

**Release Guide** 

# **Release Guide**

WebGIS 2020 WebGIS 2020 Update 1 WebGIS 2020 Update 2

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# **About This Release**

This document describes the enhancements for WebGIS products, including GeoMedia WebMap, Geospatial Portal, and Geospatial SDI. Although the information in this document is current as of the product release, see the Hexagon Geospatial Support website for the most current version.

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, analysing, and consuming geospatial data published by Hexagon Geospatial 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).



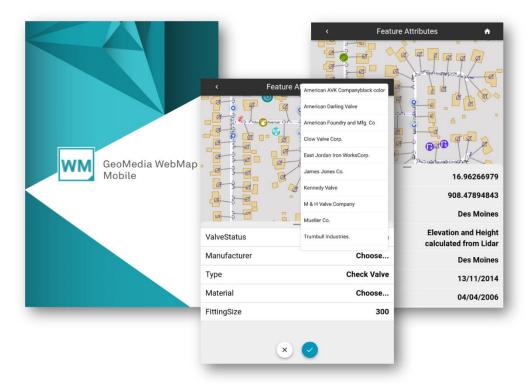
# New Technology (16.6)

## GeoMedia WebMap

GeoMedia WebMap Mobile for Field Data Editing

**GeoMedia WebMap 2020** has a new mobile application for field data editing called GeoMedia WebMap Mobile. It is a phone/tablet-based application for accessing, portraying and editing geospatial data. The user can view, edit, validate, and update enterprise GIS data from the field in real time. The updated data on the mobile device is instantly available for the GIS platform used in the same organization.

The core functionality in GeoMedia WebMap Mobile comes from the Mobile MapWorks product. Mobile MapWorks users will now find all the familiar functions and features and more in GeoMedia WebMap Mobile. In addition, because the workflows and available actions are more intuitive and easier to navigate, the user's experience is much improved.



The Feature Info panel serves as an example of the many enhancements introduced in GeoMedia WebMap Mobile. Previously, the user had to decide before selecting an object on a map whether to view or edit the feature details. If the user noticed a feature that required updates while viewing its details in the Feature Info panel, they had to close the panel, select edit option and click the feature on the map again to re-open the Feature Info panel in edit mode. In the new GeoMedia WebMap Mobile, both actions are available directly in the Feature Info panel. Now, users with editing privileges simply click an attribute, make changes, and then save the changes by clicking to confirm.

The editable and read-only attributes are easily distinguished with different presentations in the Feature Info panel. Also, because the Feature Info panel no longer occupies the entire screen, both the properties and the map are viewable at the same time. It optimizes viewing and editing of feature details; the user can easily navigate between the features on the map while their details are immediately displayed in the Feature Info



panel. To expand the Feature Info panel to full screen or minimize it, the user simply swipes it up or down, respectively.

GeoMedia WebMap Mobile can be configured to serve selected data to individual users within a pre-defined area. It can also be configured to run in offline mode to support field work in areas with weak or no online access.

GeoMedia WebMap Mobile can be used for all types of field and site inspection workflows, such as pole or vegetation inspection for utilities or public works, traffic light and bridge inspection for transportation authorities, and cell or mobile tower site inspection for communications companies.

GeoMedia WebMap Mobile application is downloadable for free from Apple, Google and Windows app stores. The server side of the GeoMedia WebMap Mobile is offered as part of GeoMedia WebMap Advantage and Professional.

#### Mobile Publisher for GeoMedia WebMap Mobile Configurations

Another feature added to GeoMedia WebMap is Mobile Publisher. This feature assists in the set-up and management of GeoMedia WebMap Mobile configurations by addressing key aspects including user identification, field zone geometry specification and field work definitions. Mobile Publisher then generates the configuration files based on the Administrator's selections.

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User:	Jane Heming												-					
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With Mobile Publisher, configuring GeoMedia WebMap Mobile is easy. The Administrator can:



- Define GeoMedia WebMap Mobile field users
- Create and manage works
- Define and apply user access and action permissions
- Set feature class attributes and properties
- Configure feature class options such as enumeration lists and more...

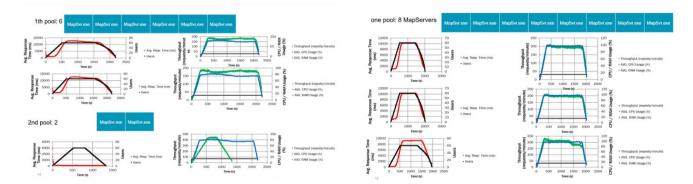
Note: Advanced users can also manually change the configuration generated by Mobile Publisher.

Mobile Publisher is available as part of GeoMedia WebMap Publisher, an add-on that is run in GeoMedia. GeoMedia WebMap Publisher is installed with GeoMedia WebMap but can be also downloaded and installed separately on a computer that has GeoMedia installed.

#### Performance Improvements

Several performance improvements were added to GeoMedia WebMap 2020. Efficiency has been enhanced when performing analyses on GeoMedia WebMap's WFS feature classes in Geospatial Portal, especially for data cases and queries, which processes filters using the database engine.

New Server Pools have been introduced to increase the reliability of a GeoMedia WebMap server and guarantee critical services' availability.



The administrator can configure Map Server Pools in the Administration Console, then define them in System Settings and finally, assign the pools to the application(s) and service(s).



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GEOMEDIA WEBMAP	wmps_pg_test_demo	WebMap Publisher Portal	13.00.00.00	Default T		
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3 <sup>st</sup> Party Map Providers	WMPP_Oracle	+ System Settings	Use default XSL file			
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SERVER CONFIGURATION	WebMapPublisherPortal_remote_02	Service Sources     Previous Services	Map Server Pools			
Hostname aliases	WebMapPublisherPortal_Otest	+ Product Information	Map Server Pool Name	Default		
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	WMS_USA_TEST	<ul> <li>→ 3<sup>st</sup> Party Map Providers</li> <li>→ Search Configuration</li> </ul>	Memory threshold for restart (MB)	0		
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			Map Server Pool Name	WMS Server Pool		
			Request time out (seconds)	0		
			Number of map servers	4		
			Memory threshold for restart (MB)	1		
			Execution time out for restart (seconds)	0		
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#### Postgres Metadata Connection

When creating a service source for a GeoMedia WebMap Publisher Portal, WMS (Map), or WFS (Feature) Service, you must specify a database connection for the service source. Publisher supports four types of databases. With 2020 release the Postgres database is supported in addition to Microsoft Access, Microsoft SQL Server and Oracle. You can use a Postgres database not only to store your geospatial data, but also GeoMedia WebMap services metadata.

Note that metadata can be published both locally and remotely.

leta Database Type What type of database o	lo you want to store your metadata in?	
SQL Server database. C choose a database that schema has already bee	ce source metadata in a Microsoft Access, Dracle, hoosing Microsoft SQL Server or Dracle will require is already a valid GeoMedia GDD Warehouse (i.e. n created), and the user that you provide must hav ble privileges in the database.	you to the GDOSYS
	or more information on initializing an SQL Server or ntages and disadvantages of each database type.	Oracle
<u>D</u> atabase type:	Postgres  Microsoft Access Microsoft SQL Server Dracle Postgres Back	Next >



### Live Search Available for GeoMedia WebMap Essentials

GeoMedia WebMap Essentials users can query (registered in Portal) WFS-G services with the new Live Search functionality. The Live Search control is located on the toolbar in GeoMedia WebMap Publisher Portal.



### Enable WebMap WFS-T for all Read-Write Data Servers

Transactional WFS functionality will be enabled when the Service Source contains features from any readwrite GeoMedia Warehouse unless the connection was explicitly opened as read-only. This introduces both the ability to restrict WFS to work in Read Only mode on some database engines that did not use to provide such configuration (e.g. SQL Server Spatial) and to setup transactional WFS without the need for installing database software (e.g. by use of new read-write data servers available in GeoMedia such as GeoPackage and ESRI file geodatabase). Please note that not all read-write data servers are capable of high-throughput and reliability in all production environments.

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## **Geospatial Portal**

#### Enhanced Measurements in Geospatial Portal - Consumer

Advanced measurement is one of the basic functionalities in Geospatial Portal - Consumer. Users can measure distances and areas on the map, as well as obtain geographic coordinates of any given point.

The measurements results are displayed in the Measurements (right) panel. With 2020 release the measurement details are also displayed on the map:

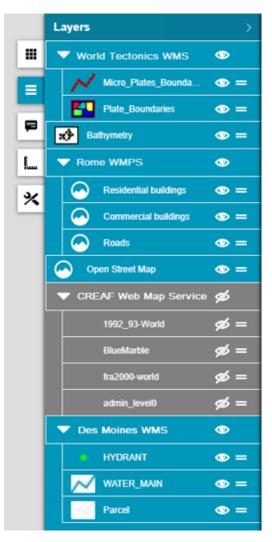
- For area measurements: over the measured area.
- For linear measurements: both the total length of the polyline and the distance between two points is displayed above each segment.
- Coordinates: in the tooltip on the map around measured point.





Groups for Layers in Geospatial Portal - Consumer

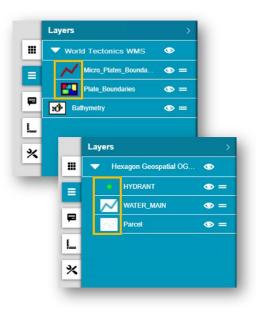
Geospatial Portal - Consumer displays the layers grouped under the name of the service the layers come from. Users can change the layer order within the group by drag and drop of individual layer, switch the layer on/off or modify its opacity for optimal map display.





### Legend style icons in Geospatial Portal - Consumer

Legend entries from WMS services can now include the icon that reflects the style applied for the layer.



Support for Custom Layer Graphics in Geospatial Portal - Consumer

WMS services may provide custom legend graphics that bring detailed information about presented phenomena. With the 2020 release the custom graphics are displayed in the legend item control beside the layer name.

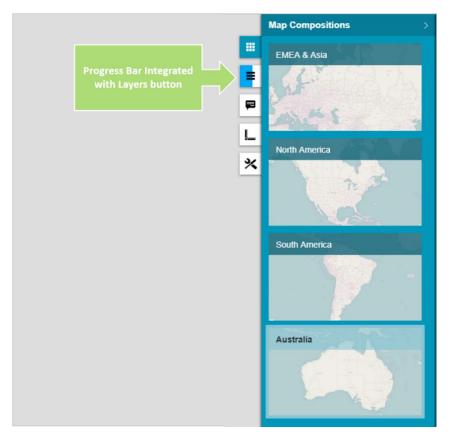
Geospatial Portal – Consumer by default tries to display the legend graphic provided by the service, if it fits the legend item control (20x15 px). If the legend graphic is larger than the legend item control, it is either automatically resized to fit the control or replaced with an icon placeholder. The graphic in its original size can be then displayed on hover.





Highlight for Loading Layers in Geospatial Portal - Consumer

Another new feature shows the legend loading progress on the Geospatial Portal - Consumer's sidebar. Now, users can easily see when all layers are loaded without checking them individually regardless of which tab is active on the right panel, and even when there is no tab open.

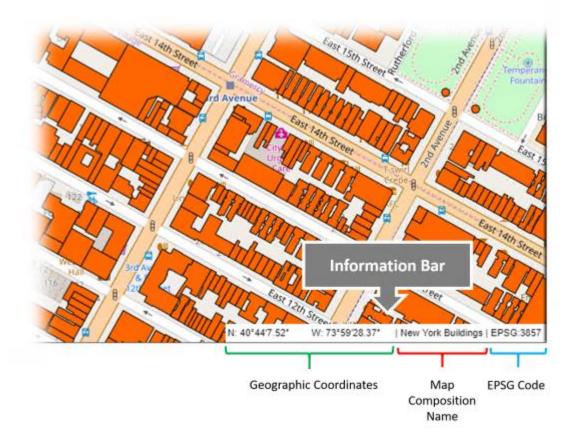




Information Bar in Geospatial Portal - Consumer

Geographic latitude and longitude for the current cursor position in a map window is displayed in the bottom right corner on the screen application.

The name of active Map Composition is displayed in the bottom right corner. The coordinate system EPSG code of the current map is visible on the information bar as well.





Highlight Active Map Composition in Geospatial Portal - Consumer

The active map composition in Geospatial Portal – Consumer is highlighted. This improvement allows users to easily distinguish which Map Composition is currently displayed.



Administrators can change the highlight color in the style.css file – the file responsible for Geospatial Portal - Consumer style configurations.



Preserve Bounding Box in Consumer while Map Composition Changes

The administrator can now configure map composition settings for Geospatial Portal – Consumer instances.

The new "When Changing Map Composition" configuration element available in Administration Console for Consumer instances has two possible settings:

- "Set New Variant's Map Range" the Consumer uses the map range defined for the Map Composition to be displayed.
- "Keep Current Map Range and Map Control" the Consumer retains the current map range when switching between Map Compositions, ignoring of the original range defined for the Map Composition to be displayed.

The latter setting is useful when adding new sets of layers to be viewed, while retaining the same viewing range.

÷	ADMINISTRATION CONSOLE	→ INSTANCE LIST → COM	SUMER PORTAL CONFIGURATION			
	CONSUMERTEST					
	Searching Configuration	Starting Configuration	Map Compositions Behavior	Details		
5	MAP COMPOSITIONS B When Changing Map Compo		p Composition Default Range			
1	Show Additional Map Switch Options in Map Composition	Panel Set New Ma	nt Map Range and Map Control ap Composition Default Range			
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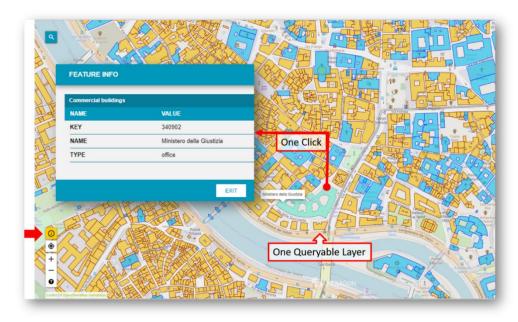
In addition, the administrator can enable the map switching option for Consumer end users. The Feature button will be displayed in the upper right corner of the Map Composition panel.

$\rightarrow$ ADMINISTRATION CONSOLE $\rightarrow$ INSTANCE LIST $\rightarrow$ CONSU	MER PORTAL CONFIGURATION		
CONSUMERTEST			
Searching Configuration Starting Configuration	Map Compositions Behavior Details		
MAP COMPOSITIONS BEHAVIOR When Changing Map Composition Keep Current Show Additional Map Switching Options in Map Composition Panel Show Map Info	Map Range and Map Control	T	
	RUN PORTAL	REFRESH	APPLY
Map Compositions > EMEA & Asia EMEA & Asia North America			



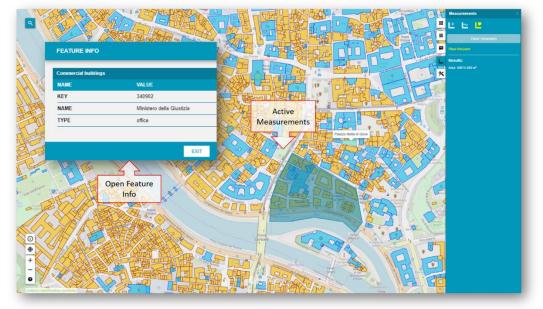
Enable Feature Information in Consumer with One Click

When using the Feature Info dialog in Geospatial Portal - Consumer, the tooltip with available layers for the feature area appears. After selecting the layer, the Feature Info dialog is displayed. If only one layer is available, the Feature Info dialog is displayed immediately.



Consumer Feature Info Dialog is Floating (Not Modal)

The feature Info window is now floating (not modal). Now users can keep it continuously open while simultaneously navigating map layers, performing measurements, and so forth.

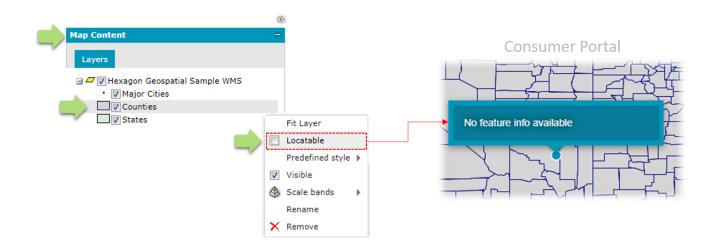




#### Feature Info Locatability for WMS/WMPS in Consumer

GeoMedia WebMap supports locatability of Feature Info operation for WMS/WMPS services in Geospatial Portal - Consumer. Users can set locatability (true/false) for a layer in Configuration Portal. Then, the starting workspace in Geospatial Portal - Consumer will display Feature Info as shown in the table:

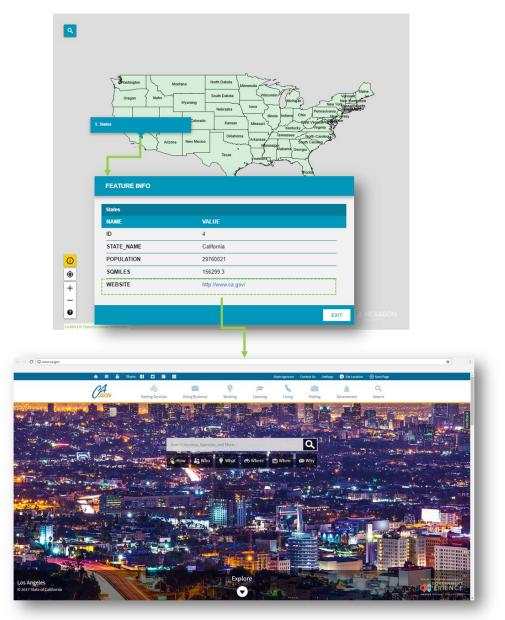
	Feature Info for particular layer in Geospatial Portal - Consumer
Is Locatable = True	Feature Info Available
Is Locatable = False	No Feature Info Available





Display WMS Feature Information with Xlink:href as Hyperlinks

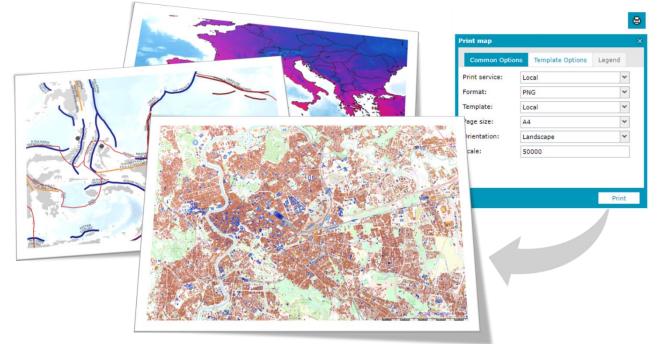
Displaying hyperlinks in attributes was improved by adding Feature Info in XML format. If hyperlink attributes are enabled in GeoMedia WebMap's WMS layers, Geospatial Portal - Consumer will properly display them as links. A new page or tab will open when the link is clicked.





### Enhanced Printing Rendering for High DPI in Geospatial Portal - Classic

Improved DPI processing for printouts in the Geospatial Portal - Classic. Higher DPI settings result in better legibility when printing images with text.



### Configurable Width of Live Search Control in Geospatial Portal - Classic

By default, the width of Live Search control is set to 200px. This may cause navigation between pages with multiple results in some languages difficult. This difficulty was resolved with the option to change the width of the Live Search combo.

Administrators can choose to display results wider than the combo. By default, the width of the results list is set to 300px. The minimum width of the result list is larger or equal to the width of the combo box. These settings can be found in the Web.config file for Geospatial Portal - Classic.

### Languages Support in Geospatial Portal - Classic

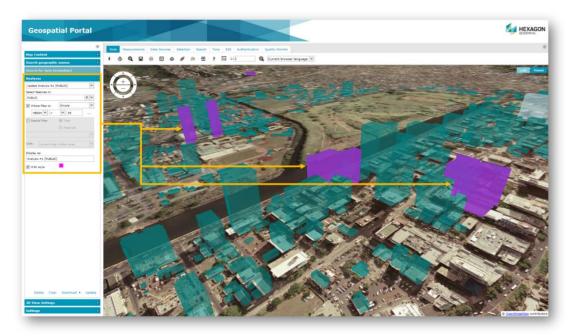
Geospatial Portal – Classic is a multilingual application with option for a variety of languages out-of-the-box and continues to enhance its rich set of languages. In this release, Marathi and Bahasa Indonesia were added.



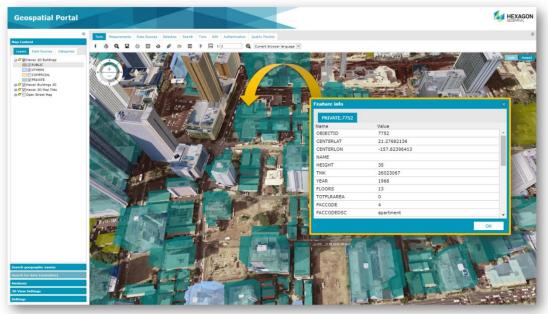
Extrude Analysis Results in Geospatial Portal - Classic

Geospatial Portal - Classic supports extrusion of 2D vector features into three dimensional solid shapes to build 3D scenes in seconds. The extrusion can be also applied to the layers resulting from the analyses based on selected attribute values and this way introduce extra information on the map.

Note: Extrusion only works with data from GeoMedia WebMap's Web Feature Services.



WFS-T Feature Attribute Updates are Reflected in 3D Extrusion in Geospatial Portal - Classic Updating attributes in WFS-T (WFS Transactional) is reflected in 3D extruded objects without refreshing the layer in Geospatial Portal - Classic.





### Display Extruded Data in Geospatial Portal – Consumer

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

Note: An administrator prepares 3D scenes with extruded data and sends the configuration to Geospatial Portal - Consumer instance to enable this feature for Consumer users.





## Improved 3D Engine

The Geospatial Portal Classic and Consumer have been updated to myVR mMap 2017.11 engine. There are multiple bug fixes in this release, as well as significant performance improvements. Users will notice faster vector data and 3D scene loading (3D Map Tiles and 3D Objects).





### Administration Console

The release of WebGIS 2020 included multiple improvements to the Administration Console where GeoMedia WebMap and Geospatial Portal services are managed and configured.

### Service Instance Name Displayed During Editing

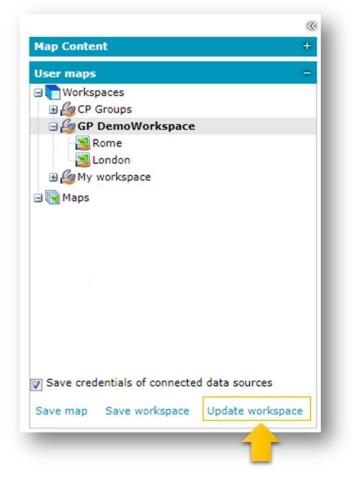
Administration Console now displays the name of the edited service instance. User no longer needs to recall or guess which instance is edited while switching between the tabs available for the instance settings.

HOME				
INSTANCE MANAGEMENT	→ ADMINISTRATION CONSOLE → INSTANC	CE LIST		
Instance List New Instance			N	EW INSTANCE
GEOMEDIA WEBMAP	INSTANCE NAME A V	INSTANCE TYPE A V	INSTANCE VERSION A V	ACTION
System Settings	AuthorizationBridge_Patch	Authorization Bridge Service	16.5.0000	
Configuration Test Publisher Settings	Consumer_Patch	Consumer Portal	16.5.0100	
Service Sources	СР	Consumer Portal	16.5.0100	
Previous Services Product Information	CP_2D	Consumer Portal	16.5.0100	
	CSW_Patch	CSW (Catalogue) / INSPIRE Discovery Service	16.5.0000	
CLIENT CONFIGURATION ?	Hexagon_Geospatial_Demo_WMS	WMS (Map) / INSPIRE View Service	16.5.0100	
Maps <u>&amp; Workenace</u> 3≓ Par → HOME			N)	
GEOMEDIA WEBHAP     System Settings     Configuration Test     Publisher Settings     Service Sources     Previous Services     Product Information	DATA SOURCE CONF Data Source     G	rformance Monitoring Service Metadata Details FIGURATION SeoMedia WebMap	<b>v</b>	NEXT
CLIENT CONFIGURAT     Maps & Workspace     3" Party Map Provi     Search Configuratio     Server Configuratio	i lers m			



Improved workflow when starting workspace update in Configuration Portal

The workflow for updating the starting workspace in Configuration Portal was enhanced to be simpler and more intuitive for administrators. Before, administrators had to remove the previous and add a subsequent map composition to reflect map changes. Now, administrators simply click the Update Workspace button to apply changes to map compositions that make up the starting workspace.

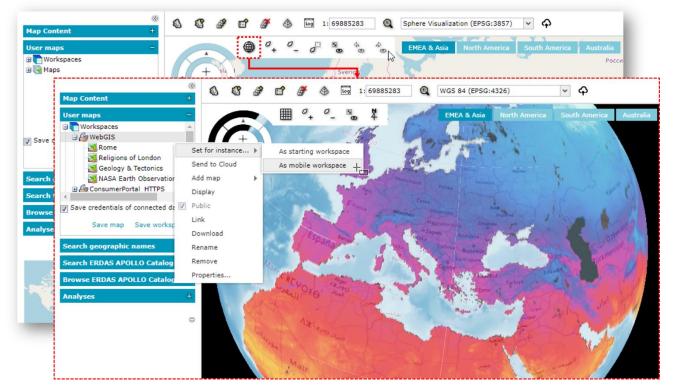


Arranging the order of the map compositions in the starting workspace is also easier. Just drag & drop the maps to change the order within the workspace. Changes are applied immediately and visible after refreshing the Geospatial Portal - Classic.



## 3D View in Configuration Portal

Administrators can enable 3D map mode in Configuration Portal. 3D maps are previewed before administrators set them as starting maps on user Portals. Lightning, shadow and underground feature data are supported in the 3D map preview.





# New Technology (16.6 Update 1)

GeoMedia WebMap

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

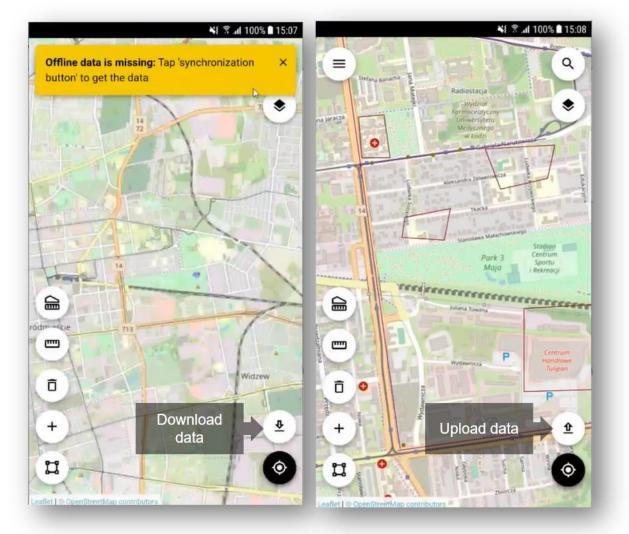
#### Enhanced offline mode

With Update 1, 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 file(s) 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).

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ap Windov	w* MapWindow1								
ser*	Jan Romanowski								
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East									
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•	Legend Entry DangerZones SafePaths	<u>र</u> र	<b>L</b>	ব	য	N N		× ×	Attributes
•	Legend Entry DangerZones SafePaths	<u>र</u> र	<b>L</b>	ব	য	N N		× ×	Attributes



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.



Name       Image       Image       Image       Text       Text       Text       Image         DangerLevel       Danger Level       Image       Image	Source Name	Display Name	Visible	Editable	Mandatory	Source Type	Display	Туре
TypeOfDanger       Type of Danger       IV       IV       Text       Pick List       IV         DescriptionOfDanger       Description       IV       IV       IT       Text       Text       IV         ID       ID       ID       IT       IT       It       LongInteger       Long Integer       It	Name	Name	2	V		Text	Text	
DescriptionOfDanger     Description     IV     IV     Text     Text       ID     ID     ID     IF     IF     LongInteger     Long Integer	DangerLevel	Danger Level	1	2	E.	Integer	Integer	-
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ID ID F F Longinteger Long Integer	DescriptionOfDanger	Description	V	•	n.	Text	Text	× -
	ID	ID	Г	Г	Г	Longinteger	Long Integer	



## 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	V		Text	Text	▼	
FCC	FCC		V		Text	Text	<b>▼</b>	
LOC_ID	LOC_ID	•	V		Text	Text	<b>•</b>	
USE	USE	•	V		Text	Text	×	
OWNERNAME	OWNERNAME	•	V		Text	Text	·	
ELEVATION	ELEVATION	2	V		Text	Text	×	
CONGES_LEV	CONGES_LEV	2	V		Text	Text	<b>.</b>	
SERV_LEV	SERV_LEV	•	V		Text	Text	▼	
LRGCERTENP	LRGCERTENP	•	V		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			~ 1	Cancel	Stal	tic text		



#### Default values

To boost fieldwork efficiency for GeoMedia WebMap Mobile app users, the ability to define default attribute values was implemented in Update 1. 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	* *
Default value	Value: 302	÷
		OK Cancel

For Text type attributes, there are the following default value types to choose from:

- 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	Source Type	Display Type	
N	AME	NAME		•	Text	Text	
F	CC	FCC	◄	◄	Text	Text	<b>_</b>
U	DC_ID	LOC_ID		<b>v</b>	Text	Text	✓
U	SE	USE	<b>v</b>	<b>v</b>	Text		· · · ·
0	WNERNAME	OWNERNAME	<b>v</b>	•	Text	Configure 'NAME' as Tex	đ
E	LEVATION	ELEVATION	<b>V</b>	~	Text	Minimum length* 0	
0	ONGES_LEV	CONGES_LEV	~	~	Text	Maximum length* 42	
S	ERV_LEV	SERV_LEV	<b>v</b>	~	Text	Regular expression	mple: ^[a-zA-Z0-9_]*\$
L	RGCERTENP	LRGCERTENP	~	~	Text	, pattern	
0	OMM_ENP	COMM_ENP	•	~	Text		Static text  Mobile Regional Airport (MOB) Static text
A	IRTAXIENP	AIRTAXIENP	~	<b>v</b>	Text	. Help	Usemame OK Cancel
F	OREIGNENP	FOREIGNENP		~	Text		Current data and time
IN	TRANENP	INTRANENP	~	~	Text	Text	✓
н	UB_SIZE	HUB_SIZE	<b>V</b>	<b>v</b>	Text	Text	✓
Т	OWER_TYPE	TOWER_TYPE	•	~	Text	Text	▼
10	)	ID		<b>V</b>	LongInteger	Long Integer	



#### Enhanced display of media files

GeoMedia WebMap 16.6.1 provides an enhanced display of media files. Media files such as photo, video, audio, signatures, and documents (pdf) gathered with the mobile app can be easily 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.

	Configu			*						
		ure attributes di	isplay in Mobile app for Manholes							
		Source Name	Display Name	Visible	Editable	and the second se	Source Type			
		State	State	•	V		Integer	Integer	-	
		Photo	Photo	V	2		Memo	Photo	-	IJ
		Material	Material		•		Text	Memo Pick List		
		Manufacturer	Manufacturer				Text	Photo Video		
		Radius	Radius				Double	Audio Signature		
		Thickness	Thickness				Integer	Pdf Doc		
		ID	ID		Г		Longinteger	Long Integer	•	Г
	les Properties ral Attributes					F	Longinteger	Long ineger	_	
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-	nal Attributes		/alue Manholes.5			F	Longineger			
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	Attributes Name Eid GML_description GML_name Manufacturer Radius Thickness Material	1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Value Manholes.5 Jinderground Devices 100 10 icopper http://lod-xjromanow10/mobilebackend/bl					OK	Canc	



#### Remote server connection to the mobile backend

With Update 1, 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.

	Home	Manage	Data	Analysis	Vector	Labeling	Raster	Toolbox	WebMap
Administr Web Publ		rks Users	Server						
		[	Server U	rl		•			×
			Server	2014 	od-xjromanow	10/mobileBack	lend		
			_	_	_	_	ОК	Cancel	J

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.

Groups (Groups)	Administrators	Members of this MobilePublisher	group can remot	Groups	
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Backup Operators	MobilePublisher			
() () () () () () () () () () () () () (	eryprogrammer operation perice Owners Distributed COM Users Event Log Readers Suests Hyper-V Administrator IS, JUSR Network Configuratio Performance Monitor Performance Monitor Performance Monitor Performance Monitor Performance Monitor Performance Monitor Performance Monitor Performance Monitor Sees MobilePublisher	General	Publisher Group for managing configuragi publisher brozmany gromanow	? × ons from mobile ter's group membership outfil 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 & 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.

File Geodatabase Read-Write       Access Connection 1         Grachnology       GeoMeda SmartStore         GeoMeda SmartStore       Connection description:         GeoMeda SmartStore       Connection description:         GML       I/CAD MAP         KML       MapInfo         Object Space       OBBC Tabular Read-Only         Oracle Object Model Read-Only       Erowse         Oracle Object Model Read-Write       Erowse         PostGIS Read-Write       SQL Server Read-Write         SQL Server Read-Write       Enable feature car         WPF       WCS         WFS       WrS         WrS       WrS Connection 1         Bit Connection 1       Bit Connection 1         Bit Connection 1       Bit Connection 1         Bit Connection 1       Bit Connection 1         WrS VPF       WrS         WrS       WrS Connection 1         Bit Connection 1       Bit Connection 1         Bit Connection 1			
GML I/CAD MAP KML MapInfo Object Space ODBC Tabular Read-Only Oracle Object Model Read-Only Oracle Object Model Read-Write PostGIS Read-Write SQL Server Read-Write SQL Server Read-Write SQL Server Read-Write Text File VPF WCS WFS.T WMS WMTS WMTS WMTS WATER_MAIN (299) k	GeoMedia SmartStore		
PostGIS Read-Write SQL Server Read-Only SQL Server Read-Write SQL Server Spatial Read-Write Text File VPF WCS WFS -T WMS WMTS WTS WTS WTS WTS WTS WATS WATS WATS WATS WATER_MAIN (299) k ⊗ Selection_of_PLMBuildingFo k ⊗ Image (1) DK	GML I/CAD MAP KML MapInfo Object Space ODBC Tabular Read-Only Oracle Object LTT Read-Write Oracle Object Model Read-Only	Access Database file	Browse
Image (1)         □	PostGIS Read-Write SQL Server Read-Only SQL Server Read-Write SQL Server Spatial Read-Write Text File VPF WCS WFS WFS-T WMS	Enable feature cac	Connection 1
Zones (1)	WATER_MAIN (299)       Selection_of_PLMBuildingFo       Image (1)       Image (1)       Image (1)		DK



#### Handle multiple map windows and assign works with a map window

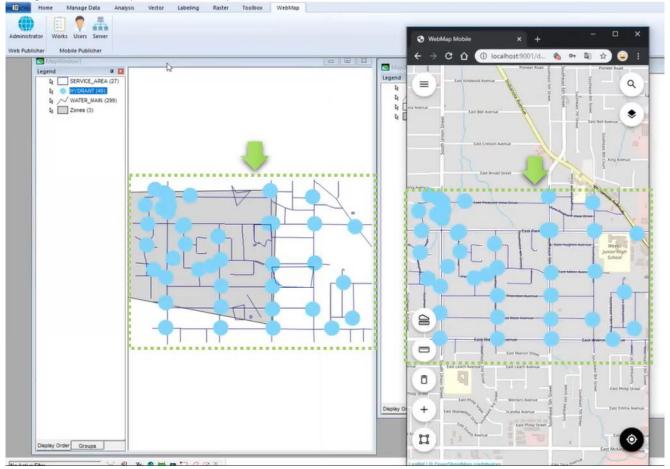
The New Map Window combo box in the **Edit Work** properties dialog was introduced. It lists all open map windows in GeoMedia (desktop). When adding a new job, the default active map window is chosen. You can change the map window that will be used with the mobile configuration. The legend entries listed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

	User*		MapWinkow1 MapWinkow2							
	Base M	ap"	None							Option
Edit V	Nork									×
Vame'	e e	Hydra	nts Inspection							
Map V	/vindow*	MapV	Window1			_				
User*		Jan R	lomanowski			_				•
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Zon lov Lo	nes ortugal wa odz	es DRANT			P	V	₹	2		Attributes
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Zon lov Lo	nes ortugal wa odz	es DRANT			P	V	₹	2		
Zon lov Lo	nes ortugal wa odz	es DRANT			P	V	₹	2		



# Use map window bounding box (BBOX) as a default

The same starting BBOX is set in 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 guide in Mobile Publisher

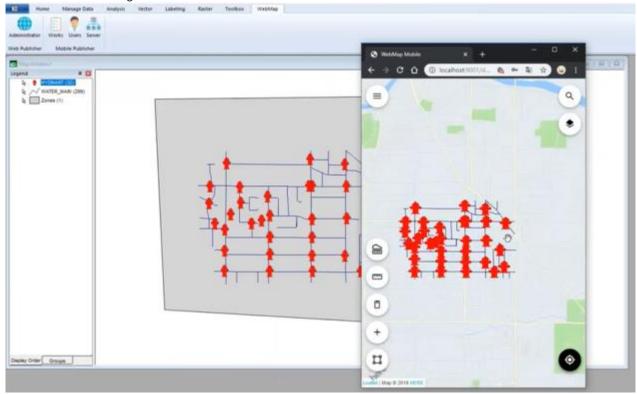
Key settings must be configured in the GeoWorkspace before defining works. The quick start guide is a new feature that makes configuration even simpler. The user-friendly quick start guide will appear when the workspace has any needed setting unconfigured, such as the proper geoworkspace coordinate system 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 also 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.

gend	
k₃ ✓ SafePati k₃ ● Manhole k₃ ■ Zones (;	Display On Display Off Display by Scale Display Scale Range Locatable On
	Locatable Off Add Subtitle <sup>®</sup> Hide Show Legend Entries Load Data Style Properties Style Scaling Map Window Tooltip
	Cut Ctrl+X Copy Ctrl+C Paste > Add Delete Fit by Legend Entry Display Data Window Legend Entry Properties
	Fit Legend Properties



# New base maps (Here Maps/Bing 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 •

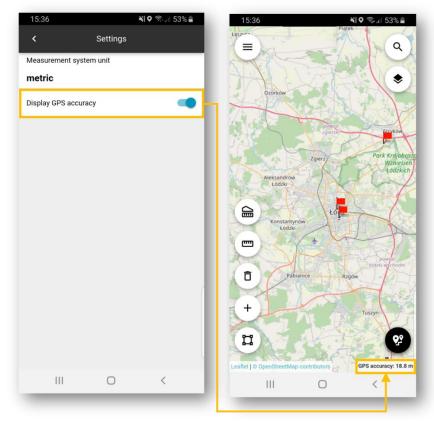
You can also refrain from using any base map – just select "none" from the list. Click the **Options** button to define more options and provide information that is needed by the API.

Name*	Hydrant Inspec	tion December 2019								
User*	John Doe									
Base Map*		ap							2	-
Offline	None Open Street Ma Bing Maps Here Maps	e 🖓								
Al Hydr	arts									
Legend E	Entries									
		Legend Entry		Include	Create		and the second se	Attributes Update	in the second	
•	HYDRANT			7		2	4		<b>x</b>	Attribu
•	HYDRANT			7		2	•		~	Attri
	HYDRANT WATER_MAIN			3	ব	4	ব	N N	2 2	
				20	25			and the second se		
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			Nonth Dr. JCVwOM	4	<b>c</b> i	4	되	and the second se		
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		Here Maps Options App Code* App Id*	NcNYh0n_CVwOM	4	<b>c</b> i	2	되	and the second se	×	Attribu



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 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 combing 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**

#### New print engine support in Geospatial Portal

Starting with Geospatial Portal version 16.6.1, it is 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

Update 1 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	URL:	[						
3D Objects								
Bing Maps								
CSW								
ERDAS APOLLO								
GeoRSS								
Google Maps					C	2		
LUWS					ø	Re	gister	
Open Street Map	Public d	ata source	25		-	Ē.		
OpenLS	No. Nan	ne	U	RL			•	
Personal	1 Geo	Names		ttp://de				
Print Service								
WCTS				Log	in method:	User	name	*
WFS								
WFS-G					Credentials			
WMS					Username:	Γ		
WMTS					Password:			
WPS-CT					rassword:			



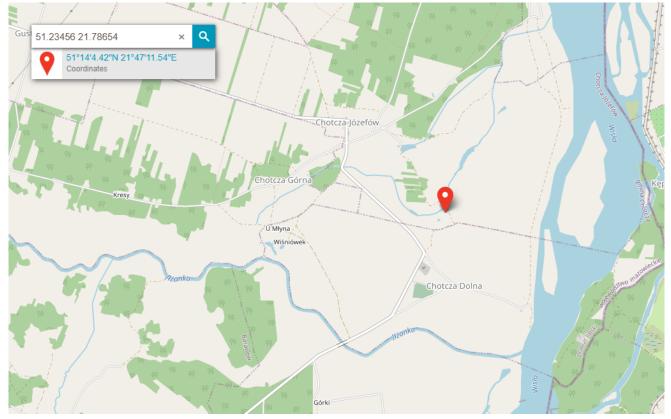
## Search for coordinates in Consumer Portal

The **Geospatial Portal - Consumer** with **Update 1** installed gives you the ability to search for geographical coordinates.

9	Search	â	Starbucks	٩	 Ave N & N 34th St	DI
	Search sources:	$\checkmark$	Coordinate sea	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. 34.23456 61.78654W or -34.23456 -61.78654).

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





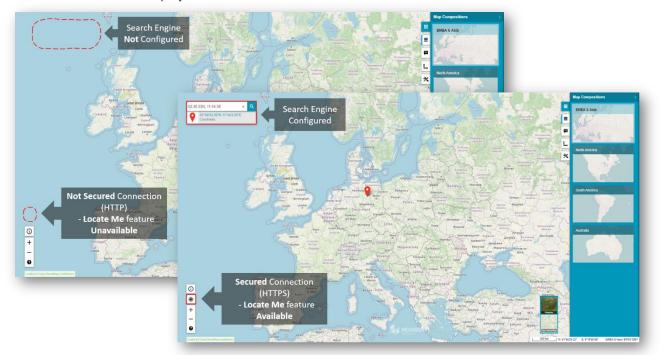
# Improved Consumer Portal UI

We've added some improvements to the portal UI that make working with the Consumer Portal more intuitive.

#### Disable unavailable elements (Search, Go to my location)

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

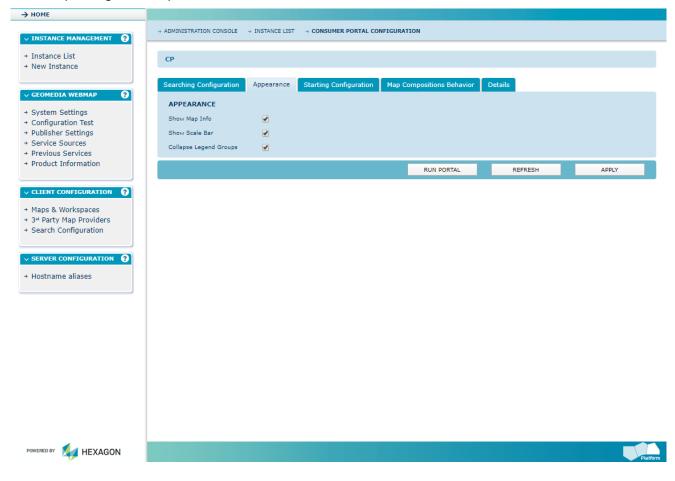
The **Go to my location** feature in Consumer Portal works only with secured (https://) connections. When a Consumer Portal instance is configured over a non-secured connection, the **Locate Me** button and the **Show my location** options on the **Settings** panel will not be displayed, and the features 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.





Secondly, an administrator 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

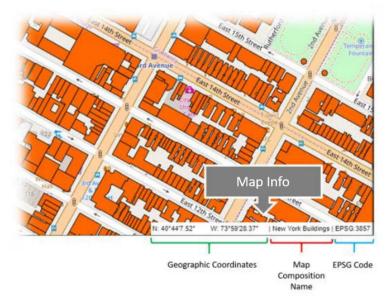




Map Info provides a set of information about the active map:

- 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.

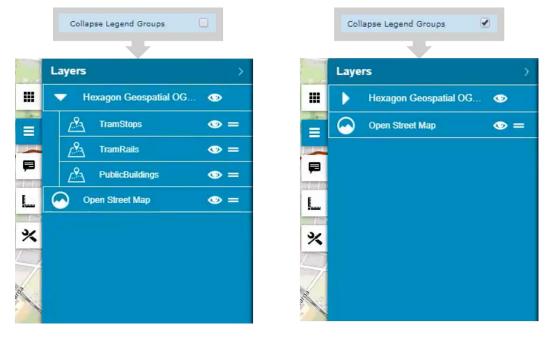


Scale bar provides approximate information about the scale and distance on the map.





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

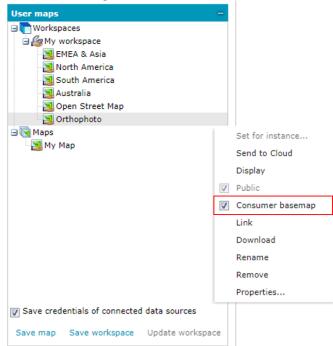
Further improvements for Consumer Portal include a memory for legend changes during one session. When a user adjusts layer properties (layer display on/off, transparency, layer order), switches the Map Composition, and displays the previous Map Composition again, all layer settings will be the same as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



## 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.

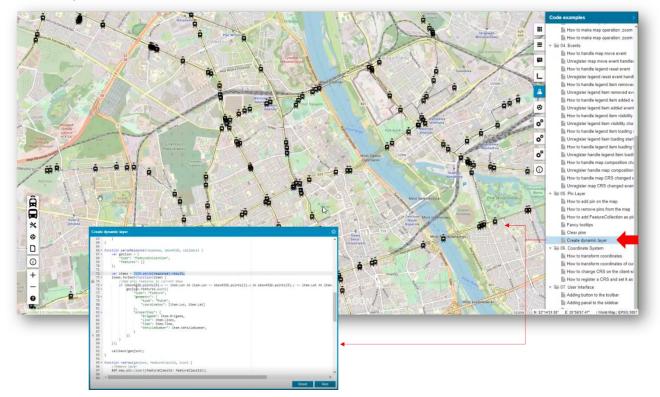




# Using Consumer Portal SDK - dynamically refreshed content

Last but not least, improvement was introduced for the Consumer Portal SDK. Now Consumer Portal 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 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.





# New Technology (16.6 Update 2)

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.



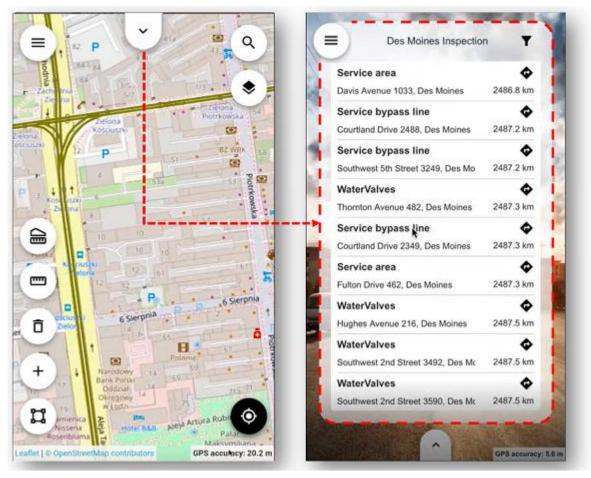
# GeoMedia WebMap Mobile and Mobile Publisher

#### Dashboard View

Update 2 brings new functionalities and extensions for the Mobile application and Mobile Publisher. A completely new feature is the Dashboard view in the Mobile application. The Dashboard allows you to display a list of objects for inspection that are available within Mobile configuration. This feature significantly helps to locate the objects to be inspected. The Dashboard is retractable, easy to use, and can be used at any time.

Within the objects listed in the Dashboard, the object type (e.g., Tram Stop, Water Meter) and the distance from current user location to object is provided. The distance displayed is updated on the fly when a user moves in the field. The distance is displayed in units of actual settings (metric/imperial). Optionally, when configured by the administrator, the object addresses can be shown.

Moreover, the Dashboard allows you 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 selected feature.



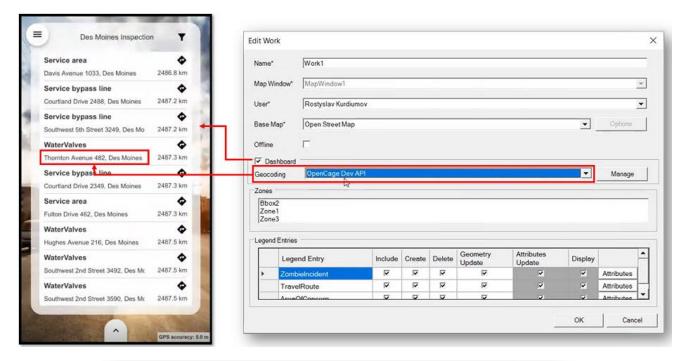
Furthermore, a user can filter the objects displayed on the panel. Available filtering options are based on featured class name. By using general filtering options, you can display either all features which is the default setting, none, or editable only. The toggle buttons for each feature class change accordingly with 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 the 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 Update 2 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. Now, you can define OpenCage and Google services, but with subsequent updates, more geocoders may be introduced in the future.



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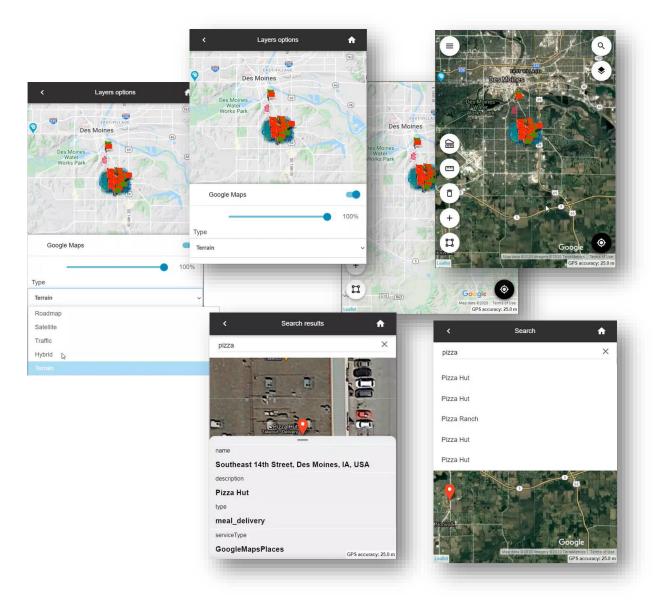


#### Integration with Google services

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 on/off the Google Maps layer, change the layer transparency, and finally choose the type of Google Maps. All this can be done in the app by using standard layer control.

The integration also includes the object search functionality. Using Google Search within GWM Mobile is available. The search results in the GWM 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 GWM Mobile Feature Info dialog.

It is worth mentioning that Google search results can be displayed only if the Google Maps layer is enabled.





## Google base map for GeoMedia WebMap Mobile

As mentioned above, in Update 2, Google services have been integrated with GWM 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 Google Maps entry. All additional settings (e.g., API Key or Google layer type) that the administrator can set for Google Maps in order to use them are available after pressing the **Options** button.

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#### Enhanced GeoPackage creation - zoom-level and quality for raster

When an offline configuration(s) 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 of a displayed map on the screen of a phone or tablet. In order 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.

Starting from version 16.6 Update 2, 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 so 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.

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Better control of the offline data synchronization process for users of the mobile app.

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

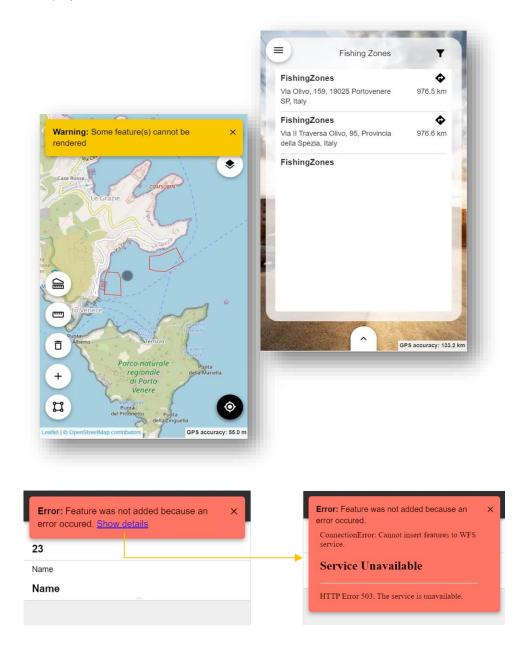
A new set of user-friendly messages for better control and full view of the GeoPackage database creation process and data synchronization was introduced.





Notification for users when geometry limitations in display

If a given type of geometry (e.g., an arc) is not supported and cannot be rendered, the app will inform the user about it. A message appears when there are some problems while adding new objects (e.g., due to temporary unavailability of the service). Show details link provides more information about an error that occurred. Further improvements are that an address for an object that cannot be rendered is not displayed in the Dashboard feature, the distance is not calculated, and the navigation button is hidden. The Feature Info also is not available for not displayed features.





Address history for GeoMedia WebMap Mobile start screen

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

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	lod-hgdv-w19/mobilebackend
	Skip 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 being currently selected.

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# Sort and order zones in WebMap Mobile Publisher

Zones defined in the GeoMedia WebMap Mobile Publisher appear in alphabetical order. This little enhancement in the **Edit Work** dialog of Mobile Publisher makes it easier to find and select the zone while preparing the configuration.

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# Geospatial Portal and Consumer Portal

#### Integration of Google Maps and Consumer Portal

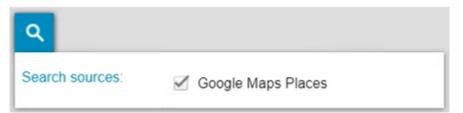
From version 16.6.2, the Consumer Portal handles Google Maps layers. This means users in Consumer Portal can view Google Maps, explore Google Street View, and search for interesting objects by using Google Maps Places search service.

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 Search service is also integrated. Consumer Portal users can search for POI and addresses by using the standard Consumer Portal search control integrated with Google Maps Places search service. Pins with the location of searched objects appear on the map.



Finally, the Google Maps and Consumer Portal integration is Google Street View mode, which is available with Consumer Portal Update 2. Exploring the Google Street View in Consumer 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 Consumer Portal bottom left toolbox. The marker on the map shows your location, view direction, and follows the position when you move in the Street View.





Configuration of Google Maps layer for Consumer Portal is also easy and intuitive as much 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.



## 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. In order to configure and use Google Maps layers in the Geospatial Portal and/or Consumer Portal layout, it is required to register a Google Maps API Key.

With Update 2, an administrator 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.

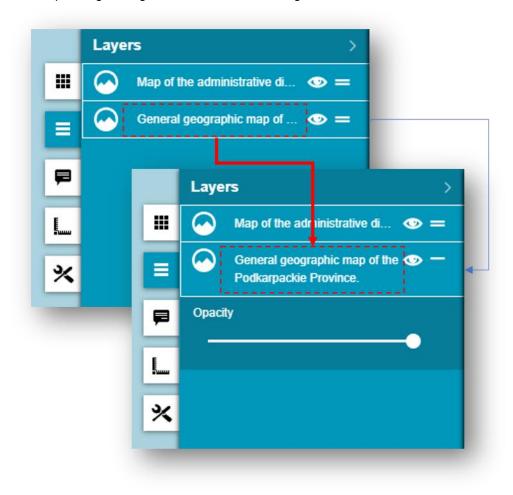
Just go to the Advanced options group in the Starting Configuration tab of Administration Console and type the key value in the GoogleMaps API Key field.

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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 it was prior to the 16.6.2 version but expanding the legend control allows viewing the full name.



Implemented a consistent mechanism of scale bounds handling for WMS, WMTS and WMPS in Consumer Portal

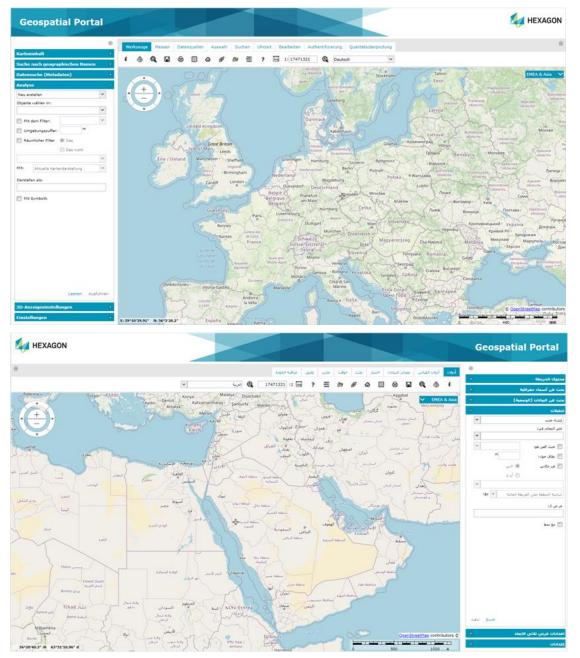
Since version 16.6.2, Consumer Portal handles scale bands advertised by Web Map Tile Service and Web Map Publisher Service.

If scale ranges have been set for the data served by the 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 for all three services: WMS, WMTS, WMPS.



# Auto adaptation of the Portal layout to RTL languages

One of the Geospatial Portal improvements relates to its feature of 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 types of languages: LTR (Left to right) and RTL (Right to left). Starting from version 16.6.2, if 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.





Improved UX for switching Map Variants in Geospatial Portal Layouts

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

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Remove all connections and clear workspace with one command in Geospatial Portal

There is a possibility 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.

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9	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			
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**Geospatial SDI** 

## OGC WFS and WCS 2.0 Façade conformance

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

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		OGC & External Inspire OGC & Inline Inspire				NEXT



# Administration Console: GeoMedia WebMap, Geospatial Portal, and 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. With Update 2, we've introduced the possibility of batch management of instances in the scope of upgrading and/or deleting instances.

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 – appeared on the top bar of the Administration Console. Now the administrator can select multiple instances (using checkboxes) and then update or delete selected instances with one click.

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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	
Product Information		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>nd</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	0	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	
_	- 4 - 2				



# **System Requirements**

### GeoMedia WebMap

Operating Systems	Windows Server 2019 (64-bit)
	Windows Server 2016 (64-bit)
	<ul> <li>NOTES:</li> <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.</li> </ul>
Operating Systems for GeoMedia WebMap Mobile	<ul> <li>iOS version 12.x or later</li> <li>Android version 5 or later</li> <li>Windows 10</li> </ul>
Server Side Database Engines	<ul> <li>Oracle® Server 12.2 (64-bit)</li> <li>Oracle Server 11g (64-bit)</li> <li>Oracle Server 11g (64-bit) (at least 11.2.0.4)</li> <li>Oracle Server 11g (32-bit)</li> <li>Oracle Express 11 g (at least 11.2.0.4)</li> <li>Oracle Client 12.2 (32-bit)</li> <li>Oracle Client 12.1 (32-bit)</li> <li>Oracle Client 11g (32-bit)</li> <li>SQL Server 2012 (64-bit)</li> <li>SQL Server 2014 (64-bit)</li> <li>SQL Server Express 2012</li> <li>SQL Server 2016</li> <li>SQL Server 2016</li> <li>SQL Server 2017</li> <li>SQL Server 2017</li> <li>SQL Server Express 2017</li> <li>PostgreSQL 9.3 with PostGIS 2.1</li> <li>PostgreSQL 9.4 with PostGIS 2.3 Note:</li> <li>All later service packs are considered viable unless otherwise noted. See the Support website for specific notices.</li> <li>Access (MDB) is considered as viable.</li> <li>No Database Engine is required on the client side nor to run the Administration Console.</li> </ul>



Client Side Internet Browsers (Client is Geospatial Portal & GeoMedia WebMap Publisher Portal)	<ul> <li>Google Chrome <sup>™</sup> 77 or higher</li> <li>Firefox® 69 or higher</li> <li>Internet Explorer® versions 11</li> <li>Microsoft Edge 44 or higher</li> <li>Safari® 12 or higher</li> <li>Note:</li> <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 were not officially certified.</li> <li>The 3D features of Geospatial Portal Classic require native WebGL support. WebGL is available in Firefox, Chrome and MS Edge.</li> <li>3D functionality in Geospatial Portal Classic /GeoMedia WebMap Publisher Portal is enabled by default in Firefox, and Google Chrome browsers. In MS Edge, 3D is available only if the administrator enables it.</li> <li>Web browser issues found on the GeoMedia WebMap 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>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> <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> </ul>	
Server Side Internet Browsers	<ul> <li>Internet Explorer versions 11         Note:         <ul> <li>Internet Explorer is required on the server side only to provide the 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> </li> </ul>	
Client Side System Dependencies & Additional Software	<ul> <li>GeoMedia or GeoMedia Professional 16.6</li> <li>NOTE:</li> <li>GeoMedia or GeoMedia Professional is required for GeoMedia WebMap Publisher Administrator.</li> </ul>	
Server Side System Dependencies & 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 2019 (64-bit)</li> <li>Windows Server 2016 (64-bit)</li> </ul>
Database Engines	<ul> <li>Oracle Server 12.2 (64-bit)</li> <li>Oracle Server 12.1 (64-bit)</li> <li>Oracle Server 11g (64-bit)</li> <li>Oracle Client 12.2 (32-bit)</li> <li>Oracle Client 12.1 (32-bit)</li> <li>Oracle Client 11g (32-bit)</li> <li>Oracle Express 11 g</li> </ul>
Client Side Internet Browsers	<ul> <li>Google Chrome 77 or higher</li> <li>Firefox 69 or higher</li> <li>Internet Explorer version 11</li> <li>Microsoft Edge 44 or higher</li> <li>Safari® 12 or higher</li> </ul> Notes: <ul> <li>For browsers: Firefox and Google Chrome version stated is the version 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 MS 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 Microsoft 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> </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. Note for Internet Explorer: <ul> <li>Geospatial Portal does not work in Compatibility View in Internet Explorer browsers - this option must be switched off by the user.</li> </ul>
Server Side Internet Browsers	<ul> <li>Internet Explorer versions 11         <ul> <li>Internet Explorer is required on the server side only to provide the 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> </li> </ul>



Server Side System Dependencies & 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>
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## Geospatial SDI

Operating Systems	<ul> <li>Windows Server 2019 (64-bit)</li> <li>Windows Server 2016 (64-bit)</li> </ul>
Database Engines	<ul> <li>Oracle® Server 12.1 (64-bit)</li> <li>Oracle® Client 12.1 (32-bit)</li> <li>Oracle® Server 11g (64-bit)</li> <li>Oracle® Client 11g (32-bit)</li> <li>Oracle® Client 11g (32-bit)</li> <li>SQL Server® 2008 (32-bit)</li> <li>SQL Server® 2008 (64-bit)</li> <li>SQL Server® 2008 R2 (32-bit)</li> <li>SQL Server® 2018 R2 (64-bit)</li> <li>SQL Server® 2012</li> <li>SQL Server® 2014</li> <li>Access® 2010 (MDAC2010 v14)</li> </ul> Note: <ul> <li>All later service packs See the Support website for specific notices.</li> <li>NHibernate, Log4Net and ADO.NET are used for accessing database 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> <li>64-bit Oracle Data Access Components (ODAC) is required for Catalogue (CSW) services running with Oracle Server 12 (64-bit)</li> </ul>
Internet Browsers (required to run Administration Console)	<ul> <li>Google Chrome 77 or higher</li> <li>Firefox 69 or higher</li> <li>Microsoft Edge 44 or higher</li> <li>Note: <ul> <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> <li>For browsers: Firefox and Google Chrome version stated is the version 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 Geospatial. Refer to vendor sites for information on their Web browsers support policies.</li> </ul> </li> </ul>



Server Side System	<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> </ul>
Dependencies & Additional Software	<ul> <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 (16.6)**

### Geospatial Server 2020

### GeoMedia WebMap, Geospatial SDI, Geospatial Portal

Issue ID	Summary	
00027335	Disabled fill style displayed on WFS feature in Consumer Portal.	
00027348	Scale Bands limiting zoom in Consumer Portal.	
00031395	Consumer Portal's layer stacking causes problems if JPEG is used.	
00030480	Consumer Portal search issues. Search tool returns search results randomly.	
00036826	Measurements lost after placing last point - iOS Chrome Browser.	
00029386	Search criteria is not giving any metadata record on registered external OGC CSW. Advance search is able to give metadata records.	
00043474	Request Portal use prefix if declared by capabilities.	
00051791	Measure area functionality enables measurement of incorrectly drawn surface geometry.	
00030999	Auto classify button disabled for text fields.	
00036041	Performance issues - Portal cluster.	
00034738	IIS windows authentication: Consumer and WMS.	
00049686	BBOX and URL parameter don't work properly Geospatial Portal 2018 KVP parameter bbox results in incorrect map extent.	
00025080	Cross site scripting vulnerability in security audit of Apollo Portal.	
00018235	Error parsing get values string in Geospatial Portal analyses.	
00033031	Extrusion issue for WMPS layers in 3D Portal.	
00041306	Critical Security Audit Report Jsquery 1.10 has known vulnerability (Apollo 2018 update 4).	
00041771	CSW Search for strings containing Diacritics gives no result.	
00045933	Wrong coordinate system transformation parameters in CRSConfig_v2.xml.	
00022957	CSW Metadata information window show up as text only (not HTML formatted).	
00011273	Run-time error '91' when publish GeoMedia workspace to WMS.	
00008981	Compiler error with configured STS service.	
00014198	Cannot render google map in HTTPS.	
00014215	Using predefined query tool changes select set item behaviour.	



00009877	Portal is not supporting 3-letter language encoding. "Cannot read property 'length' of null".	
00042585	GWMPubPro.aspx assigns the value 110 to cookie select Set after running predefined WMPS query.	
00049649	Portal sends invalid CSW request when no filter is specified.	
00045356	Annotations not getting printed from User dedicated PSS.	
00017531	Unable to add Personal Layer feature class in MapWithToolbar.aspx.	
00022650	Poor resolution on texts and symbols on PNG and PDF prints.	
00038861	In the Geospatial Portal analyses on WMPS fail.	
00028572	Security Vulnerability: CSV Injection.	
00043892	PSS features are not returned until Portal page is refreshed.	
00026575	WFS – INSPIRE Metadata - Button "Add Spatial Identifier" no responding.	
00051504	\$GP.dynamicFeatureEvents don't work with WMPS.	
00021996	Warnings about CRS84 coordinate system from WMTS service.	
00048741	GWM (COM) errors.	
00045124	Error in GeoMedia WebMap: Source: Map Server Version: 16.00.0200.00004 Function GetFromLibrary Error: 0x1 Error Description: Not available.	
00033551	MapSvr.exe crash - "No known library storage service" Error.	
00034187	Correlate OWS and WFS exception codes to HTTP status codes.	
00032353	Get Feature Info only works for one WMTS layer.	
00011711	ProductDefinition is not OPTIONAL in the WMTS configuration even though it is defined as such.	
00037562	All rules defined in Label Manager written to Generated.Irf	
00005788	WMTS - layer title is required for more layers in the service (error when it is not present).	
00039945 00029483	Arc geometries are displayed as a straight line in WebMap WMPS (svg/svgz format).	
00033686	Geospatial Portal 2018 is slower than 2016 when loading WMPS source.	
00033348	The line spacing is different than it appears in GeoMedia. Different Direct2DMode used by GeoMedia (default = 0) and WebMap (default = 1).	
00036513	Incorrect ID specified in Label Rule File generated by Publisher Administrator.	
00035213	WFS GetFeatureById urn:ogc:def:query:OGC-WFS::GetFeatureById.	
00035178	The content type for getFeature, GetPropertyValue and describeFeatureType should be at least "application/gml+xml; version=3.2" - by default. Also, it should be able to use this value in the parameter outputformat.	



00034964	Support for new SQL Server Data Server that is compatible with TLS 1.2.
00045442	GeoJSON output format not working through SDI Façade.

# **Issues Resolved (16.6 Update 1)**

Geospatial Server 2020 Update 1

	GeoMedia WebMap,	Geospatial SDI,	Geospatial Portal
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Issue ID	Summary	
00065590	Some Map Server doesn't respond on SSCU	
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"	
00060346	Cannot generate route for the provided inputs using HERE (NAVTEQ) datasets	
00059849	Connection to a https CSW fails	
00059355	Text on Legend Entries not rendering correctly - alignment issue and Layer Issue	
00059412	Service Source Configuration Utility cannot connect remotely	
00059316	Creation of data sources in Service Source Configuration Utility	
00057704	WMS Language response not passing on the INSPIRE validation	
00063124	Repeat error when trying to assign a role to a group in the SDI security console	
00056264	Geospatial SDI Security Console throwing errors	
00057729	Map Server pools allocation to WFS service does not seem to work.	
00057781	Consumer Portal 2020 - new Information Bar is not updating Map Composition Name as it changes	
00057589	Problem with printing in Geospatial Portal	
00057429	Consumer Portal - Legend icons missing and thematic not showing detail	
00035178	WFS - (content-type) - application/gml+xml; version=3.2	
00056716	Geospatial upgrade from 2016 to 2018 results in extra requests (that takes a long time)	



00056348	LabelWeb crash and Map Server hang	
00041306	Critical Security Audit Report Jsquery 1.10 has known vulnerability	
00055155	Ortophoto doesn't display after search in consumer portal	
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	
00054983	Delivering GSPortal using https	
00055008	SSCU initializes more Map Servers that Application pool associated to service has	
00054729	SDIBasicLogService - ORACLE - Attempt to load Oracle client libraries threw BadImageFormatException.	
00054647	Possible change to documentation - Map Server Memory Threshold	
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	
00044102	WFS-T set date attribute to NULL	
00042886	performance degradation in WFS filter query	
00013309	SDI Logging doesn't support WFS-T	
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	
00020867	Editing date fields through GeoMedia WebMap WFS	
00060970	Consumer Portal GUI localization	
00064447	Insert into WFS - Value cannot be null. Parameter name: value	
00002457	Some WFSG services do not work	
00019316	Annotations do not print as displayed on screen	



# **Issues Resolved (16.6 Update 2)**

Geospatial Server 2020 Update 2

### GeoMedia WebMap, Geospatial SDI, Geospatial Portal

Issue ID	Summary
00066064	CSW Service Search Not Working.
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.
00064780	Issue with Portal print service over HTTPS.
00066269	LUWS - search doesn't work.
00070530	GeoMedia WebMap Mobile layout broken.
00069073	Mobile Publisher default server URL fails.
00064585	WCS 2.0.1 is not supported.
00064940	Spatial Limitations Issue - Geospatial SDI Security Console.
00022844	Feature Info command ignores existing WMS Filter.
00066833	Adding WFS from Geoserver not working as a proxy.
00015622	Select features by bbox" on filtered WFS feature returns all records within bbox.
00070900	Portal Area Measurement Issue.
00070746	Problems with redlining in Geospatial Portal.
00067015	GetFeatureInfo command and Selection tools returns wrong result on USDemo thematic legend.
00064949	Error in GeoSpatial Portal fetching WFS Geometry.
00070626	CSRF prevention. Request not allowed. Token inconsistent with cookies data.
00070802	Portal error under Chrome CSRF prevention. Request not allowed. Token inconsistent with cookies data.



00074070	
00071273	Geospatial Portal 2020 Update1 - Printing engines (chrome and IE) don't work in win 2012 server environment.
00065027	Publisher generates 0kB LRF until certain map window is deleted.
00068472	Save photo form Mobile app issue.
00063894	WMS synchronize publisher map fails when having label entries.
00063902	Synchronize legend to Publisher portal fails with new label entries.
00036517	Publisher Administrator Map Content - Synchronise/Update & Append - Not Updating Label Rule File.
00067405	Consumer Portal 16.6.1 - names of layers trunked in Consumer Portal.
00064164	Issue with displaying WMS by https in Consumer Portal.
00059543	Unable to display https WMS in Consumer Portal.
00056538	Missing Inspire metadata elements on a WMS GetCapabilities Request.
00030872	Synchronize legend will pick up Dynamic Legends entry causing site to fail.
00030868	Publish from GeoMedia LabelManager to LRF produces incorrect results.
00065940	Portal GetFeatureInfo command fails on Postgres based WMS after modifying WebPub Admin Display Field settings.
00012654	DWithin operator is not available in the Geospatial Portal Analysis for the WFS created from GeoMedia.
00071781	WFS - parameter count ignored if KML outputFormat is specified.
00066259	GetFeatureInfo command and Selection tools return additional records nearby.
00068687	Consumer Portal 2020 - Update 1 - all layers are turned off by default after publication composition.
00065639	Main WMS service Spain cannot be assigned to Mobile Publisher.
00066039	WMPS - File Path Manipulation security issue.
00065540	High severity vulnerability found in WMPS MapService.svc.
00055312	WebMap does not display all records through AttributeFilterPipe.
00057780	Consumer Portal 3D - displaying night during day.
00069088	Server-side request forgery.
00069601	Audio record doesn't work on Mobile.



00068537	Google logo is always on top.
00072323	INSPIRE WFS - the possibility to add "metadataURL" to the existing SpatialDataSetIdentifier element.
00065380	WMS Temporal Time Series not working.
00069523	HTTPS WMS URL error.
00072271	Consumer Portal 2020 Update 1 - Consumer Portal cannot displayed data from WMS where GetCapabilities are in 1.3.0 version only.
00015243	WFS does not accept http://www.opengis.net/gml/3.2 in the GetFeature XML Post request.
00074156	Memory leak on WMPS initialization.
00073891	Analysis not removed from Data view using Analysis.remove() function and analysis not removed from map on layouts without Sidebar.
00073656	HTTPS Portal and WMPS service fail to re-connect after period of inactivity.
00072240	WFS GetFeature expects swapped coords for EPSG:31255.
00070713	WMS does not render linear features with style type "Dash Line Style".
00067839	Session handler enabled in AuthenticationPipe adds default port numbers to URL.
00061437	Consumer Portal not displaying WMPS display field settings correctly.
00061287	Data view zoom button doesn't honour swap coordinates service quirks.
00025185	WFS Metadata Editor: Wrong Tooltip and exception for Feature types Keywords in the INSPIRE profiles.
00067144	Measurement Tools not working when "Go to my location" is enabled.
00064940	Spatial Limitations Issue - Geospatial SDI Security Console.



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Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

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