

A cup of free Java

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Agenda

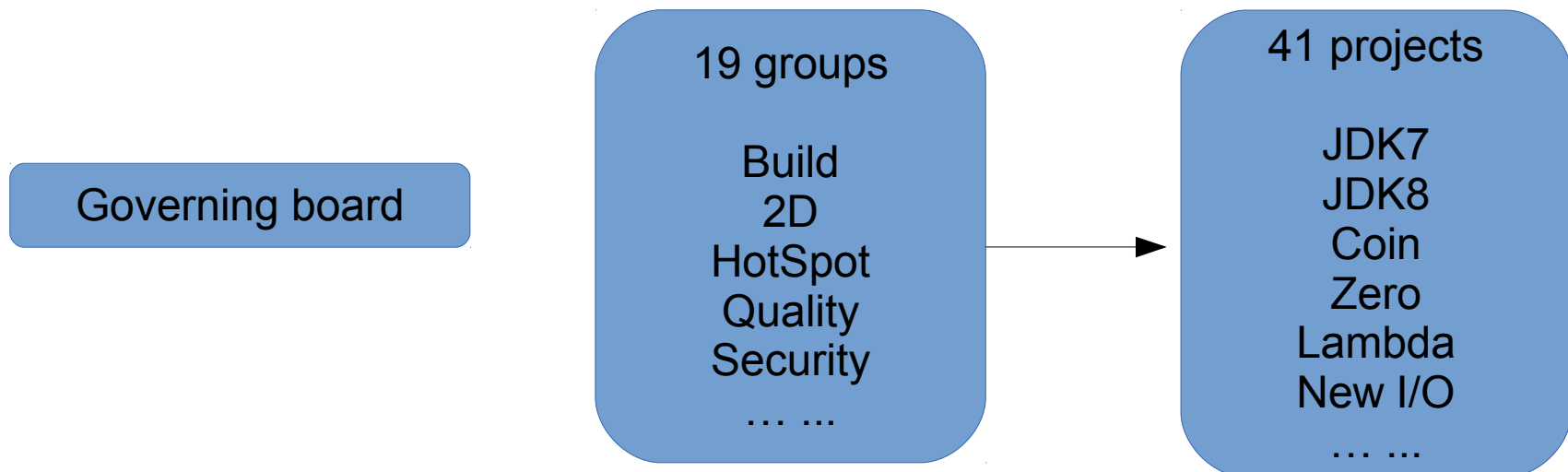
- OpenJDK community
- Life of an OpenJDK patch

OpenJDK

- Reference Implementation of Java
- GPL v2
- 465+ participants, 230 members
- Oracle, IBM, RedHat, SAP

OpenJDK community

- Community = a usually small, social unit of any size that shares common values.
- Open Source community



Roles

- Roles of community
 - Participant
 - Contributor
 - Member
 - Lead
- Roles of project
 - Author
 - Committer
 - Reviewer
 - Project Lead

-

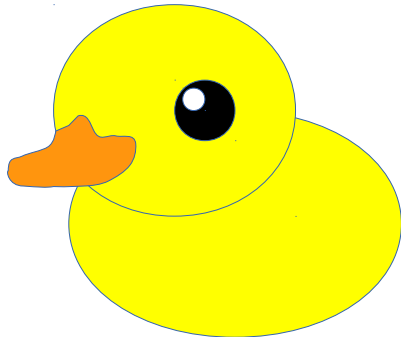
- Oracle Contribution Agreement
 - joint ownership
 - Allow modifications
 - Copyright registration

Java Enhancement Proposal

- any work that meets at least one of the following criteria
 - two or more weeks of engineering effort
 - significant change
 - in high demand by developers or customers
- OpenJDK Roadmap = JEP + JEP + + JEP
- JCP

Life of an OpenJDK patch

- Found a problem
 - Search before post
 - Double check with Java SPEC
 - Made a patch and upload [WebRev](#)
 - Create a bug and get a bug id
 - Follow Java code convention



Code Review for jdk

Prepared by: bourgesl on Fri Apr 5 13:58:53 CEST 2013

Workspace: /home/bourgesl/libs/openjdk/jdk8/jdk

Compare against: <http://hg.openjdk.java.net/jdk8/jdk8/jdk>

Compare against version: 6766

Summary of changes: 146 lines changed: 106 ins; 15 del; 25 mod; 175 unchg

Patch of changes: [jdk_patch](#)

Legend: Modified file

Deleted file

New file

[Cdiffs](#) [Udiffs](#) [Sdiffs](#) [Frames](#) [Old](#) [New](#) [Patch](#) [Raw](#) **src/share/classes/sun/java2d/pipe/AAShapePipe.java**

146 lines changed: 106 ins; 15 del; 25 mod; 175 unchg

- Code quality
 - Build & test
 - **Jtreg** test case
 - Contributor's testing: jtreg, TCK
 - Reviewer's testing : JPRT
 - Test your test
 - JCheck

- Post to OpenJDK mailing list
 - Find the right project
 - Better submit a bug before posting
 - Be informative, accurate and polite
 - Read 《 The wisdom of asking questions 》
 - Security issues are not publicly discussed

From Laurent Bourgès <bourges.laurent@gmail.com>☆

Subject **AAShapePipe concurrency & memory waste**

To 2d-dev@openjdk.java.net☆, Jim Graham <james.graham@oracle.com>☆, Phil Race☆, core-libs-c

Reply

Dear java2d members,

I figured out some troubles in `java2d.pipe.AAShapePipe` related to both concurrency & memory usage:

- concurrency issue related to static `theTile` field: only 1 tile is cached so a new `byte[]` is created for other threads at each call to `renderTile()`
- excessive memory usage (`byte[]` for tile, `int[]` and `rectangle`): at each call to `renderPath` / `renderTiles`, several small objects are created (never cached) that leads to hundreds megabytes that GC must deal with

- Discuss & get approval from reviewers
 - Focus on tech
 - Insist what do you think is correct or necessary

Here is the webrev

<http://cr.openjdk.java.net/~zhangshj/8019381/webrev>

This looks Ok for me.

☆	▲	AAShapePipe concurrency & memory waste	• Laurent Bourgès	• 2013/4/5 20:20
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurrency & me...	• Jim Graham	• 2013/4/10 1:14
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurrency & m...	• Laurent Bourgès	• 2013/4/10 1:34
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurrency &...	• Jim Graham	• 2013/4/10 1:44
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurrency ...	• Laurent Bourgès	• 2013/4/10 16:5
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurren...	• Peter Levart	• 2013/4/10 18:1
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurre...	• Laurent Bourgès	• 2013/4/10 19:2
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurren...	• Sergey Bylokhov	• 2013/10/5 3:18
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concurre...	• Laurent Bourgès	• 2013/4/11 3:46
☆		Re: [OpenJDK 2D-Dev] AAShapePipe concur...	• Sergey Bylokhov	• 2013/4/11 6:59

- Committer's job
- Verify

← → ↻ 🏠 hg.openjdk.java.net/jdk8/jdk8/rev/0d0c983a817b

[jdk8/jdk8](#) / changeset

[summary](#) | [shortlog](#) | [changelog](#) | [tags](#) | [manifest](#) | changeset | [raw](#) | [bz2](#) | [zip](#) | [gz](#)

8009315: F# on PATH breaks Cygwin tools (mkdir, echo, mktemp ...) [jdk8-b98](#)

author tbell
 Tue Jul 09 08:35:20 2013 -0700 (10 days ago)
 changeset 757 0d0c983a817b
 parent 756 99ad803f8c4e
 child 758 59dc9da81379

8009315: F# on PATH breaks Cygwin tools (mkdir, echo, mktemp ...)
 Reviewed-by: erikj

common/autoconf/generated-configure.sh [file](#) | [annotate](#) | [diff](#) | [revisions](#)
 common/autoconf/toolchain_windows.m4 [file](#) | [annotate](#) | [diff](#) | [revisions](#)

```

--- a/common/autoconf/generated-configure.sh    Thu Jul 04 01:00:06 2013 -0700
+++ b/common/autoconf/generated-configure.sh    Tue Jul 09 08:35:20 2013 -0700
@@ -1,6 +1,6 @@
 #! /bin/sh
 # Guess values for system-dependent variables and create Makefiles.
-# Generated by GNU Autoconf 2.67 for OpenJDK 1.8.0

```

More tips

- Always read SPEC
- Copy existing examples
- KISS

Thank you!

Reference

- JCP <http://www.jcp.org>
- OpenJDK home page <http://openjdk.java.net>
- Jtreg home page <http://openjdk.java.net/jtreg/>
- OpenJDK census
<http://openjdk.java.net/census>
- OpenJDK bylaws <http://openjdk.java.net/bylaws>