

# Extensions



## Carmenta Engine 5.9 Extensions

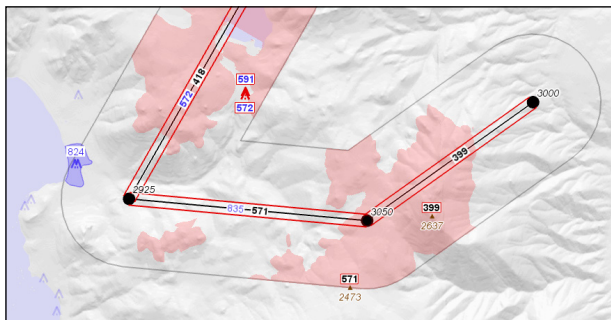


### 3D EXTENSION<sup>3</sup>

- Enables interactive 3D fly-throughs with dynamic loading of data.
- On the fly generation of 3D worlds straight from 2D/3D GIS data in any format supported by the Engine – no 3D modeling is needed.
- For more information, refer to the separate Carmenta Engine 3D Extension product sheet.

### EXTENSIONS FOR TERRAIN ANALYSIS

- Vertical Profile Extension: Generates a vertical profile along routes, cutting through both terrain and vector data sources such as airspaces.
- Vertical Clearance Extension: Calculates the terrain and obstacle clearance in a corridor around routes.
- Terrain Warning Extension: Dynamic terrain colouring in 2D and 3D to indicate the distance to the aircraft.
- For more information, refer to the separate product sheet Carmenta Engine Extensions for Terrain Analysis.

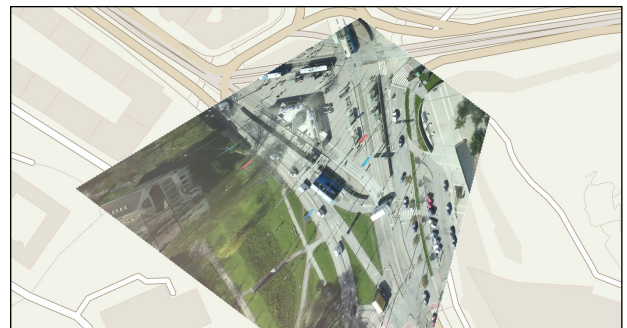


### CATALOG EXTENSION

- Gives Carmenta Engine based applications a structured way to handle background maps. A Catalog can be instantiated either from a local folder or from an OGC CSW service.
- The Carmenta Map Builder application (sold separately) gives end users an easy way to add new maps to the catalog.

### GEOREFERENCED VIDEO EXTENSION

- Makes it possible to georeference full motion video streams on the fly in order to display the video overlaid on the map.
- For more information, refer to the separate Carmenta Engine Georeferenced Video Extension product sheet.



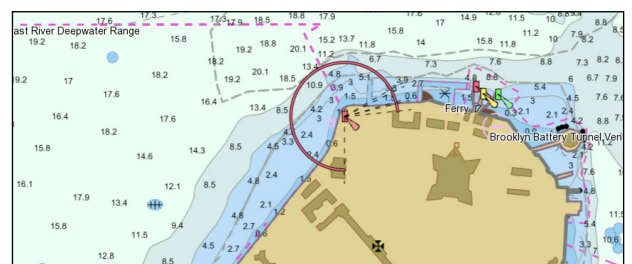
### TACTICAL EXTENSION

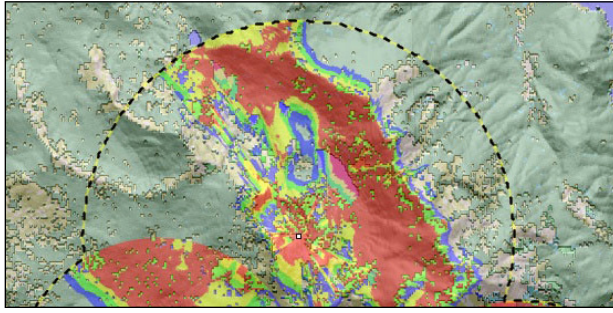
- Extension for creating, managing and visualising tactical symbols according to the DOD MIL-STD-2525 and NATO App-6 standards.
- For more information please refer to the separate Carmenta Engine Tactical Extension product sheet.



### NAUTICAL CHART EXTENSION

- Extension for reading and rendering Nautical Charts according to the IHO S-57, S-63 and S-52 standards.
- For more information please refer to the separate Carmenta Engine Nautical Extension product sheet.





### VISIBILITY ANALYSIS EXTENSION

- Extension for performing high performance visibility calculations in both 2D maps and 3D city environments.
- Extremely rapid - designed to be computed on-the-fly for moving objects.
- Also provides high-performance calculation of intravisibility between multiple moving objects, useful for target tracking.

### PRINTING EXTENSION <sup>1, 3</sup>

- Extension for handling scale-correct printing of maps and other Carmenta Engine 2D Views on printers.
- Support for printing directly on printer with printer's resolution or indirectly by first rendering to an internal bitmap.
- Support for tiled printing for large paper sizes such as A0.

### MILITARY GEODATA FORMATS EXTENSION

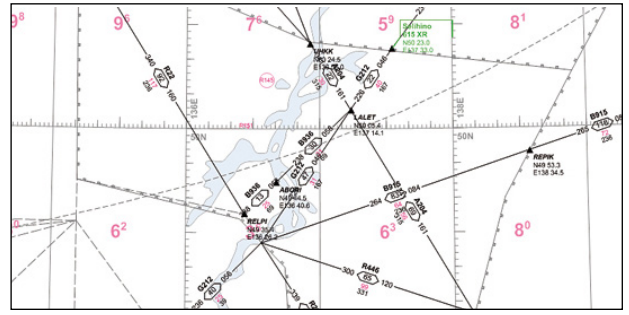
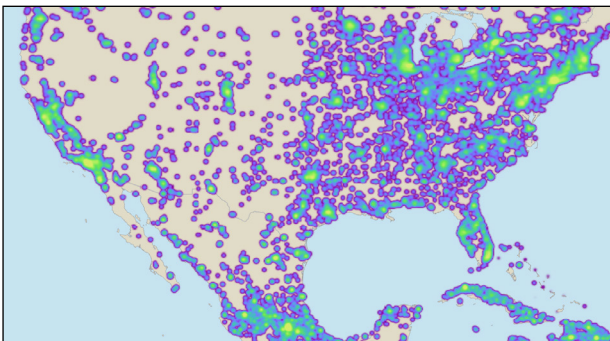
- Adds functionality for reading military geographic data in CMRG (PCMap), DFAD and RPF (CADRG and CIB) formats.

### TERRAIN VEHICLE ANALYSIS EXTENSION

- Extension for calculation of terrain vehicle accessibility and speed in terrain.

### HEATMAP EXTENSION

- Adds functionality for dynamically generating point density rasters which can be visualised as heatmaps.



### ARINC 424 EXTENSION

- Reads aeronautical navigation database files on the ARINC SPECIFICATION 424-16, 424-17 and 424-18 formats.

### MAP PACKAGE EXTENSION

- Makes it possible to package a mix of map images, raster data and vector data in a single, optimized package.
- Especially useful for mobile devices where it is essential to minimize the amount of processing necessary to read and display data.
- Supports the OGC GeoPackage standard to ensure interoperability with other systems.

### C-MAP CM93 EXTENSION <sup>1, 2, 3</sup>

- Functionality for reading Jeppesen C-Map CM93 nautical chart data.

### C-MAP CM93 S52 PRESENTATION EXTENSION <sup>1, 2, 3</sup>

- Adds support for visualising CM93 data according to IHO S-52.

### DWG AND DXF EXTENSION <sup>3</sup>

- Extension for reading CAD databases in DWG and DXF, the AutoCad file formats.

### SPATIAL DATABASE EXTENSIONS <sup>3</sup>

Extensions for reading geospatial data from different kinds of database systems:

- Microsoft SQL Server Extension
- MySQL Extension
- Oracle Spatial Extension
- PostgreSQL/PostGIS Extension

### RADAR PLOT EXTENSION

- Extension for efficient rendering of radar plots and other extremely dynamic information.
- Easily handles millions of continuously updating plots.
- For more information refer to the separate Carmenta Engine Radar Plot Extension product sheet.

<sup>1</sup> Not available on Carmenta Engine Linux.

<sup>2</sup> Not available on Carmenta Engine 64-bit.

<sup>3</sup> Not available on Carmenta Engine for Android.

