

The browser engine is the core component of every web browser on the market, from Chrome to Safari. How a website looks on your computer can greatly vary depending on what engine your web browser is based on. Browser engines are typically composed of two main components: the rendering and layout library and the JavaScript framework.

### **WebKit Browser Types**

WebKit is one of the major browser engines in use today. It's free to use on the Mac and Linux operating systems. WebKit is commonly associated with Apple because it's the browser engine used for Apple's Safari browser. It's also used on other browsers like Amazon Kindle's built-in browser and BlackBerry's browser. The core components of WebKit are WebCore and JavaScriptCore. WebCore is a rendering and layout library for HTML and Scalable Vector Graphics, while JavaScriptCore is a JavaScript framework that enables WebKit browsers to execute JavaScript. These core components make it possible for WebKit browsers to play videos and accurately display a website.

### **Blink Browser Types**

Blink is a newer type of web browser engine and has been in existence only since 2013. Chromium – an open source web browser project from Google – created Blink after taking the source code from WebKit's WebCore component and changing it to better meet the needs of Google Chrome. Google has primarily contributed to the development of Blink, but other companies like Opera Software ASA, Samsung and Intel have contributed as well. Blink is used in the Google Chrome, Vivaldi, Amazon Silk and Opera web browsers. It's free to use on the Windows, Mac, Linux, Android and Chrome OS platforms. Blink's core components include Blink XML parser and V8 JavaScript Engine. Blink XML is the rendering and layout library, while V8 JavaScript Engine is the JavaScript framework.

### **Gecko Browsers**

Gecko is one of the oldest types of web browser engines still in use. It was originally developed by Netscape in 1997 and then adapted by Mozilla in 1998. Gecko has been developed exclusively by Mozilla since 2003. Mozilla Firefox, Waterfox, Conkeror, Classilla and Lunascape web browsers all use the Gecko web browser engine. Gecko is also used in email clients like Mozilla Thunderbird. It's free to use on the Windows, Mac, Linux and Android operating systems. Gecko's core components are the SpiderMonkey JavaScript engine and Expat library, which execute JavaScript and render HTML, respectively.

### **Goanna Browsers**

The Goanna web browser engine is loosely based off the source code of the Gecko web browser engine. Goanna initially was different from Gecko in name only, but has since evolved to become its own engine with features that are different from Gecko. This browser engine is

used in the Pale Moon and Basilisk browsers. Goanna uses the same core components as Gecko: SpiderMonkey JavaScript and the Expat library. Goanna web browsers can be used for free on the Windows, Mac and Linux platforms.

### **EdgeHTML Browsers**

EdgeHTML is a newcomer to the web browser engine market, released in 2015. It's a proprietary browser engine developed by Microsoft and has superseded Microsoft's older browser engine, Trident. EdgeHTML powers the Microsoft Edge web browser. Edge has replaced Microsoft's Internet Explorer browser as the default web browser on all Windows computers. EdgeHTML's core components are the Chakra JavaScript engine and EdgeHTML rendering and layout library.

<https://www.techwalla.com/articles/the-five-different-types-of-web-browsers>