1 Automated Visual Verification

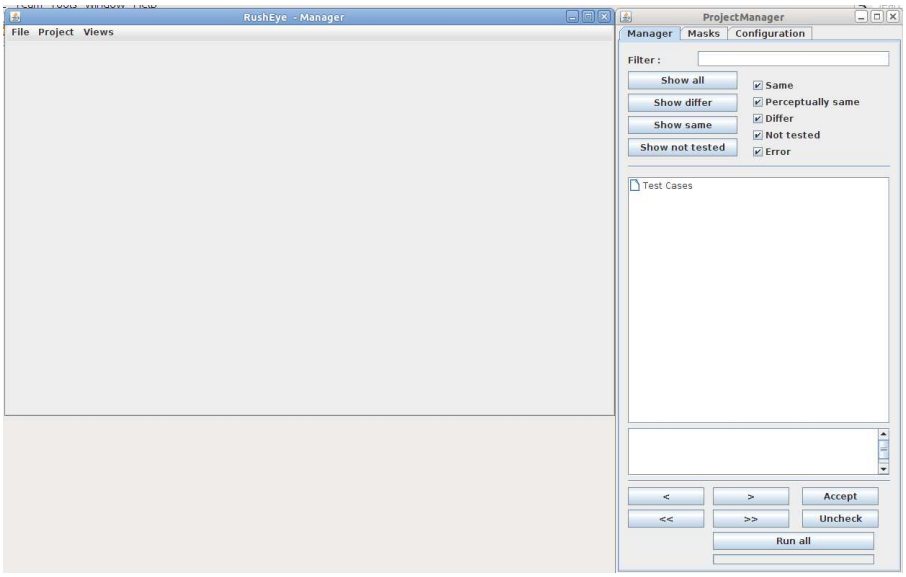
1.1 RushEye Manager

1.1.1 Brief view

RushEye Manager is graphical tool built to make using RushEye app easier.

Functionality of Manger :

- **Creating suite** - RushEye crawl option.
- **Managing results (images)** - load suite xml, images, previous results, to see and manually set changes.
- **Parsing suite** - RushEye parse option, that can take into account our manual changes.
- **Managing masks** - Creating masks 'on' the image and adding them to a suite.



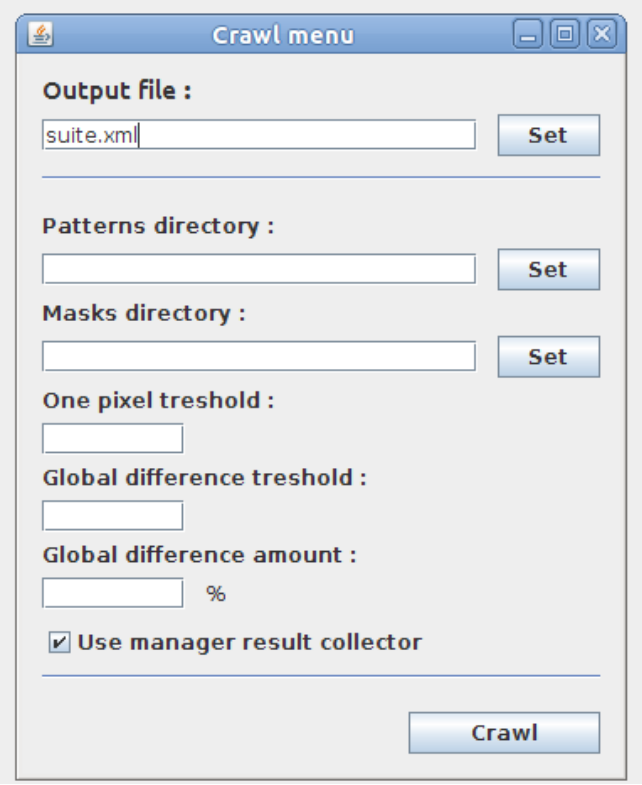
Rysunek 1: Initial view.

When we start the manager we see 2 frames, main interface frame and smaller project manager frame. Let's start with basic usage :

1.1.2 Crawl

Let's go to menu bar, then **File - Generate Suite**.

We sholud see new frame :

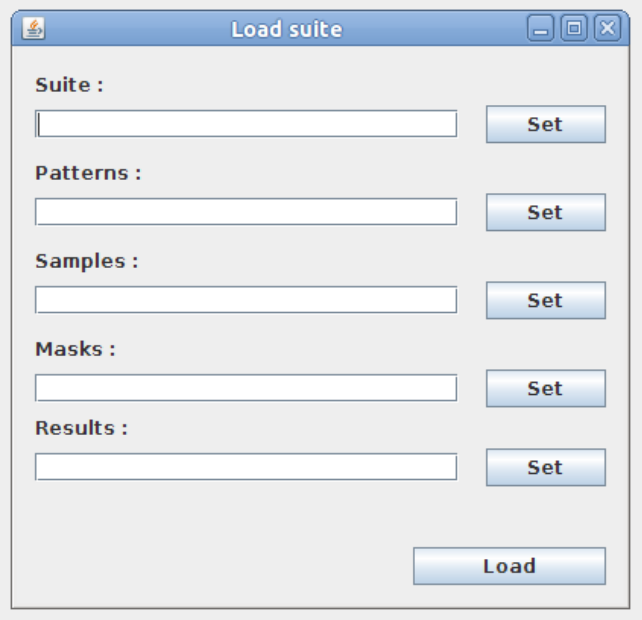


Rysunek 2: Crawl menu.

Here we can set all parameters like patterns/masks directory, perception, and output filename. When we are ready we can click **Crawl** button. If some parameters are missing, we will be informet by alert window. The xml was saved to file that we specified before, and is also automatically loaded to Manager.

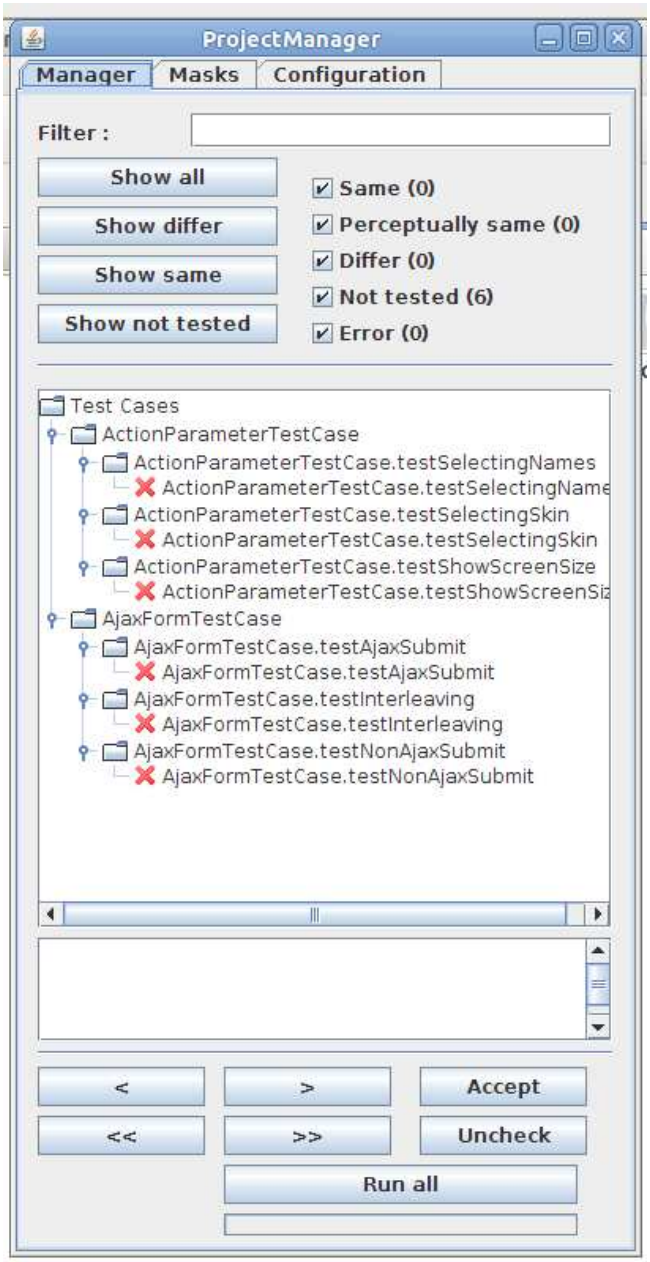
1.1.3 Loading project from xml file

When we generate suite, this step is done automatically, but if we already have one, we can load it too. Let's go to the menu bar, then **File - Open suite**. We will see another frame where we can set suite file, results file(optional), and path to patterns, samples and masks. Then we can click **Load** button.



Rysunek 3: Loading suite frame.

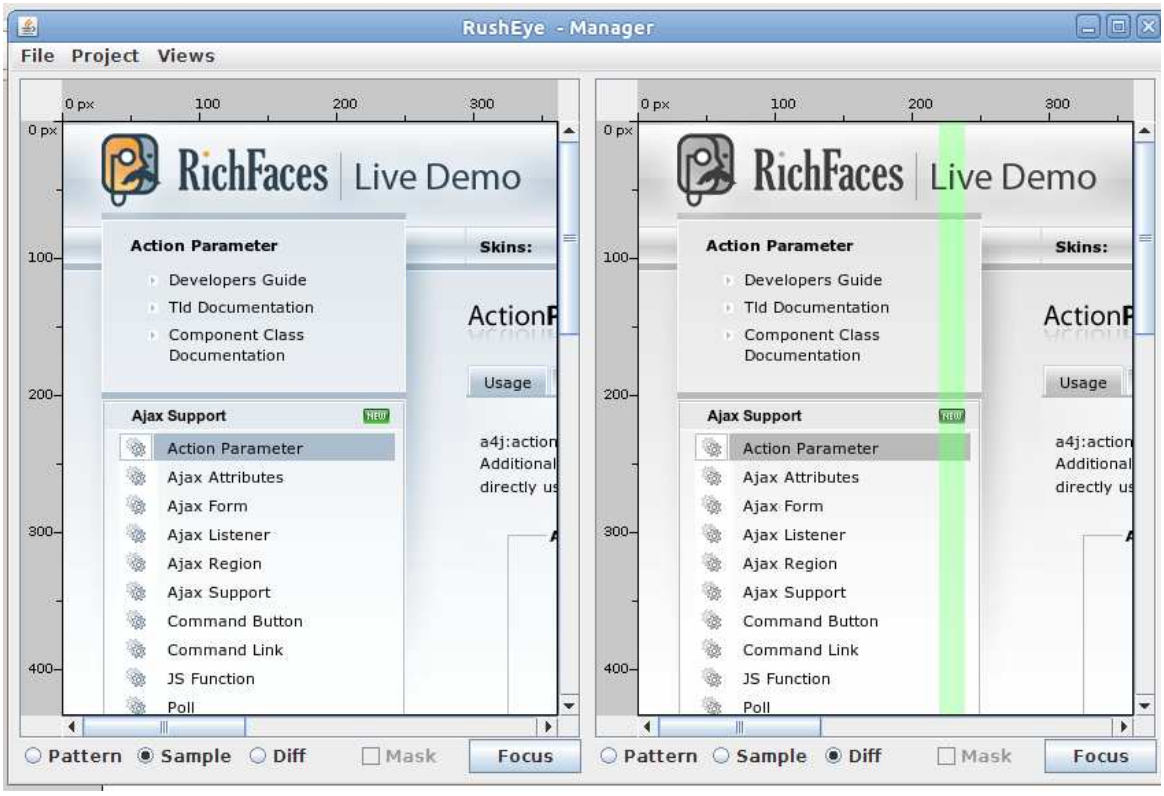
That should generated tree of tests in Project Manager.



Rysunek 4: Project Manager frame.

In this frame we can see and modify loaded suite. Main part of this frame is project tree where all cases/tests/patterns are displayed. To narrow down this tree we can use filters - text filter and result filter (we can set any combination of result conclusion we want to be displayed). If we did not set result descriptor, all pattern are set to NOT TESTED (red cross icon). No navigate through tree we can use arrow buttons(single arrow to navigate row by row, double to navigate between tests/cases). To see some images, we need to click on leaf in the tree (pattern of suite descriptor).

1.1.4 Double View



Rysunek 5: After clicking on test.

As we can see, images are displayed, and icon near test was changed. When we click on a pattern, ad hoc comparision is done (it takes into consideration masks and other stuff just like parse function, but we can see results almost immediately). Let's focus on images. What we see is called **Double View**. Here we can compare 2 images, looking for changes. **Radio buttons** at the bottom of images allow us to change between sample, pattern and diff image. **Focus** button allows us to move to changed part of diff image. Scrollbars are synchronized - when we move one, the other moves automatically.

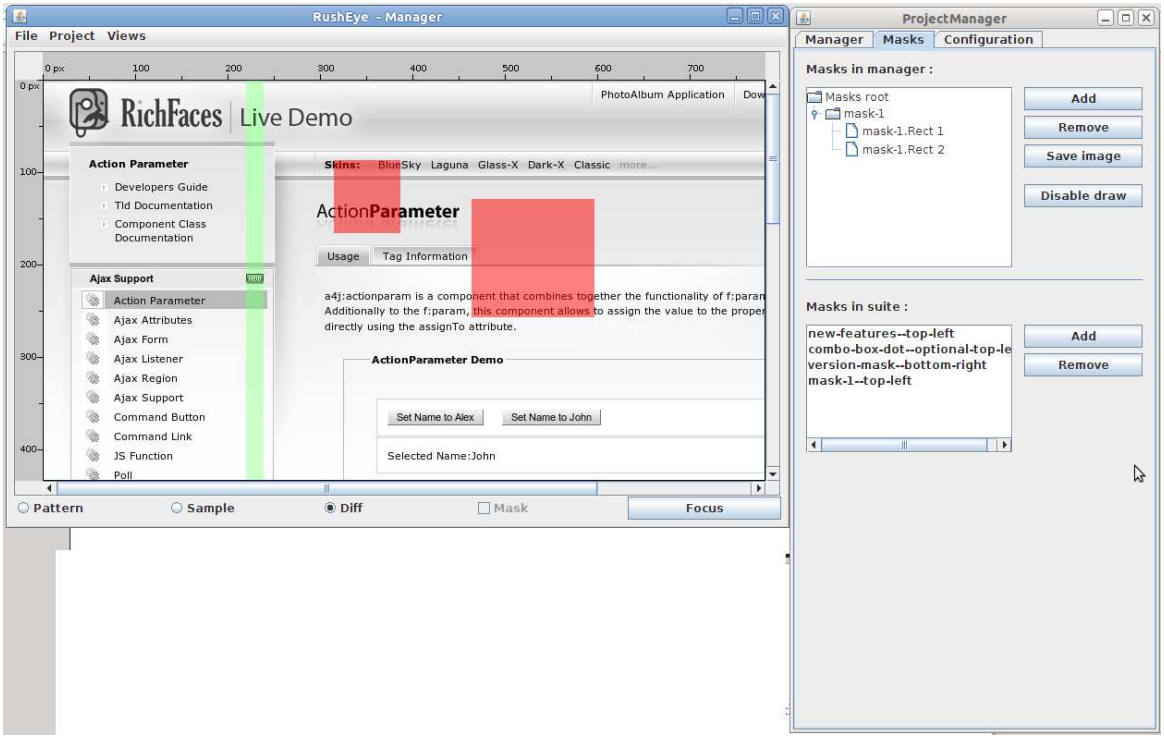
1.1.5 Single View

Using menu **Views - Single View** we can switch to another view. It is similar, but instead of 2 images we have one. Also we can zoom in/out image using mouse wheel.

Rysunek 6: Single view.

Back to the suite management. When we clicked on pattern, comparision was done. If the result was DIFFER, we might want to overwrite this result and set it to PERCEPTUALLY SAME (meaning this case was expected). We can use **Accept** button in project manager frame for this. If we change our mind, we can use **Uncheck** to set results to NOT TESTED. Those operations apply to all leafs in tree branch (so we can accept/uncheck on pattern level, test level and case level). Also, if result xml file is defined for this suite (like when it was created after parsing), those changes will be automatically saved to this xml file.

1.1.6 Mask View

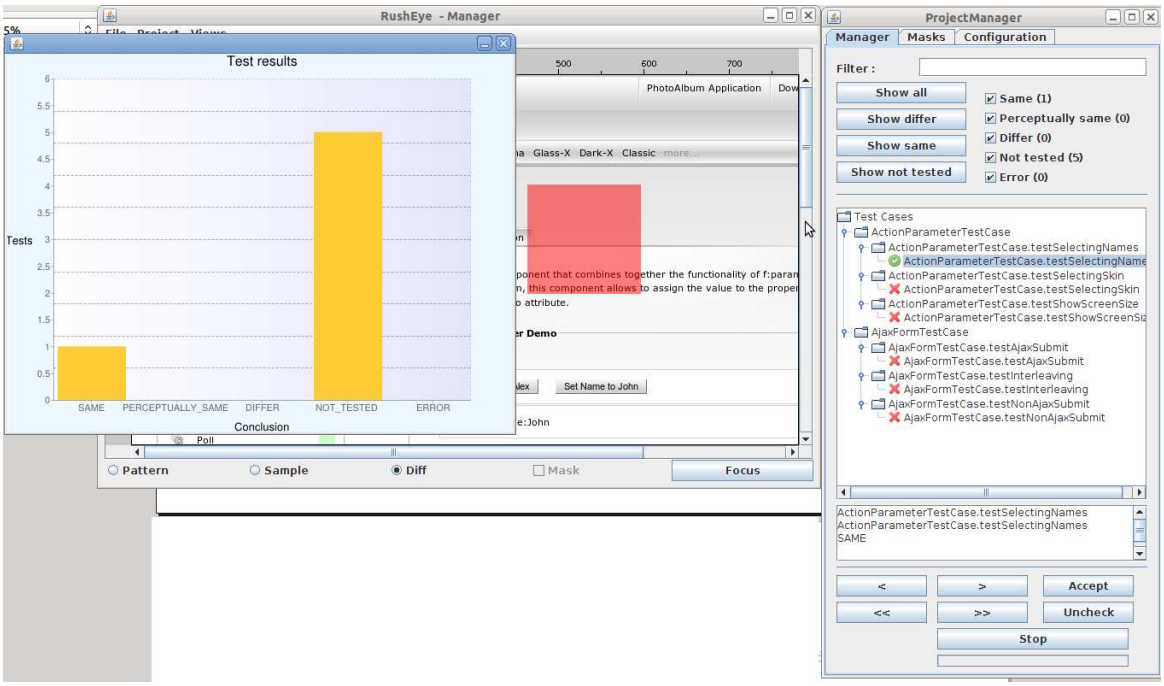


Rysunek 7: After clicking on test.

Another view is mask view. We have 2 mask 'pools' there. Firs are masks defined in manager. If we click **Allow draw** we will be able draw rectangles on current pattern. Then we can save those rectangles as a single mask. Second pool are masks defined and loaded from visual suite. They are taken into account when parsing or ad hoc comparision is done. We can remove and add existing masks there.

1.1.7 Parse

Parse option is most important for Manager. We can also run it through Project Manager Frame using **Run all** button.



Rysunek 8: Parsing in progress.

During parse **Run all** button changes into **Stop**, so we can well.. stop running our suite. Results are automatically showed in project tree and on statistics charts. They are also written to another xml file.