



EDGE SDN

CYBER SECURITY Platform for IOT and OT Industrial Network

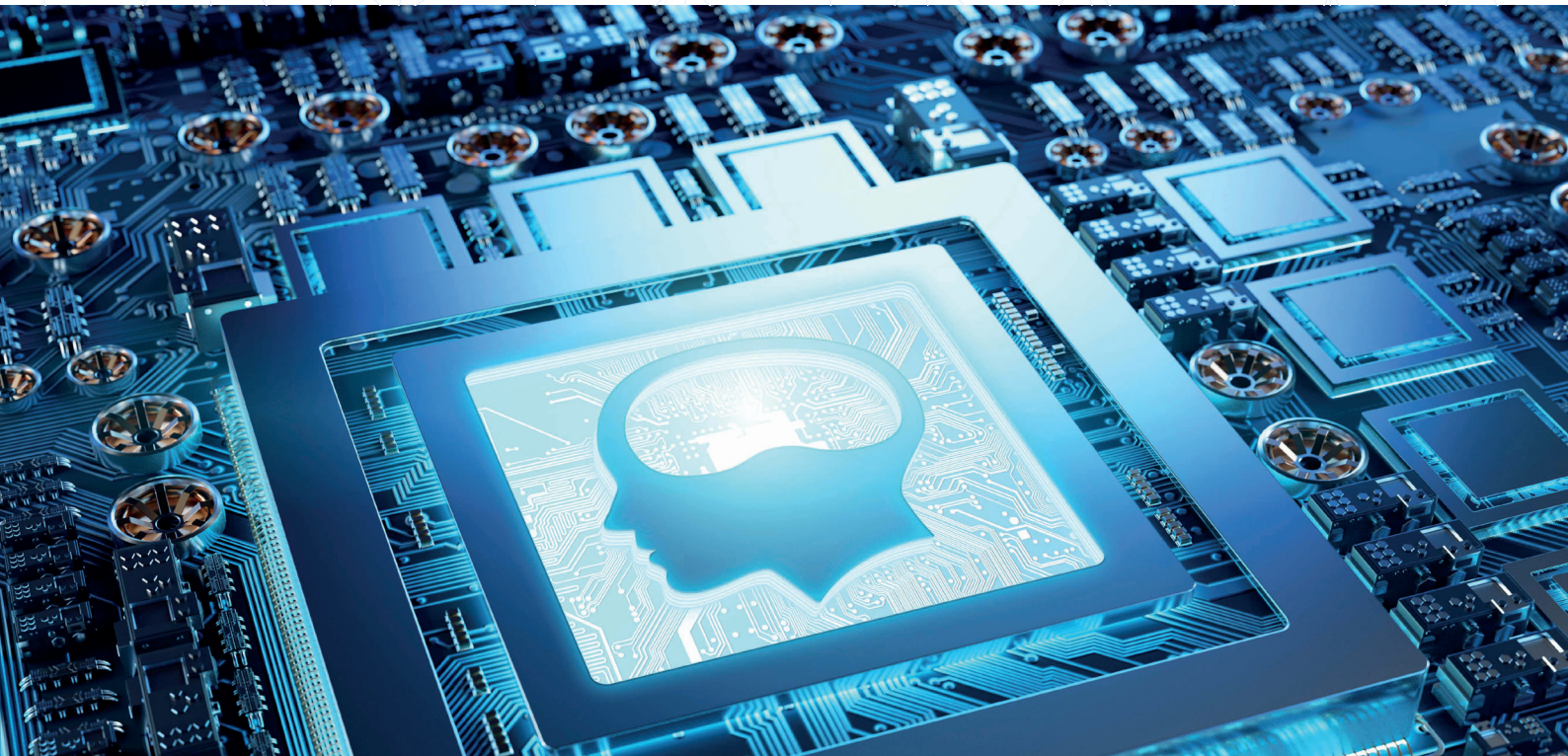
Software Defined LAN to secure and protect devices,
machines, assets, and services



ISO/IEC 62443

NIST 800-82

International Cyber Security Standards



EDGE SOFTWARE DEFINED NETWORK

Edge SDN is a **Cyber Security Platform** that secures the **assets** and the **OT telecommunications network** according to **ISO/IEC 62443** and **NIST 800-82**. Edge SDN is composed of **SDN Nodes**, to be installed in selected

points of the network; a **Central Management Console**, for the IT department to manage **security profiles**; and a Tablet, in the hands of the OT department, that allows them to **implement** security policies **independently**.



Intrusion Detection System with data analysis in every point of the network



Isolate the machines and **micro-segment** the data traffic of the OT network



IT department **oversees** the threats and **security level** of the OT network



Self-learning Artificial Intelligence System for threat assessment



SDN Edge Platform integration without modifying the existing network



OT operators work **independently** by modifying the functions of the system

HOW IT WORKS

INTERNAL PROTECTION

IoT and **OT networks** must be **protected from the inside** and not only in single network points such as Firewall or IDS at the border. Industrial networks are borderless.

UNPLUG YOUR ASSETS

Isolate hosts, devices, machines, and services from the network. **Allowed applications can exchange** traffic while threats and malwares are segregated and ineffective.

OPERATIONALLY INDEPENDENT OT DEPARTMENT

The **OT department** manages the operation of network security in **complete autonomy** with a simple click on the tablet for each **operating condition**.

NETWORK MICRO-SEGMENTATION

Prevent unplanned traffic **avoiding malicious activities**; allow communication only between well-known and authorized recipients, preventing any illegal or misused communication.

FULL CONTROL OF THE IT DEPARTMENT

The IT department creates network **operation profiles** with the desired **security levels** and supervises operation and detected alarms.

DETECT DANGERS BEFORE THEY BECOME PROBLEMS

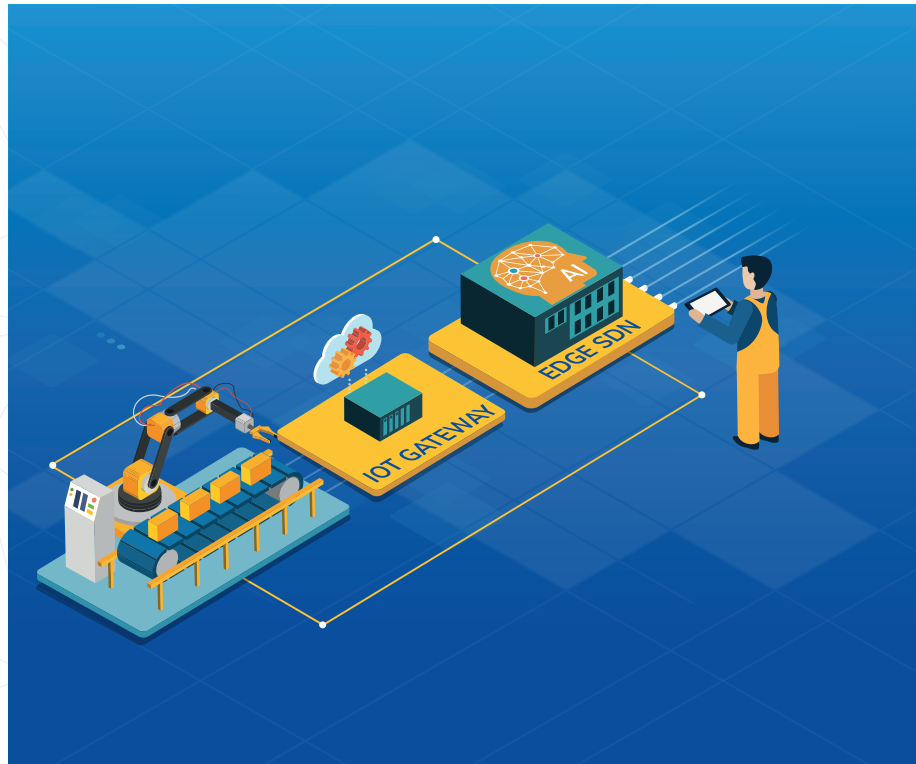
The IDS present in each network node evaluates each detected threat using an **AI self-learning** algorithm in order to report only **concrete dangers**.



SOLUTIONS FOR OEMS

The **Edge SDN platform** secures individual **machines** according to the international standard on **Cyber Security ISO/IEC 62443** and **NIST 802-82**. Manufacturers can create **customized operating profiles for each condition of use** of the machine, ensuring their customers operate with a **predefined level of security**.

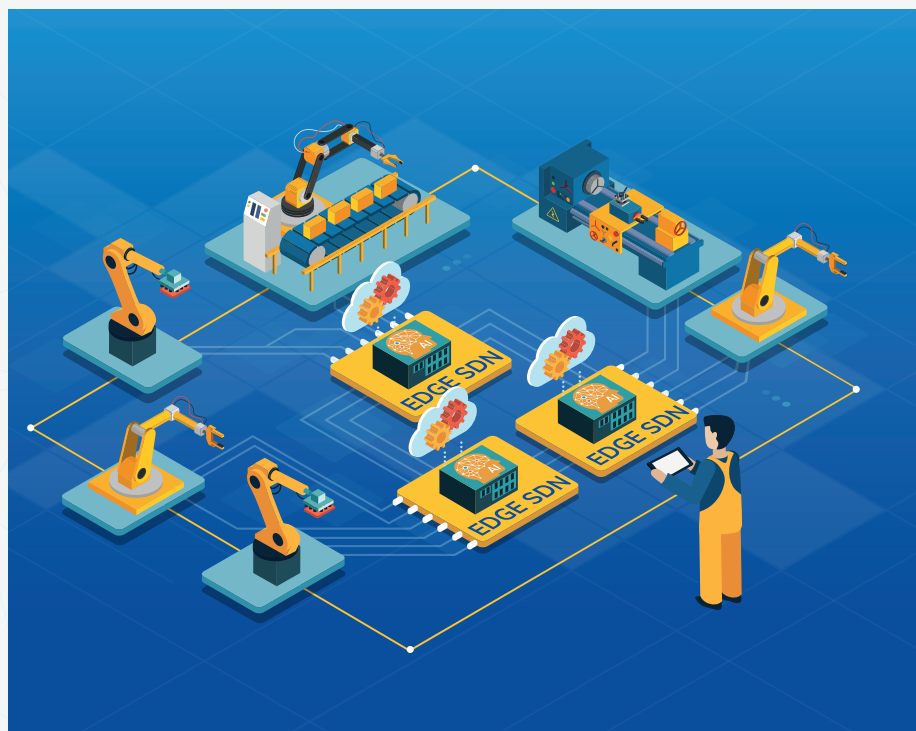
- ✓ **STAND OUT FROM THE COMPETITION** by creating an offer in which IT security is integrated.
- ✓ Make your **MACHINES COMPLIANT** with the international standard **ISO/IEC 62443** and **NIST 802-82**.
- ✓ **FEWER ASSISTANCE INTERVENTIONS** thanks to protection from possible vulnerabilities.
- ✓ During maintenance, **THREATS** on the maintainer's PC **CANNOT SPREAD** throughout the company.
- ✓ **RECTIFY VULNERABILITIES IN MACHINES** before update patches are released.
- ✓ **ACCESS TO HIGH VALUE MARKETS**, where safety and reliability are essential.



SOLUTIONS FOR IT AND OT DEPARTMENTS

The **cybersecurity** of a company involves both the IT and OT departments. The **IT department** is responsible for IT security, while the **OT department** is responsible for business continuity. The Edge SDN platform allows **the separation of roles** giving the IT department the tools to **support** and **control** the OT department that can work in **full autonomy**.

- ✓ **INCREASES THE LEVEL OF OT SECURITY** in accordance with IEC 62443 and NIST 800-82.
- ✓ **FEWER IT SUPPORT VISITS** to the OT and IOT networks.
- ✓ The **OT DEPARTMENT INDEPENDENTLY MANAGES DAILY PROBLEMS** with predefined security levels.
- ✓ **PROTECTION OF RESOURCES** from zero-day vulnerabilities by segmenting and isolating them.
- ✓ Ensure that the **OT DEPARTMENT COMPLIES WITH IT SECURITY RULES**.
- ✓ **HIGH-VALUE NETWORK DATA** and OT operating procedures.



INTEGRATE THE EDGE SDN PLATFORM INTO YOUR SECURITY STRATEGY

Whatever your **OT cybersecurity** strategy, use of VLAN, Firewall or border IDS, the **Edge SDN platform** can help you **increase** the level of security and **automate** the necessary OT operations in any **operational condition**.

The **Edge SDN platform** can be integrated without making any changes to the existing network. We

evaluate which of the functions of the Edge SDN **platform** fills an existing security gap for each **zone** or **network point**.

- ✓ Machine isolation
- ✓ Communication micro-segmentation
- ✓ Intrusion Detection System with Self-learning AI



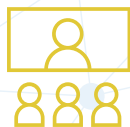
ANALYSES

We start with the **risk analysis** of the current system, identifying the **areas** and the necessary interventions to achieve the desired **Security Level** of the **ISO/IEC 62443** and **NIST 802-82** standard.



INSTALLATION AND CONFIGURATION

Edge SDN nodes* are installed in the network locations identified in the analysis and network **operation profiles** are created for each **operating condition**.



OT DEPARTMENT TRAINING

The **tablet** used by the **OT department** has individual buttons that allow operators to **apply** the operating profiles of the network in full autonomy.



GO LIVE

The system is now complete. The **IT department** through the **Central Management Console** supervises the IT security level of the **OT department** in real time.

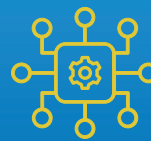
* Any **SDN switch** compatible with the **OpenFlow** protocol version 1.3 can be used

ADVANTAGES



INFORMATION TECHNOLOGY (IT)

- ✓ **Certainty** of the IT security level of the **OT department**
- ✓ **Remote control** of operating conditions in **real-time**
- ✓ Alarms from the network with risk **assessment** through **self-learning AI**



OPERATIONAL TECHNOLOGY (OT)

- ✓ **Operational independence** from the IT department
- ✓ Modification of network operation **profiles** based on **working conditions**
- ✓ **Cyber Security** management even by **inexperienced operators**

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