



Tools for mobile Linux Release Review 0.2 14 January 2009

Eric Cloninger

ericc@motorola.com

TmL Project Lead

Fabio Fantato

wfr004@motorola.com

TmL Engineering Lead

[TmL mailing list: dsdp-tml-dev@eclipse.org](mailto:dsdp-tml-dev@eclipse.org)

Release review data compiled for [Development Process 2.4](#)
(http://www.eclipse.org/projects/dev_process/development_process.php)

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TmL Background



- A sub-project of DSDP
(http://www.eclipse.org/projects/project_summary.php?projectid=dsdp.tml)
- 0.1 release was 10 October 2008
(<http://download.eclipse.org/dsdp/tml/downloads/drops/R-0.1-200810100100/>)
- 0.2 release scheduled for 14 January 2009
- Incubated in December 2006 and driven largely by Motorola
- Contributions from other mobile and embedded developers
- Goal is to provide support for development of mobile Linux applications on the Eclipse IDE using C/C++

Features (2.1)



- 0.2 project plan with Milestones and detailed Deliverables available on project web site (<http://www.eclipse.org/projects/project-plan.php?projectid=dsdp.tml>)
- Components:
 - Device framework
 - Provides support for the Devices and Services plugins
 - VNC Viewer
 - Provides the VNC viewer component. Contains a stand-alone library and plugins to use this library in a SWT viewer.
 - Protocol Component
 - Provides the Remote Frame Buffer (RFB) protocol used by the VNC viewer

Non-Code Aspects (2.2)



- User documentation and tutorials
 - End-user documentation is minimal. On-going effort to add API documentation, sample applications, and installation documentation.
 - Tutorial that explains [how to integrate the VNC viewer](#) into an Eclipse Ganymede shell targeting REACT OS and ARM Linux under QEMU. This information is being updated for Galileo. (http://wiki.eclipse.org/DSDP/TML/How_to_configure_TmL_demo)
 - Tutorial that explains [how to create plug-ins](#) to be contributed or making use of the TmL framework available for internationalization, logger entries, exception handling and common utilities for retrieve information from framework ([draft version available for 0.2](#)) (http://wiki.eclipse.org/DSDP/TML/Creating_TmL_Plugins_update, http://wiki.eclipse.org/DSDP/TML/Creating_TmL_Plugins_update)
- Current implementation is in US English. Code uses NLS Standard for retrieving strings and formatting numbers
 - Plan is to submit bundles to Babel project for Galileo train by M6 (13 March 2009)
- Slide decks presented at [EclipseCon 2008](#) and [LinuxWorld 2008](#) are available from the project wiki pages

API Status (2.3)



- [Eclipse Quality Standards](http://www.eclipse.org/projects/dev_process/eclipse-quality.php) (http://www.eclipse.org/projects/dev_process/eclipse-quality.php)
 - IP due diligence as per the [Eclipse IP Policy](#) and other Eclipse processes [\[5\]](#), [\[6\]](#), [\[7\]](#), [\[8\]](#)
- Incomplete API: Device (devices, services, state machine)
 - Specification – incomplete
 - Test Suite - incomplete
 - Implementation - yes
 - Clients - yes
 - Support Promise - yes
 - Package - public
- The device API added a contribution under [#236476](#) that provides a generic device plug-in for device types (https://bugs.eclipse.org/bugs/show_bug.cgi?id=236476)

Architectural Issues (2.4)



- The device API will be extended in 0.3 to support a Simulated end-to-end environment that provides an environment to integrate and test mobile enterprise applications
 - There is a bug to address this issue in Bugzilla ([#243500](https://bugs.eclipse.org/bugs/show_bug.cgi?id=243500)) (https://bugs.eclipse.org/bugs/show_bug.cgi?id=243500)
- Need Unit Tests
 - Unit tests will be created for the 0.3 release ([#243511](https://bugs.eclipse.org/bugs/show_bug.cgi?id=243511)) (https://bugs.eclipse.org/bugs/show_bug.cgi?id=243511)
- State Machine Mechanism
 - The mechanism used in the state machine in 0.1 was not thread safe and has been refactored in 0.2 ([#221739](https://bugs.eclipse.org/bugs/show_bug.cgi?id=221739)) (https://bugs.eclipse.org/bugs/show_bug.cgi?id=221739)
- Device interface refactoring
 - The extension point `org.eclipse.tml.device` has been replaced with `org.eclipse.tml.devicetype` in 0.2. The new extension point abstracts device types, allowing concrete implementations to share properties and services ([#236476](https://bugs.eclipse.org/bugs/show_bug.cgi?id=236476)) (https://bugs.eclipse.org/bugs/show_bug.cgi?id=236476)
- TmL 0.4 will use code from the DSDP Target Management project (TM) to connect. Plan to release TmL 0.4 in 3Q09. There will be changes to APIs and dependencies as a result.

Tool Usability (2.5)



- The tool provides VNC viewer functionality inside an Eclipse view. The interactions of the view are defined by the VNC protocol
- User interactions provided by TmL elements (e.g. property editors, preference pages, wizards, etc.) all use Eclipse SWT controls in a manner consistent with commonly accepted principles
- The user interfaces in TmL are separated from the framework underneath, so they could be replaced by adopters of the project

End-of-Life (2.6)



- The extension point `org.eclipse.tml.device` has been replaced by `org.eclipse.tml.devicetype` ([#236476](#))
(https://bugs.eclipse.org/bugs/show_bug.cgi?id=236476)
- [Ramp-down policy](#) for TmL 0.1 is available
(http://wiki.eclipse.org/DSDP/TML/Ramp_down_policy_0.1)
- For 0.3, no APIs are planned to be deprecated

Bugzilla



- 12 bugs currently resolved or closed as fixed up to 17-DEC-2008
- 63 open bugs, many of them work items for future releases
 - 23 already addressed in 0.3M4 in 17-DEC-2008
- 2 P2 bugs currently open
- 2 postponed to 0.3 for IP issues
- 1 bugs of any severity of types == blocker, critical, or major
- Main bugs categories
 - 9 bug fixes
 - 3 features improvements
- 3 bugs with external patches applied
- Limited discussions on bugzilla (area to improve)

Bugzilla (2.7)



- The current situation, as of 17 December 2008

Open bugs by target milestone	
0.1	61
0.2	15
0.3	61
Future	5

Bugs in Release 0.2	
Duplicated	1
Invalid	0
Fixed	12
postponed	2

Fixed bugs in Release 0.2 by Priority						
	Total	P1	P2	P3	P4	P5
critical	1			1		
major						
minor						
normal	8			8		
enh	3			3		

Fixed bugs in Release 0.2 by Contributor			
	External	Committer	Total
critical		1	1
major			
minor			
normal	1	7	8
enhancement	1	2	3
	2	10	12

- List of all bugs that are [still open in TmL 0.2](https://bugs.eclipse.org/bugs/buglist.cgi?cmdtype=runnamed&namedcmd=tml-02)
<https://bugs.eclipse.org/bugs/buglist.cgi?cmdtype=runnamed&namedcmd=tml-02>

Standards (2.7)



- Although the [Remote Frame Buffer protocol](http://www.realvnc.com/docs/rfbproto.pdf) is not an RFC, it is widely used. TmL uses versions 3.3 and 3.8 of the protocol. (<http://www.realvnc.com/docs/rfbproto.pdf>)
- New feature in 0.3 for viewing /proc file information uses
 - FTP
 - Telnet
 - TCF

UI Usability (2.8)



- All resources in the 0.2 release are provided in US English. All strings are stored and numeric formats are created according to Eclipse guidelines.
- All plugins store strings and other localizable resources inside bundles. For the Galileo train release, bundles will be submitted to the Babel project for localization.
- Externalization and Accessibility are not the focus of this release
- TmL provides no changes to the Section 508 compliance available in the Eclipse project as a whole

Schedule (2.9)



- All future dates tentative, except for 0.3
- 0.1 released on 10 October 2008. [Release slides](#) on TmL web site. (http://www.eclipse.org/dsdp/tml/reviews/ReleaseReview_DSDP-TmL_0_1.pdf)
- 0.1.1 release cancelled due to lack of need
- 0.2 (code freeze 17 December 2008, release planned 14 January 2009)
 - State Machine bug [#221739](#) (https://bugs.eclipse.org/bugs/show_bug.cgi?id=221739)
 - DeviceType contribution [#236476](#) + bugs arising from contribution [#250644](#) [#250290](#) [#252261](#) [#259153](#) [#259243](#)
 - Bug fixes [#247840](#) [#248663](#) [#251595](#) [#257116](#) [#257588](#)
- 0.2.1 following Eclipse 3.4.2 (~20 March 2009)
 - If necessary, as issues arise with Ganymede SR 2
- EclipseCon 2009 tutorial and demos will use 0.3 M6 (13 March 2009)
- 0.3 Galileo Release Train (25 June 2009)
 - Initial version of /proc file viewers using telnet/ftp ([#243225](#) [#243498](#))

Communities (2.10)



- Commercial adoption
 - TmL code is currently being used in several Motorola products that began shipping in August 2008. These projects will be updated to use the 0.2 TmL plugins in 1Q09.
 - TmL 0.2 is being developed for inclusion in upcoming products from MontaVista and Motorola
 - Queries from Symbian and Samsung about using TmL in their product(s)
- New members added to project in 2008
 - Two code committers added
 - Plan to add a committer from outside Motorola/Eldorado
 - New project lead (Eric Cloninger) and engineering lead (Fabio Fantato)
- Several external code contributions in 2008, reviewed for IP, and now committed in CVS
 - Considering elevating an external contributor to committer in 2009

Communities (2.10) cont'd



- Moderate activity on dsdp-tml-dev mailing list (area to improve)
- All work accounted for on Bugzilla
- Bi-weekly open phone calls since April 2007, with announcements to mailing list several days prior
- PR/Evangelism
 - EclipseCon 2007 – Short talk
 - EclipseCon 2008 – 2 talks (1 short, 1, long)
 - EclipseCon 2009 – 3 talks approved (tutorial, 1 hour, 10-minute)
 - LinuxWorld 2008 – Long talk
 - Individual recruiting activities
 - Discussions with other Eclipse groups for the Galileo train and beyond

IP Issues



Per Eclipse IP Policy, the project leadership verifies that ...

- ✓ ... the “about” files and use licenses are in place as per the Guidelines
- ✓ ... all contributions (code, documentation, images, etc) have been committed by individuals who are Members of the Foundation and are abiding by the Eclipse IP Policy (training through Committer HOWTO)
- ✓ ... 3rd party libraries have been documented in the release and reviewed by the Foundation's legal staff
- ✓ ... all contribution questionnaires have been completed
- ✓ ... the "provider" field of each plug-in is set to “Eclipse.org”
- ✓ ... the "copyright" of each plug-in is set to the copyright owner
- ✓ ... there are no 3rd party logos or fonts to be licensed under the EPL
- ✓ ... All jar packages contains “Incubation” label to indicate the currently project status

See the IP Log at

- <http://www.eclipse.org/dsdp/tml/development/tml-log.csv>
- http://www.eclipse.org/projects/ip_log.php?projectid=dsdp.tml
- <http://www.eclipse.org/dsdp/tml/ipLog.php>

IP Issues Speak-Up-Now (2.12)



- The proc file viewers were originally scheduled to integrate in TmL 0.2. The code is awaiting completion of an internal Motorola open source review since it was not part of the original TmL scope. It is being rescheduled for the 0.3 release. The code will be part of the first milestone after approval. (#[243225](https://bugs.eclipse.org/bugs/show_bug.cgi?id=243225) #[243498](https://bugs.eclipse.org/bugs/show_bug.cgi?id=243498))
(https://bugs.eclipse.org/bugs/show_bug.cgi?id=243225,
https://bugs.eclipse.org/bugs/show_bug.cgi?id=243498)

Project Plan (2.13)



- 0.2.1 in March 2009, depending on need from community
 - Based on Ganymede SR2
- 0.3 on the Eclipse Galileo train (25 June 2009)
 - Bug fixes as necessary
 - “Device proxy” framework with GPS reference implementation
 - /proc file viewers
 - Improved documentation
- 0.4 in 3Q09, integrates with DSDP-TM and TCF
- Project Plan is in CVS
 - <http://www.eclipse.org/projects/project-plan.php?projectid=dsdp.tml>

TmL Committers and Contributors



Christian Kurzke
Architect



Eric Cloninger
TmL Project Lead



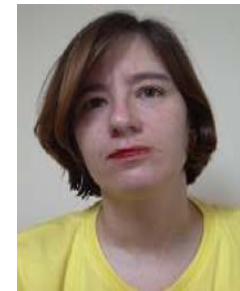
Daniel Franco



Otavio Ferranti



Fabio Fantato



Mauren Brenner
(emeritus)



Yufen Kuo

Eugene Melekhov

TmL Project Resources



- Project web site:
 - <http://www.eclipse.org/dsdp/tml>
- Project wiki:
 - <http://wiki.eclipse.org/DSDP/TML>
- Regular phone meetings:
 - <http://wiki.eclipse.org/DSDP/TML/TmLOpenPhoneMeetings>
- Developer mailing list:
 - <https://dev.eclipse.org/mailman/listinfo/dsdp-tml-dev>
 - dsdp-tml-dev@eclipse.org
- Update site
 - <http://download.eclipse.org/dsdp/tml/updates/0.1/>
 - <http://download.eclipse.org/dsdp/tml/updates/0.2/>