



The State of IcedTea

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Overview

- **Who we are**
- **What happened in the last year**
- **The difference between IcedTea and OpenJDK**
- **Testing, testing, testing...**
- **Issues**
- **Packaging**
- **What now?**



Who Are We?

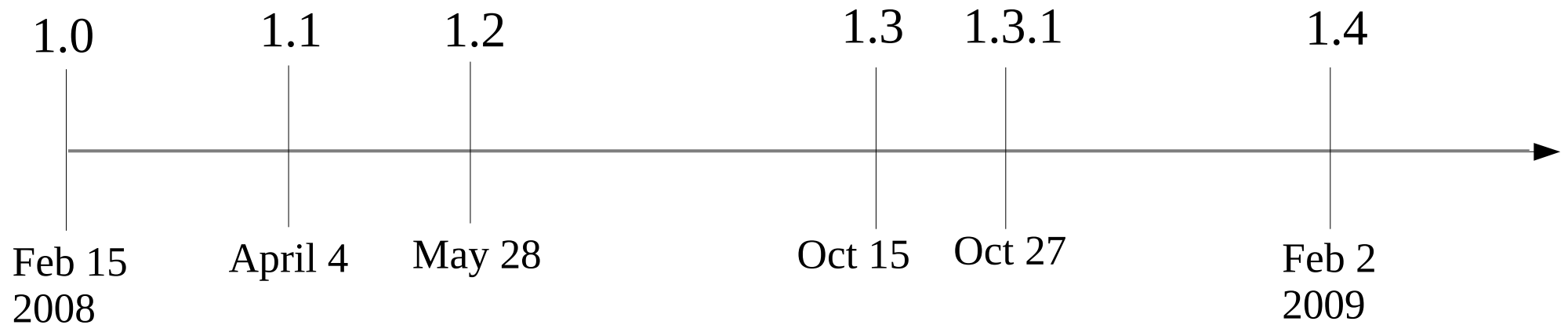
- Red Hat
- GNU Classpath + OpenJDK
- ~20 developers listed in the AUTHORS file
- Several distros already ship OpenJDK based on IcedTea.
 - Fedora, RHEL, Debian, Ubuntu, Gentoo, OpenSuSE, Mandriva...

Progress

- IcedTea - based on OpenJDK7
 - java-1.7.0-icedtea pushed into Fedora 8, November 2007.
- IcedTea6 - based on OpenJDK6
 - First released Feb 15, 2008. Adapted OpenJDK6 codebase, and merged with IcedTea 1.6's features.
 - java-1.6.0-openjdk replaced java-1.7.0-icedtea in Fedora 9, May 2008.



IcedTea6 Releases



January 20, 2009: RHEL 5.3 released with IcedTea6 1.2 (b09).

IcedTea6 != OpenJDK6

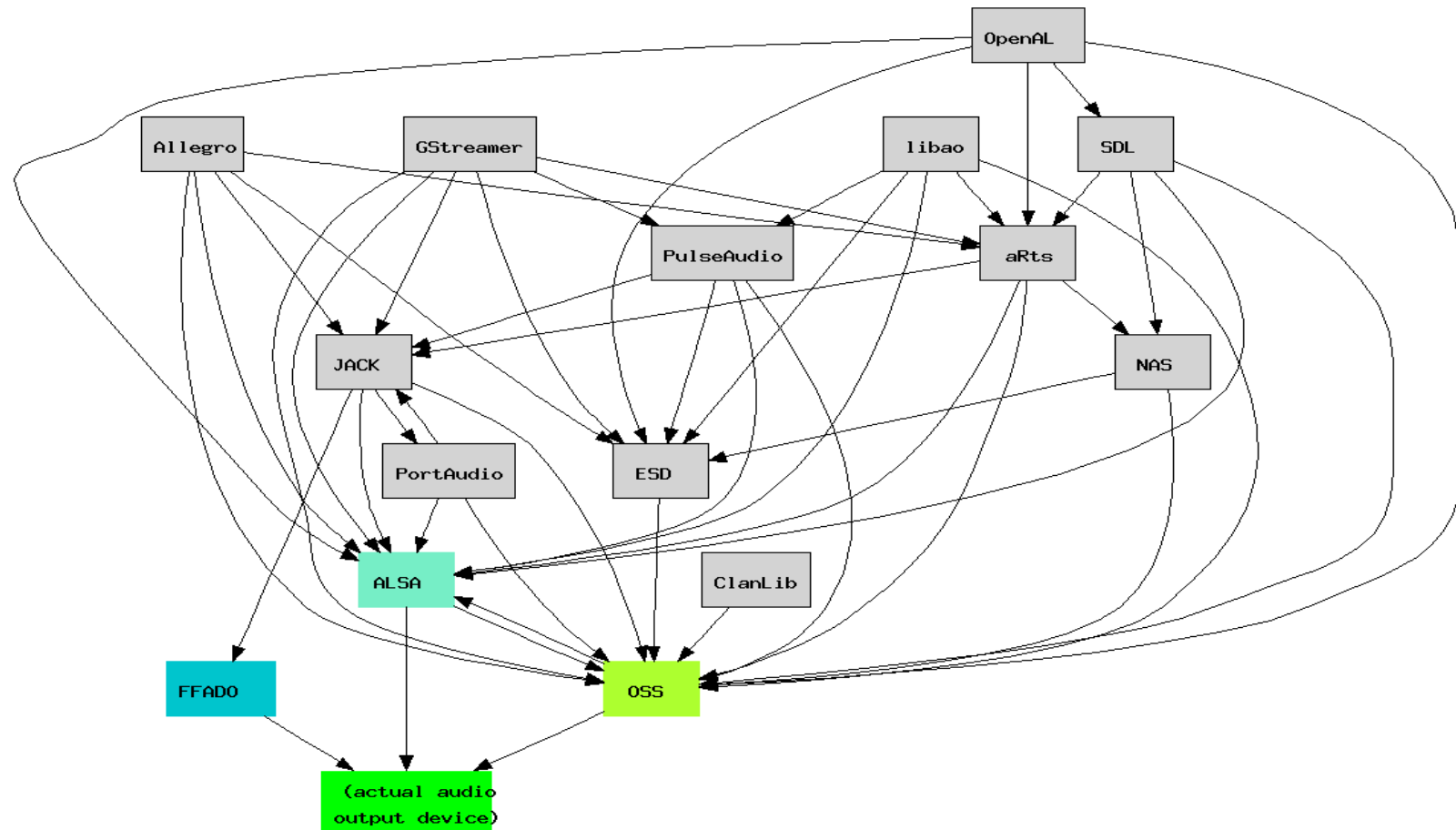
■ Features

- PulseAudio (--enable-pulse-java, edit /path/to/jre/lib/sound.properties)
- Gervill
- XRender Pipeline support
- JTreg
- Hotspot from OpenJDK7
- NIO2 from OpenJDK7 (org.classpath.icedtea)
- GNOME accessibility integration
- Web browser plugin (first 64-bit plugin!), JNLP support, signed applet support
- Porting

■ Patches

- Approximately, 16 patches are applied to the base build. (See HACKING)

PulseAudio



Jungle Of Linux Audio Output Methods
<http://blogs.adobe.com/penguin.swf/>
Updated May 12, 2007



Testing

- Mauve
- JTreg
- TCK

Mauve

IcedTea6 Mauve Report - 2009-01-30

package successes failures

gnu	3	114
java	1440	181
javax	1338	71
locales	0	1
org	19	3
runner	0	6
total:	2800	376

OpenJDK6 Mauve Report - 2009-01-30

package successes failures

gnu	3	114
java	1437	186
javax	1336	75
locales	0	1
org	19	3
runner	0	7
total:	2795	386



Fails in IcedTea6:

java.awt.Canvas.PaintTest
javax.swing.plaf.basic.BasicComboBoxUI.getMinimumSize
javax.swing.plaf.basic.BasicComboBoxUI.getPreferredSize

Fails in OpenJDK6:

java.awt.ColorClass.brighter
java.awt.Scrollbar.ScrollbarPaintTest
java.lang.Double.DoubleTest
java.lang.Float.FloatTest
java.nio.ByteBuffer.Allocating
java.security.Engine.getInstance
javax.net.ssl.SSLEngine.TestHandshake
javax.security.auth.login.TestOfConfigurationParser
javax.swing.JTextArea.preferredSize
javax.swing.plaf.basic.BasicComboBoxUI.getDisplaySize
javax.swing.plaf.basic.BasicComboBoxUI.layout
javax.swing.plaf.metal.MetalComboBoxUI.getDisplaySize
runner.XMLReportParser

JTreg

- IcedTea6:
 - HotSpot – all tests passed
 - Langtools – all tests passed
 - JDK – 32 failed and 5 errors
- IcedTea:
 - HotSpot – 1 test failed
 - Langtools - all tests passed
 - JDK – 116 tests failed and 7 errors
- OpenJDK6:
 - ????
- OpenJDK7:
 - ????



make check



TCK

- Passed on x86 and x86_64.
 - First success in June 2008.
 - OpenJDK in all stable releases of Fedora and RHEL are always certified. Not always the case with rawhide or EPEL.

Issues

- Submitting patches
- How to work directly on OpenJDK?
- Still cannot build OpenJDK7 without plugs. Why?
 - Can set `IMPORT_BINARY_PLUGS=false` for OpenJDK6
- IcedTea6 release process needs to be discussed.

Packaging

- Fedora (IcedTea6-1.4, based on OpenJDK6 b14 + HotSpot 14)
 - Process
 - Patches
 - Build options
 - JTreg and Mauve test suites are run
- RHEL (IcedTea6-1.2, based on OpenJDK6 b12)
 - What is the difference from the Fedora package?
- TCK needs to be run before each update in RHEL or Fedora (stable).



What now?!

- Short term
- Long term
- What has changed since FOSDEM 2008?



Thanks to...

- Andrew Haley, Mark Wielaard, Andrew Hughes, Omair Majid, Ioana Ivan.
- All contributors
- Sun (and those formally part of...)
- Of course, Red Hat
- Everyone else



Questions, comments, complaints?

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