## Integrating OpenStreetMap to Wikipedia

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# WHAT IS OPENSTREETMAP?

- A collaborative project to create a free editable map of the world
- Maps are created using data from portable GPS devices, aerial photography, other free sources or simply from local knowledge
- Contribution to the project is possible also without using a GPS unit
- Creative Commons AttributionShareAlike licensed



# WHY NOT GOOGLE MAP?

...OR SOME OTHER PROPRIETARY MAP

#### It doesn't have

- Creative Commons AttributionShareAlike License
- Community
- Vector data



## WHY INTEGRATION NEEDED?

- Both OpenStreetMap and Wikipedia stands benefit
- Maps are a critical tool to illustrate selected facts, and explain key historical/etc
- Map provides geografical-located links to all other Wikipedia articles in its language, that include coordinates
- Hundreds of users has work in independent or organized ways to illustrated hundreds thousands articles with maps
  - Localization of point; Localization of area; General mapping (similar to OSM usual display); Historical mapping; Technical mapping (some buildings); Topographical mapping; Exchange/Flux mapping



## Integration Process

- Display free OSM's maps within Wikipedia's articles
- Need infrastructures (servers and associated server strategy) as well as some programs for smooth display into the articles and accessibility
- OSM offers raw mapping data currently with the creative commons license by-sa 2.0
- OSM provides the tools to create rendered map images



# Integration should achieve the following goals

- The integration of OSM-maps in Wikipedia
- 2 The installation of a map toolserver



# COLLABORATION SETUP

- Developer meetup 2009 held in Berlin by Wikimedia Germany planned how to accomplish this
- Now there is an intensive and ongoing cooperation between the German Wikipedia and OpenStreetMap
- OSM is a worldwide project, that cannot be divided into local versions
- So integration has to be done in every language
- Wikimedia Germany bought special toolservers for this project



## OPENSTREETMAP IS ADDED TO WIKIPROJECT

- Wikimedia setup a database to mirror OSM data (planet.osm)
- Wikimedia setup its own rendering infrastructure for rendering tiles and other maps from the OSM data



# THE (RENDERING) DATABASE

- A PostGIS database with a limited OSM dataset used for rendering
- Around 60 GB



## MAP RENDERING

- Rendered using mapnik
- Currently using the OpenStreetMap stylesheet
- Rendered in all 279 Wikipedia languages
- We'd do more rendering variations



## Link from OSM wiki to Wikipedia

Template:Place

LANG = EN

NAME = LOS ANGELES

TYPE = CITY

SUBAREA = CALIFORNIA

AREA = UNITED STATES

LAT = 34.05

LONG = -118.25

zoom = 11

MAP = YES



# LINKING FROM WIKIPEDIA TO OSM

- Link from Wikipedia to OSM is on image description pages for the map images we upload there
- To simplify setting up image descriptions there are various templates
- See http://en.wikipedia.org/wiki/Wikipedia: WikiProject\_OpenStreetMap#Templates



# LINK TO WIKIPEDIA ARTICLES FROM WITHIN THE OSM MAP DATA

- For Wikipedia it would be interesting to draw the real OSM-objects (that were linked to Wikipedia-article) in a map inside the Wikipedia-article
- A tool to create such links is http://wiki.openstreetmap.org/ wiki/JOSM/Plugins/RemoteControl/Add-tags



# ACTIVE CONTRIBUTORS



## Mailing List

https://lists.wikimedia.org/mailman/listinfo/maps-l



## FUTURE PLANS

- Even though there is an intensive and ongoing cooperation between the German Wikipedia and OpenStreetMap
- The work of this co-operation has to be done in every local language and thus for all language versions of Wikipedia
- OSGeo Kerala Chapter is taking initiative for mapping through camps
- With the help of OSGeo Kerala Chapter, Wikipedians at Kerala can test the integration
- Collaboration Setup is needed to accomblish this
- Content adding in OpenStreetMap is also an essential thing as Wikipedia contribution
- Wikimedia Foundation should see this also as a major activity by introducing openstreetmap along with wikipedia and through workshops WIKI CONFERENCE INDIA

#### Reference

- http://meta.wikimedia.org/wiki/OpenStreetMap
- http://en.wikipedia.org/wiki/Wikipedia: WikiProject\_OpenStreetMap
- http://wiki.openstreetmap.org/wiki/Collaboration\_with\_ Wikipedia
- http://wiki.openstreetmap.org/wiki/Template:Place/doc



