

Extract, and characterize
structured observations

Integrated Intelligence Insights (I3)

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As a leading provider of artificial intelligence (AI), machine learning (ML), and data science services, BAE Systems offers a suite of AI-empowered tools to help analysts harvest and exploit the increasingly massive Open Source and commercial imagery content available.

Our Integrated Intelligence Insights (I3) capability combines state-of-the-art AI/ML applied to open data sources, including commercial satellite and airborne imagery, non-traditional imagery sources (e.g. webcam, drone footage, online images), social media, and dark web content to identify, extract, and characterize structured observations.

How it works

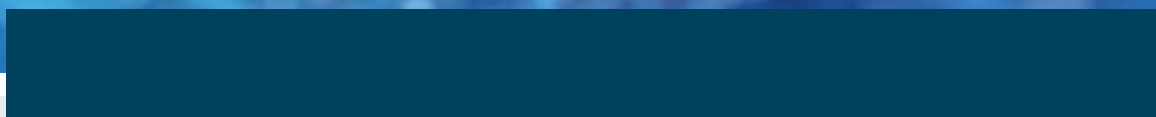
An automated pipeline processes commercial and non-traditional imagery enhanced with integrated Open Source data using AI/ML and other techniques to deliver integrated insights that enhance intelligence.

BAE Systems Cloud Operations, Support, and Mission Integration Center (COSMIC) provides a highly scalable, cloud-based analytic environment that synergizes both automated and manual capabilities to provide a full spectrum of commercial and multi-domain analytic and production services.

Our automated innovations suite saves analysts time, providing a more time-dominant, persistent, and cost effective analytic services. Empowered through a data-centric MLOps pipeline using a coordinated system of commercially available web services and proprietary data delivery platforms, our integrated toolkit ensures that analysts and product consumers receive trustworthy insights produced through repeatable, automated processes.

Highlights

- I3 Exploitation Toolkit offers depth of information, time savings, and cost reduction.
- Features proprietary ability to ingest, extract, and exploit an overwhelming volume, variety, and velocity of open source data.
- Data Science capability reveals anomalies and trends in large data that support intelligence insights.
- Supported by BAE Systems' COSMIC capability, enabling safe testing of innovations across multiple domains for implementation to enhance tradecraft and create efficiencies.
- Represents the successful evolution of a comprehensive AI/ML solution proven through critical mission-focused challenges addressed on IC and DoD programs.



Key Feature	Benefit to Government
Publicly Available Information – Twelve disparate tool and data suppliers perform global OSINT data curation.	<ul style="list-style-type: none"> • Rich diversity of Open Source data significantly increases accuracy of GEOINT-based structured observations • Ensures coverage across areas of responsibility • Broad supplier network to onboard new data sets • Enabled through an OSINT Toolkit supporting more than 10,000 users
Commercial Satellite Imagery – Rapidly task and receive sub-meter overhead unclassified imagery.	<ul style="list-style-type: none"> • I3 leverages the expanding constellation of commercial imagery providers to augment intelligence analysis tradecraft
Augmented Analytics Framework – Built on our secure AWS GovCloud/modern technology baseline	<ul style="list-style-type: none"> • Rapid adoption of new capabilities and algorithm/model deployment/retraining agility for highly variable mission parameters and emergent tradecraft
VIWS – Fully automates collection strategies and anonymizes high cadence distributed data collection. Uses National System of Geospatial Intelligence (NSG) Application System (NAS) schema.	<ul style="list-style-type: none"> • Secure obfuscation for collection preserves OPSEC • Strategies minimize cost and maximize throughput • NAS schema, an NGA standard, allows for new datasets to be quickly added to established data stores
Enforma – Streaming analytic pipeline for OSINT/ GEOINT hosts natural language processing (NLP), AI/ML, and Robotic Process Automation (RPA) analytics to combine target, entity, and order of battle knowledge. Follows NRO standard for Pedigree, Provenance, Lineage (PPnL).	<ul style="list-style-type: none"> • Based on DARPA GCA program proven at NGA • NGA-approved data model/schema • PPnL tracks training data, providing chain of custody • Streaming and batch analytics for rapid response • Integrates with FCMS API to seamlessly pull data
Data Science Platform – High performing, flexible environment with analytic tools, code repository, and core ML tools. Supports environments including Jupyter, AWS Sagemaker, Python, Java, and Matlab.	<ul style="list-style-type: none"> • Used by 100+ Army Data Scientists for OSINT analytics • Pre-loaded with OSINT/GEOINT models/algorithms • A commercially accessible data labeling platform uses automation for efficiency • Our AWS Premier Partner status reduces overall cost
Proven Capability – Comprehensive AI/ML solution proven on DARPA (INSIGHT, Hallmark, GCA), NGA (Syrian Trend Analysis), DTRA (EMTEC), and Army (AOC, DCGS-A) programs.	<ul style="list-style-type: none"> • A mature and proven Open Source data ingest and tailored analytics for an unbounded range of mission sets • Customers benefit from continual enhancement across multiple use cases and Government end-users

BAE Systems, Inc.
Intelligence & Security

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