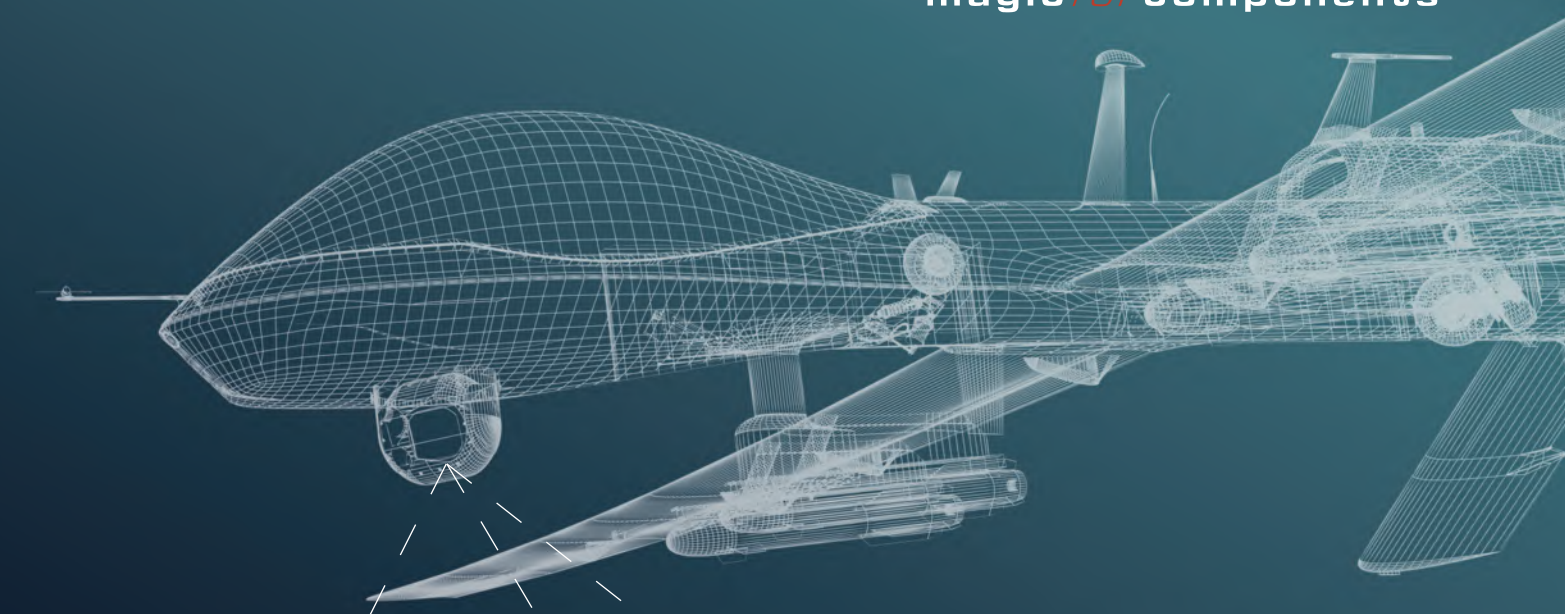
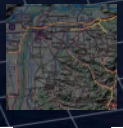
magic for components





DATA 01

```
int main(int argc, char **argv) {
    vector<char> acc;
    char ch;
    ifstream infile(argv[1]);
```

DATA 02

```
int main(int argc, char **argv) {
    vector<char> acc;
    char ch;
    ifstream infile(argv[1]);
```

DATA 03

```
int main(int argc, char **argv) {
    vector<char> acc;
    char ch;
    ifstream infile(argv[1]);
```

VIDIS

VIDEO, IMAGE AND DATA DISTRIBUTION SERVICE

VIDIS

VIDEO, IMAGE AND DATA DISTRIBUTION SERVICE

VIDIS is a big data, real time-streaming server which intakes streaming data from a variety of sensors, transcodes the data if required and makes it available to multiple users across the network. VIDIS is used for data analysis, exploitation and surveillance by providing seamless frame, time and location accurate access to the data.

Open standard interfaces are available in **VIDIS** to both providers of sensor data and users. The live streaming server processes videos, images, GMTI and signal (SIGINT) data in standard access formats or creates them from proprietary input data, which means that raw data and metadata for each piece of sensor data can be accessed quickly. The backend cluster solution can either be operated as a stand-alone solution or fully integrated into a **Coalition Shared Database (CSD).**

VIDIS is an IP-based interactive data-on-demand solution that offers unlimited, scalable real-time access to almost unlimited terabytes of raw sensor data and their metadata.

LIVE STREAMING MANAGEMENT

- Configurable, persistent input for different sensor sources (video, image, signal data)
- Inputs for proprietary and standard data streams
- Distribution to multiple users and systems in real time
- Simultaneous storage of incoming data streams during parallel provision
- Storage of raw data alongside simultaneou processing for use in forensic investigations and legal inquiries
- Livestreaming and streaming of stored data on demand
- Notification mechanism for live video streams
- Optional Coalition Shared Database (CSD) integration
- Supported Standards and Interfaces:
  - ***STANAG 4559:*** *NATO Standard ISR Library Interface*
  - ***AEDP-18:*** *NATO Standard ISR Streaming Services*
  - ***STANAG 4609:*** *NATO Digital Motion Imagery*
  - ***STANAG 4607:*** *NATO Ground Moving Target Indicator*

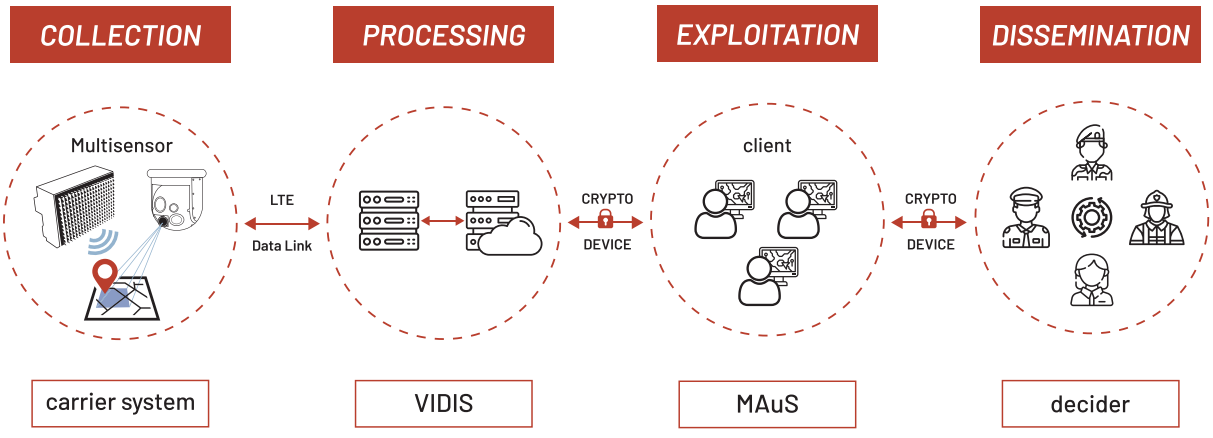
PRE-PROCESSING SERVICE

- Create additional metadata while preserving video raw data
- Source and time tagging
- Integration of server applicable algorithms, e.g.
  - *Motion estimation to support image stabilization*
  - *Mosaicking*
  - *Resolution enhancement*
  - *Feature recognition algorithms*
  - *Basis for geo-registration tools and tracking*
  - *Open plug-in interface for the integration of additional algorithms or analytics servers*

CLUSTER STORAGE AND PROCESSING

- Freely addable processing units (slaves)
- Freely addable storage units (master)
- VM and Cloud native capable
- Distributed data storage as star or ring architecture
- Replication of catalogue or data

process chain



USER STREAM ACCESS

- Random access to Image, Signal, Video and Metadata
- Seamless switch between live stream and complete history
- Access to all sensor sources and its data
- Frame accurate navigation in video and metadata
- More than 100 simultaneous active clients in parallel
- Single track access (e.g., only KLV metadata)
- Query interface to access video data using various attributes
- Retrieve video segments based on geospatial criteria
- Quality of Service (QoS) Mechanisms

TRANSCODING AND RECODING SERVICE

- Correction of non-standard compliant data streams
- Frame size adaptation (resolution, crop)
- Frame skip
- Conversion to different video codecs
- Bit rate adaptation
- Network MTU size and TTL adaptation
- Replication across WAN (VIDIS to VIDIS)

WEBINTERFACE

User Web Interface

- Search capabilities
- Geospatial query
- Video player
- Video editing
- Import and export capabilities, additionally

Administrator Web Interface

- User management
- Cluster configuration
- Storage management
- System Monitor
- Archive Functions
- Import interfaces and destination presets
- Replication etc.

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