



# PDF.js

**PDF.js** is a JavaScript library that renders Portable Document Format (PDF) files using the web standards-compliant HTML5 Canvas. The project is led by the Mozilla Corporation after Andreas Gal launched it (initially as an experiment) in 2011.

## History and application

PDF.js was originally created as an extension for Firefox<sup>[4]</sup> and is included in Firefox since 2012. (version 15),<sup>[5][6]</sup> and enabled by default since 2013 (version 19).<sup>[7][8]</sup>

The project was created to provide a way for viewing PDF documents natively in the web browser, which prevents potential security risks when opening PDF documents outside a browser, as the code for displaying the document is sandboxed in a browser.<sup>[9]</sup> Its implementation uses the Canvas element from HTML5, which allows for fast rendering speeds.<sup>[9]</sup>

PDF.js is used in Thunderbird,<sup>[10]</sup> ownCloud,<sup>[11]</sup> Nextcloud,<sup>[12][13]</sup> and as browser extensions for Google Chrome/Chromium,<sup>[14]</sup> Firefox for Android,<sup>[15]</sup> Pale Moon<sup>[16][17]</sup> and SeaMonkey.<sup>[17][18]</sup>

It can be integrated or embedded in a web or native application to enable PDF rendering and viewing, and allows advanced usages such as Server-side rendering.

Many web applications, including Dropbox,<sup>[19]</sup> Slack,<sup>[20]</sup> and LinkedIn Learning<sup>[21]</sup> integrate PDF.js to enable previewing PDF documents.

## Behavior

According to a benchmark by Mozilla, PDF.js is performant for viewing most common PDF files, while it may have some issues with large or 'graphics-heavy' documents.<sup>[22]</sup>

PDF.js supports most of the PDF specifications (including form support or XFA<sup>[23]</sup>), but some features have not been implemented yet, which may impact rendering behavior depending on the features the document uses.<sup>[24]</sup>

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PDF.js in Firefox 100, with a table of contents displayed on the sidebar

<b>Original author(s)</b>	<u>Andreas Gal</u>
<b>Developer(s)</b>	<u>Mozilla</u>
<b>Initial release</b>	2 July 2011 <sup>[1]</sup>
<b>Stable release</b>	4.0.379 <sup>[2]</sup>  / December 31, 2023
<b>Repository</b>	<u>github.com</u> <u>/mozilla/pdf.js</u> ( <u>https://github.com/mozilla/pdf.js</u> )
<b>Written in</b>	<u>JavaScript</u> , <u>CSS</u> , <u>HTML</u>
<b>Platform</b>	<u>JavaScript engine</u> , <u>web browser</u>
<b>Size</b>	3.94 MB <sup>[1]</sup>
<b>Type</b>	<u>PDF viewer</u>
<b>License</b>	<u>Apache License 2.0</u> <sup>[3]</sup>