

# GeoMapFish

Das Open Source WebGIS

AGIT 2015

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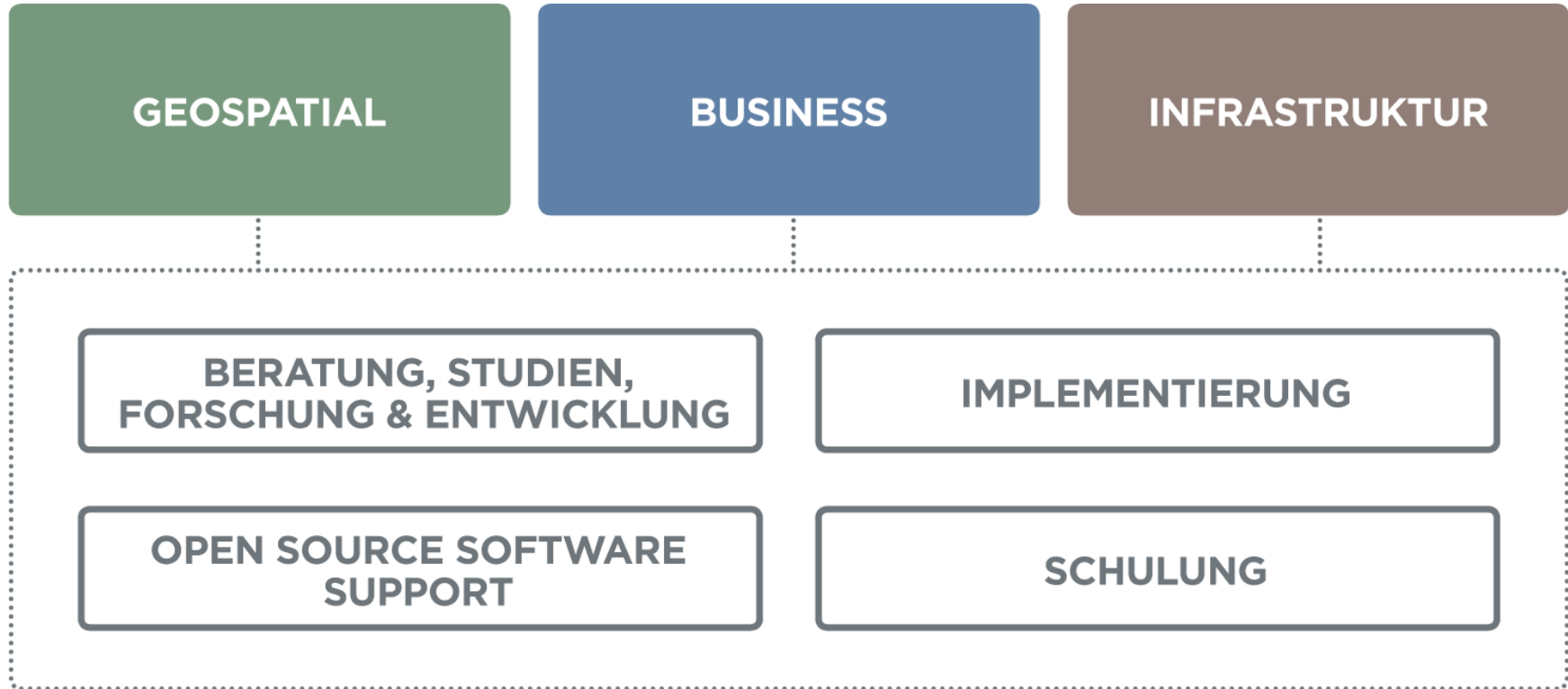
# Ablauf

- GeoMapFish - die Übersicht
- MapFish - das Framework dahinter
- GeoMapFish - im Detail
- GeoMapFish: Neuigkeiten Version 1.5 und 1.6
- Beispiele
- Ausblick - GeoMapFish 2

- Open Source Lösungen vom Editor und Integrator seit 2001
- >50Mitarbeiter
- Camptocamp bringt Sie mit den aktuellsten Open Source Technologien weiter...  
... bis an die Spitze der Innovation



# Camptocamp: 3 Abteilungen





# GeoMapFish - die Übersicht

- Generisches WebGIS
- Plugin-Basiert
- Anpassbar und Erweiterbar
- Zahlreiche Funktionalitäten
- OGC Standards-basiert
- Getragen von einer breiten User Gruppe (>20 Mitglieder)

# MapFish - das Framework dahinter



# MapFish - das Framework dahinter

- Komponenten basiert
- Server-seitige Komponenten in folgenden Programmiersprachen:
  - Pylons / Pyramid Python
  - Ruby on Rails / Ruby
  - Symfony PHP
  - Java
  - Andere Programmibliotheken (GeoAlchemy, Shapely, iText, repoze.who ...)
- Client-seitig: GeoExt
  - OpenLayers JavaScript library
  - ExtJS JavaScript library

# MapFish - das Framework dahinter

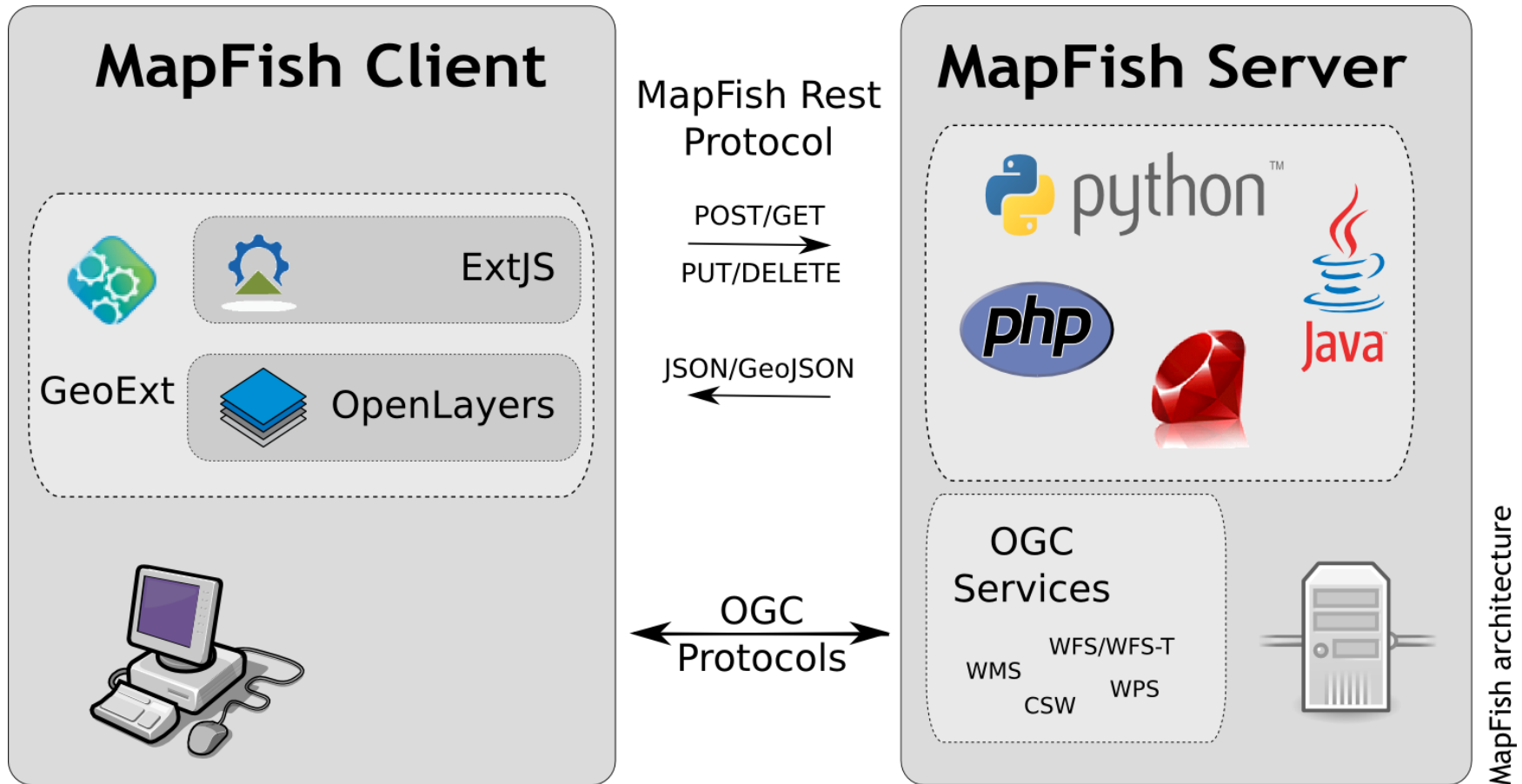
Open Source (BSD)

und

ein OSGeo-Projekt



# MapFish - das Framework dahinter



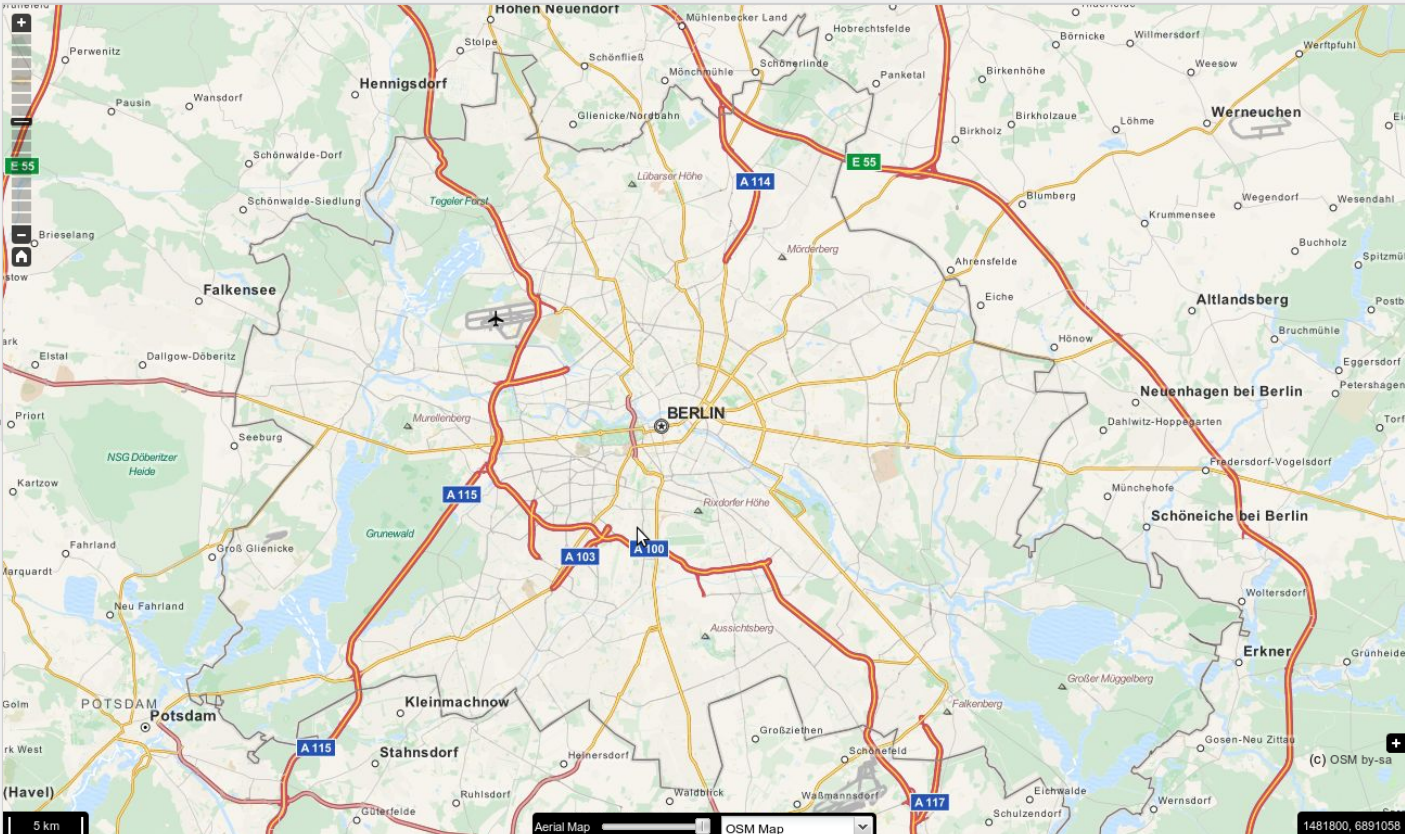
# GeoMapFish

Themes

Themes

Find a theme or a layer

- Administration
  - Districts
    - Montpellier centre
    - Près d'arènes
    - Port Marianne
    - Les Cévennes
    - Mosson
    - Hôpitaux-Facultés
    - Croix d'argent
- Equipment
  - Game area
  - Camera



5 km

Aerial Map OSM Map

Zoom to: 1 : 200000

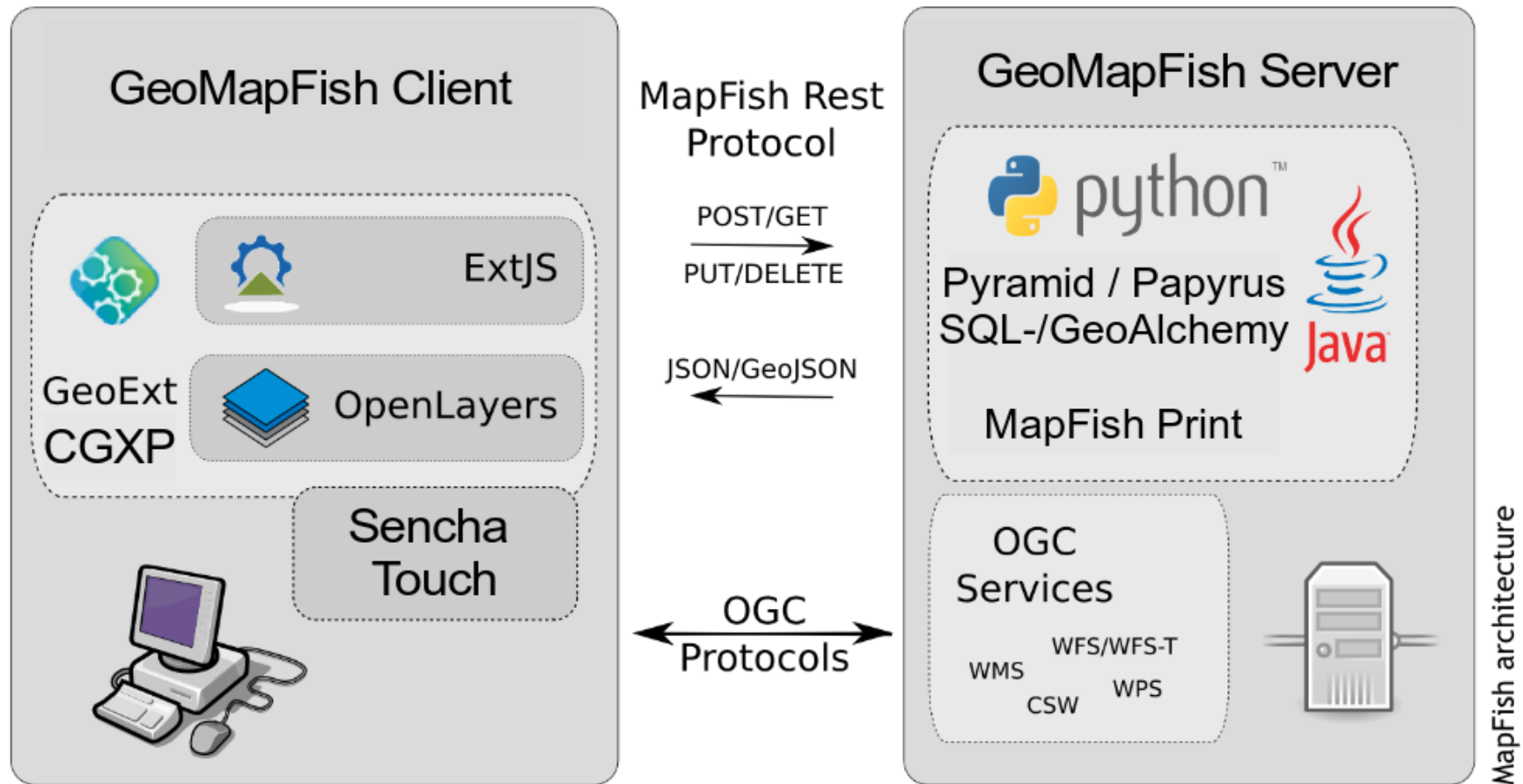
1481800, 6891058

Contact - Développé par Camptocamp.

# GeoMapFish

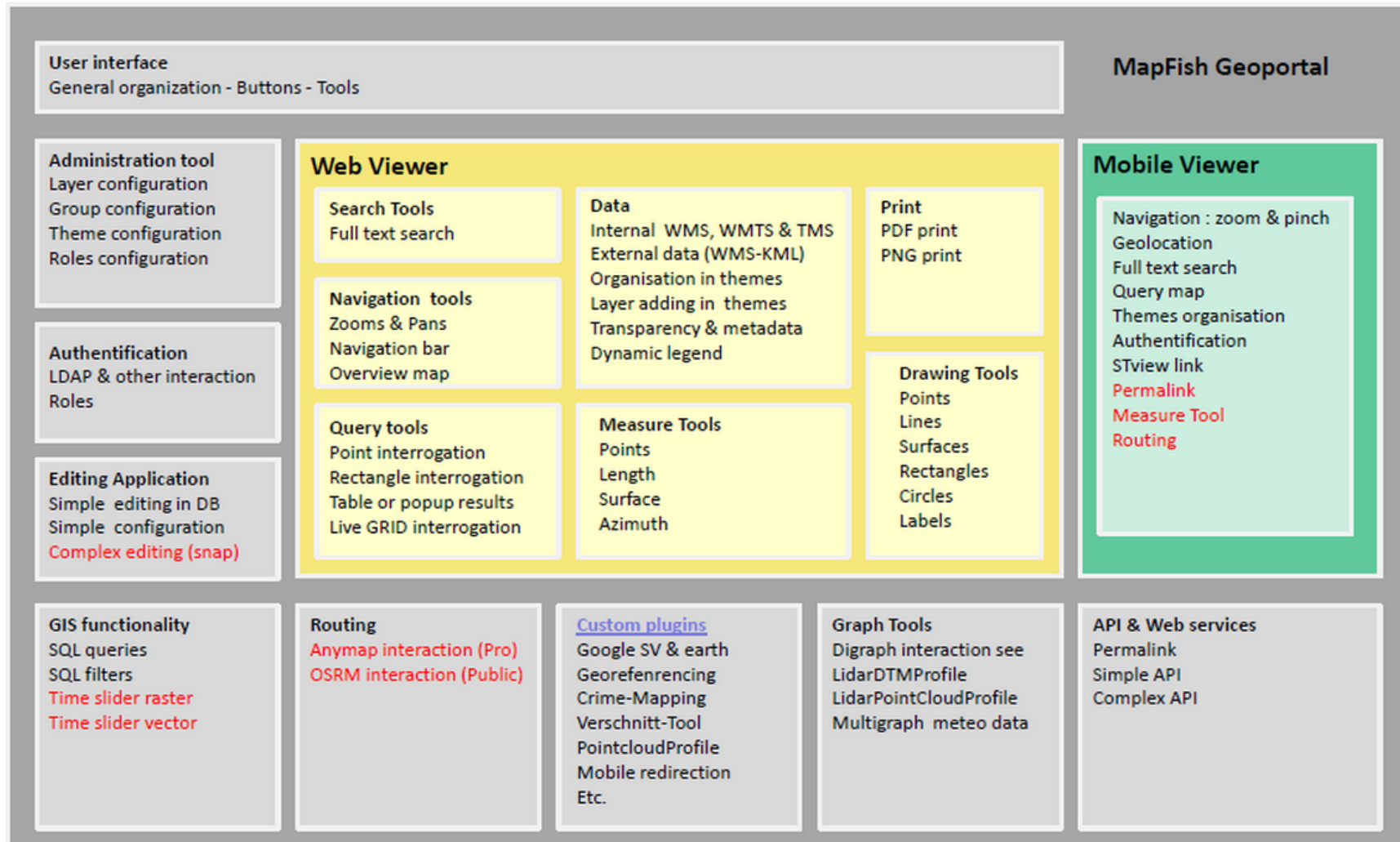
- Generisches WebGIS
- Plugin-Basiert
- Anpassbar und Erweiterbar
- Zahlreiche Funktionalitäten
- OGC Standards-basiert
- Getragen von einer breiten User Gruppe (>20 Mitglieder)
- Open Source

# GeoMapFish: Architektur





# GeoMapFish: Funktionalitäten



# GeoMapFish: Funktionalitäten

- AddKMLFile
- Data Disclaimer
- Editing
- FeaturesWindow
- FullTextSearch
- GetFeature / Query
- GoogleEarthView
- LayerTree
- Legend
- Login / Auth
- Measure
- MouseCoordinates
- Permalink
- Print
- Profile

# GeoMapFish: Konfigurierbares Interface

The screenshot displays the GeoMapFish web application interface. At the top left, the logo for "camptocamp" is visible, along with the text "INNOVATIVE SOLUTIONS BY OPEN SOURCE EXPERTS". In the top right corner, there are social media icons (LinkedIn, Facebook, Twitter, YouTube, RSS, and a user profile icon) and the text "DE - FR" and "Calcul d'itinéraire - Mobile - API - XAPI".

The main interface features a map of Berlin and its surroundings, including areas like Hennigsdorf, Falkensee, and Potsdam. The map is overlaid with various administrative boundaries and equipment locations. On the left side, there is a "Themes" panel with a search bar and two main categories:

- Administration:**
  - Districts
  - Montpellier centre
  - Près d'arènes
  - Port Marianne
  - Les Cévennes
  - Mosson
  - Hôpitaux-Facultés
  - Croix d'argent
- Equipment:**
  - Game area
  - Camera

At the bottom of the interface, there is a scale bar showing "5 km", a zoom control set to "Zoom to: 1 : 200000", and a map style selector currently set to "OSM Map". The bottom right corner shows the coordinates "1481800, 6891058" and the text "Contact - Développé par Camptocamp."



# GeoMapFish: Konfigurierbares Interface

The screenshot displays the GeoView BL web application interface. The main map area shows a detailed view of the Basel region, including municipalities like Allschwil, Birsfelden, and Muttenz. The map is overlaid with various colored lines representing different data layers, such as roads and administrative boundaries. The interface includes a search bar at the top with the text "Suche Ort, Objekte...". On the left side, there is a "Themen" (Layers) panel with a search field for "Themen- oder Layername eingeben". At the bottom left, there are buttons for "Drucken", "Abfragen", and "Bericht erstellen (PDF)". The bottom center shows the scale "1:200000" and a scale bar for "2 km". The bottom right corner displays coordinates "2604900, 1251825" and a "KML hinzufügen" button. The top right corner contains metadata: "PK | SWISSIMAGE | Geolog. Atlas/Spezialkarten | Quelle swisstopo" and "GIS-Fachstelle BL | Kreuzbodenweg 1 | CH-4410 Liestal".

# GeoMapFish: Konfigurierbares Interface

Géoportail du Système d'Information du Territoire Neuchâtelois

**ine.ch**  
RÉPUBLIQUE ET CANTON DE NEUCHÂTEL

Accueil - Thèmes - Géodonnées - Géoservices - Version mobile - Aide - Liens - Contact

Recherche et localisation

Rechercher un lieu ou un objet géographique

Choix des données

Thèmes

Thème : Plan de ville

Points d'intérêt

- Administration
- Culture / loisirs
- Points de collectes / Déchetterie
- Santé
- Services
- Sport
- Transports

Plan de ville

- Communes
- Adresses
- NPA
- Axes de coordonnées

Fonds de plan

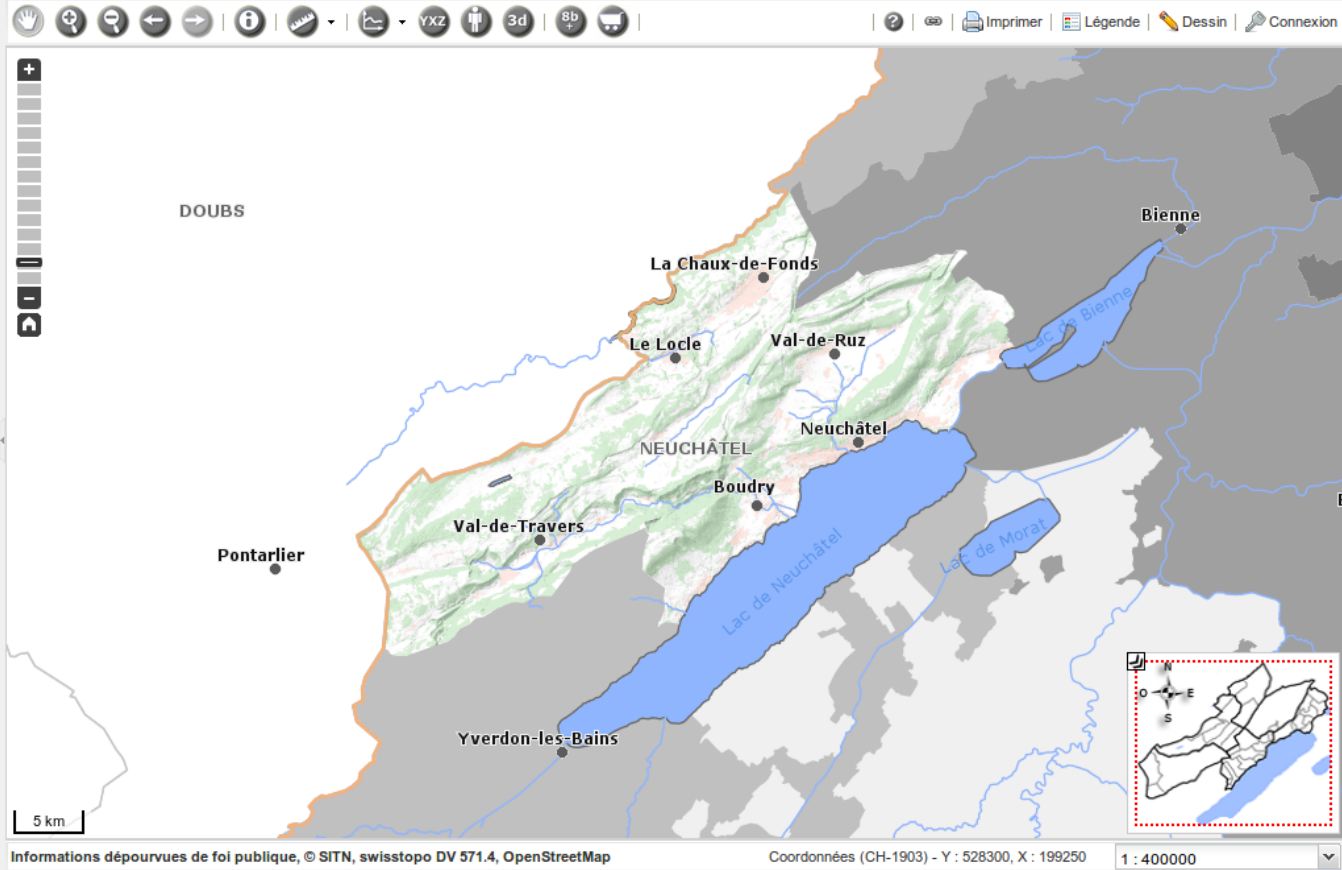
- OpenStreetMap
- Cartes et plans topographiques
- Hybride - ortho et plan

Ajouter d'autres données du SITN dans ce thème:

Rechercher des données...

Ajouter des données externes dans ce thème:

Ajouter KML Ajouter couche WMS



# GeoMapFish: Konfigurierbares Interface

The screenshot displays the GeoMapFish web interface for the Yverdon-les-Bains region. The interface is organized into several key sections:

- Header:** Features the logo for "Yverdon-les-Bains" and "Géoportail", along with the text "Système d'information du territoire Yverdon-les-Bains".
- Navigation and Tools:** A top toolbar includes icons for search, zoom in/out, pan, and print. A secondary toolbar on the right offers options for "Imprimer", "Dessin", "Légende", "Contact", and "Connexion".
- Search and Content:** A search bar labeled "Recherche et localisation" allows users to "Rechercher un lieu ou un objet...". Below it, the "Contenu de la carte" section includes "Choix des thèmes" and a "Thèmes" dropdown menu.
- Map Layer Selection:** A list of themes is shown, with "Quartiers d'Yverdon" and "Bâtiment projeté" selected.
- Map View:** The central map area shows an orthophoto of the region, including the Lac de Neuchâtel and various municipalities like Yverdon-les-Bains, Grandson, and Yvonand. A scale bar indicates 1000 meters.
- Map Controls:** A vertical zoom slider is on the left, and a "Plan couleur" dropdown is on the right.
- Footer:** Provides copyright information: "Données dépourvues de foi publique © Ville d'Yverdon-les-Bains • État de Vaud • swisstopo" and coordinates: "Coordonnées CH1903 [m] : 535227 / 178990".



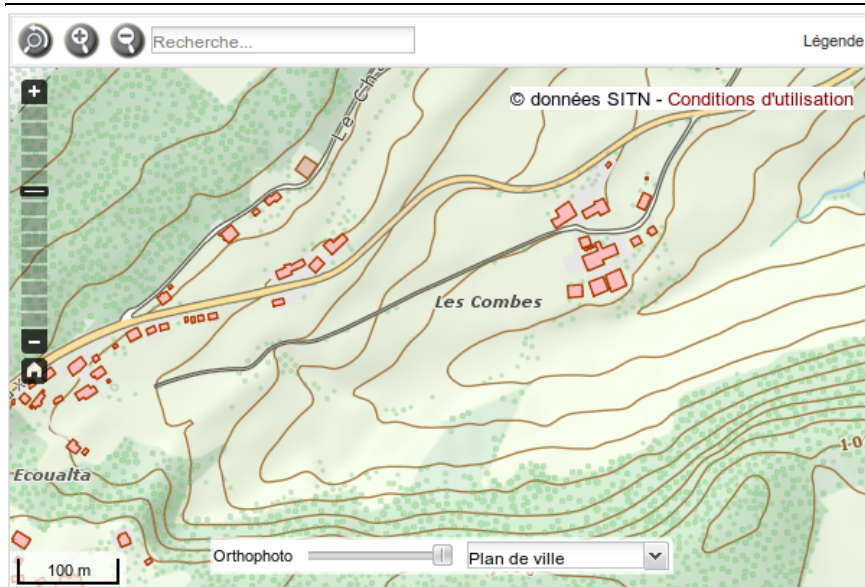
# GeoMapFish: weitere Interfaces

## Editieren

The screenshot displays the GeoMapFish web application interface. On the left, a 'Themes' panel is visible with an 'Edit' section containing three checked options: 'point' (red dot), 'line' (green line), and 'polygon' (blue polygon). The main map area shows a blue polygon representing the 'AÉROPORT DE MONTPELLIER - MÉDITERRANÉE'. A modal dialog box is open over the map, titled 'Click on the map to edit existing features, or Create a new feature in polygon'. The dialog contains a table with one row: 'name' with the value 'Flughafen'. Below the table are 'Delete', 'Cancel', and 'Save' buttons. The map includes various geographical features, roads (e.g., A9, D612, D986), and labels for locations like 'région ouest', 'Lattes', and 'AÉROPORT DE MONTPELLIER - MÉDITERRANÉE'. A scale bar indicates 2 km. The bottom right corner shows the coordinates '435833, 5396795' and the copyright notice '(c) OSM by-sa'. The top right corner indicates 'Logged in as demo Logout'.

# GeoMapFish: weitere Interfaces

## API



```
var map = new sitn.Map({  
  div: 'map1', // id de l'élément qui va contenir la carte  
  zoom: 8, // niveau de zoom  
  center: [544500, 210100] // coordonnées sur lesquelles la carte doit être centrée  
});
```



# GeoMapFish: weitere Interfaces

Mobile



# GeoMapFish: weitere Interfaces

## Routing

Recherche d'itinéraire

De:

A:

Trajet:

**Description de l'itinéraire**

Distance totale: 3.6 km  
Temps estimé: 7m 40s

Directions:

	Tout droit NW sur <b>Chemin du Crépon</b>	120 m
	Tourner légèrement à gauche sur <b>Chemin de Baugy</b>	149 m
	Tourner légèrement à gauche sur <b>Route de Chailly</b>	346 m
	Continuer	135 m
	Continuer	133 m
	Continuer	96 m
	Continuer	78 m
	Continuer	52 m
	Continuer	115 m
	Continuer	69 m
	Continuer	35 m
	Tourner à gauche sur <b>9</b>	701 m
	Tourner à gauche sur <b>Avenue des Alpes</b>	470 m
	Entrer dans le rond point et prendre la quatrième sortie sur <b>Rue de la Gare</b>	477 m
	Continuer sur <b>Rue du Pont</b>	263 m

Source : Geodonnées Etat de Vaud.

Orthophoto 2010

200 m

558274, 142444

# GeoMapFish: Neuigkeiten der aktuellen Version

- 
- WFS-T Support
- Publizieren von WMS / WFS Services
- Suchfarbe ändern
- Geolokalisierung auch auf Desktop
- "Gehe zu" Button
- neues Kompilierungstool
- PostGIS 2 Support, Mapserver 7 Support
- ... und viele weitere

# GeoMapFish: weitere Komponenten

**Deploy** - übertragen der Applikation und/oder der Daten auf andere Server mit einem einzigen Befehl

OGC Services: MapServer, QGIS Mapserver, GeoServer, ...

Datenbank-Anbindung: PostgreSQL / PostGIS, Oracle, ...

Anbindung an ein SSO, LDAP, eigenes Authentication System

# GeoMapFish: weitere Komponenten

Cyber Geo-Administration: Formulare mit geographischer Komponente

Print, Reporting mit **MapFish Print**

Vorberechnung / Caching mittels **TileCloud Chain**

Eigene REST-Services / Python-Webdienste

# Online Portale und Beispiele

GeoView BL (Kanton Basel-Landschaft)

SITN (Kanton Neuenburg)

RegioGIS Berner Oberland

Gemeinde Thun

Cartorivera

Stadt Morges

Gemeinden Pully/Paudex/Belmont

Stadt Yverdon

Kanton Jura

and more...

# Weitere Beispiele

- [map.geo.admin](http://map.geo.admin)
- [map.schweizmobil.ch](http://map.schweizmobil.ch)
- Luxembourg National Map
- [plan.epfl.ch](http://plan.epfl.ch)



# Geoportal map.geo.admin.ch

The screenshot displays the Swiss Geoportal interface. At the top left, the Swiss flag and the text "Schweizerische Eidgenossenschaft" are visible. A search bar is located at the top center. The top right contains navigation links: "Full screen", "Report problem", "Help", "Mobile version", and "EN". A "Color map" dropdown menu is also present.

On the left side, there is a sidebar menu with the following items:

- Share
- Print
- Tools
- Geocatalog** (Change topic)
- Base information and Planning
- Nature and Environment
- Population and Economy
- Selection**



Below the menu, it states "No layer in the map" and includes a "Close menu" button.

The main map area shows a topographic map of Switzerland with a green outline of the country's borders. Major cities labeled include Genève, Lausanne, Bern, Zürich, Basel, and Winterthur. Rivers like the Rhodan, Aare, and Rhodan are visible, along with lakes such as Le Léman and Bodensee. The map includes a scale bar (50km) and a coordinate system selector (CH1903+ / LV95).

At the bottom right, there is a copyright notice: "© Data: swisstopo" and "geo.admin.ch Copyright & data protection".



# SchweizMobil map.schweizmobil.ch

Switzerland **Mobility**   deutsch  
français  
italiano

Search... Place Route Service Coord.

**Map** Photo Grey

Print

Share

**My tours**  
Back to "Greina"

Hiking in Switzerland +

Cycling in Switzerland +

Mountainbiking in Switzerland +

Skating in Switzerland +

Canoeing in Switzerland +

Rail | Bus | Boat +

Accomodation +

Services +

Weather



Choose:





6 Alpine Passes Trail  
Stage 4 Vrin-Cab. Scaletta SAT

Coordinates (m): | Geodaten © swisstopo (5704000138) | Impressum | Copyright & privacy policy | Contact | Legend



# SchweizMobil map.schweizmobil.ch

Switzerland**Mobility**   deutsch  
français  
italiano

Search... Place Route Service Coord.     Plan your own tours

3D Map Photo Grey



Print

Share

**My Tours**

- Hiking in Switzerland +
- Cycling in Switzerland +
- Mountainbiking in Switzerland +
- Skating in Switzerland +
- Canoeing in Switzerland +
- Rail | Bus | Boat +
- Accomodation +
- Services +

Weather

Partners:  

Coordinates (m): | Geodaten © swisstopo (5704000138) | Impressum | Copyright & privacy policy | Contact | Legend

# Geoportal map.luxembourg.lu

The screenshot displays the Luxembourg Geoportal interface. At the top left is the logo of the Government of Luxembourg. A search bar at the top right contains the text "Search addresses, parcels, layers ...". The main map area shows a geographical view of the Mersch region, with various municipalities and roads labeled. The left sidebar contains a "LAYERS" panel with a "Background layer" dropdown set to "basemap\_2015\_global". Below this are "MY LAYERS (3)" and "CATALOG" tabs. The "GEOGRAPHICAL LOCATION" section is expanded, showing a list of administrative units: "Municipalities (names)", "Municipalities", "Cantons (names)", "Cantons", "Districts (names)", "Districts", and "Country". Other sections include "Cadastral data", "Addresses", "Topographical Maps", "EDITUS\_POIS", "TRANSPORT", "LAND SURFACE", and "ENVIRONMENT, BIOLOGY AND GEOLOGY". At the bottom, there are navigation and utility icons for "LAYERS", "MY MAPS", "INFOS", "DRAW", "MEASURE", "PRINT", and "SHARE". The bottom right corner features "LINK 1", "LIEN 2", and "LIEN 3" buttons.



# Campus Plan der EPFL plan.epfl.ch

The screenshot displays the EPFL campus map interface. At the top, there is a navigation bar with the EPFL logo and text: "ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE", "YOU ARE", "BY SCHOOL", and "ABOUT EPFL". On the right, there are tabs for "Person", "Place", and "EPFL Web", along with a search box containing "Find a place" and a search icon. Below this, there are language options for "English" and "Français".

The main interface includes a toolbar with "Search", "Points of Interest", "Routing" (selected), "Print", "Measure", "Reset", "Link", and "Help" buttons. A sidebar on the left shows a list of points of interest: "A Arrêts M1 EPFL" and "B Musée Bolo". Below this, there is a "Disabled" checkbox and "Let's go!" and "Reset" buttons. A "Departure from level 0" section lists four steps: 1. Down the ramp to level -1 (57 m), 2. Up the stairs to level 0 (123 m), 3. Up the stairs to level 1 (137 m), and 4. Down the stairs to level 0 (492 m). An "Arrival to level" section shows a total distance of 571 m.

The main map area shows a detailed campus layout with buildings labeled with letters (e.g., AA, SG, AI, SV, MX, BC, III, EL, DIA, ME, MA, BI, CH, PA, RLC, PP, CL, GC, GR, PH, GE, CH, PO, LE, BP, AN, BM, CL, m1). A red dotted line indicates a routing path starting from a point labeled 'A' and ending at a point labeled 'B'. The map also shows streets like "Rte des Noyerettes", "Rte J.-D. Colladon", "Allee de Savoie", "Av. du Tir Fédéral", "Av. J.-R. Peronnat", "Av. Piccard", "Ch. des Machines", "Ch. des Ateliers", "Ch. de la Méridienne", "Ch. des Zingstueurs", and "Sorge".

On the right side of the map, there are three panels: "Zoom" with "+" and "-" buttons, "View" with options for "3D", "Street View", "Map", and "Satellite", and "Places" with a list of locations: "EPFL Campus", "IMT Neuchâtel", "ECAL Renens", "Aula Cour", "Middle East", "Basel", "CHUV", and "Maillefer". An inset map in the bottom right corner shows the campus location within a larger regional context, with a red box indicating the current view area.

At the bottom left, the email address "webmaster.map@epfl.ch" is visible. At the bottom center, there is a copyright notice: "© 2002-2010 EPFL, © OpenStreetMap contributors".

# Ausblick

## GeoMapFish 2 !

- NGeo - Kombination Openlayers 3 mit Angular / Bootstrap
- Responsive - 1 Applikation für alle Geräte
- Bewährt - Aufbau auf den Erfahrungen des schweiz. Bundesgeoportals [map.geo.admin.ch](http://map.geo.admin.ch)
- 3D - Fließender Übergang und Synchronisation zwischen 2D und 3D

# GeoMapFish Community

Projekt: <http://www.geomapfish.org/>

<http://twitter.com/mapfish>  
[#mapfish](#)

Code: <https://github.com/camptocamp/c2cgeoportal/>

User Gruppe: <https://sites.google.com/site/geomapfishusergroup/>

MapFish Print: <http://www.mapfish.org/doc/print/index.html>

# Danke für die Aufmerksamkeit!

*Kontakt:*

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... oder am Open Source Stand

to camp

camp to camp

INNOVATIVE SOLUTIONS  
BY OPEN SOURCE EXPERTS

