OCTOPUS
control and command

English

OCTOPUS THE NEXT GENERATION OF CONVERGED PHYSICAL AND CYBER SECURITY MANAGEMENT (PSIM AND SIEM) | Summary

OCTOPUS is a new and innovative security management platform – comprising of a Physical Security Information Management system (PSIM) together with a Cyber Security Event Management System (SIEM), providing organizations a one-stop-shop software solution with more than 35 modules to effectively manage all of their physical security, cyber security, IoT and smart facility, governance, risks and threats, and operational requirements, from one platform.
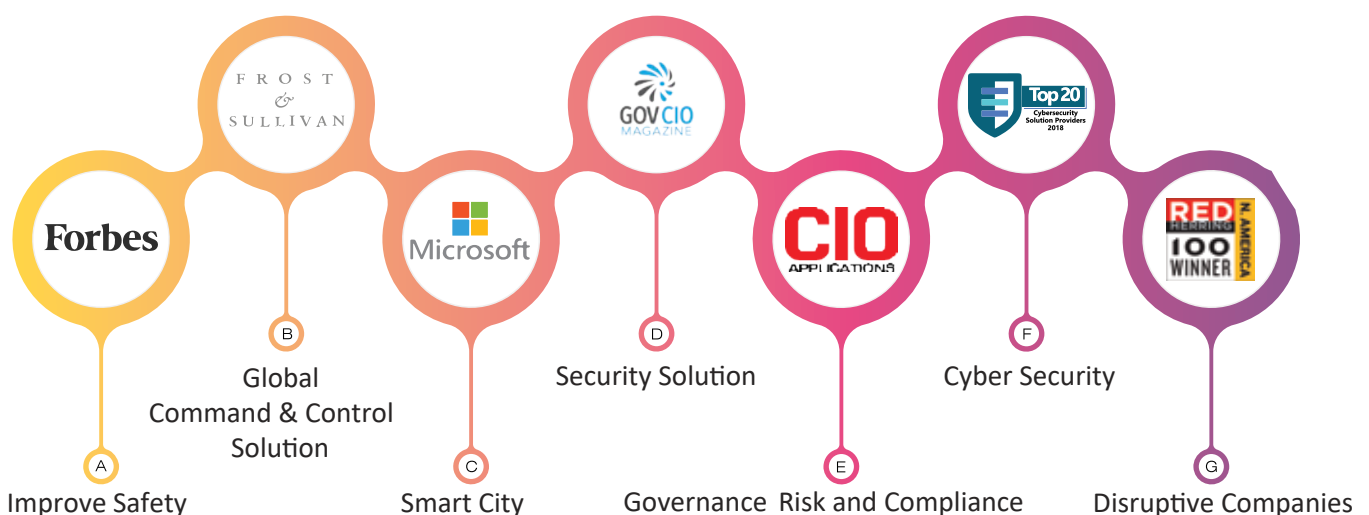
OCTOPUS fuses together all of the organization's systems, sensors, cyber components, communications, IoT, and data sources, in order to correlate and automate system operations, streamline and improve efficiency and responsiveness, which results in driving down the number of incidents, operational costs, and incident related damages, while driving up incident response time, cross-functional collaboration, standardization and compliance.

The OCTOPUS system was designed and developed by experts in the field of physical security, cyber security and IoT, and is cloud-enabled, reducing hardware costs and IT infrastructure dependencies.

The OCTOPUS software is a complete solution for managing a GSOC (Global Security Operations Center), offering a unified common operational picture of the entire organization, its assets, technologies, incidents, procedures, response, compliance, and human resources. The system can run as a Virtual SOC from any location and supports hierarchal deployments with multi-sited control centers.

OCTOPUS offers much benefits and ROI to organizations in various vertical markets, such as: critical infrastructure, safe city and smart city, financial institutions, real-estate, smart facility and integrated work-place, utilities and power, oil and gas, emergency response agencies and private security companies, government organizations, airports & seaports, border and military, and others.

OCTOPUS is an award-winning platform and an innovator in its field:

	B		D		F	
	Global Command & Control Solution		Security Solution		Cyber Security	
A		C		E		G
Improve Safety		Smart City		Governance Risk and Compliance		Disruptive Companies

OCTOPUS Properties |

Software includes the following main modules:

◆ Command and Control system with open architecture API server for integrating and controlling all organizational sub-systems such as:

- ◆ CCTV, Video analytics, Face recognition
- ◆ Intrusion, Access control, Fire alarm
- ◆ Perimeter, LPR, Radars and Drones
- ◆ IP Communications, Intercom, PA, and Radio
- ◆ IoT, SCADA, BMS and Controllers
- ◆ Location based devices
- ◆ Cyber and Network systems and agents
- ◆ Social Analysis and Open Source Intelligence
- ◆ Organizational systems and ERP

Includes a sophisticated rule engine for correlating data, defining work-flows and automating processes.

◆ **Special integrations and real time algorithms** – radars with camera target tracking, drone integration, Sigint, Visint, and Webint

◆ **SIEM and Cyber Agent** – security information event management – integrating to all cyber and network elements. Including the Octopus cyber agent for end-point intrusion detection, enforcing organizational policies and preventing unwanted behavior.

◆ **First Responder management** – CAD system (Computer aided dispatch) – dispatching staff per closest location and job title to the different incidents.

◆ **GIS System with dynamic maps and tracking** – supports Geo-maps, 2D and 3D floor plans – for viewing facilities, sensors and devices, incidents, tracking staff out-door and in-door, virtual fences, etc.

◆ **Incident management system (IMS)** – fully customizable system for customer's needs

◆ **Procedure management (SOP's)** - for business continuity, emergency protocols and standardized response, together with automated processes and actions.

◆ **Video management** – integrating VMS, NVR, DVR, Analytics, and displaying cameras automatically on a matrix and on the mobile app. Octopus incorporates a cloud-based video streaming server.

◆ **Smart building management system** – integration to building systems and IoT, maintenance operations system, asset management (AMS), managing preventive maintenance, SLA's, vendors, help-desk, technicians, facilities and equipment.

◆ **Human resource management system (HRMS)** – managing job-titles and roles, employee file, tasking and missions, time and attendance, competence management, etc.

◆ **Activity calendar** – scheduling automated activities and actions, defining routines, shifts and rosters.

◆ **Mass notifications system** – via push notification cost free mass messaging system, voice over IP to mobile app, Emails and SMS – to job title, user groups, geo-fences, channels, etc.

◆ **Vehicle route management and optimization** – routes for vehicle and drones for patrols, logistics, etc.

◆ **Guard tour system** – performing gourd tours with the mobile app, scanning barcodes or RFID tags

◆ **Visitors management system** – for managing access of visitors, suppliers, temp. employees – includes ID OCR scanner, badge printer, barcode reader, and touch pad for signing. Can run on a self-service kiosk

◆ **Performance and Monitoring system** - for managing compliance, governance, and risks. Allows organizations to monitor their planning versus their actual performance. Manage all KPI's and Risks.

◆ **Assessments' reporting module** – filling in organizational assessments, surveys, reports and routine tests.

◆ **Safety management system** - managing safety routines, governance and compliance, incidents or almost incidents, responsible managers and staff – via mobile app which can work offline.

◆ **Business Intelligence (BI) system** - for real time analysis and predictions, trends, dynamic dashboards and reports.

◆ **On-line training management system** – for generating employee training courses and exams – allows to dynamically generate training courses from: presentations, texts, graphics and video.

◆ **Hierarchy management** - for managing multiple organizational environments on the same server in hierarchy. Logical separation of customer sites for Virtual SOC management.

OCTOPUS APP FOR SMART PHONES

Managing the organization's security and operations requires a means of ommunication and response between the command center and the mobile forces, operational staff and users.

OCTOPUS has developed a rich mobile phone application dedicated for this enterprise communications management.

The app includes the following modules:

◆ Distress SOS button - with auto-dial or camera stream

◆ Preset messages

◆ GIS map + data layers

◆ Location transmission & GPS positioning

◆ Encrypted communications – Text messaging, VoIP PTT and Live Camera transmission

◆ Receiving incidents & dispatch - according to location, severity, job title

◆ Incident log & Incident reporting with SOP's

◆ Patrol & Route module and navigation

◆ Guard tour via RFID or NFC

◆ View real time location of all field staff on your phone

◆ Live view of surveillance cameras

◆ Performance and Monitoring KPIs

◆ Assessments and inspections reporting

◆ Tasking

◆ Time & attendance with geo-location + interface to Salary

◆ Scanning barcode of equipment and assets

◆ Visitor/Supplier invitation module

◆ Visitor QR code badge scanning

◆ Vehicle license plate and Citizen ID lookup

◆ Access control system for opening doors and gates

◆ Drone management with live camera view

◆ Organizational phonebook

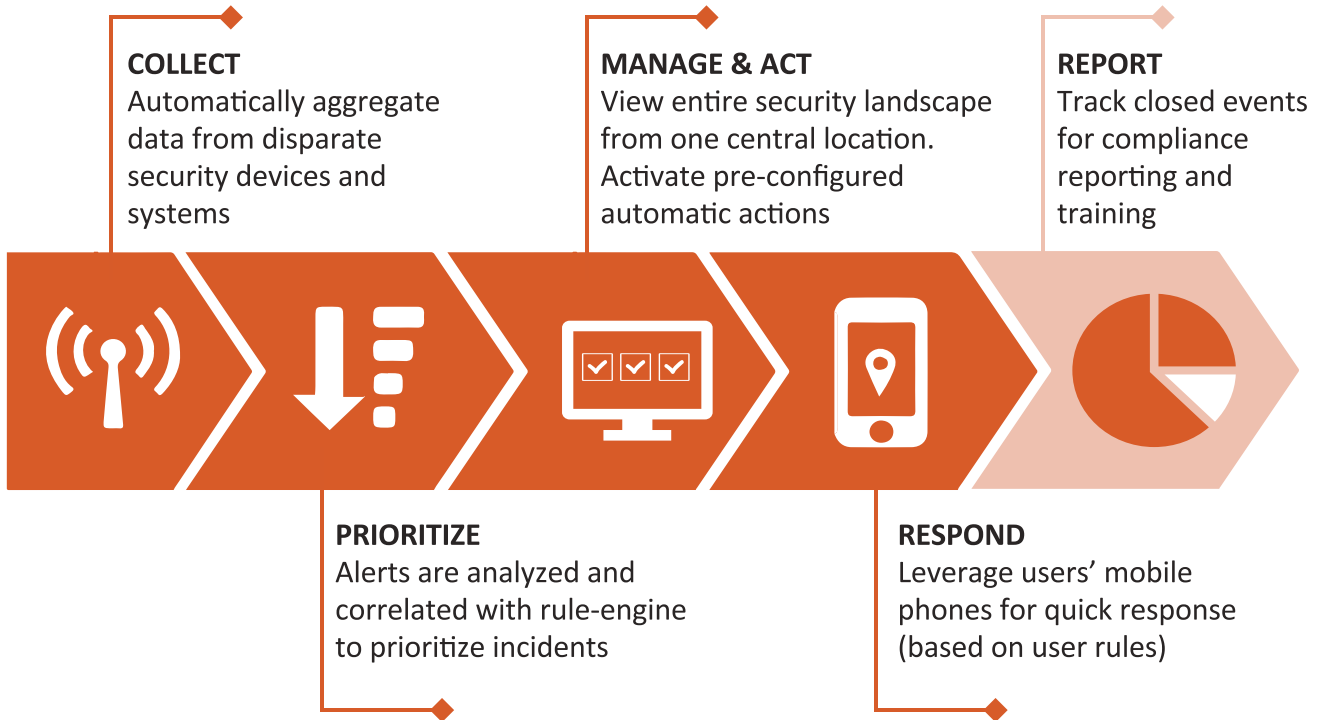◆ Places near me – geo locations with phone numbers
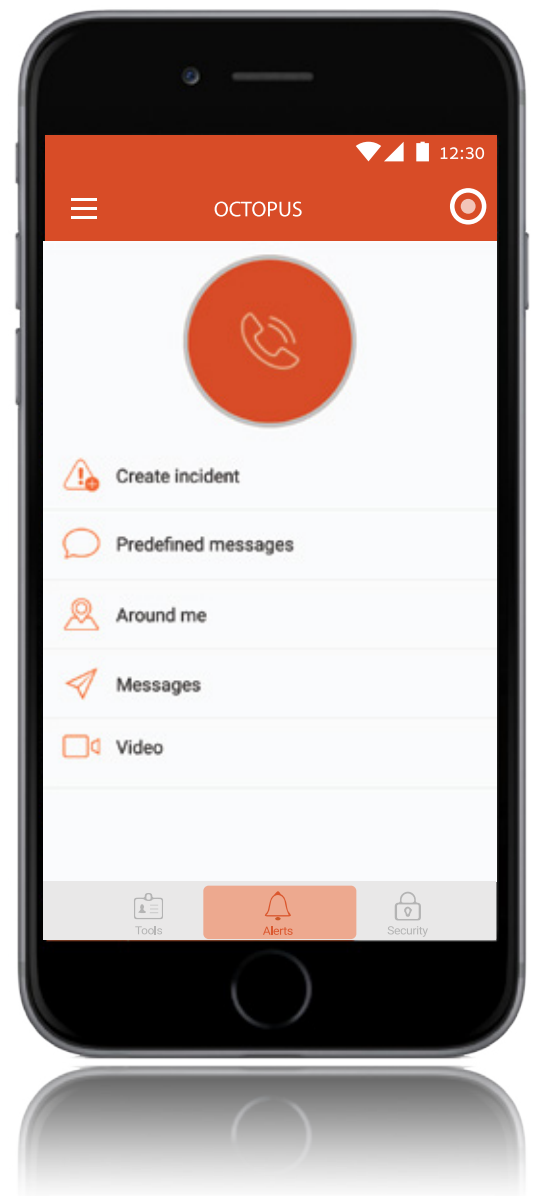
OCTOPUS IS AN ADVANCED, CLOUD ENABLED, UNIFIED PSIM COMMAND AND CONTROL SYSTEM
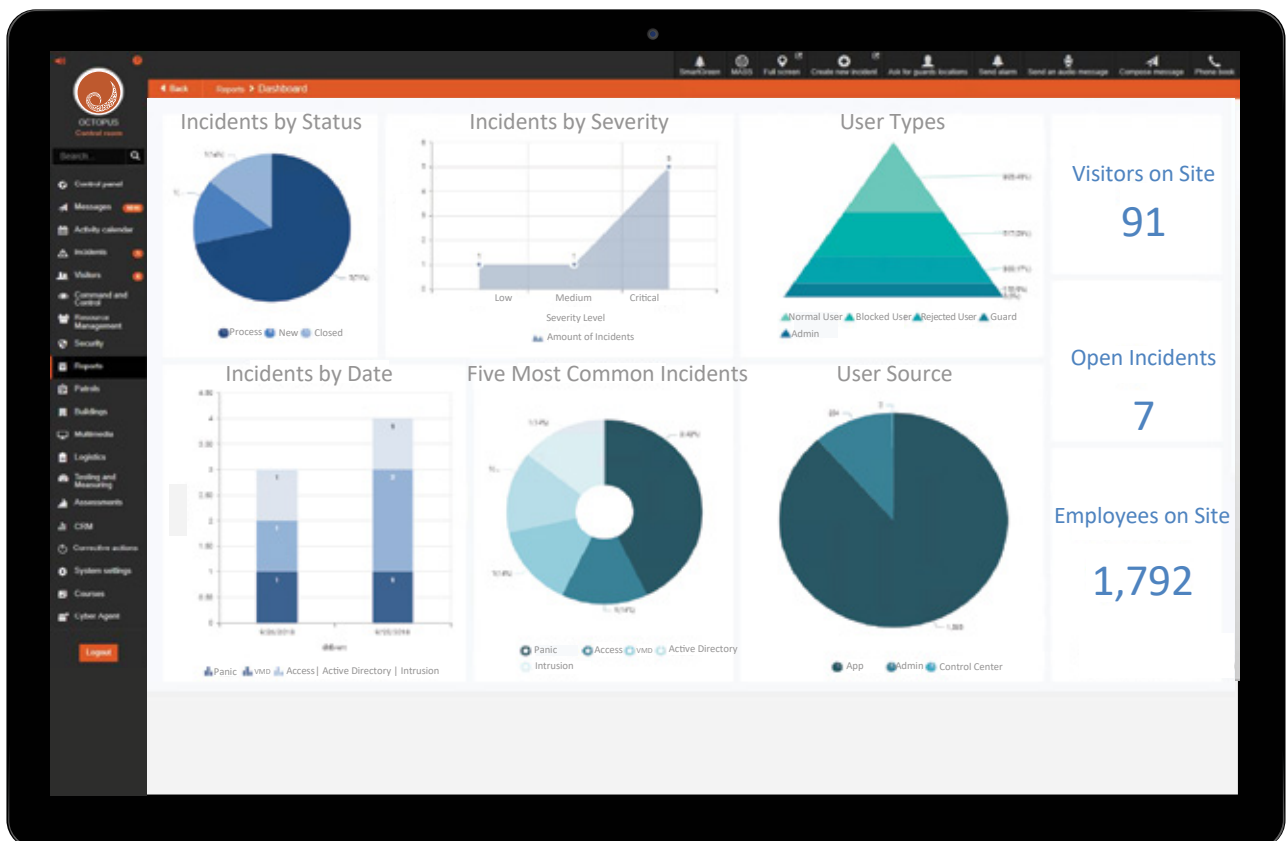
The system is based on a number of layers:

- ◆ Integrated sensors, devices & data Sources
- ◆ Cloud hosted server with secure communications
- ◆ Command and Control web-based system
- ◆ Mobile user application and web-portal

EVENT MANAGEMENT AND RESPONSE

COLLECT
Automatically aggregate data from disparate security devices and systems

MANAGE & ACT
View entire security landscape from one central location. Activate pre-configured automatic actions

REPORT
Track closed events for compliance reporting and training

PRIORITIZE
Alerts are analyzed and correlated with rule-engine to prioritize incidents

RESPOND
Leverage users' mobile phones for quick response (based on user rules)

BUSINESS INTELLIGENCE DASHBOARDS

CYBER AGENT AND SIEM SYSTEM

Organizations are implementing more IP based infrastructure which makes them prone to cyber attacks that can result in major disruption to operations and damage to the organization. Octopus Systems has developed and advanced automated end point intrusion detection agent (IDS), together with a security information event management system (SIEM) which enables organizations to monitor, receive notifications and alarms, and automate the response from different type of cyber threats and suspicious events.

The Octopus Cyber Agent is installed on hosts and servers, and scans and monitors all activities on the host computer. In case of alerts the Octopus Cyber Agent records the suspicious activity log and can scan the computers involved for signs of compromise and can trigger automated actions to allow resource proprietors and custodians (CISO/CERTS) to respond timely to covered devices that are compromised or imminently in danger of being compromised.

The Octopus Cyber Agent and SIEM can work as a monitoring tool, but also as a policy enforcer.

The agent can monitor and alert about abnormal events. Example of features and policies:

◆ Connecting a Disk on key, the system will block, alert, send picture and notify the nearest security manager.

◆ Who made too many logins/ Failed logins

◆ Who runs services that create authentication on the network

◆ See a complete list of all the applications installed on my network, I want to receive a notification on newly installed applications

◆ Anti-virus is not updated, Windows is not updated

◆ Format remotely a stolen computer

◆ Scan registry for dedicated keys and verify the value

◆ Unauthorized Usage of webmail

◆ Browsing history and categorising how much time is spent on YouTube.

◆ Which of my employees is looking for a job

◆ Who stayed too much after working hours this month

◆ Automatically capturing print screens according to a rule-based policy

◆ Sending voice commands to a remote computer

OCTOPUS SIEM SYSTEM

The Octopus Security Information Event Management - SIEM system, integrates to all the organizational cyber and network systems and components, to provide organizations with a complete picture of all the events happening, from one location. The Octopus SIEM incorporates a sophisticated rule engine and automation module, for correlating data between systems and defining conditions for creating incidents, as well as deploying automated activations as a result of an incident trigger.

The Octopus SIEM logs and retains all network and information security events, and prevents events in real time. Security officer can generate real time reports and dashboards.

Integration with Cyber Protection, Anti-Virus, IT & Network systems:

◆ IT systems
◆ Network switches and components
◆ Anti-virus systems and agents
◆ Firewalls and network security
◆ Anti-malware and Trojan horse
◆ Mail scanners
◆ Domain protection systems
◆ Active Directory
◆ External Loggers

OCTOPUS VISITOR & SUPPLIER MANAGEMENT SYSTEM

Protect your assets and employees from theft. Don't let your intellectual property fall into unwanted hands - stop unsolicited visits at the building main entrance.

An advanced, customizable and intuitive Visitor management system for controlling the access of all Visitors, Suppliers, Contractors and Temporary Employees coming in to the organization.

◆ Hosted on the Cloud or installed locally, enabling a unified database and multi-sited visitor management system

◆ Comprehensive, intuitive and streamlined visitor enrollment process and user experience

◆ Comes with dedicated enrollment equipment but can also work without any hardware – utilizing the system's smartphone app

OCTOPUS VISITOR'S MANAGEMENT SYSTEM
MAIN FEATURES

◆ Web based, cloud-enabled, supporting multiple sites on one DB

◆ Organizational web portal - for employees to invite visitors

◆ Dedicated mobile app - for reception security to scan visitor badge QR code

◆ Multiple level of authorization – for sensitive sites

◆ Kiosk stand-alone mode – for self-service registration

◆ Organizational meeting calendar

◆ Vehicle control and fleet management

◆ Digital signature on terms and conditions

◆ Time and Attendance for temp. employees – including interface to salary system.

◆ Integration with Access control, LPR, Gates and Turnstiles systems

◆ Integration with ERP systems for salary and vendor data interface

◆ Integration with Background checking systems – for receiving criminal record and watch lists.

◆ Visitor Parking optimization system with sensors and digital signage
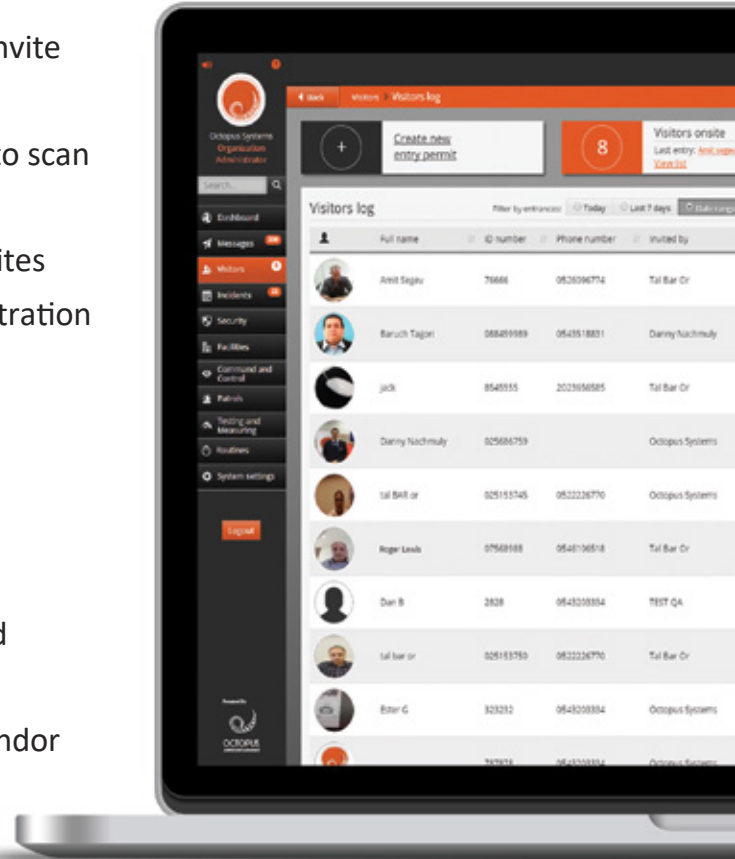
OPTIONAL HARDWARE:

◆ Multi-language ID scanner
◆ Self Service kiosk and tablet
◆ Handheld barcode scanner
◆ Badge/label printer
◆ Gate/turnstile controller with barcode rea

OCTOPUS PERFORMANCE AND MONITORING SYSTEM

Mitigate and monitor enterprise risk and compliance with the Octopus Performance and Monitoring system.

The Octopus performance and monitoring system enables the organization to create tasks, assessments, regulations and inspections of all the important key performance indicators (KPIs) that need to be evaluated and measured, for monitoring the organization's performance and enterprise risk level, making sure the organization reliably achieves its objectives. Performance is monitored in the field of security, information security, IT, HR, legal, finance, safety, governance-risk-compliance (GRC), standards and regulations, and other fields.

- ◆ Setup all the performance indicators and key elements which need to be monitored for your entire organization and divisions
- ◆ Map your organization's business units' hierarchy and decide on designated responsible employees for reporting tests and inspections in to the system
- ◆ Managers from each division fill in periodic assessments, inspections, reports and results
- ◆ Mobile app allows managers to view KPI results and fill in reports remotely from the field
- ◆ View all your organizational performance levels from one place for all the facilities
- ◆ Drill in each site to reveal the underlying tests and results
- ◆ Set risk thresholds for each monitored subject for which an escalation is triggered when performance drops below the risk threshold
- ◆ Gain insights into areas with poor performance and higher risk, compare between multiple sites and average performance
- ◆ Outstanding reported items are sent to "corrective actions" to be rectified and corrected by the responsible managers.
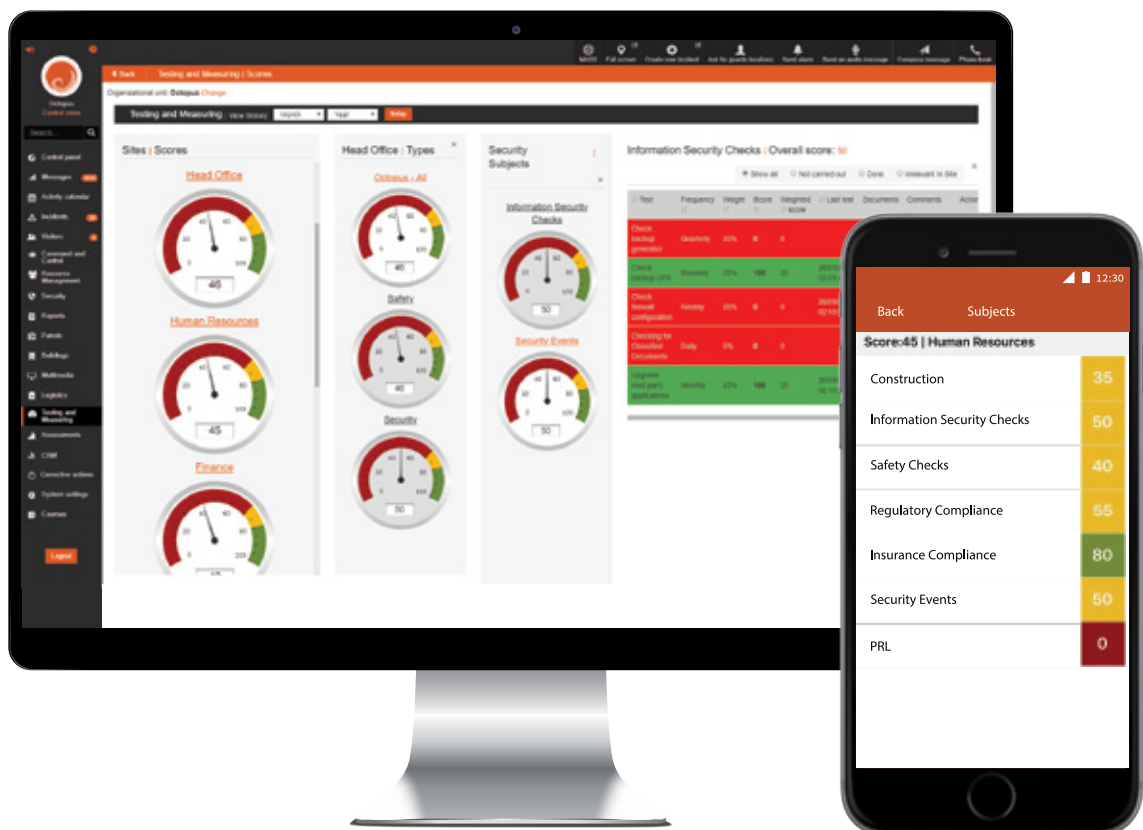
THE ADVANTAGES OF THE **OCTOPUS** CONVERGED SECURITY MANAGEMENT SYSTEM

◆ Unified common operational picture for the entire security and cyber situation landscape – sealing your organization completely.

◆ One-stop-shop for all the organization's Security, Cyber, Smart facility, IoT, Safety, Risk and Operational needs.

◆ Open architecture API server for seamless integration to any type of system, component and data source – with rule configuration, work-flow definition and automation.

◆ Converged correlation between Physical and Cyber security.

◆ Communicate with all security managers, first responders, emergency agencies, operational functions and organization employees with one mobile application. Leverages existing mobile phone, saving costs.

◆ Cloud enabled web-based system, secure and easy to install, implement and maintain - reducing the costs and dependencies on IT infrastructure and man power. Supports hierarchal multi sited SOC deployments. Available anytime – anywhere.

◆ Drives compliance and regulation conformity, with emergency, crisis and business continuity management, standardizing your response procedures throughout the organization.

◆ Mitigate enterprise risk through the performance, monitoring & risk management module.

◆ Security Intelligence – real time threat analysis and correlation of external open source intelligence, social media, and governmental data sources, for intelligent security decision making and threat dissemination.

◆ Future proof – supports integration with the next generation of cloud-based video, security systems and connection to internet of things IoT devices.

◆ Verified and secure system, with 9 ISOs and GDPR certification. Field proven solution, trusted by large organizations, global enterprises, government agencies and municipalities throughout the world.

◆ Award winning system – recognized as the most innovative and disruptive solution by: Forbes, Frost and Sullivan, Microsoft, CIO Applications, GOV CIO Outlook, Enterprise Tech Success, and Red Herring.

OCTOPUS CUSTOMER SOLUTIONS

◆ **Integrated PSIM System** – integration to all of the organization's physical security systems, sensors, cameras, devices. Situational awareness and command & control. Used by public and private organizations, sites and critical facilities.

◆ **Cyber Event Management System and Cyber Agent** – allowing integration to all of the organization's information security, network, firewall, anti-virus, domain protection system, for cyber event logging, cyber incident management. Cyber agent for policy enforcement and reducing risk of insider threat.

◆ **Crisis Management & Emergency Response** – Emergency agencies, 911 dispatch, Government agencies and Municipalities. Computer aided dispatch and Interface with crime and government data sources.

◆ **Managed Security Services** – managed platform for security service companies, for securing facilities, people, and systems – virtual guarding, remote monitoring alarms and cameras, cyber event monitoring, route allocation, tracking, distress signaling, and incident reporting.

◆ **Smart City & Safe City management** – streamline the management of all city assets & infrastructure, integrate to surveillance cameras and IoT based devices - power & water meters, smart light, garbage collection, traffic control and public transportation. Engage with city residents & city staff through a dedicated mobile app – automate processes, deploy mass notifications, hazard reporting, payments, etc.

◆ **Smart Facility and Integrated Work-Place** – integrating to all building systems and IoT. Automating, optimizing and saving on utility costs. Allowing facility tenants to report on issues via application and allowing to dispatch technical staff and maintenance, including tasking, asset management, preventive maintenance, smart parking, mobile reporting, etc.

◆ **Risk, Compliance and Safety management** – for private & government organizations – regulation and compliance protocols, reporting via mobile app terminal, monitor organizational performance indicators (KPIs) and schedule routine safety checks.

◆ **Visitor's & Supplier Management** – to Private and Government buildings and facilities. Including hardware, mobile application, stand-alone kiosk, a web portal invitation site. Integration to LPR, gates, background check systems, etc.

OCTOPUS VERTICAL MARKETS

◆ **Government and municipality**: Safe city & smart city, government departments, law enforcement agencies and emergency response 911

◆ **Transportation**: Sea Ports, air ports, trains, logistics, fleets, public transportation and road monitoring

◆ **Utilities and Energy**: Water, power, infrastructure, oil & gas, chemical plants, mining & nuclear sites

◆ **Enterprise**: Smart buildings, multi sited organizations and chains, shopping malls, universities, and factories

◆ **Financial Institutions** – Bank chains, credit card companies, and insurance companies

◆ **Private Security companies** and managed security services for physical and cyber monitoring

◆ **Critical infrastructure and Military** – Border patrol, army bases, navy, hospitals, command centers

OCTOPUS PSIM
Takes You Into The Cloud

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