

## IoT Security in a Connected World

The logo for IoT inspire, featuring four colored circles (blue, green, orange, red) above the text "visions IoT inspire".

visions  
IoT inspire

powered by IoT BUSINESS HUB

# CyOne Security AG

- Innovative, state-of-the-art solutions for complex security challenges
- Highest level of competence in cryptography and security engineering
- 100% Swiss management
- 60 security-checked and highly qualified experts

## Secure Switzerland. Bit by bit.



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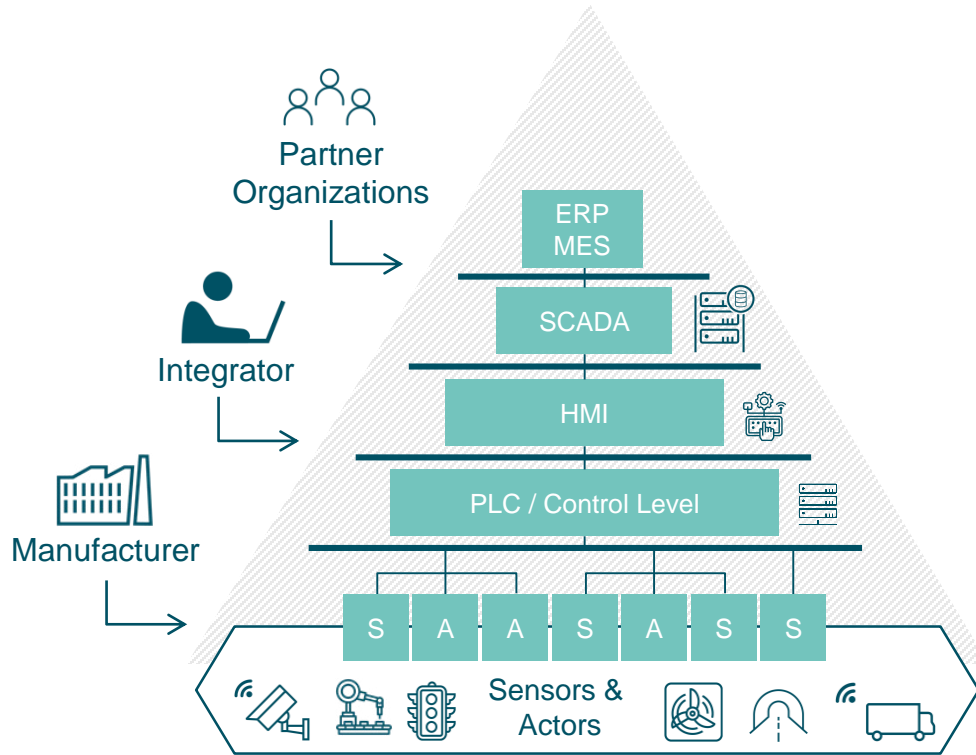


Cyber  
Security



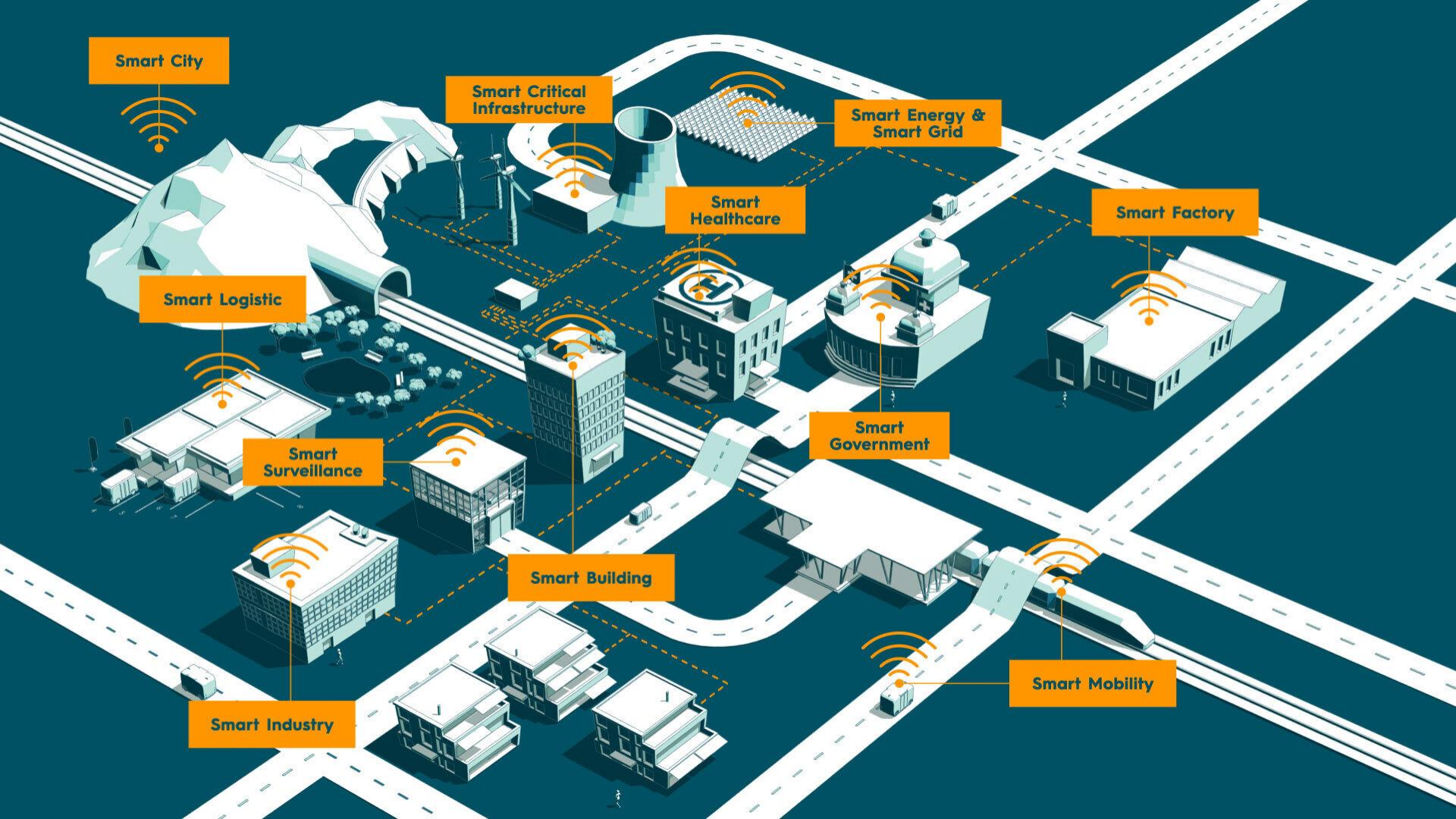
IoT  
Security

# Classical, hierarchical control systems

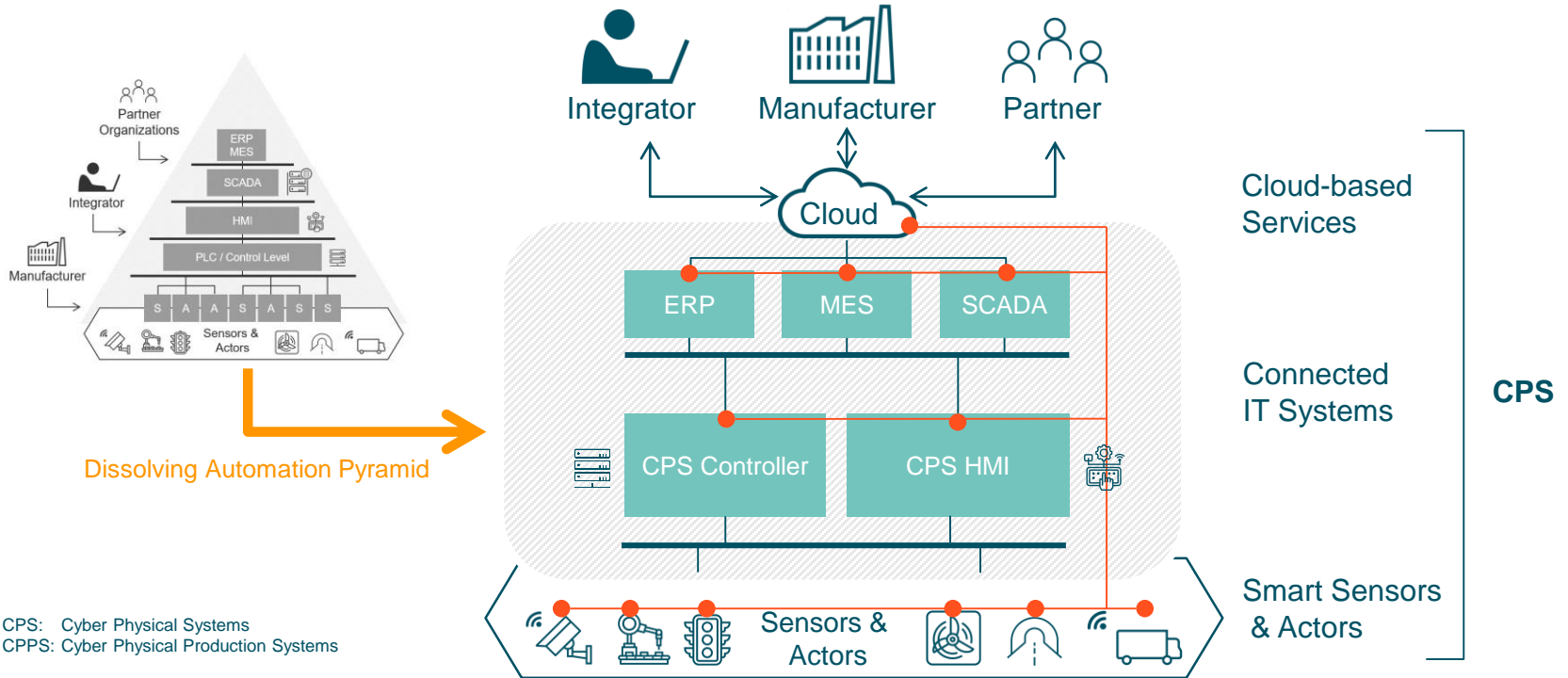


## Situation today (or at least «should»):

- Hierarchical network layers
- Mostly dedicated OT components
- Controlled and terminated external connections
- Clear segmentation of IT / OT
- Clear and controlled perimeters
- Network segments



# Industry 4.0: Connected Control Systems



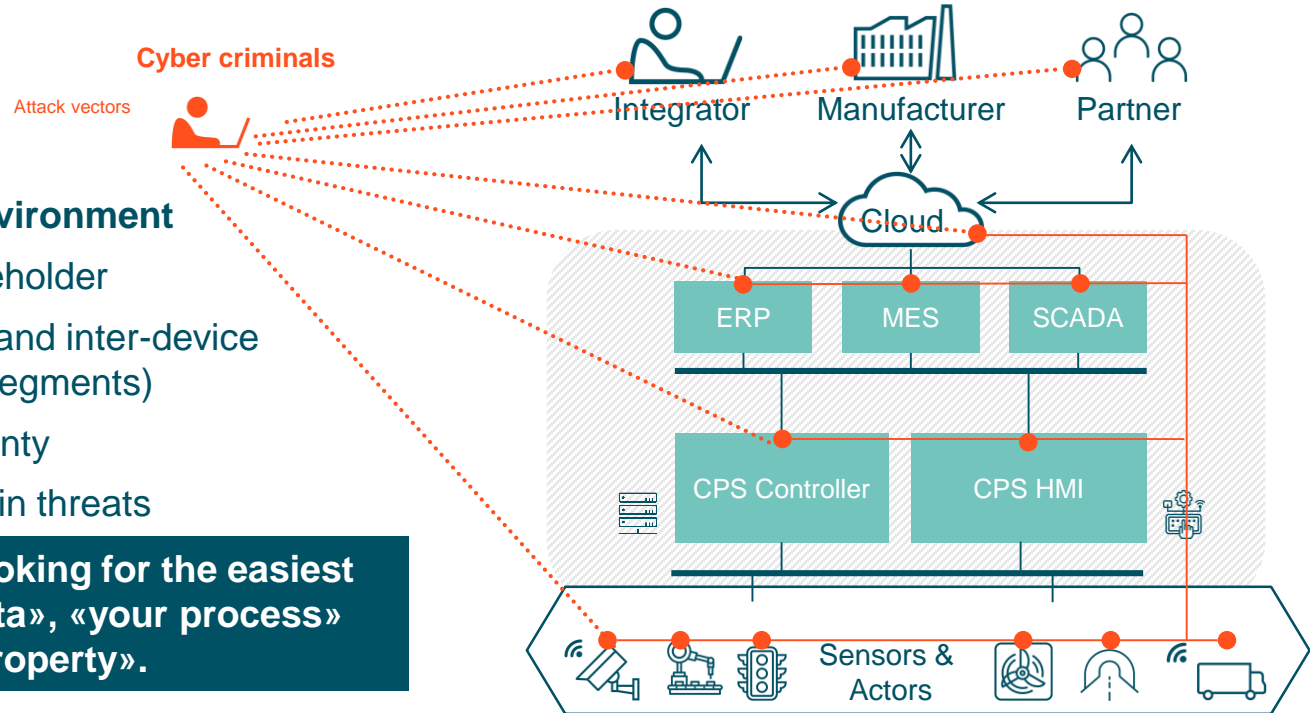
CPS: Cyber Physical Systems  
CPPS: Cyber Physical Production Systems

# Industry 4.0: Connected Control Systems

## A complex security environment

- More connected stakeholder
- External connections and inter-device connections (across segments)
- Unclear data sovereignty
- Increasing supply chain threats

**Cyber criminals are looking for the easiest way to get at «your data», «your process» or «your intellectual property».**



# IoT devices are attractive targets

as they are...

Linux / Unix-based systems that are

... always online

... products with low security standards

... easy to exploit

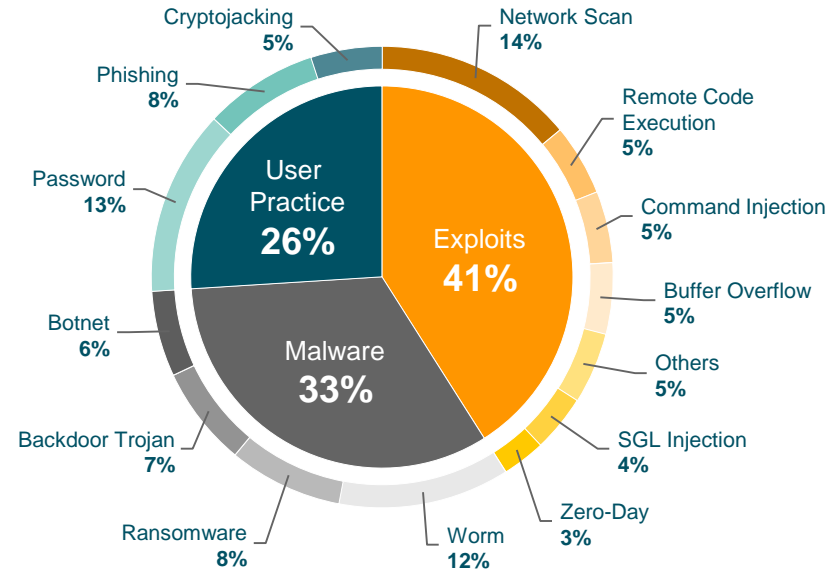
... poorly serviced

... rarely monitored

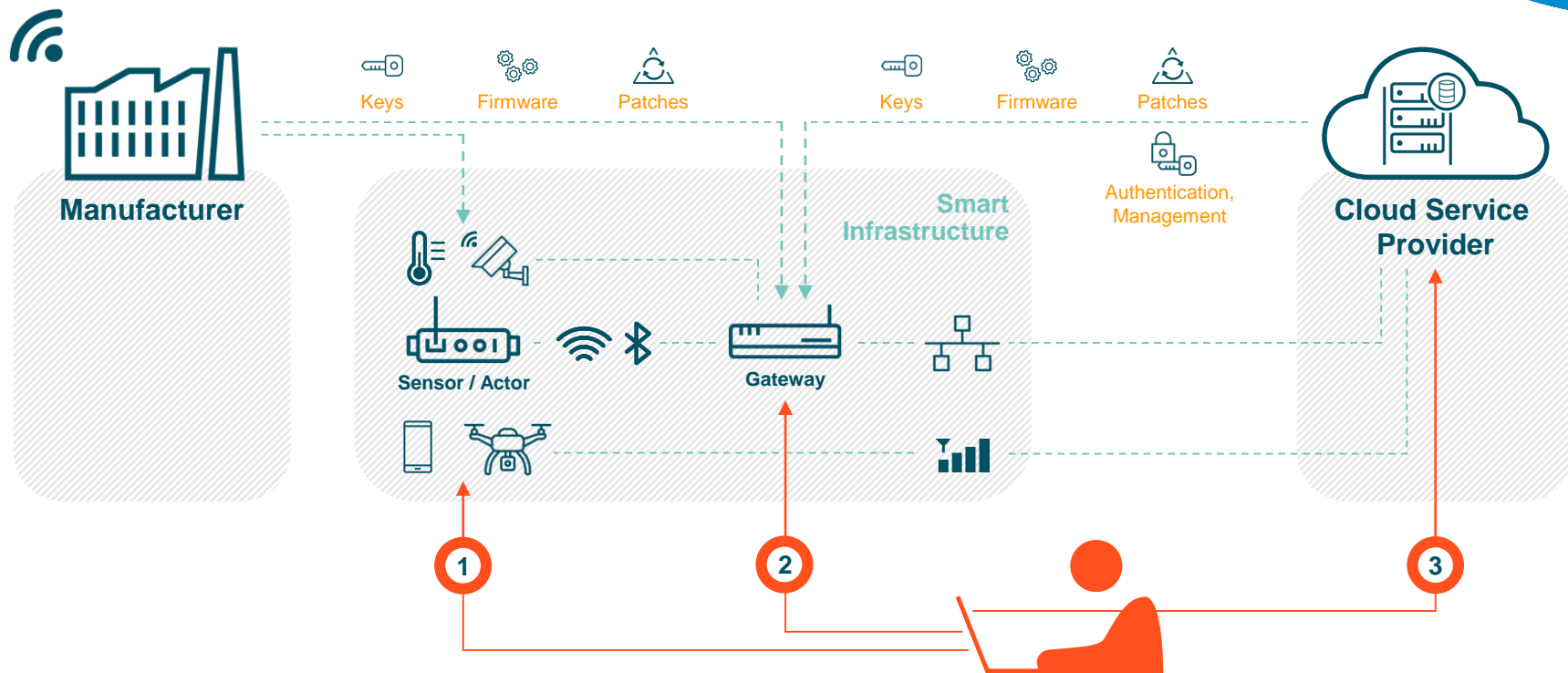
... facilitate lateral and vertical infiltration

Source: 2020 Unit 42 IoT Threat Report, Palo Alto Networks, 2020

## The three cyberattack methods

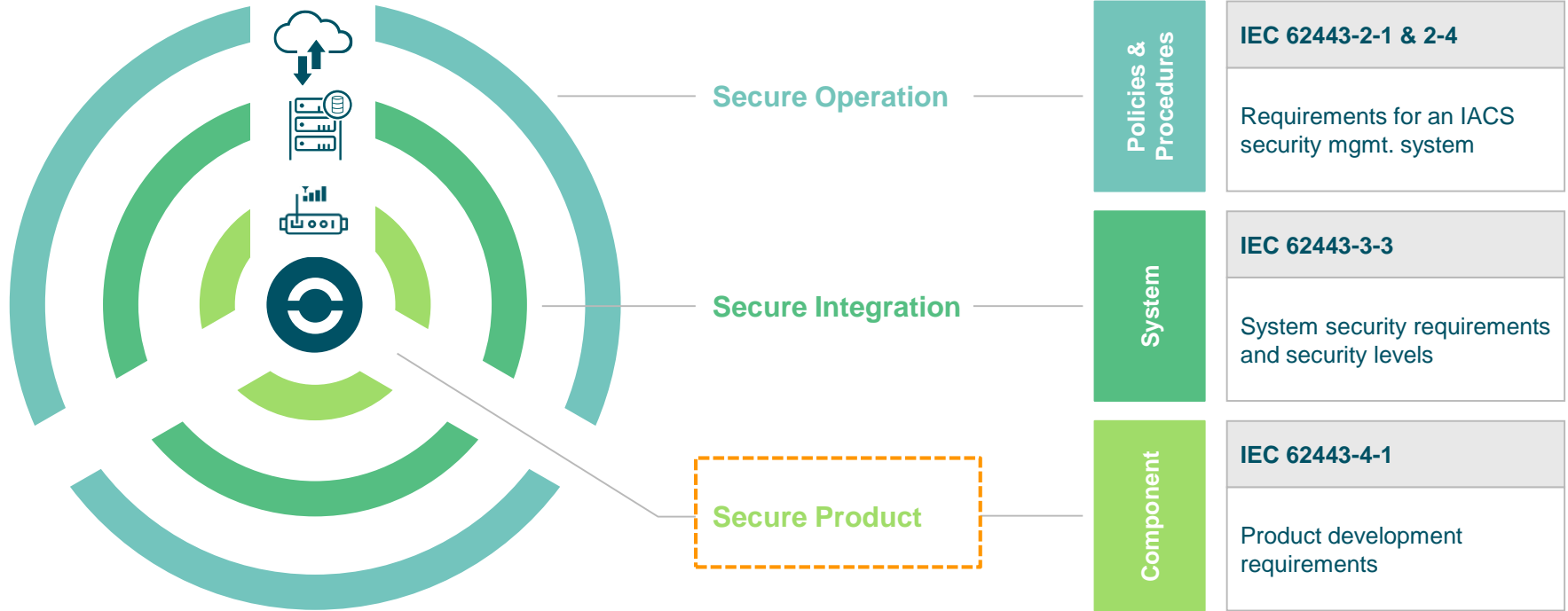


# Multiple attack vectors

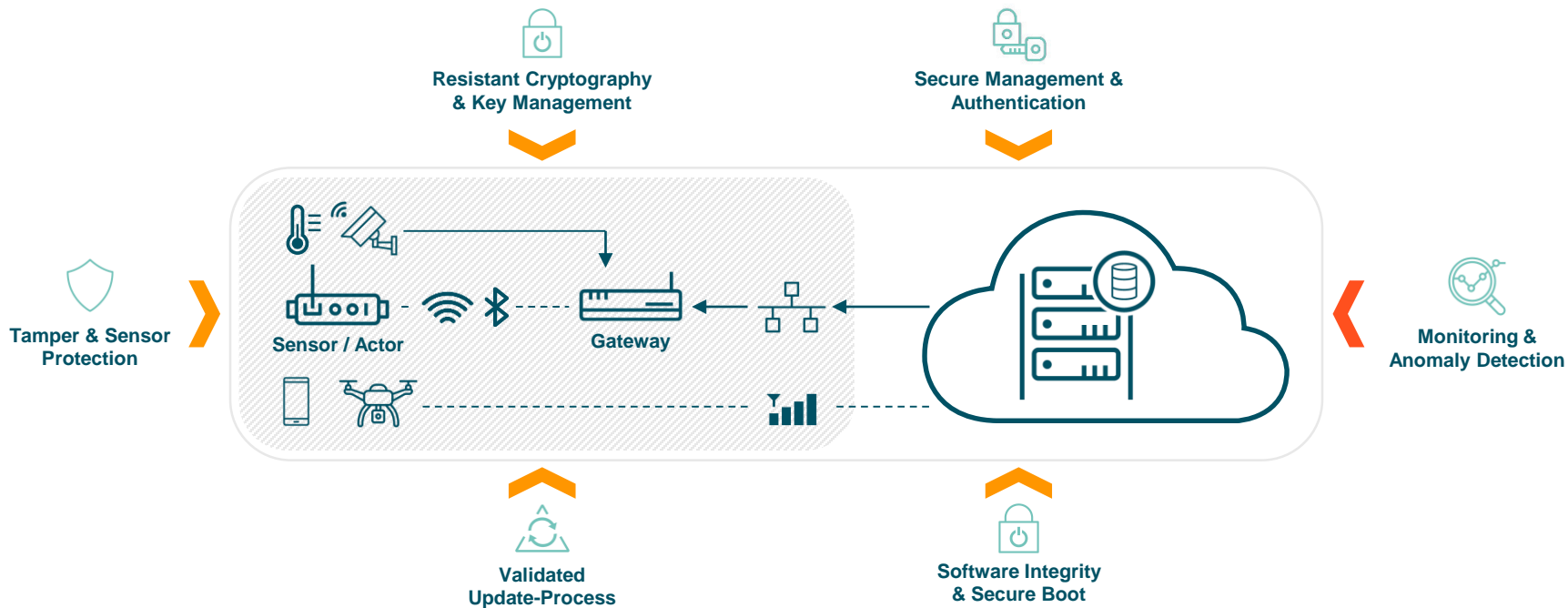




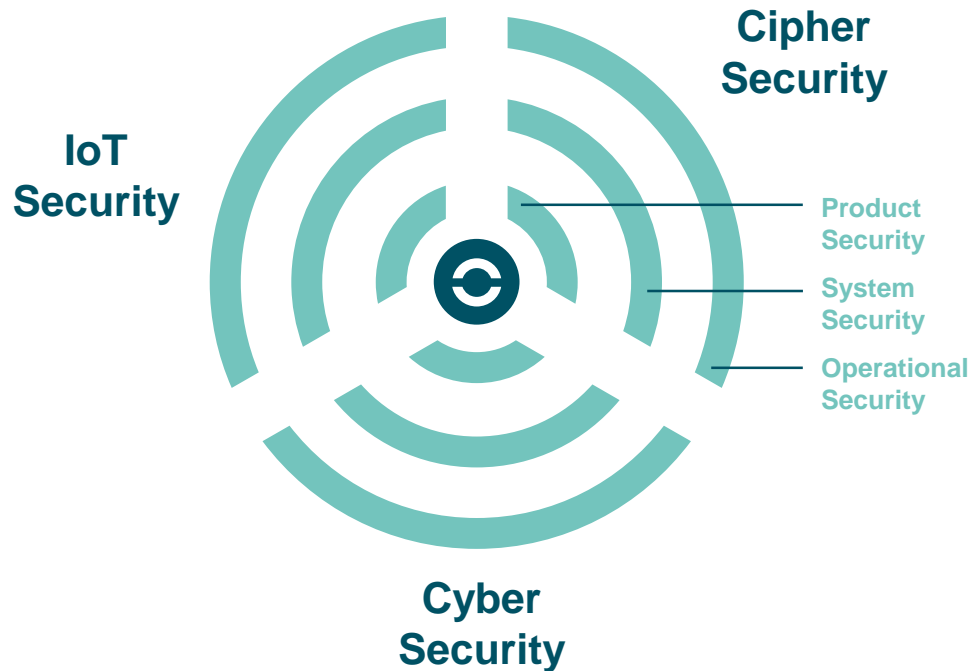
# Holistic security with Defence in Depth



# Enhancement of product related IoT cyber resilience



# Smart 360° Security Concepts and Solutions from CyOne Security



Thank you!

  
IoT visions

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INTERNET OF SUSTAINABLE THINGS  
Zurich, June 9th 2022

More on our  
IoT Security Solutions

