Java™ Microedition Embedded Profile (MEEP) – JSR-361

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About this JSR

• Update of the Information Module Profile NG (JSR-228) in order to conform to recent requirements of the Embedded Market

• Improvement of application model

• Introduction of several new APIs on an optional package base

• Prepare adjustment with Java SE
Introduction

• Target platform: Java ME

• Underlying configuration: CLDC-8 (standard under construction in parallel)

• Satisfies special needs:
  – MIDP is not flexible enough for embedded devices in the M2M area
  – Full Java platform is too large for most embedded devices
Business/marketing/ecosystem justification

• Challenges of Small Embedded Market
  – Robust
  – Long-life remote operation
  – Highly integrated
  – In-market values-add
  – Intelligence
  – Low footprint / power aware
  – Up-stack value
  – Economies of scale
  – Separate HW / SW dependence
History

• Submitted: JavaOne SF September 2012

• Stages so far:
  – EG Formation

• Start of EG work delayed
  – Legal issues to be clarified (usage of IP of other JSRs like IMP-NG and MIDP 3)
  – Analysis of the market requirements had to be finished
Technical scope and features (1)

- Scope of “Embedded” has grown heavily since the times of IMP and IMP-NG
- New capabilities = New Requirements
- Optionality
  - High-end devices with sophisticated features vs.
  - Low-end modules with huge number of units, very limited memory and the necessity to be cheap
  - Provisioning not always a MUST
- Long-life remote operation
- Separate HW / SW dependence
• New
  – Line-oriented Display API
  – Event Management (adopted from MIDP 3)
  – Power Management
  – Cellular Network Management
  – Extended SW (Application) Management
  – Inter-Application Communication (adopted from MIDP 3)
  – Services
  – Concurrency and LIBlets (as in MIDP 3)

• Improved
  – Record Management System (RMS)
  – Application Lifecycle
The Expert Group

• EG is small, but representative

• Adepts of the ecosystem and good contributors
  – Cinterion (IMP-NG)
  – Aplix (MIDP 3)
  – Noth Sixty-One (in charge for Nokia JSRs)
  – 2 individuals

• So far two meetings (telco) to discuss requirements and speclead specification draft

• Collaboration Tools:
  – JCP Site (including EG private area)
  – JSR Project website (java.net)
Publicity

- Oracle Open World / JavaOne San Francisco 2012
  - "CON2984 – IMP.next: A Profile for an Embedded World with Increasing Demands"

- Submitted Session application for Oracle Open World / JavaOne San Francisco 2013 as well

- Legwork about JSR-361 for Werner Keil‘s contribution at GeeCON
Collaboration with other community groups

• Close collaboration with JSR-360 “CLDC-8” as this becomes our underlying configuration
  – EGs have a large intersection

• Potential collaboration with other, upcoming JSRs
  – Peripheral I/O?
  – Maintenance Release SATSA?
Schedule

• Early Draft Review: July 2013
• Public Review: September 2013
• PR Vote: November 2013
• PR Approval: December 2013
• Final Draft: January 2014
• Final Release: February 2014
• RI and TCK are developed by Oracle engineering
• No open-source project
Participation and transparency

- JSR page on JCP.org

- Pointer to the “JSR project website" (Java.net.)
  - https://java.net/projects/jsr361/pages/Home
Mailing lists or forums

• Java.net project has an observer mailing list where everybody can register
  – jsr361-observers@jsr361.java.net

• The complete communication of the expert group (using the EG alias) is forwarded to this observer mailing list

• There is also a mailing list for providing issues
  – issues@jsr361.java.net
Thank you!
http://jcp.org