



HEXAGON

Product description

Geospatial Portal 2023

Product description

12 September 2023

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Product summary

Geospatial Portal – classic is a full-featured, configurable and customizable thin-client application that can be used for finding, viewing, querying, analyzing and consuming geospatial data published by Hexagon products or other standards-based web services. Because Geospatial Portal is installed and configured on a web application server, it can be accessed by multiple users via web browsers.

Multiple data sources can be integrated into an easily navigated single map view. The Geospatial Portal 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 measuring area and distance, controlling the appearance of individual map layers and saving and recalling the current map context.

Geospatial Portal – classic supports all the web services and open standards required for modern Spatial Data Infrastructure (SDI) client applications. This client solution provides International Standards Organization (ISO)/Open Geospatial Consortium (OGC) standards compliance. Geospatial Portal also offers advanced functionality, including GeoRSS, coordinate transformation (CT) capability, Transactional Web Feature Service (WFS-T) service-based features editing and ad-hoc dynamic analyses over Web Feature Service (WFS) or GeoMedia WebMap Publishing Service (WMPS.)

Cutting-edge myVR technology brings rich, 3D visualization via WebGL. Geospatial Portal – classic displays the world as it is by adapting standard raster services to the elevation model and by handling dedicated 3D data sources. Moreover, the portal offers extrusion and display of vector data within the 3D world, including underground features positioned below the globe sphere, and a first-person perspective view.

In addition to the professional-level rich internet application, Geospatial Portal includes a simplified and user-friendly, entry-level layout aimed at non-professional consumers of geospatial data. Optimized for performance and user experience, the Geospatial Portal – consumer layout takes advantage of the most up-to-date web technologies and standards.

The Geospatial Portal – consumer layout can be easily accessed on mobile devices using either a web browser or the GeoMedia WebMap Mobile application. GeoMedia WebMap Mobile runs on Android, iOS and Windows mobile platforms and is available for free download from Google Play, the AppStore and the Microsoft store.

Click on a link below for quick navigation:

[Geospatial Portal: classic layout](#)

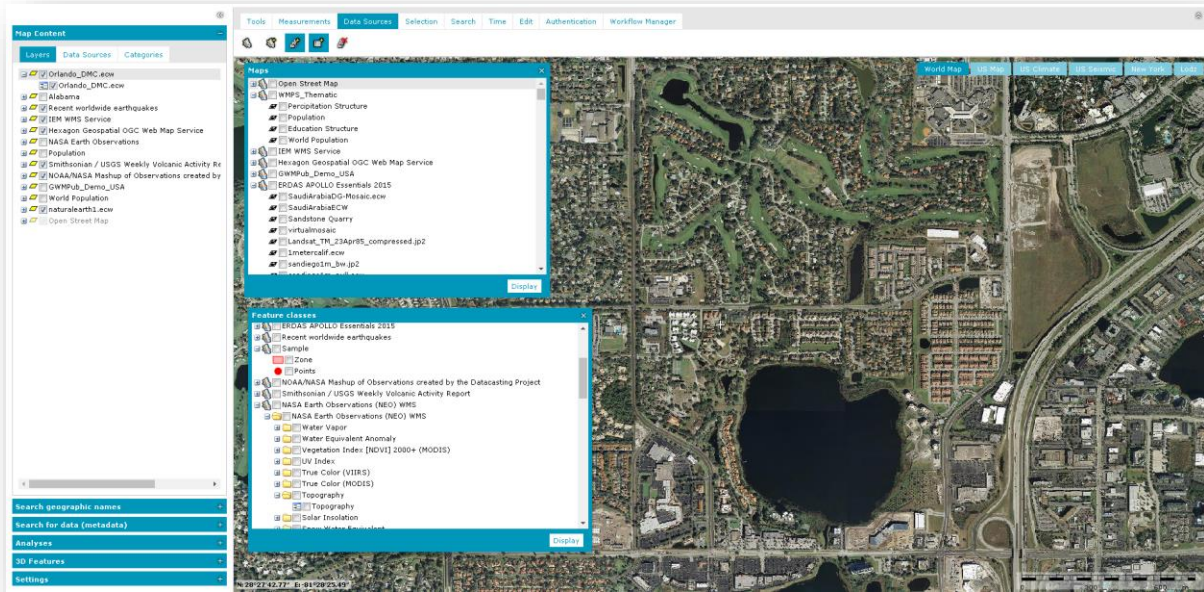
[Geospatial Portal: consumer layout](#)

Geospatial Portal: classic layout

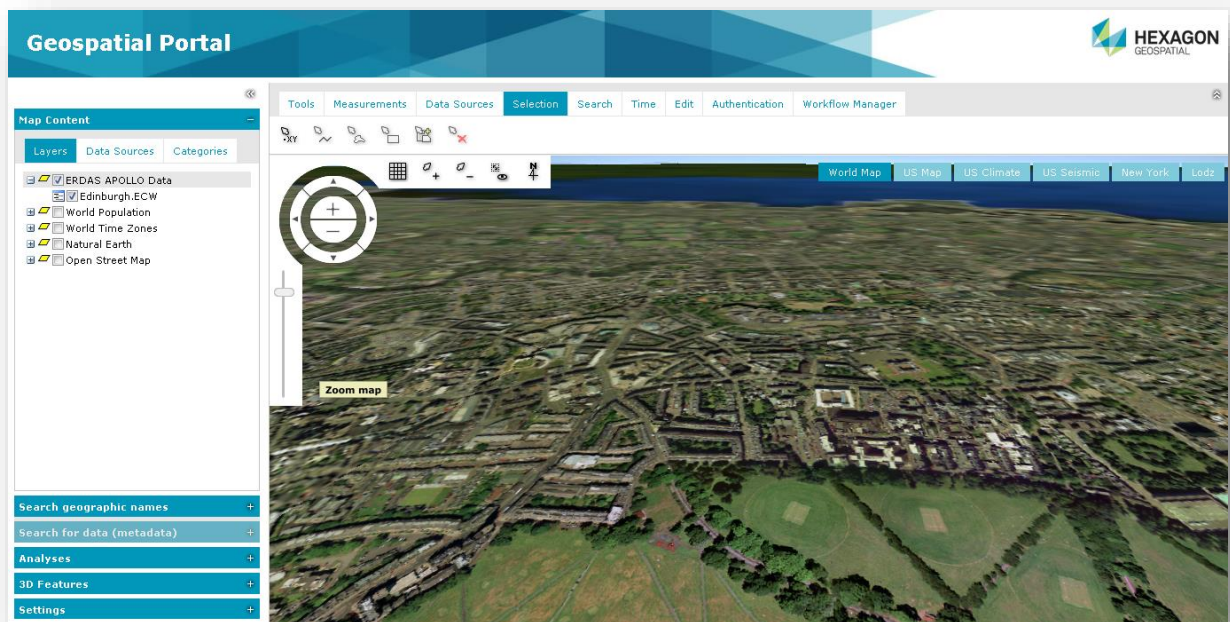
Main functions

- Navigate maps easily via intuitive mouse control
- View 2D maps and content from:
 - Web Map Service (WMS) 1.1.1 and 1.3.0
 - Web Map Tile Service (WMTS) 1.0.0
 - GeoMedia WebMap Publisher Service (WMPS)

- Google Maps and Bing Maps
- OpenStreetMap
- GeoRSS feeds

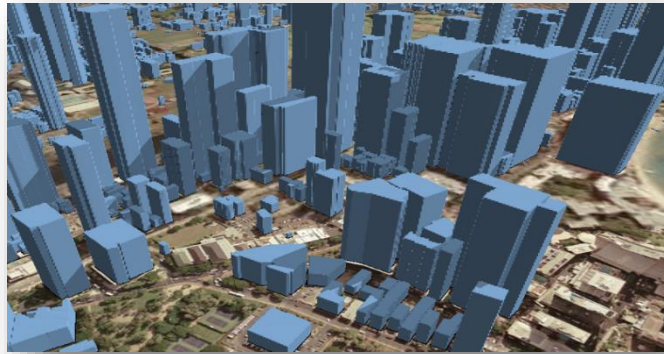


- 3D display
 - Take advantage of advanced myVR technology
 - Display data and services:
 - Base map display
 - WMS and WMTS display
 - GeoMedia WebMap Publisher Service (WMPS), including dynamic analyses over WMPS
 - 3D Tiles (prepared based on GeoTIFF using mTransformer)
 - 3D Objects (prepared based on OBJ, 3DS, KMZ using mTransformer)

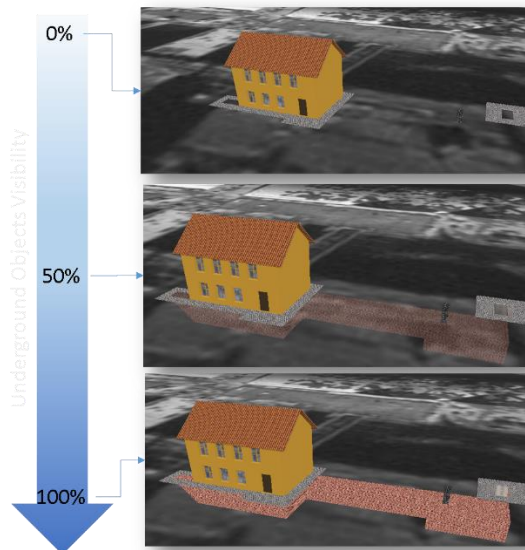


- Display vector data from GeoMedia WebMap WFS service
- Extrude 2-dimensional vector data to rapidly build 3D scenes

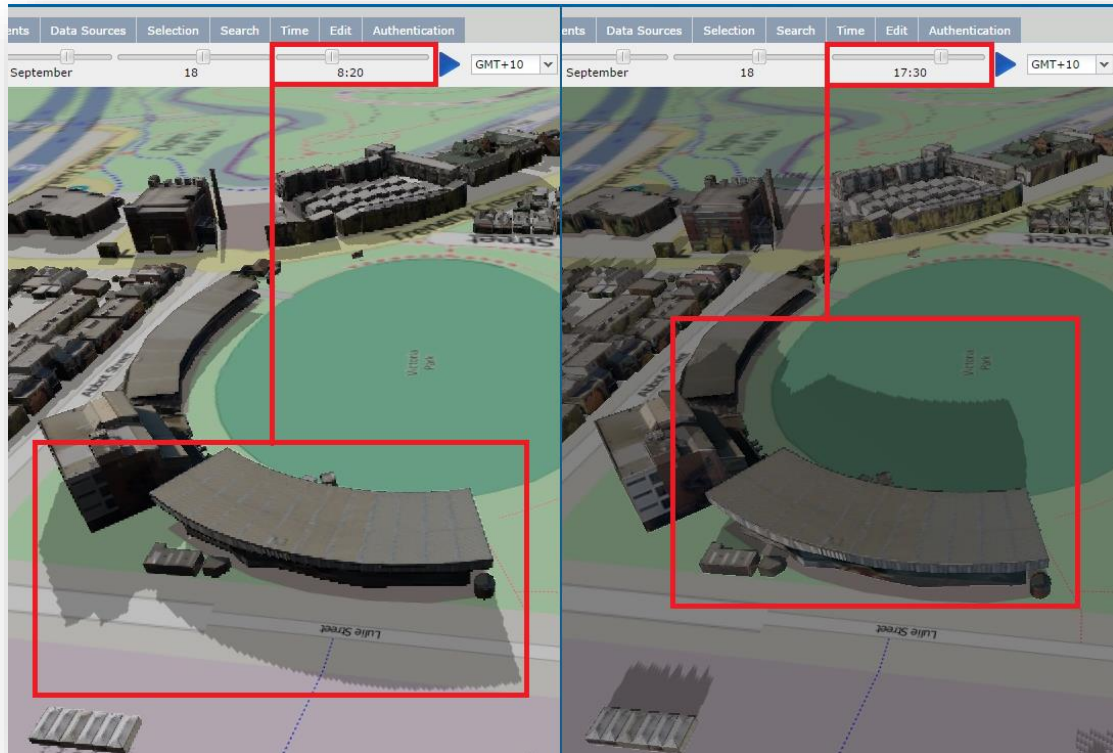




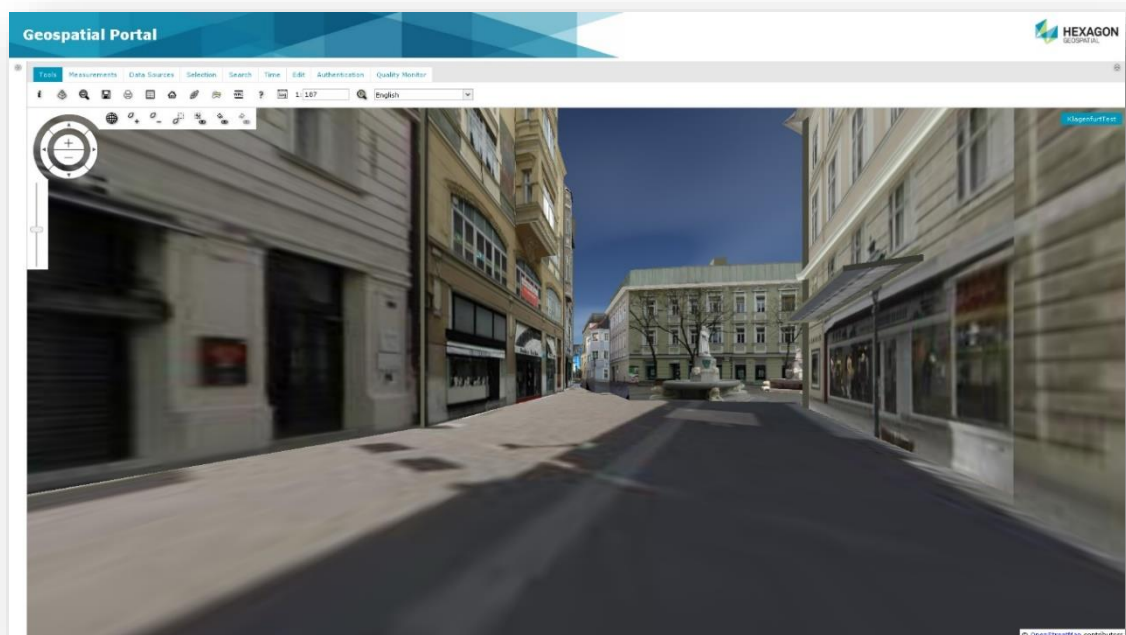
- Display underground features, both 3D Objects and WFS vector features



- Perform sunlight analysis



- Display first person perspective to explore 3D scenes

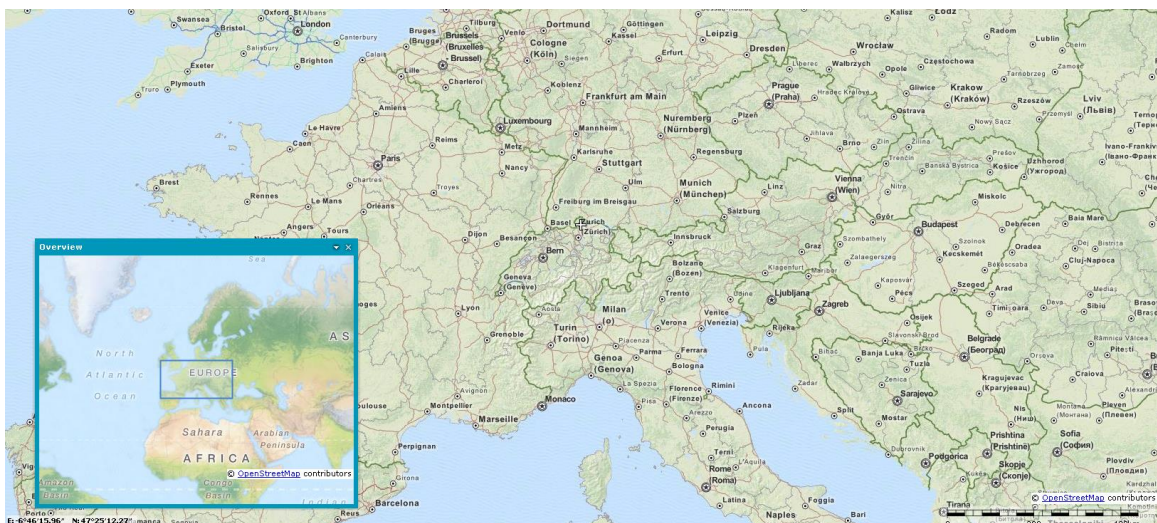


Connect to the web services for discovery, view, download and coordinate transformation.

- Query data sources:
 - WFS services, both WFS 1.1 and WFS 2.0 (ISO 19142)
 - Use Filter encoding (ISO 19143 supported)
 - GeoMedia WebMap Publisher Service (WMPS)
 - Catalog Service for the Web (CSW) services for datasets, datasets series and services metadata
 - Retrieve information from catalog services (CSW 2.0.2 ISO AP 1.0)
- Create and edit vector data stored in a user-defined service (Personal Storage Service) as well as accessed via WFS-T service
- Search for information:
 - Addresses based on OpenLS (Open Location Service) or LUWS (Location Utility Web Service)
 - Geographic names using the Gazetteer Service (WFSG)
- Transform coordinates online using Web Coverage Tiling Service (WCTS) and WPS-CT support
- Run Geospatial Portal on mobile devices:
 - Using mobile web browser (Geospatial Portal will automatically run in a dedicated mobile layout)
 - Using mobile application for Android, iOS and Windows OS mobile devices (Consumer layout)
- Create and manage user profiles:
 - Store user maps and workspaces
 - Manage user maps and workspaces
 - Save map context according to OGC Web Map Context (WMC) standard

Map tools and navigation

- Navigate the map using a mouse or the Navigation Control
- Read coordinates over mouse position
- Change map scale using the Scale Bar
- Position map view using the Overview window



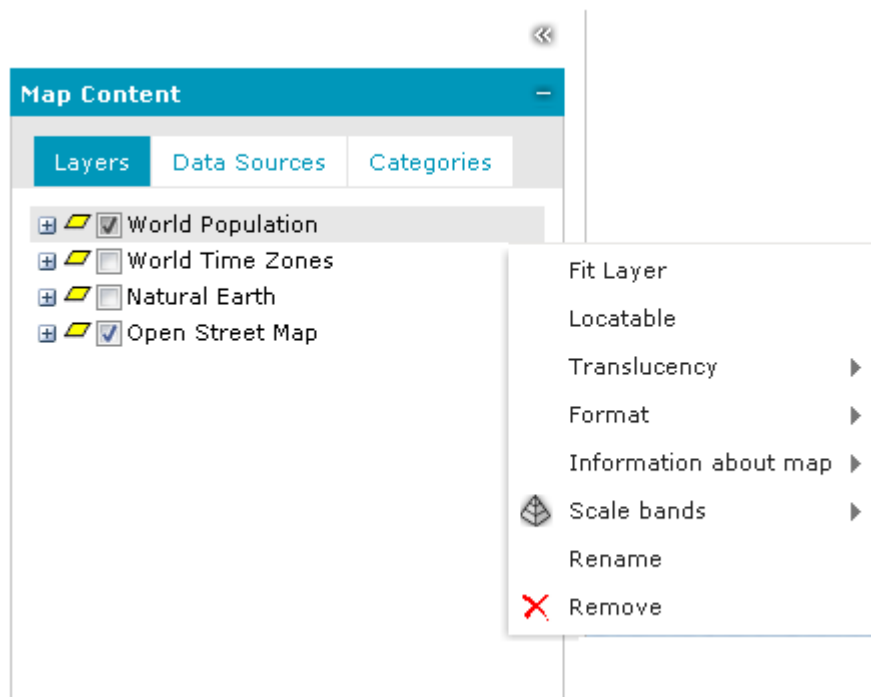
- Select features on the map by point, line or area
- Get point coordinates
- Measure distance and area



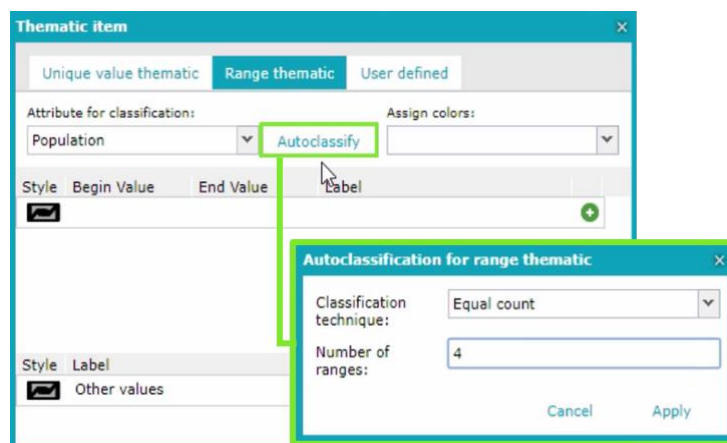
- Print simple map
 - Select format, page size, template, scale, DPI and orientation for print job
 - Supports portrait and landscape templates
 - Title and other textual fields on the printout are configurable
 - Relocate the effective printout area by mouse move
- Quick map printing using the standard browser print facilities
- Display Feature information at selected point
- Share link to a specific map view
- Dynamic object view for vector features

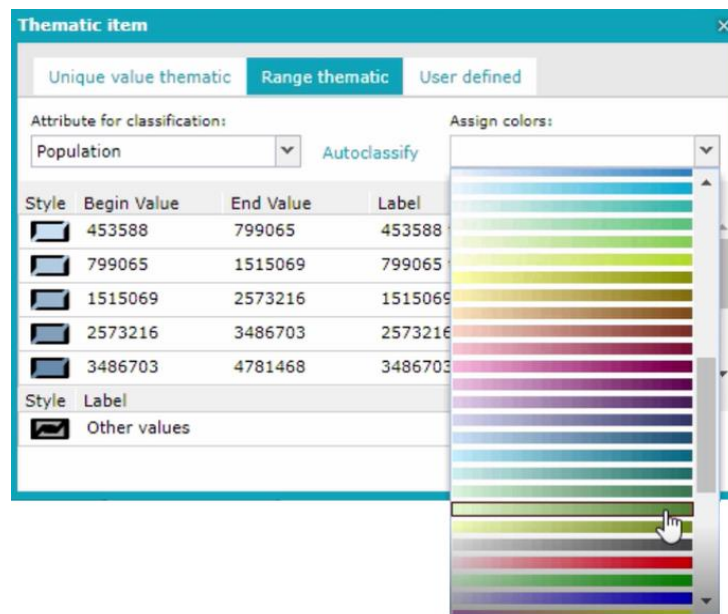
Map layers and content

- Manage layers, components and content displayed on the map
- Map Window displays all the layers that make up the map
- Manage Map Content
 - Group data layers by source/data providers
 - Arrange available layers into categories
 - Drag and drop to change the order of layers on the map
 - Assign custom layer graphics with WMS services
 - Check box to toggle layer visibility
 - Click the context menu to access more options available for single layers and/or services

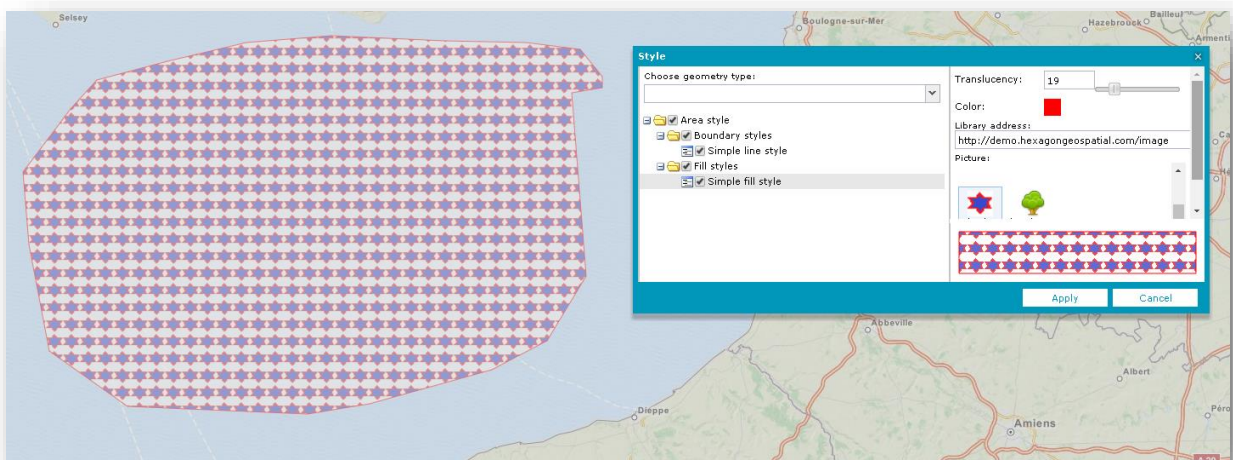


- Define layer styles (styling capabilities dependent upon individual third-party services)
- Attribute-based symbology based on:
 - Unique value
 - Range thematic
 - User-defined
- Quick thematic legend creation with automatic classification and color assignment

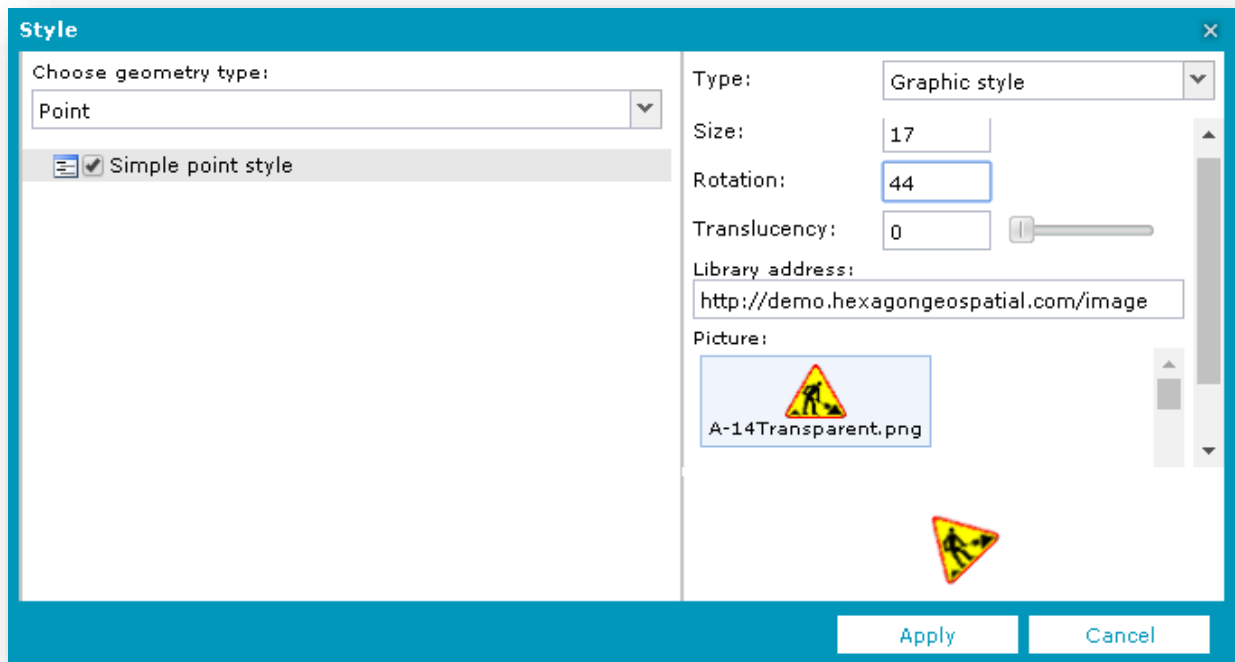




- Define layer properties such as display mode, locatability, translucency, format and more
- Define a pattern fill for area geometry



- Set graphic for point geometry type



- Display and edit labels, including label rotation, for WFS services
- Filter layers:
 - Filter display of vector data from data sources such as WMPS and WFS
 - Filter can be set separately for each feature class layer
 - Objects can be filtered in the map window using available attributes
- Set scale bands for each layer in the map
- Add predefined scales
- Save and reuse user maps and workspaces within a configuration
- Manage and configure map contexts (WMC), including export and import

Connecting to and managing data sources

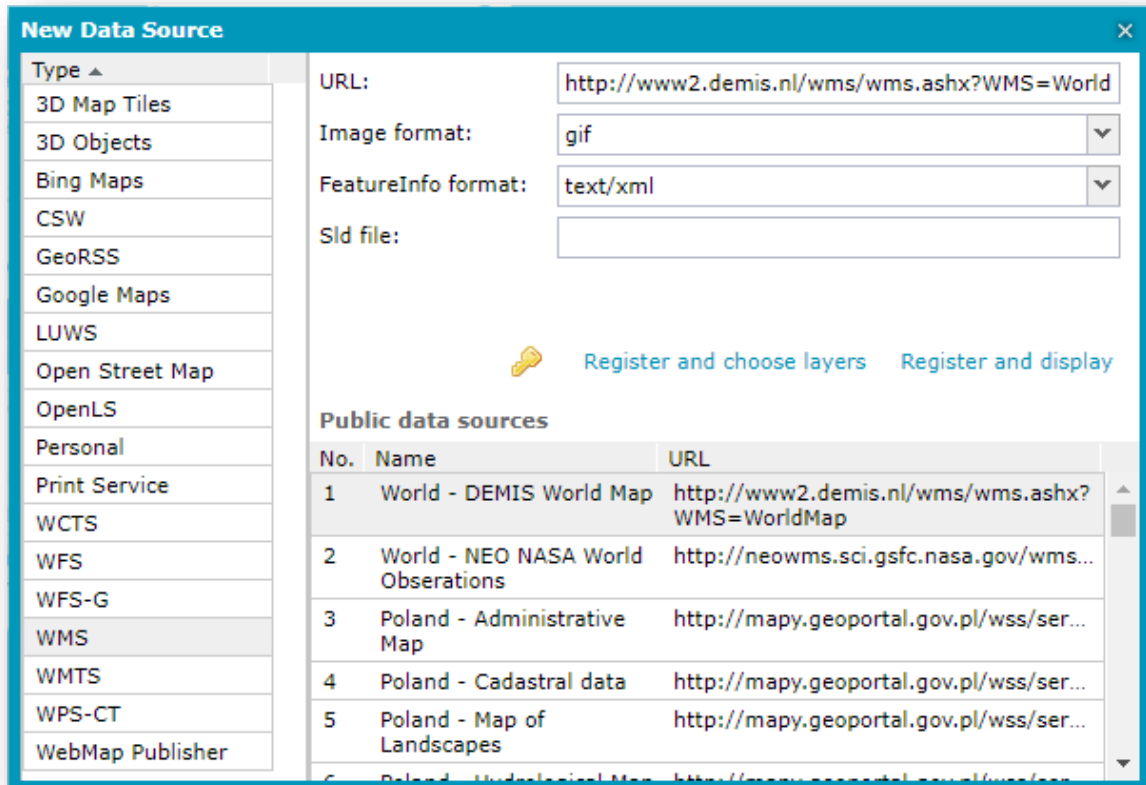
Geospatial Portal – classic offers numerous service connectors that let you consume data and functionality delivered by web services.

- Use administrator-defined connections to a service, modify them or add your own
- Connect to web services asynchronously
- View all services currently connected to and available in the Geospatial Portal

Data Sources	
Name ▼	URL
CSW (1)	
Hexagon OGC Catalog Service for the Web	http://demo.hexagongeospatial.com/CSW/Service.svc/g...
GeoRSS (1)	
Recent worldwide earthquakes	http://www.bgs.ac.uk/feeds/SchoolSeismology.xml
Open Street Map (1)	
Open Street Map	http://otile{1,2,3}.mqcdn.com/tiles/1.0.0/osm
Personal (3)	
User dedicated PSS (Administrator)	
Traffic	
Sample	
Print Service (1)	
http://demo.hexagongeospatial....	http://demo.hexagongeospatial.com/printservice/portalsp...
WFS (4)	
Trees	http://demo.hexagongeospatial.com/WFST_Trees/servic...
New York Buildings	http://demo.hexagongeospatial.com/DemoBuildingsNY/S...
Modernization Areas	http://demo.hexagongeospatial.com/WFST_Area/service...
Lodz Buildings	http://demo.hexagongeospatial.com/DemoBuildingsLodz...
WFS-G (1)	
GEONAMES	http://demo.hexagongeospatial.com/WFSG_GEONAMES_...
WMS (2)	
IEM WMS Service	http://mesonet.agron.iastate.edu/cgi-bin/wms/nexrad/n0r-t.cgi
Hexagon Geospatial OGC Web Map Service	http://demo.hexagongeospatial.com/DemoTimeZones/s...
WMTS (1)	
ERDAS APOLLO Essentials 2015	http://demo-apollo.hexagongeospatial.com/erdas-iws/ogc/wmts

Supported services include:

- Authenticated web services
- WMS Time parameter



New Data Source

Type ▲


- 3D Map Tiles
- 3D Objects
- Bing Maps
- CSW
- GeoRSS
- Google Maps
- LUWS
- Open Street Map
- OpenLS
- Personal
- Print Service
- WCTS
- WFS
- WFS-G
- WMS
- WMTS
- WPS-CT
- WebMap Publisher

URL:

Image format:

FeatureInfo format:

SLD file:

 [Register and choose layers](#) [Register and display](#)

Public data sources

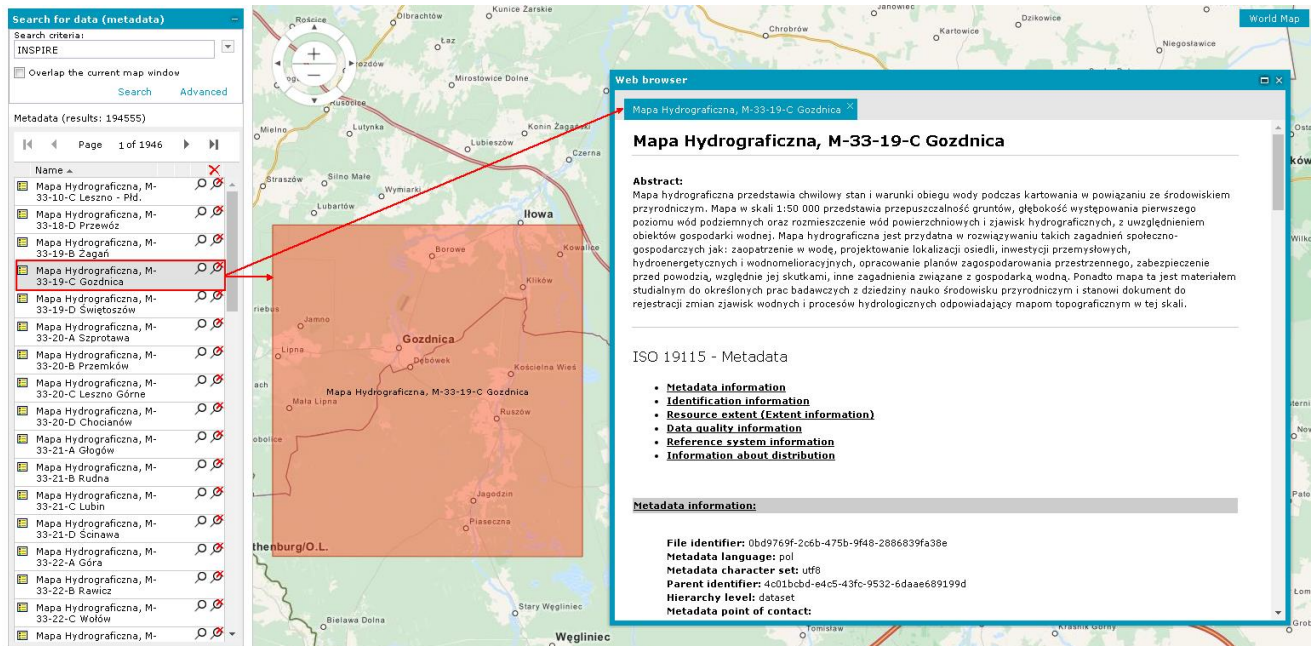
No.	Name	URL
1	World - DEMIS World Map	http://www2.demis.nl/wms/wms.ashx?WMS=WorldMap
2	World - NEO NASA World Obserations	http://neowms.sci.gsfc.nasa.gov/wms...
3	Poland - Administrative Map	http://mapy.geoportal.gov.pl/wss/ser...
4	Poland - Cadastral data	http://mapy.geoportal.gov.pl/wss/ser...
5	Poland - Map of Landscapes	http://mapy.geoportal.gov.pl/wss/ser...
6	Poland - Hydrological Map	http://mapy.geoportal.gov.pl/wss/ser...

The lists of available service types and predefined services can be configured using the administration console.

Search for dataset or service metadata

Geospatial Portal – classic lets you connect to OGC Catalog Service for the Web (CSW) and search for metadata available in a catalog or federated catalogs. Icons designate what type of data is displayed, including for series, service or dataset.

- Add service to map and center map on selected metadata (requires the web service metadata to provide this information)
- Obtain detailed information about discovered metadata
- Search metadata using multiple parameters
- Visualize the range for found metadata on the map



Search for data (metadata)

Search criteria: INSPIRE

Overlap the current map window

Search Advanced

Metadata (results: 194555)

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Name

- Mapa Hydrograficzna, M-33-10-C Leszno - Pld
- Mapa Hydrograficzna, M-33-18-D Przewóz
- Mapa Hydrograficzna, M-33-19-B Zagań
- Mapa Hydrograficzna, M-33-19-C Gozdnica**
- Mapa Hydrograficzna, M-33-19-D Świeżów
- Mapa Hydrograficzna, M-33-20-A Szprotawa
- Mapa Hydrograficzna, M-33-20-B Przemków
- Mapa Hydrograficzna, M-33-20-C Leszno Górne
- Mapa Hydrograficzna, M-33-20-D Chociadów
- Mapa Hydrograficzna, M-33-21-A Głogów
- Mapa Hydrograficzna, M-33-21-B Rudna
- Mapa Hydrograficzna, M-33-21-C Lubin
- Mapa Hydrograficzna, M-33-21-D Ścinawa
- Mapa Hydrograficzna, M-33-22-A Góra
- Mapa Hydrograficzna, M-33-22-B Rawicz
- Mapa Hydrograficzna, M-33-22-C Wólów
- Mapa Hydrograficzna, M-

Web browser

Mapa Hydrograficzna, M-33-19-C Gozdnica

Abstract:

Mapa hydrograficzna przedstawia chwilowy stan i warunki obiegu wody podczas kartowania w powiązaniu ze środowiskiem przyrodniczym. Mapa w skali 1:50 000 przedstawia przepuszczalność gruntów, głębokość występowania pierwszego poziomu wód podziemnych oraz rozmieszczenie wód powierzchniowych i zjawisk hydrograficznych, z uwzględnieniem obiektów gospodarki wodnej. Mapa hydrograficzna jest przydatna w rozwiązywaniu takich zagadnień społeczno-gospodarczych jak: zaopatrzenie w wodę, projektowanie lokalizacji osiedli, inwestycji przemysłowych, hydroenergetycznych i wodnomelioracyjnych, opracowanie planów zagospodarowania przestrzennego, zabezpieczenie przed powodzią, względnie jej skutkami, inne zagadnienia związane z gospodarką wodną. Ponadto mapa ta jest materiałem studialnym do określonych prac badawczych z dziedziny nauki środowiska przyrodniczego i stanowi dokument do rejestracji zmian zjawisk wodnych i procesów hydrologicznych odpowiadający mapom topograficznym w tej skali.

ISO 19115 - Metadata

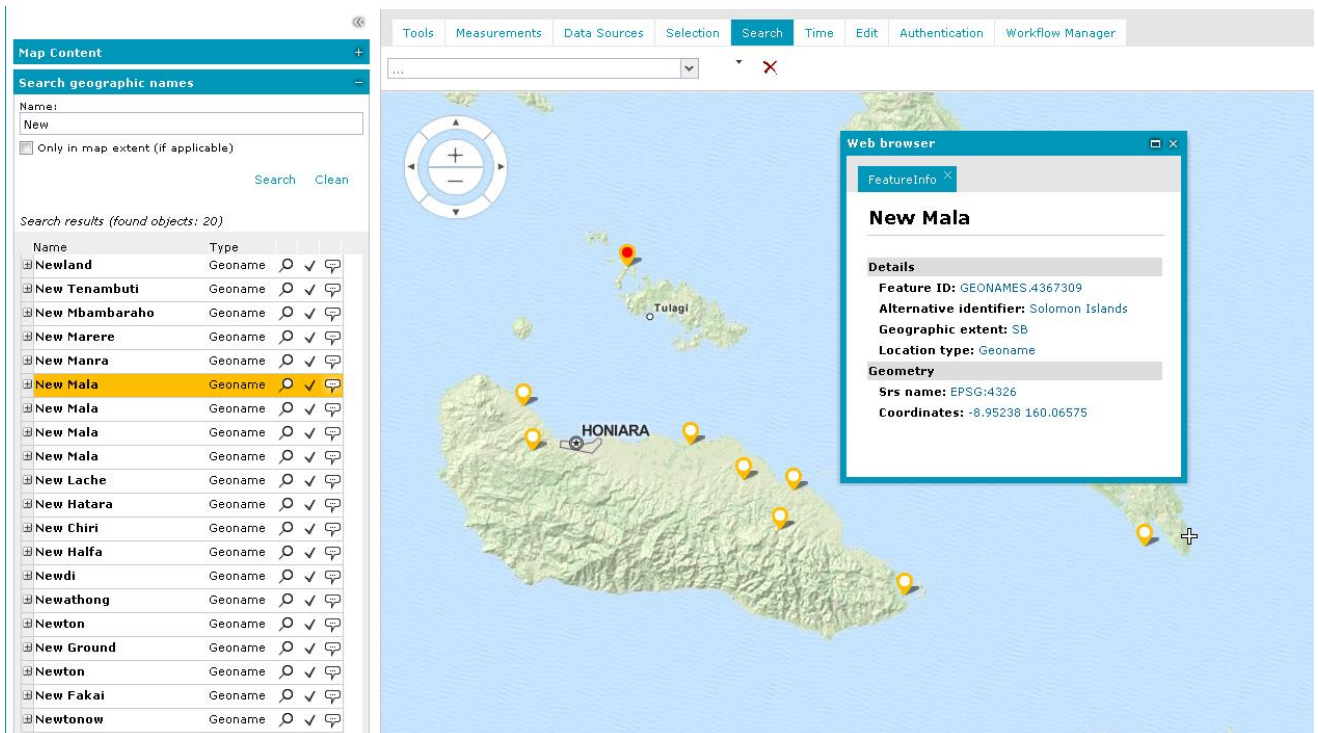
- Metadata information
- Identification information
- Resource extent (Extent information)
- Data quality information
- Reference system information
- Information about distribution

Metadata information:

File identifier: 0bd9769f-2c6b-475b-9f48-2886839fa38e
 Metadata language: pol
 Metadata character set: utf8
 Parent identifier: 4c01bcbd-e4c5-43fc-9532-6daae689199d
 Hierarchy level: dataset
 Metadata point of contact:

Search for geographic names

Connect to WFS-G (Gazetteer) service or services to search geographic objects such as cities, regions and points of interest. See information and the location in the map window for each search result.



Map Content

Search geographic names

Name:

New

Only in map extent (if applicable)

Search Clean

Search results (found objects: 20)

Name	Type	✓	✗
Newland	Geoname	✓	✗
New Tenambuti	Geoname	✓	✗
New Mbambara	Geoname	✓	✗
New Marere	Geoname	✓	✗
New Manra	Geoname	✓	✗
New Mالا	Geoname	✓	✗
New Mالا	Geoname	✓	✗
New Mالا	Geoname	✓	✗
New Mالا	Geoname	✓	✗
New Lache	Geoname	✓	✗
New Hatara	Geoname	✓	✗
New Chiri	Geoname	✓	✗
New Halfa	Geoname	✓	✗
Newdi	Geoname	✓	✗
Newathong	Geoname	✓	✗
Newton	Geoname	✓	✗
New Ground	Geoname	✓	✗
Newton	Geoname	✓	✗
New Fakai	Geoname	✓	✗
Newtonow	Geoname	✓	✗

Web browser

FeatureInfo

New Mالا

Details

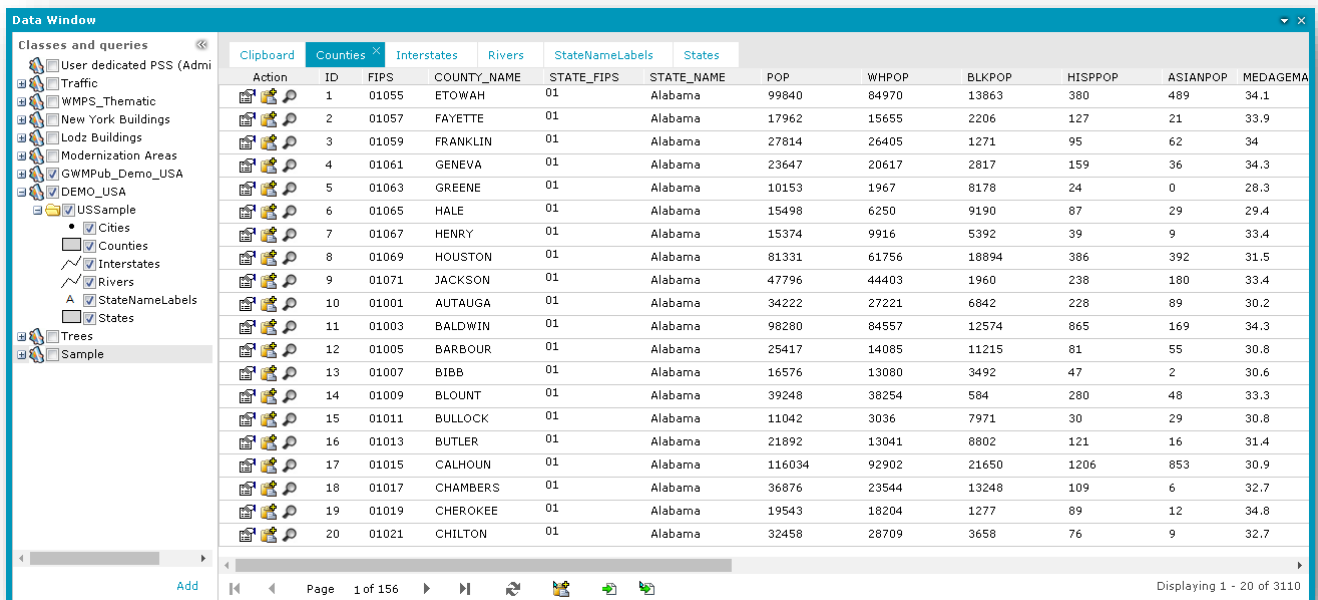
Feature ID: GEONAMES.4367309
 Alternative identifier: Solomon Islands
 Geographic extent: SB
 Location type: Geoname
 Geometry
 Srs name: EPSG:4326
 Coordinates: -8.95238 160.06575

Edit underlying WFS-T or PSS service resource

- Add features to feature classes
- Edit, move, continue and remove geometry
- Insert text on the map at any angle
- Remove selected features from the database
- Snap functionality
- Markers and annotation layers, including add, edit and delete
- Work with WFS-T or Personal Storage Service (PSS), depending on the need

Attribute data

- Display feature classes and attribute values for selected data sources (for example, WMPS, WFS or PSS)



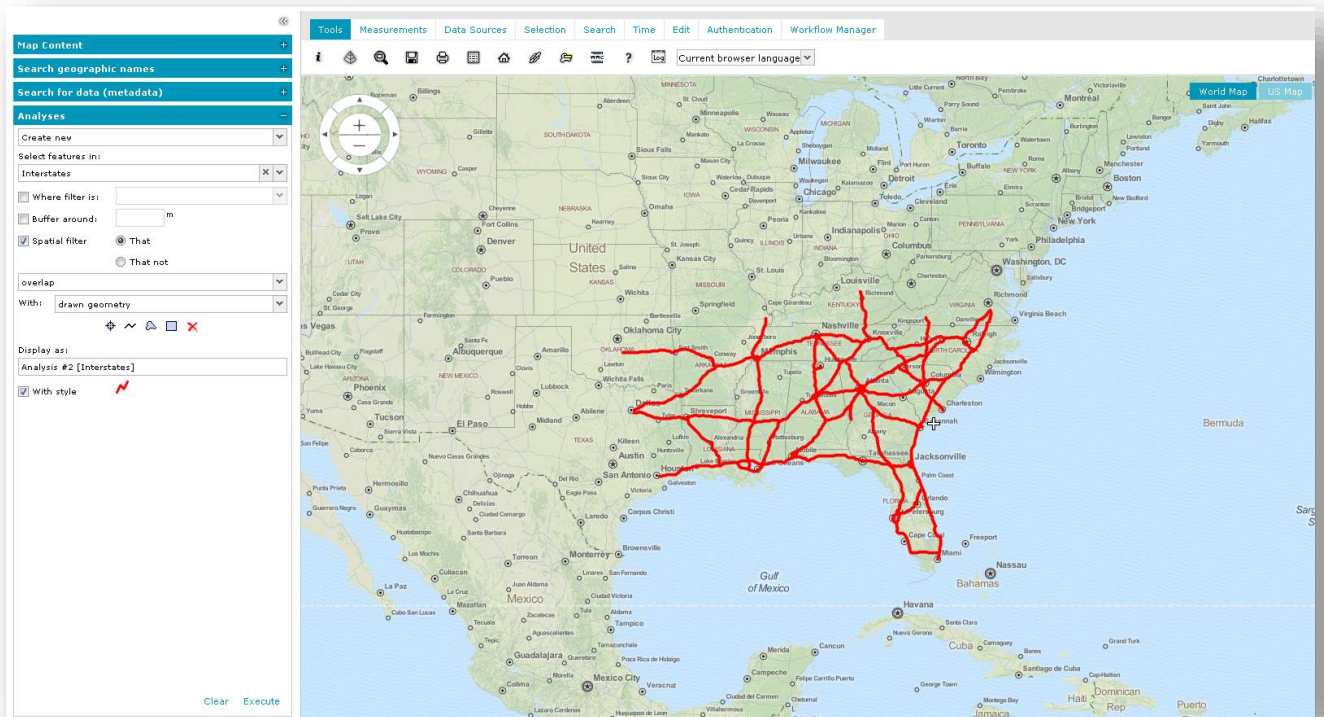
The screenshot shows the 'Data Window' interface with a table of county data for Alabama. The table has columns for Action, ID, FIPS, COUNTY_NAME, STATE_FIPS, STATE_NAME, POP, WHPOP, BLKPOP, HISPPOP, ASIANPOP, and MEDAGEMA. The data is sorted by ID, showing 20 records for Alabama counties.

Action	ID	FIPS	COUNTY_NAME	STATE_FIPS	STATE_NAME	POP	WHPOP	BLKPOP	HISPPOP	ASIANPOP	MEDAGEMA
	1	01055	ETOWAH	01	Alabama	99840	84970	13863	380	489	34.1
	2	01057	FAYETTE	01	Alabama	17962	15655	2206	127	21	33.9
	3	01059	FRANKLIN	01	Alabama	27814	26405	1271	95	62	34
	4	01061	GENEVA	01	Alabama	23647	20617	2817	159	36	34.3
	5	01063	GREENE	01	Alabama	10153	1967	8178	24	0	28.3
	6	01065	HALE	01	Alabama	15498	6250	9190	87	29	29.4
	7	01067	HENRY	01	Alabama	15374	9916	5392	39	9	33.4
	8	01069	HOUSTON	01	Alabama	81331	61756	18894	386	392	31.5
	9	01071	JACKSON	01	Alabama	47796	44403	1960	238	180	33.4
	10	01001	AUTAUGA	01	Alabama	34222	27221	6842	228	89	30.2
	11	01003	BALDWIN	01	Alabama	98280	84557	12574	865	169	34.3
	12	01005	BARBOUR	01	Alabama	25417	14085	11215	81	55	30.8
	13	01007	BIBB	01	Alabama	16576	13080	3492	47	2	30.6
	14	01009	BLOUNT	01	Alabama	39248	38254	584	280	48	33.3
	15	01011	BULLOCK	01	Alabama	11042	3036	7971	30	29	30.8
	16	01013	BUTLER	01	Alabama	21892	13041	8802	121	16	31.4
	17	01015	CALHOUN	01	Alabama	116034	92902	21650	1206	853	30.9
	18	01017	CHAMBERS	01	Alabama	36876	23544	13248	109	6	32.7
	19	01019	CHEROKEE	01	Alabama	19543	18204	1277	89	12	34.8
	20	01021	CHILTON	01	Alabama	32458	28709	3658	76	9	32.7

- Data is presented in tabular form
 - Data Window can contain many tabs with displayed data
 - Data for one feature class is presented on a single tab
 - Data view allows sorting, hiding columns, changing column size and order
- Selecting records in the Data Window automatically highlights the corresponding objects on the map
- Export all or selected features to CSV file

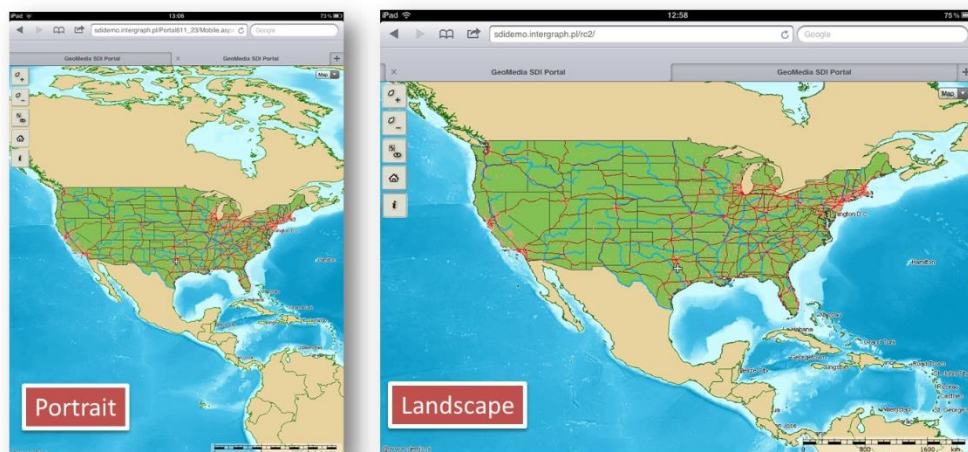
Analysis

Perform a series of attribute or spatial queries on data from selected sources. Set spatial filters or create a buffer. Geospatial Portal uses capabilities of underlying services to enable available query criteria and operations. Query definitions are saved in the Legend and can be reused or modified at any time. Updates to queries are instantaneously updated in the map and data windows.



Mobile devices

Geospatial Portal automatically displays a simplified interface, in either landscape or portrait orientation, when viewed on a mobile device.



On mobile devices, you can:

- Display, zoom and switch predefined maps
- Show feature attributes (GetFeatureInfo)
- Maintain a list of pre-defined maps

- Access the Scale Bar
- Center the map based on device localization capabilities (GPS, A-GPS)
- Use your finger to scroll the map



- Change map scale with zoom buttons or with device-specific gestures, such as pinching the screen
- Find your location on the map



Support for business workflows

When deployed with Hexagon's Workflow Manager, Geospatial Portal can be used to automate and organize the typical workflows of government agencies, utilities companies and enterprise users.

- Run pre-configured workflows with the Workflow Manager
- Combine map-based operations with the steps of business workflows, including map navigation
- Display, edit and select features and attributes

Geospatial Portal

Tools Measurements Data Sources Selection Search Time Edit Authentication Workflow Manager

Area Modernization Green City Planting

Map Content

Layers Data Sources Categories

- ☒ Trees
- ☒ Traffic
- ☒ Modernization Areas
- ☒ LODZ Buildings
- ☒ Open Street Map

Search geographic names +

Search for data (metadata) +

Analyses +

3D Features +

Settings +

Redlining
LODZ TREES

Tree Planting - Google Chrome
demo.hexagongeospatial.com/GMSC/Workflows/Form?workflow=C...
Community Budget 2015 > Personal Data > Tree Planting

Plant a Tree:

Tree Type:

Select Tree Location

© OpenStreetMap contributors

Geospatial Portal

Tools Measurements Data Sources Selection Search Time Edit Authentication Workflow Manager

Area Modernization Green City Planting

Map Content

Layers Data Sources Categories

- ☒ Modernization Areas
- ☒ Trees
- ☒ Traffic
- ☒ LODZ Buildings
- ☒ Open Street Map

Search geographic names +

Search for data (metadata) +

Analyses +

3D Features +

Settings +

MODERNIZATION AREA SELECTION

Select area for modernization

Area Name:

Area Id:

Originator:

Description:

Select Area Next Step

© OpenStreetMap contributors

Workflows can be easily configured and launched from the Geospatial Portal interface. Administration Console lets you add new icons that represent the workflows.

Create a Personal Storage Service (PSS)

Personal Storage Service lets you create a local service in the session into which you collect vector data. You can create feature classes, define attributes, add features, add and edit attribute values and display vector data served by a service in the map and data windows.

Administer instances with the Administration Console

A web-based Administration Console provides the means for creating and configuring all aspects of server-side engines, web services and web applications in a single place. Portal instances (portal applications available under a given web address) can be created, configured and removed. For each portal instance, the following features can be configured:

- Banner image
- Application title (multilingual)
- Existence and order of interface icons available to end users
- Service types available to end users
- Predefined services
- An initial default workspace, including all pre-configured services
- Color theme
- Appearance and behavior of map variants

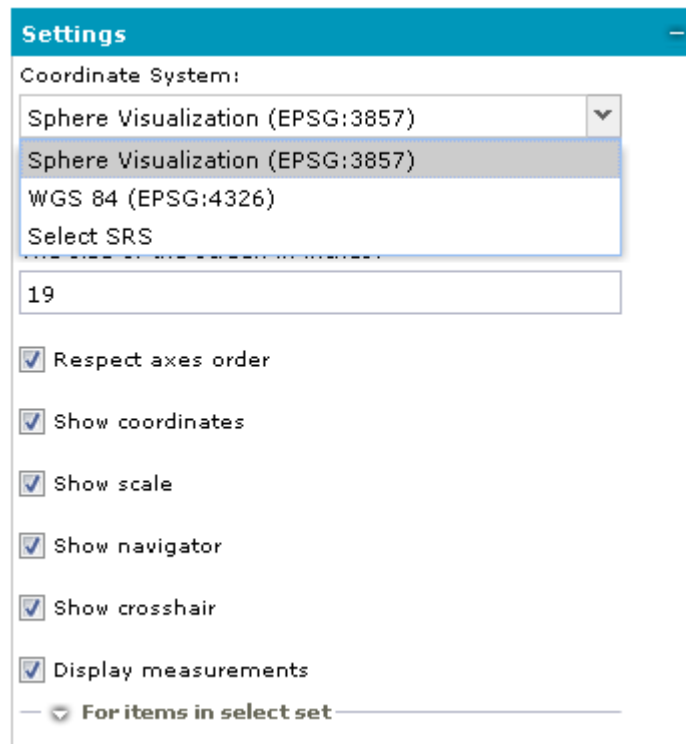
Support user registration and login

Geospatial Portal provides functionality for user registration and login. Registered users have their own profiles (folders on the server) that store user maps.

User-defined settings

Options in the settings tab let you:

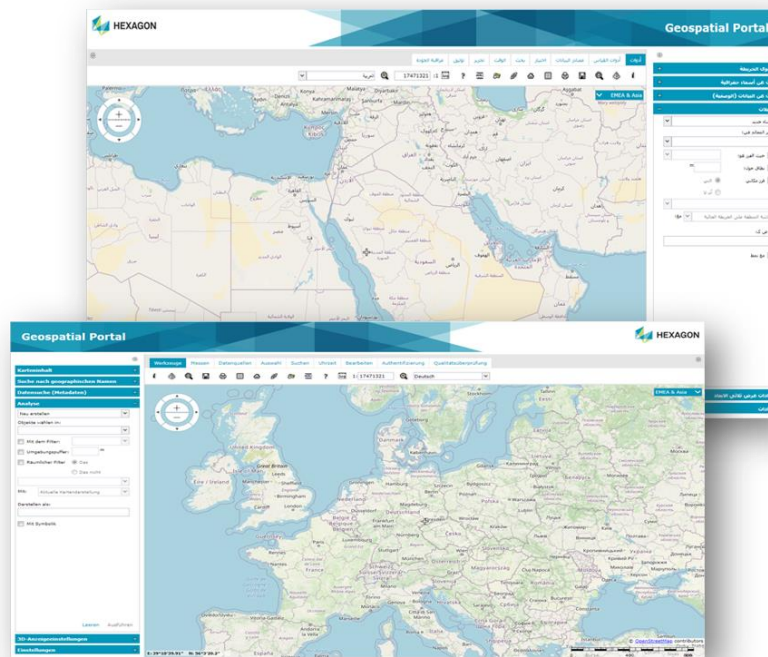
- Change the coordinate system
 - Administrator pre-defines the list of available coordinate systems
 - Map ranges are recalculated when coordinate system is changed



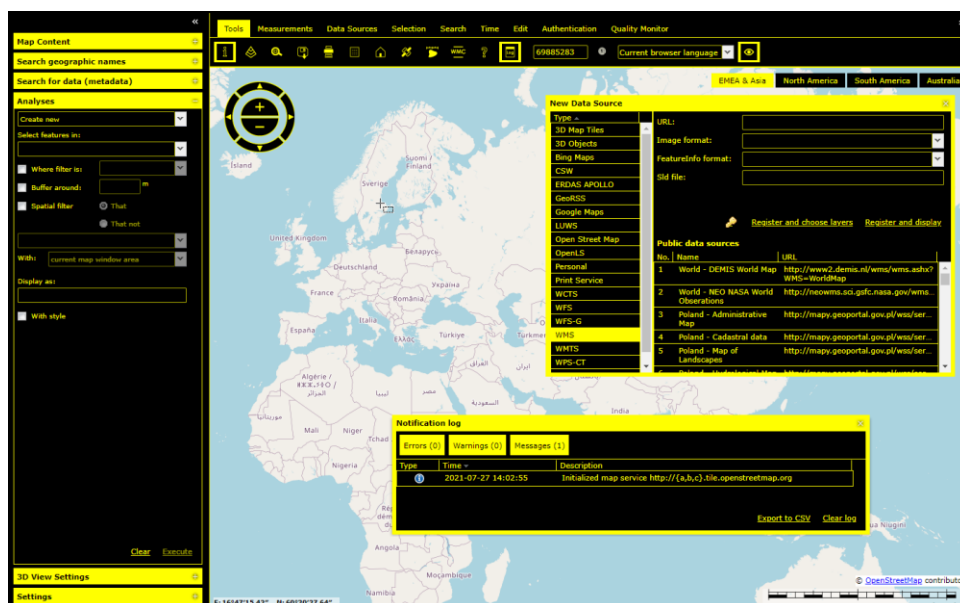
- Change screen size
- Toggle on/off:
 - Axes order
 - Coordinates visibility
 - Scale bar visibility
 - Navigator visibility
 - Cross-hair indicating map center
- Customize the view in the browser window, such as hiding elements of Geospatial Portal to give you more map window area

Easily accessible multilingual layouts

- Select language from a dropdown list (if available, Geospatial Portal automatically starts in the default user's web browser language).
- LTR (left to right) and RTL (right to left) languages are supported. Geospatial Portal layouts adapts to the currently chosen language automatically. The display of the controls for the layout is changed, and the text is aligned to the right or left.



- Adjust font size: Three font sizes are available. Adjust the font size by pressing one dedicated button.
- High contrast mode: Designed in accordance with W3C Web Accessibility Initiative (WAI) guidelines and standards, the high contrast mode is very useful to people with disabilities



Follow OGC specifications

Geospatial Portal works in accordance with OGC discovery, view, download and transformation services. It supports the following OGC/ISO specifications:

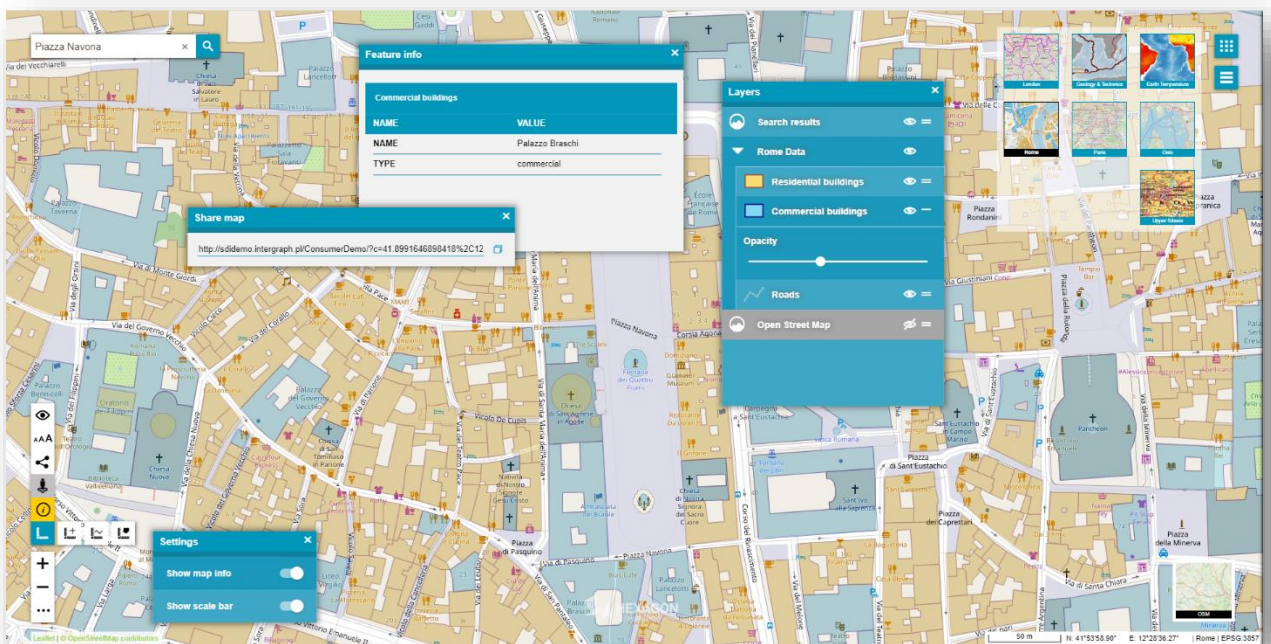
- WMS 1.1.1, 1.3.0 (time dimension)
- WMTS 1.0.0
- WFS 1.1.0, 2.0.0
- WFS(T) 1.1.0, 2.0.0
- WFS(G) 1.0
- CSW 2.0.2, ISO AP 1.0
- WCTS 0.3.0
- OpenLS [OLS] 1.1
- WMC 1.1
- GeoRSS
- FE 1.1.0, 2.0.0
- GML 3.2.1

Cloud deployment

All Geospatial server products can be deployed in the cloud (via Amazon EC2).

Geospatial Portal: consumer layout

The Geospatial Portal – consumer layout is a user-friendly, entry-level layout for non-professional consumers of geospatial data. You can use maps for discovery and visualization with minimal effort. Optimized for performance and user experience, Geospatial Portal – Consumer takes advantage of the most up-to-date web technologies and standards.



Geospatial Portal – consumer provides smooth and intuitive navigation on ubiquitous touchscreens. The technology framework behind Geospatial Portal – consumer, including CSS3 and HTML5, remains consistent across the broader Hexagon mobile story, which is crucial to homogeneity of configuration and deployment.

Geospatial Portal – consumer offers a high level of usability across desktops, laptops, tablets and mobile phones — anywhere modern web browsers are supported.

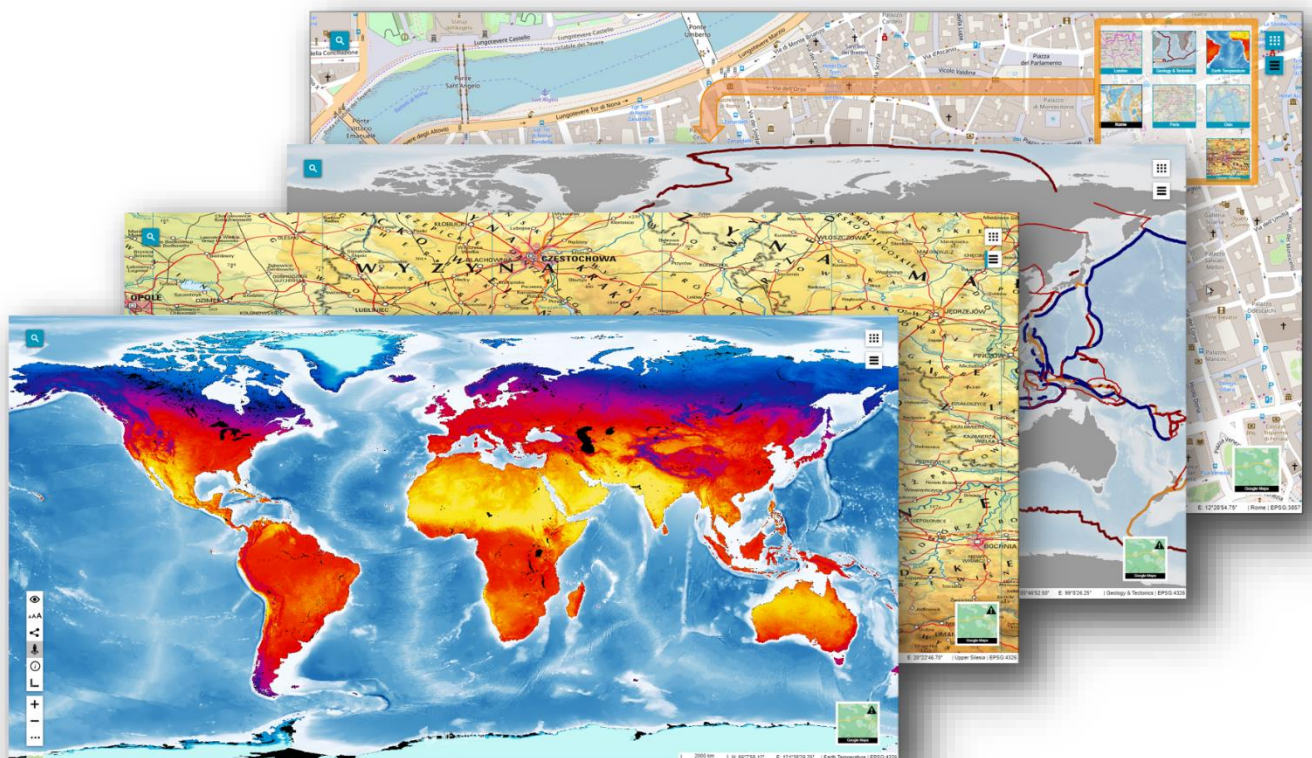
Configuration of Geospatial Portal – consumer is done via the web-based Administration Console. Both pre-configured maps and search sources can be easily configured without any need for programming. Direct access to Oracle and support for GeoMedia data warehouses make the search easy to configure and very powerful.

Key features

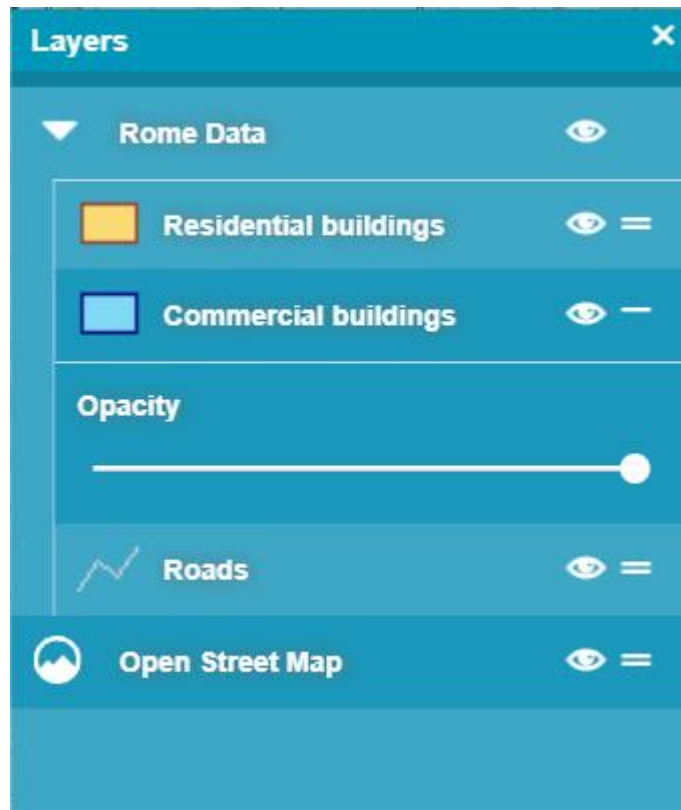
Display and navigate map compositions

Geospatial Portal – consumer displays both raster datasets published through WMS, WMPS or WMTS services and vector feature classes published through WFS. WFS service is offered in GeoMedia WebMap.

Users can define several map compositions and smoothly switch between a set of pre-configured maps. The active map composition is highlighted in Geospatial Portal – consumer.



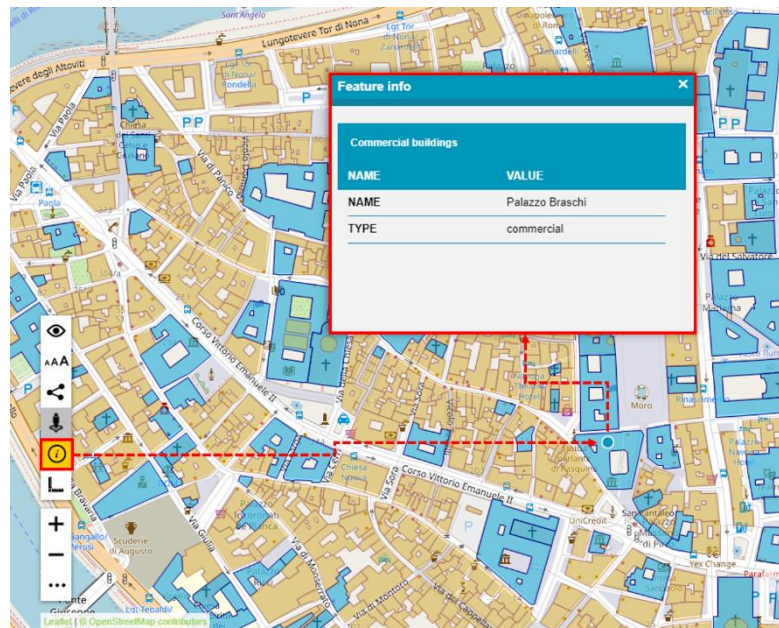
In the menu, available layers are listed, grouped under the name of the service the layers come from. Users can change the layer order within the group by dragging and dropping an individual layer, switch a layer on or off or modify a layer's opacity for optimal map display.



Feature information

The Feature Info dialog in Geospatial Portal – consumer layout displays information about features portrayed on the map.

When using the Feature Info dialog in Geospatial Portal – consumer, the tooltip showing available layers for the feature area appears. After selecting the layer, the Feature Info dialog opens immediately. Because the Feature Info dialog is floating (not modal), users can keep it open continuously while simultaneously navigating map layers, performing measurements and more.



Measurements in Geospatial Portal – consumer

Users can perform basic measurements, such as gathering point coordinates or calculating the distance between two locations. Measurement tools – Measure Point, Measure Line and Measure Area – are accessible by clicking the Measurement button in the left toolbox.

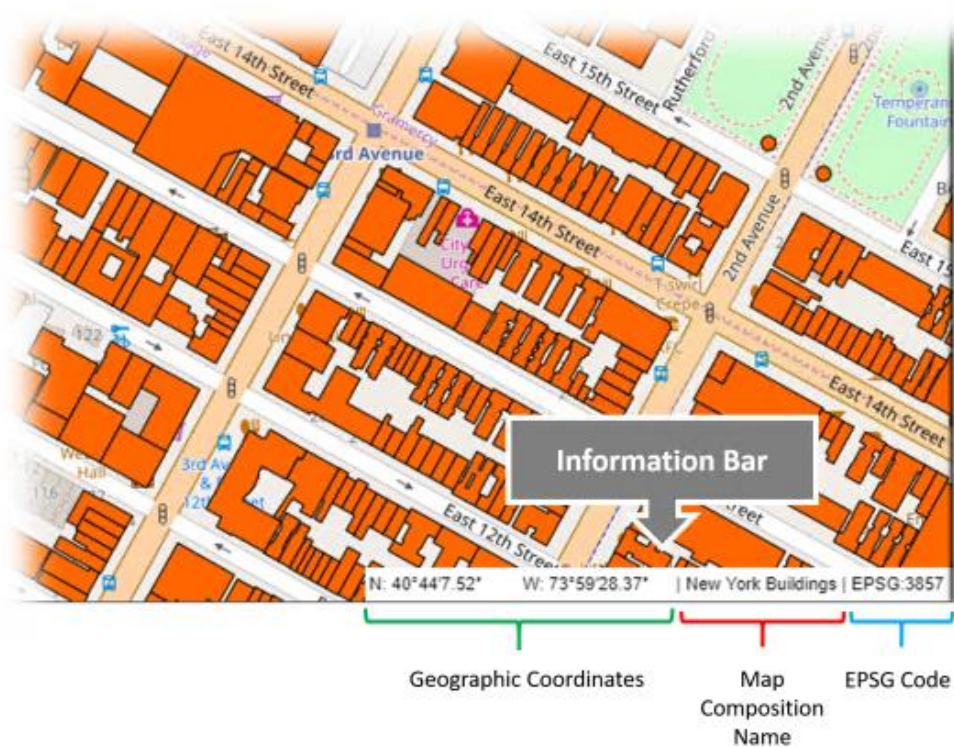
The measurement results are displayed the map over the measured feature.



Information Bar in Geospatial Portal – consumer

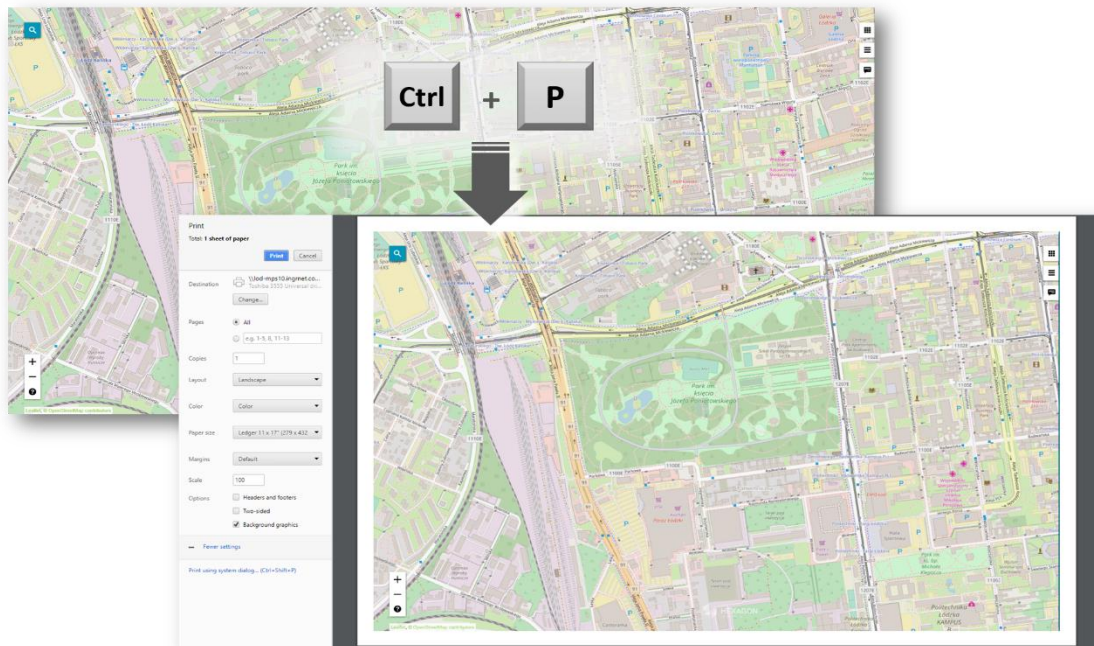
The Information Bar provides geographic information for the current cursor position in a map window. Displayed in the bottom right corner in the application, the Information Bar shows:

- Geographic latitude and longitude
- Name of the active Map Composition
- Coordinate system EPSG code of the current map



Easy printing

Maps can be printed using the standard browser print facilities. Use the Ctrl+P keyboard combination to quickly print the map currently displayed in Geospatial Portal – consumer layout.

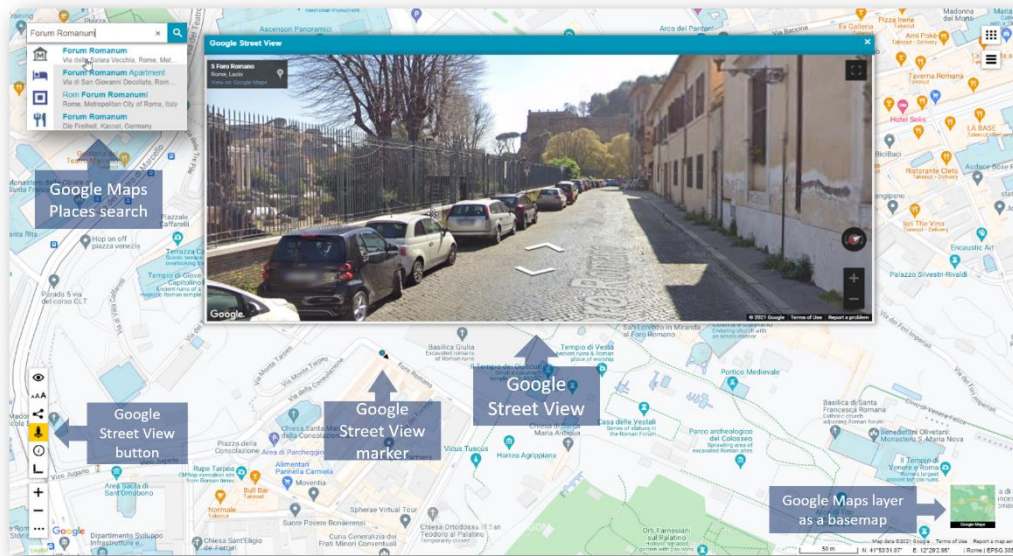


Integration with Google Map services

It is possible to view Google Maps and explore Google Street View in Geospatial Portal – consumer layout. The Google Maps layer configured with Consumer Portal can be used as a base map and/or a standard layer added to the legend. Users (for both base map and standard layer) can choose the map type: roadmap, hybrid, traffic, satellite or terrain.

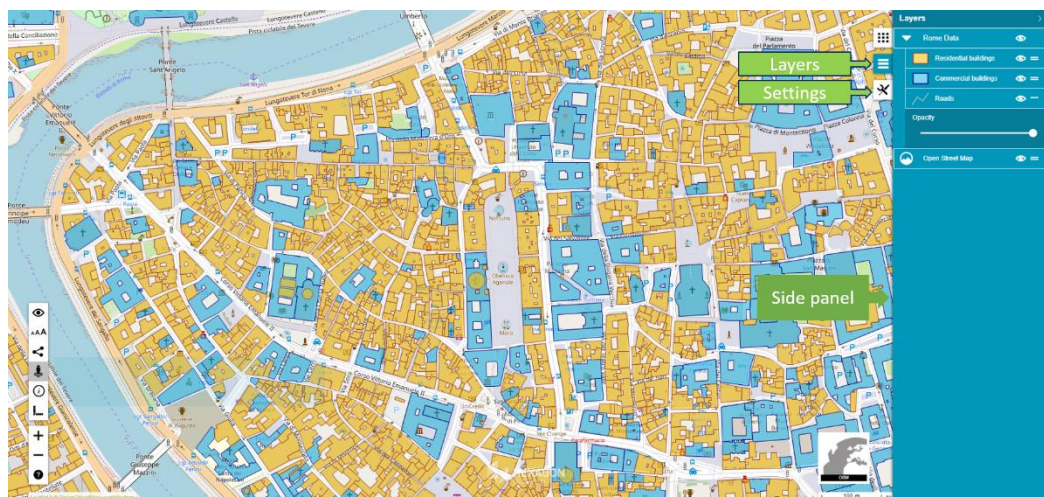
Exploring the Google Street View in consumer layout is intuitive and uses well-known Google Street View native functionality. The Google Street View mode is available in a floating and resizable pop-up window. The marker on the map shows your location and view direction and follows the position when you move in the Street View.

With integrated Google Search service, Consumer Portal users can search a POI or address by using the standard Consumer Portal search control. Pins with the locations of searched objects appear on the map.



Two Consumer Portal layouts

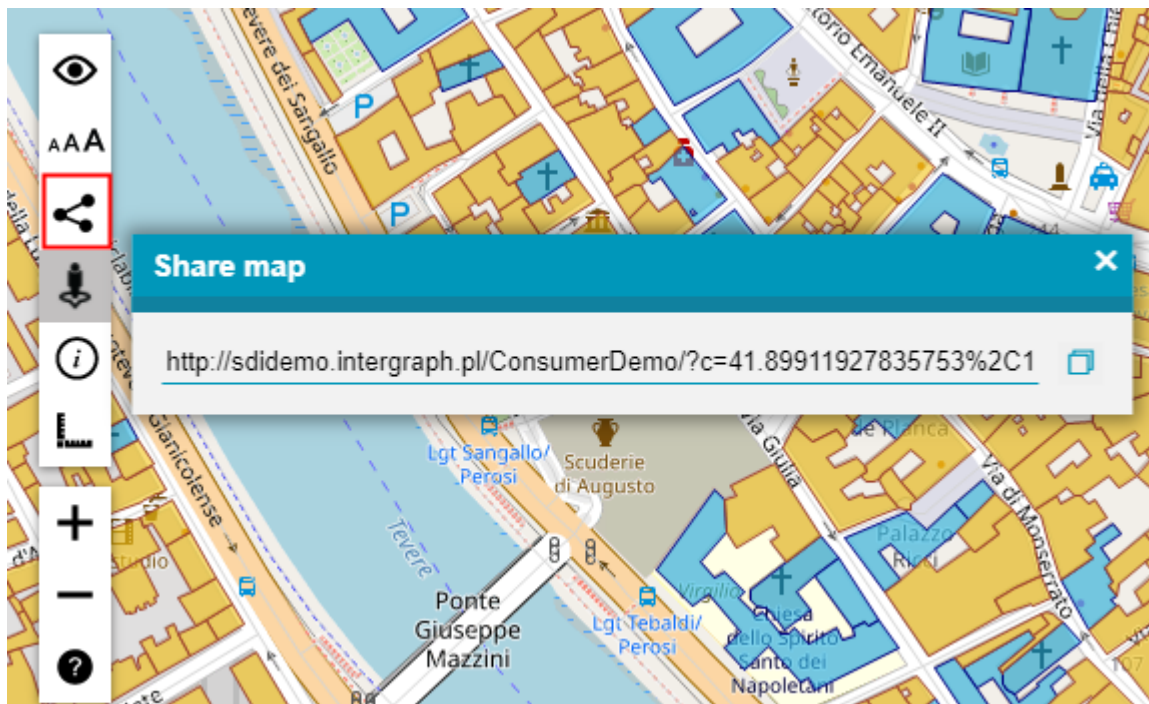
- Window (default):
 - All windows are modal and floating
 - All windows are resizable.
 - The position of the floating windows is retained
- Panel
 - Settings and Layers dialogs are displayed in the sidebar panel



Share map

Copy the URL and share the current map composition. A shared map preserves all its properties, including:

- Current map composition
- Layer settings
- The selected base map
- The map range and scale



Search

POI and Addresses – search for interesting objects or addresses. The following search engines are supported:

- Google Search (requires registering of Google API Key)
- LUWS (Location Utility Web Service): Uses geocoding to determine the position and address of an object (POI). With LUWS, users can search addresses, points of interest, cadastral data or any defined geospatial objects. LUWS service is provided within the GeoMedia WebMap product.
- Oracle and WMPs database: Define search in Administration Console by using the Search Configuration wizard
- Coordinates: The built-in coordinate search allows users to type coordinates in Decimal Degrees format (DD.ddddd; e.g., **51.23456 21.78654**) or Degrees, Minutes, Decimal Seconds (DMS; e.g., **51° 14' 4.42" N 21° 47' 11.54" E**). The coordinate separator can be a space or comma. To determine the direction, you can provide cardinals or type a minus character for West and South (e.g., **34.23456S 61.78654W** or **-34.23456 -61.78654**).

3D display

In addition to the traditional 2D map display in Geospatial Portal – consumer, you can also view data in 3D. Geospatial Portal – consumer displays a base map on a three-dimensional globe and renders other supported data sources where appropriate. With 3D objects being displayed in Geospatial Portal – consumer, you can see how the shadows cast by objects at a given latitude and longitude are changing during the day and during seasons throughout the year.



Display extruded data in Geospatial Portal – consumer

In Geospatial Portal – classic, users can extrude two-dimensional vector features and view them in 3D scenes. Now users can view 3D scenes with extruded features in Geospatial Portal – consumer as well. The highlight style for selectable WFS objects is customizable.



Dedicated mobile app for Geospatial Portal – consumer

Based on Hexagon's Mobile SDK, a touch-friendly GeoMedia WebMap Mobile application is available out of the box. The app displays 2D Consumer layout maps that can be accessed through either a URL or QR Code. The app is available for iOS, Android and Windows mobile platforms.

Features include:

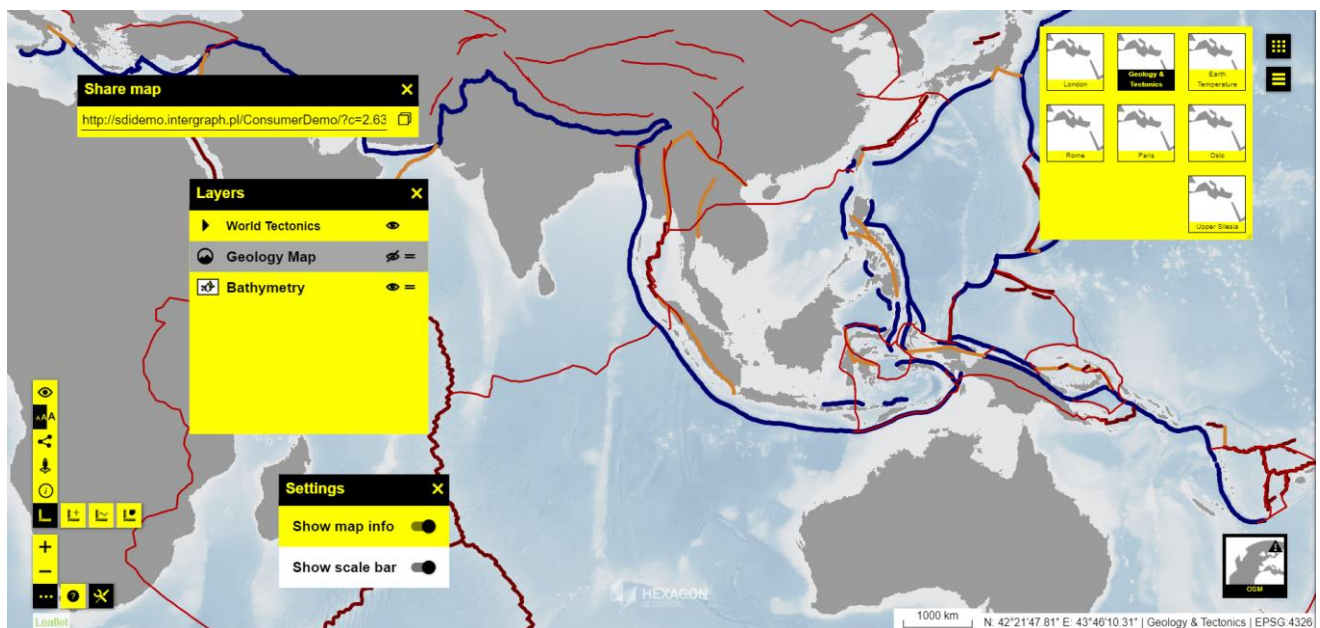
- Display pre-defined maps
- Turn on/off layers, change opacity for a specific layer
- Locate yourself on the map
- Search features on the map
- Retrieve selected feature information
- Use QR Code reader to scan QR Codes associated with Consumer layout to access the map
- Support for operating systems (both tablets and smartphones):
 - iOS, version 12 or later
 - Android, version 5 or later
 - Windows, version 10

Auto optimization of Consumer Portal layout

Consumer Portal layout is automatically optimized to the web browser in which it is launched. The GUI elements adapt to the screen size and layout (e.g., the base map switcher or map info bar is displayed horizontally or vertically.) The thumbnail size also changes slightly also if needed. Consumer Portal detects web browser type (mobile and desktop.) Since using the new Window layout on mobile devices may be a bit uncomfortable for users, the Panel layout is always applied when Consumer Portal is displayed on mobile devices, even if the new Window layout is set for given instance in Administration Console.

WAI Design

- High contrast mode: Designed in accordance with W3C Web Accessibility Initiative (WAI) guidelines and standards, the high contrast mode is very useful to people with disabilities
- Adjustable font size: Three font sizes are available. Adjust the font size by pressing one dedicated button.





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About Hexagon

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.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2bn EUR. Learn more at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).