



INNOVATIVE SOLUTIONS
BY OPEN SOURCE EXPERTS

SBB Open Source Roundtable, 2022

Wer zahlt, gewinnt

Beispiele für die institutionelle
Finanzierung von Open Source
Projekten

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Agenda

- Open Source bei Camptocamp
- OpenLayers Einsatz und Geschichte
- Institutionelles Crowdfunding
- Institutionelle Projektbeiträge
- Empfehlungen für eine Open Source Bahn Initiative

Camptocamp Geospatial Open Source Team

- Open Source, seit 2001
 - Dienstleistungsanbieter
 - Herausgeber und Integrator
- 150+ Mitarbeiter
 - Cross functional team: Plan - Build - Run
- 70+ geospatial & devops Experten
 - Open Source Beiträge
 - Agile Software Entwicklung
 - DevOps & Cloud Expertise
- Der grösste europäische Dienstleister, der zur Open-Source-Software im Geoinformationsbereich beiträgt.

camptocamp
Paris

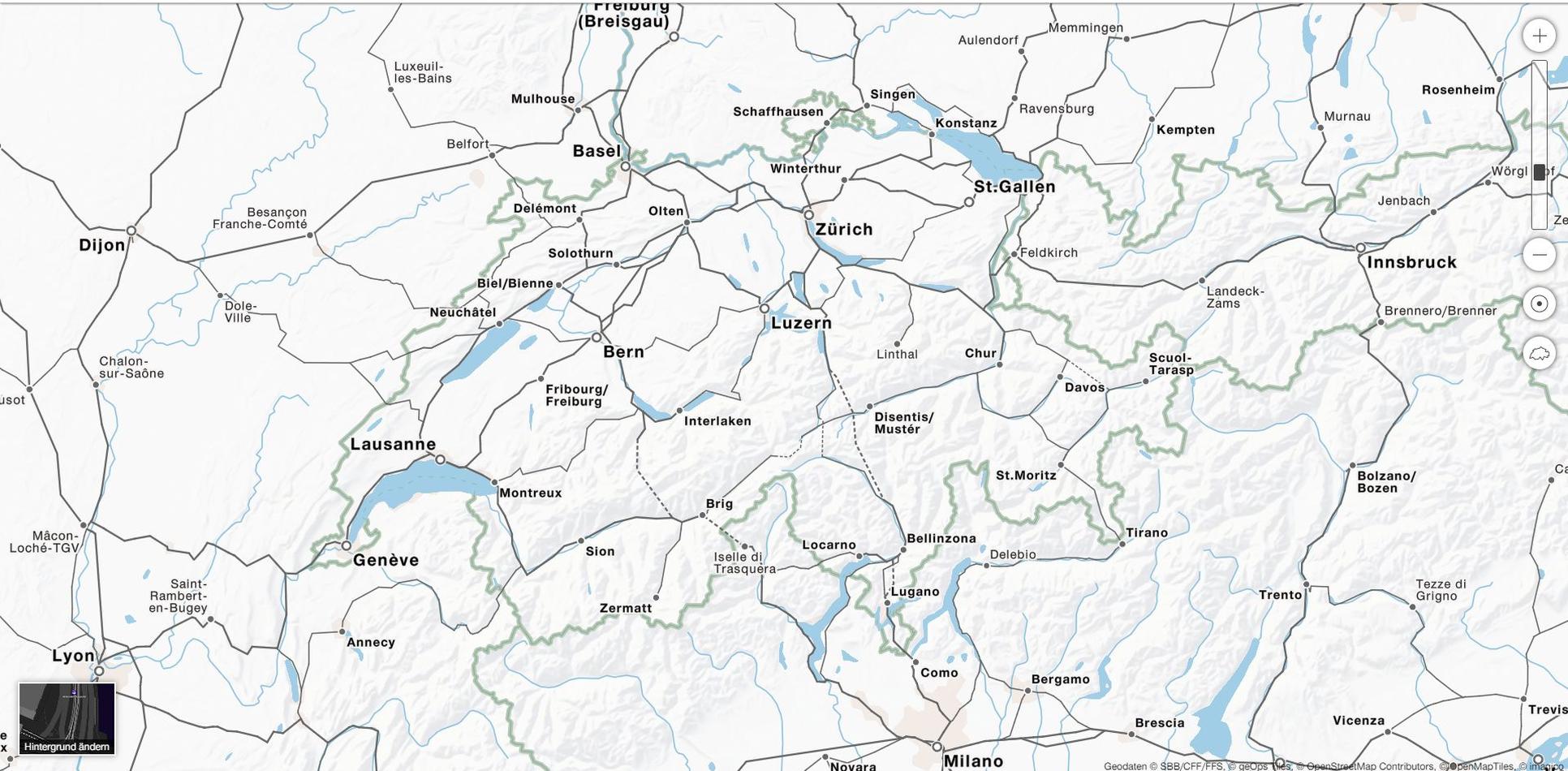
camptocamp
Munich

camptocamp
Olten

camptocamp
Lausanne

camptocamp
Chambéry

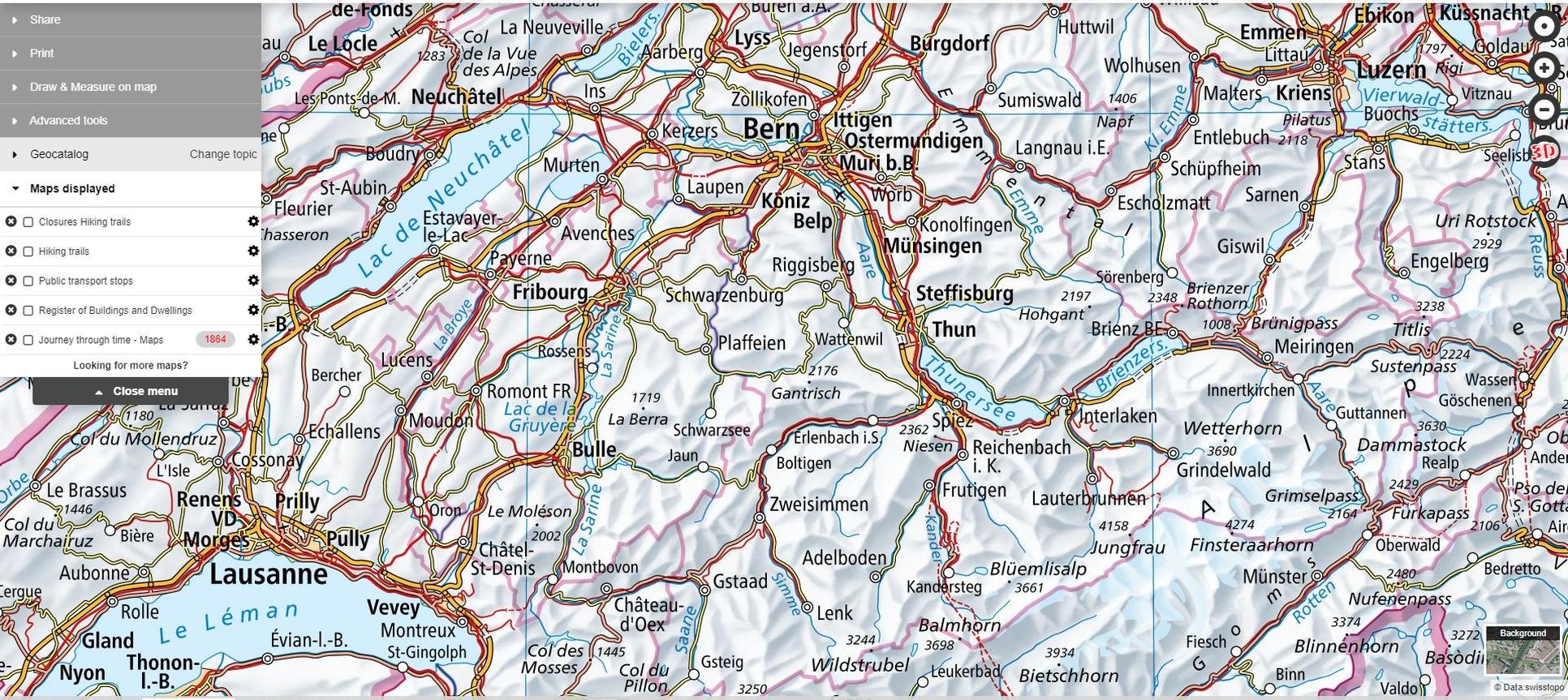
OpenLayers Einsatz und Geschichte

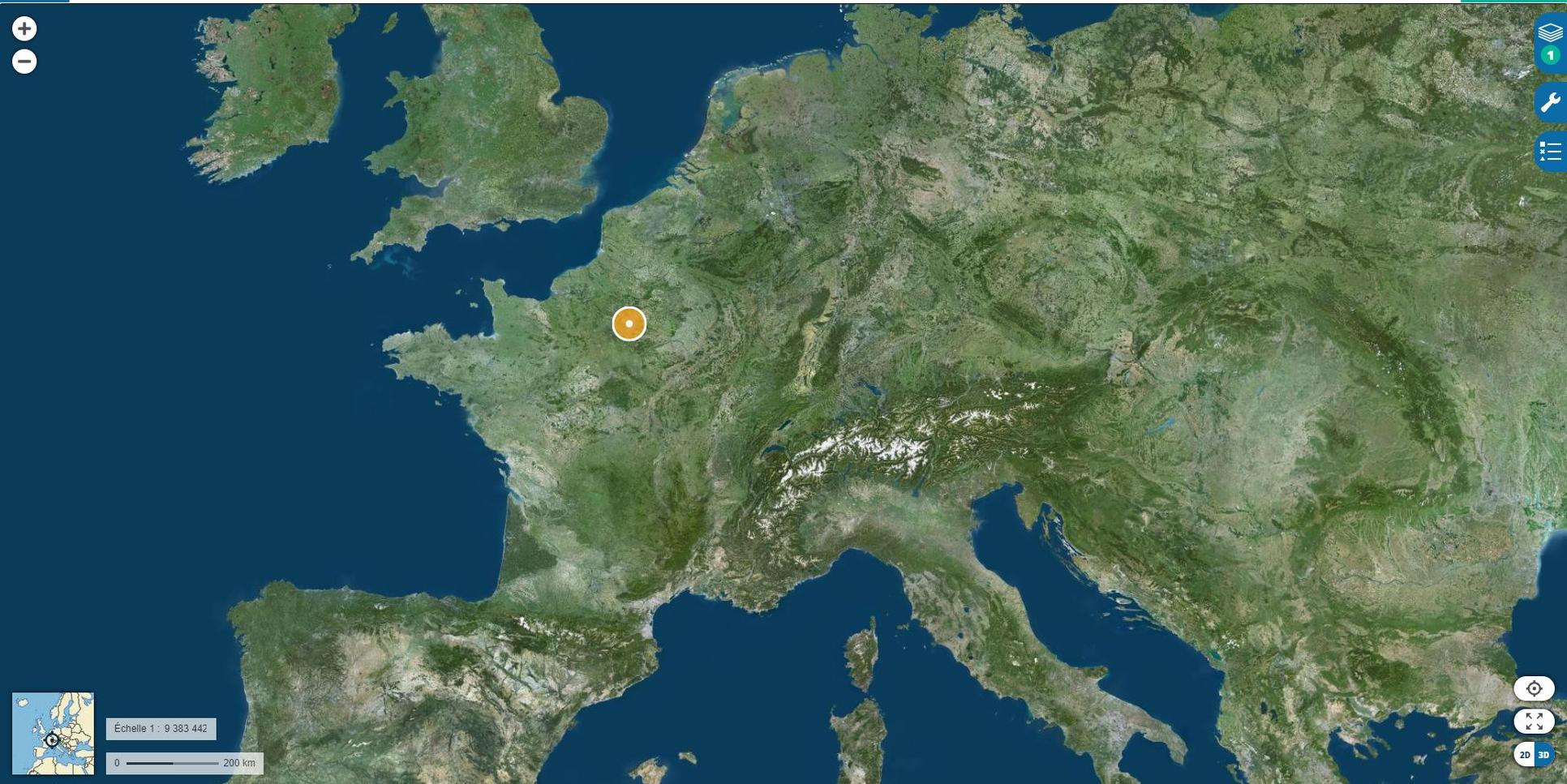


Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
In collaboration with the cantons

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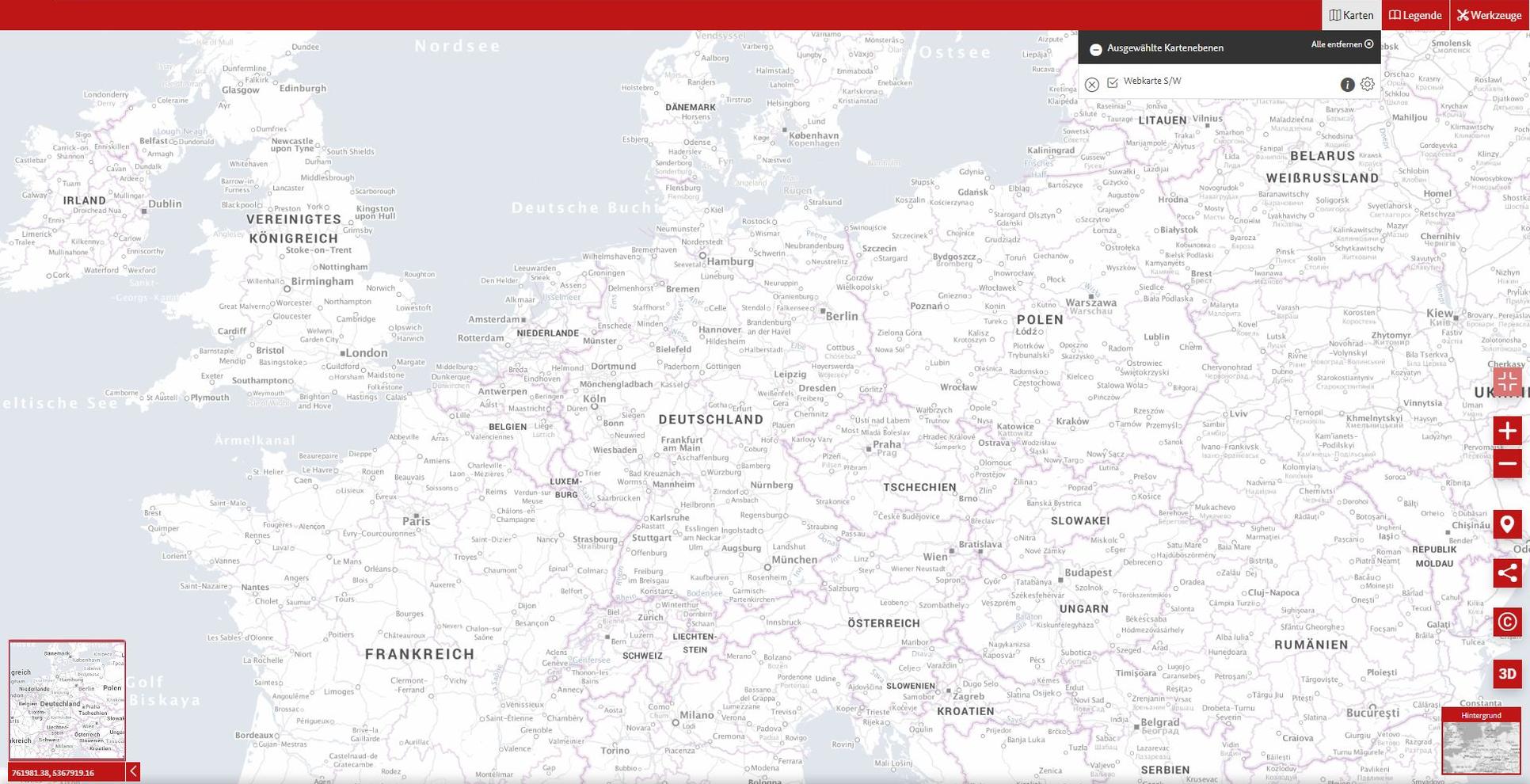
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Atlantische See

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FOSS4G 2006 Webmap BOF

The **Web Map Client Bird of a Feather (BOF) session** (also referred to as the *ka-Map/OpenLayers merger BOF* or *AJAX Map Client BOF*) at FOSS4G 2006 met from 1800 - 2000 on Wed 13 Sep 2006, with the intention of identifying common components that could be abstracted and shared between the various Free and Open web map client libraries.

Conclusion

The meeting participants agreed that the simplest and most effective place to start integrating code between projects would be to select a map tile display engine and abstract it into a library. The map and layer rendering core from OpenLayers was selected for this task, due to its relative simplicity and modularity. By the end of October, the OpenLayers team will spec out an API (tentatively to be called **webmap.js**) and begin to split out the minimal necessary portions of the OpenLayers code base into this separate library. By that time, each of the participating projects (hopefully ka-Map, OpenLayers, MapBuilder, and Mapbender, at a minimum) will evaluate their needs for a core tile display API and offer recommendations on how best to design the webmap.js library to offer maximum utility to everyone.

Our hope is that, in the future, the new core display library will ultimately be integrated into each project, and be developed collaboratively between the participating projects thereafter.

2011 Lausanne Mobile Code Sprint

Goals:

- The main goal is to work on OpenLayers and extend its capabilities to support mobile devices.

Sponsors:

- Canton of Zürich: <http://www.gis.zh.ch/>
- Canton of Neuchâtel: <http://sitn.ne.ch/>
- Canton of Jura: <http://www.jura.ch/sit>
- City of Uster: <http://www.uster.ch>
- City of Vevey: <http://www.vevey.ch>
- Geoportail Luxembourg: <http://map.geoportail.lu/>
- EPFL: <http://plan.epfl.ch/>
- Schweizmobil: <http://map.veloland.ch/>
- Swiss Open Systems User Group: <http://www.ch-open.ch/>
- Swisstopo & geo.admin.ch: <http://www.swisstopo.admin.ch/internet/swisstopo/en/home.html>
- Swisscom: <http://en.swisscom.ch/>
- OpenGeo: <http://opengeo.org/>
- Nokia: <http://www.nokia.com/>
- Camptocamp: <http://www.camptocamp.com>
- Terrestris: <http://www.terrestris.de/>



INVEST IN THE WEB MAPPING FUTURE

OPENLAYERS 3

WHY OPENLAYERS 3?

While OpenLayers is the most complete and capable javascript web mapping library around, it has also started to show its age. While there is great benefit in maintaining full backwards compatibility, the current code base is not designed to take full advantage of a number of the best features of the web, like **WebGL**, **CSS3** and other **HTML5** advances.

The **OpenLayers team** has already started work on a 3.0 version with a number of goals:

- Cleaner, **friendly API** that is more intuitive for modern web developers
- **Small size** (20kb in tests), for faster loading, leveraging Google's **Closure Compiler**
- Nicer default design, and easy designer customizability with **CSS3**
- **WebGL** fully integrated, for **3D maps** and faster **2D performance** on the latest browsers
- **Great documentation** and examples, making the library easier for all to approach and use

WHY INVEST IN OPENLAYERS 3 ?

OpenLayers promises to be a **major step** forward in web mapping, but it can only happen if enough organizations and users step up to help out. OpenLayers has been driven by a **Project Steering Committee** (PSC) of diverse individuals, making it a true collaborative project, and a commons that all can benefit from. Investment now ensures a continued commons that is not controlled by any one company.

Many have built great things with OpenLayers, and if there is one ideal time to give back, it is right now. A major government organization has committed to an important contribution, but only if the community can secure \$250'000 USD by November 30 to ensure that OpenLayers 3 will become a **reality**.

CO-FUNDING OPENLAYERS 3

OpenLayers 3 is licensed under the **BSD license** and all funded development will be available to all.

In order to make **OpenLayers 3** a reality the PSC estimates that \$400,000 USD of total effort is needed. The PSC will coordinate both funding and dedicated developer time to make it a reality. Organizations that contribute more than \$50,000 will get direct input on the priorities for the release, to ensure it meets their needs.

All money provided to OpenLayers, no matter how small is a step towards the creation of an awesome open source library. **We will be creating a kickstarter site for smaller donations, and larger organizations can email ol3-funding@googlegroups.com to coordinate other funding mechanisms.**



THANKS !

- 2012-2013
- Erstes Crowdfunding
- 400kUSD

OL6 2. Crowdfunding 2018

Vector tiles rendering + new WebGL renderer

Current OL6 funding



THANK YOU

We would like to thank our supporters for participating to this call for funding. Their commitment is of great help and very appreciated. THANK YOU!

- [swisstopo](#)
- [Amt für Raumentwicklung, Geoinformation, Kanton Zürich](#)
- [Landesamt für Digitalisierung, Breitband und Vermessung Bayern](#)
- [Amt für Vermessung und Geoinformation, Kanton Schwyz](#)
- [Grundbuch- und Vermessungsamt, Kanton Basel-Stadt](#)
- [SwitzerlandMobility](#)
- [SITN République et Canton de Neuchâtel](#)
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- [Amt für Geoinformation, Kanton Thurgau CHF 5,000](#)
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- [CartoJuraLéman](#)
- [Ville de Nyon USD 3,000](#)
- [Ville de Vevey](#)
- [Gaia3D USD 1,000](#)
- [OSGeo:UK USD 1,000](#)
- [ALTA](#)

The OpenLayers core developers would like to thank the Openlayers Development Association for organizing this effort, and all backers for their contributions.

2021 - 2022 WebGL Beiträge

- Viele WebGL-Community-Beiträge
 - Planet Labs: Raster WebGL
 - Camptocamp: Vector WebGL
 - German Region: Vektor Tiles WebGL
 - Grant of EUR 135k

- Stand 2022: 325 Entwickler haben zu OpenLayers beigetragen!

- Open Source bedeutet **Zusammenarbeit**, von den Entwicklern bis zu den Benutzern.
- Open Source ist kein Projekt, sondern ein **Produkt**, das kontinuierlich gepflegt werden sollte.
- Alle profitieren von Unternehmen, die sich in den Communities engagieren und **regelmässig Beiträge** leisten.
- Grössere Institutionen unterstützen Innovationen, indem sie einen grossen Teil davon finanzieren.
 - Sie fangen den Wurm als Early Adopter und **gewinnen Innovationspreise!**

Institutionelles Crowdfunding

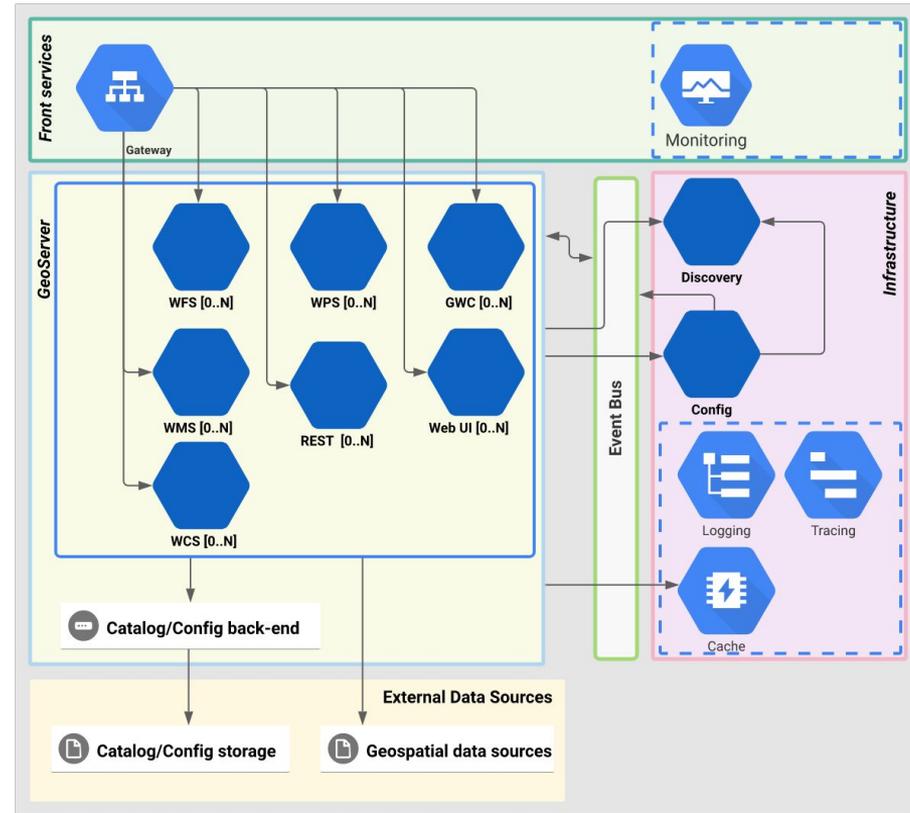
- Institutionen finanzieren gemeinsam
Open-Source-Software über Crowdfunding
 - Geeignet für grosse Entwicklungsmeilensteine.
- Gewinn:
 - Finanziell
 - Entwicklungskosten werden geteilt
 - Kleinere Partner helfen durch ihre Anzahl erheblich
 - Markenimage
 - Hohe Sichtbarkeit während der Kommunikationskampagne
 - Teilnahme an der Spezifikationen
 - Open Source Produkt mitgestalten

Produkt- und Projektbeiträge

- Institutionen oder Entwicklungspartner tragen je nach ihren Bedürfnissen direkt zu Open-Source-Software bei:
 - Geeignet für neue oder erweiterte Funktionen, Fehlerbehebung, kleines Refactoring usw.
- Gewinn:
 - Projektmitarbeiter bekommen Experten / Kernentwickler
 - Teamleistung und Codequalität
 - Hohe Team Motivation
 - Geringer Personalwechsel
 - Institution kann von den nächsten Releases profitieren
 - Einfachere Upgrade-Pfad mit wenig zu migrierendem "spezifischem" Quellcode

Beispiel: Geoserver Cloud / High Availability

- Bedarf:
 - hohe Verfügbarkeit für geschäftskritische Anwendungen
- Zeitraum: 2020 - 2022
- Institutionen:
 - ANSC - Französische Feuerwehr
 - Deutsche Telekom
 - Ministerium für Umwelt, Frankreich
 - Bundesamt für Kartographie und Geodäsie
 - Kanton Aargau
 - einer der führenden Rückversicherer
- Investition: 250 Personentage
 - Initial: 65 PT

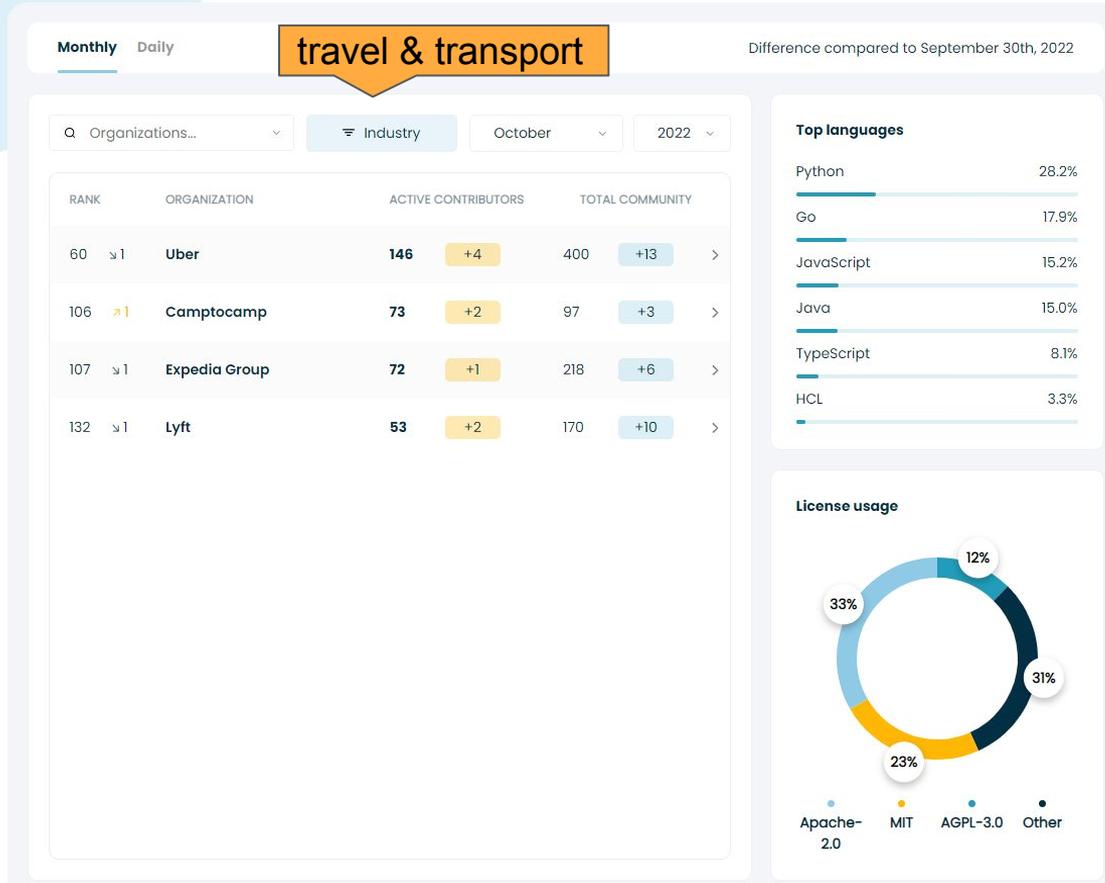


Empfehlungen für eine Open Source Bahn Initiative

- **Gemeinsame Technologien auswählen**
 - Um Open-Source-Synergien zu maximieren, sollten Sie über den Bahnsektor hinaus denken.
- **Öffentliches GIT repository einsetzen**
 - Plattform-Effekt maximieren
- **Partizipieren, organisieren, beitragen**
 - Business, PM, Entwicklung, Test and CI/CD, Dokumentation
 - Code sprints, Hackfests, Konferenzen
- **Verfolgen Sie Ihre Fortschritte**
 - Metrics

Open Source Contributor Index

Welcome to OSCI, where commercial organizations are ranked by the volume of their employees' year-to-date open source contributions on GitHub



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