



# Mapbender3 Workshop

Charlotte Toma  
FOSSGIS 2018 Bonn

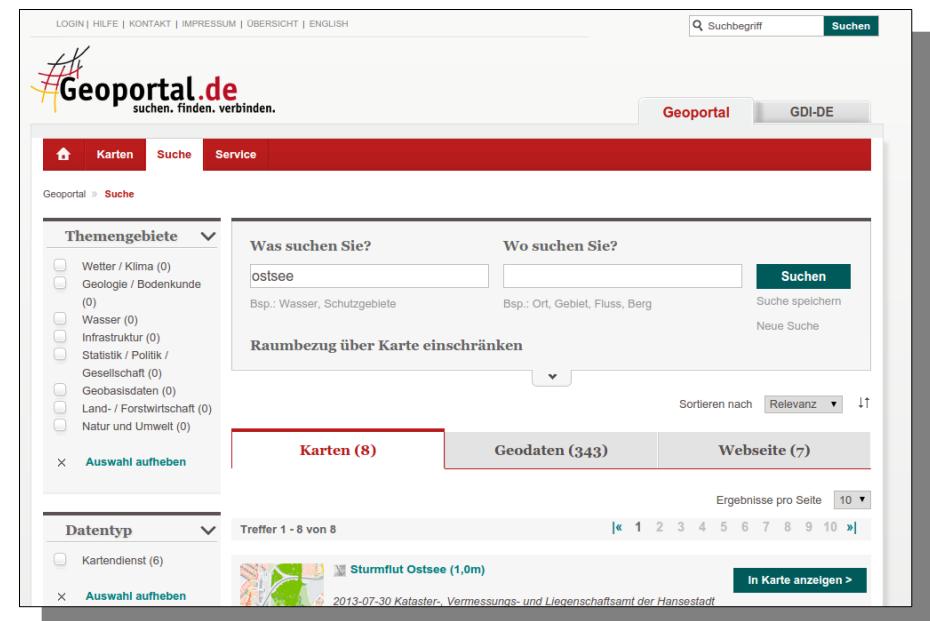
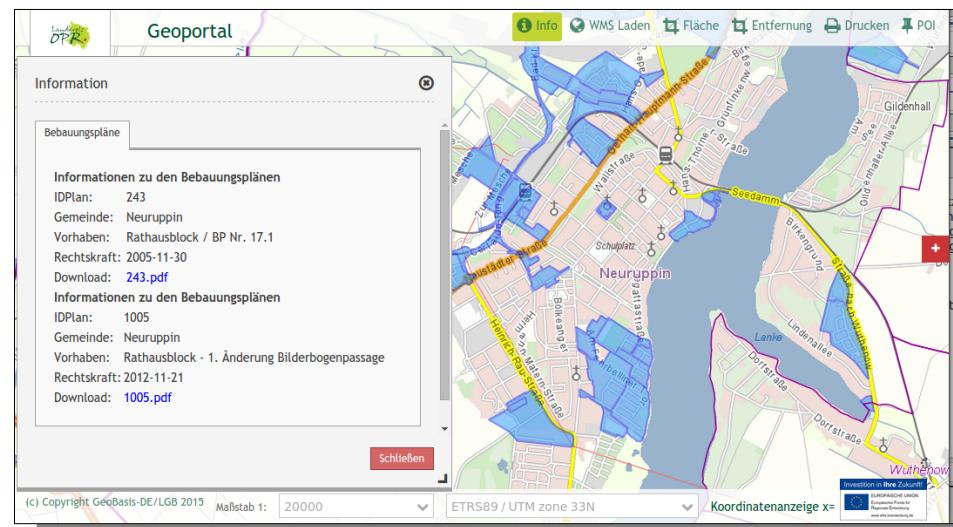
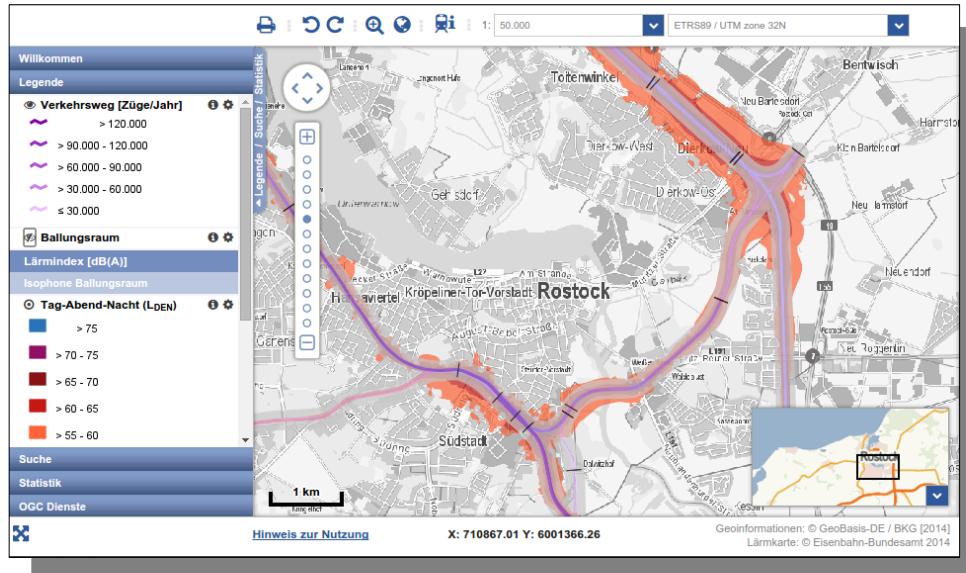


# Mapbender Team

- Charlotte Toma
- Mapbende Developer Team
- Mapbender PSC (Project Steering Committee)
- Konzeption, Testen, Dokumentation, neue Versionen
- WhereGroup Bonn <http://wheringroup.com>



# WhereGroup





# WhereGroup

The screenshot shows a map of Bonn and the surrounding region. Overlaid on the map are numerous reporting icons, including lightbulbs (representing ideas) and exclamation marks (representing problems). Some icons are accompanied by numbers (e.g., 1, 2, 3). To the right of the map is a reporting interface with the title "Meldemax". It includes tabs for "OpenStreetMap" and "Luftbild" (Aerial View), a search bar for "Adresssuche", and a section for "Neue Meldung" (New Report) with buttons for "Idee" (Idea) and "Problem" (Problem). Below these are sections for "Legende" (Legend) and "Hilfe" (Help). At the bottom of the interface, there are copyright notices: "© 2014 WhereGroup GmbH & Co. KG", "OpenStreetMap contributors", and "© Geobasis NRW 2014".

**Meldemax**  
Meldeplattform für  
Ideen und Probleme  
im Stadtbild

The screenshot shows the MeTaDor 2 metadata editor interface. The top navigation bar includes "Geodaten", "Geodatendienste", and a close button "X". The interface is divided into three main sections: "Daten" (Data), "Dienste" (Services), and "Adressen" (Addresses). The "Daten" panel lists various spatial datasets like "Testpolygon\_1", "Straßenkarte Rhein-Erft-Kreis", and "Axel Wasserschutzgebiete Stadt Cuxhaven". The "Dienste" panel lists services such as "DTK25", "Luftbild2013", and "Import-Test Web Map Service". The "Adressen" panel lists contacts with names like "Axel Schaefer", "Heinz-Georg Pankow", and "Dr. Eike Eimann".

**MeTaDor2**  
Metadateneditor

**Consulting, Schulungen  
& mehr**





# Ziele des Workshops

- Architektur und Installation
- Was bietet die Anwendung?
- Dienste laden
- Eigene Anwendung erzeugen
- Benutzer und Gruppe anlegen
- Rechtezuweisung
- Designanpassungen



# Eigene Anwendung

Mapbender3 - Mapbend x

localhost/mb3b/app\_dev.php/application/mapbender\_user\_basic#

eigene Farben  
- Toolbar  
- Icons  
- Icon aktiv

Images als Icons

einzelne Buttons individuell

Anpassung der Elemente

2 km

ETRS 50000



# Die Komponenten

- Symfony2 als PHP Framework
  - Doctrine, Twig, Monolog, Bootstrap...
  - Bundles
- OpenLayers, MapQuery
- JQuery
- Datenhaltungskomponente: SQLite, PostgreSQL, MySQL, Oracle Datenbank



# Systemvoraussetzungen

- >= PHP 5.5.4 (php)
- PHP CLI interpreter (php-cli)
- PHP SQLite extension (php-sqlite)
- PHP PostgreSQL Erweiterung (php-pgsql)
- PHP cURL extension (php-curl)
- OpenSSL
- PHP Alternative PHP Cache (php-apc bzw. php-apcu)
- PHP Internationalisierungs-erweiterung (php-intl)
- PHP GD (php-gd) (Druck)
- PHP FileInfo (für Druck)
- PHP Zip (php-zip)
- PHP XML (php-xml)
- APACHE mod\_rewrite

<https://doc.mapbender.org/de/book/installation/systemrequirements.html>





Features

Business

Explore

Marketplace

Pricing

This organization

Search

Sign in or Sign up

# Mapbender Code im Git



## Mapbender Development Team

<http://mapbender3.org> [mapbender\\_dev@lists.osgeo.org](mailto:mapbender_dev@lists.osgeo.org)

Repositories 57

People 9

Search repositories...

Type: All ▾

Language: All ▾

### mapbender

The spatial web mapping framework

javascript php mapping gis spatial

PHP ★ 30 19 MIT Updated 5 hours ago



#### Top languages

PHP JavaScript HTML CSS  
Shell

### mapbender-starter

Mapbender3 geoportal framework

framework german geo geospatial gis web-client

PHP ★ 21 16 MIT Updated a day ago



#### Most used topics

gis mapbender geo  
geolocation geoportal

### mapbender-printclient

PHP 1 MIT Updated 8 days ago



#### People



### mapbender-digitizer

Mapbender digitizing module

JavaScript ★ 4 3 MIT Updated 9 days ago





# Installation

- Dokumentation der Installation

<https://doc.mapbender.org/de/book/installation.html>

- Workshop Installation über install-Script von OSGeo-Live

[https://github.com/OSGeo/OSGeoLive/blob/master/bin/install\\_mapbender3.sh](https://github.com/OSGeo/OSGeoLive/blob/master/bin/install_mapbender3.sh)

- Download Pakete <http://mapbender.org/builds/>

- Mapbender auf OSGeo-Live

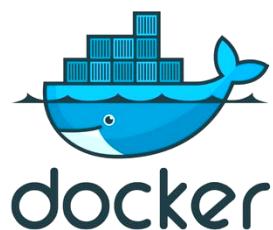
[http://live.osgeo.org/de/overview/mapbender\\_overview.html](http://live.osgeo.org/de/overview/mapbender_overview.html)





# Installation

- Docker-Builds:
  - <https://github.com/mapbender/docker>
  - <https://hub.docker.com/u/mapbender/>





# Aufruf Mapbender

- **Developer Modus** → Ausführliche Fehlermeldung direkt in der Oberfläche, Symfony Profiler, Detaillierte Logs, geringeres Caching-Verhalten

*http://localhost/mapbender/app\_dev.php*

- **Produktiver Modus** → normaler schneller Modus

*http://localhost/mapbender/(app.php)*



/app\_dev.php

The screenshot shows a map application interface. At the top, a browser window displays the URL [https://demo.postnas.org/app\\_dev.php/application/alkis\\_demo](https://demo.postnas.org/app_dev.php/application/alkis_demo). To the left of the URL, a black oval highlights the path 'app\_dev.php'. Below the browser is a map titled 'PostNAS Suite' showing land parcels and streets. On the left, a sidebar has a green header 'Thema' and three items: 'ALKIS Punktnummernübersicht', 'ALKIS (PostNAS)', and 'ALKIS (NorGIS ALKIS)', with the third item checked. A large black arrow points from the text '/app\_dev.php' to the URL in the browser. In the bottom right corner of the map area, another black arrow points from the text 'Unterstützung durch den Symfony Profiler' to the Symfony profiler toolbar. The profiler toolbar includes icons for PHP, MySQL, and Redis, along with performance metrics like 740 ms and 16.0 MB.



# Unterstützung durch den Symfony Profiler

Symfony profiler

View last 10 Profile for: GET https://demo.postnas.org/app\_dev.php/ by 172.16.2.128 at Thu, 15 Mar 2018 16:34:24 +0100

**CONFIG**

**REQUEST**

**EXCEPTION**

**EVENTS**

**LOGS**

**TIMELINE**

**ROUTING**

**E-MAILS**

**SECURITY**

**DOCTRINE** 7 8 MS

**MINIMIZE**

**SEARCH**

IP

Method

URL

Token

From

**Request GET Parameters**

No GET parameters

**Request POST Parameters**

No POST parameters

**Request Attributes**

Key	Value
_controller	"Mapbender\\CoreBundle\\Controller\\WelcomeController::listAction"
_route	"mapbender_start"
_template	"Object(Symfony\\Bundle\\FrameworkBundle\\Templating\\TemplateReference)"
_template_default_vars	"Array()"
_template_streamable	"false"
_template_vars	"Array()"

**Request Cookies**

Key	Value
PHPSESSID	"l3o2dgnrd96djgg5pn13rbrtd1"

**Request Headers**

Key	Value
accept	"text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8"





# OSGeo-Live - wo liegt was?

- ALIAS mapbender zeigt auf:  
`/var/www/html/mapbender3/web/`
- `app_dev.php` → `mapbender3/web/app_dev.php`
- Mapbender:  
`mapbender3/mapbender/src/Mapbender/CoreBundle`



# Wo liegt was? YAML

- Symfony-Konfiguration über YAML-Dateien
- Mapbender-Anwendungskonfiguration über YAML
  - mapbender3/app/mapbender.yml
  - Angaben zur Anwendung und Diensten
- Mapbender Konfiguration über Datenbank z.B. in PostgreSQL
  - parameters.yml
  - config.yml



# Wo liegt was? Mapbender Datenbank

- PostgreSQL, Sqlite, ORACLE, MySQL, MS SQL
- Tabellen für WMS, User, Group, Layer usw.
- Symfony nutzt Datenbankabstraktionsschicht

The screenshot shows a database interface with two main panes. On the left, a tree view of tables is displayed, with 'fom\_user' being the selected table. On the right, a data editor window titled 'Daten editieren - HATZFELDT Neu (91.215.7)' shows the 'fom\_user' table with four rows of data. The columns are: id, username, email, and password. The data is as follows:

	id	username	email	password
1	1	root	toni.pignataro@wheregroup.com	q3oombFLb/zmS4ezXV
2	2	e_buchen	e.buchen@hatzfeldt.de	cDfRoK/ixr+95hURu3e
3	3	b_stelter	b.stelter@hatzfeldt.de	3PG/bx9ECYW0qbPm8mF
4	4	revierleiter	charlotte.toma@wheregroup.com	z/0fZRyAgQG2r/05lM+

Below the table, the SQL definition for the 'fom\_user' table is shown:

```
CREATE TABLE public.fom_user (
    id integer NOT NULL,
    username character varying(255),
    email character varying(255),
    password character varying(255)
)
WITH (
    OIDS=FALSE
)
TABLESPACE pg_default;

ALTER TABLE public.fom_user
    OWNER TO postgres;
    USING btree
    (email COLLATE pg_catalog."default");

-- Index: public.uniq_aca60792f85e0677
-- Index: public.fom_user_pkey
```



# Anwendungsübersicht

*root / root*

- Übersicht der öffentlichen Anwendung
- Aufruf legt Session für anonymen Benutzer an
- Anzeige mit Titel, Beschreibung, Übersichtsbild
- Start der Anwendung

The screenshot shows a web browser window for 'Mapbender3 - Application' at 'demo.mapbender3.org/manager/applications'. At the top, there is a 'Login' dialog box. Below it, the main interface has a sidebar with a 'Mapbender3' logo and a navigation menu including 'Applications', 'Dienste', 'User Control', 'Users', 'Groups', and 'ACLs'. The main content area is titled 'Applications' with a 'Filter:' input field. It lists two applications: 'Mapbender Demo Map' (with a description 'Fullscreen style, Simple map showing WMS use.') and 'demo demo' (with a description 'demo application'). Both entries have edit and delete icons.

# Anwendungsliste



Mapbender3

Login

[http://localhost/mapbender3/app\\_dev.php](http://localhost/mapbender3/app_dev.php)

v. 3.0.6.3 (27.07.2017)

## Applications

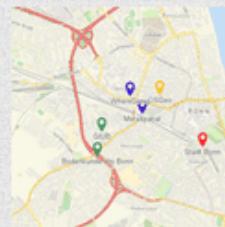
Filter application:



Mapbender Demo Map basic mapbender\_user\_basic



*Fullscreen style, simple buttons, simple map showing WMS use.*



Mapbender Demo Map mapbender\_user



*Fullscreen style, Simple map showing WMS use.*



Mapbender mobile mapbender\_mobile



*Mapbender mobile Application*

# Anwendungserstellung

The screenshot shows the Mapbender3 application interface for creating a new application. The top navigation bar includes a user icon, a status message "Logged in as: root", and a version number "v. 3.0.6.3 (27.07.2017)". The left sidebar contains a navigation menu with sections like Applications (New application, Export, Import), Sources (Add source), User control (Users, New user), Groups (New group), and ACLs. The main content area is titled "New Application" and displays a form with tabs for "Base data" and "Security". The "Base data" tab is active, showing fields for "Template:" (set to "Fullscreen"), "Title:" (set to "Demo Anwendung"), "URL Title:" (set to "demo"), "Screenshot\*", which has a "Select file" button and a note "No file selected", and "Description" (containing the text "Demoanwendung für FOSSGIS Workshop"). A blue callout box on the right provides instructions: "Create a new application by providing basic information and then use the edit mode to add elements and layers." At the bottom right of the modal are "Create" and "Cancel" buttons.

Mapbender3

Logged in as: root

v. 3.0.6.3 (27.07.2017)

New Application

Applications

- New application
- Export
- Import

Sources

- Add source

User control

- Users
- New user

Groups

- New group

ACLs

Template:  
Fullscreen

Title:  
Demo Anwendung

URL Title:  
demo

Screenshot:  
Select file: No file selected

Description  
Demoanwendung für FOSSGIS Workshop

Create Cancel



# Intuitives Rechtekonzept

The screenshot shows a software interface for managing user roles and permissions. At the top, there is a navigation bar with tabs: Base data, Layouts, Layersets, CSS, and Security. The Security tab is selected, indicated by a red arrow pointing to it from the left. Below the tabs, there is a search bar labeled "activated" with an unchecked checkbox. To the right of the search bar is a "Filter" input field and several buttons: view (grey), edit (orange), delete (grey), operator (grey), master (grey), and owner (orange). A large red arrow points from the "activated" checkbox towards the "owner" button. Below these controls, two user entries are listed in a table:

User	view	edit	delete	operator	master	owner	Actions
Workshop	view (green)	edit (orange)	delete	operator	master	owner (orange)	X
root	view	edit	delete	operator	master	owner (orange)	X

At the bottom right of the interface are two buttons: "Save" (green) and "Cancel" (red).

<https://mapbender.org/>



# Mapbender

Home Was ist Mapbender? Los geht's Dokumentation Download Community Galerie

Download

The screenshot shows a map of Bonn, Germany, with a legend on the left listing layers such as 'Mapbender Users' and 'OSM Demo'. The map includes labels for 'BONN', 'LVR-Klinik', 'Metaspacial', 'OSGeo', and 'WhereGroup'. A right-hand panel titled 'Mapbender Demoanwendung' contains text about the template application and its URL: <http://demo.mapbender3.org/application/n>.



## Willkommen auf Mapbender

### Willkommen bei Mapbender

Mapbender ist eine professionelle Software zur Verwaltung von Kartenanwendungen und Geodiensten. Mit Mapbender haben Sie die Möglichkeit Anwendungen zu erzeugen, ohne eine Zeile Code zu schreiben. Über die moderne Administrationsoberfläche können bequem Anpassungen an den zahlreichen Funktionalitäten und am Design vorgenommen werden.

Mapbender basiert auf den Technologien Symfony, JQuery und OpenLayers.



Follow us on Twitter  
<https://twitter.com/mapbender/>

#Manbender





## Table Of Contents

Welcome to the Mapbender3 documentation

- Indices and tables
- Sourcecode of this documentation
- Online version of this documentation
- Other versions of this documentation
- Download of Mapbender3

## Next topic

Welcome to Mapbender3's documentation!

## This Page

Show Source

## Quick search

 Go

Enter search terms or a module, class or function name.

# Welcome to the Mapbender3 documentation

Mapbender3 Project Page <https://mapbender3.org>

Please choose a language of your choice:

- English
- Deutsch

You find the Mapbender3 API Documentation at:

<https://api.mapbender3.org>

## Indices and tables

- Index
- Search Page

## Sourcecode of this documentation

- <https://github.com/mapbender/mapbender-documentation>

## Online version of this documentation

- <https://doc.mapbender3.org/>
- <https://docs.mapbender3.org/current/>

## Other versions of this documentation

- <https://docs.mapbender3.org/3062>
- <https://docs.mapbender3.org/3061>
- <https://docs.mapbender3.org/3060>
- <https://docs.mapbender3.org/3053>
- <https://docs.mapbender3.org/3052>
- <https://docs.mapbender3.org/3051>
- <https://docs.mapbender3.org/3050>
- <https://docs.mapbender3.org/304>

## Download of Mapbender3

- <https://mapbender3.org/download>



## Aufgaben:

- WMS laden
- Eigene Anwendung erzeugen
- Anwendung mit Karten füllen
- Anwendung mit Elementen bestücken
- Benutzer anlegen
- Anwendung und Elemente nach Benutzer absichern



# Mapbender3 Quickstart

- <http://doc.mapbender3.org/en/book/quickstart.html>

## Elementdokumentation

- <http://doc.mapbender3.org/en/bundles/Mapbender/CoreBundle/index.html>





# WMS laden

- [http://wms.wheringroup.com/cgi-bin/germany\\_workshop.xml?VERSION=1.1.1&REQUEST=GetCapabilities&SERVICE=WMS](http://wms.wheringroup.com/cgi-bin/germany_workshop.xml?VERSION=1.1.1&REQUEST=GetCapabilities&SERVICE=WMS)
- Liste mit Diensten unter  
<https://github.com/mapbender/presentations/tree/master/FOSSGIS2018/dienste.txt>



# Anwendung erzeugen

- Anwendung mit Namen FOSSGIS erzeugen
- Map-Element in Content-Bereich einfügen
  - SRS Angabe mit EPSG-Code:4326
  - Beispiel EXTENT Germany
    - 5, 45
    - 15, 55
  - Beispiel EXTENT Salzburg
    - 12.565, 47.483
    - 13.295, 48.7



# WMS zu Anwendung hinzufügen

- Layerset für Element Map und Overview anlegen
  - Name: overview/ Übersicht
  - Name: main map/ Hauptkarte
- Geladenen WMS-Dienste in Layersets einfügen
- Ggf. WMS und Layer weiter konfigurieren



# Anwendung mit Elementen bestücken

- Infos zu den Elementen gibt es unter
  - <http://doc.mapbender3.org/en/bundles/Mapbender/CoreBundle/>
- Legende, Overview usw.

***Achtung: Elemente brauchen oft einen Button, um sie zu aktivieren!***



# Benutzer anlegen

- Benutzer anlegen
  - Name fossgis oder eigener Name
- Gruppe anlegen
  - Benutzer der Gruppe zuweisen



## Anwendung Benutzer zuweisen

- Über Application → Stift → Application Security
- + → User auswählen → Recht view zuweisen
- Test der Freigabe über Anmeldung als Benutzer fossgis

**Achtung:** Es können auch nur einzelne Elemente mit Rechten versehen werden!





# CSS Editor

- Hier kann der Standard Stil mittels CSS überschrieben werden
- Anwendung mapbender\_user\_basic → Reiter css-Editor
- Anpassung der Angaben
- Beispiele zur CSS-Anpassung unter:

<http://doc.mapbender3.org/en/book/css.html>

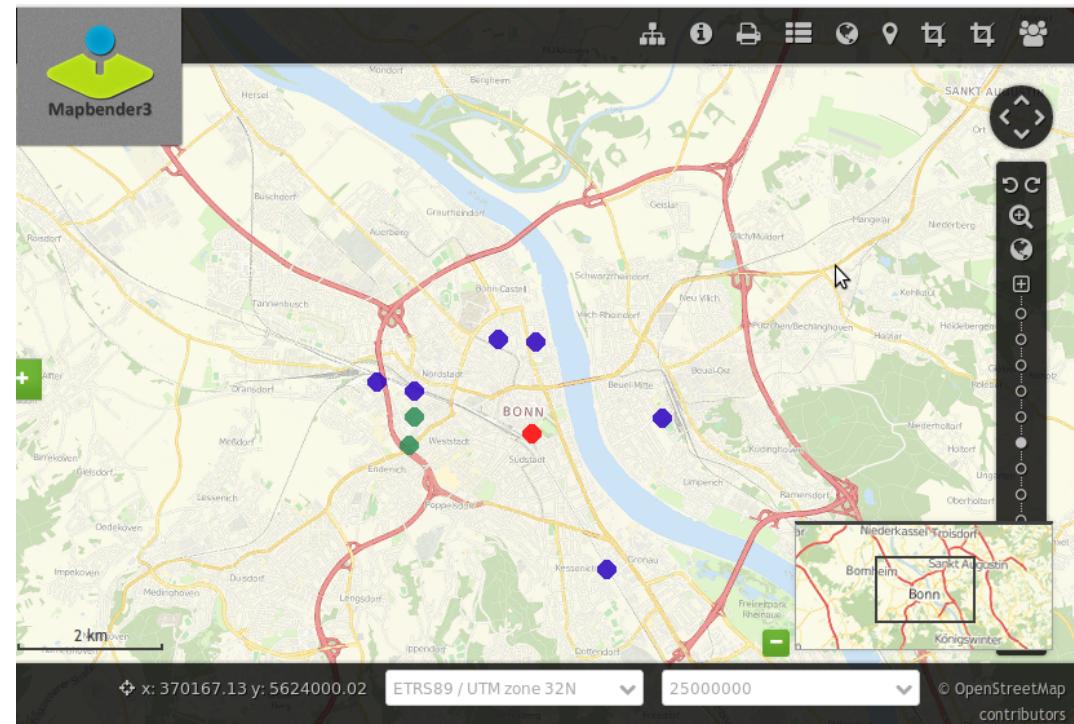




# Mapbender3 Demo

Testen Sie den  
Funktionsumfang von  
Mapbender!

<http://mapbender.org/demo/>





## Sie sind dran...

Installieren Sie Mapbender über das Download-Paket, Git-Repository oder Docker!

Dokumentation zur Installation

<http://doc.mapbender.org/>





# Wo finden Sie uns?

- Mapbender Webseite <http://mapbender.org>
- Mapbender Code <http://github.com/mapbender>
- Roadmap und Versionshistorie  
<https://doc.mapbender.org/de/book/versions.html>
- Milestones / Bugtracker  
<https://github.com/mapbender/mapbender/issues>



# Wie kann ich mitmachen?

- Testen und Feedback zu Features und Bugs
- Dokumentation schreiben
- Übersetzung von Elementen und Dokumentation
- Programmierung (Code ist im Git)
- Abonnieren von Mailinglisten und Hilfestellung
- Anwendertreffen besuchen  
<https://fossgis-konferenz.de/2018/programm/event.php?id=5307>





# OSGeo Code Sprint Bonn



2018  
G  
I  
FOSS



# Vielen Dank für ihre Aufmerksamkeit

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oder

[mapbender-users@list.osgeo.org](mailto:mapbender-users@list.osgeo.org)

Mit freundlicher Unterstützung der



WhereGroup

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