Activity Reporting Tool (ART)

Track, record, and report distinct objects and activities of interest identified in mission imagery

F/A-18 Hornet

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F/A-18 Hornet
Observed 2017-06-28T22:15:00Z

F/A-18 Hornet
Observed 2017-06-28T22:15:00Z

F/A-18 Hornet

Imagery © 2022 Maxar Technologies.

Effective object and activity analysis can inform a wide variety of mission objectives, from pre-emptive threat protection to post-event forensic analysis. Enhancing intelligence collected from geospatial imagery, the Activity Reporting Tool (ART) from BAE Systems' Geospatial eXploitation Products™ (GXP®) group delivers detailed activity-based information, registered over a period of time, into the hands of key decision makers in criminal investigations, facility and event security operations, and national defense.
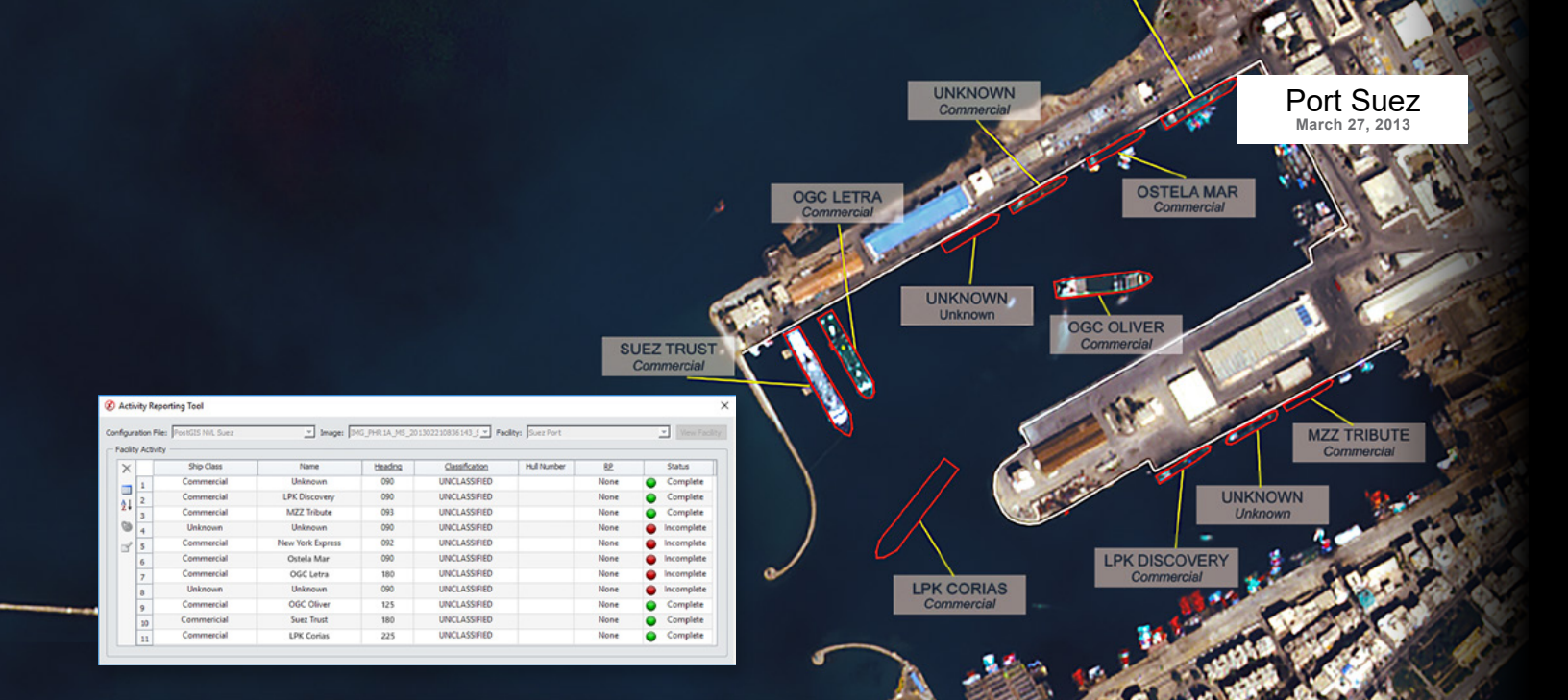
Available in both SOCET GXP® and GXP WebView®, ART enables users to:

» Create, view, and analyze observations about physical objects (including facilities, equipment, and people).

» Overlay object locations graphically on images and browse recorded observations.

» Understand changes in object activity and object relationships over space and time.

Critical information collected and reviewed through ART can then be further processed by machine analytics to facilitate object change detection, identification of patterns in activity, and enhanced situational awareness.

ART enables clear identification and analysis of objects and activities including facilities, equipment, and people.

GXP® Geospatial solutions to ensure **a safer world.**

BAE SYSTEMS

UNKNOWN
Commercial

OGC LETRA
Commercial

OSTELA MAR
Commercial

UNKNOWN
Unknown

OGC OLIVER
Commercial

SUEZ TRUST
Commercial

MZZ TRIBUTE
Commercial

UNKNOWN
Unknown

LPK DISCOVERY
Commercial

LPK CORIAS
Commercial

Activity Reporting Tool

Configuration File: PostGIS NVL Suez   Image: IMG_PHR1A_MS_20130221083614S_5   Facility: Suez Port   View Facility

Facility Activity

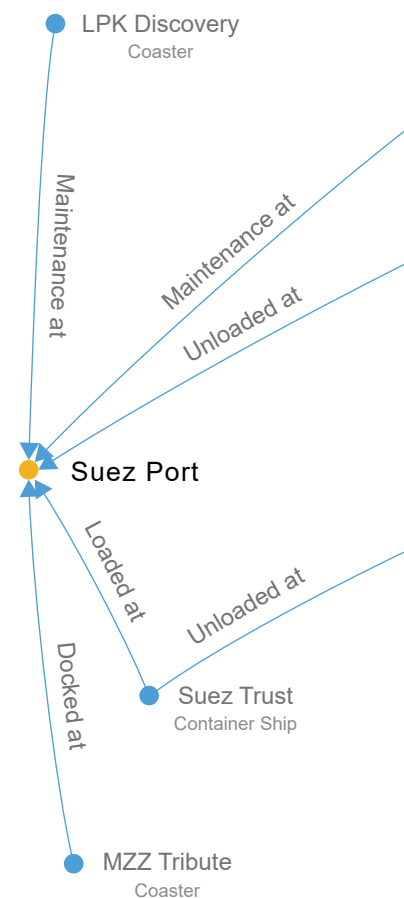|	Ship Class	Name	Heading	Classification	Hull Number	RP		Status
1	Commercial	Unknown	090	UNCLASSIFIED		None	●	Complete
2	Commercial	LPK Discovery	090	UNCLASSIFIED		None	●	Complete
3	Commercial	MZZ Tribute	093	UNCLASSIFIED		None	●	Complete
4	Unknown	Unknown	090	UNCLASSIFIED		None	●	Incomplete
5	Commercial	New York Express	092	UNCLASSIFIED		None	●	Incomplete
6	Commercial	Ostela Mar	090	UNCLASSIFIED		None	●	Incomplete
7	Commercial	OGC Letra	180	UNCLASSIFIED		None	●	Incomplete
8	Unknown	Unknown	090	UNCLASSIFIED		None	●	Incomplete
9	Commercial	OGC Oliver	125	UNCLASSIFIED		None	●	Complete
10	Commercial	Suez Trust	180	UNCLASSIFIED		None	●	Complete
11	Commercial	LPK Corias	225	UNCLASSIFIED		None	●	Complete

ART in SOCET GXP

Expanding upon traditional geospatial exploitation, ART in SOCET GXP integrates Structured Observation Management (SOM) with the advanced capabilities of GXP software's leading geospatial analysis desktop solution.

Through an intuitive workflow, activities and changes in an area of interest can be recorded and monitored over time as imagery of the area is periodically refreshed. This process is configurable for a customized user experience by leveraging the workflows and nomenclature most familiar to an organization.

ART in SOCET GXP enables consistent workflows and reliable recording of observations in an area or facility of interest including:

- » General description of scene.
- » Weather conditions.
- » Obscured areas.
- » Activities of the objects.
- » Objects added and/or removed since previous image.

The information is stored in a shared ART database for product generation and additional processing by machine analytics.
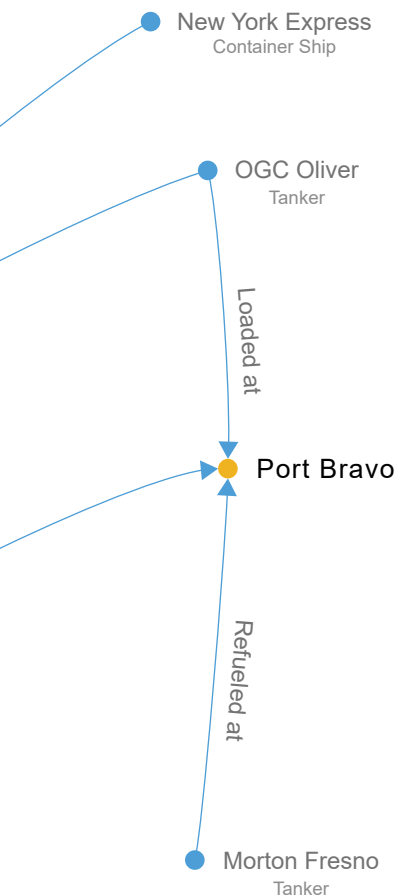
LPK Discovery
Coaster

Maintenance at

Maintenance at

Unloaded at

Suez Port

Loaded at

Unloaded at

Docked at

Suez Trust
Container Ship

MZZ Tribute
Coaster

Port Bravo
June 14, 2013

Morton Fresno
Tanker

Suez Trust
Container Ship

OGC Oliver
Tanker

OBSERVATION PROPERTIES

Object Type
Maritime Vessel

Object
OGC Oliver

Lat, Lon: 27° 08' 46.237"N 56° 12' 12.093"E

Date-time: 2008-12-22T21:07:00Z

Source: 20081222_port.ntf

Source Location: brugger-win7.irad.net/webview?gxp.pixel.182d1790-5107-4a90-81df-52e3e0a53068.pixel/1035508741

Certainty: Confirmed ▾

Classification: Unclassified ▾

Activity: Loading ▾

Equipment Count: 1

Equipment Type: Commercial Ship ▾

Create Observation

Imagery courtesy of ©Airbus DS 2013.

AIRBUS

ART in GXP WebView

ART in GXP WebView delivers browser-based viewing and analysis of objects and activities recorded over time (either in GXP WebView, SOCET GXP, or other activity reporting applications) by multiple analysts. Leveraging a shared ART database either on-premise or in the cloud, users collaborate to view object locations and activity records while filtering by object type, time, and location.

Using analytical visualizations such as time animation and network graphs, users can study patterns and relationships of objects for deeper analysis. Such analysis can drive the collection of more targeted and relevant observations.

Additional observations can be created in real time by analysts collaborating together from disparate locations around the world, supporting continuous enrichment of knowledge pertaining to activities of interest.

New York Express
Container Ship

OGC Oliver
Tanker

Loaded at

Port Bravo

Refueled at

Morton Fresno
Tanker

Activities identified in both ART in SOCET GXP (top left image) and ART in GXP WebView (top right image) can be combined in a network graph within GXP WebView to illustrate relationships between objects requiring deeper analysis.

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GXP software solutions

Supporting development of the most advanced geospatial intelligence, BAE Systems GXP software enables rapid discovery, exploitation, and dissemination of mission-critical geospatial data. From key military, security, and incident response operations, to a variety of commercial development and research initiatives, GXP provides a comprehensive suite of solutions to inform effective decision making and ensure a safer world.

GXP software solutions support image, video, and all-source analysts at defense and intelligence agencies, as well as commercial organizations, around the world including:

- » Defense forces, intelligence agencies, and homeland security (including all major branches of the military)
- » Private security and first responder personnel
- » Photogrammetry, mapping, and surveying agencies

- » Systems integrators
- » State, local, and regional governments
- » Transportation departments
- » Natural resource management consultants
- » Universities and research organizations

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