Project Overview

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

The 0.8 version has focused on the delivery of a first-class IDE for the Lua language that will be part of the Juno repository.

The other important feature is a simulator for the OMA-DM protocol.

Important Milestones

- Creation review: May 11th, 2011
- Project plan: http://www.eclipse.org/koneki/project-info/project-plan-0.8.xml
Lua Development Tools is an IDE for the Lua programming language. Features available in 0.8 are:

- Syntax coloring
- Error markers
- Outline
- Code folding
- Code templates/snippets
- **Content assist**
- Code navigation
- Semantic highlighting
- Code formatter
- **Debugger**
OMA-DM is a protocol used to remotely manage mobile devices and modules that are used in Machine-to-Machine solutions. Koneki 0.8 includes a simulator for OMA-DM communications:

- **Sessions visualization**: The OMA-DM simulator provides you with a visual dashboard from where you can see the current state of your local device management tree.
- **Monitoring alerts**: You can use the simulator to send monitoring alerts for one or many leaf nodes.
- **FUMO**: You can simulate FUMO operations for which you will be able to indicate either a success or a failure in the update process, and then test what are usually tricky cases.
Project Health

Active Code Base (git)
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, sign, deploy nightly repo

Additional Testing
Developers are encouraged to smoke test every new feature by updating from the nightly repository
We plan on adding more tests for the Lua AST in the 0.9 release, since it is what supports the rest of LDT.
**Project Health (cont’d)**

Documentation

Documentation is crowd-sourced on the Eclipse Wiki and documentation plug-ins are automatically created at build time


Other documentation on wiki

- Tutorials/FAQ
- Technical/design discussions

Bugs

- 96 bugs OPENED during 0.8
- 72 FIXED!
Community

Developers

3 active committers
Several Code contributions from individual contributors

Users

Great adoption of LDT by the game developers community
It has been downloaded 8000+ times!
OMA-DM simulator is a niche tool but a few feedbacks have been provided on the forum
Engage the community via Twitter (@koneki)
Community (cont’d)

- ~2500 unique visitors/month on Koneki website
- Forum is quite active (5-10 posts/week) even though the project is only 1 year old
- Lua Development Tools has been downloaded 8000+ times!
  - Strong adoption by game developers
- Koneki presentations at conferences and workshops.
  - EclipseCon Europe, EclipseCon NA, EclipseDay Toulouse, PCCA Workshop, Lua Workshop, DemoCamps ...
  - http://wiki.eclipse.org/Koneki#Events.FFPresentations.FFArticles
- Very positive blog posts. Example:
  - http://www.thijsschreijer.nl/blog/?p=604
**Distribution**

LDT is distributed in the form of a **standalone RCP product** to ease adoption by developers who are not regular Eclipse users.

OMA-DM simulator and LDT are available as update sites, and installable from the **Eclipse MarketPlace**.

LDT is shipped as part of the IDE that Sierra Wireless provides to develop applications for its Lua embedded framework.
APIs

- Koneki is a 0.8 release but still provides Eclipse Quality API
- We plan to provide APIs to ease the inclusion of Koneki bits in other tools
Architectural Issues

No critical architectural issue identified but code refactoring will be performed in early 0.9 to limit the number of unnecessary plug-ins.
UI usability

- Some users are complaining that LDT does not provide a Launch Configuration for Lua apps
  - The reason is that there are many different ways to bootstrap a Lua VM
  - We will try to provide a first version of a Launch Configuration for 0.9 release.
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
  - M2M metamodel
  - Development use cases
IP Log

- The Eclipse IP policies and procedures have been followed
- The IP Log for the 0.8 release has been approved by Eclipse legal already
End Of Life Strategy

- 0.8.0 Release
  - No new features are being deprecated
Schedule

- Next release: Koneki 0.9.0
  - Winter 2012
  - 1.0 Graduation with Kepler
Feedback

- **Newsgroup:** [http://www.eclipse.org/forums/eclipse.koneki](http://www.eclipse.org/forums/eclipse.koneki)

- **Mailing lists:**
  - koneki-dev@eclipse.org
    - (= Release Review communication channel)

- **Eclipse Bugzilla**
  - Technology
  - Product: Koneki
Credits & Kudos

Julien Desgats for his tremendous work on the Lua debugger
Ludovic Delfau and Pierrick Marie for their work on the OMA-DM simulator
Marc-André Laperle for his code contributions and overall valuable feedback
Simon Bernard and Kévin Kin-Foo, the main committers