Firefox users can plan on seeing web engine leap next year

October 31 2016, by Nancy Owano

(Tech Xplore)—Mozilla has news about a web engine for Firefox. It is called Project Quantum. Head of Platform Engineering at Mozilla, David Bryant, said in Medium: "Quantum is our effort to develop Mozilla's next-generation web engine and start delivering major improvements to users by the end of 2017."

Neowin reporter Ben Moore was one of numerous tech watchers talking about it recently. Think "faster loading pages, smoother animations and real-time interactivity for users," said Moore.

The word Quantum was chosen for a reason, as Bryant said the team was

to deliver a "quantum leap" in performance. "We are striving for performance gains from Quantum that will be so noticeable that your entire web experience will feel different. Pages will load faster, and scrolling will be silky smooth. Animations and interactive apps will respond instantly, and be able to handle more intensive content while holding consistent frame rates. And the content most important to you will automatically get the highest priority, focusing processing power where you need it the most."

Notice this is talk about a web engine. This is not a new browser. Moore said, "It's an "engine that can handle the growth of a more complex and interactive web."

Mozilla's Bryant said "it's the core of the browser that runs all the content you receive as you browse the web."

When and on which operating systems? The web engine will launch across Android, Windows, Mac and Linux. Bryant said, "We're going to ship major improvements next year, and we'll iterate from there. A first version of our new engine will ship on Android, Windows, Mac, and Linux. Someday we hope to offer this new engine for iOS, too."

Browser users can expect extensive use of parallellization, said *Neowin*.

Moore also said that "some parts of Quantum are written in Rust, a system programming language which Mozilla says 'runs blazing fast, while simplifying development of parallel programs by guaranteeing thread and memory safety.'"

Stephen Shankland in *CNET* talked about Quantum. "At the heart of Firefox today is a browser engine called Gecko, the software that executes website programming instructions and paints the website on your screen. Quantum will build on Gecko, but it'll also draw from

Mozilla's newer, experimental browser-engine project, called Servo."

Firefox has had loyal supporters but also critics. There are many people avoiding Firebox as a default browser, and Firefox could benefit from a brighter future. Supporters look at the spirit and efforts through the years of the Mozilla team.

Shankland commented that "Even if you've stopped using Firefox, though, Mozilla still has an important role to play. The company helps develop new web standards and establish those developed by other browser makers as tech web programmers can confidently use."

The problem involves a dwindling share of usage on PCs whereas Chrome has become a popular choice.

Lucian Armasu in *Tom's Hardware*: "Over the past few years, Chrome has steadily increased its market share, becoming the most used browser in the world, to Internet Explorer's, but also Firefox's, detriment."

Liam Tung, *ZDNet*, said, "Mozilla's efforts to modernize Firefox come as the browser continues to lose market share to Chrome on the desktop while on mobile it's got a smaller share than Opera Mini." Mark Hachman, senior editor, *PCWorld*, said, "Firefox's user base has been gently waning for months—down from almost 12 percent in 2014 to 6.36 percent in September—as rival browsers pick off users with new features."

Nonetheless, those behind Project Quantum are neither resting nor discouraged. This is not a tweak but seen as something big. Tom Dawson, editor in chief, *Android Headlines*, said, "For users of Firefox, as well as perhaps the web in general, this move to Quantum is going to be a big deal. With drastic improvements to the underlying code, Firefox could give Google and the rest of the market something to worry about."

More information: wiki.mozilla.org/Quantum