

Plugin JasperReport

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I. Introduction

The JasperReport plugin allows you to generate reports to help you to efficiently manage the qualification of a software. These reports are made up of extracted data from Salome and Mantis databases, statistics and indicators. You can easily display reports in the internal frame of Salome as you can export reports to PDF, HTML and XLS formats.

II. Overall architecture

The main frame of the plugin is made up of 5 tabs :



fig1: The plugin-five-tabs

Each tab is linked to one family of metrics which can be generated in a report.

The requirement, Test, Campaign and Bug tab have all the same overall architecture:

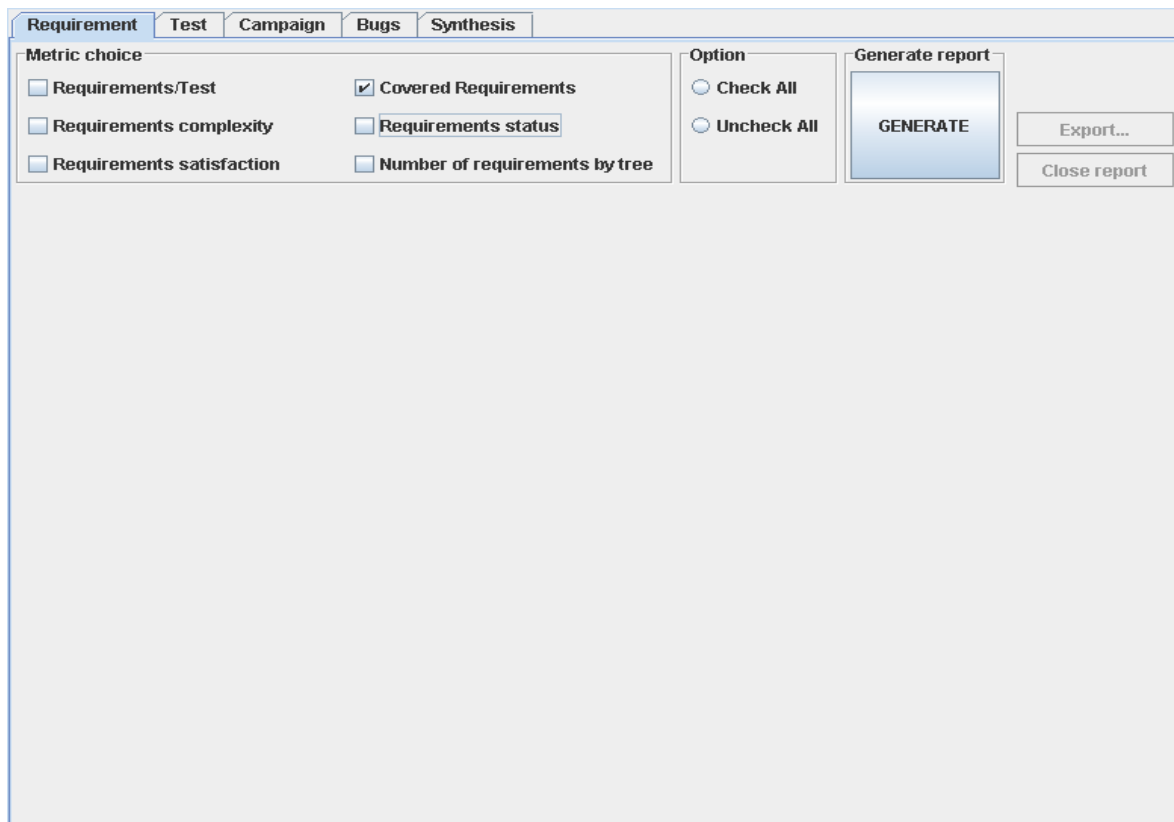


fig2 : Overall architecture of metric tabs

Each tab have a main panel placed at the top of the frame. This panel is made up of :

- The **Metric choice** panel (at left) which allows you to select the metrics you want to generate. Several metrics can be generated in the same report.
- The **Option** panel (center) which enables you to check or uncheck all metrics.
- The **Generate report** panel (at right) which , according to the selected metrics in the Metric choice panel, generates the appropriate report by pressing the **GENERATE** button.
- The **Export...** And **Close report** buttons which respectively enable you to export reports to HTML, PDF and XLS formats and to close the internal display of the report. As long as no report is generated, these buttons are unactivated.
- The free space at the bottom of the north main panel is given to the internal display of reports.

The Synthesis tab is slightly different :

- You cannot generate several metrics in the same report.
- The Option panel does not exist.

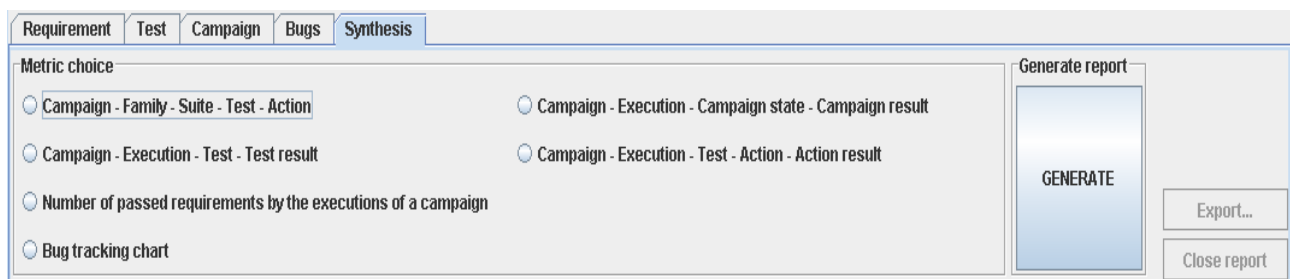


fig3 : The Synthesis tab has a slightly different overall architecture.

III. Report generation

You just have to check the metrics you want to generate in the **Metric choice** panel and then click on the **GENERATE** button to create your report.

An example of a generated report :

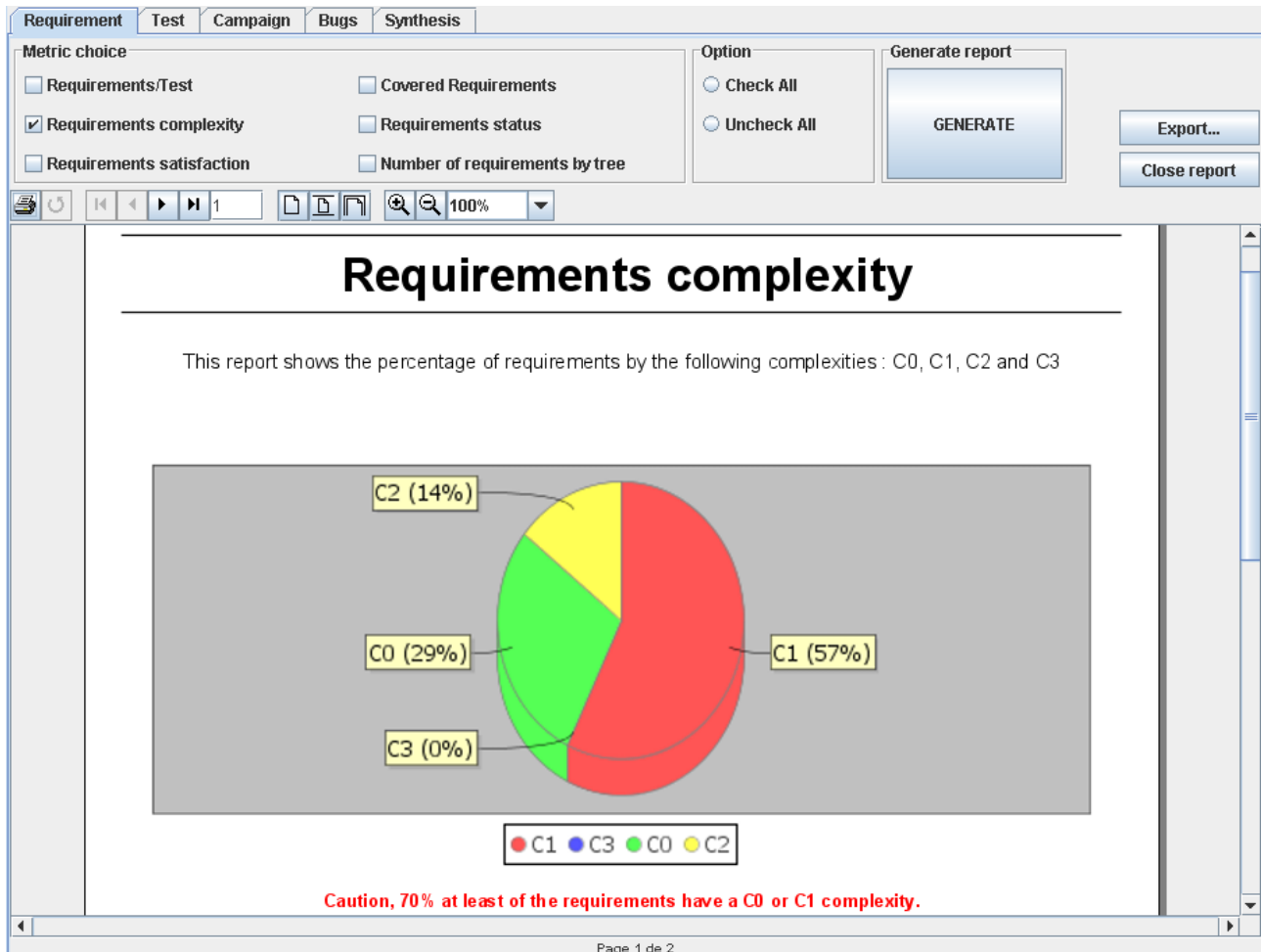


fig4 : This report was generated by checking the requirements complexity metric.

A report always has a metric title and a description of the data displayed on the report.

A tool bar appears on the top of the report each time a report is generated :

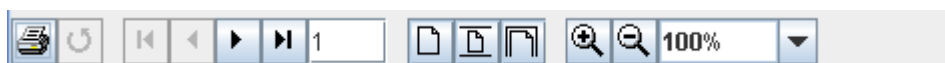


fig5 : This tool bar allows you to print, navigate, zoom in and zoom out on the report.

IV. How to export a report

You can easily export your report by clicking on the **Export...** button at the right top corner of the frame.

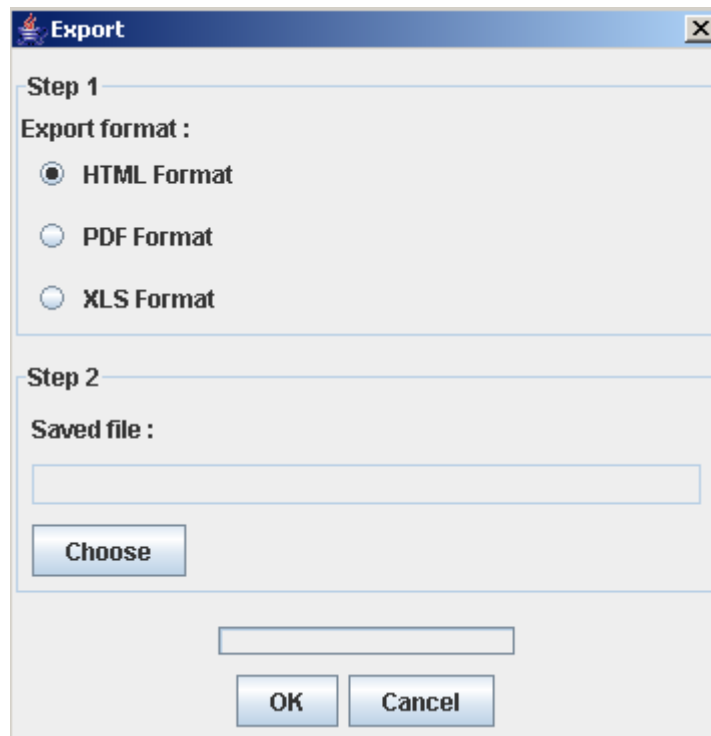


fig6 : Export window

Just choose your export format and the location where you want to save your report and click on the **OK** button.

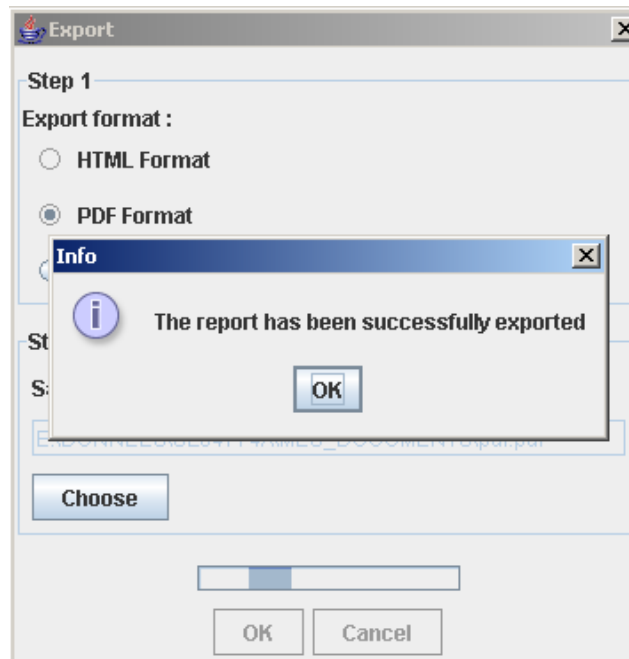


Fig7 : A message dialog box confirmed the report export success.

V. Memo

This is a reminder of all available metrics in the JasperReport plugin. Let us remind you that each metric is explained in the report where it is generated [**fig4**] .

Requirement:

- Requirements / Test
- Covered requirements
- Requirements complexity
- Requirements status
- Requirements satisfaction
- Number of requirements by tree

Test :

- Test / List of actions
- Test / Number of actions
- Tests without action
- Test duration

Campaign :

- Number of campaigns
- Campaigns status
- Campaign / Bugs number by status
- Campaigns duration

Bugs :

- Bugs severity
- Bugs state
- Average gravity
- Bugs rate
- Weighted bugs rate
- Defection percentage

Synthesis :

- Campaign – Family – Suite – Test – Action
- Campaign – Execution – Campaign state – Campaign result
- Campaign – Execution – Test – Test result
- Campaign – Execution – Test – Action – Action result
- Number of passed requirements by the executions of a campaign
- Bug tracking chart