



*Koneki 1.0 Graduation Review*  
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# *Project Overview*



Koneki delivers a set of tools helping M2M (Machine-to-Machine) developers to write, simulate, and debug their applications.

The 1.0 version has focused on improving the out-of-the box experience for Lua Development Tools, its support of Lua 5.2, and the compatibility of the debugger with different kinds of Lua VMs



## *Koneki 1.0 features - LDT*

**Lua Development Tools** is an IDE for the Lua programming language. Features added in 1.0 are:

- Lua 5.2 support
- Debugger compatible with other VMs (e.g. LuaJIT)
- Richer AST



# *Project Health*

## Active Code Base

Koneki is built using Hudson, Maven and Tycho.

## Testing

- JUnit test cases for regression testing
- Continuous build
  - Runs after every push to the Git repository
  - Compile/Run tests/Deploy nightly repo

## Additional Testing

- Developers are encouraged to smoke test every new feature by updating from the nightly repository

# Project Health (cont'd)



## Documentation

- Documentation is crowd-sourced on the Eclipse Wiki and doc. plug-ins are automatically created at build time
- [http://wiki.eclipse.org/Koneki/LDT/Developer\\_Area/User\\_Guides/User\\_Guide\\_1.0](http://wiki.eclipse.org/Koneki/LDT/Developer_Area/User_Guides/User_Guide_1.0)
- Other documentation on the wiki
  - Advanced guides for users and contributors
  - Technical documentations

## Bugs

- **21 issues FIXED** for 1.0

	RESOLVED	CLOSED	Total
major	<u>4</u>	.	<u>4</u>
normal	<u>3</u>	.	<u>3</u>
minor	<u>4</u>	.	<u>4</u>
enhancement	<u>6</u>	<u>4</u>	<u>10</u>
Total	<u>17</u>	<u>4</u>	<u>21</u>



## Developers

- 3 active committers
- Several Code contributions from individual contributors

## Distributions

- LDT is distributed in the form of a standalone RCP product
- LDT Remote feature is available through update sites
- LDT is shipped as part of the IDE that Sierra Wireless provides to develop against its Lua embedded framework



## *Community (cont'd)*

### **Users**

- Great adoption of LDT... ~55,000 times!
- Available on the Marketplace
- Engage the community via Twitter (@koneki)
- Koneki LDT now part of the official CoronaSDK (major mobile dev. fwk) user guide as a recommended IDE

# Community (cont'd)



## Number of new posts on Koneki forum





## Community (cont'd)



Koneki presentations have been given at numerous conferences and workshops.

- JAX 2013, EclipseCon NA, EclipseCon France...

InfoQ interview:

<http://www.infoq.com/interviews/Benjamin-Cabe-Eclipse-M2M>

<http://wiki.eclipse.org/Koneki#Events.2FPresentations.2FArticles>

# APIs



As part of the graduation to 1.0, API of Lua Development Tools has been stabilized



## *Architectural Issues*

No outstanding architectural issue.

**Metalua** (Lua library parsing the source code under the hood) has been moved to Eclipse (and its maintainer is now a Koneki committer) and it's now much easier to integrate bug fixes and the like without requiring CQs.

**However**, Lua Development Tools relies on **DLTK** for most of the basic infrastructure, and it can sometimes be difficult to collaborate with the team: late releases, bug reports sometimes ignored (see [1]).

[1] bug reports to DTLK by Koneki committers with no feedback to the reporter: <http://goo.gl/3clwv>

## *UI usability*



As part of our continuous improvement of the developer experience, Koneki now ships with an embedded Lua VM which makes it easier to run a Lua script with a vanilla installation of the IDE



## *Non-code aspects*

Koneki has proper i18n, and resource bundles are available in Babel

The Koneki team has strong interactions with the M2M Industry Working Group

The Lua Remote development feature is now used in combination with Mihini and Mihini Execution environment for making it simple to develop and debug remote Mihini applications. This was demoed in the EclipseCon 2013 and EclipseCon France 2013 tutorials

## IP Log

- The Eclipse IP policies and procedures have been followed
- The IP log for the 1.0 release has been submitted and approved
- [http://www.eclipse.org/projects/ip\\_log.php?projectid=technology.koneki](http://www.eclipse.org/projects/ip_log.php?projectid=technology.koneki)

# *End Of Life Strategy*



- No new features are being deprecated

# Schedule



Next release: Koneki 1.1 – end 2013.

- Stabilize error handling
- Improve AST and content-assist (e.g. for require constructs)
- Improve code formatter (long comments, Lua formatting convention as a default setting, ...)
- Improve debugger (tables display, ...)

Tentative plan is already at

[http://wiki.eclipse.org/Koneki/LDT/Developer\\_Area/Project\\_Plan/1.1](http://wiki.eclipse.org/Koneki/LDT/Developer_Area/Project_Plan/1.1)



# Feedback



- **Newsgroup:** `http://www.eclipse.org/forums/eclipse.koneki`
- **Mailing lists:**
  - [koneki-dev@eclipse.org](mailto:koneki-dev@eclipse.org) (= Release Review communication channel)
- **Eclipse Bugzilla**
  - Technology
  - Product: Koneki



## *Credits, Kudos*

Julien Desgats for long term support on the Lua debugger.

Fabien Fleutot for his expertise and work on Metalua.

Marc Aubry, Simon Bernard and Kévin Kin-Foo, the main committers.

The participants to the 2 EclipseCon tutorials who provided very valuable feedback!