

The WebRenderer™ Competitive Advantage

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What is WebRenderer™

WebRenderer is a Java™ component that facilitates the rendering of web content and multi-media within a Java client-side application.

Unique Architecture

The key difference between WebRenderer and existing Java HTML rendering engines is that WebRenderer leverages off native resources to deliver super fast, quality web content rendering. WebRenderer is not written entirely in Java but is based on the portable Mozilla™ browser and Internet Explorer™. Through leveraging off these two market-leading browsers WebRenderer stays ahead of the competition in standards support, speed, security and feature implementation.

WebRenderer is the only Java browser component to support all the latest industry standards including HTML 4.01, CSS, JavaScript, XML, XSL, XSLT and SSL as well as common multimedia formats.

Rendering Quality

Rendering of documents is provided via the Mozilla and Internet Explorer rendering engines. Mozilla is the basis of the Netscape™ Navigator browser. Netscape have a reputation for quality HTML and general web content rendering. Using these technologies WebRenderer provides document rendering that users expect - precise table structures, correct fonts and support for the display of badly constructed HTML.

Standards Support

What happens when your mission critical application requires support for the latest web content standard but your pure Java browser company takes months to implement or decides not enough clients require the standard to justify the investment? This is a real scenario that can delay your entire mission critical project. WebRenderer does not have this problem due to WebRenderer's underlying architecture that relies on Mozilla and Internet Explorer for document rendering.

Any new Standards that Microsoft or Mozilla/Netscape decide to support are supported in WebRenderer.

Speed

WebRenderer is significantly faster than any Java HTML rendering component we have tested. Large documents render with ease and we have not found a document that will not render due to its size. No more slow Java Swing GUIs - WebRenderer adds speed to your application. There is a noticeable speed difference when using native-based components such as WebRenderer over Swing-based components. WebRenderer follows the same architecture as IBM's™ SWT that overcomes the inherent problems of Swing.

Pure Java browser solutions have problems scrolling through documents. There are known issues with scroll speed and document responsiveness. By utilising native technology for our drawing canvas we avoid any speed issues with re-draw and unresponsive documents which are an issue in larger documents.

Security and features of the industry leading browsers

Pure java browsers are relatively untested in terms of security. Rather than “reinventing the wheel” and competing with proven browsers such as Internet Explorer and Navigator/Mozilla, The WebRenderer team utilised this proven technology to develop a superior rendering component. Thousands of hours of testing have been invested into Internet Explorer and Netscape Navigator. By piggybacking these technologies, WebRenderer directly benefits from these security enhancements. Would you use a relatively untested pure Java browser to run your mission critical sensitive tasks? Doing so could expose your organisation to malicious activity.

Architecture choice

The decision to use native browser components was not taken because it was the easiest path. The task of building a Java browser that runs on native code was a complex task requiring thousands of hours of programming and tens of thousands of lines of code on both the Java and the native side. WebRenderer is portable, super fast, standards compliant and supports a large array of multimedia and other features. WebRenderer follows the Sun Microsystems term "Write Once, Run Anywhere" by using the same interface model across builds. For example, you can compile your Java application on Linux and run it on Windows - WebRenderer does not require a separate compilation or any operating system changes or function calls. WebRenderer is a normal Java component.

Competing with the likes of Microsoft, Mozilla and Netscape

JadeLiquid also has an internally developed, pure java browser solution. However, the problem encountered with this pure Java browser is that we are competing with Mozilla/Netscape and Microsoft to maintain the latest standards, security features, tag support and general features. We also found that the pure Java Swing-based browser was slow when compared to native browser technology. By leveraging off native browser components we can easily maintain the latest standards and provide a far better quality portable Java browser component.

Microsoft and Mozilla/Netscape have a reputation for quality browsers and are world leaders in this field, so it was an easy decision to utilise their browsers to produce the highest quality, standard compliant, feature supporting, security stress-tested, Java browser component on the market. When new features are added to Mozilla or Internet Explorer they will be instantly available to your WebRenderer application. Through WebRenderer we are leading the pack, not fighting the standards and fully supporting XML, CSS, SSL, XSL, XSLT etc as compared with a pure Swing-based web content rendering engine.

Rather than compete head-on with Microsoft and Mozilla/Netscape WebRenderer leverages off their technology. By leveraging off Mozilla/IE technology we offer a browser that has virtually unlimited resources and development hours invested to perfect Web Content rendering.

Predictable results

When viewing Web based documents and multimedia some browsers act differently to others. Internet browsers incorporate their own specific HTML parsers that structure and render documents differently to other HTML parsers. JavaScript functions are a prime example of browser rendering differences. Some JavaScript functions are supported by Mozilla/Netscape but not Internet Explorer and vice versa. Many web developers build web content based upon compatibility with both Mozilla/Netscape and Internet Explorer. Using pure Java HTML browsers many find that some HTML tags or certain JavaScript functions are not supported. In many cases pure Java HTML rendering engines can and do produce unpredictable results.

WebRenderer Overview

WebRenderer is a web content and multimedia, rendering component for the Java programming language.

WebRenderer is unprecedented technology that significantly reduces application development time and is the only available tool capable of consistently delivering quality web content within a Java application.

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About Us

Established in 2002 JadeLiquid Software Pty Ltd (the WebRenderer development company) is located in Tasmania, Australia.

Tasmania is rapidly becoming recognised as the intelligence hub for Australian IT development and the Tasmanian government provide significant support for innovation in the IT sector.

JadeLiquid Software focuses on Java component development providing cutting edge Java components to the worldwide market.