



Mobile Tools for Java 1.2 Release

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Release Review Agenda



- MTJ Overview and History
- Features
- Non-Code Aspects
- API Status
- Architectural Issues
- Tool Usability
- End-of-life
- Bugzilla
- Standards
- UI Usability
- Schedule
- Communities
- IP Issues
- Next Release Project Plan

A Brief MTJ History



- MTJ Project was submitted by Nokia in 2005
 - Main project contributors were Nokia and IBM
- Mobile application development environment
 - **CLDC** and **CDC** based devices
 - **Deploy** and **Execute** an application
- Focus was on providing a **framework** that other vendors can extend to create their own JavaME tools
- Current MTJ codeline is rebooted using the **EclipseME**



- Project was rebooted with the leadership of Motorola
- Contributions from different companies such as:
 - Nokia,
 - Research In Motion
 - Sony Ericsson
 - IBM
- MTJ was part of Eclipse Helios Train
- MTJ is also one of the core components of Eclipse Pulsar Package
 - Eclipse package for Mobile Development
- MTJ is distributed via various channels
 - Pulsar
 - MTJ Download site
 - Eclipse Helios Update Repository
 - Eclipse Marketplace

Features



- MTJ is done in terms of basic features
- Current focus is mainly bug fixes
- Looking for ways to provide better vendor SDK and vendor API integrations

Non-Code Aspects



- Requirements and system test cases
 - [Requirements document](#)
 - [Manual System test cases document](#)
 - All documents reviewed with the community
- ISV documentation
 - Includes [Javadoc and a developer documentation](#)
 - Automatically updated from nightly builds
 - [MTJ Webinar](#)
 - [MTJ Video](#)
- Working Example Code
 - All extension points have sample code that shows how to use them
- Conference talks
 - EclipseCon 2010



- MTJ 1.0 defined the first MTJ API release
 - Based on initial EclipseME API with some improvements
 - Add new APIs
- API classes were broken into internal and public classes
 - MTJ 0.9.1
 - Core: 210 classes/interface
 - UI: 339 classes/interface
 - MTJ 1.0
 - Public:
 - Core: 54 classes / interfaces
 - UI: 11 classes / interfaces
 - Internal:
 - Core: 219 classes / interfaces
 - UI: 357 classes / interfaces
- Assumption was to leave as public only a minimum set of classes/interfaces
- All public APIs still declared as provisional

API Status



- Core API is broken into 6 packages
 - Build, Launching, Persistence, Project, SDK and Symbol APIs
- All packages have
 - Full javadoc and examples on how to use the classes
 - Only manual test cases (there was not time to implement automated test cases)
 - Each package have at least two clients inside MTJ
- **No API changes on MTJ 1.2**



- 8 extension points
 - 2 originally from EclipseME
 - 6 added on MTJ
- All extensions have
 - Full detailed description
 - A sample plugin that shows how to use it
 - At least one client inside MTJ
 - Commercial clients are under development on Nokia and Motorola
- A new extension point is added to MTJ 1.1
 - SDK Extension API (Research In Motion contribution)
- **No extension point changes on MTJ 1.2**

Architectural Issues



- MTJ UI still need to be refactored
 - Most of the work done until focus on MTJ core
 - Still need to do some cleaning on MTJ UI
 - Remove unnecessary classes
 - Refactor it
 - Provide more extensions
- Need to provide more than MIDP support
 - MTJ API enables non-MIDP development environment
- Need Unit Tests
 - Original EclipseME did not have a lot of unit tests
 - This effort depends on creating a well defined API



- As a tool MTJ inherited all the good usability that was already available on EclipseME
- Developer is able to execute all main operations that are associated with JavaME development
 - Create MIDlet suites and MIDlets
 - Edit JAD file
 - Build & Sign the MIDlet suite
 - Import / Edit JavaME SDKs
 - Run & Debug MIDlet
- Several improvements were made on the workflow to make it easy to execute some of those tasks
- MTJ 1.2 adds a new Import/Export wizard to improve deployment unit creation usability

End-of-life



- All APIs and Extension Points available on 1.0.X are still available

Bugzilla



- 15 bugs resolved since the last major release (MTJ 1.1)
- Open discussions on bugzilla
- No major bugs on final 1.2 release

Standards



- Mobile Information Device Profile Specification
 - Version 2.1: <http://www.jcp.org/en/jsr/detail?id=118>
- Connected Limited Device Configuration Specification
 - Version 1.1: <http://www.jcp.org/en/jsr/detail?id=139>
- UEI Specification is implemented on MTJ
 - Version 1.0.2 http://java.sun.com/j2me/docs/uei_specs.pdf

UI Usability



- All visible UI strings are externalized
 - Externalization done via Eclipse NLS
- MTJ is also part of Eclipse Babel
- Accessibility were not the focus of this release

Schedule



- Focus on API related issues and major bug fixes
 - Limited amount of code changes in MTJ 1.2

Communities



- Contributors
 - There is a lack of contributions
 - Currently the work is being handled by individuals
 - There is also contributions from Research In Motion and Nokia, but the project misses a stronger leadership
- Adopters
 - Eclipse Pulsar is discontinued
 - Nokia is interested to provide extensions
- Users
 - A good number of download both from MTJ itself and Eclipse Pulsar
 - Discussions on the user's forum



As per the Eclipse IP Policy, the project 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)
- ... all significant contributions have been reviewed by the Foundation's legal staff – even if written by committers prior to joining Eclipse
- ... third-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 - DSDP"
- ... the "copyright" field of each plug-in is set to the copyright owner
- ...there are no 3rd party logos or fonts to be licensed under the EPL
- See the IP Log at
<http://www.eclipse.org/dsdp/mtj/development/mtj-log.csv>
<http://www.eclipse.org/dsdp/mtj/ipLog.php>

Future Plans



- Future of MTJ now is unclear since it lacks contributors
 - It has a large user base and maybe it will continue as it is until there is market for MIDP/JavaME development
- Other option is to establish MTJ as the Eclipse mobile IDE environment
 - Add Android support?
- MTJ Team needs to work with the community to show the features that are currently available on MTJ 1.2
 - Conferences
 - Articles
 - Tutorials



Thank You