

# True Spirit of Open Source

GeoServer (<http://geoserver.org>) is an open-source server for geospatial information based Open Geospatial Consortium (OGC) OpenGIS Web Feature Service (WFS) and Web Map Service (WMS) Implementation Specifications. The Open Planning Project (TOPP), a not-for-profit organisation based in New York City, started the project in 2001 with the intention of growing a community of contributors who would work together to build software better than any single organisation could on its own. GeoServer is now an extremely powerful and capable server, with international contributors from academia, government, large corporations, small consultancies and non-governmental organisations.

Standards have always been our central focus, as GeoServer, based on WFS, was selected to serve as the reference implementation for WFS 1.0 and 1.1. Standards made the implementation of GeoServer much easier as the design process had a specific goal that could not be left to interpretation. Thus diverse contributors could easily agree a way forward. The focus on OGC specifications also helped to raise the profile of GeoServer, since many people seeking a standard way to expose and edit geospatial information discovered the OGC and were then attracted to GeoServer as an existing, accessible, open implementation of OGC standards.

GeoServer is growing in exciting ways, evolving into a generic framework upon which new open spatial web services can be built. In GeoServer 1.5 there is full support for the OpenGIS Web Coverage Service 1.0.0 Implementation Specification, as well as the ability to display rasters with the WMS. GeoSolutions in Italy (<http://geo-solutions.it/>) has performed most of this work and is now offering support services on the new features in GeoServer. GeoSolutions joins a growing list of contributors that includes Refrations Research in Canada, Axios in Spain, Social Change Online in Australia, and Blue Sphere Technologies in South Africa.

The Open Planning Project has also completed a contract from Google to add Google Earth connectivity to GeoServer. TOPP accepts funded development work and invests the profits in improving the software for all users. While Google's 3D-software offered a way to connect to remote servers there was no good open-source implementation allowing display of large amounts of information on Google Earth. TOPP was able to leverage the standards that GeoServer was built upon to quickly offer Google Earth compatibility by outputting KML/KMZ through the WMS protocol. Now users need configure their data only once and it is instantly available as WMS, WFS and on Google Earth.

The TOPP goal for 2007 is to enable open-source-based collaborations surrounding geodata while also meeting the complex editing needs of traditional GIS users. We will build upon existing support for WFS-Transactional and validation to add security, rollbacks, diffs, GeoRSS and email notifications, and peer review. As GeoServer is a truly open community, all are encouraged to participate, help with planning or build new services upon the GeoServer solid geospatial core.

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<https://www.gim-international.com/content/article/true-spirit-of-open-source>

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