



MapStore at geOcom 2026

An Year in Review

Tobia Di Pisa, GeoSolutions

10th - 12th June 2026 - geoCom

Strasbourg - Headquarters of the Grand Est Regional Council

Geospatial open-source experts

- Building **open-source geospatial products** since **2006**
- Certified **ISO 9001, ISO 27001**
- Delivering **scalable, secure, and interoperable** solutions for public and private sectors



- **Products**



- **Services**



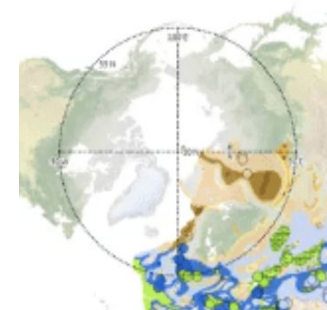
Enterprise Support Services



Enterprise Subscriptions



Professional Training



Customized Solutions



helping customers all over the world



335 customers, 42 countries, 4 continents



to transform **geospatial data** into **insights**



We design, develop and deploy end-to-end scalable, interoperable, secure geospatial solutions

thanks to a **top-notch** team

- Offices in **Italy & US**, Global Team
- 40+ Staff Members
- 30+ Software Engineers

- GeoServer Committers & Steering Members
- GeoNode Committers & Steering Members
- MapStore Committers & Steering Members
- GeoNetwork Committers & Steering Members

We do not just use the products; we actively participate and lead the development!



Agenda

- **New features released for the MapStore integration with geOrchestra v2025.02**
- **What's new in MapStore v2026.01 ready to land on [geOrchestra](#)**
- **Ongoing work for MapStore in 2026/2027**





MapStore integration with geOrchestra v2025.02



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MapStore integration with geOrchestra v2025.02

Officially released in May 2026

compatible with georchestra v25 or later

Complete release notes available on Github

<https://github.com/georchestra/mapstore2-georchestra/releases/tag/2025.02.00-geOrchestra>



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MapStore integration with geOrchestra v2025.02

What is included in respect to 2024.02.00-geOrchestra?

All new features and enhancements released under:

[MapStore v2025.01](#) and [v2025.02 series](#)

Let's briefly recap at the main ones from v2025.01

MapStore integration with geOrchestra v2025.02

- **Layout** completely reviewed and UX improved

The screenshot displays the MapStore interface with several key components:

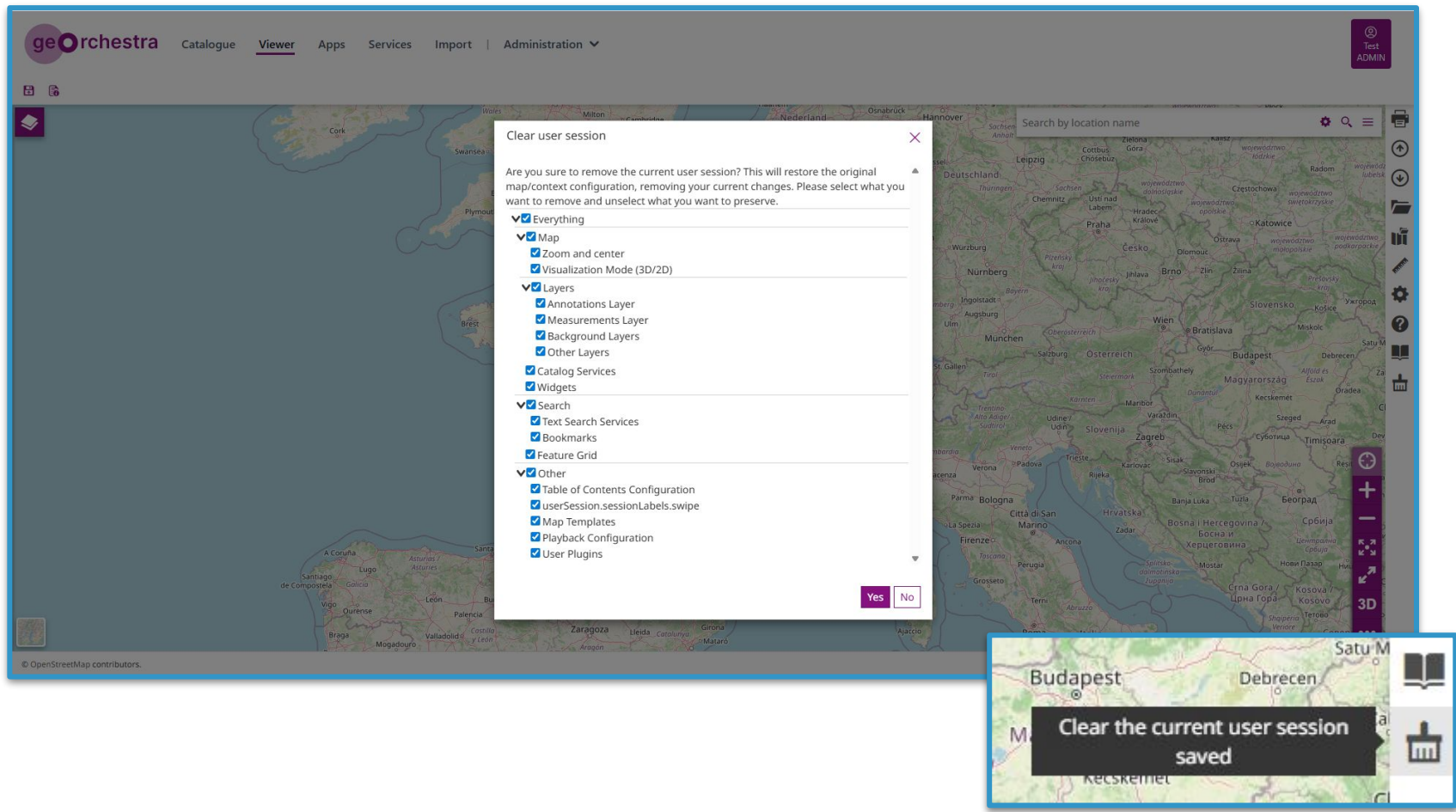
- Filters Panel (Left):** Includes search, resource types (My resources, Favorites, Maps, Dashboards, Geostories, Contexts), groups, tags (test), maps by context, and creation date filters (May 2026).
- Featured Resources (Center):** Shows 4 resources found, including 'Demo Map 18', 'test', and 'test geostory'.
- Resource Detail (Right):** Provides information for 'Demo Map 18', including name, description, creation/modification dates, and tags.
- Featured Grid (Bottom Left):** A grid view of featured resources.
- Contents Table (Bottom Left):** A table listing 43 resources with columns for Name, Description, Tags, and Modified.
- Tags Management (Bottom Right):** A panel for managing tags, showing 'demo maps', 'test geosolutions', and 'test maps'.

Name	Description	Tags	Modified
ikopää		test	May 28th 26, 11:38:44 am
asdfsadf		N/A	Mar 11th 26, 2:17:38 pm
asdfsadfse013434		N/A	N/A
bo		N/A	Mar 25th 26, 4:41:28 pm
burger-menu		N/A	N/A
CDGtest		N/A	N/A
cyclomedia-streetview		N/A	N/A
dash 06		N/A	Mar 6th 26, 3:12:37 pm
Elevationlayer		N/A	N/A
geoprocessingplugin		N/A	N/A
Isochrome		N/A	N/A



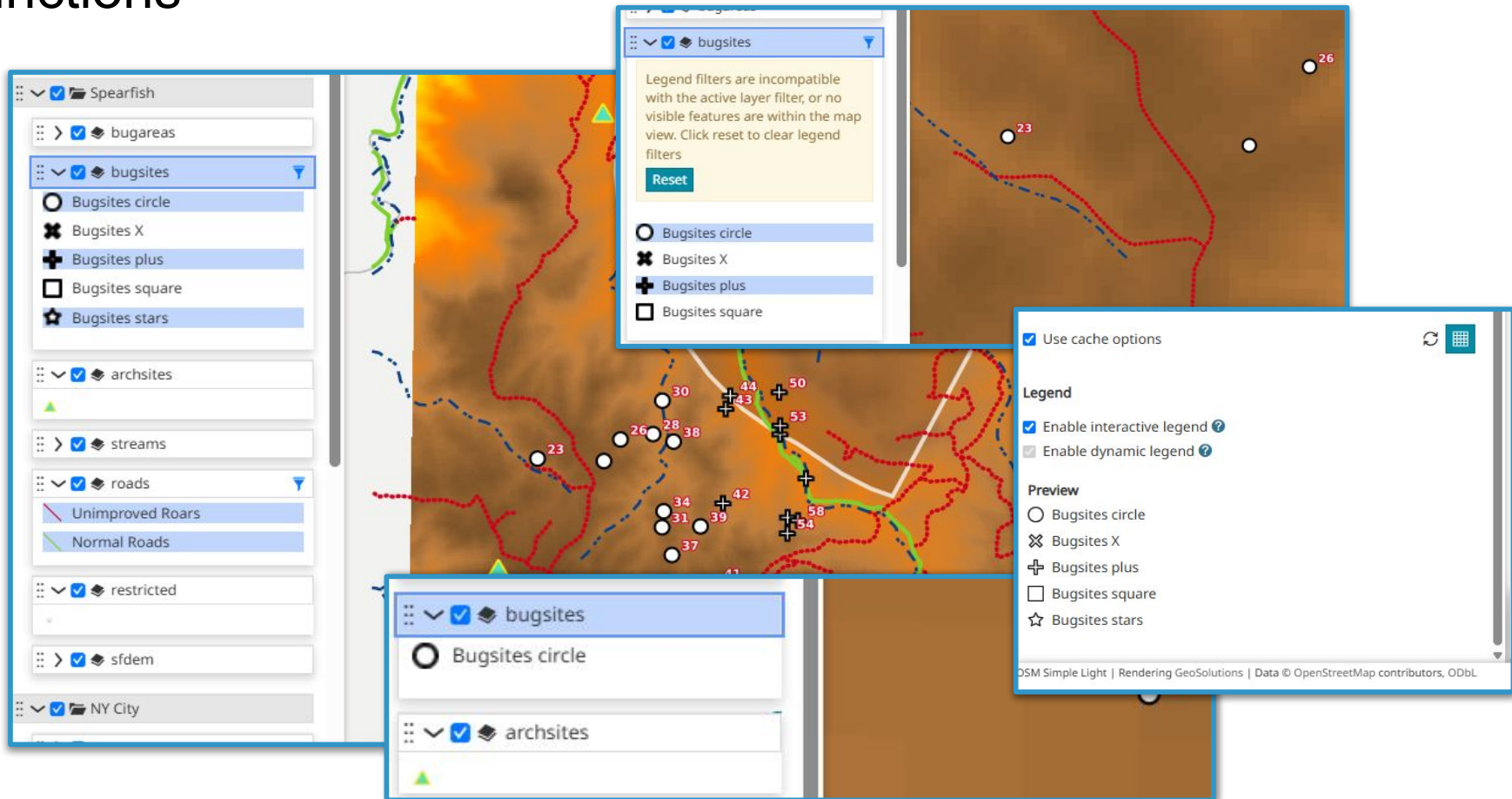
MapStore integration with geOrchestra v2025.02

- **MapStore User Session** update with an improved support and a finest control on session items



MapStore integration with geOrchestra v2025.02

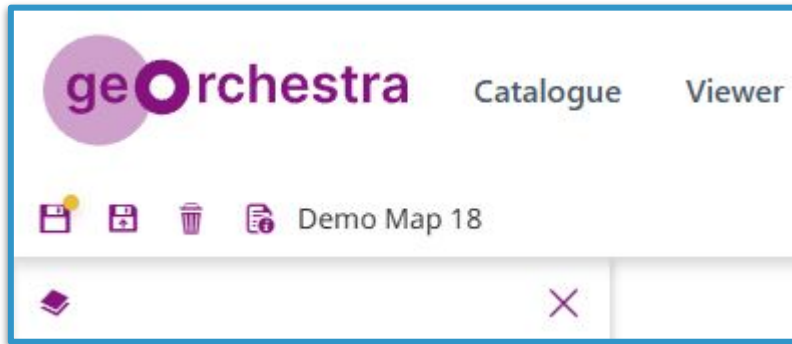
- **MapStore Layer Legend** update with new Dynamic and Interactive functions



Working on top of [GetLegendGraphic](#) in **JSON** format and [content dependent legend](#) GeoServer capabilities (requires GeoServer)

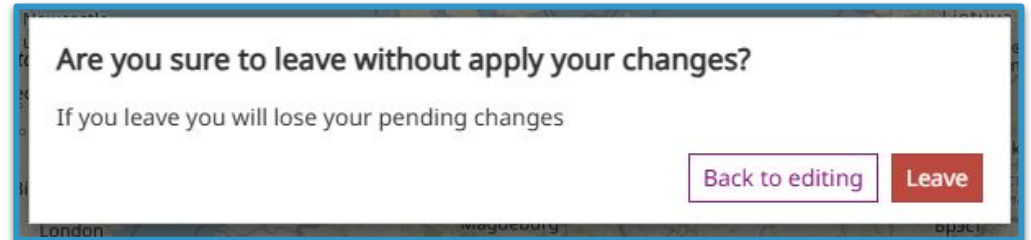
MapStore integration with geOrchestra v2025.02

- **MapStore Layout and Look & Feel ...** for better notifications!

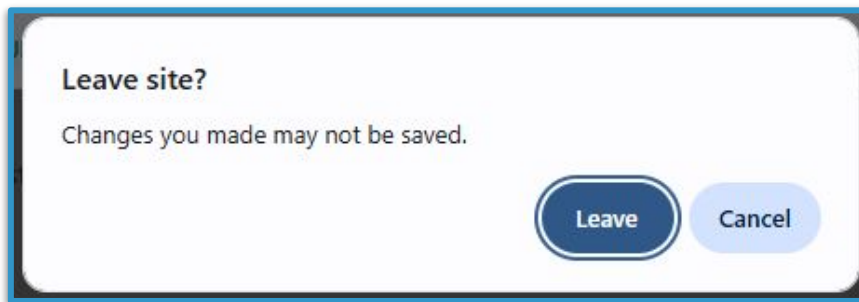


Improved user feedback on modified resources

Renewed confirmation dialog when leaving resources



Improved UX with new confirmation dialog when closing the browser window



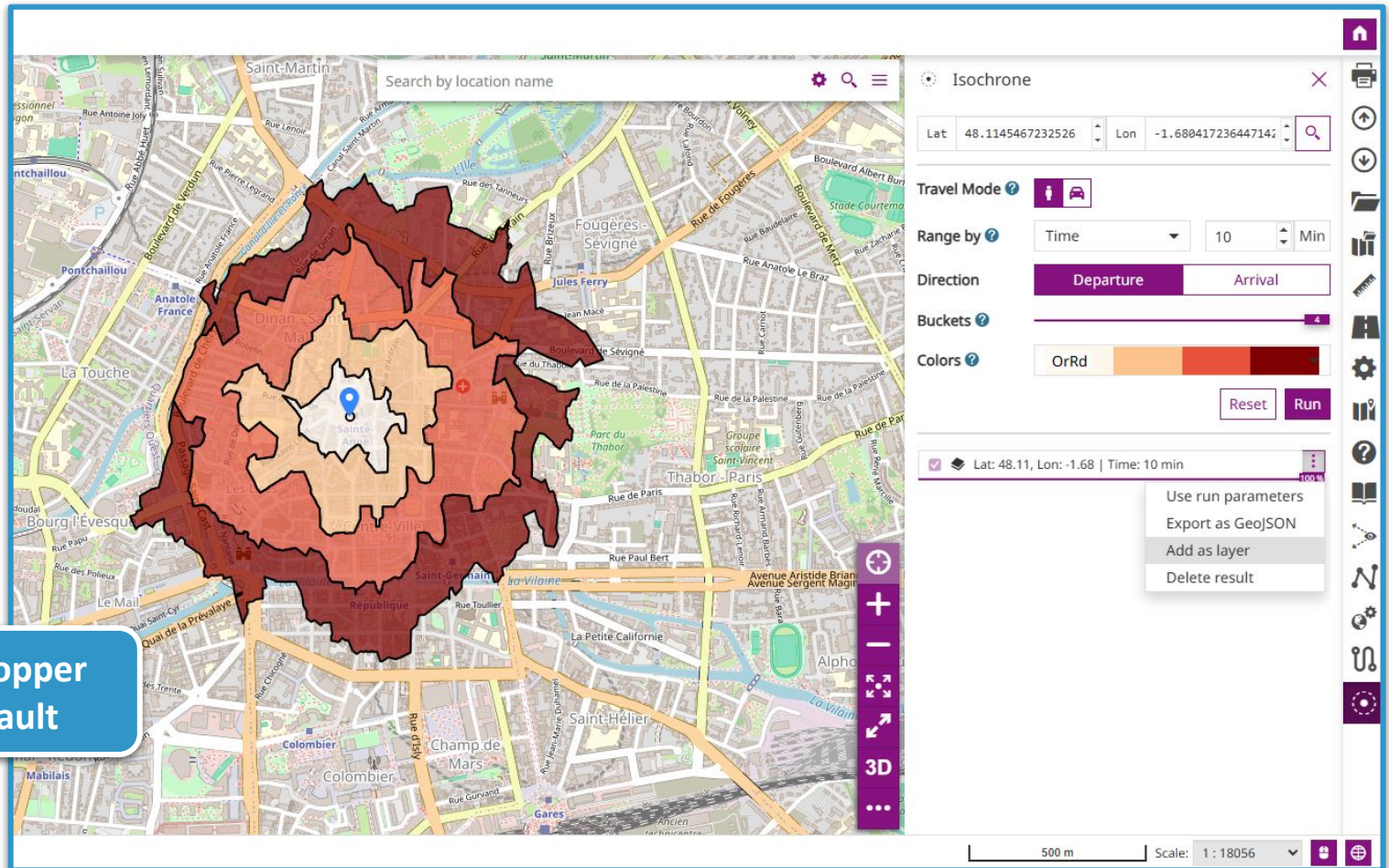
MapStore integration with geOrchestra v2025.02

**Let's see now major additions from
MapStore v2025.02 series**



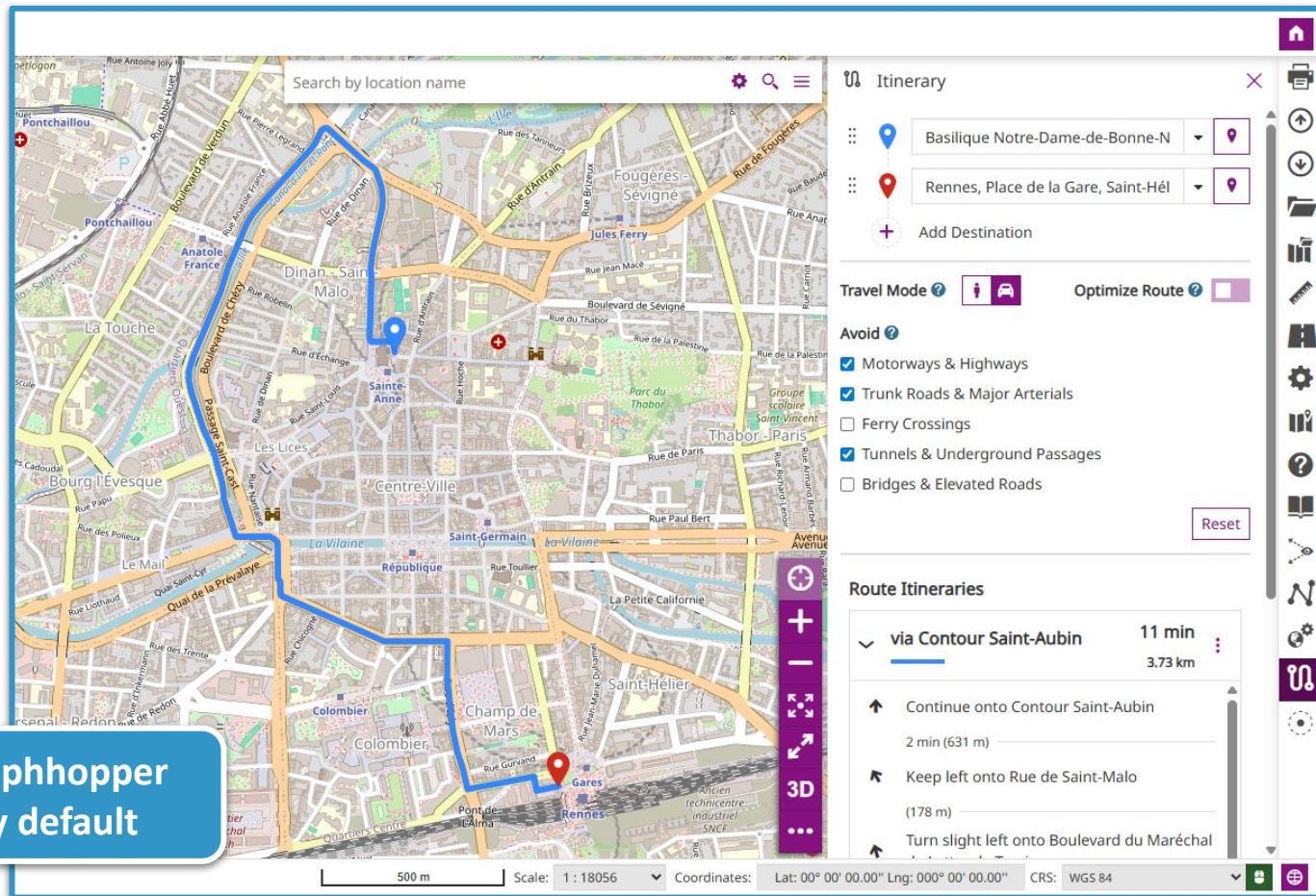
MapStore integration with geOrchestra v2025.02

- **Isochrone plugin:** a new tool that allows users to draw a reachability area (isochrone) around a selected point, based on time or distance parameters.



MapStore integration with geOrchestra v2025.02

- **Itinerary plugin:** introducing the ability to calculate and visualize a route (itinerary) between two or more points on the map, typically using an external routing service.



Support for Graphhopper routing API by default



MapStore integration with geOrchestra v2025.02

- **Terrain layer selector:** allowing users to select, activate, and deactivate different terrain layers in 3D visualizations, enhancing control over elevation and terrain detail.

The image displays a 3D map interface with a terrain layer selector. The selector is a vertical panel on the right side of the map, showing a list of layers: 'Backgrounds' (with a plus sign) and 'Terrains' (with a plus sign). Under 'Backgrounds', there are 'OpenStreetMap' and 'Empty Background'. Under 'Terrains', there is 'Ellipsoid'. A black tooltip with the text 'Add new terrain' is positioned over the plus sign in the 'Terrains' section. The map background shows a 3D terrain visualization of a city area. At the bottom of the map, there is a 'CESIUM Ion Data attribution' logo.

Three 'Add new terrain' dialog boxes are overlaid on the map. The top dialog box has a close button (X) in the top right corner. It contains the following fields:

- Provider: Cesium (dropdown)
- Title: Enter title ... (text input)
- URL: Enter URL ... (text input)

The bottom-left dialog box has an 'Add' button at the bottom right. It contains the following fields:

- Provider: Cesium Ion (dropdown)
- Title: Enter title ... (text input)
- Asset ID: Enter asset ID ... (text input)
- Access Token: Enter access token ... (text input)
- Server: Enter server ... (text input)

The bottom-right dialog box has an 'Add' button at the bottom right. It contains the following fields:

- Provider: WMS (dropdown)
- Title: Enter title ... (text input)
- URL: Enter URL ... (text input)
- Layer Name: Enter Layer name ... (text input)
- Projection: CRS:84 (dropdown)
- WMS Version: 1.3.0 (dropdown)

MapStore integration with geOrchestra v2025.02

- **GeoFence Rule Manager:** enhanced tool for managing auth data rules from MapStore.

The screenshot displays the GeoFence Rule Manager interface. The main table lists rules with columns for Role, User, IP, Service, Request, Workspace, Layer, Date, and Access. Two modal windows are overlaid on the table:

- General Rule Modal:** Shows configuration options for Role, User, IP, Service, Request, Workspace, Layer, Validity Period (From/To), and Access.
- Date Modal:** Shows a calendar for selecting a date for the rule's validity period.

Role	User	IP	Service	Request	Workspace	Layer	Date	Access
ADMIN			WFS	GETCAPABILITIES	geosolutions			ALLOW
1 elena_group_test		165.185.1.15/8	WMS		test	Linea_costa		DENY
5 ROLE_AUTHENTICATED					basic			ALLOW
6					basic			DENY
11 GEOSTORE			WMS	DESCRIBELAYER	geosolutions	Linea_in_america		ALLOW
12 Eumetsat			WFS	DESCRIBEFEATURETYPE	geosolutions	Linea_in_america		ALLOW
13 new-resources								ALLOW
15 geosolutions			WFS	TRANSACTION				ALLOW
17 geosolutions								ALLOW
18								DENY
25			WFS	LOCKFEATURE				DENY
26			WFS	TRANSACTION				DENY
40								ALLOW

- Ability to filter by IP GeoFence rules
- Ability to disable GeoFence rules by validity period

MapStore integration with geOrchestra v2025.02

- **Added support for 3D Tiles imagery layers:** adding support for visualizing imagery layers (e.g. WMS) on top of 3D Tiles (OGC standard).

Based on Cesium native support!

firenze_mesh_15122025

Visibility limits

Max value (excluded)

Select max value

Min value (included)

Select min value

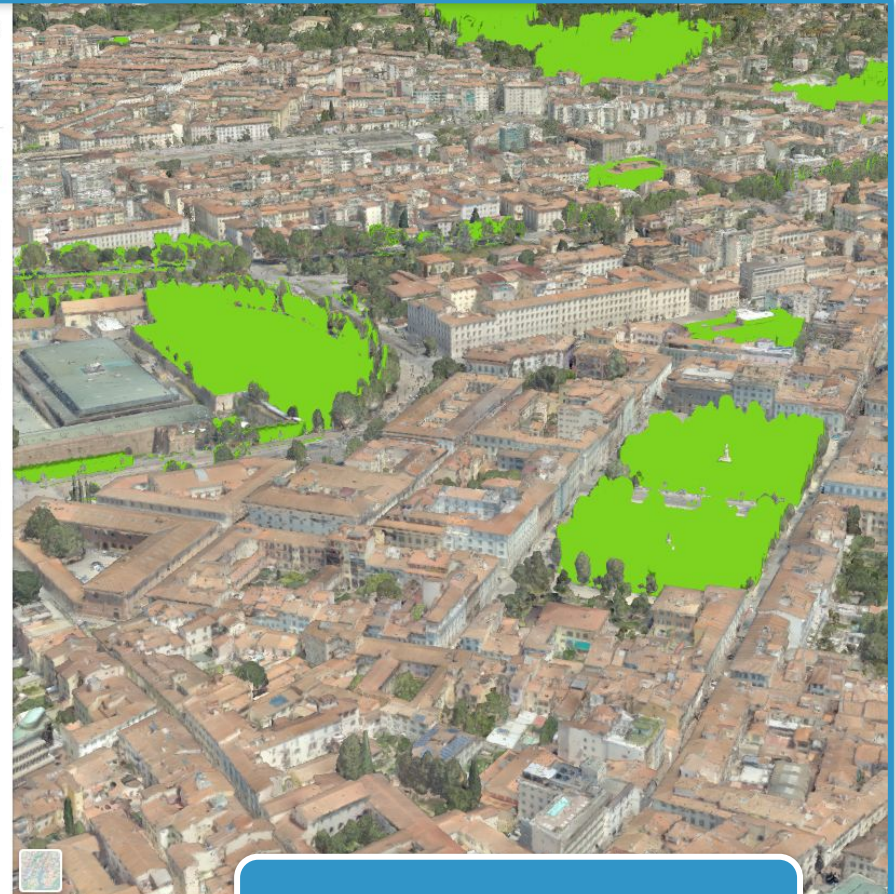
Limits type

Scale

Enable imagery layers overlay

Format 3D Model

Height offset (m) 0 m



Note: Enables imagery layers such as WMS, TMS, or WMTS to be rendered on top of the 3D Tiles layer, rendered sequentially in their defined order.

Updated CesiumJS v1.131.0

MapStore integration with geOrchestra v2025.02

- **Grant access to MapStore resources by IP:** extending security features to allow access to specific MapStore resources (like maps or dashboards) based on the requesting client's IP address.

The screenshot displays the geOrchestra v2025.02 interface. The main navigation bar includes 'Catalogue', 'Viewer', 'Apps', 'Services', 'Import', and 'Administration'. The 'IP Ranges' section is active, showing a search bar and a list of IP ranges. One range, 'GeoSolutions VPN IP', is highlighted. An 'Edit IP range' dialog box is open, showing the IP range '192.168.1.0/32' and the description 'GeoSolutions VPN IP'. The dialog has 'Cancel' and 'Save' buttons. In the background, the 'RennesMetro' application is visible, showing its 'Permissions' tab. The 'Permissions' tab includes a search bar, a '+ Add Permission' button, and a list of IP ranges. The 'GeoSolutions VPN IP' range is listed in the background interface.

MapStore integration with geOrchestra v2025.02

Cesium native 3D Clipping

Support to Grid Based
Datum Adjustments

Managing multiple GS
instances from the
Mapstore Rule Maager

Check out the rest in Github
<https://github.com/geosolutions-it/MapStore2/releases/tag/v2025.02.00>

Enhanced Admin Section
with new UI

...

Improved temporal charts to
show current selected time
in Timeline

Improved Identify Support
for time-enabled layers



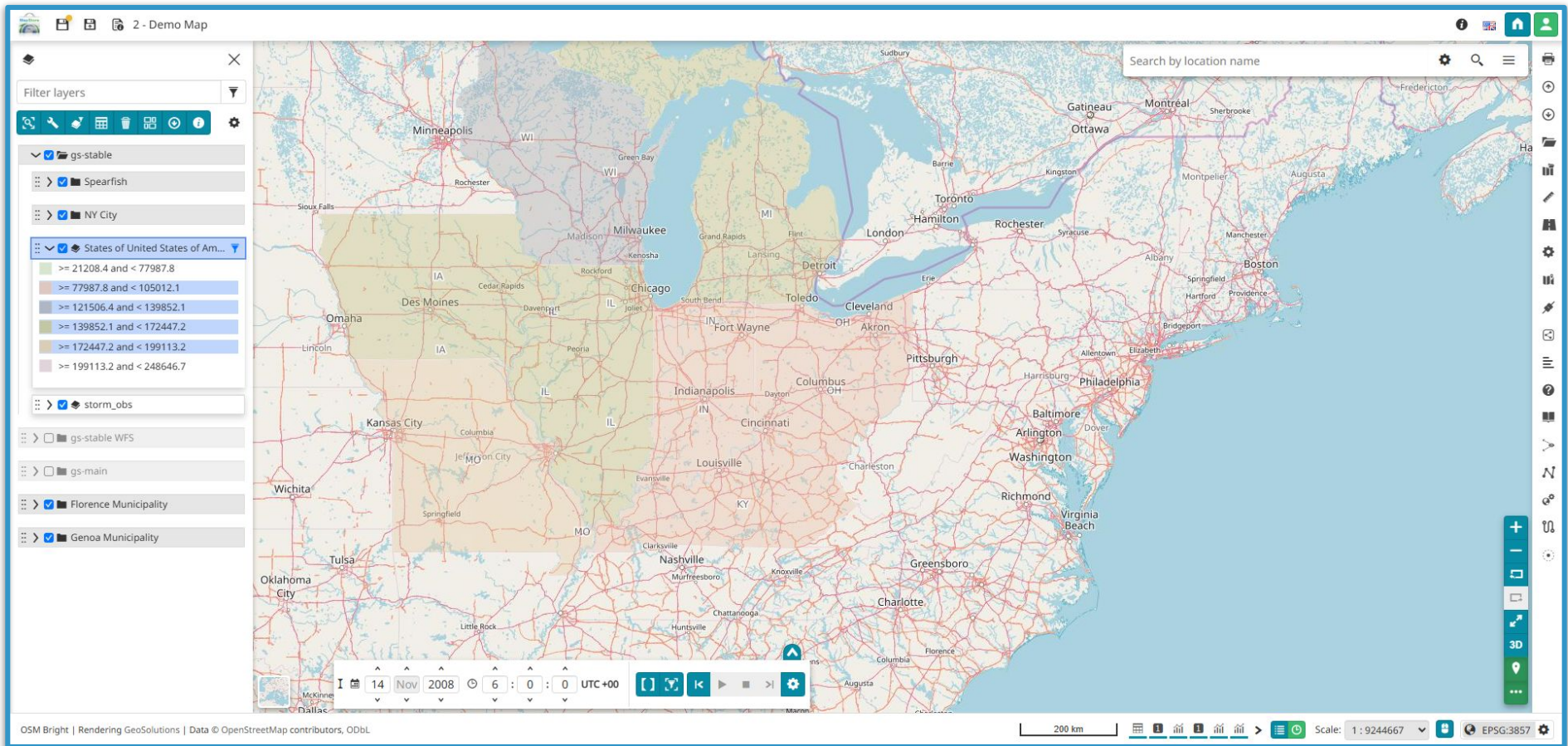
What's new in MapStore 2026.01



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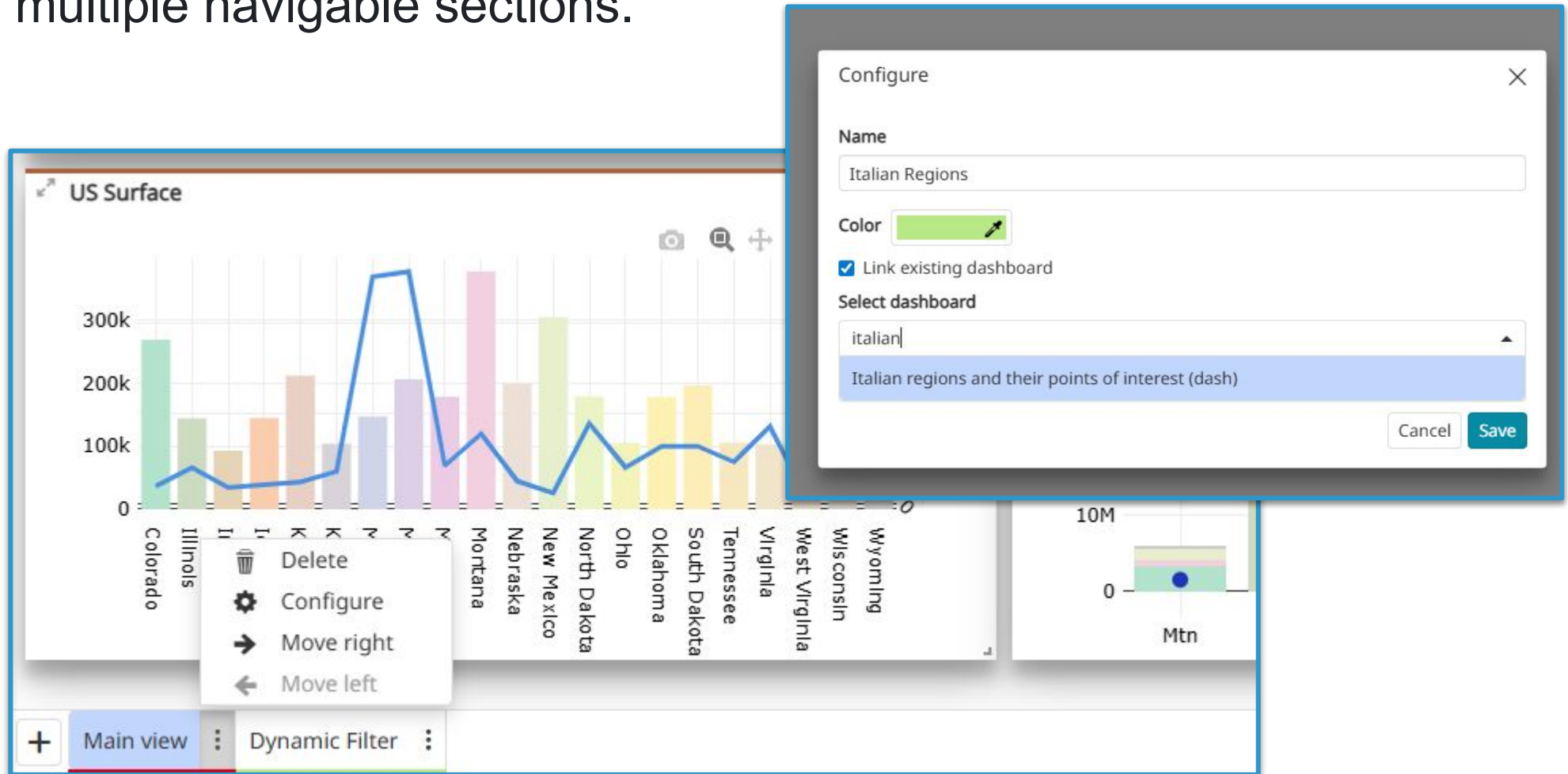
What's new in MapStore 2026.01

- **Map Viewer & UI Flexibility:** added more layout flexibility with support for different container positions and a general restyling of application buttons



What's new in MapStore 2026.01

- **Advanced Tabbed View for Dashboards:** introducing a new tabbed layout system for Dashboards, allowing users to organize widgets into multiple navigable sections.



What's new in MapStore 2026.01

- **Dynamic Filter Widget Builder:** a new dedicated component for the dynamic creation of filter widgets. The tool provides a more intuitive way for users to build custom filtering interfaces.

The screenshot displays the Dynamic Filter Widget Builder interface in MapStore 2026.01. The interface is divided into several panels:

- Widget Preview:** Shows a list of US States (Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky) with checkboxes and a "Select All / Clear" button.
- Configuration Panel:** Contains settings for the widget's behavior and appearance.
 - Data:** Data Source: Features; Layer: States of United States of A; Values From: Unique values; Value Attribute: STATE_NAME; Sort By Attribute: STATE_NAME; Max Features: 100; Filter Composition: Match Any Filter(OR); No selection mode: No filter.
 - Layout:** Variant: Dropdown; Selection Mode: Multiple; Direction: Vertical; Max Height: 128; Show Select All / Clear: ; No target message: .
 - Interactions:** On Selection Change: Apply Filter.
- Map View:** Shows a map of the United States with a table of state data and several charts:
 - US Selection:** A table with columns: FIPS, SUB_REGION, STATE_ABBR, LAND_KM. Data rows: Mtn, AZ, 294,333; Mtn, NM, 304,472; Mtn, MT, 976,900.
 - US Workers:** Two pie charts showing "Workers" (Mid Atl - 73.9%, Mtn - 26.1%) and "Employed" (Mid Atl - 74.2%).
 - US Population:** A bar chart showing "Persons" and "Mid Atl" across various states.
 - US Male:** A large text display showing "~25M".
 - US Female:** A large text display showing "~26M".

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What's new in MapStore 2026.01

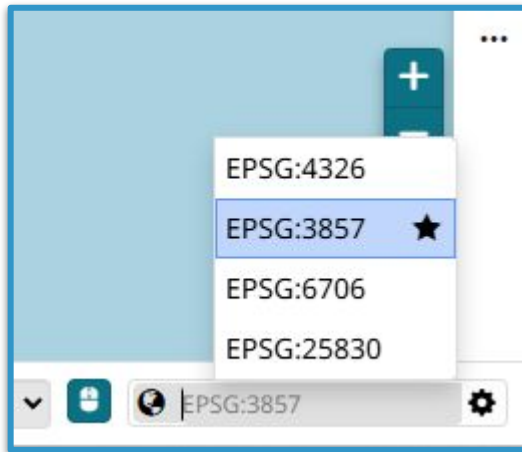
- **CameraPosition Plugin:** added a specialized plugin for advanced camera position management. Users can now save, manage, and recall specific coordinates and viewing angles.



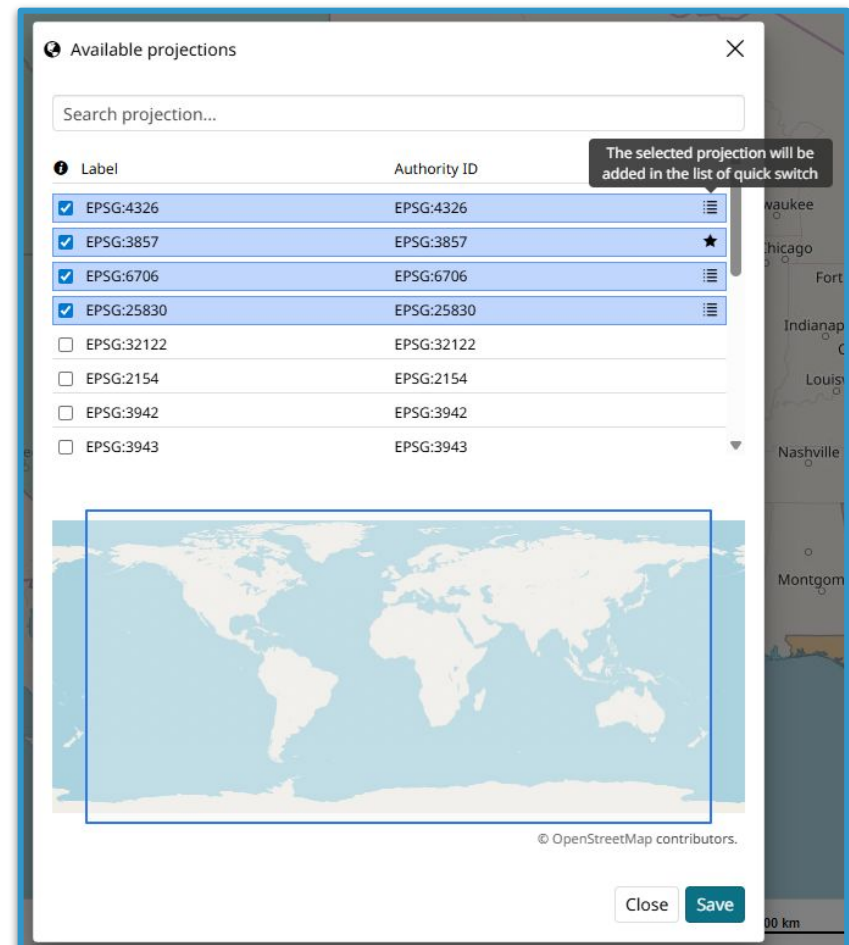
- **Widgets Tray** also moved in the footer!

What's new in MapStore 2026.01

- **Improved CRS Selector and Projection Management:** redesigned the Coordinate Reference System (CRS) selection interface, introducing a "Quick Selector" for fast access and a dedicated modal for advanced projection search and selection.

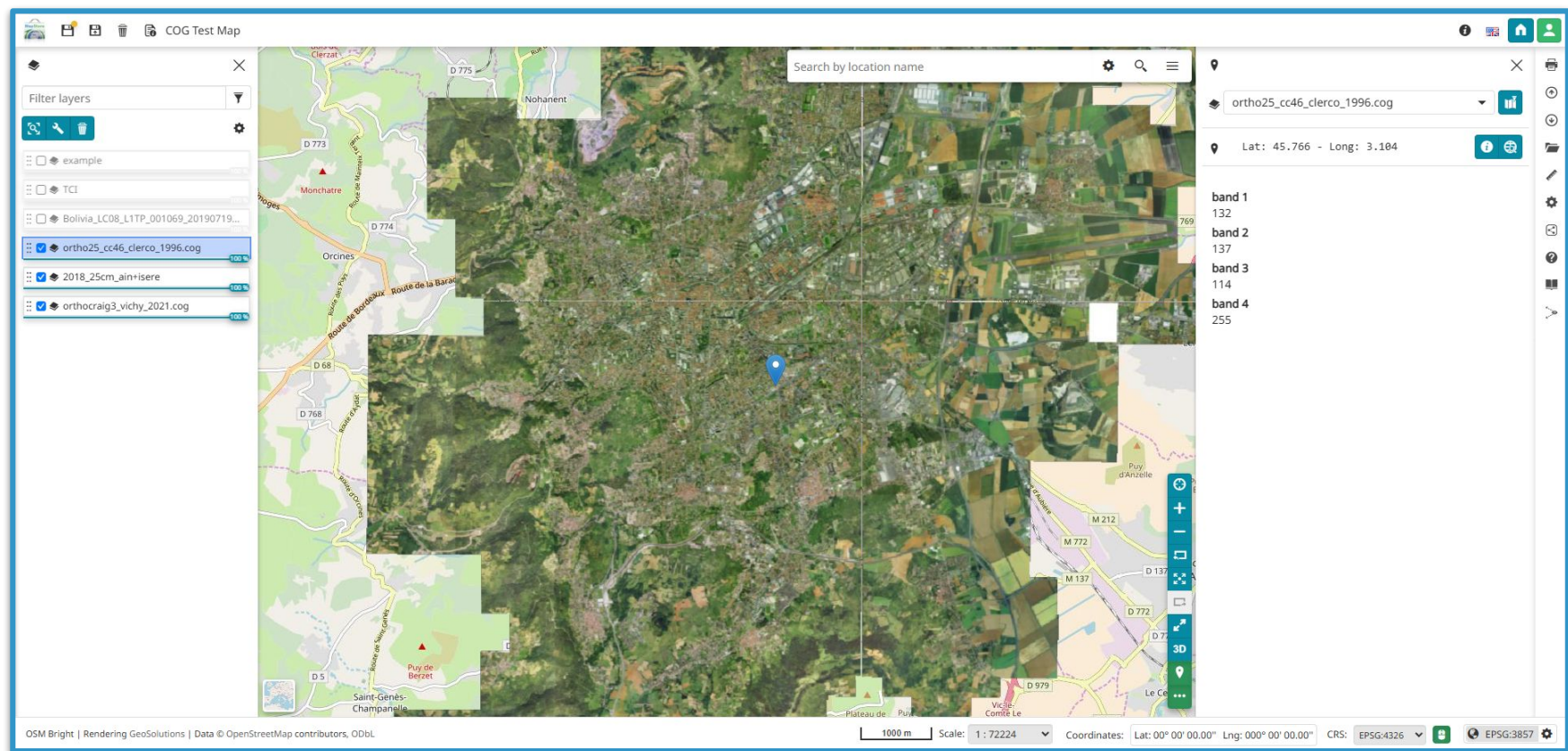


Configuration has been also unified under the new **availableProjections** property, simplifying admin management



What's new in MapStore 2026.01

- **Cloud Optimized GeoTIFF (COG) Support:** Improved COG integration by adding support within the 3D viewer and enabling the identify tool for direct data inspection on COG layers



What's new in MapStore 2026.01

Non-Spatial Dataset
Management

Floating Dynamic Legend for
ArcGIS & WMS Layers

3D, Printing & Geodetic
Updates

Check out the rest in Github
<https://github.com/geosolutions-it/MapStore2/releases/tag/v2026.01.00>

System & Infrastructure
Updates

...

Line traces classification

Dashboard & Map Editor
Enhancements



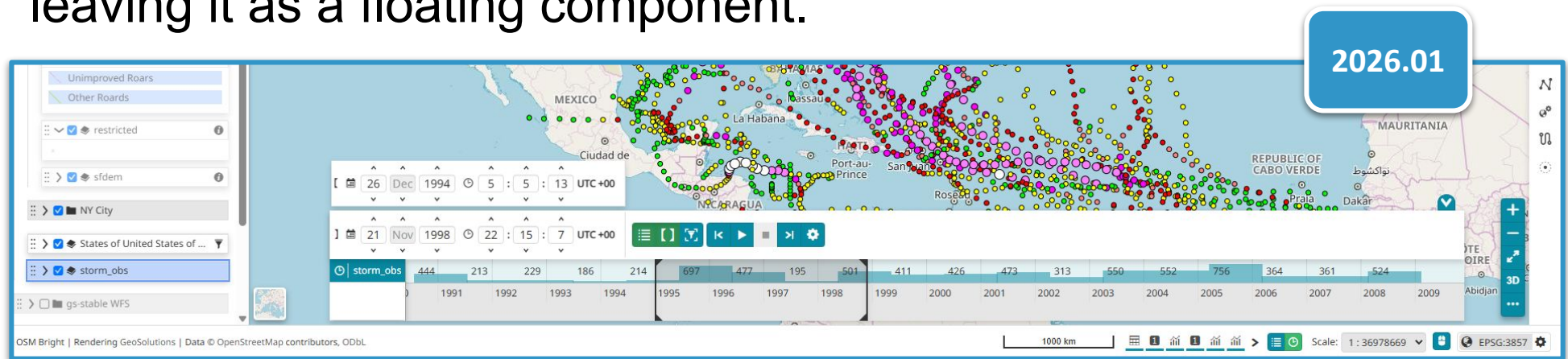
Ongoing works for MapStore in 2026/2027



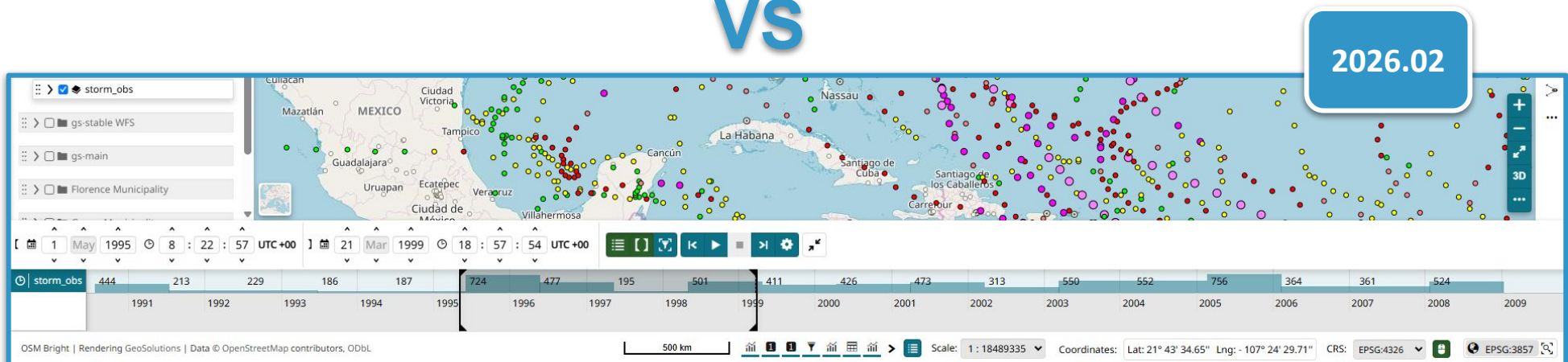
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Ongoing works for MapStore in 2026/2027

- **Timeline Plugin Layout and Location Review:** leveraging on layout updates made for **v2026.01** series, the layout structure has been revisited integrating it into the application's bottom section instead of leaving it as a floating component.

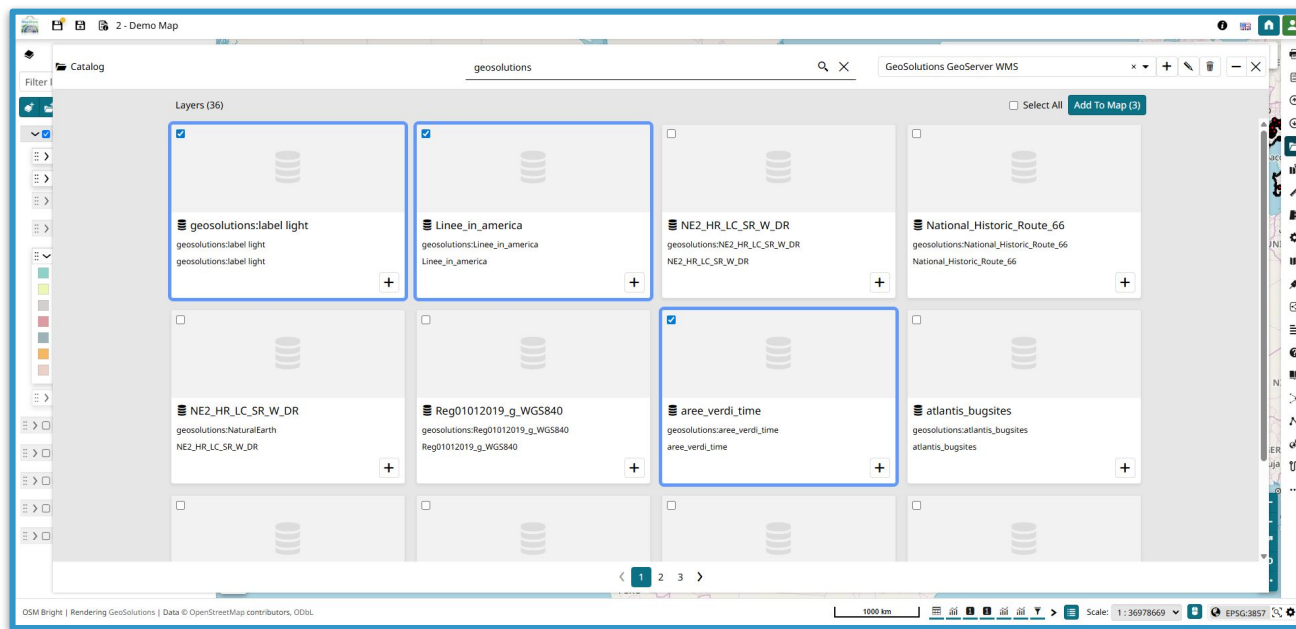


VS

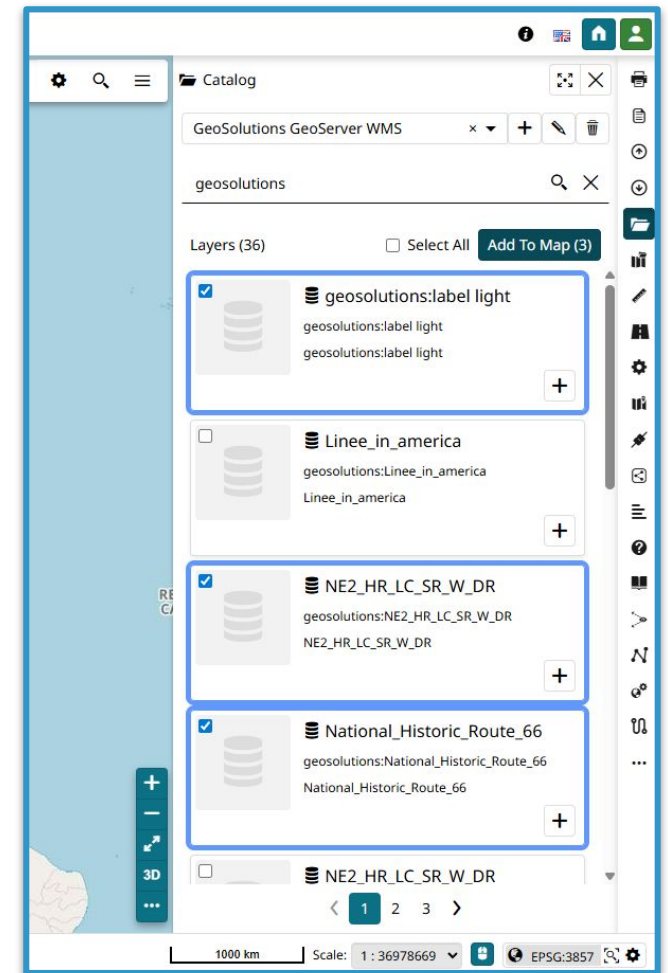


Ongoing works for MapStore in 2026/2027

- **Catalog Refactor:** a major structural initiative based on an approved MapStore Improvement Proposal (MIP) to completely refactor the layers catalog module.

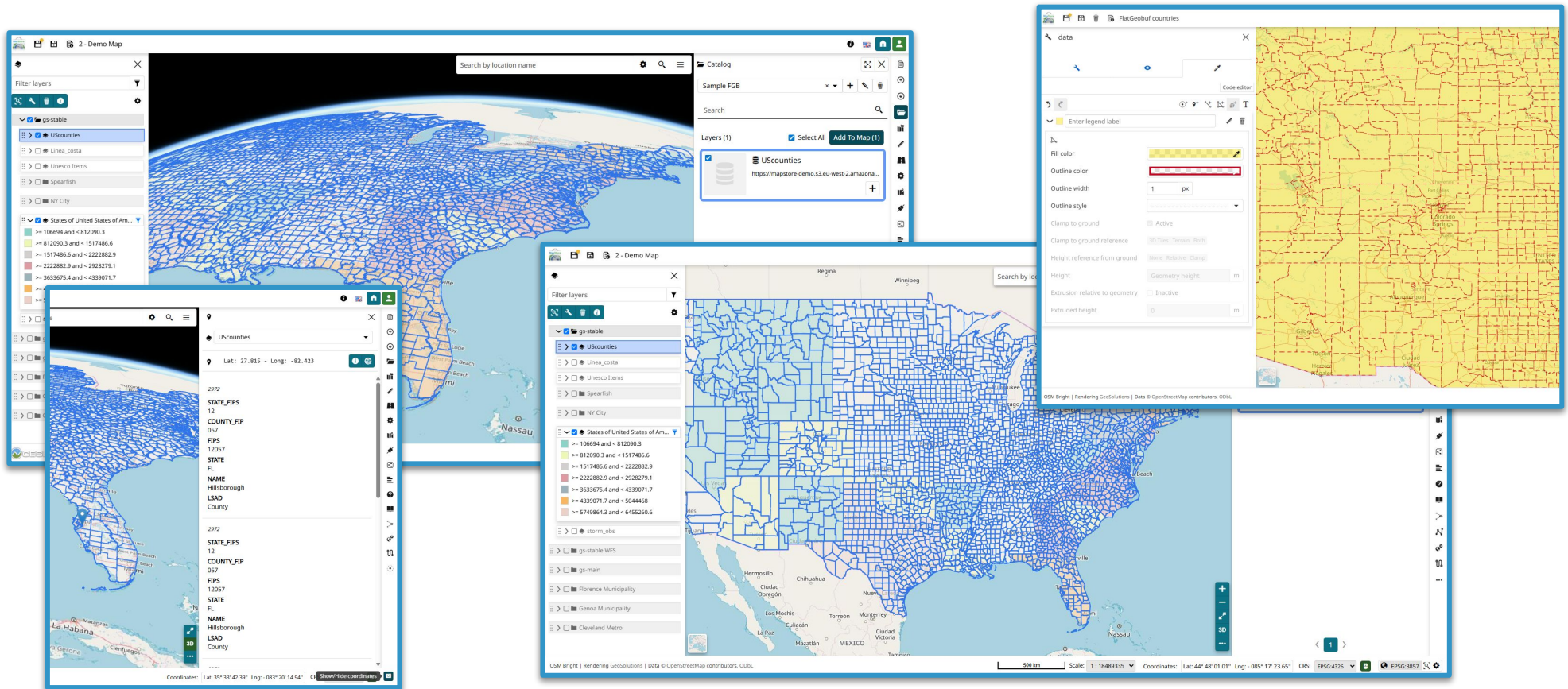


Modernized interface dynamically integrated with native **GeoNode APIs**.



Ongoing works for MapStore in 2026/2027

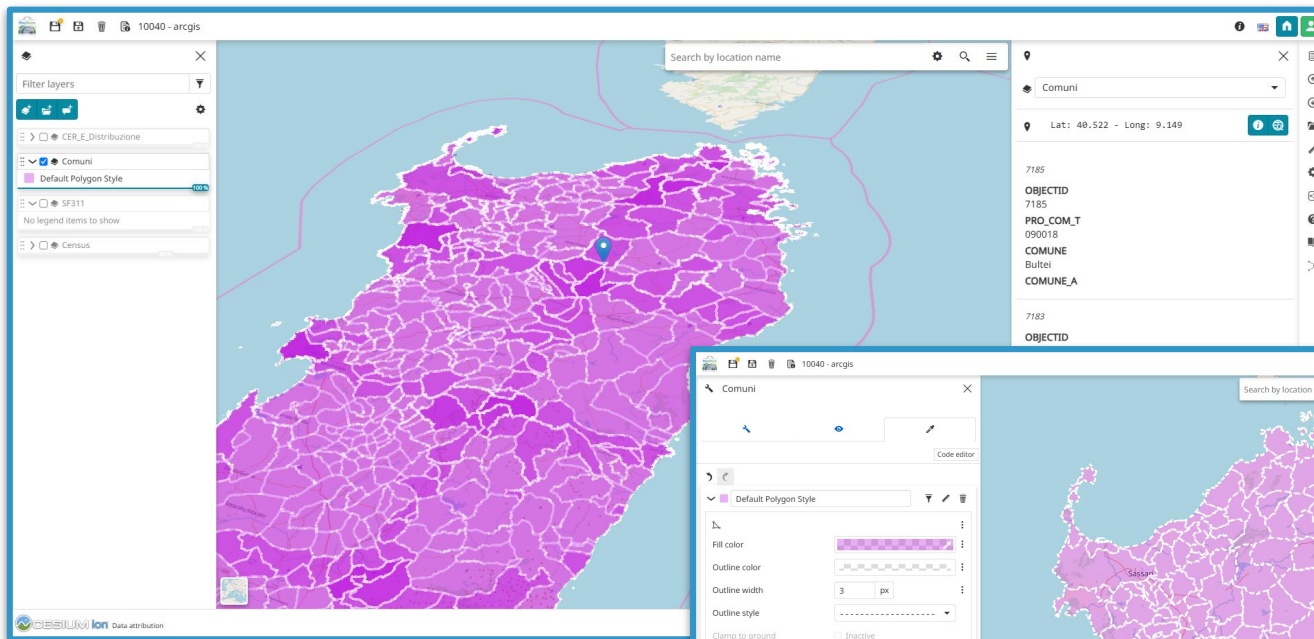
- **FlatGeobuf Format Support:** adding native support for the binary FlatGeobuf (FGB) format, enabling highly efficient streaming of large vector datasets over the web.



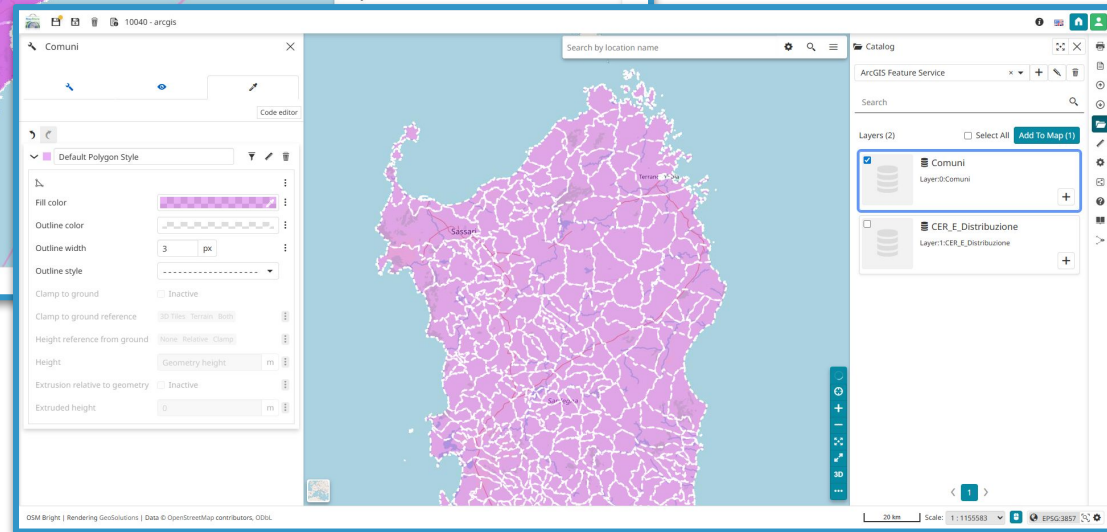
Read geographic data streams with significantly reduced latency!

Ongoing works for MapStore in 2026/2027

- **ArcGIS Support for FeatureService:** introducing native support for vector layers served via ArcGIS FeatureServer endpoints.



Optimal client performance with large datasets adopting **tilled loading strategy**.



Complete out-of-the-box compatibility with the **Identify**, **Legend** and the **Style Editor**!

Ongoing works for MapStore in 2026/2027

Core lightening & simplification

Modernized package distribution

Sprint 7 Upgrade

Extension First-Architecture

Core libraries upgrade (React/RXxJS)

Epic

[#12429](#)

Downstream Project Streamlining

Catalog of extensions

Backend consolidation



Ongoing works for MapStore in 2026/2027



- **Demo site:** <https://mapstore.geosolutionsgroup.com>
- **User documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/latest/user-guide/home-page/>
- **Developers documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/latest/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>



Ready to scale your geospatial platform?



Questions?