Superior 3D Graphics for the Web a Step Closer

September 22 2009, by Lin Edwards

(PhysOrg.com) -- The development of improved three-dimensional graphics in Web-based applications took a step forward recently, when programmers began building WebGL into the Mozilla Firefox nightly builds, and into WebKit, which is used in Google Chrome and Apple's Safari browser.

The WebGL (Web Graphics Library) is an emerging open-source standard specification that follows on from Mozilla's earlier project Canvas 3D, which aimed to display three-dimensional graphics via Web browsers without the need for special plug-ins. WebGL aims to allow web-based software to use the power of the computer's hardware-accelerated graphics to produce superior 3D graphics to rival offline software applications.

WebGL will allow people to use Web-based versions of 3D software for playing games or running applications such as [Google](#) Earth. Coupled with JavaScript in the browser, the new technology will allow for fully three-dimensional Web-based applications.

The WebGL project is overseen by the Khronos Group, which manages all OpenGL applications. Earlier this year, Khronos formed a WebGL working group that includes representatives from companies such as Mozilla, Google, Opera, Ericsson, NVIDIA, and AMD.

Google is a supporter of the open-source WebGL, but is also working on its own three-dimensional capability for browsers, called [O3D](#), which it plans to build into its own Chrome browser.

WebGL standard is expected to be released during the first half of 2010, but some implementations will appear earlier, according to Mark Steele, a WebGL programmer. Meanwhile, programmers wishing to try it out can do so by downloading the Firefox 3.7 nightly build and enabling WebGL. Developer Vladimir Vukićević has instructions in his [blog](#).

© 2009 PhysOrg.com