

GXP Xplorer® Platform v2.5.0 release details

Presented by GXP® Product Development



Infrastructure

- New licenses are required when upgrading from GXP Xplorer Platform v2.4 or earlier.
- A new add-on license was created to allow CORBA connections to Coalition Shared Databases (CSD)
 - GXP_CSDConnector
 - Can be added to GXP Xplorer Basic Plus and higher.
- Upgrade is supported from GXP Xplorer v2.4.4+.
- Federation is supported from GXP Xplorer v2.4.4+.
- DRS version is 5.6.05.R1.
- All instances of Log4j v2.x have been updated to v2.17.1 or later.
- Rancher compatibility has been updated to v2.6.5 for containerized deployments.
- Install Anywhere has been updated to 2021 SP2.

GXP Xplorer v2.5.0 updates



Job Queue

- A new Job Queue has been added across all products in the GXP Xplorer Platform.
 - All long running jobs will be managed with this Job Queue (Reformat, Terrain Generation, Video Clipping, etc.).
 - Admins will be able to see all jobs.
 - Users will only see jobs they have submitted.
 - This replaces the Status window from previous releases.
 - Download status can be obtained from the browser.
 - Can be accessed from the main menu ... Jobs.

GXP Xplorer® Platform

Jobs

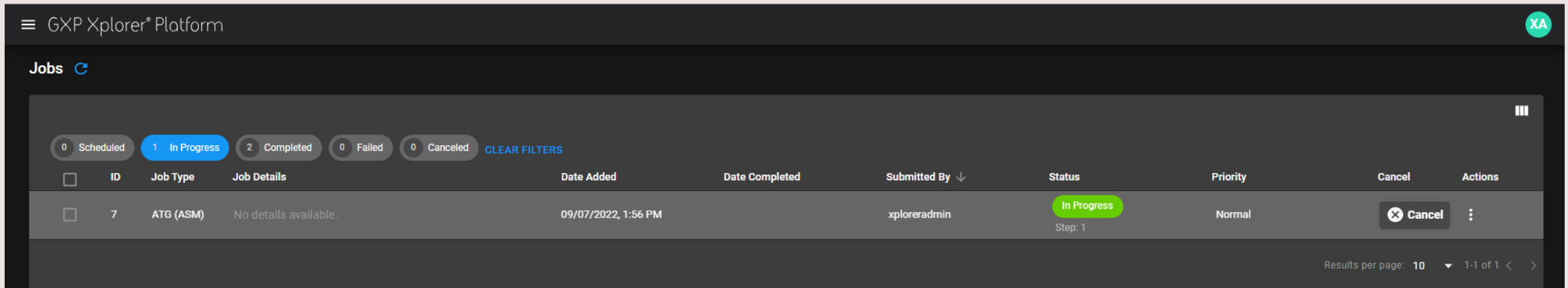
0 Scheduled 1 In Progress 2 Completed 0 Failed 0 Canceled

ID	Job Type	Job Details	Date Added	Date Completed	Submitted By	Status	Priority	Cancel	Actions
7	ATG (ASM)	No details available.	09/07/2022, 1:56 PM		xploreradmin	In Progress Step: 1	Normal	Cancel	⋮
6	Reformat	No details available.	09/07/2022, 1:54 PM	09/07/2022, 1:57 PM	xploreradmin	Completed			⋮
1	Create Video C...	No details available.	09/07/2022, 1:45 PM	09/07/2022, 1:46 PM	xploreradmin	Completed			⋮

Results per page: 10 1-3 of 3

Job Queue ...2

- Users can cancel jobs directly from this window.
- Priority of jobs can be set (as long as they are scheduled and not yet started or completed).
 - High, Normal, and Low options for priority.
 - Administrators are the only ones who can change priority.
- Users can filter based on status using the Status Filters along the top.



The screenshot displays the 'Jobs' section of the GXP Xplorer Platform. At the top, there is a navigation bar with the platform name and a user profile icon labeled 'XA'. Below this, the 'Jobs' header includes a refresh icon. A filter bar shows the following counts: 0 Scheduled, 1 In Progress (highlighted), 2 Completed, 0 Failed, and 0 Canceled, with a 'CLEAR FILTERS' link. The main content is a table with the following columns: ID, Job Type, Job Details, Date Added, Date Completed, Submitted By, Status, Priority, Cancel, and Actions. One job is listed with ID 7, Job Type ATG (ASM), Job Details 'No details available.', Date Added '09/07/2022, 1:56 PM', Submitted By 'xploradmin', Status 'In Progress' (highlighted in green), and Priority 'Normal'. The 'Cancel' button for this job is visible. At the bottom right, there is a pagination control showing 'Results per page: 10' and '1-1 of 1'.

ID	Job Type	Job Details	Date Added	Date Completed	Submitted By	Status	Priority	Cancel	Actions
7	ATG (ASM)	No details available.	09/07/2022, 1:56 PM		xploradmin	In Progress Step: 1	Normal	Cancel	⋮

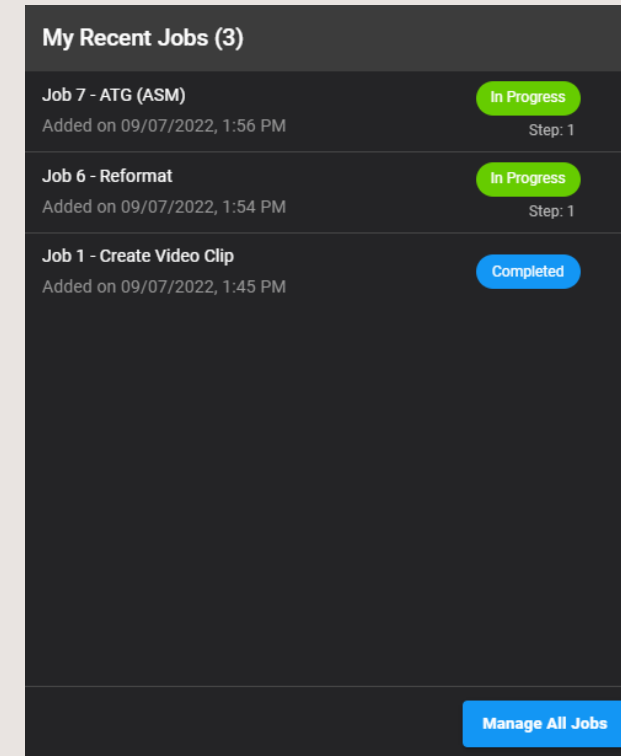
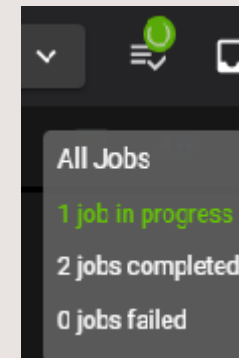
Jobs

- The following is a list of jobs that are handled through the job queue.
- Anonymous users are no longer allowed to submit jobs.

- ATG (ASM) (/terrain-generation/execute/asm)
- ATG (NGATE) (/terrain-generation/execute/ngate)
- Chip (/conversion/execute/pixchip)
- Chip to PowerPoint (/orchestration/chip-to-powerpoint)
- Convert then publish (/orchestration/convert-then-publish)
- Create video clip (/orchestration/create-video-clip)
- Create video chip (/orchestration/create-video-chip)
- Create video chip (/orchestration/create-video-chip-ppt)
- Ftp (/orchestration/format-image-ftp)
- Reformat (/conversion/execute/reformat)
- Video Reformat (/conversion/execute/videoReformat)
- Movint approve change (/tass/approveChangeSet)
- Movint publish kmz (/tass/publishKmz)
- Movint publish shapefile (/tass/publish/Shape)
- Rset (/conversion/execute/rset)
- WFS URIs (/publishing/publish/wfs)
- Stage (/staging/stage)
- Order (/ordering/order)
- Orthomosaic (ortho/execute/orthomosaic)
- Stereo Pair Finder (/orchestration/find-stereo-pairs)
- Subset (/conversion/execute/geosubset)
- TASS Track Generation (/tass/generate/generateTracks)
- TASS VMTI Track Generation (/tass/generate/generateVMTITracks)
- TASS Publish KMZ (/tass/publishKmz)
- TASS Publish Shape (/tass/publishShape)

Jobs Indicator

- A quick status can be obtained from the main toolbar ... Jobs Indicator.
 - Hovering over this will give a snapshot of jobs in progress.
 - Clicking on this will bring up My Recent Jobs.
 - The Manage All Jobs button will take you to the main Jobs page.

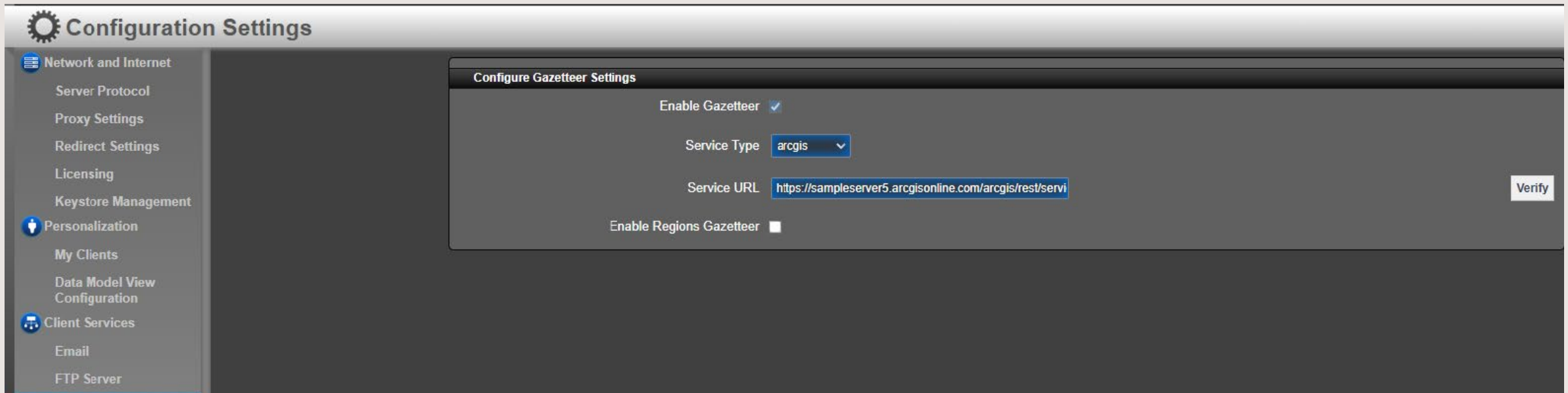


Automated Jobs

- The Mosaic Algorithms section in Administration Settings ... GXP Xplorer Global Settings has been renamed to Automated Jobs.
- This is the location to setup future or re-occurring processing algorithms against data in the GXP Xplorer catalog.
 - Can include Orthomosaic, Orthophoto, automatic target recognition algorithms, etc.

ArcGIS Gazetteer

- Support has been added for using ArcGIS web-based Gazetteers (Geocode Service).
 - Configured in Administration Settings ... Configuration Settings ... Gazetteer.
 - Multiple links can be added using a comma separated list of URLs.

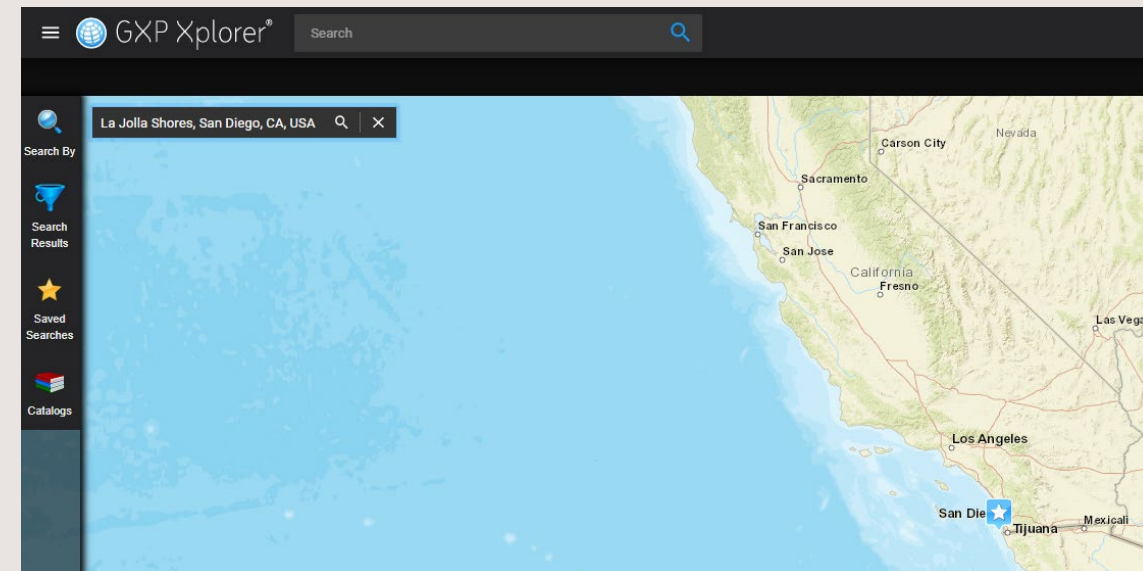
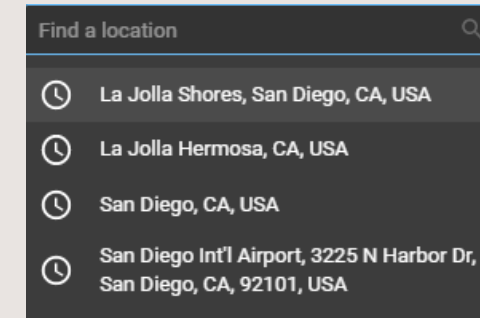


The screenshot displays the 'Configuration Settings' interface. On the left is a navigation menu with categories: 'Network and Internet' (Server Protocol, Proxy Settings, Redirect Settings, Licensing, Keystore Management), 'Personalization' (My Clients, Data Model View, Configuration), and 'Client Services' (Email, FTP Server). The main content area is titled 'Configure Gazetteer Settings' and contains the following configuration options:

- Enable Gazetteer**:
- Service Type**:
- Service URL**:
- Enable Regions Gazetteer**:

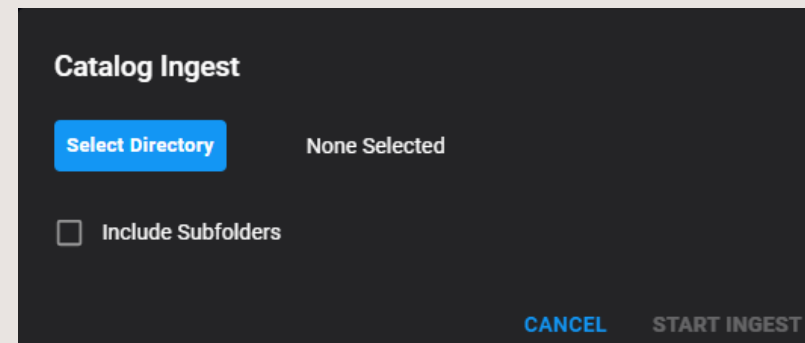
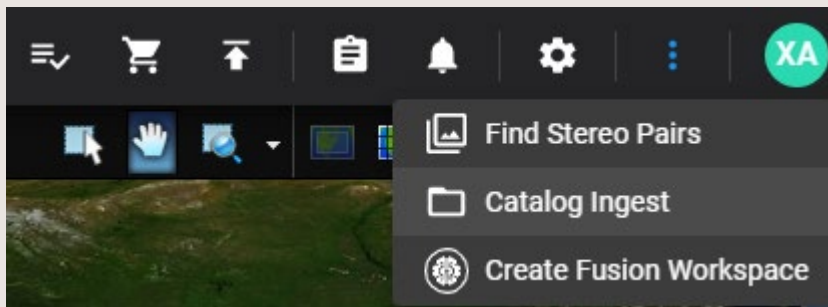
Jump to Point updates

- The GXP Xplorer Map Page has been updated to use the new Jump to Point tool that was previously implemented in GXP WebView.
 - Users no longer have to select different sources depending on what they want to jump to.
 - As users type, suggestions will be added to the drop-down.
 - A history has been added keeping track of the last five locations a user has jumped to.
 - Users can clear the marker that is automatically dropped when jumping to a point by clearing the location.
- This Jump to Point tool has also been implemented consistently across all products in the GXP Xplorer Platform.



User Roles updates

- A new role has been added called Ingest Metrics Analyst.
 - Users with this role will be able to access the Metrics pages associated with catalog ingest only (no other administration or metrics functionality).
 - Ingest Overview, Tile Pyramid Overview, Crawl Metrics, Ingest Detail, Browse Metrics, Parse Metrics.
- A new capability has been added to the Catalog Ingest Role to allow users to do a one time directed ingest for cataloging.
 - This is applicable only if users aren't actively cataloging directories (directories are defined, but disabled).
 - When activated, this will catalog the selected directory as a one-time event.



Discretionary Access Control updates

- Users can now enforce AND rules for Discretionary Access Control.
 - So users must be a part of group 1 and group 2 in order to see data.

The screenshot shows a configuration window for Discretionary Access Filters. At the top, there is a header "Discretionary Access Filters:" followed by a search box containing "Filters..." and a "Preview" button. Below this is a "General" tab. The "Enabled" toggle is turned on. The "Filter Name" field is empty. The "Included Groups" section shows two groups, "DAC Group 1" and "DAC Group 2", with an "X" icon and a dropdown arrow. To the right of the groups are radio buttons for "AND" (selected) and "OR". The "Discoverable Types" dropdown is set to "All Types" with a "View All Data Types" button. At the bottom, the "Include Non-Geotagged" checkbox is checked.

Container updates

- Users can now customize containers in GXP Xplorer by excluding components of the containers.
 - For example, a multipart NITF with 1 image component and 2 shapefile components can be made to ignore the shapefile components when cataloging.
 - This is done by adding in a .json file in the following location.
 - C:\Program Files\GXP Xplorer Platform Data\config\karaf\sgxpParseConfig
 - Users can make complex Lucene queries to determine which containers are affected and which components are ignored.
- Users can also enforce a container to not be created if only a single component remains as a result of these rules.
 - Setting is in: <GXP Xplorer Platform Data>\config\karaf\etc\com.baesystems.gxp.services.parser.sgxp.cfg
 - sgxp.metadata.service.rule.preventContainerIfOneChild = false

```
{
  "parseRules": [
    {
      "primaryContainer": {
        "query": "tags: NITF2.1"
      },
      "excludeComponents": {
        "query": "tags: Vector"
      }
    },
    {
      "primaryContainer": {
        "query": "tags: VIS"
      },
      "excludeComponents": {
        "query": "tags: Shapefile"
      }
    }
  ]
}
```

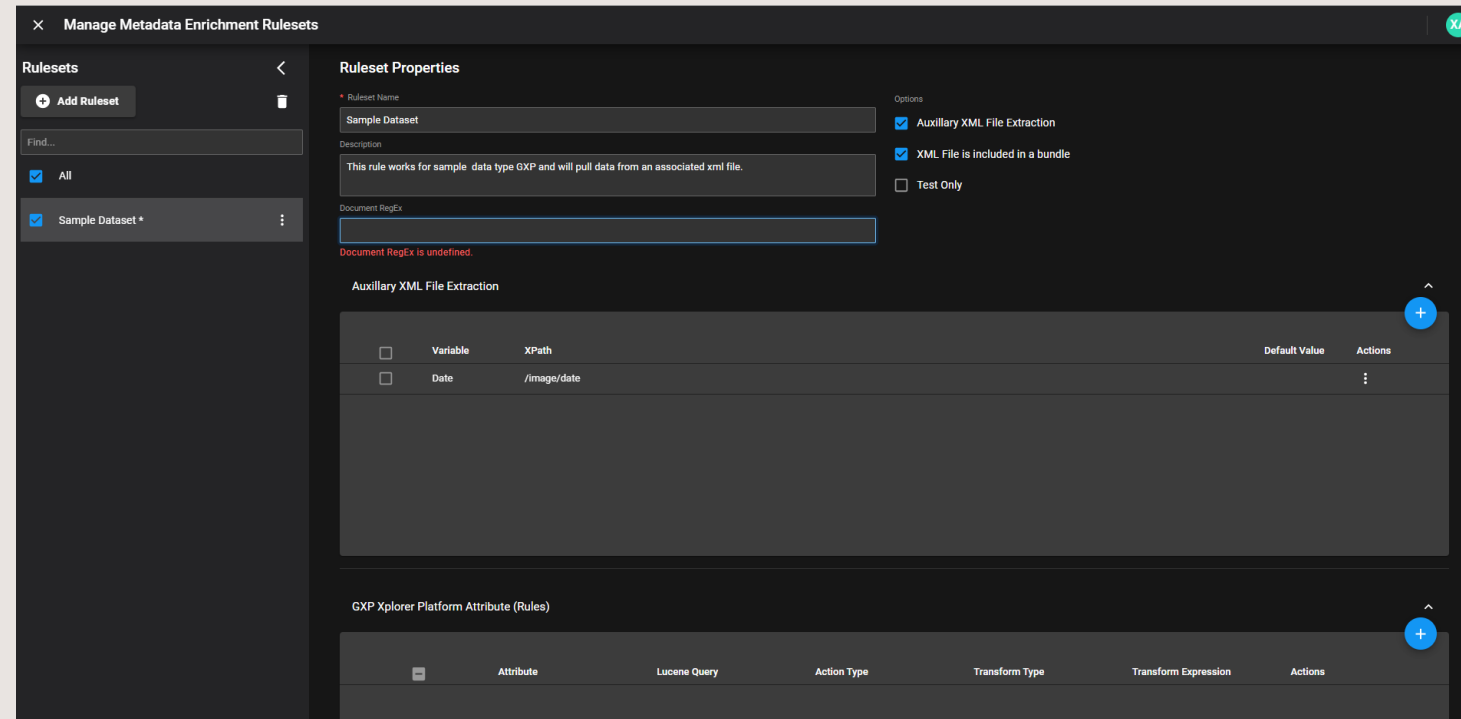
Metadata Enrichment

- A new capability has been added to Data Management to allow for extracting metadata from auxiliary XML files or directly populating metadata fields in the catalog.
- Users can define how to identify the auxiliary files as well as which metadata to pull out and map to fields in the GXP Xplorer catalog.
 - This is customized through Rulesets.

The screenshot shows a configuration window with two main sections: 'General' and 'Actions'. In the 'General' section, the '* Task Name' is set to 'Metadata Extraction' and the 'Task Description' field contains the placeholder text 'Please enter a short description of the task...'. In the 'Actions' section, the 'Action' dropdown is set to 'METADATAENRICHMENT - Enrich Metadata based on customizab...' and the 'Ruleset' dropdown is set to 'Unnamed ruleset 0'. A 'Manage Rulesets' button is located to the right of the Ruleset dropdown.

Metadata Enrichment Rulesets

- Users can define regular expressions to identify how to find the auxiliary files.
- Auxiliary XML File Extraction checkbox must be checked.
- The Auxiliary XML File Extraction section let's users define what metadata to pull out of the XML file using Xpaths.
- Will be stored in the user defined Variable.
- A default value can be set if the value happens to be unpopulated in the XML file.



Metadata Enrichment Rulesets ...2

- The GXP Xplorer Platform Attribute (Rules) section allows users to define how the value pulled out gets mapped to the GXP Xplorer catalog.
 - The Attribute is the field in the GXP Xplorer catalog that will be populated.
 - Lucene Query optionally allows users to define if this rule will get applied.
 - The Action Type defines if metadata will be replaced, removed, or appended in the catalog.
 - Transform Type:
 - String – Stores value as a string.
 - Make WKT Point – Converts value into well known text coordinates
 - Evaluate – Allows for manipulation of the metadata such as converting radians to degrees.
 - Make Date Time Attribute – Converts value into a date.
 - Transform Expression – This is dependent on the Transform Type.

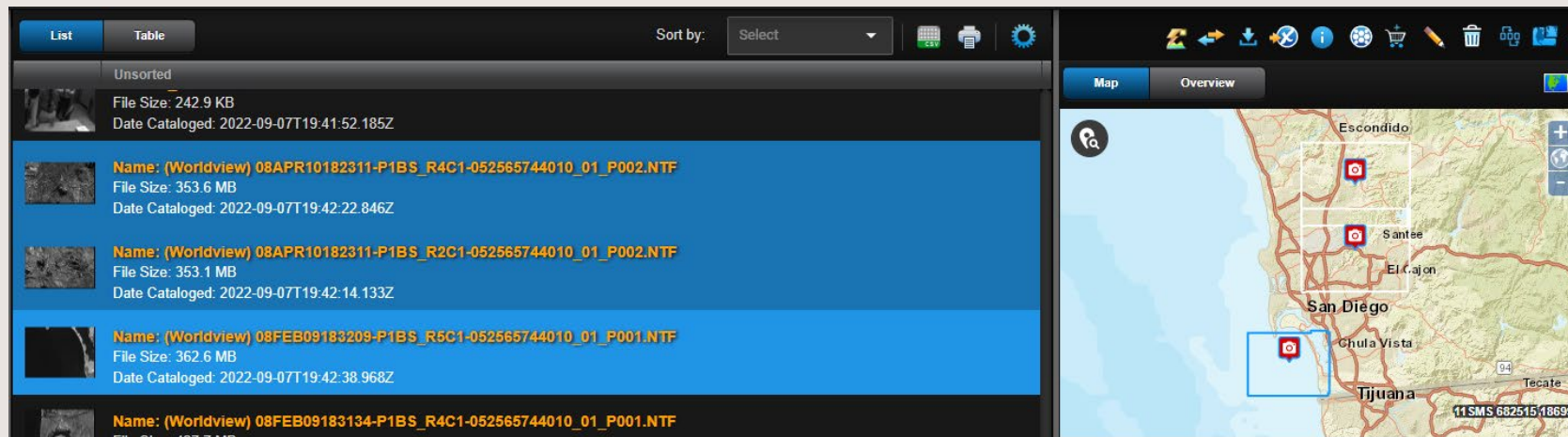
The screenshot shows a 'New Attribute' configuration form with the following fields and options:

- * Attribute:** A text input field.
- Lucene Query:** A text input field.
- * Action Type:** A dropdown menu with 'Replace' selected.
- * Transform Type:** A dropdown menu with 'STRING' selected.
- * Transform Expression:** A text input field.

At the bottom right, there are two buttons: 'CANCEL' and 'CREATE'.

Other significant enhancements

- GATOR has been added as an automated target recognition algorithm.
- Users can now select multiple images from the List Page and see all of the selected footprints in the map .
- The source for results can be shown in the Jump to Point tool through a configuration value.
 - Useful if multiple sources are being searched such as multiple ArcGIS Geocode Services.
 - `jump-to-point.showSource = true` in `<data dir>\config\webclient\webClient_dynamic.properties`.
- The Planet catalog plugin was updated to require permissions for activating imagery.
- The API documentation pages have been updated.

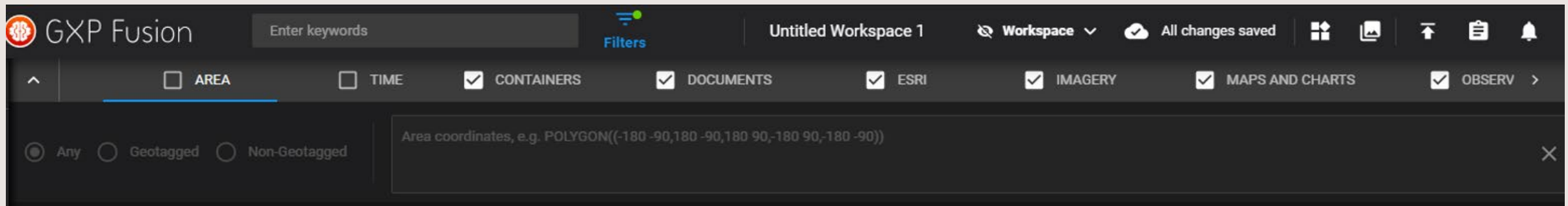


GXP Fusion v2.5.0 updates



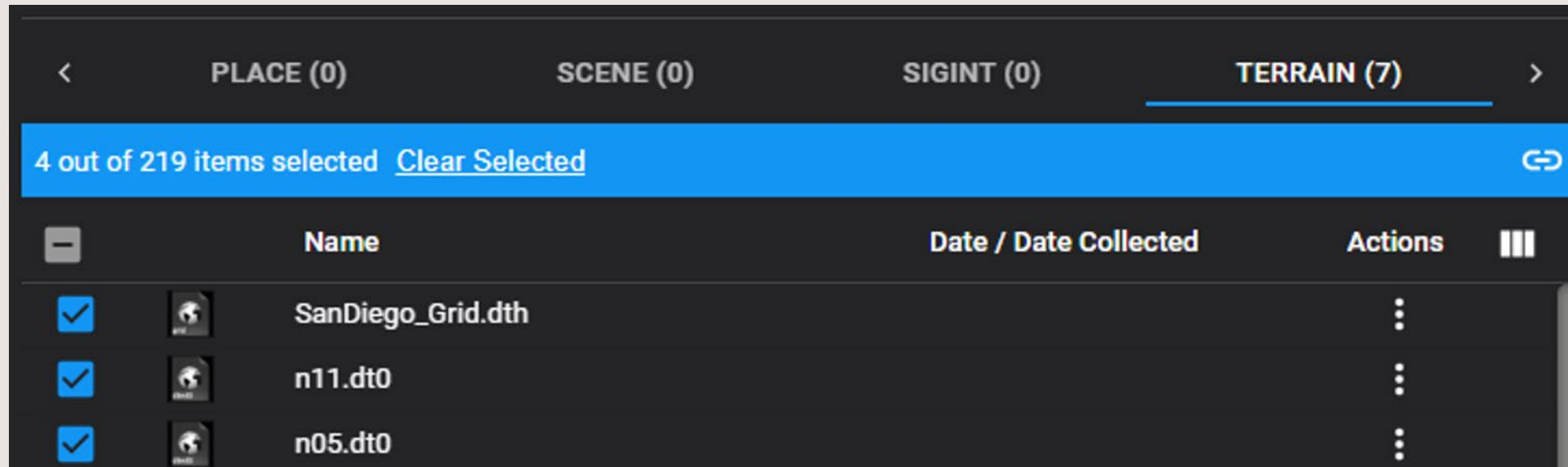
GXP Fusion Data Feed Filters

- The Data Feed Filters previously used with GXP Fusion now default to open / expanded so users can easily see and make changes.
- The Data Feed Filters can still be collapsed, if preferred.



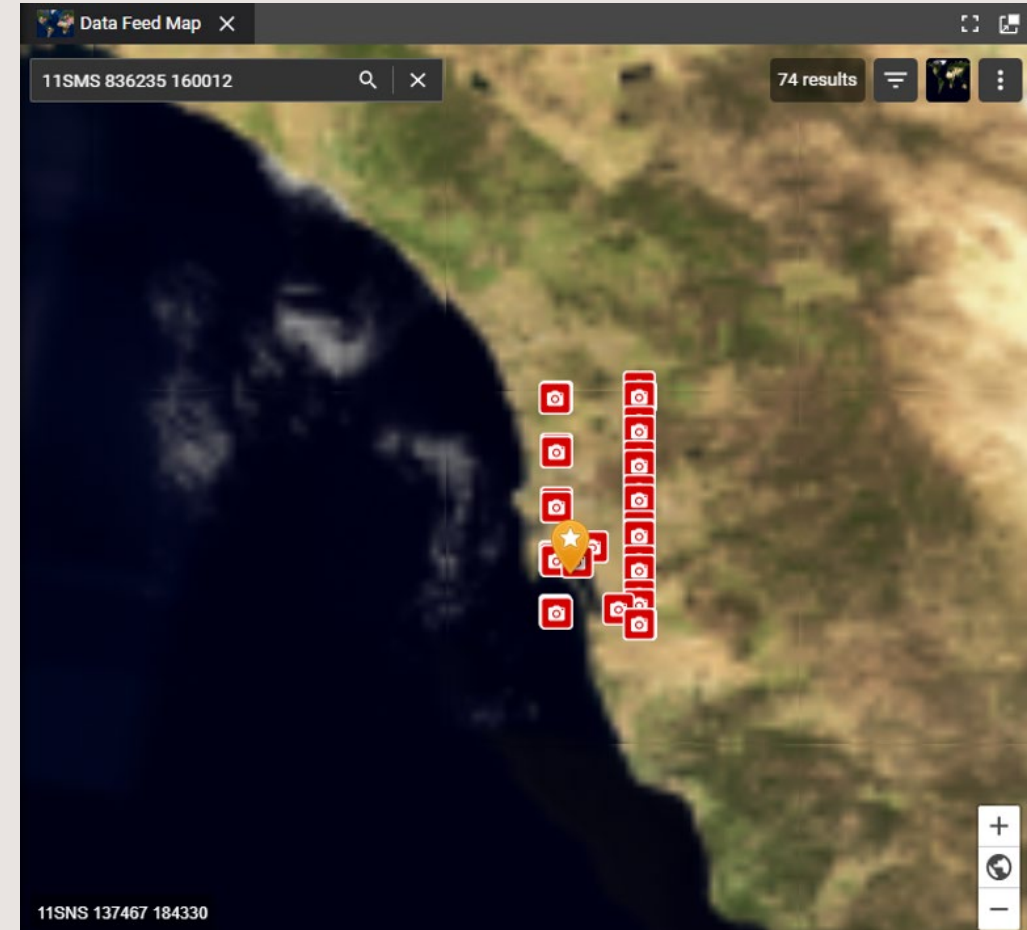
GXP Fusion Shareable Product Link from the Data Feed List

- Quickly generate a link for your customers to download selected products.
 - Select individual products on the left using the check boxes.
 - Click the link icon on the upper right blue bar to create your shareable link.
- Link will generate a zip file containing all shared products.



GXP Fusion Jump-To-Point

- Users can now insert a coordinate into the jump-to-point box and re-center their Data Feed Map or Data Feed Globe widgets.
- An orange icon is added to the map or globe for reference.
- Each widget still acts individually so users can search different locations in each widget simultaneously.



GXP InMotion™ v2.5.0 updates



GXP InMotion significant features

- Remove restrictions on unique 'call sign' field.
 - The GXP InMotion server has capture and restream services. These services require basic fields to properly catalog and tag the captured video feeds. Typically, users set up multiple channels in advance of when missions begin, typically reusing the same call sign information. In v2.5.0.0 work was performed to remove those restrictions put on the 'call sign' field to prevent any other channel to have the same call sign. The realized value for administration of the video feeds is that user doesn't have to come up with a unique call sign for each individual channel.
- Implemented Output Channel Uniqueness on Startup
 - In scenarios where 2 output channels (like 2 video restream outputs) are allowed to have the same triplet <IP address, Port number, NIC device>, and broadcast at the same time, the received data could be corrupted.
 - A previous enhancement to restrict this was implemented on channel creation, but based on input from the user representatives this was determined to be overly restrictive. This feature implemented a start channel 'check' to make sure that the channel being started doesn't have a duplicate channel running already.

Thank you