



Mapbender3

**Create your own Geoportal Web Application
and
Service Repository**

Astrid Emde

FOSS4G 2013 Nottingham

Astrid Emde

- Mapbender Team
-  WhereGroup
- FOSSGIS e.V.
- Involved in OSGeo-Live

What does Mapbender do?



WebGIS Client Suite with administration web interface



Create a geoportal without writing a single line of code!



Create and maintain an OWS repository



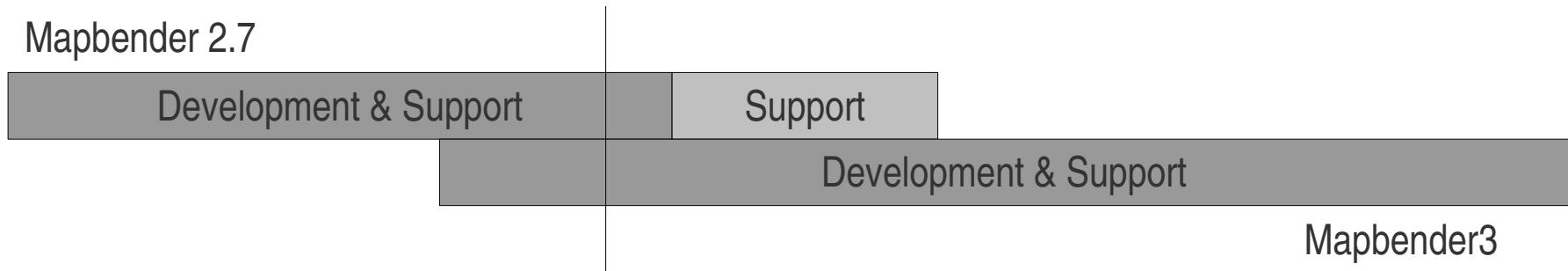
Distribute configured services among applications



Grant users and groups access to applications and services



From Mapbender 2.x to Mapbender3





The Mapbender components

Applications

Services

Roles



Applications

**one or many
depends on your needs**



Services

OWS
WMS
WFS
WMTS & more



Roles

users and groups



Applications

Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender Demo Map - Chromium

sandbox.mapbender3.org/application/mapbender_user

Mapbender3

Scale 1 : 100K

Brühl

Stadtwerke Wesseling

Niederkassel

Troisdorf

Lohmar

Sankt Augustin

Hennel

Bornheim

Wesel

QSGeo

terrestris GmbH & Co. KG

5 km

LayerTree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About

CC Q + -

x: 357446.33 y: 5641658.76 ETRS89 / UTM zone 32N 100000 © OpenStreetMap contributors

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Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender

sandbox.mapbender3.org/application/mapbender_user

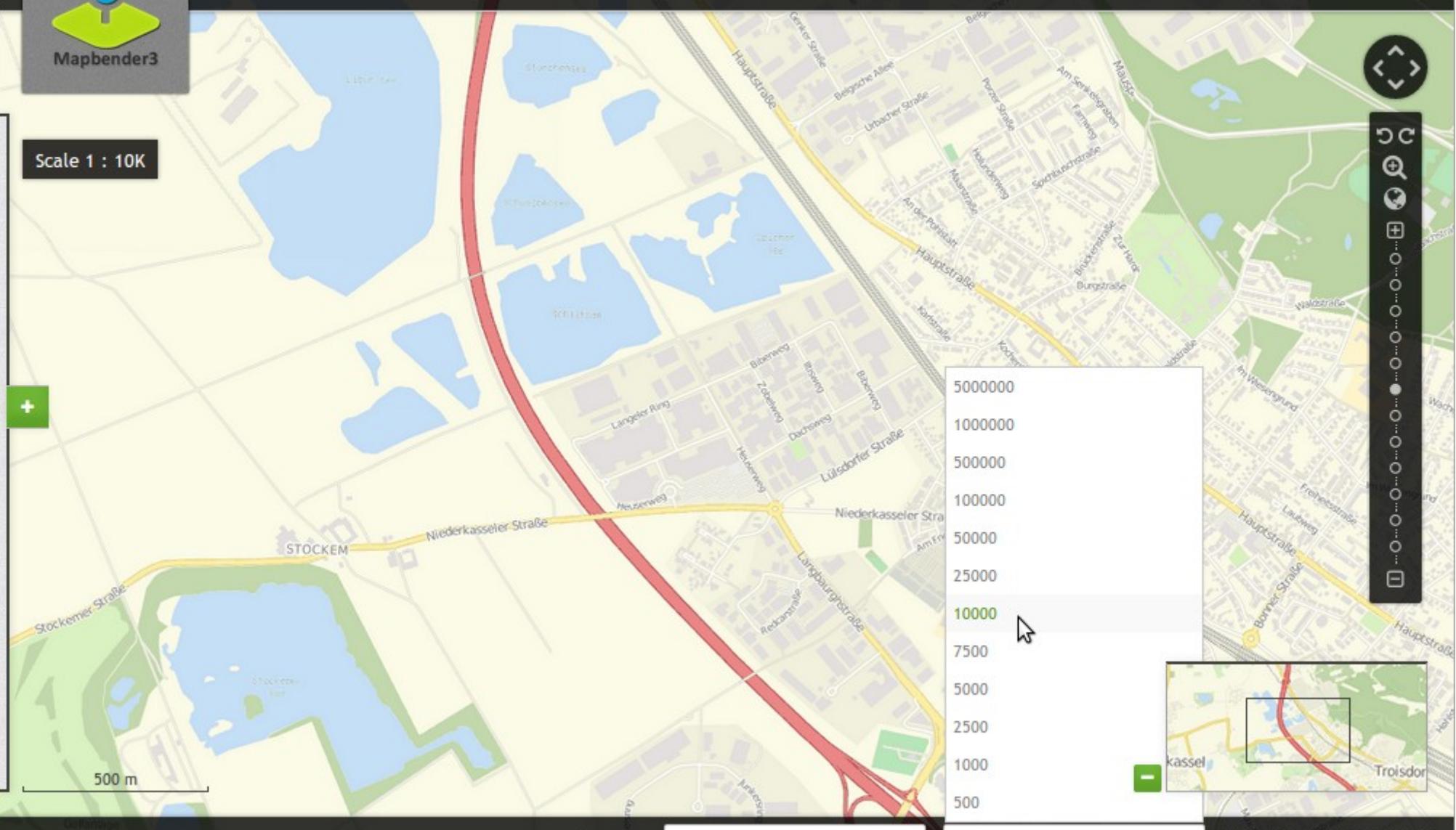


Layertree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About



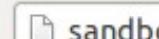
Mapbender3

Scale 1 : 10K



Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender



sandbox.mapbender3.org/application/mapbender_user



Layertree

Feature Info

Print

Legend

WMS Loader

GPS

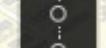
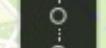
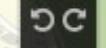
Line Ruler

Area Ruler

About



Scale 1 : 6341



ETRS89 / UTM zone 32N

ETRS89 / UTM zone 33N

DHDN / 3-degree Gauss-Kruger

zone 2

DHDN / 3-degree Gauss-Kruger

zone 3

WGS 84



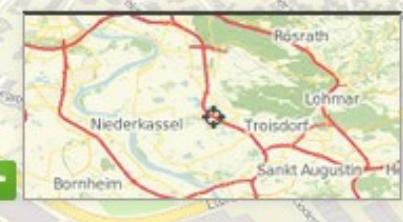
x:

- y:

WGS 84

10000

© OpenStreetMap contributors



Layertree

Feature Info

Print

Legend

WMS Loader

GPS

Line Ruler

Area Ruler

About



Mapbender3

layertree

- Mapbender Users* ✕
- Name* ✕
- User* ✕
- Mapbender OSM* ✕

Close

+



200 m

X: - y: -

WGS 84

10000

© OpenStreetMap contributors

Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender Demo Map

sandbox.mapbender3.org/application/mapbender_user

Layertree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About

Mapbender3

Mapbender Users
Name
User
Mapbender OSM

X: - y: - WGS 84 10000 © OpenStreetMap contributors

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Mapbender3 - Mapbender Demo Map - Chromium

sandbox.mapbender3.org/application/mapbender_user

Layertree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About

Mapbender3

Scale 1 : 50K

Legend

Mapbender Users

User

- Company
- Administration
- University
- User

Mapbender OSM

BONN

Close

2 km

X: - y: - ETRS89 / UTM zone 32N

50000

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Niederkassel
Friedrichsfeld
Bornheim
Sankt Augustin
Bonn
Koenigswinter

Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender

sandbox.mapbender3.org/application/mapbender_user

Layertree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About

Mapbender3

Scale 1 : 50K

WMS Loader

Example: <http://wms.wherogroup.com/cgi-bin/germany.xml?VERSION=1.1.1&REQUEST=GetCapabilities&SERVICE=WMS>

Service url

Load Cancel

2 km

X: - y: - ETRS89 / UTM zone 32N 50000 © OpenStreetMap contributors

wikisquare Kessenich Gronau

Niederkassel Trossendorf

Bonheim Sankt Augustin Bonn

Königswinter

Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender



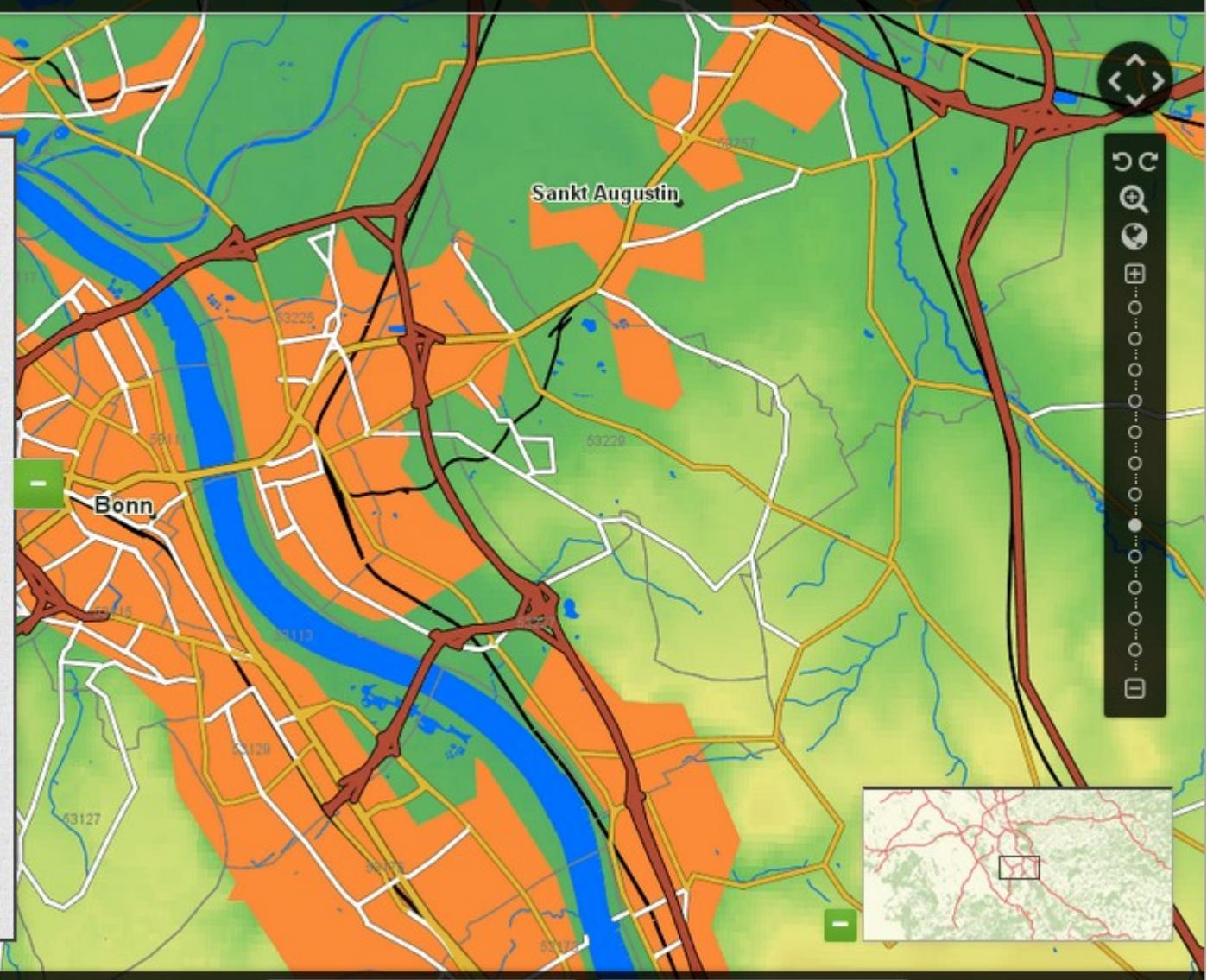
sandbox.mapbender3.org/application/mapbender_user



Layertree Feature Info Print Legend WMS Loader GPS Line Ruler Area Ruler About



- Germany* ×
- federal states...* ×
- places (names)* ×
- postcode areas...* ×
- places as point* ×
- roads* ×
- railroad lines* ×
- postcode areas* ×
- rivers* ×
- places* ×
- federal states* ×
- border* ×
- topography* ×
- Mapbender Users* ×
- Name* ×
- User* ×
- Mapbender OSM* ×





Layertree

Feature Info

Print

Legend

WMS Loader

GPS

Line Ruler

Area Ruler

About



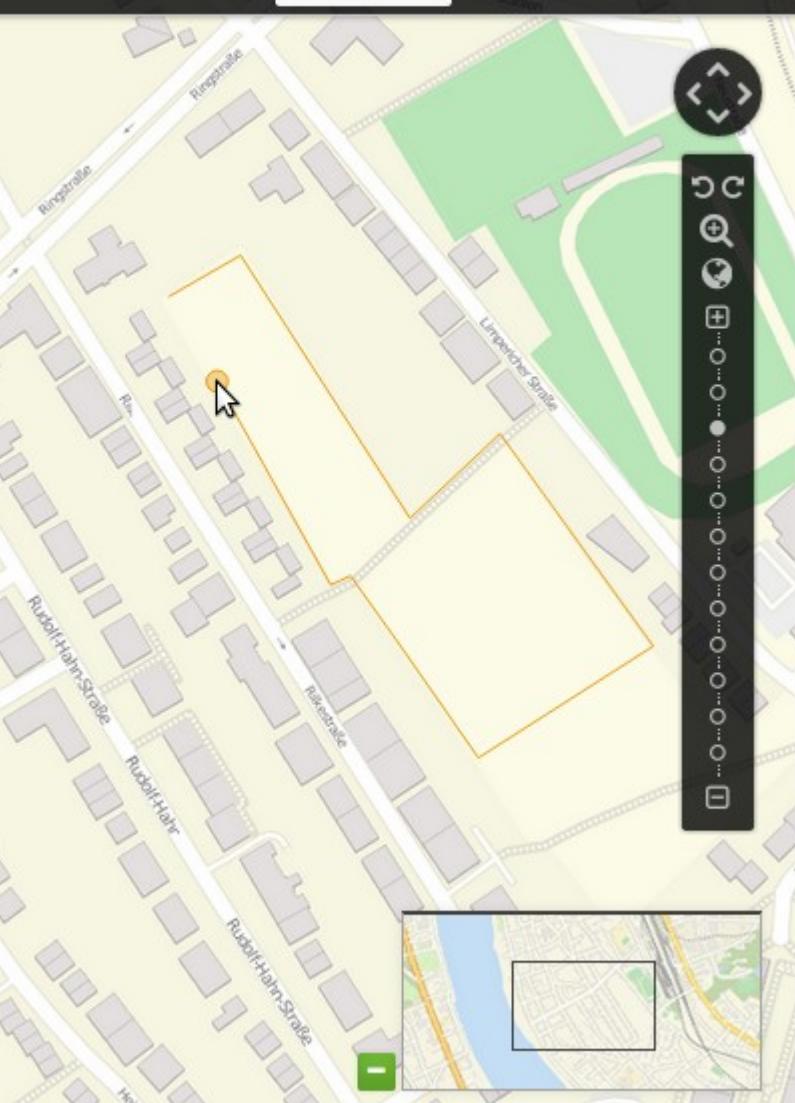
Mapbender3

Scale 1 : 2500

Distance

40.69 m
193.84 m
254.36 m
382.62 m
484.15 m
555.10 m
593.03 m
603.69 m

Close



100 m

x: 367697.96 y: 5621775.46

ETRS89 / UTM zone 32N

2500

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Mapbender3 - Mapbender Demo Map - Chromium

Mapbender3 - Mapbender

sandbox.mapbender3.org/application/mapbender_user



Layertree

Feature Info

Print

Legend

WMS Loader

GPS

Line Ruler

Area Ruler

About



Mapbender3

Scale 1 : 2500

Area

1819.33 m²

Close



100 m

C

Q

E

+

-

0

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

x: 367683.85 y: 5621800.15

ETRS89 / UTM zone 32N

2500

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Layertree

Feature Info

Print

Legend

WMS Loader

GPS

Line Ruler

Area Ruler

About



Mapbender3

Print Client

Template: A4 Landscape official

Quality: Document (288dpi)

Scale: 1:5000

Rotation: 0

Title:

Print

Cancel



x: - y: -

ETRS89 / UTM zone 32N

7500

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Mapbender3

Print Client

Template A4 Landscape official

Quality Document (288dpi)

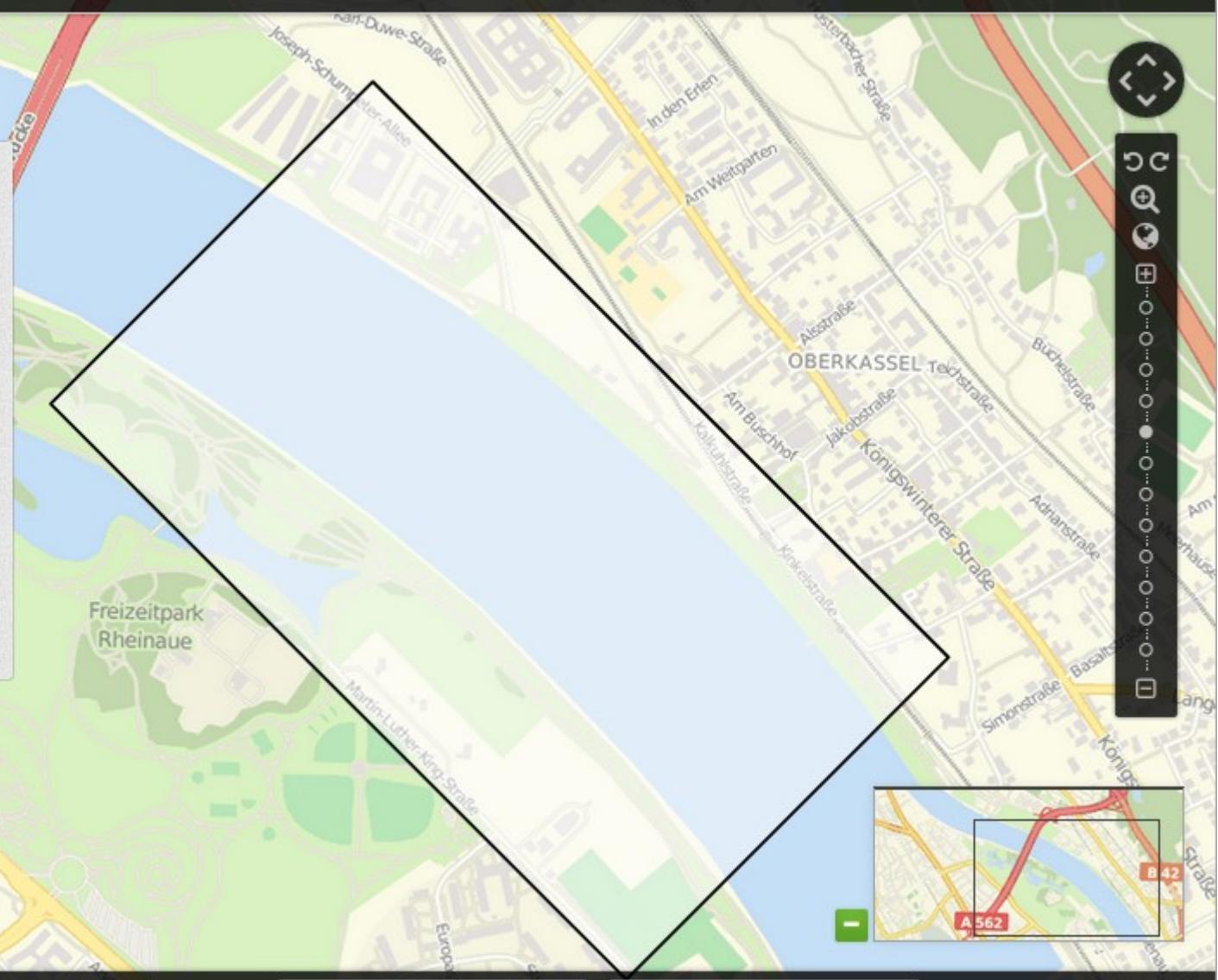
Scale 1:5000

Rotation 45

Title

Print

Cancel





Mapbender3 Astrid Emde



Set up your own application



Login

- root user is created on installation
- You can provide register and Forgot password functionality

Login

Username:

Password:

[▶ Register](#) [▶ Forgot password?](#)



Logged in as: root

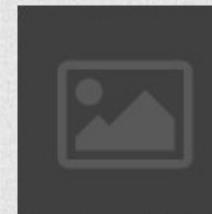


Mapbender3

v. 3.0.1.0

Applications

Filter:



Mapbender Demo Map mapbender_user



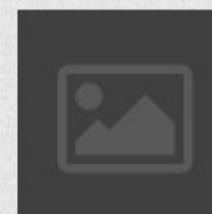
Fullscreen style, Simple map showing WMS use.



Mapbender Demo Map basic mapbender_user_basic



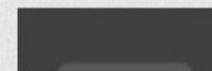
Fullscreen style, simple buttons, simple map showing WMS use.



1378996 Mapbender Demo Map 1378996_mapbender_user



Fullscreen style, Simple map showing WMS use.



13789 Mapbender Demo Map basic 13789_mapbender_user_basic





Logged in as: root



Mapbender3

v. 3.0.1.0

New Application

Base data

Security

Title*

demo

URL title*

demo

Description

Demo application

Create a new application by providing basic information and then use the edit mode to choose template, add elements and layers.

 Create Cancel



Mapbender3

v. 3.0.1.0

demo

- ▶ Applications
 - ▶ New Application
- ▶ Services
 - ▶ Add Service
- ▶ User Control
 - ▶ Users
 - ▶ New User
 - ▶ Groups
 - ▶ New Group
 - ▶ ACLs

Base data Layout Layers Security

Template*

Fullscreen template

Toolbar

Title	Type	+
-------	------	---

No elements added.

Sidepane

Title	Type	+
-------	------	---

No elements added.

Content

Title	Type	+
-------	------	---

No elements added.

Footer

Title	Type	+
-------	------	---

No elements added.



Applications
New Application
Services
Add Service
User Control
Users
New User
Groups
New Group
ACLs

demo

Base d...

Tem...

Tools...

Title...

Side...

The...

Con...

Title...

No...

Cont...

Title...

No...

Footer

Title

Type

Add element - *

Tree of map's layers

Legend Object
The legend object shows the legend of the map's layers.

Line/Area Ruler

Map
MapQuery/OpenLayers based map

Navigation Toolbar
The Navigation Toolbar element provides a floating control to pan and zoom, similar to the OpenLayers PanZoomBar control. This element though is easier to use when custom styling is needed.

Overview
Renders a small overview map

Choose Map Element

Cancel



- ▶ Applications
 - ▶ New Application
- ▶ Services
 - ▶ Add Service
- ▶ User Control
 - ▶ Users
 - ▶ New User
 - ▶ Groups
 - ▶ New Group
 - ▶ ACLs

demo

Base d...

Tem...

Tool...

Tit...

Side...

Tit...

No...

Con...

Tit...

No...

Footer

Title

Type

No elements added.

Add element - Map



Title*

Map

Layerset*

main

DPI*

main

overview

SRS*

EPSG:4326

Map units*

Degrees

Max. extent

min x*

0

min y*

40

max x*

20

max y*

60

Start. extent

min x*

5

min y*

45

max x*

15

max y*

55

Scales (csv)*

25000000,10000000,5000000,1000000,500000

Back

Ok

Cancel

Mapbender3 - demo - Chromium

Mapbender3 - demo

Mapbender3 - demo

sandbox.mapbender3.org/application/demo



Mapbender3





Services

**add service once
configure
control access**



Logged in as: root



Mapbender3

v. 3.0.1.0

Add Service

OGC WMS

Serviceurl:

Username:

Password:

Load

Cancel



Logged in as: root ▾



Mapbender3

v. 3.0.1.0

Services

- ▶ Applications
 - ▶ New Application
- ▶ Services
 - ▶ Add Service
 - ▶ User Control
 - ▶ Users
 - ▶ New User
 - ▶ Groups
 - ▶ New Group
 - ▶ ACLs

Filter

1
WMS

Germany



Germany

2
WMS

BGS 50000 scale digital geology



Note: This dataset is designed for the 1:50000 scale but can be viewed in this WMS between 1:100000 and 1:25000 (Only).

The 1:50 000 DiGMapGB data covering the whole of the United Kingdom is available in this OGC WMS service for your personal, non-commercial use only. Separate bedrock geology, superficial deposits, artificial ground, mass movement deposits and geological linear features layers are available in this service. For information about more of the British Geological Survey's maps that are available digitally please visit

<http://www.bgs.ac.uk/products/digitalmaps/digimapgb.html>. These data are delivered under the terms of the Open Government Licence (<http://www.nationalarchives.gov.uk/doc/open-government-licence/>), subject to the following acknowledgement accompanying the reproduced BGS materials: Contains British Geological Survey materials copyright NERC [year]. Contact us if you create something new and innovative that could benefit others using bgsdata@bgs.ac.uk.

3
WMS

British Geological Survey (BGS) 1:625 000 scale digital hydrogeological data



The hydrogeological map indicates aquifer potential in generalised terms using a threefold division of geological formations: those in which intergranular flow in the saturated zone is dominant, those in which flow is controlled by fissures or



Mapbender3

v. 3.0.1.0

WMS BGS 50000 scale digital geology

Metadata

Contact

Details

Layers

Back

Title:	BGS 50000 scale digital geology
Name:	OGC:WMS
Version:	1.1.1
Origin URL:	http://maps.bgs.ac.uk/ArcGIS/services/BGS_Detailed_Geology/MapServer/WMServer?service=WMS&version=1.1.1&request=GetCapabilities
Abstract:	<p>Note: This dataset is designed for the 1:50000 scale but can be viewed in this WMS between 1:100000 and 1:25000 (Only). The 1:50 000 DiGMapGB data covering the whole of the United Kingdom is available in this OGC WMS service for your personal, non-commercial use only. Separate bedrock geology, superficial deposits, artificial ground, mass movement deposits and geological linear features layers are available in this service. For information about more of the British Geological Survey's maps that are available digitally please visit http://www.bgs.ac.uk/products/digitalmaps/digmapgb.html. These data are delivered under the terms of the Open Government Licence (http://www.nationalarchives.gov.uk/doc/open-government-licence/), subject to the following acknowledgement accompanying the reproduced BGS materials: Contains British Geological Survey materials copyright NERC [year]. Contact us if you create something new and innovative that could benefit others using bgsdata@bgs.ac.uk.</p>
Online Resource:	http://www.bgs.ac.uk/products/digitalmaps/digmapgb_50.html
Exception Formats:	application/vnd.ogc.se_xml , application/vnd.ogc.se_inimage , application/vnd.ogc.se_blank
Fees:	none
Access constraints:	<p>Note: This dataset is designed for the 1:50000 scale but can be viewed in this WMS between 1:100000 and 1:25000 (Only). These data are delivered under the terms of the Open Government Licence (http://www.nationalarchives.gov.uk/doc/open-government-licence/), subject to the following acknowledgement accompanying the reproduced BGS materials: Contains British Geological Survey materials copyright NERC [year]. Contact us if you create something new and innovative that could benefit others</p>



Mapbender3

v. 3.0.1.0

Wms Instance - Germany

- ▶ Applications
 - ▶ New Application
- ▶ Services
 - ▶ Add Service
- ▶ User Control
 - ▶ Users
 - ▶ New User
 - ▶ Groups
 - ▶ New Group
 - ▶ ACLs

Origin URL

Save

Cancel

http://wms.wherogroup.com/cgi-bin/germany.xml?VERSION=1.1.1&REQUEST=GetCapabilities&SERVICE=WMS

Format*

image/png

 Visible

Infoformat

text/html

 Proxy

Exceptionformat

application/vnd.ogc.se_xml

 Transparency

Opacity*

100

 Tiled

Title	Minsc	Maxsc	Active	Select		Info		Toggle		Reorder	
				allow	on	allow	on	allow	on	allow	on
Germany	1	9.99999460	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▶ topography	1	9.99999460	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▶ border	750000	124999932f	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▶ federal states	750000	7999996	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▶ places	0	8999995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



Roles



Logged in as: root



Mapbender3

v. 3.0.1.0

New User

Base data Profile Groups Security

Username* Astrid Emde

E-Mail* astrid.emde@wherogroup.com

Choose password*: *****

Confirm password*: *****

Create

Cancel



Logged in as: root



Mapbender3

v. 3.0.1.0

New User

[Base data](#) [Profile](#) [Groups](#) [Security](#)First name Last name Notes Phone Organization Role Street Zip code City Country [Create](#)[Cancel](#)



Logged in as: root



Mapbender3

v. 3.0.1.0

demo

- ▶ Applications
 - ▶ New Application
- ▶ Services
 - ▶ Add Service
- ▶ User Control
 - ▶ Users
 - ▶ New User
 - ▶ Groups
 - ▶ New Group
 - ▶ ACLs

[Base data](#) [Layout](#) [Layers](#) [Security](#) Publish

Filter

[view](#)[edit](#)[delete](#)

operator

master

owner



Astrid Emde

[view](#)[edit](#)[delete](#)

operator

master

owner



root

[view](#)[edit](#)[delete](#)

operator

master

owner



IS_AUTHENTICATED_ANONYMOUSLY

[view](#)[edit](#)[delete](#)

operator

master

owner

[Save](#)[Cancel](#)



Öffnen



Speichern



Drucken



Ansicht



Werkzeuge

Suche nach Karten:

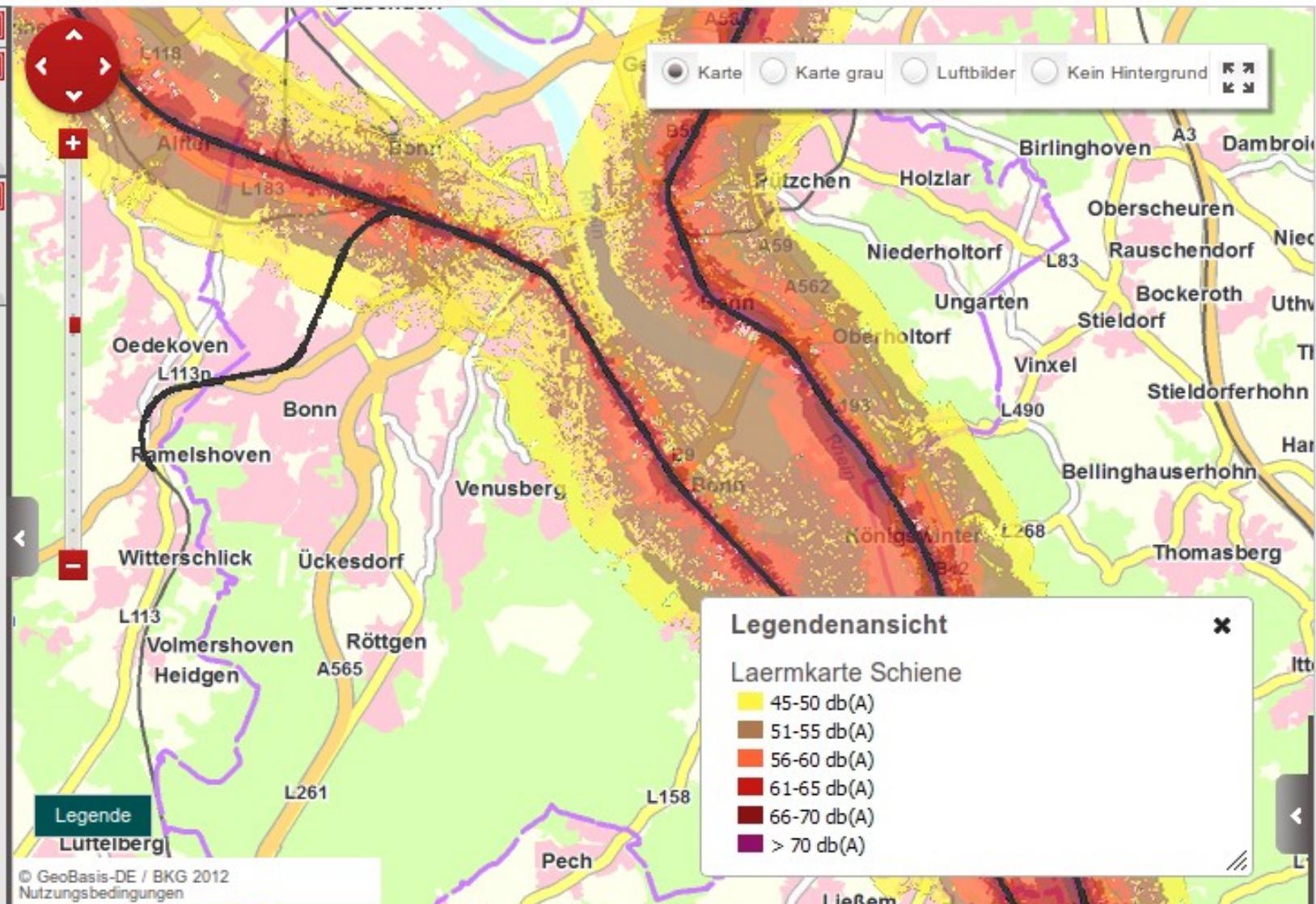
Karte suchen



Ort suchen



Auswählbare Ebenen (2)

 Eisenbahntrasse Laermkarte Schiene

Maßstab 1:

100000

Koordinaten:

x=369209
y=5619256

ETRS89 / UTM Zone 32N



Geoportal.DE

Suche nach Karten:

Karte suchen Bonn Auswählbare Ebenen (3) 

Eisenbahntrasse

Laermkarte Schiene

VBG_Einwohnerdichte



Transparenz



Zoom auf Ebene

Metadaten

Legende

KML-Export

Legende

© GeoBasis-DE / BKG 2012
Nutzungsbedingungen

Maßstab 1:

100000


 Karte Karte grau Luftbilder Kein Hintergrund 

Legendenansicht

Laermkarte Schiene

■	45-50 dB(A)
■	51-55 dB(A)
■	56-60 dB(A)
■	61-65 dB(A)
■	66-70 dB(A)
■	> 70 dB(A)



Koordinaten: x-- y--

ETRS89 / UTM Zone 32N



radwanderland

Sattelfest durch Rheinland-Pfalz

Eingabe Start/Ziel... ?

Rheindiebach

Entfernung: 2,682 km

über - oder Klick in Karte

Bacharach

► Optionen ein-/ausblenden ?

▼ Streckeninformationen ?

Entfernung: 2,682 km

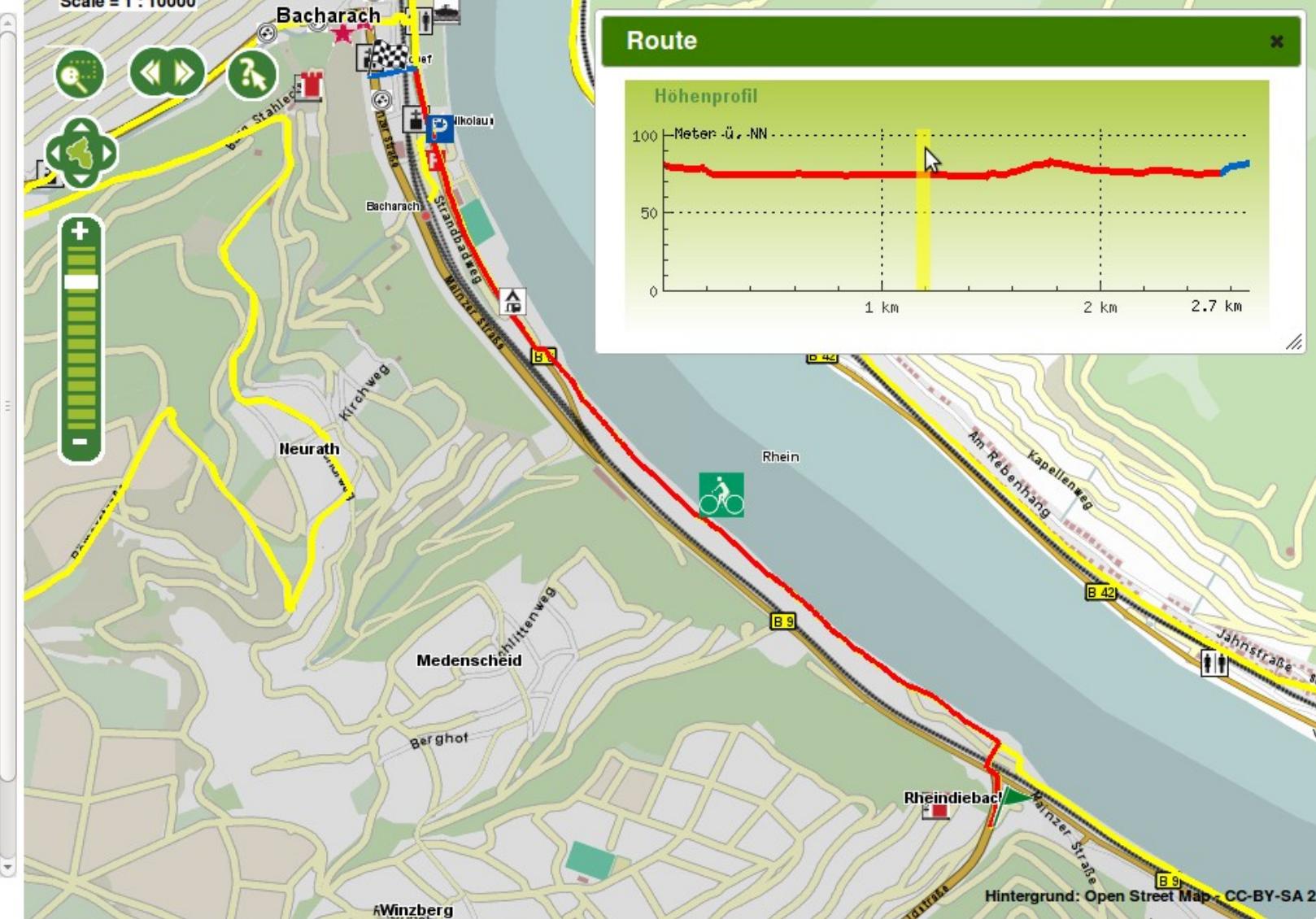
Aufsteigend: 23 m

Absteigend: 22 m

[Route umkehren](#)[Route zurücksetzen](#)**Details der Routenführung**— Radwegenetz— Verlauf auf Straßen— Verlauf außerhalb von
Rheinland-Pfalz[Startseite](#)[Radrouten](#)[Radwegenetz](#)[Routenplaner](#)[A++](#) [Kontakt](#) [Hilfe](#) [Impressum](#) [Über uns](#)

RheinlandPfalz

Scale = 1 : 10000





geo.kreislippe.de/kartenanzeige.html?url=http://geo.kreislippe.de/cgi-bin/bildung.exe?REQUEST=GetCapa! Wikipedia (de)

Startseite Suche

Lippe GEOPORTAL

offen, sympathisch, zukunftsorientiert

Thematische Auswahl Allgemeine Suche Adress- und Flurstücksuche Kartenanzeige

Geoportal Kreis Lippe > Kartenanzeige

Kartenebenen WMS laden Legende Information

Detail-Information

Bildung

Kindertageseinrichtungen

Name	Kita Großenmarpe
Strasse	Selbecker Straße 8
Ort	32825 Blomberg
Telefon	05236-888846
Fax	05236-888 499
eMail	grossenmarpe@familie-in-blomberg.de
Link	Internetauftritt der KiTa
Träger	Die Familiengesellschaft Blombergs FiBs gGmbH
Stand	2011-08-03

© Konzern Kreis Lippe

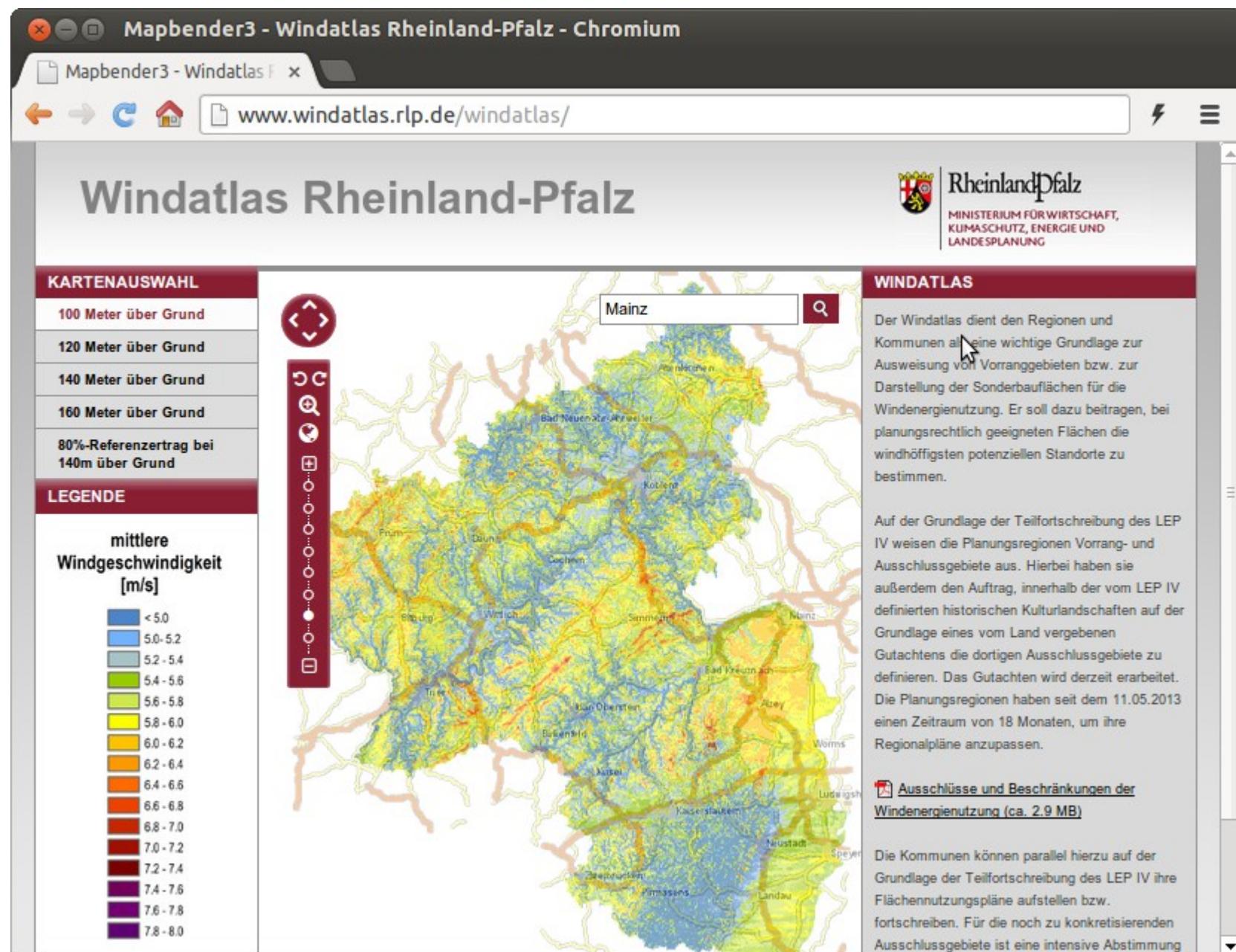
Mossenberg, Brüntrup, Wellentrup, BLU

Scale = 1 : 75K

1 km

© Copyright ETRS89 / UTM Zone 32N

Bad Salzuflen, Hohenhauser Extertal, Bösingfeld, Dörentrup, Lemgo, Barntrup, Blomberg, Bad Meinberg, Detmold, Hohenbörne, Voigtskamp, Lipp, Leese, heide, Windelstein, AT, Hillen-trup, trip, querry, 380, Hörstmar, Brake, Breite, Völkheim, Kluckhof, Bloh, Trophagen, Bentrup, Wahmbecker, Niembeck, Heiden-bruch, Niemald, Oettens, Klied, Rohrsn, Altenham, Mosebeck, Vahl, hausen, Diestel, Koordinaten: x = 497390.25764 y = 5761806.09429





Which components does Mapbender3 use?

- **Symfony2** as PHP framework
 - Doctrine, Twig, Monolog, Bootstrap...
 - Bundles
- **OpenLayers**
- **MapQuery**
- **jQuery**
- **SQLite, PostgreSQL, MySQL, Oracle database**

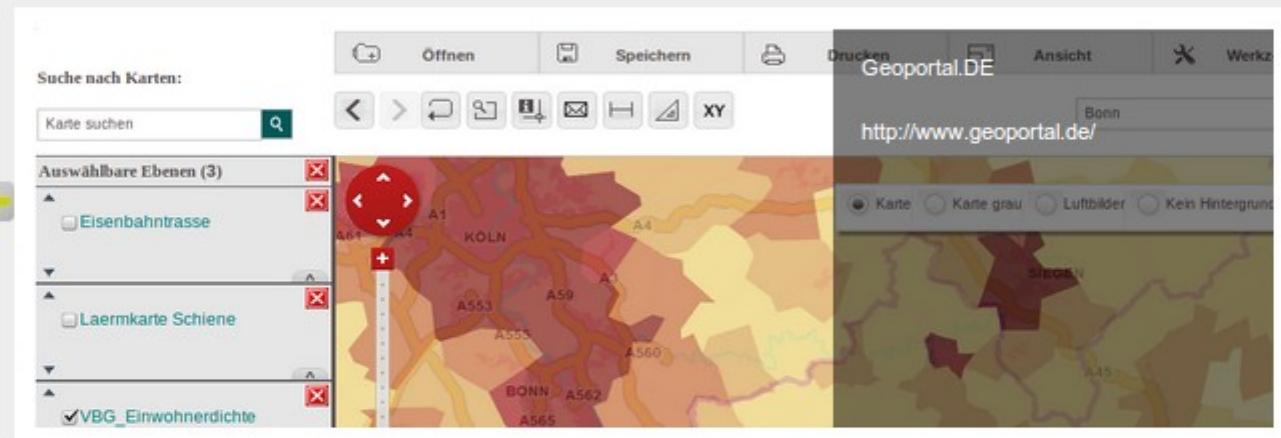


Next steps

- Roadmap <http://mapbender3.org/de/roadmap>
- WFS as datasource
- Service update
- SQL / WFS digitalisation
- SQL / WFS search and Lucene search
- WMC editor / loader
- Mobile solution



Mapbender3

[Download](#)[Home](#) [Was ist Mapbender3?](#) [Los geht's](#) [Dokumentation](#) [Community](#) [Download](#)

Willkommen auf mapbender3.org

Willkommen auf der Mapbender3-Seite

Mapbender ist ein Content Management System für Kartenanwendungen und Geodatendienste. Die Software ist in PHP und JavaScript implementiert. Mapbender wird mit vorkonfigurierten Anwendungen zur Anzeige, Navigation und Abfrage von Karten ausgeliefert. Alle Anwendungen können über die Weboberfläche den eigenen Bedürfnissen angepasst oder komplett neu implementiert werden.

Mapbender3 ist der Nachfolger der erfolgreichen Mapbender Version 2 und basiert auf aktuellen Technologien wie dem Web Application Framework Symfony2, JQuery und OpenLayers.

[Weiterlesen](#)

17.-23. September 2013



Mapbender ist ein offizielles
OSGeo-Projekt.

Chloro 20 Developers

Mapbender.org

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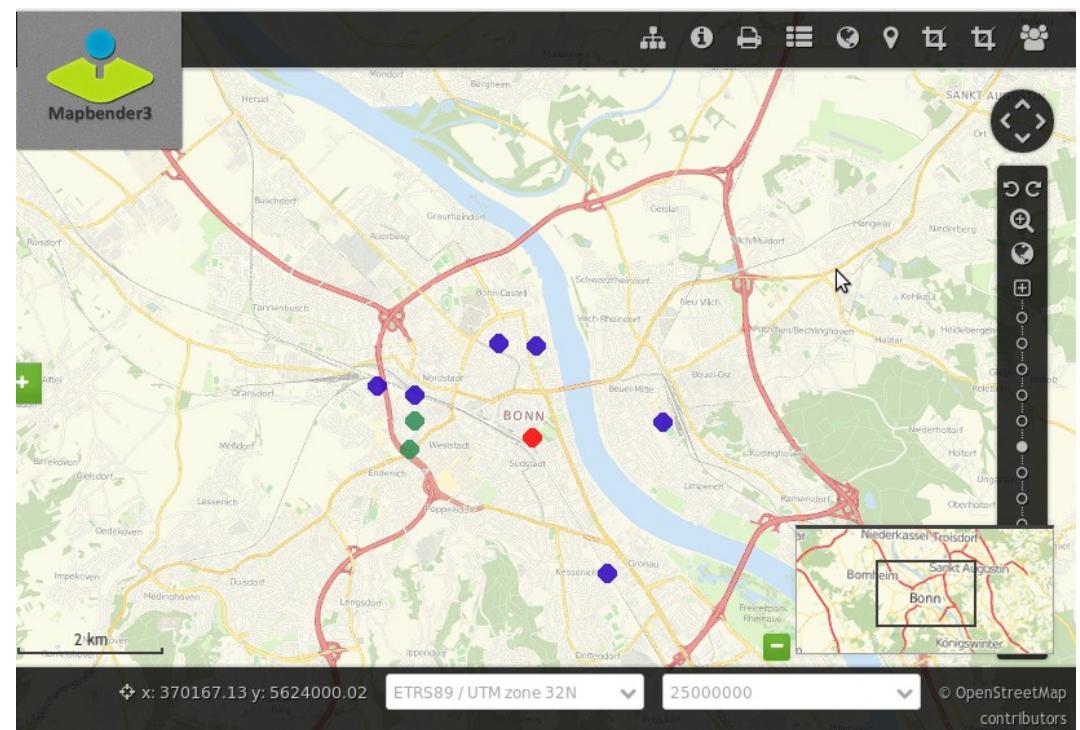


Mapbender3 Demo

Try it yourself

<http://mapbender3.org/demo/>

Mapbender 3.0.0.2 on
OSGeo-Live 7.0





Installation

Download packages

<http://mapbender3.org/en/download>

git repositories

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

Documentation of installation and elements

<http://doc.mapbender3.org>



More information

- <http://mapbender3.org>
- Mapbender3 Code <http://github.com/mapbender>
- Roadmap <http://mapbender3.org/de/roadmap>
- Issuetracker <https://github.com/mapbender/mapbender/issues>



Thank you

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With friendly support by:

