Java Micro Edition

Current state, and where are headed to?

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Leonardo Lima

CTO

llima@v2com.mobi

Java ME 8
State at launch

- **Java ME 8 JSRs (360 and 361) finished in 2014**

- **Closed the gap between Java SE and ME**

  - And the idea was to keep the gap narrow: "Java ME & Java SE release cycles are in sync" (J1 LAD 2015, by Simon Ritter)

- **Defined a good Java platform for embedded devices**

  - better device peripheral interfaces

  - multiple midlets running in the same environment

  - well defined lifecycle for midlets, isolation of underlying HW

  - unique over-the-air update with guarantees that made updates easy

Java ME 8
State at launch

- ‣ **Embedded devices in this case are really small, such as 256 kB RAM and 1 MB ROM for the VM**

    - ‣ Java SE 8 Embedded has 32MB RAM and 11MB ROM for the VM alone.

- ‣ **"Bootstrap" support for Raspberry Pi and some HW vendors (like NXP (then Freescale), Qualcomm, STMicro)**

- ‣ **So Java ME 8 was a good progress with a lot of promises, such as keep SE/ME in sync.**

- ‣ **But, after 2 years…**

Java ME 8
Current state - after 2 years

- ‣ **Vendor support? Who sells modules with Java ME 8?**

- ‣ **Java ME "messengers" are gone (much like Java EE's)**

  - ‣ Oracle points to Terrence Barr's and Hinkmond Wong's Weblogs, both no longer with Oracle

- ‣ **No new Java ME content for JavaOne 2016, no JSR yet filled for it**

Java ME 8

Current state - after 2 years

- ‣ **Oracle is "quiet" about it for a while now:**
  - When asked about "Oracle's IoT strategy", the presentation was a product (IoT CS) and not an platform such as Java SE/EE, at the **June 15-16 2015 F2F meeting**.

  - On the same meeting, "Mike said that we need a Java platform strategy that will benefit the entire Java ecosystem"

- ‣ **I've been asking since August/2016 for a statement on Java ME future, but Oracle's response is none**

Java ME …9?

Will there be a Java ME 9?

- ‣ **If the idea before was to close the gap between Java SE and ME, are we to expect a Java ME 9?**

- ‣ **Maybe Java SE modularization will make ME irrelevant?**

  - • Or maybe we'll just have Java SE Embedded and that's it?

- ‣ **What about the unique parts of ME, such as a well defined provisioning mechanism, security measures?**

Java ME …9?
What would I like to see there

- ▸ **Continue to close the gap between the languages (Stream support would be great)**

- ▸ **Support for emerging standards**

  - • REST client

  - • Communication protocols such as MQTT and/or COAP

- ▸ **Expansion of the Device IO capabilities**

- ▸ **Expansion of the OTA for new networks and protocols**

- ▸ **Continued support for multi-midlet environments**