

**Hibernation
is over!**





MOVING JAVA FORWARD

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JavaOne 2011 Update

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Mid 2012

Project Coin (JSR 334)

InvokeDynamic (JSR 292)

Fork/Join Framework

Project Jigsaw

Project Lambda (JSR 335)

Strict Verification

Type Annotations (JSR 308)

Parallel Class Loaders

Bulk-Data Operations

Phasers

Transfer Queues

New I/O (JSR 203)

Unicode 6.0

Enhanced Locals

SDP & SCTP

TLS 1.2

ECC

JDBC 4.1

XRender Pipeline

Swing JLayer

Swing Nimbus



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Project Jigsaw **Project Lambda**

Type Annotations (JSR 308)

Bulk-Data Operations

Four JSRs

1,966 Enhancements

9,018 Mercurial Changesets

9496 Bug Fixes

147 Builds

Four years, seven months,
and seventeen days ...

Java 7

2011/7/28



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Project Coin (JSR 334)

InvokeDynamic (JSR 292)

Fork/Join Framework

Project Coin (JSR 334)

- Diamond Operator
- Multi-Catch Statement Blocks
- String Constants as Case Labels
- Try-with-Resources
- ...



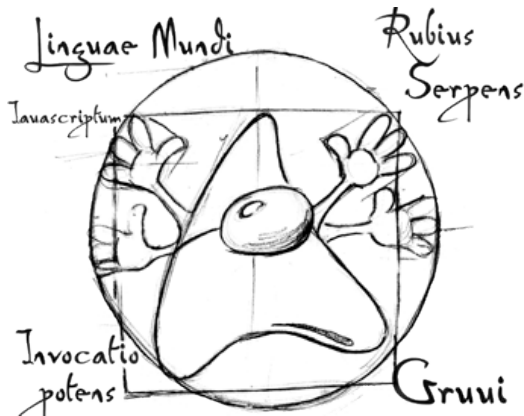
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Project Coin (JSR 334)

InvokeDynamic (JSR 292)

Fork/Join Framework

InvokeDynamic (JSR 292)



- Ruby = Method Calls (...and lots of them!)
- InvokeDynamicRuby > JRuby > Ruby

openjdk.java.net/projects/mlvm



JavaOne™

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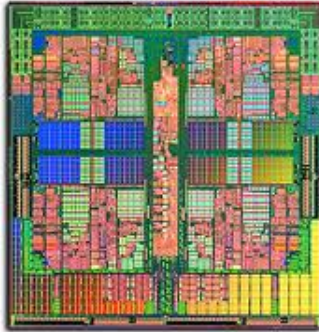
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Project Coin (JSR 334)

InvokeDynamic (JSR 292)

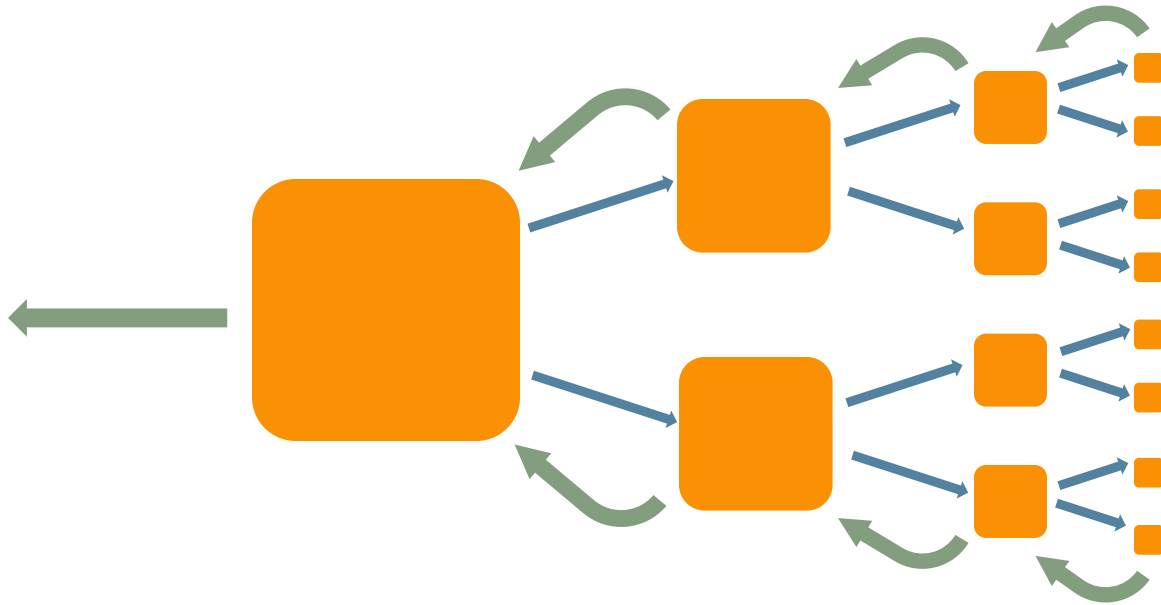
Fork/Join Framework

Fork/Join Framework



- Keep all processor cores busy
- Minimize synchronization overhead
- Scale linearly as the number of cores increases

Fork/Join Framework



gee.cs.oswego.edu/dl/papers/fj.pdf

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Project Coin (JSR 334)

InvokeDynamic (JSR 292)

Fork/Join Framework

Strict class-file checking • Upgrade the class-loader architecture • Method to close a URLClassLoader • Concurrency and collections updates • Unicode 6.0 • Locale enhancement • Separate user and user-interface locales • More new I/O APIs (JSR 203) • Filesystem provider for zip/jar archives • SCTP • SDP • Windows Vista IPv6 stack • TLS 1.2 • Elliptic-curve cryptography (ECC) • JDBC 4.1 • XRender pipeline for Java 2D • New platform APIs for 6u10 graphics features • Nimbus look-and-feel for Swing • Swing JLayer component • Gervill sound synthesizer • Update the XML stack • Enhanced MBeans

JDK Roadmap

NetBeans 7

- Java SE 7 support
- more

JDK 7

JDK 7u2

- JRE 7 on java.com
- JavaFX 2.0 co-install

Last public JDK 6 update

JDK 7u6

- OS X JRE port (for end-users)
- Improved OS integration, auto-update

NetBeans.next

- Java SE 8 support
- JavaFX 3.0 support
- more

2011

2012

2013

2014

Mac OS X

- JDK 7 Dev Preview
- JavaFX 2.0 Dev Preview

NetBeans 7.1

- JavaFX 2.0 support

JDK 7u4

- OS X JDK Port (for developers)

JDK 8

- Windows, Linux, Solaris, OS X
- Jigsaw
- Lambda
- JavaFX 3.0
- Complete Oracle JVM convergence
- JavaScript interop
- more

OpenJDK



Key Message







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