

# GXP Xplorer® and GXP WebView® v2.4.6 release details

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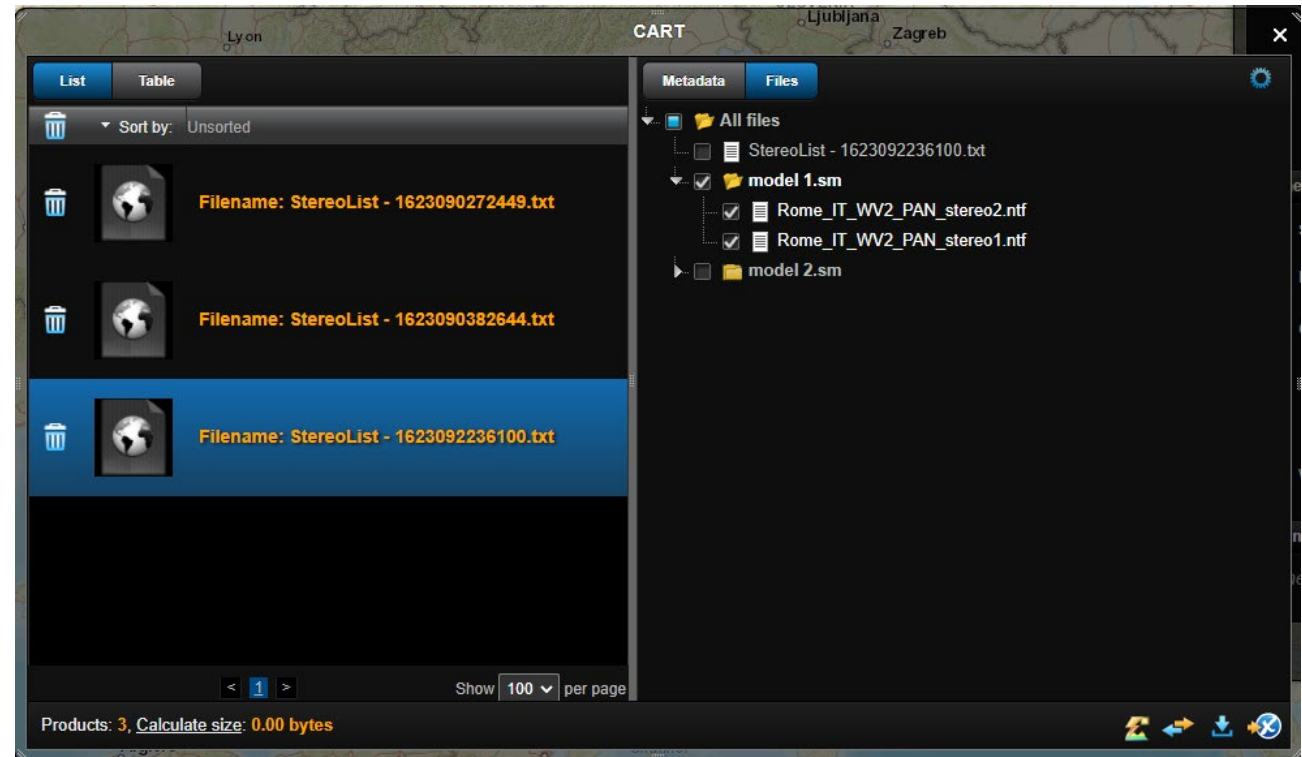
## Stereo Pair Finder

- A Stereo Pair Finder user interface has been added to the toolbar in the GXP Xplorer® Map and List Pages:
  - Only available if logged in.
  - Can limit search by Area of Interest (AOI).
  - Options to match sensors for pairs, set time limits between collects, and convergence angle (satellite imagery) or percent overlap (aerial frame imagery).
    - Additional search criteria can be added using the Advanced Search section.
- When a search is performed, a job will be submitted.
  - Status can be viewed in the Status window.

The screenshot shows the 'FIND STEREO PAIRS' dialog box. It has a title bar with a close button (X). The main content is divided into sections: 'Specify the location to identify stereo pairs' with input fields for '\*UL:' and '\*LR:' and a 'Select Area' button; 'Define the Stereo Model Criteria' with radio buttons for 'Satellite Imagery' and 'Aerial Frame Imagery', checkboxes for 'Limit pairs to matching sensor types' and 'Collected between', and time range inputs 'From: 2021-05-26T00:00:00Z' and 'To: 2021-06-02T23:59:59Z'; and 'Advanced Search' with a gear icon and the text 'The following fields are optional'. At the bottom are 'Submit' and 'Clear' buttons.

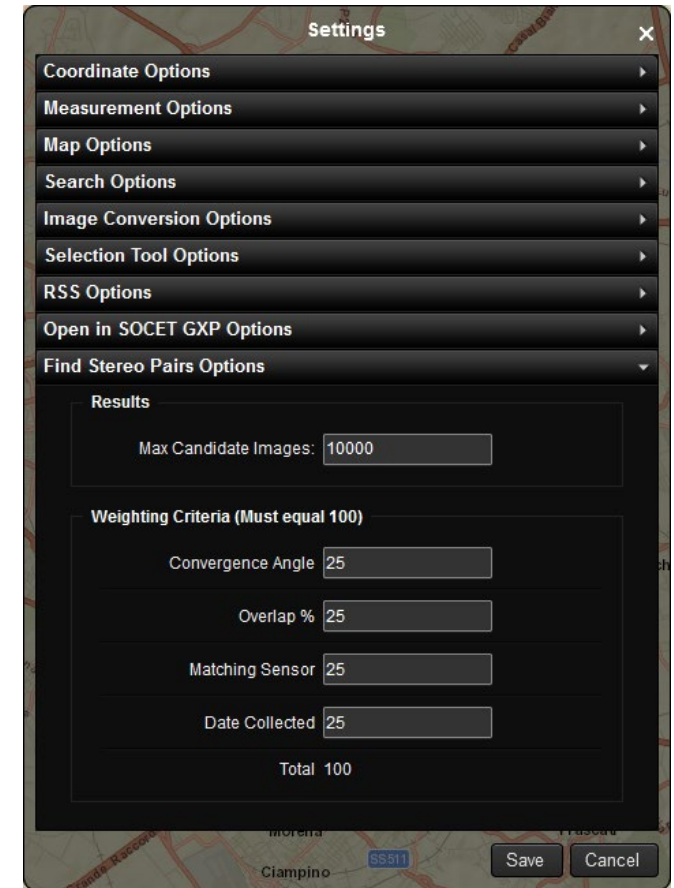
## Stereo Pair Finder ...2

- After the job completes, a text file and the stereo pairs will be added to the Cart.
- Users can download or FTP the stereo models, individual images, and a stereo list text file directly from the Cart.
- The stereo models or individual images can also be opened directly into SOCET GXP®.
- Automatic Terrain Generation (ATG) can be launched directly from here as well.



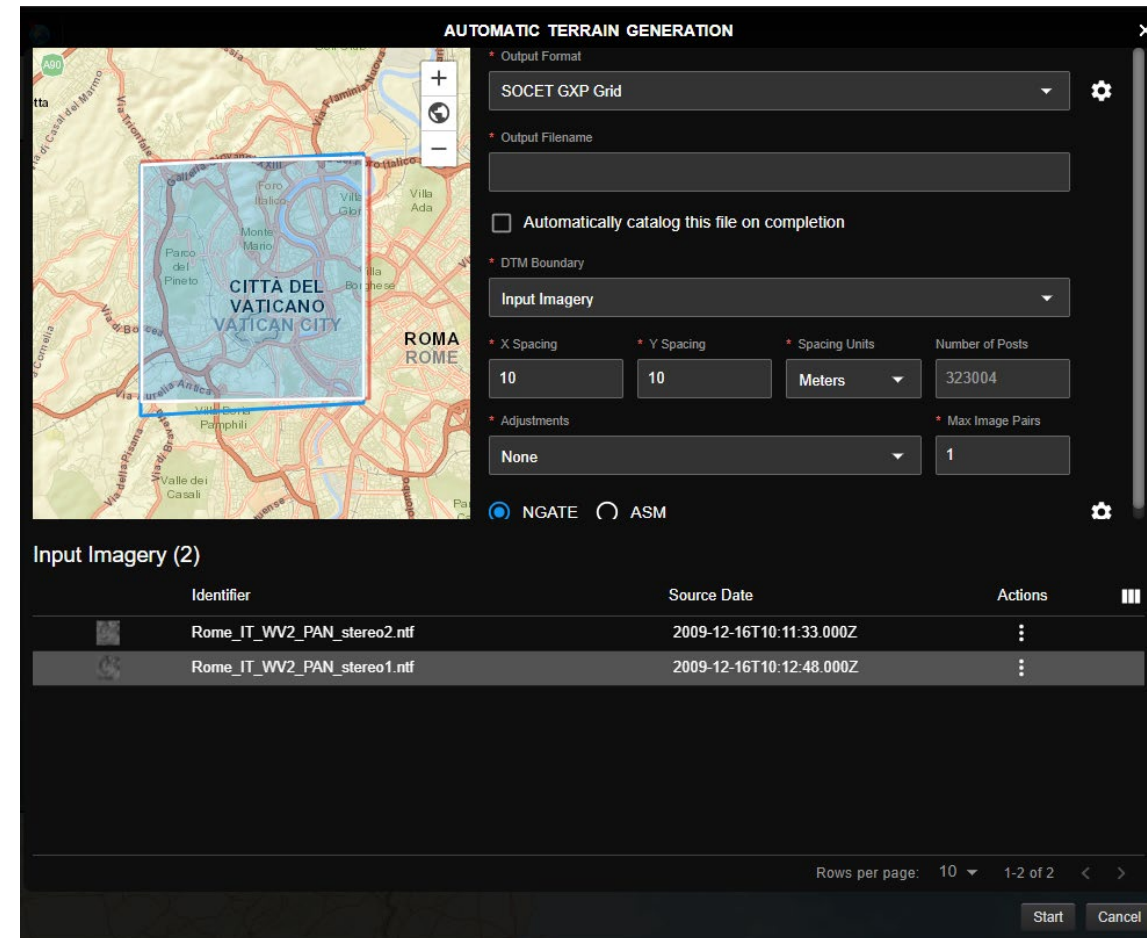
## Stereo Pair Finder ...3

- Settings have been added in GXP Xplorer for the Stereo Pair Finder.
  - The Max Candidate Images will determine how many images will be evaluated when deciding whether an image has a stereo match.
  - The Weighting Criteria determines how the algorithm applies different factors in determining the best stereo match for a particular image.



# Automatic Terrain Generation

- Users can now generate terrain directly from GXP Xplorer using stereo images (can be accessed from the Cart or the Product Gallery):
  - This is an add-on license module that can be added to GXP Xplorer (GXP\_TerrainGeneration).
    - Comes with one (1) ASM license and eight (8) ATG licenses.
      - Concurrent processors can be set in a configuration file.
    - Users must have the Catalog/Upload role to generate terrain.
  - Terrain can be generated in the following formats:
    - SOCET GXP Grid (.dth).
    - NITF
    - GeoTIFF
      - 32 bit float or 16 bit short.
    - Tiled and Precision Output settings can be changed for NITF and TIFF formats.
  - Coordinate system support includes:
    - Geographic and MGRS coordinate systems.
    - WGS\_84 horizontal datum (Degrees or Radians).
    - Ellipsoid and MSL vertical datums (International Feet, Meters, or US Survey Feet).
  - The boundary and spacing settings can be adjusted from this window.



## Automatic Terrain Generation ...2

- Both Automatic Spatial Modeler (ASM) and Next Generation Automatic Terrain Extraction (NGATE) algorithms are available for terrain generation.
  - ASM and NGATE settings and strategies can be customized.
  - Users can generate both bare-earth and surface models from either algorithm.

**Edit NGATE Strategy Settings** [Save] [Cancel]

\* NGATE Strategy  
ngate.strategy

**General Settings**

\* Smoothing: None  
\* Precision/Speed: High/Slow

**DTM Filters**

☒ Generate DSM (Includes Structures)  
☐ Generate DEM (Bare Earth)

**Bare Earth Settings**

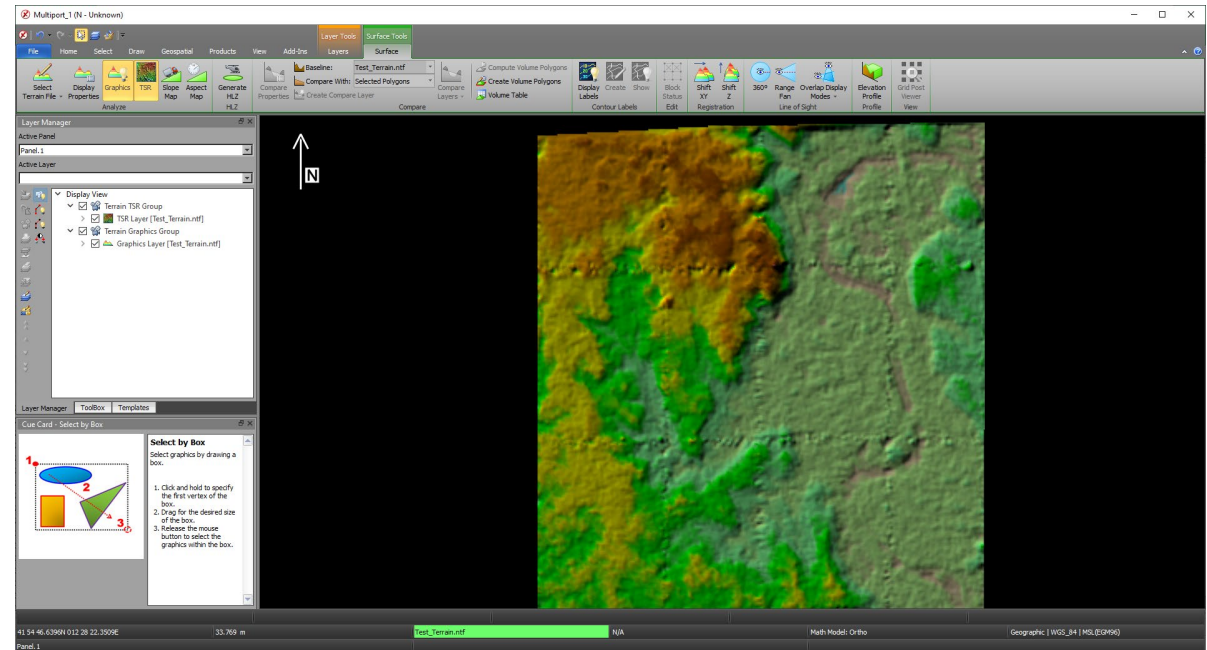
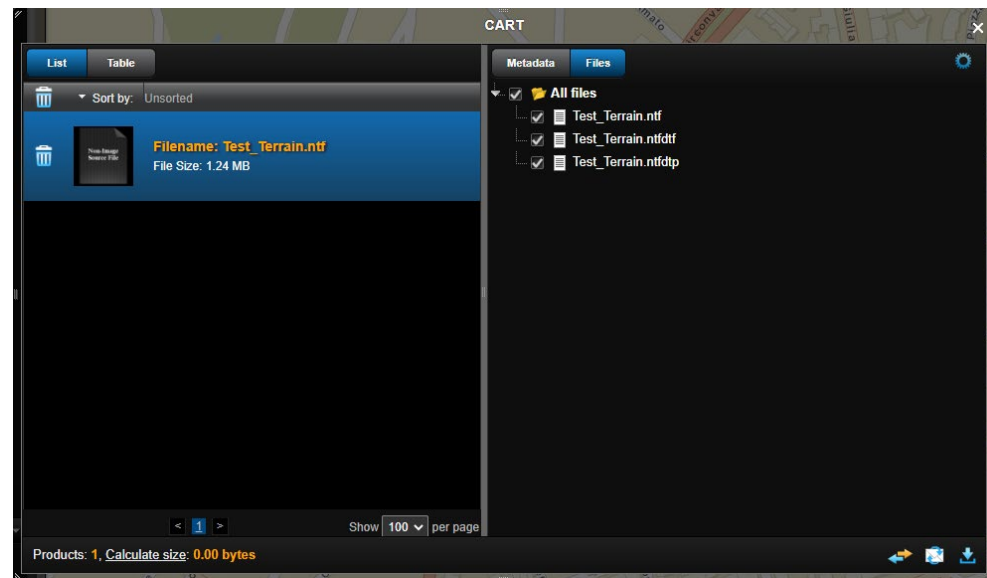
☐ Remove Small Objects  
\* Minimum Height: 3 meters  
\* Maximum Width: 30 meters

☐ Remove Large Objects  
\* Minimum Height: 10 meters  
\* Maximum Width: 100 meters

☐ Remove Editing Signature  
\* Vertical Deviation: 1.5 meters  
☐ Eliminate Wells  
\* Minimum Depth: 6 meters

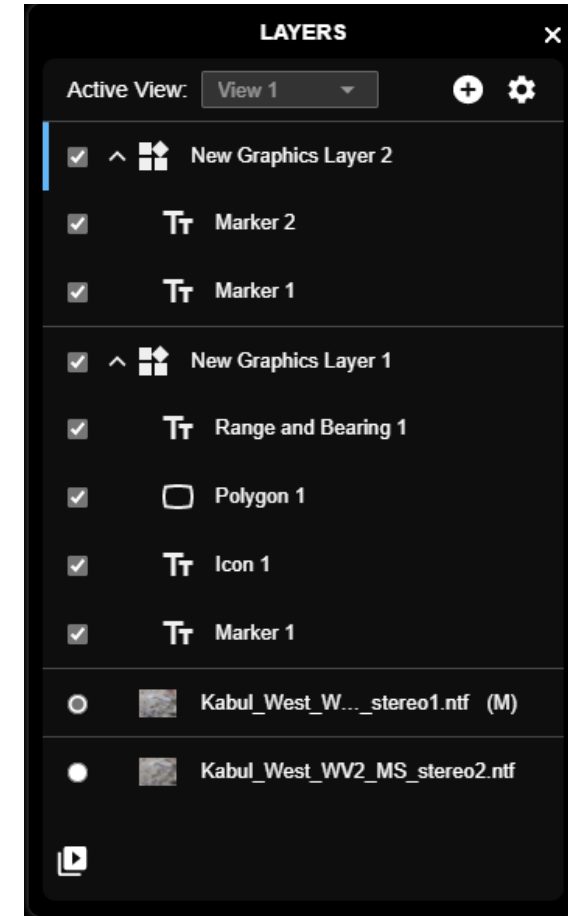
## Automatic Terrain Generation ...3

- Output can be automatically cataloged on completion.
  - If this is not checked, the file will still be available in the Cart.
- Terrain files can be downloaded or obtained through FTP in the Cart or Product Gallery if it was automatically cataloged and exploited using SOCET GXP.



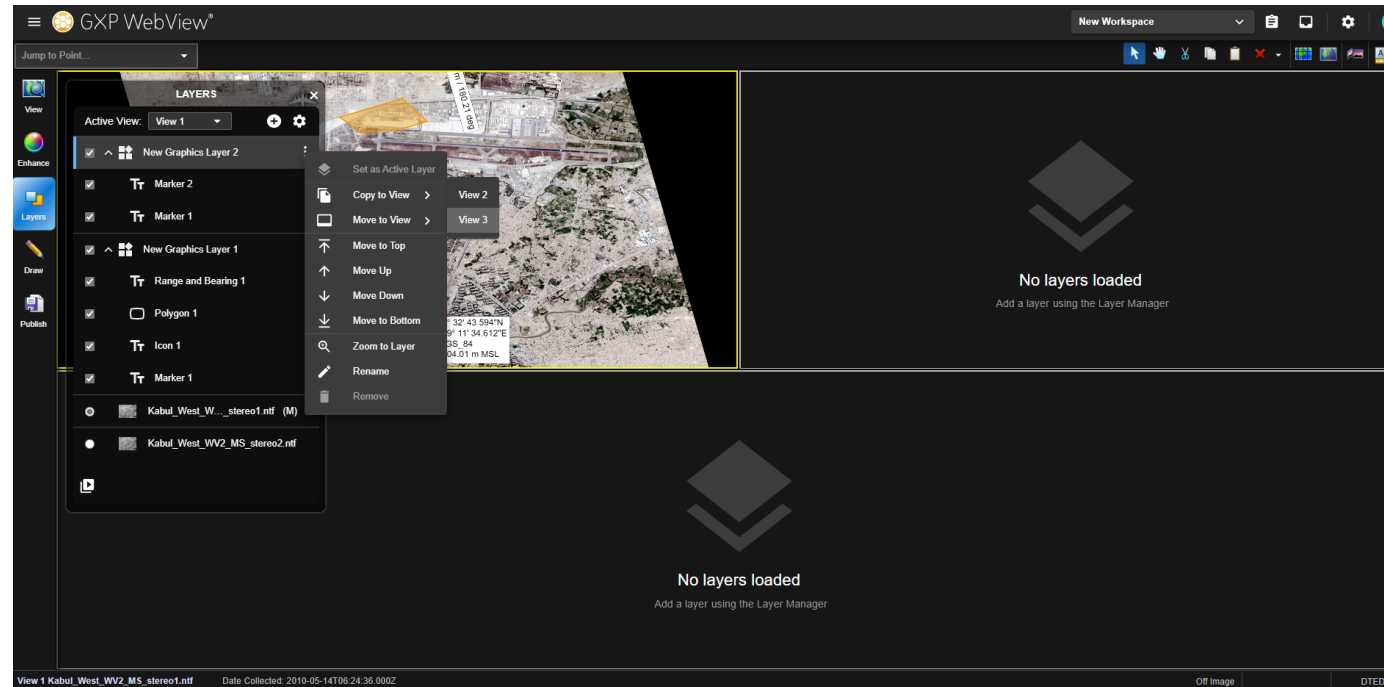
## Updated Layer Manager in GXP WebView®

- The Layer Manager in GXP WebView has been updated.
  - Multiple Graphic Layers can be created each with their own individual set of graphics.
    - Visibility for each layer can be toggled on and off.
    - Graphic Layers can be set as active to determine where drawn graphics will show up.
      - Active Layer is indicated by a blue bar to the left of each layer.
  - Image nodes, Graphic Layers, and individual graphics can be moved up or down in the Layer Manager using drag and drop now.
  - Multi-component files will show their sub-image layers along with the parent in the Layer Manager.
  - Templates will show as a node in the Layer Manager and will always be on top.
  - The Add New button has been updated and will now show recent images that can be loaded in addition to new Graphic Layers, and service layers (Web Map Service (WMS), Web Map Tile Service (WMTS), etc.).
  - The Image Mode (Single Image or Mosaic) has been added to a settings button.
  - Image sorting has been added to the settings button as well.
  - Animation of images has become much more performant.



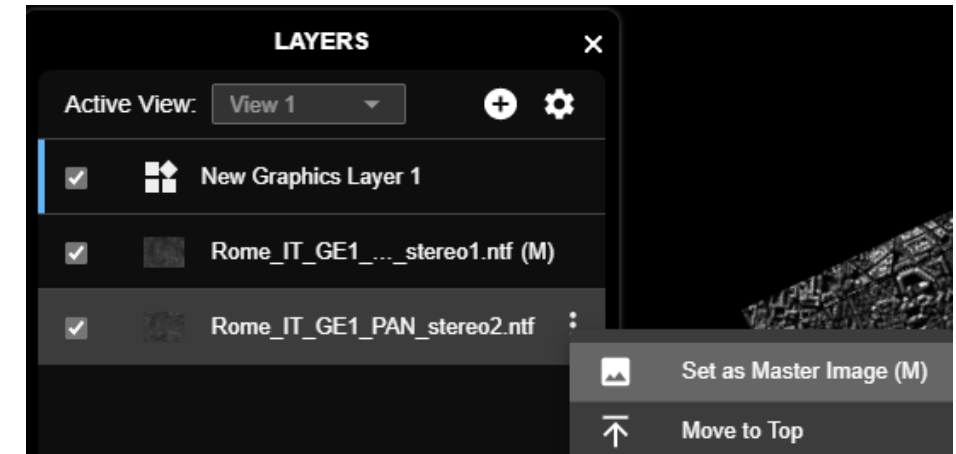
## Updated Layer Manager in GXP WebView ...2

- When multiple Views are available in GXP WebView, users can copy or move graphics and images from one View to another from the Layer Manager.



## Other significant enhancements

- When mosaicking images in GXP WebView, users can now set the Master image in the Layer Manager.
- Data can now be mosaicked with WMTS layers in GXP WebView.
- Users can now sharpen federated images that come from a v2.4.6 catalog.
- GXP Xplorer can now catalog Terraform terrain data.
- The All Source Analysis workflow has been limited to only work with Documents.
- A Workflow Description has been added when creating a Workflow.
  - This information will be included as Tasks get created.
- When upgrading or patching a distributed setup, the catalog and settings are now preserved.
- MSP has been updated to v1.6.4.



# GXP Fusion™ 2.4.6 release enhancements

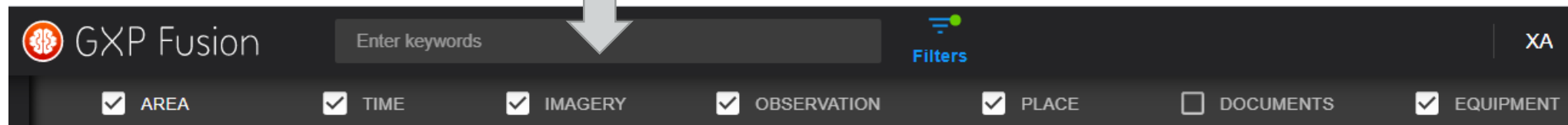
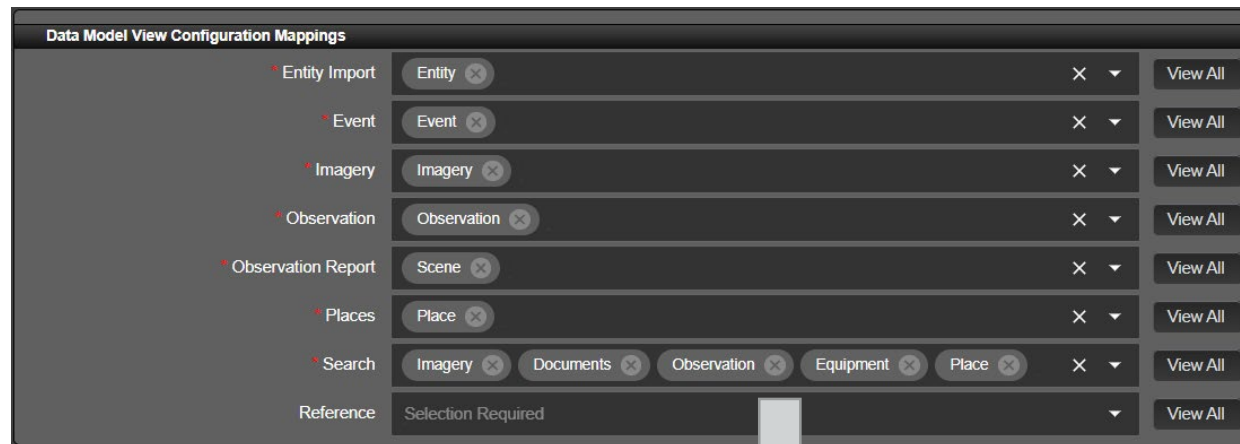
Gregg Goddard  
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## GXP Fusion v2.4.6 release enhancements

New features include improved user experience:

- Data model mapping to Fusion system layers.
- Filter data feeds by data type.



## GXP Fusion v2.4.6 release enhancements ...2

Other improvements include NLP enabled all source workflow with QA.

- Run Natural Language Processing on ingest (requires Rosette).
- Assign tasking to Analyst and QA roles.
  - New Roles created: Text Analyst and Text QA.
- Workflow task descriptions provide guidance to analyst.

The screenshot displays the 'Configuration' step of a four-step workflow. The steps are: 1. Define Rule, 2. Trigger, 3. Configuration (current), and 4. Preview. The 'Configuration' section contains three checked options: 'Run NLP', 'Analyst Required', and 'QA Required'. A question mark icon is next to 'QA Required'. At the bottom, there are buttons for 'Cancel', 'Previous', 'Next', and 'Skip Preview'.

1 Define Rule 2 Trigger 3 Configuration 4 Preview

**Configuration**

- ☒ Run NLP
- ☒ Analyst Required
- ☒ QA Required ?

Cancel Previous Next Skip Preview

# GXP InMotion™ v2.4.6 release details

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GXP Product Development



## GXP InMotion miscellaneous features

- GXP InMotion Web now indicates that web playback is available after cataloging.
  - Previously, there was no indication for a GXP InMotion Web user to tell if a recently cataloged video is ready for web playback. This feature now provides a preview of the video while the HLS finished rendering and informs the user.
- GXP InMotion Server Live Tracking (Capture) Update that designates Tracking Analytics Software Suite (TASS) to generate MPEG-2 TS files with embedded 0903.4 as output using a designated output URL.
- Mission 'Start Date' changed to when mission is started, versus when the Mission was created.

# GXP OpsView® v2.4.6 release enhancements

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GXP Product Development



## GXP OpsView v2.4.6 few Features

- **Added user “Orientation” to location reporting.**
  - Now you can see the direction Personnel are facing in real time.
  - *Note: the device must support reporting its orientation.*
- **Added support for “Height” values in a location.**
  - The Location Services endpoint now accepts “Lat Lon Elevation”, in addition to a simple “Lat Lon”.
  - Height values cannot be seen in the app yet.
  - 3-D visualization is coming in a future release.
- **Discretionary Access Controls (DAC) can now be applied to “Markers”.**
  - Now, Administrators and DAC Admins can create filters to control access to Markers.
  - They may also filter out specific Markers based on their details.





# Thank You

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