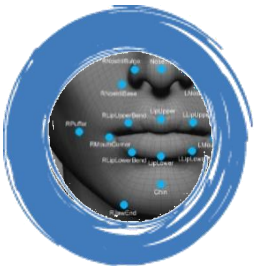
CymbIoT

Making IoT Smarter

CymbIoT Data Analytics

CymbIoT
Analytics Module
VISUAL | AUDIO | DATA

The CymbIoT Analytics Module offers a series of integral analytics packages- comprising the world's leading visual content analysis capabilities, and a range of cutting-edge sound analytics: from License Plate Recognition, through Face Recognition, to audio identification of gunshots, screams, and panic.



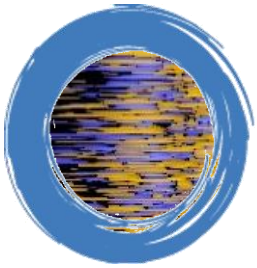
The CymbIoT C&C software integrates with any existing surveillance infrastructure (cameras, microphones, gates, access control systems, etc.). And applies selected analytics to the data produced by the installed systems.

CymbIoT has three (3) dedicated Analytics modules:

Visual Analytics – including Face Recognition, License plate Recognition, Heat Maps, and more.

Audio Analytics: identify gunshots, distress sounds, glass breaking – and more.

Data Analytics: Analyze and present data using our Reports module, create complex events, and utilize our Executive Dashboard.



CYMBIOT DATA ANALYTICS

CymbIoT's core delivery is seamless off-the-shelf integration between different operational systems and sensors- on the data and on the operational level.

Various CymbIoT modules offer a range of Data Analysis capabilities, delivering insight into real-time events, providing trend-capabilities for predictive modeling, and enabling rapid response to complex real world events.

While data fusion and analytics are an integral part of the CymbIoT solution, they are accessible to the user via three (3) main interfaces:

System Procedures

Enable users to define automatic processes within the system, based on processed data from multiple sources.

System Reports

Fuse data from multiple sources into unified interface, supporting filters based on any type of data.

Executive Dashboard

View system status and trends in real-time, with a high-level overview of all system operations.

CYMBIOT SYSTEM PROCEDURES

Procedures are templates of instruction flows. Operators use procedures to react to events when they occur, by defining a series of triggers (i.e. specific data collected by sensors and systems) that may be simple (data from a single sensor) or complex (data from multiple sensors).

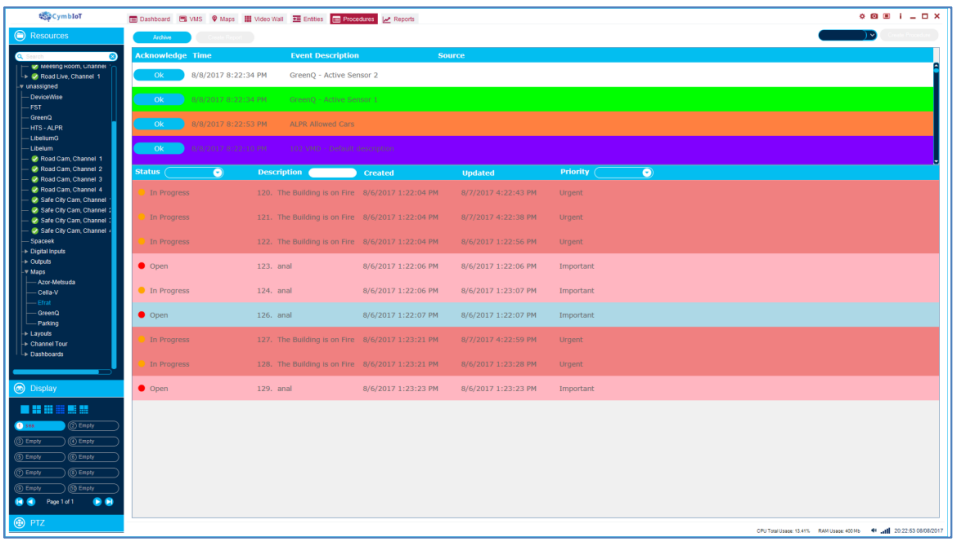
The procedure setup is composed of distinct steps, where each step is composed of one or more options and every option leads the operator to the next step.

Each step in the procedure can be linked to various actions supported by connected systems, which help the operator navigate the procedure and choose the appropriate options.

Procedures and procedure step can include a variety of data formats (audio, video, etc.), as well as configuration parameters (i.e. requirements for received data to be within preset limits in order to trigger actions).

The types and formats of data that can be included in any procedure are determined by the end-unit sensor: e.g. a temperature sensor and a light sensor will enable the operator to create a procedure based on temperature ranges AND light levels.

Utilizing multiple sources of data (e.g. requiring both audio and visual events to trigger a procedure) reduces false alarms and system “noise”.



CYMBIOT REPORTS MODULE

The CymbIoT Reports module is a querying component that produces dynamic reports from the Cymbiot Events database.

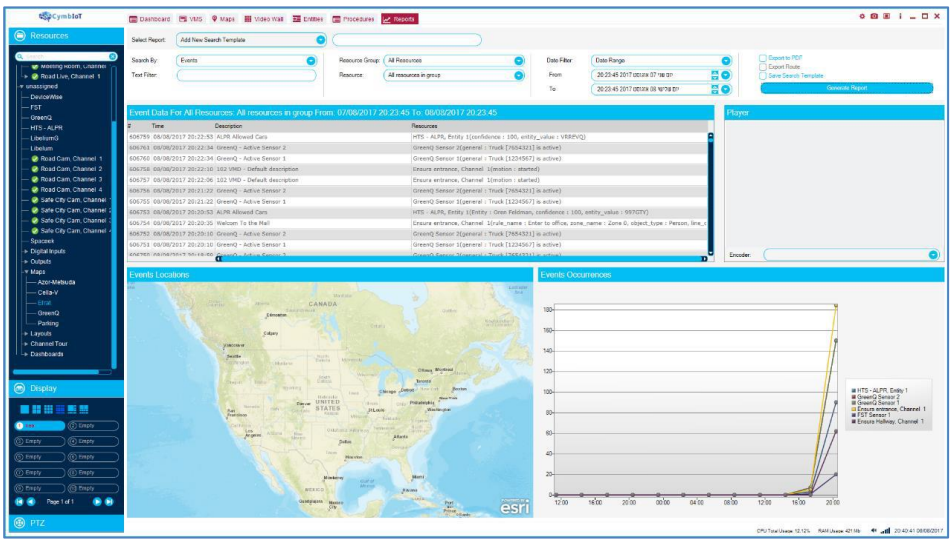
The produced reports include information about events, single triggers that compose the events, and additional visual information, like video recordings and map locations that attached to the results.

Data collected for reports can be in any protocol supported by the systems and sensors connected to CymbIoT, and filters can be used to analyze the fused data – also based on the data collected by subsystems.

Fused data and applied filters can include any format: audio, visual, tabular, lists, graphs, and more.

The Reports module also supports identification of abnormalities by allowing users to fuse and cross-reference different types of data from different sources in order to identify patterns and correlation.

Report queries may be saved, sent to other users, defined and templates – and more. As new sensors are connected to the system, additional sources and data types will become available via the Reports module.



EXECUTIVE DASHBOARD

The Dashboard Tab provides easy visual access to all system operations, data, and connected sensors.

Dashboards can be easily configured using a drag & drop interface, with users free to connect different visual elements to different data sources.

The Dashboard supports fusion of data from multiple sources, and can display audio, visual, graph-based, tabular, and any other type of data display.

The Dashboard module also offers Trend Analysis capabilities, based on analyzed historic data as well as real-time inputs, identifying patterns and correlations in the interaction of various system elements and users.

Security

Event

Person on terrorist watchlist enters city.

Detection

LPR identifies blacklisted car.

Response

CymbIoT C&C analyzes data and implements **procedures**:.

Directs cameras to event

Phone recognition searches for phone.

Alert police

Issue report of all blacklisted cars

Safety

Event

Fight breaks out in access point.

Detection

Audio analytics identify aggression.

Response

CymbIoT C&C analyzes data and implements **procedures**:.

Directs cameras to event

Sends security

Raises alert levels in all entrances & exits.

Issue report in module to send to police.

Traffic

Event

Traffic jam in front of secured area.

Detection

Visual analytics identify traffic jam

Response

CymbIoT C&C analyzes data and implements **procedures**:.

Security is alerted

Close gate nearest event

Alert traffic police

Analyze traffic trends via Dashboard Trend Analysis

CymbIoT’s mission is to design, implement and deliver advanced Internet of Things (IoT), Video Management Solution (VMS), and Command & Control (C&C) platforms. We empower end users to configure and manage integrated networks of all types and scales - from Smart and Safe Cities, through Transportation Hub security, to Smart Buildings and Enterprise management.

With millions of sensors across numerous verticals using our products to deliver actionable intelligence and real-time response capabilities to customers worldwide - we have the experience, know-how and technology to deliver real world solutions that work.

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