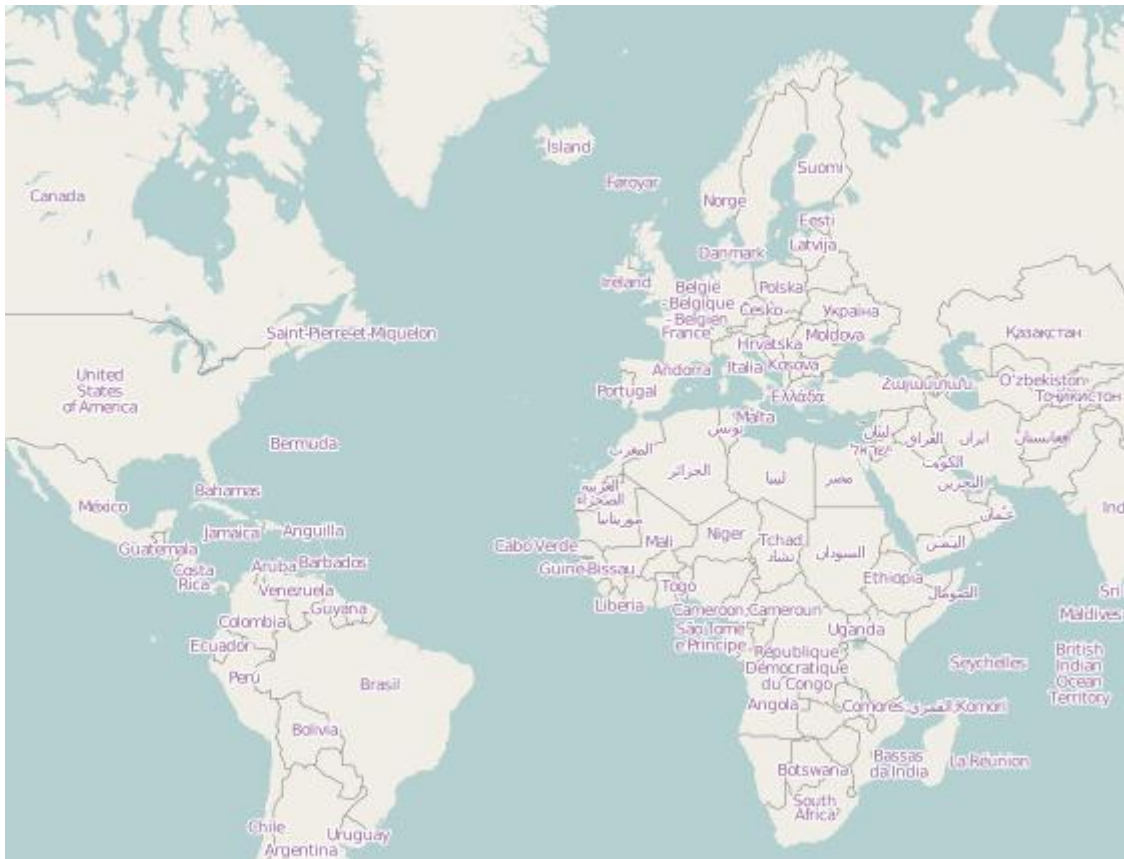


R&S[®] OpenStreetMap-Wizard

Geschäftsbereich / Division
Überwachungs- und Ortungstechnik /
Radiomonitoring and Radiolocation

Operating Manual



Printed in Germany.

MV-OSMWIZ: 3029.8315.02

RsOsmWizard is a tool intended for the purpose of downloading OpenStreetMap tiles from the OpenStreetMap server.

OpenStreetMap is a free and editable world map (http://wiki.openstreetmap.org/wiki/Main_Page).

License:

OpenStreetMap data can be used freely under the terms of the [Creative Commons Attribution-ShareAlike 2.0 license](https://creativecommons.org/licenses/by-sa/2.0/).

RsOsmWizard is capable of downloading OSM tiles which are each specified by a particular combination of area and zoom level.

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1 Installation

Insert the supplied Setup-CD into an available CD drive.

Run “setup.exe” from the directory “..\OSMWizard” on the CD.

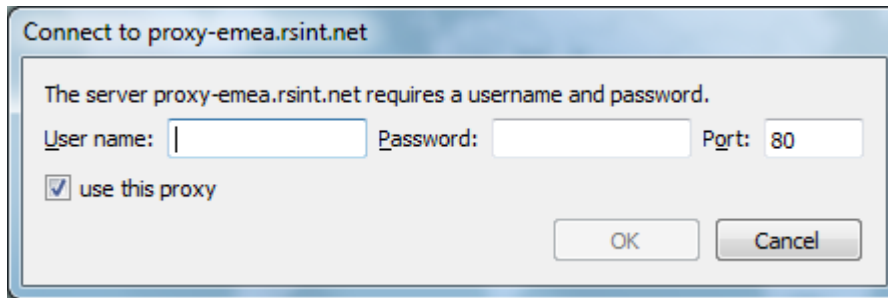
Commence the installation using the default-settings.

2 Operation

Start the R&S OSMWizard by selecting “Start→ All Programs → R&S OSMWizard → OSM_Wizard”.

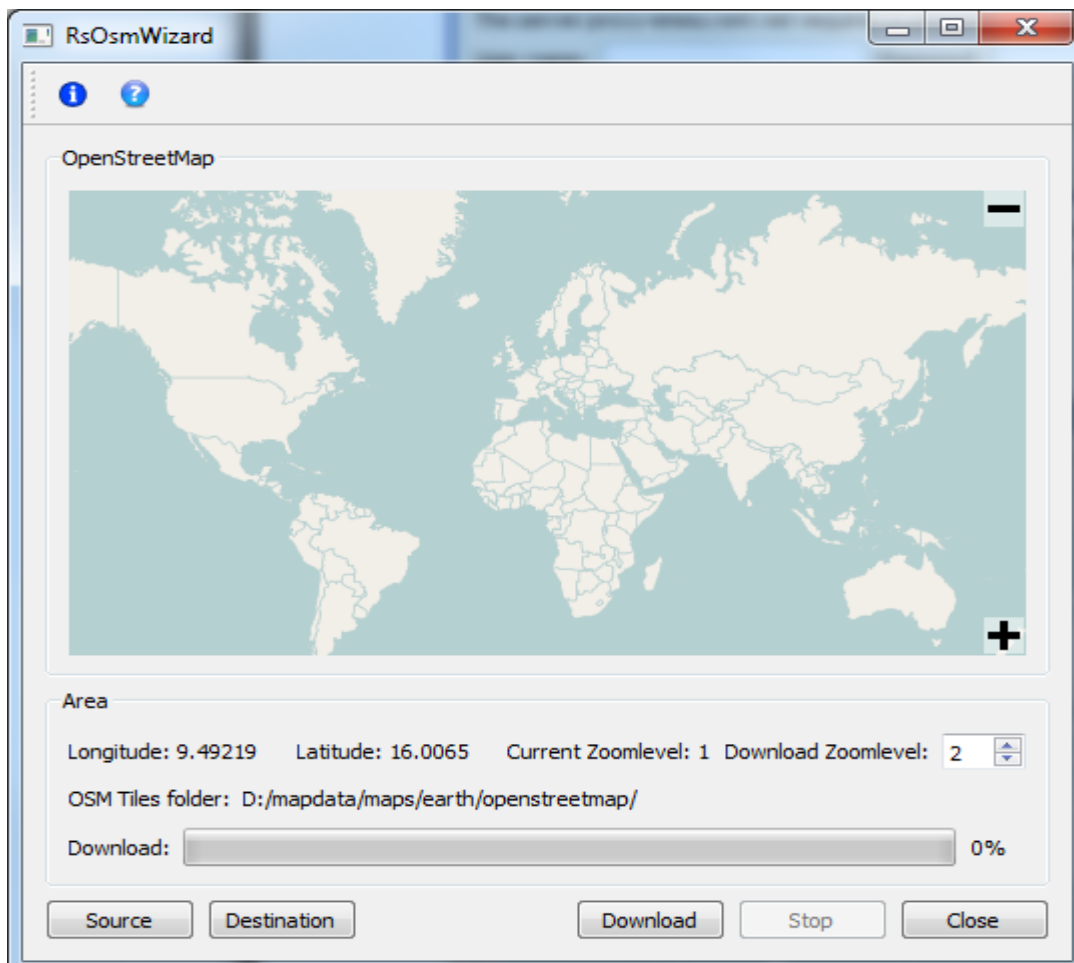
Note: Use of R&S OSMWizard requires a functioning internet connection.

If you are connected via a proxy server to the internet, you will be automatically prompted to enter a user name and password. Additional modify proxy port if port 80 is not used by your proxy.



It is possible that both a direct and proxy based connected are simultaneously available. In such cases, the direct connection is utilized when the “*use this proxy*” is left unselected.

The R&S OSMWizard starts with following screen:



Map navigation

ZoomIn / ZoomOut:	Left mouse click on +/- buttons Mouse wheel up/down
Pan the map:	Hold left mouse button while dragging mouse

Area section

<i>Longitude/Latitude:</i>	Displays center coordinates of the current map area.
<i>Current Zoomlevel:</i>	Displays zoom level of the current map area.
<i>Download Zoomlevel:</i>	Use this to set " <i>Download Zoomlevel</i> " level range.

The "Zoomlevel" is adjustable from levels 1 to 18.

Note: In a scenario where, for example, the "*Current Zoomlevel*" is set to 10 and a "*Download Zoomlevel*" of "14" is subsequently selected, the OSM tiles from "Zoomlevels" 10,11,12,13 and 14 within the current map area will be stored on disk.

Limitation: In order to avoid huge downloads, which are not permitted by the OpenStreetMap server, setting wide map areas and deep zoom ranges is not possible. For example, if a "*Current Zoomlevel*" of 10 is set then "*Download Zoomlevel*" may only be increased to 14.

Downloading OSM Tiles

Step_1:

Navigate to the map area corresponding to the tiles which you intend to download.
(Use "ZoomIn", "ZoomOut" and/or Panning Map)

Step_2:

Set Download "Zoomlevel"

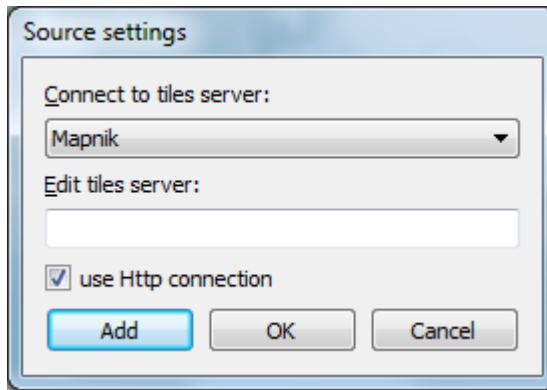
Step_3:

Use the <Destination> button to specify the folder location where the OSM Tiles should be downloaded to. By default this is the OSMWizard installation folder.

You may specify a custom folder, e.g. <Munich>. All OSM tiles will be stored according to the OSM folder structure.

Step_4: (Optional)

Click the <Source> button to specify your download server, by default the *Mapnik* server is defined. For regular configurations it should not be necessary to modify this field.



Step_5:

Click the *<Download>* button to start: All tiles will be stored within the OSM Tiles folder.
(Click the *<Stop>* button to cancel downloading tiles).

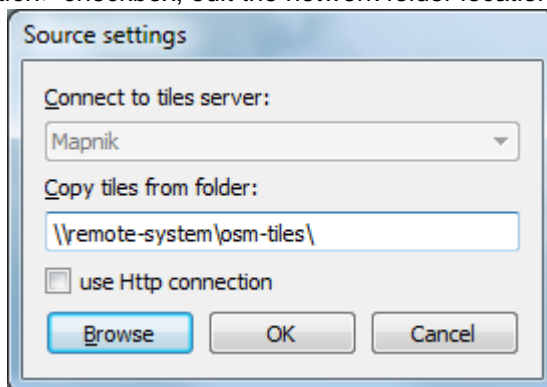
Remark: In order use a custom user defined server, edit server name and tiles path within the “*Edit tiles*” server field and then click *<Add>* to append this server to server list.

For example:

http://myServer/osm/tiles

//OSM tiles are stored in server folder: osm/tiles/

Alternatively, tiles can be copied from a network resource. To do this, uncheck the *<use Http connection>* checkbox, edit the network folder location field, and click *<Ok>* to commence copying.



Hint: If you wish to create some OSM city maps, please follow these steps:

Create the necessary folders (e.g. Munich, Berlin, Hamburg).

Set the corresponding map area.

Define “*Zoomlevel*” and set the corresponding OSM Tiles folder.

Start download.

These steps should be repeated for each subsequent city.

While different city maps may be associated with the same “*Zoomlevel*” folder or even the same Longitude index folder, they each possess unique Latitude indices (i.e. tile name index).

Copying OSM Tiles to a SD-Card

In order to use the OSM tiles with devices such as the PR100 or DDF007, the OSM titles must be copied to the SD-Card by means of a SD-Card reader attached to the PC. To do this, simply select the root folder (which includes all “Zoomlevel” folders) and copy it to SD-card .Subsequently the SD-Card must be inserted in the destination device.

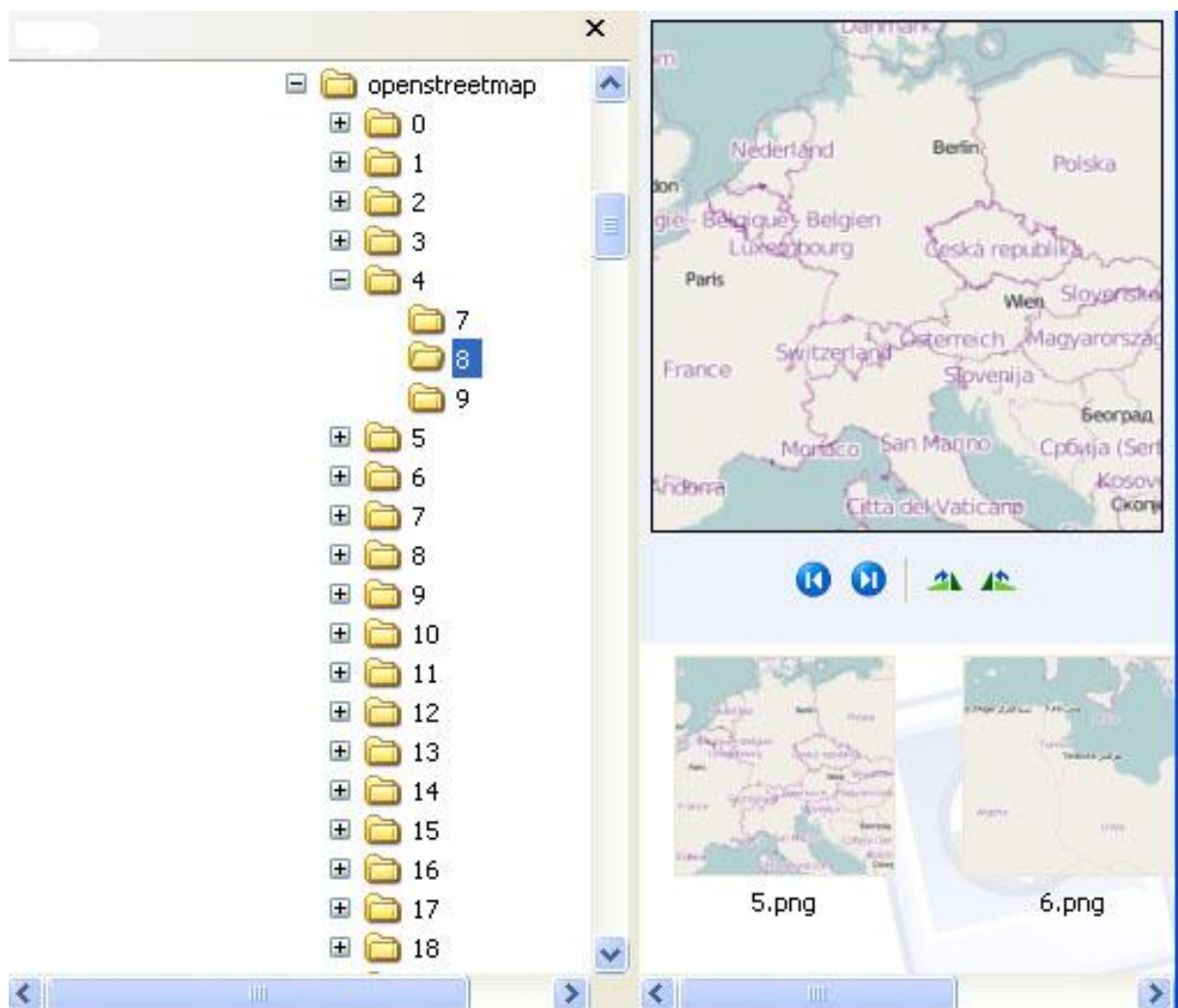
Background information on OSM Tiles

OSM is a raster map organized by zoom levels (1 – 18); each zoom level consists of indexed folders within which the indexed tiles are stored.

The folder and tilename indices correspond to Longitude and Latitude respectively.

OSM folder structure is as follows:

openstreetmap (root) / 4 (Zoom level) / 8 (Longitude index) / 5.png (Latitude index)



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