



MOTION IMAGERY PROCESSING
AND EXPLOITATION SOFTWARE

D-VEX

Accelerate time from intelligence to insight.

D-VEX, part of the General Dynamics Mediaware Products suite, is an award-winning motion imagery Processing, Exploitation and Dissemination (PED) software application that delivers productivity and intelligence benefits for Intelligence, Surveillance and Reconnaissance (ISR) operations. One of the most pressing challenges facing ISR users today is how to efficiently process and manage the large volumes of video imagery collected from unmanned aerial vehicles (UAV) and surveillance aircraft.

The practical software tools provided by D-VEX solve this problem by accelerating key intelligence value extraction from accumulated full motion video, enabling confident and timely mission analysis and reporting. With the ability to synchronize and display mission data from multiple ISR platforms and sensors, D-VEX simplifies video processing, exploitation and dissemination for military, government, public safety and commercial ISR operations.

D-VEX has an operationally proven track record and boasts demonstrated plug and play interoperability with STANAG 4609/NGA MISP compliant manned and unmanned ISR platforms. It has low training and operational support requirements and delivers a cost-effective solution for leveraging vital intelligence from airborne sensor imagery.

- Record scalable video and metadata
- Enhance low latency video display
- Search through archives, user tags, and intelligence products
- Manage, label, and export data
- Share and export geo-location information

Immediate tactical advantage.

D-VEX complements existing ground control and mission planning software by providing operators of ISR platforms with easy-to-use tools to derive, manage and distribute critical intelligence from the full motion video gathered, through in-field processing.

IMPROVED SITUATIONAL AWARENESS

Ensure critical events are not overlooked through low latency video display, instant replay and moving map.

INSTANT ACCESS FOR REPORTING AT MISSION-SPEED

Exploit live imagery and communicate intelligence as situations develop, using georeferenced images and full motion video snippets.

Retain mission-critical knowledge.

Maximize the value extracted from surveillance imagery using a searchable, geo-referenced video library in which collected video can be archived and retained for immediate retrieval. Gain deeper insights into operational areas, accelerated with end-to-end data management and search functionality that condenses thousands of hours of mission data and assists the authoring of post-flight intelligence products.

GROUND-BASED VIDEO REPLAY

D-VEX provides a ground-based, off-platform replay system for multi-channel flight recorders and tactical computers.

DETAILED POST-MISSION EVENT ANALYSIS

D-VEX supports post-mission imagery exploitation and reporting. It allows operators to instantly search for and retrieve the precise event of interest out of thousands of hours of collected video.

FACILITATE TRAINING AND MISSION LESSONS

Imagery from every mission can be returned for assessment and training purposes, used for informing new arrivals and ensuring valuable field experience doesn't disappear with every troop rotation.

D-VEX supports flexible deployment options from single user ruggedized tablets and laptops through to scalable multi-user systems. The software is available in multiple configurations.

FOR ALL INQUIRIES INCLUDING MAAS/
MEDIWARE PRODUCTS (MWP):

MotionGEOINT@gdit.com

Technical Specifications

STANAG 4609/ Motion Imagery Standard Profile (MISP) compliant, including:

- Standards 0104, 0102, 0601, 0602, 0603, 0604, 0605, 0801, 0806, 0807, 0902, 0903, 1002, 1010, 1107, 1202, 1206, 1601, 1602 and SMPTE RP210v13, 20120214
- ESD Carried in Closed Caption fields (Line-21)

Video

- AVC (H.264) Base, Main & High Profile
- HEVC (H.265) Main and Main 10 Profile
- MPEG-2 Main and 4:2:2 Profile

Audio

- MPEG-1 & 2 Layer-I and II
- AAC-LC, HE-AAC

Image

- NTIF 2.1, JPEG, BMP, PNG, PPM, TIF

Supported Features

Playback

- Review up to 9 video channels in multi-display

Recording and storage

- Record up to 30 HD video streams simultaneously per server
- mIRC chat ingest
- Archive stores up to 100,000hrs of video data

Mapping Clients

- FalconView™
- Google Earth™
- WMS Map Servers

Minimum System Requirements

- Windows® 8, Windows® 10 or Windows® Server 2012
- Graphics cards must support OpenGL® version 1.5 (NVIDIA® cards recommended)
- RAM Needed: 8GB minimum