GXP Xplorer® Platform v2.4.7 Release Details

Presented by Nicholas Rosengarten, GXP™ Product Development



© 2021 BAE Systems. All Rights Reserved. Geospatial eXploitation Products, GXP, GXP Fusion, GXP InMotion, GXP WebView, GXP Xplorer, and SOCET GXP are registered trademarks of BAE Systems. This document gives only a general description of the product(s) or service(s) offered by BAE Systems. From time to time, changes may be made in the products or conditions of supply. Approved for public release as of 09/30/2021; This document consists of general information that is not defined as controlled technical data under ITAR Part 120.10 or EAR Part 772. 20210921-19.



Infrastructure

- Upgrades are supported from GXP Xplorer® v2.3.6.2+.
- Federation is supported from GXP Xplorer v2.3.6.2+.
- MSP has been upgraded to v1.6.4.
- DRS version is 5.6.04.R3.
- GXP Xplorer now has the ability to catalog Amazon Glacier[®] storage.

Amazon Glacier is a trademark of Amazon.com, Inc. or its affiliates in the United States and/or other countries.

GEOSPATIAL EXPLOITATION PRODUCTS™







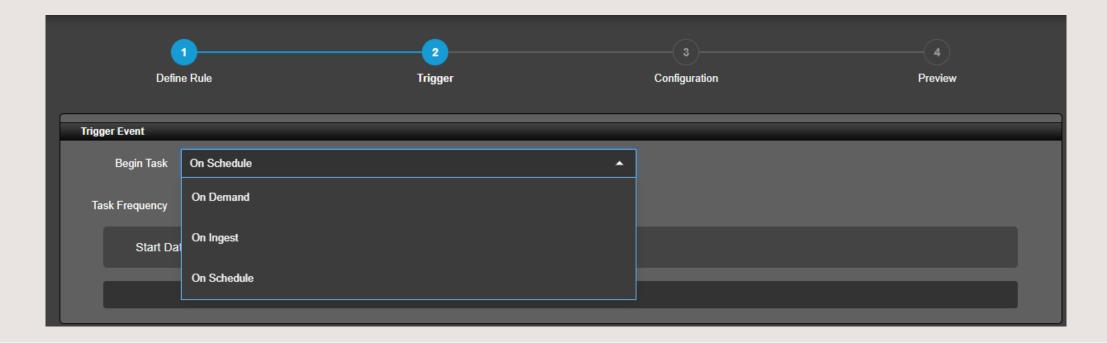
Data Model updates

- Data Models has been broken out into a separate page under Administration Settings.
- Users can now directly edit the default Data Model without being forced to create a clone.
- A Revert option has been added to reset the Data Model to default values.
- A Data Model Admin Role has been added that will allow editing of Data Models so users don't need full Admin roles just to modify the Data Model.



Workflow updates

- When setting up a Workflow rule, options have been added for On Demand and On Schedule (One Time Only).
 - This allows for Workflows to work against data that has already been cataloged as opposed to only On Ingest.





Cataloging of STANAG 4676 updates

- Cataloging of STANAG 4676 (track) data is disabled by default as this can be a very time-consuming process.
 - To re-enable, the user must modify the following files in the <data dir>\config\karaf\etc\ directory
 - com.baesystems.gxp.services.ingest.cfg
 - Change ingest.typedeterminator.stanag4676 = false to ingest.typedeterminator.stanag4676 = true
 - com.baesystems.gxp.services.ingest.common.cfg
 - Change ingest.common.association.stanag4676.enabled = false to ingest.common.association.stanag4676.enabled = true
 - This is documented in the release notes.



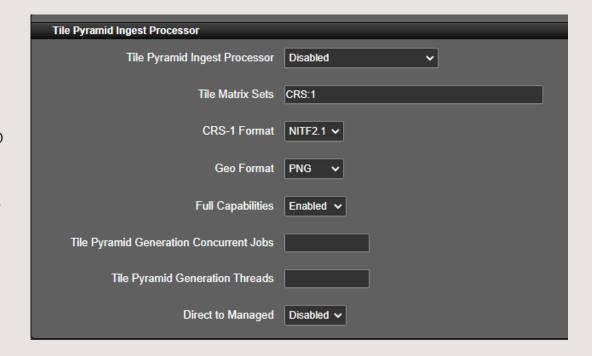
New Pixel Streaming option

- GXP Xplorer can now stream pixels to SOCET GXP® using an OGC® Web Map Tile Services (WMTS) protocol with detailed metadata as opposed to the GXP™ Tile Streamer.
 - Benefits include:
 - SOCET GXP can continue to exploit scenes where communication is interrupted or restarted on the backend.
 - Allows for site caching of imagery tiles for multiple users.
 - Allows for pre-generated tile content with tile pyramid functionality.
 - Allows for streaming to be performed without a running pixel service as tiles are created at ingest as opposed to on user demand.
 - Decreased bandwidth requirements with JPEG 2000 Numerically Lossless compression for WMTS.
 - This can be set in Administration Settings ... GXP Xplorer Application Settings ... Discovery Agent ... Detailed Metadata Processor.
 - This setting only applies to SOCET GXP v4.5.0.1 or later.
 - GXP WebView® will still exclusively use the GXP Tile Streamer.



New Pixel Streaming option ...2

- A new set of options has been added to the Administration Settings to allow for pre-generating tiles to be used for the new WMTS protocol.
 - If this data is generated, no active pixel streaming needs to occur at demand time.
 - Administration Settings ... GXP Xplorer Application Settings ... Discovery Agent ... Tile Pyramid Ingest Processor
 - Requires On File Discovery RSet mode.
 - Open in SOCET GXP requires CRS-1 (image space) coordinate system.

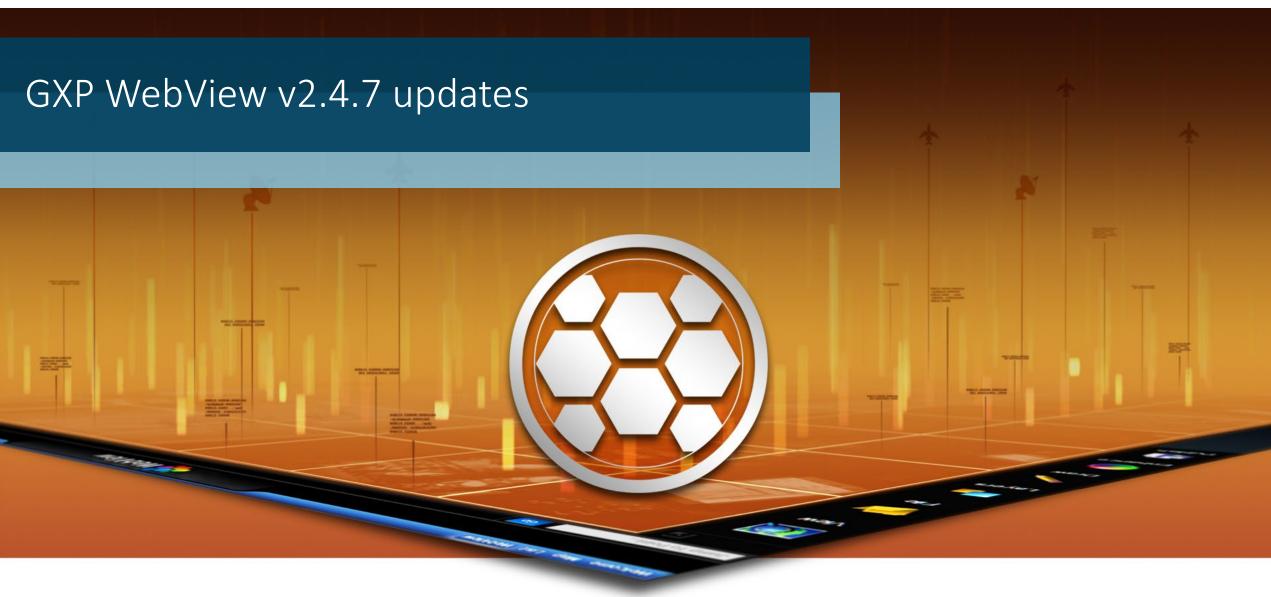




Other significant enhancements

- Support has been added for a Boolean data type for attributes in the Data Model.
 - These can be used to search through GXP Xplorer.
- Orthomosaic generation will now succeed with a very large number of input images.
- Better thumbnail creation for some complex Synthetic Aperture Radar (SAR) data types.
- WebGL browser support is now a hard requirement for running GXP WebView.
- The My Workflows and My Tasks page have been renamed to Workflows and Tasks respectively.
- A new option was added to Administration Settings ... GXP Xplorer Application Settings ... Discovery Agent ... RSet, Overview, and Thumbnail ... Task Schedule
 - Directly on File Discovery is meant to ensure that the same ingest node that discovers a file is also responsible for generating browse.
 - This is only relevant in the distributed ingest case and is most useful in enterprise deployments so data doesn't have to get staged multiple times.









Swiper Tool

- A Swiper tool has been added to GXP WebView to allow for comparison between two or more images.
 - Only available in mosaic mode with two or more overlapping images.
 - The divider line can be customized and autolabels can be added to the Swiper tool.
 - Scrolling the middle mouse wheel will cycle through the images.

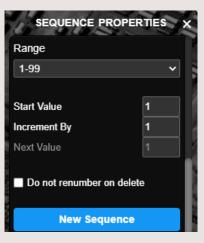


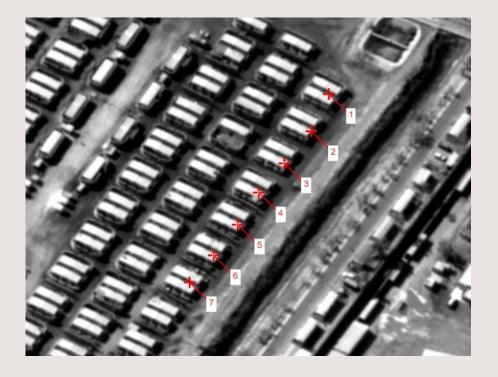


Sequence Graphics

- Sequence graphics can now be created in GXP WebView.
 - Allows for easy incremental counting of objects on an image.
 - Point style, size, and color can be customized.
 - Connecting line color, size, and style can be customized.
 - The associated text box can also be fully customized.
 - Several alpha-numeric ranges are available that can be incremented by custom steps.
 - A Distance Renumber tool is available to reorder a sequence based on proximity to a user defined point.



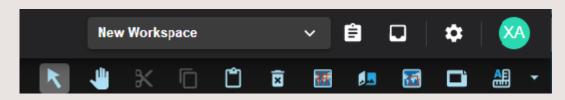


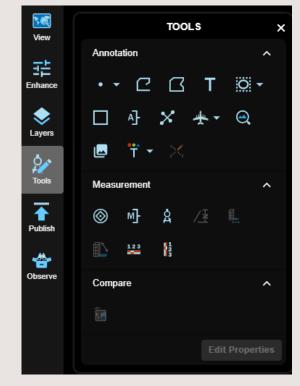




Other significant enhancements

- The icons in GXP WebView have been updated to a more modern look and feel
- The Draw menu drawer has been renamed to Tools







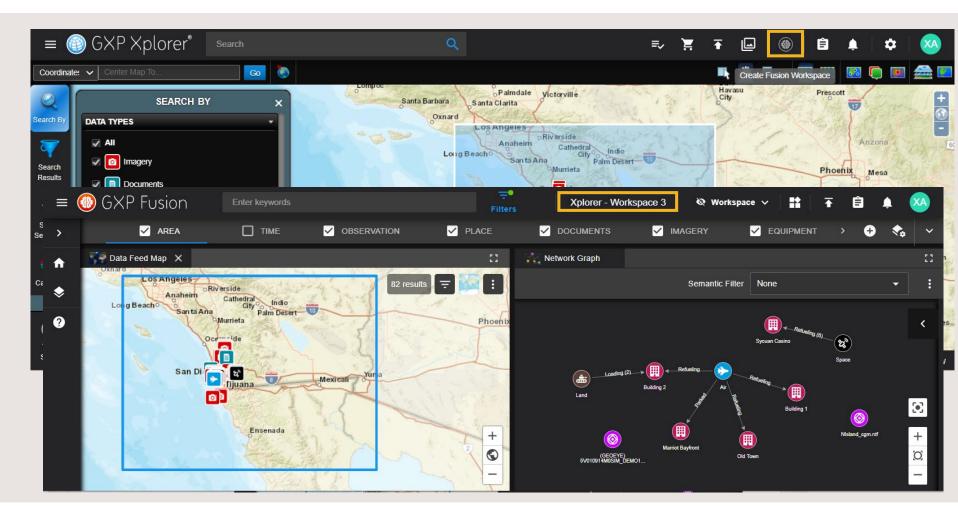






Create Workspace from GXP Xplorer Map or List Page

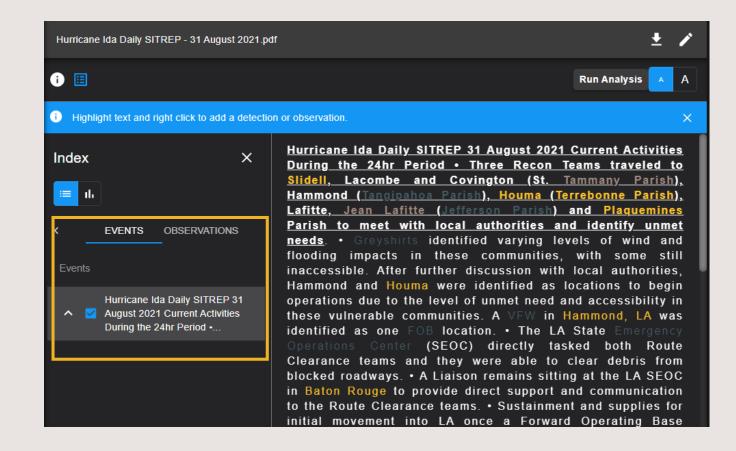
- Transfers
 GXP Xplorer
 search settings
 to GXP Fusion.
- Opens a Default
 Workspace in
 GXP Fusion with
 layers and filters
 that correspond
 the GXP Xplorer
 setting.





Event Extraction from Text

- Events is a new type of data added to the GXP Xplorer Platform.
- Events represent an action that occurred in space and time involving one or more entities (people/places/things).
- The Text Analysis widget supports both manual and automatic event detection (automatic requires Rosette Natural Language Processing).

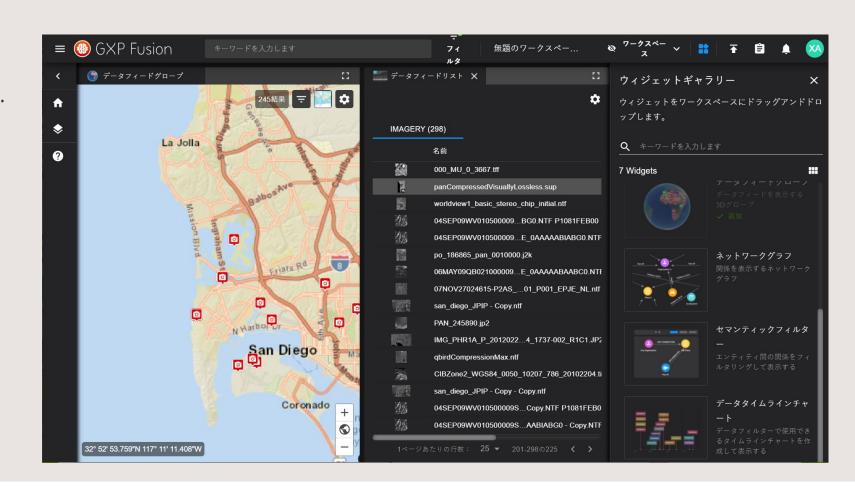




User Interface Internationalization

- Provides a set of editable locale files for easy translations to any language.
- Support right-to-left and left-to-right writing systems.
- Supports Language and Region Settings.

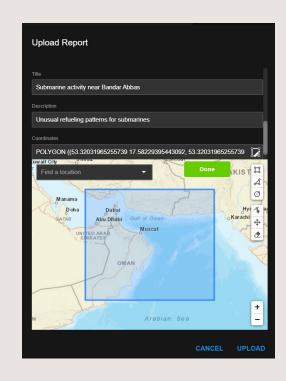


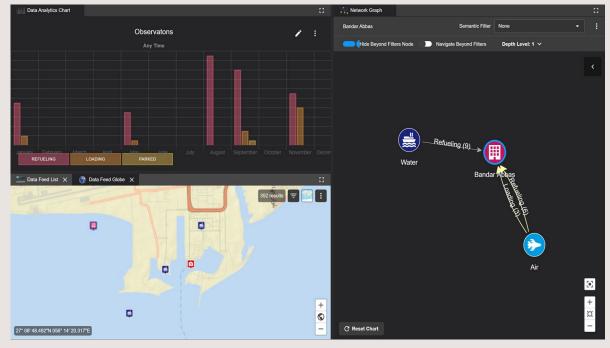




Upload Report to GXP Xplorer Catalog

- Creates PowerPoint®,
 JPG, or PNG snapshots
 of GXP Fusion
 workspace.
- Provides analysis reporting form and ability to geotag.
- Uploads to GXP Xplorer catalog for sharing and collaboration.

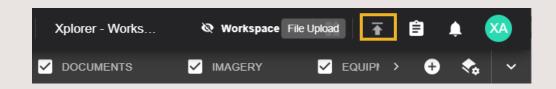






Other significant enhancements

- An Upload button has been added to GXP Fusion.
 - Upload files to the GXP Xplorer catalog from GXP Fusion.
- Observations made against federated imagery can now be viewed in the Network Graph in GXP Fusion.











Secondary ID Field

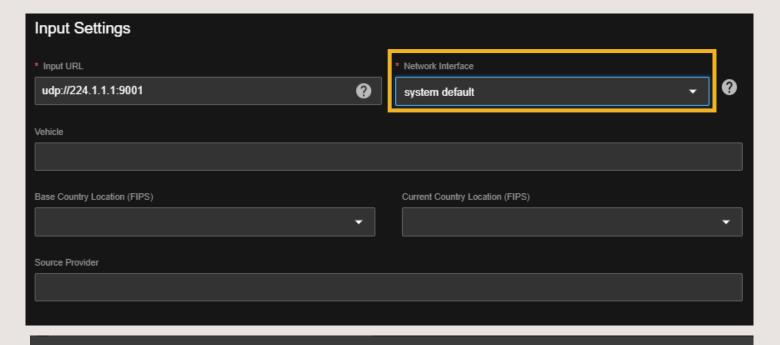
- A Secondary ID field was added to the New Mission User Interface.
- The addition of the Secondary ID allows for customers that add additional information during a Live Mission, not to interrupt the recording of the associated Capture.





Network Interface Card Picker for Channels

- A Network Interface Card (NIC) enables connectivity with other network devices.
- A NIC Picker was implemented for GXP InMotion server allowing system administrators additional options when working within virtualized networks.



Network Adapter settings are optional and allow you to select over which adapter streaming actions will take place Leaving the selection on system default (taking no action) will use the default network interface configured by the operating system



Generate HLS On Demand

- By default, GXP InMotion server will generate HTTP Live Streaming (HLS) data when capturing video.
- For cataloged archives to be web browser playable, videos may need manually generate HLS.

