



the
POWER
of



ORACLE®

JSR 231: Java Binding for the OpenGL(r) API

Ken Russell
Travis Bryson

Sun Microsystems

<https://jogl.dev.java.net>

<https://jogl-demos.dev.java.net>

BOF-0899

Agenda

- JSR 231 Specification update
- JSR 231 Reference Implementation status
- Cool new JOGL features
- Community involvement
- Demos

Source: Please add the source of your data here

JSR 231: Specification Status

- Specification in Proposed Final Draft stage on JCP.org
- Target 1.0.0 Specification Schedule
 - Submission of all final materials to JCP: late June
 - Final Official Approval from JCP: early August
- Maintenance release process
 - OpenGL 2.1 coming
 - JCP maintenance process much lighter weight than 1.0
- Probable Name Change: Java Binding for the OpenGL(r) API

JSR 231 Specification Status, Contd.

- Major API changes since BOF last June (partial list)
 - Removed all OpenGL extensions that were promoted to core OpenGL by OpenGL 1.3
 - javax.media.opengl, javax.media.opengl.glu
 - GLDrawableFactory changes, GLCanvas/GLJPanel now extensible
 - Support interaction with external OpenGL libraries (enables JOGL/Java 2D bridge)
 - Method for exposing new OpenGL extensions
 - Exposed Threading class to increase run-time control over threading model used by implementation
 - Removed all glX, wgl, cgl, etc. platform-specific APIs
 - Decided not to expose GLU NURBS

JSR 231 Reference Implementation

- Release status
 - Merge of JOGL project & JSR 231 completed
 - Builds posted to web nightly
 - Beta 4 release available
 - Signed Java Web Start JOGL binaries updated with each release
- Platforms: Solaris (SPARC32/64, x86, AMD64), Linux (x86, AMD64), Windows (x86), Mac OS X (PPC, x86)
- Target schedule
 - Beta 5: early June
 - 1.0.0 Release: early August
 - Regular update releases after that

JSR 231 Reference Implementation, Contd.

- Some JOGL deployment options
 - Point user to java.net JOGL web site
 - Bundle JOGL libraries with your application
 - Use Java Web Start
 - Applet (still experimental)
 - Future possibility: JOGL Installers
- JOGL source vs. Reference Implementation
 - We will periodically copy source code verbatim from JOGL to RI
 - Periodically run TCK on RI, release in binary form as official release

Cool New Features

- TextureIO classes
- Screenshot class
- Gamma class
 - Control over gamma, brightness, contrast
- TileRenderer class for high-resolution screenshots
 - Courtesy of Brian Paul
- Java2D/JOGL bridge
 - High performance for GLJPanel

Community Involvement

- JOGL forum on <http://javagaming.org/>
- Try latest builds, provide feedback
- Contribute to your areas of interest
 - 2D/3D font helper classes
 - More...

DEMOS

Java2D/JOGL bridge
Medical Imaging demo from GE Healthcare
Swamped!

For More Information

- <https://jogl.dev.java.net>
 - These slides will also be available here
- <https://jogl-demos.dev.java.net>
 - Run the Java Web Start demos from your browser!!
- Pavilion
 - POD #719 – Java 3D, JAI, and JOGL
- Emails:
 - kenneth.russell@sun.com
 - travis.bryson@sun.com

Q&A

Kevin Rushforth
Chien Yang
Ken Russell
Travis Bryson



the
POWER
of



ORACLE®

JSR 231: Java Binding for the OpenGL(r) API

Ken Russell
Travis Bryson

java.sun.com/javaone/st

Sun Microsystems
<https://jogl.dev.java.net>

BOF-0899