Gumtree 1.6.x Project Plan

Introduction

This document lays out the development priorities and plans for the GumTree software version 1.6. The aim of this plan is to provide an overview of works that are committed in the current development iteration cycle. This is a living document and is subject to change based on the project priority.

The overall theme for version 1.6.x is about cleaner design and improving user experience. The aim is to create a software stack that helps to produce science more quickly. A number of infrastructural tasks, including new better GumTree middleware support, will run in background. Version 1.6.x will set a new milestone for the GumTree development.

Release Schedule

The deployment date of GumTree software for individual instrument is depended upon reactor cycle and instrument maintenance schedule. However, the release date for the GumTree Platform (or the base NBI target for development) should be fixed, so that the development process is agile (with short iteration) and predictable.

At the end each final release, a change log and brief new feature description must be supplied with the artifacts. After each iteration, a new target will be produced for internal development use, and all developers need to sync with this latest target. Developers will need to meet together for quick briefing on the new features introduced in each iteration.

Each release is set to 4 months long, with 1 week planning, four 3 week long iteration, and 3 week endgame (final integration test, documentation and release work). All phases may be adjustable to fit operation needs, but we usually do not encourage this.

However, due to the build process refactoring, our release schedule has been modified. This release will feature 5 major releases with 8 month release schedule.

Planning: 7th March 2011 - 1st April 2011 (4 week)
Technology Investigation: 4th April 2011 - 29th April 2011 (4 week)
Iteration 0: 2nd May 2011 - 3rd June 2011 (4 week) - version 1.6.0
Iteration 1: 6th June 2011 - 1st July 2011 (4 week) - version 1.6.1
Iteration 2: 4th July 2011 - 19th July 2011 (4 week) - version 1.6.2
Iteration 3: 1st August 2011 - 26th August 2011 (4 week) - version 1.6.3
Iteration 4: 29th August 2011 - 23rd September 2011 (4 week) - version 1.6.4
Endgame: 26th September 2011 - 14th October 2011 (3 week) - version 1.6.5 (official 1.6.x release)

Instrument Specific Themes

An instrument theme is a high level task description on what use requirement we need to fulfil for this release of GumTree. Those requirements come from instrument scientists meeting, instrument maintenance jobs (software bug fixes), and refactoring tasks for making software maintainable.

Echidna

- Update UI of the experiment workbench required by users - Iteration 0. (GUMTREE-624, GUMTREE-623)
- Provide preference page for user to do customisation - Iteration 0. (GUMTREE-621, GUMTREE-622)
- Make batch processing available in analysis workbench - Iteration 1-2. (GUMTREE-472, GUMTREE-620)

Wombat

- Try using python/jython script in data analysis. Provide basic python wrapper library for GDM and VIS components. - Iteration 4

Kowari

- Provide updates for UI of the experiment workbench. This may require deep level of library to be updated, for example Workflow UI. - Iteration 3-4 (GUMTREE-444, GUMTREE-466, GUMTREE-483, GUMTREE-485)

Quokka

- **Status display.** (GUMTREE-137)

Platypus

No scheduled plan for Platypus in this version.

Pelican

No scheduled plan for Pelican in this version.

NESCA

No scheduled plan for NESCA in this version.

Generic Component Themes

GumTree Platform

Infrastructure Themes

Cross Cutting

- **System testing and runtime diagnostic tools.** (GUMTREE-330, GUMTREE-487)
- **Better workflow user experience.** (GUMTREE-466, GUMTREE-495)
- **SICS batch buffer improvement.** (GUMTREE-133, GUMTREE-480)
- **Support for new SICS features.** (GUTMREE-522, GUMTREE-524)
- **More DAE features on the GumTree server.** (GUMTREE-447, GUMTREE-516)
- **Python/Jython for data reduction and analysis.** (GUMTREE-638)

Ongoing Tasks

- **Investigate non-flash based web client technology.** (GUMTREE468)
- **Extend DLTK for code completion on SICS commands.** (GUMTREE-460)
- **Investigate and prototyping new components.** New components include visualisation toolkit (Fable, in house SWT 2D, CSS XY graph, etc) (GUMTREE-525)
- **Adoption of new GDM model.** (GUMTREE-526)
- **New S2 API for server.** (GUMTREE-535)
- **Workflow 2.0 prototype.** (GUMTREE-533)

Draft Items:

- New SICS proxy
- New workflow API and UI
- Kakadu refactoring
- Python/Jython data analysis API
- Stablising new visualisation engine
- Improved dashboard API
- Improved workbench layout

- GumTree Data space API
- GumTree Scheduling API
- Adapt OSGi event bus system
- Quokka improvement
- Documentation