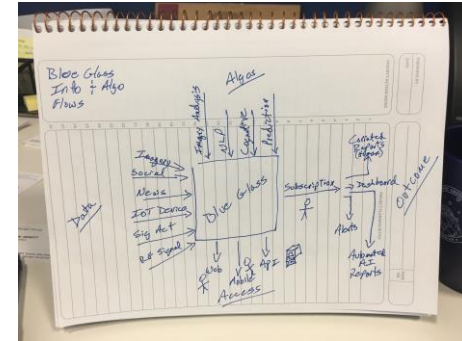




Helping the United States Government
Be Future Ready

In the three years since our founding, Geospark Analytics has helped commercial, defense and intelligence, and non-governmental organization clients make better decisions faster by identifying and forecasting emerging events on a global scale to mitigate risk, recognize threats, and leverage opportunities.



AI-Driven Global Situational Awareness for the Entire U.S. Federal Government

Defense, Intelligence and Security



Watch Operations



Infectious Disease Monitoring



Supply Chain, Logistics and Transportation



Disaster and Crisis Management



Law Enforcement



Sponsored by the U.S. Space Force, our SBIR Phase III commercialization contract is a five (5) year firm fixed-price, IDIQ Government-wide contract. This enterprise-level contract provides near real time situational awareness capabilities to the entire U.S. federal government, enabling users to make better decisions faster. We identify and forecast emerging events from social media, news and other sources on a global scale to mitigate risk, recognize threats, greatly enhance indications and warnings and provide predictive analytics capabilities.

ORDERING PROCEDURES

- STEP 1** Provide a scope determination to the USSF Acquisition Office at (afspc.esd.nnc@us.af.mil) with subject: GEOSPARK CONTROL REQUEST FA2544-20-D-0001.
- STEP 2** The USSF Acquisition Office contracting officer will provide a control number
- STEP 3** The issuing contract office will use their local DoDAAC/PIID for all ordering procedures.
- STEP 4** Contract office will issue an RFQ/RFP to Geospark Analytics
- STEP 5** Submit task order award on the decentralized contract directly with Geospark Analytics

EASE OF ACQUISITION

We offer our Hyperion AI to provide real-time forecasting and situational awareness support to the federal government to identify and predict emerging events while mitigating risks on a global level. Our contract offers a full suite of Hyperion products, services, and solutions. Our pre-competed SBIR Phase III contract enables:

- Federal Acquisition Regulation (FAR) compliance
- Faster acquisition
- Simplified acquisition - task orders on existing contract
- Flexibility to meet your mission – platform, data, services and training.



US Northern Command Case Study – Global PAI and Custom Risk Models

About

U.S. Northern Command (USNORTHCOM) was established Oct. 1, 2002 to provide command and control of Department of Defense (DOD) homeland defense efforts and to coordinate defense support of civil authorities. USNORTHCOM defends America's homeland — protecting our people, national power, and freedom of action. USNORTHCOM's AOR includes air, land and sea approaches and encompasses the continental United States, Alaska, Canada, Mexico and the surrounding water out to approximately 500 nautical miles. It also includes the Gulf of Mexico, the Straits of Florida, portions of the Caribbean region to include The Bahamas, Puerto Rico, and the U.S. Virgin Islands. The commander of USNORTHCOM is responsible for theater security cooperation with Canada, Mexico, and The Bahamas.

Challenge

USNORTHCOM's civil support mission includes domestic disaster relief operations that occur during fires, hurricanes, floods and earthquakes. Support also includes counter-drug operations and managing the consequences of a terrorist event employing a weapon of mass destruction.

An emergency must exceed the capabilities of local, state and federal agencies before USNORTHCOM becomes involved. In most cases, support will be limited, localized and specific.

Given the critical and wide scope of COVID-19, USNORTHCOM requires the ability to monitor and anticipate events that may impact the health and safety of America's homeland.

Solution

USNORTHCOM selected Geospark Analytics' Hyperion global threat and risk assessment platform, Geospark Analytics' COVID-19 seven-day Risk Model, and enterprise access to all of Geospark Analytics' data in USNORTHCOM's ESRI ArcGIS environment to provide analysts and operators unprecedented situational awareness. Analysts can now query open source news feeds in over 100 languages to identify potential trends and threats; leverage advancements in artificial intelligence and machine learning (AI/ML) in order to derive insights and reduce analyst workload; and view risks, events, trends, and activities in an interactive user interface visualized geospatially.

Benefits

USNORTHCOM has been utilizing Hyperion and its Esri Feature Layers effectively and has seen increased collaboration between Intelligence, Operations and Planning groups.

Geospark Analytics has been working with the NORTHCOM J5 on development of a Mexico Transnational Crime dashboard and a Maritime Investigation Event Model. The development of a machine learning model gives the Command a growing knowledge base of Mexico transnational crime and insight into the illicit transshipment activities. This approach will result in a much higher rate of collection and less false positives than a traditional keyword-based approach or simply subscribing to specific news and social media feeds as data from other sources would be lost.



“ *I continue to use your platform daily and find it helpful.* ”

Director of Intelligence and Information
United States Northern Command and
North American Aerospace Defense Command

US Army North Case Study – *Global PAI Platform*



“*The Hyperion app kept me informed while on the road. The graphics and flow provide easy access to the information I want directly from the phone.*”

Border Commanders Program Manager
US ARNORTH
G5 Security Cooperation Division

About

U.S. Army North (ARNORTH) conducts Unified Land Operations in support of U.S. Northern Command in order to detect, deter and defeat threats to the Homeland, conduct support of civil authorities, and security cooperation initiatives to defend the United States and its interests. Even as Army North conducts its primary mission of homeland defense, when requested, their forces are prepared to deploy at the speed of need to provide Defense Support of Civil Authorities for disaster or emergency response. Army North plans, exercises and provide life-saving and life-sustaining capabilities in support of federal, state, local, tribal and territorial partners during natural (hurricanes and wildfires) or manmade (Chemical, Biological, Radiological, Nuclear and Explosive) disasters.

Challenge

Similar to the USNORTHCOM Mission, Army North is faced with the continued struggle of doing more with less. Due to the wide variety of missions and steady increase in natural disasters, ARNORTH is having difficulty getting a comprehensive picture of the situation before they are asked to respond and deploy.

Solution

ARNORTH selected Geospark Analytics' Hyperion global threat and risk assessment platform to provide analysts and operators unprecedented situational awareness on missions they were operating near the southern U.S. border. Conducting much of their work in multiple languages, Hyperion translates all the data into English and summarizes content for analyst quickly and accurately.

Analysts now can query open source news feeds in multiple languages to identify potential trends and threats around drug trafficking, crime, narcotics sales, and leverage advancements in AI/ML in order to derive insights and reduce analyst workload as they prepare for the missions of the future.

Benefits

ARNORTH is using Hyperion's full suite of capabilities –Pulse, Hotspots, Events, Alerts and Collaboration- to increase efficiency in research and allow further time for analysis as they are conducting their missions on or near the southern U.S. border.

As the missions increase, ARNORTH can keep up with their current workload by having Hyperion do the heavy lifting for them. This time savings and scalability allows for analysts to focus on the things that matter most to them

US Air Force – Global PAI Platform and Mobile App

About

The 89th Airlift Wing (89th AW) is one of 17 Air Force active duty wings assigned to Air Mobility Command (AMC) and is a tenant unit based at Joint Base Andrews, Maryland. The 89th AW provides global Special Air Mission airlift, logistics, aerial port and communications for the president, vice president, cabinet members, combatant commanders and other senior military and elected leaders as tasked by the White House, Air Force chief of staff and AMC. The 89th AW has an exceptionally experienced and ready force of more than 1,200 personnel. The wing maintains an alert posture as well as 24/7 operations of the base aerial port, Andrews Network Control Station Government Network Operation Center (GNOC), Mission Defense Team and Air Terminal Operations Center (ATOC).

Challenge

The 89th AW mission is a challenging one - Advancing national interests by delivering diplomacy...safe, comfortable, reliable, connected, and protected.

Perfection is the standard and there is no room for failure. Pilots and Analysts are tasked with gathering, researching and analyzing as much information as possible about a location in advance of their mission to assure success.

Whether CONUS or OCONUS, most missions consist of multiple stops and are filled with variables of the unknown. The 89th AW must quickly become experts on anything from the safety surrounding scheduled hotel locations to road detours to scheduled protests where travel is anticipated.

Solution

The 89th AW selected Geospark Analytics' Hyperion global threat and risk assessment platform and mobile app to provide analysts and operators unprecedented situational awareness at base, in the air, or in the field.

Analysts and Pilots can now query open source news feeds in over 100 languages to identify potential trends and threats; leverage advancements in artificial intelligence and machine learning (AI/ML) in order to derive insights and reduce analyst workload; and view risks, events, trends, and activities in an interactive user interface visualized geospatially.

Benefits

The 89th AW has been utilizing Hyperion and its Mobile App to increase collaboration and communication between those on base and those in the field.

Analysts on base can now prepare a repository of information specific to the mission and share content folders directly to those pilots and squad members in the field. The collaboration has led to a significant increase in efficiency and has created a common operating picture for all involved in assuring mission success.



“ *I continue to use your platform daily and find it helpful.* **”**

Director of Intelligence and Information
United States Northern Command and
North American Aerospace Defense Command

National Security Agency Case Study – *Global PAI Platform*



“Our evaluation of Hyperion makes it very clear that it can help us identify hot spots and high priority topics faster and with more surgical precision than any other approach we’ve evaluated previously, and doesn’t necessarily require an increase in personnel, which is a critical factor in adding mission capability.”

Operations Center Technical Director
National Security Agency

About

The National Security Agency (NSA) leads the U.S. Government in cryptology that encompasses both signals intelligence (SIGINT) and cybersecurity products and services, and enables computer network operations (CNO) in order to gain a decision advantage for the Nation and our allies under all circumstances.

Challenge

The National Security Operations Center (NSOC), is the Agency's current operations center. Much more than just a “Watch Center,” the NSOC is the authoritative center for dynamic management of time-sensitive SIGINT and Watch operations for the agency.

Part of those operations includes ingesting data from publicly available information (PAI) - which can take many forms and often requires time to monitor, collect, and analyze.

Solution

Analysts can monitor emergent events using Hyperion's easily navigable UI. With robust querying capabilities as well as translation from over 100 languages, they are able to track events globally while also conducting research for more topical events simultaneously.

With Hotspots and Pulse, analysts are able to track trends, breaking events, and situational developments from a single UI. Using advanced alerting techniques, analysts can automate workflows with ease, leaving time for further analysis into varied topics.

Benefits

Providing alerting and querying capabilities on PAI allows for enrichment of data found in classified systems.

Watch officers are also able to easily track trends and changes to stability on a country, region, and city level.

A customer since 2018 with Geospark Analytics Annual Subscription Services for Hyperion.

U.S. Customs and Border Protection Case Study – *Global PAI Platform*

About

With more than 60,000 employees, U.S. Customs and Border Protection, CBP, is one of the world's largest law enforcement organizations and is charged with keeping terrorists and their weapons out of the U.S. while facilitating lawful international travel and trade. As the United States' first unified border entity, CBP takes a comprehensive approach to border management and control, combining customs, immigration, border security, and agricultural protection into one coordinated and supportive activity.

Challenge

Given the critical and wide scope of the CBP mission, CBP requires the ability monitor and anticipate events that may impact CBP operations and personnel, as well as guarantee security across the nation's borders. Employees aim to understand trends and anomalies to identify current threats and potential risks. CBP relies on tools to facilitate access open source information and effectively provide holistic insight into current and emerging global events to enable effective border security.

Solution

CBP selected Geospark Analytics' Hyperion global threat and risk assessment platform to provide analysts and operators unprecedented situational awareness and an AI-driven forecast of risk across the globe. Analysts can now query open source news feeds in over 100 languages to identify potential trends and threats; leverage advancements in artificial intelligence and machine learning (AI/ML) in order to derive insights and reduce analyst workload; and view risks, events, trends, and activities in an interactive user interface visualized geospatially.

The current user group, comprises of over 100 analysts, supervisors, deputy directors and directors from Border Patrol, the Watch Center in Headquarters and the international team tracking stability and emerging threats, smuggling, and international trade.

Benefits

CBP employees are using Hyperion's full suite of capabilities –*Pulse, Hotspots, Events, Alerts* and *Collaboration*- to increase efficiency in research and allow further time for analysis. CBP users have saved a minimum of 690 hours this year, equating to well over \$30,000 in savings for the organization.

Advanced Alerting is enabling teams to access curated data sets specific to CBP's mission.

Hyperion Pulse provides additional context and visualizations within their reports.

A customer since 2020 with Geospark Analytics Annual Subscription Services for Hyperion Enterprise Licenses for 115 users.



U.S. Customs and Border Protection

“ I was getting immediate reports and sending them up the chain even before people in the field knew about it. ”

Intelligence Analyst
Current and Emerging Threats Division
Office of Intelligence
U.S. Customs and Border Protection



FEMA Case Study – Global PAI and Custom Risk Model for COVID-19 Response



FEMA

“Geospark’s data looks great! Keep up the good work.”

Executive Office of the President
Office of Science and Technology Policy

About

At FEMA, the mission is to help people before, during and after disasters. FEMA employs more than 20,000 people nationwide. Headquartered in Washington, D.C., FEMA has 10 regional offices located across the country. The organization leverages a tremendous capacity to coordinate within the federal government to make sure America is equipped to prepare for and respond to disasters.

Challenge

To date, information nodes have been stove piped, limiting the usefulness of real-time analytics or data services. The focus of this effort would be to support the development of a highly scalable, interoperable, flexible framework that would automate and improve FEMA’s ability to identify threats, trends, or stability indicators earlier in the decision lifecycle. This effort supports the development of a solution that will include authoritative datasets (such as weather services) with external data sources (such as social media and traditional news media). The solution should be based in cloud technologies to quickly generate consumable data outputs and services.

Solution

FEMA’s Response Geospatial Office selected Geospark Analytics to support the country’s COVID-19 Response. Geospark Analytics will leverage its Artificial Intelligence engine, Hyperion, to produce a county-level seven day forecast of the potential impacts of COVID-19. The goal of this model is to assist with resource prioritization/allocation based on identified need.

The model accounts for factors such as total population, population density, population over 60, availability of ICU beds, stresses on the hospital and ICU system of each county, as well as confirmed cases of COVID-19. Each county is rated from 0 – 10 with 10 being the most at risk counties for their ability to manage the spread of the virus with known hospital resources.

Benefits

Geospark Analytics COVID-19 Seven Day Risk Model, built within FEMA’s Esri ArcGIS environment, has been accessed over 3.5 million times in the last six months.

Geospark Analytics COVID-19 Risk Model includes solely authoritative datasets, but can quickly be overlaid with Hyperion’s 6.8 million sources of social media and traditional news media.

A customer since 2020 with Geospark Analytics Annual Subscription Services for Hyperion, Hyperion API and Esri Feature Layers.

Department of Health and Human Services – *Global PAI Platform and Mobile App*

About

The mission of the Health and Human Services Office of the Assistant Secretary for Preparedness and Response (ASPR) is to save lives and protect Americans from 21st century health security threats. ASPR leads the nation's medical and public health preparedness for, response to, and recovery from disasters and public health emergencies. ASPR collaborates with hospitals, healthcare coalitions, biotech firms, community members, state, local, tribal, and territorial governments, and other partners across the country to improve readiness and response capabilities.

Challenge

ASPR's Security Intelligence and Information Management (SIIM) Office is tasked with gathering, organizing, and visualizing the information needed both by senior leadership and teams in the field.

With teams responding to disasters, including hurricanes and wildfires, as well as monitoring hospital capacity and broader trends with COVID-19, ASPR requires the ability to monitor and anticipate events that may impact the health and safety of its team members, volunteers, and the American community.

Solution

HHS selected Geospark Analytics' Hyperion global threat and risk assessment platform, Geospark Analytics' COVID-19 Risk Model, and enterprise access to all of Geospark Analytics' data in the HHS ESRI ArcGIS environments to provide analysts and operators unprecedented situational awareness. Analysts, managers, and deployed personnel can now access threat data wherever they are in the world. With Geospark Analytics' Data Science team and government modeling experts, the teams are working to improve COVID-19 risk forecasting and modeling to provide better data to those who need it.

Benefits

Geospark Analytics data is used to assist in the COVID-19 Common Operating Picture (COP) within the GeoHealth system and is not available anywhere else. The data is trusted by several federal agencies such as HHS, FEMA, DoD and the White House. Due to this and the availability of the system and the possibilities of this system to be fine-tuned and built to watch and monitor federal sources as well as open source makes this system a vital addition to the capabilities for situational awareness.



Analysts are utilizing Hyperion to bolster rapid response capabilities for teams entering the field in emergent situations.

HHS ASPR SIIM Analysts