

PRTG NETWORK MONITOR

Мониторинг цифровых производств с PRTG

Объединение мониторинга IT/OT
с помощью PRTG



Ваши собеседник сегодня:



Вячеслав Милованов
PreSales Systems Engineer

Темы



Мониторинг промышленной IT инфраструктуры с PRTG



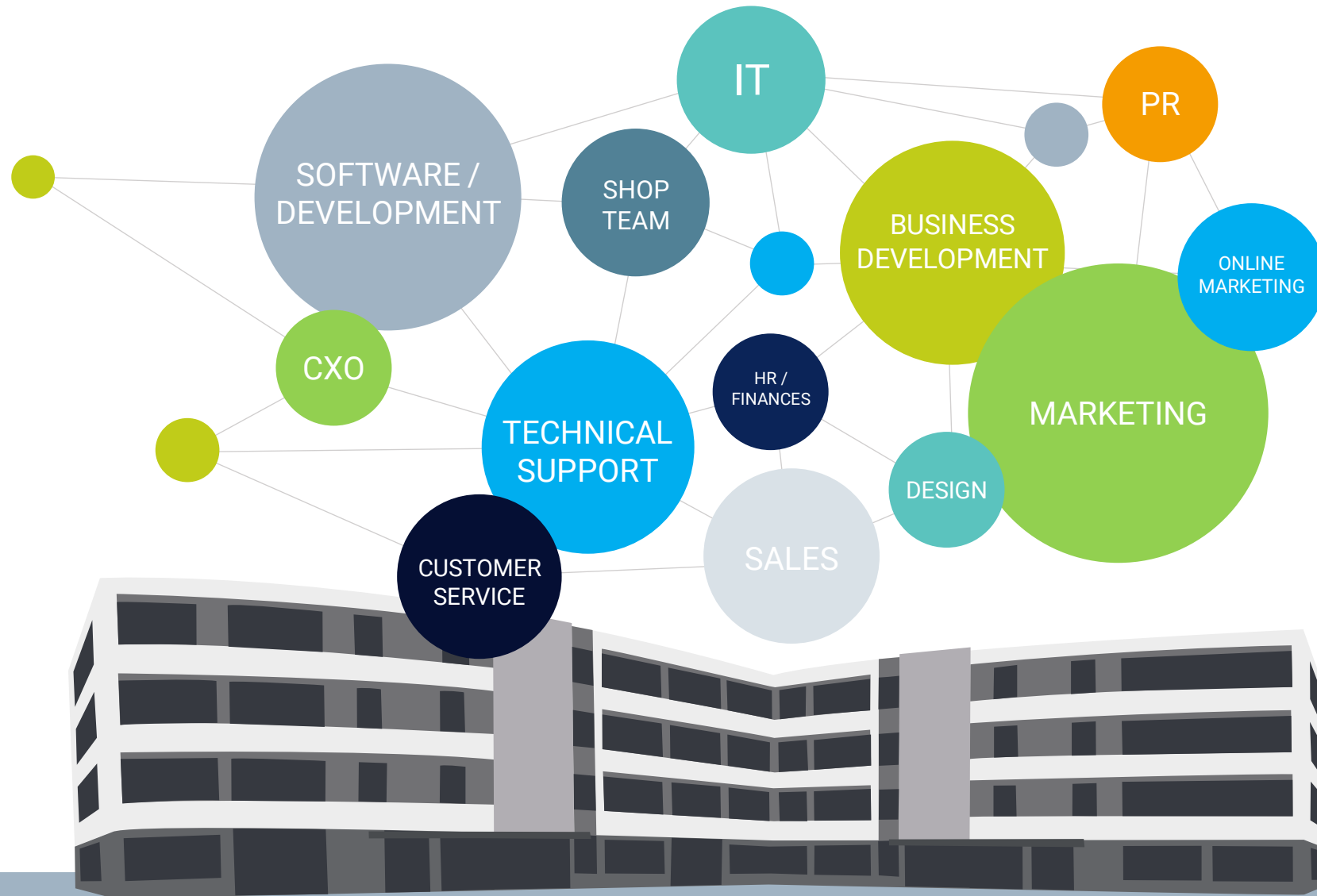
Примеры использования наших OT сенсоров



<https://www.paessler.com/>



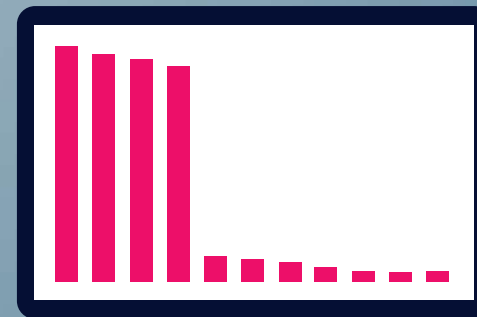
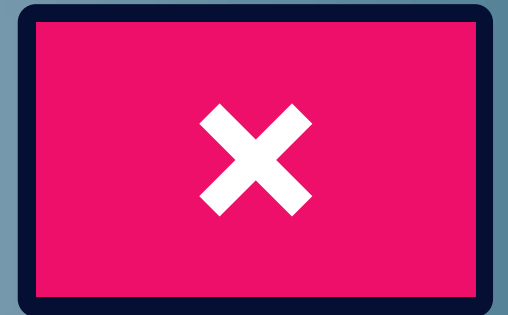
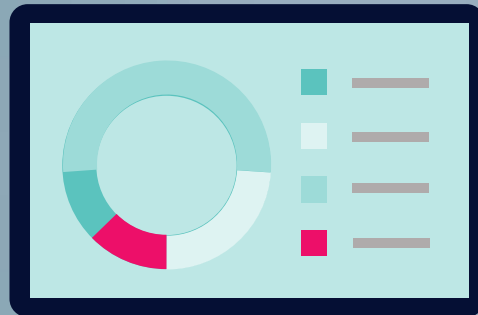
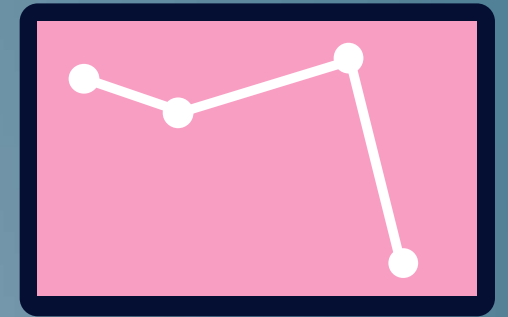
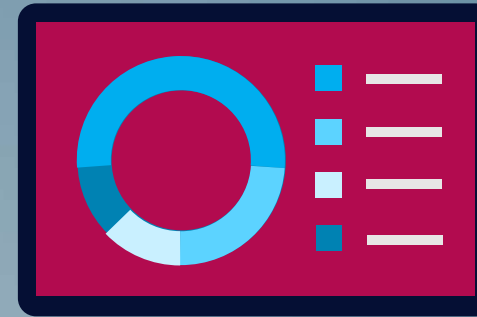
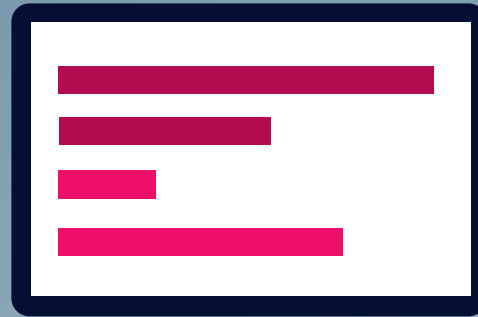
Paessler & PRTG



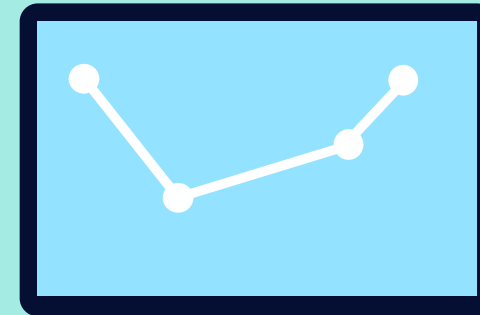
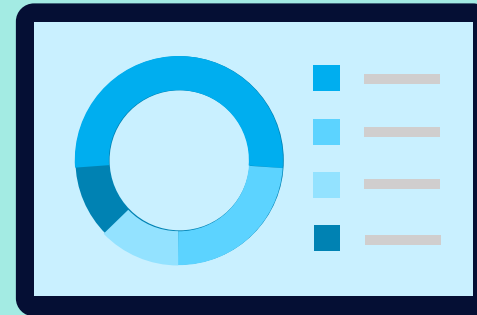
Растущая цифровизация...



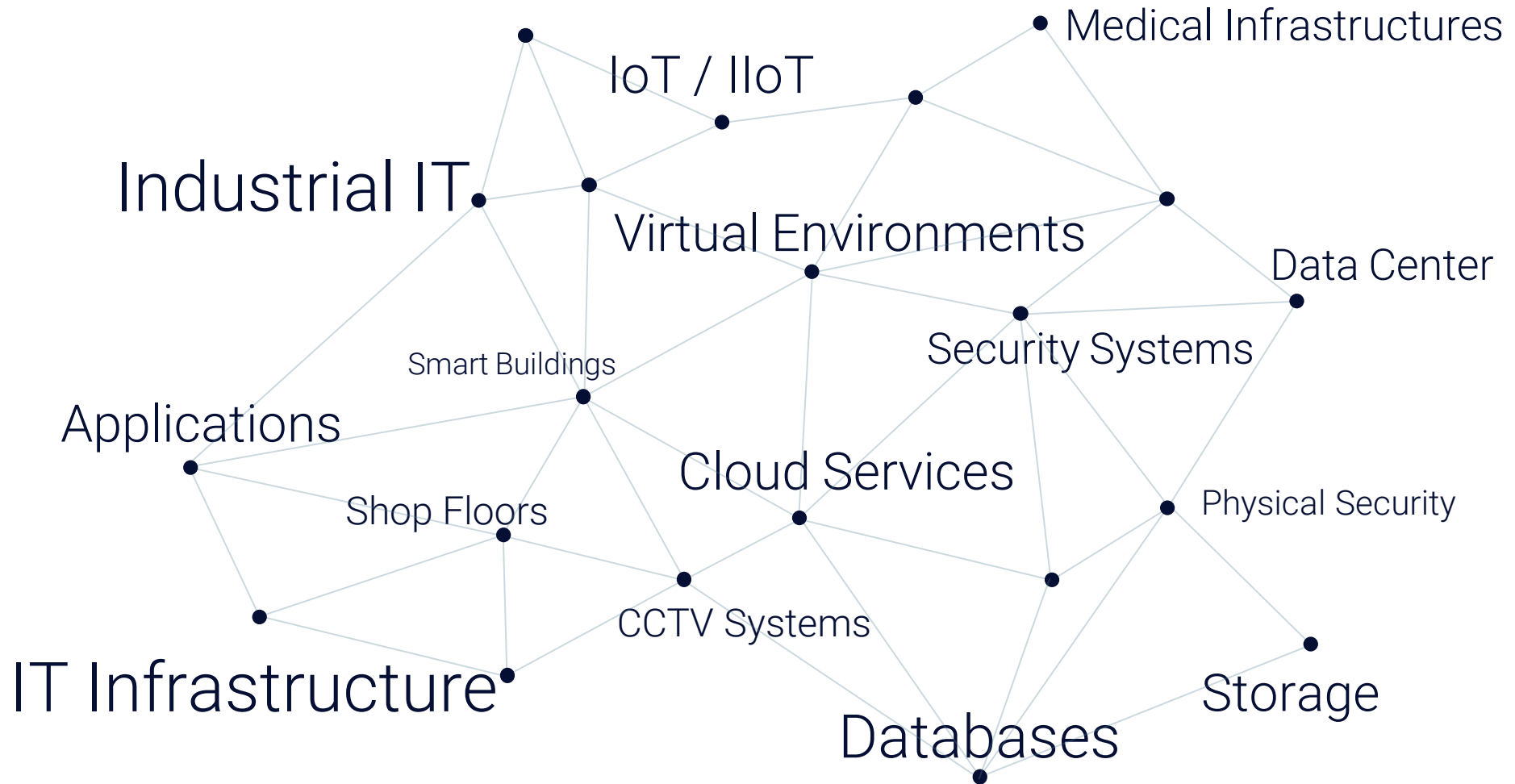
Разное ПО, Множество панелей управления



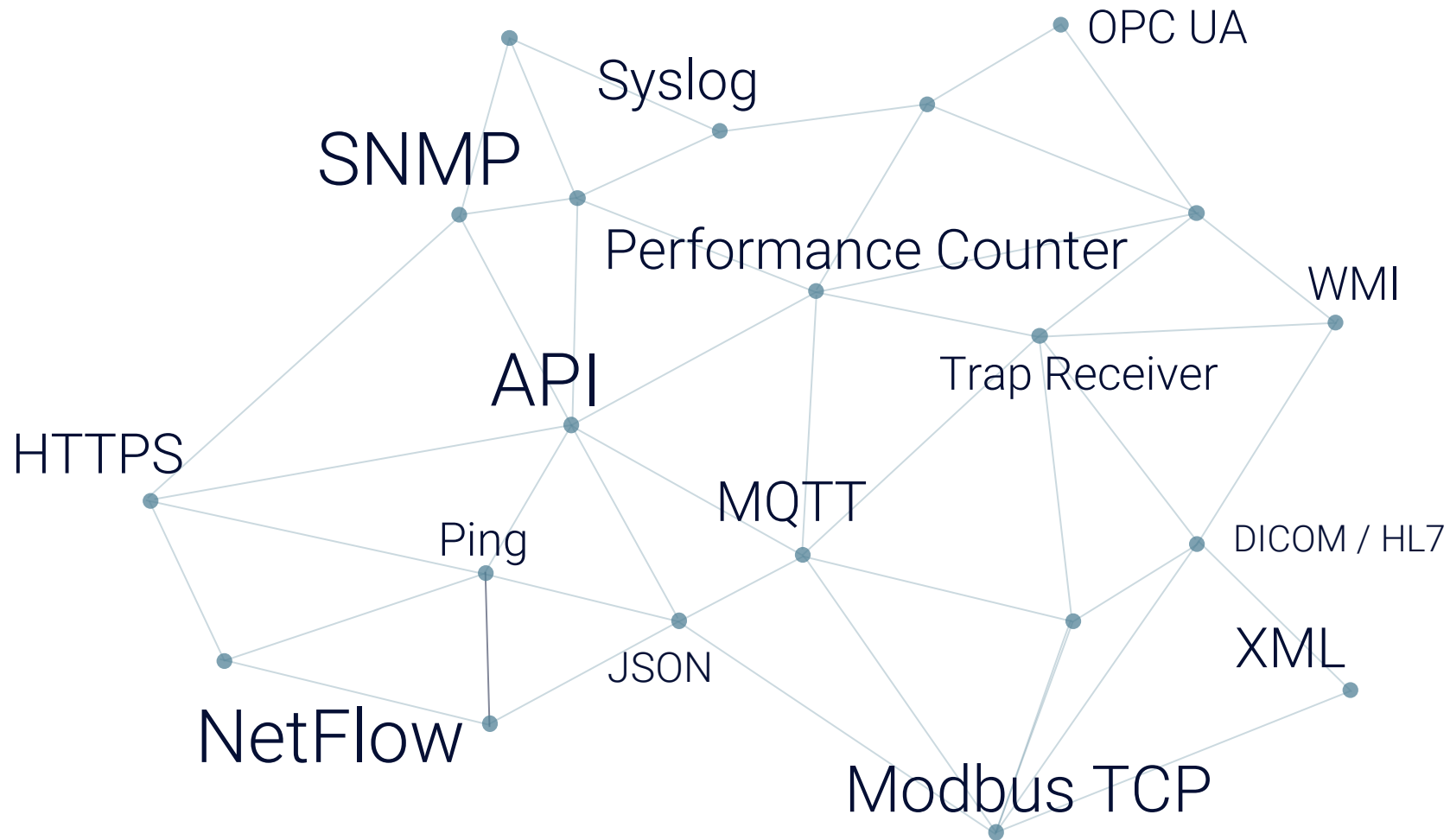
Вам
необходим
контроль над
всеми
компонентами.



Решение для мониторинга всего...



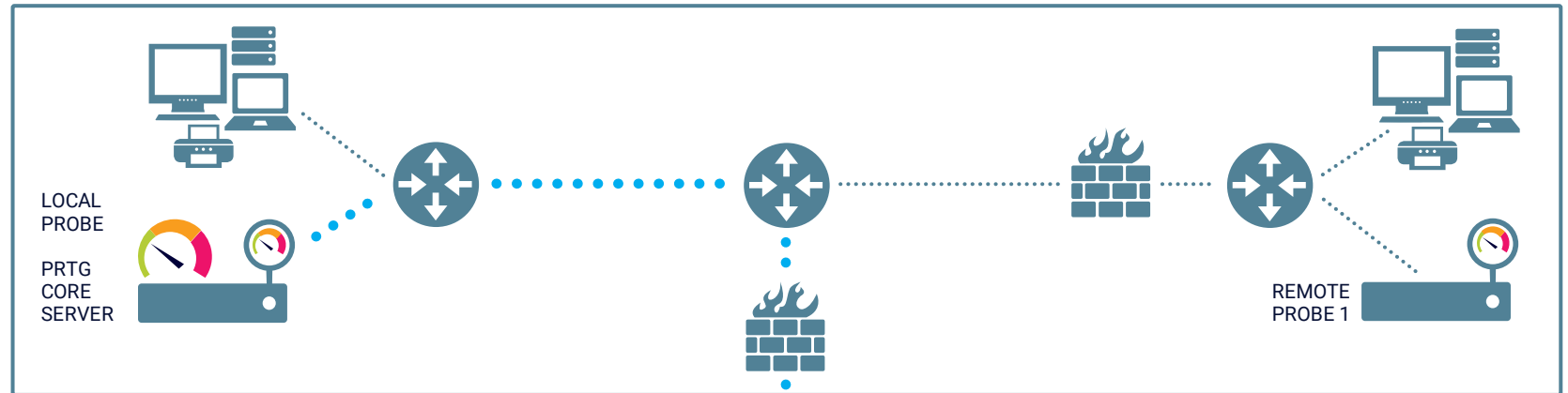
... ВСЕМИ ДОСТУПНЫМИ СПОСОБАМИ...



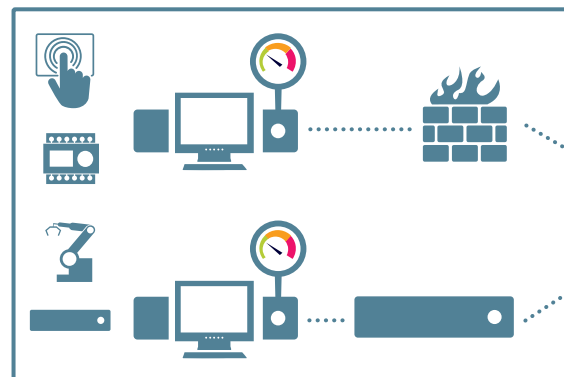
...где угодно...

Используя удалённые зонды

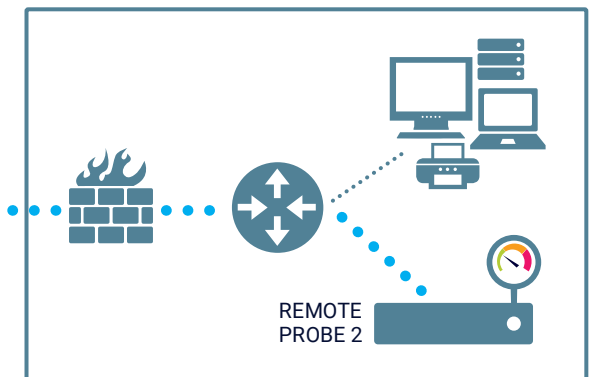
CORPORATE LAN



SHOP FLOOR



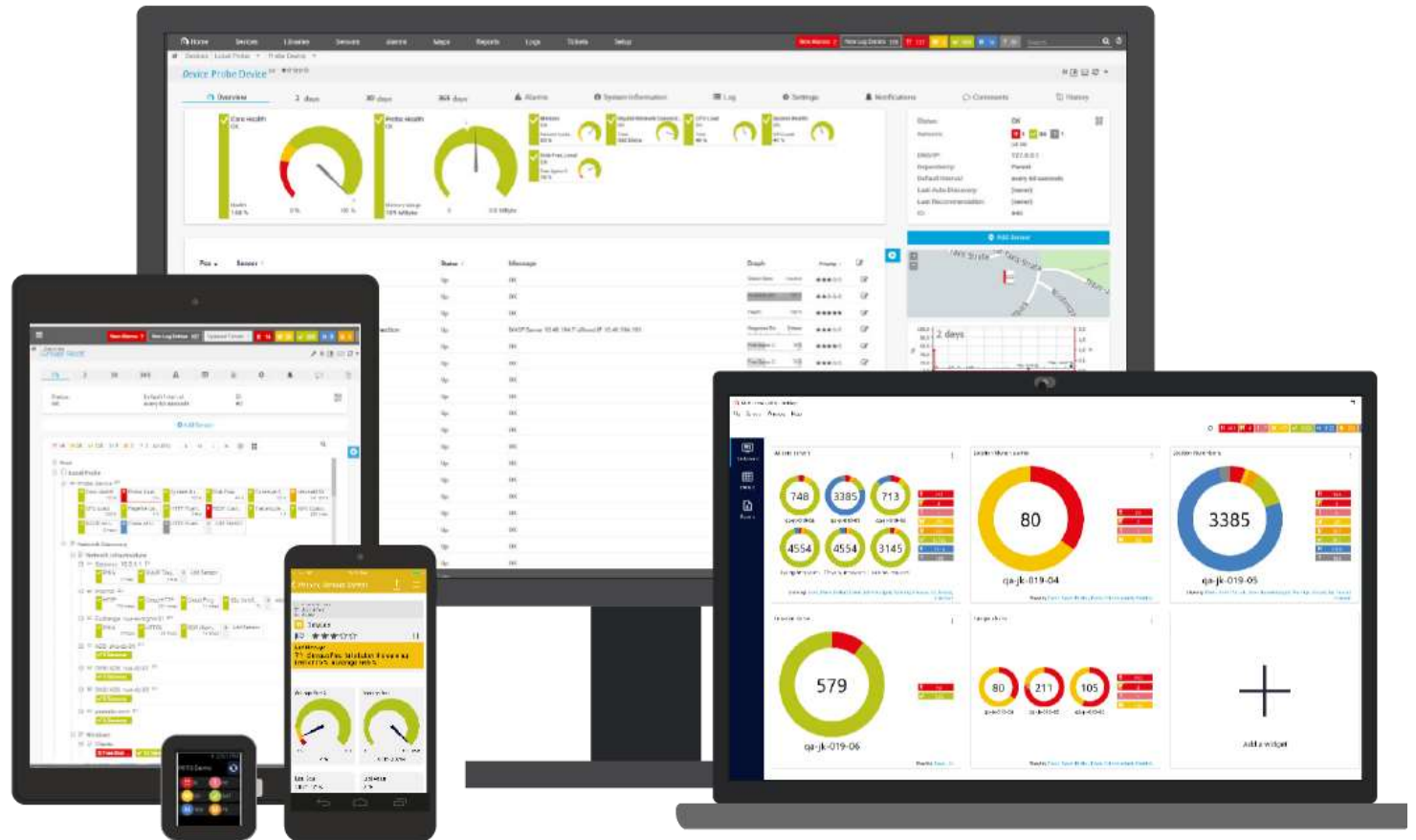
TOP FLOOR & LOCATION INFRASTRUCTURE



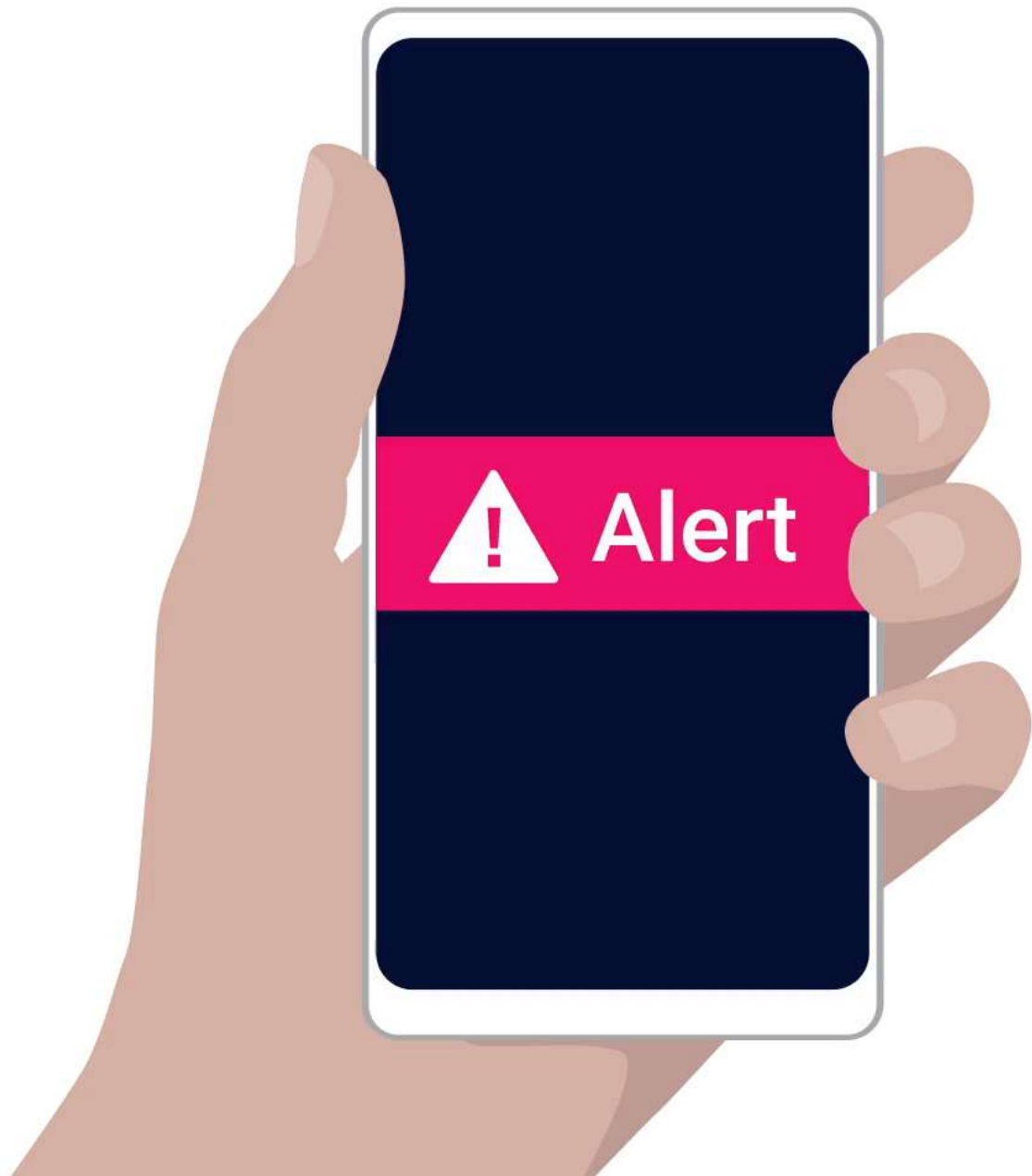
INTRANET /
INTERNET
(DEDICATED
CONNECTION)

...UI на любой вкус

- Ajax Web Interface
- PRTG Desktop App
- PRTG Mobile Apps

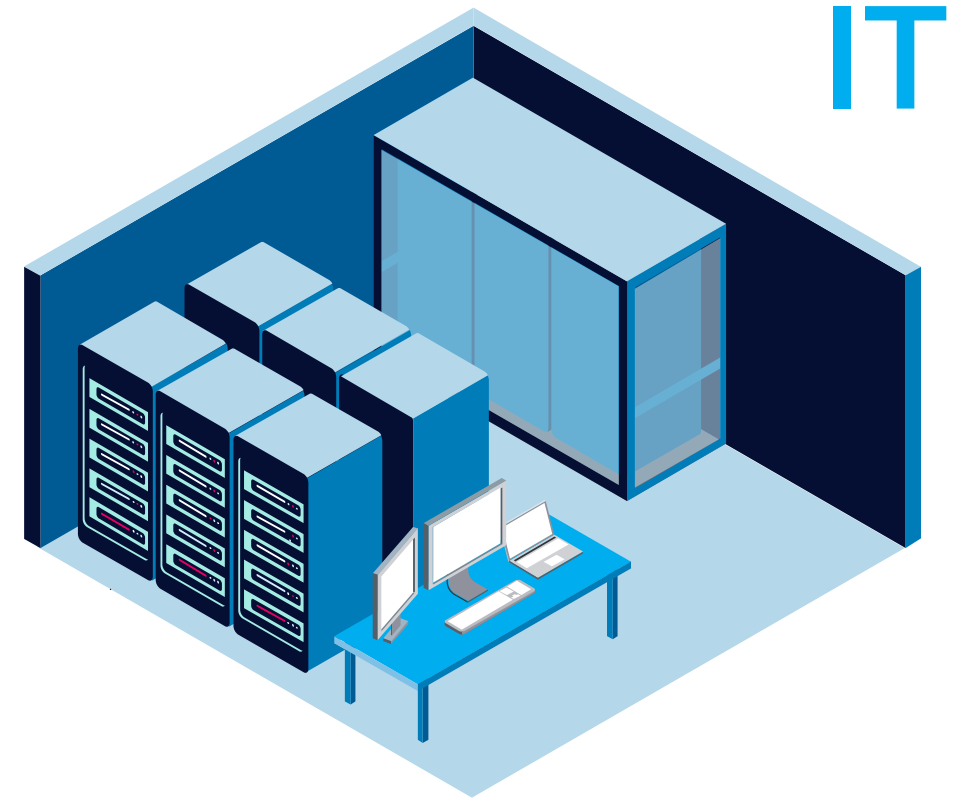






Стыковка IT / OT

Что такое Industrial IT?

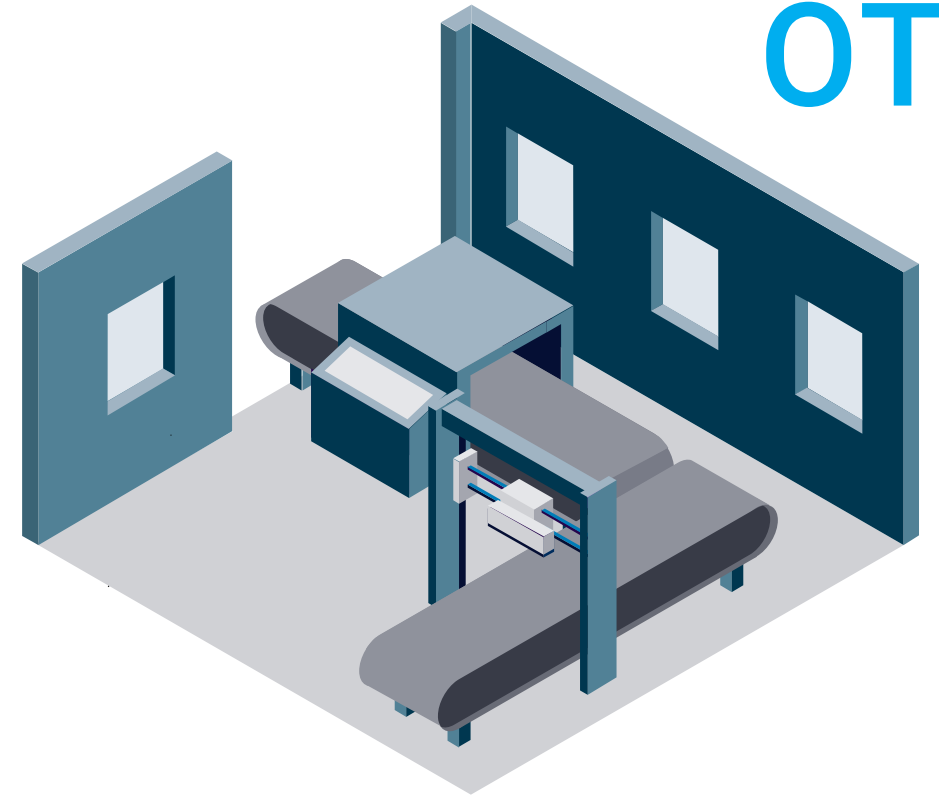


Что такое Industrial IT?

IT



OT

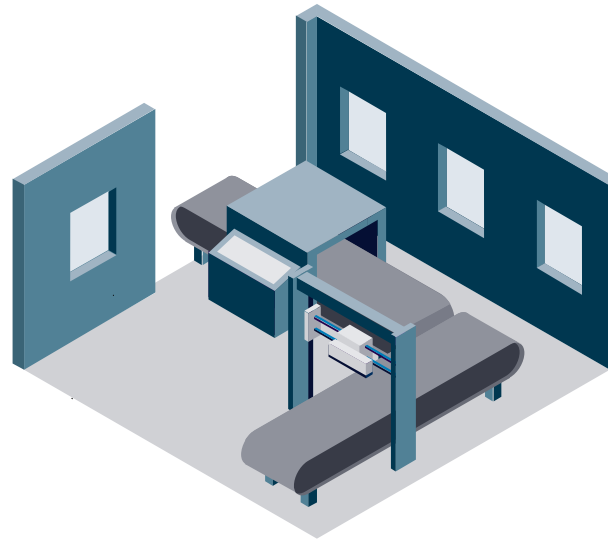


Что такое Industrial IT?

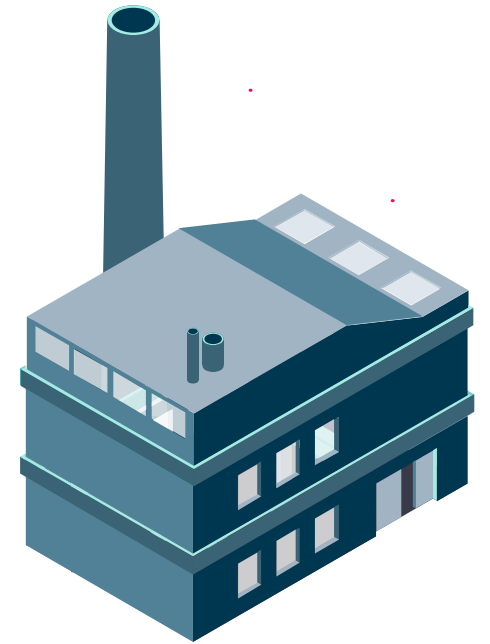
IT



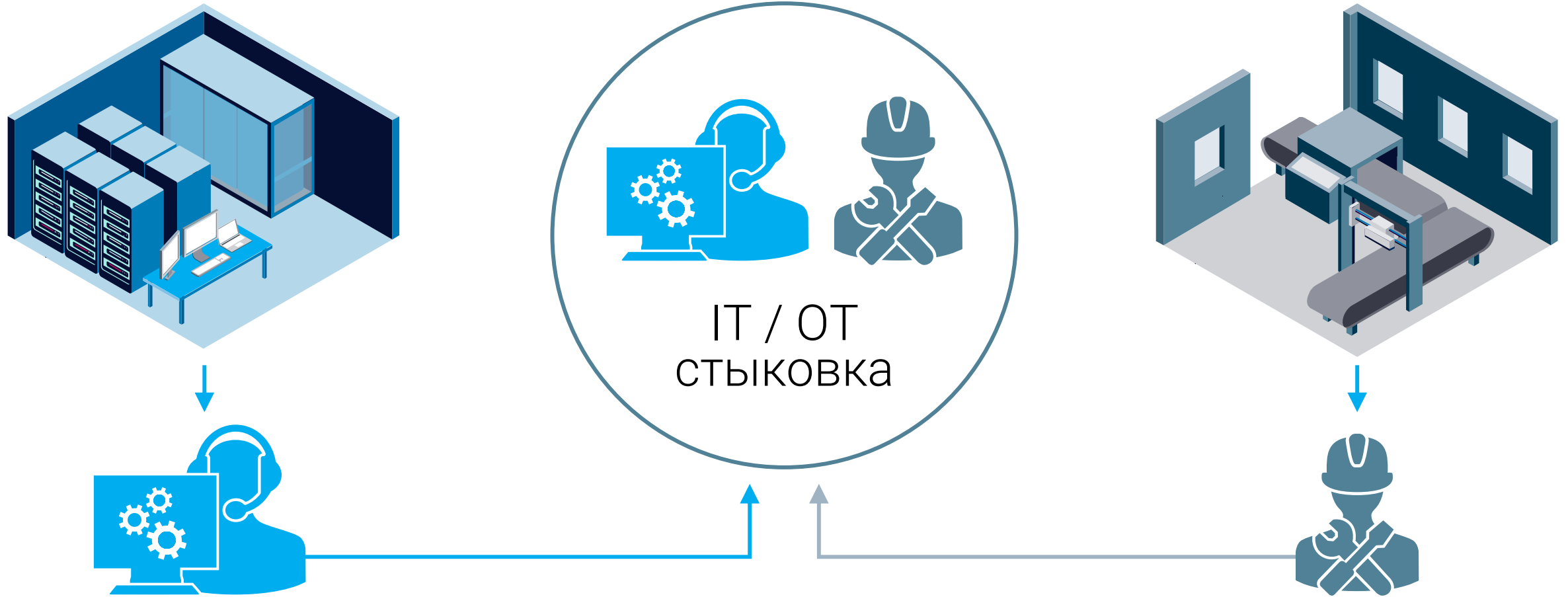
OT



IIoT

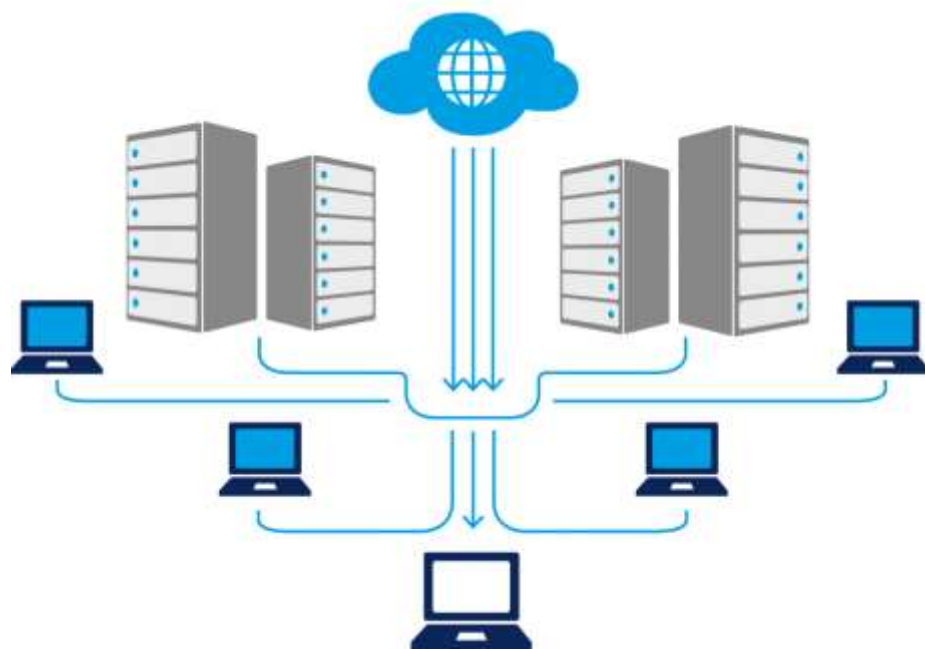


Как объединить два этих мира?



IT / OT стыковка

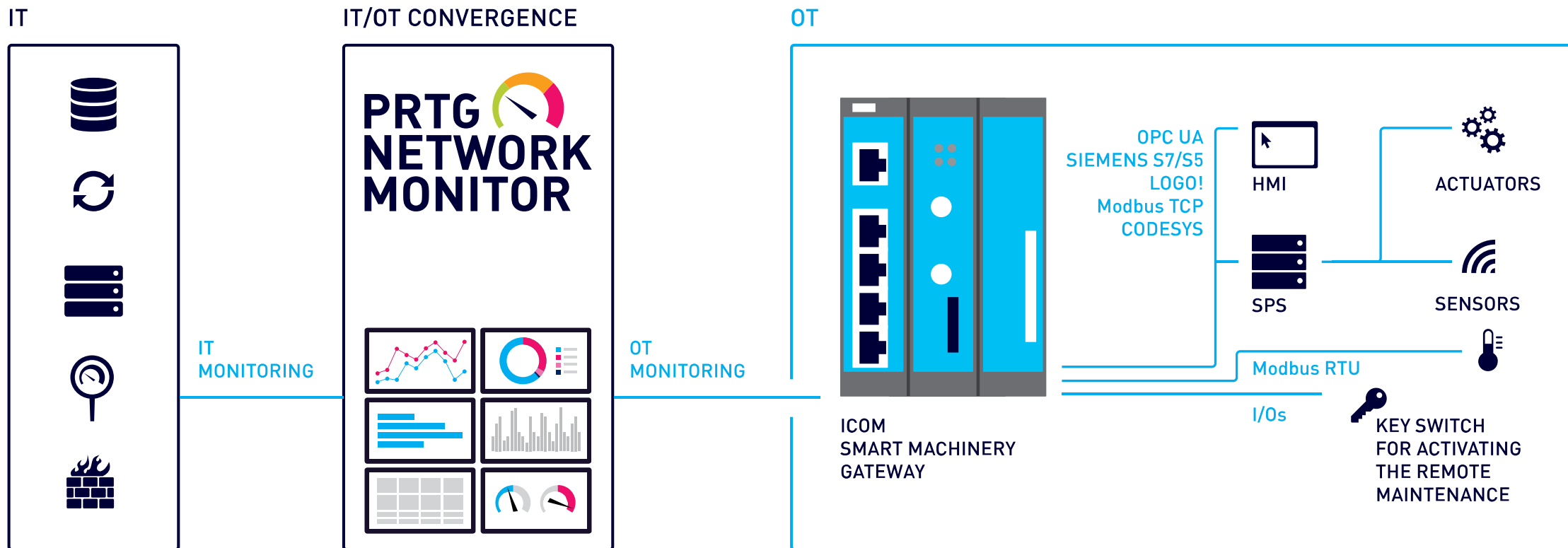
IT инфраструктура



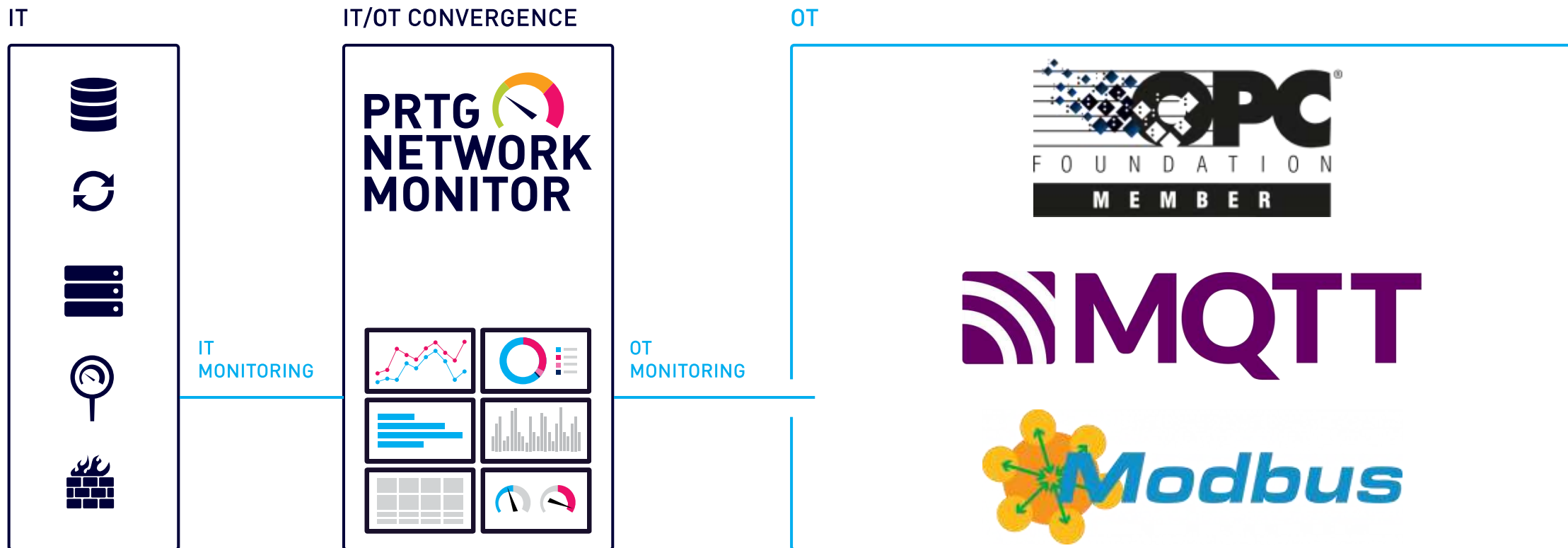
IoT / IIoT инфраструктура



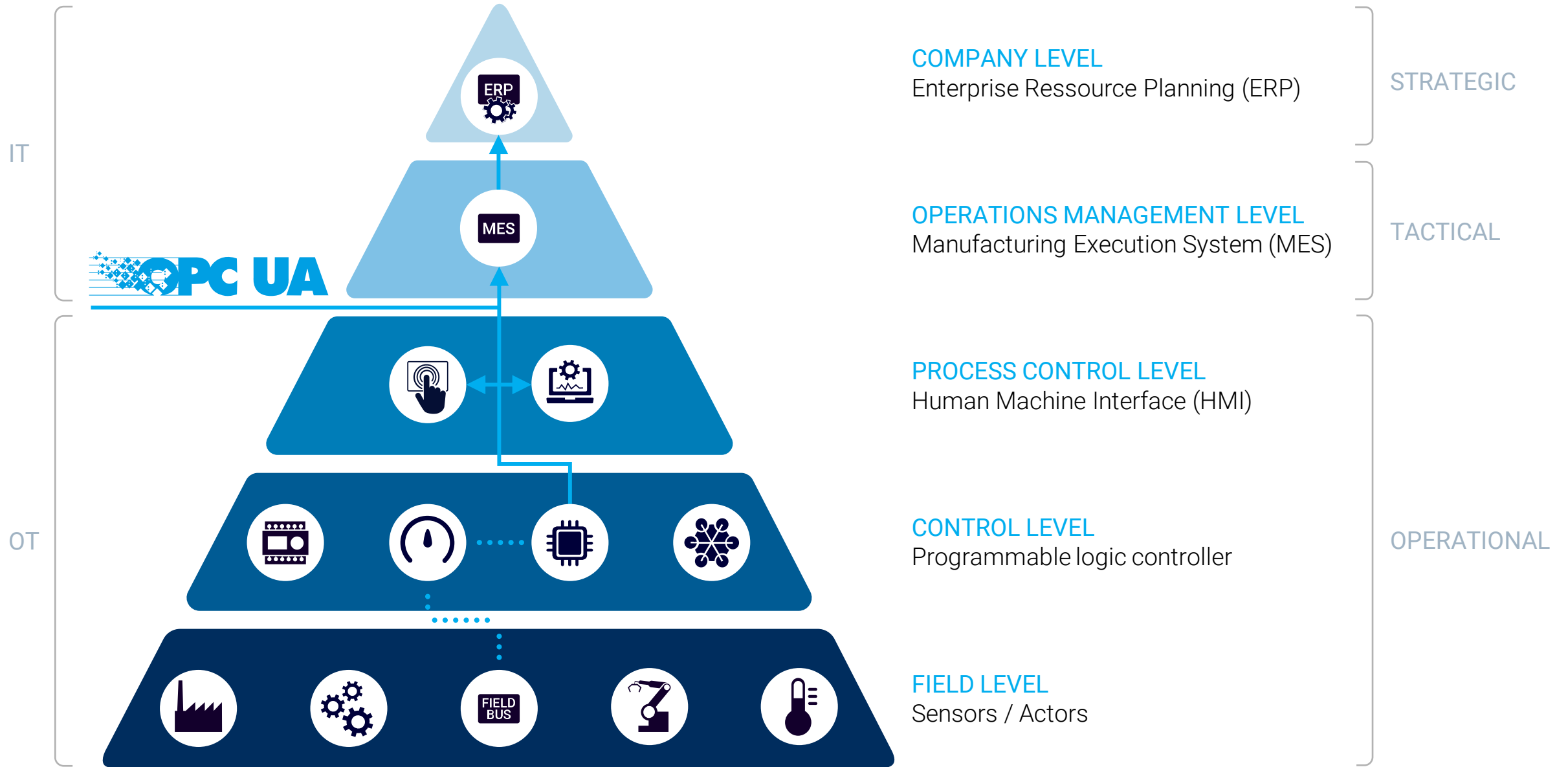
IT / OT стыковка с помощью шлюзов

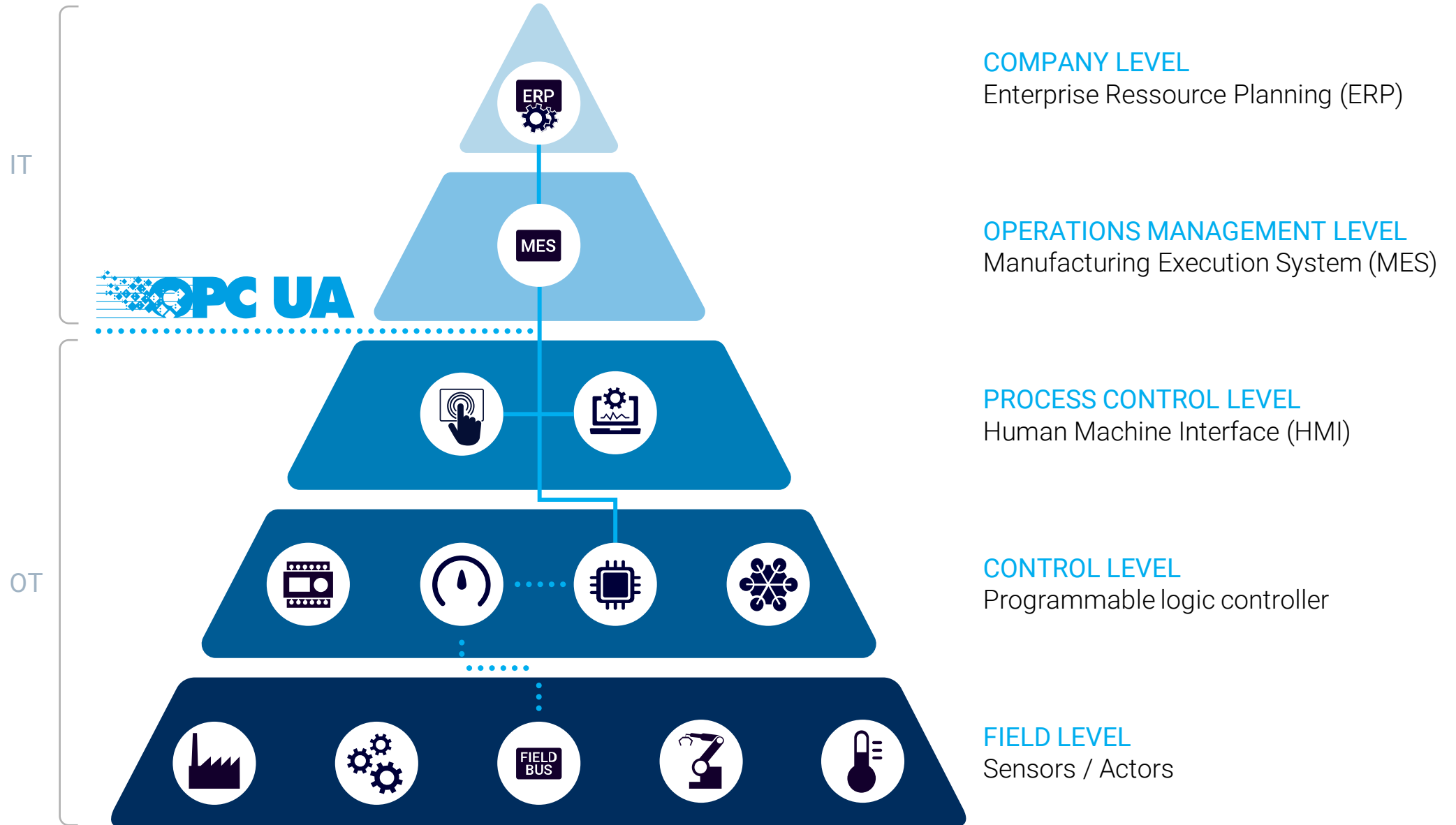


IT / OT стыковка с помощью PRTG









Данные с производства

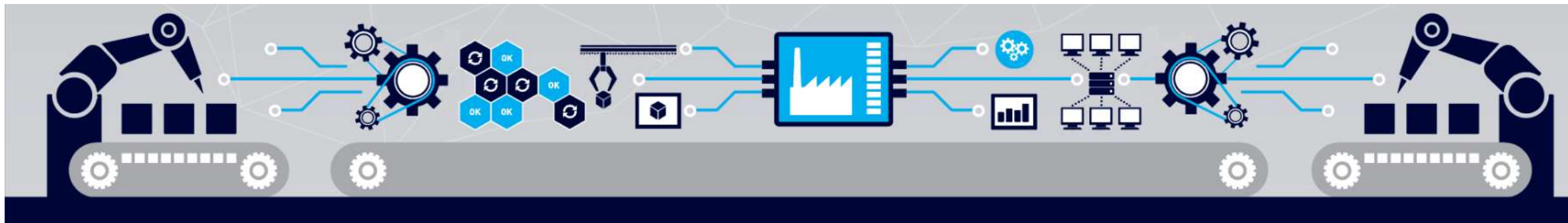
SPS

OPC UA Сервер

Энергия, клапаны,
насосы

Machine A

Machine Status	Overall machine status (signal tower)	Machine control panel status stopped	Conveying speed 0 m/s	input module selector state 0 #	Output module selection 0 #	Running State producing
sorting shunt 0 #	Machine Environment Temp & Humidity	+ Add Sensor				





Industrial Edge Data- center



Modbus – Мониторинг системы кондиционирования

Register Address	Register Address	R/W	Description
0	1	R/W	AC unit On/Off <ul style="list-style-type: none">• 0: Off• 1: On
1	2	R/W	AC unit Mode 1 <ul style="list-style-type: none">• 0: Auto• 1: Heat• 2: Dry• 3: Fan• 4: Cool
2	3	R/W	AC unit Fan Speed <ul style="list-style-type: none">• 0: Auto• 1: Low• 2: Mid-1• 3: Mid-2• 4: Mid-3• 5: High

Modbus – Мониторинг системы кондиционирования

Error Code	Error Description
0	No active error
19	Interlock error for fan
20	Drain level system error
23	Fan motor locked, overload, over current
24	Swing flap motor error
27	Heater overheat
28	Dust collector error / No-maintenance filter error
56	Overload of fan motor / Over current of fan motor
57	Over current of AC input

Modbus TCP Sensor

✓ *Sensor Air conditioning system* ★★★★★

OK

Overview

Live Data

2 days

30 days

365 days

Historic Data

Log

Settings

unit mode



Auto

error code

No active error



unit backup

Off



unit fan mode

Auto



unit state

On



Панель: Industrial Edge Datacenter

Building Facilities

Temperature - Air Conditioning System / 10 Hours



Humidity / 10 Hours



Access Management System

Website
OK

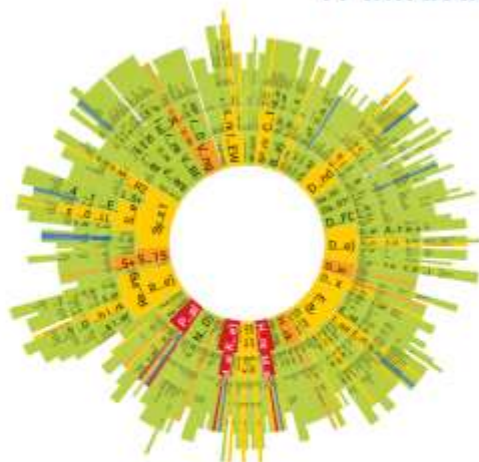
Security-cameras System

Surveillance
OK

Electric System

Uptime
OK

IT Infrastructure



Server
3



Virtual Hosting
12



SQL01.crpdemo.lan
2



Storage
1



Network
1 4



Demo Server
5

Host (WBEM)

System

Processor 1 Temp 41 °C	System Board 1 CPU Usage 1,300 %	System Board 1 HD Usage 0 %	System Board 1 Power Consumption 76 Watt
Power Supply 1 Current 1 499 mA	Power Supply 1 Voltage 1 232 Volt	Power Supply 2 Current 2 200 mA	Power Supply 2 Voltage 2 232 Volt
System Board 1 Fan1 3,240 RPM	System Board 1 Fan2 3,240 RPM	System Board 1 Fan3 3,240 RPM	System Board 1 Fan4 3,120 RPM

Services & Apps

Services

- Terminal Services
OK
Total Sessions: 4 #
- Service: Print Spooler
OK
Server Execut.: 100 msec
- Service: Remote Proceed...
OK
Server Execut.: 164 msec



Backup System



XenServer VM Backup
1

File



WWW



#Com



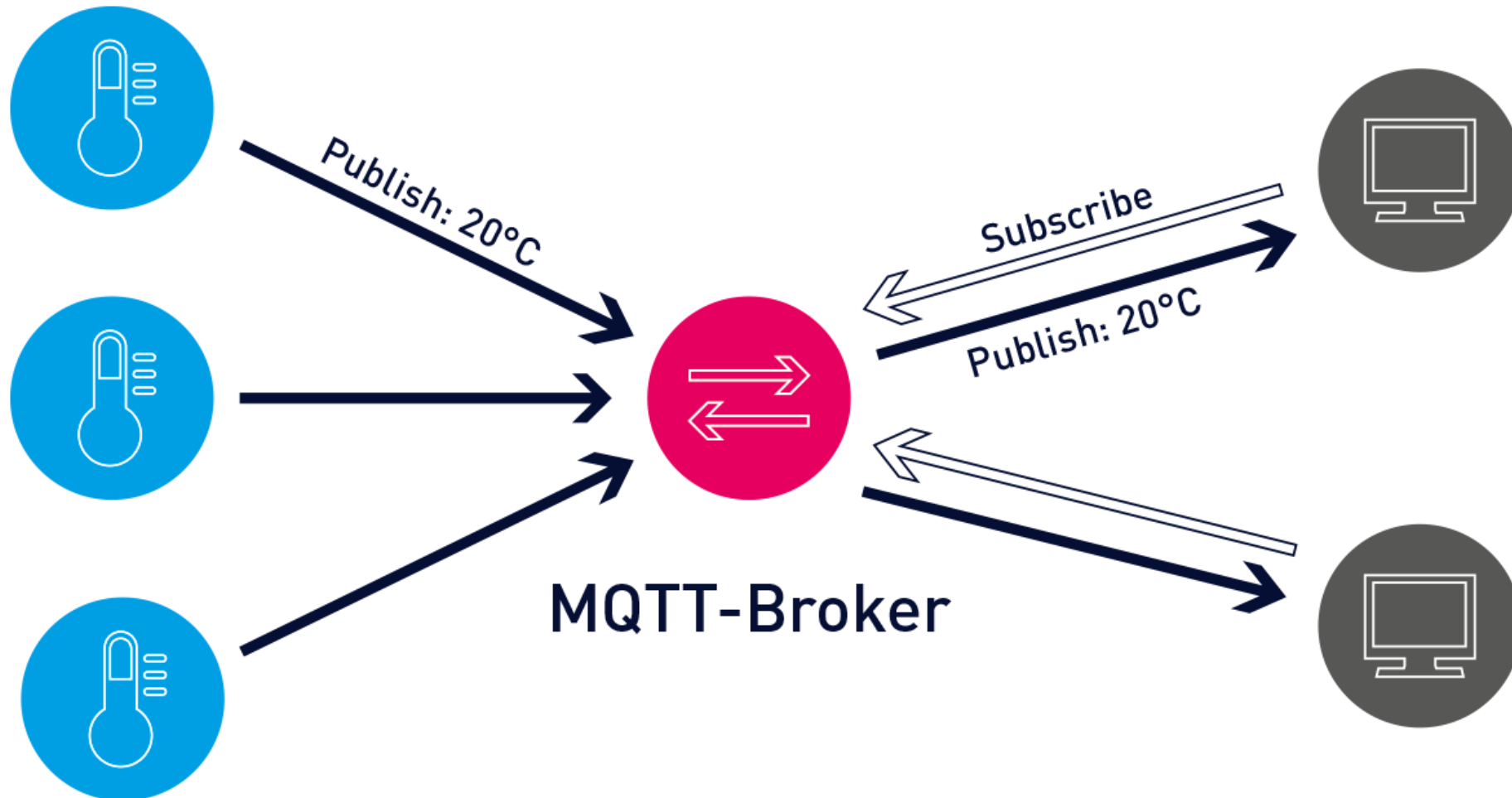
E-Mail

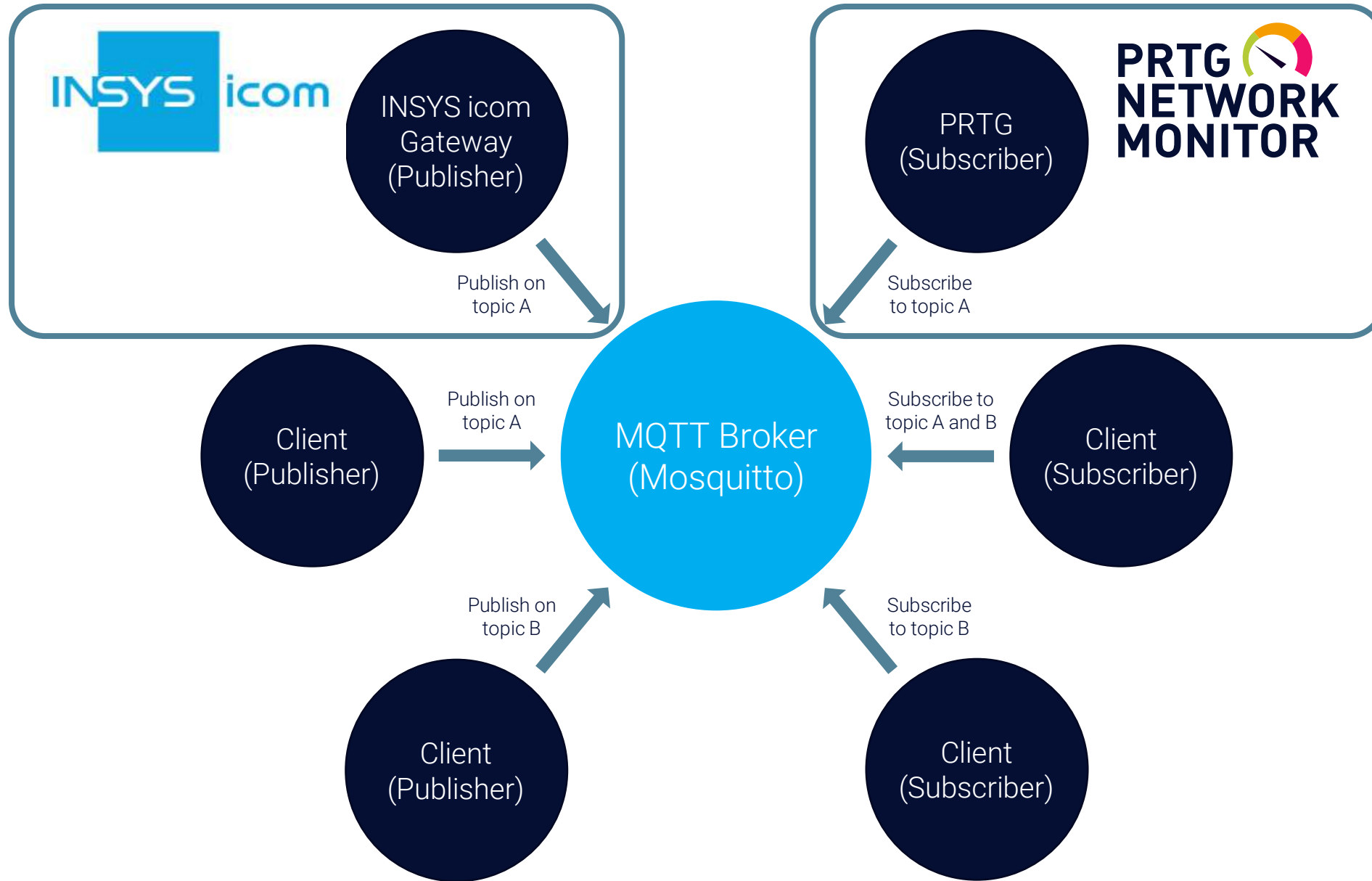


Cloud Services
2

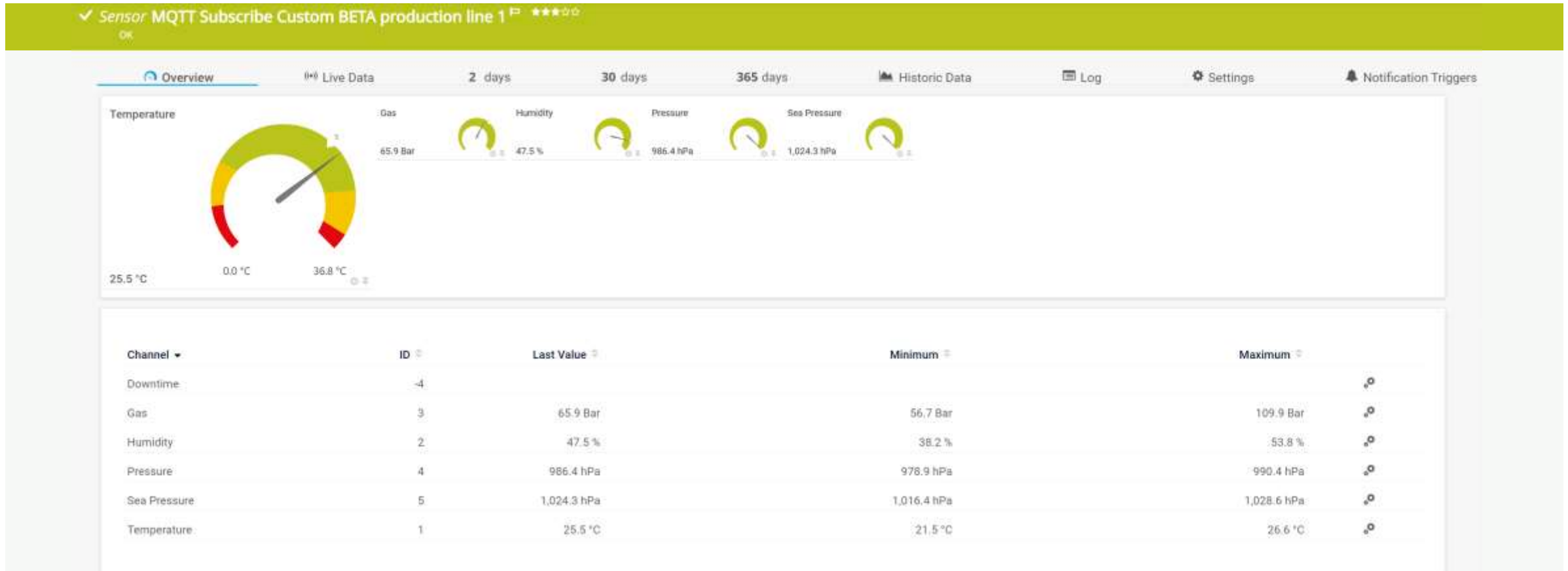
The MQTT logo is centered on a dark teal background. It consists of a square icon on the left with three white curved lines on a purple background, followed by the text 'MQTT' in a bold, purple, sans-serif font.

Архитектура MQTT

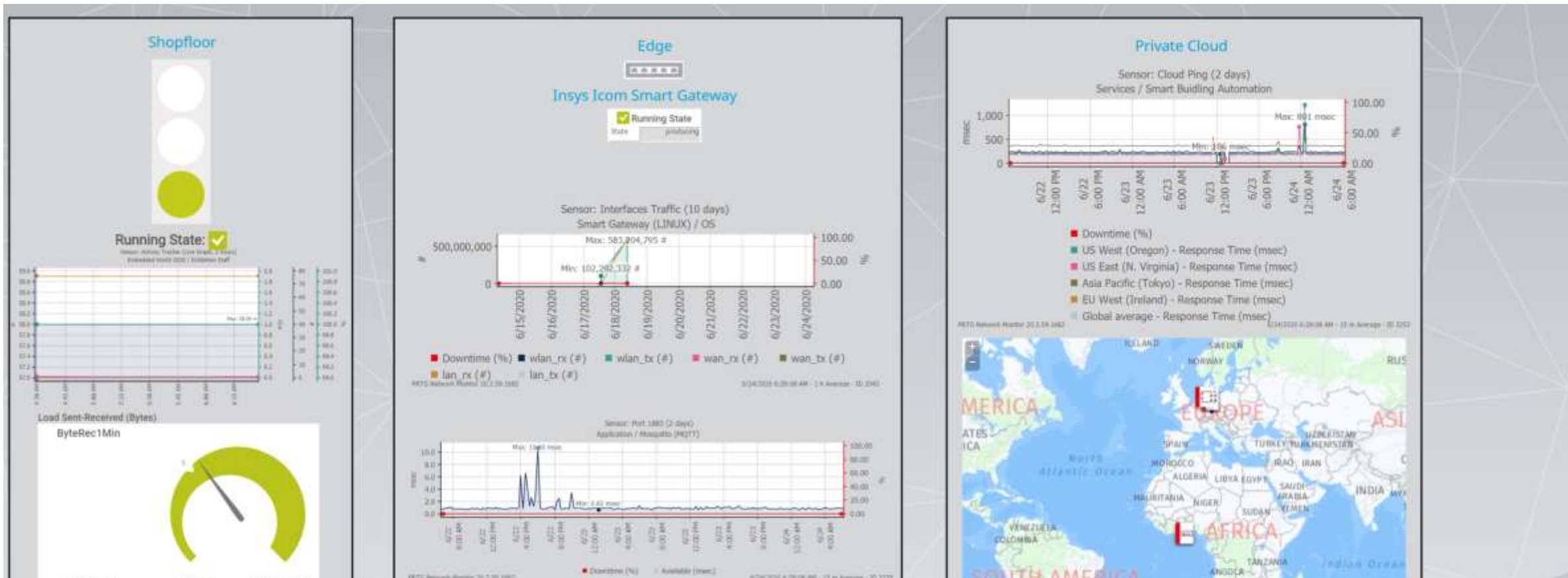


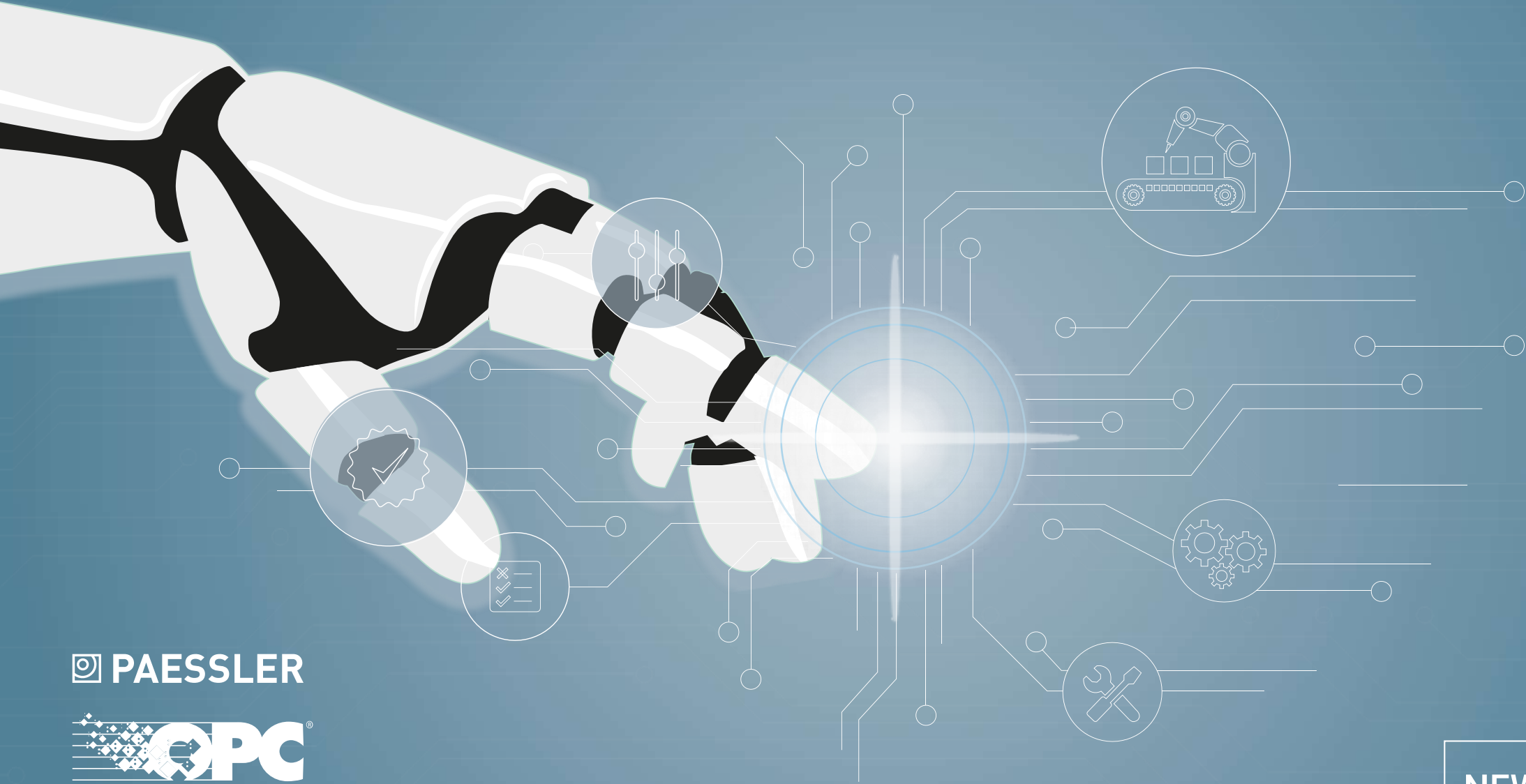


MQTT Subscribe Sensor (20.4.63)

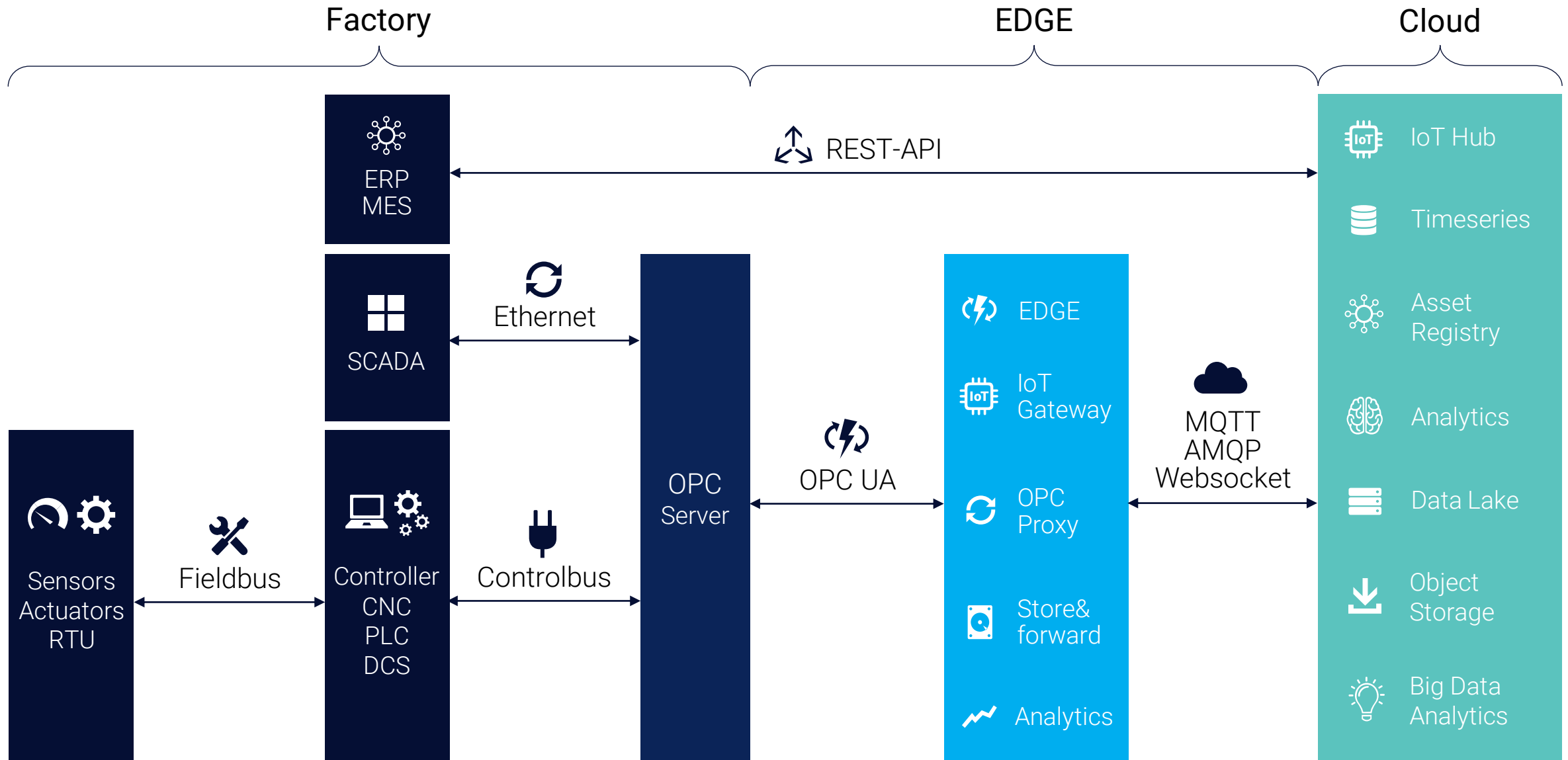


Dashboard: Производственная площадка

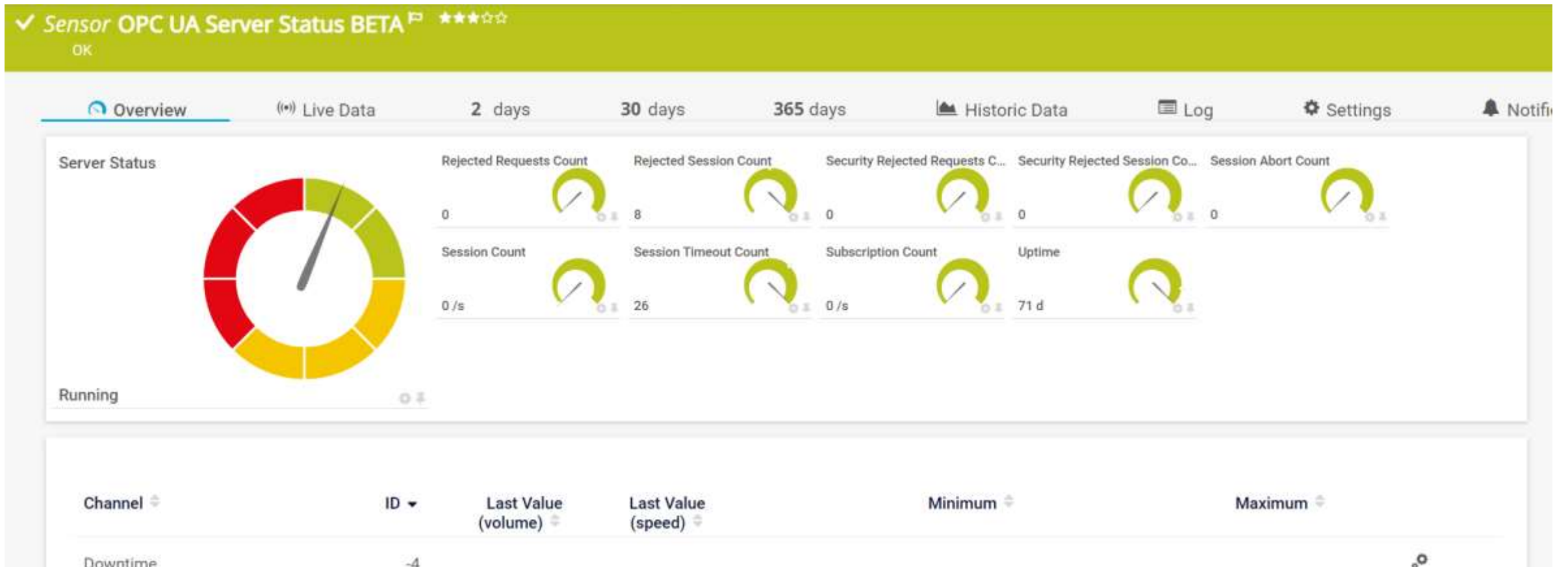




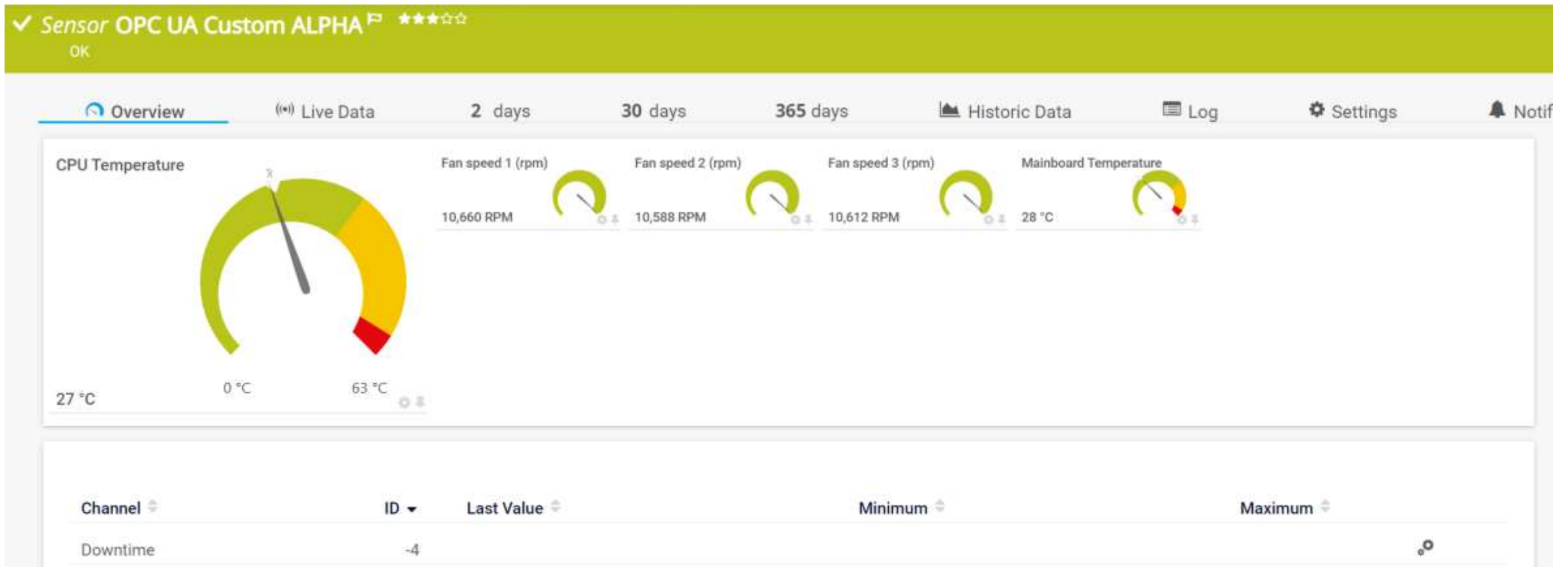
NEW SENSORS



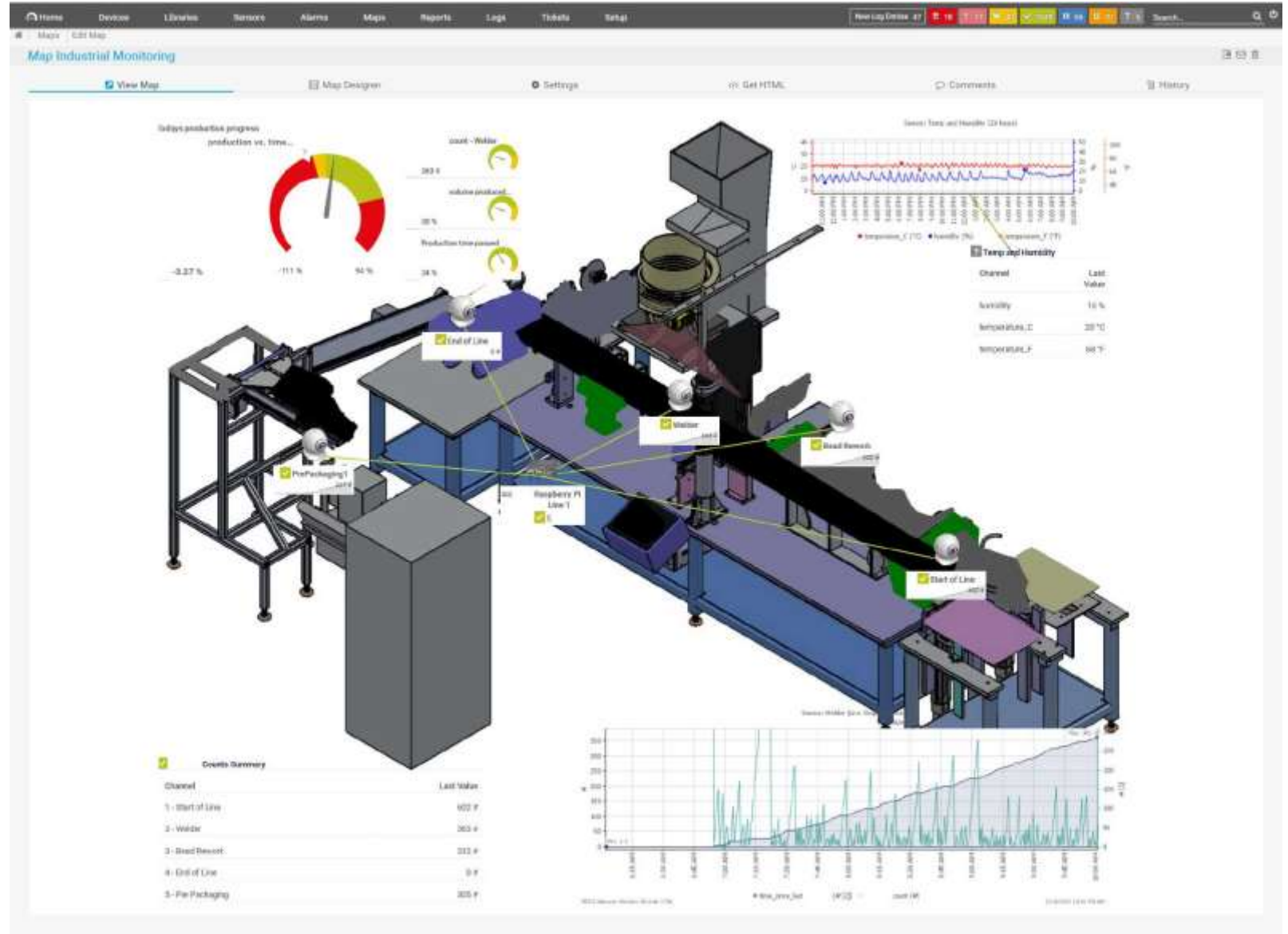
OPC UA Server Status Sensor (20.4.63)



OPC UA Custom Sensor (20.4.63 Alpha)



Dashboard: Линия



Демо

Спасибо!



Вячеслав Милованов
PreSales Systems Engineer

Свяжитесь с нами!

E-Mail: sales@paessler.com