



October 18, 2017

Technology Demonstrations

Joint Content Management (JCM)

Joint Content Management (JCM) is tasked to develop unified processes for managing and disseminating content across the Analysis (A) and Source (S) directorates. Working across NGA, the working group defines governance and best practices for content management and oversees the implementation of the policies within Analysis and Source branches. JCM is currently working with Agency initiatives such as the Analysis Data Strategy and the Enterprise System for GIS.

Office of Asia-Pacific GEOINT Contingency Packages and Web Viewers

The NGA Office of Asia-Pacific GEOINT contingency program is a collection, production, and analysis strategy to manage risk in a resource-constrained environment. Lower priority issues are placed in contingency status, monitored, and are required to have a contingency package that provides a baseline of knowledge to enable the GEOINT enterprise to respond to crises or other threats to U.S. and allied security interests.

Multi-INT Knowledge Graph (MKG) Demo

The Multi-INT Knowledge Graph (MKG) capabilities will be demonstrated.

Using User Experience (UX) Research to Improve Technology Adoption

UX Research can help arm program owners, designers, and developers with the user-centric insights to improve the adoption of and satisfaction with apps, websites, and other technology. UX Research can be used throughout the product development life cycle – from inception to optimization.

eXploit

This will be a comprehensive demonstration of the eXploit tools and workflow to include the web-based ELT applications and the NGA SOM capture tool.

Consolidated NGA Security Classification Guide (CoNGA) Security Management Resource Tool (SMaRT)

This demonstration will include an introduction to NGA's new Security Classification Guide (CoNGA SCG), along with a technical demonstration of how the Security Management Resource Tool (SMaRT) can be used to quickly access NGA classification guidance from any terminal on the JWICS network. This tool aims to improve accessibility and user interface with NGA's classified equities. The SMaRT site, along with the CoNGA SCG content, will be streamlined to incorporate rapid changes to ensure users of NGA information have the most accurate classification guidance at all times.

N2W Project Management Office (PMO)

The Next NGA West (N2W) Transformation and Engagement (T&E) team will provide an Overflight Video of the new site and host a Q&A. IT, Security and T&E program managers will be in attendance.

FMV to NITF Mosaic

Convert Full Motion Video (FMV) data into still NITF imagery that can be exploited in an electronic light table just like satellite or high-altitude airborne imagery. The capability can help users get a better/bigger view of an area that is often lost with the small field-of-view provided by most FMV sensors today.

GEOINT Services

Learn about both new and upcoming Mission and DevOps tools from GEOINT Services. Mission users can take advantage of tools and apps that provide a variety of geospatial capabilities and services, including big-data processing, analytics, map editing, collaboration, high-performance spatial analytics, high-speed streaming of imagery, and more. Developers can access GEOINT Services' DevOps environment, where they will find a platform and tools to help build solutions. GEOINT Services includes tools to help manage, test, and store code, track issues, collaborate with team members, manage projects, manage artifacts, and more.

Aeronautical Mobile Application (AMA)

Learn about aeronautical navigational information that is viewable/searchable in a mobile device (iOS, Android, or OS) supporting worldwide mission planning and execution through all phases of flight.

Geospatial Terminals Operations (GTO)

This is a web-based automated generation of aviation terminal instrument procedures graphs from an aeronautical database.

DoD Customers Gain from New NGA Mobile Technology Capabilities

NGA unveils a complete package that enables its mobile customers to access and download digital aero and maritime charts as well as topo data to their mobile tablets and smartphones in the new, mobile-friendly geopackage data format via Map of the World. NGA's DoD customers can also view their current GPS location on top of these map layers in the NGA Mobile Air, Land, Sea app for improved situational awareness for navigation and mission success.

NSF Open Mapping Environment (NOME)

NOME is an online capability where the community (NSG Members & Partners) can edit existing content and add new features throughout the world. This Volunteered Geographic Information (VGI) approach improves the quality of the foundation data & ensures everyone has immediate access to the newest content.

Quality Assurance Checks (QAC)

QAC is a suite of tools to determine the level of acceptance of spatial data by NGA. QAC is built using open-source tools and will replace that GAIT checks, which is being retired.

Print on Demand

This demo will showcase Print on Demand Web Service and Forward Based GEOINT Georeferenced Data. STM supports hard copy printing and the digital dissemination of NGA's Standard Maps and Charts. Included will be a demonstration of custom services available through STM.

IGAPP — Mobile applications for the DoD user

Through Vendor Opportunity Packages (VOPs), IGAPP delivers the information received directly from our users and removes the guesswork – ensuring developers are creating meaningful apps. By simplifying the federal government acquisition requirements, IGAPP removes the barriers that have historically stymied most private sector firms or small businesses. IGAPP provides an open-source environment required for the government to engage directly with startups, academia, and mid-sized software firms. This environment not only gives the government access to the most cutting-edge GEOINT apps proposed direct from our vendors, but reduces the procurement timeline from 18 months to four to six weeks.

Map of the World (MoW)

The Map of the World is an online geospatial environment that provides GEOINT-related and multi-source content for use by the IC and DoD community to meet their mission needs. It serves two critical functions for the Community:

- 1) Content Service: Provides integrated, authoritative geospatial content; and
- 2) Geospatial Environment: Integrates data from multiple sources into a single view, providing fast and easy access to information. The Map of the World serves a wide community of users across the IC and DoD, supporting a range of expertise, from a novice with minimal GIS expertise to an expert analyst applying the available content services to execute robust analytics. By improving the IC's access and discovery of authoritative content, the MoW will facilitate improved collaboration throughout the IC. As organizations produce, obtain, and store data and intelligence, the Map of the World will enable others to discover this content, thereby increasing efficiencies in data management and reducing possibilities of duplicative content.

Geospatial Repository and Data Management (GRiD)

The Geospatial Repository and Data (GRiD) Management System will present an in-depth demonstration.

Commercial GEOINT Information Service

The Commercial GEOINT Information Service (CGIS) provides U.S. government users with on-demand access to global commercial imagery and information automatically extracted from commercial imagery. CGIS enables analysts to set alerts for detected objects such as aircraft and ships, provides over a billion square kilometers of imagery for foundation GEOINT production, and streams imagery into every major DoD mobile device application. This demonstration will showcase the ability to generate automated information alerts based on object-detection algorithms, as well as how to use CGIS as an imagery source in foundation GEOINT workflows.

NGA Analytic Production and Design Center

The Analytic Production and Design Center offers products and services that touch every step of the analytic process. We will demonstrate how advanced visualization, multimedia, custom graphics, and 3D models are used to increase the impact of analytic products and are leading the way in Intelligence Community analytic reporting.

In-Q-Tel pilot programs: DataRobot, MapD

The DataRobot platform enables non-technical analysts to perform self-service data science tasks. DataRobot allows for an 'auto-pilot' mode for data science that automatically generates thousands of predictive analytic models and selects the best performers by leveraging a sophisticated cloud-based analytic framework. MapD is an end-to-end data analytic and visualization platform that leverages the power of GPUs to deliver extreme speed and scalability in a minimal hardware footprint. The Immerse client provides both complex data visuals and standard reporting charts.

Using Small UAVs for Next Generation GEOINT

Small Unmanned Aerial Vehicles provide an inexpensive, user-friendly, safe, and repeatable system for remote sensing. These autonomous platforms allow users to rapidly collect and disseminate FMV, EO, IR, and LIDAR data. This data is used to create geo-referenced 3D models for mission planning and rehearsal, security purposes, and disaster relief operations.

Using Virtual Reality for Immersive GEOINT

Virtual Reality headsets allow users to be completely immersed in interactive 3D environments. This ability to walk around or fly-through a scene provides an unprecedented sophistication for visualizing 3D models. Users can easily visualize cities, terrain, and other objects in 3D, which is ideal for mission planning and rehearsal.

WATCHMAN

WATCHMAN is a tool that leverages machine learning (via the deep learning technique) to automate the process of object/target detection (e.g. a truck mounted crane) within an image(s). The tool will aid the GEOINT analyst workflow by automatically identifying an object of interest, then providing an alert to the analyst. This process will supplement the analyst's time and provide a capability to triage their work, moving the most pertinent information to the forefront.

GLIDES

GLIDES offers global, dynamic foreign language mapping, supporting hundreds of analysts in a wide variety of missions with real-time mapping of language usage around the world on various social media channels. This tool identifies languages that are out of place, and exposes the underlying data and algorithms as services for other applications. In the past year GLIDES has expanded its language coverage and improved to support faster, more relevant queries.