



AnOl, GeoExt, MapStore 2, ngeo, ...

An overview of extensions,
plugins, libraries & frameworks
around OpenLayers

Marc Jansen / @selectoid

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Outline

- Disclaimer
- About ...
- Motivation
- Examples galore
- Conclusion

Disclaimer

Disclaimer

- Overview ... but likely incomplete
- Comparison? Apples and oranges!
- I am partly involved in development of some projects
- I'll try to be unbiased
- Vanilla JS vs. JavaScript fatigue vs. reinventing the wheel
- Non-scientific definitions



Image: Nature morte aux pommes et aux oranges, Paul Cézanne, Public Domain

About ...

Marc Jansen



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👤 @marcjansen

🐦 @selectoid



- Technical lead @ terrestris
- Core developer OpenLayers
- Core developer / PSC member GeoExt
- Author "OpenLayers" (German)
- Speaker & workshop instructor national & international
- OSGeo Foundation Charter Member

terrestris



 @terrestris
 @terrestrisde

- terrestris.de
- Top-notch OpenSource GIS from Bonn, Germany
- Development, projects, support & teaching
- Consulting, implementation, planning & maintenance

...this talk

extension, plugin, add-on

Focused addition, new feature

library

multiple different additions, collection

framework

often built on top of 3rd party software, usually
comes with a paradigm / structure / pattern

Sometimes the boundaries are blurred and there is a
fluid transition

Motivation

Why?

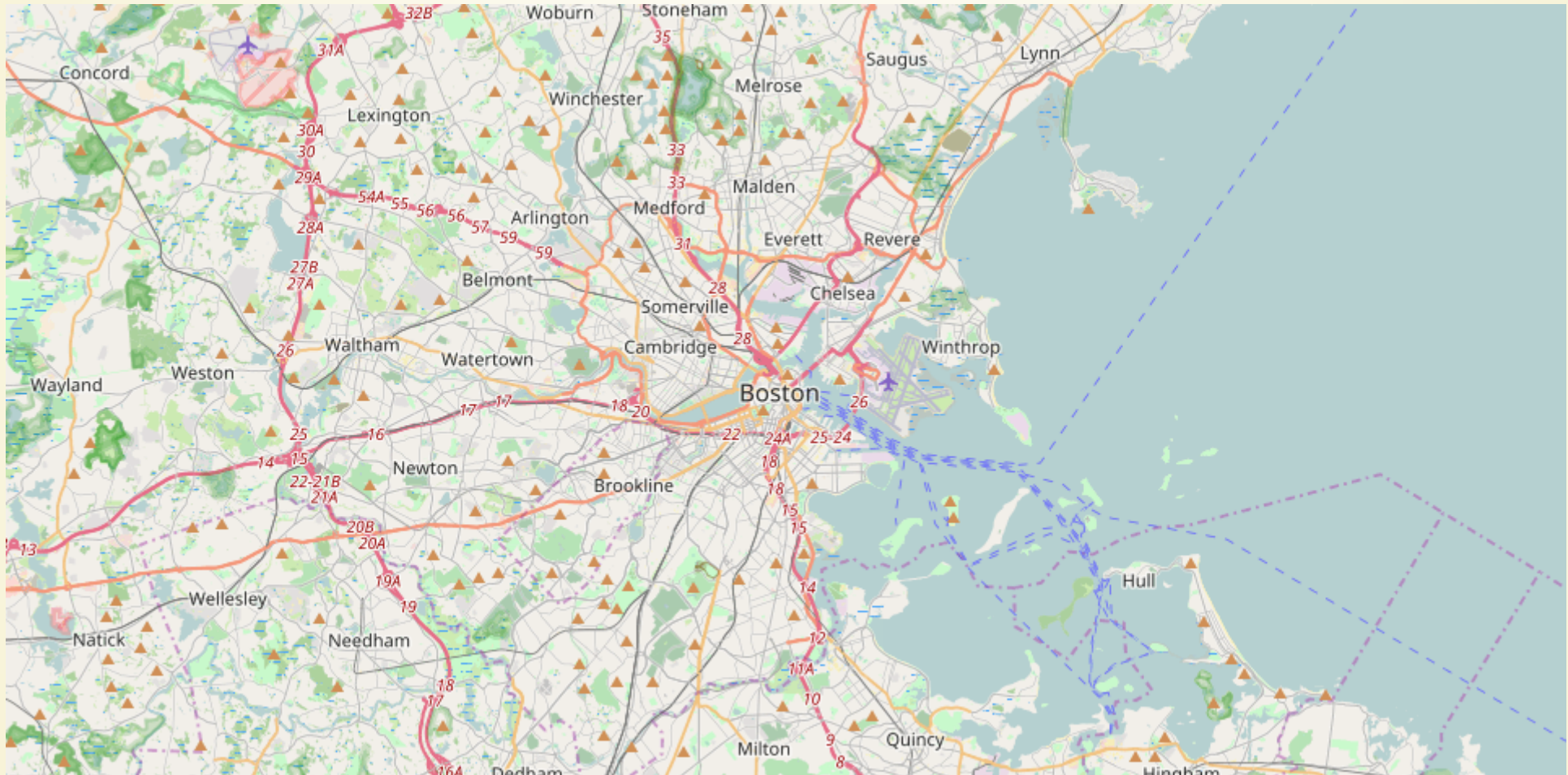
- OpenLayers doesn't have everything
- What else is there on the market?
- There is a lot out there!
- Impact of decisions for own projects

Examples
galore

Layerswitcher

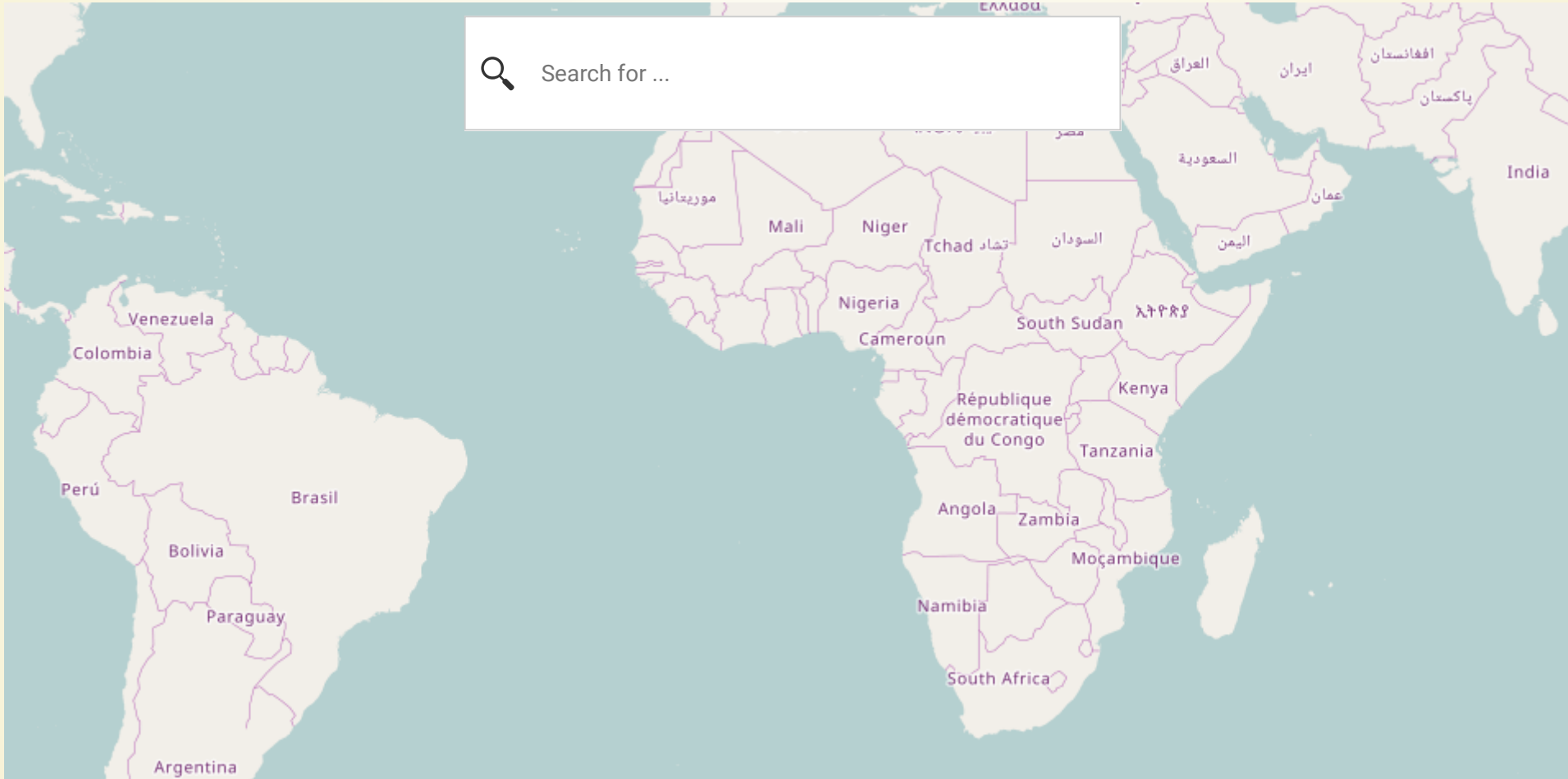


Popups

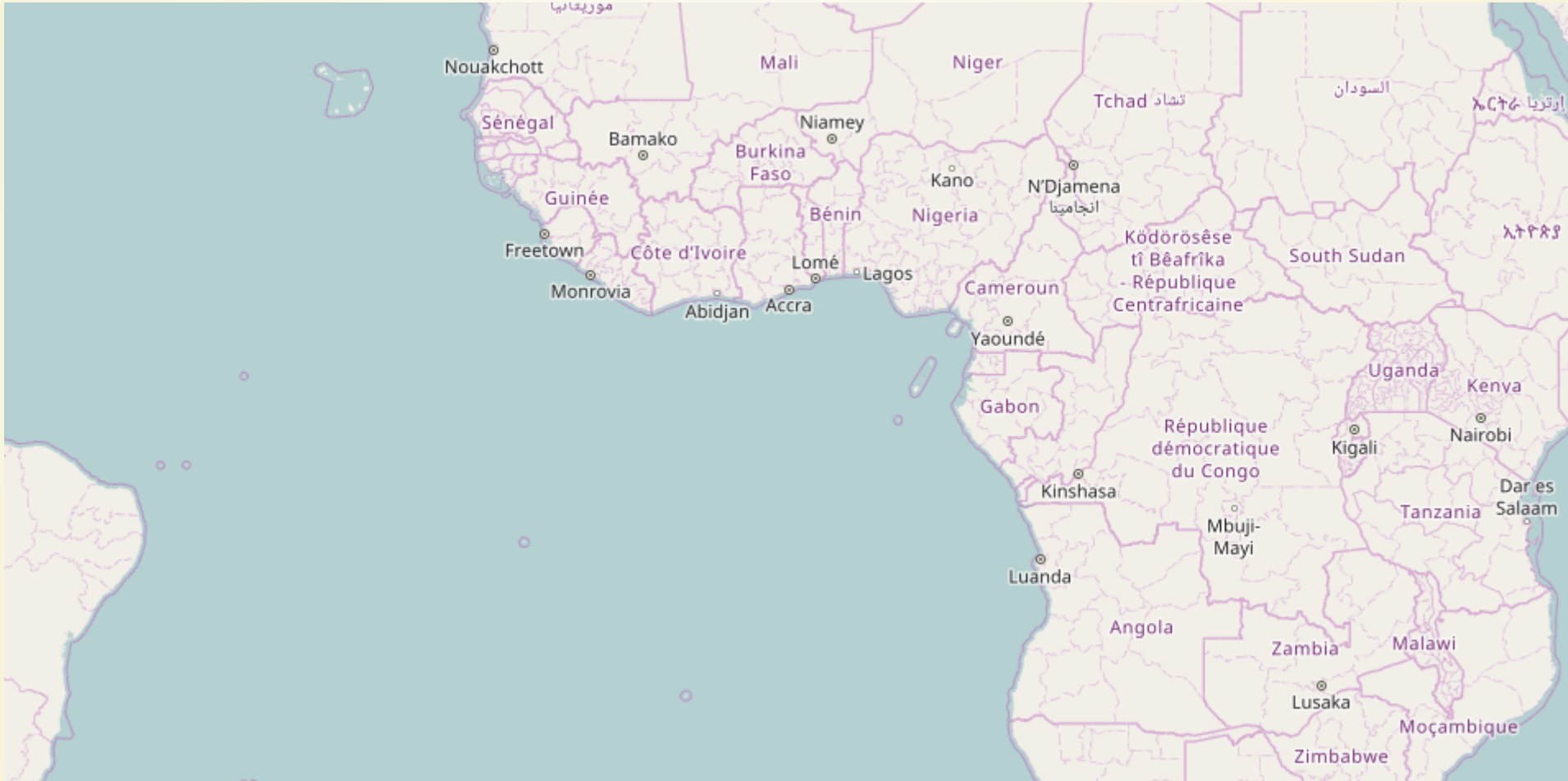


ol3-popup by Matt Walker: <https://github.com/walkermatt/ol3-popup>

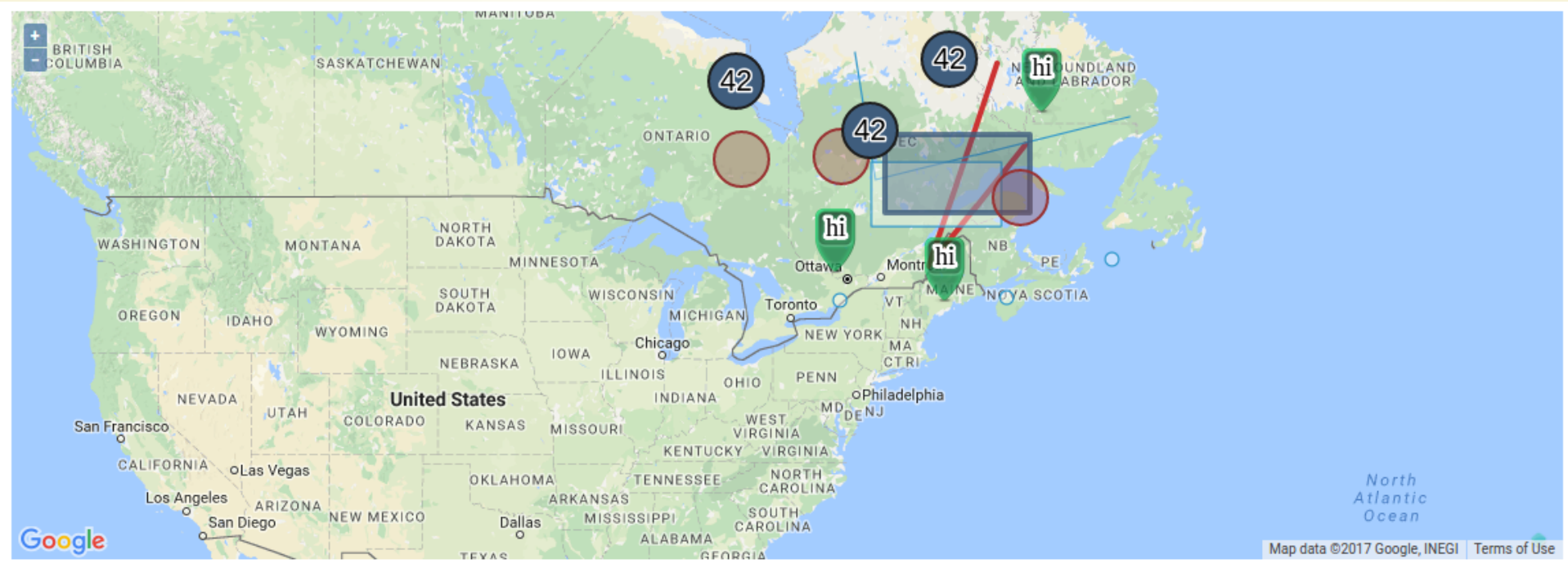
Geocoding



Contextmenu



Google



ol3-google-maps by Mapgears: <https://github.com/mapgears/ol3-google-maps>
Concept



**ALWAYS WANTING
MORE, MORE, MORE!**

There is more, e.g.

- **ol3-projection-switcher**, by National Snow and Ice Data Center,
- **GWT-OpenLayers**, by Tino Desjardins
- **Wrapper for Vaadin 8**, (mostly) by Martin Stypinski
- Integration into **Drupal** and **WordPress**
- See also <https://openlayers.org/3rd-party/>
(PRs accepted to become part of this list)

ol-ext



OL3-ext: Extensions for OpenLayers 3

Fork me on GitHub

Cool extensions for OpenLayers 3 (OL3).

If you like this, you may like [OL3-AnimatedCluster](#)

Styles

Font style

([map.style.font.html](#))

Draw points using an iconic font (font Awesome) gives you scalable vector icons that can instantly be customized (form, size, color, drop shadow) using attributes..

[style](#), [vector](#), [font](#), [fontawesome](#), [icon](#), [maki](#)

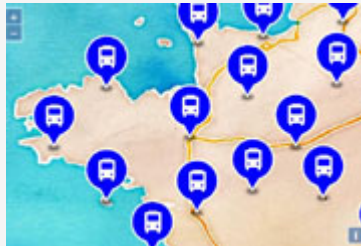


Photo style

([map.style.photo.html](#))

The ol.style.Photo is an image style to show photos or images on a map. The photos are drawn in a box and can be anchored.

[style](#), [vector](#), [photo](#)



Statistic charts style

([map.style.chart.html](#))

The ol.style.Chart is an image style to draw statistical graphics (bar, donut or



OL3-ext: style textPath

Fork me on GitHub

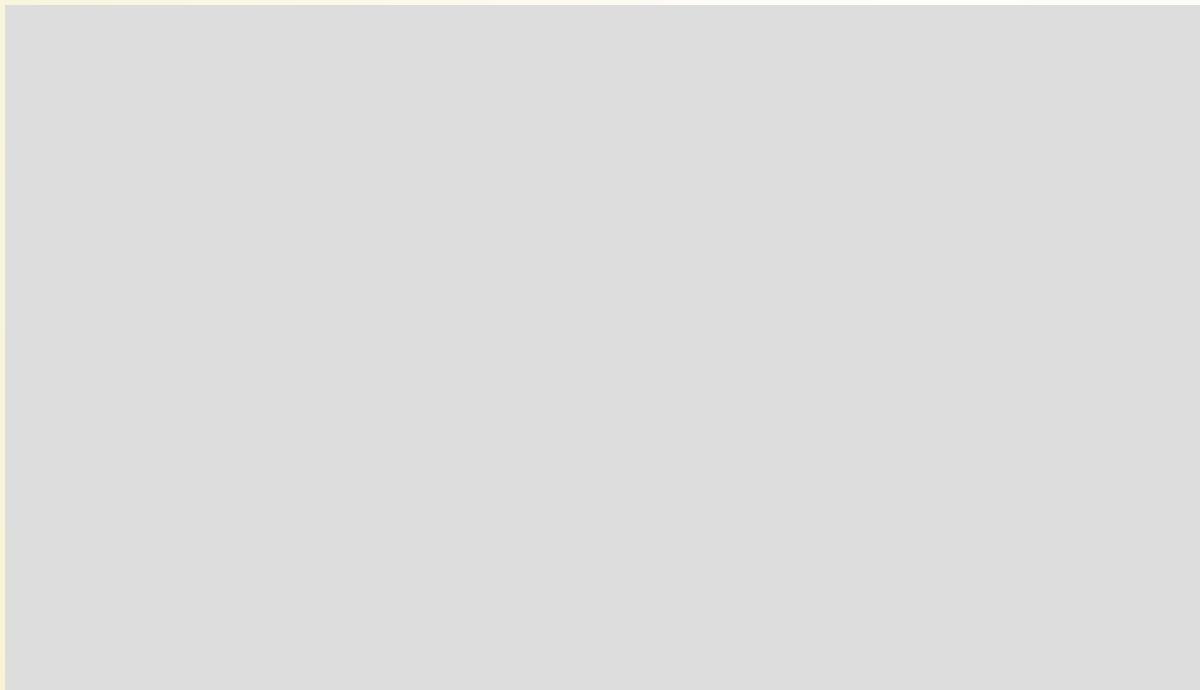
The [ol.vector.setTextPathStyle\(\)](#) is a function to draw text along a linear feature (`ol.geom.LineString`) on postcompose. The function is called as the `ol.vector.setStyle()` function but rendered in a postcompose frame.

An [ol.style.TextPath](#) is defined but [ol.style.Text](#) can be used instead.

You can specify a [minResolution](#) to prevent drawing beneath this resolution.

- The [rotateWithView](#) option is used to render readable text (the function tries to display text upward).
- The [textOverflow](#) option determines how overflowed content that is not displayed is signaled to users.
- If the length of the linestring (in pixel) is less than [minWidth](#), text won't be displayed.

The example uses an [ol.geom.LineString.cspline](#) to smooth support and avoid letters collision.



Options:

textAlign: center ▼

textBaseline: middle ▼

textOverflow: hidden ▼

minWidth: 0 px

☐ rotateWithView (readable)

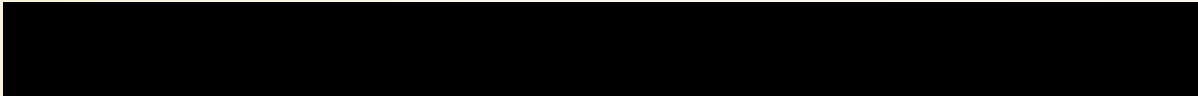
☐ smooth support

minZoom: all ▼ (~ maxResolution)

But: <https://github.com/openlayers/openlayers/pull/7022>

ol-cesium

Enable/disable



*ol-cesium by the ol-cesium developers: <http://openlayers.org/ol-cesium/>
Some cesium talks during the conference*

GeoExt

Feature Grid

| | Name | Population |
|--|-----------------|------------|
| | Hamburg | 1,700,000 |
| | Frankfurt / ... | 700,000 |
| | Berlin | 3,500,000 |
| | München | 1,400,000 |
| | | |

Feature Grid with selection

| | Name |
|--|----------------|
| | Dortmund |
| | Köln |
| | Kaiserslautern |
| | Bonn |
| | Stuttgart |
| | |

Description

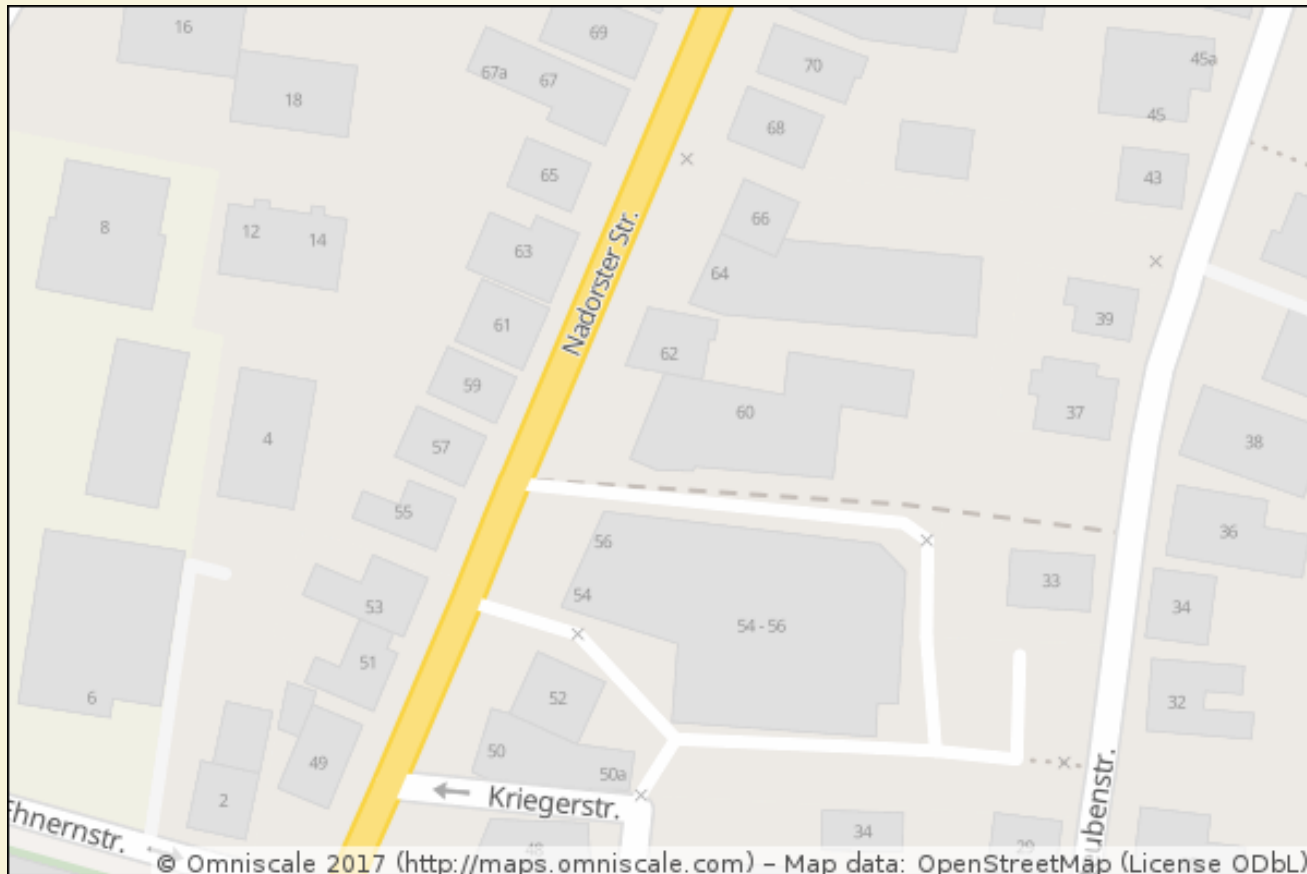
This example shows how to display features in grids.

The grid on the left side is created by passing an OpenLayers collection (`ol.Collection`) with feature objects (`ol.Feature`)

The grid on the right side is created from an existing vector layer and also highlights the selected feature in the grid on the map.

Have a look at [grid.js](#) to see how this is done.

An01



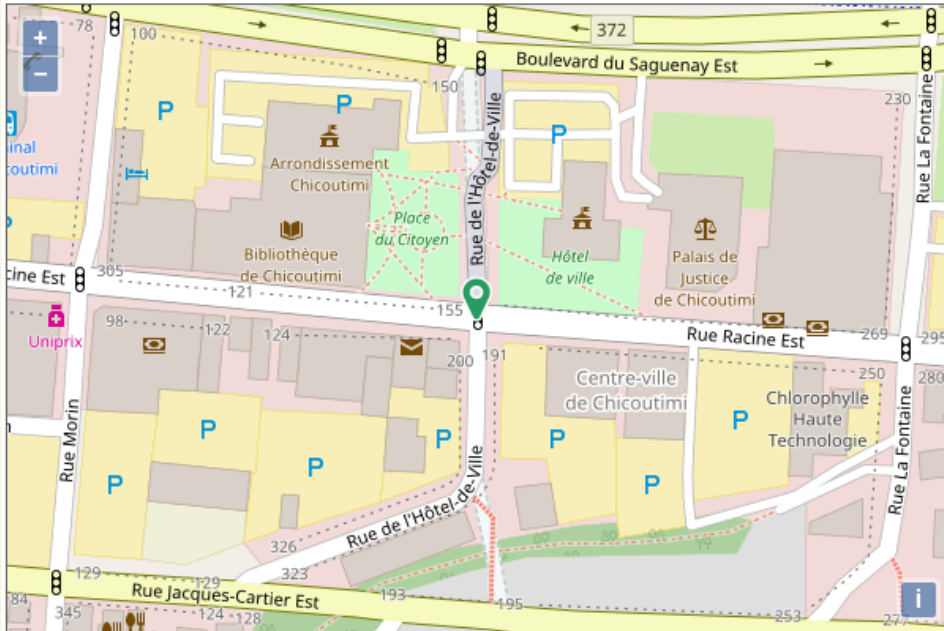
Background layers

- ☒ OSM Omniscache
- ☐ OSM Omniscache Grayscale

Overlay layers

- ☒ Polygon
- ☒ Features
- ☒ Point
- ☒ Line

ngeo



This example shows how to use the `ngeo-googlestreetview` component.

☒ GoogleStreetView ☐ Dummy tool

ngeo by Camptocamp: <https://github.com/camptocamp/ngeo>
talk @ 11:30 AM today, this room

MapStore 2



MapStore 2 by GeoSolutions: <https://github.com/geosolutions-it/MapStore2> & <http://mapstore2.geo-solutions.it/mapstore/docs/>
talk @ 5:00 PM today, this room



**ALWAYS WANTING
MORE, MORE, MORE!**

More?

- Integrations with your framework of choice?
- Chances are good!
- e.g. Ember.js / Meteor
- Some not-quite-up-to-date
- Some are more proof of concepts / examples

Conclusion

Conclusion

- There is a lot!
- A lot quality-wise, too!
- Vanilla JS vs. JavaScript fatigue vs. reinventing the wheel
- Can OpenLayers make it easier to create plugins etc.?
- Thanks to everyone involved in building *sth.* with OpenLayers

Thank you

Questions &
comments?

Imprint

Imprint

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Slides, PDF version, git repository