GXP Xplorer® Platform v2.5.5 release details

Presented by GXP® Product Development

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The GXP ecosystem

SOCET GXP®

DESKTOP UI

GXP WEBVIEW®

WEB / SERVER UI

WIM / STREAMING

STREAMING

GXP XPLORER PLATFORM

DISCONNECTED

GXP XPLORER® DISCONNECTED

MOBILE

GXP ONSCENE™

DATA MANAGEMENT	VIDEO ANALYSIS	TRACK MANAGEMENT	DATA FUSION	OPERATIONAL RESPONSE
GXP XPLORER® MODULE	GXP INMOTION™ MODULE	TASS MODULE	GXP FUSION™ MODULE	GXP OPSVIEW® MODULE

SHARED CORE COMPONENTS	CLASSIFIED COMPONENTS	BASE SERVICES	DATABASE SERVICES	AI / ML	ADD-ON SERVICES	DEVLAB / APIs	PIXEL STREAMING	SENSOR MODELS

PARTNERS

INFRASTRUCTURE		
HYBRID / CLOUD	ON PREMISE SERVER / DATA CENTER	STAND-ALONE

SUPPORT SERVICES	
CUSTOMER TECHNICAL SOLUTIONS	PROFESSIONAL SERVICES

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Infrastructure

- New licenses are required when upgrading from GXP Xplorer Platform v2.4 or earlier.

- Upgrades are supported from GXP Xplorer v2.5.1+.

  - Reclassification must occur after upgrading (see release notes or System Admin Manual) from v2.5.2 or earlier.

- Federation is supported for GXP Xplorer v2.5.1+.

- Synchronization is supported for GXP Xplorer v2.5.1+ (see release notes for additional information).

- Data Reformatting Services (DRS) v5.6.08.R2.15 which contains Mensuration Services Program (MSP) v2.1.0.

- Core Software Development Kit (SDK) MSP is v2.1.1.

- Microsoft Edge® has been added as a supported browser.

- Enterprise deployment has been updated for Universal Base Image 8 (UBI8) Operating System (OS) support.

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GXP Xplorer v2.5.5 updates

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Support for multiple locations in Documents

- When cataloging a Document with multiple coordinates, the search results will show all locations on the Map page as opposed to just the first coordinate.

  - The marker will be placed at the first coordinate extracted with points showing other locations.

- In addition, a new preference has been added to control how many characters are cataloged from Documents.

  - Administration Settings …GXP Xplorer Application Settings …Discovery Agent …Documents …Max Character Limit.

  - Can be set up to 50,000 characters.

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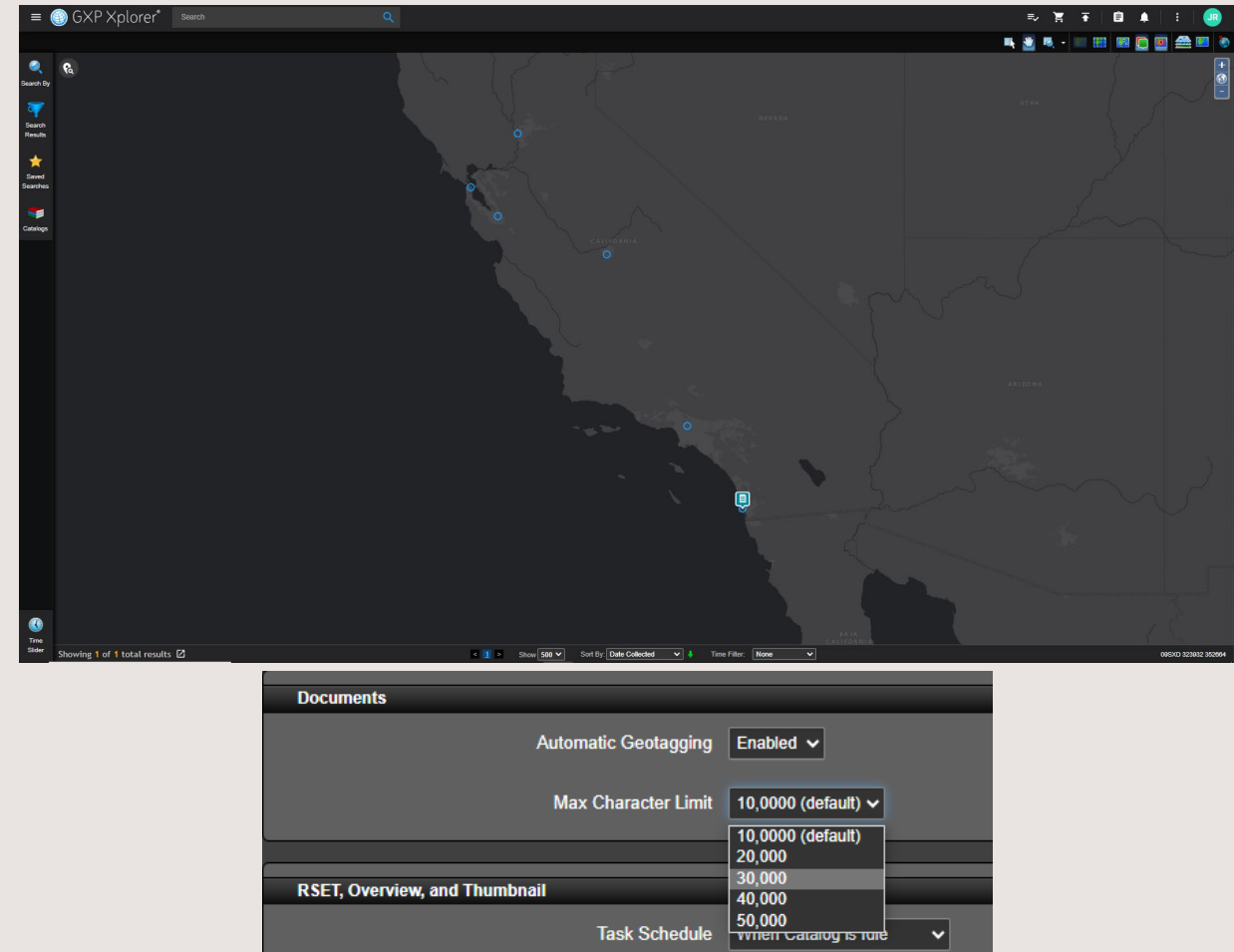
Catalog of Esri® feature servers

- GXP Xplorer can now catalog Esri feature servers.
  - Set in Administration Settings …GXP Xplorer Application Settings …ArcGIS® Instance.
  - Can choose to catalog Map or feature servers.

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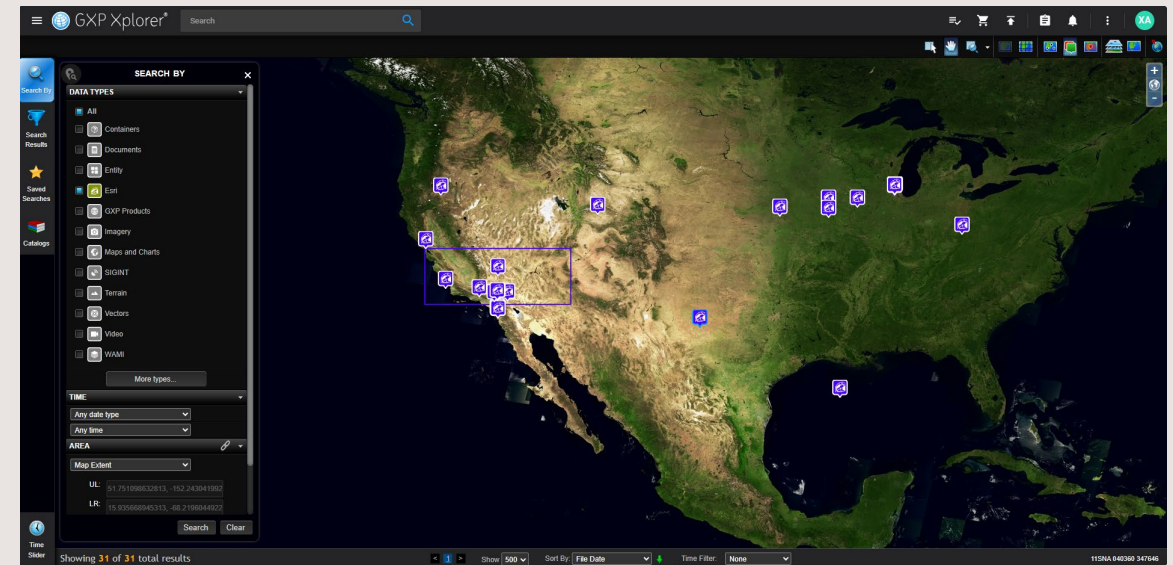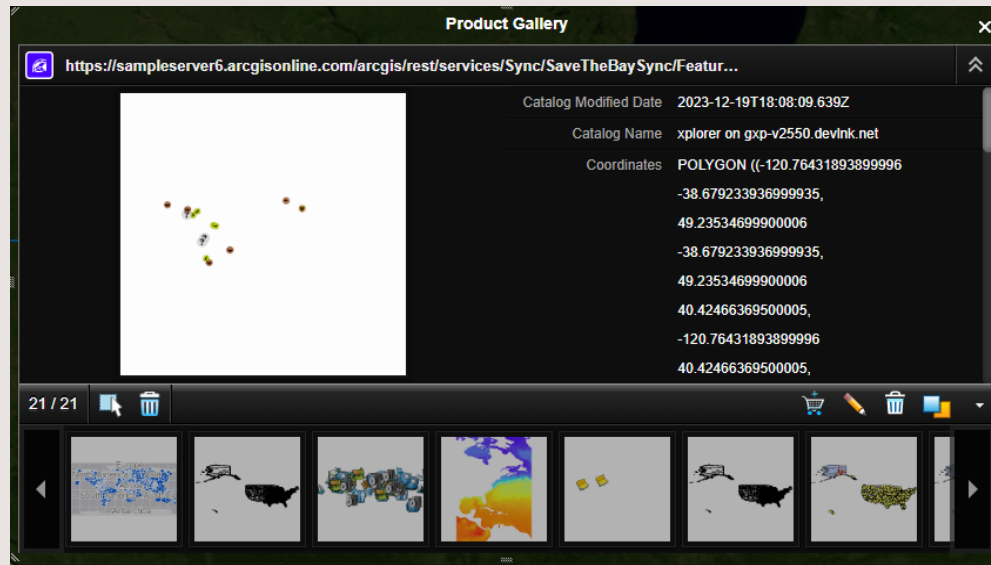
Tile Pyramid Rendering (TPR) updates

- Additional configuration parameters have been added to the Tile Data Management job for TPR.

  - Can be triggered on demand or on schedule from Data Management.

  - On Discovery is available from the Discovery Agent.

- Product retention days has been added to the Tile Cleanup Data Management Task.

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TPR updates …2

- Additional functionality is now supported when using TPR.
  - J2K format.
  - Automatic Dynamic Range Adjustment (ADRA).
  - Rigorous mensuration.
  - TIL format.
- Some functionality is still in work for TPR including Band Selection and Sharpness.
  - In order to enable these enhancements, if desired, a user can select Enable all enhancements which will switch them to a pixel server stream where these enhancements will be available.

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Workflow updates

- Additional information is now shown when viewing Workflow Tasks:

  - Created on.

  - User entered description.

  - Location.

  - Source.

  - Area of Interest (AOI).

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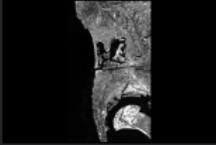
Custom Workflows

- A new page has been added called Workflow Definitions to allow users to edit and create new Workflows for GXP Xplorer Platform.
  - This page can be accessed by Administrators or Workflow Supervisors under the Workflows section.
  - Workflows included in GXP Xplorer Platform by default cannot be edited.
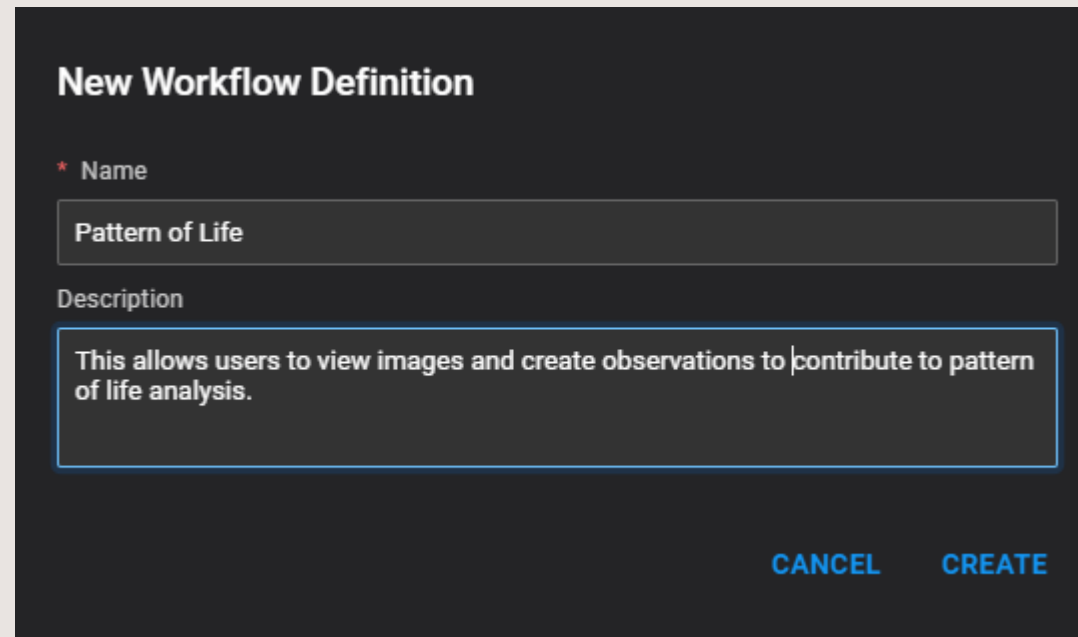 - Workflows can be enabled or disabled from this page.

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Custom Workflows …2

- Existing Workflows can be cloned to use as the basis for creating a new Workflow or new Workflows can be created from scratch.

- New or cloned Workflows will be in draft form until published.

Custom Workflows ...3

- Creating a new Workflow allows users to give it a Name and a Description.

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Custom Workflows ...4

- Clicking on a Workflow will take you the editor to see a model representation of the Workflow that a user can edit.
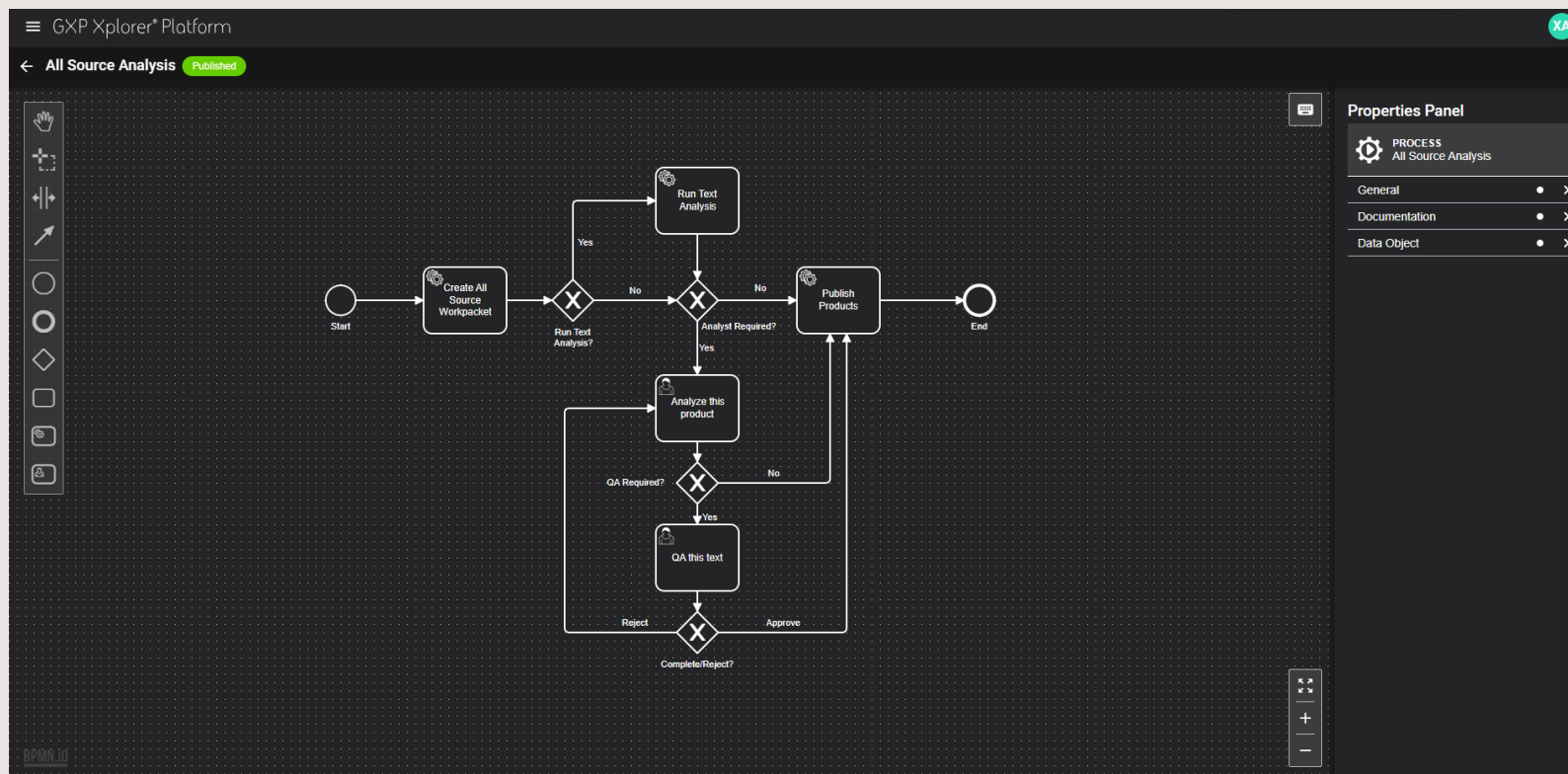
Custom Workflows …5

- Users have several options from the Workflow editor page:
  - Save.
  - Save as.
  - Delete.
  - Download Scalable Vector Graphic (SVG) representation of the Workflow model.
  - Download the Business Process Model and Notation (BPMN) file (the actual Workflow file).

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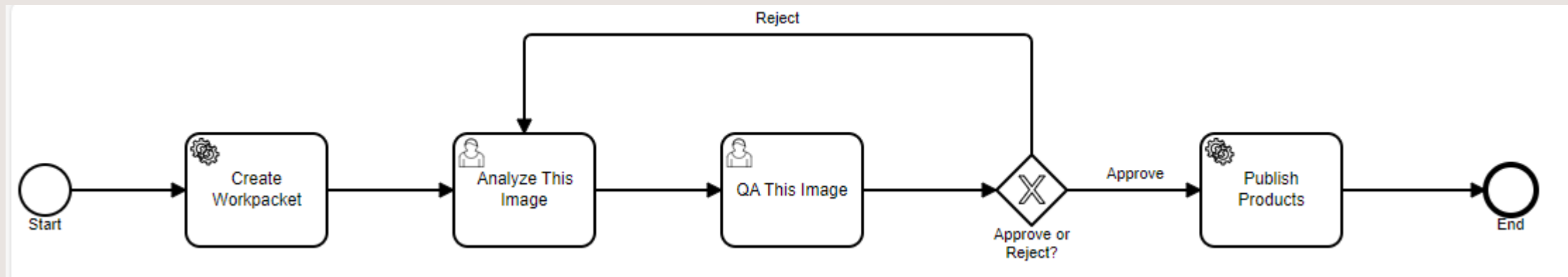
Custom Workflows …6
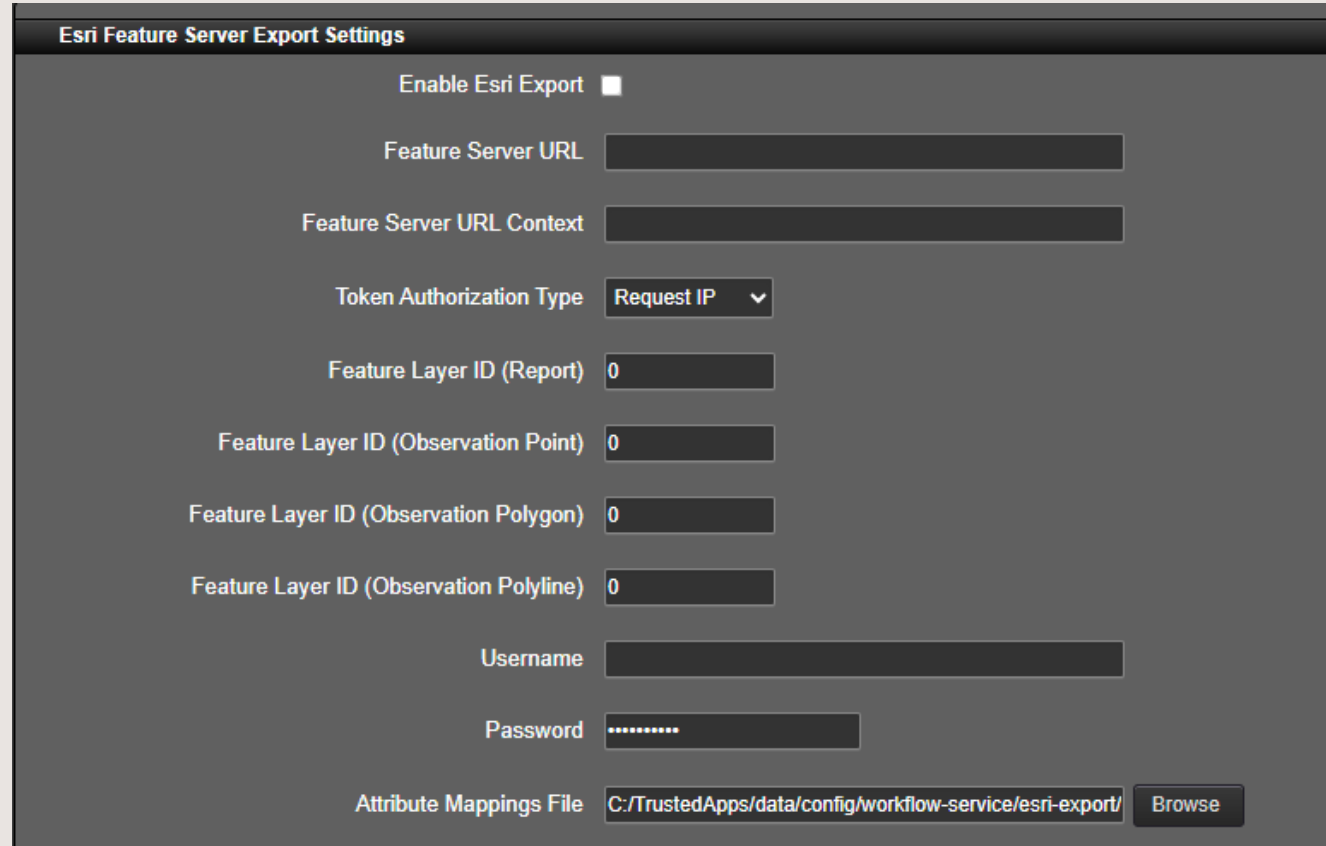
- Workflows use BPMN format.

- The editor is an embedded capability called BPMN.io

- The creation of Workflows and how to utilize the various components including Start Event, End Event, Gateways (decision points), etc. will require advanced training for most users.

Other significant enhancements

- Workflow metrics are now available on upgraded systems.

- When creating an all source Workflow, it will include Non-Geotagged which will now automatically be checked.

- Tasks are now automatically unassigned from a user if that user is deleted.

- Polyline and polygon geometries are now supported for export when dual publishing Observations to an Esri feature server.

- All users with catalog/import permission can now request the product from a metadata sync.

Esri Feature Server Export Settings

Enable Esri Export	☐
Feature Server URL	
Feature Server URL Context	
Token Authorization Type	Request IP ▾
Feature Layer ID (Report)	0
Feature Layer ID (Observation Point)	0
Feature Layer ID (Observation Polygon)	0
Feature Layer ID (Observation Polyline)	0
Username	
Password	•••••••••
Attribute Mappings File	C:/TrustedApps/data/config/workflow-service/esri-export/ Browse

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GXP WebView® v2.5.5 updates

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Other significant enhancements

- The Observation table in GXP WebView now displays a status column to indicate whether an Observation has been published or not.

- Entities are now filtered based on the geographic bounds of an image in GXP WebView when creating an Observation.
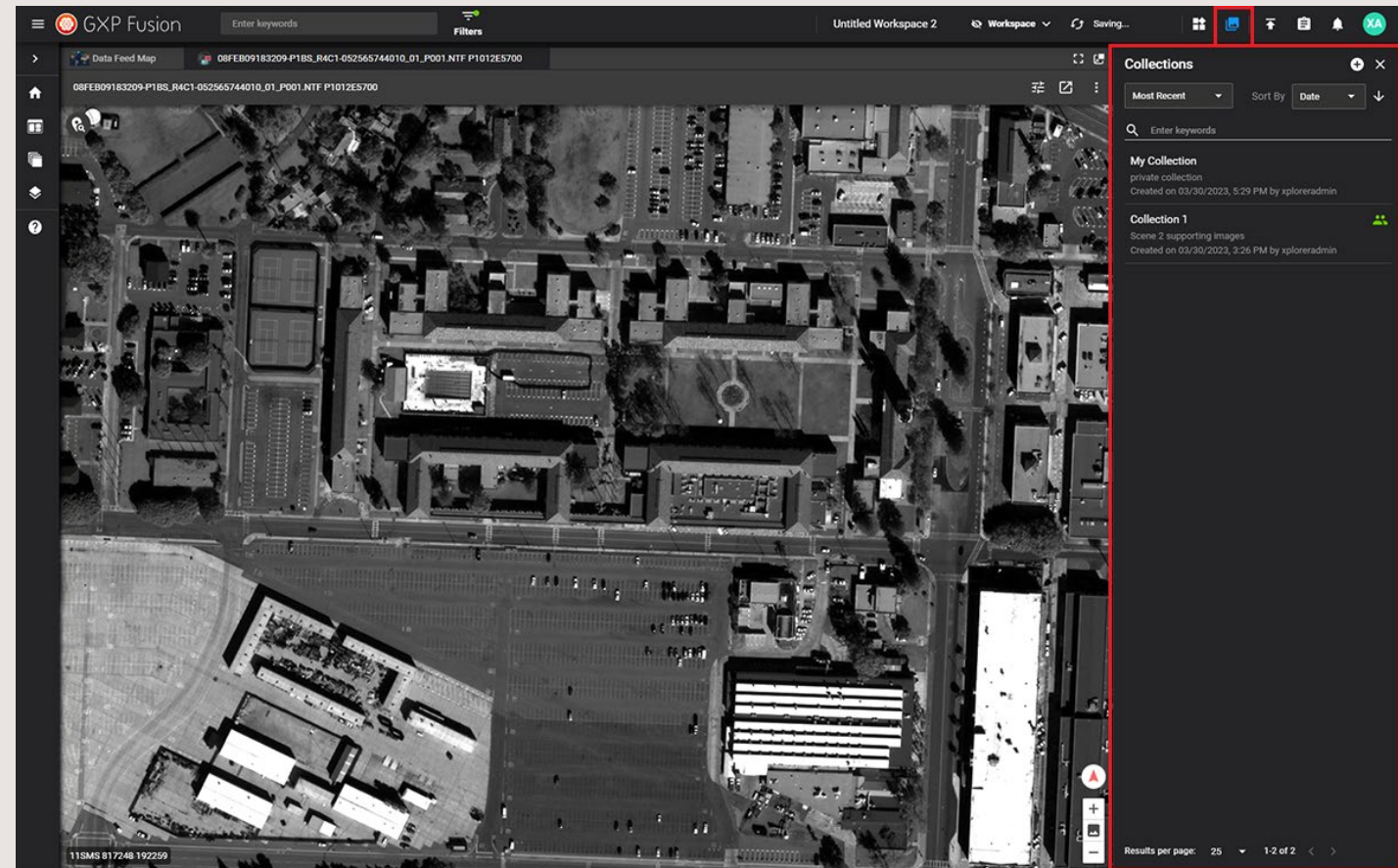
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GXP Fusion® v2.5.5 updates

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Collection drawer for interactive reporting

- All widgets can now be added to a collection drawer.

- Each widget title can be edited.

- Collection drawers can be public or private and exported to build a report.

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Create new workflow metrics template in GXP Fusion

- This capability enables users to identify and track metrics related to GXP Xplorer's workflow.

  - Data Feed filter for the Container class filtered by Data type: Workflow.

  - Pre-configured widgets to display the Simple Count Chart, various Data Analytics Charts, Data Feed List, and the Data Feed Map.

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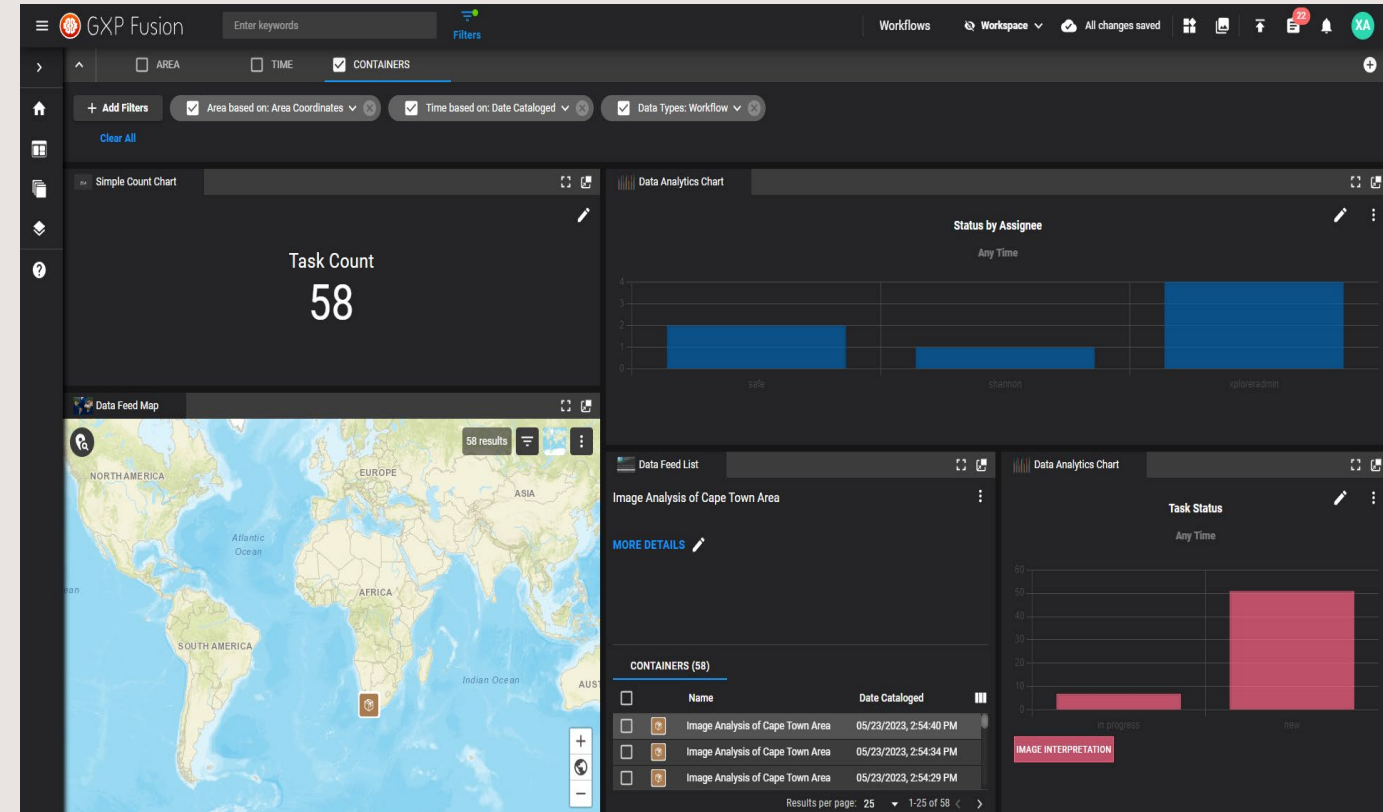
GXP InMotion™ v2.5.5 updates

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# New icon for GXP InMotion's Movement Intelligence (MOVINT) panel menu

- A new icon was implemented for the MOVINT panel menu within GXP InMotion Web.

- Users looking to take advantage of GXP's MOVINT processing capabilities should look for this new icon to exploit 4607 Ground Moving Target Indicator (GMTI), 4676, Wide Area Motion Imagery (WAMI), Automatic Identification System (AIS), and GPS type datasets.
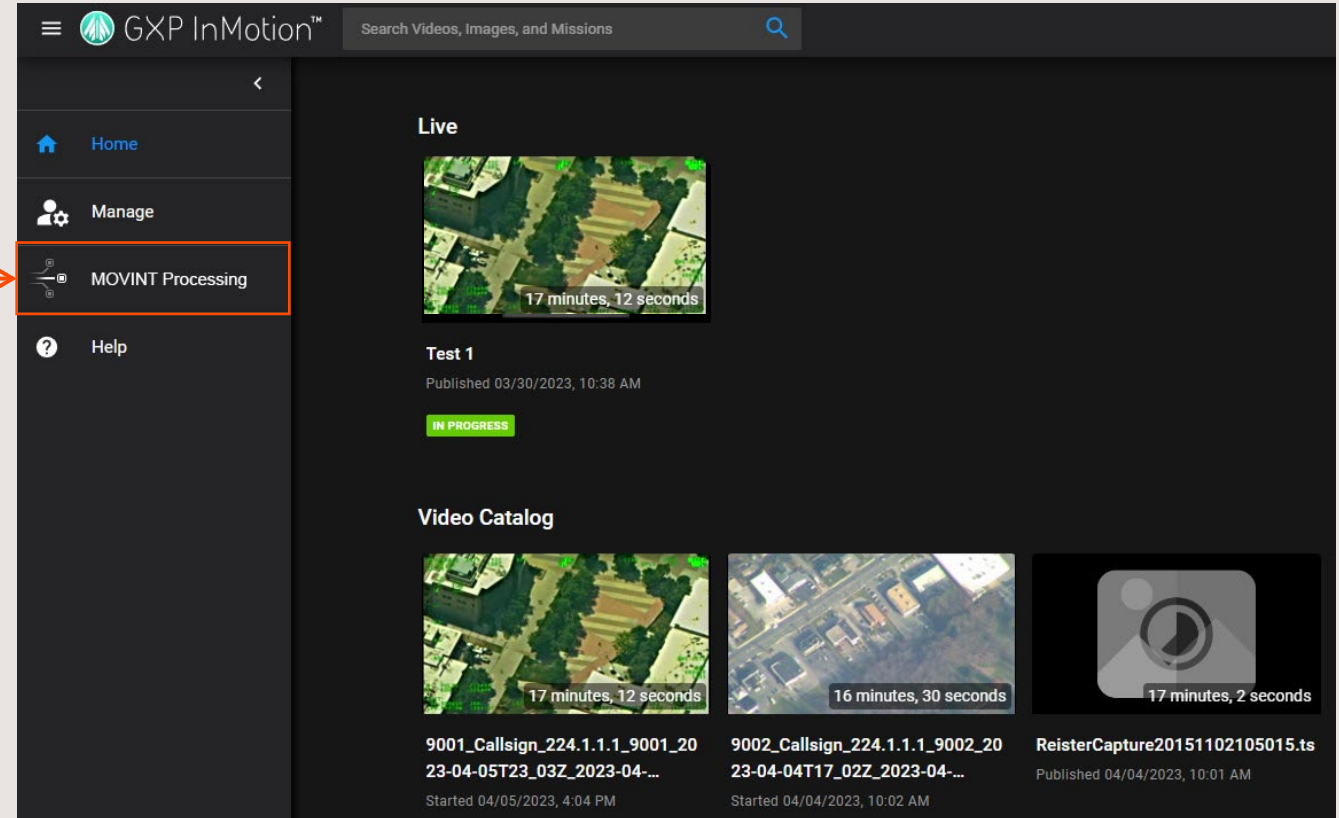
Imagery of MX-15 videos over Ft. Collins, CO; Courtesy of L-3 Communications, EO/IR Inc.

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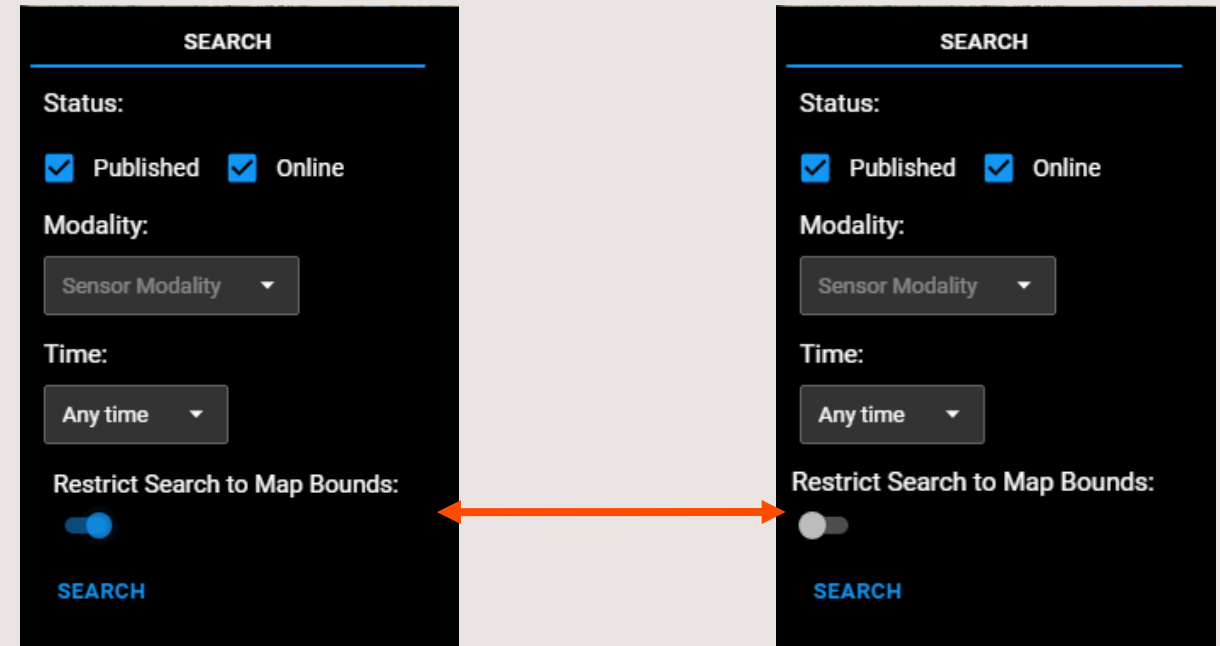
Collection panel updates

- The collection panel on the GXP InMotion Web's MOVINT page was updated with new capabilities and now has three tabs: Search, Results, and Details.

- The Search tab allows a user to narrow down collection search results by specifying:
  - Ingest Status (Published vs Online).
  - Sensor modality (FMV, GMTI, etc.).
  - Time range.

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Collection panel updates …2

- The Search tab now allows a user to narrow collection Search results using the map bounds or none at all.

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Collection panel updates …3

- If a search was performed with 'restrict search to map bounds', and no collections are found, users will be given a message indicating 'No collections currently loaded in the current view' along with the option to either 'Load More' or 'New Search'.

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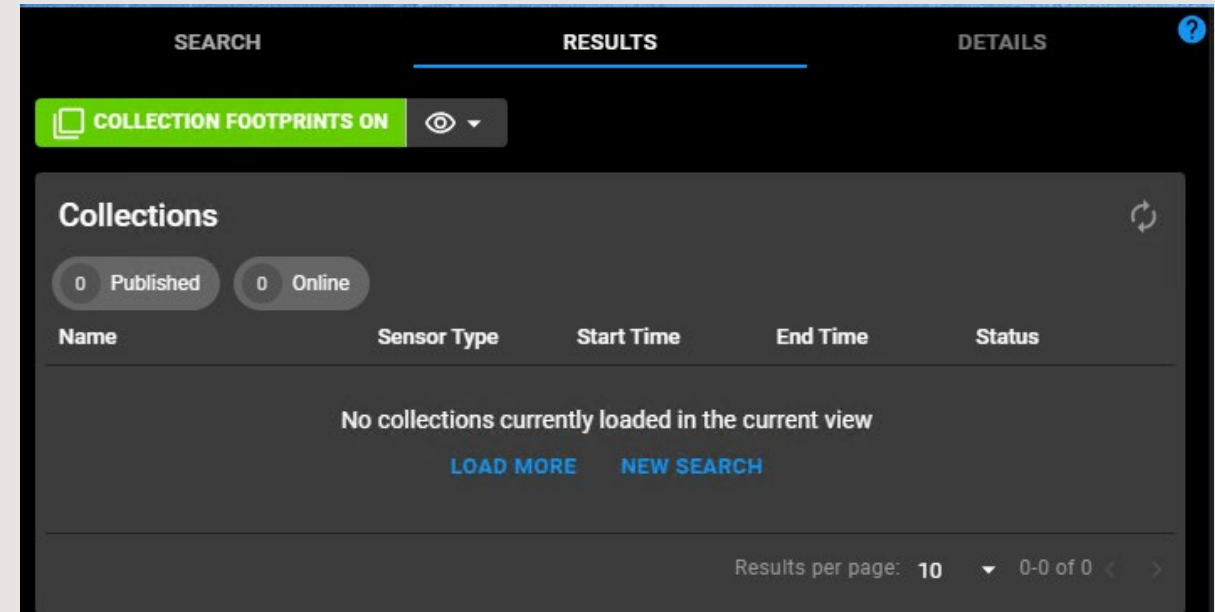
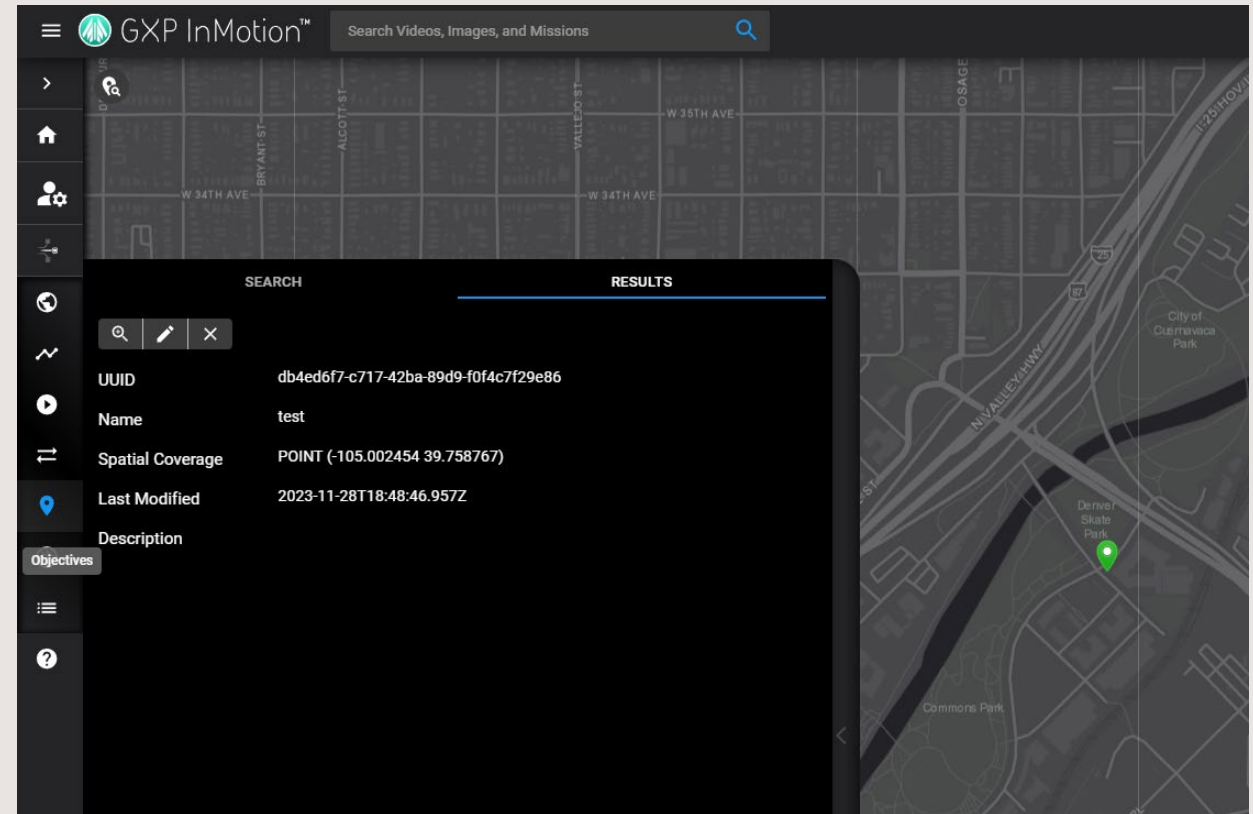# Objectives

- Objectives are locations of interest (i.e. 'targets') that are associated with FMV Missions and associated activities.

- Previously the only way to create new Objectives was during the Mission creation process.

- When a Mission is created the user can proceed to the Manage Objectives page to add new Objectives to the Mission.
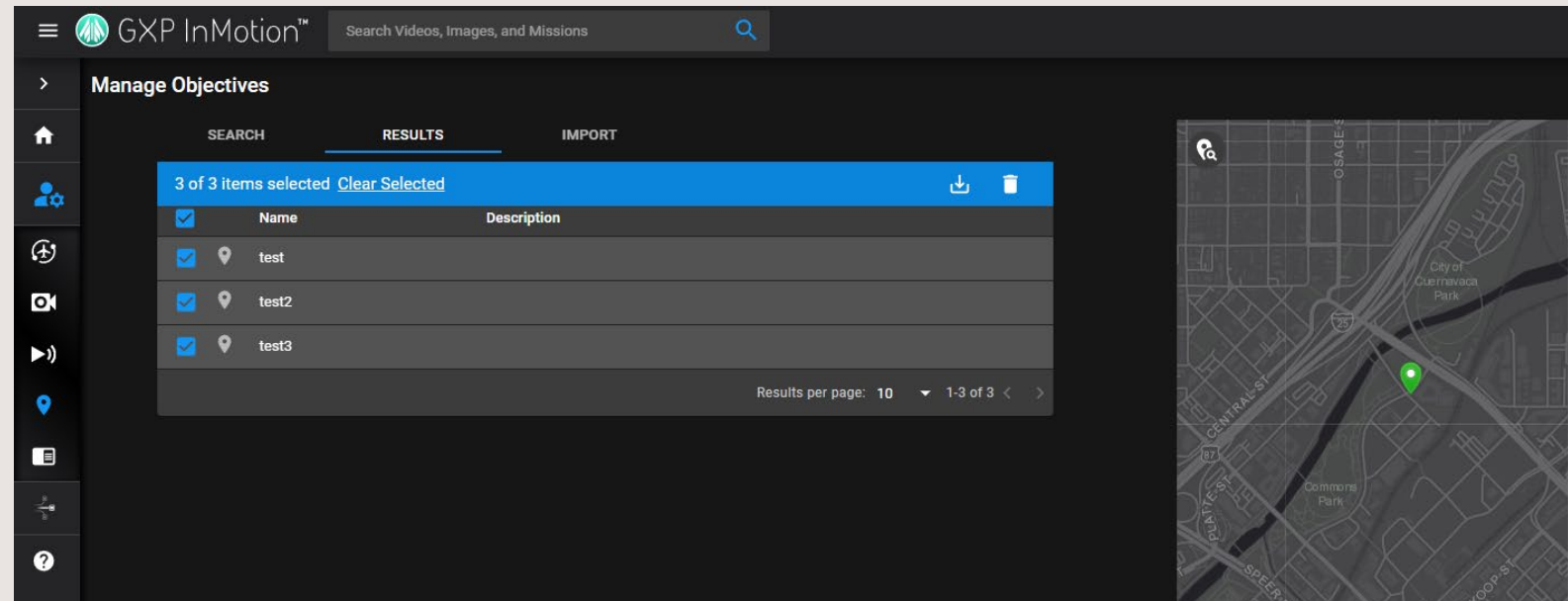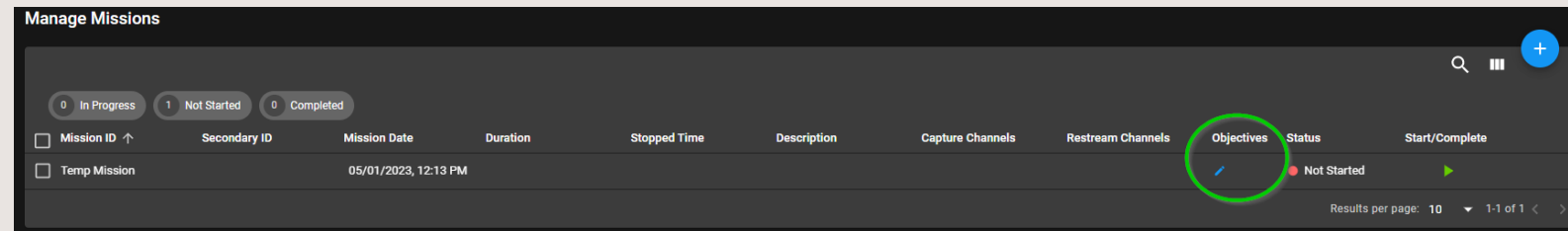
ESRI® ArcGIS Server (AGS) layers

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Objectives ...2

- A number of updates were implemented related to 'Objectives' to include:
  - New Objective management pages for both FMV and MOVINT workflows.
  - Zoom to Objectives.
  - Edit Objective details.
- Named Areas of Interest (NAI) have been replaced with Objectives in the MOVINT user interface.

ESRI® ArcGIS Server (AGS) layers

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Objectives …3

- Users can now add Objectives directly on the map from a right-click menu option.

- Options for Objective creation are either using a point or drawing a polygon.

- NOTE: To import a CSV file of multiple objectives users will continue to use the CSV import function within the 'Edit' User Interface (UI) of the Mission Management page. Bulk import of Objectives for the new Manage Objectives pages is planned for a future release.
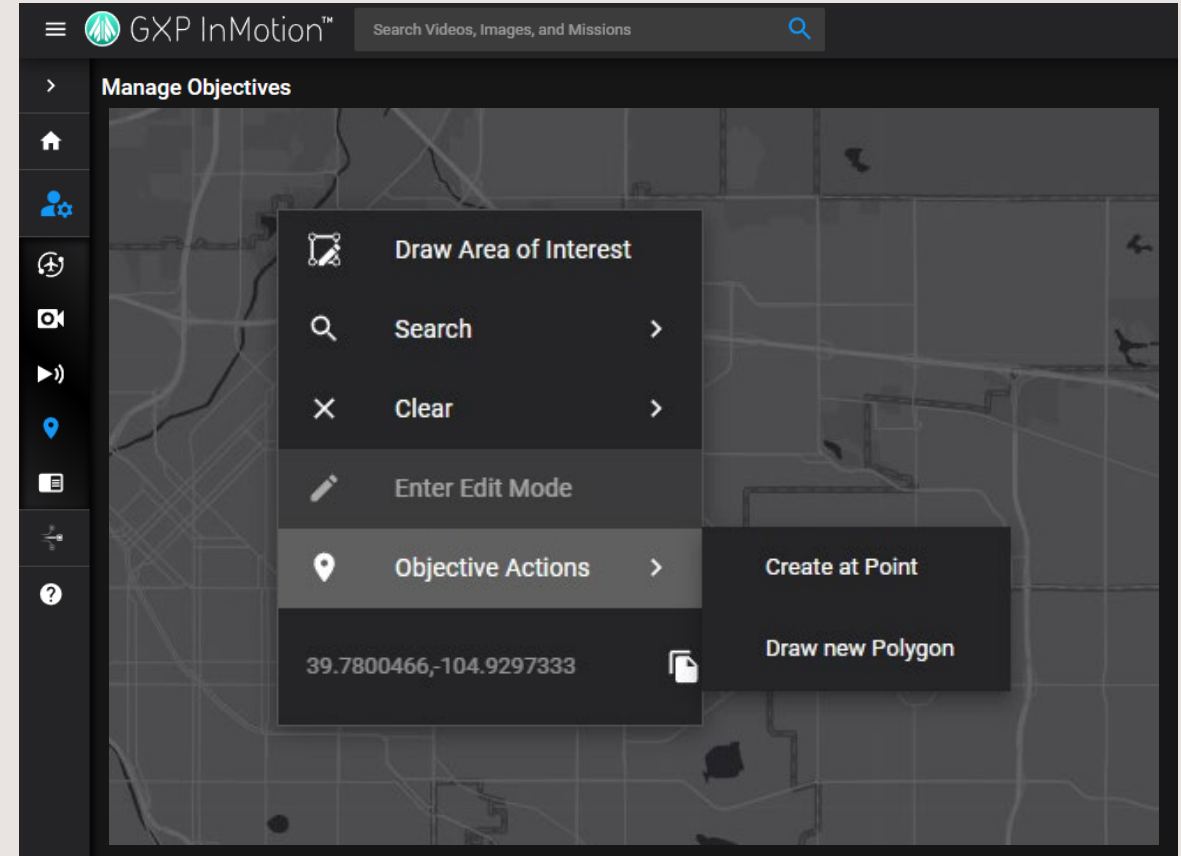
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# Display actual time in clipping tool of video player

- Previously, the GXP InMotion Web Video player displayed video based on the offset time of a video (time since the capture started). A customer request to display the video using absolute time was implemented in v2.5.4.

- In v2.5.5 this effort was extended to add absolute time (original time) to the GXP InMotion clip generation tool, as seen on the right.

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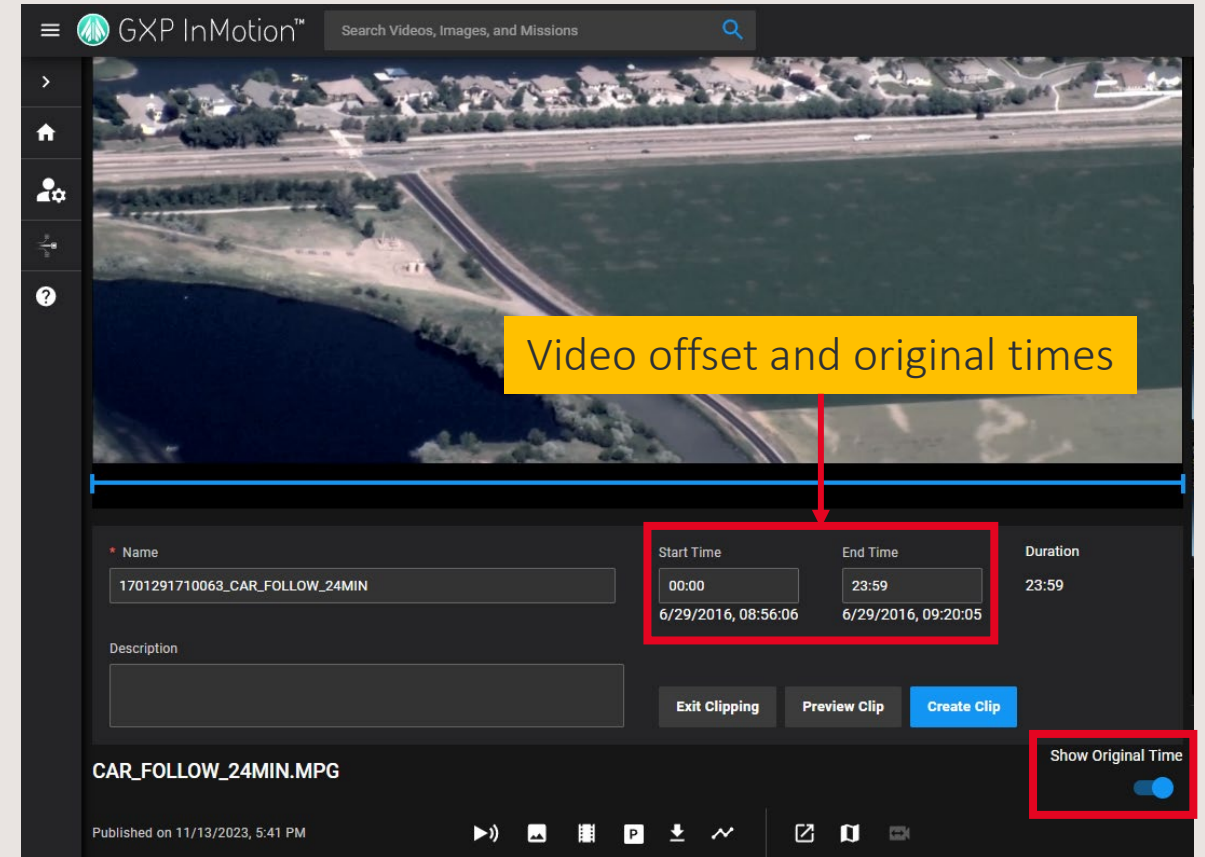
Track playback panel (near real-time GMTI Playback)

- Near real-time GMTI visualization and Playback is being introduced in v2.5.5.

- The 'animation' panel introduced in v2.5.4 allows users to search for specific 4607 (shown) or 4676 datasets to load for playback.
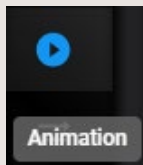
- A new timeline and Playback tools are shown displayed at the bottom of the map when the animation panel is engaged.

ESRI® ArcGIS Server (AGS) layers

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Thank you

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