m2e 1.1 Release Review

Planned Review Date: [Date]

Communcation Channel: m2e-dev@eclipse.org

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Introduction

- m2e provides both a framework for building Maven-centric Eclipse tools and a set of tools and user interface elements directly consumable by Eclipse Users.

- As a framework, m2e provides facilities to import and configure Maven projects in Eclipse workspace as well as APIs that allow m2e extensions to access Maven project metadata and participate in Maven project configuration and workspace build.

Introduction cont'ed

- For the end user, m2e provides

  - wizards to import existing and to create new Maven projects

  - rich form-based and text-based pom.xml file editor

  - launch configuration types to launch Maven build directly from Eclipse IDE

  - access Maven repository index to browse repository contents and in various code-assist

- JDT integration, both directly useful to endusers and extensible

Project history

- m2e started as "m2eclipse" at codehaus in 2005

- Codebase moved to Sonatype public SVN repository in 2008 and to a public Github repository in 2010

- Proposed as Eclipse project in 2008 but actual move was delayed due to m2e dependency on prereleased version of Maven 3.0 (released on 2010-10-08)

- m2e 1.0 was released in June, 2011, as part of Eclipse Indigo simultaneous release

- m2e was #2 most downloaded on Eclipse Marketplace in Jan-May 2012

Features

- The following features have been added or significantly reworked in m2e 1.1 release

    - Embedded Maven runtime based on Apache Maven 3.0.4

    - Reworked and improved support for automatic code generation

    - New customizable "Convert to Maven Project" implementation

    - Overall usability, stability and performance improvements

    - Reworked and significantly simplified development environment setup

Non-Code Aspects

- Localization, Internationalization, Accessibility

  - All m2e strings are externalized, but only English strings are provided.

  - m2e development team did not do any localization and/or accessibility testing due to resource constraints.

- Active user and development mailing lists as well as #m2eclipse IRC channel at codehaus.

- User and Developer Documentation and Wiki are outdated and largely not applicable to m2e 1.0+

APIs, workspce compatibility

- m2e 1.1 is backwards compatible with m2e 1.0, extensions that work with 1.0 are expected to work with 1.1 without changes, but not vice versa.

- There were no workspace metadata format changes between version 1.0 and 1.1, the two versions are expected to work for the same workspace.

Architectural Issues

- m2e continues to suffer from lack of proper support for nested workspace projects

- Lack of support for proper classpath separation between test and main/production source paths in JDT is another long-standing problems that affects m2e.

Tool Usability

- Generic tools for working with Maven projects inside Eclipse workspace

  - Automatic discovery and installation of required m2e extensions based on pom.xml

  - Feature-rich pom.xml editor, error markers and quick-fixes for common problems and best practices

  - Maven launch configuration types

  - Automatic project dependency resolution

- Support for "plain" Java projects out-of-the box via JDT integration

  - JDT project configuration based on pom.xml

  - Automatic compile classpath management

  - Maven specific classpath in RunAs JavaApplication and JUnitTest

Bugzilla

- From 2011-07-01 until 2012-05-31
    - 335 bug records were opened
    - 300 bug records were resolved, out of which 110 were closed as "FIXED"
    - Majority of bug records were opened by non-committers
- As of 2011-05-31, there are 197 outstanding bug records

Standards

- m2e 1.1 is fully compatible with pom.xml format used by Maven 3.0.x, 2.1.x and 2.0.x

- m2e 1.1 is fully compatible with Maven "default" repository layout and Maven repository Index format

- m2e 1.1 provides limited support for Maven Archetype descriptor format

UI Usability

- m2e team did not evaluate m2e conformance to the User_Interface_Guidelines

- The code is expected to support multiple languages but this has not been tested by m2e team

Project Health

- Moderately active codebase

    - 159 commits from 2011-07-01 to 2012-05-31

- Separate git repository at Github for unit and integration tests due to significant effort involved in moving test code and its dependencies to Eclipse

- m2e 1.1 did not have publicly accessible CI build

    - work is being done to setup CI system at http://ci.tesla.io:8080/job/m2eclipse-core/

Schedule

- m2e build and release schedule is aligned with Eclipse yearly simultaneous release
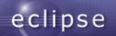
Communities

- Active user community

    - Over 100 messages/month on average on m2e-users mailing list in the first half of 2012

- Active developer and adopter communities

- Fred Bricon from RedHat joined m2e development team

- All project decisions are discussed on m2e-dev mailing list

- Active irc://irc.codehaus.org/m2eclipse IRC channel

- Sonatype presented m2e 1.0 during Eclispecon 2012

- m2e team maintains a number of opensource extensions at Github that are both useful to endusers and as working examples for adopters

- Close collaboration with Apache Maven; collaboration with m2e/wtp, JBossTools and other opensource projects

Committer Diversity

- Developers from Sonatype and RedHat work on m2e core

IP Log

- m2e 1.1 IPLog has been approved by Eclipse IP team.

IP Issues

Notes

eclipse

Credits and Kudos

- Welcome Fred Bricon of RedHat as a new m2e-core committer!