



Tools for mobile Linux Release Review 0.3 29 May 2009

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Release review data compiled for [Development Process 2.4](http://www.eclipse.org/projects/dev_process/development_process.php)
(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)
- Incubated in December 2006 and driven largely by Motorola
- Contributions from other mobile and embedded developers
- 0.1 release was 10 October 2008
(<http://download.eclipse.org/dsdp/tml/downloads/drops/R-0.1-200810100100/>)
- 0.2 release was 14 January 2009
(<http://download.eclipse.org/dsdp/tml/downloads/drops/R-0.2-200901142200/>)
- 0.3 release on 24 June 2009 with Eclipse Galileo
(<http://download.eclipse.org/dsdp/tml/downloads/drops/S-0.3RC-200905152200/>)
- 0.4 release planned for 4Q2009
- Long term plan is to expand scope to be more of a general “mobile development” project with reduced focus on Linux

Features



- 0.3 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
 - Linux /proc Tools
 - Provides Eclipse views to show CPU Load and Memory Map from the Linux /proc file system

Non-Code Aspects



- User documentation and tutorials
 - End-user documentation is minimal. On-going effort to add API documentation, sample applications, and installation documentation.
 - Tutorial and sample projects from EclipseCon 2009 are available from the conference page
 - Older samples and tutorial available from the wiki pages
- Current implementation is in US English. Code uses NLS Standard for retrieving strings and formatting numbers
 - Bundles submitted to Babel project for Galileo at M6 (13 March 2009)
- Slide decks presented at EclipseCon 2009, CELF 2009, [EclipseCon 2008](#), and [LinuxWorld 2008](#) are available from the project web pages

(<http://www.eclipsecon.org/2009/sessions?id=481>)

(<http://tree.celinuxforum.org/CelfPubWiki/ELC2009Presentations>)

API Status



- Eclipse Quality Standards (http://www.eclipse.org/projects/dev_process/eclipse-quality.php)
 - IP due diligence as per the Eclipse IP Policy and other Eclipse processes [\[5\]](#), [\[6\]](#), [\[7\]](#), [\[8\]](#)
 - IPzilla bugs [#3065](#) and [#3066](#)
- APIs (http://wiki.eclipse.org/Eclipse_Quality)
 - Specifications: incomplete
 - Test suites: no unit tests available, but there are sample components that use them
 - Implementation: complete within the scope of the current specifications
 - Clients: some components are used in products, but not all
 - Support promise: within the scope of the current specifications
- Note: /proc tools component has no APIs
- Device Proxy component will be available in 0.4 with new APIs
 - See bugs [#243500](#) and [#243504](#)

Architectural Issues



- Need Unit Tests
 - Unit tests will be created after 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)
- TmL 0.4 may use code from the DSDP Target Management project (TM) to connect
 - There may be changes to APIs and dependencies as a result.
- Plan to release TmL 0.4 in 4Q09
- After 0.4, project will be rescoped for Eclipse Helios time frame

Tool Usability



- 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 Eclipse UI Guidelines
- GUI code is separate from core code. This allows TmL adopters to use the core components while having a consistent GUIs by using their own GUI components

End-of-Life



- Ramp-down policy for TmL 0.2 is available
(http://wiki.eclipse.org/DSDP/TML/Ramp_down_policy_0.2)
- For 0.3, no APIs are deprecated
- For 2009-2010, there are plans to modify the scope of TmL to reflect current needs of the sponsors. This scoping may involve changing the name of the project as well as the package name, class names, etc.

Bugzilla



- 68 bugs currently resolved or closed as fixed from 18 Dec 2008 to 29 May 2009
- 17 open bugs, some of them work items for future releases
- 1 P2 bug currently open
- 1 bugs of any severity of types == blocker, critical, or major
- Main bug categories
 - 1 bug fix
 - 16 feature improvements
- 5 bugs with external patches applied

Bugzilla



- The current situation, as of 29 May 2009

Open bugs by target milestone	
0.1	61
0.2	15
0.3	75
0.4	3
Future	14

Bugs in Release 0.3	
Duplicated	4
Invalid	0
Fixed	68
Postponed	17

Fixed bugs in Release 0.3 by Priority						
	Total	P1	P2	P3	P4	P5
critical						
major	3			3		
minor	3			3		
normal	52	22	5	25		
enh	10		1	8		1

Fixed bugs in Release 0.3 by Contributor			
	External	Committer	Total
critical			
major	1	2	3
minor	1	2	3
normal	3	49	52
enhancement		10	10

- List of all bugs that are [still open in TmL 0.3](https://bugs.eclipse.org/bugs/buglist.cgi?cmdtype=runnamed&namedcmd=tml-03)
(<https://bugs.eclipse.org/bugs/buglist.cgi?cmdtype=runnamed&namedcmd=tml-03>)

Standards



- 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
 - Eclipse TCF project

UI Usability



- All resources in the 0.3 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 were submitted to the Babel project for localization at the M7 milestone
- 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



- 0.1 released 10 October 2008. [Release slides](http://www.eclipse.org/dsdp/tml/reviews/ReleaseReview_DSDP-TmL_0_1.pdf) on TmL web site.
(http://www.eclipse.org/dsdp/tml/reviews/ReleaseReview_DSDP-TmL_0_1.pdf)
- 0.2 released 14 January 2009. [Release slides](http://www.eclipse.org/dsdp/tml/reviews/ReleaseReview_DSDP-TmL_0_2.pdf) on TmL web site.
(http://www.eclipse.org/dsdp/tml/reviews/ReleaseReview_DSDP-TmL_0_2.pdf)
- 0.3 Galileo Release Train (25 June 2009)
 - Initial version of /proc file viewers using telnet/ftp ([#243225](#) [#243498](#))
- 0.4 release in 4Q2009
- After 0.4, for Eclipse Helios, TmL will be rescoped to have less focus on Linux and work with Pulsar and other projects to be more of a general “mobile development” project

Communities



- Commercial adoption
 - TmL code is currently being used in several Motorola products that began shipping in August 2008. These projects were updated to use the 0.2 TmL plugins in 1Q09
 - TmL 0.3 is being developed for inclusion in upcoming products from Motorola. Montavista and Nokia have contributed code to the project, but haven't announced that they are using it commercially
 - Queries from Symbian and Samsung about using TmL in their product(s)
- New members added to project in 2009
 - One code committer added (Mauren Brenner)
 - New engineering lead (Mauren Brenner)
- One external code contributions 2009, reviewed for IP, and now committed in CVS

Communities 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 – 1 talk (1 10-min short talk)
 - EclipseCon 2008 – 2 talks (1 1-hr long talk, 1 10-min short talk)
 - EclipseCon 2009 – 3 talks (1 2-hr tutorial, 1 1-hr long talk, 1 10-min short talk)
 - LinuxWorld 2008 – Long talk
 - Linux Foundation Consumer Electronics Forum 2009 – Long Talk
 - Individual recruiting activities

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



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

Project Plan

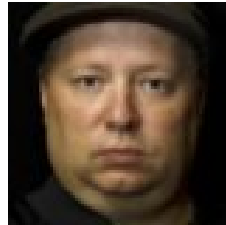


- 0.3 on the Eclipse Galileo train (25 June 2009)
 - Bug fixes as necessary
 - /proc file viewers
- 0.4 in 3Q09
 - Bug fixes
 - Device Proxy with GPS reference implementation
- Expand TmL into a more general “mobile development” project, regardless of platform or language, with contributions from Pulsar and MTJ.
- Project Plan is in CVS
 - <http://www.eclipse.org/projects/project-plan.php?projectid=dsdp.tml>

TmL Committers and Contributors



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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/>
 - <http://download.eclipse.org/dsdp/tml/updates/0.3/>