

Runter von meinem Rasen!

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**ShadowDOM und WebComponents**

# HALLO ZUSAMMEN!

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PHP, VanillaJS, ASP.NET, Salesforce, Python, Go u.a., DevOps,  
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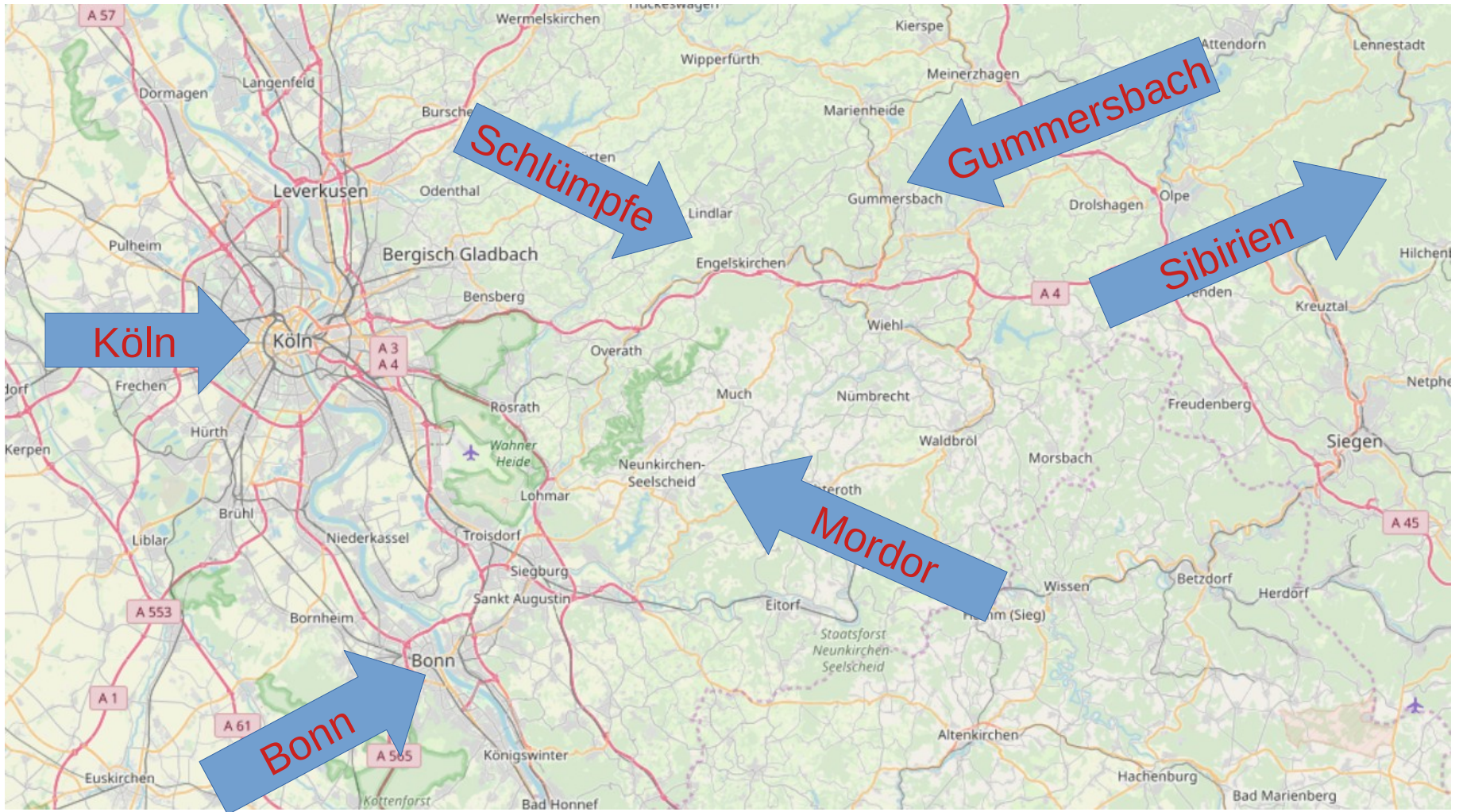
Seit Juni 2018 Leiter Softwareentwicklung  
WhereGroup Bonn/Berlin/Freiburg

# Mein Schicksal Teil 1

my old programming projects  
waiting for me to finish them:



see you someday





# Mein Schicksal Teil 2



**KAUFT HONIG!**

Zurück zum Thema:

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**WebComponents**

## Warum überhaupt?

- Übergreifendes Plugin-System für das Frontend
- Flache Lernkurve
- Intuitiv benutzbar (CMS)
- Interoperabel (React, Vue, etc)
- Bringt gängige Programmierpattern endlich ins Frontend:
  - Wiederverwendung
  - Kapselung
  - Vererbung
  - Wohldefinierte Schnittstellen





# Ein Beispiel ohne WebComponents

```
<script src="http://maps.googleapis.com/maps/api/js?
key=APIKEY&sensor=true"></script>
```

```
<script>
  new google.maps.Map(document.getElementById('Map'), {
    center: new google.maps.LatLng(-52.033, 8.533),
    zoom: 8,
    mapTypeId: google.maps.MapTypeId.ROADMAP
  });
</script>
```

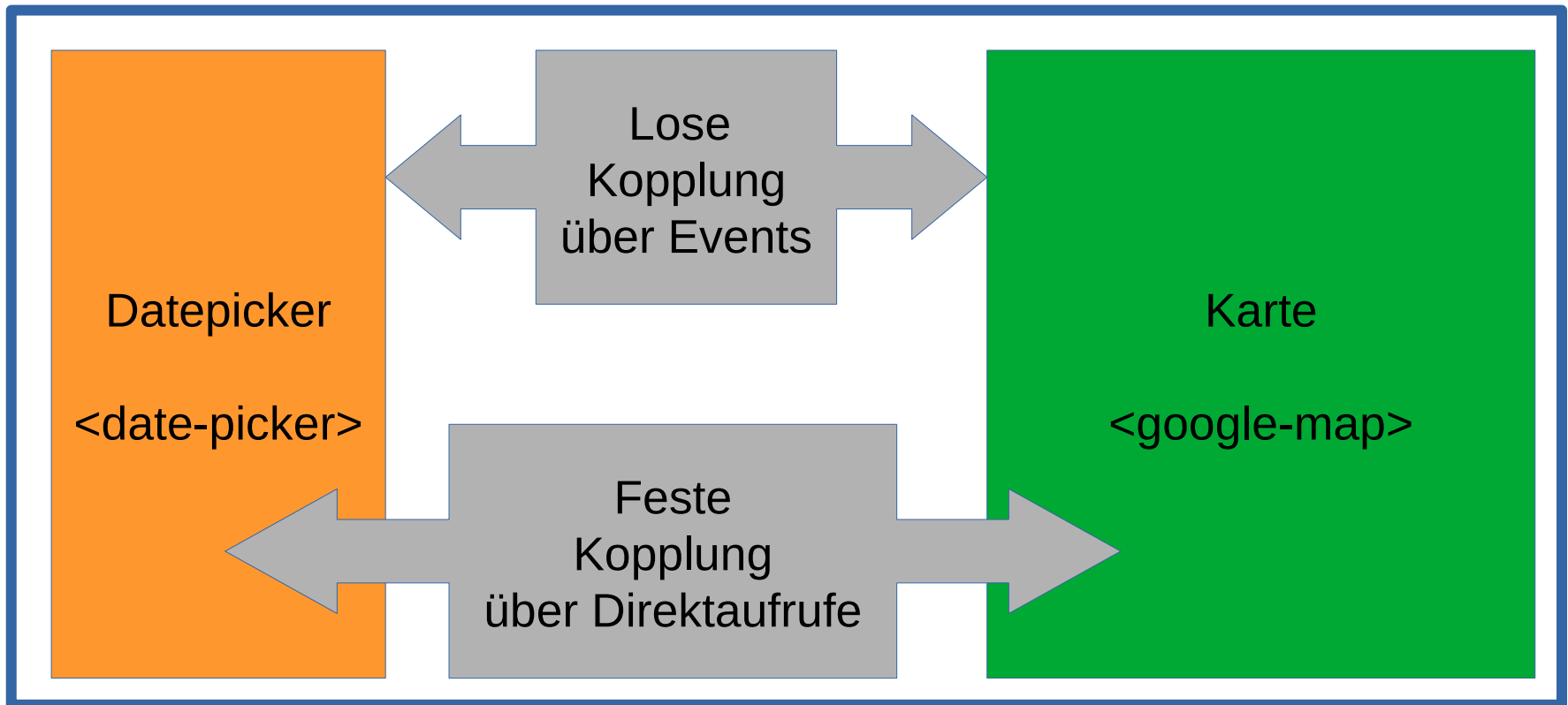
```
<div id="map"></div>
```

# Ein Beispiel mit WebComponents

```
<script src="http://maps.googleapis.com/maps/api/js?
key=APIKEY&sensor=true"></script>
```

```
<google-map
  latitude="-52.033"
  longitude="8.533"
  zoom="8"
  type="roadmap"></google-map>
```

# Loose und feste Kopplung möglich

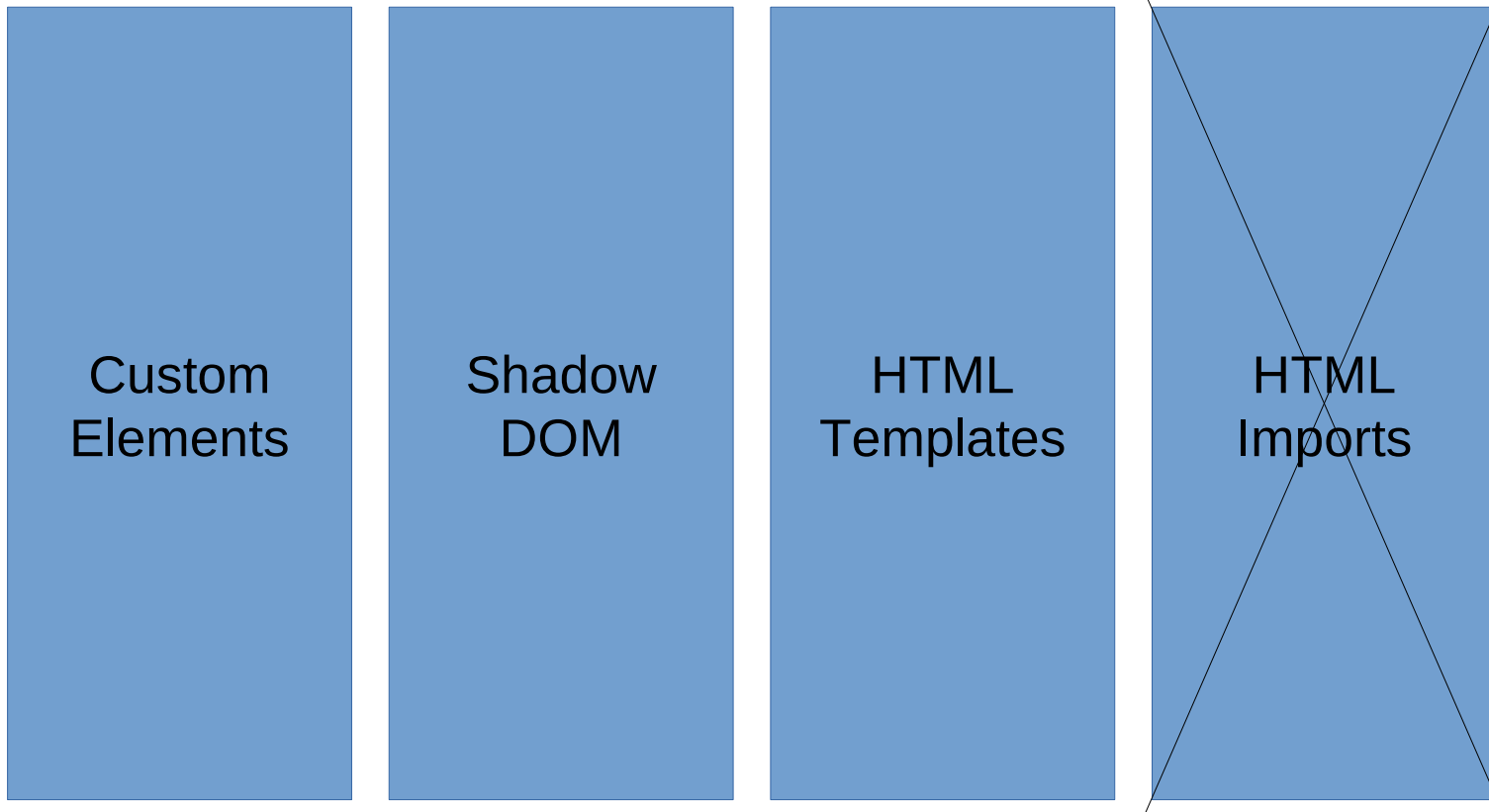


# Und warum jetzt?

- V1 der 2019 veröffentlicht
- 90% Browserunterstützung nach Usern
- Fast 100% mit Polyfills
- Vermutlich das beherrschende Frontend-Thema der nächsten Jahre



# Die Bestandteile

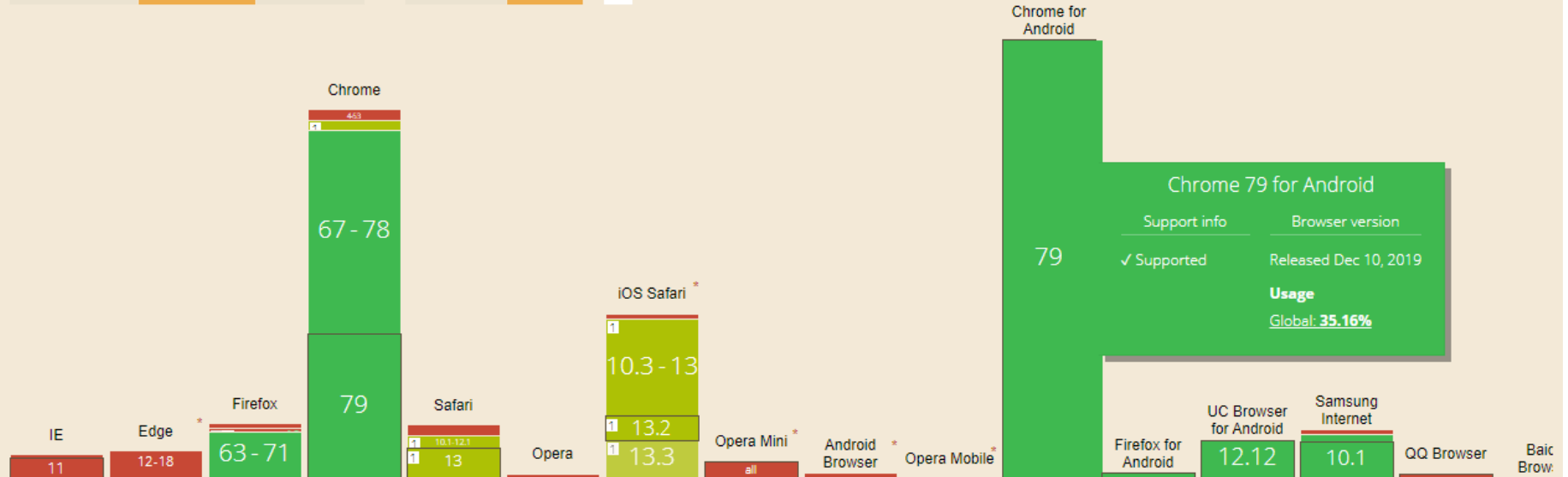


## Custom Elements (V1) - LS

Usage % of all users   
 Global 72.98% + 16.6% = 89.58%

Method of defining new HTML tags.

Current aligned **Usage relative** Date relative Apply filters Show all ?



Notes Known issues (0) Resources (11) Feedback

MS Edge status: In Development

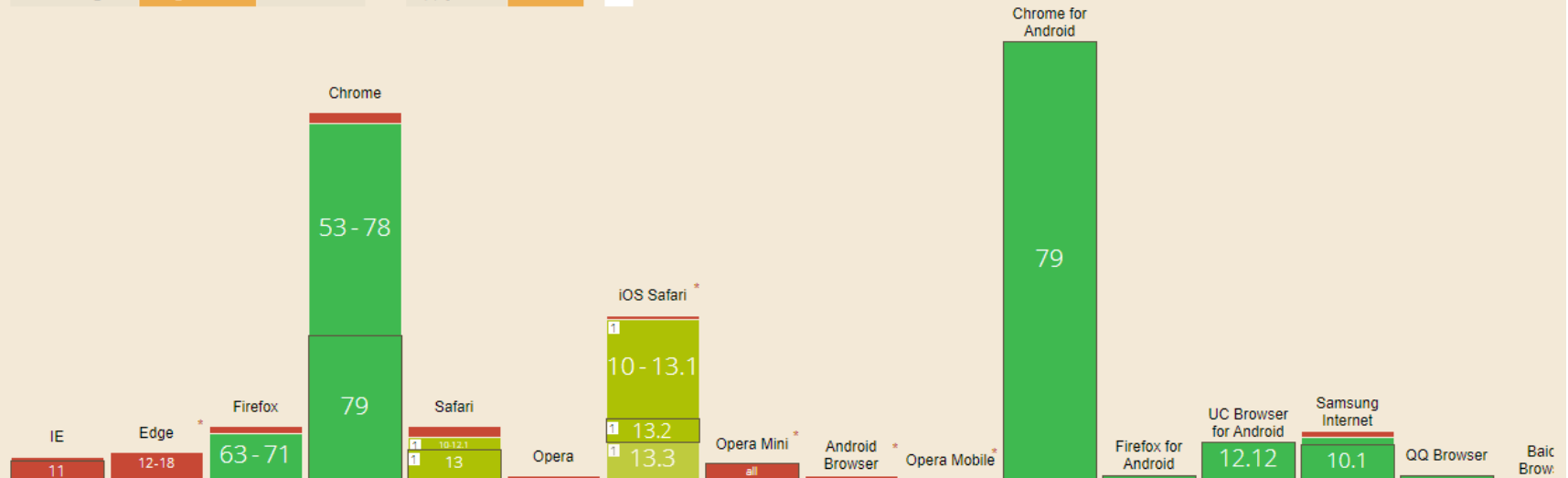
- <sup>1</sup> Supports "Autonomous custom elements" but not "Customized built-in elements".
- <sup>2</sup> Enabled through the `dom.webcomponents.enabled` preference in `about:config`.
- <sup>3</sup> Enabled through the `dom.webcomponents.customelements.enabled` preference in `about:config`.

## Shadow DOM (V1) - WD

Usage  
Global 74.07% + 15.82% = 89.89%

Method of establishing and maintaining functional boundaries between DOM trees and how these trees interact with each other within a document, thus enabling better functional encapsulation within the DOM & CSS.

Current aligned Usage relative Date relative Apply filters Show all ?



Notes Known issues (0) Resources (8) Feedback

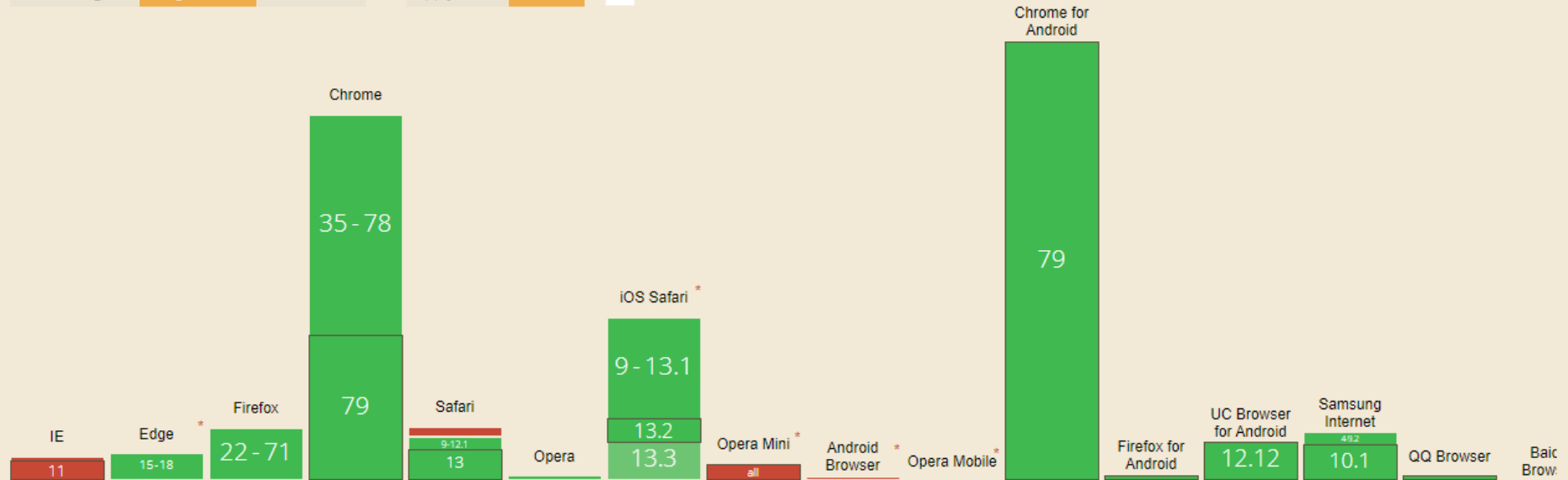
- MS Edge status: *In Development*
- 1 Certain CSS selectors do not work (:host > .local-child) and styling slotted content (::slotted) is buggy.
  - 2 Enabled through the dom.webcomponents.enabled preference in about:config.
  - 3 Enabled through the dom.webcomponents.shadowdom.enabled preference in about:config.

## HTML templates - LS

Usage % of all users   
Global 94.08% + 0.18% = 94.26%

Method of declaring a portion of reusable markup that is parsed but not rendered until cloned.

Current aligned **Usage relative** Date relative Apply filters Show all ?



Notes **Known issues (1)** Resources (8) Feedback

- 1 Does not support Document.importNode on templates, nested templates or elements that contain templates.
- 2 Does not support Node.cloneNode on templates, nested templates or elements that contain templates.
- 3 Safari 6.2 has the same partial support as Safari 7.1.



Und jetzt:

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**Den Code bitte!**

# DANKE FÜR EURE AUFMERKSAMKEIT!

Fragen? Meinungen?

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