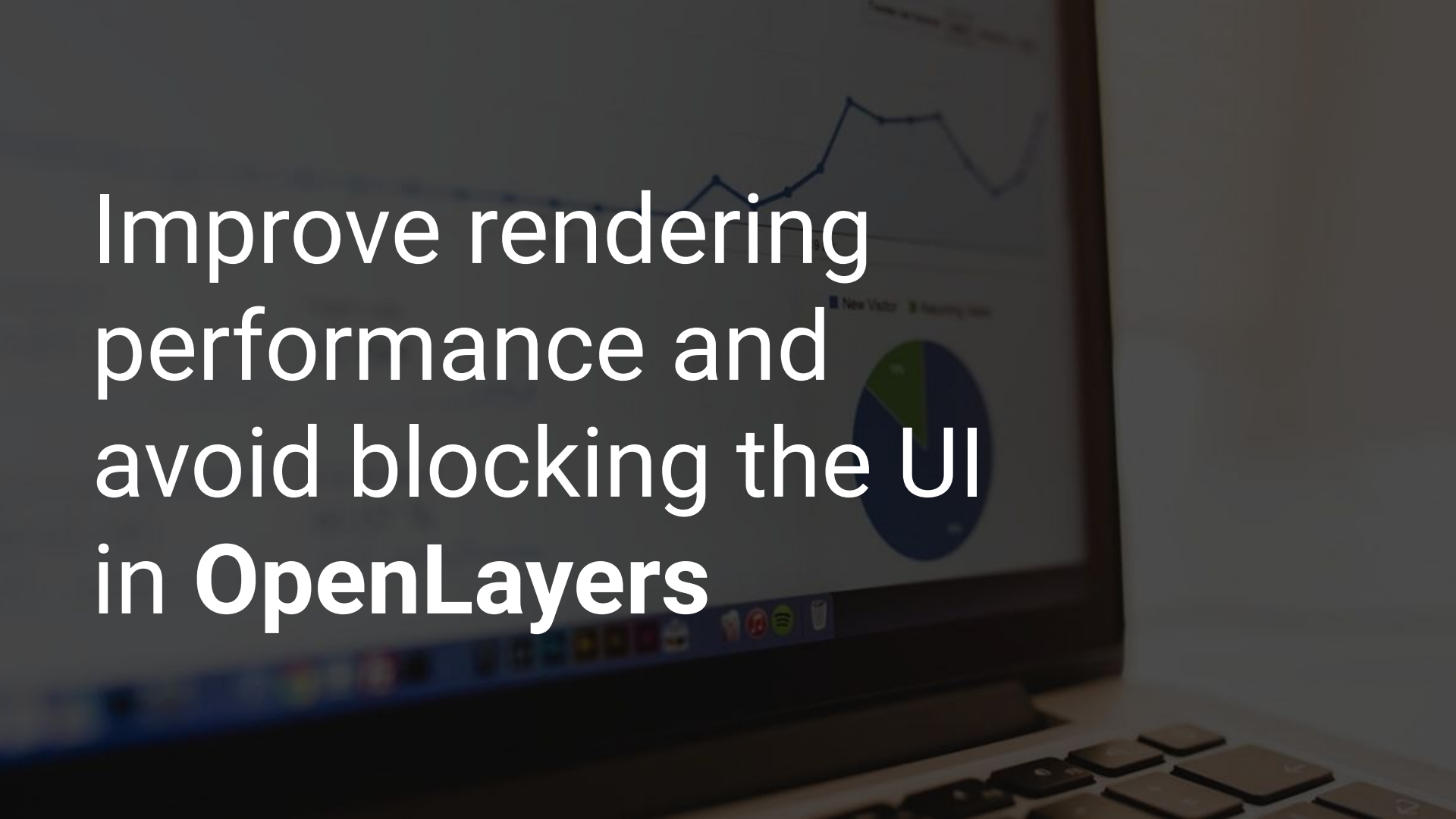


OffscreenCanvas

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A laptop screen is shown in a dark, dimly lit environment. The screen displays a data visualization interface. At the top, there is a line graph with a blue line and several data points. Below the graph, there is a pie chart with a blue and green segment. The text 'New Visitor' and 'Returning Visitor' is visible near the pie chart. The overall scene is dark, with the laptop screen being the primary light source.

Improve rendering performance and avoid blocking the UI in **OpenLayers**

OpenLayers is a library for creating interactive maps on the web. It can display map tiles, vector data and markers loaded from any source on any web page.



The problem

Map generation and update process with async fetch/XHR

load

parse

render

interact

The problem

Map generation and update process with web workers





The solution

Eliminate UI blocking by moving the whole rendering pipeline into a worker.

With **OffscreenCanvas!**

The solution

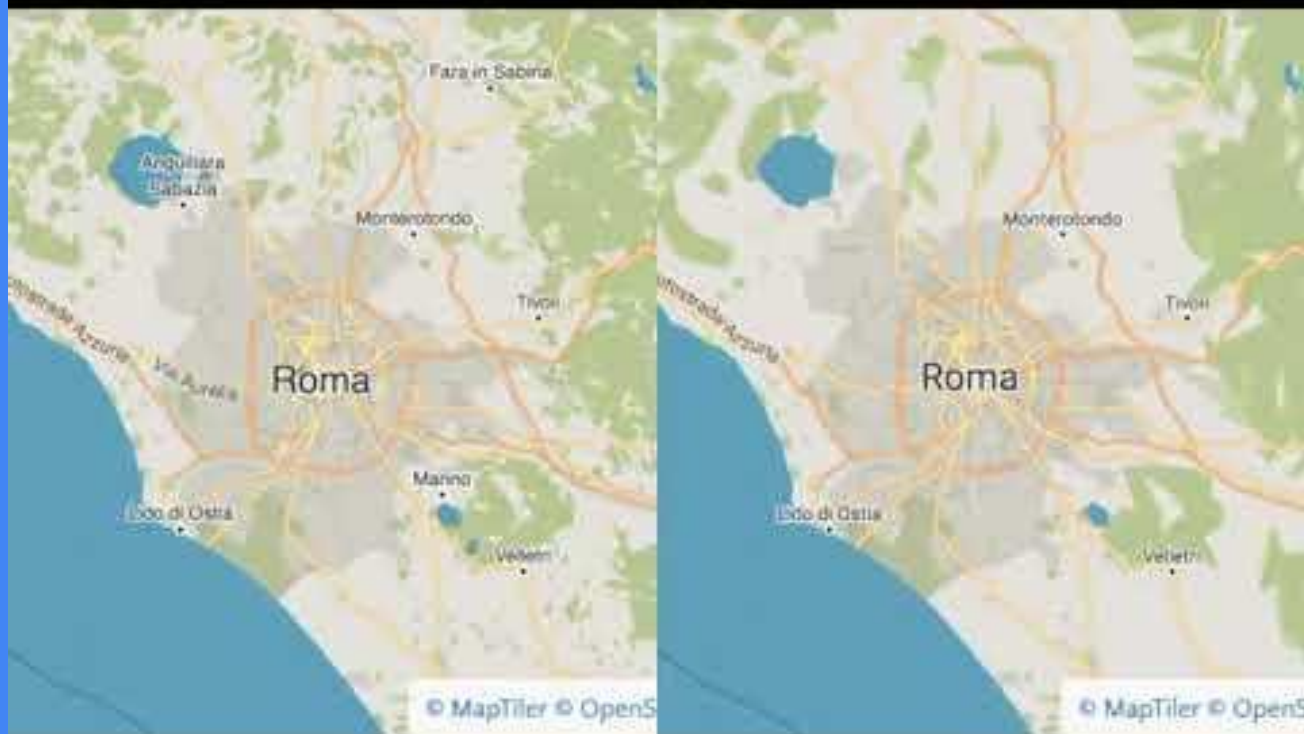
Map generation and update process with OffscreenCanvas

load

parse

render

interact







An aerial photograph of a city skyline at dusk or dawn. The sky is a mix of dark blues and oranges. The city is densely packed with skyscrapers, many of which have their lights on. The Empire State Building is prominent in the center, with its top lit up. The text "So, why don't we use this by default?" is overlaid in a large, white, sans-serif font across the middle of the image.

So, why don't we use
this by default?

Browser compatibility

[Update compatibility data on GitHub](#)

											
Chrome	Edge	Firefox	Internet Explorer	Opera	Safari	Android webview	Chrome for Android	Firefox for Android	Opera for Android	Safari on iOS	Samsung Internet
OffscreenCanvas 											
69	≤79	44 * 	No	56	No	No	69	44 * 	48	No	10.0

An aerial photograph of a city skyline at dusk or dawn. The sky is a mix of dark blues and oranges. The city is densely packed with skyscrapers, many of which have their lights on. The Empire State Building is prominent in the center. The text 'Webkit & Gecko: Please implement OffscreenCanvas!' is overlaid in a large, white, sans-serif font, centered on the image.

Webkit & Gecko:
Please implement
OffscreenCanvas!

Thank you!

