

# YAGA

## Yet Another Geo Application

Angular2 Geo-Apps mit YAGA

FOSSGIS 2018 Bonn



# Referenten



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**S. Herritsch**

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Geograph

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Uni Bonn



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**A. Schubert**

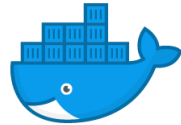
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Entwickler

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REWE digital

# YAGA Development-Team



docker

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leaflet-ng2

GeoServer

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etl

MapProxy

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geojson-redux

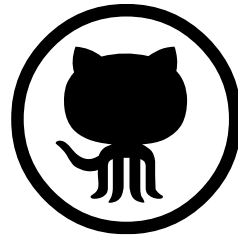
Solr

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...

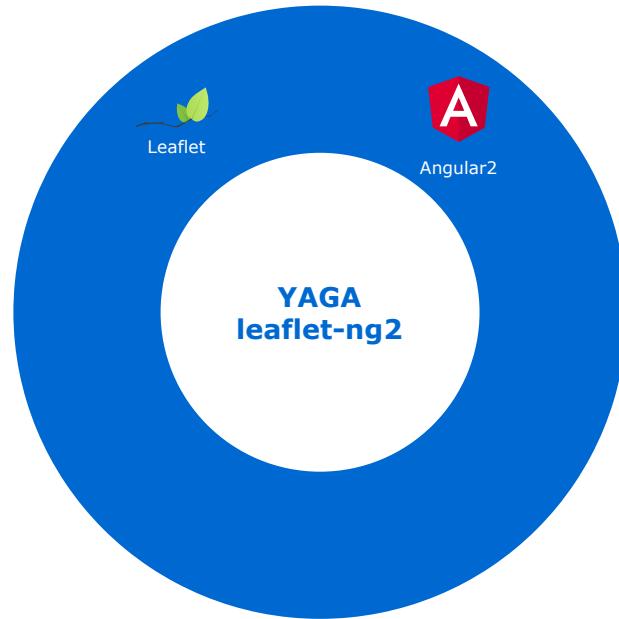
...

# YAGA Development-Team

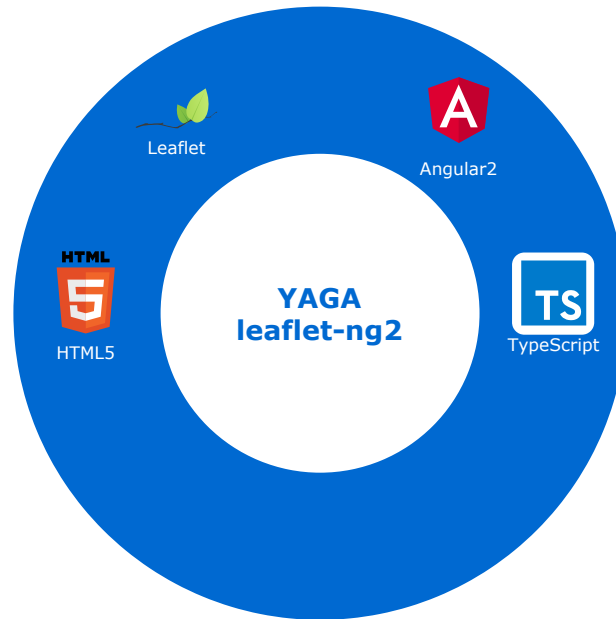


yagajs

# YAGA leaflet-ng2



# YAGA leaflet-ng2

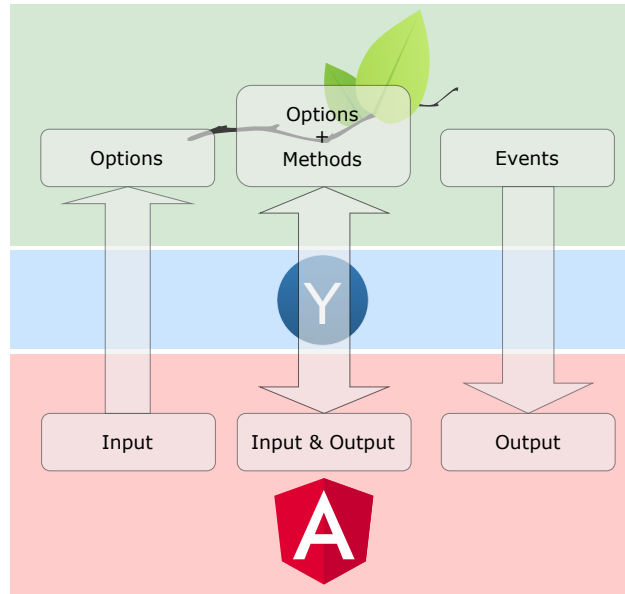


# YAGA leaflet-ng2



# YAGA leaflet-ng2

...integriert vollständig Leaflet in Angular

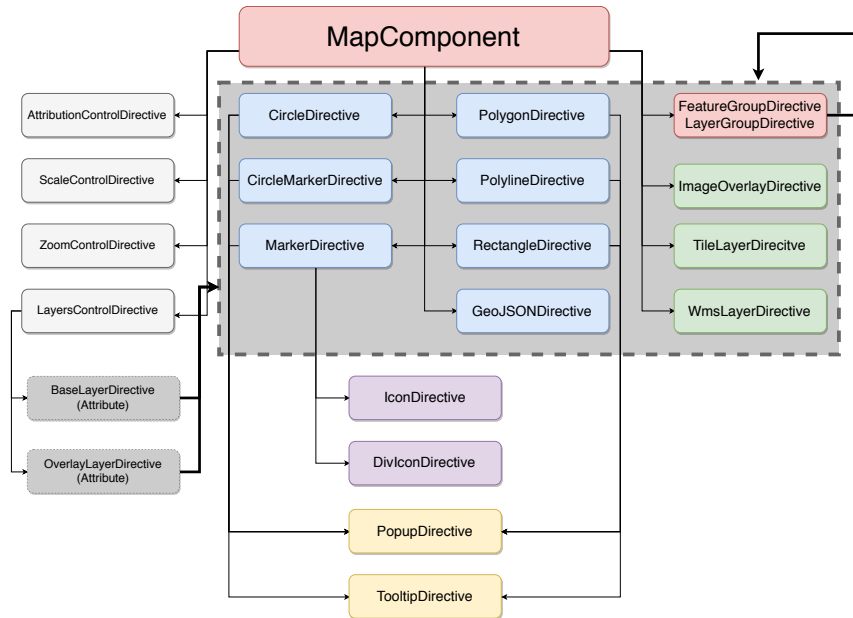


*Vererbt von Leaflet - Dekoriert mit Angular2*



# 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/cov-report/lib/div-icon.directive.js.html) <https://leaflet-ng2.yagajs.org/latest/coverage/cov-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

[/leaflet-ng2/typedoc/classes/wmslayerdirective.html](https://leaflet-ng2/typedoc/classes/wmslayerdirective.html) [amples/div-icon-directive/](https://leaflet-ng2/typedoc/classes/wmslayerdirective.html)

Globals

- AttributionControlDirective
- CircleDirective
- CircleMarkerDirective

#### DivIconDirective

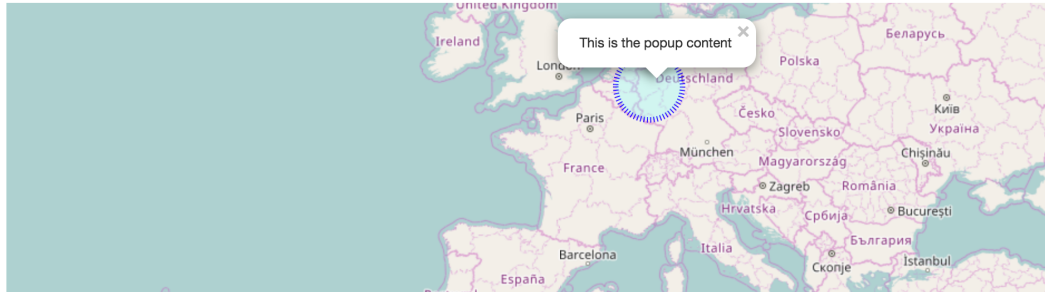
- constructor
- contentHtml
- updateEvent
- iconAnchor
- iconSize
- popupAnchor
- createIcon

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



# YAGA leaflet-ng2

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



## 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

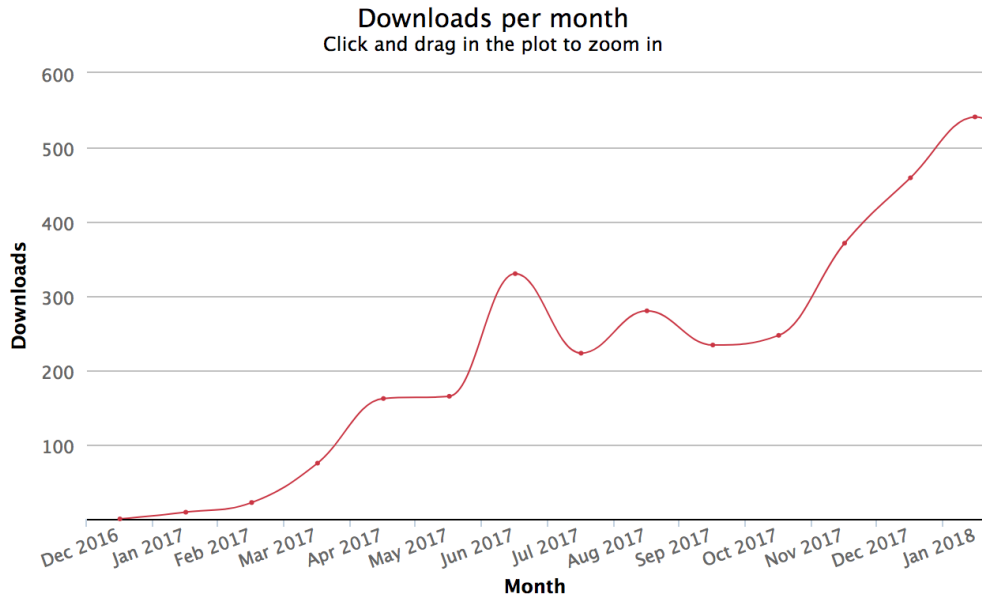
...ist komplett getestet

```
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

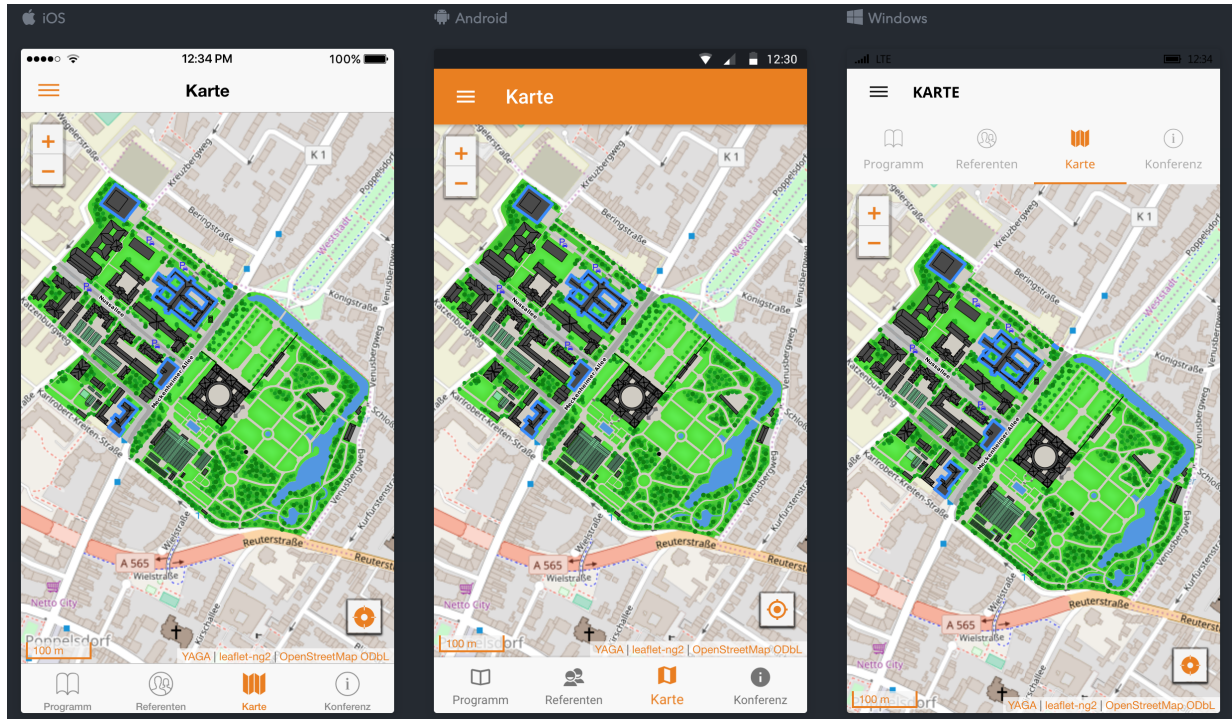
```
<yaga-map>
  <yaga-tile-layer
    [url]=" 'https://tile.openstreetmap.org/{z}/{x}/{y}.png' "
  ></yaga-tile-layer>

  <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

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

# 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](https://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]="..."></image-overlay>
      <yaga-image-overlay [url]="..."></image-overlay>
      <yaga-image-overlay [url]="..."></image-overlay>
    </yaga-layergroup>
  </yaga-layers-control>
</yaga-map>
```

# Vollständige API Dokumentation



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Globals / DivIconDirective /

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[amples/div-icon-directive/](#)

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- 🔗 CircleDirective
- 🔗 CircleMarkerDirective

### 🔗 DivIconDirective

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- 🔗 contentHtml
- 🔗 updateEvent
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- 🔗 createIcon

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- 🔗 IconDirective
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- 🔗 RectangleDirective
- 🔗 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

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## 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

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[info@yagajs.org](mailto:info@yagajs.org)

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

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

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[yaga](#)