

**Release Guide** 

# **Release Guide**

WebGIS 2022 WebGIS 2022 Update 1

Version 16.7 Version 16.7.1 21 July 2021



# Contents

Release Guide	1
WebGIS 2022	1
WebGIS 2022 Update 1	1
About This Release	6
GeoMedia WebMap	6
Geospatial Portal	6
Geospatial SDI	6
New Technology (16.7)	7
GeoMedia WebMap	7
INSPIRE-Ready Services and Enhanced Metadata Editor	7
OGC WFS 2.0 Conformance	7
GeoMedia WebMap Mobile and Mobile Publisher	8
GeoMedia WebMap Publisher Portal Redesigned/UX Improvements	8
Instructions Note for Work (with Markdown) in GeoMedia WebMap Mobile	10
Easy Configuration of Searchables	11
Easy Zones Application	12
Tasks and Works Lifecycle Monitoring	13
Snapping in Mobile App	15
Generate ID for Related Features	16
GPS Data Storage in the Added Features	17
Enhanced Display of GPS Location	18
Localized GeoMedia WebMap Mobile app	19
GeoMedia WebMap Mobile App as Consumer Portal Client	20
Quick Configuration Access with QR Code Scanning	21
Dashboard View	22
Geocoding Configuration for the Dashboard Feature	23
Integration with Google Services	24
Google Base Map for GeoMedia WebMap Mobile	25
Enhanced GeoPackage Creation – Zoom Level and Quality for Raster	26
Better Control of the Offline Data Synchronization Process for Users of the Mobile	App27



	Geometry Limitation Notification for Users	28
	Address History for GeoMedia WebMap Mobile Start Screen	29
	Display Feature Class Name in Feature Info Header of GeoMedia WebMap Mobile	30
	Enhanced Offline Mode	31
	Auto-Configured Primary Key	33
	Auto-fill Values for Different Data Types	34
	Default Values	35
	Enhanced Display of Media Files	36
	Remote Server Connection to the Mobile Backend	37
	Enabled Multiple Connections (Handling Several Sources)	38
	Handle Multiple Map Windows and Assign Works with a Map Window	39
	Use Map Window Bounding Box (BBOX) as a Default	40
	Quick Start Guides in Mobile Publisher	41
	Picture Style Support for the Point Feature Class	42
	Honoring WFS/WMS Legend Entries' Locatability in GeoMedia WebMap Mobile	43
	New Base Maps (Here Maps/Bing Maps/Google Maps)	44
	Display of GPS Accuracy in GeoMedia WebMap Mobile App	45
G	eospatial Portal and Consumer Portal	46
	Redesigned and Refreshed Consumer Portal UI	46
	Smart Optimalization of Consumer Portal Layout	47
	New Map Composition Switcher	48
	Improved Measurements UI in Consumer	49
	Share Map	50
	LUWS Search Configuration for Consumer Portal	51
	Search for Coordinates in Consumer Portal	52
	Base Maps in Consumer Portal	53
	Integration of Google Maps and Consumer Portal	54
	Disable Unavailable Elements (Search, Go to My Location)	56
	New Display Settings for Consumer Portal and Improved Legend Entry Behavior	57
	Preserve Legend Settings Between Map Composition Switches	59
	Consistent Mechanism of Scale Bounds Handling for WMS, WMTS, and WMPS	59
	Allow Display of Long Layer Names in Consumer Portal	
	High Contrast Mode and Font Size Change (WAI Design)	



Easier Registration of Google Maps API key for Portals	62
Auto Adaptation of the Portal Layout to RTL Languages	63
New Print Engine Support in Geospatial Portal	64
Ability to Connect to Secured WFSG Services in Geospatial Portal	65
Improved UX for Switching Map Variants in Geospatial Portal Layouts	66
Remove all Connections and Clear Workspace with One Command in Geospatial Portal	67
Using Consumer Portal SDK: Dynamically Refreshed Content	68
Geospatial SDI	69
OGC WFS and WCS 2.0 Façade Conformance	69
INSPIRE-Ready and Enhanced Metadata Editor	69
Administration Console: GeoMedia WebMap, Geospatial Portal, Geospatial SDI	70
Manage Multiple Instances with Administration Console	70
New Technology (16.7.1)	71
GeoMedia WebMap	71
Managing instances with Administration Console command line interface	71
Publish and handle multiple WMS styles	72
GeoJSON output format for GeoMedia WebMap WMS Feature Info response	73
GeoMedia WebMap Mobile and Mobile Publisher	74
Enhanced zone assignment	74
Turn on/off Google Search for Google Base Map in Mobile Publisher work	76
Enhanced UI of WebMap Mobile Publisher for bulk configuration changes	77
Improved search configuration UI in WebMap Mobile Publisher	78
Snapping in geometry edition	79
Adjustable tap tolerance	80
Copying of read-only attributes to clipboard	81
Grouping of feature actions button	82
Notification about feature unavailability	82
Language selection	83
Visual enhancements of user interface	84
Synchronization user experience improvements	85
Select cache type (raster/vector) on clearance in GeoMedia WebMap Mobile app	89
Filter Works in GeoMedia WebMap Mobile App	90
Geospatial Portal and Consumer Portal	91



Google Street View in Geospatial Portal	91
Google Search Places in Geospatial Portal	92
Hot swapping capabilities to LUWS	93
Manage WMS Feature Info format in Geospatial Portal	94
Consumer Portal Feature Info enhancements	95
Ability to run Feature Info and Street View simultaneously in Consumer	98
Remember sizes and positions of Consumer Portal windows	99
Customize starting map range in Consumer Portal	100
Dedicated window for legend hover	101
Map printouts with Consumer Portal legend graphics	102
Slight visual enhancements in Consumer Portal	103
New warning notification in Consumer	103
Enhanced APOLLO catalogue browsing in Geospatial Portal	104
Portal SDK: Workspace update from API	105
Consumer Portal SDK: New code examples and features to customize Consume layout and its behavior	
Administration Console	108
Prevent sending unsupported searchable to Consumer Portal instances	108
Improvements on LUWS Search Configuration and usage.	109
Information about instance version	111
System Requirements	112
GeoMedia WebMap	
Geospatial Portal	
Geospatial SDI	116
Issues resolved (16.7)	119
Geospatial Server 2022	119
GeoMedia WebMap, Geospatial SDI, Geospatial Portal	119
Issues resolved (16.7.1)	126
Geospatial Server 2022 Update 1	126
GeoMedia WebMap, Geospatial SDI, Geospatial Portal	126
About Hexagon	127



# **About This Release**

This document describes the enhancements for WebGIS 2022 products, including GeoMedia WebMap 2022, Geospatial Portal 2022, and Geospatial SDI 2022.

This release includes both enhancements and fixes. For information on enhancements, see the New Technology section. For information on fixes that were made to the WebGIS products for this release, see the Issues Resolved section.

This document is only an overview and does not provide all the details about the product's capabilities. See the online help and other documents provided with the WebGIS products for more information.

# GeoMedia WebMap

GeoMedia WebMap supports a broad range of customers that require visualization and examination of geographic data on the web. From easily creating standards-compliant web services to providing sophisticated visualization and analysis within interactive web mapping applications, GeoMedia WebMap builds powerful solutions for sharing your organization's rich geospatial data.

# **Geospatial Portal**

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

# **Geospatial SDI**

Geospatial SDI is an interoperable and scalable component of spatial data infrastructure for cataloging and delivering enterprise geospatial data over the web. It is designed for data providers who need to manage and serve secure or licensed information using standards-based web services. It offers powerful tools for controlled access to standards-compliant services and data published by those services, as well as tools for monitoring and reporting service performance. The product adheres to Open Geospatial Consortium (OGC<sup>®</sup>), INSPIRE, and International Standards Organization (ISO) standards for web services and metadata compliance. Geospatial SDI can easily extend solutions based on GeoMedia<sup>®</sup> WebMap, ERDAS<sup>®</sup> APOLLO, or any other vendor's OGC-compliant product to assure the full set of services required for implementation of custom secure Spatial Data Infrastructure (SDI).



# New Technology (16.7)

GeoMedia WebMap

**INSPIRE-Ready Services and Enhanced Metadata Editor** 

GeoMedia WebMap services have been adjusted to meet the most recent INSPIRE Directive technical specifications. The INSPIRE technical guidance for view services, download services, discovery services, and coordinate transformation services were followed and implemented.

#### OGC WFS 2.0 Conformance

Web Feature Service delivered with GeoMedia WebMap follows the OGC 2.0 International Standard. The OpenGIS Web Feature Service 2.0 Interface Standard (also ISO 19142) has been implemented for Simple WFS, Basic WFS, Spatial Filter, and Transactional WFS conformance classes.



# GeoMedia WebMap Mobile and Mobile Publisher

#### GeoMedia WebMap Publisher Portal Redesigned/UX Improvements

GeoMedia WebMap Mobile Publisher has been redesigned to make the creation and management of mobile configurations even more intuitive and the entire Work management process more organized.

Most changes concern the **New/Edit** Work window where the administrator mainly creates and manages privileges to data and application components for users. It is also here that he monitors and manages the Work lifecycle. On the left side of the window are now grouped general options such as **Work name**, user assignment, **Dashboard** enablement, and **Offline** configuration mode. The completely new option here is **Type**. This option allows you to specify whether a given Work is of the **task** type (new) or **general**, as it was before 16.7 (the general Works do not support Work life cycle management).

The **Description** option is also new in the **New/Edit Works** dialog. It gives administrators the ability to turn on or off the display of Work description in the app. The Work description presented to users (with or without a todo list) can be prepared on the new **Description** tab.

There are also two new tabs in the **New/Edit Work** dialog: **Map Content** and **Description**. The already mentioned **Description** tab is used to prepare the Work description, which is a new feature of release 16.7.

The **Map Contents** tab contains all the (well-known) controls necessary to prepare the configuration, which is closely related to the GeoMedia Desktop map window on which the configuration is built. It includes base maps, zones, a list of features and their attributes available to users, and more setting options (e.g., searchable).

	File	er lame					tatus		▼ Us	0.7		. 98
		ame				] 3	tatus		<b>•</b> ] 05	27		
			Name		State	JS		User				
		Richard's Work			N/A		Ric	hard Kosinsky		-	Properties	Clone
		James' Work			N/A		Jan	nes Smith		-	Properties	Clone
fork												×
Richard's Work	Map Conten	t Description										
General	Map Windo	w* MapWindow1								•		
Richard Kosinsky	"Base Map"									-	Options	
ription T	Zones	There are no zones	avalable Please	innert facturer	in "Zanas" fa	atura alaa					Select	
ffline	- Loosed Co	,	avaliable. Tiease,	insert reactives	sin zones re						Delect	
nsampling		Legend Entry	Searchable	Zones	Include	Create	Delete	Geometry Update	Attributes	Displa	N .	Close
		Recreational_Area			🗆			Opdate	Update	<b>V</b>	Attributes	
ashboard		Transportation_Terminal			🔽				~	V	Attributes	
oding None 💌		Highway		🔳	🔽			1	~		Attributes	
User* Descripti	Richard Kosinsk		he water supply n	etwork in the 3	Brd district.							
C Offin	e											
Downsar	npling vel Low (17)	<u> </u>										
	board											
		- ToDo										
Zoom Le	ng None											
Zoom Le	ng None Manag											
Zoom Le		Task		tency								
Zoom Le		Task	k infrastructure pa k the operation of		er							
Zoom Le		Task	k infrastructure pa		er							
Zoom Le		Task Chec	k infrastructure pa		er							
Zoom Le		Task Chec L	k infrastructure pa		er							
Zoom Le		Task Chec L	k infrastructure pa		er							DK v Canc



Improvements have also been made to the **Works** dialog. The new **Filter** panel in the Works list can be used to categorize and sort Works by Work name (or its part), Work status, or User assigned. Moreover, now you can:

- Select multiple items in the grid (all, selected, one, none) by using the Shift or Ctrl key.
- Add new Work to the list and open its properties dialog with one (button) click.
- Remove Users and Works in bulk.

Protection against the accidental deletion of a User or Work has been introduced, so the operation must always be confirmed.

Works											×			
Filter														
Dist	trict				N/A		•	Peter Gab	iel	- 9	8			
		Name	×	Status	✓ N/A		^			1				
•	West District			N/A	□ New	r			Properties	Clone				
	South Distric	t Works		N/A	🗆 In Pi	rogress			Properties	Clone	,			
	North District	1		N/A	🗆 Don	e			Properties	Clone	,			
	East District	Works		N/A	🗌 Upd	ated			Properties	Clone				
				N/A	C Reie	cted	~	<b>+</b>						
		Works					Stat	205		User			-	×
							1			,				
			Nam ast District Works	ie		Status N/A		Peter Gab	User		Prope	artice	Cla	ne
			est District Works			N/A		Peter Gab			Prope			ne
			dustrial Zone Works			N/A		Peter Gab			Prope			one
								Peter Gab						one
			outh District Works			N/A		Feler Gab	nei		Prope	aues		
		•				N/A				•				
<b>⊕</b> >	×					Warning     Works will b     Do you want     Yes	e dele	ted.	×					
		₩Χ									Si	ave	CI	ose

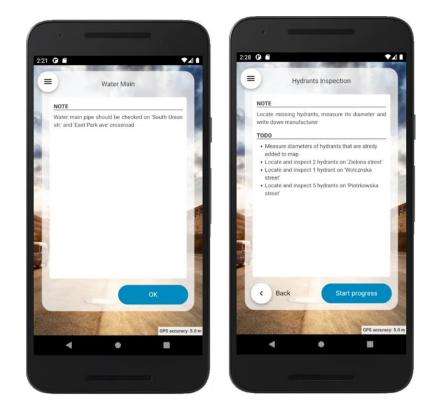


#### Instructions Note for Work (with Markdown) in GeoMedia WebMap Mobile

The administrator can write a short description of the Work and prepare the task list to be displayed in the app. The description and the to-do list are presented to the user when he starts the Work. The user, working with the mobile app, can view the description and checklist later at any time to simply make sure that his job is done as planned. This improves the communication between the fieldworker and dispatcher.

In GeoMedia WebMap Mobile Publisher, the new **Description** tab was introduced in the **New/Edit Work** dialog where the administrator can prepare the description and/or list of tasks. The description is saved with the Work definition and can be disabled/enabled for the user at any time by switching the **Description** option on/off. The description text can be formatted by using the syntax of simple, easy-to-use, and popular Markdown language.

Now mobile app users will always know what to do in the field, even when the internet connection is lost.





#### Easy Configuration of Searchables

Users of the GeoMedia WebMap Mobile app can easily and quickly search for objects from defined data sources. The administrator decides and defines which feature class objects are searchable. Now the configuration process is quick and easy without the need for manual editing of the JSON file with complicated structure.

For each searchable feature class, it is possible to define search attributes and display the name (attribute) for the search results. The administrator simply selects the legend entries and attributes by using the checkboxes in the New/Edit Work dialog. Finally, the searchable configuration is validated on the fly when the work is being saved.

ame* Demo	Map Content	Description									
	Map Window	MapWindow1								•	
	Base Map*	Open Street Map								•	Options
Offline	Zones										Select
	- Legend Entri	ies									
		egend Entry	Search	able I	Include	Create	Delete	Geometry Update	Attributes Update	Display	
	_	ecreational_Area	<b>v</b>		7	•	•	V	V	~	Attributes
Dashboard	Tra	ansportation_Terminal	<b>v</b>		~						Attributes
-	⊻ ► Hi	ghway	<b>v</b>		<b>v</b>			✓		•	Attributes
Manage	Ra	ailroad	<b>₽</b>		Ъ.			•	✓		Attributes
		ater_Linear	<b>□</b>		<b>v</b>			<b>V</b>	•		Attributes
		rport	<b>V</b>			P L	•		~		Attributes
	Ma	ajor_Water			•			~			Attributes
			Configure Searchat					ansporta on_Termir	tion_Term	iinal	×
_		-		le name	•		portati			inal	
_		-	Searchat Display I	le name lame	•	Trans NAMI	portati E	on_Termir	nal		→ Lancel
-		-	Searchal Display I	le name	•	Trans NAMI	portati E play Na	on_Termir	nal	iinal Searchab	→ Lancel
		-	Searchat Display I	le name lame Source N	e     Name	Trans NAMI Disp STA	portati E play Na	on_Termir	nal	Searchab	→ Lancel
_		-	Searchat Display I	le name lame Source N TATE	e     Name	Trans NAMI Disp STA	portati E play Ni TE JNTY	on_Termir	nal	Searchab	→ Lancel
_		-	Searchal Display I	le name lame Gource N TATE OUNTY	e     Name	Trans NAMI Disp STA COL	portati E Diay Na TE JNTY ME	on_Termir	nal	Searchab	→ Lancel
		-	Searchal Display I	le name lame Gource N TATE OUNTY AME CC	e     Name	Trans NAMI Disp STA COL NAM	portati E Diay Na TE JNTY ME	on_Termir	nal	Searchab	→ Lancel
		-	Searchal Display I S P C F F	le name lame Gource N TATE OUNTY AME CC	e     Name	Trans NAMI Disp STA COL NAM	portati E Diay Na TE JNTY ME	on_Termir	nal	Searchab	→ Lancel



# Easy Zones Application

Zones used in the current Work configuration are listed in the Zone field. Adding a zone to the Work definition is intuitive: all the administrator needs to do is to click the **Select** button and choose the zones from the list. It is possible to sort zones in ascending and descending order and filter zones by name or part of the name to find the required zone quickly. If no zone is defined in the database, the message to the user is displayed in the Zones field. This little enhancement in the **New/Edit Work** dialog of Mobile Publisher makes it easier to find and select the zone while preparing the configuration.

Name*	Demo		Content De	escription										
Type* User*	General James Smith	Map	Window*	MapWindow1									*	
	,	Bas	e Map*	Open Street Mag	>								-	Options
Descriptio		Zon	es.	Richard's Zone,	James' Z	008								Select
✓ Offline			end Entries	prioritare e cone,		2110								Contex
Downsam		· -		15.		Searchab			0.1		Geometry	Attributes	0.1	
Zoom Leve	el Low (17)	<b>_</b>	_	nd Entry		Searchad	ie I	Include	Create	Delete	Geometry Update	Attributes Update	Display	
Dashb	oard			ational_Area		v V		v V	v V	<u>د</u>	ঘ	v v	~	Attributes
Geocoding	Naca			portation_Terminal	_						V	<b>v</b>		Attributes Attributes
Geocodiny	y Inone Mana	-	Highw		Zone	s config	uratio	n					×	Attributes
				_Linear	Cile	r by nan							_	Attributes
		-	Airport		File	s by fidi	ie.	p.					- 8	Attributes
				Water		Nan	ne					Selec	ted	Attributes
					•	Rich	ard's Z	one					1	
					-	-	es' Zon	_				Г		
						Jame	s Zon	e						
													1	Cancel
														-
											ОК	Cance	_	



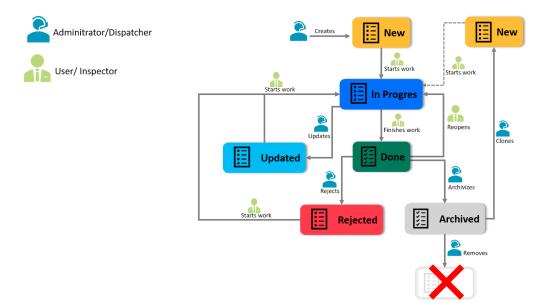
#### Tasks and Works Lifecycle Monitoring

Especially for customers working with mobile technologies from Hexagon, we addressed a new feature – **Work statuses**. Work statuses is a feature of GeoMedia WebMap Mobile that helps trace the Work progress. By tracking the statuses, the administrator easily receives information about which Works have not been started yet, which are completed and archived, and which have been updated or rejected.

The new filter panel above the Works list in Mobile Publisher allows filtering the tasks as needed. Administrators can filter the items by name, assigned user, or by status. The filter criteria can be freely combined (e.g., it is possible to display finished tasks assigned to a particular user and containing a part of the Work name). This function, especially in the case of large organizations with many field inspectors and a big amount of fieldwork, will make it easier to find a specific Work and then manage and monitor the Work progress.

Work statuses are also displayed in the mobile app so the field inspector can see the status of Work assigned to him. The preview of the status of Work defined in the system is displayed in the **Works** window, in the **Status** column. Each change of Work status made by the inspector or the administrator (e.g., when the administrator rejects the Work due to detected issues) is immediately reflected in the app so the inspector can react faster and more efficiently.

The Work lifecycle:





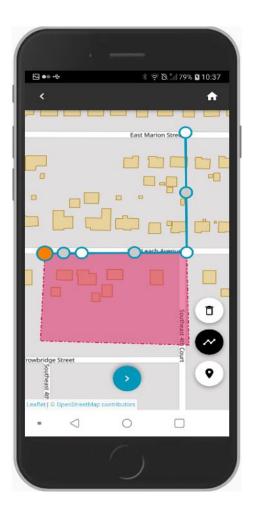




# Snapping in Mobile App

To accelerate the productivity and quality of GIS data acquired with the mobile app, snapping (when editing objects geometry) has been implemented. The snapping feature in the GeoMedia WebMap Mobile app allows you to edit the feature geometries that connect to other features quicker and with more precision and accuracy. Now it is much easier to position a geometry in relation to the other features. Snapping significantly reduces the risk of making mistakes such as overlapping polygons, spaces between polygons, and overlapping lines, making edits quicker.

Snapping works with all types of geometries supported by the mobile app and is active while editing existing features and adding new ones. The vertex of the edited geometry can be snapped to vertices of other geometry and to any point, line, or boundary of area features. The snapping feature is enabled by default but can be turned off by users if needed.





#### Generate ID for Related Features

By using the **Autofill** feature, it is possible to generate a unique identifier (GUID) for a feature. The unique identifier is generated and inserted into the feature attribute automatically after creating and editing a feature. The unique identifier changes with every feature change (e.g., when some attribute values are updated). This smart feature can be helpful to analyze data and actions made by users and easily track relations between features. It works in both configuration modes, online and offline.

Configure 'TextT' as Auto	Fill ×
Unique ID	•
☞ 옷 🖾 ··· 🗼 중ll 100% 🗎 14:08	ເຊັ້າ ເພື່ອ ເພິ່ງ ເພິ່
K Stars 🔶	Success: Feature edited.
Gender	Gender
Oscars	Oscars O
Action ID	Action ID
680b99d4-ccf2-42e4-bdf9-5a0b8297a6ab	195b9327-b408-4b97-99f5-fdd4a2f57cff
Autograph	Autograph
Photo GPS accuracy: 14.2	Photo m GPS accuracy: 14.2 m

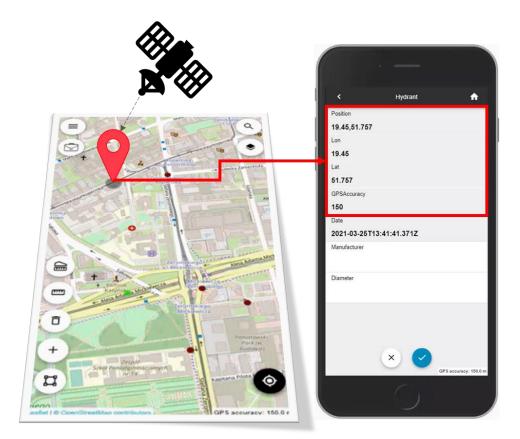


### GPS Data Storage in the Added Features

The **Autofill** feature has been extended with the possibility of getting and storing the current GPS data in the attribute of an added or edited object. You can get and store:

- Current GPS location
- Current GPS accuracy
- Current longitude and latitude.

The device's GPS data is stored in Text and Double type attributes. Attribute values are filled automatically when an object is added. Editing an object makes the attribute values update automatically. This autofill feature improvement for 2022 allows automatic collection of feature location so data administrators and managers can monitor and control feature localization.





#### Enhanced Display of GPS Location

The **Locate Me** button (when touched) in the Mobile app acquires and shows the user location. The location marker is displayed on the map temporarily as the default behavior. Starting with the 2022 release, every mobile app user can make the location marker always display. Additionally, the current map scale and zoom level are preserved when the user clicks **Locate Me**.

Changing the behavior for the displayed location marker is simple — just go to the GeoMedia WebMap Mobile app settings screen and toggle the new **Keep my location marker** option.

The location marker follows the user's device localization when the tracking mode is enabled.

		🔌 🛜 .iil 100% 🗎 14:29
<	Settings	
Measurement system unit		
metric		
Display GPS accuracy		-
Keep my location marker		-





#### Localized GeoMedia WebMap Mobile app

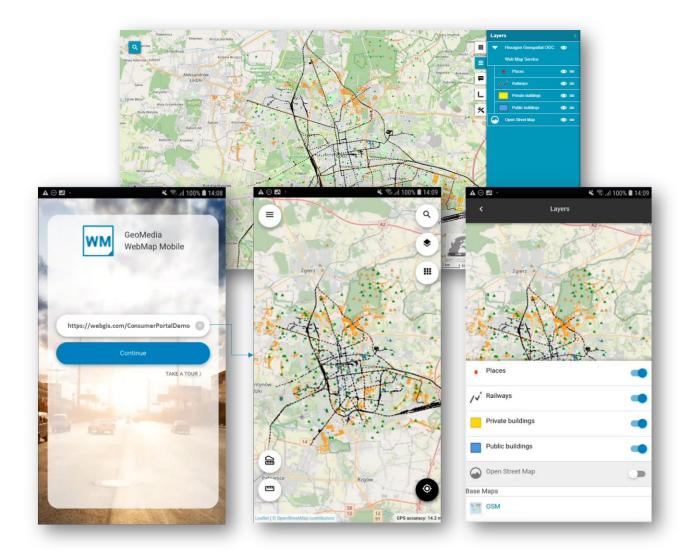
The WebGIS family of products are multilingual, with options for a variety of languages out of the box. Continuing to enhance its rich set of languages, the new GeoMedia WebMap Mobile app, which is an integral part of GeoMedia WebMap, is also localized. The GeoMedia WebMap Mobile app was translated to be available in Arabic, Catalan, Chinese, Czech, French, Hindi, Polish, Portuguese, Romanian, and Spanish. The GeoMedia WebMap Mobile app detects the default language on the user's mobile device and starts automatically in this language if available. Otherwise, it is run in English. With this feature of the Mobile app, you can reach more customers and users around the world and easily adapt the product to various languages and cultures.





### GeoMedia WebMap Mobile App as Consumer Portal Client

The GeoMedia WebMap Mobile application can act as a client for Consumer Portal layout. It means that users can connect to Consumer Portal instances in the field with ease and use a GeoMedia Mobile app to consume Consumer Portal GIS data. This approach makes access to your GIS data easier and faster than running the Consumer Portal in a standard web browser on a mobile device. It is important to mention that no additional step or configuration is required to run the Consumer Portal in the app. All the user needs to do is provide the Consumer URL in the Configuration field or scan a QR code.

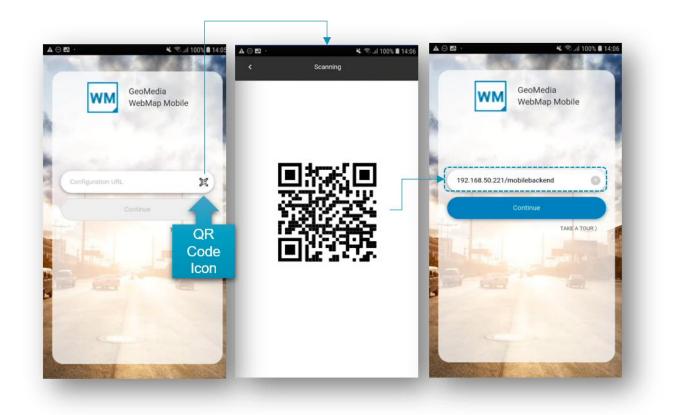




# Quick Configuration Access with QR Code Scanning

To run the GeoMedia WebMap Mobile app, the user must provide the configuration URL. In some situations, especially when working in the field, it can be more convenient for the user to scan a QR code with the configuration address instead of typing it directly into the app control. Typing, particularly a long configuration address, is prone to errors; therefore, to speed up and facilitate the loading of configurations in the mobile app, the possibility to scan QR codes with encoded configuration URLs was introduced.

Tapping the QR code icon opens the default camera app. Once the user scans the QR code, the proper configuration URL appears in the address field. Mobile users have the freedom to choose entering the address manually or using a QR code scanner.



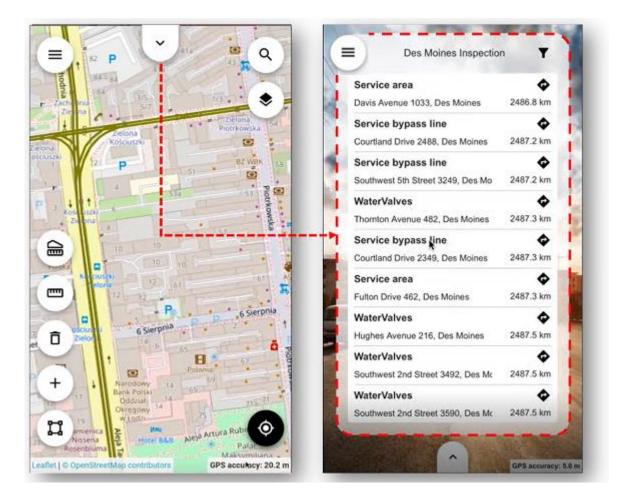


#### Dashboard View

A completely new feature is the Dashboard view in the mobile application. The Dashboard allows displaying a list of objects for inspection that are available within mobile configuration. This feature helps locate the objects to be inspected. The Dashboard is retractable and easy to use and can be accessed at any time.

Within the objects listed in the Dashboard, the object type (e.g., tram stop, water meter) and the distance from the user's current location are provided. The distance displayed is updated on the fly when user moves in the field. The distance is displayed in units of actual settings (metric/imperial). Optionally, when configured by an administrator, the object addresses can be shown.

Moreover, the Dashboard allows users to plan a route to the selected object with one click. For each object, there is a button that launches the default navigation application on user's mobile device, which maps the route to the selected feature.



Users can filter the objects displayed on the panel. Available filtering options are based on feature class name. By using general filtering options, you can display either all features (which is the default setting), none, or editable only. The toggle buttons for each feature class change accordingly to an applied filter setting. You can individually adjust the filter using the toggle button for each feature class instead of using the general filter buttons.

The new Dashboard feature can be enabled or disabled by an administrator. This operation can be performed with one click in the GeoMedia WebMap Publisher.



# Geocoding Configuration for the Dashboard Feature

Along with the Dashboard, GeoMedia WebMap offers the possibility for the administrator to define geocoding addresses that are displayed in the mobile app Dashboard. The Mobile Publisher console has been expanded with new controls that allow administrators to define an external API for address geocoding. Defined APIs are used by WebMap to display addresses on the Dashboard if such a function has been defined. Currently, you can define OpenCage and Google services, but with subsequent updates, more geocoders may be introduced in the future.

Des Moines Inspection	Edit Work							
Des Momes inspection	Name* Richard's Work_Clon Type* General •	Map Content Description						
ramStops 💠	User* General  User* Richard Kosinsky	Map Window* Map Window 1					Ψ	
h Street, 50314, Des Moines 27.3 in	Description	Base Map* Open Street Map					•	Options
ramStops 💠	Offline	Zones						Select
alnut Street, 50309, Des Moin 314.3 yd	Downsampling M	Legend Entries						
ramStops 💠	Zoom Level Low (17)	Legend Entry	Searchable	nclude Create	Delete Geometry Update	Attributes Update	Display	
0309, Des Moines 342.6 yd		Recreational_Area				<b>v</b>	<b>V</b>	Attributes
amStops 🔷 🔶	Dashboard	Transportation_Terminal		▼ ▼				Attributes
and Avenue, 50309, Des Moir 484.0 yd	Geocoding Google	<ul> <li>Highway</li> </ul>	<b>—</b>			~		Attributes
amStops 🔶 🔹	Manage	Rairoad	<u> </u>					Attributes
outhwest 9th Street 403, Des 1 582.3 yd		Water_Linear				~		Attributes
ramStops 💠		Airport	<u> </u>			v v	_	Attributes
eosauqua Way 900, Des Moini 948.3 yd		Major_Water	<u> </u>			v		Attributes
MainRoads 🔷								
50309, Des Moines 1051.0 yd								
·							OK 7	Cancel
GPS accuracy: 1.9 yd								
Edit Work					-	• ×	1	
Name" Fichard Type" Genera Usen" Refarc Description Zoom Level Line (T) © Dashbad Geoceding None	J Kosinsky Vindow Map		Add nex AP Edit AP Remove AP	×	butes butes butes 2 2 2 2 2 2 2	Options Select Atributes Atributes Atributes Atributes Atributes Atributes Atributes		

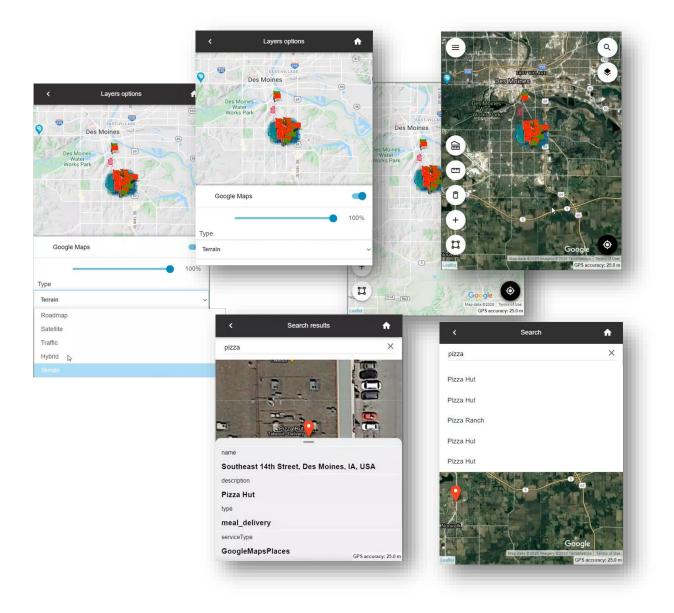


#### Integration with Google Services

A nice new feature in GeoMedia WebMap Mobile is the integration with Google services. Google Maps layers can be displayed in the Mobile application. Users can turn the Google Maps layer off and on, change the layer transparency, and choose a type of Google Maps. All this can be done in the app by using standard layer control.

The integration also includes object search functionality. Using Google Search within GeoMedia WebMap Mobile is available. The search results in the GeoMedia WebMap Mobile app are the same as in the native Google Maps app. Pins show the search result, and Feature details can be displayed in the GeoMedia WebMap Mobile Feature Info dialog.

Google search results can be displayed only if the Google Maps layer is enabled.





#### Google Base Map for GeoMedia WebMap Mobile

As mentioned above, Google services have been integrated with GeoMedia WebMap Mobile. It also means that Google Maps layers can be configured as a base map for a GeoMedia WebMap Mobile application. The base map pull-down list in Mobile Publisher has been extended with a Google Maps entry. All additional settings (e.g., API Key or Google layer type) that the administrator will set for Google Maps are available after pressing the **Options** button.

Ilame* Richard's Work_Con ype* General  Jeer* Richard Kosinsky  Description  Offline	Map Conter Map Wind Base Map	nt Description									
Jser* Richard Kosinsky Description Offline		dow* MapWindow1									
Description  Offline	Base Map								Ŧ		
Offline		o* Google Maps								Options	
		None						N			
. r <b>F</b>	Zones	Open Street Map Bing Maps						2		Select	
lownsampling	Legend E	Open Street Map Bing Maps Here Maps Google Maps					-				
oom Level Low (17) 💌		Legend Entry	Searchable	Include	Create	Delete	Geometry Update	Attributes Update	Display	I	
		Recreational_Area						<b>v</b>		Attributes	
Dashboard		Transportation_Terminal	<b>V</b>		•		~		•	Attributes	
eocoding None -	•	Highway		🔽			<b>v</b>	7	~	Attributes	
Manage		Railroad		🔽						~	
		Water_Linear		🔽							e Q
		Airport		🔽				PA III	J.S.	1 march	
		Major_Water		🔽						MAN AND	•
		i i							Ser.		
Google	Maps	•			>	<			A	L and	
Api Key	_	oogleApi	•	] <u>Ma</u>	nage						
Layer T	Ro	padMap padMap atellite	•	]			2				
He	lp Tr	affic /brid		Ca	ncel			D A		0	3
		errain						U A PER	-	RANT	
								ALC: NOT			
								+		44	
								172		net int	Di la
								LI V		1	. 0
								-	120	Goo	igle
							Le	aflet	SE I	GP: km	S accuracy: 133.2



# Enhanced GeoPackage Creation - Zoom Level and Quality for Raster

When an offline configuration uses data from WMS service(s), the WMS tiles are generated and stored in the raster database on the mobile device.

Until now, if the map tile source was WMS service, the generated maximum zoom was limited to 16 levels. Tiles for the lower levels were always generated automatically by downsampling the highest one (16 zoom level). This could result in a poor-quality displayed map on the screen of a phone or tablet. To enhance the quality of raster (base) maps and improve the user experience working offline, the new method of preparing the map tiles was implemented.

When preparing offline configuration for mobile app users, an administrator can control the accuracy levels for WMS tiles to be generated for offline jobs and can choose the method of generating tiles at lower zoom levels.

To ensure the highest quality of the raster tiles for offline mode at all zoom levels (and to generate all tiles straight from the WMS service), uncheck the new **Use downsampling** option.

The maximum zoom level can be set to:

- 17 levels (low accuracy)
- 18 levels (medium accuracy)
- 19 levels (high accuracy)

The selection of max zoom level is made with the use of a new dedicated drop-down list available in the Edit Work dialog. The WMS tiles will be generated starting from the selected level and with the method and precision determined by the **Use downsampling** control.

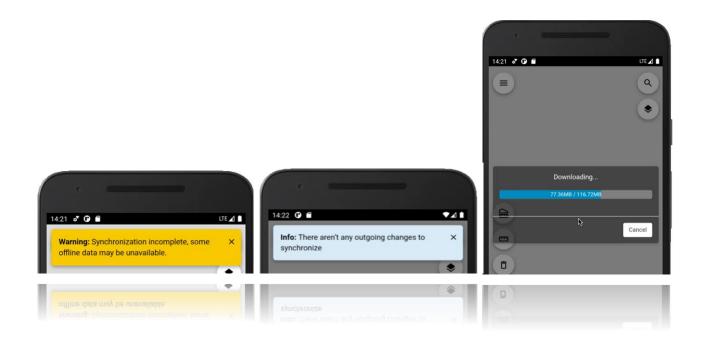
ame* /pe* General ser* James Smith	Map Content Description Map Window* Map Window 1						•	
escription	Base Map* Open Street Map Zones						•	Options Select
ownsampling 🔽	Legend Entry	Searchable	Include	Create Del	ete Geometry Update	Attributes Update	Display	
,	Recreational Area		V			~	~	Attributes
Dashboard	Transportation_Teiminal		~				V	Attributes
eocoding None 👻				1 🗖		V	Attributes	
Manage	Railroad		•			~		Attributes
	Water_Linear					~	•	Attributes
	Airport		•			~		Attributes
	Major_Water						V	Attributes
	Offline	_				_	ок	Cancel
	ownsampling oom Level Low (17)	۲ ۲						



Better Control of the Offline Data Synchronization Process for Users of the Mobile App.

Users of the GeoMedia WebMap Mobile app working offline will see the progress bar when downloading and uploading their offline data. Users can terminate the sync operation with the new **Cancel** button.

A new set of user-friendly messages was introduced for better control and full view of the GeoPackage database creation process and data synchronization.

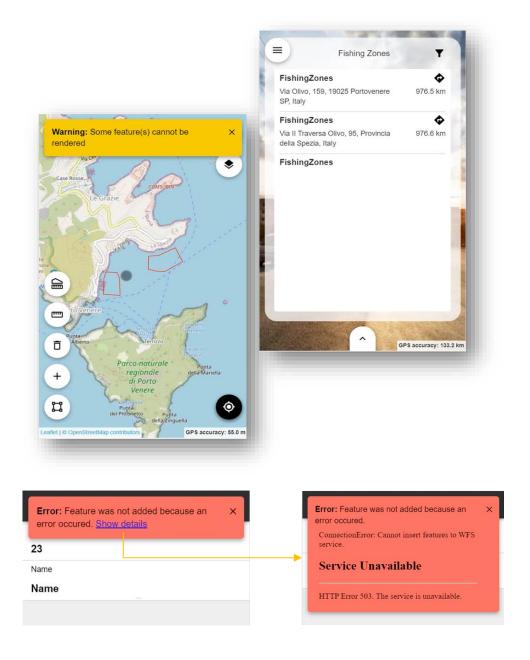




#### Geometry Limitation Notification for Users

If a given type of geometry (e.g., an arc) is not supported and cannot be rendered, the app will inform the user. A message appears when there are problems adding new objects (e.g., due to temporary unavailability of the service). The **Show details** link provides more information about the error that occurred.

The address for an object that cannot be rendered is not displayed in the Dashboard, distance is not calculated, and the navigation button is hidden. The Feature Info is also not available for features not displayed.





Address History for GeoMedia WebMap Mobile Start Screen

After starting the mobile application, it is required to provide a configuration URL. Users working with several configurations and switching between them need to enter the link to each one. All valid configuration URLs provided are saved in the history. The next time the user would like to change configurations, they can choose a saved URL from the list in the address history, making the configuration launch simpler and faster.

ô	≴ জ.⊪170% 🖬 13:5
WM	GeoMedia WebMap Mobile
Configurat	ion URI
server.de	
serverde	mo/MobileBackend
serverder	mo_2/MobileBackend
2	
2	kip and go to demo >



Display Feature Class Name in Feature Info Header of GeoMedia WebMap Mobile.

Enhancements for the Mobile app include the possibility to see the selected feature class name in the **Feature Info** header. This may be especially useful when the user swipes the **Feature Info** screen for several objects currently being selected.

<	BuildingFootprints	<ul> <li> <ul> <li> <li> </li></li></ul> </li> </ul>
NbrFloors		
0		
BuildingHe		
17.3155113	ł	
BaseElevFt		
927.154467	'4	
City		
Des Moines		
Remark		
Elevation an	nd Height calculated fr	om Lidar
DataOwner		PS accuracy: 48.9 m



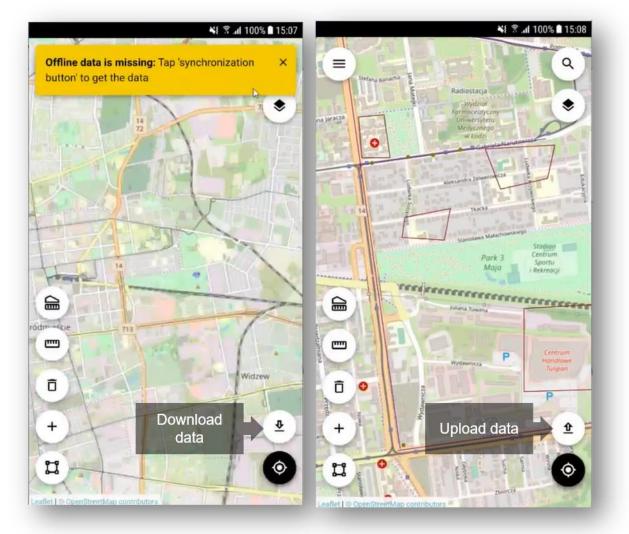
### Enhanced Offline Mode

With release 2022, preparing offline configuration is as simple as enabling the new **Offline** checkbox in the **Edit Work** dialog. The offline configuration is prepared automatically and does not require any additional configuration. If enabled, Works can be used in offline mode. There is no need to copy the Geopackage database to the mobile device and then copy it back to the server anymore. With the enhanced offline mode, you download the GPKG database that is dynamically generated on the server together with stored media files. Data in GPKG files comes from WFS and/or WMS services. You can work in offline mode when there is no internet connection. When the connection is back, you can upload your changes to the server (WFS-T transaction).

New Work										-		>
Name* Type* General User* James Smith  Description  Of Offline	M B	ap Conte 1ap Wine lase Map Cones								•	Options Select	1
Downsampling Zoom Level Low (17)		_egend {	Legend Entry	Searchable	Include	Create	Delete	Geometry Update	Attributes Update	Display		
			Recreational_Area		 •	•	•				Attributes	,
Dashboard			Transportation_Terminal		 •	V	•	~	~		Attributes	
Geocoding None 👻		►	Highway								Attributes	
Manage			Railroad		 •	V	•	~	~		Attributes	
			Water_Linear			•	•	~			Attributes	
			Airport		 •	V	•	~	~		Attributes	
			Major_Water		 •						Attributes	
										ок	- Can	ce



In the GeoMedia WebMap Mobile app, the synchronization button is used to download and upload data.





# Auto-Configured Primary Key

The primary key field is no longer available in the attributes view because the mobile application handles it on its own. Backward compatibility is maintained, so if you had a primary key defined in the previous configuration, it will be set in the app.

			No F Key	Prima y fiel					
Conf	gure attributes display	in Mobile app for DangerZones		Æ					_
	Source Name	Display Name	Visible	Editable	Mandatory	Source Type	Display Type		
F.	Name	Name		V		Text	Text	-	
	DangerLevel	Danger Level	2	2	E.	Integer	Integer		
	TypeOfDanger	Type of Danger		V	E	Text	Pick List	•	
	DescriptionOfDanger	Description	1	•	П	Text	Text	14	
	ID	ID	Г	Г	Г	Longinteger	Long Integer		

OK

Cancel



# Auto-fill Values for Different Data Types

An administrator can provide a value for an attribute so inspectors in the field do not need to provide the value in the mobile app. In the GeoMedia WebMap Mobile application, attributes with an auto-fill option defined are displayed but cannot be edited by users. Auto-fill can be defined for the following attribute types:

- Date
- Date-time
- Enumeration
- Number
- Text

Source Name	Display Name	Visible	Editable	Mandatory	Source Type	Display Type		
NAME	NAME	~	V		Text	Text	·	
FCC	FCC	~	V		Text	Text	•	
LOC_ID	LOC_ID		V		Text	Text	· · · ·	
USE	USE		V		Text	Text	·	
OWNERNAME	OWNERNAME	•	V		Text	Text	•	
ELEVATION	ELEVATION		V		Text	Text	•	
CONGES_LEV	CONGES_LEV		V		Text	Text	•	
SERV_LEV	SERV_LEV		V		Text	Text	•	
LRGCERTENP	LRGCERTENP		▼		Text	Text		
COMM_ENP	COMM_ENP		V		Text	Text	• ••	
AIRTAXIENP	AIRTAXIENP		V		Text	Text	•	
FOREIGNENP	FOREIGNENP	•	V		Text	Text	•	
INTRANENP	INTRANENP		V		Text	Text	•	
HUB_SIZE	HUB_SIZE		V		Text	Text	•	
TOWER_TYPE	TOWER_TYPE		V		Text	Text	•	
ID	ID		V		LongInteger	Text Pick List		
						Auto Fil Dynamic Pick List Text Autocomplete		
Configure 'ID' a	as Auto Fill			>		figure 'TOWER_TYPE' as Auto Fill	*	
Value: 0			ĸ	Cancel	Sta Use Cur	tic text		



#### **Default Values**

To boost fieldwork efficiency for GeoMedia WebMap Mobile app users, the ability to define default attribute values was implemented. The default value is used when there is a need to automatically fill a form's field when creating a feature. The defined default value will always appear to the user in the form but can always be changed.

For administrators, setting up the default value is as simple as enabling the **Default value** checkbox in the **Configure** window for chosen the attribute and providing the value.

Configure 'RECN	JM' as Long Integer	×
Minimum Value*	-2147483648	÷
Maximum Value*	2147483647	<u>*</u>
Default value	Value: 302	÷
		OK Cancel

For Text type attributes, the following default value types exist:

- Static text the text value from the input text will be inserted in the field
- Username the user's login will be inserted in the field
- Current date the date of modification will be used
- Current date and time the date and time of modification will be used

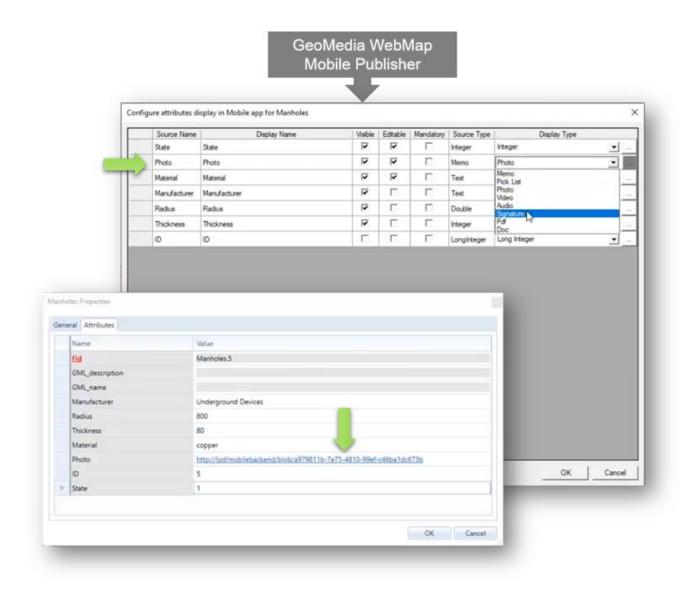
Source Name	Display Name	Visible	Editable	Mandatory	Source Type	Display Type	
NAME	NAME	<b>V</b>	~		Text	Text	
FCC	FCC	•	$\checkmark$		Text	Text	<b>_</b>
LOC_ID	LOC_ID	•	•		Text	Text	▼
USE	USE		~		Text		
OWNERNAME	OWNERNAME	~	~		Text	Configure 'NAME' as	Text
ELEVATION	ELEVATION		~		Text	Minimum length*	0
CONGES_LEV	CONGES_LEV	•	~		Text	Maximum length*	42
SERV_LEV	SERV_LEV		~		Text	Regular expression	example: ^[a-zA-Z0-9]*\$
LRGCERTENP	LRGCERTENP		•		Text	, pattern	
COMM_ENP	COMM_ENP	•	•		Text		Static text     Mobile Regional Airport (MOB)     Static text
AIRTAXIENP	AIRTAXIENP		<b>v</b>		Text	. Help	Usemame OK Cancel
FOREIGNENP	FOREIGNENP	~	~		Text		Current data and time
INTRANENP	INTRANENP	~	~		Text	Text	✓
HUB_SIZE	HUB_SIZE	<b>V</b>	~		Text	Text	<b>.</b>
TOWER_TYPE	TOWER_TYPE	•	~		Text	Text	✓
ID	ID	<b>V</b>	~		LongInteger	Long Integer	▼



#### Enhanced Display of Media Files

GeoMedia WebMap provides an enhanced display of media files. Media files such as photo, video, audio, signatures, and documents (pdf) gathered with the mobile app can easily be reviewed in GeoMedia Desktop. In Mobile Publisher, to configure the media files for a memo type attribute, just pick the media type from the list in the Display Type column.

The URL to the multimedia files is present as a media attribute in GeoMedia Desktop. Simply click the link to open the media. Please note that the Hyperlink option must be enabled for the WFS attribute.





## Remote Server Connection to the Mobile Backend

There is ability to connect to the mobile backend remotely. An administrator can set the URL to the mobile backend server with configurations. Synchronization with the configuration on the remote server is ensured. You can download the configuration from a connected remote server, and it will overwrite the local one.

<b>I</b> ×	Home	Manage	Data	Analysis	Vector	Labeling	Raster	Toolbox	WebMap	1
Administ Web Pub	rator Wo	orks Users	Server							
		ſ	Server U	d		•			×	
			Server l	let: http://	od-spomanov	v10/mobileBack				
						_	ОК	Cancel		

All changes made in the configuration are saved on the provided remote server.

A Mobile Publisher server connection with Windows authentication is also available. For this purpose, Windows authentication must be enabled in the IIS settings on the mobile backend side. A notification appears when permissions are not sufficient. The Mobile Publisher group is used to control accounts that have permission to access the server.

Local Users and Groups (Local)	Name	Description		Actions	
Users Grouper	Access Control Assist	Members of this	s group can remot	Groups	
Groups	Administrators Administrators Construction	MobilePublisher General Description: Members: INGRNET	Properties Probleher Group for managing configur publisher Vorozmany Ypmanow	7 X	
		Add	Remove are not effectuser logs on OK Cancel	tive until the next time the	

An administrator assigns users to the group. There is no need to provide any additional information when a user is logged in and using a domain account.



## Enabled Multiple Connections (Handling Several Sources)

Now you can make configurations with legend entries from different connections. Supported data sources include not only WFS and Geopackage, but also WMS and WMTS. Configure legend entries from raster services (WMS and WMTS). Raster layers can be used instead of a base map. WMS and WMTS legend entries are read-only (there is no ability to create, delete, and update features in GeoMedia WebMap Mobile). Feature Info works with WMS layers.

Connection type:	Connection name:	
File Geodatabase Read-Write G/Technology GeoMedia SmartStore GeoPackage Read-Write	Access Connection 1     Connection gescription:	
GML I/CAD MAP KML MapInio Object Space ODBC Tabular Read-Only Oracle Object LTT Read-Write Oracle Object Model Read-Only	Access Database file	Browse
Oracle Object Model Read-Write PostGIS Read-Write SQL Server Read-Only SQL Server Read-Write SQL Server Spatial Read-Write Text File VPF WCS WFS WFS-T WMS WMTS	Add Legend Entries Feature: Calibrian Carc Location:	e Connection 1 on 1
k ● HYDRANT (32) k ✓ WATER_MAIN (299) k ⊗ Selection_of_PLMBuildingFo k ⊗ Image (1) k ⊗ naturalearth1_ecw (1) k ⊘ Zones (1)		OK Ca



## Handle Multiple Map Windows and Assign Works with a Map Window

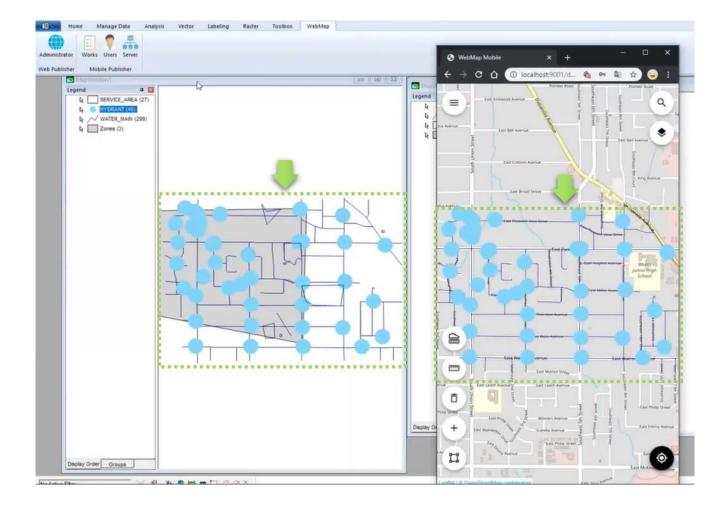
The New Map Window combo box in the **New/Edit Work** properties dialog was introduced. It lists all open map windows in GeoMedia Desktop. When adding a new job, the default active map window is chosen. You can change the map window that will be used with the mobile configuration. The legend entries listed in Mobile Publisher will be refreshed based on the currently selected map window. The map window relates to the Work, so once the Work is created and saved, the map window cannot be changed.

		v3 The second s											
k₂ ● Trans k₂ / Highv k₂ / Rairo k₂ / Wate	eational_Area (6)				4	R	∕ Hig ∕ Rai ∕ Wa	/2 hway (17 Iroad (755 ter_Linea nes (2)					
k Zor C Display Order	Name* Type* General User* James Smth Description Offline Downsampling	Map Wi Base M Zones	Map Madow 1									Options Select	
	Zoom Level Low (17)		Legend Entry	Searchable		Include	Create		Geometry Update	Attributes Update	Display		
	Dashboard	• •	Recreational_Area			•	•	7	•	~		Attributes	
			Transportation_Terminal			•	•	7	V	~		Attributes	
	Geocoding None -		Highway			•	•	7	V	7		Attributes	
	Manage	_	Rairoad				•	2	₹	<b>v</b>		Attributes	
		_	Water_Linear				•	•	<b>V</b>			Attributes	
			Airport Major Water			<u>र</u>	ঘ	v V	ম		×	Attributes Attributes	
			major_trater					I.	IV.		×	Aubures	
										_	ОК	• Cancel	



## Use Map Window Bounding Box (BBOX) as a Default

The same starting BBOX is set in the GeoMedia WebMap Mobile app as defined in the GeoMedia Desktop Map window for the corresponding configuration. Zones are superior, which means that if a zone is defined in the configuration, the map view will be adjusted to the zone area for the user.





## Quick Start Guides in Mobile Publisher

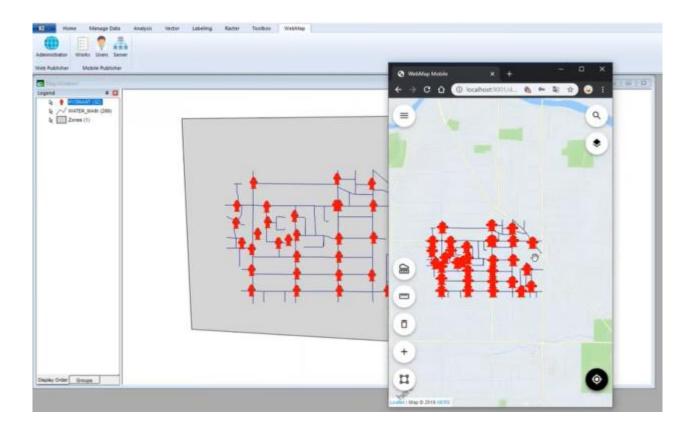
Key settings must be configured in the GeoWorkspace before defining Works. The quick start guide is a new feature that makes configuration even simpler. The user-friendly quick start guide will appear when the workspace has any needed setting unconfigured, such as the proper GeoWorkspace coordinate system set or registered data sources; when the active map window with legend entries is not present; or when at least one user account is not defined for GeoMedia WebMap Mobile. The quick start guide dialog will list the task(s) that need to be done. Short instructions on how to do it will be also provided. Simply do the steps listed in the quick start guide dialog before you start to define Works.





## Picture Style Support for the Point Feature Class

Point feature class can have the picture style defined. The picture style for points can be used irrespective of configuration mode, online or offline. In addition, static and dynamic picture rotation is supported for both online and offline configuration modes.





## Honoring WFS/WMS Legend Entries' Locatability in GeoMedia WebMap Mobile

The legend entry locatability setting in GeoMedia Desktop is directly mapped with the layer locatability in the GeoMedia WebMap Mobile application. Setting a given WFS feature class or WMS layer's Locatable option to Off will prevent the possibility of clicking on the same layer in the GeoMedia Mobile application. To change the legend entry locatability setting in the GeoMedia WebMap Mobile app, just set the **Locatable** option to the desired state (**On/Off**) in the GeoMedia legend and then overwrite the configuration in the GeoMedia WebMap Mobile Publisher.

	4 🖬	
MapWindow1 gend ls Danger2200 ls SafePati ls Manhole ls Zones (;	Image: Straight of the straight	
	Legend Entry Properties Fit Legend	
	Properties	
splay Order Groups		



## New Base Maps (Here Maps/Bing Maps/Google Maps)

A base map pull-down list (in **Edit Work** dialog) is now enabled for a Work. You can pick from several base maps:

- Open Street Map
- Bing Maps
- Here Maps
- Google Maps

You can also refrain from using any base map – just select "none" from the list.

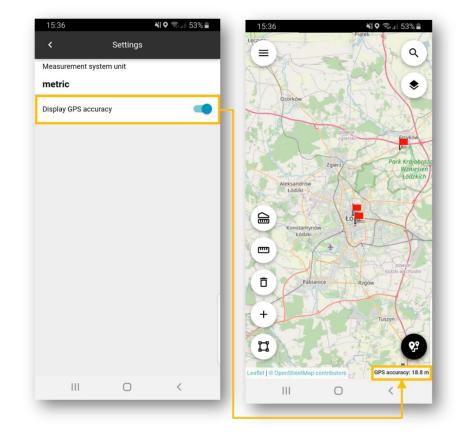
Click the **Options** button to define more options and provide information that is needed by the API.

Iser <sup>a</sup> Richard Kosnsky Rap Vindow Map Vindow 1 C Ceste Delete Geometry Updates Deplay Legend Entries Here Maps Come Level Low (17) C Legend Entries Here Maps Come Level Low (17) C Come Come Come Come Come Come Come Co	lame* Richard's Work_Clon	N	lap Conte	ent Description									
Base Map*       Google Maps       Google Maps         Offline       Doen Sheet Map       Select         Downsampling       V       Legend Entry       Searchable       Include Create       Delete       Geometry       Update       Daplay         V Dashboard       Image       Recreational Area       Image       V       V       Attributes         Highway       Image       Image       V       V       V       V       Attributes         Water_Linear       Image       Water_Linear       Image       V       V       Image       V       Attributes			Map Win	idow* MapWindow1								Ŧ	
Offline       Zones       Bing May Map Bing Map	,		Base Ma	sp* Google Maps		_	-	-	-			- 0	Options
Image       Image <td< td=""><td>□ Offline</td><td></td><td></td><td>Open Street Map Bing Maps</td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td><td></td><td>Select</td></td<>	□ Offline			Open Street Map Bing Maps							3		Select
Image       Recreational_Area       Image       Image <td></td> <td></td> <td></td> <td>Legend Entry</td> <td>Searchable</td> <td></td> <td>Include</td> <td>Create</td> <td>Delete</td> <td>Geometry Update</td> <td></td> <td>Display</td> <td></td>				Legend Entry	Searchable		Include	Create	Delete	Geometry Update		Display	
Geocoding None     Manage       Manage       Manage       Water_Linear       Airport       Airport	,			Recreational_Area								~	Attributes
Manage       Ralioad       I       I       I       I       I       I       I       Atributes         Water_Linear       I	Dashboard			Transportation_Terminal	~		•	~		~	~		Attributes
Water_Linear         Image: Constraint of the second s	Geocoding None 💌		•	Highway			•			~		~	Attributes
Arport I I I I I I I Atributes	Manage			Railroad			•			~		~	Attributes
				Water_Linear							~	~	Attributes
Major_Water 🔽 🔽				Airport							~		Attributes
				Major_Water			~					•	Attributes



# Display of GPS Accuracy in GeoMedia WebMap Mobile App

A new feature in GeoMedia WebMap Mobile displays the most recent device request GPS accuracy value in the bottom right corner of the application screen, using the preferred system of units. Presented values are rounded to one decimal place, and units depend on GPS antenna strength. For example, the m/yd/ft will change into cm/in while obtaining signal from better equipment than a built-in cell phone GPS module. Displayed is the value from the most recent device request and updates depending on the location mode selected. This feature makes it possible to combine the software with Leica devices. GPS accuracy is also visible while editing and inserting new features.



The GPS accuracy view can be disabled globally in the app settings.



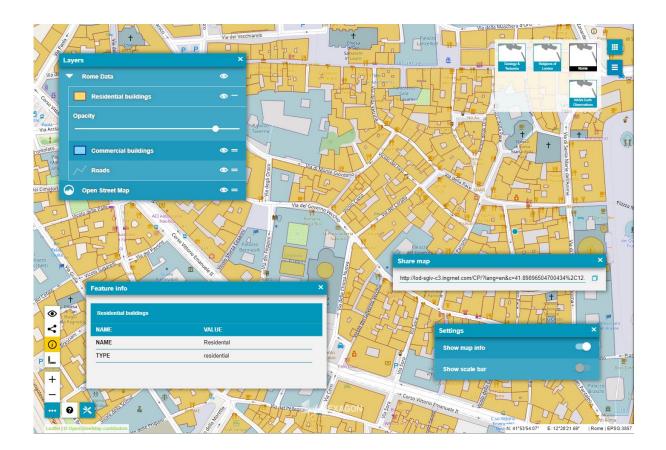
## Geospatial Portal and Consumer Portal

#### Redesigned and Refreshed Consumer Portal UI

Consumer layout is a simplified and user-friendly entry-level layout for non-professional consumers of geospatial data. It 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. With this release (16.7), the new window layout of Consumer Portal is introduced. The new layout not only brings a fresh and attractive appearance to the application, but also a number of functional improvements. Floating and modal windows help users organize the space on screen more efficiently, improving productivity. Now users can freely arrange the view and use functions simultaneously. All windows are resizable. Moreover, the position of the floating windows is remembered — if the window has been moved by the user to a different place on the screen, then after it is closed and reopened, its position will be the same as the last one.

These changes make the Consumer Portal layout easier to operate not only for desktop web browser users, but also for mobile browser users. The refined UI does not distract users and focuses attention on important functions.

Administrators can choose and set the layout while preparing the Consumer Portal configuration for users. Both layouts are available: new, referred as to Window layout, and legacy, referred to as Panel layout. A new option in Administration Console has been added to easily select and set the Consumer layout.



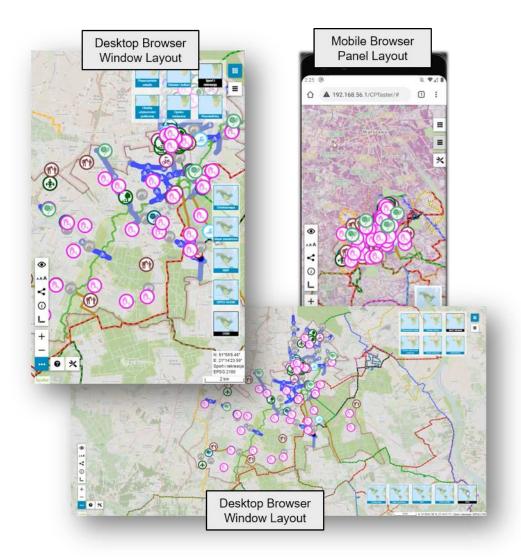


## Smart Optimalization of Consumer Portal Layout

Starting from version 16.7, the Consumer Portal layout is automatically optimized to the web browser in which it was launched, so that working with Consumer Portal is pleasant, easy, and as efficient as possible.

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 if needed.

Consumer 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 in Administration Console.





## New Map Composition Switcher

The new Map Composition picker for displaying predefined maps is invoked using the buttons in the upper right corner, making it handier and more intuitive to use. The smaller, more compact map picker has the same functionality as before. It displays map composition thumbnails and allows for different map switching options if those were included by the administrator in the given instance configuration.

When the Consumer Portal configuration contains a lot of map compositions, due to the new compact map picker, the user has all map compositions at hand and does not have to scroll the panel to select a given one. Users can resize the area for the Map Composition picker to display more or fewer map thumbnails. If not all thumbnails fit in the set area, a slider appears.

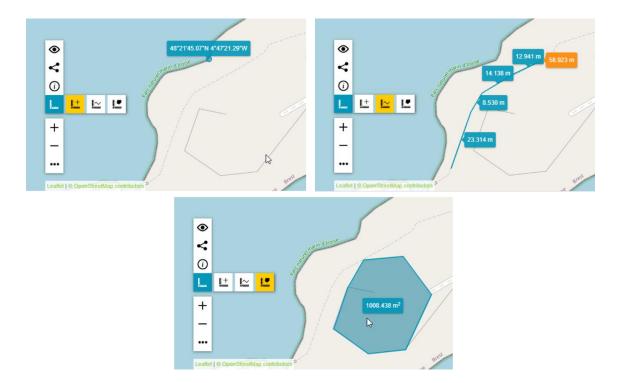
The new map picker has been implemented for the new Window layout. The **Map Composition** tab in the legacy Panel layout is replaced by the new map picker.





#### Improved Measurements UI in Consumer

With Consumer Portal, you can measure distances or an area of features displayed on the map and return the geographic coordinates of a given point. Measurements have been available in the Consumer layout for quite a long time, but in this 2022 release, the feature was slightly redesigned to improve the ease of use. The Measurements control was moved to the bottom left toolbox. One measurement group button is always visible, and when you click it, the buttons for particular measurement types are shown. The button for active measurement is yellow. Measurement results are displayed on the map, over measured geometries.





## Share Map

Efficient flow of information is very important in the modern world. Now you can easily share spatial data with the community with the new Share Map feature. Portal users can easily send each other maps and their insight into geospatial data. In the Consumer layout GUI, the new Share Map button was introduced in the left toolbar. It opens a window with the URL to the current map being displayed. An additional button allows copying the address quickly to the clipboard. A shared map preserves all its properties, including:

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





## LUWS Search Configuration for Consumer Portal

The LUWS — Location Utility Web Service — is an exceptionally flexible method for finding geospatial information. It uses geocoding to determine the position and address of an object (POI). LUWS is a search service that can be compared to Google's search services. With LUWS, users can search addresses, points of interest, cadastral data, or any defined geospatial objects.

Users of Consumer Portal can search for objects from the Oracle database or WebMap Publisher Services. Since version 16.7, they can also search for objects by using the LUWS service. With the new LUWS tab in the Search Configuration section of the Administration Console, it is possible to add a working LUWS service to the Consumer searches. Administrators can configure LUWS to be used with Consumer instances with a few mouse clicks; no programming skills are required.

The LUWS service is provided within the GeoMedia WebMap product, so now WebGIS 2022 delivers a complete solution for those who want to provide their users with the services of searching for geographic data and objects.

ew Instance	2 Database Search UV DEFINE SEARC	7	SEARCHABLE ATTRIBUTES		
ystem Settings onfiguration Test ublisher Settings ervice Sources	Selected search: Damo LUWS service adress: http://ocalhosal.UWS_DE				
revious Services roduct Information	LUWS REQUEST PAG	re:		Q	
laps & Workspaces Harty Map Providers earch Configuration	Regex predicate:			Object name Object name Object name Object name Object name	
ERVER CONFIGURATION	0		Object name	TT	
	HOME  INSTANCE MANAGEMENT  O  Instance List	+ ADMINISTRATION CONSOLE = INSTANCE LIST + COO	NSUMER PORTAL CONFIGURATION		
	New Instance     GEOMEDIA WEBHAP	CP_LUWS Searching Configuration Appearance Starts SELECT SEARCH SOURCE	ng Configuration Map Compos	tions Behavior Details	
SRD PY 🍇 HEXAG	System Settings     Configuration Test     Publisher Settings     Service Sources     Previous Services     Product Information	Available search sources SearchBackend,Oracle Butth,CoordinateSearch GoogleSearch		Chosen search sources LUWSSearch.Demo	Î
	mlock Ln Whitier NC 287 × Q 288 HEMLOCK LN WHITTIER, NC 28789		4		
	ters 267 HEMLOCK LN WHITTIER, NC 28713 Knis 289 HEMLOCK LN WHITTIER, NC 28713				
	ture	288 HEMLOCK LN WHITTIER, NC 28789 Iures	R	UN PORTAL REFRESH	APPLY
		<b>9</b>			



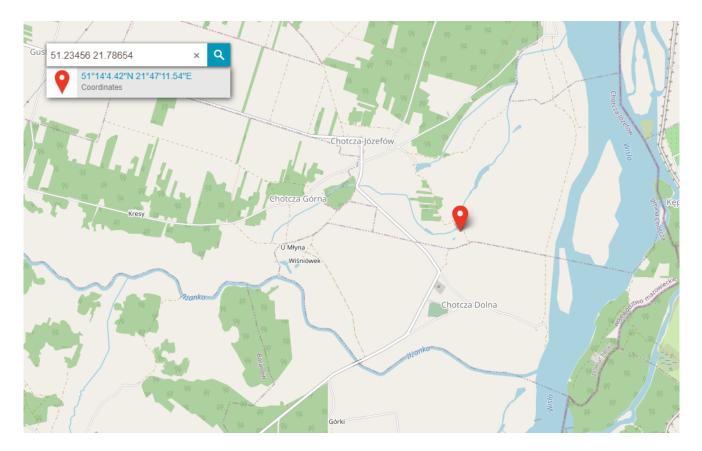
# Search for Coordinates in Consumer Portal

Consumer Portal gives you the ability to search for geographical coordinates.

Search	â	Starbucks	٩	 Ave N & N 34th St	DU
Search sources		Coordinate se	arch		

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**).

When coordinates are found, a pin showing the location on the map is displayed.

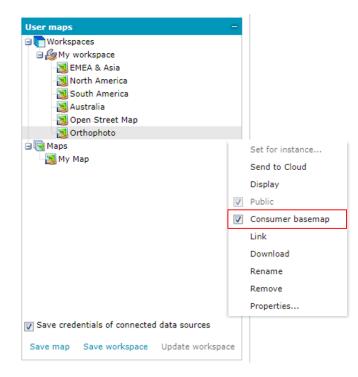




## Base Maps in Consumer Portal

The new base map feature provides a background of geographical context for the content displayed within a Map Composition. Users can change the base map of the current Map Composition at any time using the base map switcher. The base maps available in the current Consumer Portal instance are prepared by the administrator.

The process of creating base maps with Configuration Portal is quick and easy. Just select the **Consumer Base Map** option for the map composition(s) in the workspace prepared and send the workspace to the chosen Consumer Portal instance. Maps with the **Consumer Base Map** option enabled will be translated into the workspace, as the base maps and will not be included in Map Compositions. This means the layers included in them will not be visible in the legend.



The base map thumbnails for the base map selector in the Consumer Portal GUI are generated automatically based on the Map Composition thumbnails defined for the Consumer Portal instance.





#### Integration of Google Maps and Consumer Portal

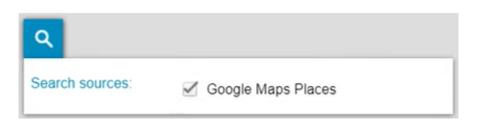
Consumer Portal handles Google Maps layers. This means users in Consumer Portal can view Google Maps, explore Google Street View, and search for interesting objects by using the Google Maps Places search service.

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 type of Google Maps.



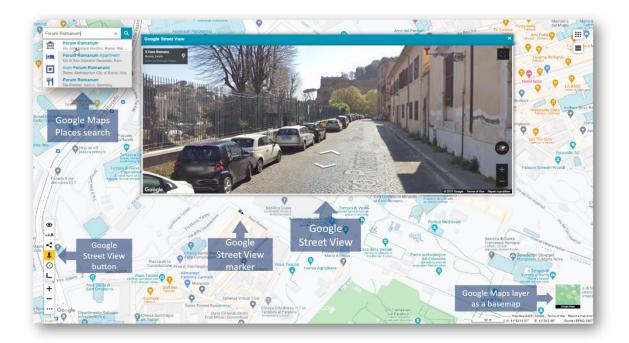
For standard layers displaying Google Maps, the user can choose the map type: roadmap, hybrid, traffic, satellite, or terrain. The map type for a base map is selectable by using the standard base map switcher in Consumer.

Google's search service is also integrated. Consumer Portal users can search for a POI or address by using the standard Consumer Portal search control integrated with Google Maps Places. Pins with the locations of searched objects appear on the map.



Google Street View mode is also available with Consumer Portal. Exploring the Google Street View in Consumer Portal is intuitive and uses well-known Google Street View native functionality in a floating and resizable pop-up window. All you need to do is to enable Street View mode and place a marker on the map. The Street View mode icon was added to the Consumer Portal bottom left toolbox. The marker on the map shows your location and view direction and follows the position when you move in the Street View.





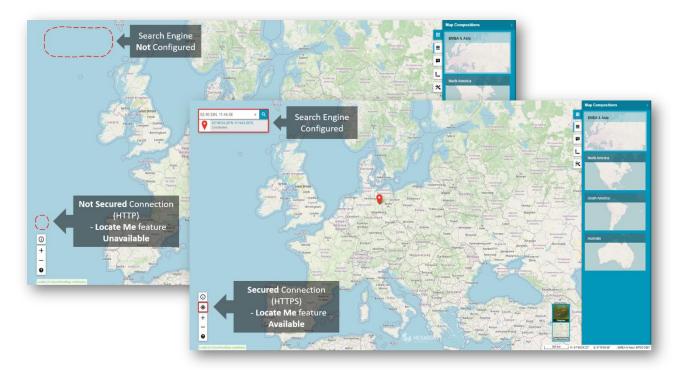
Configuration of Google Maps layer for Consumer Portal is as easy and intuitive as possible. All the Administrator needs to do is run Administration Portal, prepare map composition with Google Maps, and send it to a Consumer Portal instance.



## Disable Unavailable Elements (Search, Go to My Location)

Features that are not configured are not displayed on the Consumer Portal screen. This applies to the **Go to my location** and **Search** features.

The **Go to my location** feature in Consumer Portal works only with secured (https://) connections. When a Consumer Portal instance is configured over a non-secured connection, the **Locate Me** button and the **Show my location** options on the Settings panel will not be displayed, and the features will not be available. The same mechanism applies for **Search** bar. If no search engine is configured for Consumer Portal, then the search controls are not displayed for users.





# New Display Settings for Consumer Portal and Improved Legend Entry Behavior

Administrators can adjust the Consumer Portal to the users' needs. With the new **Appearance** tab in the Administration Console, the following display options can be enabled or disabled:

- Show Map Info
- Show Scale Bar
- Collapse Legend Group

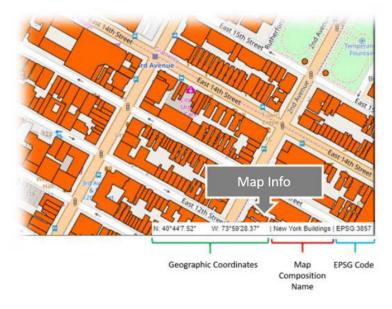
→ номе								
- 10112								
VINSTANCE MANAGEMENT	→ ADMINISTRATION CONSOLE	$\rightarrow$ INSTANCE LIST	→ CONSUMER PORTAL CO	NFIGURAT	TION			
→ Instance List	СР							
→ New Instance								
	Searching Configuration	Appearance	Starting Configuration	Map C	ompositions Behavior	Details		
V GEOMEDIA WEBMAP	Scarching configuration	rippedranee	Starting Configuration	нар с	ompositions benavior	Detuns		
	APPEARANCE							
→ System Settings	Show Map Info							
→ Configuration Test								
<ul> <li>→ Publisher Settings</li> <li>→ Service Sources</li> </ul>	Show Scale Bar							
→ Previous Services	Collapse Legend Groups							
→ Product Information						_	_	
					RUN PORTAL	REFRESH		APPLY
✓ CLIENT CONFIGURATION ?								
→ Maps & Workspaces								
→ 3 <sup>rd</sup> Party Map Providers								
→ Search Configuration								
✓ SERVER CONFIGURATION ?								
→ Hostname aliases								
POWERED BY								Platform



Map Info provides a set of information about the active map:

- Geographic latitude and longitude for the current cursor position in a map window
- The name of active Map Composition
- The coordinate system EPSG code of the current map

Map info is displayed in the bottom right corner on the screen application.

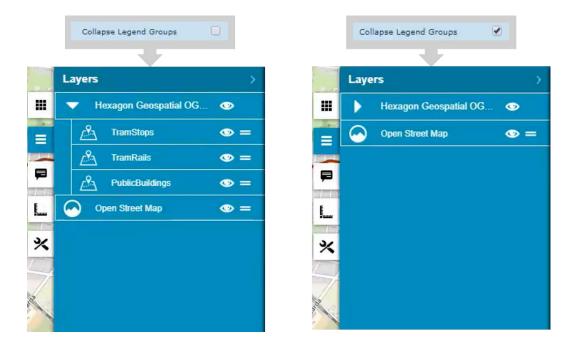


Scale Bar provides approximate information about the scale and distance on the map.





The **Collapse Legend Entry** setting allows users to decide whether all layers in the Consumer Portal legend should be collapsed on start or not. If enabled, all groups in the Consumer Portal Legend are collapsed when Consumer Portal starts. This is especially useful when multiple map layers from several data sources are in the workspace and as an administrator you do not want to show them all when the user runs Consumer Portal.



## Preserve Legend Settings Between Map Composition Switches

Further improvements for Consumer Portal include a memory for legend changes during one session. When a user adjusts layer properties (layer display on/off, transparency, layer order), switches the Map Composition, and displays the previous Map Composition again, all layer settings will be the same as set before.

#### Consistent Mechanism of Scale Bounds Handling for WMS, WMTS, and WMPS

Consumer Portal handles scale bands advertised by Web Map Tile Service.

If scale ranges have been set for the data served by the WMTS service, the same ranges will apply when displaying them in Consumer Portal. This function does not require any additional steps on the administration side of the Consumer Portal, and it works in the same way as for the services (such as WMPS or WMS).



Allow Display of Long Layer Names in Consumer Portal

Now users can see the entire name of the feature class in Consumer Portal legend, even if the panel is shorter than the name. Long names in the collapsed Consumer legend panel are still truncated, as was the case prior to the 16.6.2 version, but expanding the legend control allows you to view the full name.

Laye	rs	>
$\bigcirc$	Map of	the administrative di 💿 💳
$\odot$	General	l geographic map of 👁 💻
		Layers >
		Map of the adr inistrative di 👁 =
	▣	General geographic map of the 👁 — Podkarpackie Province.
	P	Opacity
	Į	
	*	
		Map of General



## High Contrast Mode and Font Size Change (WAI Design)

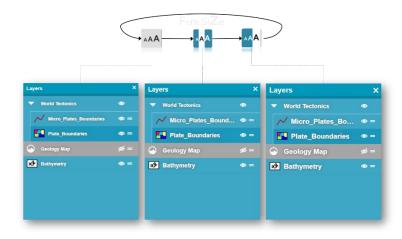
The new High Contrast mode is now available for both Geospatial Portal and Consumer Portal. High contrast makes Consumer and Geospatial Portal more accessible and usable to people with disabilities. High Contrast mode was designed in accordance with W3C Web Accessibility Initiative (WAI) guidelines and standards and is user-friendly — users can turn on or off the high contrast mode with one click of a button that is easily accessible.

The next facilitation is the ability to change the size of the text font in the Geospatial Portal and Consumer layouts. Three font sizes are available, and users can adjust the font size by pressing one dedicated button.

For the sake of product consistency in the portfolio, the same icons are used in both Consumer and Geospatial Portal. The font size and contrast features work with every Portal theme, current and legacy. These features reduce digital exclusion among your audience.







Easier Registration of Google Maps API key for Portals

The Google Maps layer configured with Consumer Portal can be used as a base map and/or a standard layer added to the legend. To configure and use Google Maps layers in the Geospatial Portal and/or Consumer Portal layout, you must register a Google Maps API Key.

Administrators can register the Google key for a Geospatial Portal or Consumer instance directly in the Administration Console. There is no longer a need to edit the Web.config file for each instance anymore.

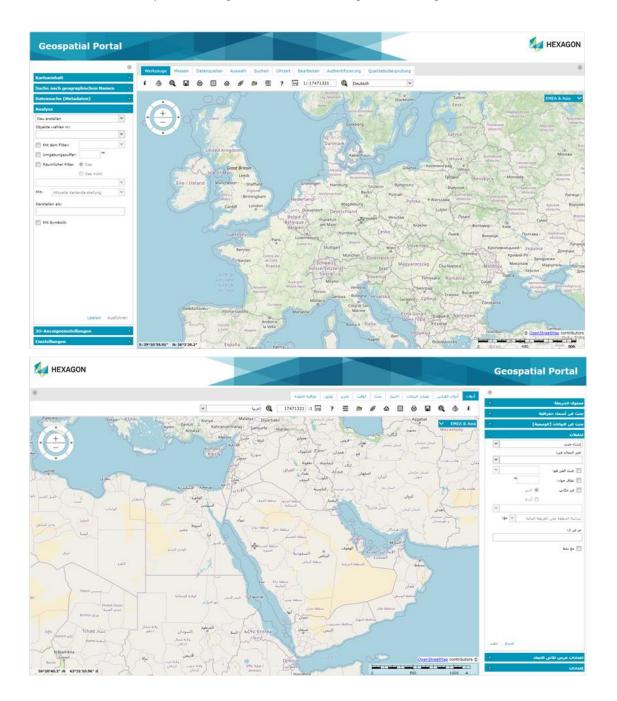
Go to the **Advanced options** group in the **Starting Configuration** tab of Administration Console and type the key value in the **GoogleMaps API Key** field.

HOME						
	+ ADMINISTRATION CONSOLE +	INSTANCE LIST - GEOSPATIAL PORT	AL CONFIGURATION			
Instance List New Instance	GPMMAJEWSK					
	Appearance Starting Conf	figuration Map Variants Dehavio	r Map Services L	ayouts Workflow	Manager Details	
	STARTING CONFIGURAT	ION				
System Settings	Default Layout	Full-aspx		v		
Configuration Test	Starting Workspace			~		
Publisher Settings Service Sources						
Previous Services	Mobile Workspace			~		
Product Information	Overview Map			~		
	Advanced options					
LIENT CONFIGURATION	Starting Workspace ID	SDIPortalSampleWorkspace				
Maps & Workspaces	Overview Map ID	SDIPortalSampleMap				
34 Party Map Providers	Mobile Workspace ID					
Search Configuration	GoogleMaps API Key					
SERVER CONFIGURATION	Switching between 2D/3D	🗹 Enabled				
Hostname aliases						
	1		RUN	PORTAL	REFRESH	APPLY



#### Auto Adaptation of the Portal Layout to RTL Languages

One of the Geospatial Portal improvements relates to multilingualism. Portal starts in the same language as the default setting for the web browser. You can change the language using the drop-down list that contains the available languages. Geospatial Portal supports both LTR (left to right) and RTL (right to left) languages. If a RTL language is selected (e.g., Arabic or Hebrew), the layouts will be automatically adapted. The display of the controls for the layout is changed, and the text is aligned to the right.



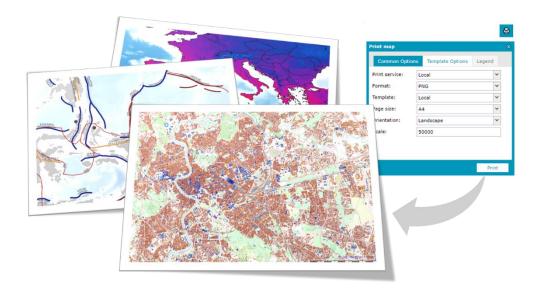


## New Print Engine Support in Geospatial Portal

It is now possible to configure a Chrome print engine. You can print maps using Internet Explorer, phantomJS, and Chrome (new). The engine definition is stored in the WebConfig file for the Portal instance and requires only two parameters: the type of engine and the path to the executable file.

#### Sample:

<printing tileSize="2000" mapSizeLimit="5000" timeout="00:02" defaultService="FirstExternal" precisionGeographic="7" precisionProjected="0" printingEngine="chrome" chromeProgramLocation="C:\Program Files (x86)\Google\Chrome\Application\chrome.exe"/>\





## Ability to Connect to Secured WFSG Services in Geospatial Portal

The new release gives you the benefit of registering an authorization-protected WFS-G service. In the **New Data Source** window for the WFS-G connector, a new key button has been added. This key button opens a registration form to provide credentials for the WFS-G service. After registering a secured WFS-G service, the Geospatial Portal search engine works as it used to.

lew Data Source			•				×	
Type ▲ 3D Map Tiles 3D Objects Bing Maps CSW ERDAS APOLLO GeoRSS Google Maps LUWS Open Street Map OpenLS Personal Print Service WCTS WFS WFS-G WMS WMTS WPS-CT	 	: Name GeoN	ces	URL http://de	Login method: Username: Password:	Use	egister	



Improved UX for Switching Map Variants in Geospatial Portal Layouts

The combo box style map variant switcher was slightly redesigned in order to make it more consistent with the rest of the Geospatial Portal styling.

EMEA & Asia North	h America South America Australia
EMEA & Asia	EMEA & Asia
	EMEA & Asia North America
	South America Australia



Remove all Connections and Clear Workspace with One Command in Geospatial Portal

It is possible to remove all registered data sources and thus completely clear the workspace with one click. Press the **Remove All** button located at the bottom of the **Data Sources** window. Then confirm the removal operation, and all registered sources will be deleted, the legend entries will be removed, and the map window cleared.

Now you can start to register new sources by selecting the **Define a data source** 🕸 button from the toolbar.

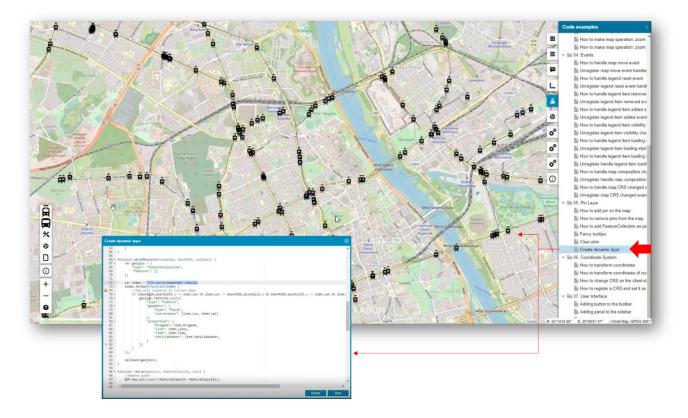
Dat	a Sources		×		
	Name 🔺	URL			
	Open Street Map (1)				
	Open Street Map	http://{a,b,c}.tile.openstreetmap.org			
	WFS (1)				
Ŧ	IDENA - Infraestructura de Datos Espaciales de Navarra	http://idena.navarra.es/ogc/wfs			
	WMS (2)				
	NASA Earth Observations (NEO) WMS	http://neowms.sci.gsfc.nasa.gov/wms/wms			
	World Map	http://www2.demis.nl/wms/wms.ashx?WMS=WorldMap			
		_			
		Remove A	AH.		



## Using Consumer Portal SDK: Dynamically Refreshed Content

Consumer Portal now supports dynamically refreshed content so you can observe objects moving on the map in real time (e.g., public transport, railway, metro, buses, planes, etc.). Dynamically refreshed content is based on third-party API services. An SDK example showing how to implement dynamic layers has been introduced and can be used to enhance Consumer Portal's capabilities with a layer of data updated online.

In short, from a technical point of view, the response from the custom API format is parsed to the JSON format, and all features are collected within the current bounding box and then displayed on the map. The layer is refreshed by the time set.



Moreover, each dynamically displayed feature on the map has a tooltip with additional information. The tooltip is displayed when the user clicks on the feature.





**Geospatial SDI** 

#### OGC WFS and WCS 2.0 Façade Conformance

Web Feature Service Façade and Web Coverage Service Façade delivered with Geospatial SDI follow the OGC 2.0 International Standard.

The OpenGIS Web Feature Service 2.0.0 Interface Standard (also ISO 19142) has been implemented for Simple WFS, Basic WFS, Spatial Filter, and Transactional WFS conformance classes.

The OGC Web Coverage Service 2.0.1 Interface Standard has been implemented.

#### **INSPIRE-Ready and Enhanced Metadata Editor**

Geospatial SDI services have been adjusted to meet the most recent INSPIRE Directive technical specifications. The INSPIRE Technical Guidance for View Services, Download Services, Discovery Services, and Coordinate Transformation Services were followed and implemented.

Metadata Editor for Geospatial SDI Web Coverage Service Façade was introduced in Administration Console, which provides the ability to easily set OGC and INSPIRE (both Inline and External) metadata profiles. This works in the same way as for services such as WFS or WMS.

wcs.						
Data	Logging	Performance Monitoring	Service Metadata	Details		
MET	ADATA PRO	FILE CONFIGURATION				
Meta	data Profiles	OGC			~	
		OGC				
		OGC & External Inspire OGC & Inline Inspire				NEXT



## Administration Console: GeoMedia WebMap, Geospatial Portal, Geospatial SDI

#### Manage Multiple Instances with Administration Console

The enhancements also reached the Administration Console, the basic instance management tool for administrators of products such as WebMap, Portal, or SDI. The possibility of batch management of instances in the scope of upgrading and/or deleting instances was introduced.

Prior to version 16.6.2, upgrading multiple instances to a newer version or removing multiple instances required the administrator to update/remove each instance individually.

Two new buttons — one for upgrade, and the second for removing instances — were added on the top bar of the Administration Console. Now the administrator can select multiple instances (using checkboxes) and then update or delete the selected instances with one click.

Instance List New Instance	UPGRADE INSTANCES	NCES		NEW INSTANCE
Select all	INSTANCE NAME	INSTANCE TYPE A 🔻	INSTANCE VERSION	ACTION
instances	СР	Consumer Portal	16.6.1	
System Settings Configuration Test	CP_Demis	Consumer Portal	16.6.0	
Publisher Settings Service Sources	CP_Impossible_To_remove	Consumer Portal	16.6.1	
Previous Services Product Information	CP_To_Remove	Consumer Portal	16.6.1	
rioudet mornation	CP_To_Remove2	Consumer Portal	16.6.1	
CLIENT CONFIGURATION	GP_New_Buttons	Geospatial Portal	16.6.1	
Maps & Workspaces	GP_RTL	Geospatial Portal	16.6.1	
3 <sup>st</sup> Party Map Providers Search Configuration	GP_RTL_template	Geospatial Portal	16.6.1	
	GP_To_Remove	Geospatial Portal	16.6.1	
SERVER CONFIGURATION ?	GP_WMPS_FI	Geospatial Portal	16.6.1	
Hostname aliases	WebMapPublisherPortal_Demo	WebMap Publisher Portal	16.6.0	
	WebMapPublisherPortal_Demo_U1	WebMap Publisher Portal	16.6.1	
	WFS	WFS (Feature) Service	16.6.0	
	WFS_demo	WFS (Feature) Service	16.6.0	
	WMPP_Hotfixed	WebMap Publisher Portal	16.6.1	
	WMS_To_Remove	WMS (Map) / INSPIRE View Service	16.6.1	



# New Technology (16.7.1)

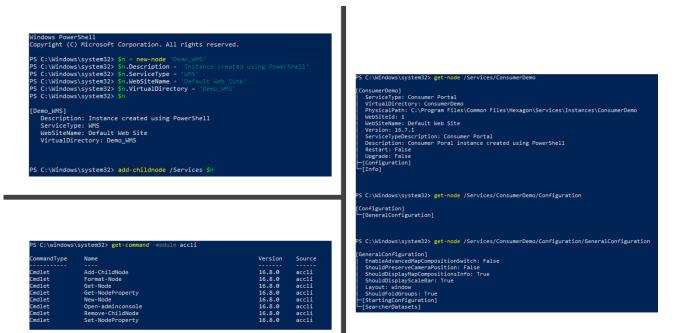
# GeoMedia WebMap

#### Managing instances with Administration Console command line interface

The GeoMedia WebMap 16.7 Update 1 comes with preinstalled PowerShell module and provides several cmdlets to configure and manage GeoMedia WebMap instances and services. Using PowerShell commands is very handy when administrative tasks are frequent, repetitive and/or need to be automated.

By using PowerShell and the newly introduced cmdlets, every administrator of GeoMedia WebMap can:

- Review the configuration and get the list of cmdlets available
- Display the configuration tree exposed by the server
- List all service instances
- Inspect services exposed by the Administration Console service
- Create or remove instances of GeoMedia WebMap services
- Manage instances and change GeoMedia WebMap settings

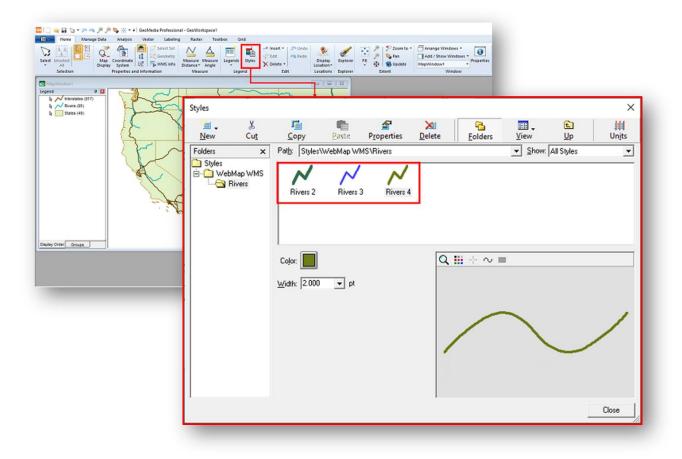




#### Publish and handle multiple WMS styles

When Geoworkspace content is published to the WMS Metadata, the current style set for a legend entry is published as a default one for the WMS layer. Update 1 adds the ability to handle additional (non-default) styles for legend entries. A geospatial server administrator can publish several predefined styles per layer, so end users can choose and switch between these styles (e.g., in Geospatial Portal). This is how easy it is now to match the WMS style to a particular map composition (e.g., prepare separate styles optimised for dark and bright backgrounds).

Additional styles are prepared using the standard GeoMedia functionality. It is enough to put additional styles in an appropriately named folder before starting the standard procedure of data publishing.





### GeoJSON output format for GeoMedia WebMap WMS Feature Info response

GetFeatureInfo response from WMS service can be obtained in many formats, like XML, HTML, or plain text. Now one can also get and consume the FeatureInfo output in geoJSON format. Beginning from version 16.7.1, the application/geo+json output format is available out of the box, and no additional configuration on the GeoMedia WebMap server side is required.

```
<!-- Service Metadata -->
▼<Service>
   <Name>WMS</Name>
   <Title>Hexagon Geospatial OGC Web Map Service</Title>
   <Abstract>Service powered by Hexagon Geospatial Server products - GeoMedia WebMap and/or Apollo and/or Geospatial SDI.</Abstract>
   <KeywordList/>
   <OnlineResource xlink:href="http://www.hexagon.com/"/>
 <AccessConstraints/> </Service>
▼<Capability>
  ▼<Request>
   ▶ <GetCapabilities>
     </GetCapabilities>
   ▶<GetMap>
     . . .
      </GetMap>

<GetFeatureInfo>
<Format>text/xml</Format>

       <Format>text/html</Format>
       <Format>application/gml+xml; version=3.1</Format>
      <Format>application/geo+json</Format>
<Format>application/json</Format>
```



# GeoMedia WebMap Mobile and Mobile Publisher

#### Enhanced zone assignment

Apart of filtering all active map layers by defining zones, now there is an option to opt out of limiting the legend entries to global work zone selection. With the introduced 'Use Zones' option column in Mobile Publisher legend entries control, the administrator can select the feature classes filtered by a chosen zone(s).

		map con	ent Description									
pe* er*	General	Map Wir	MapWindow1								Ψ	
	Łukasz Segiet 💌	Base Ma	ap* Open Street Ma	p							•	Options
cription	Г	Zones	ŁÓDŹ-ŚRÓDM	EŚCIE								Select
Offline -	_	Legend	1									
wnsampli om Level	ng 🔽 Low (17) 🗾		Legend Entry	Searchable	Use Zones	Include	Create	Delete	Geometry Update	Attributes Update	Display	
			schools		🔽	•	•	•	~			Attributes
Dashboa	ird		hospitals		🔽	•	•	•	<b>V</b>			Attributes
coding	None 👻		hotels		<b>v</b>	•	•	◄	•	<b>V</b>	<b>V</b>	Attributes
Manage		Þ	roads			1	~	•	~	<b>V</b>		Attributes
			wateways		🔽	•	•	•	•	<b>V</b>		Attributes
			parks			•	•	•	•			Attributes



Further enhancements in the Zones functionality include selecting and displaying the zones on the list.

All applicable zones that one can select to filter features are now displayed in a separate Zones configuration window that one can open with the Select button. The dialogue allows users to conveniently filter and select a zone or zones. The selected zones are then listed in the Zones field on the Map Content tab of Mobile Publisher.

lit Work									
Name*	Zones	Map Content Descrip Zo	nes configuration		×		_		
Type* Jser*	General 💌		ilter by name		8			Ŧ	
Description	n E	Base Map* Or	Name		Г	-		-	Options
Offline		Zones 🔽 🕨	ŁÓDŹ-WIDZEW						Select
		Legend Entries -	ŁÓDŹ-BAŁUTY						
lownsamp		Legend E	ŁÓDŻ-GÓRNA ŁÓDŻ-ŚRÓDMIEŚCIE			Geometry	Attributes	Display	
oom Leve	el Low (17) 👻					Update 5	Update		Attributes
Dashbo	oard	b schools hospitals	ŁÓDŹ-POLESIE		1.1	<u>२</u>	<b>v</b>	V	
		hotels				v ▼	v	V	Attributes Attributes
eocoding	None 🔻	roads					V	V	Attributes
	Manage	wateways					v V	V	Attributes
		parks				<b>V</b>	~	~	Attributes
				СКС	Cancel				
		L						ок	Cancel

The last but not least improvement in zone assignment workflow is that zones with wrong, empty, or unsupported geometry are displayed in the zone's selection window as unsupported, and selection for such zones is blocked.



Turn on/off Google Search for Google Base Map in Mobile Publisher work

Before adding a Google service to the work definition (e.g., set): Google Base Maps layer, the Google API must be configured. The Google API may activate not only the Google Maps display, but also the access to Google Search services.

GeoMedia WebMap Mobile Publisher users have a new option to turn on/off Google Search when configuring Google Base Map in Mobile Publisher work. The new option is located in the Google Maps base map options dialogue. Google Search is enabled by default for a Google Base Map defined in Mobile Publisher works.

Google Maps	×
Api Key* API	Manage
Layer Type* RoadMap	•
Google Search* ☞	
Help	OK Cancel



### Enhanced UI of WebMap Mobile Publisher for bulk configuration changes

To speed up the editing and preparation of the Work configuration, a header cell context menu for checkbox columns was implemented in version 16.7.1. The new context menu for **Visible**, **Editable**, and **Mandatory** columns in the **New/Edit Work** dialogue has the following options:

- Select All
- Deselect All

With this little improvement, one configuring a Work can quickly check or uncheck all attributes at one time.

Visible	Editable	Ma	Select All	Display
$\checkmark$	<b>V</b>			ng Integer
1			Deselect All	xt
<b>V</b>	•		Double	Double



Improved search configuration UI in WebMap Mobile Publisher

User Interfaces for searcher configuration in Legend Entries control in the New/Edit Work dialogue has also been improved.

First, searcher configuration is available only for WFS-T Legend Entries that have attributes:

	Legend Entry		Searchable	Use Zones	Include	Create	Delete	Geometry Update	Attributes Update	Display	
•	IncidentsI			 <b>v</b>		<b>V</b>	~				Attributes
	MainRoads	WFS-T		 <b>v</b>	~	•	~	~			Attributes
	Hospitals			 <b>V</b>		•	~				Attributes
	TramStops			 •	~	•	~	~			Attributes
	Places	ן ו		 •	~						Attributes
	Public_Buildings	WMS		 •	~						Attributes
	Railways			 •	~						Attributes
	Lodz_Ortho				~						Attributes

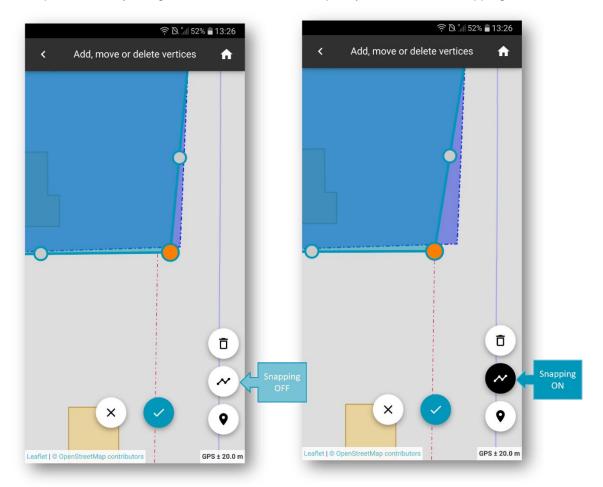
Second, after clicking the checkbox, a configuration window appears, which, when cancelled, will deselect the checkbox:

	General		ap Window	w* MultipleConnect	ionsLocatableOn	_					Ŧ	
	mm mm	► Bi	ase Map*	Open Street Ma	p		_		+			Options
scription			ones egend Eni	There are no zon	nes available. Ple	ase, insert fe	a		earch for IncidentsI	×		Select
wnsampli om Level				Legend Entry	Search	able	U Disp	ay Name		•	Display	
			▶ Ir	ncidentsl		4-1		Source Name	Display Name	Searchable		Attributes
Dashboa	brd		N	1ain Roads			•	MemoM	MemoM			Attributes
ocoding	None	-	H	lospitals				Audio	Audio			Attributes
-	Manage		Т	ramStops				Photo	Photo			Attributes
	manago		P	laces				Video	Video			Attributes
			P	ublic_Buildings	Г			Signature	Signature			Attributes
			F	Railways				DocD	DocD			Attributes
			L	odz_Ortho				PdfP	PdfP			Attributes
						1		TextT	TextT			
									ОК	Cancel		



### Snapping in geometry edition

Snapping works with all types of geometries supported by the mobile app and is active while editing existing features and adding new ones. The vertex of the edited geometry can be snapped to vertices of other geometry and to any point, line, or boundary of area features. In version 16.7.1, the special snapping button has been implemented. By using the new button users can quickly turn off/on the snapping feature if needed.





#### Adjustable tap tolerance

This new feature introduced with Update 1 should significantly improve the user experience while working with the GeoMedia WebMap Mobile application.

Depending on many factors, such as the physical size of the device screen, resolution of the screen, object style, arrangement of objects on the map, etc., it was sometimes difficult to hit the right object on the map on the first try. Now mobile app users can adjust the tap tolerance to adjust to individual preferences and device properties. Every user can set individual tap tolerance by using the slider in the Settings panel.

Also, the style of the feature (e.g., dot size for points, or line thickness) is taken into consideration, so one does not need worry about hitting the center of the feature (for a feature with a large enough style). It is enough to hit on the edge of the object to display its feature info.

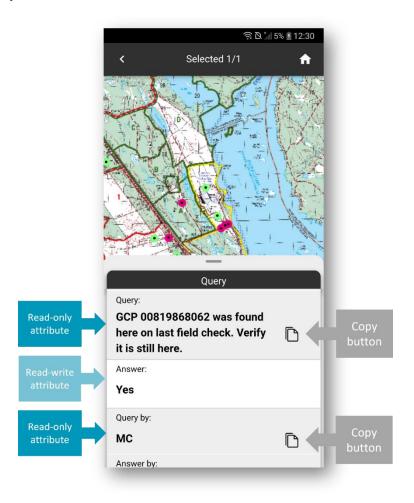
	🛜 🖻 ភ្លា∥ 87% 🖬 14:04
< Settings	
Measurement system unit	
metric	
Display GPS accuracy	•
Keep my location marker	
Tap tolerance	
	— o
Language	
Current device language	
-	_



### Copying of read-only attributes to clipboard

In the feature info card when viewing or editing object attributes, both read-only and read-write attributes are displayed. The read-only attribute fields are inactive, so the user cannot change the fields or even select an attribute's value.

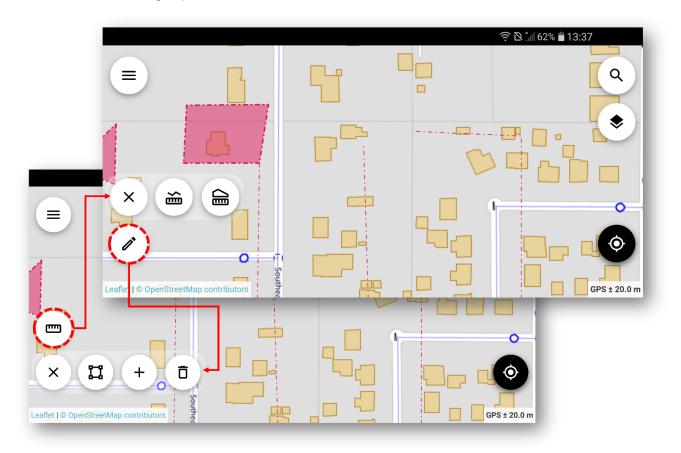
Update 1 for the 16.7 version makes it possible to copy a read-only attribute's value. It can be done with the new Copy button displayed with every read-only attribute field. Tapping this button copies the attribute value to the system clipboard. In the case of the read-write attributes, there is no special button, and the copying is done using standard system commands.





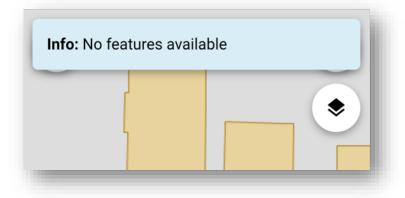
### Grouping of feature actions button

To enhance the responsiveness of the UI of the GWM Mobile application on different devices, the automatic grouping of action buttons was introduced. If there is not enough space on the device screen (e.g., when the screen has low resolution and/or is switched to the horizontal view), the actions buttons are organized into groups. Clicking one button expands the other buttons in the group. The device's aspect ratio also determines whether buttons will be grouped or not.



#### Notification about feature unavailability

By default, tapping a point on the map opens the Feature Info for the underlying query-able layers. Now, in case there is no query-able layer in the tapped map point, the appropriate notification is displayed to the user.





#### Language selection

The WebGIS family of products, including the GeoMedia WebMap Mobile app, are multilingual, with options for a variety of languages out of the box. The GeoMedia WebMap Mobile app was translated to be available in many languages like Arabic, Catalan, Chinese, Czech, French, Hindi, Polish, Portuguese, Romanian, and Spanish. The GeoMedia WebMap Mobile app detects the default language on the user's mobile device and starts automatically in this language if available. Update 1 brings the possibility to change the language of the app without changing the default device language settings. Users can set the preferred application language by selecting it directly in the GWM Mobile app settings. With this feature, using the app in different languages becomes more convenient.

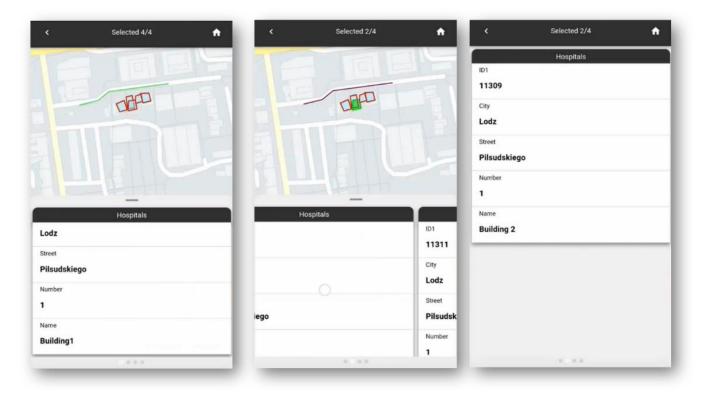
? D. * 87% ■ 14:04		중 ॏॣ∦ 87% ∎14:				
< Settings		Current device language	۲			
Measurement system unit <b>metric</b>	n		0			
Display GPS accuracy	D	Català	0			
Keep my location marker	к	Čeština	0			
Tap tolerance		English	0			
Language	L	Español	0			
Current device language	c	Français	0			
		हिंदू	0			
		Polski	0			

Prior to version 16.7.0, the mobile application is displayed in current mobile device language.



#### Visual enhancements of user interface

The UX and design of the attribute panel in the mobile app were slightly redesigned to make it more userfriendly. Now moving from one to another feature is smoother, and it looks more modern with a better attribute view. The new visual improvements include a new card panel where the feature class name is close above the attribute section instead of showing it on the top. The feature class name is visible when users scroll the attribute view. With the new layout, it is easier to determine what feature is currently edited. On the top, users will see the information on which feature is now displayed and what is the total number of selected features. The next improvement here is the nice-looking carousel animation when feature cards are swapped. The cards can be dragged from left to right or right to left in an infinite loop, and the feature corresponding to the currently displayed attribute card is highlighted on the map. The unchanged thing is that the feature card can be resized to a full-screen mode, but when the feature info panel is moved up or down, the animation is present with the move.



When adding a new feature, the same card view style and behavior are applied.

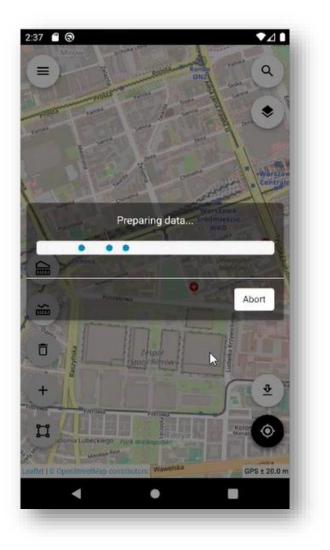


#### Synchronization user experience improvements

A few improvements to the mobile app concern the offline data synchronization process. With the synchronization enhancements described below, WebMap Mobile users have much more control possibilities over working with and synchronizing offline data.

#### New download progress bar

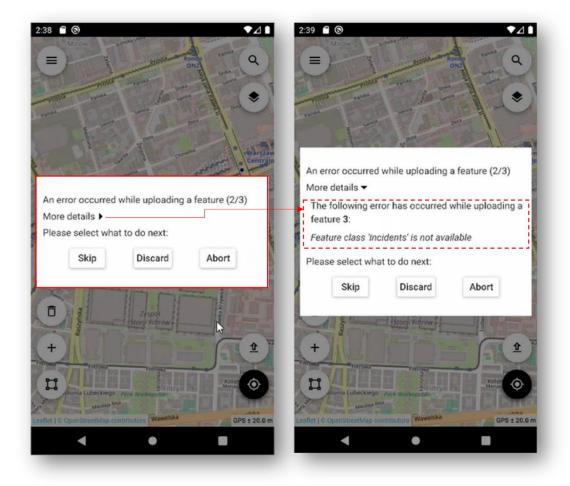
The progress has been refreshed, and now a nice new animation is shown when the data for download are being prepared.





Better error handling during a data synchronization process

Previously, when there was an error during the data synchronization, the process was automatically aborted. Now, with Update 1, a new prompt dialogue appears if an error occurs. The user receives information on how many objects have been synchronized and how many errors occurred and for which objects. Then one can see more detailed information about the error. Moreover, users can skip or discard the change or abort the entire process. In the end, the notification with a short summary is displayed, so the user knows how many features were skipped and/or how many were discarded during the synchronization process or whether the synchronization was aborted if such was a user choice.









#### Checking raster geopackage

Until Update 1, when the user pressed the download button to download data to work online, the entire data packet was always downloaded, which, for example, could extend the process or increase the costs associated with it (especially when working in the field and using cellular data packages).

Since version 16.7.1, the repeated download process synchronizes only vector data. In case the raster data was downloaded with the previous tap of synchronizing button, and the raster is still available in the app cache and the data did not change on the server-side, it won't be downloaded again (until the user clears the cache).

2nd download: 120,14KB

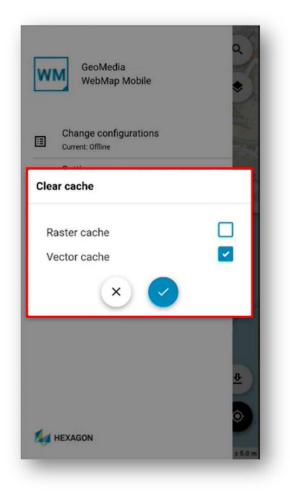


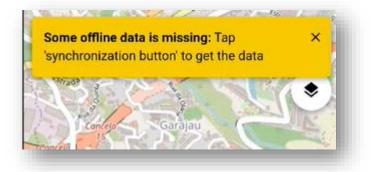




Select cache type (raster/vector) on clearance in GeoMedia WebMap Mobile app

GeoMedia WebMap Mobile app users can choose the type of cache (raster/vector) to be cleared. After selecting the option to clear the cache (available in the same place as in the previous versions of the application), a new simple dialogue window will appear with two options that allow selecting the type of cache to be cleared. It is possible now to clear only the raster cache or vector cache or both. After clearing the cache (raster or vector), a new notification appears informing users that some data may be missing.

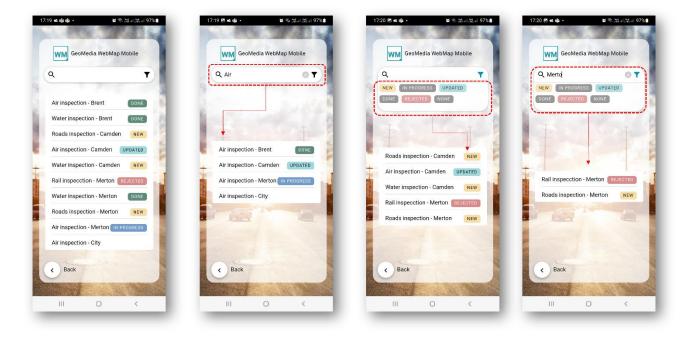






## Filter Works in GeoMedia WebMap Mobile App

Users of the mobile application can filter the list of works assigned to them. Now one can quickly find a specific Work when there are many of them on the list. On the screen with the list of works to choose from, the search control has been added, where after entering the phrase (part of the name), the Works are automatically filtered upon. An additional option here is the possibility of filtering Works according to their status, such as New, Updated, In Progress, Done or Rejected. It is possible to filter Works by the status and a part of the name at the same time. There is also an option to easily clear the filter with the X button in the field.





# Geospatial Portal and Consumer Portal

### Google Street View in Geospatial Portal

The Geospatial Portal handles Google Maps layers and Google Maps Places search service, but from version 16.7.1, users in Geospatial Portal can also explore Google Street View. Exploring Google Street View in the Geospatial Portal is intuitive and uses well-known Google Street View native functionality available in a floating and resizable pop-up window. All you need to do is to enable Street View mode and place a marker on the map. The Street View mode icon was added to the Geospatial Portal navigator toolbar. The marker on the map shows your location and view direction and follows the position when you move in the Street View.

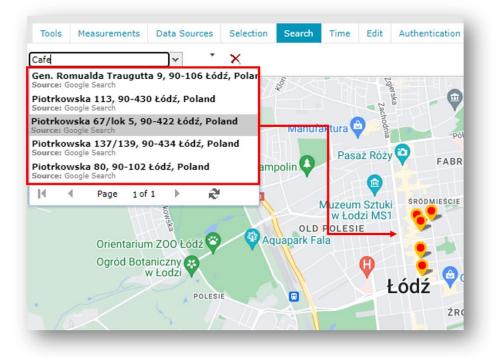




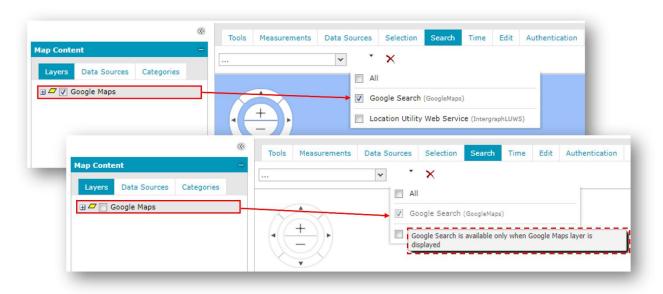
## Google Search Places in Geospatial Portal

Geospatial Portal handles Google Maps layers. Users can view Google Maps, explore Google Street View, and search for interesting objects by using the Google Maps Places search service.

While the Google Map layer is active, users can search for a POI or address by using the standard Portal search control integrated with Google Maps Places. Pins with the locations of searched objects appear on the map.



In case the Google Maps layer is not visible or the current CRS is not supported by Google Maps, a message about Google Search unavailability will be displayed to the user.

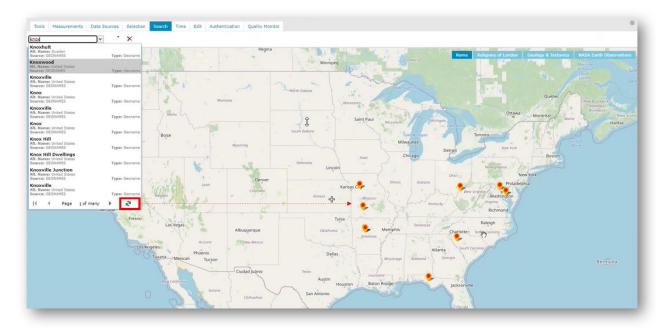




#### Hot swapping capabilities to LUWS

Hot swapping capabilities to LUWS in Geospatial Portal is another new feature worth mentioning. It significantly improves the user experience while working with LUWS services that change quite often.

In case some changes occur in the LUWS service configuration or LUWS dataset and those service updates impact the search results, there is no need to reregister the LUWS in data sources. All the users need to do is press the Refresh button in the search list control and the results will be updated, including search results in the list and on the map.





### Manage WMS Feature Info format in Geospatial Portal

Registering a new WMS service in Geospatial Portal and/or Administration Portal one must provide not only URL service, but also set a few parameters, including Feature Info Format. Users and administrators of Portals with Update 1 applied can change with ease the Feature Info Format for already registered services. There is no longer a need to unregister the service and register it again. The Feature Info format can be changed at any time by using the new context menu option in the Map Content > Data Sources tab.

Map Content	-	Feature info	×
Layers Data Sources Categorie	5	<pre>Vorld Map </pre> <pre> </pre> <pre> </pre>	
😠 🚯 💟 World Map	User  FeatureInfo format Information about map Scale bands Add category Remove	lain <pre></pre>	
Layer ID I	stlines Topography Countries Description Value and	Feature info       ×         Rivers       Coastlines       Topography       Countries         Layer ID Name Data Countries PL Poland       •	ок
	ок	ок	

The Feature Info format can also be chosen in the Data Sources dialogue menu for registered WMS.

Data S	ources			×		
Nar	me 🔺	URL				
🛛 Pers	sonal (1)					
	er dedicated PSS dministrator)					
B WM	S (1)					
Wo	orld Map	http://www2.demis.nl/wms/wms.ashx?WMS=WorldMap				
				User	►	
			×	Remove		
			0	GetCapabilities docum	nent	
				FeatureInfo format	. ▶	🔲 text/xml
					3	🔲 text/plain
						👿 text/html
		Remove	All			



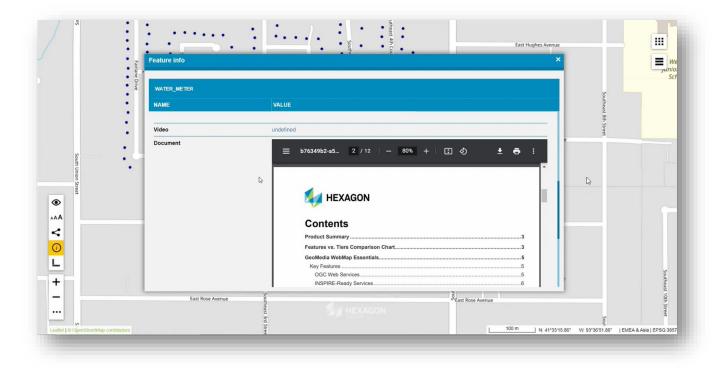
### **Consumer Portal Feature Info enhancements**

Update 1 for version 16.7 brings a set of improvements to the Feature Info functionality in Consumer Portal.

#### Embedded PDF and multimedia files

For attributes in data that represent photo or video or audio URLs, the user can see an image or html5 player for audio/video within the Feature Info dialogue instead of URLs as text.

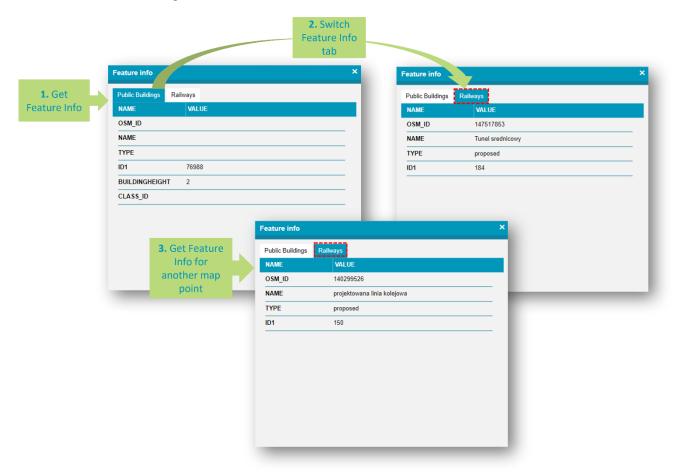
The image or media player (for video/audio) is shown within the appropriate Feature Info data cell. The image and video player may occupy either the full width of the cell or a fixed width and height passed as part of the configuration. Current Web browser compatibility determines whether a multimedia file can be displayed instead of links and what formats are supported. In case the link to the multimedia file is invalid or the Web browser does not support the given media format, then instead of showing video/audio, it displays the URL. The same is true for PDF documents, which also can be displayed within the Feature Info dialogue, instead of as URLs.





Store active Feature Info tab in Consumer Portal

The next enhancement related to the Feature Info dialogue is the possibility of displaying the previously opened tab for the last reviewed feature class. The behavior is configurable with a new option in Administration Console. It is the administrator's choice whether the reloaded Feature Info window shows the tab that was open previously (on the condition that the same query-able layer(s) is present in a map point where the Feature Info is issued again) or the first tab in Feature Info dialogue is displayed, even if the user switched to a different one before issuing new Feature Info.



Feature Info window reflects the current state of the map.

It is also worth to mentioning that since version 16.7.1, the Consumer Portal Feature Info window reflects the current state of the map. When the map layers change their visibility or locatability while the Feature Info window is still open, the Feature Info window is closed automatically since displayed data in the dialogue may not be valid anymore.



#### Adjustable columns in Feature Info dialogue

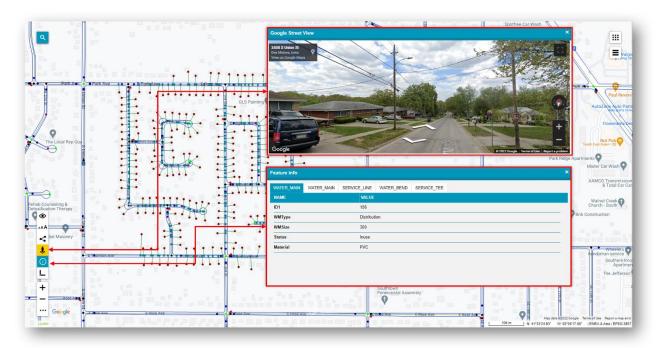
Another little but still very handy enhancement is that users can adjust column size in Consumer Portal Feature Info dialogue; thus they can customize the view to their needs while browsing the data.

NAME       VALUE         DSM_ID       302789909         NAME       Solaris Park         Private Buildings         D1       75431         D1       75431         D1       75431         D1       75431         D1       302789909         NAME       VALUE         OSM_ID       302789909         NAME       Solaris Park         Feature info       TYPE         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         CLASS_ID       4	Private Buildings					
NAME       Solaris Park       Feature info       X         TYPE       apartments       D1       75431       Private Buildings         BUILDINGHEIGHT       12       NAME       VALUE         CLASS_ID       4       OSM_ID       302789909         NAME       Solaris Park       Feature info         TYPE       apartments       ID1         ID1       75431       Private Buildings         NAME       Solaris Park       Feature info         TYPE       apartments       ID1         ID1       75431       Private Buildings         NAME       CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park       Frivate Buildings         NAME       CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park       TYPE         QSM_ID       302789909         NAME       Solaris Park       TYPE         ID1       75431       BUILDINGHEIGHT         ID1       75431       BUILDINGHEIGHT	NAME	VALUE				
rype       apartments         D1       75431         Build DINGHEIGHT       12         SLASS_ID       4         OSM_ID       302789909         NAME       VALUE         OSM_ID       30278909         NAME       Solaris Park         Feature info       12         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park         Functional Solaris Park       Feature info         NAME       CLASS_ID         VALUE       OSM_ID         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         VALUE       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12	DSM_ID	302789909				
D1       75431         BUILDINGHEIGHT       12         NAME       VALUE         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         NAME       VALUE         OSM_ID       30278909         NAME       Solaris Park         Feature info       TYPE         BUILDINGHEIGHT       12         CLASS_ID       4         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         OSM_ID       302789909         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12	AME	Solaris Park	Feature info		×	
BUILDINGHEIGHT 12 NAME VALUE OSM_ID 302789909 NAME Solaris Park Feature info TYPE apartments ID1 75431 BUILDINGHEIGHT 12 CLASS_ID 4 OSM_ID 30278900 NAME VALUE OSM_ID 30278900 NAME VALUE OSM_ID 30278900 NAME VALUE OSM_ID 30278900 NAME Solaris Park TYPE apartments ID1 75431 BUILDINGHEIGHT 12 CLASS_ID 4 OSM_ID 30278900 NAME Solaris Park TYPE apartments ID1 75431 BUILDINGHEIGHT 12 OSM_ID 30278900 NAME Solaris Park TYPE 1 OSM_ID 30278900 NAME 1 OSM_ID 30278900 NAME 1 OSM_ID 30278900 NAME 1 ID1 75431 ID1	YPE	apartments				
NAME       VALUE         OSM_ID       302789909         NAME       Solaris Park       Feature info         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12         CLASS_ID       4         OSM_ID       30278909         NAME       Solaris Park         FUPE       apartments         ID1       75431         BUILDINGHEIGHT       12         NAME       Solaris Park         TYPE       apartments         ID1       75431         BUILDINGHEIGHT       12	D1	75431	Private Buildings			
CLASS_ID       4       OSM_ID       302789909         NAME       Solaris Park       Feature info         TYPE       apartments       ID1       75431         BUILDINGHEIGHT       12       NAME       VALUE         CLASS_ID       4       OSM_ID       302789909         NAME       VALUE       OSM_ID       302789909         NAME       VALUE       OSM_ID       302789909         NAME       Solaris Park       TYPE       osm_ID       302789909         NAME       Solaris Park       TYPE       osm_ID       302789909         NAME       Solaris Park       TYPE       ospartments       ID1       75431         BUILDINGHEIGHT       12       ID1       75431       ID1       75431	BUILDINGHEIGHT	12	NAME	VALUE		
NAME     Solaris Park     Feature info       TYPE     apartments       ID1     75431       BUILDINGHEIGHT     12       CLASS_ID     4       OSM_ID     302789909       NAME     Solaris Park       TYPE     apartments       ID1     75431       BUILDINGHEIGHT     12       CLASS_ID     4       OSM_ID     302789909       NAME     Solaris Park       TYPE     apartments       ID1     75431       BUILDINGHEIGHT     12	CLASS_ID	4				
ID1     75431       BUILDINGHEIGHT     12       CLASS_ID     4       OSM_ID     302789909       NAME     Solaris Park       TYPE     apartments       ID1     75431       BUILDINGHEIGHT     12			NAME	Solaris Park	Feature info	
BUILDINGHEIGHT     12     NAME     VALUE       CLASS_ID     4     OSM_ID     302789909       NAME     Solaris Park     TYPE     apartments       ID1     75431     BUILDINGHEIGHT     12			ТҮРЕ	apartments		
BUILDINGHEIGHT     12     NAME     VALUE       CLASS_ID     4     OSM_ID     302789909       NAME     Solaris Park     TYPE     apartments       ID1     75431     BUILDINGHEIGHT     12			ID1	75431	Private Buildings	
NAME     Solaris       TYPE     apartments       ID1     75431       BUILDINGHEIGHT     12			BUILDINGHEIGHT	12	NAME	
TYPEapartmentsID175431BUILDINGHEIGHT12			CLASS_ID	4	OSM_ID	302789909
ID1 75431 BUILDINGHEIGHT 12					NAME	Solaris Park
BUILDINGHEIGHT 12					ТҮРЕ	apartments
					ID1	75431
CLASS_ID 4					BUILDINGHEIGHT	12
					CLASS_ID	4



## Ability to run Feature Info and Street View simultaneously in Consumer

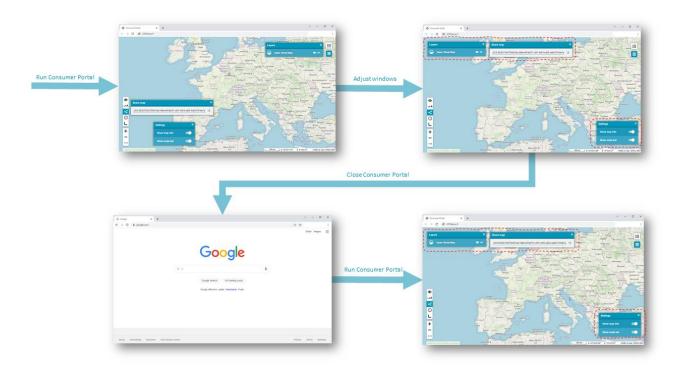
Consumer Portal users can use both the Feature Info command and the Street View window at the same time. The constraint to have the Feature Info and Street View modes exclusive has been removed. This results in changing both for subsequent clicks on the map. After a relevant window is shown, the clicking of the other modal button doesn't disable the current mode entirely, but switches map input, while keeping the current window open and non-reactive to subsequent map clicks.





#### Remember sizes and positions of Consumer Portal windows

Users of Consumer Portal can adjust window sizes and positions to their preferences. The enhancement is that now Consumer Portal can remember the position and size of windows as set by the user. When the Consumer Portal is run, the size of the windows and their arrangement will be the same as during the last session, even if the Web page was refreshed, or the Web browser tab or the entire Web browser was closed. The behavior is configurable with an option in the Administration Console. The administrator of Consumer Portal can disable the window size and position memory, and then the windows will be in a default state with every Portal run or refresh of the page.



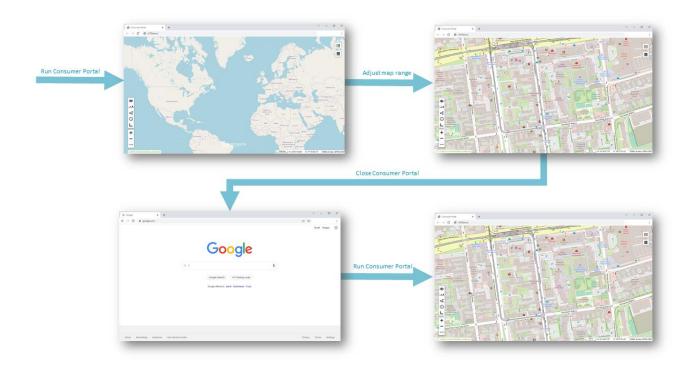


### Customize starting map range in Consumer Portal

Consumer Portal by default starts with the map range as defined in its starting workspace definition. With Update 1, there are two additional startup options:

Remember the last session map range: With the first run of Consumer Portal, the map range will be as defined in the starting workspace, but with every subsequent session of the Consumer portal, the map will open with the same range in which it was previously closed.

Use client location: Consumer Portal will attempt to acquire the user's location and adjust the map range to the location obtained. This option requires enabled localization services to work.

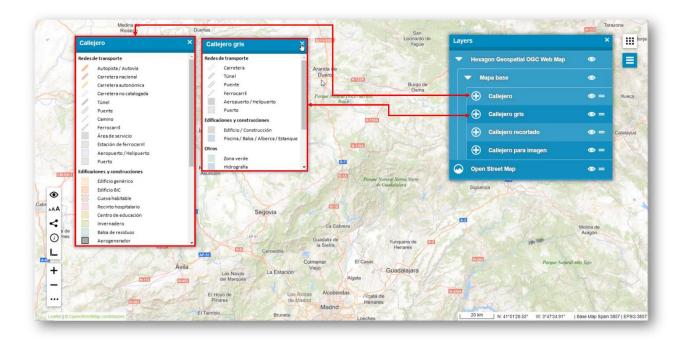




### Dedicated window for legend hover

The legend is an indispensable element of every map and allows you to understand what the map is about. WMS services serving map data often provide a comprehensive legend in the form of a picture. In the Consumer Portal, the map legend was available after hovering the cursor over a pictogram of a given legend entry (and disappeared after moving out the cursor). Since version 16.7.1, the legend from the WMS service can be displayed all the time in a separate window. Moreover, the window with a legend picture can be resized and placed anywhere on the screen. The benefit is that the Legend is visible all the time while working with the map, even after closing the legend entries window. It is possible to display legends for multiple layers/services.

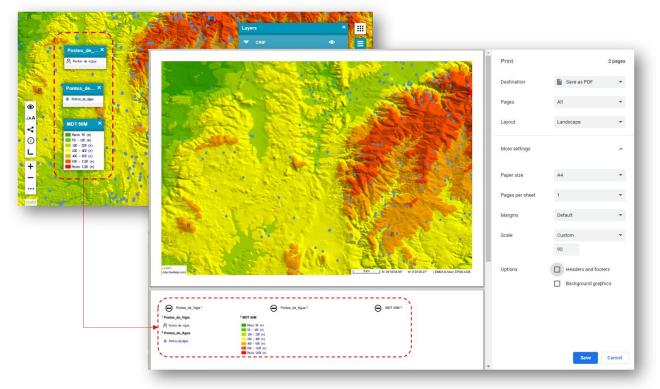
To emphasize that a new window is being opened from the Layers form to the location of the window (by default displayed in place of hover), an animation is displayed. The same animation runs backwards while closing the window.





## Map printouts with Consumer Portal legend graphics

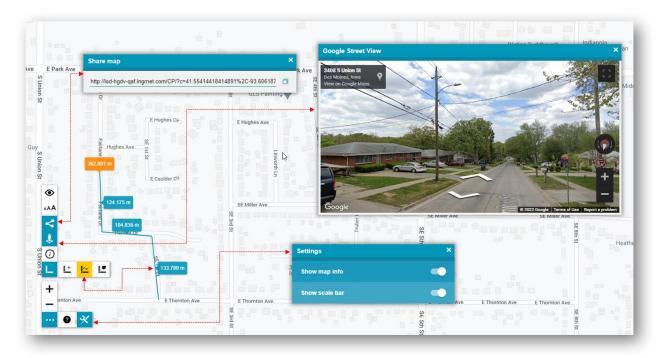
A map without a legend is not a good map. Starting with Update 1 the legend graphics displayed in Consumer Portal's map composition are also added to the map printouts. The printout legend can contain both single map composition legend entries and extensive legends of the thematic maps. With this enhancement, one can easily determine information about phenomena presented on the printed map.





## Slight visual enhancements in Consumer Portal

Minor visual changes have been made to make the entire Consumer Portal look more consistent and intuitive. By default, the buttons are white. The buttons for all active and open windows in Consumer Portal are highlighted in blue. Once enabled in the active mode, they become yellow.



#### New warning notification in Consumer

If service initialization has failed and data sources for the Consumer Portal workspace are invalid, the appropriate notification will be displayed. With this new notification, Consumer Portal users and administrators will know that certain services have not been initialized and the workspace may not be valid.





# Enhanced APOLLO catalogue browsing in Geospatial Portal

The last but not least important improvements for the Geospatial Portal that appeared with Update 1 relate to the ERDAS APOLLO catalogue browsing functionality. Those enhancements include:

- Possibility to select multiple items added to CZS and modify their options in a bulk.
- New setting to configure APOLLO catalogue timeout in Geospatial Portal. The timeouts possible to configure are:
  - EXT.Ajax.Timeout (by default, set to 30 seconds)
  - httpWebRequest.Timeout (by default, set to 90 seconds)

The apolloRequestTimeout property is possible to set in the Geospatial Portal instance Web.config file.

• Support for "rpc" APOLLO catalog profile (verify Metadata, ClipZipShip bands etc.). The profit of "rpc" profile requests, compared to "full" profile, is that the "rpc" requests are significantly faster. Users still have the choice of which profile should be used.



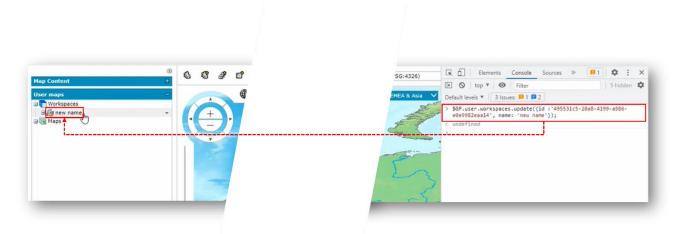
## Portal SDK: Workspace update from API

Update 1 brings a new method to the API in the Portal SDK to change Workspace parameters like:

- Workspace name
- Public/private workspace type
- Map range

One customizing Geospatial Portal has the \$GP.user.maps and \$GP.user.workspaces methods giving additional update() contracts

- \$GP.user.workspaces.update()
- \$GP.user.maps.update()



Various combinations of updating workspace or map parameters are possible:

```
> SGP.user.workspaces.update({id :'495531c5-20a8-4199-a986-
e0e9982eaa14', name: 'new name'});
< undefined
> SGP.user.workspaces.update({id :'495531c5-20a8-4199-a986-
e0e9982eaa14', isPublic: false});
< undefined
> SGP.user.workspaces.update({id :'495531c5-20a8-4199-a986-
e0e9982eaa14', isPublic: true, name: 'another new name'});
< undefined
> SGP.user.workspaces.update({isPublic: false, name: 'another
new name'});
< undefined
> undefined
```



Consumer Portal SDK: New code examples and features to customize Consumer Portal layout and its behavior

A set of new Consumer Portal customization examples are added with the Update 1 for the 16.7 product version.

Expose methods in Consumer Portal API to display layer for search results

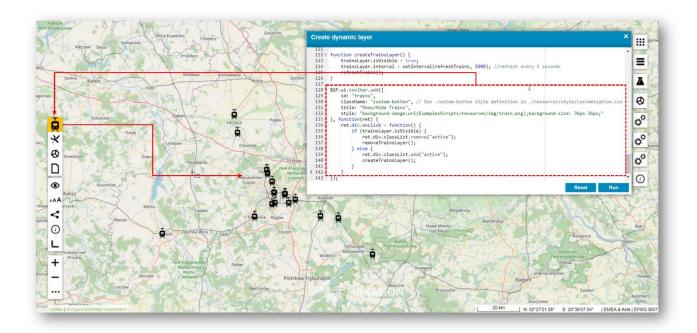
New code examples were introduced to customize Consumer Portal behavior for actions related to search result control. Sample events allows users to add search results to the map with additional data. Exposed events can react to search result popup, search result click or search result clear. Custom layers added along with search result can be both raster and vector types and can be added temporally or permanently to the map view.



Activate icons for enabled dynamic legends

One of the code examples in Consumer Portal SDK creates a dynamic layer from third-party services. For example, it can be icons of trams or buses moving on the map in the real time, using external API sources. Introduced in version 16.7.1, the new extension adjustment for that code example is that it is possible to show whether the layer is being displayed or not. It is achieved by adding to the Consumer Portal toolbar a new button that not only turns on and off the dynamic layer, but also the button state (its highlight color) gives immediate information to users whether a given layer is active. The button style is customizable with the CSS.





Code examples to showcase the possibility of customizing Consumer Portal starting behavior

Further code examples to demonstrate the possibilities of adjusting and controlling the map range at the launch of the Consumer Portal are provided for the SDK in the latest 16.7.1 version.

The enhanced options for customizing starting map range include:

- Use the current client location and adjust the map range to the location obtained
- Reopen the last viewed map range with every subsequent session of the Consumer portal



# Administration Console

#### Prevent sending unsupported searchable to Consumer Portal instances

Geospatial Portal Administrators can define Coordinate/Google/LUWS searches in WebGIS and then send them to any Consumer Portal instance.

To prevent breaking Consumer Portal instances, unsupported searches cannot be applied to the Consumer Portal instances. Breaking the instance might happen if the unsupported search is sent to a non-upgraded instance. Now, Administration Console checks whether the Consumer Portal instance version is high enough to send a given search to it. If not, the search is hidden on the search list and thus cannot be selected and sent. As a reminder, Coordinate search is available from version 16.6.1, Google search is available from 16.6.2, and LUWS search is available from 16.7.0.

→ номе		
V INSTANCE MANAGEMENT	→ ADMINISTRATION CONSOLE → INSTANCE LIST → CONSUMER PORTAL CONFIGURATION	
<ul> <li>→ Instance List</li> <li>→ New Instance</li> </ul>	CP 16.7.1	
CEOMEDIA WEBMAP	Searching Configuration     Appearance     Starting Configuration     Map Compositions Behavior     Details       SELECT SEARCH SOURCE       Available search sources     Chosen search sources       BuiltIn.CoordinateSearch GoogleSearch LUWSSearch.LUWS_search     Image: Chosen search sources       Image: Configuration     Image: Chosen search sources       Image: Configuration     Image: Chosen search sources	*
	RUN PORTAL REFRESH AF	PPLY



Improvements on LUWS Search Configuration and usage.

LUWS Search Configuration for Consumer Portal in Administration Console GUI

The LUWS — Location Utility Web Service — is an exceptionally flexible method for finding geospatial information. It uses geocoding to determine the position and address of an object (POI). LUWS is a search service that can be compared to Google's search services. With LUWS, users can search addresses, points of interest, cadastral data, or any defined geospatial objects.

Starting from version 16.7, users of Consumer Portal can search for objects by using the LUWS service. With the LUWS tab in the Search Configuration section of the Administration Console, it is possible to add a working LUWS service to Consumer searches. Administrators can configure LUWS to be used with Consumer instances with a few mouse clicks; no programming skills are required. To make the process of the configuration of LUWS in Portals more friendly and intuitive, a few LUWS-related improvements were introduced with Update 1.

The first LUWS-related improvement is the automatic validation of provided LUWS URLs. When the administrator configures the LUWS search for Consumer Portal and types or pastes the LUWS URL into the LUWS address field, it is validated for syntax and LUWS response and availability. If the validation fails, a field is marked with a red border, and the tooltip notification is displayed.

ncorrect LUWS ervice address	DEFINE SEARCH         SELECT SEARCHABLE ATTRIBUTES           Selected search:         UWS search99           LUWS SEARCH PARAMETERS         UWS service adress:*           http://server.name/LUWS/wrong_uti/asmx         Parameters
provided	Implementation       Implementation         Implementation       Implementa
	dataset name are mandatory.



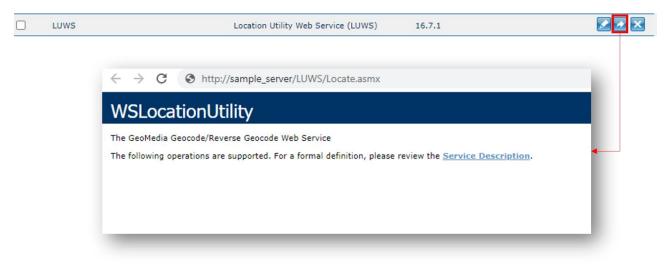
The next improvement is the automatically populated LUWS dataset name field. If the LUWS service URL is valid, there is no need to type the dataset name. The field is populated with values automatically, and in case the given LUWS service provides more than one dataset, the administrator who is configuring the LUWS search can easily choose one from the pull-down list. If there is a change on the LUWS service side and the state of datasets changes, then after setting the focus on the LUWS address field, the LUWS dataset list is refreshed and updated

ES	
	APPLY



#### Run LUWS button in Administration Console

With the latest Geomedia WebMap release, administrators can press the new Run button assigned to a given LUWS instance entry. Pressing this new (for LUWS) Run button opens the LUWS locate.asmx service info page. Administrators can copy the URL to paste it into the Consumer search configuration or simply view more details about LUWS service by clicking the Service Description link provided.



#### Information about instance version

The current instance version is displayed on the instance configuration screen of the Administration Console. With this little label displayed, it is now easy to determine which version of a service is being configured.

→ номе	
V INSTANCE MANAGEMENT	→ ADMINISTRATION CONSOLE → INSTANCE LIST → WEBMAP PUBLISHER PORTAL CONFIGURATION
→ Instance List→ New Instance	WEBMAPPUBLISHERPORTAL (16.7.1)
	Appearance Starting Configuration Map Variants Behavior Map Services Layouts Workflow Manager Data Details
V GEOMEDIA WEBMAP 🕜	MAP VARIANTS BEHAVIOR
→ System Settings	When Changing Map Variant Set New Variant's Map Range
→ Configuration Test → Publisher Settings	
Service Sources	Out of scale Out of Map Range
Previous Services	Method Of Changing Map Variant Buttons
→ Product Information	RUN PORTAL REFRESH APPLY
V CLIENT CONFIGURATION ?	
→ Maps & Workspaces	
→ 3 <sup>rd</sup> Party Map Providers	
→ Search Configuration	
✓ SERVER CONFIGURATION ?	
→ Hostname aliases	



# **System Requirements**

GeoMedia WebMa	ap
Operating Systems	<ul> <li>Windows Server® 2016 (64-bit)</li> <li>Windows Server® 2019 (64-bit)</li> <li>Windows Server® 2022 (64-bit)</li> </ul> Notes: <ul> <li>All later service packs are considered viable unless otherwise noted. See the Support website for specific notices.</li> <li>On the Client side (Geospatial Portal and/or GeoMedia WebMap Publisher Portal), any operating system equipped with one of the supported browsers will work.</li> </ul>
Operating Systems for GeoMedia WebMap Mobile App	<ul> <li>iOS version 12.x or later</li> <li>Android version 5.1 or later</li> <li>Windows 10</li> </ul>
Server-Side Database Engines	<ul> <li>Oracle® Server 12c R1 (12.1.0.1)</li> <li>Oracle® Server 12c R2 (12.2.0.1)</li> <li>Oracle® Server 18c (12.2.0.2)</li> <li>Oracle® Server 19c (12.2.0.3)</li> <li>Oracle® Client 12.1.0 (32-bit)</li> <li>Oracle® Client 12.2.0 (32-bit)</li> <li>Oracle® Client 18.5.0 (32-bit)</li> <li>Oracle® Client 19.12.0 (32-bit)</li> <li>SQL Server® 2012</li> <li>SQL Server® Express 2012</li> <li>SQL Server® Express 2014</li> <li>SQL Server® Express 2016</li> <li>SQL Server® 2017</li> <li>SQL Server® Express 2017</li> <li>SQL Server® Express 2017</li> <li>SQL Server® Express 2019</li> <li>SQL Server® Int 10.0 or higher</li> <li>Azure SQL Database compatible with SQL Server® 2014, 2016, 2017, or 2019</li> <li>PostgreSQL 9.6 with compatible version of PostGIS</li> <li>PostgreSQL 10 with compatible version of PostGIS</li> </ul>



	PostgreSQL 12 with compatible version of PostGIS
	PostgreSQL 13 with compatible version of PostGIS
	Notes:
	<ul> <li>All later service packs are considered viable unless otherwise noted. See the Support website for specific notices.</li> </ul>
	Access (MDB) is considered viable.
	• No database engine is required on the client side nor to run the Administration Console.
	<ul> <li>SQL Server Native Client 10.0 or higher is needed in order for the Database Utilities utility to automatically create the correct GeoMedia metadata for date, time, and datetime2 data types when using a SQL Server or SQL Server Spatial warehouse. You may get SQL Server Native Client 10.0 or higher from the corresponding Microsoft websites. If the SQL Server Native Client is not installed on the system, you need to manually choose Date as the data type from the drop-down combo box for these data types in the Feature Class Properties dialog and set the format properly.</li> </ul>
	Google Chrome <sup>™</sup> 93 or higher
	• Firefox® 92 or higher
	Internet Explorer® version 11
	Microsoft Edge 93 or higher
	Safari 12 or higher
	Notes:
	<ul> <li>For browsers: Firefox and Google Chrome versions stated above are the versions certifications were conducted on. The software should work on newer versions of these browsers, but they were not officially certified.</li> </ul>
Client-Side Internet Browsers	<ul> <li>The 3D features of Geospatial Portal Classic require native WebGL support. WebGL is available in Firefox, Chrome, and Edge.</li> </ul>
(Client is Geospatial Portal and GeoMedia	<ul> <li>3D functionality in Geospatial Portal Classic/GeoMedia WebMap Publisher Portal is enabled by default in Firefox and Google Chrome browsers. In Edge, 3D is available only if the administrator enables it.</li> </ul>
WebMap Publisher Portal)	<ul> <li>Web browser issues found on the GeoMedia WebMap product that are no longer supported by the browser vendor can be addressed within a limited scope by Hexagon. Refer to vendor sites for information on their web browsers support policies.</li> </ul>
	<ul> <li>Geospatial Portal Classic is not supported to work in Compatibility View in Internet Explorer browsers. This option must be switched off by the user.</li> </ul>
	• The mobile versions listed as supported web browsers are compatible with GeoMedia WebMap. However, differences in system architecture and mobile device limitations may result in some of functionality being unavailable when running on a mobile browser. Hexagon will attempt to address any mobile browser issues; however, a solution may ultimately depend on support from the browser provider.
	The Internet Explorer (IE) 11 desktop application ended support for Windows 10 semi-annual channel on June 15, 2020. For more information, visit <a href="https://docs.microsoft.com/en-us/lifecycle/products/internet-explorer-11">https://docs.microsoft.com/en-us/lifecycle/products/internet-explorer-11</a> .
	Internet Explorer version 11
Server-Side	
Internet Browsers	<ul> <li>Notes:</li> <li>Internet Explorer is required on the server side only to provide printing functionality unless Google Chrome or PhantomJS engine is used.</li> </ul>



	• To run the Administration Console directly on the server host machine, any browser listed in Client-Side Internet Browsers can be used. Administration Console can be run remotely from the client side.
Client-Side System Dependencies and Additional Software	<ul> <li>GeoMedia or GeoMedia Professional 16.7</li> <li>Notes:</li> <li>GeoMedia or GeoMedia Professional is required for GeoMedia WebMap Publisher Administrator.</li> </ul>
Server-Side System Dependencies and Additional Software	<ul> <li>.NET Framework 4.7.2</li> <li>Microsoft Identity Foundation</li> <li>Windows Installer 3.1 or higher</li> <li>Internet Information Services (IIS) 10.0</li> </ul>



Geospatial Portal	
Server-Side Operating Systems	<ul> <li>Windows Server® 2016 (64-bit)</li> <li>Windows Server® 2019 (64-bit)</li> <li>Windows Server® 2022 (64-bit)</li> </ul>
Database Engines	<ul> <li>Oracle® Server 12c R1 (12.1.0.1)</li> <li>Oracle® Server 12c R2 (12.2.0.1)</li> <li>Oracle® Server 18c (12.2.0.2)</li> <li>Oracle® Server 19c (12.2.0.3)</li> <li>Oracle® Client 12.1.0 (32-bit)</li> <li>Oracle® Client 12.2.0 (32-bit)</li> <li>Oracle® Client 18.5.0 (32-bit)</li> <li>Oracle® Client 19.12.0 (32-bit)</li> </ul>
Client-Side Internet Browsers	<ul> <li>Google Chrome 93 or higher</li> <li>Firefox 92 or higher</li> <li>Microsoft Edge 93 or higher</li> <li>Internet Explorer version 11</li> <li>Safari 10 or higher</li> <li>Notes:</li> <li>For browsers: Firefox and Google Chrome versions stated are the versions that certification was conducted on. The software is expected to work on newer versions of these browsers, but they were not officially certified.</li> <li>The 3D features of Geospatial Portal require native WebGL support. WebGL is available in Edge, Firefox, and Chrome.</li> <li>The 3D functionality in Geospatial Portal Classic/GeoMedia WebMap Publisher Portal is enabled by default in Firefox and Google Chrome browsers. In Edge, 3D capabilities are only available if enabled by the administrator.</li> <li>Web browser issues found on the Geospatial Portal Classic product that are no longer supported by the browser vendor can be addressed with a limited scope by Hexagon Geospatial. Refer to vendor sites for information on their Web browsers support policies.</li> <li>The mobile versions listed as supported web browsers are compatible with GeoMedia WebMap. However, differences in system architecture and mobile device limitations may result in some of functionality being unavailable when running on a mobile browser. Hexagon will attempt to address any mobile browser issues; however, a solution may ultimately depend on support from the browser provider.</li> <li>Geospatial Portal does not work in Compatibility View in Internet Explorer browsers. This option must be switched off by the user.</li> <li>The Internet Explorer (IE) 11 desktop application ended support for Windows 10 semi-annual channel on June 15, 2020. For more information, visit https://docs.microsoft.com/enus/lifecycle/products/internet-explorer-11.</li> </ul>



	Internet Explorer version 11
Server-Side Internet Browsers	<ul> <li>Notes:</li> <li>Internet Explorer is required on the server side only to provide printing functionality unless Google Chrome or PhantomJS engine is used.</li> <li>In order to run the Administration Console directly on the server host machine, any browser listed in Client-Side Internet Browsers can be used. Administration Console can be run remotely from the client side.</li> </ul>
Server-Side System Dependencies and Additional Software	<ul> <li>.NET Framework 4.7.2 or higher</li> <li>Windows Identity Foundation</li> <li>Windows Installer 3.1 or higher</li> <li>Internet Information Services (IIS) 10.0</li> </ul>

Geospatial SDI	
Operating Systems	<ul> <li>Windows Server® 2016 (64-bit)</li> <li>Windows Server® 2019 (64-bit)</li> <li>Windows Server® 2022 (64-bit)</li> </ul>



	Oracle® Server 12c R1 (12.1.0.1)
	Oracle® Server 12c R2 (12.2.0.1)
	Oracle® Server 18c (12.2.0.2)
	Oracle® Server 19c (12.2.0.3)
	Oracle® Client 12.1.0 (32-bit)
	Oracle® Client 12.2.0 (32-bit)
	Oracle® Client 18.5.0 (32-bit)
	Oracle® Client 19.12.0 (32-bit)
	SQL Server® 2012
	SQL Server® 2014
	SQL Server® Express 2012
	SQL Server® Express 2014
	SQL Server® 2016
	SQL Server® Express 2016
	SQL Server® 2017
	SQL Server® Express 2017
	SQL Server® 2019
	SQL Server® Express 2019
Database Engines	SQL Server Native Client 10.0 or higher
	• Azure SQL Database compatible with SQL Server® 2014, 2016, 2017, or 2019
	PostgreSQL 9.6 with compatible version of PostGIS
	PostgreSQL 10 with compatible version of PostGIS
	PostgreSQL 11 with compatible version of PostGIS
	PostgreSQL 12 with compatible version of PostGIS
	PostgreSQL 13 with compatible version of PostGIS
	Access® 2010 (MDAC2010 v14)
	Notes:
	<ul> <li>For all later service packs, see the Support website for specific notices.</li> </ul>
	<ul> <li>NHibernate, Log4Net, and ADO.NET are used for accessing databases in SDI Pro Security and Logging mechanisms. The full list of supported database engines depends on these third-party frameworks. However, SDI services were used successfully with listed engines.</li> </ul>
	64-bit Oracle Data Access Components (ODAC) is required for Catalogue (CSW) services running with Oracle Server 12 (64-bit).
	• SQL Server Native Client 10.0 or higher is needed in order for the Database Utilities utility to automatically create the correct GeoMedia metadata for date, time, and datetime2 data types when using a SQL Server or SQL Server Spatial warehouse. You may get SQL Server Native Client 10.0 or higher from the corresponding Microsoft websites. If the SQL Server Native Client is not installed on the system, you need to manually choose Date as the data type from the drop-down combo box for these data types in the Feature Class Properties dialog and set the format properly.



-	
Internet Browsers (required to run Administration Console)	<ul> <li>Google Chrome<sup>™</sup> 93 or higher</li> <li>Firefox® 92 or higher</li> <li>Internet Explorer® version 11</li> <li>Microsoft Edge 93 or higher</li> </ul> Notes: <ul> <li>For browsers: Firefox and Chrome versions stated are the versions that certification was conducted on. The software is expected to work on newer versions of these browsers, but they were not officially certified.</li> <li>Web browser issues found on the Geospatial SDI product that are no longer supported by the browser vendor can be addressed with a limited scope by Hexagon. Refer to vendor sites for information on their browser support policies. <ul> <li>The Internet Explorer (IE) 11 desktop application ended support for Windows 10 semi-annual channel on June 15, 2020. For more information, visit https://docs.microsoft.com/enus/lifecycle/products/internet-explorer-11.</li> </ul></li></ul>
Server-Side Internet Browsers	<ul> <li>Internet Explorer version 11</li> <li>Note:</li> <li>Internet Explorer is required on the server side only to provide printing functionality unless Google Chrome or PhantomJS engine is used.</li> <li>In order to run the Administration Console directly on the server host machine, any browser listed in Client-Side Internet Browsers can be used. Administration Console can be run remotely from the client side.</li> </ul>
Server-Side System Dependencies and Additional Software	<ul> <li>.NET Framework 4.7.2</li> <li>Windows Identity Foundation</li> <li>Windows Installer 3.1 or higher</li> <li>Internet Information Services (IIS) 10.0</li> <li>Note:</li> <li>All later service packs for the system dependencies are considered supported unless otherwise noted. See the support website for specific notices.</li> </ul>



# **Issues resolved (16.7)**

## Geospatial Server 2022

### GeoMedia WebMap, Geospatial SDI, Geospatial Portal

Support ticket	Summary
00035178	The content type for getFeature, GetPropertyValue and describeFeatureType should be at least application/gml+xml; version=3.2.
00055008	Service Source Configuration Utility Initialize button doesn't consider Map Server Pools.
00057589	Problem with printing in Geospatial Portal- PhantomJS printer cannot finish printing (endless loop).
00056716	WFS info not cached across sessions for 'action=columns' request.
00002457	Some WFSG services do not work. The error message "Sequence contains no elements" is displayed.
00059412	Service Source Configuration Utility cannot connect remotely to a server with large number of services.
00077056	Data window in Geospatial Portal - issues with selection behavior on multiple pages.
00079672	Autofill feature in GeoMedia WebMap Mobile app doesn't work properly for Integer column in offline mode.
00077029	WMPS hotspot 'Opens an URL' fails if URL starts with https.
00069088	Server-side request forgery.
00054647	Update of documentation with notes regarding Map Server Memory Threshold.
00066269	LUWS search doesn't work in the Geospatial Portal.
00081117	WMPS queries don't work when Portal uses session state service.
00072271	Consumer Portal cannot display WMS where Capabilities is in version 1.3.0 only.
00067015	GetFeatureInfo command and Selection tools returns wrong results on thematic legends.
00067405	Issue with display of long layer names in Consumer Portal.
00072240	WFS GetFeature issue for EPSG:31255. It expects swapped coordinates.
00060346	Cannot generate route for the provided inputs using HERE (NAVTEQ) datasets.
00068472	Save photo form Mobile app issue: WFS-T over PostGIS cannot update 'memo' field.



00072323	INSPIRE WFS - the possibility to add "metadataURL" to the existing SpatialD\ataSetIdentifier element.
00057780	Consumer Portal in 3D mode shows incorrect sun position.
00078872	Can't connect to an HTTPS WMPS on a different server (domain).
00078906	WCS 2.0.1 Facade doesn't work.
00079548	WCSfacade - missing rows in the capabilities document.
00073656	HTTPS Portal and WMPS service fail to re-connect after period of inactivity.
00061437	Consumer portal does not filter fields and displays Geometry and Geometry_SK fields and does not display alternate field names.
00030872	Map Content legend manipulation does not ignore dynamic legend entries while generating LRF.
00077167	Mobile Publisher - Works broken after WFS-T attribute(s) update.
00079485	Geomedia WebMap Mobile app (for Windows) timeouts when waiting for offline data.
00069073	Mobile Publisher cuts off custom parameters from WMTS service.
00074104	Error while publishing metadata - Oracle metadata corruption.
00077168	Spatial Limitations Issue for Geospatial SDI Security Console Upgraded WMS/WFS instances fails with error Required attribute 'CRSTableName' not found.
00025185	WFS Metadata Editor: Wrong Tooltip and exception for Feature types Keywords in the INSPIRE profiles.
00064164	Issue with displaying WMS by https in Consumer Portal - WMS doesn't return Capabilities version 1.1.1 if both HTTP & HTTPS bindings are available on the server.
00064133	CSW search results list doesn't show starting from page 3.
00067144	Measurement Tools not working when "Go to my location" is enabled.
00068537	Google logo and trademark are always on top of Portal forms and windows.
00054729	Misleading documentation for Oracle client requirements.
00042886	MatchCase for WFS queries is not documented nor available in web.config template.
00065027	Problem with dynamic labels - publisher generates 0kB LRF until certain map window is deleted.
00063902	Issue with synchronizing legend to Publisher Portal. Label Rule File is not updated.
00065380	WebMap WMS TimeDimension doesn't work on MS SQL warehouse connection.



00065639	One of the main services of National Geographic Institute of Spain cannot be used with Mobile Publisher.
00044102	WFS-T - cannot update DATE column with NULL value.
00020867	WFS-T does not handle date field changes.
00057704	The language parameter ignored for WMS INSPIRE queries.
00059355	WebMap WMS does not render layer which was in the GM Legend turned off.
00067042 00056264	Geospatial SDI Security Console crashes showing – "Object reference not set to an instance of an object."
00059316	Creation of a new service fails in Service Source Configuration Utility when there is 2000+ services.
00064447	WFS-T Insert operation in Geospatial Portal doesn't work with {http://www.opengis.net/gml/3.2}id.
00057429	WMPS icons are not shown in Consumer Portal legend.
00055312	WebMap does not display all records through AttributeFilterPipe - Missing records in map.
00054983	Bing maps cannot be displayed over https.
00055155	WMTS layer is not displayed after first search in Consumer Portal.
00060970	Consumer Portal GUI localization issues: Unify translation keys in consumer-portal and webgis-core. Add translation for hardcoded values in consumer-portal.
00070626	Blocked cookies issue after chrome cookie policy update.
00067703	WMS GetFeatureInfo returns no attributes from GeoPackage data source.
00064028 00063864	GeoMedia WebMap still delivers MSXML4 which is EOL.
00066064	CSW search results can add only a WMS service layer.
00066833	SDI WFS Facade not working properly for geoserver WFS.
00066012	GeoMedia WebMap Mobile app crashes on devices with Android 10.
00064940	Security Console's Spatial Limitations Issue - Bounding Boxes not working under EPSG 31256.
00064780	Issues with Portal print service over HTTPS.
00065590	Some mapserver doesn't respond on Service Source ConfigurationUtility.



0064949	Error in Geospatial Portal fetching WFS Geometry with arc in internal ring.
00065940	Portal GetFeatureInfo command fails on Postgres based WMS after modifying WebPub Admin Display Field settings.
00051504	\$GP.dynamicFeatureEvents don't work with WMPS.
00037597	Raster file not displayed in WebMap WMS.
00057729	WFS does not honor Map Server Pool setting.
00068687	No layers initially loaded from a gpw file.
00067839	'Session' handler enabled in AuthenticationPipe adds default port numbers to URL.
00071273	Printing with Chrome does not work.
00015622	"Select features by bbox" on filtered WFS feature returns all records within bbox.
00071781	WFS - parameter count ignored if KML outputFormat is specified.
00069523	Admin Console ignores the port of an HTTPS IIS Website Binding unless specific IP address binding is set.
00015243	WFS errors/does not accept http://www.opengis.net/gml/3.2 in the GetFeature XML Post request.
00013309	SDI Logging doesn't support WFS-T – Redlining issues.
00027030	Cannot display all layers from WMTS with both png and jpg layers.
00061287	Data view zoom button doesn't honour swap coordinates service quirks.
00070713	WMS does not render linear features with style type "Dash Line Style".
00005154	Long picklist values are truncated in display.
00073891	Analysis not removed from Data view using Analysis.remove() function & Analysis not removed from map on layouts without Sidebar.
00074156	Memory leak on WMPS initialization – with Thematic legend (Range).
00076815	SDK - Issues with WMPS registrations and queries - \$GP.queries.add fails to execute.
00078660	WFS area features not drawn when saved GPW loaded. Selected WFS feature doesn't change color.
00079836	The WMS request GetFeatureInfo does not respect scale ranges for layers.



00081411	Custom Feature Info doesn't work with new Portal template SDK - layerNameSuffixes error on \$GP.map.draw.clear().
00082042	STS-secured services unable to recover after Portal session times out (HTTPS/LOB environment).
00078433	Mobile Backend - Offline generation fails if specific attribute name is present in WFS.
00081897	Insert Marker/Annotation dialogue missing tabs under HTTPS.
00080099	Printing doesn't work in a Load Balanced environment - WFS-G service serialization issues when printing in LOB.
00077772 00016223	WMTS facade - Capabilities document - Layer - Style - LegendURL is not replaced with the façade URL.
00078139	LUWS for EPSG:5514 not working properly under Portal with EPSG:3857.
00062193	Multiple WMS instances in the same application pool throw assembly error.
00081042	Loss of WMS Image Resolution in WebMap Mobile in Offline Mode.
00081762	MapServer memory usage too high for Oracle connection.
00079752	Offline mode doesn't offer quick switch when editing overlapping features.
00082832	Track Option not showing any moving marker on map in Geomedia WebMap mobile app.
00063197	Invalid license page has a wrong link to the licensing portal.
00071568	Authorization Bridge web.config template needs updating for newer targetFramework.
00059467	Issue with Access to AuthorizationBridge in Security Console via https.
00065643	Layer not listed on a Work when editing but listed on mobile app.
00056637	Incorrect definition for the root element in schema for WFS with authorization.
00064151	Error initializing map service when registering service using its URL with https.
00070530	GeoMedia WebMap Mobile layout broken.
00064585	WCS 2.0.1 is not supported.
00022844	Feature Info command ignores existing WMS Filter.
00070900	Portal Area Measurement Issue.
00070746	Problems with redlining in Geospatial Portal.



00070802	Portal error under Chrome CSRF prevention. Request not allowed. Token inconsistent with cookies data.
00063894	WMS synchronize publisher map fails when having label entries.
00036517	Publisher Administrator Map Content - Synchronise/Update & Append - Not Updating Label Rule File.
00059543	Unable to display https WMS in Consumer Portal.
00056538	Missing Inspire metadata elements on a WMS GetCapabilities Request.
00030868	Publish from GeoMedia LabelManager to LRF produces incorrect results.
00012654	DWithin operator is not available in the Geospatial Portal Analysis for the WFS created from GeoMedia.
00066259	GetFeatureInfo command and Selection tools return additional records nearby.
00066039	WMPS - File Path Manipulation security issue.
00065540	High severity vulnerability found in WMPS MapService.svc.
00069601	Audio record doesn't work on Mobile.
00064226	Attribute names and attribute aliases of WMS have - by Customer - insufficient configuration option.
00062043	Error defining WMPS Search for Consumer Portal - "WMPS connection string is flawed"
00059849	Connection to a https CSW fails
00063124	Repeat error when trying to assign a role to a group in the SDI security console
00057781	Consumer Portal 2020 - new Information Bar is not updating Map Composition Name as it changes
00056348	LabelWeb crash and Map Server hang
00041306	Critical Security Audit Report Jsquery 1.10 has known vulnerability
00060498	There is no graphic in GetMap request where Postgres in 11 version is involved
00060467	Problem with PostGIS data and WebMap 2020
00055034	WFS version 16.6 fails to retrieve features
00038927	WebMap WMS IIS Application Pool - CPU thread looping
00049656	Spatial restriction with SDI on a WFS not working



00048760	WCTS service does not work on https
00008307	Can't edit point features in WFS
00015236	Redlining error
00039773	Apollo 2018 install WMS image not displaying - cannot run Get capabilities
00034442	AdministrationService.svc always called using HTTP
00019316	Annotations do not print as displayed on screen
00083420	Could Not Load Luciad Fusion WFS at Portal
00079627	LabelWeb causes MapSvr.exe hangs/crashes
00080673	Secure WFS from ESRI is not displaying in Geospatial Portal
00082476	Secure WFS from ESRI connection error



# **Issues resolved (16.7.1)**

## Geospatial Server 2022 Update 1

### GeoMedia WebMap, Geospatial SDI, Geospatial Portal

Support ticket	Summary
00065234	WebMap Publisher WMS metadata corrupted after SVG symbol is assigned to point feature
00052217	WMTS SDI Facade - RESTful constraint not declared in Capabilities
00053053	Issue with "\$GP.events.featureInfoRequested.register"
00040538	LabelWeb crashes with specific (renaming) rule
00038444	WMTS HTTPS documentation missing
00035119 00055664	ApplySpatialFilterService not working under WebMap 2022
00028639	CreateMapByRange with SVG output format fails to produce proper XML output
00027923	Publishing WebMap metadata fails; Certain legend configuration breaks WMS service source
00027245	Scale settings are not honored; Document Scale Band logic explicitly



## **About Hexagon**

Hexagon is a 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 22,000 employees in 50 countries and net sales of approximately 4.3bn EUR. Learn more at hexagon.com and follow us @HexagonAB.

### Copyright

© 2022 Hexagon AB and/or its subsidiaries and affiliates. All rights reserved

Warning: The product made the subject of this documentation, including the computer program, icons, graphical symbols, file formats, audio-visual displays and documentation (including this documentation) (collectively, the "Subject Product") may be used only as permitted under the applicable software license agreement, and subject to all limitations and terms applicable to use of the Subject Product therein. The Subject Product contains confidential and proprietary information of Intergraph Corporation, a member of the Hexagon Group of companies ("Hexagon"), its affiliates, and/or third parties. As such, the Subject Product is protected by patent, trademark, copyright and/or trade secret law and may not be transferred, assigned, provided, or otherwise made available to any third party in violation of applicable terms and conditions cited further below.

## Terms of Use

By installing, copying, downloading, accessing, viewing, or otherwise using the Subject Product, you agree to be bound by the terms of the EULA found here: https://www.hexagonsafetyinfrastructure.com/-/media/Legal/Hexagon/SI/Licenses/EULA\_SA\_SIG-Eng\_062021.pdf.

### Disclaimers

Hexagon and its suppliers believe the information in this publication is accurate as of its publication date. Hexagon is not responsible for any error that may appear in this document. The information and the software discussed in this document are subject to change without notice.

Language Translation Disclaimer: The official version of the Documentation is in English. Any translation of this document into a language other than English is not an official version and has been provided for convenience only. Some portions of a translation may have been created using machine translation. Any translation is provided "as is." Any discrepancies or differences occurring in a translation versus the official English version are not binding and have no legal effect for compliance or enforcement purposes. Hexagon disclaims any and all warranties, whether express or implied, as to the accuracy of any translation.



Reasonable efforts have been made to provide an accurate translation; however, no translation, whether automated or provided by human translators is perfect. If any questions arise related to the accuracy of the information contained in a translated version of Documentation, please refer to its official English version. Additionally, some text, graphics, PDF documents, and/or other accompanying material may not have been translated.

#### Links To Third Party Websites

This Document may provide links to third party websites for your convenience and information. Third party websites will be governed by their own terms and conditions. Hexagon does not endorse companies or products to which it links.

Third party websites are owned and operated by independent parties over which Hexagon has no control. Hexagon shall not have any liability resulting from your use of the third party website. Any link you make to or from the third party website will be at your own risk and any information you share with the third party website will be subject to the terms of the third party website, including those relating to confidentiality, data privacy, and security.

Hexagon provides access to Hexagon international data and, therefore, may contain references or cross references to Hexagon products, programs and services that are not announced in your country. These references do not imply that Hexagon intends to announce such products, programs or services in your country.

#### Revisions

Hexagon reserves the right to revise these Terms at any time. You are responsible for regularly reviewing these Terms. Your continued use of this Document after the effective date of such changes constitutes your acceptance of and agreement to such changes.

#### Questions

Contact us with any questions regarding these Terms.