

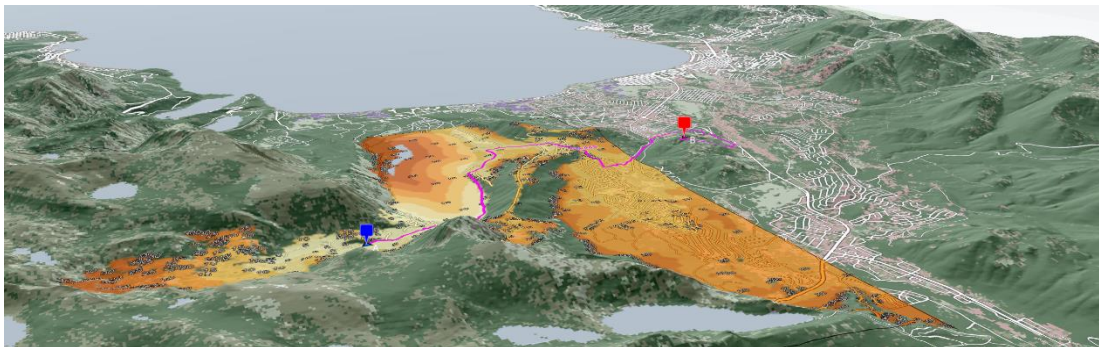
What's New in Carmenta Server 4.7 and Carmenta Server Core 2020.0

Carmenta Server Versions

Carmenta Server 4.7 and Carmenta Server Core 2020.0 together comprise a versatile web map server offering for deployment on Windows Server and the Docker container platform. They share the same scalable architecture based on the Carmenta Engine map server runtime, providing very high performance and reliability necessary for mission-critical systems.

Besides the publishing of background maps and map overlays where geospatial data is read and processed in real-time from a large number of data sources and formats, Carmenta Server and Carmenta Server Core allow the publishing of advanced geospatial analysis functions, using either built-in or custom algorithms.

Since both versions share almost the same set of features, this document applies to both versions, unless otherwise noted.

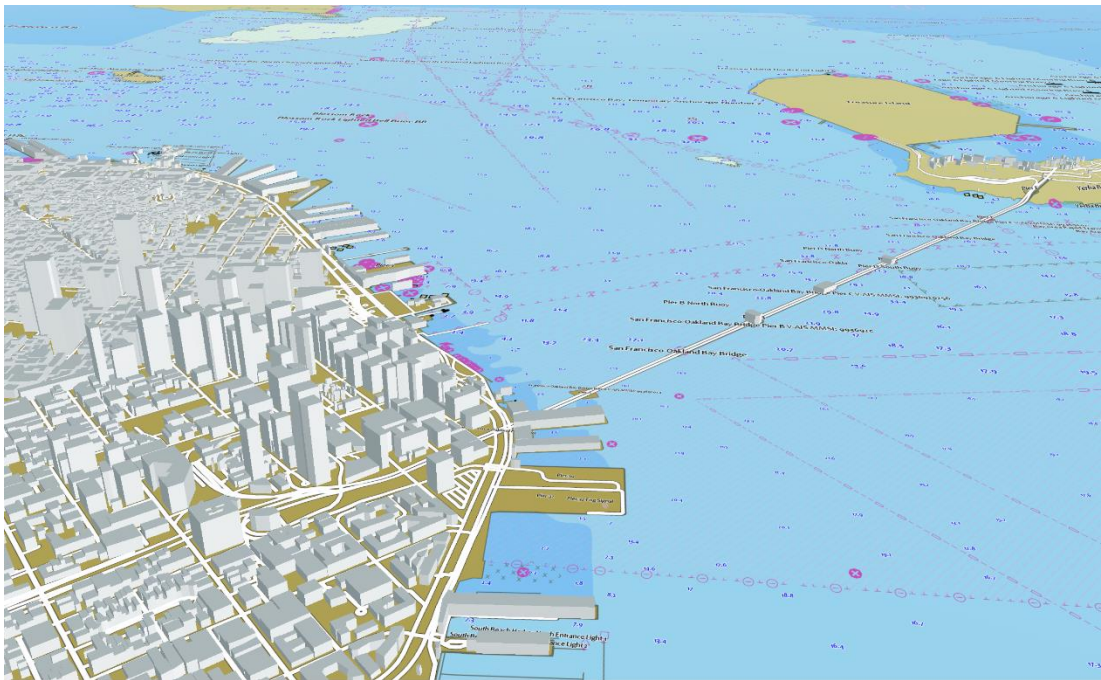


RESTful Administration API

A new RESTful API is introduced which allows system administrators to manage a Carmenta Server installation or a running Carmenta Server Core container. After authentication, a system administrator may retrieve and modify map server settings, retrieve a list of all published map services or map services available for publishing, publish or unpublish them as applicable as well as manage the tile store pre-populator service.

Nautical Charts Improvements

The support for publishing nautical charts in Carmenta Server and Carmenta Server Core includes reading data on the S-57 format, optionally encrypted using S-63, and visualizing it according to the S-52 specification. The new release contains several improvements to published nautical chart services.



Improved Visualization of Tiled Services

Publishing nautical charts as tiled map services while strictly adhering to the S-52 specification, results in poor handling of certain objects and text labels. The result is a duplication of certain objects and text labels across multiple tiles, as well as clipping near tile borders in some cases.

These problems are solved with the new release, with the possibility to configure the map configuration to adhere to the strict S-52 visualization if required.

Integrated Manager for S-63 Encrypted Data

Carmenta Server and Carmenta Server Core allows using S-63 encrypted data sources for nautical charts. In order to manage the encrypted data in a more practical way, both during development and testing but also in a deployed system, the new release contains a command line tool for management of S-63 User Permits and import of encrypted data. This applies both to initial data import as well as subsequent updates.

Carmenta Server Core: The command line tool may be run either on a developer system with the SDK installed, or in a running container on a production system.

Documentation and Samples

The documentation and samples that are included with the SDK versions of Carmenta Server and Carmenta Server Core have been extended in the new release, in order to aid developers and system administrators getting started quicker and easier with understanding different aspects of configuring and publishing advanced and complex map services. The samples section has been extended to contain a large number of samples to guide and illustrate how different tasks can be achieved.

Carmenta Server Core: Guides and samples are now included to explain how to setup and use networking with Docker Swarm, as well as Kubernetes.

Vector Tiles Improvements

The Vector Tiles interface has seen some improvements with the new release:

- Optimized handling of features that extend over tile boundaries into two or more tiles, by cutting them at tile borders and letting the client application re-connect them, as required.
- Improved service list entries to include all endpoints available for multi-layer Vector Tiles services, simplifying the task of finding all available endpoints for a client application.

Miscellaneous Improvements

The following additional improvements have been made:

- Updated Carmenta Engine runtime to the latest version 5.14
- Support for reading AIXM aeronautical navigation database files on the 5.1 and 5.1.1 formats
- Support for reading and visualizing tactical symbols on the DOD MIL-STD-2525D and NATO App-6D standards
- New SortOperator for sorting features in map configurations
- **Carmenta Server Core:** Updated Ubuntu base image to Ubuntu 20.04 LTS