

Open Historical Map: re-using obsolete information

or, the world's most outdated map

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State of the Map: Birmingham 2013

Presentation Outline

- 1 Introduction - Why OHM?
- 2 Use cases
- 3 Data Feeds to it
- 4 Conclusion



Introduction

- Born from many competing ideas about historical mapping.
- Using its own database, as opposed to **OpenSeaMap**.
- **OHM** prefix for tag namespaces
(`ohm:military:wireObstacle`).
- Slightly modified toolchain.
- Primary interested in things that aren't there anymore, *or that have a historical value*.

Seattle, then (1860) and now - Jeff Meyer



<http://www.openhistoricalmap.org/?lat=47.60075949&lon=-122.332471&zoom=17&layers=H>

Initial Drivers

- Born from many competing ideas and projects dealing with historical mapping.
- Academic, government and hobby projects generate GIS data that needs a home.
- “Users” tend to be institutional / research employees that don’t want to hand edit things but provide data dumps.

OHM vs. OSM

- Data comes from scripted processes - if you break it, you fix it.
- Aggressive use of *start_date*, *end_date* and *historic:era* - both as a search key and rendering hint.

Use cases

- Primary use as repository of historical GIS information.
- Recycling all of those edits that ended up deleted (or have date_end) from OSM.
- Useful as secondary layers - what was here before?.
- Search for lost features, places and things.
- An obvious “Killer App” is safety during excavation.

What was here before?!

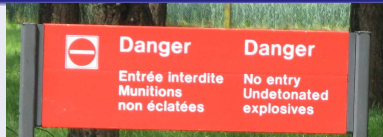


Forgotten infrastructure can be deadly



Source: <http://myblog.it/>

What was here before?!

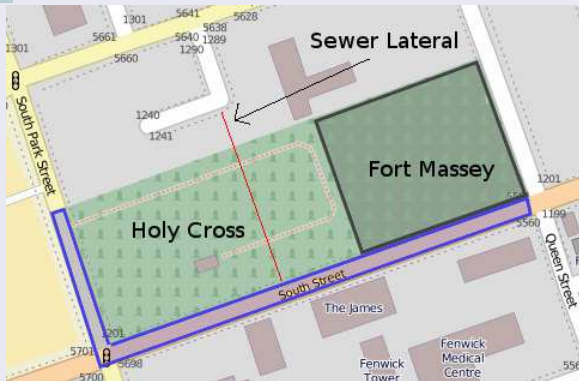


Punctured pipeline was unmapped

A natural gas leak that forced more than 40 people from their homes along the Burnaby-Coquitlam border occurred when a road crew struck an old service pipeline not on FortisBC's map, a spokeswoman for the energy company said Wednesday.

BY VANCOUVER SUN FEBRUARY 9, 2012

Corpses need mapping too!



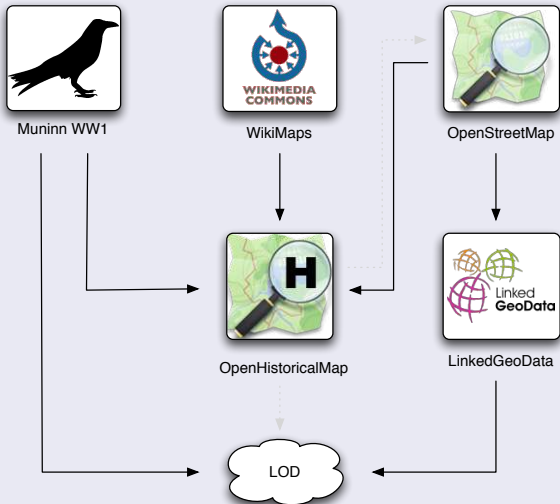
<http://www.openstreetmap.org/#map=17/44.63910/-63.57568>

London Crossrail Dig Sites



[http://www.crossrail.co.uk/sustainability/archaeology/
case-study-archaeology-at-crossrail-liverpool-street-site](http://www.crossrail.co.uk/sustainability/archaeology/case-study-archaeology-at-crossrail-liverpool-street-site)

Process



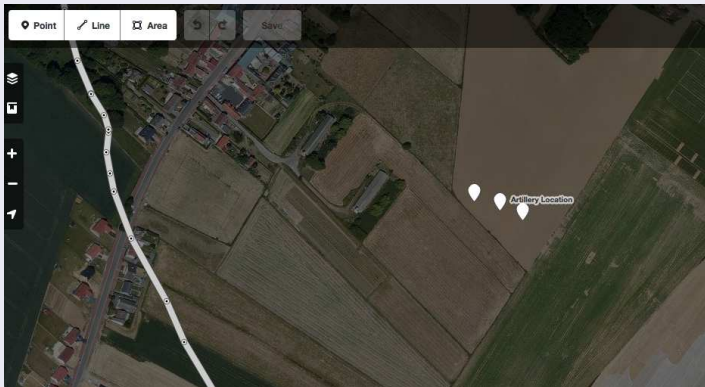
Great War Trenches Overlays



Moeuvres, France

<http://www.openhistoricalmap.org/?lat=50.16668&lon=3.053815&zoom=16&layers=H>

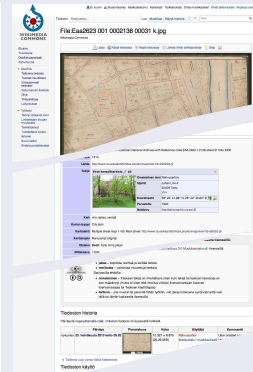
Great War Artillery Locations



Inchy-En-Artois, France

<http://www.openhistoricalmap.org/?lat=50.17405&lon=3.05191&zoom=16&layers=H>

Wikimaps 1/3



- Record mapping meta-data in Commons.
- Extract data from maps images already available.

Wikimaps 2/3

Wikimaps Warper

Home Browse All Maps Upload Map Browse All Layers Add Layer About Help

Search Maps > Map 10

Eaa2623_001_0002138_00031_n.jpg

Uploaded to wikiMap. Last modified 12 days ago. 7 control points.

Show Edit Rectify Preview Map Export

Double-click on both maps, then click [AddControlPoint](#). Do this for at least three points.

Control Panel

Control Points

Image #	Image URL	SRS	UTM	UTM Y	Mask
5167121381382	5167121381382	URN:OGC:WGS84	58.3881128194	13.45	Mask
51681233803841	5167121381382	URN:OGC:WGS84	58.3789976129	13.45	Mask
51671400000000	51681233803841	URN:OGC:WGS84	58.381128194	13.41	Mask
51621767020000	51681233803841	URN:OGC:WGS84	58.381128194	13.45	Mask
51677610000701	51681233803841	URN:OGC:WGS84	58.381128194	13.37	Mask
51681233803841	51681233803841	URN:OGC:WGS84	58.381128194	13.33	Mask
51621767020000	51681233803841	URN:OGC:WGS84	58.3881128194	13.41	Mask

Add Control Points Manually

Advanced options

This map either is not currently masked. Do you want to add or edit a mask now?
Apply clipping mask when rectifying? Yes No

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- Warp / Re-project the Map.
- Available as a web service.
- Acts like a WMS and OSM xyz tile server.

Wikimaps 3/3

The screenshot displays the Wikimaps interface. On the left, there is a sidebar with a logo featuring a magnifying glass over a green map with a white 'H', titled "Open Historical Map Sandbox". Below the logo, it says "Vapaa ja avoin maailmankartta". There is a search bar with the text "Haku" and a magnifying glass icon. Below the search bar, there is a small text block: "esim. 'Sankarit' -kartasta, 'Oulu' tai 'post offices near Helsinki' -ssä osittainköösi englanniksi... Napsuta sijainti?". Further down, there are links for "Ohje", "Ohjekekus", "Wiki", "Tietojoukot ja lisenssit", "Yhteisö", "Yhteisöblogi", "Säätö", "Päiväajamarkkinat", and "GPS-tiedot". At the bottom of the sidebar, there is a green box with the text "PLEASE SUPPORT OUR SERVER DONATION DRIVE" and a "Lahjota" button. Below that, there is a small text block: "Palvelinta ylläpitää UCL, VRI Centre, Imperial College London ja Rytymark Hosting sekä muut kumppanimme."

The main area shows a historical map of a building, outlined in red. The building is labeled "Kaubahov" and "Kaufhof". The map includes street names like "Kauf-Strasse" and "Wahlstrasse". There are navigation controls on the left side of the map, including a zoom in (+) and zoom out (-) button, a home button, and a search button. At the top of the map area, there are tabs for "Kartta", "Muokkaa", "Historia", and "Vienti". Below the tabs are icons for "Point", "Line", "Area", and "Save".

On the right side, there is an "Editing Building" panel. It has a home icon at the top. Below the home icon, there are fields for "Name", "Building", "Levels", and "Address". The "Name" field contains "Kaubahov" and has a plus sign icon. Below it, there are two rows of language options: "Deutsch" with "Kaufhof" and "Русский" with "Гостинный двор". The "Building" field contains "yes". The "Levels" field is empty. The "Address" field contains "House name", "123" in the "Street" field, and "City" and "Postal code" fields. At the bottom of the panel, there is a small text block: "Contributed by jaa | report a bug | 1.0.1".

Rendering with OHM

- Trying to get rendering of the map is ... annoying. Fighting with the renderd codebase while trying to make sense of multiple ways of seeing time. (How do we transform "The 1860's" into a date query?)
- Attempting to use a simple rendering system based on `start_date` and `end_date`.
- Some rough starts - *We need help with rendering!*

Links within and without OHM

- Experimenting with OHM:SameAs - add a owl:sameAs to the LOD?
- Lessons from Time Ontology - `start_date:before` and/or `start_date:after`?
- Link nodes in OHM imported from OSM using OHM:OSMOriginal?
- Linked Open Data has interesting applications to fuzzy information.
- before, after, during, partOf
- Very Experimental.
- *Record whatever data we have now and let the renderer decide later...*

Help wanted!

- Different rendering styles needed (NATO, Archaeological, Hazmat Map styles?).
- Historical applications abound - let's use the data!
- OHM/OSM are great data integration points with other databases (wikipedia, LOD).



More Talking

- Open Historical Map mail-list: <http://lists.openstreetmap.org/listinfo/historic>
- Open Historical Map irc: **#hosm** on irc.freenode.net
- **github** <https://github.com/OpenHistoricalMap>
- <http://www.openhistoricalmap.org/>