



Introducing Carmenta Map Builder

An easy-to-use application that lets end users prepare and deploy background maps to your Carmenta based applications.

Carmenta's geospatial technology is known for its high performance and round the clock reliability, which is why it is used in mission critical systems for defence and security applications all around the world.

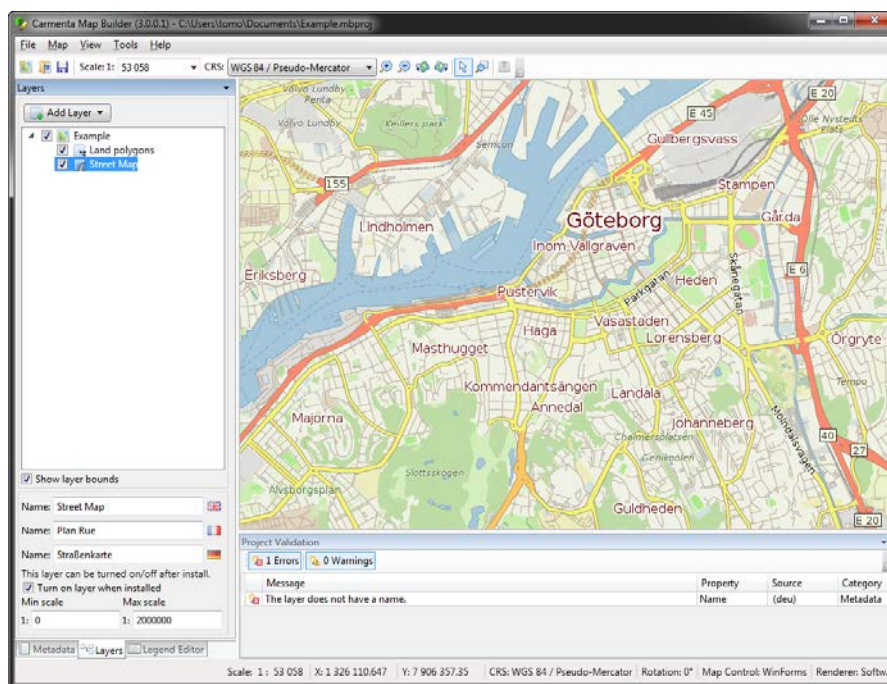
With Carmenta Map Builder, it is now much easier to prepare background maps for these systems, even for people who are not experienced GIS users. Streamlining the map preparation process is key to ensuring that systems are using up-to-date maps.

Overview

Carmenta Map Builder is a modern desktop application, designed for Windows 7 and 10. It provides a straightforward way to configure the background map – all changes are immediately visible in the map window.

Built in project validation functionality instantly highlights potential problems in the map configuration, such as missing project metadata.

The picture below is a screenshot of the Carmenta Map Builder main window, showing a project which contains an OpenStreetMap layer.



The Carmenta Map Builder user interface also provides the ability to define comprehensive metadata such as title, abstract, responsible organisation and revision date for each map.

As can be seen in the screenshot, all metadata can optionally be entered in multiple languages.

Supported map formats

Carmenta Map Builder projects can freely mix imagery, raster maps, vector maps and elevation data.

The following map formats are supported out of the box:

- Vector maps in ESRI Shape (.shp) format, with customizable visualization.
- Imagery and raster maps in GeoTIFF, JPEG2000 (.jp2), ECW and MrSID formats.
- Point data stored as comma-separated values (.csv) files
- Elevation data in DTED formats.
- Nautical charts in IHO S-57 format.
- OpenStreetMap data in .osm, .osm and .pbk format.

Additional input formats supported by Carmenta's geospatial technology can easily be added on request – contact Carmenta for more information.

The picture below shows an example of the built-in OpenStreetMap visualization.



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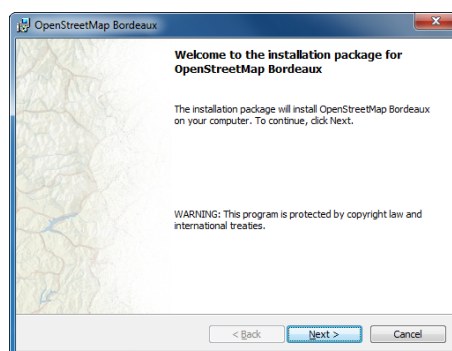
Different ways to package and distribute Map Builder Maps

There are several ways to build and distribute maps created in Carmenta Map Builder to your target systems. The “build project” functionality in Map Builder supports the following output types:

- **Folder Output** – copies the geographical data and Carmenta Engine configuration files to a folder for easy distribution to the target system.
- **Windows Installer** – packages the geographical data and Carmenta Engine configuration files into an MSI file for manual installation or automatic deployment.

The generated packages contain a familiar wizard user interface (see below) which makes it very easy for end users to install the maps in their system.

The packages can also be automatically deployed to clients using Microsoft Active Directory technology, ensuring that all clients are always up-to-date.



- **Map Package** – automatically build optimized Carmenta Engine Map Packages directly from your Carmenta Map Builder projects.

The Map Packages contain pre-rendered, multi resolution raster images, ensuring maximum performance in your target system.

Using Map Builder maps in Carmenta Engine

Applications use the Carmenta Engine Catalog mechanism to access Carmenta Map Builder maps. For more information about this mechanism, refer to the Catalog Extension introduction document in the Carmenta Engine SDK documentation.

An added benefit of using the Catalog mechanism in your Carmenta Engine application is that you automatically make your application service-ready – the Catalog can just as easily be instantiated from a server implementing the Open Geospatial Consortium CSW interface as from a local folder.

Using Map Builder maps in Carmenta Server

All maps created in Carmenta Map builder can be directly used in Carmenta Server.

Simply copy (or install, if using the MSI packaging mechanism) the map into your Carmenta Server's Catalog folder and it will immediately show up in the service list where it can be published.

The Carmenta Map Builder user interface also makes it straightforward to define server specific metadata such as supported service types and fixed scale levels.