

OpenStreetMap South Africa Press Pack

What is OpenStreetMap?

OpenStreetMap creates and provides free geographic data such as street maps to anyone who wants them. The project was started because most maps you think of as free actually have legal or technical restrictions on their use, holding back people from using them in creative, productive, or unexpected ways.

Background

OpenStreetMap is an Open Source GIS data project. The project has around 135 000 registered contributors worldwide that are working together to create a very detailed world geodata source that is free for anyone and everyone to use. The data in the project is freely (libré and gratis) available to all under the Creative Commons Attribution-Share Alike 2.0 license¹. It was started in the UK in 2004, and has rapidly spread across the world to include almost every country on the planet. The dataset is far from complete as it is quite an ambitious task, but there are several places where the mapping data is already complete to the level that contributors are now surveying and mapping individual buildings and post boxes (most of these examples can be found in Germany and the UK).

South Africa has not been left behind in this project either, and we have a number of users actively surveying and mapping in all areas of the country. Most of the local mapping has been completed by tracing aerial photography used under license from Yahoo, or by users using GPS units to physically survey their cities and towns. Project members have built an impressive set of Open Source collaborative mapping software, and there are a number of very dedicated users in South Africa that make use of their GPS units to map the world around them. Recently, we have been able to gain permission from a few municipalities in South Africa to use their data, and we are in the process of importing this data into OpenStreetMap.

OpenStreetMap has had a number of high profile imports over the last few years, and has received generous support from:

- eThekweni Municipality
- City of Cape Town
- Australian Bureau of Statistics
- Danish National Survey and Cadastre
- Brazilian Geographic Office
- UK Department for Transport (NaPTAN)
- Italian Bureau of Statistics
- Commonwealth of Massachusetts (MassGIS)

In addition:

- TIGER data in the United States has been imported
- The UN is working with the project to release its data for 6 African Countries including the DRC (more information on that import can be found online at <http://is.gd/tTb4>).
- During the Gaza conflict earlier this year, OpenStreetMap contributors donated money to purchase satellite imagery of the post Gaza conflict area and mapped the region in a matter of days. NGO's and aid agencies were then free to use this up to date information at no cost so that they could carry out vital relief efforts with accurate and recent data.

1. <http://creativecommons.org/licenses/by-sa/2.0/>

There have been many other contributions of government data from countries across the world, and this type of information is proving valuable for the many users of the data.

Growth of the project

The project started in 2004, and reached 1000 users after a year. The user base currently [12 July 2009] stands at around 135 000 users and the growth trend has been almost exponential².

For these and other statistics, a periodically updated webpage is maintained:

<http://wiki.openstreetmap.org/wiki/Stats>

Why South Africa?

OpenStreetMap is more than just an online map. The underlying data can be downloaded and used by anyone, and the data can be updated by anyone. This makes it possible to author your own maps, or to fix an error immediately if one is found in the online map. There are also no concerns about making printed copies of the map or using it on a company website etc.

Users benefit from the immediacy of OpenStreetMap as street name changes and new town extensions can be added to OpenStreetMap immediately by any contributor, instead of waiting for conventional mapping houses to publish new data, which is often only done once or twice a year.

The online maps currently available in South Africa are free to use, but the underlying mapping data cannot be used or copied. Purchasing map data is very expensive and there are heavy restrictions on its usage. These restrictions do not exist with OpenStreetMap data, giving South Africans the ability to contribute to a map that is free for them to use and copy, and in so doing ensure that cheaper, more innovative and up-to-date mapping products are available for all to use.

Can we use all the government mapping data?

In South Africa, access to government mapping data is covered under the Spatial Data Infrastructure Act (inherited from Promotion of Access to Information Act).

It would be great if we could include all government data as it is good quality data.

Contributors to OpenStreetMap in South Africa are working with the government to try and gain access to valuable mapping data, but the laws are still unclear, and the process is slow. There have been a number of municipalities that have allowed their data to be uploaded into the OpenStreetMap project, and more are releasing data as they hear about the project. This is valuable data, and these municipalities are helping a great deal to increase the coverage of South Africa in OpenStreetMap.

Unfortunately not all municipalities can grant OpenStreetMap access to their data as some did not create their data themselves, and do not have the license to allow the inclusion of their data in the OpenStreetMap project.

In areas where government data cannot be used OpenStreetMap benefits greatly from on-the-ground mapping by OpenStreetMap contributors.

Who can get involved?

Absolutely anyone can get involved in the OpenStreetMap project. The simplest way to get involved is just to tell other people about the project and give them the website link

2. <http://wiki.openstreetmap.org/wiki/Image:Osmdbstats1.png>

so that they can view the map and wiki (<http://www.openstreetmap.org>). The more exposure that the project gets, the more likely it is that people will join up and start contributing data.

The main ways that contributors get involved are:

- **Mapping:**
For those who would like to help with contributing data, there are a number of tools available that have been built by other OpenStreetMap contributors. You can find some more detail on how to map later in this document in "How do you map?".
- **Spotting errors and alerting other contributors so that they can be fixed**
There are tools within the project that allow contributors to pin point problems in the data. If they do not feel confident enough to fix the problem themselves, they can flag the problem for another user to fix.
- **Donating money**
Contributors volunteer their time and do not cost the project any money. However, the project does still require money for running costs (such as servers and bandwidth). These are covered by donations, in much the same way as Wikipedia uses donations to cover running costs.

Sometimes contributors donate money to purchase aerial photography for areas where there is no coverage. A good example of this was the Gaza conflict earlier this year, where post conflict photography was purchased in order to get up to date mapping of the area in order to assist aid agencies working in the area.

- **Spreading the word**
Word of mouth, blogs and magazine articles are all valuable ways to get the word out that there is a community that is interested in providing free mapping data for anyone (commercial and non-commercial use) without limitations.

How do you "map"?

Mapping can be done in a number of ways:

- Uploading traces from a GPS device and mapping over them (many mobile phones have a built in GPS).
- Tracing over aerial photography such as that from Yahoo! or Landsat.
- Contacting local municipalities to find out whether they are the custodians of their data, and whether they would allow their data to be included into OpenStreetMap.

Details on this process can be found online at http://wiki.openstreetmap.org/wiki/Beginners%27_Guide

Who is in charge?

OpenStreetMap is a community based project where anyone can get involved, similar to Wikipedia. Anyone can support the project, and they can do it in a number of ways (mapping, developing software to support the project, creating awareness about the project, donating money for server upgrades and the like). The communication in the project is conducted like many other Open Source projects, with mailing lists, a wiki, forums and chat clients being used on a daily basis to make decisions and share information.

In individual countries, there are often local groups of mappers that coordinate activities

within the country. These activities include deciding how certain local features should be mapped, organising mapping parties (where a specific area is mapped on a day or over a few days), contacting local governments to get access to any map data that may be publicly available and helping others out in the local language (good examples of this are the thriving German and Spanish communities).

How do I join the South African OpenStreetMap community?

South Africa has its own mailing list. If you are interested in joining the South African OpenStreetMap community, the best way to start is to subscribe to the mailing list online at <http://lists.openstreetmap.org/listinfo/talk-za>. The South African OpenStreetMap community is quite close and friendly, so please do introduce yourself to the list. There are a number of very experienced contributors that are always willing to help get you on your feet. New contributors are most welcome.

But how do you guarantee it will be accurate?

Like Wikipedia, or any other project where the general public are active contributors, there can never be a guarantee that the data is totally accurate. However, this hasn't stopped these types of projects from becoming valuable sources of information. Although there is no guarantee of accuracy, the effect of crowd sourcing generally means that there are more people looking out for errors and actively fixing the data, leading to very accurate data.

Sometimes starting with inaccurate data can be advantageous. When starting to map an area where there is no data, anything can be better than nothing. If there is a starting point, other people may find it easier to approach an area and add detail and correct what is already there.

How is vandalism prevented?

A full history of all data and changes is kept, and changes can be linked to a user account. If data is found to be compromised, then those changes can be investigated and restored to their original form if need be.

Can I not just copy other mapping data I have and upload it?

Maps are covered by copyright law, and as with any other form of intellectual property, it is illegal to copy someone else's maps without their permission. OpenStreetMap contributors view copyright infringement seriously and will remove any suspicious data found. If you created the data using a GPS or Yahoo! imagery, or have express permission from the custodian of the data to distribute it in the OpenStreetMap project, then you may upload it. Otherwise, please do not upload the data. If you would like to know if you can upload a source of mapping data, it is best to contact the author of the mapping data and also ask other OpenStreetMap contributors on the local mailing list.

OpenStreetMap Images

Every week an image is chosen to highlight some work that has been done by OpenStreetMap contributors. A link to the "Image of the week" can be found on the wiki home page³, and a full list of previously featured images is available at http://wiki.openstreetmap.org/wiki/Featured_images.

3. <http://wiki.openstreetmap.org>