



## *Mobile Tools for the Java Platform (MTJ) – 0.7 Release Review*

Mika Hoikkala/Petri Virtanen



# *Review Topics*

- Overview
- Community
- Schedule
- Features
- Extension Points
- Supported Standards
- IP Review
- Documentation status
- Quality status
- Future Plans
- Q&A

# MTJ Project Overview



- The scope of the MTJ is to enhance Eclipse platform to support Java development for mobile devices
- The project was proposed autumn 2005 by Nokia and it was approved January 24 2006
- Is part of the Device Software Developer Platform top level project
- Project requires Eclipse 3.2 and EMF 2.2.x
- Project homepage: <http://www.eclipse.org/dsdp/mtj/>

# Community



- Major Participants
  - Nokia (6 committers)
  - IBM (1 committer and 1 major contributor)
  - EclipseME (Major contributor: Craig Setera)
  - SonyEricsson (contributor)
- Other Participants
  - Sybase, Apogee Software, Sprint, Motorola, Four2B, Tira Wireless, RIM, Sysline Inc, Antenna, ShareME Technologies
- Bi-weekly status conf calls
  - Latest status provided and discussed
  - Possibility for developers to provide ideas and proposals
- Face-to-Face meetings arranged two times during 2006

# Community, cont.



- Conferences
  - EclipseCON 2006: long talk
  - Java ONE 2006: presented at Eclipse booth
  - Eclipse Summit Europe 2006: talk

# *MTJ 0.7 Schedule*



- 0.7 release schedule
  - M1 – 12 Sept
  - M2 – 2 Oct
  - RC1 – 25 Oct
  - R0.7 – 8 Nov

# MTJ 0.7 Features

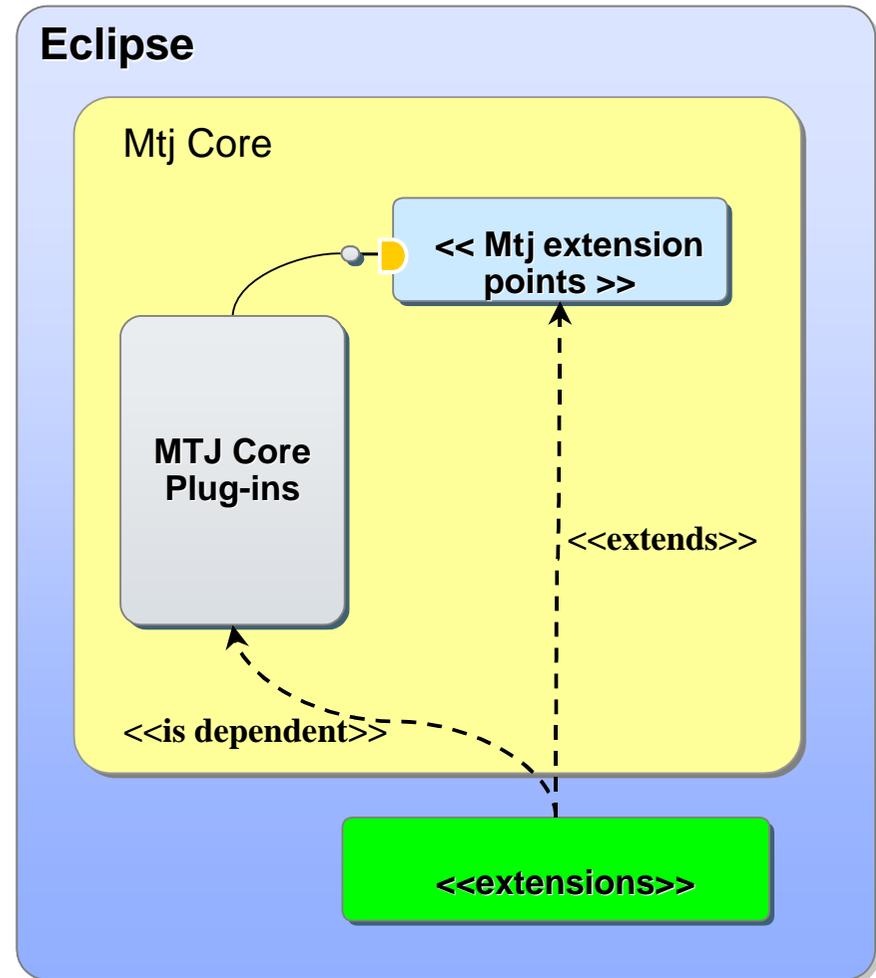


- Tools to develop mobile Java applications.
  - Create a project (MIDP specific and general Java ME) wizard
    - Simple template for MIDP application (Hello World)
  - Create a code
  - Mobile target SDK management
  - Build tool (compile and create application package)
  - Run and Debug in emulators
  - Management for keys & certificates and signing tool for applications
  - Transfer to real Device (only Nokia, delivered from Nokia site)
- User and developer documentation

# Extension points



- Runtime management framework
  - adding device adapter to manage emulators + real devices
- Build framework, customized and extensible build process
  - Packaging (CDC, CLDC, Java in Palm devices, Java in Nokia devices,...)
  - Signing (differences between devices)
- Deployment framework
- Developer documentation and API javadocs





## *Supported Standards*

- Mobile Information Device Profile (MIDP) 1.0/2.0
- Connected Limited Device Configuration (CLDC) 1.0/1.1
- Unified Emulator Interface (UEI)
- JDWP (Java Debugging Wire Protocol)

# IP Review



- All code under EPL?: Yes (except two 3<sup>rd</sup> party components, see project IP Log)
- About files and license files are complete and correct?: Yes
- All significant and third-party contributions have been reviewed by Eclipse legal?: Yes (see project IP log)
- All committers have completed Eclipse Committer Agreements?: Yes
- Project IP log complete and approved by eclipse legal. Available <http://www.eclipse.org/dsdp/MTJ/development/mtj-log.csv>

# Documentation Status



- User Documentation
  - Near comprehensive user documentation available in Eclipse Help.
  
- Developer Documentation
  - Initial developer documentation available in Eclipse Help. Covers basic architecture, preliminary extension points, and gives brief examples
  - Javadocs from extension points to provide API references (included in Eclipse Help)
  - More Architecture and Design documents available in CVS.

# Quality Status



- JUnit tests integrated with the build process ([org.eclipse.mtj/tests](http://org.eclipse.mtj/tests)). Unit testing mostly done during the development. All tests passed.
- System tests (manual) done for every released build during the whole development cycle.
- Bug counts
  - 6 Open (5 Bugs, 1 enhancements)
  - 72 Fixed (66 Bugs, 6 enhancements)

# Future Plans



- MTJ version 1.0, Q3/2007
  - With needed quality
  - With needed features (to have “full” development environment)
  - With needed documentation
- Content & Tasks
  - Fixes and enhancements to R0.7
    - Finalize the Extension APIs
    - Enhance documentation
    - Project based preferences
    - Support for non UEI SDKs (user provides the information)
    - Enhance build mechanism to manage resources
    - Bug fixes
  - Visual Designers
    - LCDUI
    - eSWT (co-operation with eRC, which now part of the DSDP)
  - Fragmentation
    - Build time solutions e.g. pre-processing
    - Device Information database access
  - Obfuscation
    - External obfuscators are possible to plug-in
    - Possible one default integrated
  - New Profiles and configurations
    - CDC
    - Foundation Profile, Personal Profile (no AWT visual editor), Personal Basis Profile
    - MIDP 2.1 support, MIDP 3.0 support (not included, but may come to the picture)
  - Mobile JUnit
  - Localization (low)
    - Manage resources
    - Visual designer support
- Further grow the community



## Questions and feedback

- Please send us feedback, requirements and issues at
  - Newsgroup: `eclipse.dsdp.mtj`
  - Mailinglist: `dsdp-mtj-dev@eclipse.org`
  - Bugzilla: [https://bugs.eclipse.org/bugs/enter\\_bug.cgi?product=MTJ](https://bugs.eclipse.org/bugs/enter_bug.cgi?product=MTJ)
- Please visit the MTJ website

<http://www.eclipse.org/dsdp/mtj/>

# Thanks!