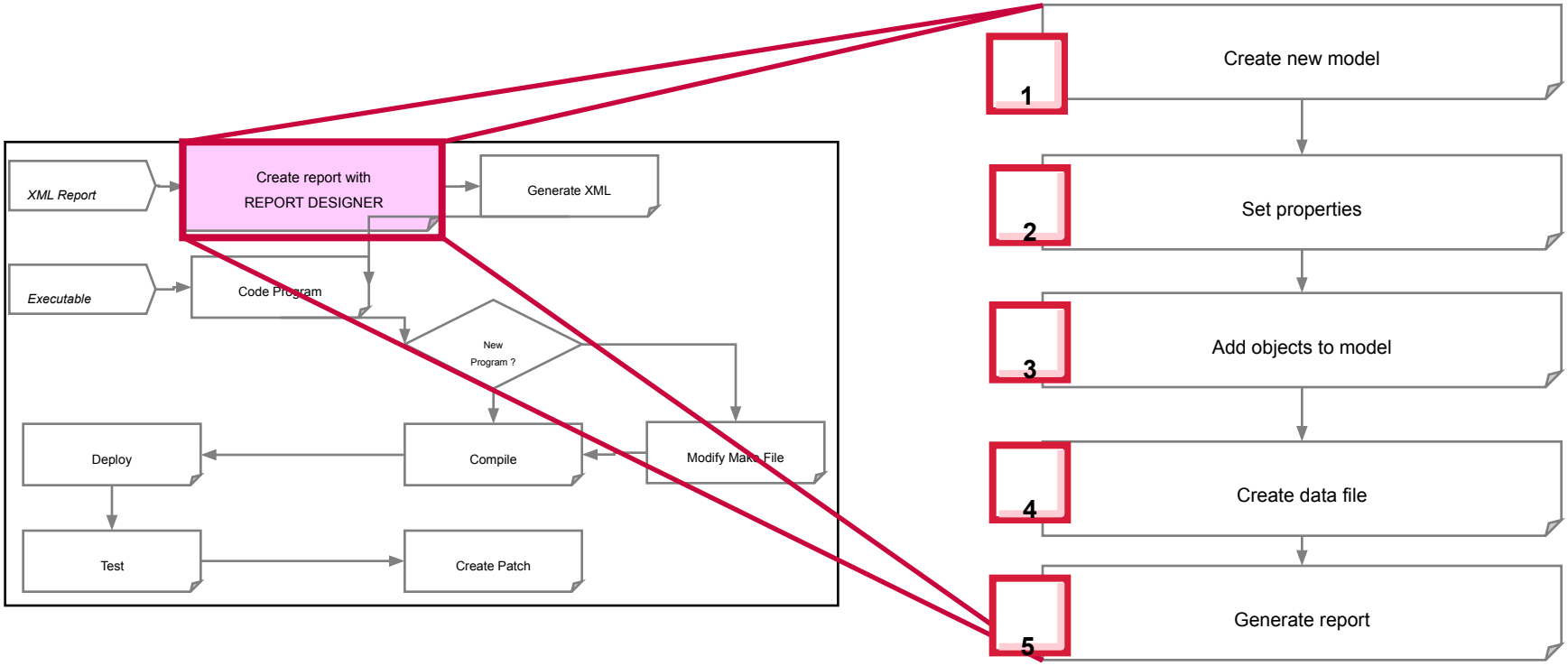
- It is used to create three files :

  - **Model** :
    - to print the publishing model set (**myreport.xml**)
  - **Custom**:
    - to alter objects of the model set (**myreport-custom.xml**)

  - **Data**:
    - to manage the publishing data (**myreport-data.xml**)

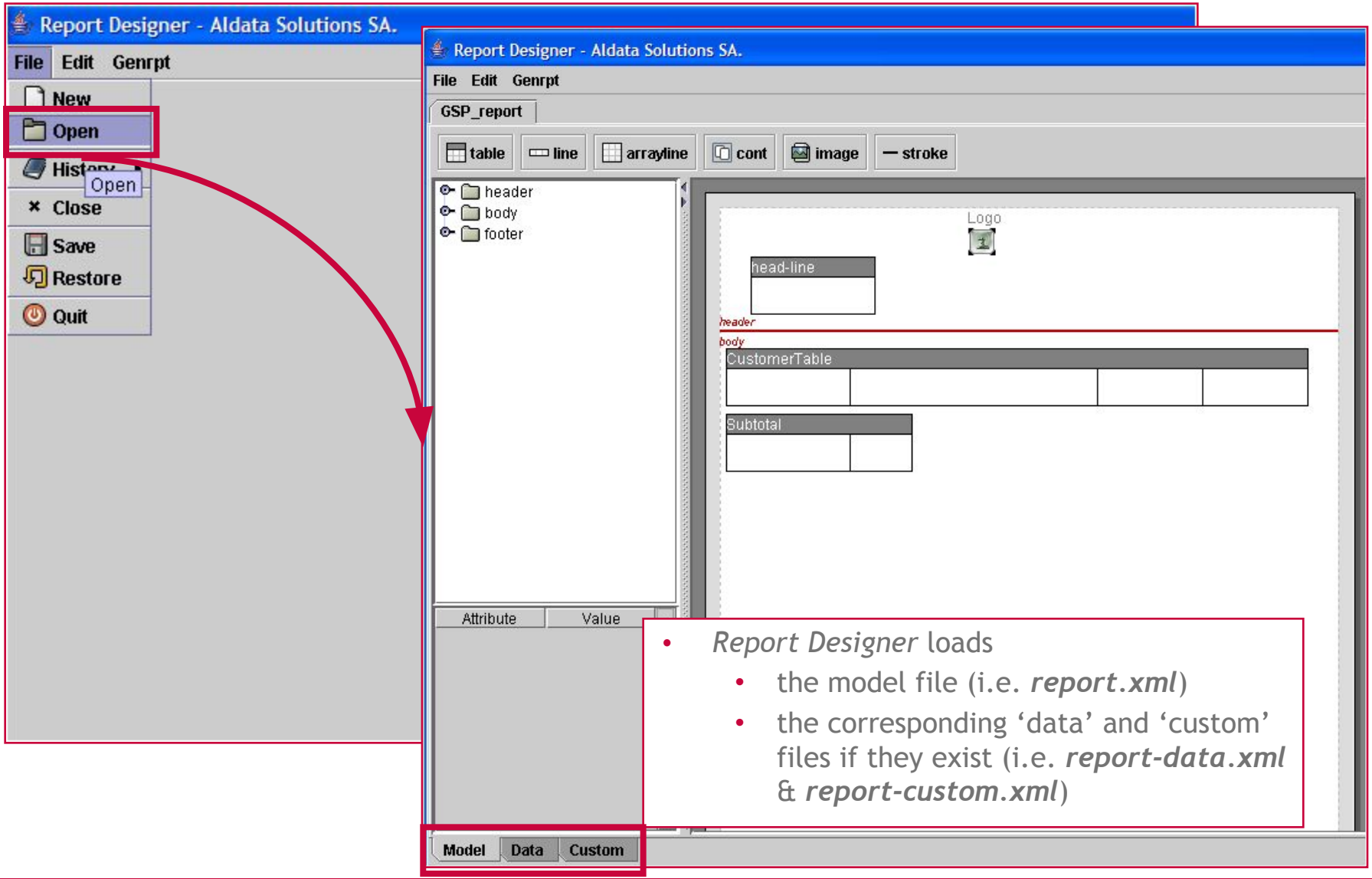
- ***Required Reading :***
  - *Construction of the publishing model sets*
  - *Use and compilation of Genrpt*

Report Designer



New Model Set Creation

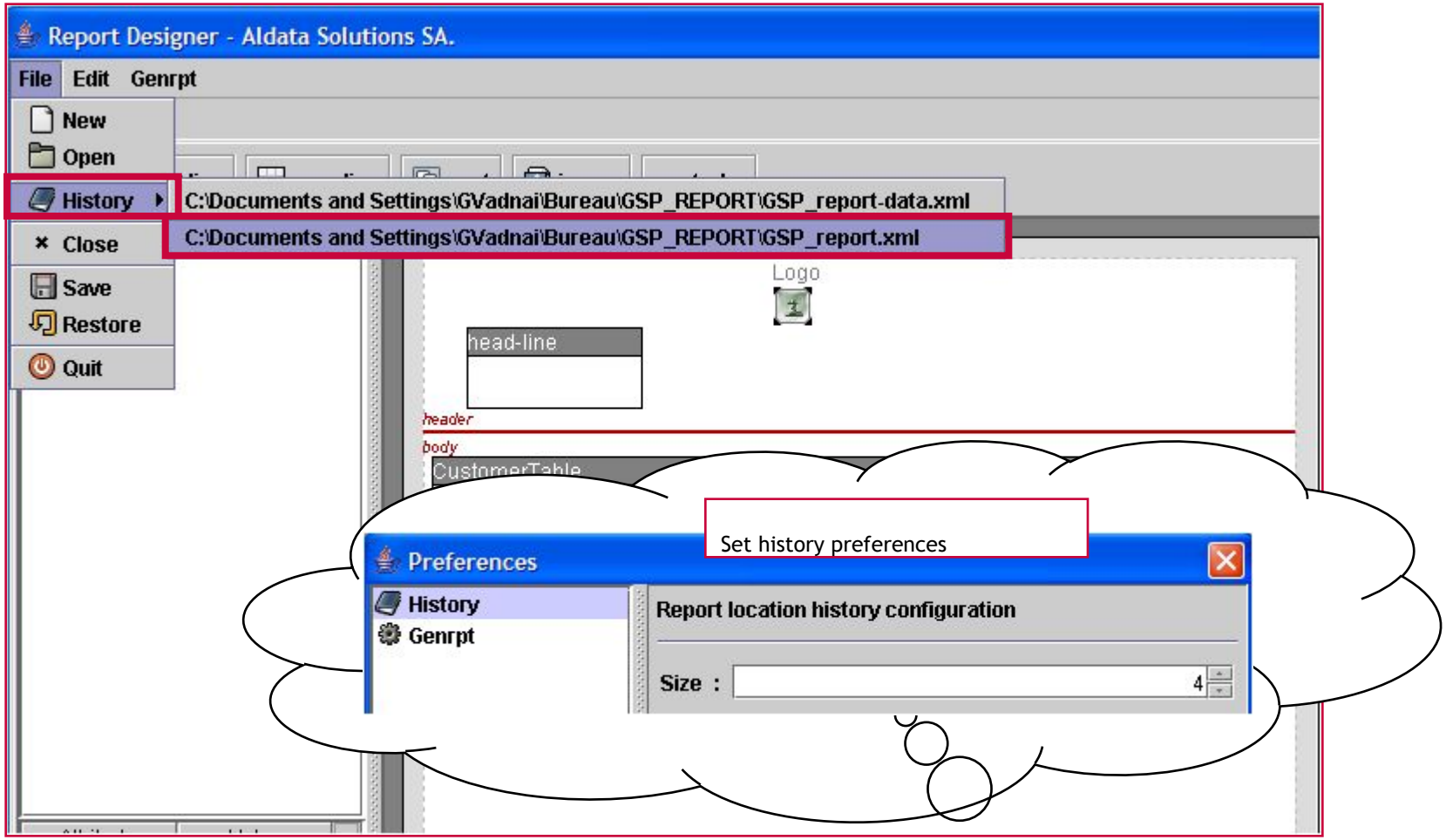
Model Set Loading



- *Report Designer* loads
  - the model file (i.e. ***report.xml***)
  - the corresponding 'data' and 'custom' files if they exist (i.e. ***report-data.xml*** & ***report-custom.xml***)

History

- *Report Designer* stores the loaded reports in the option **History**



Models

Report Designer - Aldata Solutions SA.

File Edit Genrpt

Untitled1

table | line | arrayline | cont | image | stroke

- header
- body
- footer

All objects that are on the model set

- simple object (none for now)
- container that will be used to organise layout

~~Note~~ :

The data in the "header" or "footer" is static :

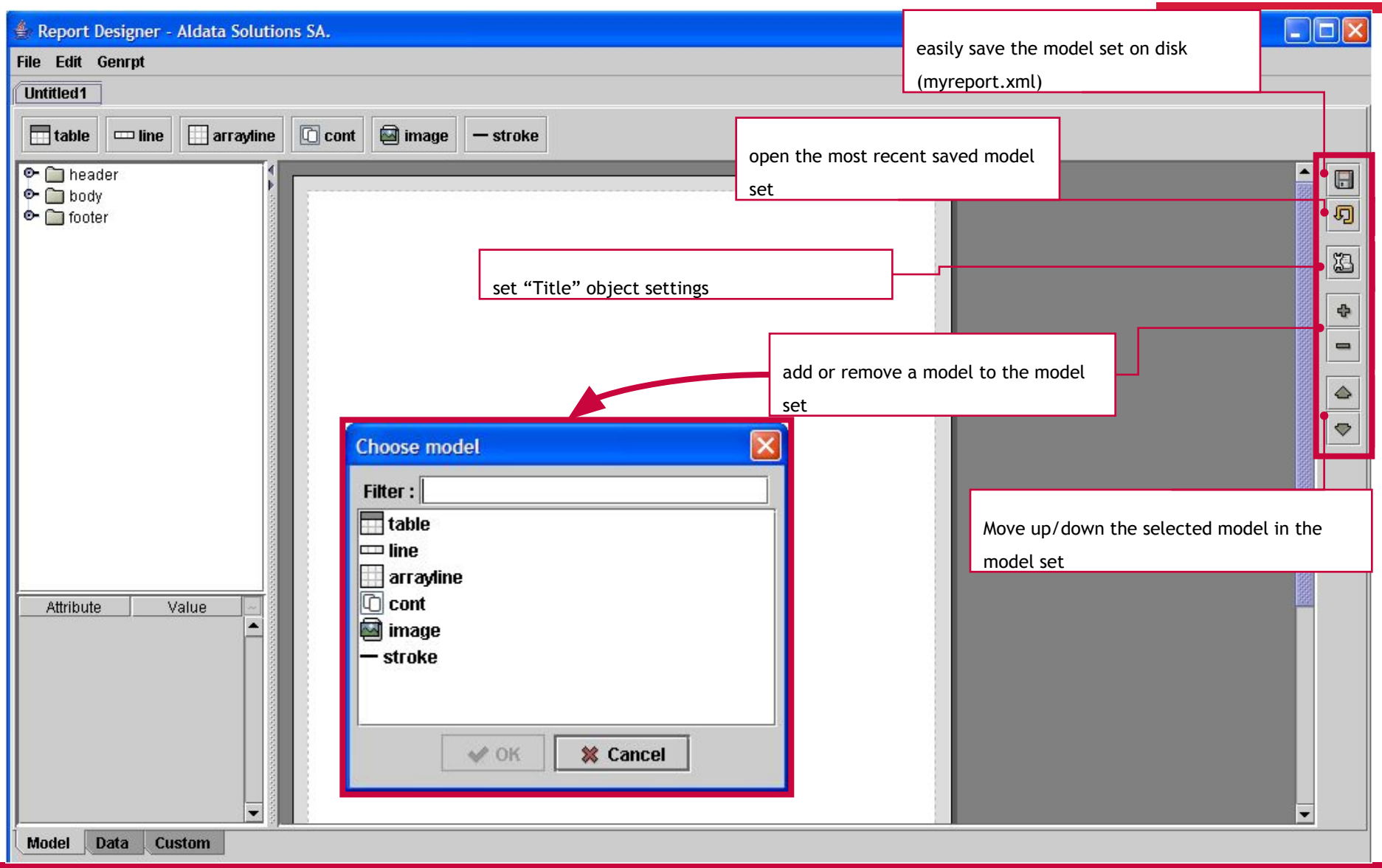
objects located in the Header or Footer part will only be displayed once on the XML data document and the data in the header and footer never changes in the document.

Attribute	Value

Attributes of selected object will show here

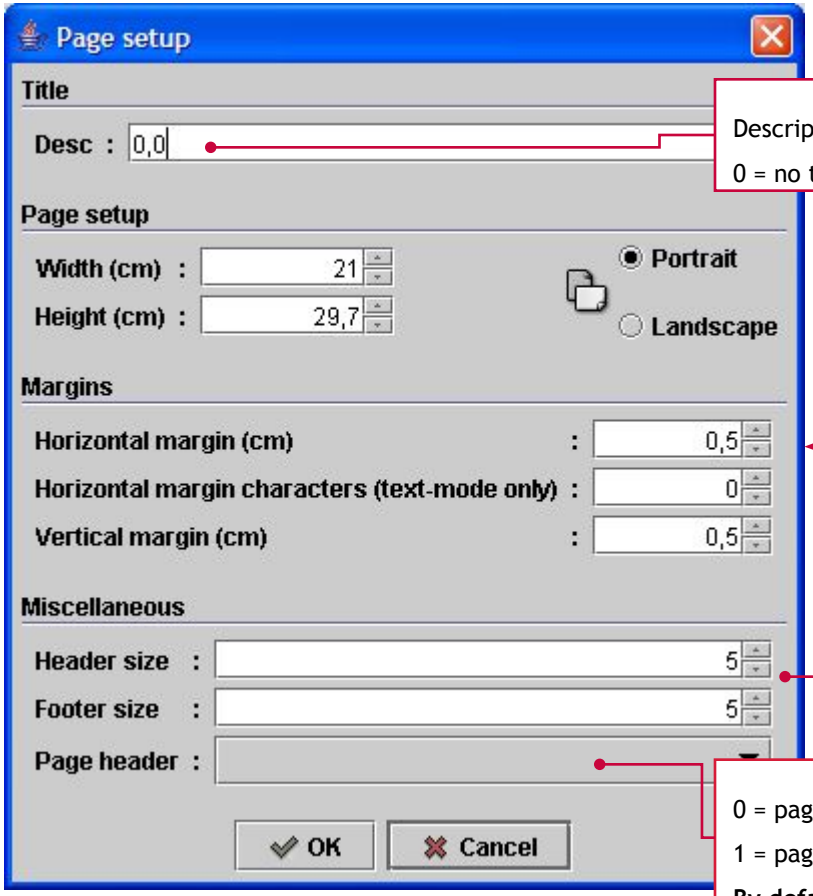
Model | Data | Custom

Toolbar


Report Designer - Aldata Solutions SA.
File Edit Genrpt
Untitled1
table
line
arrayline
cont
image
stroke
header
body
footer
Attribute
Value
Model
Data
Custom
Choose model
Filter :
table
line
arrayline
cont
image
stroke
OK
Cancel
easily save the model set on disk (myreport.xml)
open the most recent saved model set
set "Title" object settings
add or remove a model to the model set
Move up/down the selected model in the model set

Page Setup (Title Object)

- This object must absolutely be present in the model and set up first.
- It specifies the report environment.



Description number.

0 = no title bar displayed

In % of the page

0 = page header and footer not displayed

1 = page header and footer are displayed.

By default : standard page header and footer are displayed

Set Genrpt properties

Preferences

History
Genrpt

Genrpt parameters and environment

Genrpt.exe path : genrpt.exe
Oracle connection : stkdev/stkdev@devstock
Application name : ESTOCK
Output type : HTML
Use Custom model :
Number of lines :
Language : GB
Number of char :
Extended :

Environment variables

GOLDNUMBERSEP : .
GOLDDATEMASK : DD/MM/RR
GOLDTIMEMASK : HH24
GOLDENCODING : ISO-8859-1
REPORT_CFG : .
GENRPT_DEBUG :

OK Cancel

complete path to the **genrpt.exe** program

User/Password oracle for the connexion to the dictionary

PDF, HTML or TXT

Type of the template. (Automatic)

Number of lines per page for the HTML editions (0 for PDF)

language code for searching in the dictionary

Set to 1 if use of extended ASCII characters

Number of characters per line (for txt output)

Set environment variables

Preferences

History
Genrpt

Genrpt parameters and environment

Genrpt.exe path : genrpt.exe
Oracle connection : stkdev/stkdev@devstock
Application name : ESTOCK
Output type : HTML
Use Custom model :
Number of lines : 10
Language : GB
Number of char : 132
Extended : 1

Environment variables

GOLDNUMBERSEP : .
GOLDDATEMASK : DD/MM/RR
GOLDTIMEMASK : HH24
GOLDENCODING : ISO-8859-1
REPORT_CFG : .
GENRPT_DEBUG :

OK Cancel

Decimal separator ('.' or ',')

encoding type for the XML generated file (ex : ISO-8859-1)

Date format : use same codes as Oracle

Time format : HH24 or HH12

Report_cfg folder if used

Add objects to model

Simple objects that can be dragged and dropped to be included in the model set.

Report Designer - Aldata Solutions SA.

File Edit Genrpt

* Untitled0 * GSP_report

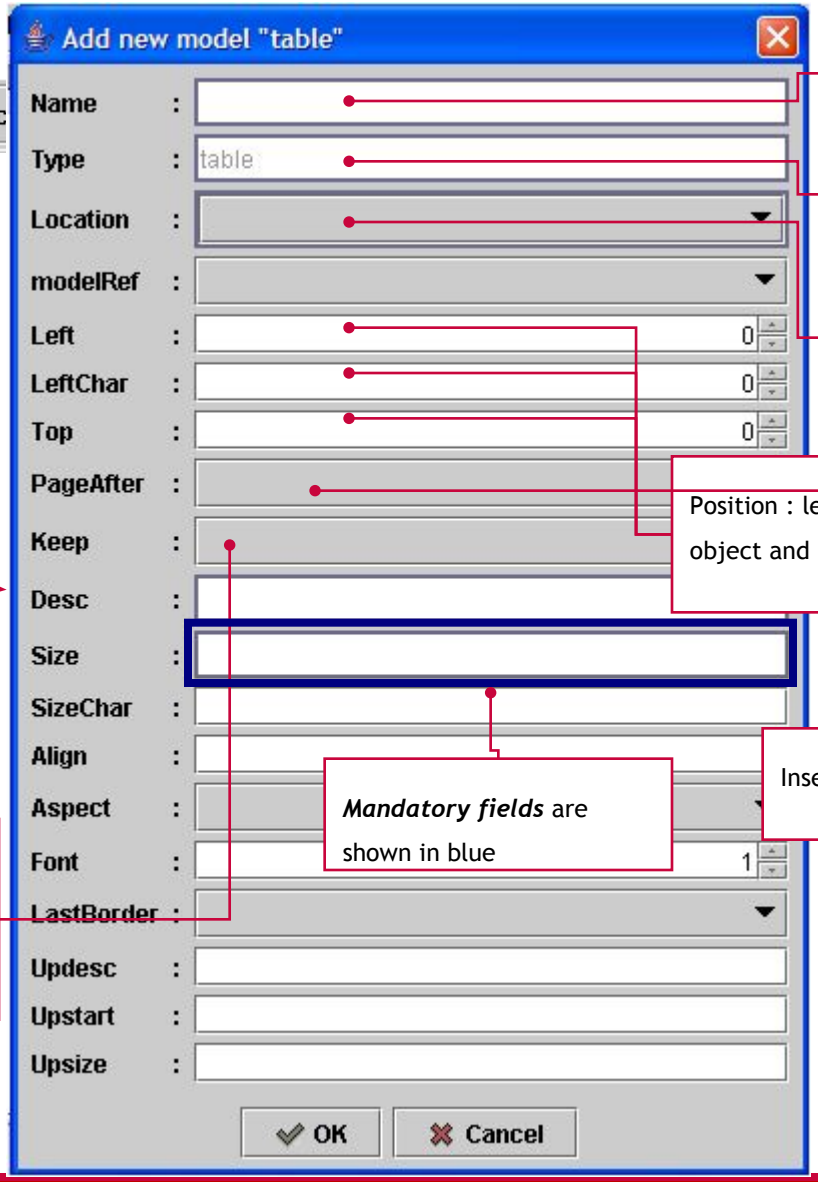
table line arrayline cont image stroke

header
Logo
head-line
body
CustomerTable
Subtotal
footer

Attribute Value

Logo
head-line
header
body
CustomerTable
Subtotal

Properties common to all objects.



Name of the template (50 characters max - no spaces)

Type of the template. (Automatic)

Section in which the object will show (header, body, footer)

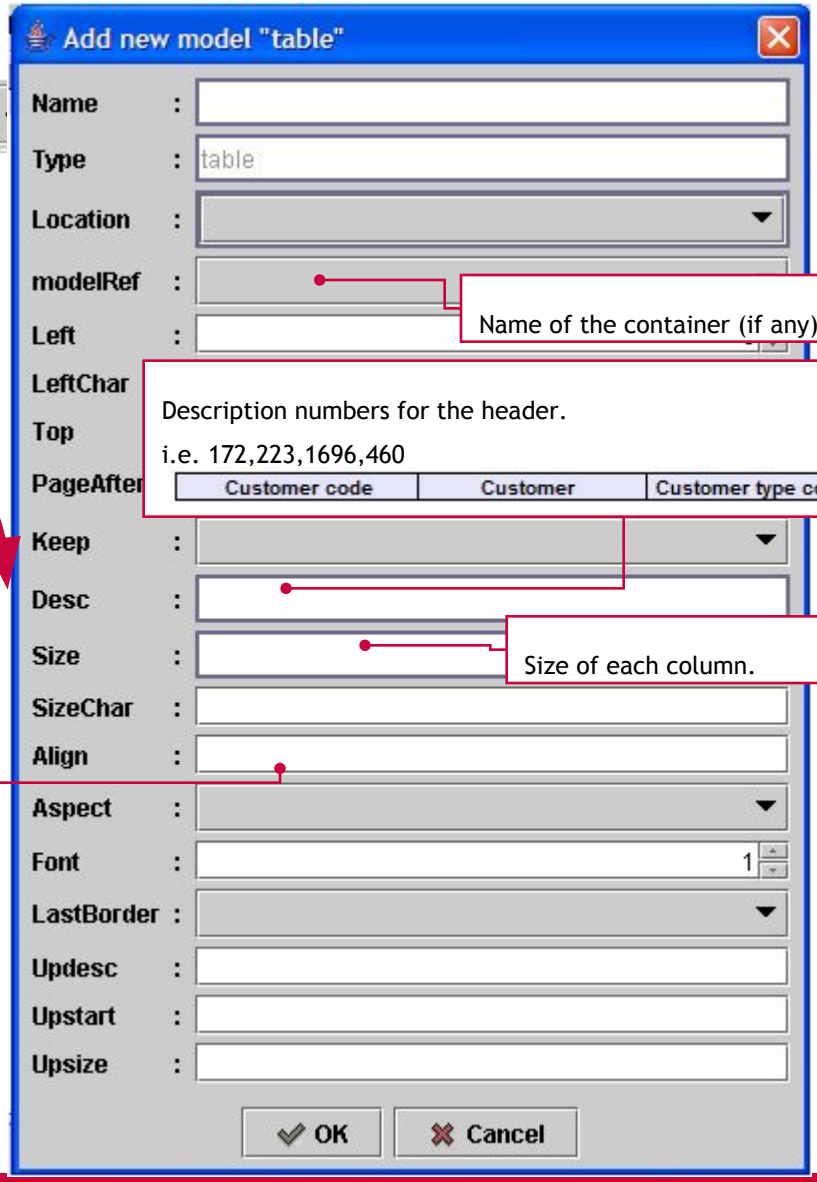
Position : left margin, … , distance between object and previous one.

Insert a page break after the object.

Mandatory fields are shown in blue

Indicate if Generator should keep this block and the next one on the same page.

Table Object



Name of the container (if any)

Description numbers for the header.

i.e. 172,223,1696,460

Customer code	Customer	Customer type code	Creation date

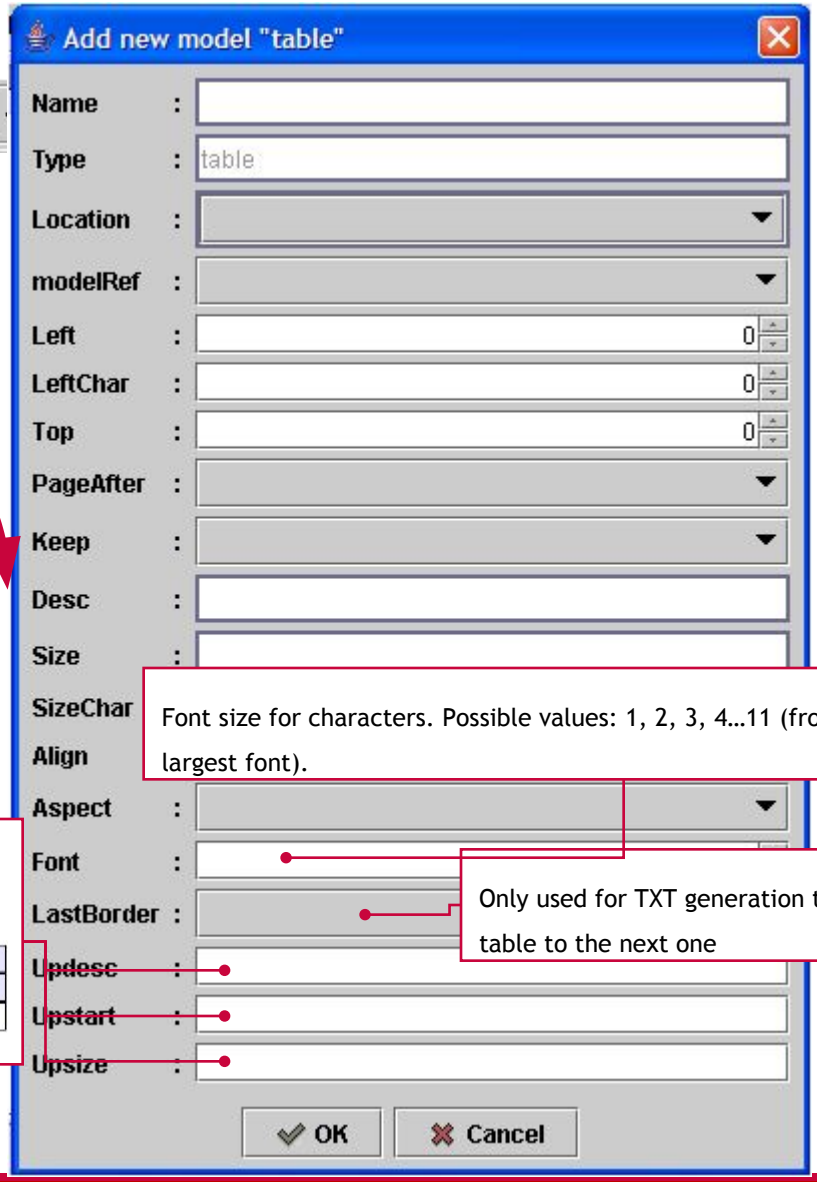
Size of each column.

Alignment for each column. (l, c or r)

Note:

- by default, **columns are left aligned.**
- only specifies the alignment of values in columns (**no impact on headers** that are always centered)

Table Object



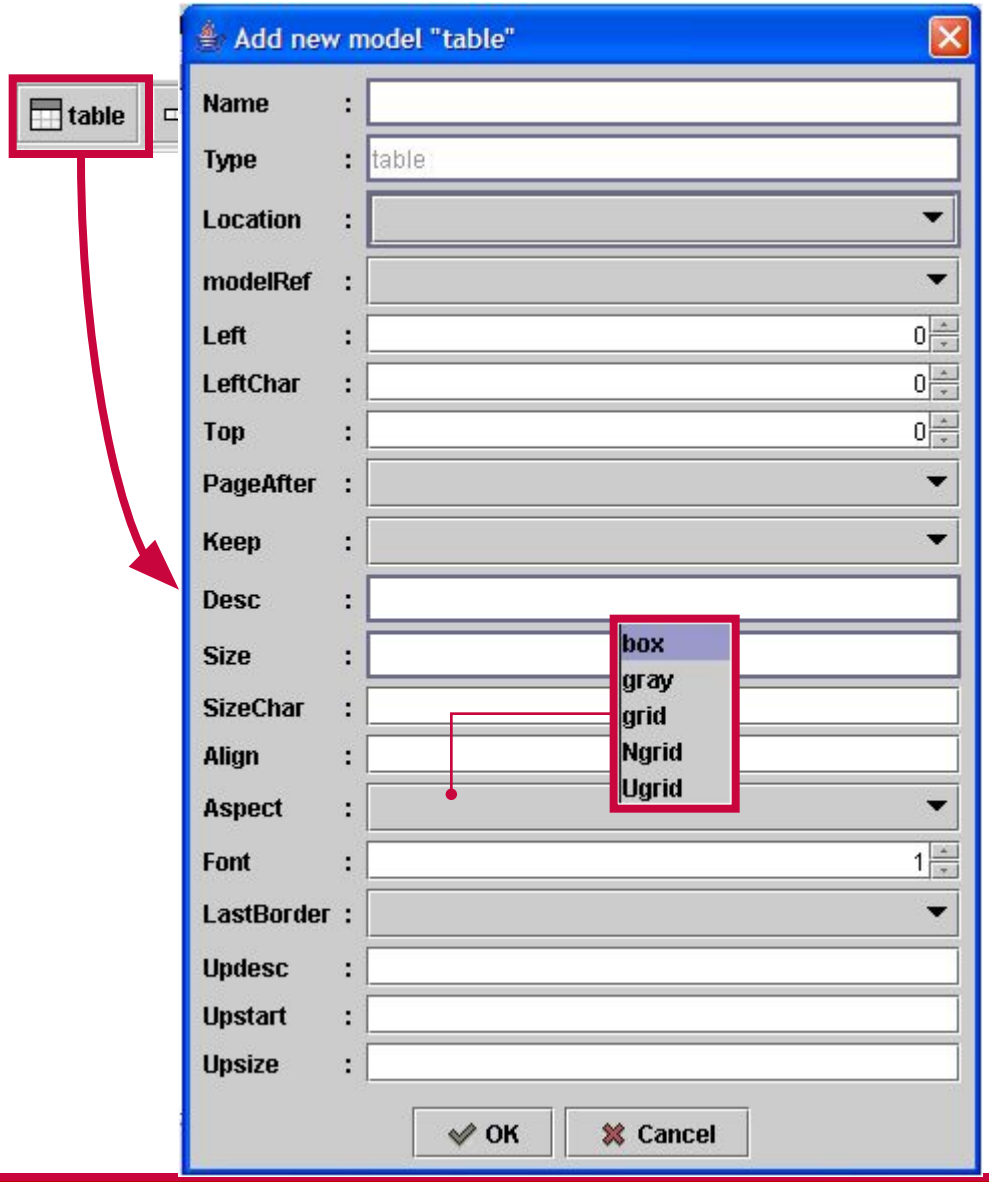
Font size for characters. Possible values: 1, 2, 3, 4…11 (from the smallest to the largest font).

Only used for TXT generation to fuse last border of a table to the next one

Used for complex tables to group headers

DESIGNATION ARTICLE				FOURNISSEUR	
Article	VA	VL	No ligne	Code	Filiere
colonne 1	colonne 2	colonne 3	colonne 4	colonne 5	colonne 6

Table Aspect



- Graphic aspect of the table.
  - "gray" : highlight a line out of two
  - "grid" : border around the table
  - "Ugrid" : border around the table except from top first line
  - "Ngrid" : border around the table except bottom last line
  - "box" : specific border of box type

Table Aspect : examples

- Graphic aspect of the table.
  - “gray”

Customer code
xxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx

  - “gray” + “grid”

Customer code	
xxxxxxxxxxxxxxxx	x
xxxxxxxxxxxxxxxx	x
xxxxxxxxxxxxxxxx	x

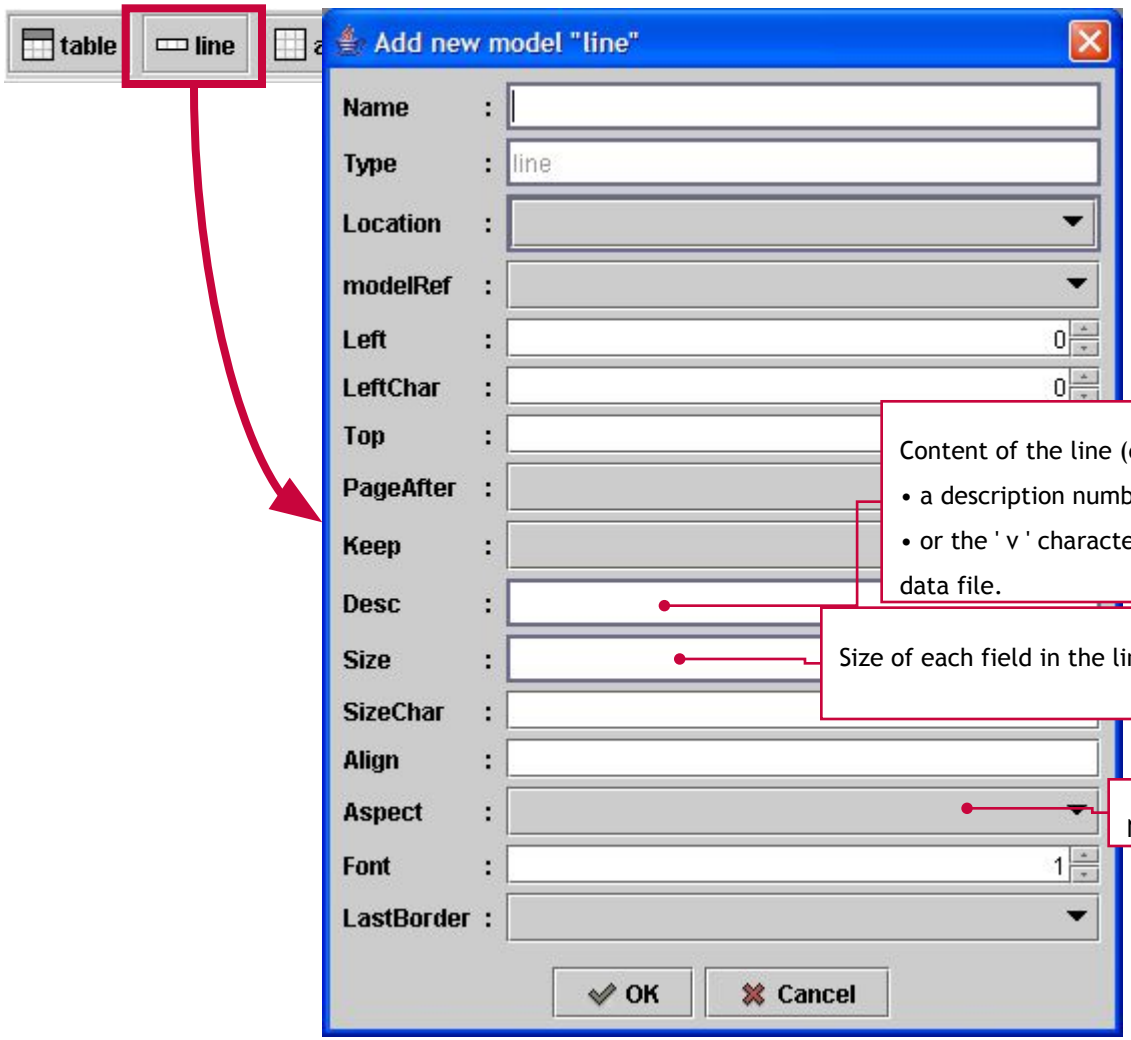
  - Nothing

Customer type code
xxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx

  - “box”
    - “box” attribute is only valid for **a table with one column.**
    - “box” attribute is not compatible with “gray” and “grid” attribute

Total number of lines
xxxxxxxxxxxxxxxxxxxx

Line Object



- Object used to insert a line of text into a report and does not retrieve any information from the XML data file.

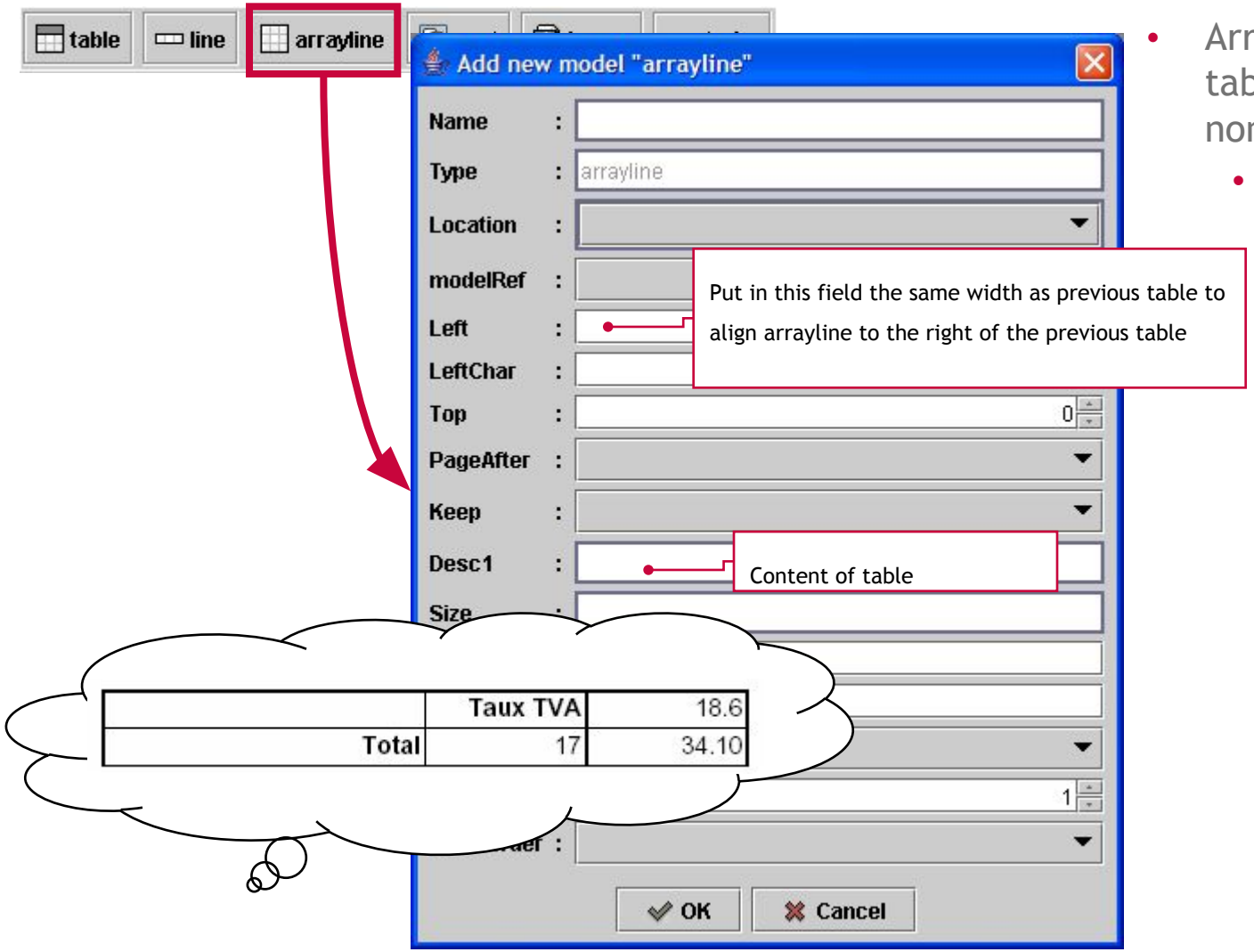
Content of the line (description or variant):

- a description number
- or the ' v ' character to indicate the presence of a variable in the XML data file.

Size of each field in the line

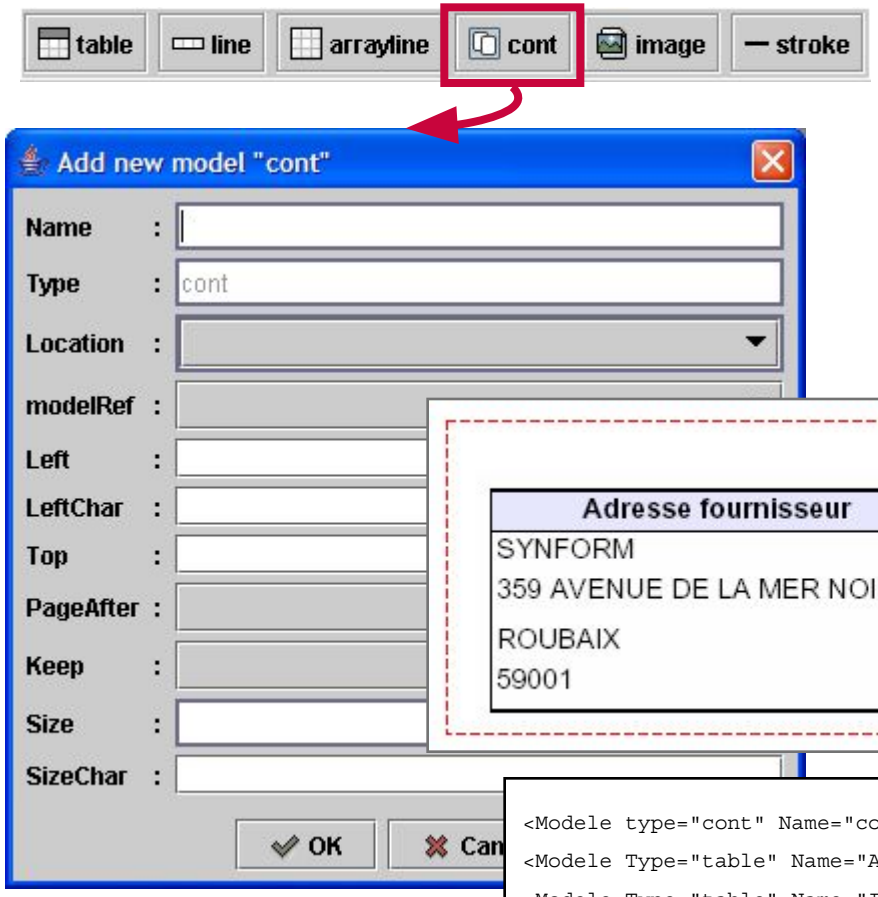
Nothing or “gray”

Arrayline Object



- Arrayline objects are tables with non-homogeneous data.
  - Some columns of the table may not contain any data.

Container Object



- Objects cannot be aligned horizontally when using simple objects : you must use a container.

Example :

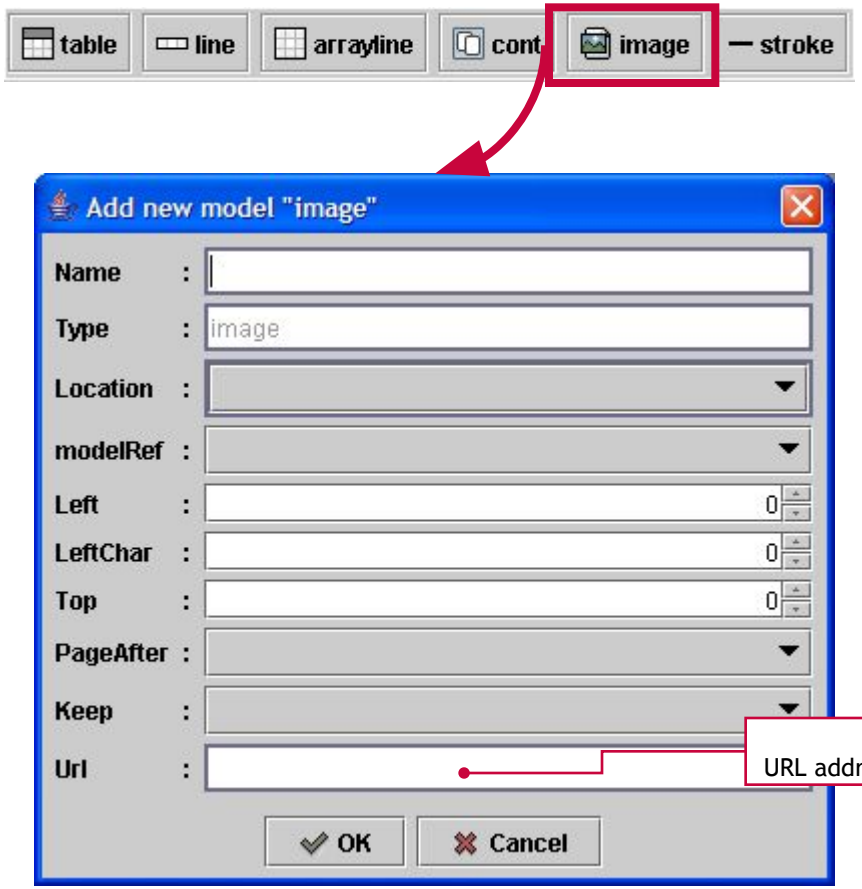
Container with two columns

Adresse fournisseur
SYNFORM 359 AVENUE DE LA MER NOIRE ROUBAIX 59001

Acte	No. commande	Code fournisseur	Clf
023	0309000012673	92001	1

```
<Modele type="cont" Name="commande" size="40,60"/>
<Modele Type="table" Name="Adresse" modelRef="commande" …. />
<Modele Type="table" Name="InfoCommande" modelRef="commande" …. />
```

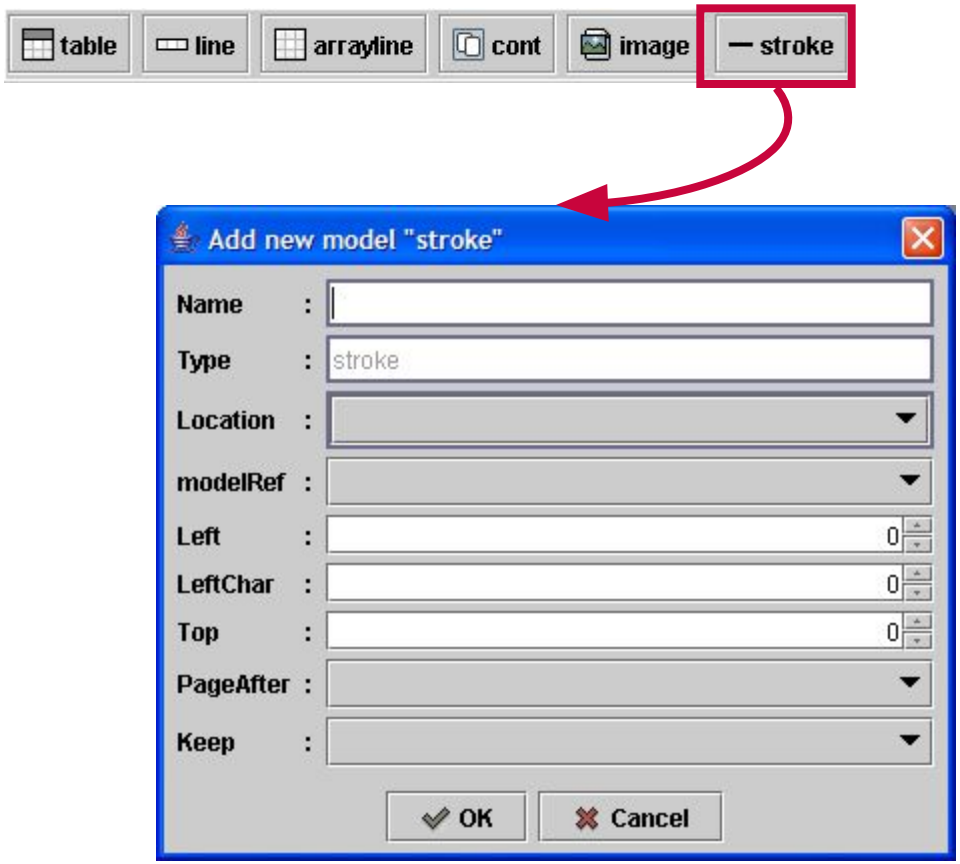
Image Object



URL address where image can be found.

- Object used to insert an image into a report and does not retrieve any information from the XML data file.
- Compatible image format:
  - Gif
  - Jpeg

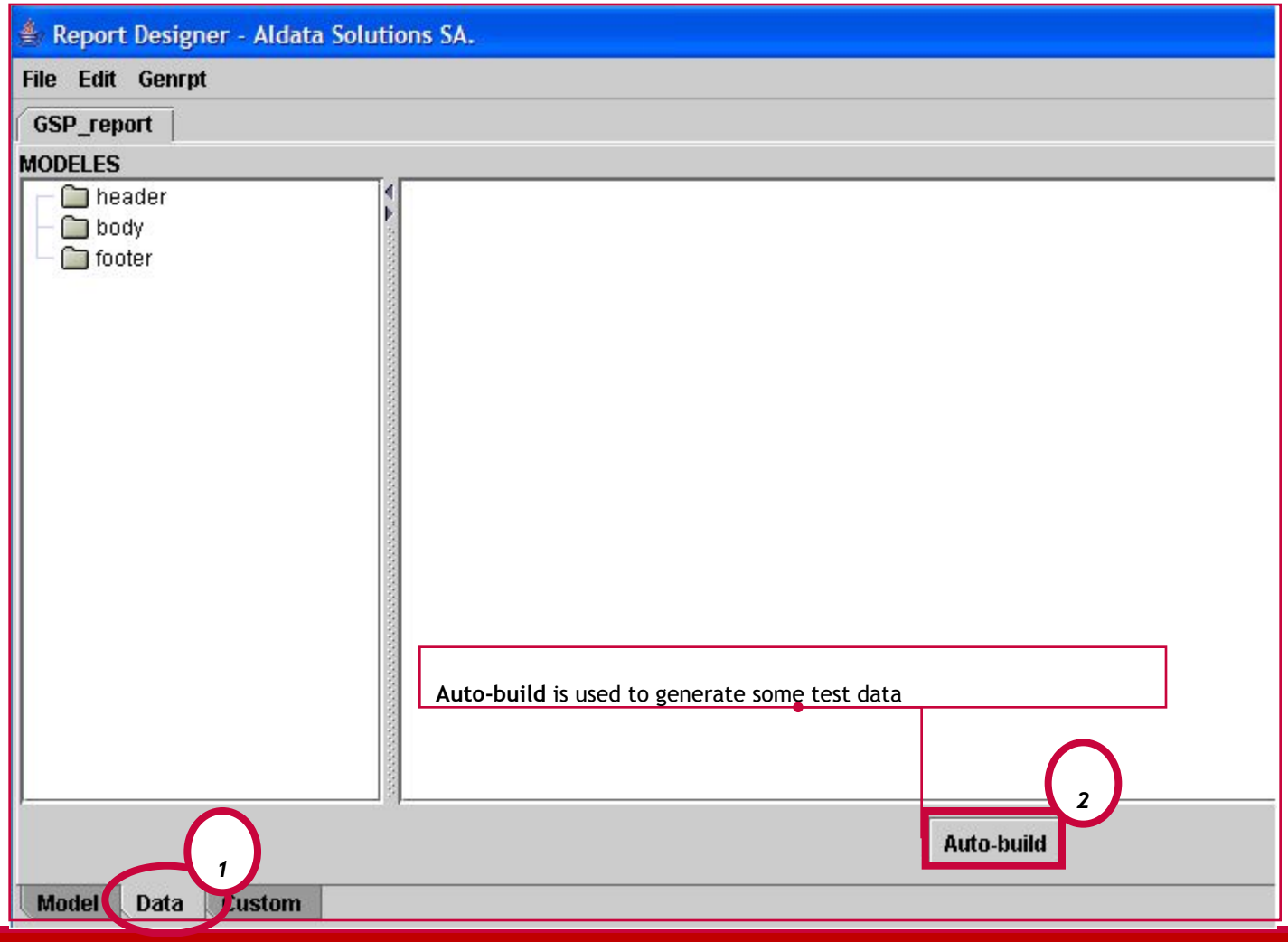
Stroke Object



- Object used to display an horizontal line in the document and does not retrieve any information from the XML data file.

Create data file – 1/2

- Creating the data.xml file now will be useful for tests or previews.



Create data file – 2/2

Report Designer - Aldata Solutions SA.

File Edit Genrpt

* GSP_report

MODELES

- header
- body
- footer

Logo

Max number of characters for this field

head-line

xxxxxxxxxxxxxxxxxxxx

CustomerTable

xxxxxxxxxxxxxxxxxxxx | xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx... | xxxxxxxxxxxxxxxxxx

Subtotal

6139

Auto-build

Data successfully generated !

OK

Generate Report

Report Designer - Aldata Solutions SA.

File Edit Genrpt

GSP_rep Run

table line arrayline cont image stroke

header
Logo
head-line
body
CustomerTable
Subtotal
footer

Attribute	Value
Name	CustomerTable
Type	table
Location	body
modelRef	
Left	1
LeftChar	
Top	
PageAfter	0
Keep	1
Desc	172,223,1696...
Size	20,40,17,17
SizeChar	
Align	l,l,c,r

Logo

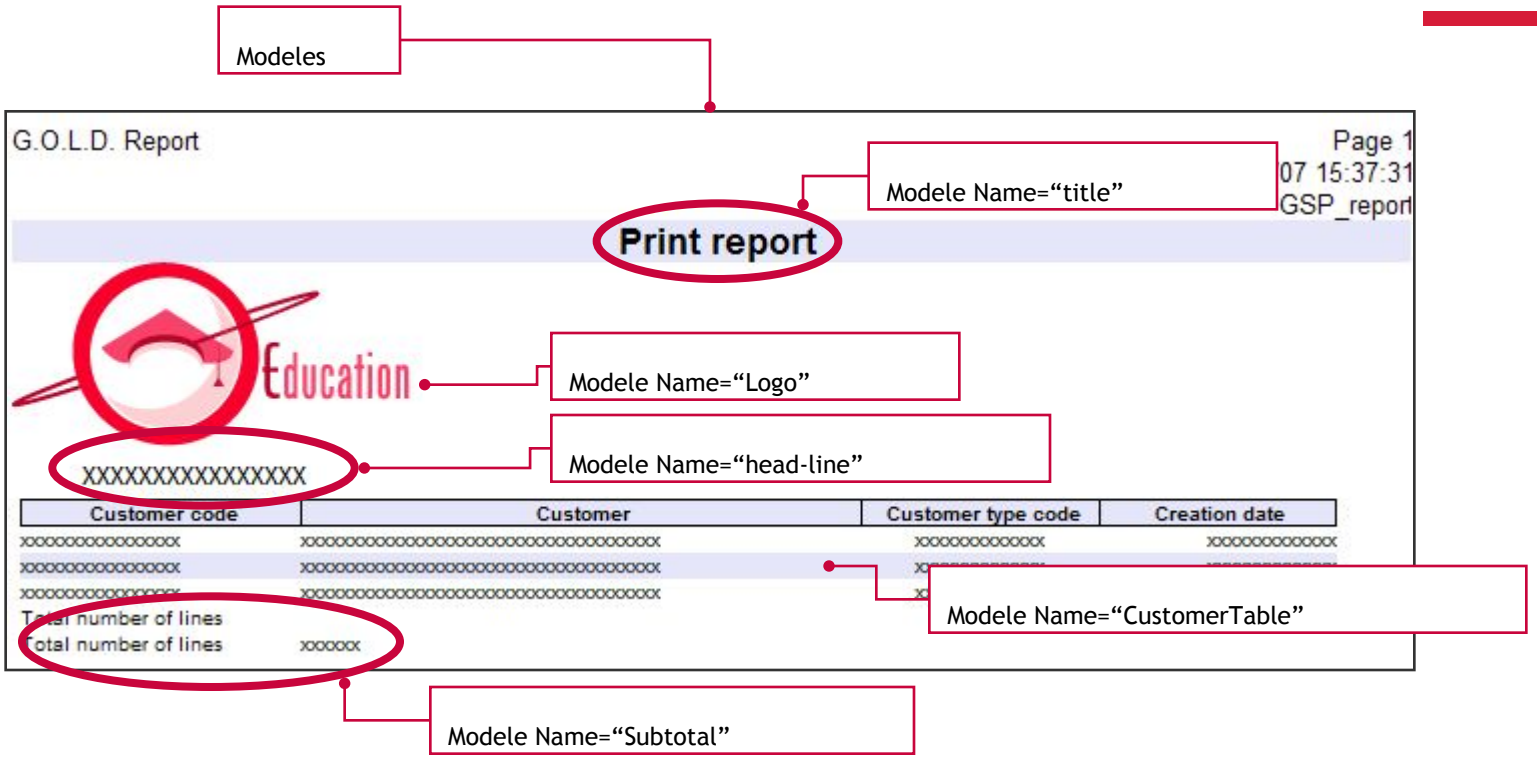
Genrpt Launch Parameters

Genrpt.exe path : genrpt.exe
Oracle connection : stkdev/stkdev@devstock
Application name : ESTOCK
Output type : HTML
Use Custom model :
Number of lines : 50
Language : GB
Number of char : 132
Extended : 1

OK Cancel

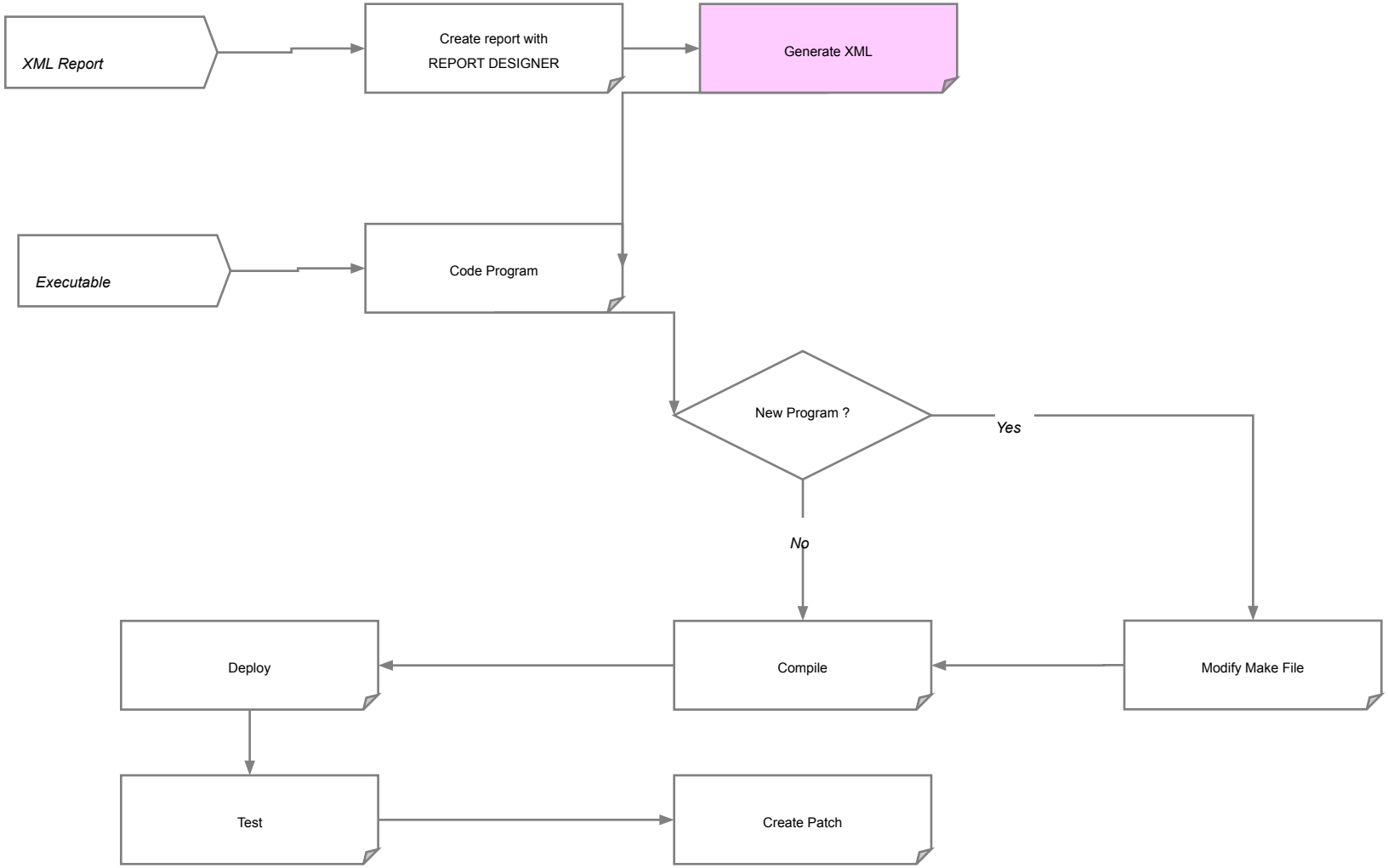
Pick Format

Preview Report Layout

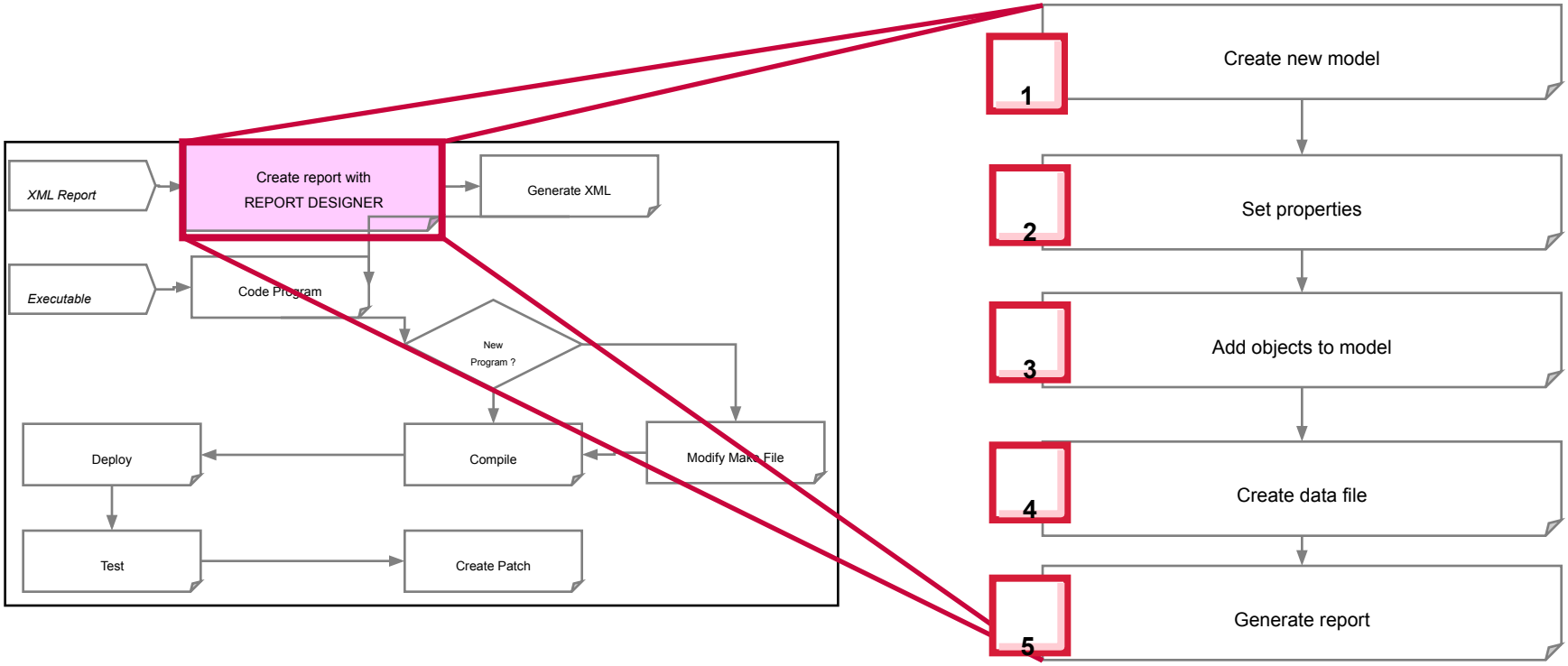



```
<Modeles>
  <Modele Name="title" Type="" Location="" Desc="5976,0" Height="29.700000762939453" Width="21.0" Hmargin="0.5" HmarginChar="0" Vmargin="0.5"
    Sizeheader="5" Sizefooter="5" />
  <Modele Name="Logo" Type="image" Location="header" Left="40" Top="0" PageAfter="0" Keep="0" Url="http://odeon/GSP/LOGOGSP.png" />
  <Modele Name="head-line" Type="line" Location="header" Left="5" Top="0" PageAfter="0" Keep="0" Desc="v" Size="20" Font="5" />
  <Modele Name="CustomerTable" Type="table" Location="body" Left="1" PageAfter="0" Keep="1" Desc="172,223,1696,460" Size="20,40,17,17" Align="l,l,c,r"
    Aspect="gray" />
  <Modele Name="Subtotal" Type="line" Location="body" Left="1" Top="1" PageAfter="0" Keep="0" Desc="6139,v" Size="20,10" />
</Modeles>
```

Create a program process



Report Designer



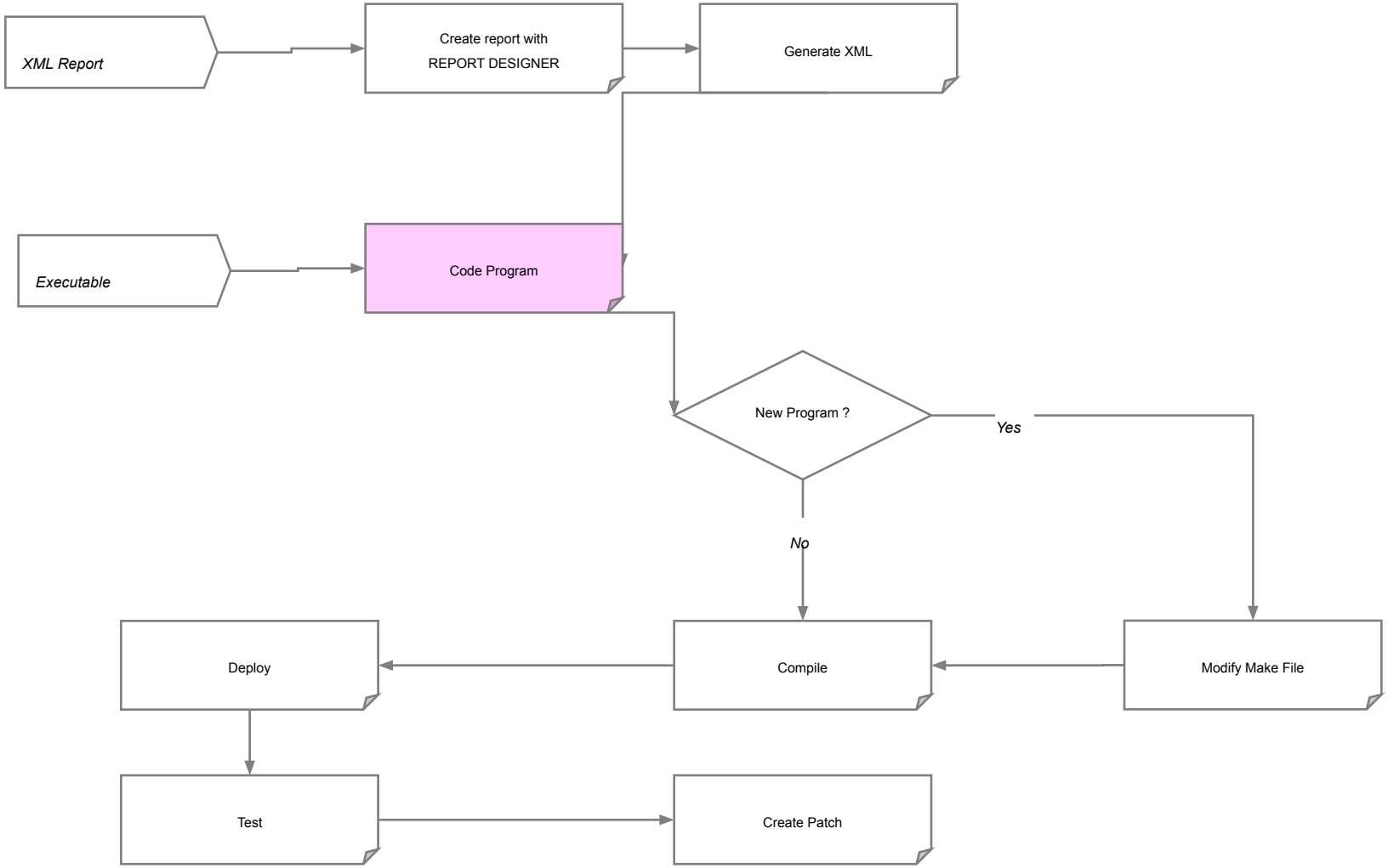
EXERCISE: Report Designer

- Open the following file for more details on this exercise:
  - TS200_GOLDStockDevelopment_Exercises

- 5.Report Designer
  - 1.1. Set preferences
  - 1.2. Open existing report
  - 1.3. Create data file
  - 1.4. Generate report

- ***6. Review sample reports***
  - Launch report from command line
  - Generate report from XML model and data file: genrpt, FOP

Create a program process



Code report program

- In the program is implemented logic for report, report XML data generation
- Pro*C program use standard functions of the different GOLD libraries

- Functions for creating report data
  - **InitReport**(fIleName)
    InitReportWithAttributes(fIleName,Attrib,nbAttrib)
  - **CloseReport**

  - **InitModele** (templateName)
    InitModeleWithAttributes(templateName,Attrib,nbAttrib)
    Attrib[]={"Label","3,toto,1,tutu"," UpLabel","1,up1,2,up2"};

  - **WriteRow**(n, arg1, arg2, …, argn)
    The first argument always gives the number of the next argument in the function
    arg1 is the name of an element, arg2 is the value of this element,

- It is very important that the call order in the data XML file starts with the HEADER data then the FOOTER data, and finally the data to be displayed in the BODY.

Code report program

Utility functions for WriteRow:

- char * DoubleToChar (arg1, arron)
  This function changes the arg1 argument with character-string format, rounded to the decimal number indicated in the rounding argument.

  WriteRow(2, « SiteNumber », **DoubleToChar ((double) site , 0)**) ;

  GOLDNUMBERSEP: indicates the decimal separator ('.' or ',').
  GOLDGROUPNUMBERSEP: indicates the separator for thousands.

Special elements to the data:

- Images: REFIMG(url_image) ;
  WriteRow(2, « Img », « REFIMG(http://127.0.0.1/img/hello01.jpg) »);

- bar codes: REFBARCODE (bar_code, type, height, numeric_display) ;
  WriteRow(2, «CodeBarre », « REFBARCODE (9780444505156, EAN13, 23.1, TRUE) ») ;

EXERCISE: reports

- Open the following file for more details on this exercise:
  - TS200_GOLDStockDevelopment_Exercises – 5, 6

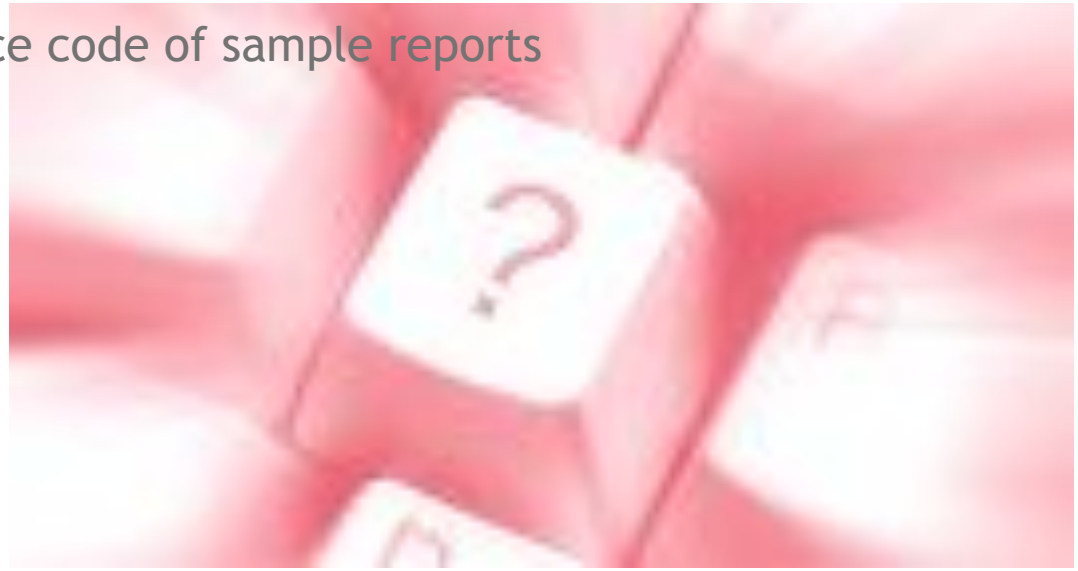
1. Report designer

2. ***Review sample reports***

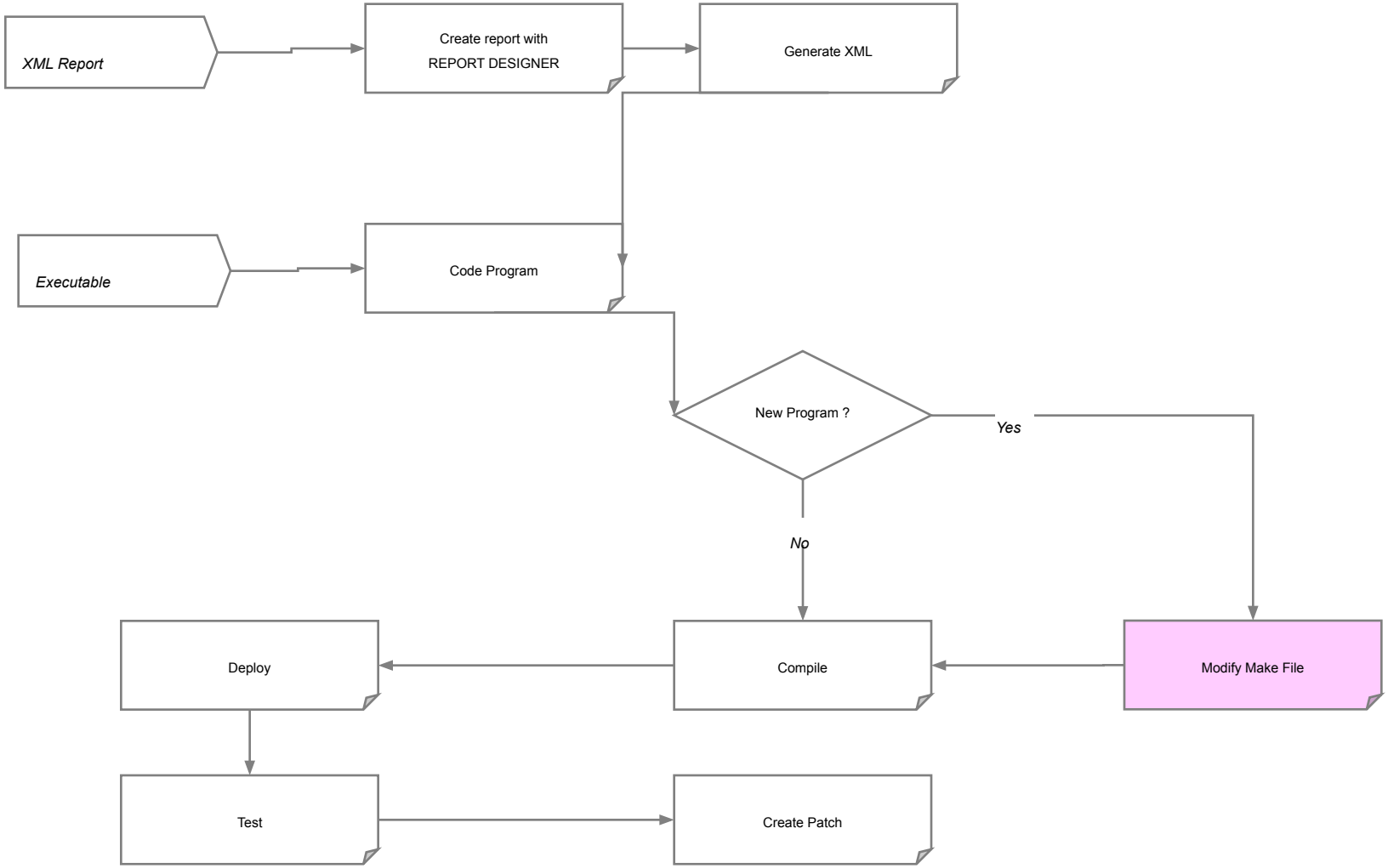
EXERCISE: reports

- Open the following file for more details on this exercise:
  - TS200_GOLDStockDevelopment_Exercises – 7

1. Review source code of sample reports



Create a program process

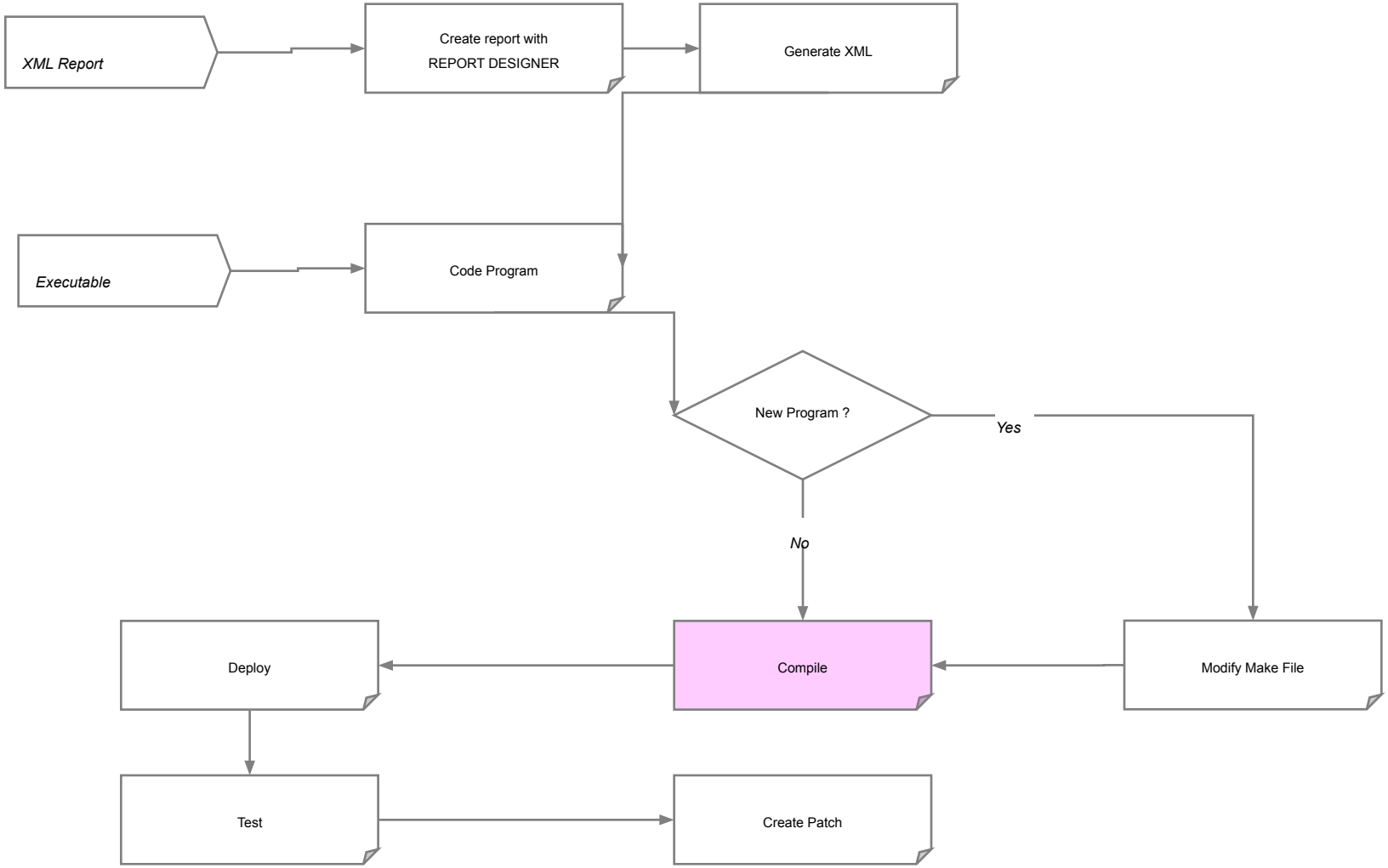


Modify Make File

- The makefile file is used to get a binary file from sources

```
    @if [ -f $(TEMP)/$(@F).c    ] ; then rm $(TEMP)/$(@F).c; fi
    @if [ -f $(DESTEXE)/$(@F)  ] ; then $(STRIP) $(DESTEXE)/$(@F); fi

#-----------------------------------------------------------------------------#
# Programmes linkes avec LIBEDT, LIBETI, LIBGEN1, LIBSTD
#=============================================================
PRG_EDT =       $(DESTEXE)/ba_rec01 \
        $(DESTEXE)/pr_gdb01 \
..
        $(DESTEXE)/pr_rem21 \
        $(DESTEXE)/pr_tra11 \
        $(DESTEXE)/pr_tra12 \
        $(DESTEXE)/st_spe01


PRG_EDT :    $(PRG_EDT)

$(PRG_EDT) :     $(SRC_C)/$$(@F).pc $(DEPBASE) $(LIBEDT) $(LIBETI) $(LIBGEN1) $(LIBSTD) $(LIBEDT)
    @echo "pc -> exe" $(@F)
    @if [ -f $(DESTEXE)/$(@F).o ] ; then rm $(DESTEXE)/$(@F).o; fi
    $(PCC) $(PROC_FLG) iname=$(SRC_C)/$(@F).pc oname=$(TEMP)/$(@F).c lname=$(TEMP)/$(@F).lis
    $(CC_OBJECT) $(CC_FLG) $(TEMP)/$(@F).c -o $(DESTEXE)/$(@F)
    @if [ -f $(DESTEXE)/$(@F)  ] ; then mv $(DESTEXE)/$(@F) $(DESTEXE)/$(@F).o; fi
    $(CC) $(CC_FLG) $(DESTEXE)/$(@F).o -o $(DESTEXE)/$(@F) \
```

Create a program process



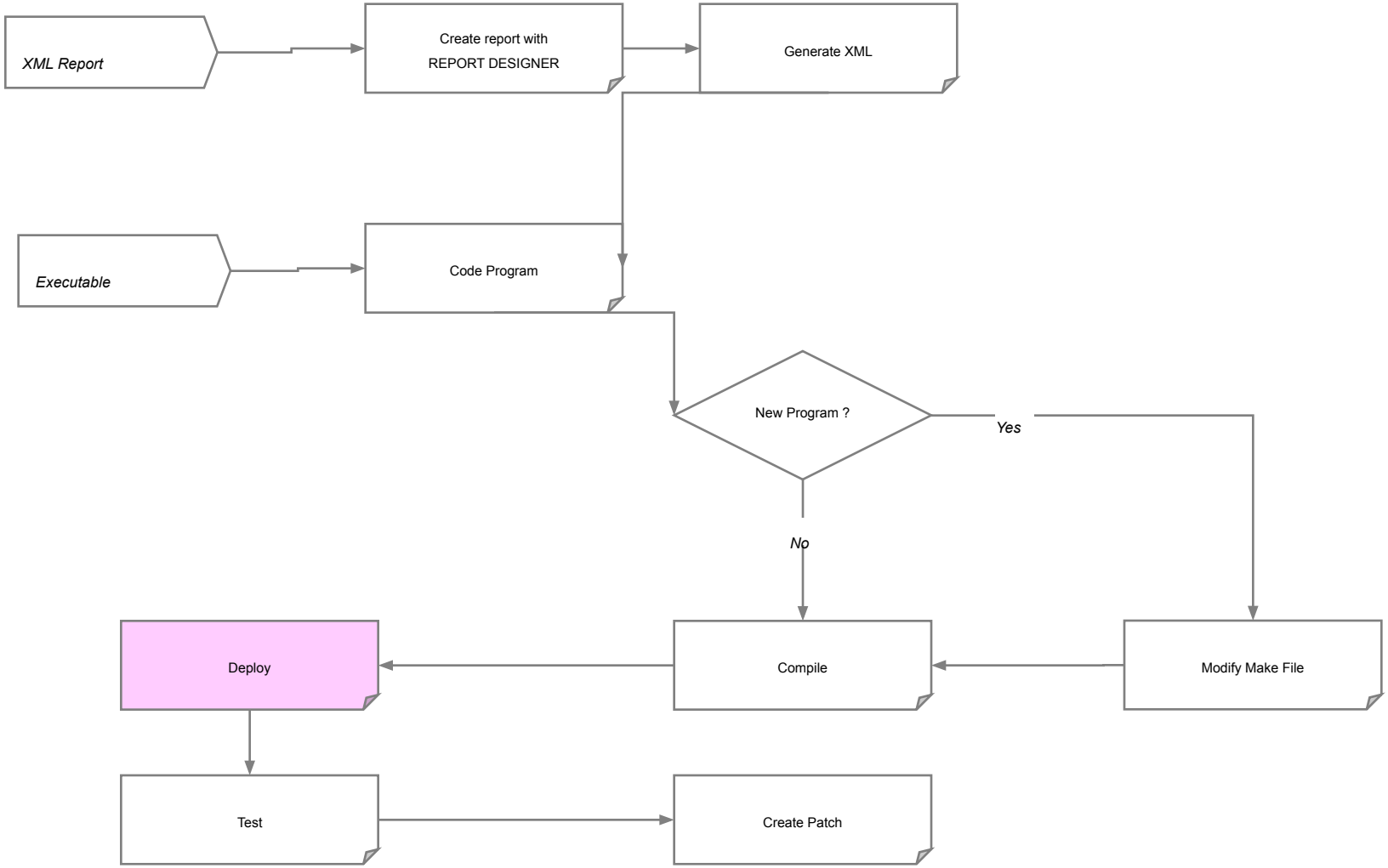
Compilation

```
[egold@DevLinux ~]$ cd $pc
[egold@DevLinux pc]$ make $bin/pr_par01
pc -> exe pr_par01
proc sqlcheck=full userid=STK507/STK507 errors=yes dbms=v8 char_map=VARC
HAR2 unsafe_null=yes select_error=no ltype=short ireclen=256 oreclen=256
 parse=partial define=GOLDDOUBLEBYTES define=STOCK define=UNIX_SYSTEM_V
CODE=ANSI_C hold_cursor=yes release_cursor=no lines=yes mode=oracle xref
=no maxopencursors=5000 varchar=yes include=/opt/GOLD/stk507/src/inc inc
lude=/opt/oracle/product/10g/sqllib/public include=/usr/include include=
/opt/oracle/product/10g/xdk/include iname=/opt/GOLD/stk507/src/pc/pr_par
01.pc oname=./tmp/pr_par01.c lname=./tmp/pr_par01.lis

Pro*C/C++: Release 10.2.0.1.0 - Production on Mon Jun 15 23:10:26 2009

Copyright (c) 1982, 2005, Oracle.  All rights reserved.

System default option values taken from: /opt/oracle/product/10g/precomp
/admin/pcscfg.cfg

cc -w -c  -O2   -fPIC -DPRECOMP  -DLINUX -D_GNU_SOURCE -D_LARGEFILE64_SO
URCE=1 -D_LARGEFILE_SOURCE=1 -DSLTS_ENABLE -DSLMXMX_ENABLE -D_REENTRANT
-DNS_THREADS    -I/opt/GOLD/stk507/src/inc -D "UNIX_SYSTEM_V" -D "STOCK"
 -D "GOLDDOUBLEBYTES" -g   ./tmp/pr_par01.c -o /opt/GOLD/stk507/bin/pr_p
ar01
cc -w  -O2   -fPIC -DPRECOMP  -DLINUX -D_GNU_SOURCE -D_LARGEFILE64_SOURC
E=1 -D_LARGEFILE_SOURCE=1 -DSLTS_ENABLE -DSLMXMX_ENABLE -D_REENTRANT -DN
S_THREADS    -I/opt/GOLD/stk507/src/inc -D "UNIX_SYSTEM_V" -D "STOCK" -D
 "GOLDDOUBLEBYTES" -g   /opt/GOLD/stk507/bin/pr_par01.o -o /opt/GOLD/stk
507/bin/pr_par01 \
        -o /opt/GOLD/stk507/bin/pr_par01 -L/opt/oracle/product/10g/preco
mp/lib/ -L/opt/oracle/product/10g/lib/ -L/opt/oracle/product/10g/lib/stu
```

The compilation, though one command is used, two compiles are done :

- Oracle Proc
- CC compilator

Create a program process



Deploy and test

- Program/Batch
  - $BIN ($GOLD_HOME\bin)

- Report XML Model
  - $XML ($GOLD_HOME\gaia\deploy\DEFAULT\web\estock\xml)

- Test compiled binary from command line
- Review generated report and report data in $LST directory

- Test report from Gold Stock application

EXERCISE: Customize report

- Open the following file for more details on this exercise:
  - TS200_GOLDStockDevelopment_Exercises - 8

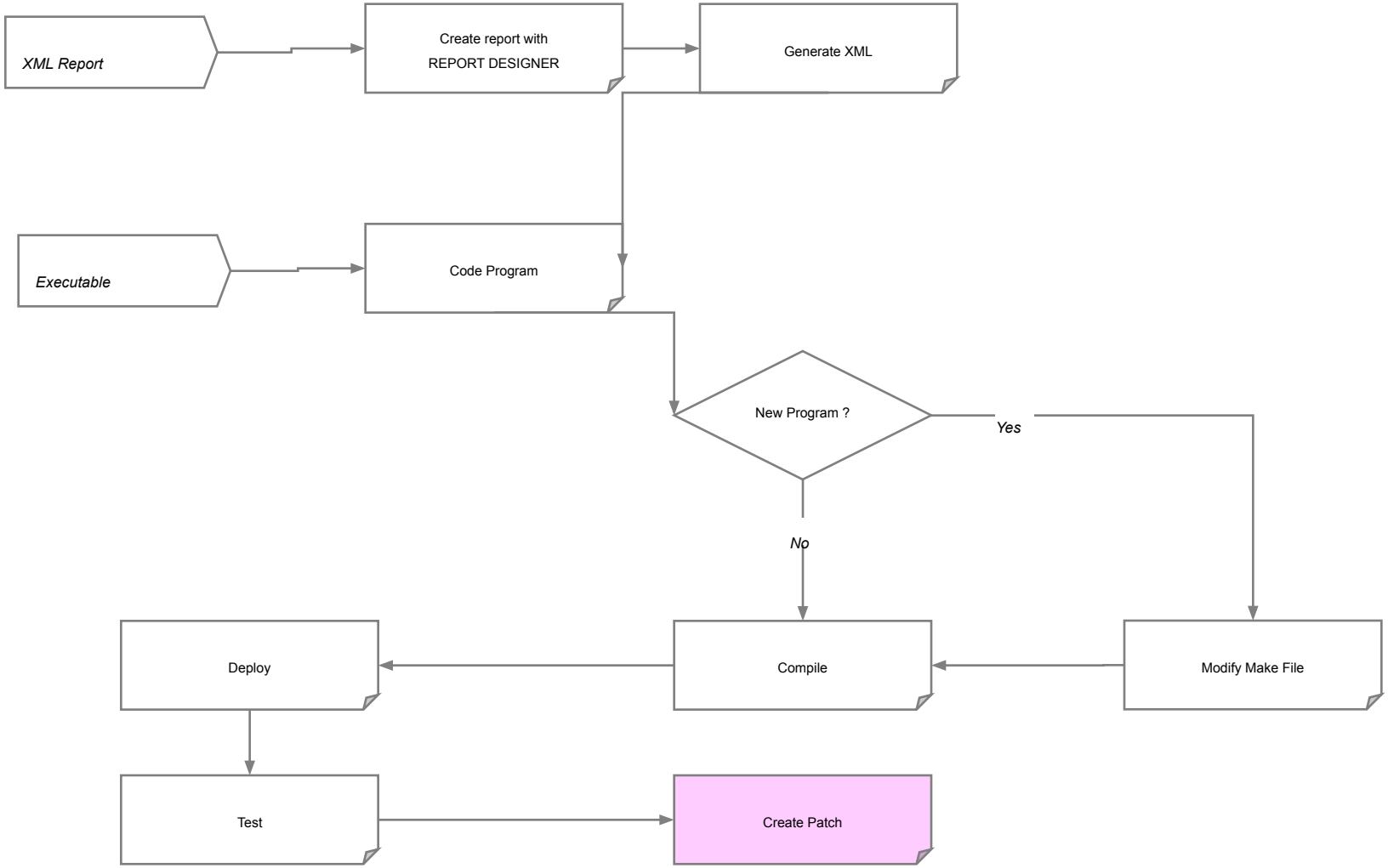
1. Customize report
2. Alter source code
3. Modify makefile
4. Compile
5. Deploy and test

EXERCISE: Create new report

- Open the following file for more details on this exercise:
  - TS200_GOLDStockDevelopment_Exercises - 9

1. Design report template
2. Report source code
3. Modify makefile
4. Compile
5. Report parameterization
6. Deploy and test

Create a program process



Create Patch

- Files you MUST add to patch after a program was created :
  - Binary files
  - XML Model (if it is a report)

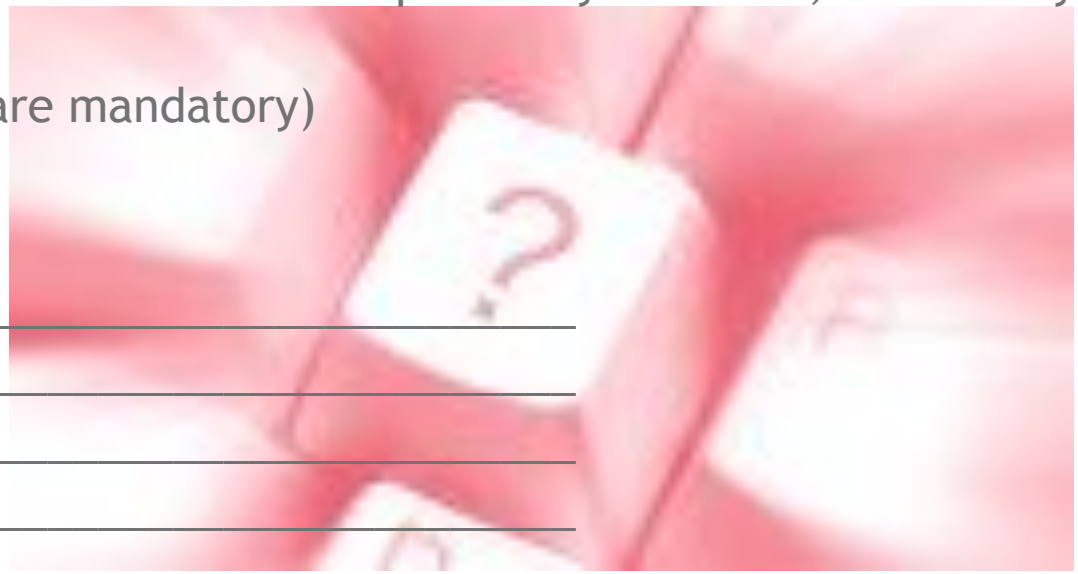
- Files you may add to patch after a program was created :

  - Script with “Descriptions/Labels” if new ones are used in report
  - Script with Message Usage
  - Script with Message Errors
  - Script to insert menu entry in the ESTOCK application

EXERCISE: Patch Content

- TS200_GOLDStockDevelopment_Exercises - 10

- If you create a new screen + report for your client, what will you put in the patch ?
  - (5 files are mandatory)



  - _____
  - _____
  - _____
  - _____
  - _____

  - ***Answer on next screen***

Patch Content

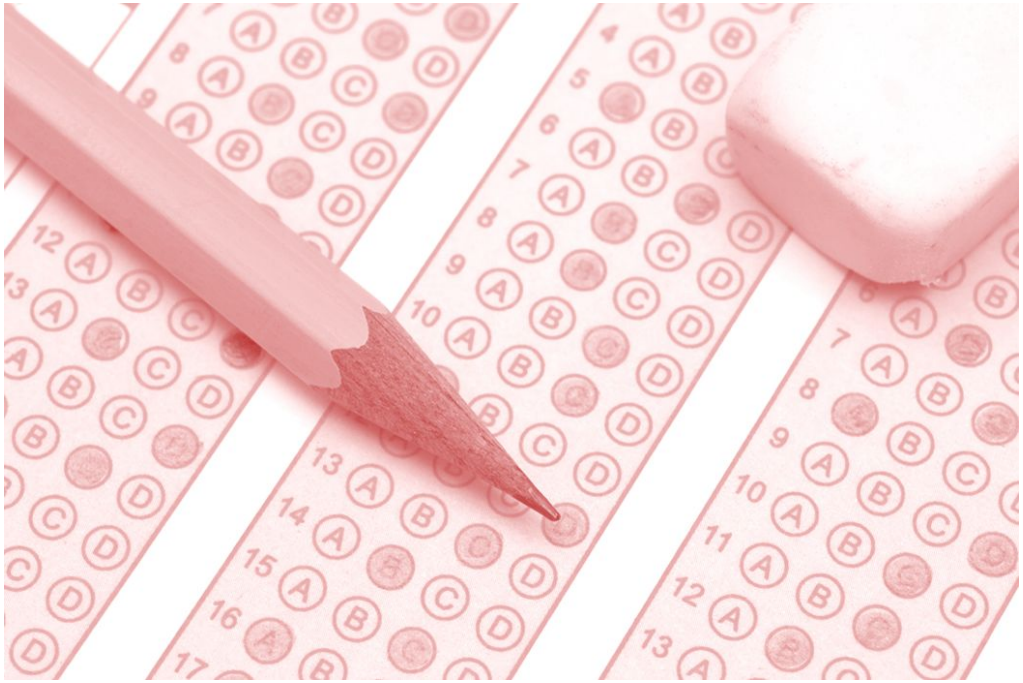
- Previous' page answers :
  1. xxx.server.yyy.jar
  2. xxx.client.yyy.jar
  3. estock.html
  4. prXXX
  5. modele.xml

- You could also need to add the makefile and prXXX.o files in order to re-link with specific Oracle version on your client's server

Questions?

Quiz

- Please complete the following quiz on the intranet:
  - TS200_GOLDStockDevelopment_Quiz



Additional Documentation

- Ergonomy of JAVA Screens for G.O.L.D.
  - Ref. GB-GSP-505-EXP-ERGO-241-1.pdf
- A.D.E.R. 2.0
  - Ref. GB-GSP-505-EXP-ADER-240-1
- Reporting engine
  - Ref. GB-GSP-505-EXP-MOREP-242-1
- Graphic Framework Documentation
  - Ref. GB-GSP-505-EXP-GFWK-243-1