



OpenGL SDK and Developer Resources

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SDK Contents

- Web Delivery Format
 - <http://www.opengl.org/sdk/>
- ARB-developed resources
 - API documentation & specifications
 - Communications
- Community-developed resources selected by the ARB Ecosystem TSG
 - Libraries
 - Tutorials
 - Tools



SDK Documentation & Communications

- **Traditional API & GLSL Specifications**
- **Developer documentation (“man pages”)**
 - Completely up to date with OpenGL 2.1
 - Now in Docbook XML format, easy to retarget to many different delivery formats
 - ARB delivers XHTML+MathML at present
- **OpenGL Pipeline Newsletter**
 - Quarterly, includes status reports and mini-tutorials
 - Newsletter has been growing steadily in size and is becoming one of our primary outreach methods
 - Will expand to include other Khronos APIs (at least OpenGL ES)
- **OpenGL.org Message Boards**
 - ARB members participate in some threads, and there are many other smart developers on the boards



SDK Libraries

- **Equalizer**
 - Parallel graphics framework
 - Scalable from single-pipe to large distributed graphics systems
- **Extension Loading Libraries**
 - GLee
 - GLEW
- **OpenSceneGraph**
 - Full-featured scene graph



SDK Tutorials

- **Clockworkcoders**
 - Introduction to the OpenGL Shading Language
 - Using extensions, GLSL overview, Shader API overview, uniform variables, vertex attributes, varying variables, texturing, per-fragment lighting
- **CodeColony**
 - Camera, Vertex Array, Particle System (fountain) projects
- **Lighthouse3D**
 - View frustum culling, billboarding, picking, terrain synthesis and rendering, display lists, GLUT, shadows, and more



SDK Debuggers

- **BuGLe**
 - Open source wrapper library around GL library
 - Logging, per-call error checking, statistics gathering, screenshots
 - Debugger with breakpoints, tracing, GL state examination
- **gDEBugger**
 - Graphic Remedy's commercially supported debugger (described earlier today)
 - ARB has partnered with Graphic Remedy to subsidize gDEBugger for developers in academic environments



Future Plans & Credits

- **We've started small**
 - The ARB spends most of its own cycles on growing the OpenGL API and Shading Language
 - Ecosystem TSG looks for ways to leverage the OpenGL developer community
- **The SDK will grow**
 - Add selected community projects
 - Keep developer documentation up to date
 - In the Longs Peak timeframe, we will do tutorials and frameworks to get people up to speed on the new API quickly
 - Likely to add some utility libraries for Longs Peak as well
 - Other additions to the SDK will depend on community participation
- **Credits**
 - Thanks to all the developers who have contributed to the SDK
 - Special note of thanks from the Ecosystem TSG members to Benj Lipchak of AMD, our first chairman and driving force behind the SDK!



Any Questions?

