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JDK 7 Updates: Director's Cut

Tuesday, October 2, 12

JDK 7 Updates: Director's Cut

Dalibor Topić (@robilad)
Principal Product Manager

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JDK 7 Updates: Director's Cut
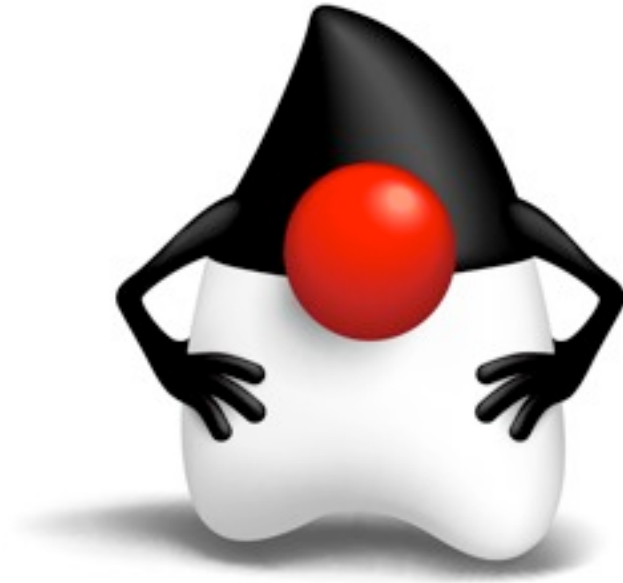
Dalibor Topić (@robilad)
Principal Product Manager

JDK 7 Updates: Director's Cut

Dalibor Topić (@robilad)
Principal Product Manager

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The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

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Hands up!

Program Agenda

- Audience Survey

- Demo

- Motivation

- JDK 7 Updates In OpenJDK

- Results

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Demo

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http://jdk7.java.net

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Motivation

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"The goal of this Project is to develop updates to JDK 7"

JDK 7 Update Project Website
http://openjdk.java.net/projects/jdk7u

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Henrik on Java

Official and not-so-official thoughts on Java

« JRockit is Now Free... | Main | Java SE 7 is now GA »

Moving to OpenJDK as the official Java SE 7 Reference Implementation

By Henrik Stahl on Jun 08, 2011

Update 7/22/2011: The JavaSE 7 Reference Implementation is now available for download from java.net.

We are now less than two months away from the JDK 7 release date. In parallel with the development project, Oracle and the other members of the Java SE 7 Expert Group have been putting the finishing touches to the Java SE 7 specification (JSR 336). In its role as the specification lead, Oracle is responsible for delivering the Java SE 7 Reference Implementation. In line with our strategy towards a more open Java ecosystem, we are going to provide a Reference Implementation that is based entirely on the OpenJDK open source code and make it available under the GPL open source license.

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Java SE 7 RI

- Available at http://jdk7.java.net/java-se-7-ri
- Based solely upon open source code from JDK 7 Project in OpenJDK
- Binaries provided for linux-x64 and windows-i386
- Binaries provided primarily for use by implementors of the Java SE 7 Platform Specification
- Recommended for reference purposes only
- Reference Implementations have been approved by the JCP
- They will receive no updates, not even for security issues

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Oracle Press Release

Oracle Announces Availability of Java SE 7

Redwood Shores, Calif. – July 28, 2011

News Facts

- Oracle today announced the availability of Java Platform, Standard Edition 7 (Java SE 7), the first release of the Java platform under Oracle stewardship.

- The Java SE 7 release is the result of industry-wide development involving open review, weekly builds and extensive collaboration between Oracle engineers and members of the worldwide Java ecosystem via the OpenJDK Community and the Java Community Process (JCP).

JDK 7 Updates Project in OpenJDK

- Oracle JDK 7 Updates based on an OpenJDK Project
- Web Site: http://openjdk.java.net/projects/jdk7u
- Information on developers and development processes
- Q & A and status updates
- Sources: http://hg.openjdk.java.net/jdk7u/jdk7u
- Master forest: jdk7u/jdk7u
- Development forest: jdk7u/jdk7u-dev
- Mailing list: jdk7u-dev@openjdk.java.net

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JDK 7 Updates in OpenJDK

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OpenJDK 7u Reviewers, Committers & Authors

robilad acorn alanb alexp andrew anthony art bae chegar coleenp darcy dav dcherepanov dcubed dholmes emcmanus flar herrick igor iveresov jcoomes jgodinez jjg jjh jmasa johnc jrose kamg katleman ksrini kvn lana lancea malenkov martin mchung mcimadamore michaelm mr mullan naoto never ngthomas ohair okutsu peterz peytoia phh prr rasbold rupashka sherman tbell tonyp trims twisti valeriep vinnie weijun wetmore xuelei yan ysr **alexsch amenkov ant apangin apetrusenko aph asaha avu bdelsart blacklion bobv bpatel briangoetz bristor brutisso ccheung cfang cgruszka cl coffeys ctornqvi denis dfuchs dlila dlsmith dmeetry dsamersoff dwanvik fparain gbenson idk ikrylov jccollet jeff jfdenise jferaud joehw jqzuo jtusla jwilhelm kevinw khazra kizune langel leonidr lmalvent mduigou mfang mikejwre minqi mlapshin mrkam neugens ngmr nloodin ohrstrom omajid pbk poonam ptisnovs ramap rbackman rkennke robm roland rottenha sbohne schien serb sjiang skoppar skovatch sla smarks son srl stanleyh stayer stefank sundar swamyv swingler tdv thurka uta vasya vikram vladidan volk xdono xlu yhuang zgu** *ahgross alitvinov amurillo bagiras billyh briand bvaidya ceisserer dbhole dbuck dingxmin dl duke dxu egahlin ewendeli gkbrown hawtin huntch jdn jfranck jjb jmelvin jonathan juh kalli katakai littlee luchsh lvjing mbankal mbykov mgrebac mgronlun miroslawzn mkos mschoene nloodin ogino paulk pbhat ptbrunet rbackman resii rgallard sharonz shirishk simonis skannan skoivu spoole sspitsyn tellison ulfzibis youdwei zhouyx*

200+ individuals with a Role in the Project

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OpenJDK 7u Committs
2408 Commits in 12 Months

Commits per Month

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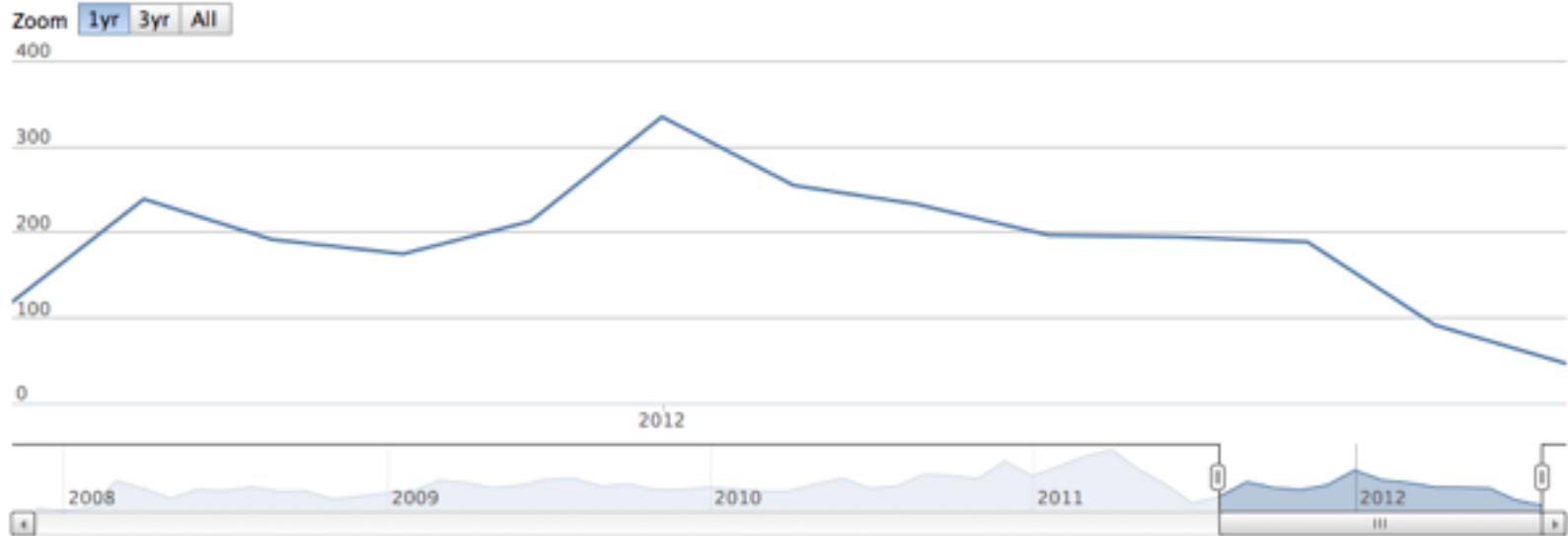
OpenJDK 7u Contributors

119 Contributors in 12 Months

Number of Contributors

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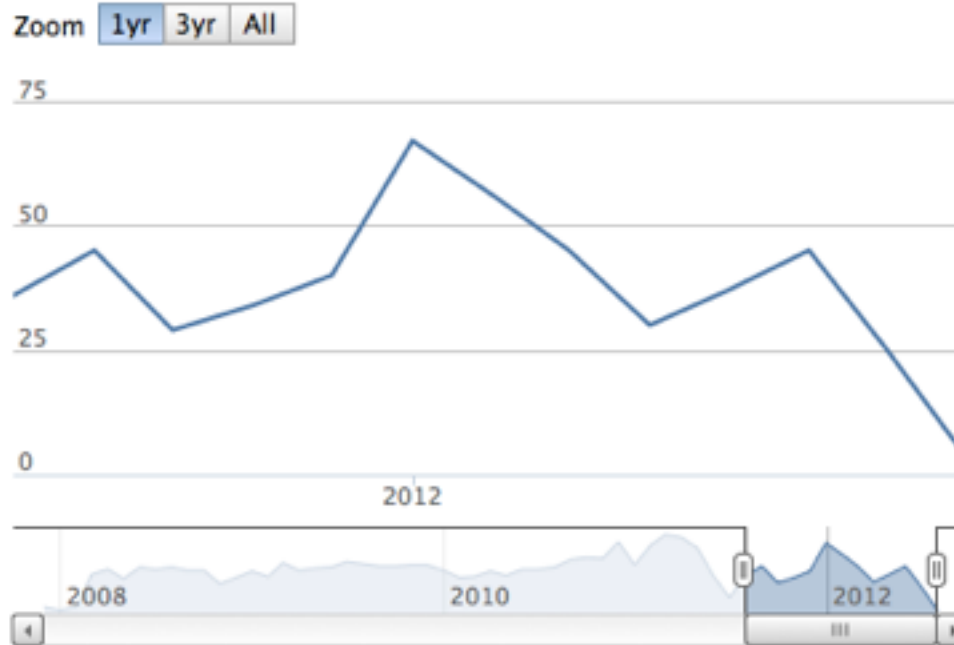
"Projects are expected to operate in an open, transparent and meritocratic manner. Their alignment with these principles will be monitored by the Governing Board."

OpenJDK Bylaws
http://openjdk.java.net/bylaws#_6

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Ground Rules in OpenJDK 7u

- Rule 0: Processes can change, but only after public discussion.
- Rule 1: Get changes into JDK 8 first then backport them.
- Rule 2: Forests can have Maintainers, who approve (or don't) changes
- Rule 3: Changesets must be publicly reviewed and approved
- Rule 4: Approvals are done centrally, reviews don't need to be
- Rule 5: Maintainers can pre-approve changes
- Rule 6: Maintainers may ask for additional reviews
- Rule 7: Maintainers act as glue between all stakeholders
- Rule 8 & 9: OpenJDK 7u changes should be plausible

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Public Code Review in OpenJDK 7u

- Rule 0: Code reviews are public
- Rule 1: There is a fast path for unmodified backports from JDK 8
- Rule 2: There is a slow path for backports with modifications
- Rule 3: Changes for a mainline forest require at least one reviewer
- Rule 4: Changes for a release forest require at least two reviewers
- Rule 5: Share your backport plans with original author & reviewers

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Example Approval Request

Hello,

Requesting approval to commit fix for 6997116 into 7u10.

The fix has already been pushed to jdk8, the change for 7u10
is exactly same.

Bug: http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6997116
jdk8 changeset: http://hg.openjdk.java.net/jdk8/2d/jdk/rev/7746eb8c610b
Webrev: http://cr.openjdk.java.net/~bae/6997116/7u10/webrev.00/
Review thread:
http://mail.openjdk.java.net/pipermail/2d-dev/2012-September/002710.html
Reviewed by: Jennifer Godinez, Phil Race

Thanks,
Andrew

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Bulk Changes in OpenJDK 7u

- Preamble: Applies for CPUs, HotSpot, CORBA, JAXP, JAX-WS
- Rule 0: Maintainers regulate bulk change traffic
- Rule 1: Maintainers may ask for additional review
- Rule 2: Bulk changes require approval before they can be pushed
- Rule 3: Bulk changes have to build everywhere and pass the tests

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Example Bulk Approval Request

Requesting approval to integrate hs23.6-b03 into jdk7u10-b08.

A webrev is available at:

http://cr.openjdk.java.net/~amurillo/7u10/hs23.6-b03-jdk7u10-b08.webrev/

Pre-integration testing is in progress; the integration will proceed
only after SQE has analyzed the results and approved.

The fixes in the proposed integration are below. All have undergone
nightly testing and are already in a jdk8 repository.

6294277: java -Xdebug crashes on SourceDebugExtension attribute larger than 64K
7171824: assert(_offset >= 1) failed: illegal call to offset()
7197100: new hotspot build - hs23.6-b03
7198338: make jdk7u10 the default jprt release for hs23.6

I have a fix, where should I go?

- If you don't know, ask on jdk7u-dev mailing list
- We'll likely tell you to go somewhere else ... first
- JDK 8, for the vast majority of changes
- HotSpot, for changes related to HotSpot
- and so on for CORBA, JAXP, etc.
- Get your fix accepted and integrated into JDK 8 first
- Come back to JDK 7 Updates Project later with a backport
- Not all backports make sense - discuss with your reviewers first

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Example: OS X Port Integration

- In the Beginning: BSD Port Project in OpenJDK
- Darwin Port contributed to BSD Port Project
- 2010: Mac OS X Port Project
- 2011: Interim jdk7u-osx integration forest
- 2012: Integrated into jdk7u-dev forest
- Forward-ported to JDK 8
- Maintained in JDK 8 now
- Discussed on macos-port-dev mailing list

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Results

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OpenJDK 7u2 Release

- First ever JDK Update release in the open
- Released in December 2011
- New HotSpot (v22) for improved reliability & performance
- Support for Oracle Solaris 11
- Olson time zone data 2011l
- Bug fixes for Project Coin features

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OpenJDK 7u4 Release

- First ever integration of a port to a new OS in the open
- Released in April 2012
- Started publishing a source code bundle as ZIP file
- Integrated the OS X Port (developer preview - jdk)
- New HotSpot, v23
- New supported GC: Garbage First (G1)
- JAXP upgraded to 1.4.6
- Olson time zone data 2012c

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OpenJDK 7u6 Release

- Released in August 2012
- JDK and JRE support for OS X
- Alternative hash function
- Olson time zone data 2012c

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Make The Future Java 7 Updates Better

- Get involved!
- Download developer preview builds and test your code
- http://jdk7.java.net
- Let us know about any issues your find as early as possible
- Subscribe to the mailing list and participate

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