

Introduction

Process summarisation techniques generate overviews of the current state of a business process to enable evaluation of progress to date and to aid future planning.

An overview of any process essentially reduces to answering the following key questions:

- What is the actual status of each process?
- What are the recent changes?
- Is there a problem looming up?

While current issue trackers already provide an impressive amount of structured information on the status of issues, there is a substantial amount of free text provided by users and administrators in these systems that, up to now, has not been widely exploited for summarisation. The analysis and integration of the information in this free text into process summaries is the focus of the Summit project.

Bug tracking is an important process in the software industry. Managing the correct handling of issues is crucial and requires a quick oversight of the actual state of each process and its development over time. Furthermore, bug tracking data is easily available and the tracking process is a good approximation for many different types of processes other industries. The current Summit prototype focuses on summarising the process of addressing bugs in large software projects.

Technology Solution

Summit builds summarisations of processes using varied raw data sources including structured process data and unstructured text data. Summit first provides an overview of all active processes, highlighting recent changes and important topics. Custom analysis rules are used to determine the importance of individual processes.

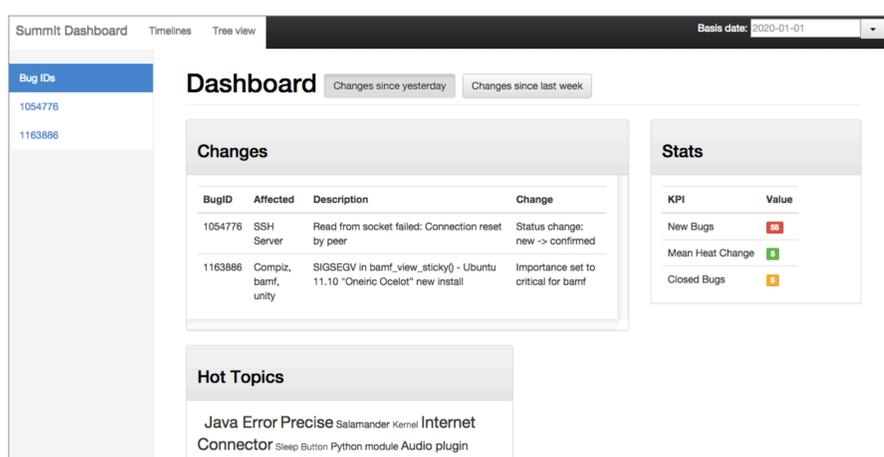


Figure 1: The Summit dashboard overview window.

Structured data (e.g. status of an issue and criticality) is used to track the status of a process over time. This is augmented with the unstructured data (i.e. text) associated with a process so as to help fully understand it. A summarisation step transforms raw process information into a generic overview.

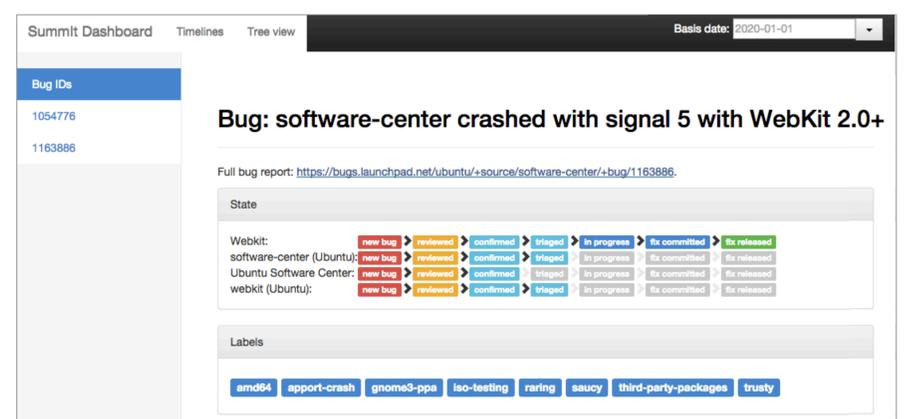


Figure 2: A summarisation of an individual process.

A drill down from the top-level summarisation to detailed information about a process can also be performed so as to give more detail. Even at this level summarisation techniques are used to give a quick overview of each event associated with a process.

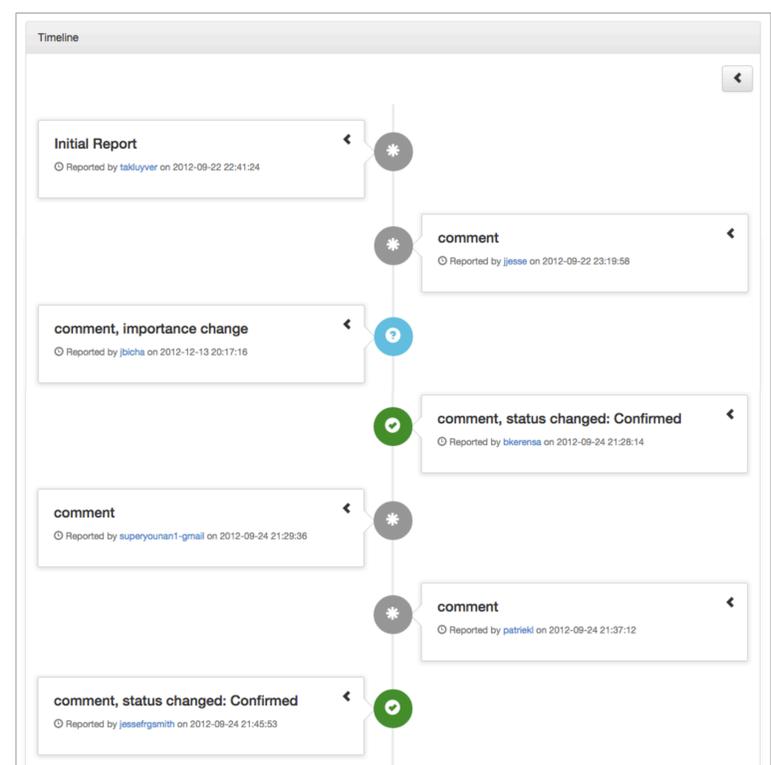


Figure 3: The detailed process timeline.

Research Team

Dr Ingo R. Keck, Dublin Institute of Technology
Dr. John Kelleher, Dublin Institute of Technology

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