A Quick Start Guide of Pe^2



Overview of Pe^2

1. Views

 Pe^2 has three views to describe different aspects of the issue status workflow.

1.1 The timeline view

The timeline view shows trends and serves as time span selector. It is represented by an area chart with date on the horizontal axis and chosen statistics on the vertical axis. Statistics include Birth Rate (the number of issues reported during one month), Expiration Rate (the number of issues resolved during the month), and Cumulative Issues (open, but not yet resolved). The timeline view shows two subsets of the selected issue population. The part shown in darker color represents the entire selection while the lighter color shows one part of the selection, for example, issues that are reported as "NEW". In addition, the fraction of issues representing the lighter color is drawn as a black line.

1.2 The transition view

The transition view shows frequencies and time spent between the states the issues pass through. Circles show states and arcs transitions, with the thickness of the arc indicating one of the following statistics for the selected set: the number of issues having that transitions, the total time spent for that transition, and the average time spent for that transition. The arcs above the circles go left to right while the ones below circles go right to left. As noted above, the transition view is linked with the timeline (and other) view(s). In particular, moving the time range in the timeline view shows the animation of the evolution of the transitions among states.

1.3 The process view

The process view is designed to quantify workflow efficiency. It provides details of the time spent for each transition. The horizontal axis shows time and the vertical axis shows the numbers of issues. Each state is drawn in single color with the width representing average time and the high the number of issues. The area of each state shows the total time spent transiting between two states in all selected issues.

2. Selectors

 Pe^2 offers selectors to select and narrow down the investigation scope.

2.1 The time span selector

The time span selector displays the timeline to designate a time span for further investigation.

2.2 The transition selector

The transition selector provides visual and textual methods to select subsets of issues that went through chosen state transitions.

2.3 The resolution and completeness selector

The resolution and completeness selector display the number (and fraction) of issues with each resolution and level of completeness in the current subset. A user may also expand or narrow the current subset of issues by adding (removing) resolutions or levels of completeness to (from) the current subset.

3. Usage

All the investigations start from timeline view with selection of a time span through pushing the right mouse button and dragging from start month to the end month. Click the "do select" button **u** to display the results. The subsequent operations with other selectors are similar.