

YAGA

Yet Another Geo Application

Angular2 Geo-Apps mit YAGA

FOSSGIS 2018 Bonn



Referenten



S. Herritsch

Geograph

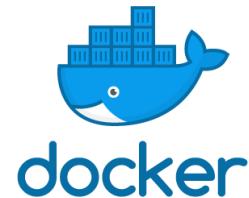
Uni Bonn

A. Schubert

Entwickler

REWE digital

YAGA Development-Team



leaflet-ng2

GeoServer

etl

MapProxy

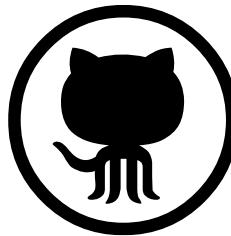
geojson-redux

Solr

...

...

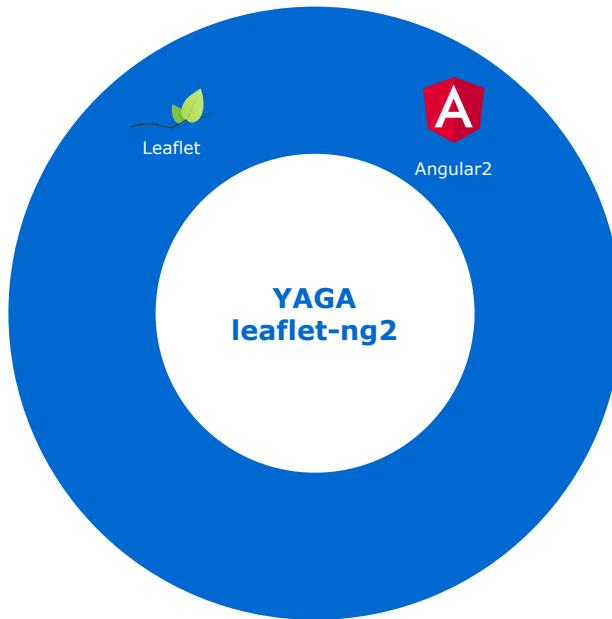
YAGA Development-Team



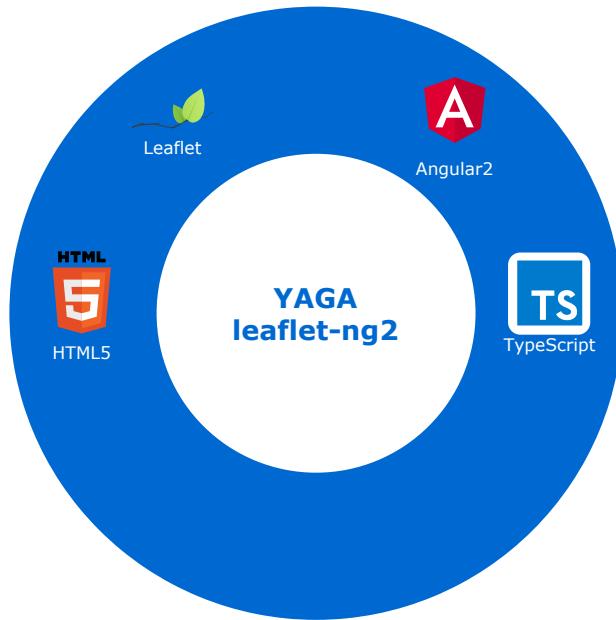
yagajs



YAGA leaflet-ng2



YAGA leaflet-ng2

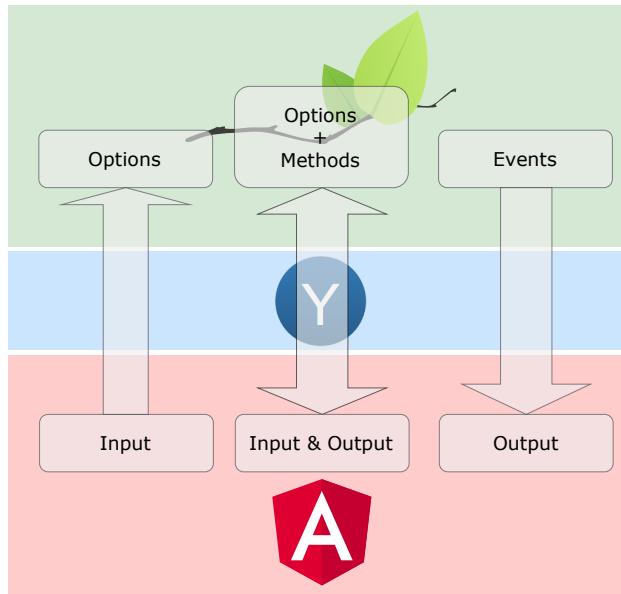


YAGA leaflet-ng2



YAGA leaflet-ng2

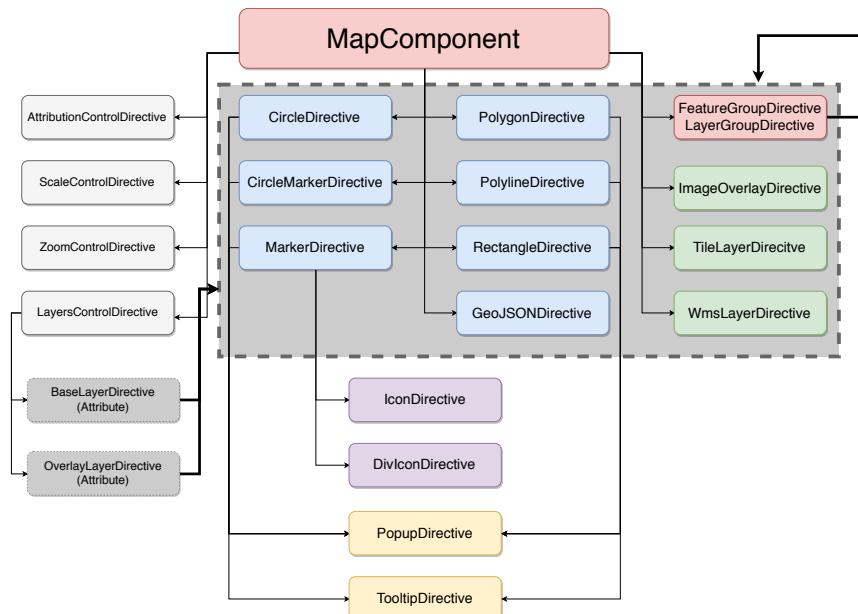
...integriert vollständig Leaflet in Angular



Vererbt von Leaflet - Dekoriert mit Angular2

YAGA leaflet-ng2

...ist granular



YAGA leaflet-ng2

...ist komplett dokumentiert

Globals / DivIconDirective /

Class DivIconDirective

Angular2 directive for Leaflet div-icons.

You can use this directive in an Angular2 template after importing YagaModule.

How to use in a template:

```
<yaga-map>
  <yaga-marker>
    <yaga-div-icon
      [iconAnchor] = "..."
      [iconSize] = "..."
      [popupAnchor] = "...">
      You can paste your HTML content for the icon here!
    </yaga-div-icon>
  </yaga-marker>
</yaga-map>
```

Notes:

- All div-icon-directives have the css-class yaga-div-icon.
- The contentHTML property is not the child-node in the leaflet div-icon, it is the clone of it and gets cloned again on every change.

[link](http://leafletjs.com/reference-1.0.3.html#divicon) <http://leafletjs.com/reference-1.0.3.html#divicon> Original Leaflet documentation

[link](https://leaflet-ng2.yagajs.org/latest/browser-test?grep=DivIcon%20Directive) <https://leaflet-ng2.yagajs.org/latest/browser-test?grep=DivIcon%20Directive> Unit-Test

[link](https://leaflet-ng2.yagajs.org/latest/coverage/lcov-report/lib/div-icon.directive.js.html) <https://leaflet-ng2.yagajs.org/latest/coverage/lcov-report/lib/div-icon.directive.js.html> Test coverage

[link](https://leaflet-ng2.yagajs.org/latest/typedoc/classes/divicondirective.html) <https://leaflet-ng2.yagajs.org/latest/typedoc/classes/divicondirective.html> API documentation

Globals

- ➊ AttributionControlDirective
- ➋ CircleDirective
- ➌ CircleMarkerDirective

- ➍ DivIconDirective
 - ➎ constructor
 - ➏ contentHTML
 - ➐ updateEvent
 - ➑ iconAnchor
 - ➒ iconSize
 - ➓ popupAnchor
 - ➔ createIcon

- ➏ GeoJSONDirective
- ➏ IconDirective
- ➏ ImageOverlayDirective
- ➏ MapComponent
- ➏ MarkerDirective
- ➏ PolygonDirective
- ➏ PolylineDirective
- ➏ PopupDirective
- ➏ RectangleDirective
- ➏ ScaleControlDirective
- ➏ TileLayerDirective
- ➏ TooltipDirective
- ➏ WmsLayerDirective

YAGA leaflet-ng2

...hat zu (fast) jeder Directive ein Beispiel

YAGA leaflet-ng2 Release Examples Circle-Marker-Directive



Duplex

display	<input checked="" type="checkbox"/>
stroke	<input checked="" type="checkbox"/>
color	blue
weight	5
opacity	<input type="range"/>

Output

click dblclick mousedown mouseup
mouseover mouseout mousemove
contextmenu keypress preclick

Input

interactive	<input checked="" type="checkbox"/>
tooltip directive	This is the tooltip conte
popup directive	This is the popup conte

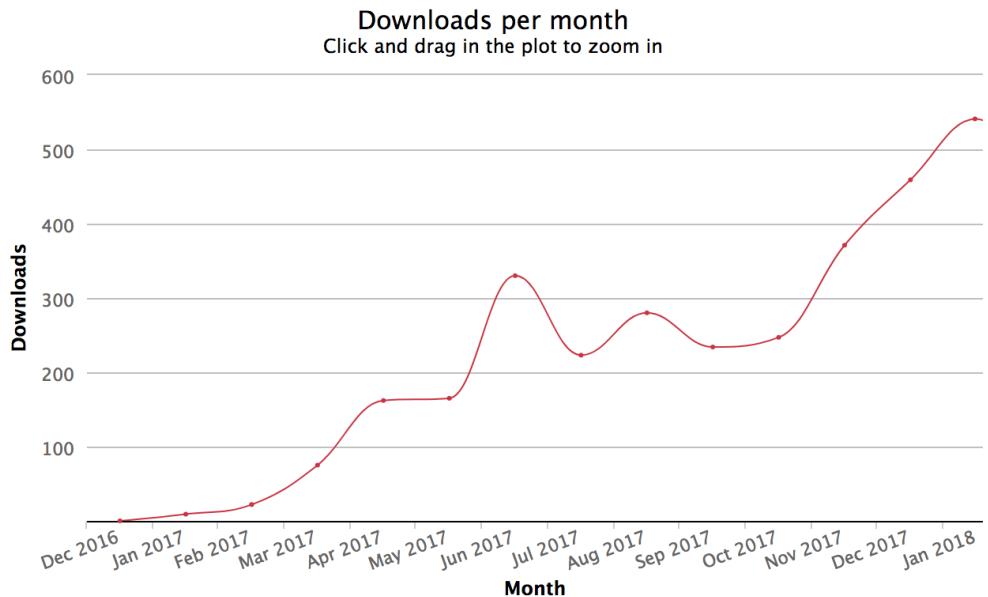
YAGA leaflet-ng2

...ist komplett getestet

```
2708  1595 passing (21s)
2709
2710 =====
2711 Writing coverage object [/home/travis/build/yagajs/leaflet-ng2/coverage/coverage.json]
2712 Writing coverage reports at [/home/travis/build/yagajs/leaflet-ng2/coverage]
2713 =====
2714
2715 ====== Coverage summary ======
2716 Statements : 98.23% ( 10218/10402 ), 122 ignored
2717 Branches   : 80.29% ( 843/1050 ), 103 ignored
2718 Functions  : 97.21% ( 3306/3401 ), 6 ignored
2719 Lines      : 98.92% ( 10192/10303 )
2720 =====
2721
2722
2723 The command "npm test" exited with 0.
► 2724 store build cache
► 2728 $ cat coverage/lcov.info | ./node_modules/.bin/coveralls
2730
2731 Done. Your build exited with 0.
```

YAGA leaflet-ng2

...hat eine wachsende Community



YAGA leaflet-ng2

Application Showcase



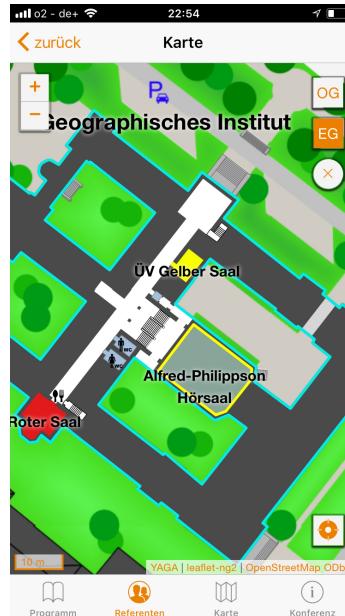
YAGA leaflet-ng2

Supporter



YAGA leaflet-ng2

Beispiel: Konferenz-App



<https://fossgis2018.yagajs.org>

Einfach zu entwickeln

HTML Kenntnisse für einfache Anwendungen ausreichend

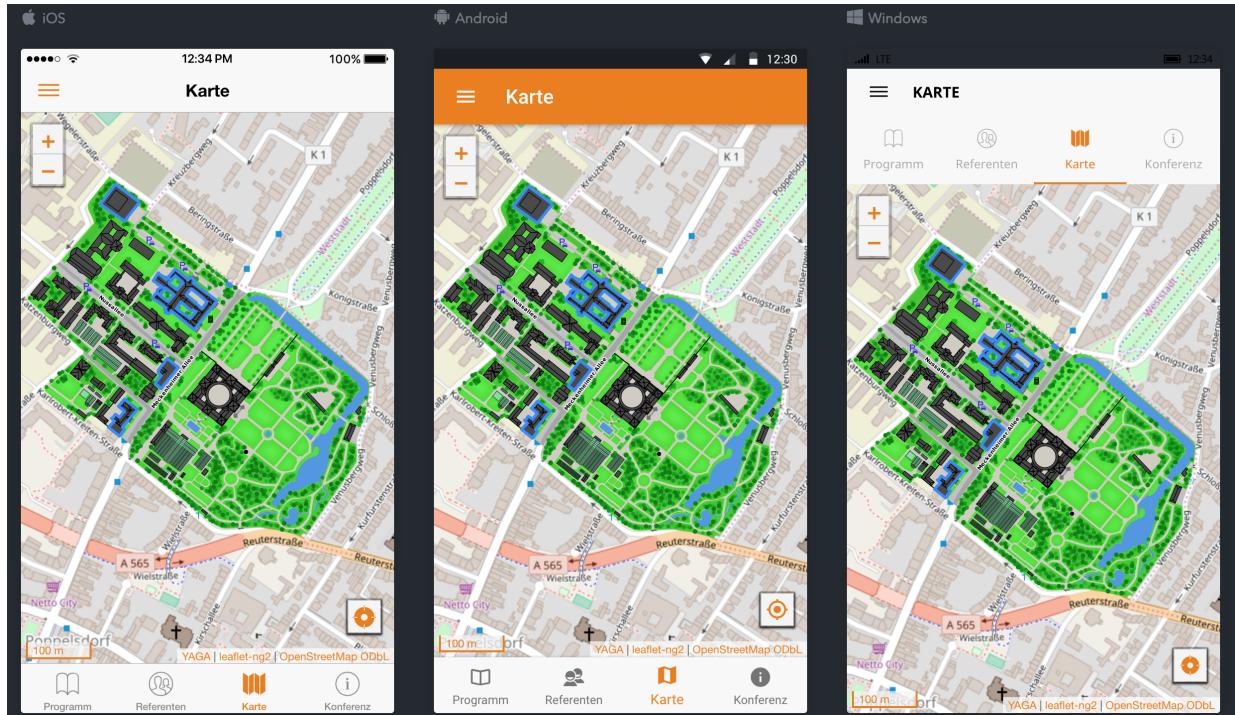
```
<yaga-map>
  <yaga-tile-layer
    [url]="'https://tile.openstreetmap.org/{z}/{x}/{y}.png'"
  ></yaga-tile-layer>

  <yaga-scale-control
    [metric]="true"
    [imperial]="false"
    [maxWidth]="200"
  ></yaga-scale-control>
</yaga-map>
```

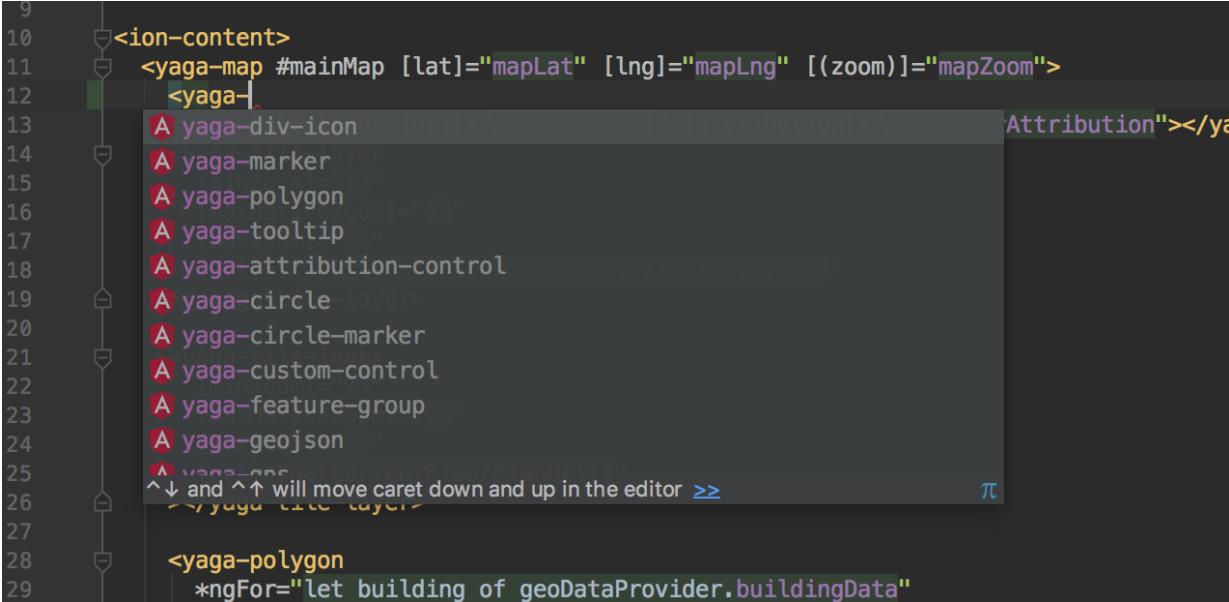
Umfangreiches Toolset

- Vorschau im Browser
- Live-Reload
- Templates
- Generatoren
- IDE Integration
- Deployment
- ...

Vorschau im Browser



IDE Unterstützung



The screenshot shows a code editor with the following code:

```
9 <ion-content>
10   <yaga-map #mainMap [lat]="mapLat" [lng]="mapLng" [(zoom)]="mapZoom">
11     <yaga-|
12       A yaga-div-icon
13       A yaga-marker
14       A yaga-polygon
15       A yaga-tooltip
16       A yaga-attribution-control
17       A yaga-circle
18       A yaga-circle-marker
19       A yaga-custom-control
20       A yaga-feature-group
21       A yaga-geojson
22       A yaga-layer
23       A yaga-layer
24       A yaga-layer
25       A yaga-layer
26       A yaga-layer
27       A yaga-layer
28     <yaga-polygon
29       *ngFor="let building of geoDataProvider.buildingData"
```

A code completion dropdown is open at line 12, showing suggestions for YAGA components: yaga-div-icon, yaga-marker, yaga-polygon, yaga-tooltip, yaga-attribution-control, yaga-circle, yaga-circle-marker, yaga-custom-control, yaga-feature-group, and yaga-geojson. The suggestion 'yaga-layer' is currently selected.

Below the dropdown, a tooltip provides keyboard navigation instructions: '^↓ and ^↑ will move caret down and up in the editor' followed by a double-right arrow icon.

Generator

```
? What would you like to generate: (Use arrow keys)
> component
directive
page
pipe
provider
tabs
```

Online Workshop

github.com/atd-schubert/leaflet-ng2-workshop-froscon



Fortschritte

Erweiterung um Angular-Provider

- Verschachtelte Layer
- Layers-Control-Directive
- Leaflet-Extensions

Erweiterung um Angular-Provider

```
<yaga-map>
  <yaga-layers-control>
    <yaga-tile-layer base-layer="Basis-Karte"
      [url]="#">
    </yaga-tile-layer>
    <yaga-layer-group overlay-layer="Gebäude">
      <yaga-image-overlay [url]="#">
      <yaga-image-overlay [url]="#">
      <yaga-image-overlay [url]="#">
    </yaga-layergroup>
  </yaga-layers-control>
</yaga-map>
```

Vollständige API Dokumentation



Vollständige API Dokumentation

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/leaflet-ng2/typedoc/classes/wmslayerdirective.html [examples/div-icon-directive/](#)

Globals

- [AttributionControlDirective](#)
- [CircleDirective](#)
- [CircleMarkerDirective](#)
- [**DivIconDirective**](#)
 - [constructor](#)
 - [contentHtml](#)
 - [updateEvent](#)
 - [iconAnchor](#)
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 - [popupAnchor](#)
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- [ScaleControlDirective](#)
- [TileLayerDirective](#)
- [TooltipDirective](#)
- [WmsLayerDirective](#)

Die YAGA App



YAGA App

Basis

- Bisherige Entwicklungen
- Funktionsumfang Geopaparazzi



YAGA App

Browser Nativ

- Cordova Plugins nur optional
- immer lauffähig als Web-App

YAGA App

Offline fähig

- Anwendung
- Raster-Daten
- Vektor-Daten



YAGA App

Integration Redux



YAGA App

Import / Export

Gängige Geo-Formate



YAGA App

YAGA Server

als Gegenspieler



YAGA App

YAGA Server

Micro-Service basiert



Nächste Schritte

Nächste Schritte

Final Release 1.0.0

- Leaflet >1.3.1
- Fehlende Beispiele

Nächste Schritte

Browser-Native Extensions

- Offline Daten
- Turf in Angular2
- GeoPackage

Nächste Schritte

- YAGA App
- YAGA Server

Fazit

Give it a try

Fazit

Give it a try

... and YAGA a feedback

Anwendertreffen

Heute 18:00 Uhr

ÜIII - hier im Gebäude



YAGA Development Team



info@yagajs.org



[@yagajs](https://twitter.com/yagajs)



[yagajs](https://github.com/yagajs)



yaga