



MapStore at geOcom 2025

An Year in Review

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GeoSolutions



23th - 25th of June 2025 - geOcom



Agenda



- What's new in MapStore 2025.01 ready to land on geOrchestra
- Ongoing works for MapStore 2025.02





What's new in MapStore 2025.01



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- MapStore Home Page layout completely reviewed and UX improved



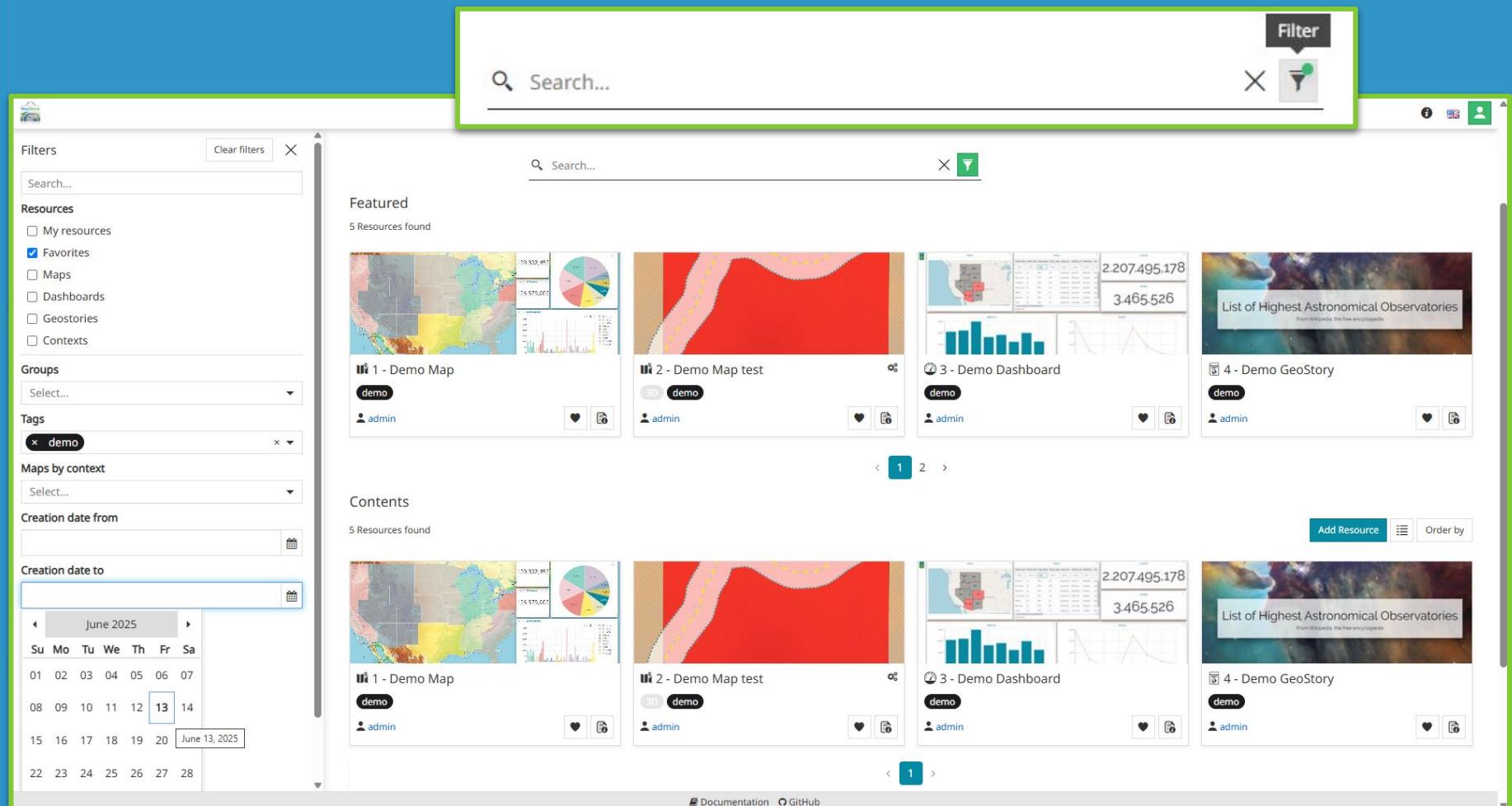
The screenshot shows the MapStore 2025.01 home page with several features highlighted:

- Filtering Resources**: A green callout box pointing to the search bar and filter options at the top of the page.
- Viewing Resources information**: A green callout box pointing to the "Featured" section, which displays four resource cards: "1 - Demo Map", "2 - Demo Map test", "3 - Demo Dashboard", and "4 - Demo GeoStory".
- Organizing Resources**: A green callout box pointing to the "Contents" section, which displays a grid of 15 resource cards.
- Accessing customized catalog state**: A green callout box pointing to the "Contents" section.
- Searching Resources**: A green callout box pointing to the search bar and filter options at the top of the page.
- Browsing Resources**: A green callout box pointing to the "Contents" section.

What's new in MapStore 2025.01



- MapStore Home Page layout completely reviewed and UX improved

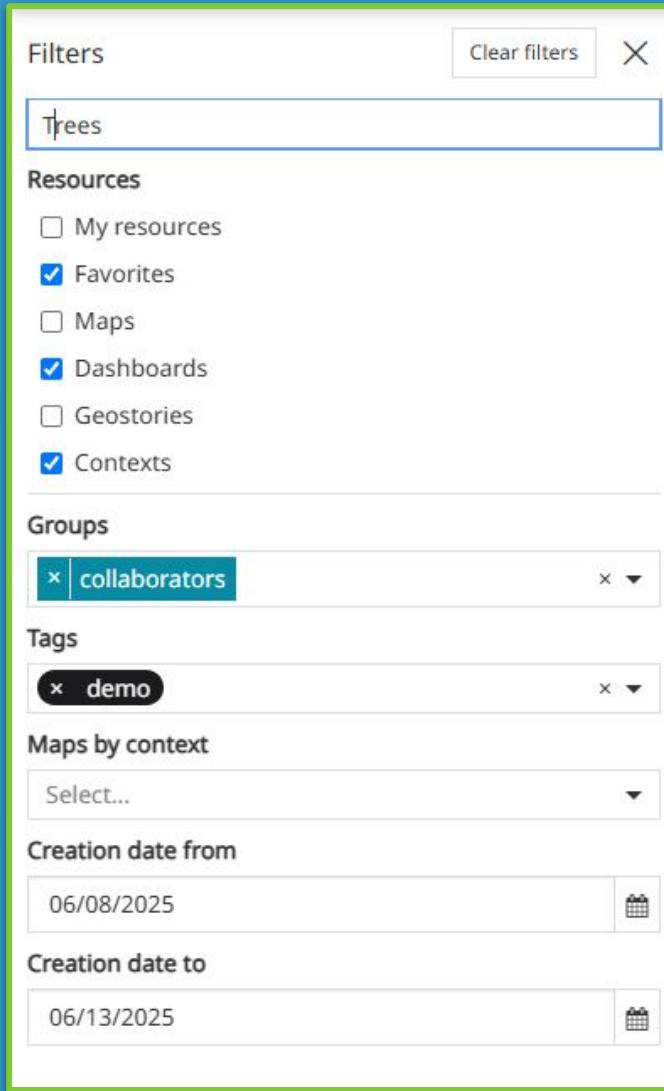


The screenshot shows the updated MapStore home page. At the top is a large search bar with a magnifying glass icon and placeholder text "Search...". To its right is a "Filter" button with a dropdown arrow. Below the search bar is a "Clear filters" button and a close button. On the left side, there is a sidebar titled "Filters" containing sections for "Resources" (with checkboxes for "My resources", "Favorites", "Maps", "Dashboards", "Geostories", and "Contexts"), "Groups" (with a "Select..." dropdown), and "Tags" (with a "demo" tag selected). Below the sidebar are two date range inputs: "Creation date from" and "Creation date to", each with a calendar icon. The main content area is divided into two sections: "Featured" and "Contents". Both sections show a grid of four resource cards each. The "Featured" section has a title "5 Resources found" and the "Contents" section has a title "5 Resources found". Each card displays a thumbnail image, a title (e.g., "1 - Demo Map", "2 - Demo Map test", "3 - Demo Dashboard", "4 - Demo GeoStory"), a status badge ("demo" or "admin"), and three action icons (heart, folder, and magnifying glass). At the bottom of the page are links for "Documentation" and "GitHub".

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What's new in MapStore 2025.01

- MapStore Home Page with many new filtering capabilities!



- My resources
- Free text
- Groups
- Application context
- Tags
- Date Period

Filter state now in
Catalog URL!

<https://dev-mapstore.geosolutionsgroup.com/mapstore/?#/?q=Storm&f=map&f=context&f=favorite&filter%7Bgroup.in%7D=geosolutions&filter%7Btag.in%7D=demo&filter%7Bcreation.gte%7D=2021-03-02T00%3A00%3A00&filter%7Bcreation.lte%7D=2025-06-13T23%3A59%3A59>

What's new in MapStore 2025.01

- The new MapStore Home Page brings also Tags!

A screenshot of the MapStore Tag Management interface. At the top, there is a search bar labeled "Filter tags by name..." and a "New tag" button. Below this, a table lists various tags:

Name	Description	Color
My Tag		Green
1		
2		
3		
3D		
ABO ENERGY		
demo		
elena		
My tag	this is a test	
new		
test1		
test1223		

A screenshot of the MapStore User Profile interface. At the top, there is a user profile icon and a language selection (US English). The sidebar contains the following menu items:

- tdipisa
- Account Info
- Change Password
- Manage Accounts
- Manage Access Rules
- Manage tags
- Logout

Administrators can define
Tags for users

What's new in MapStore 2025.01



- MapStore Home Page with improved resource **Details** for a better UI/UX

The screenshot shows the MapStore 2025.01 home page. At the top, there is a large map and the text "Welcome to MapStore" followed by "Modern webmapping with OpenLayers, Cesium, Leaflet and React". Below this, there is a "Featured" section displaying four resource cards:

- 1 - Demo Map: A map showing land parcels and a pie chart.
- 2 - Demo Map test: A map showing a red area with a yellow line.
- 3 - Demo Dashboard: A dashboard with a map, a bar chart, and some numbers.
- 4 - 4141 support: A card with a clock icon and names elena and ABO ENERGY.

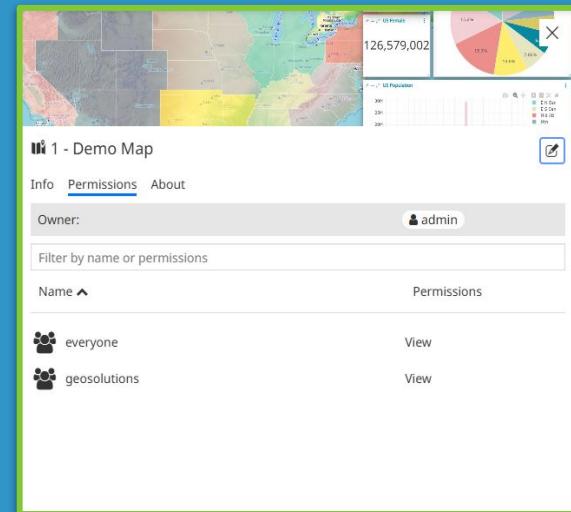
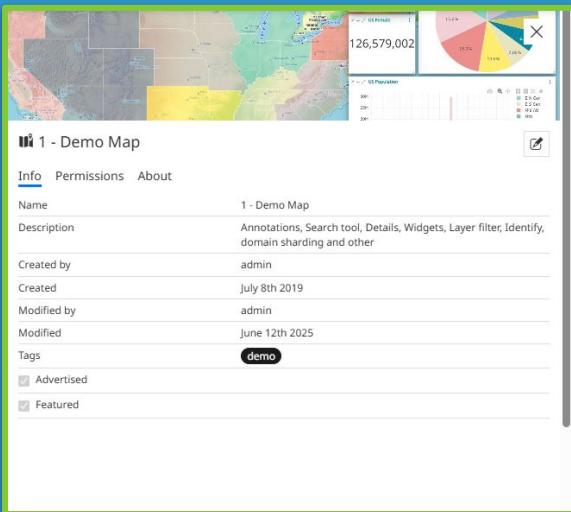
Below the featured section is a "Contents" section showing a grid of 1,642 resources. On the right side of the page, there is a detailed "Info" view for the resource "2 - Demo Map test". This view includes tabs for "Info", "Permissions", and "About". The "Info" tab displays the following data:

Name	Value
Name	2 - Demo Map test
Description	Sample map from GS demo context test
Created by	admin
Created	October 18th 2023
Modified by	tdipisa
Modified	May 26th 2025
Contact details	tobia.dipisa@geosolutionsgroup.com
Tags	3D, demo
Advertised	<input checked="" type="checkbox"/>
Featured	<input checked="" type="checkbox"/>

At the bottom of the page, there is a footer with links to "Documentation" and "GitHub", and a URL "https://dev-mapstore.geosolutionsgroup.com/mapstore/?#".

What's new in MapStore 2025.01

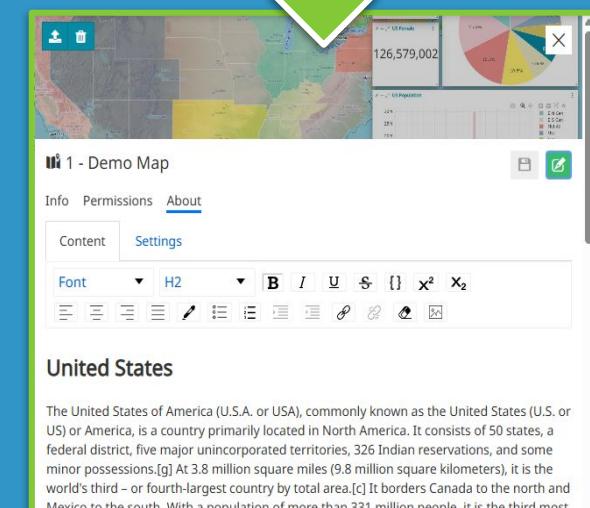
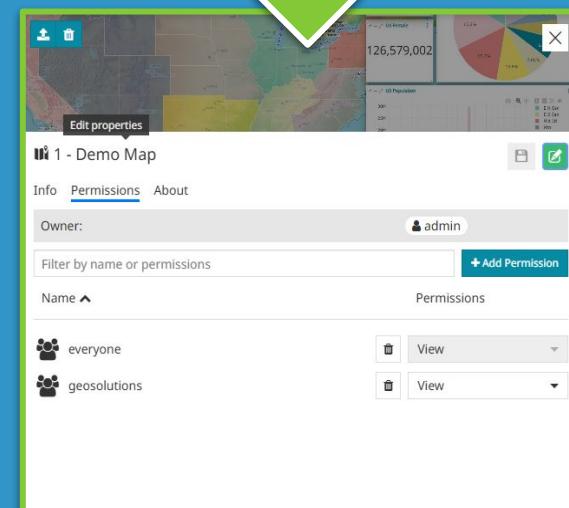
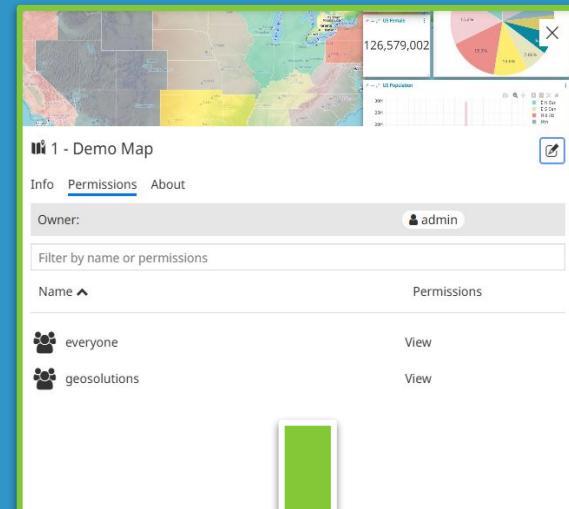
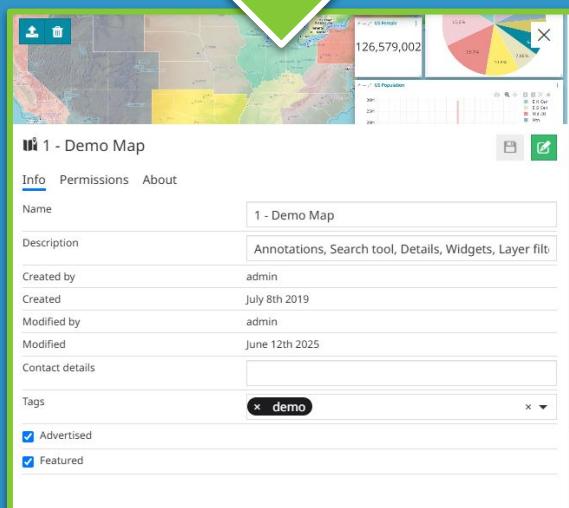
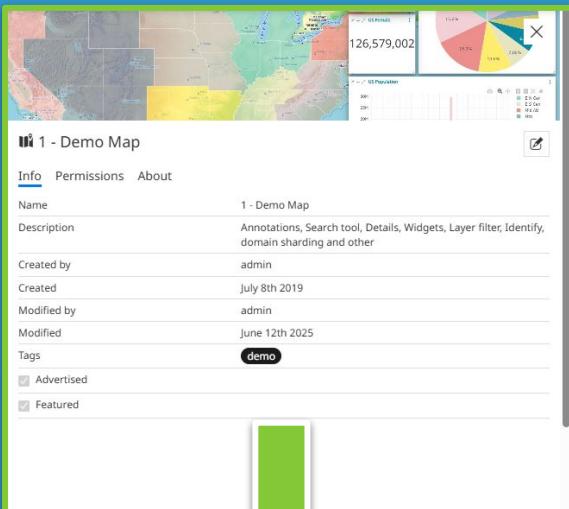
- MapStore Home Page with improved resource Details for a better UI/UX



What's new in MapStore 2025.01



- **MapStore Home Page with improved resource Details for a better UI/UX**



What's new in MapStore 2025.01

- MapStore Home Page with an alternative catalog mode for improving the overall UX

14 Resources found

1 admin 1 admin 1 admin 1 admin 1 admin

< 1 2 3 4 >

Contents

15 Resources found

Name	Description	Tags	Modified	Created by
10358_demo_dashboard		demo	Jun 13th 25, 4:22:56 pm	surendhar
1 - Demo Map	Annotations, Search tool, Details, Widgets, Layer filter, Iden...	demo	Jun 12th 25, 10:48:09 am	
2 - Demo Map test	Sample map from GS demo context test	3D demo	May 26th 25, 6:10:54 pm	
3 - Demo Dashboard	Filtering Capabilities	demo	May 15th 25, 9:48:46 am	admin
4 - Demo GeoStory	Highest Astronomical Observatories	demo	May 12th 25, 4:25:27 pm	admin
5 - 3D Underground Transparency	This example shows how apply globe transparency inside a ...	3D demo	Jun 13th 25, 4:20:44 pm	admin

Add Resource Order by

10358_demo_dashboard

1 - Demo Map

2 - Demo Map test

3 - Demo Dashboard

4 - Demo GeoStory

5 - 3D Underground Transparency

surendhar

Add to favorites

Open properties

Share

Delete

admin

What's new in MapStore 2025.01

- MapStore Home Page ... to manage all resources together!

The screenshot shows the MapStore Home Page interface. At the top, there are two sections: "Contents" (15 Resources found) and "Recent" (14 Resources found). Below these are tabs for "Name", "Description", "Tags", "Modified", and "Created by". A search bar and filters are also present. On the right, there is a "More options" menu with options like "Add to favorites", "Open properties", "Share", and "Delete". A modal window is open at the bottom left, titled "Add Resource", with options to "Create map", "Create dashboard", "Create geostory", and "Create context".

Name	Description	Tags	Modified	Created by
10358_demo_dashboard		demo	Jun 13th 25, 4:22:56 pm	surendhar
1 - Demo Map	Annotations, Search tool, Details, Widgets, Layer filter, Iden...	demo	Jun 12th 25, 10:48:09 am	
2 - Demo Map test	Sample map from GS demo context test	3D demo	May 26th 25, 6:10:54 pm	
3 - Demo Dashboard	Filtering Capabilities	demo	May 15th 25, 9:48:46 am	admin
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- MapStore Home Page ... with improved sorting options!

The screenshot shows the MapStore Home Page interface. At the top, there are two sections: "Contents" and "Resources". The "Contents" section lists 15 resources, while the "Resources" section lists 14 resources. Both sections include columns for Name, Description, Tags, Modified, and Created by. A "Sort" button is located at the top right of each section. Below the "Resources" section, a modal window is open, showing options to "Add Resource", "Order by", and "Create map", "Create dashboard", "Create geostory", and "Create context". The "Order by" dropdown menu is expanded, showing sorting options: "Most recent", "Less recent", "A Z", and "Z A".

What's new in MapStore 2025.01

- MapStore Home Page ... with a better controls on resource items. Highly customizable also for downstream projects!

The screenshot displays the MapStore 2025.01 home page. At the top, there are sections for 'Contents' and 'Resources'. The 'Contents' section shows a list of 15 resources, including '1 - Demo Map', '2 - Demo Map test', '3 - Demo Dashboard', '4 - Demo Geostory', and '5 - 3D Underground Transparency'. The 'Resources' section shows a list of 14 resources found, with a specific resource '2 - Demo Map test' highlighted. A context menu for this resource is open, showing options like 'Share' and 'Delete'. The page also includes a search bar, a sidebar with 'Add Resource' and 'Order by' buttons, and a footer with a 'Most recent' dropdown menu.

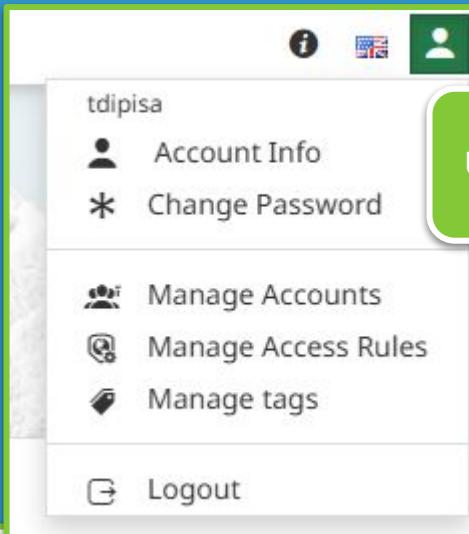
What's new in MapStore 2025.0

- MapStore Layout and Look & Feel significantly reviewed to provide a better accessibility.

Improved About management for the whole application



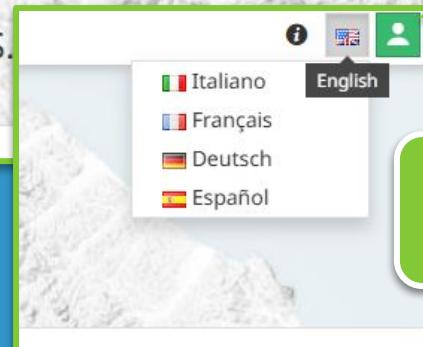
Unified user Menus



to MapStore

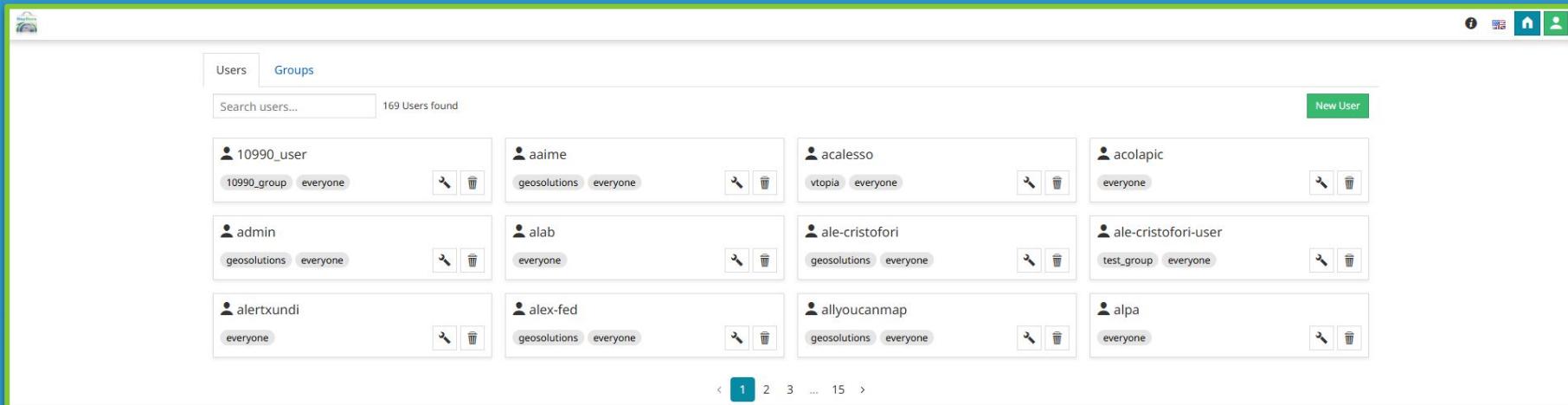
OpenLayers, Cesium, Leaflet and ReactJS.

New Brand Navbar component



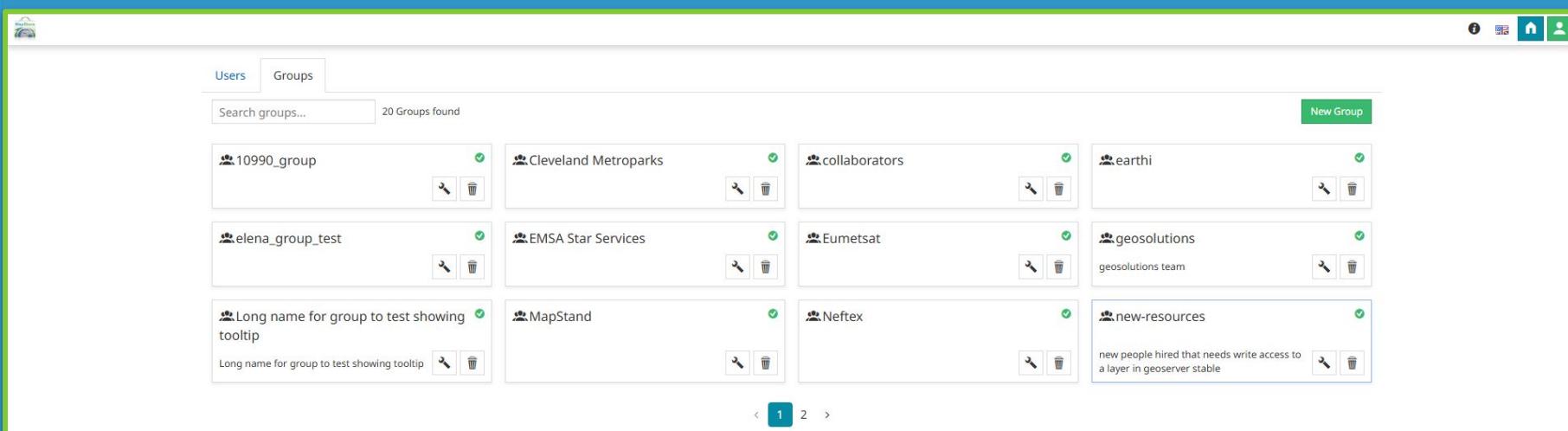
What's new in MapStore 2025.0

- MapStore Layout and Look & Feel ... to harmonize contents and improve the UX also of admin sections!



The screenshot shows the 'Users' section of the MapStore administration interface. It displays a grid of 169 users, each with a profile icon, name, group membership, and access level. Below the grid is a navigation bar with page numbers 1 through 15.

User	Group	Access Level
10990_user	10990_group	everyone
aaime	geosolutions	everyone
acaless	vtopia	everyone
acolapic	everyone	everyone
admin	geosolutions	everyone
alab	everyone	everyone
ale-cristofori	geosolutions	everyone
ale-cristofori-user	test_group	everyone
alertxundi	everyone	everyone
alex-fed	geosolutions	everyone
allyoucanmap	geosolutions	everyone
alpa	everyone	everyone

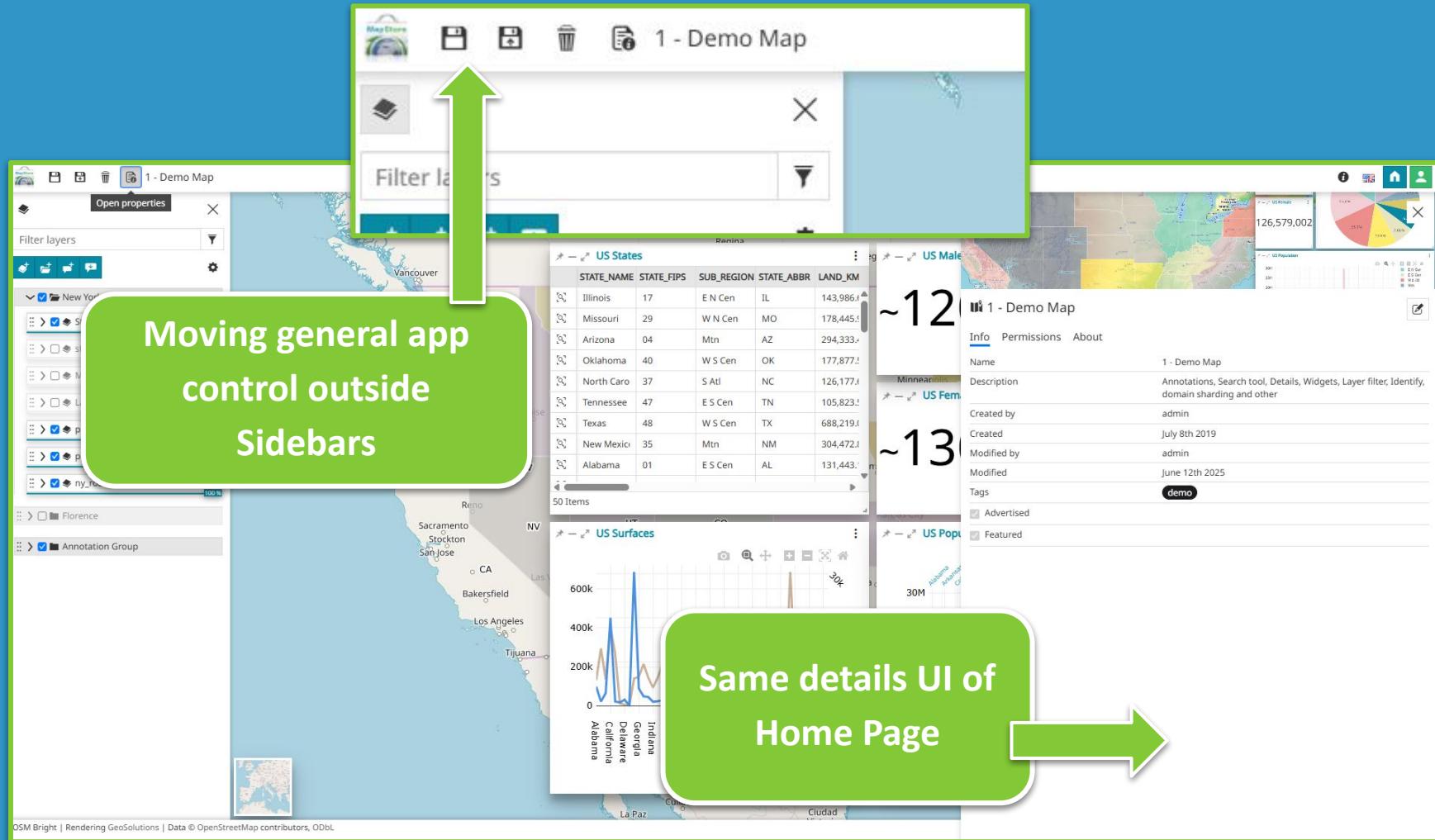


The screenshot shows the 'Groups' section of the MapStore administration interface. It displays a grid of 20 groups, each with a profile icon, name, and a green checkmark indicating status. Below the grid is a navigation bar with page numbers 1 and 2.

Group
10990_group
Cleveland Metroparks
collaborators
earthi
elena_group_test
EMSA Star Services
Eumetsat
geosolutions
Long name for group to test showing tooltip
MapStand
Neftex
new-resources

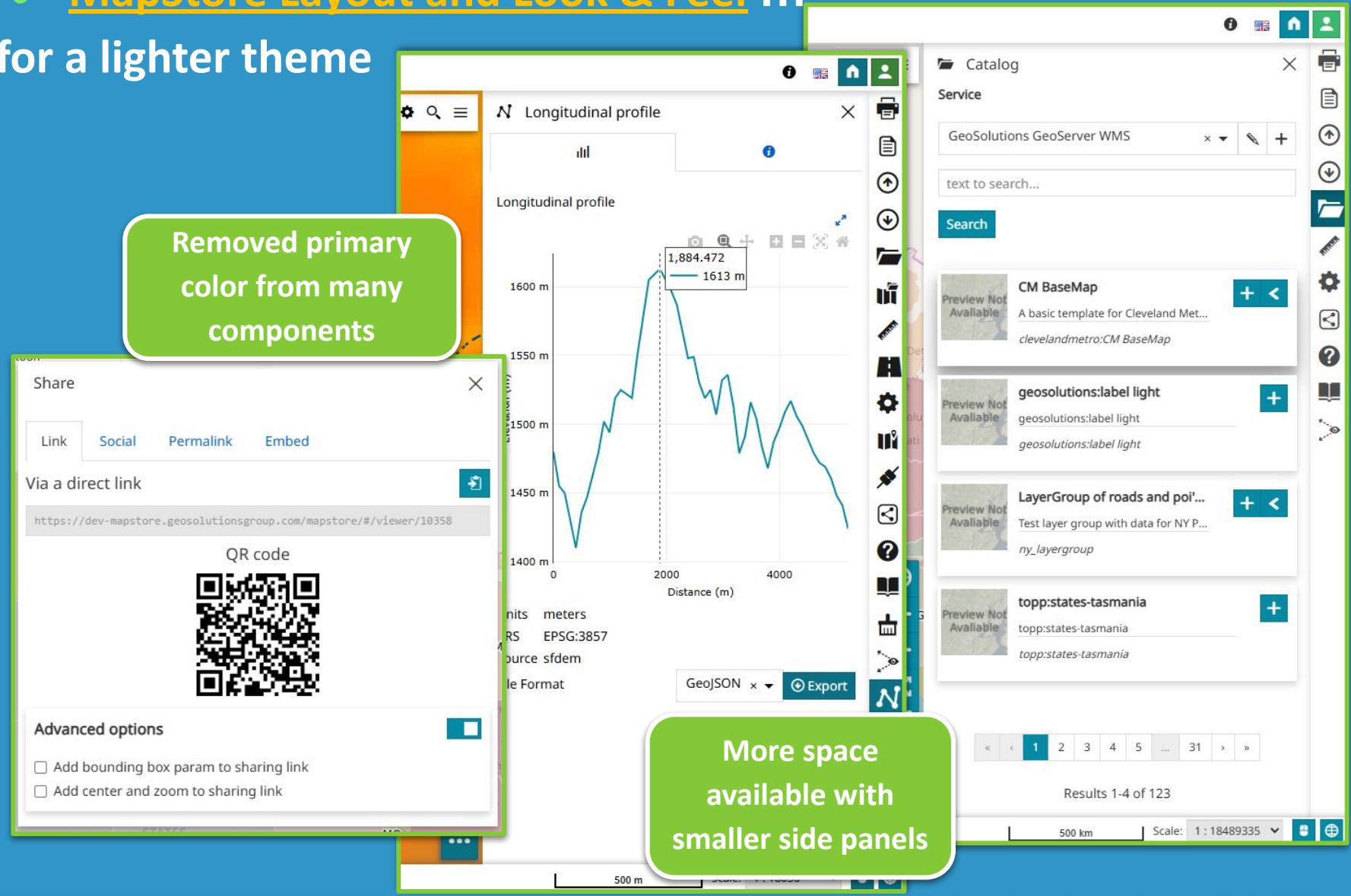
What's new in MapStore 2025.0

- MapStore Layout and Look & Feel ... to enhance the UX also within resources with the new Brand Navbar



What's new in MapStore 2025.0

- MapStore Layout and Look & Feel ...
for a lighter theme



The screenshot illustrates the updated layout of the MapStore application. A central longitudinal profile plot shows elevation versus distance, with a callout highlighting the removal of primary colors from components like the legend. To the left, a 'Share' dialog box is open, showing options for Link, Social, Permalink, and Embed, along with a QR code and sharing links. To the right, a catalog sidebar displays various services and layers, with a callout noting more space available with smaller side panels.

Removed primary color from many components

Longitudinal profile

Elevation (m)

Distance (m)

More space available with smaller side panels

Share

Via a direct link

QR code

Advanced options

Add bounding box param to sharing link

Add center and zoom to sharing link

Catalog

Service

GeoSolutions GeoServer WMS

text to search...

Search

CM BaseMap

geosolutions:label light

LayerGroup of roads and poi...

topp:states-tasmania

Results 1-4 of 123

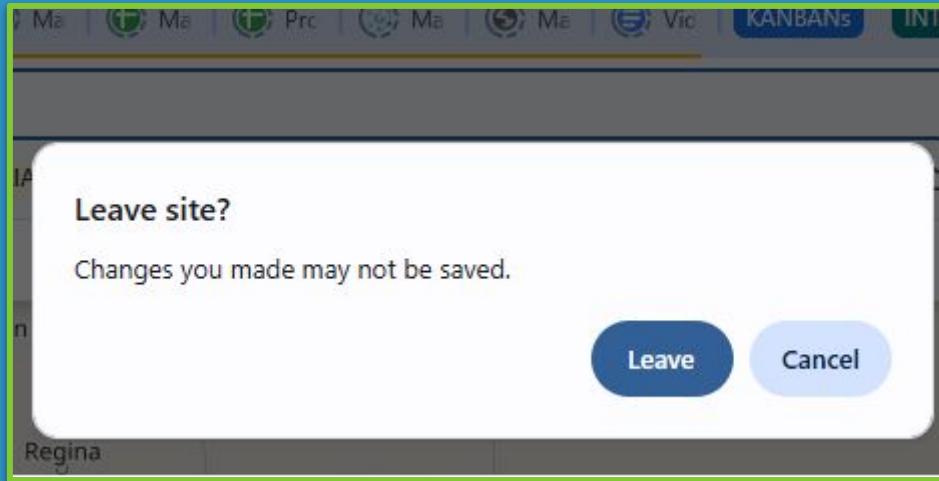
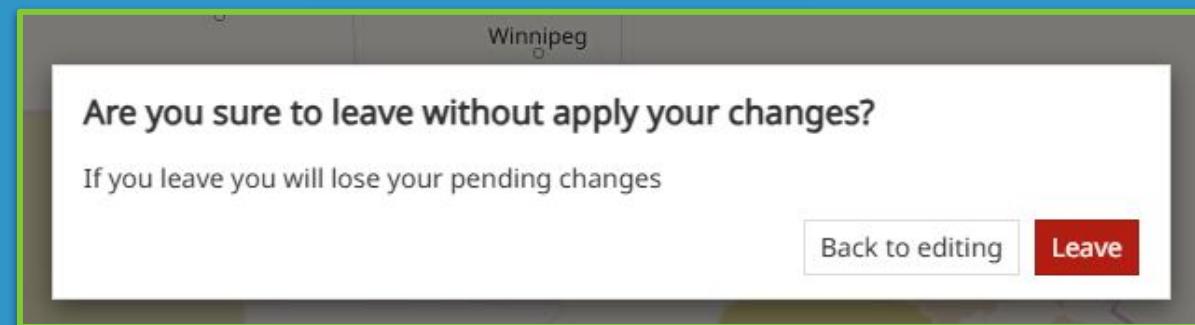
What's new in MapStore 2025.0

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



Improved user feedback on modified resources

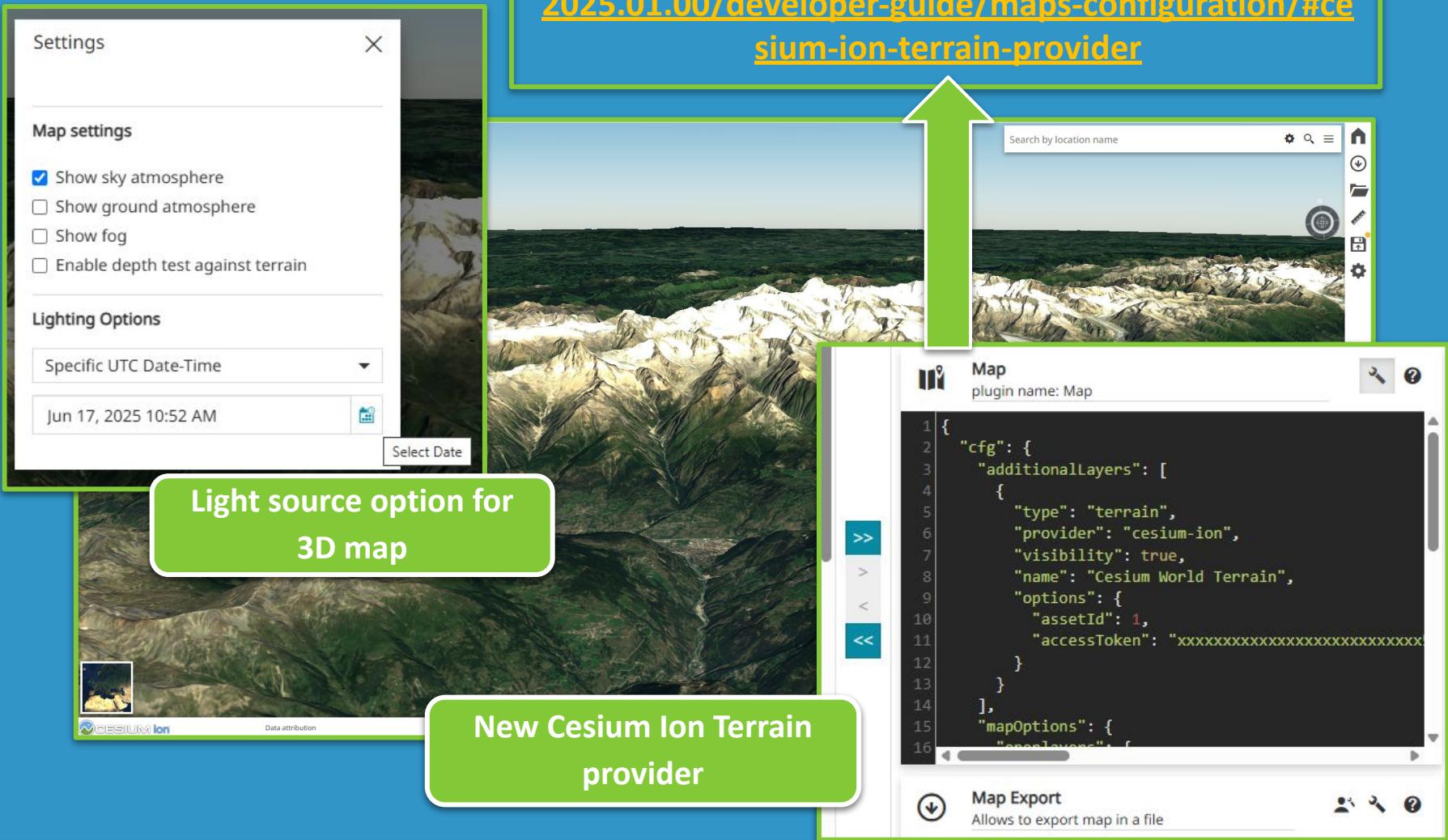
Renewed confirmation dialog when leaving resources



Improved UX with new confirmation dialog when closing the browser window

What's new in MapStore 2025.0

- **MapStore 3D updates with new Terrain provider and Map settings**



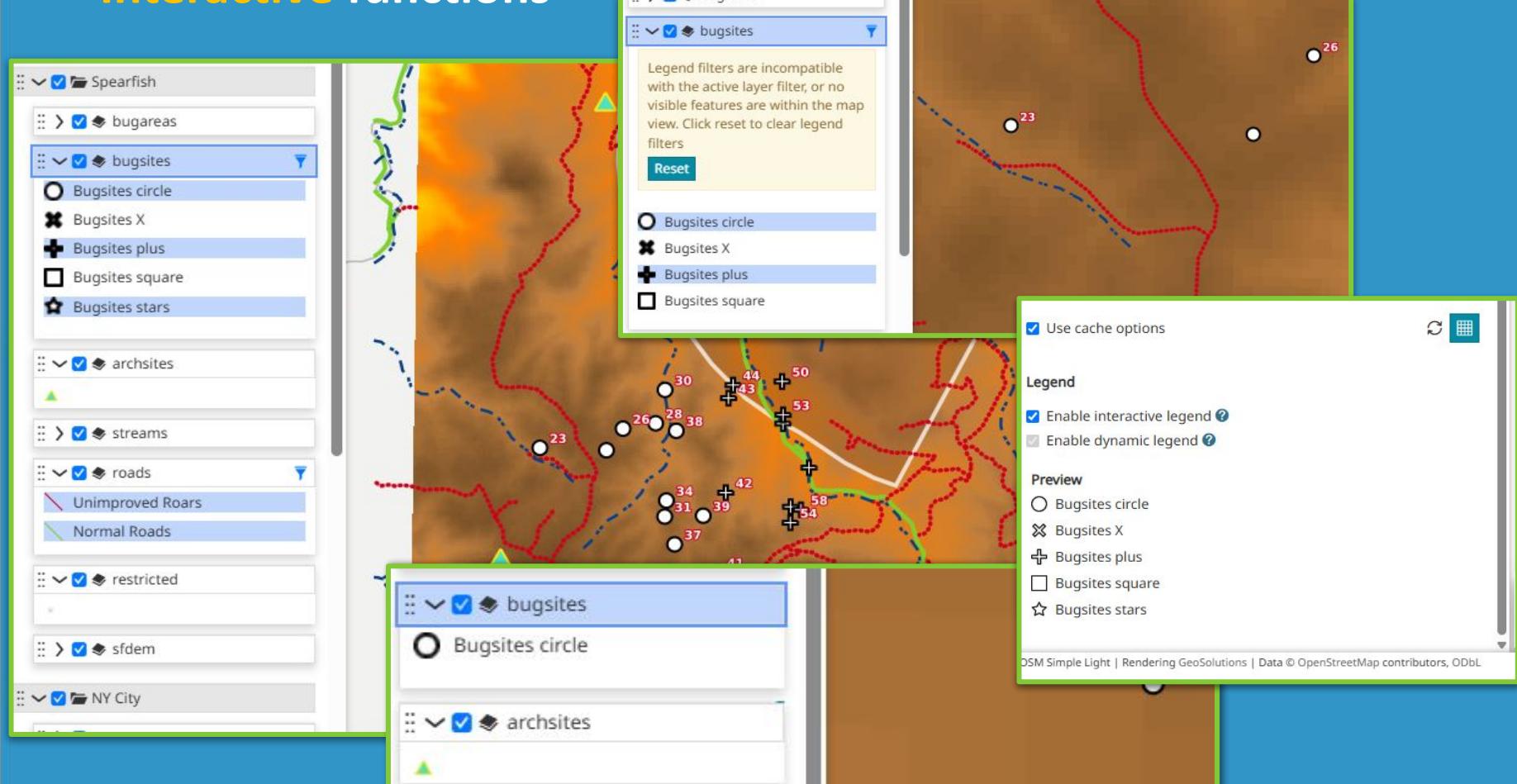
The screenshot illustrates the new features in MapStore 2025.0. On the left, a 'Settings' dialog box shows 'Map settings' with options like 'Show sky atmosphere' (checked), 'Show ground atmosphere', 'Show fog', and 'Enable depth test against terrain'. Below it, 'Lighting Options' include a dropdown for 'Specific UTC Date-Time' set to 'Jun 17, 2025 10:52 AM' and a 'Select Date' button. A green callout box points to this area with the text 'Light source option for 3D map'. In the center, a 3D terrain map of a mountainous region is displayed. A green callout box points to the bottom left of the map with the text 'New Cesium Ion Terrain provider'. To the right, a configuration editor window titled 'Map' shows JSON code for the terrain provider:

```
cfg": {  
  "additionalLayers": [  
    {  
      "type": "terrain",  
      "provider": "cesium-ion",  
      "visibility": true,  
      "name": "Cesium World Terrain",  
      "options": {  
        "assetId": 1,  
        "accessToken": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"  
      }  
    }  
  ],  
  "mapOptions": {  
    "openlayers": [
```

At the bottom right, there is a 'Map Export' button with the sub-instruction 'Allows to export map in a file'.

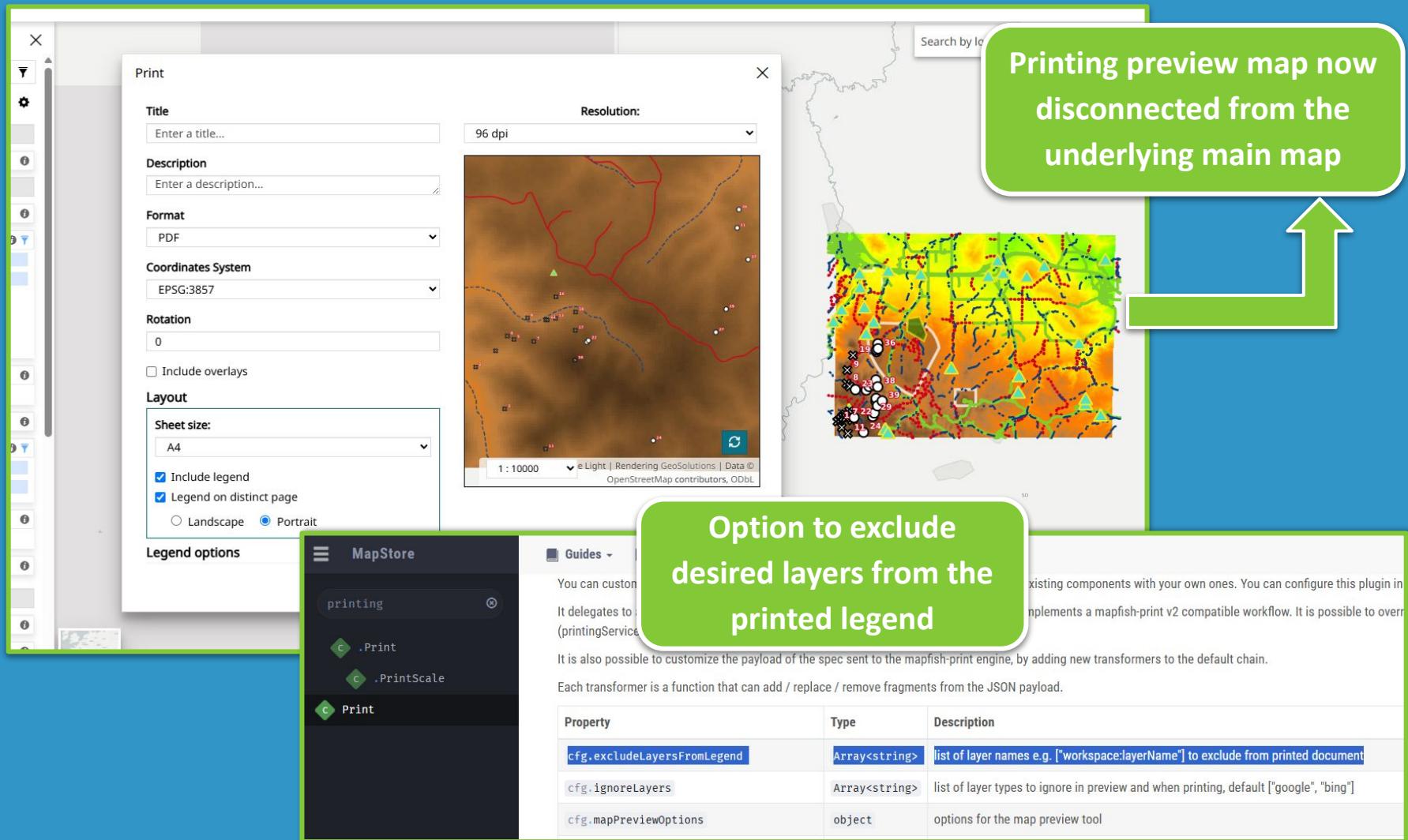


- MapStore Layer Legend update with new Dynamic and Interactive functions



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

- MapStore Printing update for an improved UX and a new function also available



Printing preview map now disconnected from the underlying main map

Option to exclude desired layers from the printed legend

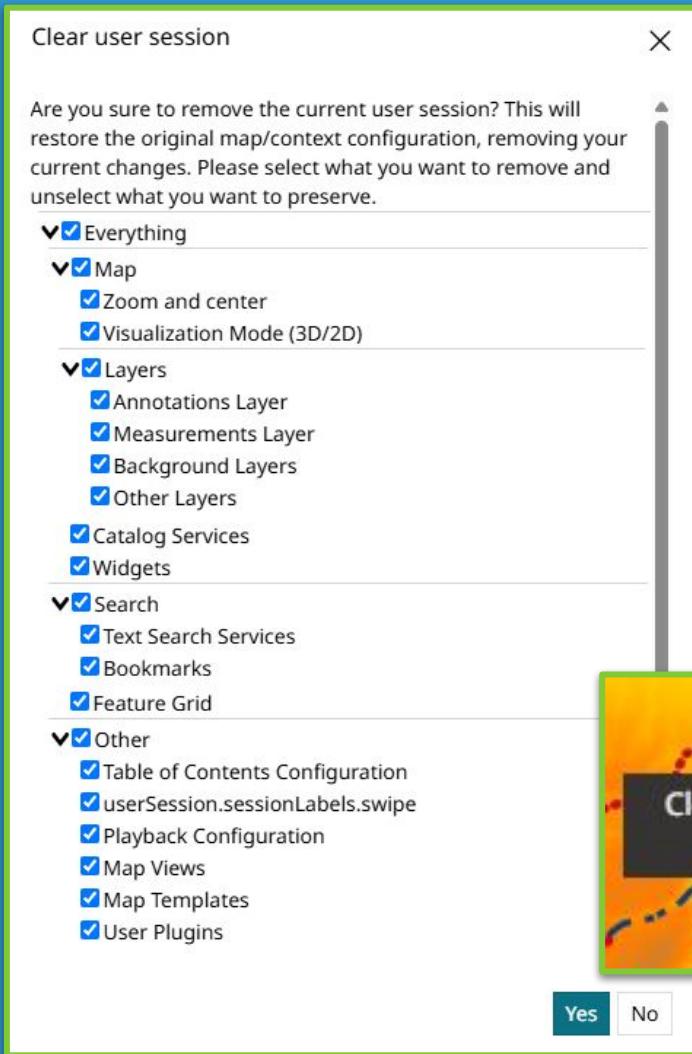
existing components with your own ones. You can configure this plugin in implements a mapfish-print v2 compatible workflow. It is possible to over

It is also possible to customize the payload of the spec sent to the mapfish-print engine, by adding new transformers to the default chain.

Each transformer is a function that can add / replace / remove fragments from the JSON payload.

Property	Type	Description
<code>cfg.excludeLayersFromLegend</code>	Array<string>	list of layer names e.g. ["workspace:layerName"] to exclude from printed document
<code>cfg.ignoreLayers</code>	Array<string>	list of layer types to ignore in preview and when printing, default ["google", "bing"]
<code>cfg.mapPreviewOptions</code>	object	options for the map preview tool

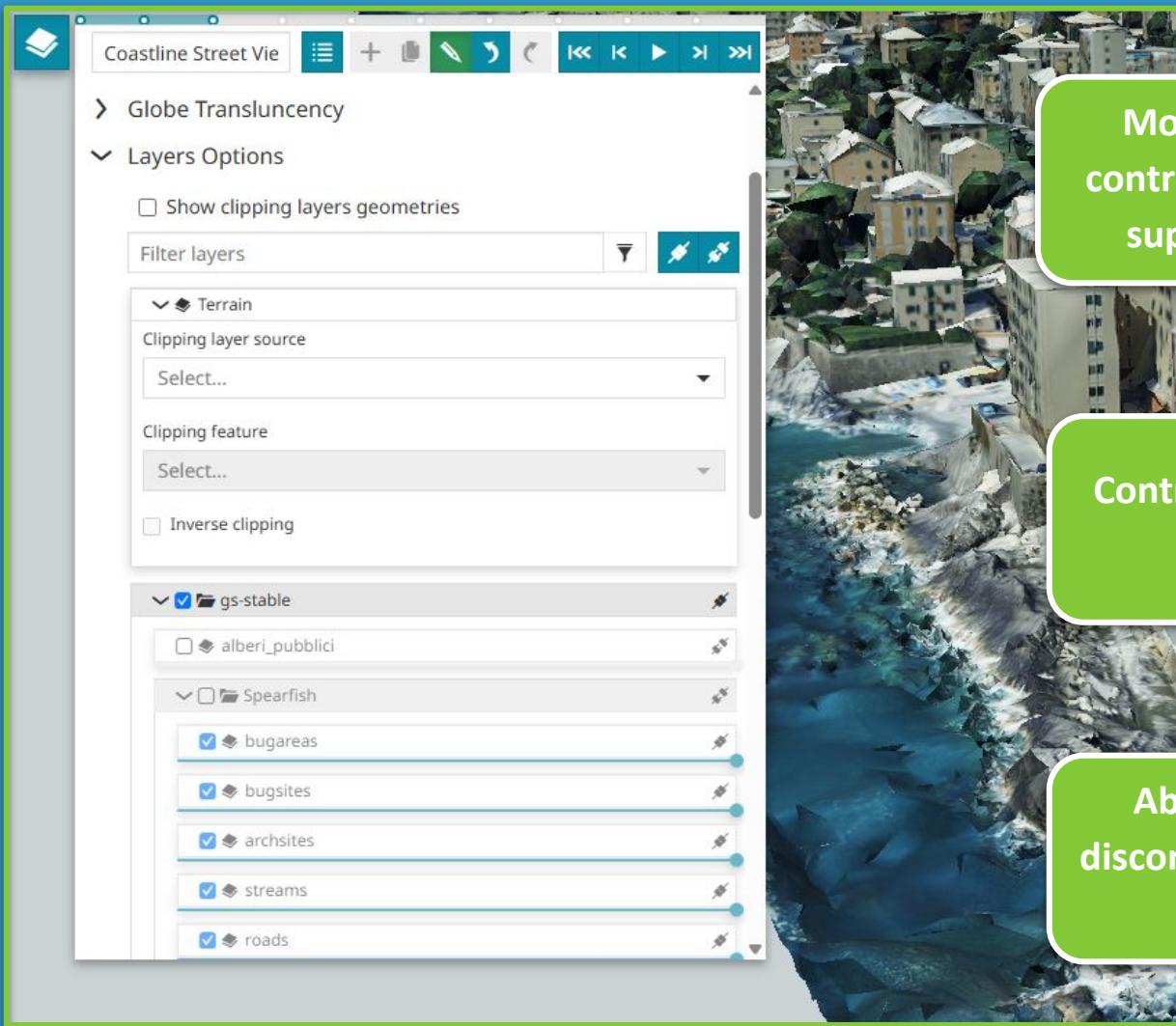
- MapStore User Session update with an improved support and a finest control on session items



Yes No

- Different clear options map specific
- **Search services also supported**
- **Attribute Table**
- **Table of Contents and others plugins**
- **Widgets**
- **Catalog services**

- MapStore MapViews update for an improved control of views layers with a more advanced TOC



More advanced TOC controls with embedded support for Terrains

Controls to sync with the main TOC

Ability to selectively disconnect layers from the main TOC

What's new in MapStore 2025.01

- Various dependency updates and clean up. Consolidated dependency management and code clean up



Check out the new version
from Github and enjoy the
new functionalities
released for MapStore 2025.01 also in geOrchestra!



The complete release notes are
available on Github at:

<https://github.com/geosolutions-it/MapStore2/releases/tag/v2025.01.00>



Ongoing works for MapStore 2025.02



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- Further enhancement for the overall project structure and the BE dependencies management

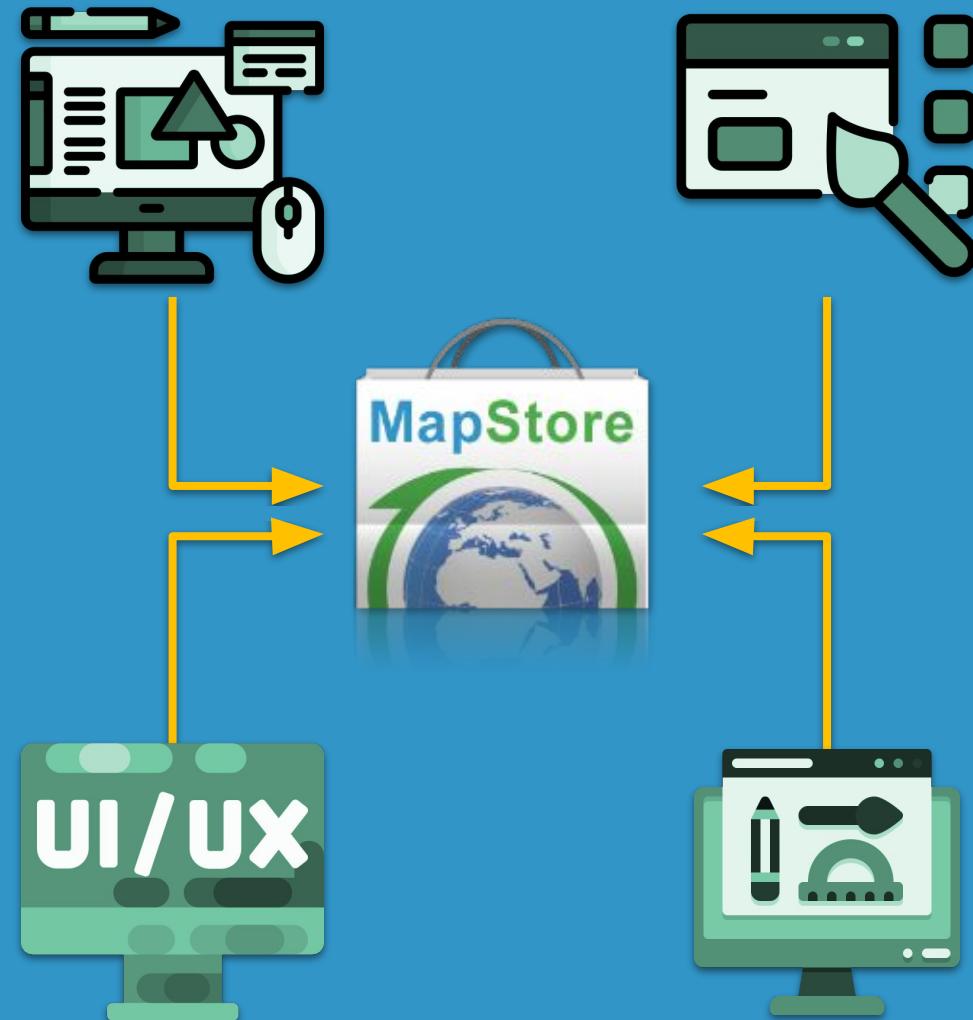


Ongoing works for MapStore 2025.02



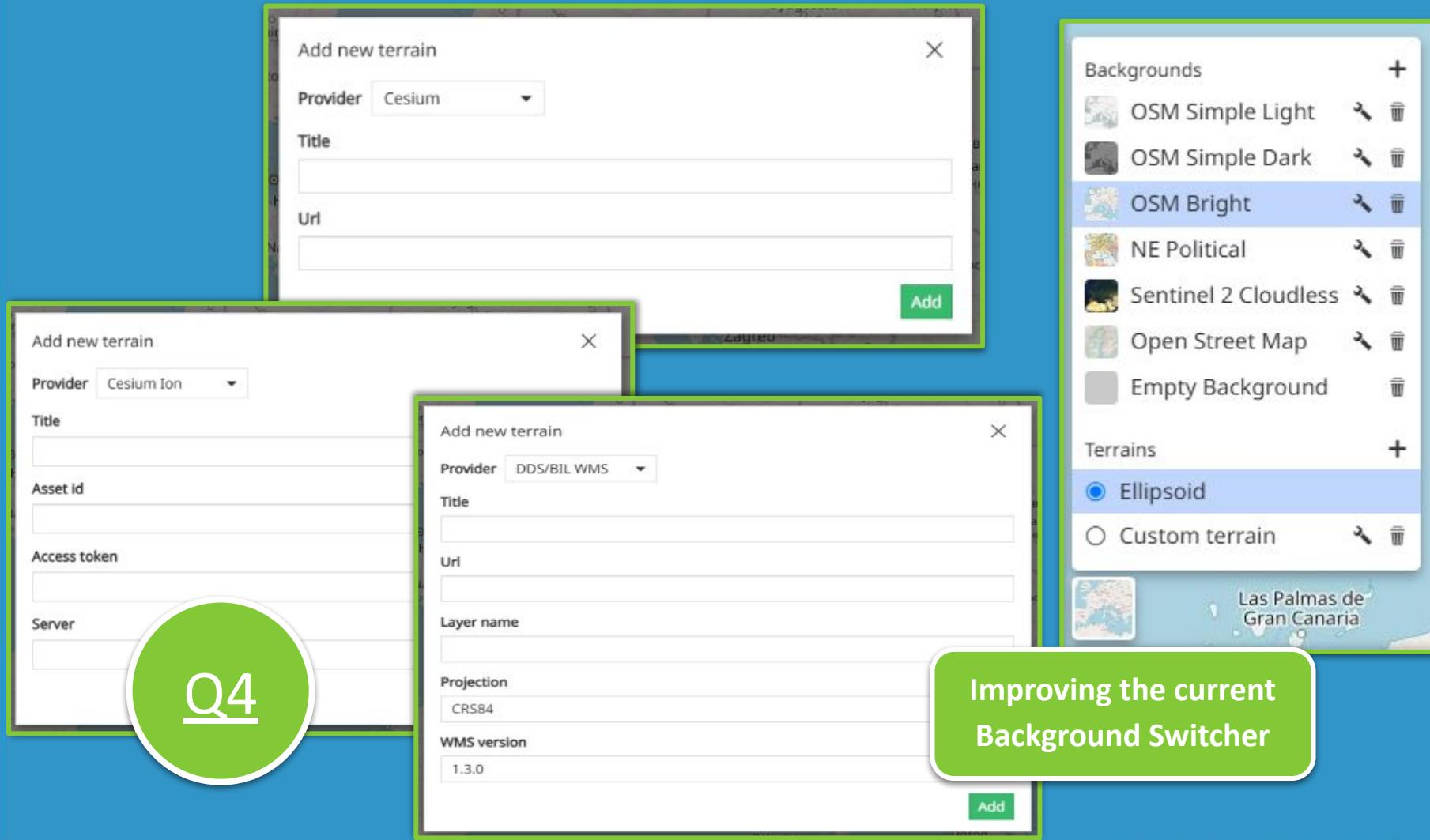
- Further updates for the MapStore's **theme** and **layout**
 - New default theme
 - Possibility to switch to dark theme from user menu
 - Further harmonization of buttons
 - Further updates on dialogs and card items
 - New font-family
 - New project entry page
 - Overall layout renew

Expected for **Q4 2025/2026**





- New **Terrain Switcher** component for managing terrain layers from UI and switching between them



The screenshot shows the MapStore interface with three overlapping 'Add new terrain' dialog boxes:

- The top dialog has 'Provider' set to 'Cesium'.
- The middle dialog has 'Provider' set to 'Cesium Ion'.
- The bottom dialog has 'Provider' set to 'DDS/BIL WMS'.

To the right, a sidebar lists 'Backgrounds' and 'Terrains':

- Backgrounds: OSM Simple Light, OSM Simple Dark, OSM Bright, NE Political, Sentinel 2 Cloudless, Open Street Map, Empty Background.
- Terrains: Ellipsoid (selected), Custom terrain.

A green circle containing the text 'Q4' is overlaid on the middle dialog. A green callout bubble contains the text 'Improving the current Background Switcher'.



- Enhancements for the GeoFence Rule Manager

Q3

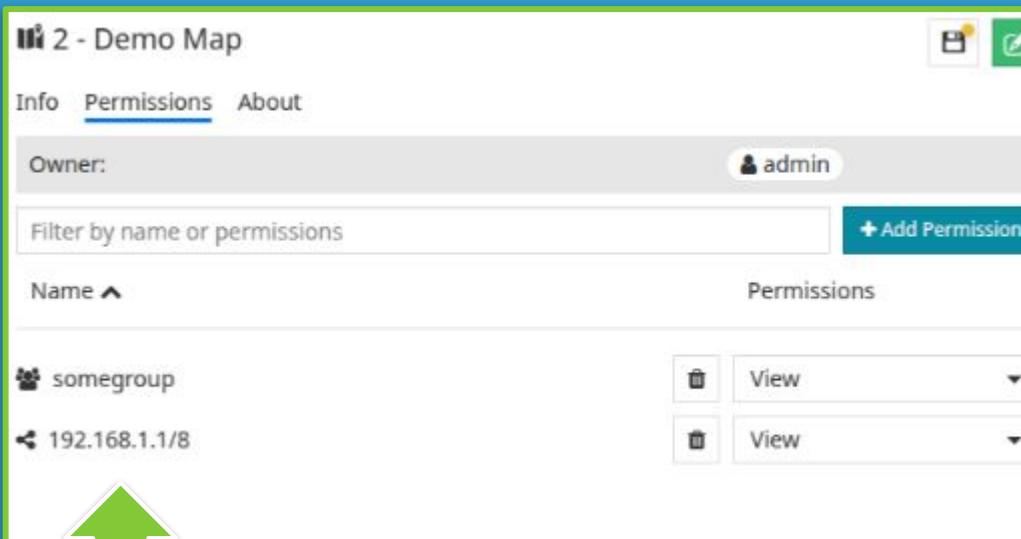
The screenshot shows the GeoFence Rule Manager interface. On the left, a large table lists numerous authentication rules. A green callout box highlights the filtering feature, stating "Filtering auth rules by IP address". In the center, a detailed rule editor window is open, showing fields for Role, User, IP, Service, Request, Workspace, Layer, Date, and Access. It also includes tabs for General Rule, Style, Filters, and Attributes Rule. A calendar is used to set validity periods. A green callout box states "Requires GeoServer v2.27 and GeoFence v3.8.0". On the right, a smaller table shows a subset of rules with specific access grants like "ALLOW" and "DENY".

Filtering auth rules by IP address

Requires GeoServer v2.27 and GeoFence v3.8.0

Managing auth rules by validity period automatically disabling them

- Managing Resource Permissions by IP address



2 - Demo Map

Info Permissions About

Owner: admin

Filter by name or permissions

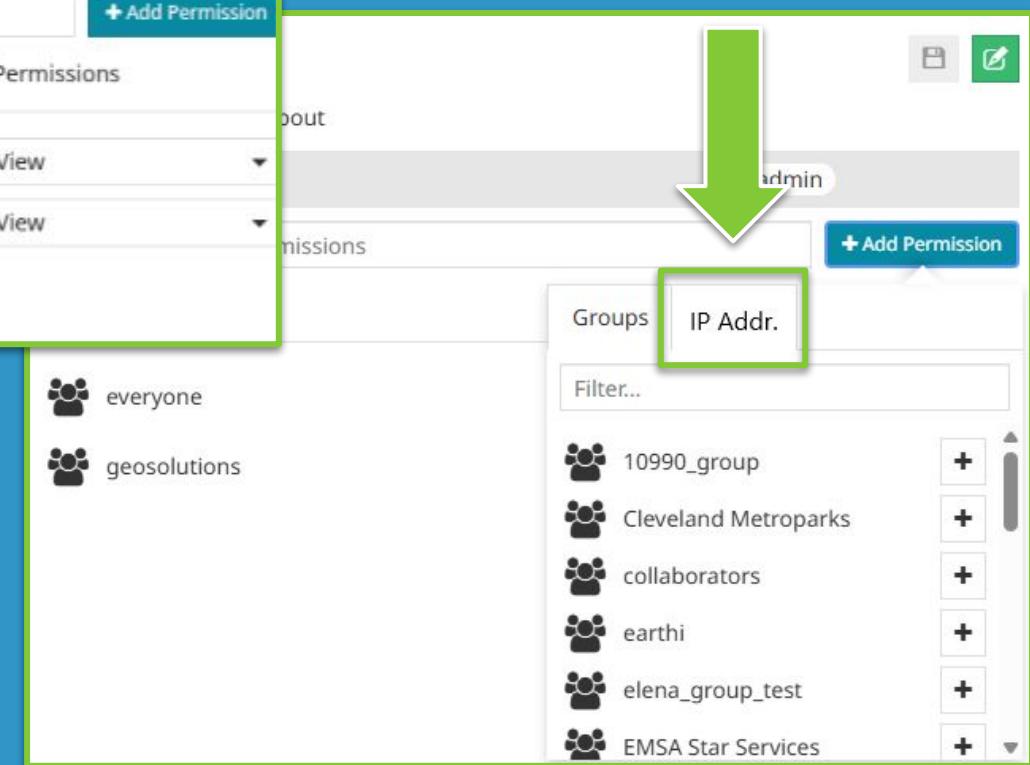
+ Add Permission

Name ▾

Permissions

somegroup View

192.168.1.1/8 View



about

admin

+ Add Permission

Groups

IP Addr.

everyone

geosolutions

Filter...

10990_group

Cleveland Metroparks

collaborators

earthi

elena_group_test

EMSA Star Services

More Info - Online resources

- **Demo site:** <https://mapstore.geosolutionsgroup.com>
- **User documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/v2025.01.00/user-guide/home-page/>
- **Developers documentation:**
<https://docs.mapstore.geosolutionsgroup.com/en/v2025.01.00/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