



MapStore at *geOcom 2024*

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GeoSolutions



17th - 19th of June 2024 - geOcom



BY NC SA

- What was released during 2023 for the MapStore integration with geOrchestra
- What's new in MapStore 2024.01 ready to land on geOrchestra
- Ongoing work for MapStore 2024.02

Overview of MapStore releases during last year



**What has been released in MapStore
from the last geOcom
?**

Two major series:

2023.01/02 (compatible with geOrchestra v23.0 series)

Released in Mar/Oct 2023 respectively (2 minor releases each)

2024.01 (available starting with geOrchestra v24.0 series)

Released in May 2024 (1 minor version released so far, the next
in July 2024)

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Lots of new powerful features and updates!

What released during 2023 on geOrchestra

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Let's see together the
main entries during 2023
for geOrchestra!



The complete release notes
available on Github at:

<https://github.com/georchestra/mapstore2-georchestra/releases/tag/2023.02.00-geOrchestra>

What released during 2023 on geOrchestra

- Handling permissions for editing capabilities with Attribute table

Read only layers

The screenshot shows a map of Nevada with a yellow polygon highlighting the Las Vegas area. In the foreground, there is a data table with two columns: 'PERSONS' and 'FAMILIES'. The 'PERSONS' column contains values 4,040,587, 3,665,228, 2,350,725, and 29,760,021. The 'FAMILIES' column contains values 1,103,835, 940,106, 651,555, and 7,139,394. Below the table is a 'Columns' section with checkboxes for various attributes: STATE_NAME, STATE_FIPS, SUB_REGION, STATE_ABBR, LAND_KM, WATER_KM, PERSONS, and FAMILIES. Most checkboxes are checked, except for STATE_FIPS and SUB_REGION. At the bottom of the interface, there are controls for Scale (1:18489335), Coordinates (Lat: 34° 59' 11.16" Lng: -082° 26' 20.69"), and CRS (WGS 84).

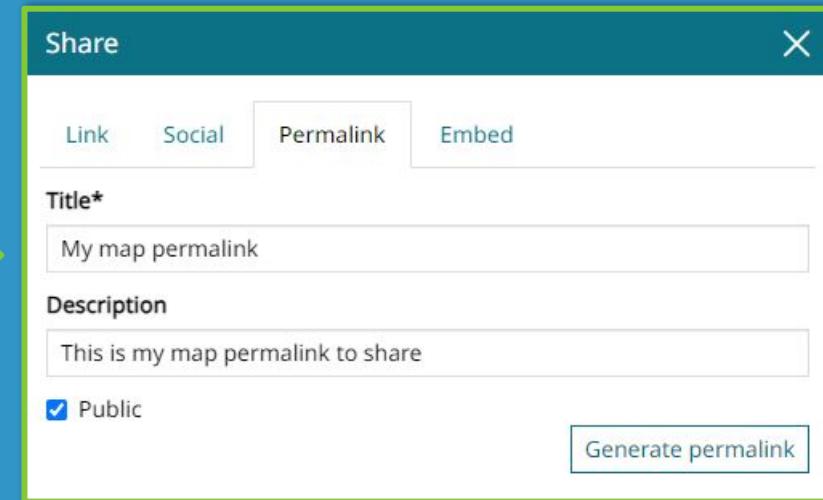
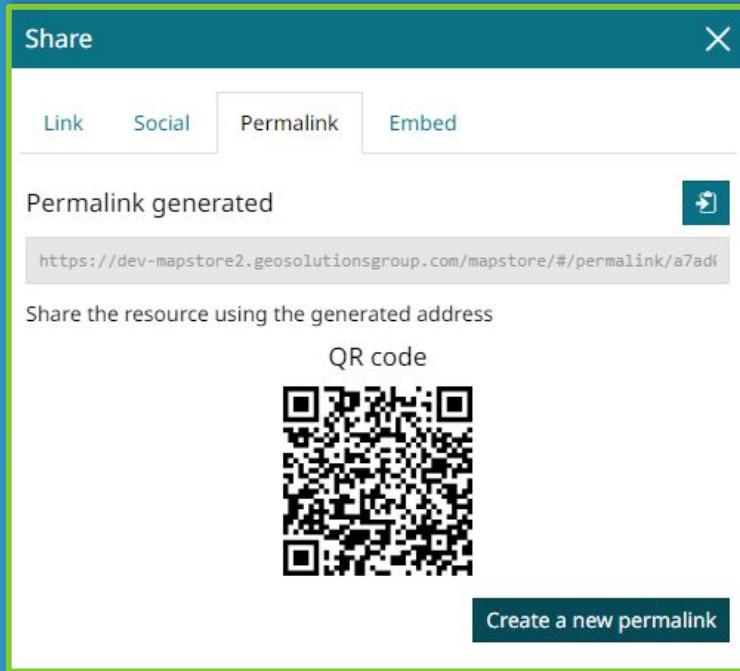
Persistence of hidden attributes

Allowed user groups
(also for Style Editor and Catalog tool)

The screenshot shows a configuration editor with a single field named 'cfg.editingAllowedGroups' of type 'Array<string>'. The field contains the value '["cfg"]'.

What released during 2023 on geOrchestra

- Share plugin: **permalink** function

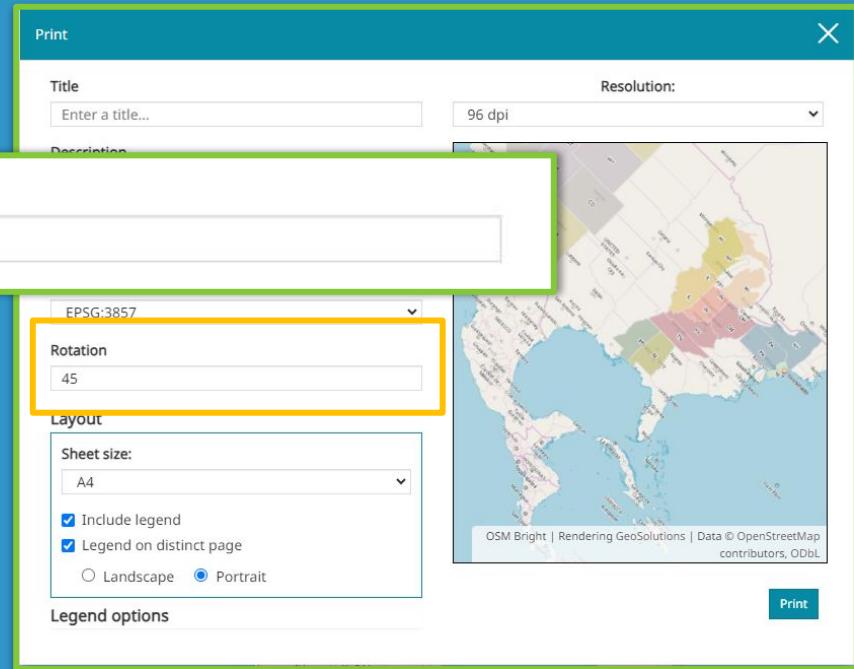
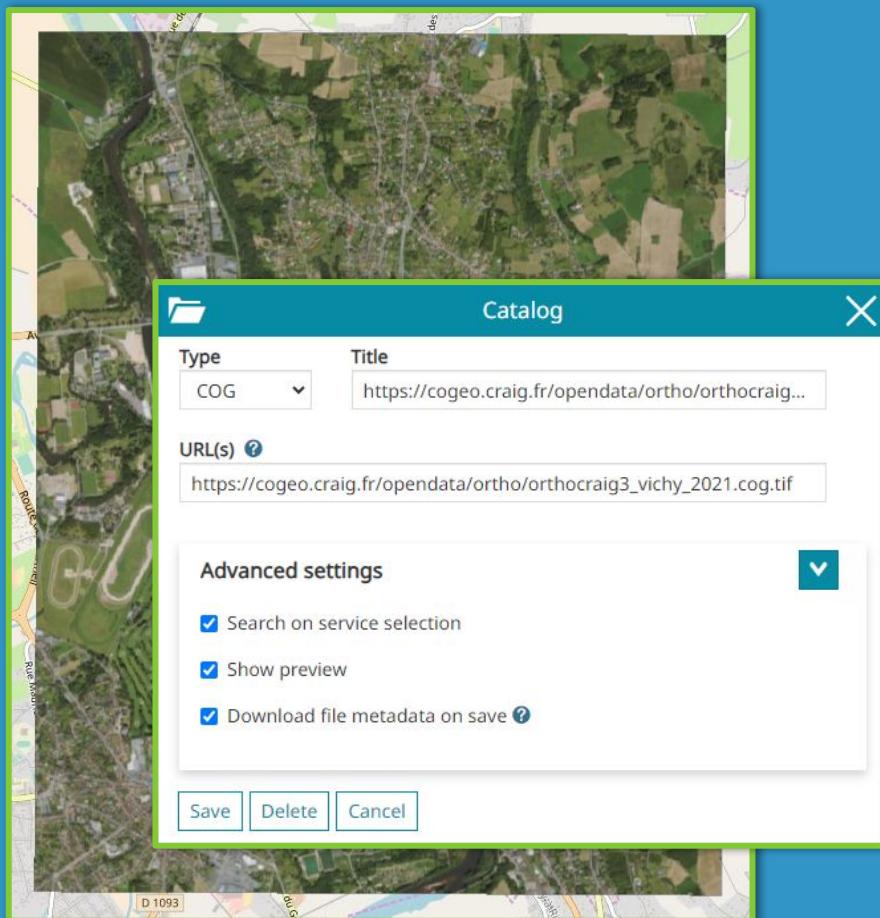


- Import/Export of Application Contexts



What released during 2023 on geOrchestra

- Printing rotated maps



- Cloud Optimized
GeoTIFF (COG):
 - The support for this new source type included in MapStore Catalog tool ...



What's new in MapStore 2024.01

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Let's see together the
main new entries
released for MapStore 2024.01!



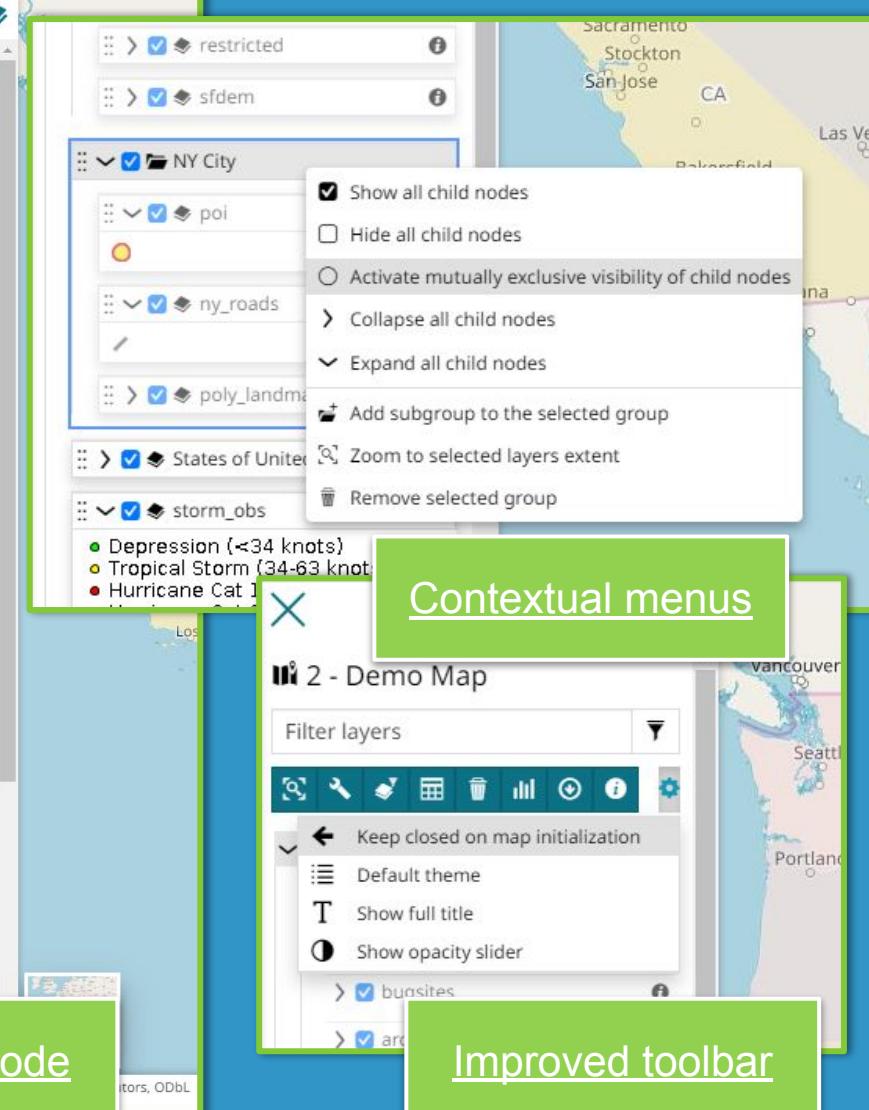
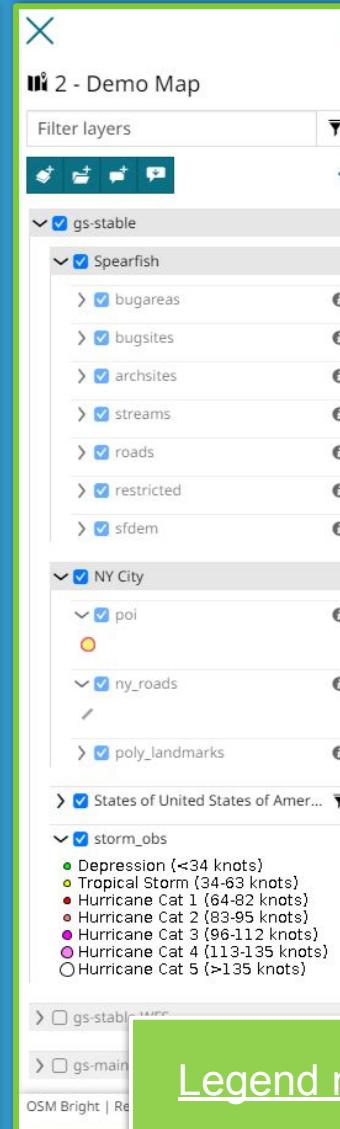
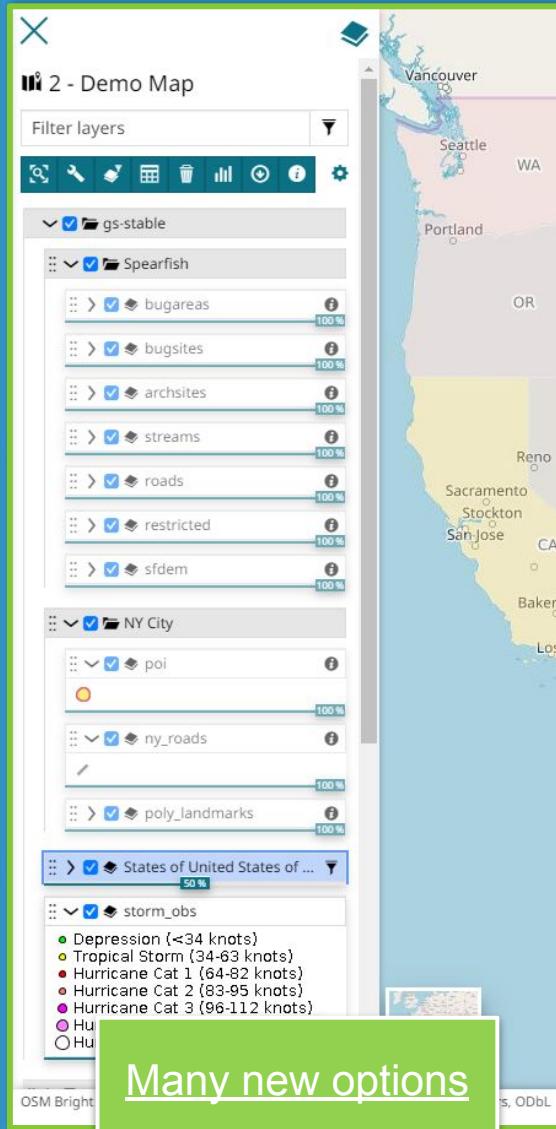
The complete release notes
available on Github at:

<https://github.com/geosolutions-it/MapStore2/releases/tag/v2024.01.00>

What's new in MapStore 2024.01

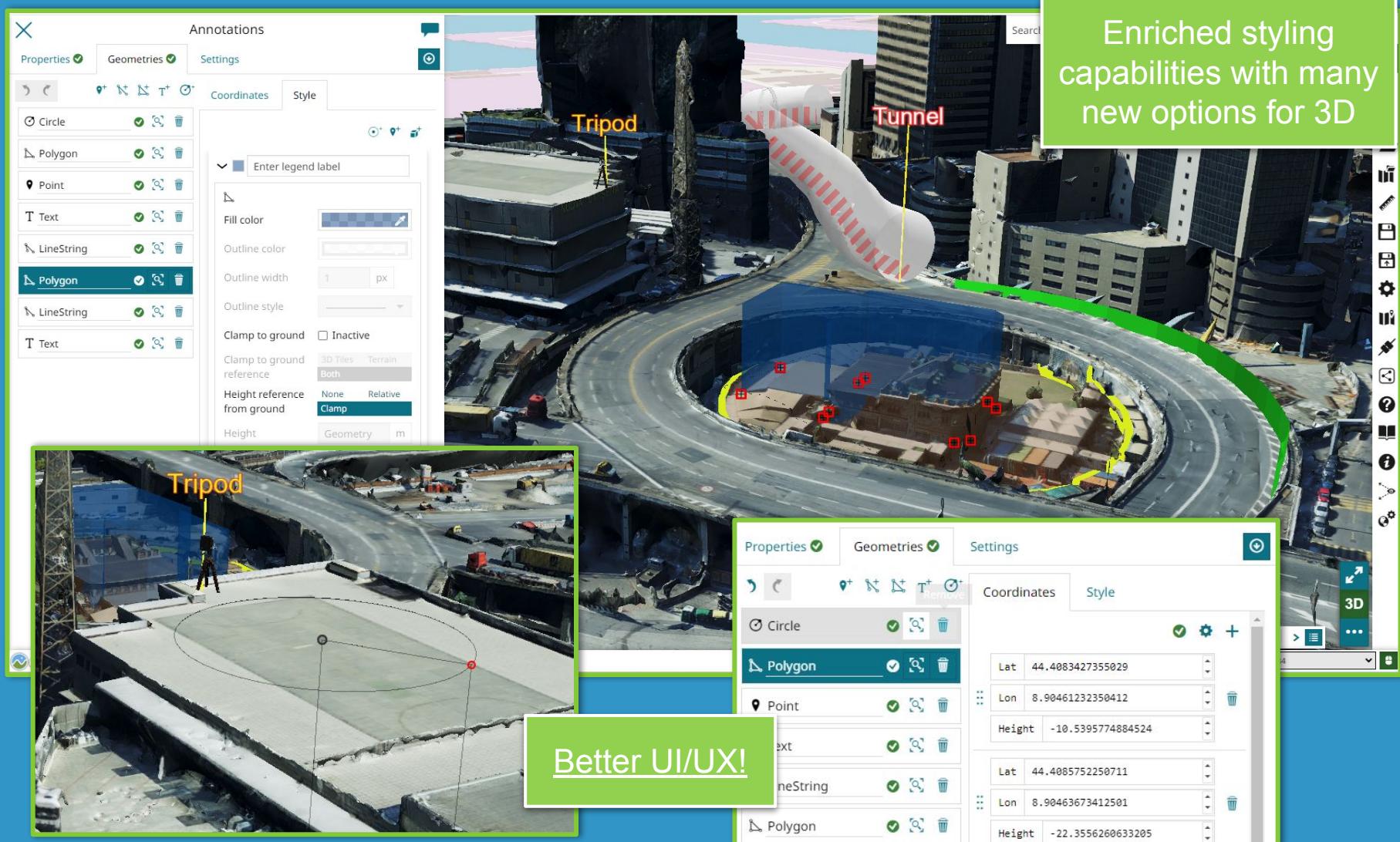


- Complete TOC reskin and many new functionalities added





- Complete Annotation tool reskin and 3D editing capabilities



The screenshot displays the MapStore 2024.01 interface, specifically the 3D editing and annotation tools. On the left, a sidebar lists various geometric shapes (Circle, Polygon, Point, Text, LineString) with checkboxes and delete icons. A central panel shows a 3D city model with a road under construction. Annotations include a yellow circle labeled "Tripod" and a red polygon labeled "Tunnel". A green callout box on the right states: "Enriched styling capabilities with many new options for 3D". In the bottom-left corner, there is a zoomed-in view of a construction site with a tripod and a circular annotation. A green callout box here says: "Better UI/UX!". The bottom-right corner shows a properties panel with coordinates and height fields for different points.

Annotations

Properties Geometries Settings

Coordinates Style

Enter legend label

Tripod

Tunnel

Enriched styling capabilities with many new options for 3D

Better UI/UX!

Properties Geometries Settings

Coordinates Style

Tripod

Tunnel

Height reference from ground: Clamp

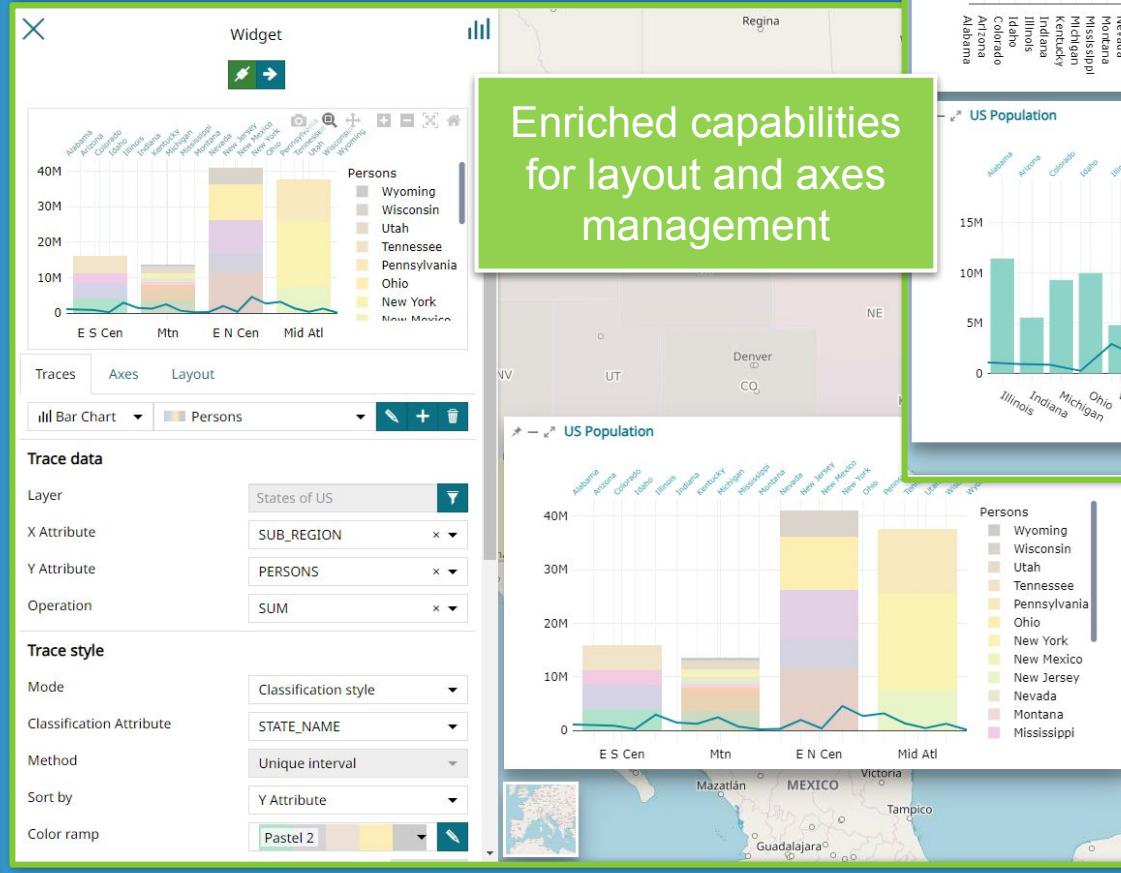
Lat: 44.4083427355029
Lon: 8.90461232350412
Height: -10.5395774884524

Lat: 44.4085752250711
Lon: 8.90463673412501
Height: -22.3556260633205

What's new in MapStore 2024.01

- Improved widgets with multi-variable charts capabilities

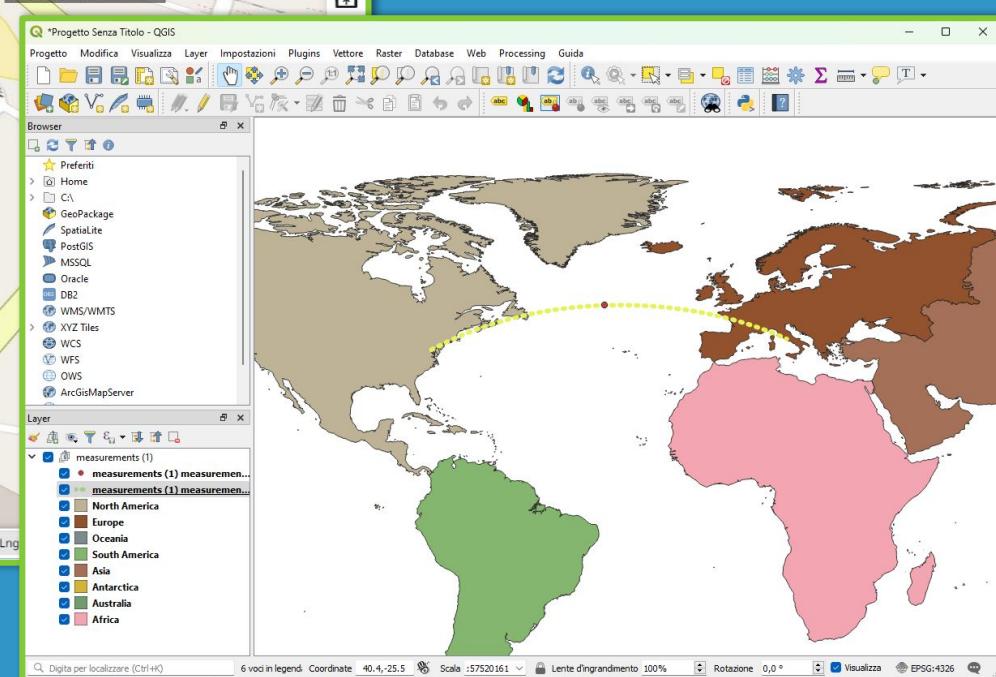
Multiple traces for all chart types



Also for Dashboards!

What's new in MapStore 2024.01

- 3D geodesic length measurement and geodesic export of measurements

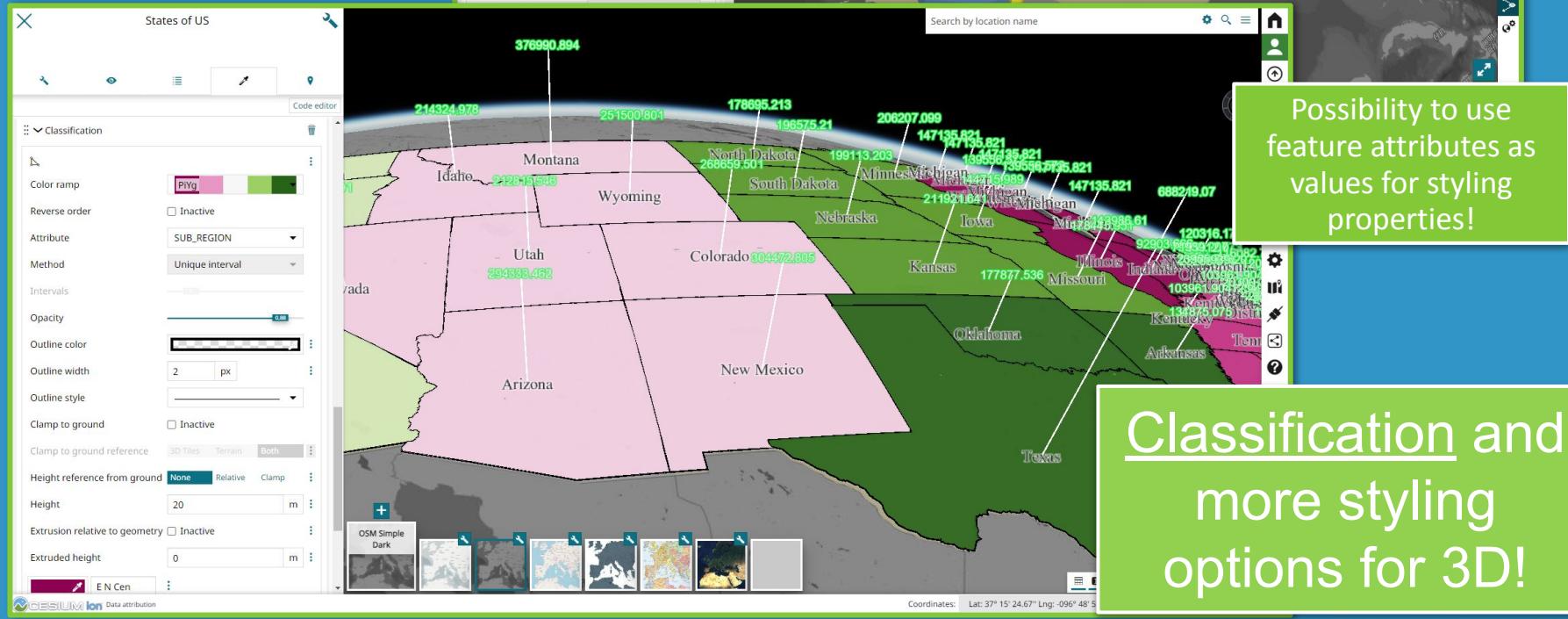
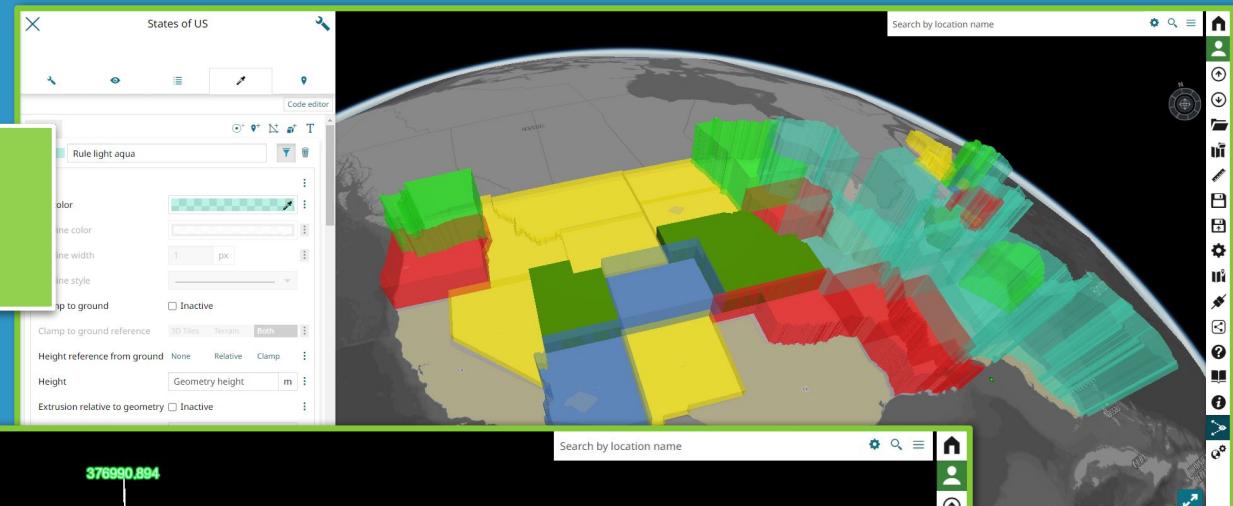


What's new in MapStore 2024.01



- Enriched styling capabilities of WFS and vector layers

Extrusion



Possibility to use
feature attributes as
values for styling
properties!

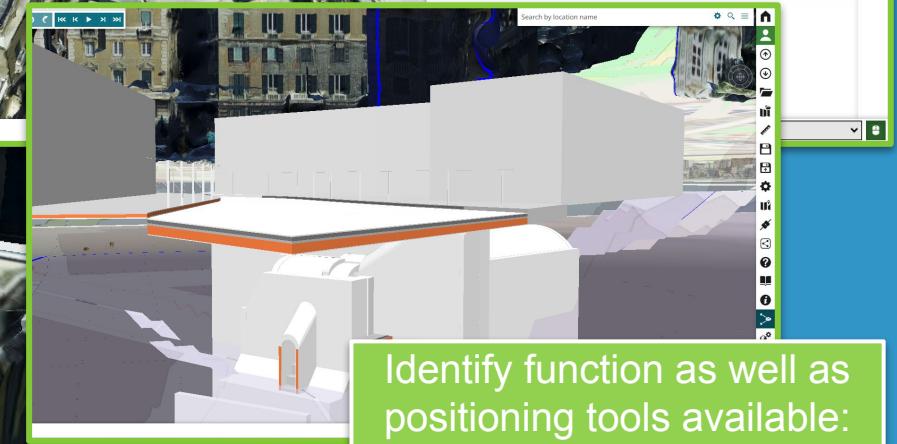
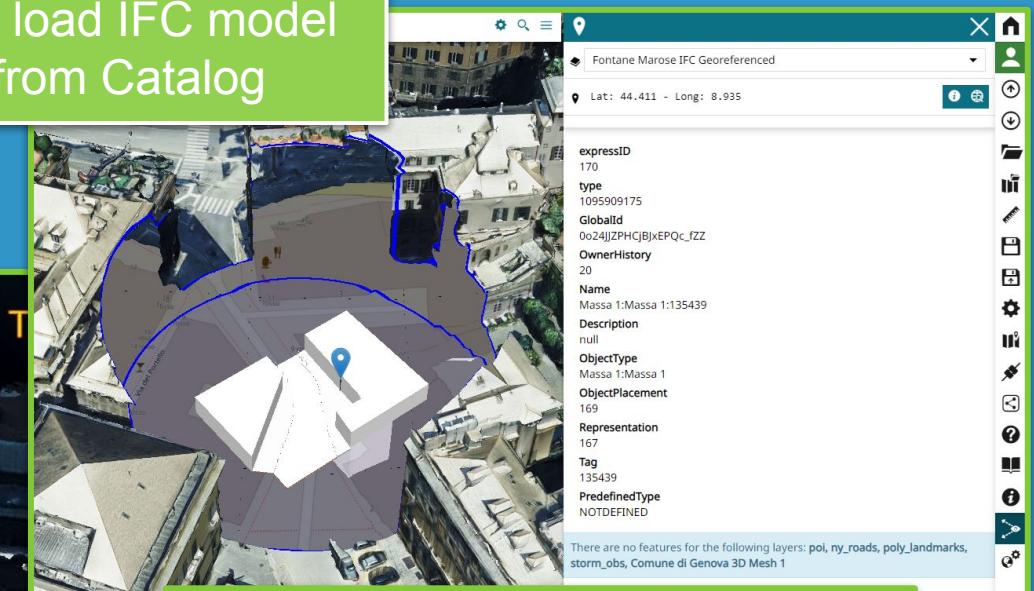
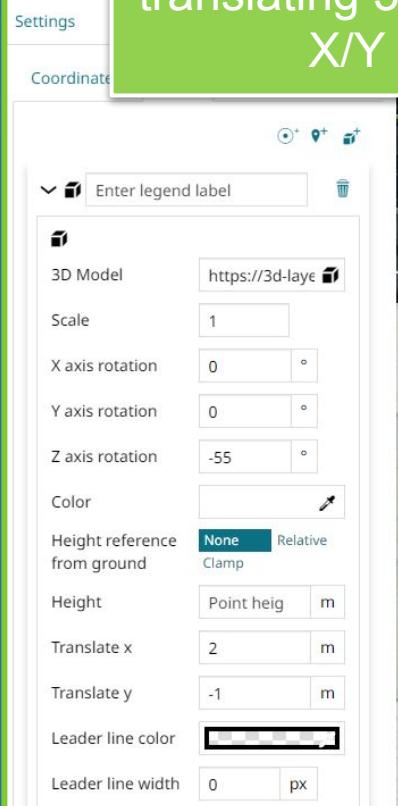
Classification and
more styling
options for 3D!

What's new in MapStore 2024.01

- **IFC model layer and more on 3D model symbolizer for GLB/GLTF**

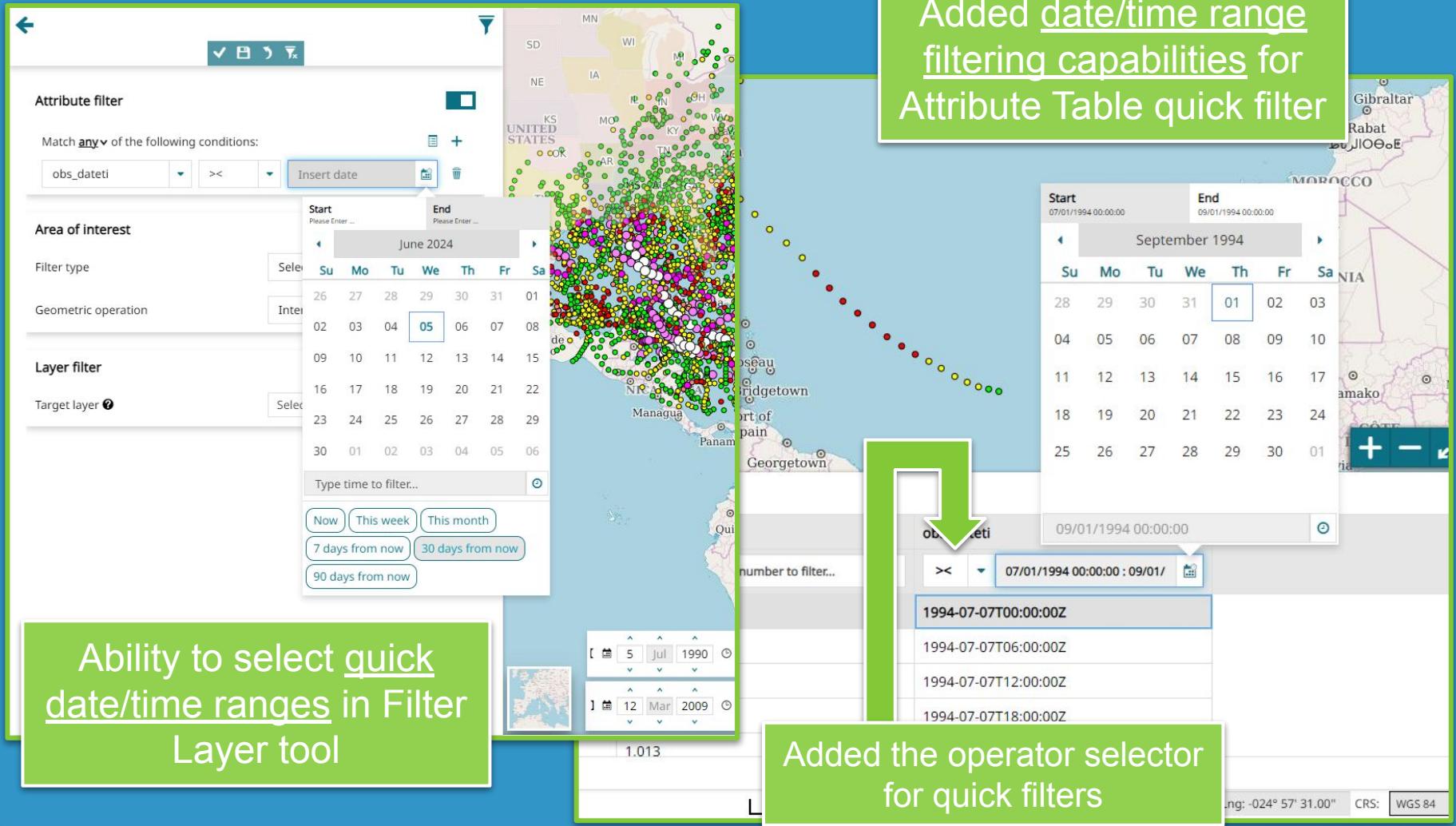
Support to load IFC model layers from Catalog

More styling options for translating 3D models on X/Y axes



What's new in MapStore 2024.01

- Improved Date/Time filtering capabilities in Attribute Table and Layer Filter tools



The screenshot shows the MapStore interface with the Attribute Table and Layer Filter tools. A green callout box highlights the "Ability to select quick date/time ranges in Filter Layer tool" with a date range selector showing "07/01/1994 00:00:00 : 09/01/1994 00:00:00". Another green callout box highlights the "Added the operator selector for quick filters" with a dropdown menu showing operators like "<=", ">=", and "<". A third green callout box highlights the "Added date/time range filtering capabilities for Attribute Table quick filter" with a date range selector showing "Start: 07/01/1994 00:00:00" and "End: 09/01/1994 00:00:00".

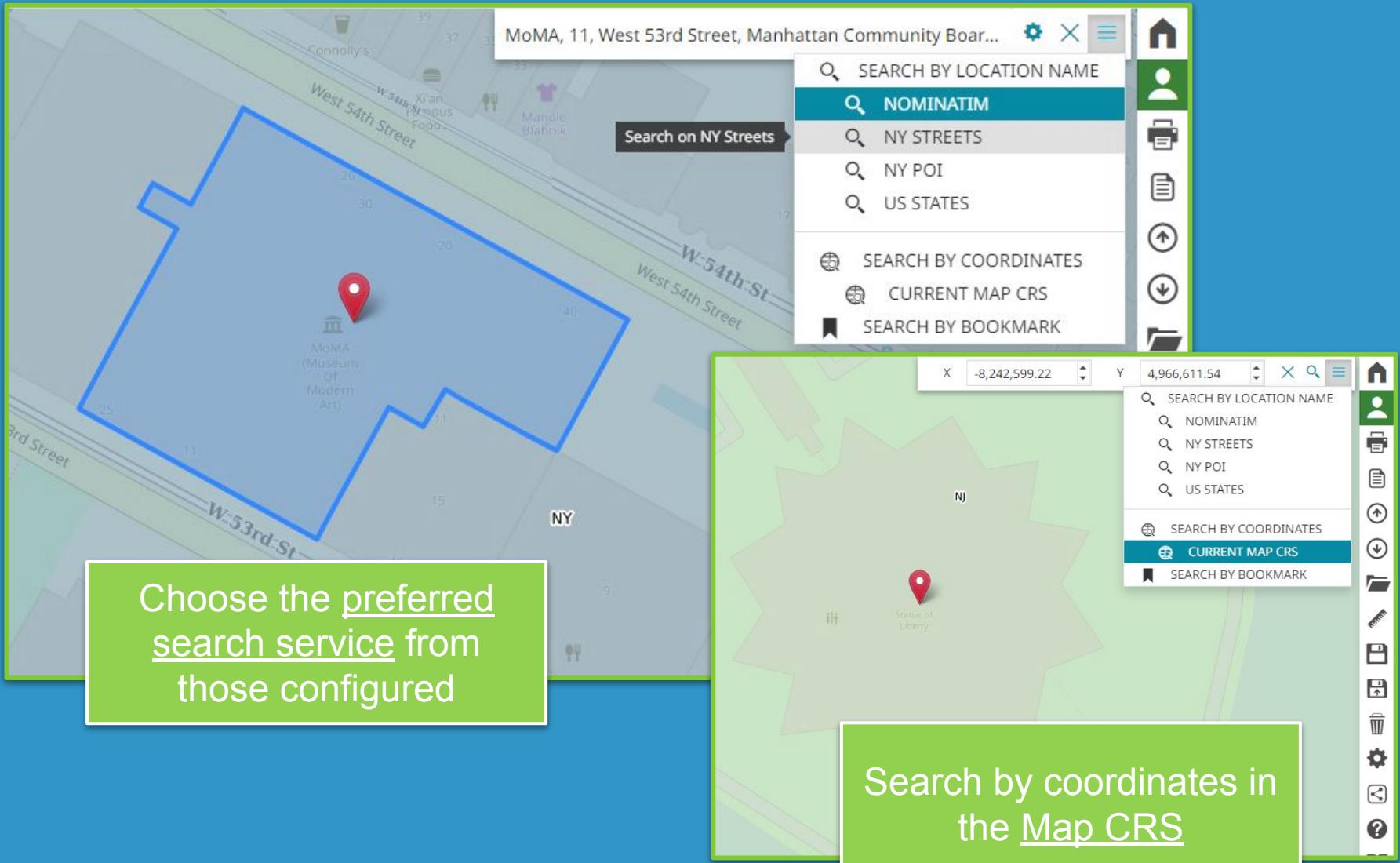
Ability to select quick date/time ranges in Filter Layer tool

Added the operator selector for quick filters

Added date/time range filtering capabilities for Attribute Table quick filter

What's new in MapStore 2024.01

- Search tool improvements for an enriched UX



The screenshot displays the MapStore interface with two main map views. The left map shows a blue polygon around MoMA on West 53rd Street in New York City, with a red marker indicating the location. The right map shows the Statue of Liberty in New York Harbor. A search sidebar is visible on the right side of the interface.

Choose the preferred search service from those configured

SEARCH TOOL IMPROVEMENTS

- SEARCH BY LOCATION NAME
 - NOMINATIM
 - NY STREETS
 - NY POI
 - US STATES
- SEARCH BY COORDINATES
 - CURRENT MAP CRS
- SEARCH BY BOOKMARK

SEARCH BY COORDINATES IN THE MAP CRS

X -8,242,599.22 Y 4,966,611.54

SEARCH BY LOCATION NAME

NOMINATIM

NY STREETS

NY POI

US STATES

SEARCH BY COORDINATES

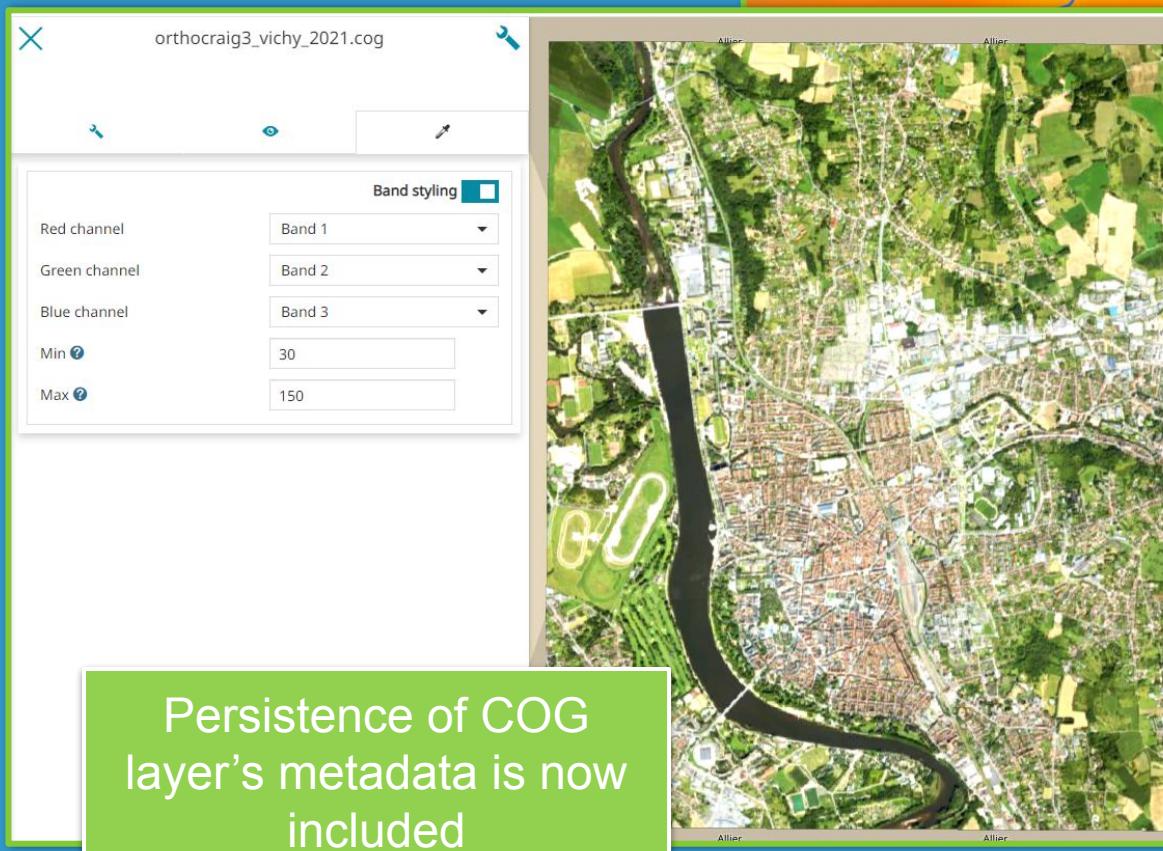
CURRENT MAP CRS

SEARCH BY BOOKMARK

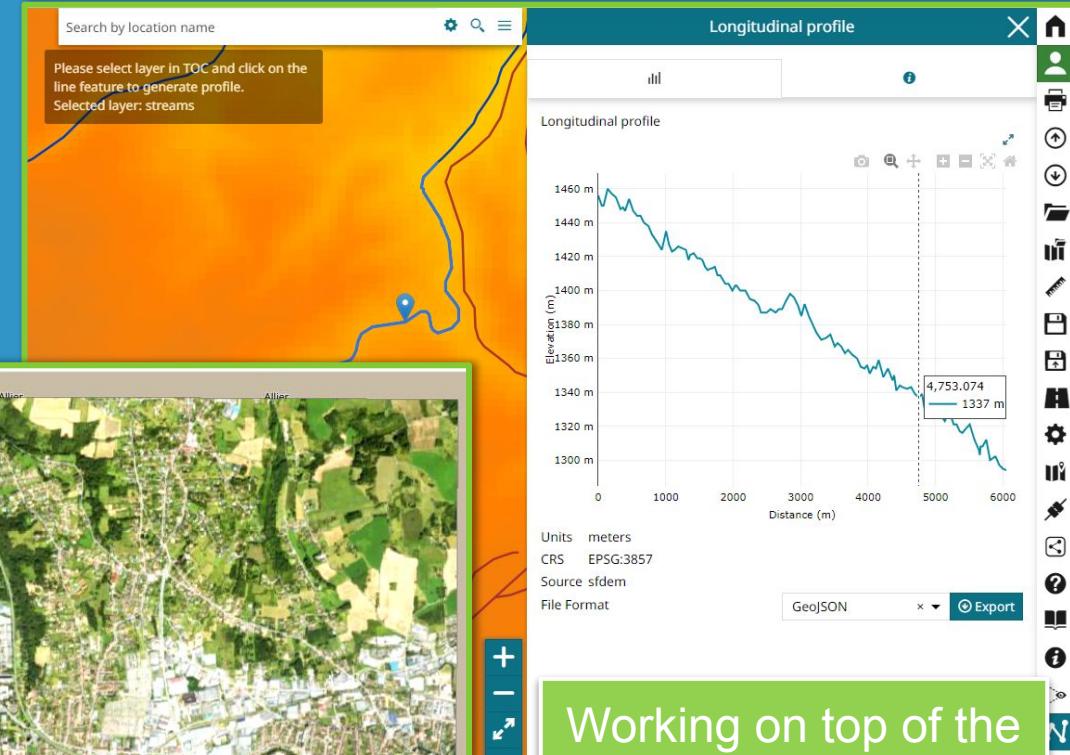
What's new in MapStore 2024.01



- Added support to multi-band color mapping for COG layers



Persistence of COG layer's metadata is now included

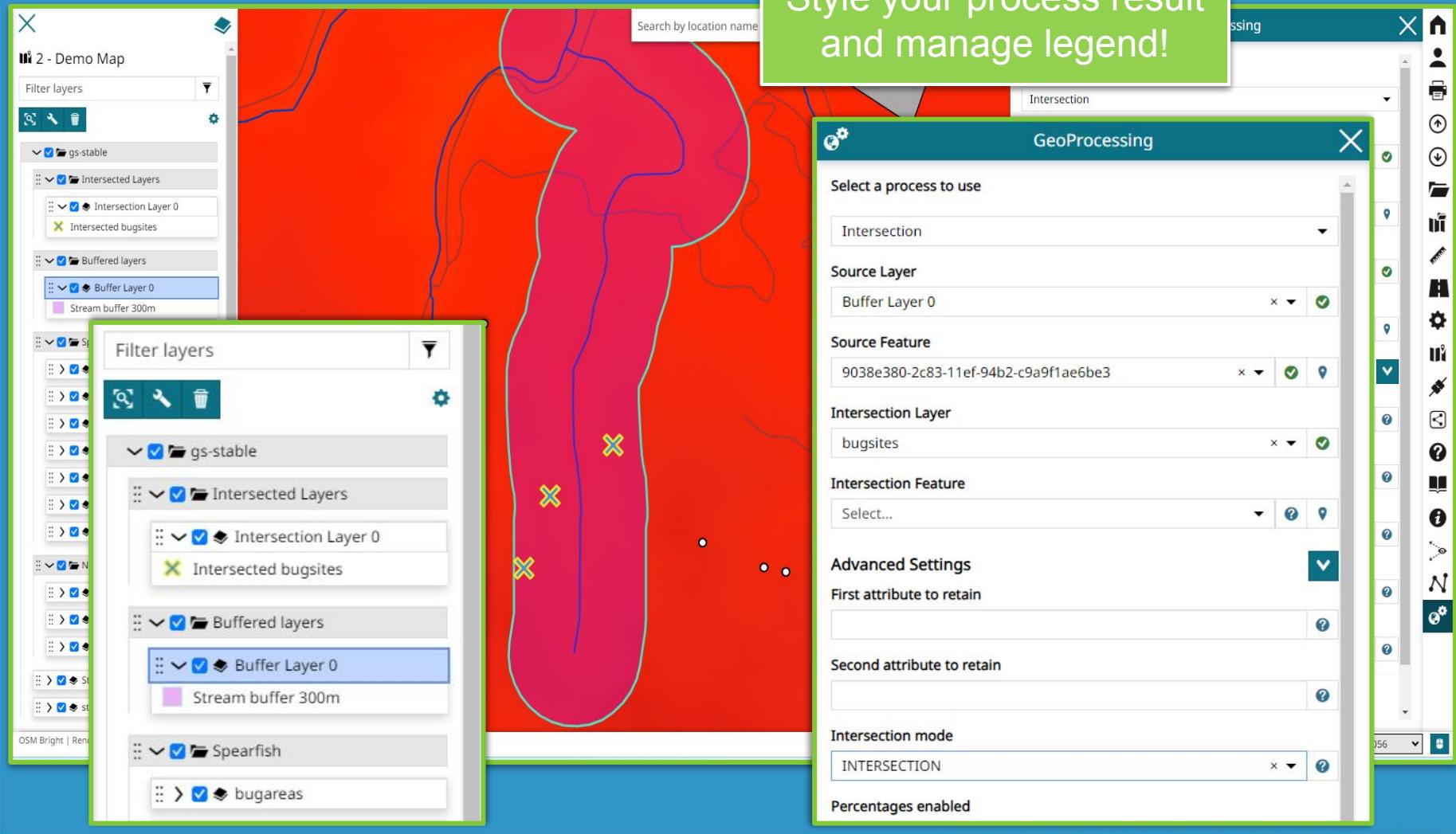


Working on top of the official GeoServer community module

- Longitudinal Profile tool
(requires Geoserver)

What's new in MapStore 2024.01

- **GeoProcessing capabilities kick in with Buffer and Intersection**

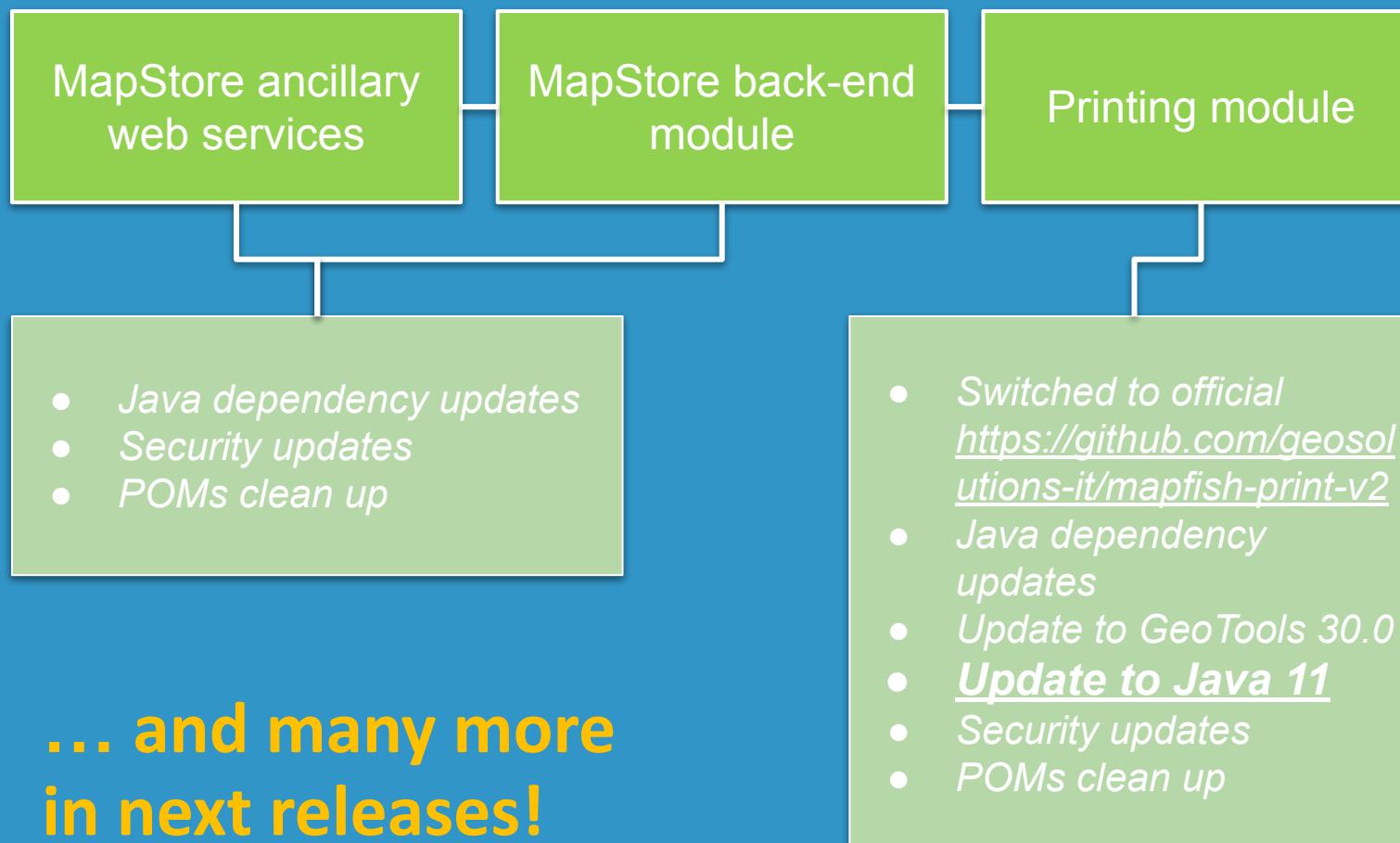


The screenshot displays the MapStore interface with several key components highlighted:

- Map View:** Shows a map with a red base layer and a pink buffer layer around a blue polygon. A legend entry for "Intersected bugsites" is also visible.
- Filter Layers Panel:** A floating panel titled "Filter layers" lists layers including "gs-stable", "Buffered layers", and "Spearfish".
- GeoProcessing Panel:** A central panel titled "GeoProcessing" shows the configuration for an "Intersection" process. It includes fields for "Source Layer" (set to "Buffer Layer 0"), "Source Feature" (set to "9038e380-2c83-11ef-94b2-c9a9f1ae6be3"), "Intersection Layer" (set to "bugsites"), and "Intersection Feature" (set to "Select..."). Advanced settings like "First attribute to retain" and "Second attribute to retain" are also present.
- Legend Panel:** A green callout box on the right side of the interface states: "Style your process result and manage legend!"

What's new in MapStore 2024.01

- Many Java dependency updates and security improvements on the MapStore backend side



... and many more
in next releases!



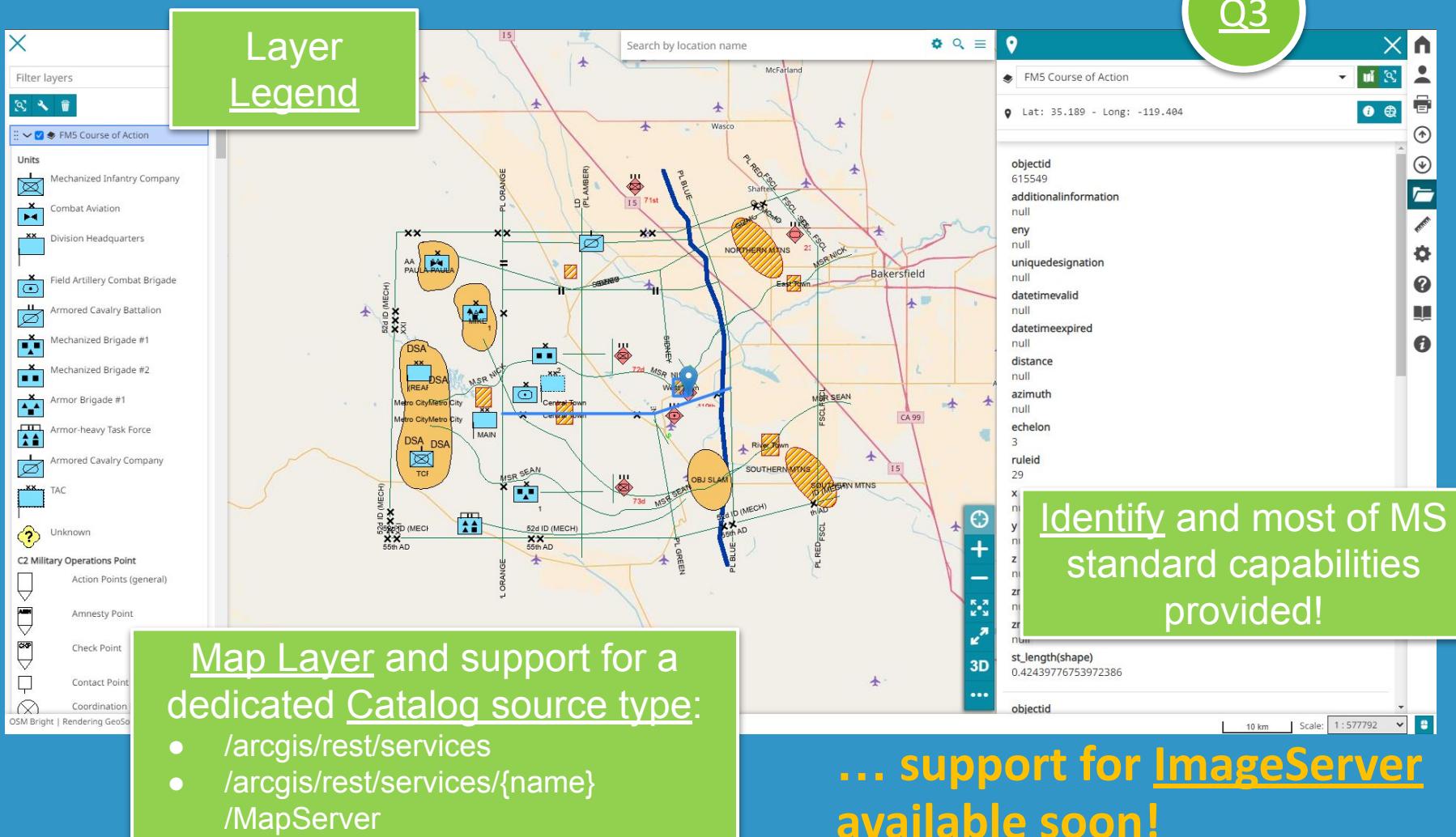
Ongoing work for MapStore 2024.02

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Ongoing work for MapStore 2024.02

- Interoperability with ArcGIS servers: WMS endpoints and REST APIs



Layer Legend

Map Layer and support for a dedicated Catalog source type:

- /arcgis/rest/services
- /arcgis/rest/services/{name}/MapServer

Identify and most of MS standard capabilities provided!

... support for ImageServer available soon!

Ongoing work for MapStore 2024.02

- Enhancing the pluggability of Street View tool including the Mapillary viewer for custom 360 imagery



Support for standard Mapillary provider still in progress

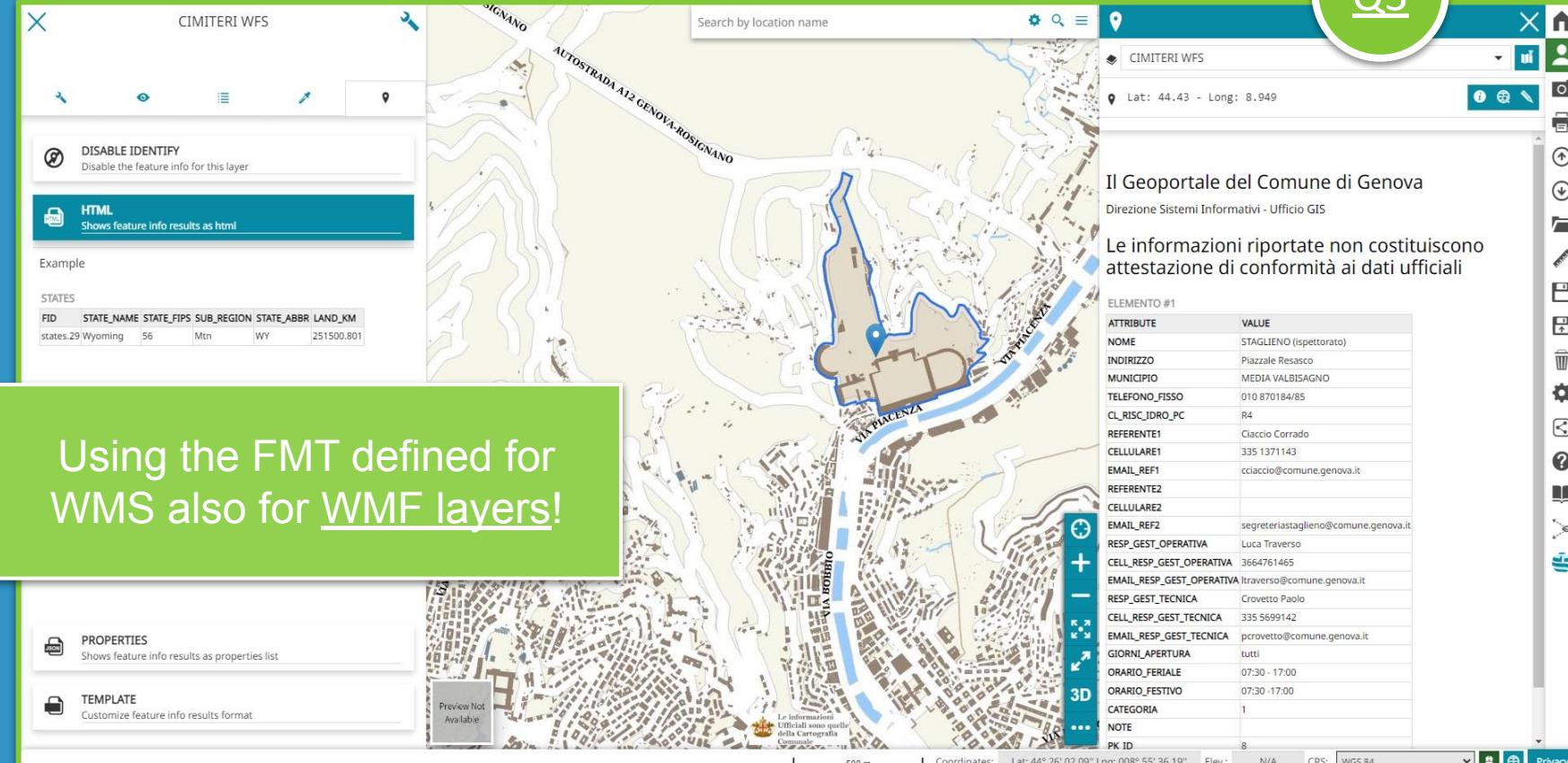
Available on both 2D and 3D!

Q3

Cyclomedia Street Smart APIs also supported!

Ongoing work for MapStore 2024.02

- Support to identify responses in HTML format for WFS layers



Using the FMT defined for WMS also for WMF layers!

The screenshot shows the MapStore interface with a map of Genoa, Italy. A green callout box highlights the text "Using the FMT defined for WMS also for WMF layers!". The interface includes a sidebar with various tools and a legend. A green circle in the top right corner contains the text "Q3".

CIMITERI WFS

DISABLE IDENTIFY
Disable the feature info for this layer

HTML
Shows feature info results as html

Example

STATES

FID	STATE_NAME	STATE_FIPS	SUB_REGION	STATE_ABBR	LAND_KM
states.29	Wyoming	56	Mtn	WY	251500.801

PROPERTIES
Shows feature info results as properties list

TEMPLATE
Customize feature info results format

Preview Not Available

Search by location name

Coordinates: Lat: 44° 26' 02.09" Lng: 008° 55' 36.19" Elev: N/A CRS: WGS 84

Il Geoportal del Comune di Genova
Direzione Sistemi Informativi - Ufficio GIS
Le informazioni riportate non costituiscono attestazione di conformità ai dati ufficiali

ELEMENTO #1

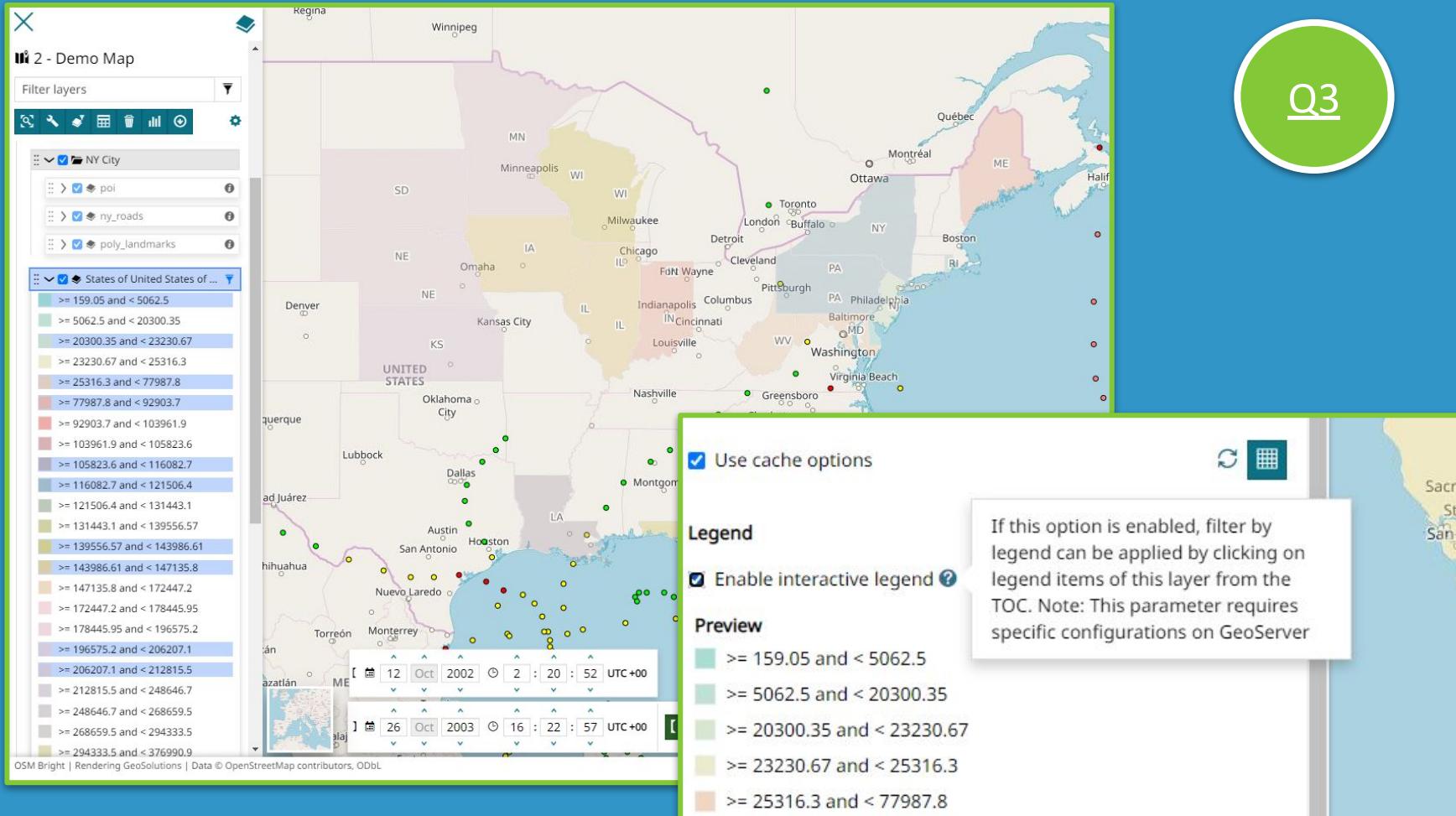
ATTRIBUTE	VALUE
NOME	STAGLIELINO (ispettoreto)
INDIRIZZO	Piazzale Resasco
MUNICIPIO	MEDIA VALBISAGNO
TELEFONO_FISSO	010 870184/85
CL_RISC_IDRO_PC	R4
REFERENTE1	Ciacchio Corrado
CELLULARE1	335 1371143
EMAIL_REF1	cciacchio@comune.genova.it
REFERENTE2	
CELLULARE2	
EMAIL_REF2	segreteriastaglieno@comune.genova.it
RESP_GEST_OPERATIVA	Luca Traverso
CELL_RESP_GEST_OPERATIVA	3664761465
EMAIL_RESP_GEST_OPERATIVA	ltraverso@comune.genova.it
RESP_GEST_TECNICA	Crovetto Paolo
CELL_RESP_GEST_TECNICA	335 5699142
EMAIL_RESP_GEST_TECNICA	pcrovetto@comune.genova.it
GIORNI_APERTURA	tutti
ORARIO_FERALE	07:30 - 17:00
ORARIO_FESTIVO	07:30 - 17:00
CATEGORIA	1
NOTE	
PK_ID	8

Q3

Working on top of gs-wfs-freemarker-plugin community module
(requires Geoserver)

Ongoing work for MapStore 2024.02

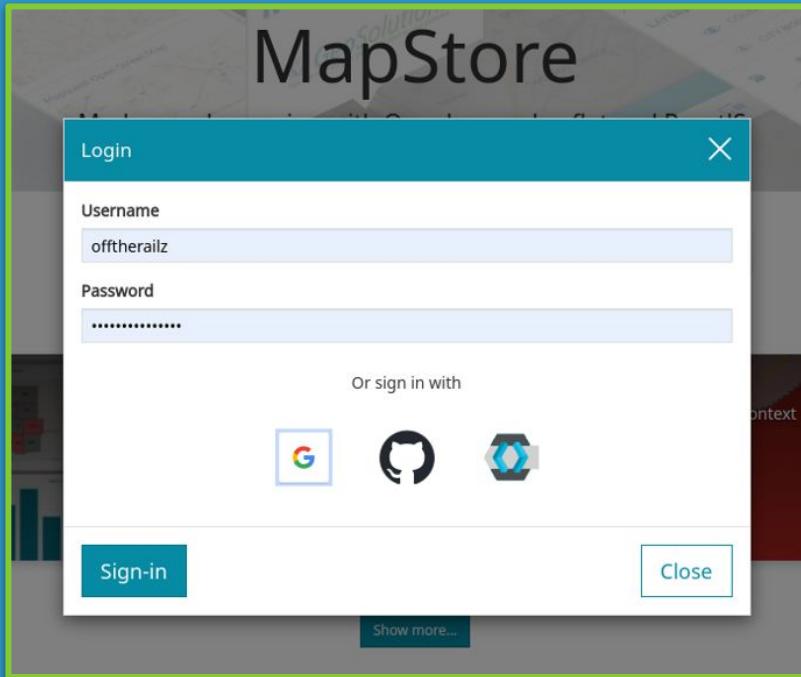
- Support for **interactive legend** functionalities



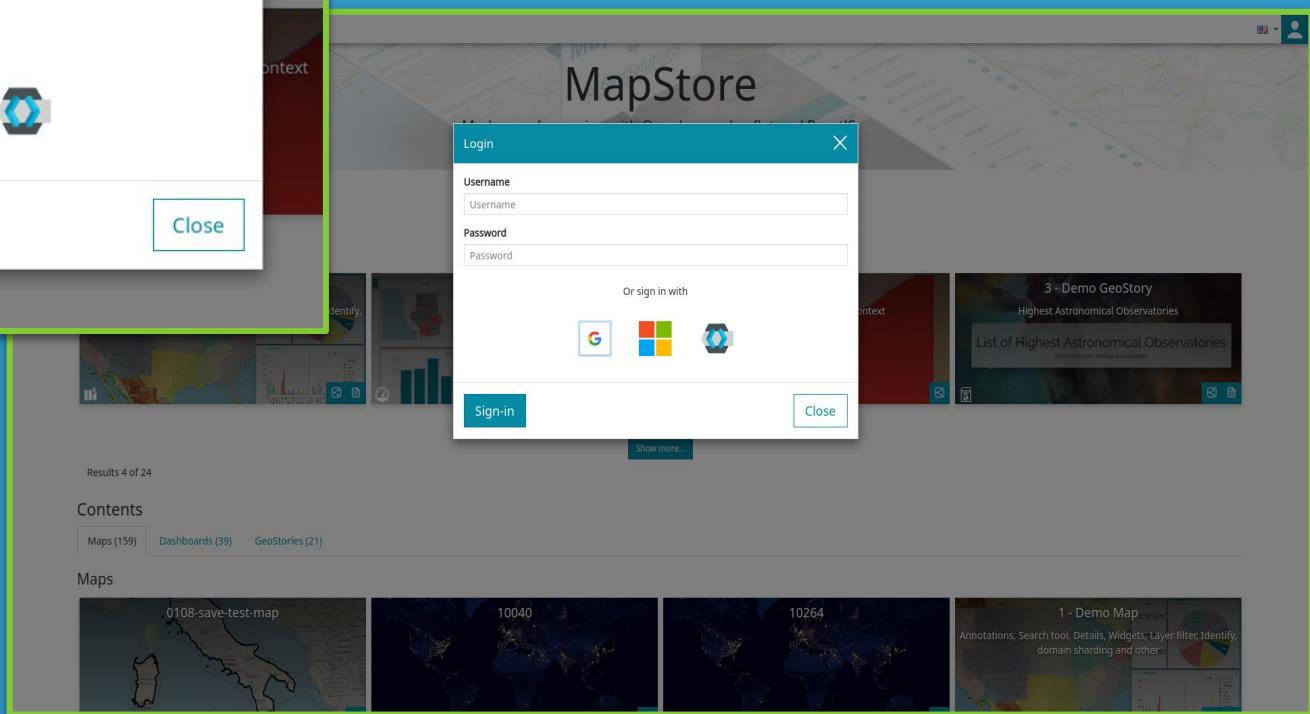
Working on top of **GetLegendGraphic** in JSON format (requires Geoserver)

Ongoing work for MapStore 2024.02

- Improving the **OpenID Connect (OIDC)** support with a new client to enhance and generalize the existing support



- Allowing at the same time the integration with other providers like [Microsoft Azure AD](#)



Q3

Ongoing work for MapStore 2024.02

- Further performance improvements in loading script bundles and general cleanup of bundles from deprecations



Removing further big dependencies

Lazy loading with React

Q4

Removing obsolete tools and components

Lightening the bundle and lazily loading chunks will be the main goal!

More Info - Online resources

- **Demo site:** <https://mapstore.geosolutionsgroup.com>
- **User documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/v2024.01.01/user-guide/home-page/>
- **Developers documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/v2024.01.01/developer-guide/requirements/>
- **GitHub Repo:** <https://github.com/geosolutions-it/MapStore2>
- **Youtube Videos:**
https://www.youtube.com/playlist?list=PLe2yzutVrnZ5tjYGYYcKmZzo_M9ku5I9X
- **Mailing Lists:** <https://groups.google.com/g/mapstore-users>
<https://groups.google.com/g/mapstore-developers>



That's all folks!



Questions?

info@geosolutionsgroup.com