CymbIoT

Making IoT Smarter

Smart City Solution

About CymbIoT

The Challenge

The CymbIoT Smart City

Operational Scenarios

Why CymbIoT?

CymbIoT
Making IoT Smarter

The Problem

Millions of dollars spent on IOT sensors & systems annually.

No interconnectivity of data & operations.

Integration projects demand high time & budget investments.

Insufficient ROI in IOT for Smart cities.

The CymbIoT Solution

An **off-the-shelf IOT management product** that provides cities and enterprises with **rapid integration** of new & existing sensors and systems for **efficiency**, **security** – and **rapid ROI**.

The CymbIoT Offering

Product, not Program

Market-available, off-the-shelf product with over 50 IoT use cases.

Immediate ROI

Immediate ROI for cities and enterprises via integration of existing systems and sensors within 14 days

Flexible

Flexible integration engine to support any sensor and system:

- 70+ formats supported
- Up to 14 days for deployment of new format

Tested & Proven

Scalable & Robust architecture supporting any kind of deployment- Cloud & on premise.

CymbIoT C&C Core Features

Maps

Operational GIS dynamic navigation maps.

Scalability

Endless connectivity with standard COTS HW.

BI Data Fusion

Real-time data & operational fusion of all systems.

Advanced VMS

Internal VMS and 3rd party video support.

Analytics

Video, Audio & Data Analytics turn data to triggers.

Automation

Flexible process automation wizards.

Architecture

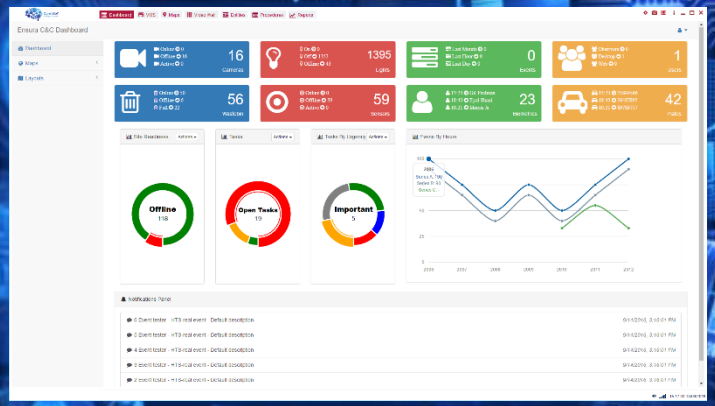
Hybrid cloud and on premise deployments.

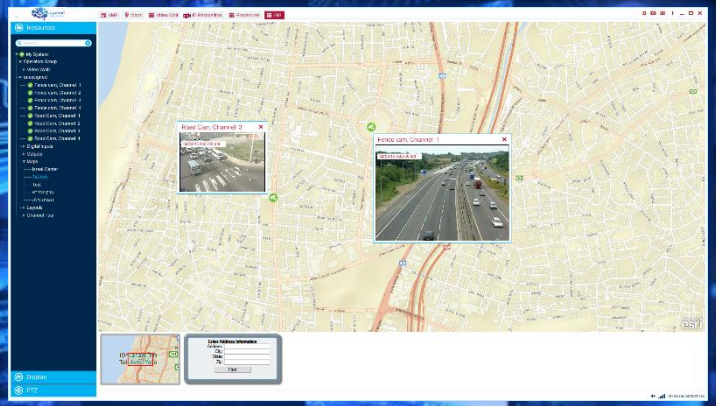
Agnostic

Integrate any 3rd party element.

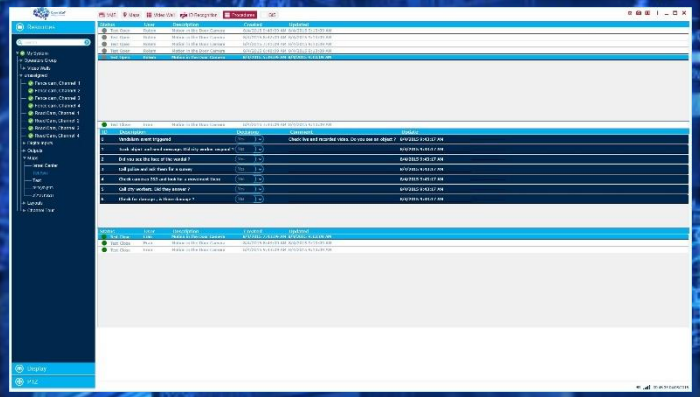
Customization

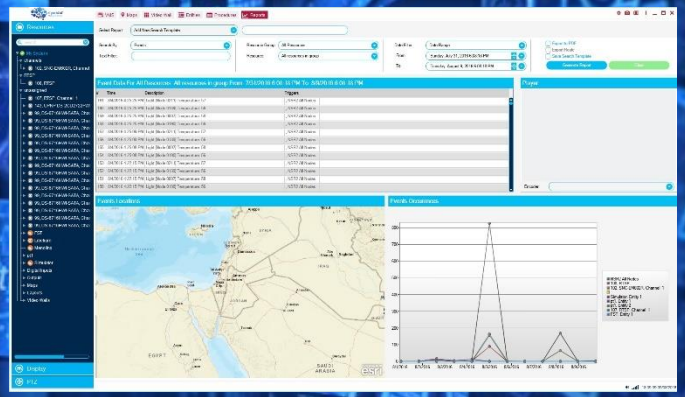
On the fly UI design per need.



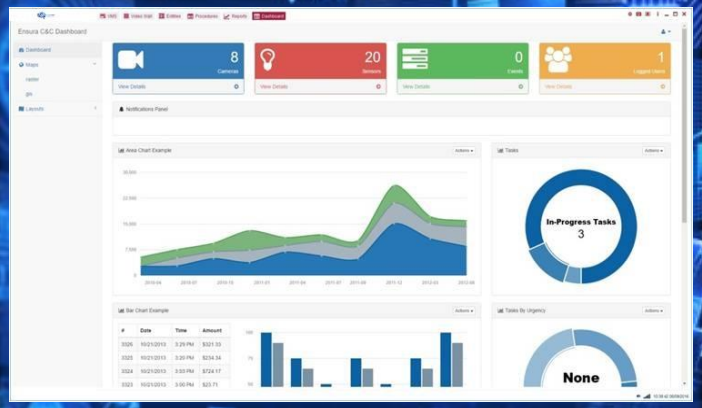


A Unified Interface for all Security & IoT Systems

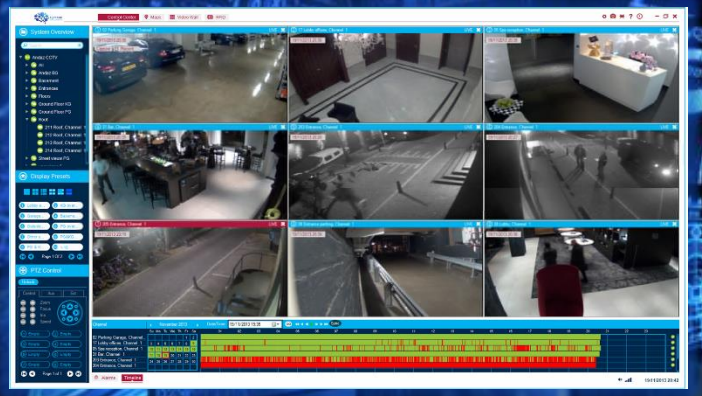


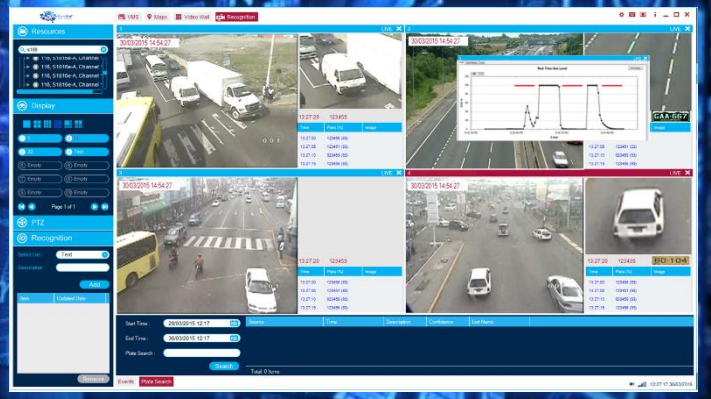


Reporting & Task Management Module for Cross-system Queries



Cloud-based & Onsite Deployments





Support for Proprietary VMS & Internal Video Analytics

CymbIoT
Making IoT Smarter

CymbIoT Smart City

Smart cities have a number of dedicated sensor networks, deployed throughout the urban environment:

- **Transportation Sensors**
- **Security Sensors**
- **Environmental Sensors**
- **Crowd Management**
- **Emergency Response**
- **Smart Lighting**

Smart City Elements

Transportation Sensors

CCTV Cameras

- Track vehicles
- Track commuters
- Video content analysis
- …more

ANPR Sensors

- Track vehicles
- Identify vehicles
- Manage traffic
- …more

Smart Signs

- Update routes
- Update schedule
- Crowd control
- …more

Bus GPS

- Track location
- Plan routes
- Send updates
- …more

Dedicated App

- Plan routes
- Track public transport
- Receive updates
- …more

Smart City Elements

Security Sensors

Video Analytics

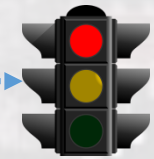
- Face Recognition
- Identify vehicles
- Manage traffic
- …more

Crowd Meters

- Track crowds
- Identify riot
- Analyze actions
- …more

Panic Button

- Emergency alert
- Call responders
- Emergency information
- …more



Stoplight Control

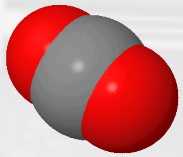
- Vehicle management
- Traffic management
- Crowd control
- …more

CCTV Cameras

- Automated event recognition
- Track vehicles
- Track commuters
- Identify crowds

Smart City Elements

Environmental Sensors



CO^2 Sensors

- CO^2 levels
- CO^2 location
- …more

Water Sensors

- Water levels
- Water purity
- Usage trends
- …more

Soil Sensor

- Soil contents
- Pollution levels
- Humidity levels
- …more

Pollution Sensor

- Pollution location
- Pollution levels
- …more

Congestion Sensor

- Vehicles location
- Vehicles congestion
- Congestion pollution levels
- …more

Smart City Elements

Crowd Management Sensors

CCTV Cameras

- Track vehicles
- Track commuters
- Video content analysis
- …more

Crowd Meter

- Track crowds
- Identify riot
- Analyze actions
- …more

Smart Signs

- Direct people
- Direct vehicles
- Crowd control
- …more

Video Content Analysis

- Identify people
- Identify vehicles
- Video content analysis
- …more

Access Control

- Control entry & exit
- Track people
- Trend analysis
- …more

Smart City Elements

Emergency Response Sensors

Earthquake Sensors

- Seismic Sensors
- Structural Integrity Sensors
- …more

Flood Sensors

- Water Level Sensors
- Weather Sensors
- …more

Fire Sensors

- Temp. Sensors
- Smoke Sensors
- …more

First Responders

- Police GPS & Dispatch
- Fire Dept. GPS & Dispatch
- Paramedic GPS & Dispatch
- …more

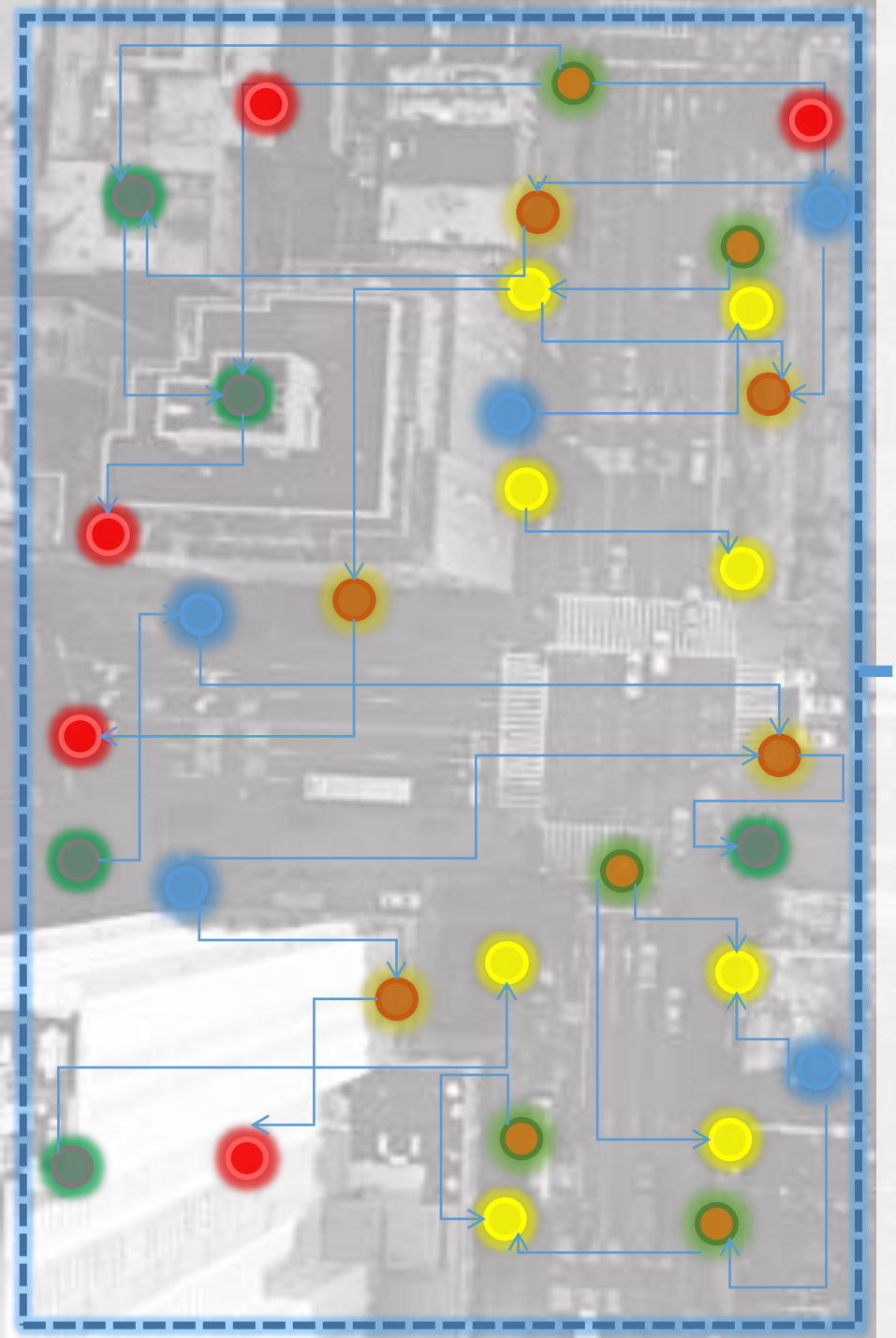
Panic Buttons

- Emergency alert
- Call responders
- Emergency information
- …more

The Smart City

Smart Lighting

- 24/7 power supply
- City-wide WIFI infrastructure
- Independent power supply to multiple systems
- Between 30%-50% reduction in lighting expense
- Reduced air pollution
- Smart lighting plans according to input from other urban sensors



Smart City Elements

C&C and Integration

- CymbIoT integrates the data and operational capabilities of different sensors and systems.
- CymbIoT integrates legacy systems into the Smart City, and upgrades legacy functionalities.
- CymbIoT ensures “handover” between sensing elements (tracking a person across sensors), and operational systems (traffic monitoring & transportation management).
- CymbIoT receives, integrates, analyzes, and releases information to users across the urban center – from municipal users, through service providers, to residents and visitors.

CymbIoT

Making IoT Smarter

About CymbIoT

The Challenge

The CymbIoT Smart City

Operational Scenarios

Why CymbIoT?

CymbIoT
Making IoT Smarter

Scenario – Safe City

1. Blacklisted person enters city

Scenario – Safe City

1. Blacklisted person enters city
2. CymbIoT sensors collect data:
   - Street cams send image to C&C.
   - LPR identify suspect vehicle

Scenario – Safe City

1. Blacklisted person enters city
2. CymbIoT sensors collect data:
   - Street cams send image to C&C.
   - LPR identify suspect vehicle
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:

Scenario – Safe City

1. Blacklisted person enters city
2. CymbIoT sensors collect data:
   - Street cams send image to C&C.
   - LPR identify suspect vehicle
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Police alerted with suspect identity & location

Scenario – Safe City

1. Blacklisted person enters city
2. CymbIoT sensors collect data:
   - Street cams send image to C&C.
   - LPR identify suspect vehicle
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Police alerted with suspect identity & location
   - Suspect vehicle located & towed

Scenario – Safe City

1. Blacklisted person enters city
2. CymbIoT sensors collect data:
   - Street cams send image to C&C.
   - LPR identify suspect vehicle
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Police alerted with suspect identity & location
   - Suspect vehicle located & towed
   - National blacklist DB updated

Scenario– Fire Control

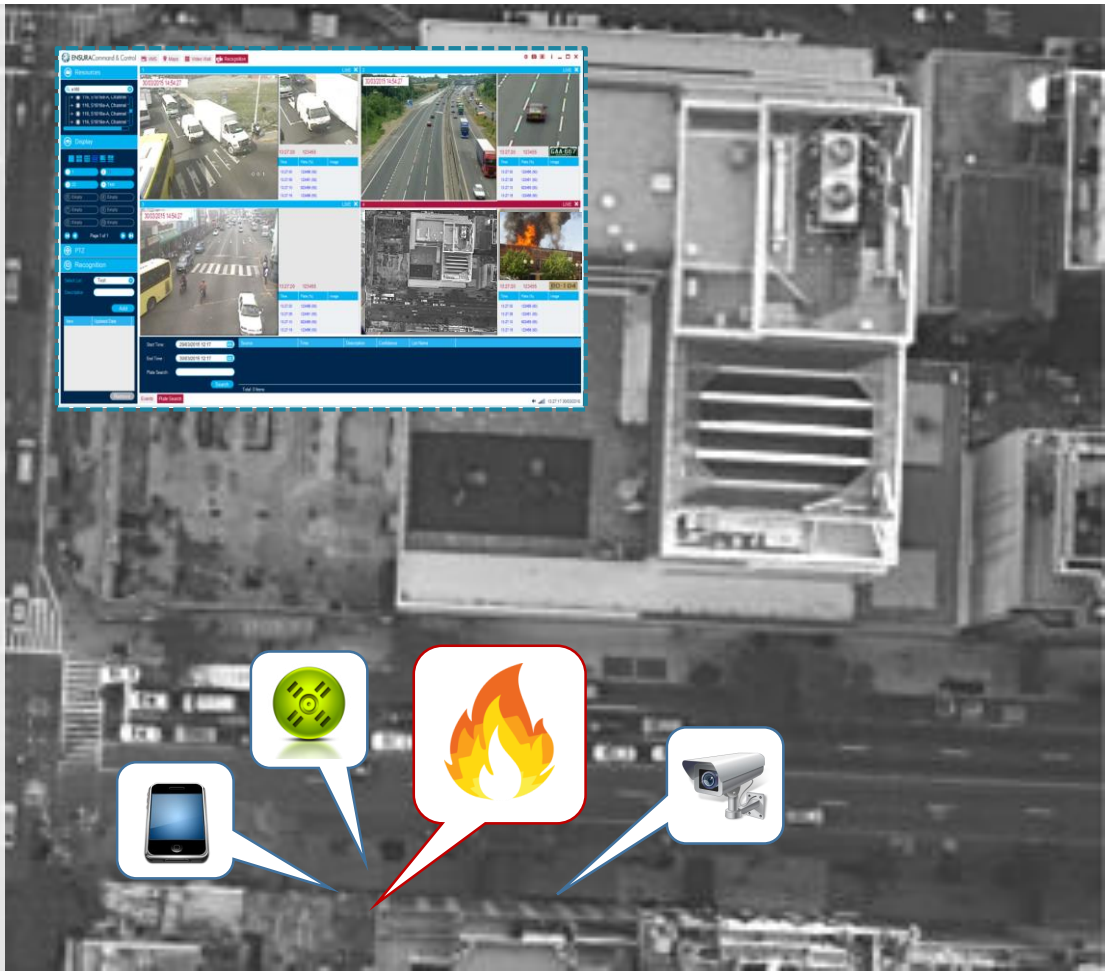
1. Fire in residential building.

Scenario– Fire Control

1. Fire in residential building.
2. CymbIoT sensors collect data:
   - Smoke sensors alert C&C
   - Street cams send image to C&C.
   - Residents update city C&C via dedicated CymbIoT app.

Scenario– Fire Control

1. Fire in residential building.
2. CymbIoT sensors collect data:
   - Smoke sensors alert C&C
   - Street cams send image to C&C.
   - Residents update city C&C via dedicated CymbIoT app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:



Scenario– Fire Control

1. Fire in residential building.
2. CymbIoT sensors collect data:
   - Smoke sensors alert C&C
   - Street cams send image to C&C.
   - Residents update city C&C via dedicated CymbIoT app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Sends residents SMS with alert & evacuation instructions

Scenario– Fire Control

1. Fire in residential building.
2. CymbIoT sensors collect data:
   - Smoke sensors alert C&C
   - Street cams send image to C&C.
   - Residents update city C&C via dedicated CymbIoT app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Sends residents SMS with alert & evacuation instructions
   - Alerts Fire & Police Dept.

Scenario– Fire Control

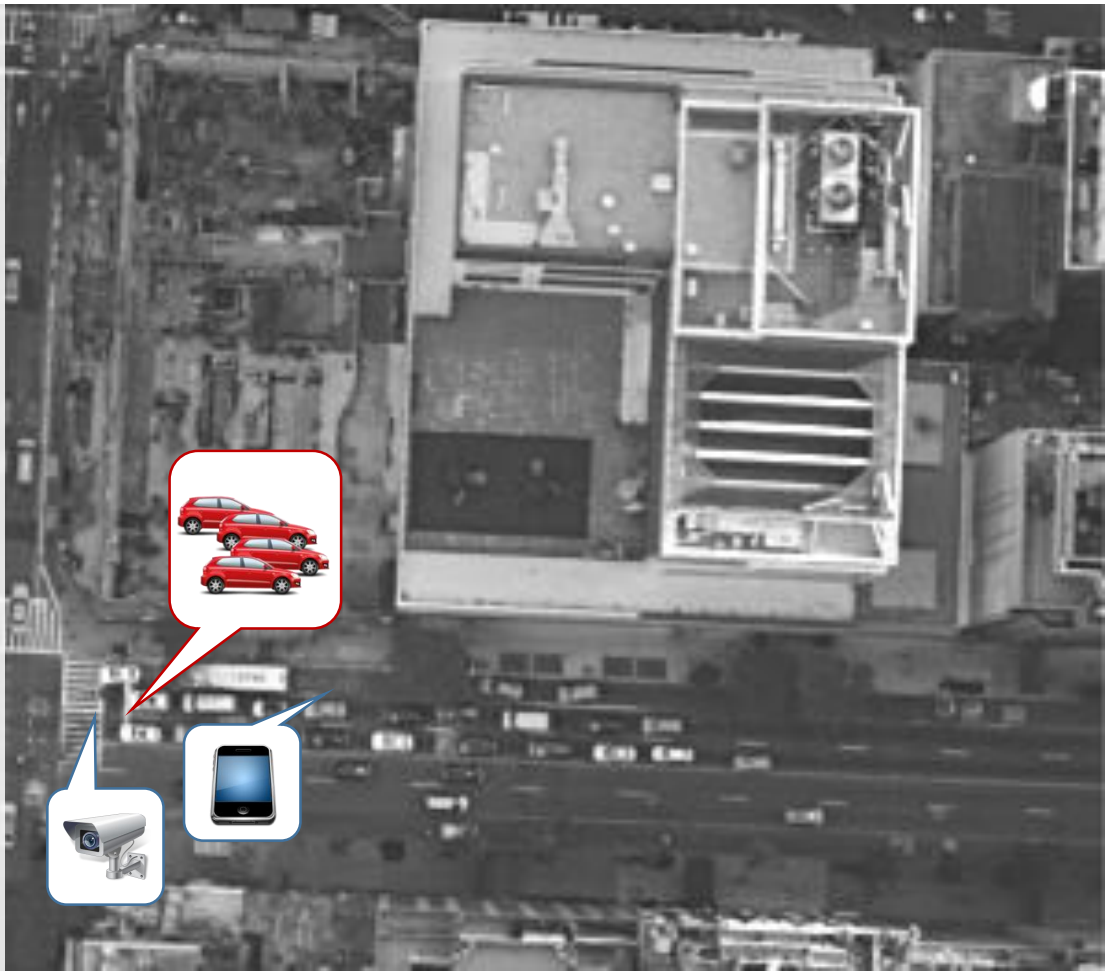
1. Fire in residential building.
2. CymbIoT sensors collect data:
   - Smoke sensors alert C&C
   - Street cams send image to C&C.
   - Residents update city C&C via dedicated CymbIoT app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Sends residents SMS with alert & evacuation instructions
   - Alerts Fire & Police Dept.
   - Updates area Smart Signs with evacuation notices.

Scenario– Traffic Control

1. Traffic accident causes congestion in city center.

Scenario– Traffic Control

1. Traffic accident causes congestion in city center.
2. CymbIoT sensors collect data:
   - Street cameras alert C&C
   - Commuters alerts C&C via dedicated app.



Scenario– Traffic Control

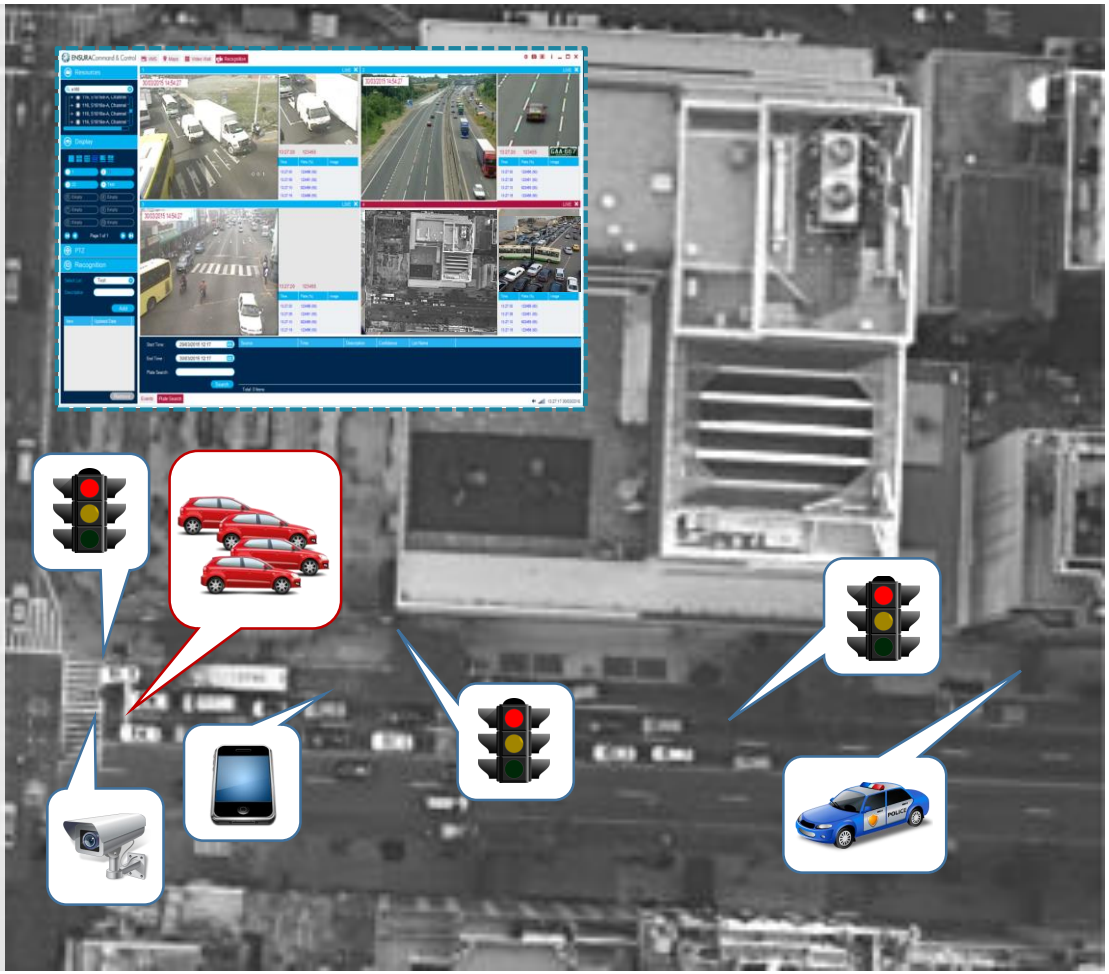
1. Traffic accident causes congestion in city center.
2. CymbIoT sensors collect data:
   - Street cameras alert C&C
   - Commuters alerts C&C via dedicated app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:

Scenario– Traffic Control

1. Traffic accident causes congestion in city center.
2. CymbIoT sensors collect data:
   - Street cameras alert C&C
   - Commuters alerts C&C via dedicated app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Alerts traffic police

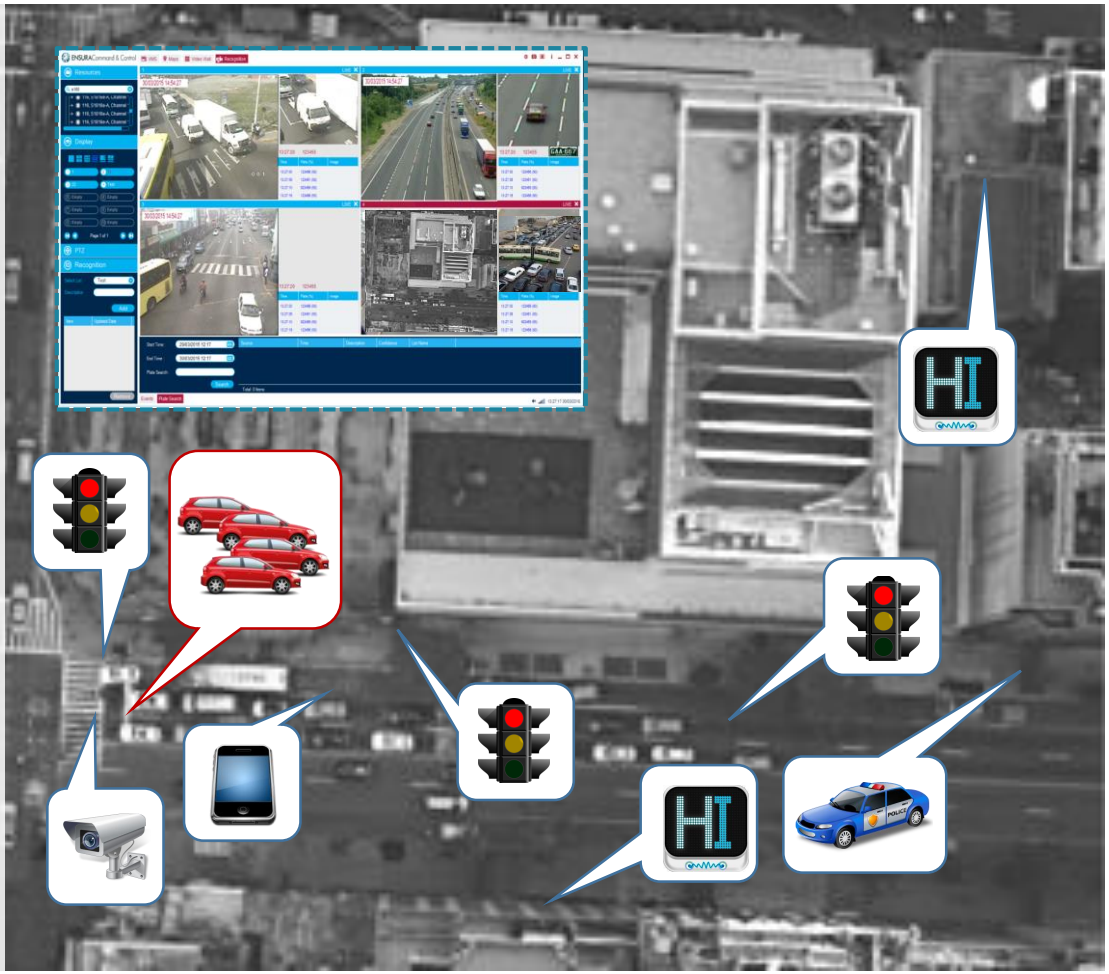
Scenario– Traffic Control

1. Traffic accident causes congestion in city center.
2. CymbIoT sensors collect data:
   - Street cameras alert C&C
   - Commuters alerts C&C via dedicated app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Alerts traffic police
   - Manages traffic lights in area to reduce congestion



Scenario– Traffic Control

1. Traffic accident causes congestion in city center.
2. CymbIoT sensors collect data:
   - Street cameras alert C&C
   - Commuters alerts C&C via dedicated app.
3. Data is sent to CymbIoT C&C
4. C&C analyzes data and implements processes:
   - Alerts traffic police
   - Manages traffic lights in area to reduce congestion
   - Updates Smart Signs in area to warn approaching commuters



About CymbIoT

The Challenge

The CymbIoT Smart City

Operational Scenarios

Why CymbIoT?

CymbIoT
Making IoT Smarter

Why Choose CymbIoT C&C?

A single Command & Control interface for all existing and new sensors, systems, and subsystems, providing:

- **Rapid, out-of-the box integration.**
- **Immediate ROI from Day One**
- **Interface between all data & systems.**
- **UX for operational & executive levels.**

CymbIoT

Making IoT Smarter

Some Global References…

NETHERLANDS
Hyatt Hotel Chain
Management & Security

ISRAEL
4 Smart City Programs

MEXICO
Federal Jail Management
& Security

JAMAICA
Kingston Safe City

NEPAL
International Airport
Management & Security

NETHERLANDS
Private port Management
& Security

SINGAPORE
Safe Transit Program

INDIA
Petrol Station
Management & Security

CymbIoT

Making IoT Smarter

HEADQUARTERS

Mail: P.O.B 37, Azur 5819001
ISRAEL

Tel: +972 (0)3-631-6881

Contact Us: info@cymbiot.com

SINGAPORE OFFICE

Mail: 6A Shenton Way
SINGAPORE 068807

Contact Us: APJ@cymbiot.com

ROMANIA OFFICE

Mail: Hareju 29, 2nd District, Arh.
Bucharest, ROMANIA

Contact Us: office@cymbiot.ro

ONLINE CONTACT

www.cymbiot.com/contact