# **FORCYTE**

Cyber Situational Understanding

ENABLING STRATEGIC DECISION MAKING

Forcyte is an exportable Cyber Situational Understanding & Awareness tool designed to provide Visualization of the Cyberspace and Electromagnetic (CEMA) domains, Planning & Mission Management and Intelligence-driven Operations.

It is built on a **modular design** and **open framework** that is operationally tested, and leverages standards such as the Structured Threat Information Exchange (**STIX**) and Trusted Automated eXchange of Indicator Information (**TAXII**) for **Threat Intelligence**.

Forcyte utilizes mission playbooks, workflows, standard military symbology, and user roles mapped to Joint Doctrine, enabling familiarity and ease of use.

#### **Cyber Situational Awareness**

Provides Awareness and Understanding of impact to mission and associated response options to drive actionable mission outcomes.

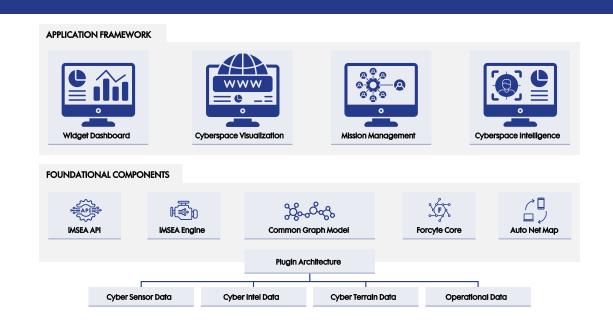
Cyber Planning and Mission Management Mission Plans, Playbooks, Plays and Courses of Action are modelled and missions may be simulated for training exercises, or operationally executed.

# **Cyber Survivability Assessments**

Provides a key element for simulated forceon-force survivability assessment with Measures of Effectiveness, Measures of Performance (MOE/MOP) and postexecution analysis.

# **Operationally Tested**

Field tested with integrations to many military systems, commercial products and compatible with the US Army Common Operating Environment (COE).



- + Open Architecture
- + Modular Design
- Customizable Dashboards
- + Mission Workflows
- + Enhanced
  Visualization
- + Threat
  Playbooks
- Forcyte is specifically designed to support the planning, execution, and monitoring of cyberspace operations





# **Key Features**

# Cyberspace Threat Intelligence Editor

- Enables network defenders and intelligence analysts to send, receive, and edit STIX data.
- Link diagrams of cyber attacks and machine-readable graphs may be shared to help others defend against similar attacks.

#### Order of Battle Editor

 Visualizes the task organization and associated capabilities of friendly, neutral and enemy forces in an easy-to-navigate tree structure.

# Mission Planning and Management

- Supports mission planning for multi-domain missions.
- Provides mission rehearsal and simulation capabilities with real-time health & status monitoring of mission execution.

# **Cognitive Engine Catalog**

- Creates custom analytics to alleviate cognitive burden.
- Enables junior-level operators to create complex analytics without requiring intensive data science training.

Forcyte uses "Cognitive Engines" that make use of the Observe, Orient, Decide, and Act (OODA) construct to model an analyst's thought process. The system will **Observe** streaming data, **Orient** the data by providing context using the Common Knowledge Graph to assess impact, **Decide** which actions to recommend to the user, and even **Act** on the recommendations in a fully autonomous manner.

Forcyte takes all of the data inputs and contextualizes them in the Common Knowledge Graph that uses a Semantically-Enabled Ontology Al technique to understand the relationships between the complex data.

Forcyte receives data that has been processed by cyber sensors, log aggregators, and other operational Programs of Record.

# **Cyberspace Domain** Visualization

#### Cyber-Physical View

- Geospatial overlay to present infrastructure, sites, and units
- Provides overview of network device location, health and status
- Context-aware pivoting between views

### Cyber-Logical View

- Shows network topology for cyber terrain
- Blue, Red, and Grey cyber terrain
- Spectrum dependent devices and RF connection types
- Multiple security enclaves
- Physical vs Logical connections

### Cyber-Persona View

- Shows relevant personas of interest
- Blue, Red, and Grey personas
- Display alerts from user behaviour cyber sensors
- Tracks enemy personas from social media accounts, system logins, email accounts, etc





Contextualizing



TIER 1: **Raw Data Processing** 

