

## JAGWIRE™

### Manage, Discover and Deliver Geospatial Data

Remote sensing technologies have dramatically altered battlefield and disaster response operations, modernizing the ways that wars are fought, and improving the effectiveness and safety of relief and recovery efforts. With the explosion in the availability of sensors and platforms, the defense and intelligence community is facing numerous varieties of complex data coming in faster and in larger volumes than ever before. To address this growing need, NV5 Geospatial has developed a solution for end-to-end content management, discovery and near-real-time (NRT) dissemination of geospatial data to analysts and warfighters, regardless of their location.

Jagwire is world-class and battle-tested. It's an out-of-the-box data ingest, management, exploitation and information dissemination tool that turns data into high-confidence decisions faster than ever before. Jagwire delivers real-time search and discovery capabilities to the tactical edge, freeing up commanders and operations centers to focus on solving problems rather than searching for data. With state-of-the-art Full Motion Video (FMV) processing, data analytics and a powerful automated geospatial data federation capability, Jagwire meets Intelligence, Surveillance and Reconnaissance (ISR) requirements.



#### BATTLEFIELD PROVEN AND READY FOR OPERATION

Jagwire has a proven track-record that dates to 2004 when early versions provided combat support for operations in Iraq and Afghanistan. Jagwire has continued to be instrumental in recent operations such as humanitarian support missions for foreign and domestic wildfires, as well as relief operations in the aftermath of hurricanes and floods.

Currently, Jagwire is the FMV and geospatial management system of record for the U.S. Army's Shadow, Hunter and Gray Eagle (MQ-1C) Unmanned Aerial Systems (UAS) and the U.S. Army Special Operations (USASOAC)/160 SOAR MQ-1ER program.

Jagwire is currently being used by four U.S. Air National Guard units, including the MQ-9 Schoolhouse and Follow-on Training Unit (FTU), and supporting MQ-9 operations for domestic/civil operations.

Jagwire implements a STANAG 4559 interface for coalition dissemination of data and has been deployed with the European Partner Integration Enterprise (EPIE) under the U.S. Battlefield Information Collection and Exploitation Systems (BICES) program and is currently operated by the Royal Netherlands Air Force and Italian Air Force.

# EXTENDING THE REACH OF CRITICAL GEOINT DATA TO THE TACTICAL EDGE

As a web-based geospatial content management solution, Jagwire is designed to get the most out of existing infrastructure investments. Jagwire is highly scalable, from enterprise-level server environments to tactical small form factor devices and is designed to operate on standard off-the-shelf server/storage hardware. It is seamlessly compatible with a wide range of industry leading GOTS and COTS multi-INT and geospatial analytical software systems. Jagwire is also designed for secure environments and incorporates a number of features to control data dissemination, including FMV metadata redaction and role-based access controls (RBAC).

## THE STANDARD

Standards enable easy sharing of information between systems. Jagwire is built around adopted Open Geospatial Consortium (OGC) compliance standards and web services, ensuring systems are compliant, interoperable and secure. Jagwire is certified to support industry data and format standards and is accredited for Department of Defense (DoD) secure networks (SIPR, JWICS, BICES).

## FEDERATED ARCHITECTURE

Jagwire is a federated system and does not simply replicate data. When data is made available in one point of the enterprise it is immediately discoverable by Jagwire users and can be accessed from the cloud, desktop and even from mobile devices. Jagwire's federation capability supports a flexible deployment model that reduces costs and network bandwidth requirements by only moving data where it is needed and when it is needed.

## DELIVER CRITICAL INTELLIGENCE TO THE FIELD

Jagwire lets soldiers, sailors and first responders view live video from manned/unmanned aerial, ship-borne and shore surveillance systems, provides real-time video feeds to a command center and connects the field of vision of each member of a unit.

Along with real-time ingest of an unlimited number of live feeds, Jagwire supports adaptive bit-rate streaming for dissemination to users in low-bandwidth environments. Jagwire can similarly provide simultaneous transcodes at multiple output resolutions in real-time to support both robust and austere communication environments. Jagwire is the industry leader in providing uninterrupted FMV over limited bandwidth and is optimized for delivery of video with low-latency over disadvantaged networks, including dissemination to thin clients and mobile devices.



## UNPARALLELED ACCESS TO MULTI-MODAL DATA

Jagwire supports near-real-time ingest, access and dissemination, even in low-bandwidth environments, for a variety of multi-source, multi-INT and multi-modal geospatial data types and supporting information:

- > FMV
- > LiDAR
- > Imagery and SAR
- > Wide-Area Motion Imagery (WAMI)
- > Supplemental data (i.e. mission chat, tracking data, annotations and reports/documents)

## ADVANCED DISCOVERY AND FILTERING CAPABILITIES

Whether in the field or in an operations center, users can quickly access the data they need to make decisions with a high degree of confidence. Jagwire's enhanced filtering capability reduces the time from data collection to decision making and enables fast and easy discovery across the enterprise, even through large amounts of disparate data. Users can quickly filter data based upon a variety of parameters including geolocation, time/date, platform, sensor modality and user-defined tags.



Jagwire's video player is designed to provide quick exploitation functions. DVR-like controls enable users to quickly search through their FMV, even while watching live video. Users can easily create on-the-fly video clips and imagery snapshots that can be annotated and re-ingested as imagery assets.

## Jagwire™

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