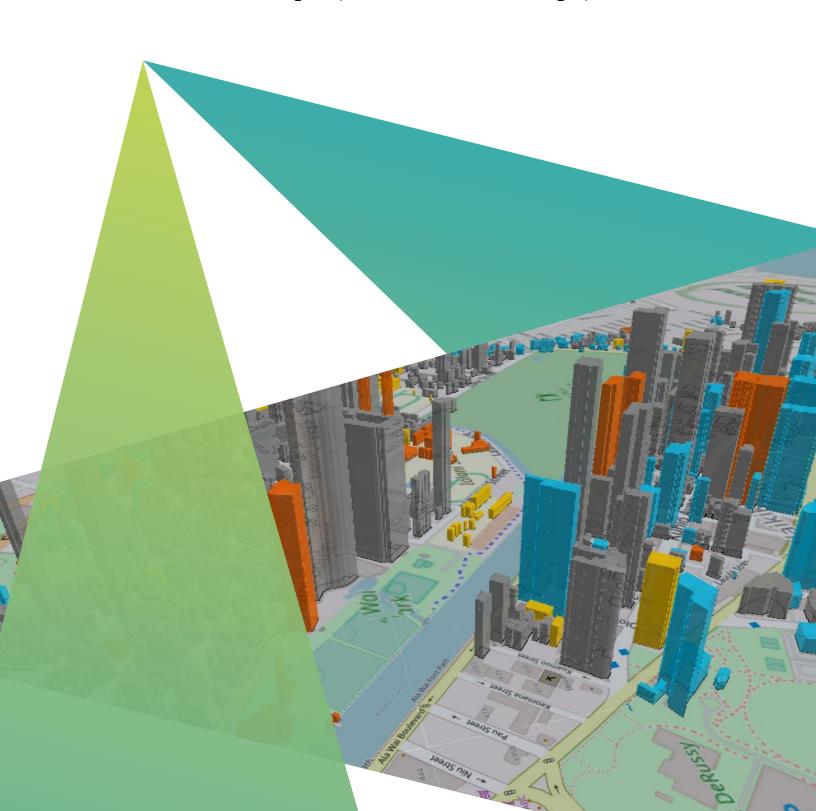


Geospatial Portal

Interactive access to geospatial information using open web services



Overview

Geospatial Portal is a browser-based, multilingual web application that can be used for finding, viewing, querying, analyzing and consuming geospatial data and web services. These web services can be published by other solutions from Hexagon or by third-party products.

Geospatial Portal offers advanced client-side discovery, connection and interaction through a simple client geo-browser that provides an intuitive and attractive user experience. In addition, Geospatial Portal integrates multiple sources into a single 2D or 3D map view that can be easily navigated.





Using integrated Google services allows you to see your GIS data in a wider geographical context.

Flexible access

Geospatial Portal is powering the next generation of web applications, providing a far wider community with simple and interactive access to geospatial information using open web services. Its flexibility enables it to connect to a variety of web services based on open standards and proprietary services. Those services can originate from Hexagon's products, other server technologies or a combination of both. Geospatial Portal greatly optimizes the client browsing experience when connecting to Spatial Data Infrastructure (SDI) services.

Modern navigation and tools

Geospatial Portal simplifies the process of finding, connecting to and displaying spatial data published through web services and provides a modern and attractive user experience. It ensures smooth browsing through intuitive navigation controls and technical advances such as asynchronous communication that ensures panning and zooming are not interrupted by having to wait for servers to respond. The client's utility is enhanced by additional tools, such as area and distance measurements, customizable map layers and the ability to save and recall favorite map compositions. Geospatial Portal supports access to all web services and open standards required for a modern SDI client application.

Integration with Google services

View more, explore more and search for more with integrated Google services. Users of Geospatial Portal can display Google Maps layers and search for interesting objects by using Google Maps Places search service. Pins show the search result and feature details can be displayed in the Feature Info dialog. All available Google Map types — roadmap, hybrid, traffic, satellite or terrain — are supported. Moreover, explore the real Street View, in user-friendly Consumer Portal layout.

Geocoding and location-based searches

Geospatial Portal offers robust search mechanisms out of the box. Such mechanisms include geographic name and point-of-interest (POI) searches based on the gazetteer specification (Open Geospatial Consortium (OGC) WFS-G) and geocoding search, for example via Open Location Service (OpenLS). Search capabilities can be customized using Geospatial Portal configuration. The built-in coordinate search in Consumer Portal layout allows users to locate any point on the globe with ease by providing its geographic coordinates.

Easy editing

Geospatial Portal allows users to create and update attribute data. The editing workflow is supported by the OGC Web Feature Service (WFS)-T industry standard, used to edit, update and delete features in the database.

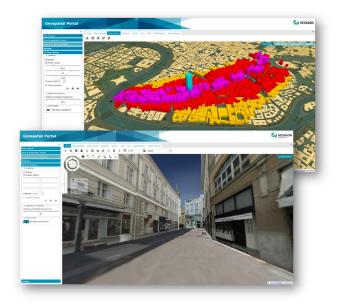
Exciting 3D experiences

Geospatial Portal provides a modern 3D view based on Hexagon visualization technology that lets you visualize your data in real-world context and view it from a new perspective. The globe view supports a base map and can display numerous raster and vector data sources from OGC Web Map Service (WMS), Web Map Tile Service (WMTS) and WFS on top of 3D terrain. Using the mTransformer tool, 3D object models and terrain scenes can be produced and displayed in the Geospatial Portal.

- Extrude vector data to update your view based on the latest warehouse content
- Highlight vectors to gain valuable insight into attribute data via tooltips
- Visualize sunlight and shadows for more accurate urban planning
- "Walk through" your data with a new perspective using the 3D first-person view

Consumer Portal layout

Simplified and user-friendly, entry-level layout for non-professional consumers of geospatial data is dedicated to end users who use maps for discovery and visualization, with minimum clicks required. It is optimized for performance and user experience and takes advantage of the most up-to-date web technologies and standards. The modern and freshlooking user interface is designed to enhance the most important user workflows with the displayed data, including accessibility features.



Visualize your data in 3D and view it from a new perspective.

Consumer Portal, integrated with Google and other third-party services and search engines, allows users to find information with minimal effort and better understand GIS data by placing it in the appropriate geographical context.



Better understand your GIS data by placing it in the appropriate geographical context.



Through the integration of WebGIS products, Geospatial Portal and Consumer Portal can be used by various authorities or agencies to manage and monitor the work of technicians, surveyors or other field operatives who use the GeoMedia WebMap Mobile application.

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Use proprietary services by building websites and web services that natively access Esri File Geodatabase (FGDB) geospatial data, along with many other data types.

Multilanguage capabilities

As a multilingual application, Geospatial Portal provides a variety of language settings. In addition, the list of languages can be extended to fully localize the product. Geospatial Portal will detect your web browser language settings and attempt to conform to that language.

Geospatial Portal supports both LTR (left-to-right) and RTL (right-to-left) direction of written languages. The application layout is automatically adapted to the language type.

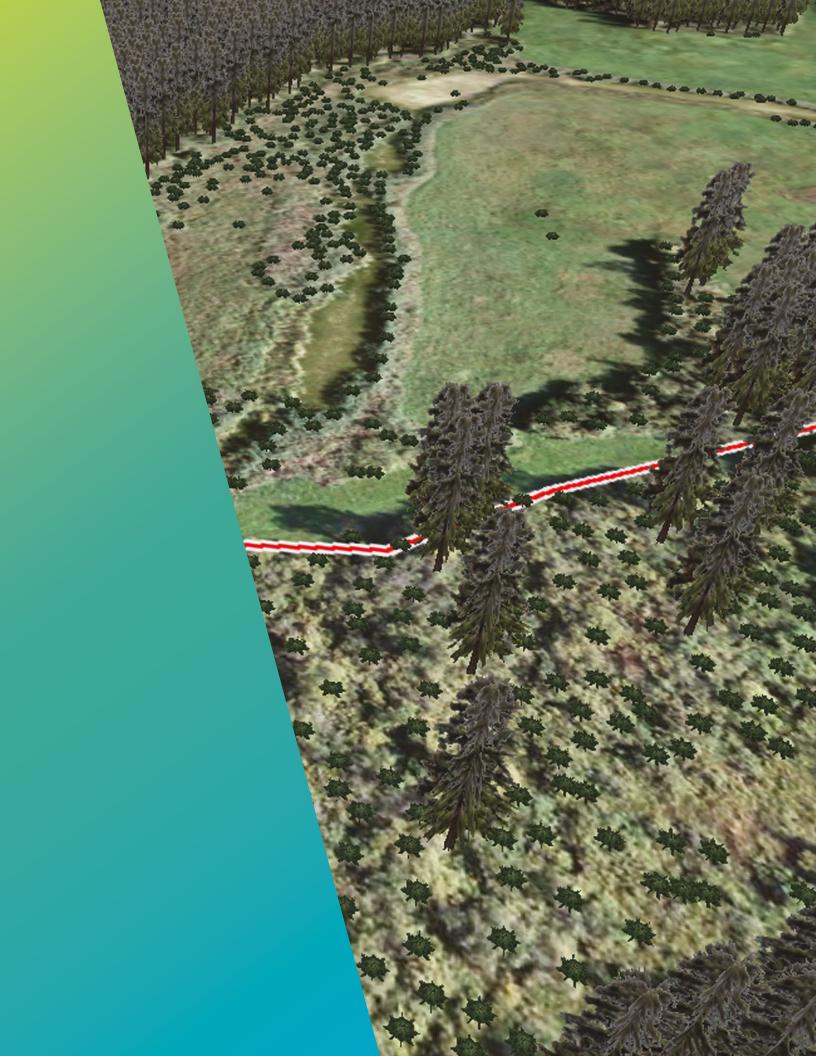
Customize and extend

The powerful Geospatial Portal Software Development Kit (SDK) lets developers create customized portal workflows and experiences using extensive APIs, documentation and reusable code examples. The SDK can also be used in conjunction with other Hexagon server products that include Geospatial Portal as the client application, such as GeoMedia WebMap.

Offerings

Hexagon's SDI solutions support geospatial industry standards, including those from International Organization for Standardization (ISO) and OGC, as well as U.S. National SDI, Canadian Geospatial Data Infrastructure and the United Nations SDI. Geospatial Portal enables organizations to collaborate with government agencies, commercial businesses and the public — all while adhering to government mandates to ensure users have access to authorized data.

Geospatial Portal supports development of SDIs by providing discovery, view, download and transformation services. It also supports infrastructure control with results of the monitoring process shown on the map or in tabular form. Detailed information on a particular service and its performance can also be presented as a pie chart.





Geospatial Portal includes a 3D globe capable of rendering a base map, terrain and numerous other data sources in 3D, including those from GeoMedia WebMap or ERDAS APOLLO.

One connected solution

Geospatial Portal is the integrated client supporting all browser-based geospatial server products in the Power Portfolio, providing a seamless solution to geo-enable your enterprise.

Product and interaction

GeoMedia WebMap uses Geospatial Portal as an integrated web client for web map publishing.

Geospatial Portal SDK enables creation of customized portal workflows and experiences using extensive APIs, documentation and reusable code examples.

Geospatial Portal complies with ISO/OGC standards and enables INSPIRE services to support secure and compliant access of web services delivered by Geospatial SDI.

Supported standards

Supported protocol and encoding standards include: WMS 1.3.0 (time dimension), WMS 1.1.1 (time dimension), WMTS 1.0.0, WFS 1.1.0, WFS 2.0.0, WFS(G) AP 1.1.0, CSW 2.0.2, ISO AP 1.0, WCTS 0.3.0, OpenLS (OLS)1.1, WMC 1.1, GeoRSS, FE 1.1 and GML 3.2.1, according to the technical specifications listed in the product documentation.

Geospatial Portal follows the Infrastructure for Spatial Information in the European Community (INSPIRE)
Technical Guidances and is INSPIRE compatible and works with INSPIRE Network Services. The INSPIRE directive establishes an infrastructure for sharing spatial information among public authorities in Europe.

Join the community

To better support extending and customizing the Geospatial Portal platform by our large, global development community, we provide the means for these experience-builders to connect with each other, share knowledge and ultimately build better solutions. Participate in the community forum that gives you access to the most recent information on the SDK, APIs and code samples from the product team.



Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, utilities, defense, transportation and government. Learn more at hexagon.com and follow us ohexagonAB.

