GeoServer

The Open Source server for the dissemination of geospatial data



What is GeoServer?

GeoServer is an open source Java-based server for publishing your geospatial data. GeoServer is designed for interoperability, publishing from any major spatial data source using Open Geospatial Consortium (OGC) standards.



Easy to Install, Ready to Use

GeoServer is ready to use out of the box with standalone installers for Mac and Windows, a ready-to-run Linux bundle, and a web archive for enterprise use. It provides a web administration program with screens to configure data access, layer publication, and styling. Administrators are offered a full range of integration and security options.

GeoServer is ready to work with your organization providing:

- A comprehensive GUI for simplified administration
- · Strong format support to work with your data
- Database support including PostGIS, DB2, SQL Server, and extensions for the latest cloud databases
- · Ability to cascade map, feature, and tile web services
- Fine-grained control of access to individual services and per layer permissions
- Enterprise security with built-in integration for LDAP, CAS and Active Directory
- REST API for automating GeoServer deployment.
- · Many extensions for additional format and services

Create Beautiful Maps

Bring your cartography to the world with GeoServer Web Map Service (WMS). GeoServer rendering features:

- Fast vector data rendering enabling you to work with all your data
- Visualize raster data with band selection and normalization, fine tuned color maps, and time based animations
- Powerful label composition performing dynamic collision avoidance under your control
- Styling configured using industry standard OGC Style Layer Descriptor files, or your choice of CSS, JSON or YAML.
- Go beyond the standard with powerful rendering transformations that can preprocess your data for great effects like heat maps and contour lines
- Full range of interlayer special effects with alpha blending and grouping options

Share Features Online

Go beyond simple maps with GeoServer Web Feature Service (WFS).

- Incorporate your data into websites, mobile and applications
- Our standards support provides a wide selection of clients, toolkits and libraries
- Access your information in standard GML, KML, and JSON formats, or look to our extensions for shapefile, excel, and more.

GeoServer offers WFS-Transactional for online editing, and Web Processing Service (WPS) for online analysis.

Direct Raster Access

Share your raster data with full Web Coverage Service (WCS) support.

- Provide clients with direct access to raster data and imagery
- Explore advanced features including time, elevation and n-dimensional raster support.
- Additional support provided for MetOc and Earth Observation data

We also provide Web Processing Service (WPS) access to raster information allowing you to perform analysis on the server.

Free, Open Source and Supported

GeoServer is free software with all the benefits of an open source license and vibrant community.

- Free lowers the financial barrier and avoids costly per-seat license agreements as your use grows.
- Our Open Source GPL License provides a better relationship than proprietary GIS products protecting you from vendor lock-in.
- A strong online community of users and developers provides peer support from all over the world, balanced with commercial training and support options for your team.
- GeoServer is structured as an OSGeo project with transparent communication, an open issue tracker and regular releases.

Free your data, free yourself, use GeoServer.

