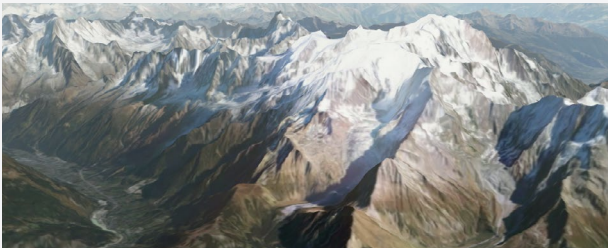


Carmenta Server 4.9

3D EXTENSION

- Enables interactive 3D maps with dynamic loading of data.
- On the fly generation of 3D worlds straight from 2D/3D GIS data in any format supported by Carmenta Server (such as OGC WMS/WMTS), together with a Cesium quantized mesh terrain service – no 3D modelling is needed.
- Additional support for detailed city models etc. with services providing OGC 3D Tiles as Batched 3D Models.

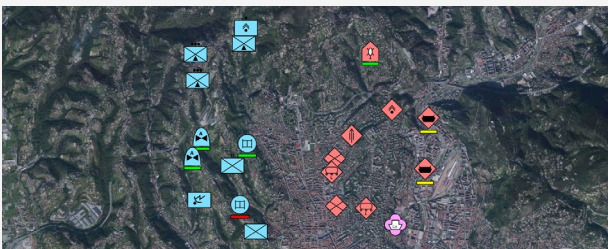


VECTOR TILES EXTENSION

- Allows fast vector maps by supporting tiled and cached vector data on the Mapbox Vector Tiles (MVT) format, either encoded as highly compressed Google Protocol Buffers (Protobuf) or plain GeoJSON.

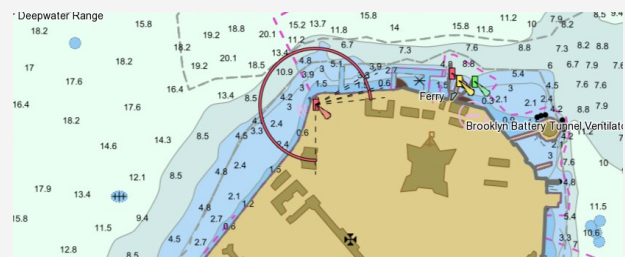
TACTICAL EXTENSION

- Extension for managing and visualising tactical symbols according to the DOD MIL STD-2525 and NATO App-6 standards.



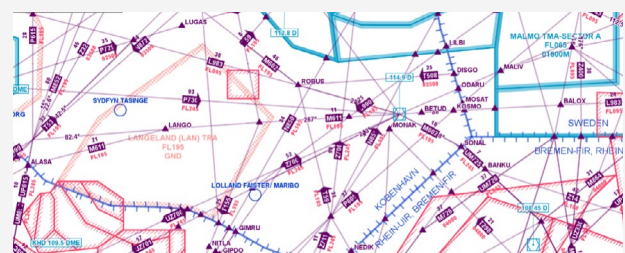
NAUTICAL CHARTS EXTENSION

- Extension for reading and rendering Nautical Charts according to the IHO S-57, S-63* and S-52 standards.
- Reads and portrays both ENC and NATO AML data.
- Support for reading C-MAP CM93 nautical charts and visualising them according to the IHO S-52 standard.



AERONAUTICAL DATA FORMATS EXTENSION

- Reads aeronautical navigation database files on the ARINC SPECIFICATION 424- 16, 424-17 and 424-18 formats, as well as the AIXM 5.1 and 5.1.1 formats.

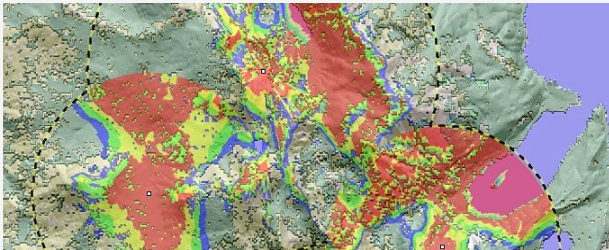


* S-63 encrypted Nautical Charts require explicit permission from the data provider if published as map services on a web map server.



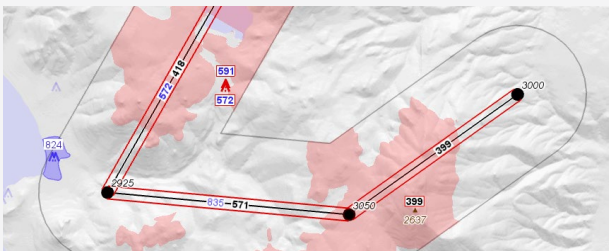
VISIBILITY ANALYSIS EXTENSION

- Extension for performing visibility calculations such as line of sight.



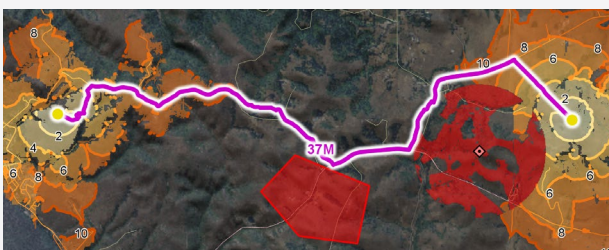
TERRAIN ANALYSIS EXTENSION

- Generates a vertical profile along routes, cutting through both terrain and vector data sources such as airspaces.
- Calculates the terrain and obstacle clearance in a corridor around routes.



VEHICLE ANALYSIS EXTENSION

- Calculates how ground-based manned and autonomous vehicles can interact with the terrain and the roads.
- Makes it possible to calculate optimal off-road routes for terrain vehicles based on ground conditions, operational constraints and vehicle characteristics.
- Provides information on the terrain accessibility, through the calculation of isochrones (travel times) or local speeds.
- Calculates flightpaths for UAVs taking terrain elevation into account.



ABOUT CARMENTA

Carmenta provides software tools to empower visualization and analysis of dynamic geospatial information in time-critical applications. Our powerful technology is deployed across the world, by system providers in defense, unmanned systems, maritime, and public safety sectors.



METEOROLOGICAL EXTENSION

- Read meteorological data in the GRIB format, and the output can be used as any raster in Carmenta Engine, either for direct visualization, or as input to other geo-processing operators.

