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

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https://jogl.dev.java.net
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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

java.sun.com/javaone/sf

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!

java.sun.com/javaone/sf

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

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Q&A

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