**Stericocycle POC development notes**

**Objects:**

* Create reports samples using Pentaho Report Designer. The reports should contain three charts of different styles (bar, pie and area etc).
* Create reports as show in attachment below. Use mock data from DB.
* Setup MySql database as data source of Pentaho report
* Setup Tomcat server
* Create a web application to display Pentaho report from any web browser remotely

**Tasks:**

* Install the JDK
* Set the JAVA\_HOME and PATH variables
* Download and install Pentaho Report Designer 5.0. Required only if you need to change the layout of reports.
* Configure the memory for PRD
* Configure JDBC drivers to be used in PRD
* Install the Stericycle sample database, Stericycle DB, using .sql scripts
* Install Eclipse development tool
* Load Stericocycle\_POC application source code into Eclipse
* Install Tomcat server
* Start Tomcat server from within Eclipse
* Run Stericocycle report from any web browser

**Install The JDK:**

Note: JDK 1.8 does not work

Install JDK 1.7 and set JAVA\_HOME environment variable to JDK home. Refer to the attachment below.

**Install Pentaho Report Designer (PRD):**

This step is not required if you are not going to change the layout of the report. PRD is used to edit the report definition file. The report definition files .prpt are included as part of the web application.

Install PRD from <http://sourceforge.net/projects/pentaho/files/Report%20Designer/>. For some reasons the latest build 5.0 does not work well. I stalled 3.7 which works fine.

**Setup MySql server:**

Download and setup MySql server. <https://dev.mysql.com/downloads/mysql/>

Create Stericycle DB by executing scripts:

mysql> mysql -u root -p < [Stericycle POC source code]/MOCKDB/stericycle.sql

Unix or Windows Shell prompt>mysql -u root -p

Enter password: \*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

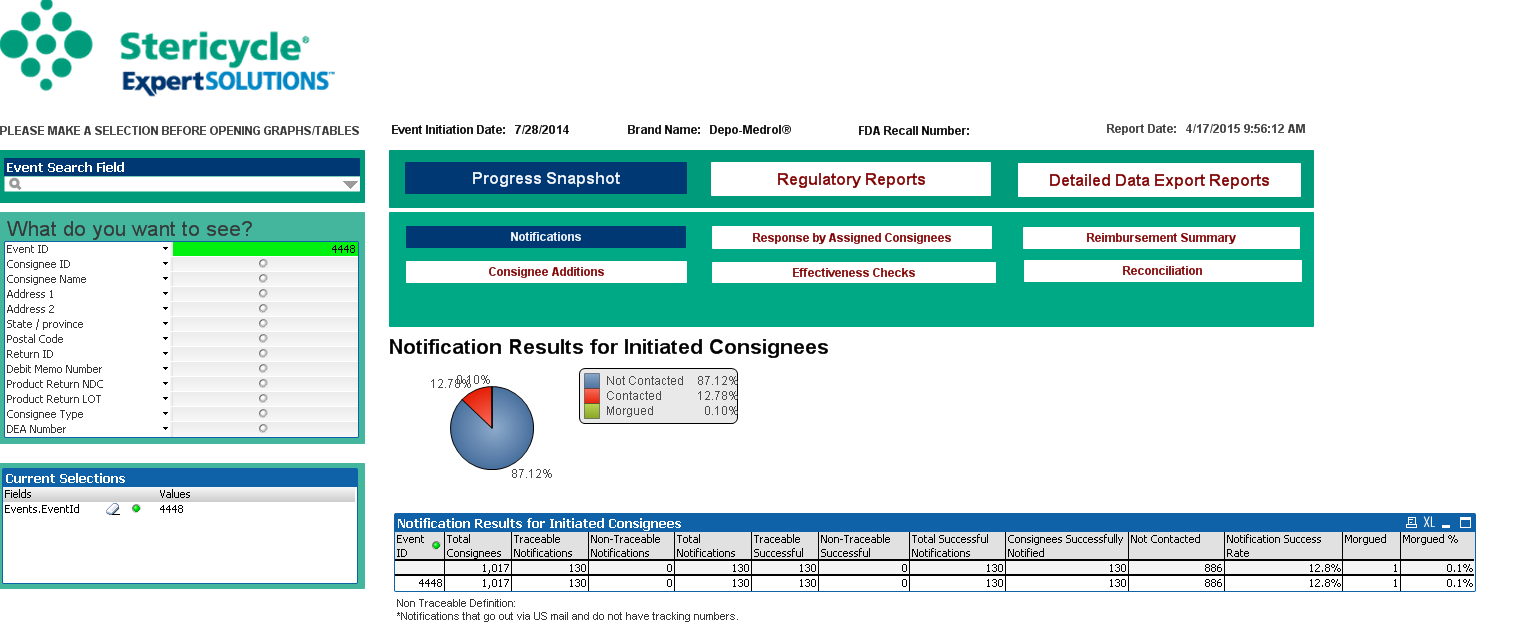
Server version: 5.1.73-community MySQL Community Server (GPL)

Mysql> use stericycle;

Mysql>show tables;

**Attachment:**

**Sample Report:**



**To configure the JAVA\_HOME and PATH variables, follow these steps:**

**Installing on a LINUX environment**:

1. Install JDK 1.7. You can go to the official Java website ([www.java.com](http://www.java.com)), download the installer file and then execute it in your operating system. Or you can execute the following commands in a terminal:
2. shell> sudo add-apt-repository ppa:webupd8team/java
3. shell> sudo apt-get update

shell> sudo apt-get install oracle-java7-installer

1. Write the following command in the terminal:

shell> sudo gedit /etc/environment

1. Add a line in this file that contains the following (or similar, depending on each environment):

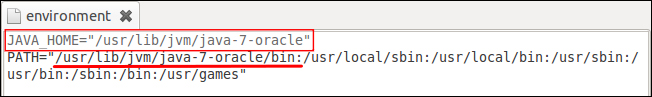
JAVA\_HOME="/usr/lib/jvm/java-7-oracle"

1. To the beginning of the value of the PATH variable, add the /usr/lib/jvm/java-7-oracle/bin: string.

### Note

The separator for the PATH entries in Linux environments is ":".

1. The /etc/environment file should look like this:



1. Restart the session.

**In Windows environments**:

1. Install JDK 1.7. Go to the official Java website ([www.java.com](http://www.java.com)), download the installer file, and then execute it in your operating system.
2. Click on the **Environment Variables...** option:

**Download source code from github:**

<https://github.com/kevinlinbjss/Stericycle-POC.git>

**Populate MySQL sample data**

Two SQL scripts were created to create new schema and sample data.

..Stericycle-POC.git\Pentaho\_POC\StericycleDB

> mysql -u root -p < … Pentaho\_POC\StericycleDB\stericycle-schema.sql

> mysql -u root -p < … Pentaho\_POC\StericycleDB\stericycle-data.sql

**Install Tomcat 7.0:**

Download and install Tomcat 7.0 on your local machine.

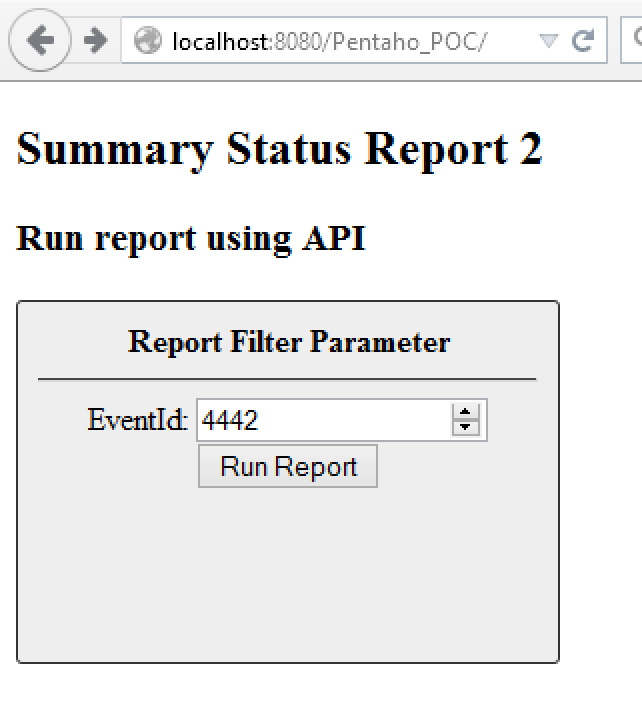
**Import the project into Eclipse:**

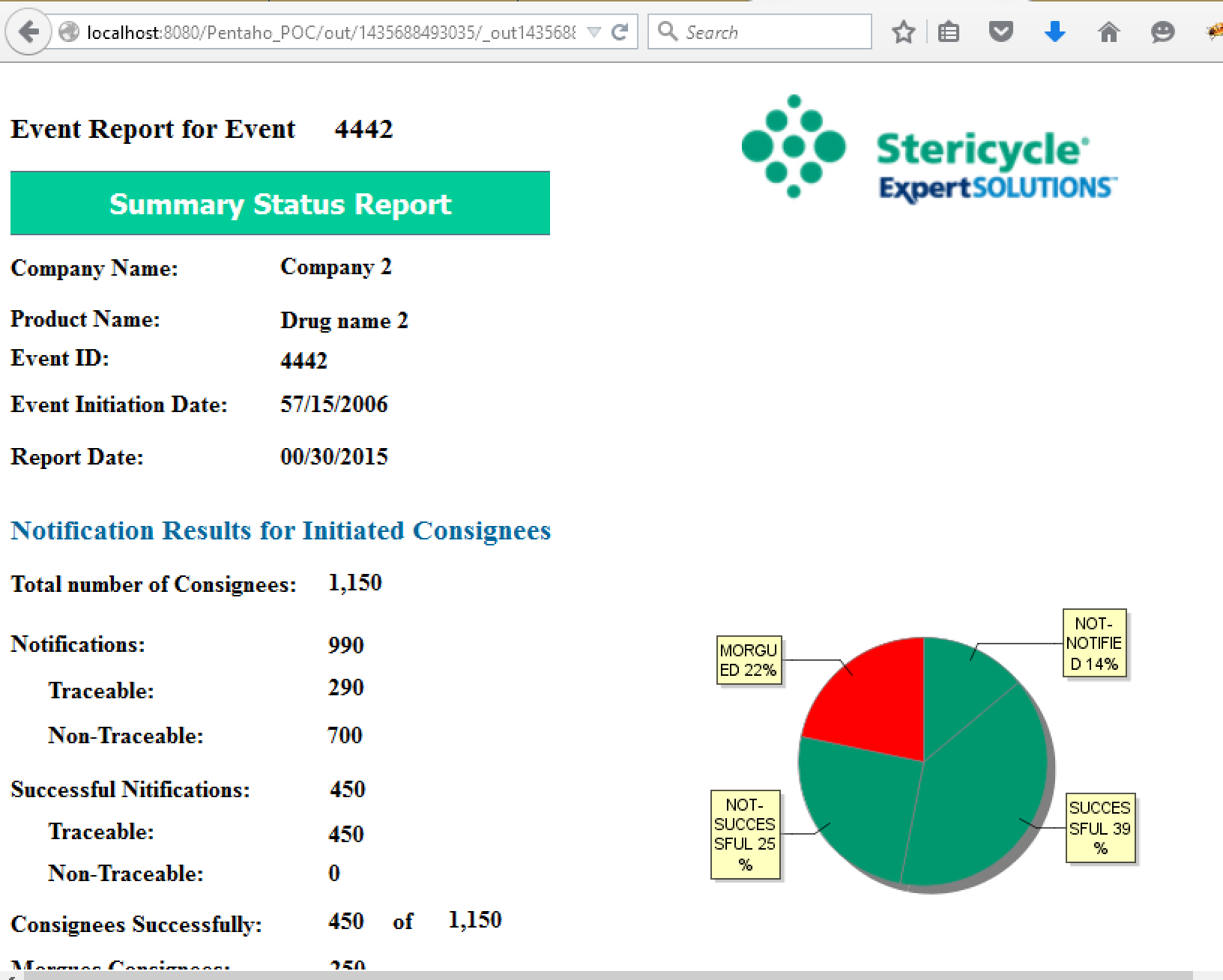
Once the project is loaded into Eclipse, Add the Pentaho\_POC web application from the Server tab. Remember to set Tomcat timeout to 90 seconds because Pentaho need a long time to load.

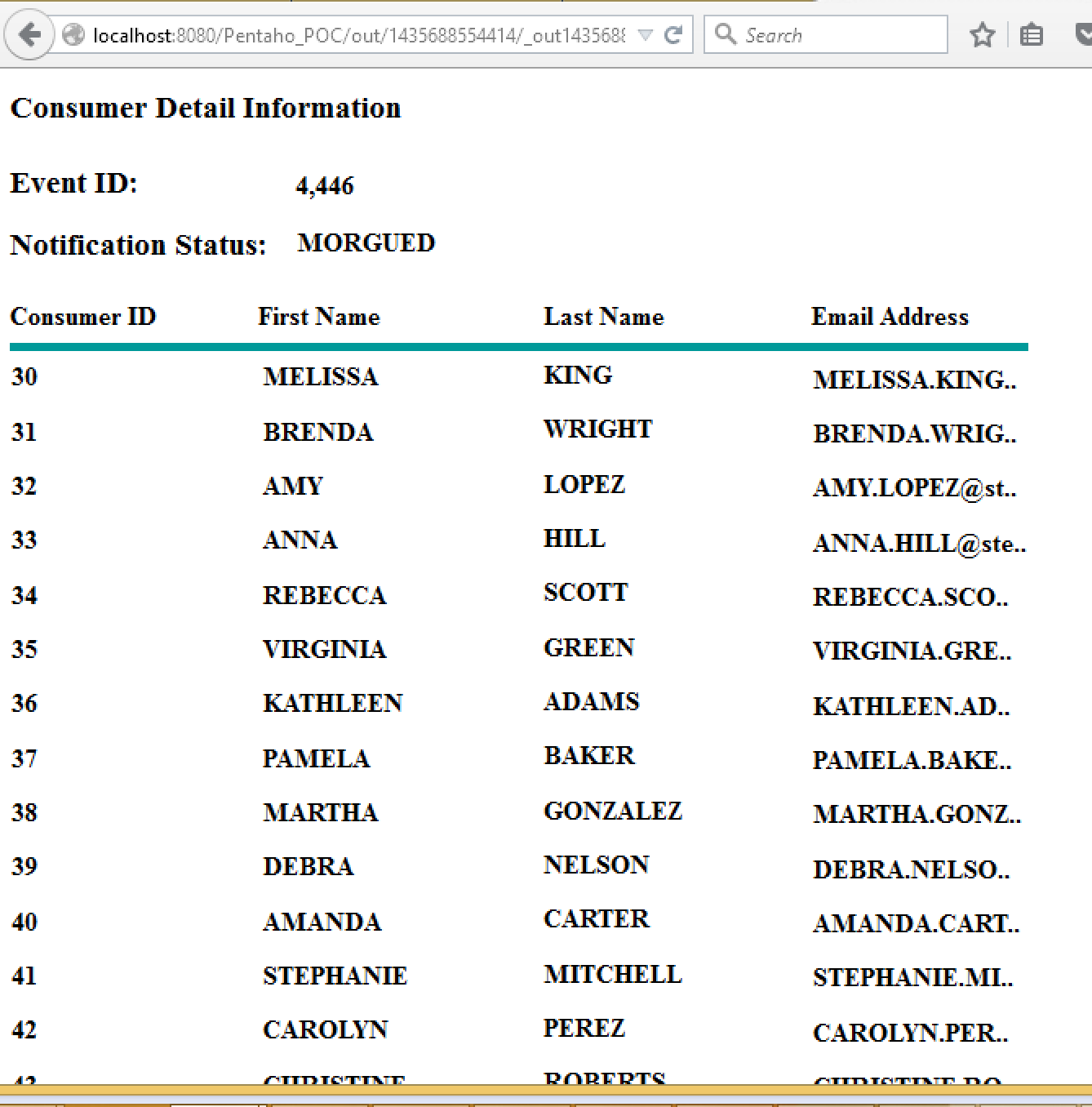
Start the Tomcat server from Eclipse.

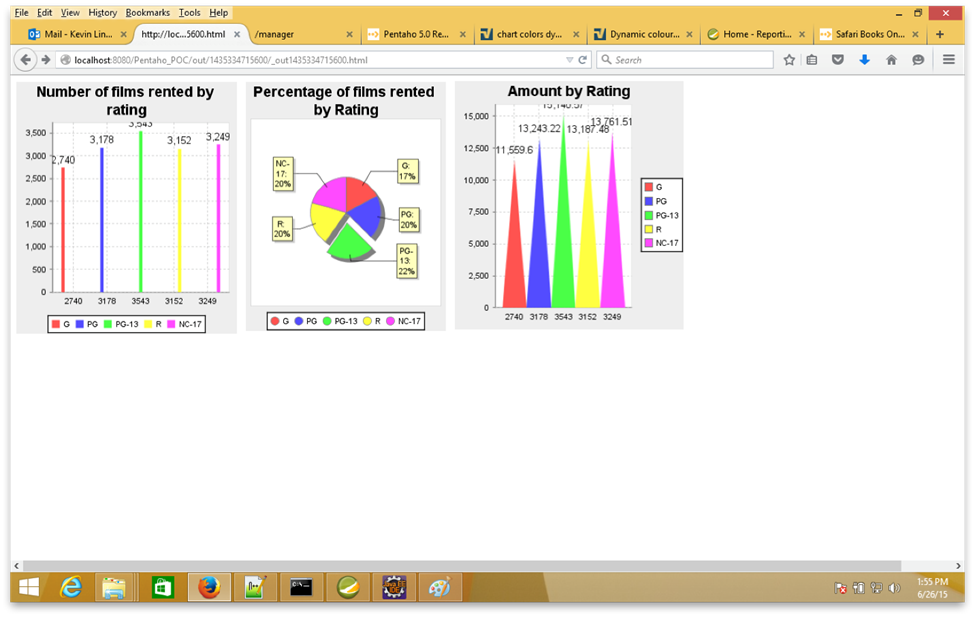
**Test the result:**

<http://localhost:8080/Pentaho_POC/>









**References:**

**Pentaho 5.0 Reporting by Example Beginner’s Guide**

<http://techbus.safaribooksonline.com/book/databases-and-reporting-tools/9781782162247>