

JSR 363

First meeting

AGENDA

- Use cases that should be part of the API/RI
- The current state of JSR363 (API, RI)
- JUG participation

USE CASES

- “Java developers who work with physical quantities (such as developers in the scientific, engineering, medical, and manufacturing domains) need to be able to handle measurements of these quantities in their programs.”
- “The RI should support units in the SI system”

USE CASES

- This JSR specifies one or more Java packages for the programmatic handling of physical quantities and their expression as numbers of units. The specification includes:
 - Interfaces and abstract classes for unit of measurement operations:
 - Checking of unit compatibility
 - Expression of a quantity in various units
 - Arithmetic operations on units and quantities
 - Concrete classes implementing the standard types of units (such as base, supplementary, and derived) and unit conversions.
 - Classes for parsing unit specifications in string form and for formatting string representations of quantities A set of predefined units based on at least one of
 - ISO 80000
 - UN/CEFACT
 - Unified Code for Units of Measure (UCUM)

USE CASES

- The packages are primarily targeted at Java ME Embedded (CLDC, MEEP). This JSR should have few or no dependencies outside the packages and types defined by CLDC 8. Where applicable a RI may have dependencies in a different platform, if such specialized RI for Java SE Embedded was desired. The core API must be portable across all supported platforms and profiles.
- (<https://jcp.org/en/jsr/detail?id=363>, item 2.3)

USE CASES

- So, do we handle Java SE (Embedded or not?)
 - Yes! But not as EG, it would be community effort
 - If so, how?
 - Separate project for SE 8
- (Minimal) Changes for Java SE / OpenJDK
 - Change JUnit for TestNG
 - Make better use of Lambdas

CURRENT STATE

- 6 projects in API
- 1 project in RI
- Complaints about being too modular
 - Modularity can be “documented only”?
 - Gains in size?

CURRENT STATE

- Merge all API into one?
 - We'll try 2 versions:
 - Core + Basic infrastructure (Project Core), Everything else but quantity (Project "Extras") and Quantity.
 - Core + Basic infrastructure (Project Core), Everything else (Project "Extras")
- Merge all RI into one?
 - One for ME (RI)
- How do we support Java SE?
 - Different project?
 - One for SE (Project SE)

JUG PARTICIPATION

- Mohamed Taman (MorrocoJUG) is in EG, but not the JUG
 - No specifics on how they'll participate
- SouJava is not in EG as well
 - Otávio Gonçalves de Santana is already working with us.
- Otávio is legally OK and will work on Project SE, so no EG requirements.
- JUGs can't join the EG
- Adopt-a-JSR page changes?
 - Leonardo will make the page changes by end of week/weekend

MEETING PARTICIPATION

- Karen Legrand
- Leonardo Lima and Gustavo Sampaio, V2COM
- Werner Keil