

Linux Tools 0.1 Release Review

The Eclipse logo features the word "eclipse" in a white, lowercase, sans-serif font. The text is centered over a dark, circular sphere that has a bright, glowing highlight on its upper-left edge, suggesting a light source. Three horizontal white lines pass behind the sphere and the text, creating a sense of depth and motion.

eclipse

Planned Review Date: 2009-02-11

Communication Channel:

<news://eclipse.technology.linuxtools>

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Introduction

- The Linux Tools project is a two-faceted project
 - Firstly, it provides a place for Linux distributions to **collaboratively** overcome issues surrounding distribution packaging of Eclipse technology. The project produces both **best practices** and tools related to packaging.
 - Secondly, the project develops and produces **tools** relevant to Linux developers.
- Project plan:
 - <http://www.eclipse.org/projects/project-plan.php?projectid=t>

Features

- This is our first unified release of all of our tools. It contains:
 - the latest ChangeLog management tools
 - an RPM .spec editor with rpmlint integration
 - the first release of our plugin building and packaging tool named RPM Stubby
 - a resurrected set of plugins integrating the OProfile profiler with the CDT

Features continued

- More features:
 - the initial eclipse.org release of our GNU Autotools CDT additions
 - an initial attempt at bridging the CDT's hover help functionality with the various open source API documentation formats; called libhover
 - the first public release of our Valgrind integration work featuring BIRT-rendered charts of heap usage
 - an editor for Systemtap scripts
- This release puts us on track with our roadmap and brings many features which will be useful to Linux C/C++ developers

Features continued

- 0.1 New and Noteworthy:
 - <http://www.eclipse.org/linuxtools/new/>

Non-Code Aspects

- As this is our first release, our user documentation is sparse. For upcoming pre-1.0 releases, we plan on ramping up our documentation to include tutorials and screencasts.
- One of our pre-1.0 goals is to interface with the Babel project to get our strings localized. We are constantly striving to have all of our strings externalized to facilitate translation.

APIs

- Being an 0.1 release, our APIs are subject to change.
- We will converge on stability – and document such stability – in our APIs well before our 1.0 release.

Architectural Issues

- As our focus has been to bring Eclipse technology to Linux users who would otherwise be unaware of its power, we have spent less time on extensibility than on user-visible features in our 0.1 release.
- As we work towards our 1.0 release, we will continue to better define our APIs while stabilizing them and documenting them.

Architectural Issues continued

- Despite being user-focused, we have a few components which provide extension points:
 - our profiling tool framework whose use is demonstrated by our OProfile and Valgrind integration plugins
 - our ChangeLog plugin which allows for extensible parsers, formatters, and editors. The extensibility of formatters is demonstrated by our RPM .spec editor.
 - our libhover component. This plugin provides an extension point that defines a common documentation format for C library hover help.

Tool Usability

- Many of our tools have had pre-0.1 releases in Linux distributions. They have been well-received and at present have satisfied users.
- Due to the large number of people packaging software for RPM-based distributions, our .spec editor has become one of our more popular features. The in-line warnings and error checking as well as templates and completion are incredibly useful features.

Tool Usability continued

- Our work integrating native profiling tools like OProfile and Valgrind has been introduced to excited audiences. We aim to bring the power of these tools into the IDE while making them trivial to use. Developers making use of our tools will be able to focus on their own projects and not on setting up the underlying tools.

End-of-Life

- As this is our first project release, we have no end-of-life issues to discuss.

Bugzilla

- For our 0.1 release we have attempted to have 0 outstanding release-blocker bugs.
- We have postponed 8 bugs until our 0.2 release but none of these affect usability of 0.1.
- At the time of writing, we have 28 bugs targetted at 0.2 but will likely end up with many more fixed.
- Due to the movement of a variety of our components from other bug tracking systems in the course of our development of 0.1, it is hard to get a grasp on bug-fixing metrics. A rough count of closed bugs gives 123 which is likely on the correct order of magnitude of bugs fixed in this release.

Standards

- Our project conforms to the following ad-hoc standards:
 - Fedora RPM packaging guidelines
 - <http://fedoraproject.org/wiki/Packaging/Guidelines>
 - Informal conventions around use of the GNU Autotools
 - GNU ChangeLog formatting
 - http://www.gnu.org/prep/standards/html_node/Style-of-Change-Log

UI Usability

- Our project aims to conform to the Eclipse user interface guidelines
- All of our user interface components support keyboard navigation
- For a future release we are investigating interactivity of our Valgrind BIRT-generated charts to support accessibility
- All of our strings are externalized but we currently have no language packs

Schedule

- We originally planned to release 0.1 in Q4 2008
- We slipped due to a number of new components being added (Valgrind, OProfile, Systemtap editor) and wanting to delay until their initial release
- Another reason for the delay was the fact that we wanted to use the new common build infrastructure for our builds
- Now that we have development procedures in place, we plan to deliver on time for future releases
- Our plan has been updated with more accurate future dates

Communities

- Our project has a strong relationship with the various Linux distributions (Fedora, Mandriva, Debian, Ubuntu, etc.)
- Prior to their contribution to this project, a few of our projects were hosted elsewhere and had disjoint bug tracking occurring at various sites
- The majority of our project's interactions occur on IRC (#eclipse-linux) and our mailing list (linux-distros-dev@eclipse.org)
- With this release, we hope to improve our feedback processes by centralizing on our update site and eclipse.org bugzilla

Communities continued

- Our project members often speak at conferences including EclipseCon, LinuxWorld, FUDCon, and the Red Hat Summit
- Our team members maintain the following blogs:
 - <http://overholt.ca/wp/> (part of Planet Eclipse)
 - <http://akurtakov.blogspot.com/> (part of Planet Fedora)
 - <http://picobot.org/wordpress> (part of Planet Fedora)
- We interact often with the CDT project and make use of the BIRT and CDT projects

Communities continued

- An update on our project's progress will be given at EclipseCon 2009
- Now that we have a standardized release process and plan, we will work to ensure our three communities are properly nurtured

IP Log

- Our IP log including information about all CQs, external contributions, and committers can be found here:
 - http://www.eclipse.org/projects/ip_log.php?projectid=techn

IP Issues

- The EMO explicitly asks during the Release Review if any Member would like to assert that this release infringes their IP rights.
- If so, the EMO and the project will follow the Eclipse IP Policy in discussions with that Member.