

PRODUCT DATA SHEET BLUEFORCE EDGE

Autonomous mobile edge compute software for IoT sensor and AI fusion

Increasingly sophisticated and pervasive IoT sensor technology presents the opportunity for agencies and organizations to extend their capabilities, share information horizontally, and swarm faster than their adversaries, by communicating with and leveraging IoT devices that are installed at fixed locations, carried, mounted on manned and unmanned systems, or worn on the body. BlueforceEDGE is an autonomous IoT data fusion software platform and gateway that uses edge-based processing to accelerate recognitional decision-making by fusing unattended sensors & devices, artificial intelligence (AI) & analytics, and for interoperability with external data stores. BlueforceEDGE is built on a services oriented architecture and uses composable services which optimize forward sensor fusion providing automated cueing and higher confidence of assessments than could be obtained from single sensor instances or modalities.

BlueforceEDGE Benefits...

- Rapid adaptation through a documented BlueforceEDGE Plugin API and SDK
- Interprocess messaging interface for plugin-to-plugin communications for speedy sensor cueing
- Bidirectional chat interfaces for authentication and control of autonomous endpoints
- Native REST/JSON interfaces exposed through an API for listener and publisher interfaces in BlueforceEDGE plugins
- Secure and autonomous publish/subscribe interfaces for rapid swarming

•* 🕤 • •

XPLORE

 Plugins may be configured for use as sensor ingest/query, self
-contained services, and/or interoperable data streams

Copyright 2019-2020 | Blueforce Development Corporation | www.blueforcedev.com



Forward Sensor Fusion with Edge-Based Processing

The Blueforce Sensor Fabric is the formation of multiple Blueforce application instances on mobile computing devices, command center computers, and servers, interfacing with internal and external sensors and data services, that are managed by a proprietary Decentralized Fusion Engine (DFE), interconnected through an open architecture sensor messaging fabric (SMF) providing a rapidly formed network of humans, sensors, and intelligent information services.

Forward Sensor Fusion

Sensor data output, fused with metadata and among multiple sensors of single or diverse types, to provide information and action.

Alerting

Generation and distribution of system messages amongst humans, sensors, and autonomous agents, triggered by threshold, location, or rules.

Edge-Based Processing

Flexibility to process data serially or in parallel at the sensor head, on the gimbal, on the end-user device, or in the cloud.

Correlation

Diagnostic and predictive analysis, based on known or discovered relationships amongst sensor data attributes, fused with metadata.

Field Gateway

Message queued interconnection of sensor networks with access to data from a disparate array of systems and sensors.

Data Flow

Movement of data and information amongst system nodes to and from external systems for serial and parallel processing and consumption.



To learn more and request a demo visit: www.blueforcedev.com