General Dynamics’ Multi-INT Analysis and Archive System (MAAS) supports the Motion GEOINT Analyst with a scalable, open, service-based solution to capture, exploit, disseminate and archive intelligence, surveillance and reconnaissance (ISR) data, including Full Motion Video (FMV) and GMTI. MAAS enables real-time and forensic analysis of multiple intelligence (Multi-INT) sources that support live missions, Structured Observation Management (SOM), and Activity-Based Intelligence (ABI) methodologies.

With real-time exploitation, analysts can view, tag, report, and dynamically discover intelligence events as they occur in one or more mission views for immediate reporting or post-mission forensic analysis. MAAS provides an advanced video player with zoom, pan, filtering, edge detection, multi-speed play, real-time quality enhancement, and full annotation capability. Built upon a Service Oriented Architecture (SOA), MAAS offers analysts a versatile multimedia environment compatible with open source solutions as well as exposed service endpoints for third-party integration and enhancement.

- Generate custom reports in real-time
- Configure entire report templates
- Customize tools for rapid reporting to decision makers
- Deploy hybrid/cloud-ready solution into diverse environments
- Easily share and federate captured observations across missions
MISSION CAPTURE

Mission Capture performs data remediation, including frame insertion to insure analysts can capture, what they see, when they see it to meet mission needs. As an open platform, the MAAS suite of capabilities is specifically developed to support whatever tools the mission requires, including an advanced, frame accurate, metadata-aware video player with zoom, pan, filtering, multi-speed and single frame play with full annotation capability.

MISSION EXPLOITATION

MAAS exploitation capabilities provide an intuitive solution for exploiting and analyzing video imagery supporting a variety of ingest formats. Analysts can exploit video streams by tagging, annotating, associating, linking, sharing and documenting intelligence events occurring within that video, including the capture of structured observations. The captured data is immediately available to all analysts on the system, thus enabling collaboration between all of the analysts. This allows for coordinated, thorough analysis and ultimately better products.
MISSION DISSEMINATION

MAAS provides various pathways for data to be disseminated to support mission analysis.

The MAAS web services and portal provide access to stored MAAS information via a standard web browser. The browser interface enables a web portal user to contextually, geospatially, or temporally query the MAAS database for all original digitized data, in-work efforts, or finished products via keyword, metadata, geolocation or document content searches. Any data returned from a query may be disseminated through the web services, web portals, email, and/or via removable media. Other forms of Mission Dissemination include Full Motion Video (FMV) rebroadcast with or without metadata remediation, publishing to a DIB/CSD/NCCT enterprise data repository, searching and playing MAAS missions from Pursuer, and dissemination to coalition partners.

OPEN SERVICES PLATFORM

The MAAS family of Open MG Services supports a variety of modern and legacy web clients, as well as integration with other capabilities, by offering multiple access points for all deployed services. For modern HTML based web technologies such as AngularJS or ReactJS, MAAS offers a full suite of REST based services accepting and returning JSON structured data. For legacy web technologies based on ASP, JSP, Flash or Silverlight, MAAS offers a full suite of SOAP based services accepting and returning XML structured data. Our engineering reviews and tenets ensure that all current and future MAAS services comply with both REST and SOAP formats. In addition, each service offered by MAAS has an OGC compliant counterpart allowing easy integration with OGC compliant tools that may already be in use.

MISSION ARCHIVE

The MAAS platform provides a secure storage management solution for original video information, metadata, and derived video information for user-defined periods. MAAS provides access to multiple tiers of storage depending upon the site Concept of Operations (CONOPS) and availability. The storage is scalable from single disks to large enterprise storage systems, including various near line and off-line storage solutions, such as SAN, NAS, tape backup offerings, and the cloud. The value is that MAAS can be tailored to any available storage platform.
TECHNICAL SPECIFICATIONS

Motion GEOINT Inputs
- Full Motion Video (FMV)
  - MISP standard H.264 and H.265 video delivered via a MPEG2 Transport Stream (MPEG2TS) container, with or without KLV metadata or audio channels.
  - MPEG2 TS with MISP compliant video elementary stream
  - Streaming FMV data, delivered by UDP multicast or unicast
  - Standard Definition (SD) video
  - High Definition (HD) video
- Legacy Video
  - Analog and digital video from handheld recording devices
  - Legacy analog tape formats and MPEG-1
- Metadata
  - MISB EG 0104
  - Key Length Value (KLV)
  - Closed Caption (CC) metadata
  - Cursor on Target (CoT)
- Support Data
  - National Imagery Transmissions Format (NITF) from Global Hawk, U-2 aircraft and other sources
  - Digital images, documents, maps, and shape files
  - Real-time chat sessions from several common platforms (IRC and XMPP based solutions).
  - Video Moving Target Indicator (VMTI)
  - Ground Moving Target Indicator (GMTI)

Outputs
- HTML web reports
- Highlight videos
- Annotated products in jpg, ppt, gif or other formats
- NITF files
- Shape files
- Windows Media™ format video
- MPEG-1
- MPEG-2, H.264 or H.265 encoded video clips with metadata
- Mission summary reports
- KML files for display in Google Earth™
- Selected Image Target Area (SITA) files

Third-party products
- Open Map™
- Falcon View™
- Google Earth™
- ESRI ArcGis®
- SOCET GXP®
- © Palantir
- © Ikena ISR
- MPEG-1
- MPEG-2, H.264 or H.265 encoded video clips with metadata
- Mission summary reports
- KML files for display in Google Earth™
- Selected Image Target Area (SITA) files