

Carmenta Server

A complete solution for cost-effective visualisation and distribution of GIS data through web services

Carmenta Server provides all the necessary functionality for managing, publishing and distributing maps and other geospatial data to end users via Internet and intranet services. It offers robust, cost-effective technology for building highly scalable web-based geospatial solutions and simplifies the exchange of geographic data using standardised, open interfaces. Carmenta Server has proven its value to customers in a wide range of domains, from official governmental websites to private enterprise networks.

- Cost-effective, through advanced technology that enables set-up using fewer servers without compromising capacity
- Easy implementation, with clear and straightforward built-in support that facilitates integration into your IT environment
- Excellent performance, due to a very fast map engine core and efficient usage of hardware resources
- Proven record of reliability, thanks to high quality software components, with built-in monitoring and automatic remedy of map services
- Optimum interoperability, based on broad support for open industry and international de-facto standards

The Carmenta Server has outstanding performance and reliability credentials in operational deployments. It is built around the ability to read any raster and vector data from multiple sources in its native format and handles everything relating to maps, sensor data and other types of geospatial information. The product allows for on-the-fly data geoprocessing operations, enabling in-line transformations in all service interfaces.

The Carmenta Server fully utilises the latest in server technology and hardware architectures. It can be deployed to support small GIS teams with single machine installations and scaled up to run enterprise-wide networks. Given the very high performance figures and an ability to handle high loads, a business critical GIS website can run on fewer servers without compromising capacity or availability. The product fully supports deploying Internet services in virtual and cloud environments.



Carmenta is a technical committee member of the Open Geospatial Consortium, Inc. (OGC), an international industry consortium of more than 520 companies, government agencies and universities. We strive to use open and international de-facto standards wherever possible in our products.

KEY FEATURES

- Native reading of GIS data from more than 70 GIS file formats and spatial databases
- Powerful geoprocessing of geospatial data on-the-fly such as Slope and Line-of-Sight calculations
- Combines and analyses data from multiple sources simultaneously
- Full integration of sensor data and dynamic object information in all services
- On-the-fly transformation of customerspecific data models to external standards
- Geodata catalogues for keeping track of datasets and services with automatic updates
- Comes bundled with Carmenta Web Explorer,
 a feature-rich web client based on OpenLayers 3
- Ready-to-use geospatial portal components
- Efficient tools for creating, editing, storing and publishing metadata
- Built-in map tile cache with tools to pre-populate the cache in runtime
- Built-in proxy server for cascading data from external services
- Full control over server administration from a single web page
- Optimised for multi-core processors and highly scalable
- Adapted for deployment in virtual and cloud environments
- Available in both 32-bit and 64-bit versions

RELIABILITY AND SECURITY

- Possible to add and remove services without restart
- Login with ticket/cookie based sessions or challenge based (NTLM etc.)
- Security controlled by setting access restrictions on services and layers
- Integrated monitoring of server usage with live graph presentation in runtime

- Automatic notification of errors and re-start of services
- Flexible connection to external authentication servers
- Holds the following OGC certificates:



- Supports other OGC standards such as: WFS 2.0.0, GML 3.2.1, WCS 1.1.2 and WPS 1.0.0 etc.
- Transactional WFS (WFS-T) for creating, deleting and updating features on the server
- Publish metadata from Catalogue Service following ISO standards and INSPIRE requirements
- Feature Portrayal Service (FPS) for rendering features from WFS servers
- Automatic GML generation from multiple vector data sources on-the-fly
- Advanced download service based on WFS including on-the-fly Shapefile generation
- Support for Styled Layer Descriptor/Symbol Encoding (SLD/SE) for setting map portrayal

ABOUT CARMENTA

Carmenta is a software company offering high-performance geospatial (GIS) products and solutions as well as systems for emergency response and critical infrastructure protection. With over 30 years of experience our technology is characterised by high performance, easy-to-use, openness and scalability. Our products are based on standards and we support most geospatial data formats. As an active member of the Open Geospatial Consortium, Carmenta is dedicated to using and promoting open standards wherever possible. For more information please visit www.carmenta.com.

