

Mobile Runtime for Java Applications (JRT) Roadmap for Nokia Symbian Devices October 2009



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Now & next? – Mobile Runtime for Java Applications

2009

2010

1H

2H

1H

2H

JRT base APIs

- MIDP 2.1 (JSR-118) & CLDC 1.1 (JSR-139)
- MSA subset (JSR-248)
 - File and PIM (JSR-75)
 - Bluetooth 1.1 (JSR-82)
 - Multimedia 1.2 (JSR-135)
 - 3D Graphics (JSR-184)
 - Wireless Messaging 2.0 (JSR-205)
 - Vector Graphics 1.1 (JSR-226)
- Web Services 1.0 (JSR-172) - Not part of SF contribution
- Location 1.0 (JSR-179)
- Security and Trust (JSR-177): Crypto & PKI
- Advanced Multimedia 1.1 (JSR-234): music, audio3d
- Nokia UI API 1.1
- IAP Info API
- eSWT 1.0.3 – embedded Standard Widget Toolkit
- Runtime extension mechanism for partners

JRT 1.3 - 5800XM PR2

- Full touch support with tactile feedback
- UX: User manageable security prompts, more permissive security policy
- UX: Freely resizable fonts (Nokia UI API 1.2)
- Soft Notification API for Home Screen (Nokia UI API 1.2)
- Pop-up TextBox
- Discontinuation of SIP API

JRT 1.4 - 5th edition devices (and 2009 3rd Edition FP 2 devices)

- Accelerometer access via Sensor API (JSR-256)
- Support for 8 megapixel camera
- Support for half/mini/full QWERTY keyboards
- On-screen keypad for touch keyboard devices & tap detection helper for Canvas

JRT 2.0 - S60 5.0 devices as OTA SW update

- Faster startup with transition animation
- One click installation for Java applications
- Nokia UI API 1.4: TextEditor on Canvas
- Simplified network prompting (smart defaults)
- MMAPI progressive download of MP3 (part of JSR-135)
- Access SIM applications (SATSA-APDU of JSR-177)

JRT 2.1 - S60 5.2 (Symbian^3)

- Graphics hardware acceleration support (2D and 3D)
- Improved touch user experience: e.g. single tap UI
- Support for advanced haptics
- Location API enhancements: e.g. proximity support
- Native/Java applications launch with parameters

JRT 2.2 - S60 5.2 (Symbian^3)

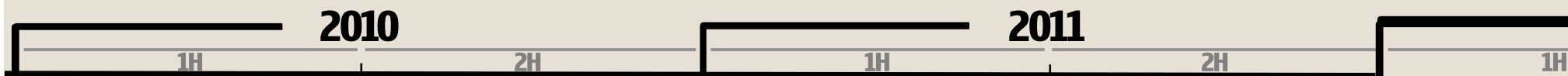
- Contactless communication (JSR-257)
- Mobile TV API (JSR-272)
- MMAPI video overlays
- Java application native access

STATUS

- Identified
- Planned
- Committed
- Existing

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Symbian^4 & JRT



JRT 3.0 – SW update to earlier Symbian devices

- Architectural change: Java UI toolkits on top of Qt
 - eSWT on Qt
 - OpenLCDUI: LCDUI implementation on eSWT
- MMAPI migration on Qt based Java UI toolkits
- Support for eSWT widget usage via LCDUI
- Location API to support network cell based location methods

JRT 3.1 – Symbian^4

- Direct UI support on Java
- Installation alignment to Direct UI
- Multi-touch event APIs
- Gesture support
- Easy access and better usability of Java application settings

JRT 3.2

- Animations API
- Support for UI customization via CSS
- Support for new features in Multimedia (Camera, Image handling, Tuner) (part of JSR-234)
- Home screen access API

STATUS

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Possible inclusion items to roadmap

- Compatibility with Nokia Series 40 Java
 - Series 40 Java is clearly the biggest volume (>1 billion) Java ME runtime implementation
- More Java SE compatible configuration library set
 - Enable Java open source SW utilization
- Selected MSA 2.0 (JSR-249) APIs
 - Location 2.0 (JSR-293)
- Qt service API access from JRT