# Mapbender Workshop

## Astrid Emde

## Christoph Baudson

## FOSS4G Barcelona 2010

# Christoph Baudson

- Started hacking HTML in 1996, PHP and JavaScript in 1999, jQuery in 2007

- Joined Mapbender in 2005, now Project Chair and member of Mapbender Project Steering Commitee

- Employed at WhereGroup in Bonn, Germany

- Enjoys collaboration, has experience as staff council and Scrum Master

- Regular blogger, aims to develop software at a sustainable pace

# Astrid Emde

- Mapbender Developer Team since 2004

- PSC (Project Steering Commitee)

- Works at WhereGroup, Bonn

- Project management and development

- Trainings for MapServer, PostgreSQL/PostGIS, Mapbender, GeoServer

- Works with the OSGeo stack for many years

# FOSSGIS e.V. and FOSSGIS conference

- FOSSGIS e.V.

    - Free and Open Source Software for GIS

    - German Language OSGeo Chapter

- Organization of the anual FOSSGIS conference

    - Presentations, workshops, networking

    - BoF, developer sprints

    - About 500 participants, similar to FOSS4G

    - 5. - 7. April 2011 in Heidelberg, Germany

# Fairs with the Open Source Park

- Open Source Park on AGIT http://www.agit.at/
  - Salzburg, next AGIT 6. bis 8. Juli 2011

- Open Source Park on Intergeo
  - Intergeos says they are "the world's largest event and communication platform for geodesy, geoinformation and land management"
  - 5.-7. October 2010 Cologne, Germany

# Open Source Park



- Intergeo 2009, Karlsruhe

# **Web Mapping Illustrated (german)**

- Together with Arnulf Christl german technical translation and revision of the book Web Mapping Illustrated from Tyler Mitchell

- German Version 01/2008 Web-Mapping mit Open Source-GIS-Tools)

- ISBN 978-3-89721-723-2
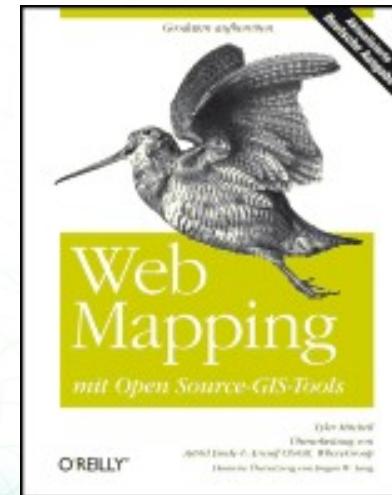
# Mapbender Workshop Structure

- **Introduction** to Mapbender - 30 min


- **Hands on** - 90 min


- **Outlook** - 45 min


- **Questions & answers** - 15 min

# What does Mapbender do?

- Create **geospatial web applications** without writing a single line of code

- Create and maintain an **OWS repository** (focus on WMS, WFS)

- Distribute **configured services** among applications

- Grant **users and groups** access to applications and services

# The Mapbender components

- **Applications**

- **OGC Web Services**

- **User and groups**

# The Mapbender components

**Applications**

OGC Web Services

User and groups

# What does Mapbender do?

This is a typical Mapbender application:
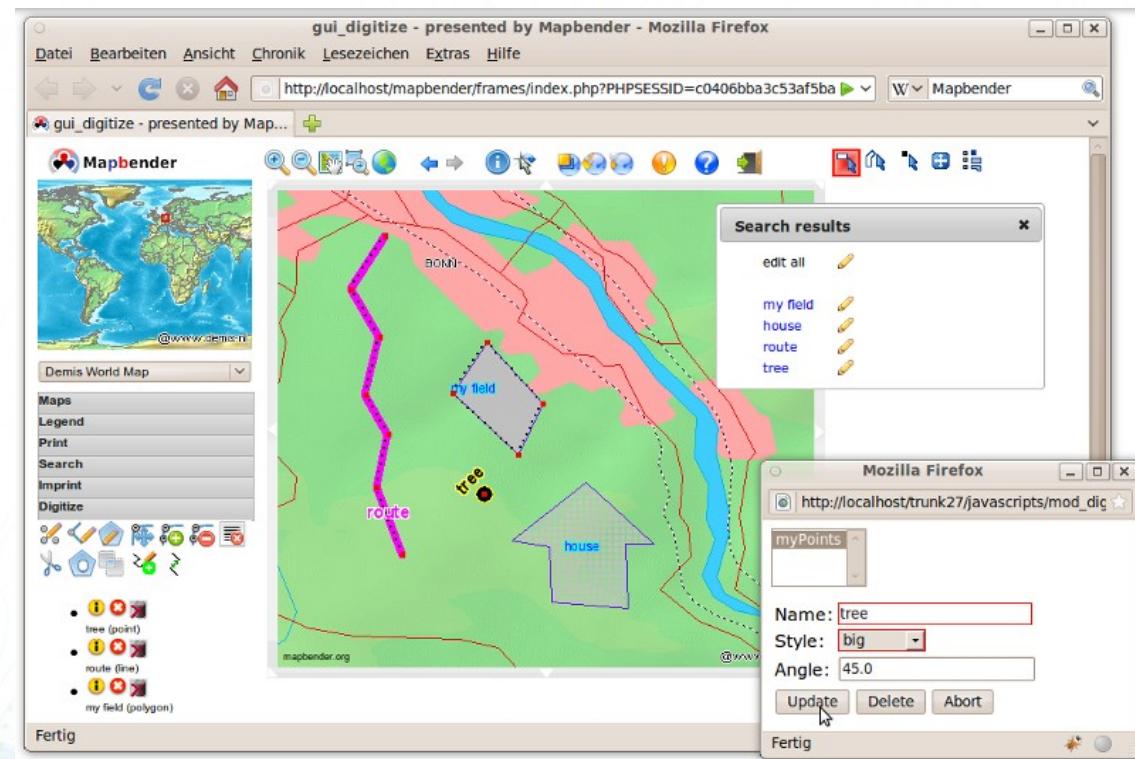
# What does Mapbender do?

How is it created? By another Mapbender application!
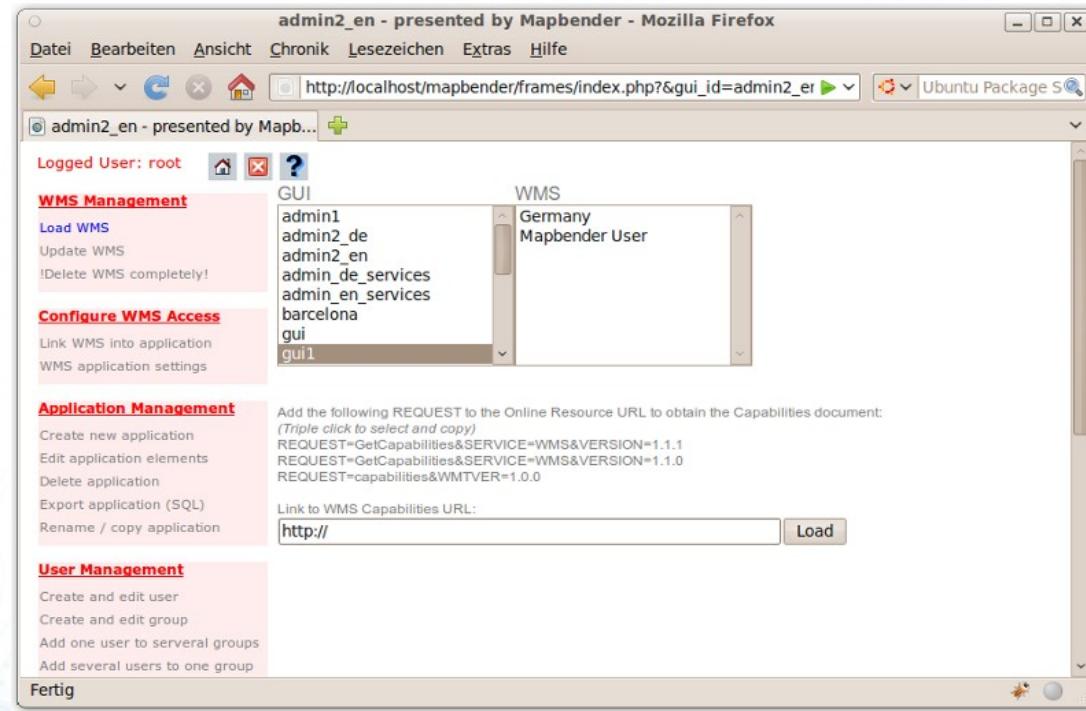
# What does Mapbender do?

The concept is easy: Mapbender is written in Mapbender!
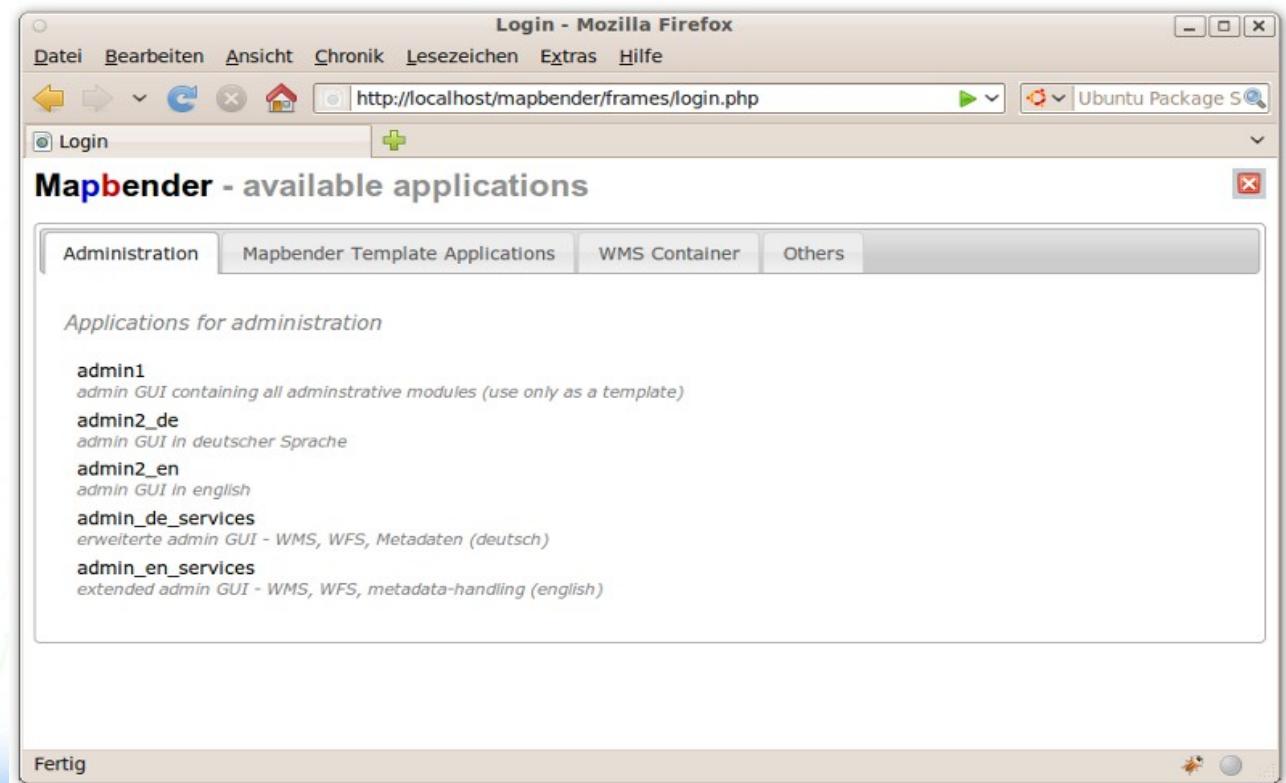
# The Mapbender components

- Applications

- **OGC Web Services**

- User and groups

# What is Map**b**ender ?
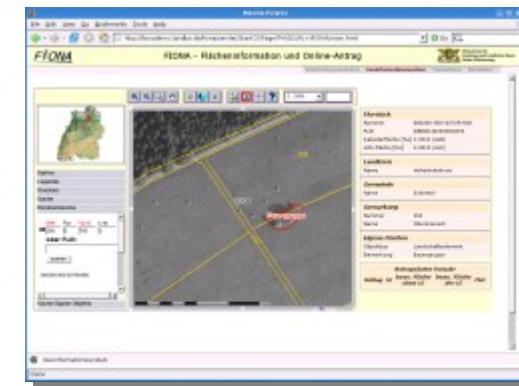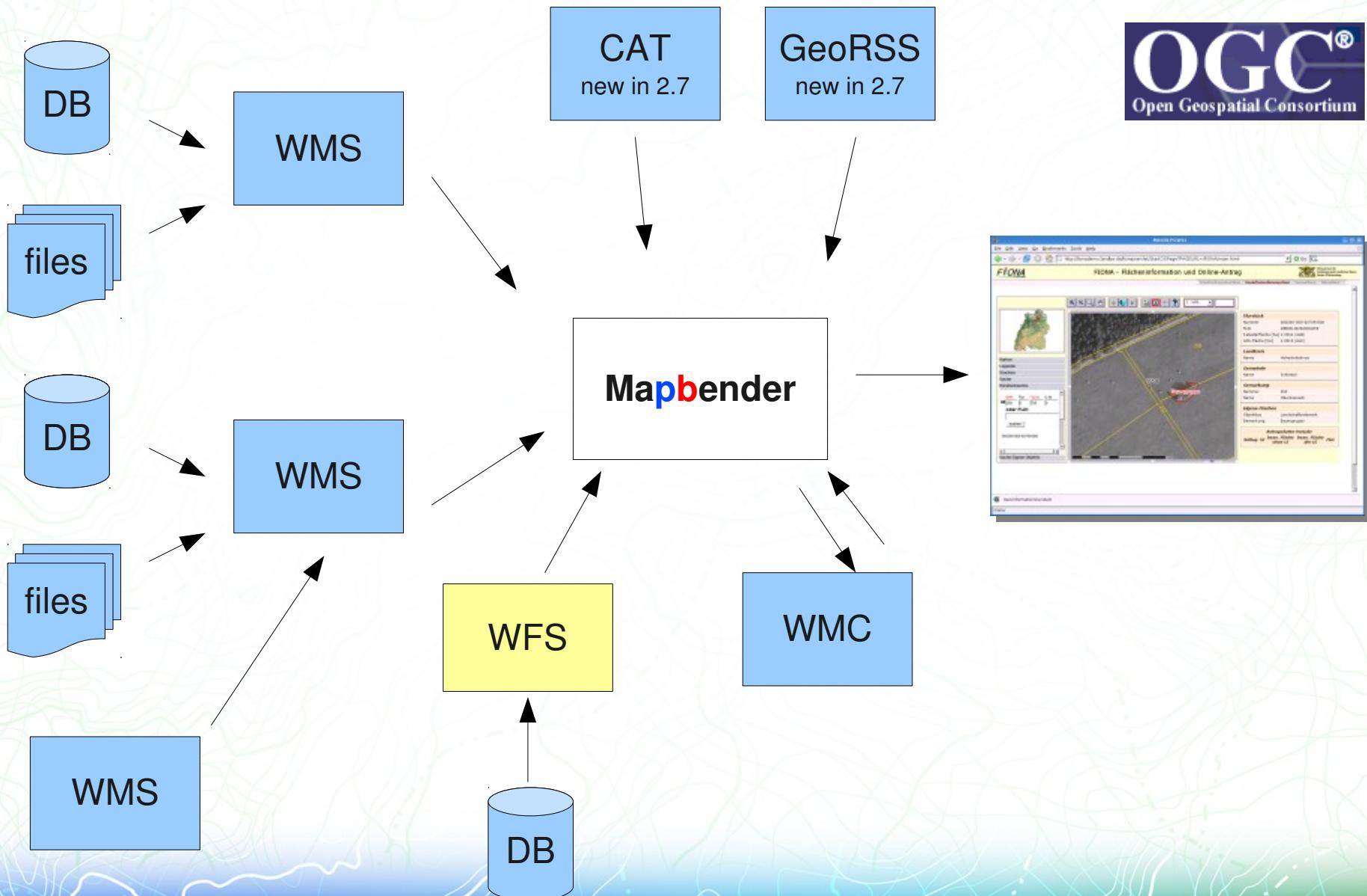
# The Mapbender components

- Applications

- OGC Web Services

- **User and groups**

# The Mapbender components

- Create **user hierachies** with **groups** (system administrators, sub administrators, end users, etc.)

- Grant **read/write access to applications** to individual **users or groups.**

- **Read access to services** is inherited from application read access.

- **Execute rights** are dependent on the applications you are allowed to read.

# Functionality

- The obvious (Map interaction, measuring, etc.)

- Template printing

- Security management

- CMS integration

- Access logging for billing systems

- Service monitoring

- Configurable search interfaces

- Extensive feature editing tools

# Summary

You can create powerful geoportals without writing a single line of code:

## Cómo hacer un Geoportal a partir de gvSIG en 15 minutos

**http://www.viddler.com/explore/gvsig/videos/211/**

# How does Mapbender compare to other OSGeo software?

# How does Mapbender compare to other OSGeo software?

**Mapbender**

- server software package, PHP

- used by portal administrators

- web map application deployment, service, user and access management

# How does Mapbender compare to other OSGeo software?
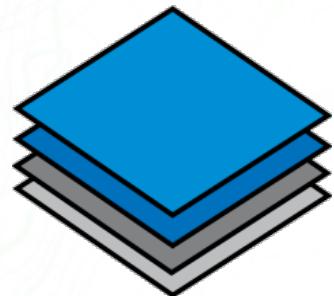
OpenLayers

- JavaScript library

- used by web developers

- add maps to web sites and applications

# How does Mapbender compare to other OSGeo software?



- development framework, Java (GWT)

- used by geospatial software developers

- integrates powerful server side algorithms into the web browser

# How does Mapbender compare to other OSGeo software?



- development framework, Python

- used by geospatial software developers

- implement web map applications and portals

# How does Mapbender compare to other OSGeo software?

Want more? Join the presentation

**„A Typification of Open Source Web Mapping Client Software and Frameworks"**

Tuesday, 16:30

# Mapbender History

# **Mapbender History**

# 2001

- project started in at CCGIS (Bonn, Germany)

- name CCGIS Client Suite, optimized for SICAD SD-IMS using WMS standards

- 1.0 release

# **Map**b**ender History**

# 2003

- Licensed under GNU GPL License
- the name Ma**p**bender was invented
- registration on sourceforge.net

# **Map**b**ender History**

# 2005

- Mapbender 2.x in wide use in eGovernment applications and city maps

- First user conference (80 participants)

- Google Maps announced

# **Map**b**ender History**

# 2006

- OSGeo founded, Mapbender is first graduated project
- OpenLayers released

# Mapbender History

2007

- jQuery introduced in Mapbender
- Regular code sprints
- Regular IRC meetings

# **Map**b**ender History**

# 2008

- Mapbender participates in Google Summer of Code

- MapFish 1.0 released

- GeoMajas registered at SourceForge

# **Mapbender History**

# 2009

- Boost in functionality, wide usage

- Major refactoring, adoption of jQuery UI

- OpenLayers integration

- Thoughts about GeoJQuery

# Mapbender History

# 2010

- Focus on INSPIRE, collaboration with GeoNetwork opensource, metadata solution MeTaDor

- First thoughts about Mapbender 3.0

- Mapbender on OSGeo-Live DVD 4.0.1

# Project Organisation

- OSGeo Project https://mapbender.osgeo.org

- Wiki http://www.mapbender.org

- Trac http://trac.osgeo.org/mapbender/report

- SVN https://svn.osgeo.org/mapbender/

- Mailing lists

    - users@mapbender.osgeo.org

    - dev@mapbender.osgeo.org

- IRC-meetings  irc://irc.freenode.net#mapbender

- regular development meetings, Fairs, OSGeo

# Software Requirements

- Web Server (Apache)

- PHP > 5.1.x

- Administrative Database

  - PostgreSQL (PostGIS)

  - ~~MySQL~~

- Browser: all major browsers like

  - Mozilla Firefox

  - Internet Explorer

- gettext, ImageMagick

http://www.mapbender.org/Installation

# Mapbender solutions

# Mapbender in Geoportal solutions

- Geoportal.RLP

  Extensive case study



- There are many more:

  PortalU, GeoPort.HRO,

  Geoportal der Stadt Remscheid

  Geoportal Wohnregion Bonn-Rhein-Sieg

  Geonetzwerk Münsterland

# Mapbender as a city portal

- GeoPort.HRO

- Geoportal der Stadt Remscheid

- Stadtplandienst Mainz

- Stadtplandienst Regensburg

- Portal der Gemeinde Zwischenwasser
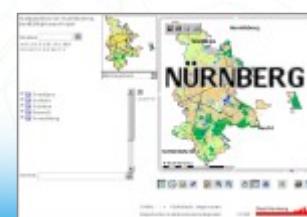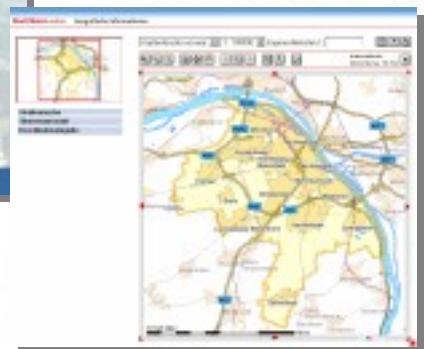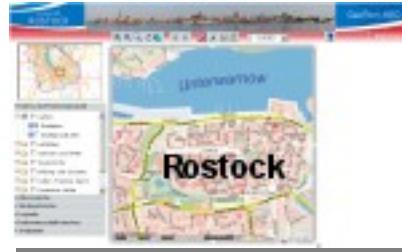
# **Mapbender Solutions**



- Tourenplaner RLP

- Naturpark-Scout

- FIONA - Flächeninformation und Online-Antrag

- FLOrlp

- Landesarchiv Baden-Württemberg
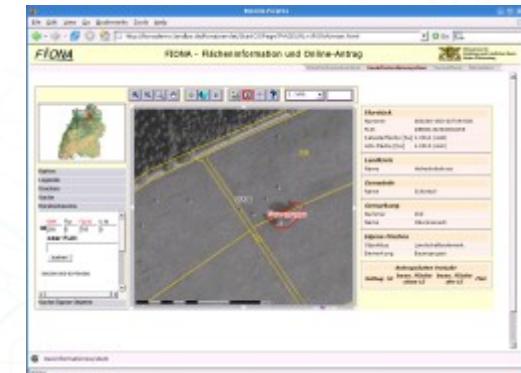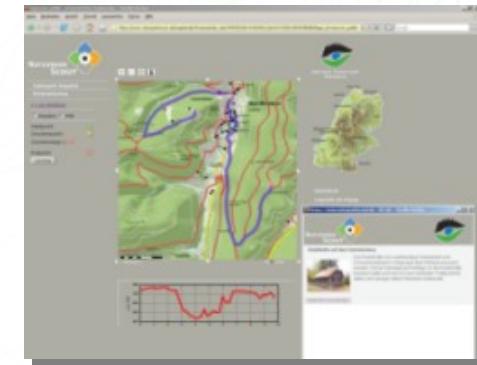
# **Map**b**ender solutions**

There is more: Take a look at the **Mapbender gallery**



http://www.mapbender.org/Gallery

# WhereGroup

- Major Mapbender sponsor



- Company in Bonn, Germany

- Founded in january 2007 as merger
  of CCGIS, KARTA.GO GmbH and Geo-Consortium

- 15 employees

# WhereGroup

- Service provider with experience in all field of spatial data management with free software: WebGIS, SDI, database , relevant standards, trainings, conferences

- Founding member of the FOSS Academy

- Member of the OGC

- Open Source projects: Mapbender, PostNAS

# WhereGroup Projects

- Survey Office of Rhineland-Palatinate GeoPortal.rlp

- Survey Office of Baden-Württemberg: Geodatenportal

-  Pollutant Release and Transfer Register

- German Hiking Association: Webbased Hiking Trail Administration

- Agency for Tourism of Rhineland-Palatinate:
  Cycle Route Planner for of Rhineland-Palatinate

- Archaeological Office of East Friesland

# Try Mapbender on your own

http://www.osgeo.org/mapbender

http://localhost/mapbender/

**Thanks you for your attention!**

If you have any question please contact us

Astrid Emde (astrid_emde@osgeo.org)

Christoph Baudson (christoph@osgeo.org)

or write to the mapbender-users mailinglist

mapbender-users@list.osgeo.org