

International Cyber Expo 2021

Understanding Cyber Resilience in the Security Sector



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CENSUS at a glance – Meet us @ Stand: B71

- ◆ **CENSUS** is an **internationally acclaimed** Cybersecurity services provider, supporting the needs of **multiple industries**.
- ◆ We are offering state-of-the-art services to organizations **worldwide** to cover the complex needs of today's **IT & OT ecosystems**:
 - ◆ Security Assessments
 - ◆ Product Security
 - ◆ Secure Systems Development Lifecycle
 - ◆ Vulnerability Research
 - ◆ Information Security Consulting
- ◆ Services built upon the **company's leading research** to provide high quality InfoSec services.
- ◆ We are very proud of our **ethos**, as we care about **quality (in) systems**.

70 Security engineers **12+** Years of innovation

Company certified for quality and security management systems



Understanding Cyber Resilience in the Security Sector



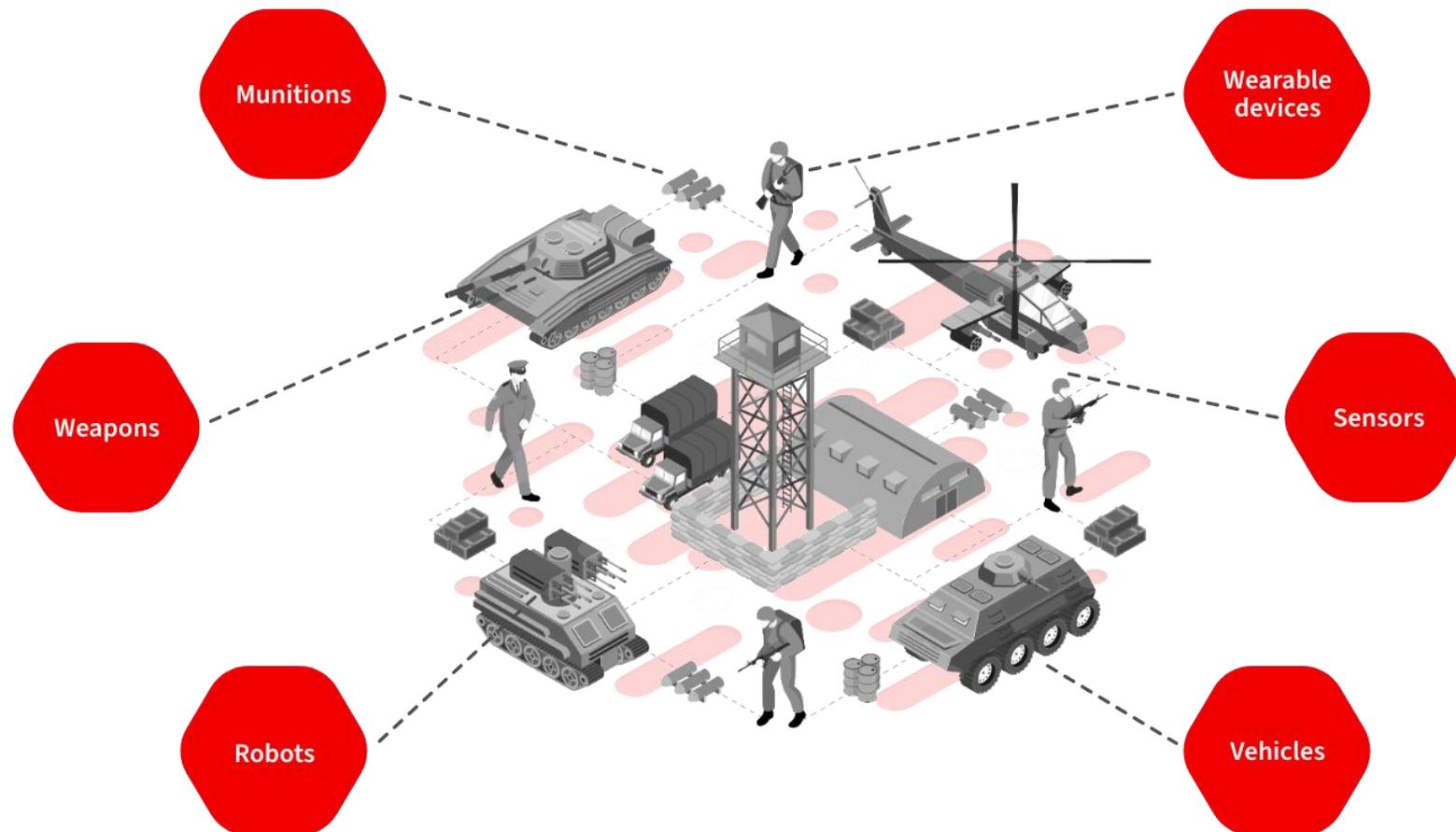
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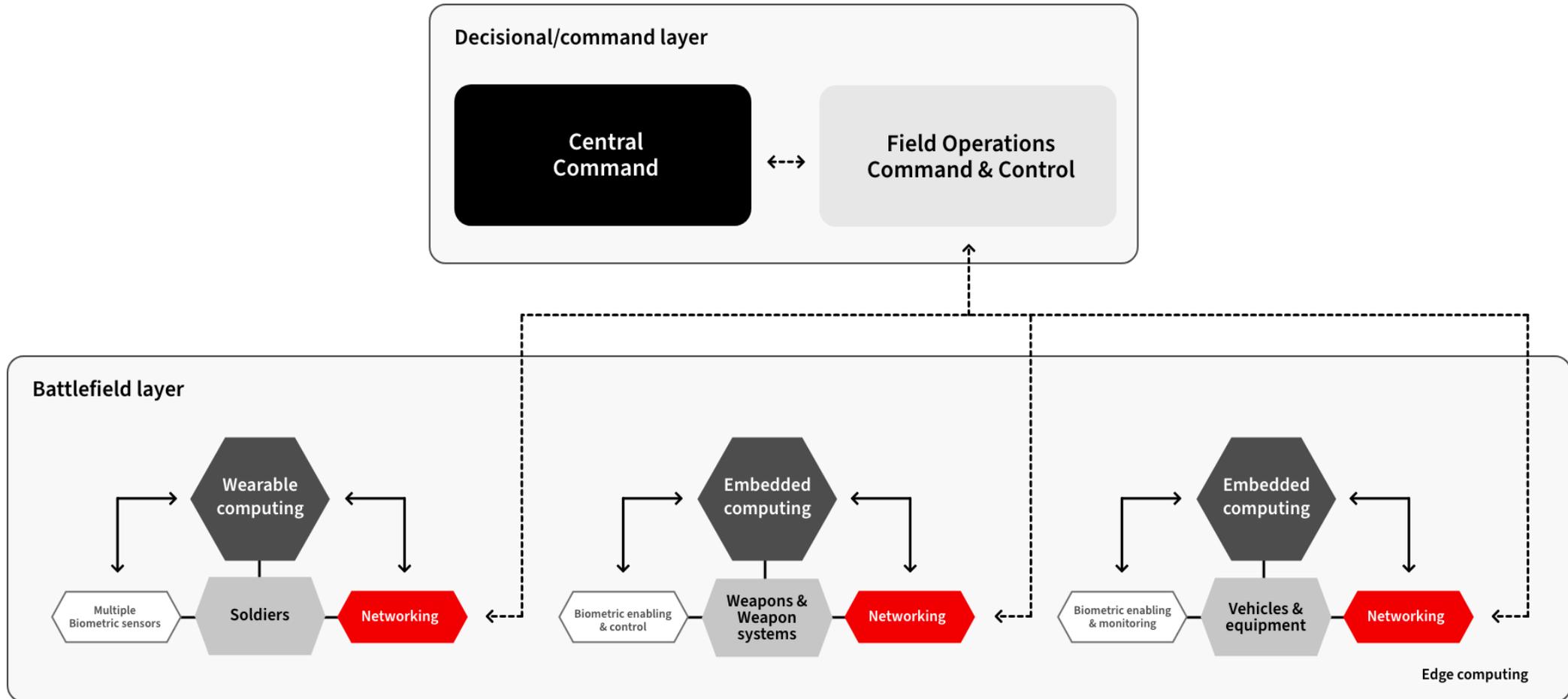
Agenda

- ◆ Cloud and edge computing in the defence & security sector
- ◆ Threat Modelling Analysis
- ◆ Why edge computing is critical to Internet of Security Things (IoST)
& Internet of Military Things
- ◆ Cybersecurity assessments and the resilience of this ecosystem
- ◆ CENSUS References / Projects

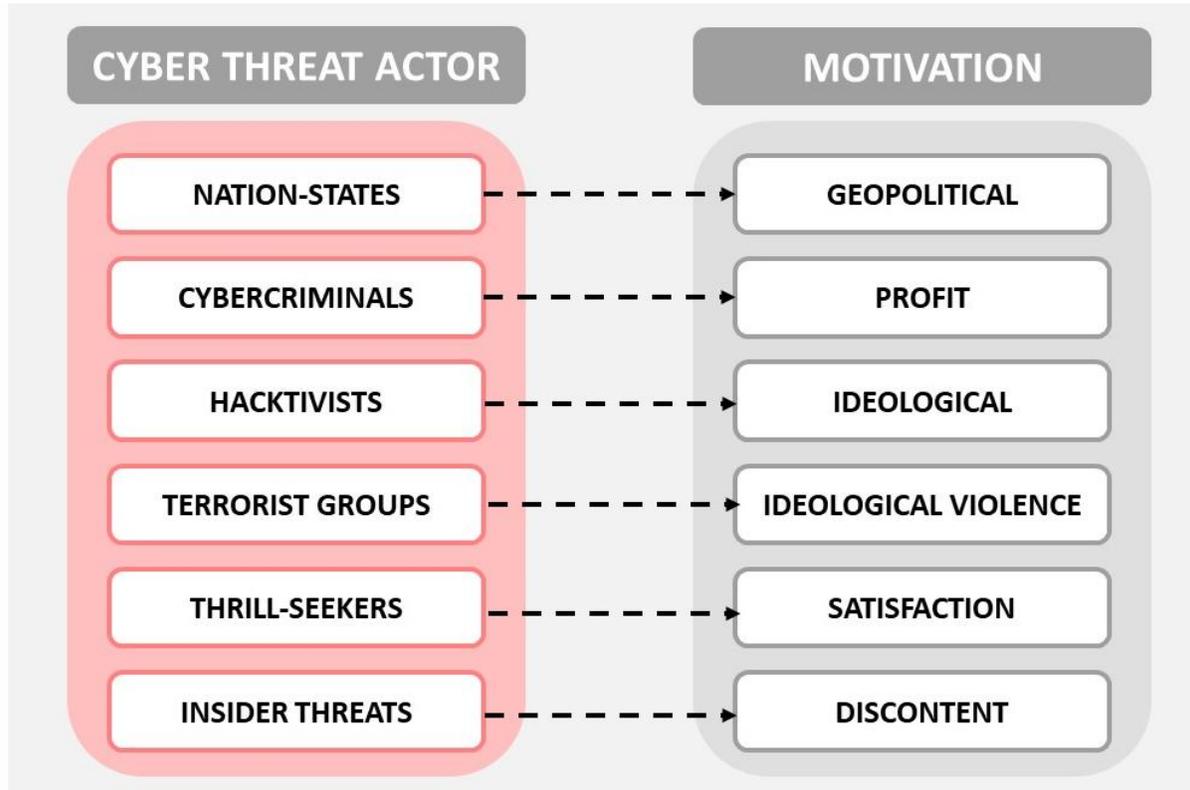
Cloud and edge computing in the defence & security sector



Why edge computing is critical to IoST / IoMT?



Threat Modelling Analysis



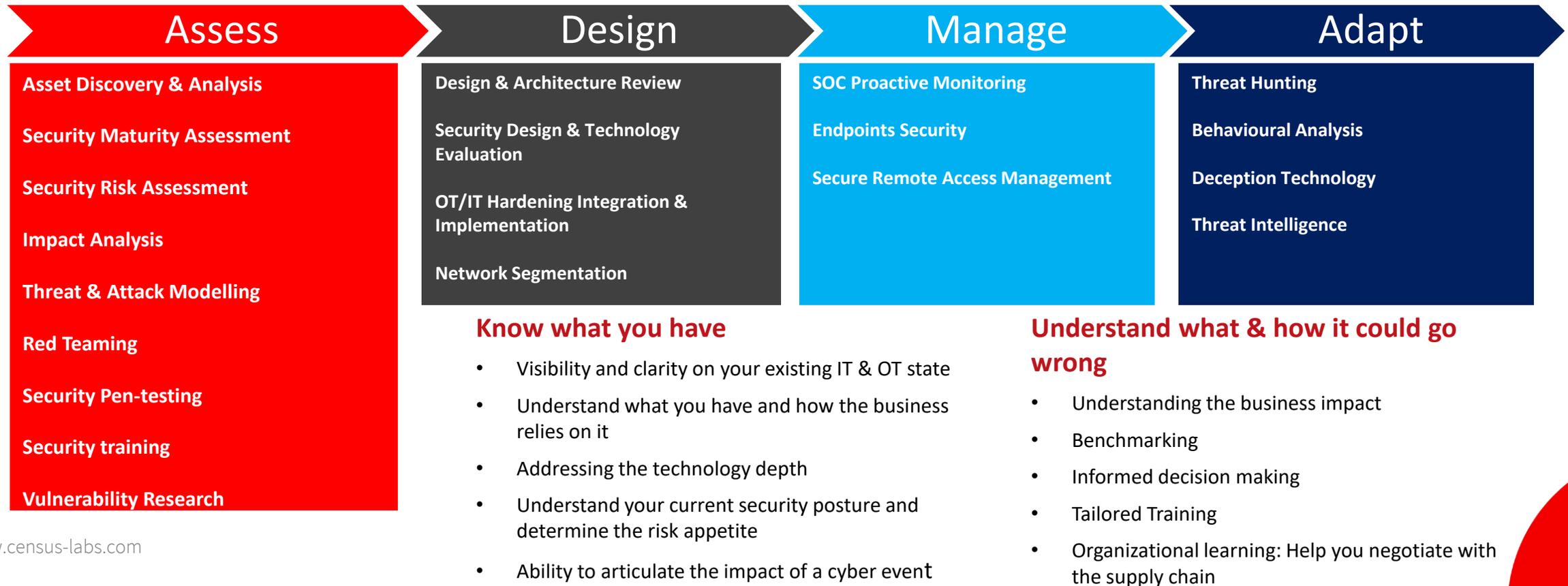
What does this mean?

Adversarial actions on the Security Ecosystem may lead to:

- Personnel injuries
- Civilian casualties
- Damage in products
- Damage in infrastructure
- Outage in Critical Services

How can information security assessments help improve the resilience of this ecosystem?

Cyber Resilience Journey



Testing the Security of IoT Devices

Device

Command & Control

Hardware Security



Is it possible to decrypt stored data just by communicating with the secure chip?

Software Security



Is it possible for an unauthorized actor to remotely control the device due to a bug in the software?

Communications Security



Is it possible for someone to eavesdrop on the device communications?

Management Platform Security



Is it possible for an unauthorized actor to collect all data gathered by the devices?

CENSUS References / Projects

Dash Camera
Unbiased recorded account of events and real-time visual data

Dash Computer
Real-time access to the network systems (RMS & CAD) and expedited report submission

Enterprise Cloud Manager
Centralized, intelligent Cloud networking platform used for configuration, monitoring, and remote management of Cradlepoint devices

Cradlepoint Router
Cradlepoint's COR family provides rugged, reliable routing for In-Vehicle Networks

Body Camera
Continuous video documentation of incidents in the field

Wireless Tablet
Portable device used to issue citations, document evidence, and report data

Multi-band Antenna
Broadcast WiFi, track the emergency vehicle, and increase cellular signal

Rugged Laptop
Access dispatch information (CAD), monitor response times, and look up patient records

Enterprise Cloud Manager
Centralized, intelligent cloud networking platform used for configuration, monitoring, and remote management of Cradlepoint devices

Cradlepoint Router
Cradlepoint's COR family provides rugged, reliable routing for In-Vehicle Networks

Connected Medical Devices
Monitor, analyze, and diagnose patients on the road

Wireless Tablet
Look up vital information and update records immediately



- Car infotainment system firmware security assessment
- Truck fleet management web platform security testing
- Vessels OT Infrastructure



- Security Assessments
- Red Teaming on Shipping management infrastructure.
- Tiger Team on ICS/SCADA



- Systems
- Gas metering / monitoring devices
- XFS dispensers of ATMs



- S-SDLC on Drone Management Software & Platforms
- Wireless Communication Assessments



- Product security services for the hardware and firmware of Drones & Bomb Disposal robots



- Product security services for trusted mobile communications devices & Dash Computers



- RTOS based Robotic-assisted surgical instruments
- Automated Image processing systems (from embedded cameras, microscopes. etc).
- 100+ assessments in medical devices from smart surgical



- equipment and robotic arms to pacemakers and defibrillators.
- Device Testing on Scientific equipment.
- Automated blood diagnostic



- systems
- Chemistry systems

Thank you!