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# Meshviewer documentation

build **passing** code quality **9.53** license **AGPL-3.0**

Meshviewer is an online visualizaiton app to represent nodes and links on a map for Freifunk open mesh network.



## Github

[Code, Issues & Pull Requests](#)

## Demo

Embedded: <https://regensburg.freifunk.net/netz/karte/>

Standalone: <https://regensburg.freifunk.net/meshviewer/>

## Known instances

[Moved to multiple instances - About tab](#) (best performance in chromium/e or edge)

## About

## Support/Help

- IRC on [irc.hackint.org](https://irc.hackint.org)
  - [#meshviewer](#) (development-channel)
- Feel free to open an [issue](#) for a problem or an idea.

## Sponsoring / Supporting

- [BrowserStack](#) for providing an awesome testing service for hundreds of browsers
- [Travis CI](#) for building meshviewer on every push and pull request
- [Scrutinizer CI](#) for testing code quality on every push and pull request
- [POEditor](#) for providing an easy non-developer translation environment
- [Netlify](#) preview for every PR and also provide a [page with current develop branch](#)

These tools need a lot of infrastructure and provide a free account for open source software.

# Build/Install

## Build utilities

- yarn <https://yarnpkg.com/>
- optional: gulp-cli (or use `yarn run gulp [command]` instead of `gulp` )

## Installing dependencies

Install yarn package-manager:

```
Choose your OS and install yarn https://yarnpkg.com/en/docs/install
```

Execute these commands on your server as a normal user to prepare the dependencies:

```
git clone https://github.com/ffrgb/meshviewer.git
cd meshviewer
yarn
# Only needed if no global gulp is installed / OS like arch provides a package
yarn global add gulp-cli
```

## Adjust config and style

1. [Change configuration to your community](#)
2. (optional) Edit files in `scss/custom/` . Additional information under [development](#).
3. (optional) Change `logo.svg` and generate new icons or adjust the images yourself.

## Building

Just run the following command from the meshviewer directory:

```
gulp
```

This will generate the folder `build/` that will contain all required files.

# Map layers

List of map layers for your meshviewer.

## Freifunk Regensburg Layer

Ask us friendly and you can use our layers. Compared to Standard OSM our tiles are 30-50% smaller means less traffic.

Key	Value
Recommend	yes
Style	simple & night
HTTP/2	yes
Retina tiles	yes
Tracking	no

```
{
  "name": "Freifunk Regensburg",
  // Please ask Freifunk Regensburg before using its tile server - example with retina tiles
  "url": "https://{s}.tiles.ffrgb.net/{z}/{x}/{y}{retina}.png",
  "config": {
    "maxZoom": 20,
    "subdomains": "1234",
    "attribution": "<a href='\"http://www.openmaptiles.org/\"' target='\"_blank\"'>&copy; OpenMapTiles</a> <a href='\"http://www.openstreetmap.org/about/\"' target='\"_blank\"'>&copy; OpenStreetMap contributors</a>",
    "start": 6
  }
},
```

## Night style

```
{
  "name": "Freifunk Regensburg Night",
  // Please ask Freifunk Regensburg before using its tile server - example with retina and dark tiles
  "url": "https://{s}.tiles.ffrgb.net/n/{z}/{x}/{y}{retina}.png",
  "config": {
    "maxZoom": 20,
    "subdomains": "1234",
    "attribution": "<a href='\"http://www.openmaptiles.org/\"' target='\"_blank\"'>&copy; OpenMapTiles</a> <a href='\"http://www.openstreetmap.org/about/\"' target='\"_blank\"'>&copy; OpenStreetMap contributors</a>",
    "mode": "night",
    "start": 19,
    "end":
  }
}
```

## OpenStreetMap FR - Hot style

Key	Value
Recommend	yes
Style	hot & others

HTTP/2	no
Retina tiles	no
Tracking	unknown

```
{
  "name": "OpenStreetMap.HOT",
  "url": "https://{s}.tile.openstreetmap.fr/hot/{z}/{x}/{y}.png",
  "config": {
    "maxZoom": 19,
    "attribution": "&copy; Openstreetmap France | &copy; <a href='\"http://www.openstreetmap.org/copyright\"'>OpenStreetMap</a>"
  }
}
```

## HERE Map

Key	Value
Recommend	no - limit is to low, nice satellite view available
Style	normal & satellite
HTTP/2	no
Retina tiles	no
Tracking	unknown

Requires API token - free account with limited views available.

```
{
  "name": "HERE",
  // Please use your own API key - Free plan is on right side after the pay plans
  "url": "https://{s}.base.maps.api.here.com/maptile/2.1/maptile/newest/normal.day/{z}/{x}/{y}/256/png?app_id=YOUR_KEY&app_code=YOUR_CODE&lg=deu",
  "config": {
    "attribution": "Map &copy; 1987-2014 <a href='\"http://developer.here.com\">HERE</a>",
    "subdomains": "1234",
    "maxZoom": 20
  }
}
```

## Satellite hybrid View

```
{
  "name": "HERE.hybridDay",
  // Please use your own API key - Free plan is on right side after the pay plans
  "url": "https://{s}.aerial.maps.api.here.com/maptile/2.1/maptile/newest/{variant}/{z}/{x}/{y}/256/png?app_id=YOUR_KEY&app_code=YOUR_CODE&lg=deu",
  "config": {
    "attribution": "Map &copy; 1987-2014 <a href='\"http://developer.here.com\">HERE</a>",
    "subdomains": "1234",
    "variant": "hybrid.day",
    "maxZoom": 20
  }
}
```

## Satellite map

Key	Value
Recommend	no - slow
Style	normal & satellite
HTTP/2	no
Retina tiles	no
Tracking	unknown

```
{
  "name": "Esri.WorldImagery",
  "url": "//server.arcgisonline.com/ArcGIS/rest/services/World_Imagery/MapServer/tile/{z}/{y}/{x}",
  "config": {
    "maxZoom": 20,
    "attribution": "Tiles &copy; Esri &mdash; Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, UPR-EGP, and the GIS User Community"
  }
},
```

## Map layers

Examples of GeoJSON as Promise. the split between json and option is from leaflet implementation. Multiple geo implementations are supported.

### Single Object

```
geo: [
  {
    json: function () {
      return Promise.resolve({
        'type': 'Feature',
        'geometry': {
          'type': 'Polygon',
          'coordinates': [
            [
              [
                12.04925537109375,
                49.036517514836994
              ],
              [
                12.033462524414062,
                49.021660359632115
              ],
              [
                12.058181762695312,
                48.99553703238219
              ],
              [
                12.11311340332031,
                49.001843917978526
              ],
              [
                12.122726440429686,
                49.03381654386847
              ],
              [
                12.04925537109375,
                49.036517514836994
              ]
            ]
          ]
        }
      });
    },
    option: {
      style: {
        color: '#e23535',
        weight: 5,
        opacity: 0.4,
        fillColor: '#6de922',
        fillOpacity: 0.1
      }
    }
  }
]
```

### Multi object

```
geo: [
  {
```



```
json: function () {
  return Promise.all([
    {
      'type': 'Feature',
      'geometry': {
        'type': 'Polygon',
        'coordinates': [
          [
            [
              12.04925537109375,
              49.036517514836994
            ],
            [
              12.033462524414062,
              49.021660359632115
            ],
            [
              12.058181762695312,
              48.99553703238219
            ],
            [
              12.11311340332031,
              49.001843917978526
            ],
            [
              12.122726440429686,
              49.03381654386847
            ],
            [
              12.04925537109375,
              49.036517514836994
            ]
          ]
        ]
      }
    }, {
      'type': 'Feature',
      'geometry': {
        'type': 'Polygon',
        'coordinates': [
          [
            [
              11.04925537109375,
              49.036517514836994
            ],
            [
              12.033462524414062,
              49.021660359632115
            ],
            [
              12.058181762695312,
              48.99553703238219
            ],
            [
              12.11311340332031,
              49.001843917978526
            ],
            [
              12.122726440429686,
              50.03381654386847
            ],
            [
              12.04925537109375,
              49.036517514836994
            ]
          ]
        ]
      }
    }
  ])
}
```

```

    });
  },
  option: {
    style: {
      color: '#e23535',
      weight: 5,
      opacity: 0.4,
      fillColor: '#6de922',
      fillOpacity: 0.1
    }
  }
}
]

```

## Dynamic/Ajax objects

```

geo: [
  {
    json: function () {
      var linkScale = require('d3-interpolate').interpolateHslLong('darkblue', 'darkred');

      return require('helper').getJSON('https://opendata.ffggrz.de/').then(function (result) {
        result.features.forEach(function (item) {
          var temp = ((item.properties.temperature ? item.properties.temperature.toString() : 0) + 20) / 55
          ;

          item.color = linkScale(temp);
        });

        return result.features ? result.features : false;
      }, function () {
        return false;
      });
    },
    option: {
      pointToLayer: function (feature, latlng) {
        return L.circleMarker(latlng, {
          radius: 8,
          fillColor: feature.color,
          color: '#000',
          weight: 1,
          opacity: 1,
          fillOpacity: 0.8
        }).bindTooltip(feature.properties.temperature ? 'Temperatur: ' + feature.properties.temperature.toString() + 'C' : '');
      },
      pane: 'markerPane'
    }
  }
]

```

<https://github.com/d3/d3-interpolate#color-spaces> - Info about colors

# Deploy on Netlify

THIS IS OPTIONAL, we use netlify for deploying every Pull Request and the setup is done in a few minutes

## Free plan

- Supports custom DNS with SSL
- Simple deployment & build of a Github branch

## How-to setup

- Register by <https://www.netlify.com/>
- Select your repo
- Adjust Branch, Build command and Publish directory

## Create a new site

From zero to hero, three easy steps to get your site on Netlify.

---

1. Connect to Git provider

2. Pick a repository

3. Build options, and deploy!

## Deploy settings for xf-/meshviewer-1

Get more control over how Netlify builds and deploys your site with these settings.

Branch to deploy

develop



### Basic build settings

If you're using a static site generator or build tool, we'll need these settings to build your site.

Build command

gulp

Publish directory

build/

### Advanced build settings

Define environment variables for more control and flexibility over your build.

Pro tip! Add a [netlify.toml](#) configuration file to your repository for even more flexibility.

New variable



## Development

Use `gulp serve` for development and reload on JS changes and injection for style.

## SCSS/Style

Avoid modifying files outside of `scss/custom/`. Sass-linting throws only warnings. If you don't intend to get your changes upstream, you can ignore them (can be disabled for a file).

## Debug

### Find errors with sentry

We provide a branch with sentry <https://sentry.io/> and it will send errors reports to your or our sentry server. This will improve quality and we depend less on user reports (not every user reports or we don't get the error forwarded).

#### Advantages

- Find errors from users with different usage of meshviewer.
- Reports include a full stacktrace, browser version and other information.

You can use the Saas version or host it yourself. Or ask us for an instance, we are happy for more feedback from different instances.

You might need to rebase the debug branch to have your settings.

### Find errors without sentry

#### Browsersync

We use Browsersync for local development and `gulp serve` will show a second port with Browsersync settings and tools. It includes winere, a remote inspection tool and allows to sync tabs. The web-interface can often be found under port 3001.

#### Javascript console

Use `console.log`, it only throws a warning and no error in linter.

## Supported Backends

### Yanic

We only support Yanic Backend from from Freifunk Bremen. Cooperation between multiple communities allows us to enhance the Meshviewer with new and optimize meshviewer.json.

Github: <https://github.com/FreifunkBremen/yanic>

## Unsupported Backends

### ffmap-backend

Our original base supports ffdmap-backend with nodes.json v2. Ffdmap-backend is not maintained according to ffnord github.

Github: <https://github.com/ffnord/ffmap-backend>

---

### Hopglass-Server

Hopglass-server has its own frontend called hopglass.

Github: <https://github.com/hopglass/hopglass-server>

# Release process

## Version

- Version number x.x.x
  - xx.X
    - Bugfix for last release
    - Translation update
    - Minor library updates
  - x.X.x
    - Possible style adjustments needed
    - Smaller code adjustments
  - X.x.x
    - Major changes code or frontend
    - Backend (yanic) updated needed
    - Large Library updates
- Starting with v10.0.0 to avoid confusion

## Release

- Tag release
- Write [Changelog](#)
- Try to provide Builds



# Changelog

## 11.1.0

- **[TASK] Add nodes as title and link to link-infobox**
- [BUGFIX] Update gulp-inline-source & injectFaviconMarkups
- **[TASK] Update packages to remove flatmap-stream**
- **[BUGFIX] Clear link/node in sidebar destroy**
- [TASK] Nodejs 11 support/tests
- [TASK] Avoid unnecessary loops in domain name mapping
- [TYPO] Change Ghz to GHz
- [All changes](#)

### Additionally

- v11.0.0 isn't buildable anymore because of deleted build dependency
- Moved form travis-ci.org to travis-ci.com

## 11.0.0

- [TASK] Use Promises for GeoJSON
- [TASK] Update packages & add SHA integrity
- **[TASK] Replace site with domain**
- **[TASK] Libary updates gulp4**
- **[TASK] Prevent XSS in tooltip**
- [TASK] Remove unnecessary moment
- [TASK] Remove obsolete windows, rename macosx to osx
- [TASK] Remove bithound
- [TASK] Remove localStorage
- **[TASK] Add dynamic title to offline html and multiple metatags**
- **[TASK] Add optional fullscreen mode**
- **[TASK] Add GeoJSON support**
- [TASK] Improve night colors
- **[!!!][TASK] Indexable urls**
- [BUGFIX] URL router can fail at high load
- [TASK] Update github issue templates
- [TASK] Add nodejs 10 and remove 9 from travis
- [TASK] Move to v8 promies polyfill & eslint5
- **[TASK] Add posibility for links DSGVO** und natürlich auch andere
- **[TASK] Add OpenGraph, twitter card & Microdata + Favicon update**
- **[TASK] Add simple offline service worker**
- **[TASK] Add source/target address to link variables**
- [BUGFIX] Bar width max 100%
- **[BUGFIX] Allow negative coordinates**
- **[BUGFIX] Correct filled loadavg bar with nproc > 1**
- **[TASK] Show rectangle gateway in forcegraph**
- **[TASK] Show offline nodes in forcegraph**

- [TASK] Upgrade to leaflet 1.3
- [TASK] Upgrade to navigo 7
- [Multiple minor library updates like d3js](#)

## Additionally

- `multiple` -branch
  - Our test environment has now over 21500 nodes on a single map and still works <https://multi.meshviewer.org/>
- We moved the docu, website, multi and develop instance - currently no auto builds on master branch
- Multiple changes on webhooks and tests like scrutinizer


# THX @all active and passed contributors!

## 10.0.0

- Performance improvements (critical path, avoid blocking code)
- Replaced router - including language, mode, node, link, location
- Leaflet upgraded to v1 - faster on mobile
- Forcegraph rewrite with d3.js v4
- Map layer modes (Allow to set a default layer based on time combined with a stylesheet)
- Automatic updates for selected node or list (incl. image stats cache-breaker)
- Node filter
- Zoom level for clicking on a node ( `nodeZoom` ) is definable independently from the maximum zoom level 22
- Formatted Code
- Translation support - Help to improve or add languages at [Online translation platform](#)
  - Currently available: en, de, fr, cz, tk & ru
- Gulp inline for some css and js - fewer requests and instant load indicator
- Icon font with needed icons only
- Switch to Gulp (Tested with Node.js 6 LTS, 8 on Linux, OSX & W\*\*)
  - css and some js moved inline
- Yarn in favour of bower
  - Load only moment.js without languages (Languages are included in translations)
  - unneeded components removed (es6-shim, tablesort, numeraljs, leaflet-providers, leaflet-label jshashes, chroma-js)
- RBrush v2 - performance boost in last versions (positions, labels and clients on the map)
- Ruby dependency removed
- FixedCenter is required
- Sass-lint, scss and variables rewritten for easy customizations/adjustments
- Cross browser/device support improved (THX@BrowserStack)
- Yarn package manager in favour of npm
- Configurable reverse geocoding server
- Split clients into 2,4, 5Ghz and others
- Show nexthop and gateways (IPv4/IPv6)
- Dynamic node detail attributes
- Config inheritance and functions
- Dynamic map center (sidebar toggle)
- Show connection type (icon) ^ Accessibility improvements
- Few Internet Explorer 11 fixes

- Necessary polyfills - no overhead
- **Switch to meshviewer.json - less depth, new informations** <<<<<<< Updated upstream

## • **A lot more in the commit history**

- [A lot more in the commit history](#)  
 Stashed changes

# Configuration

Gulp merges `config.js` into `config.default.js` (`config.default.js` will be overwritten). **This is no deep merge**, i.e. you always need to add **complete** arrays or objects like `nodeInfoBox` or `supportedLocale` to your `config.js`. You can use JS and functions to create new node details rows.

`config.default.js` contains settings like `supportedLocale` or `maxAge`. `config.js` contains community specific settings like `statisticImages` or `siteName` (and the values/arrays/objects you want to overwrite in `config.default.js`)

## config.js

### dataPath (string/array)

`dataPath` needs a path/URL with `meshviewer.js` provided in an array. Don't forget the trailing slash! Also, proxying the data through a webserver will allow `brrotli` or `deflat/gzip` which will greatly reduce bandwidth consumption. The header `Access-Control-Allow-Origin: "*"`  should be added to allow local development.

Single data source

```
'dataPath' : [
  'https://regensburg.freifunk.net/data/'
]
```

Multiple data sources

```
'dataPath' : [
  'https://regensburg.freifunk.net/data/',
  'https://bremen.freifunk.net/data/'
]
```

### siteName (string)

Set this to match your community name. It's used in several places.

```
'siteName': 'Freifunk Regensburg'
```

### mapLayers (List)

A list of objects describing the map layers. Each object has at least the properties `name`, `url` and `config`.

- A list of some possible layers available: [Example layers and configuration](#), but every source supporting the used standard will work.
- [Layer provider list for meshviewer](#)

### mode (string, optional)

Allows to load an additional style for a night mode or a similar use case. It is possible to load the stylesheet `inline` or with a `link`-tag. Inline avoids re-rendering and possible issues with label-layer updates. It is important to add the following attributes: `class="css-mode mode-name" media="not"`.

Default mode is `night` which is added inline in `index.html`

```
'mode': 'night'
```

html/index.html

```
<link rel="stylesheet" class="css-mode mode-name" media="not" href="mode-name.css">
```

or

```
<style class="css-mode mode-name" media="not">
  <inline src="mode-name.css" />
</style>
```

## start (integer, optional)

Start a time range to put this mapLayer on first position.

```
'start': 19
```

## end (integer, optional)

End a time range for first map. Stops sort this mapLayer.

```
'end': 7
```

## fixedCenter (array[array, array])

This sets the initial area shown on loading the map. Chose exactly two locations. Everything between those two locations will be displayed. Nodes outside the initial `fixedCenter` will be visible then you use map controls like zoom or moving around on the map.

Examples for `fixedCenter` :

```
'fixedCenter': [
  [
    49.3522,
    11.7752
  ],
  [
    48.7480,
    12.8917
  ]
],
```

## nodeInfos (array, optional)

This option allows to show node statistics depending on following case-sensitive parameters:

- `name` - header of statistics segment in the infobox
- `href` - absolute or relative URL to statistics image
- `image` (**required**) - absolute or relative URL to image, can be the same like `href`
- `title` - the image title tag (also used as mouse hover)

To insert variables in either `href`, `image` or `title` you can use the case-sensitive template strings `{NODE_ID}`, `{NODE_NAME}`, `{LOCALE}` and `{TIME}` (as cache-breaker).

Examples for `nodeInfos` :

```
'nodeInfos': [
  {
    'name': 'Clientstatistik',
    'href': 'stats/dashboard/db/node-byid?var-nodeid={NODE_ID}',
    'image': 'stats/render/dashboard-solo/db/node-byid?panelId=1&fullscreen&theme=light&width=600&height=300&var-nodeid={NODE_ID}&var-host={NODE_NAME}&t={TIME}',
    'title': 'Knoten {NODE_ID}'
  },
  {
    'name': 'Uptime',
    'href': 'stats/dashboard/db/node-byid?var-nodeid={NODE_ID}',
    'image': 'stats/render/dashboard-solo/db/node-byid?panelId=2&fullscreen&theme=light&width=600&height=300&var-nodeid={NODE_ID}&t={TIME}',
    'title': 'Knoten {NODE_ID}'
  }
]
```

In order to have statistics images available, you have to set up an instance of each [Prometheus](#) and [Grafana](#).

## globalInfos (array, optional)

This option allows to show global statistics on statistics page depending on following case-sensitive parameters:

- `name` - header of statistics segment in the infobox
- `href` - absolute or relative URL to statistics image
- `image` (**required**) - absolute or relative URL to image, can be the same like `href`
- `title` - the image title tag (also used as mouse hover)

To insert the variables locale or time (as cache-breaker) in either `href`, `image` or `title` you can use the case-sensitive template strings `{LOCALE}` and `{TIME}`.

Examples for `globalInfos` using Grafana server rendering:

```
'globalInfos': [
  {
    'name': 'Wochenstatistik',
    'href': 'stats/render/render/dashboard-solo/db/global?panelId=1&fullscreen&theme=light&width=600&height=300'
  },
  {
    'image': 'nodes/globalGraph.png',
    'title': 'Bild mit Wochenstatistik'
  }
]
```

## linkInfos (array, optional)

This option allows to show link statistics depending on the following case-sensitive parameters:

- `name` - header of statistics segment in the infobox
- `href` - absolute or relative URL to statistics image
- `image` (**required**) - absolute or relative URL to image, can be the same like `href`
- `title` - the image title tag (also used as mouse hover)

To insert the source or target variables in either `href`, `image` or `title` you can use the case-sensitive template strings `{SOURCE_ID}`, `{TARGET_ID}`, `{SOURCE_MAC}`, `{TARGET_MAC}`, `{SOURCE_ADDR}`, `{TARGET_ADDR}`, `{SOURCE_NAME}`, `{TARGET_NAME}`, `{LOCALE}` and `{TIME}` (as cache-breaker).

```
'linkInfos': [
  {
    'name': 'Linkstatistik',
    'href': 'stats/dashboard/db/links?var-source={SOURCE_ID}&var-target={TARGET_ID}',
    'image': 'stats/render/dashboard-solo/db/links?panelId=1&fullscreen&theme=light&width=800&height=600&var-source={SOURCE_ID}&var-target={TARGET_ID}&t={TIME}',
    'title': 'Bild mit Linkstatistik'
  }
]
```

## siteNames (array, optional)

In this array name definitions for site statistics and node info can be set. This requires one object for each `site` code. This object must contain:

- `site` - the site code
- `name` - the displayed name for this site

If neither `siteNames` nor `showSites` are set, site statistics and node info won't be displayed.

Example for `siteNames` :

```
'siteNames': [
  {
    'site': 'ffrgb',
    'name': 'Regensburg'
  },
  {
    'site': 'ffrgb-dummy',
    'name': 'Regensburg Test'
  }
]
```

## linkList (array, optional)

Defines an additional list of links displayed in the infobox. It can be used for links to legal notice, web or stats:

- `title` - the image title tag (also used as mouse hover) link
- `href` - URL of the link

Example for `linkList` :

```
'linkList': [
  {
    'title': 'Impressum',
    'href': '/verein/impressum/'
  },
  {
    'title': 'Datenschutz',
    'href': '/verein/datenschutz/'
  }
]
```

## geo (array, optional)

The definition for additional custom GeoJSON objects to be displayed in Meshviewer.

- `json` - geoJSON (javascript allowed e.g. load external json)
- `option` - style or other options

### Multiple GeoJSON examples

Example for `geo` :

```
geo: [  
  {  
    json: function () {  
      return Promise.all([  
        // Content  
      ]);  
    },  
    option: {  
      style: {  
        color: '#e23535',  
        weight: 5,  
        opacity: 0.4,  
        fillColor: '#6de922',  
        fillOpacity: 0.1  
      }  
    }  
  }  
]
```

## config.default.js

### reverseGeocodingApi (string)

Settings for a reverse proxy or your own geocoding server used by the location-picker. Setting up this will enhance data privacy and avoid problems caused by script-blockers like NoScript in case you are using different domains for your json data or the map tiles. External URLs need to be considered in your privacy policy.

```
'reverseGeocodingApi': 'https://nominatim.openstreetmap.org/reverse'
```

### maxAge (string)

Nodes being online for less than `maxAge` days are considered "new". Likewise, nodes being offline for more than than `maxAge` days are considered "lost".

```
'maxAge': 14
```

### maxAgeAlert (integer)

Nodes being offline for more than than `maxAge` days are considered "lost". Lost will be split up in `alert` and `lost` .

```
'maxAgeAlert': 3
```

### nodeZoom (integer)

The zoom level that is used when clicking on a node or when using a deep-link URL directly to a node. The value `18` is a good default where nearby buildings and streets should be visible.



```
'nodeZoom': 18
```

## labelZoom (integer)

Min. zoom level from which on the node labels are shown on the map. Note that every level in between `labelZoom` and `maxZoom` (defined in `mapLayers`) has a negative performance impact.

```
'labelZoom': 13
```

## clientZoom (integer)

The min. level from which on the client dots are visible. Note that every level in between `clientZoom` and `maxZoom` (defined in `mapLayers`) has a negative performance impact.

```
'clientZoom': 15
```

## nodeAttr (array)

Remove or add node properties in details view. The value can be a node attribute (depth 1) or any of the functions with a name starting with "show" from `lib/utils/node.js`.

```
'nodeAttr': [  
  // value can be a node attribute (depth 1) or any of the functions with a name starting with "show" from li  
  b/utils/node.js with  
  {  
    'name': 'node.status',  
    'value': 'Status'  
  },  
  {  
    'name': 'node.gateway',  
    'value': 'Gateway'  
  },  
  {  
    'name': 'node.coordinates',  
    'value': 'GeoURI'  
  },  
  // Remove unwanted attributes  
  // {  
  //   'name': 'node.contact',  
  //   'value': 'owner'  
  // },  
  {  
    'name': 'node.hardware',  
    'value': 'model'  
  },  
  {  
    'name': 'node.primaryMac',  
    'value': 'mac'  
  },  
  {  
    'name': 'node.firmware',  
    'value': 'Firmware'  
  },  
  {  
    'name': 'node.uptime',  
    'value': 'Uptime'  
  },  
  {  
    'name': 'node.firstSeen',  
    'value': 'FirstSeen'  
  }  
]
```

```
    },
    {
      'name': 'node.systemLoad',
      'value': 'Load'
    },
    {
      'name': 'node.ram',
      'value': 'RAM'
    },
    {
      'name': 'node.ipAddresses',
      'value': 'IPs'
    },
    {
      'name': 'node.update',
      'value': 'Autoupdate'
    },
    {
      'name': 'node.site',
      'value': 'Site'
    },
    {
      'name': 'node.clients',
      'value': 'Clients'
    }
  ]
}
```

## supportedLocale (array)

Add supported locale (with matching language file in `locales/*.js`). This will be matched against the browser language setting. Fallback will be the first language in the array.

Example for `supportedLocale` :

```
'supportedLocale': [
  'en',
  'de',
  'cz',
  'fr',
  'tr',
  'ru'
]
```

## color (array)

Different color values for all canvas related settings. Couldn't be done via SCSS.

## cacheBreaker (string)

Will be replaced in every build to avoid missing or outdated language strings because `language.js` is not up to date.

*Fixed value (vy0zx).*