

PRTG NETWORK MONITOR

Мониторинг промышленной IT инфраструктуры 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/>



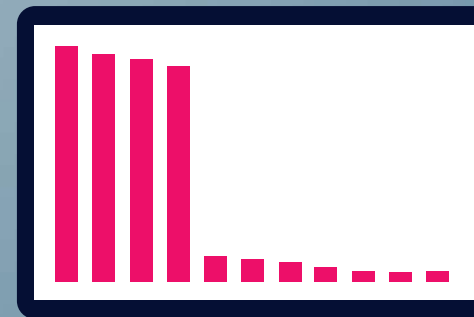
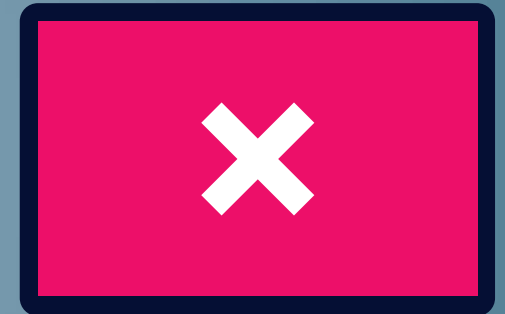
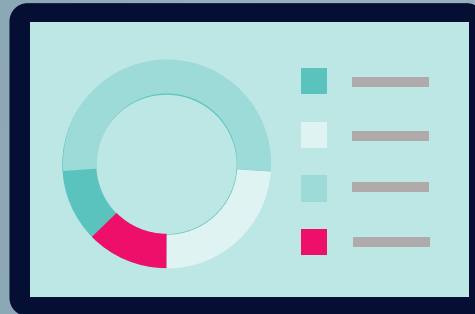
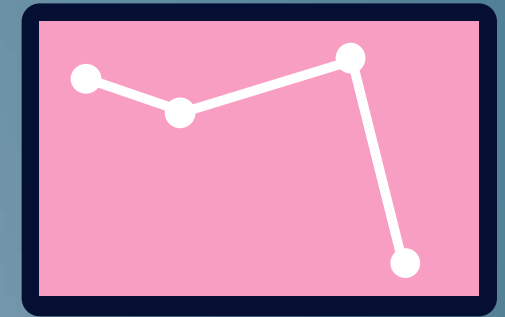
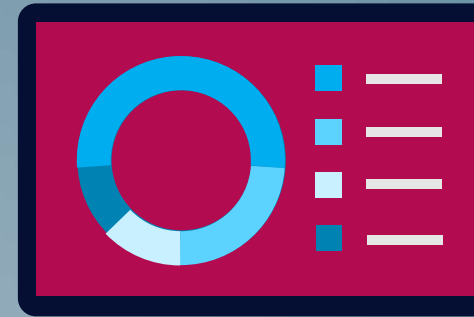
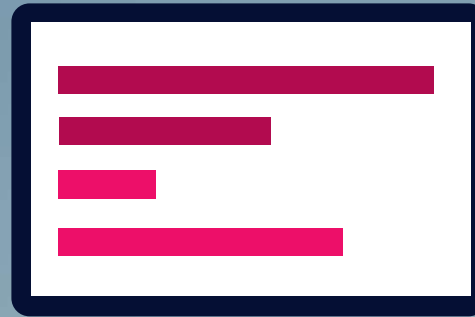
Paessler & PRTG



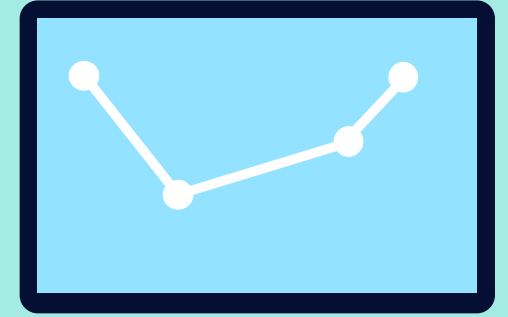
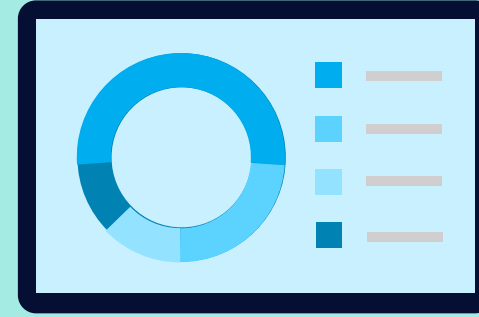
Растущая цифровизация...



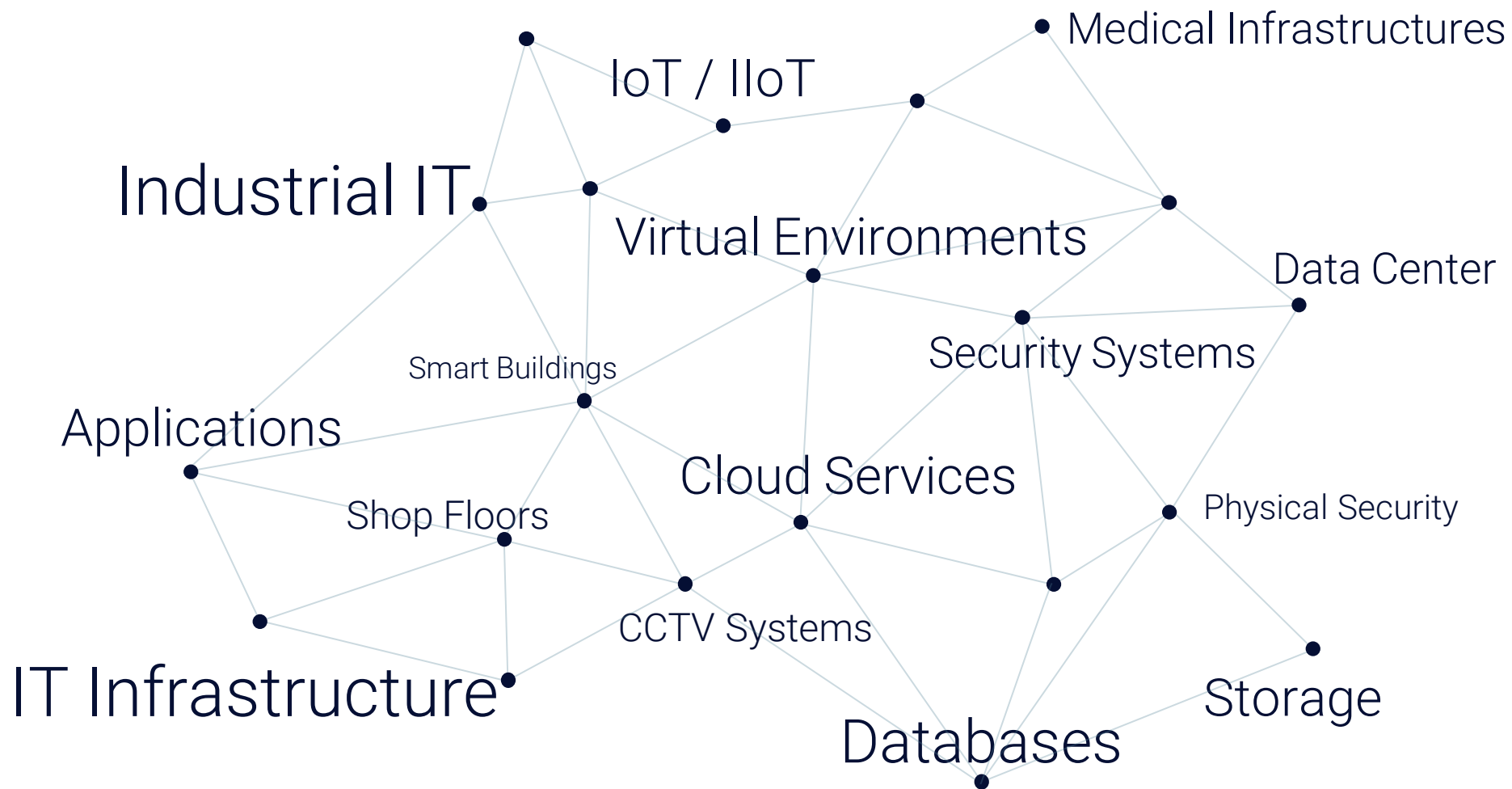
Разное ПО, Множество панелей управления



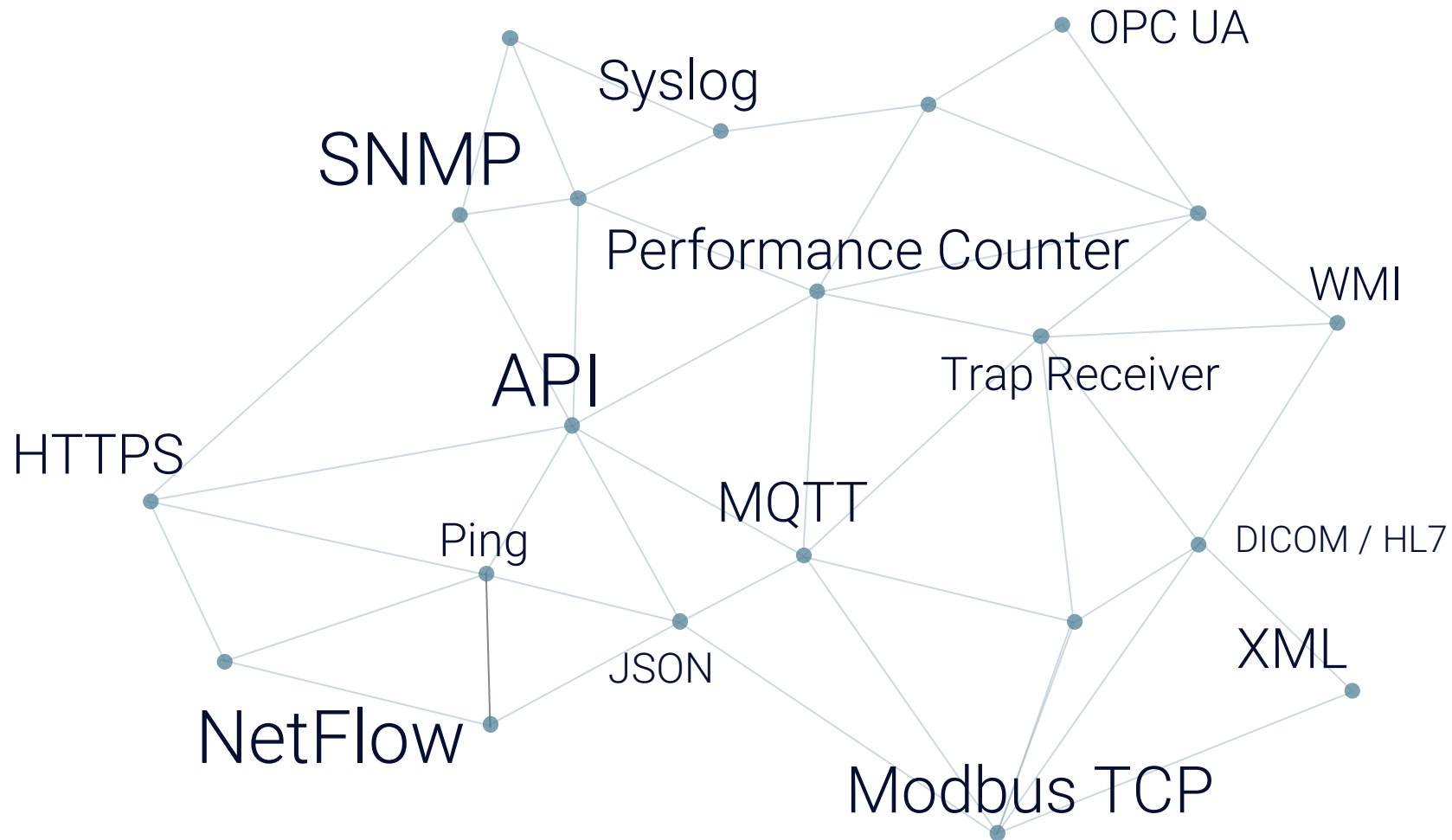
Вам
необходим
контроль над
всеми
компонентами.



Решение для мониторинга всего...



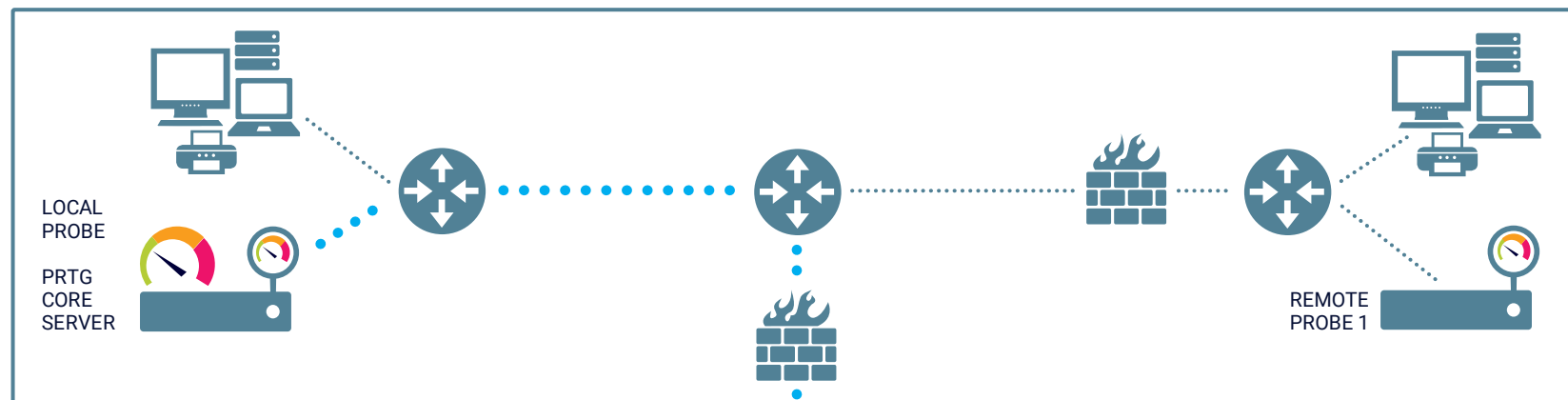
... всеми доступными способами...



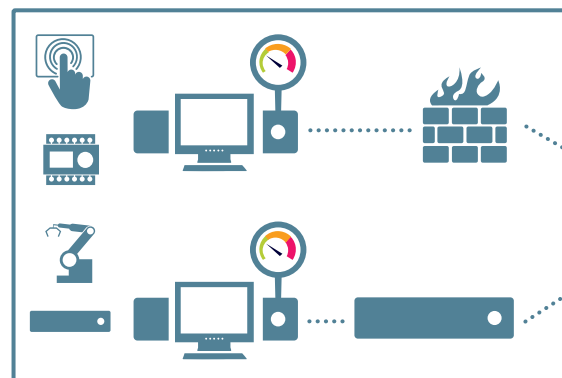
...где угодно...

Используя
удалённые
зонды

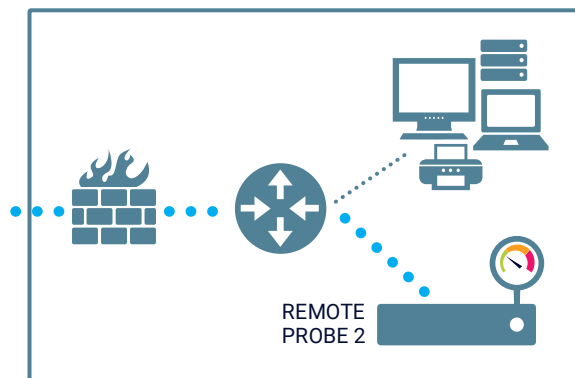
CORPORATE LAN



SHOP FLOOR



TOP FLOOR & LOCATION INFRASTRUCTURE

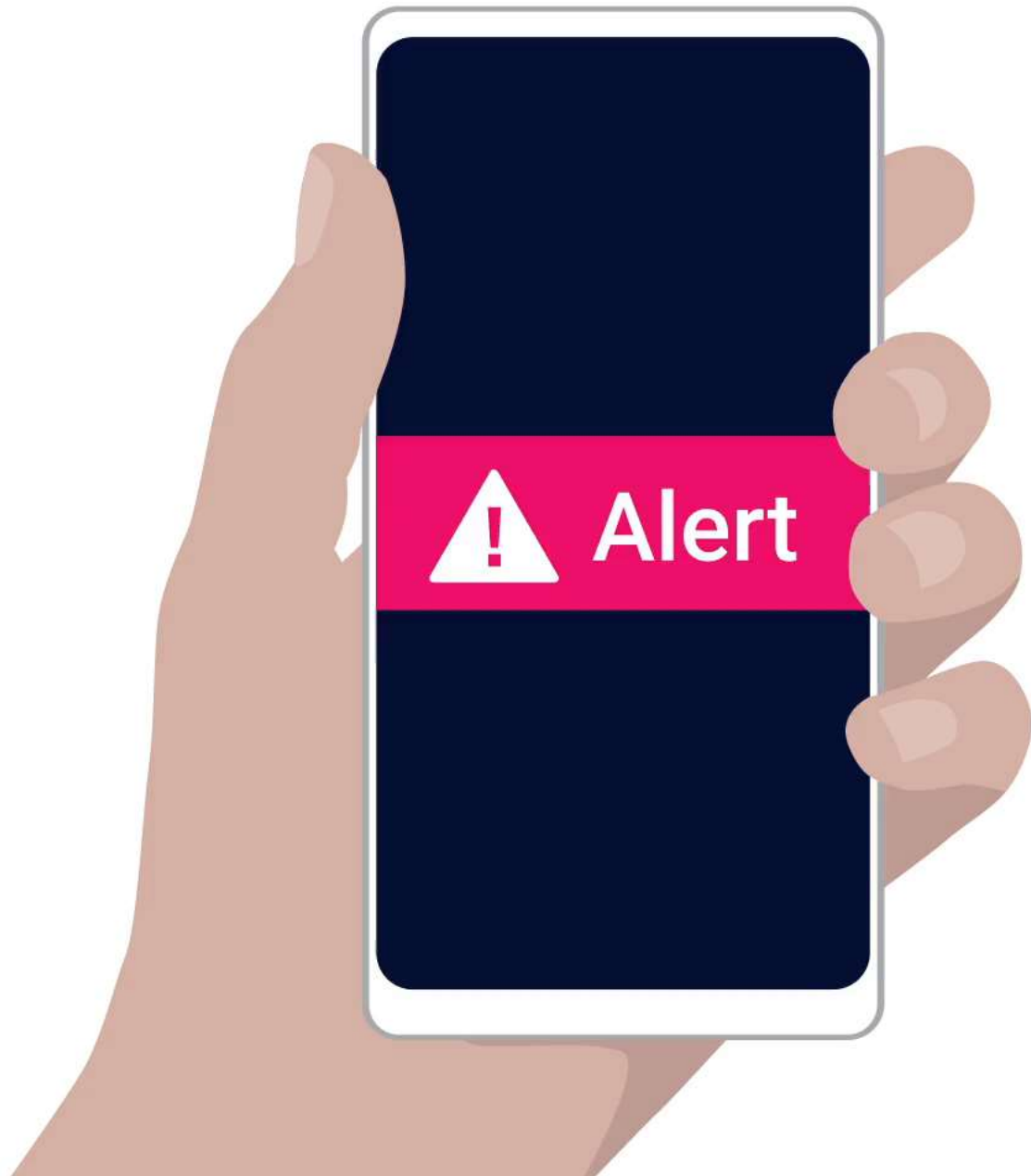


...UI на любой вкус

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

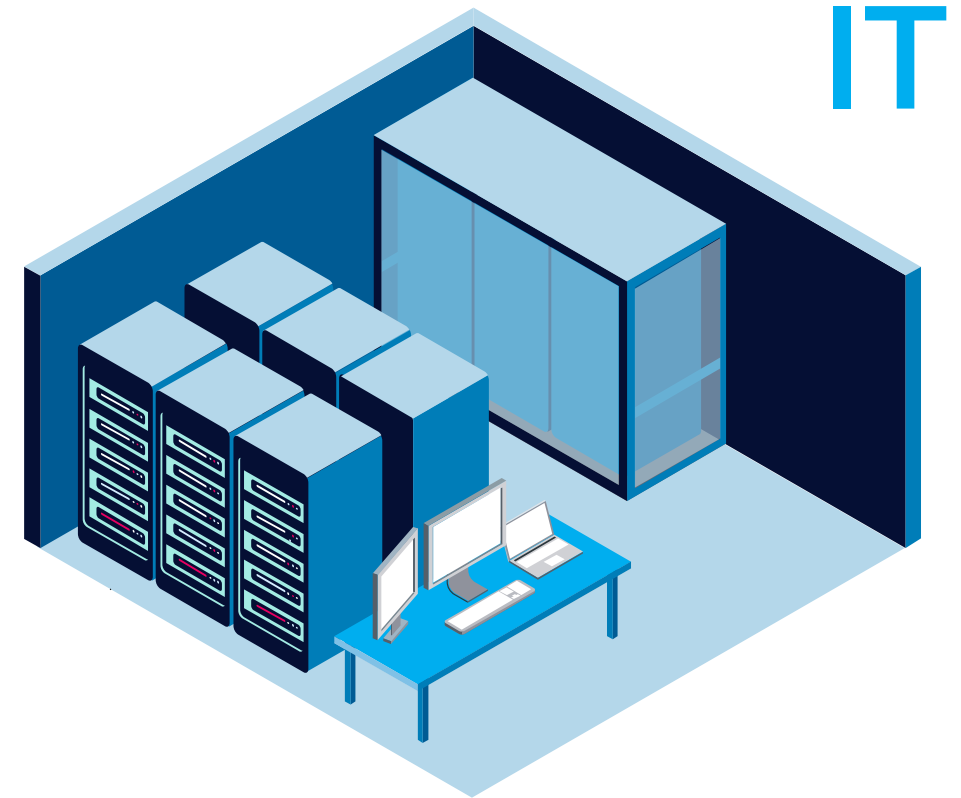






Стыковка IT / OT

Что такое Industrial IT?

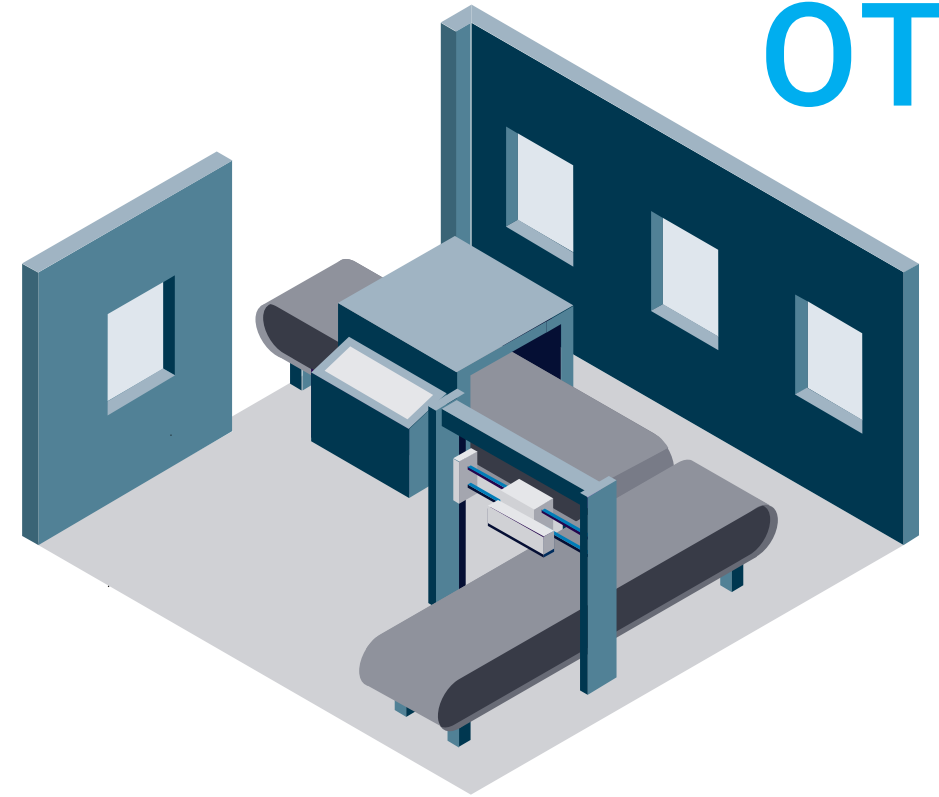


Что такое Industrial IT?

IT



OT

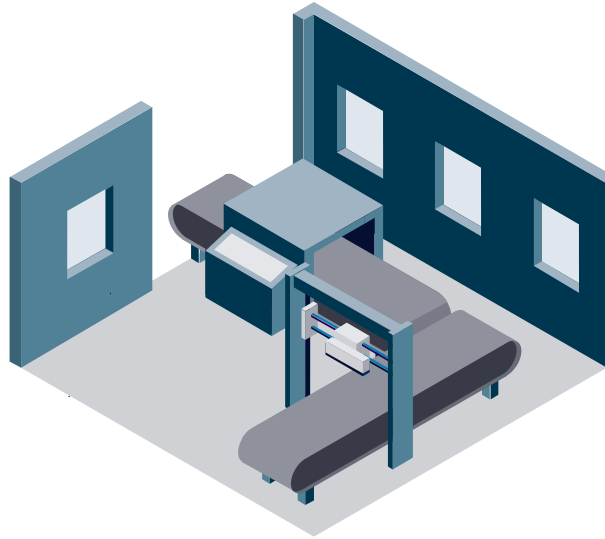


Что такое Industrial IT?

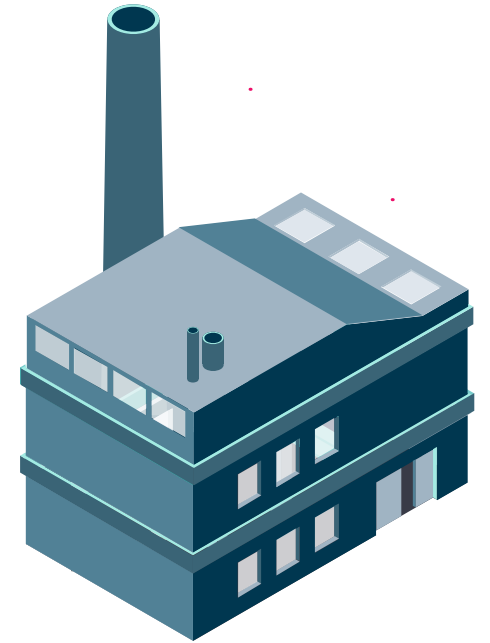
IT



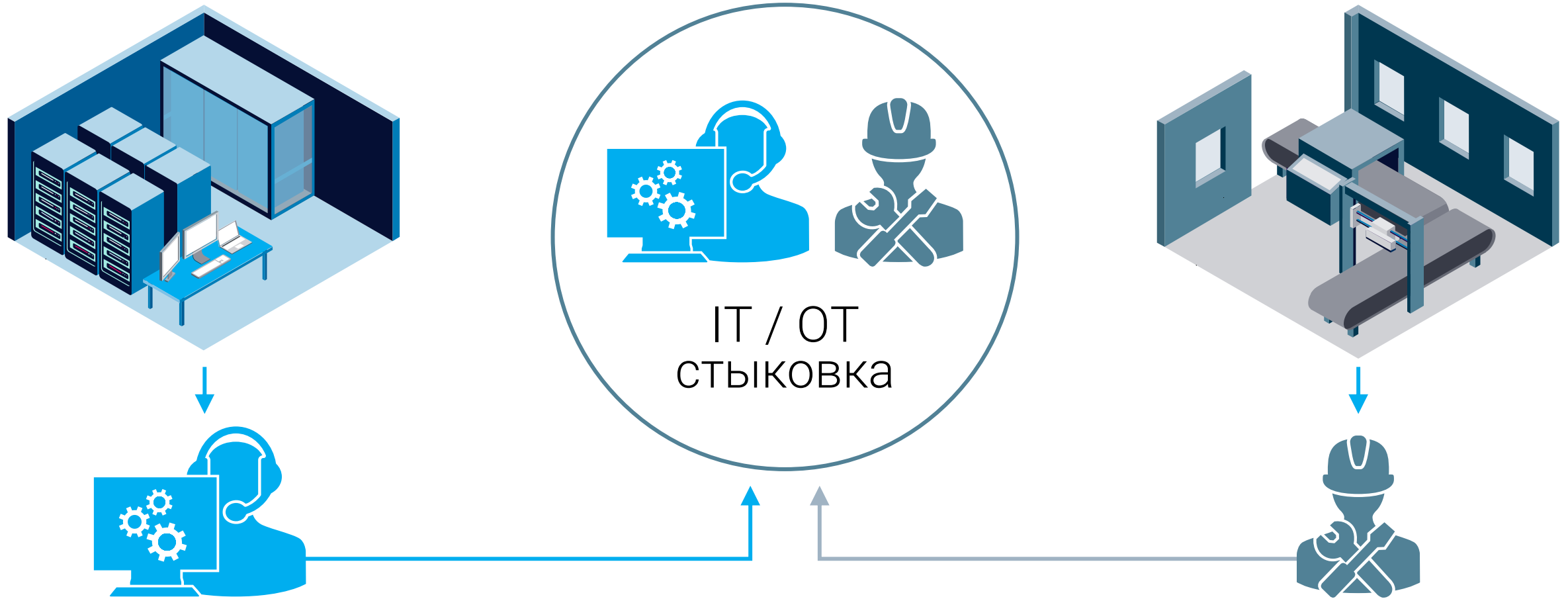
OT



IIoT

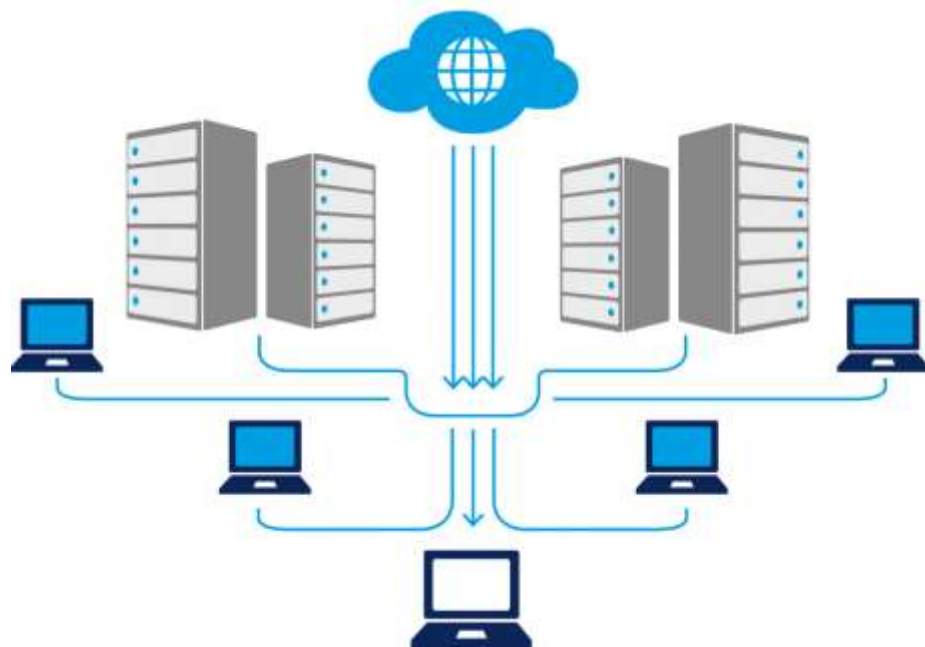


Как объединить два этих мира?



IT / OT стыковка

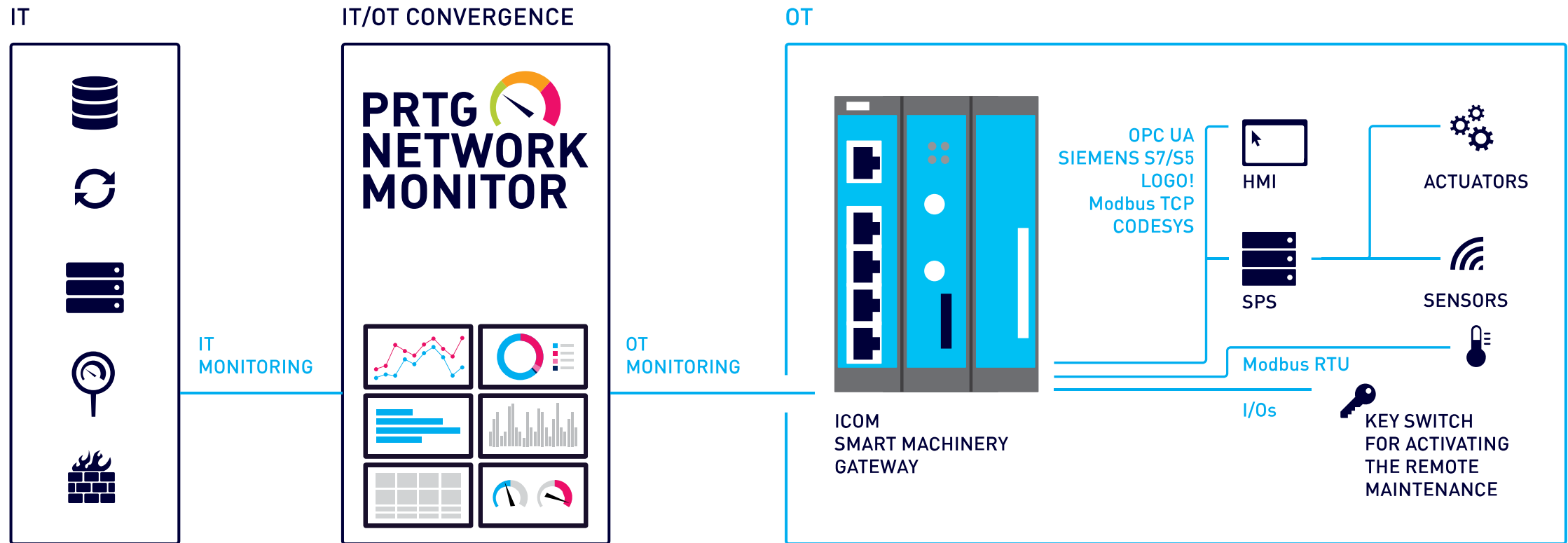
IT инфраструктура



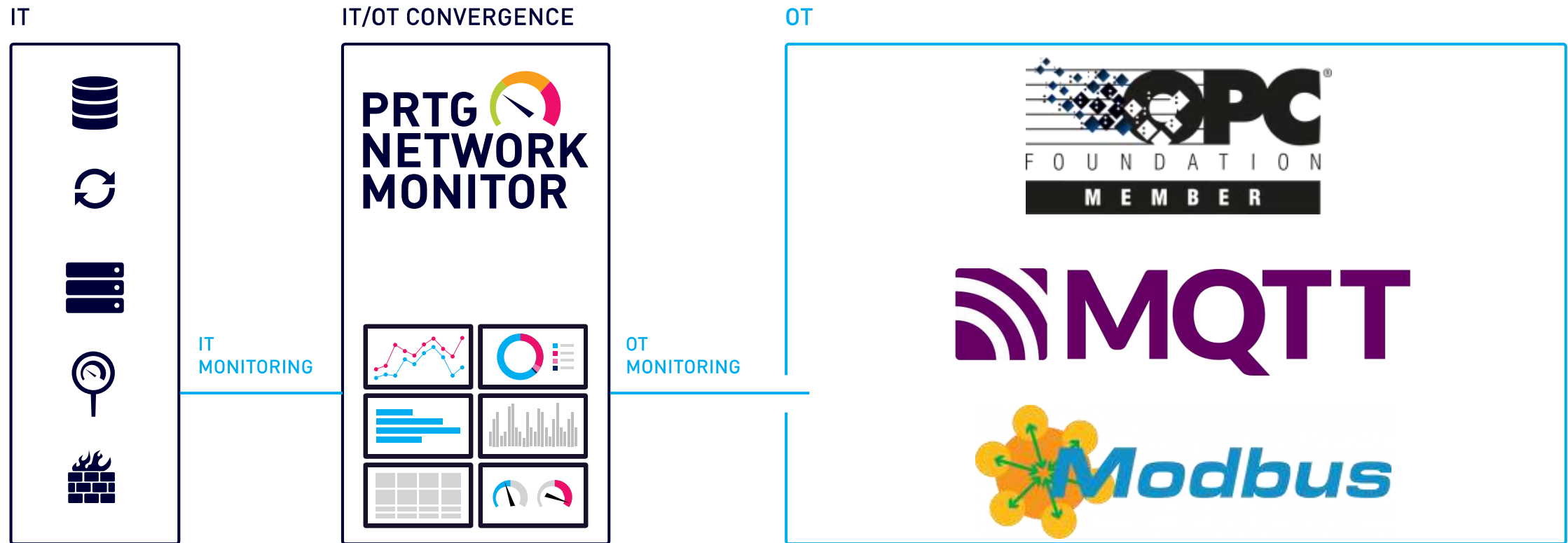
IoT / IIoT
инфраструктура



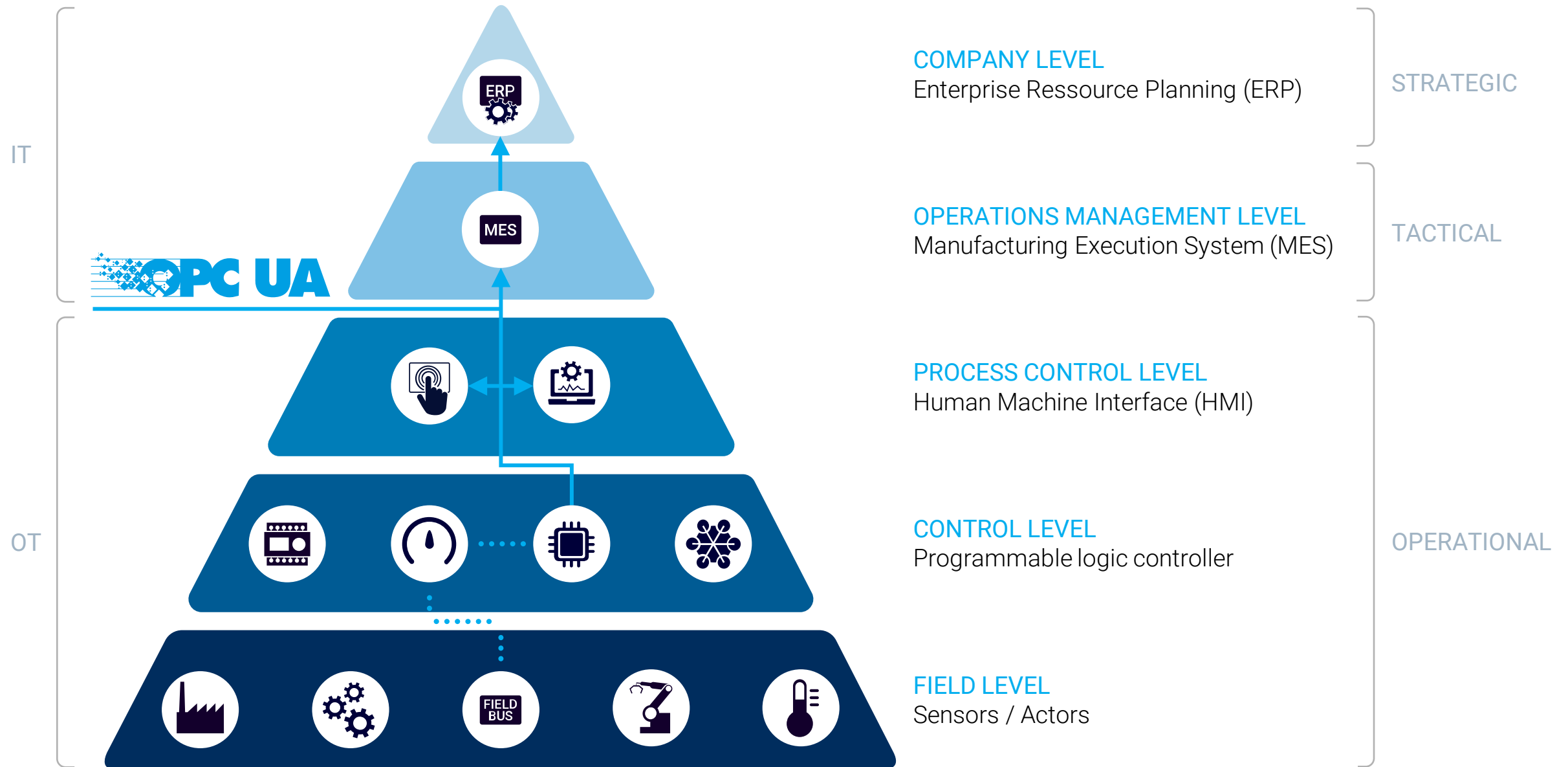
IT / OT стыковка с помощью шлюзов

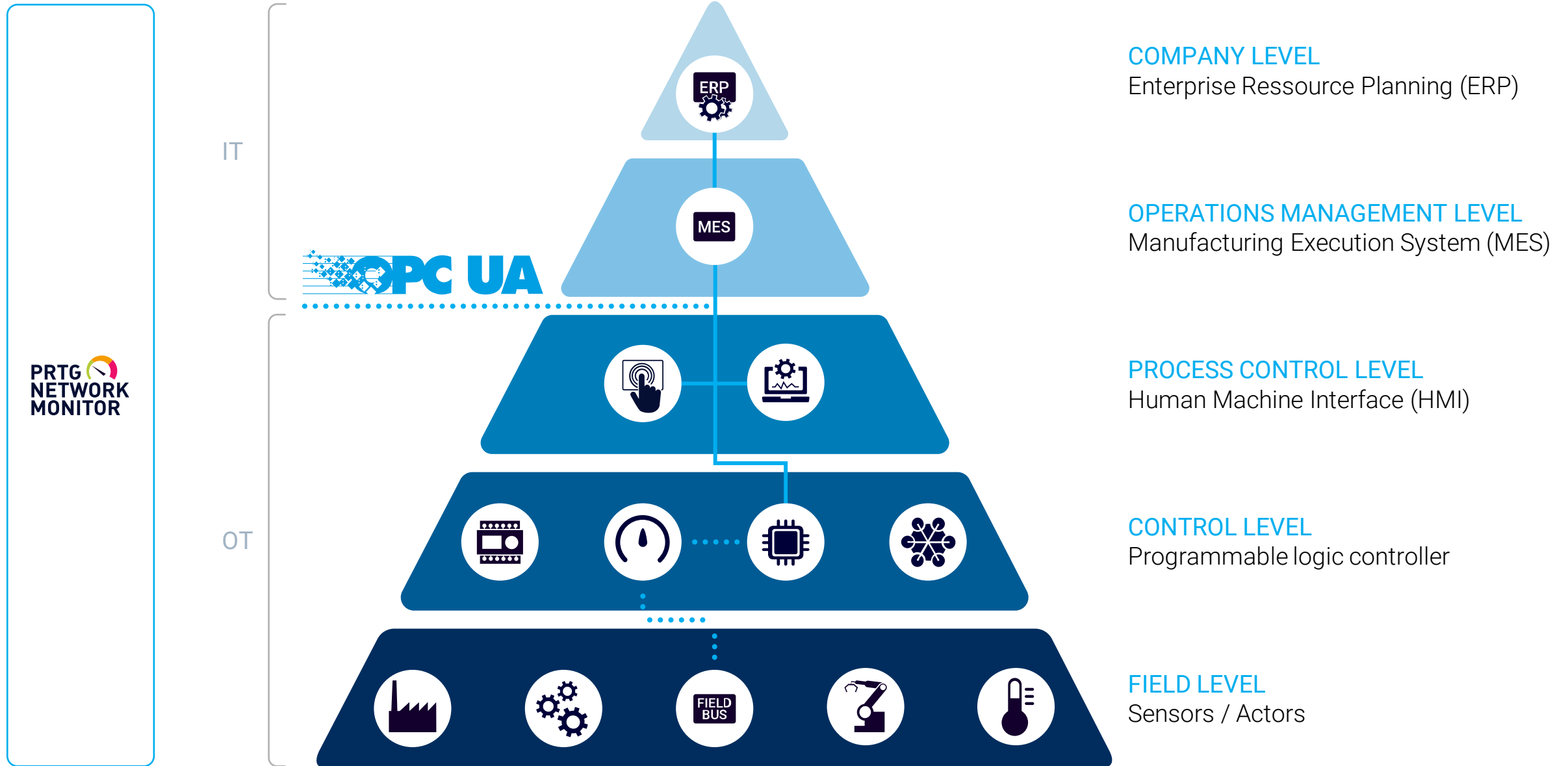


IT / OT стыковка с помощью PRTG









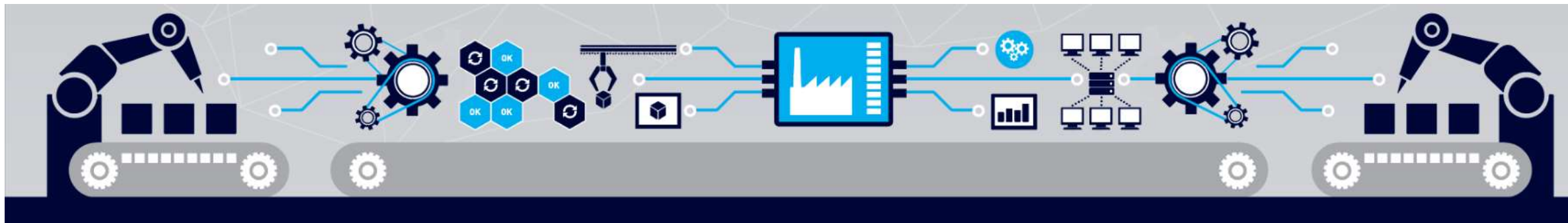
Данные с производства

SPS

OPC UA Сервер

Энергия, клапаны,
насосы

Machine A





Industrial Edge Data- center



Modbus – Мониторинг системы кондиционирования

Register Address	Register Address	R/W	Description
0	1	R/W	AC unit On/Off • 0: Off • 1: On
1	2	R/W	AC unit Mode 1 • 0: Auto • 1: Heat • 2: Dry • 3: Fan • 4: Cool
2	3	R/W	AC unit Fan Speed • 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

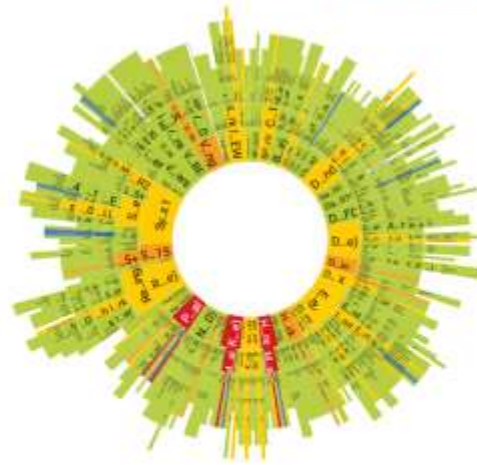
Security-camera System

Surveillance
OK

Electric System

Uptime
OK

IT Infrastructure



Server
OK 3



Storage
OK 1



Virtual Hosting
OK 12



Network
OK 1 4



SQL01.pridemo.lan
OK 2



Server
OK 3



Storage
OK 1



Virtual Hosting
OK 12



Network
OK 1 4



SQL01.pridemo.lan
OK 2

Host (WBEM)

System

Power Supply

Fan

Processor 1 Temp
41 °C

Power Supply 1 Current 1
490 mA

System Board 1 Fan1
3,240 RPM

System Board 1 CPU Usage
1,300 %

Power Supply 1 Voltage 1
232 Volt

System Board 1 Fan2
3,240 RPM

System Board 1 IO Usage
0 %

Power Supply 2 Current 2
200 mA

System Board 1 Fan3
3,240 RPM

System Board 1 Fan Consumption
70 Watt

Power Supply 2 Voltage 2
232 Volt

System Board 1 Fan4
3,120 RPM

Services & Apps

Services

Terminal Services
OK

Total Sessions
4 #

Service: Print Spooler
OK

Service: Remote Procedure
OK

Service: Remote Procedure
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Service: Remote Procedure
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Service: Remote Procedure
OK

Backup System

XenServer VM Backup
OK 1

File

WWW

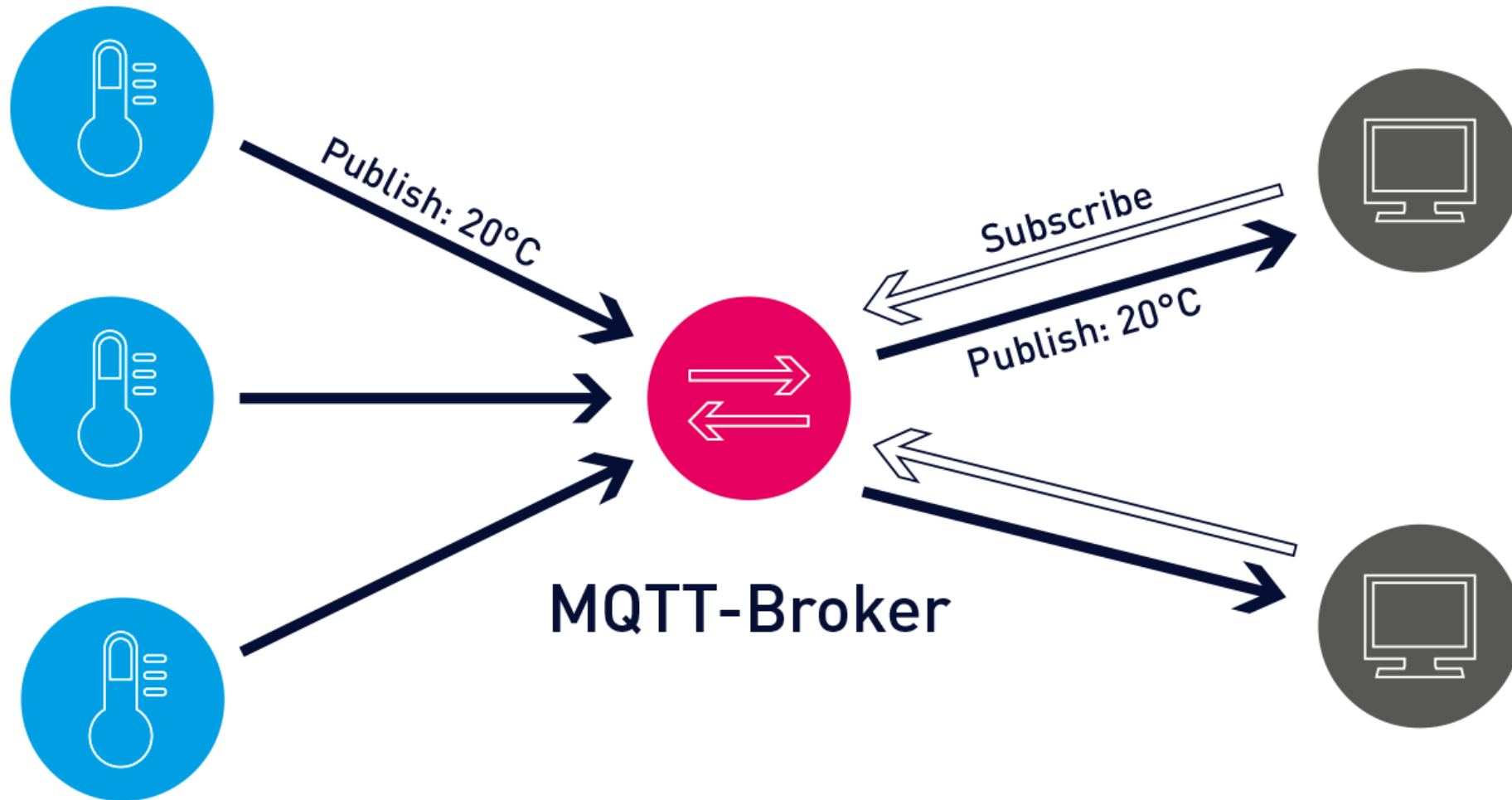
#Com

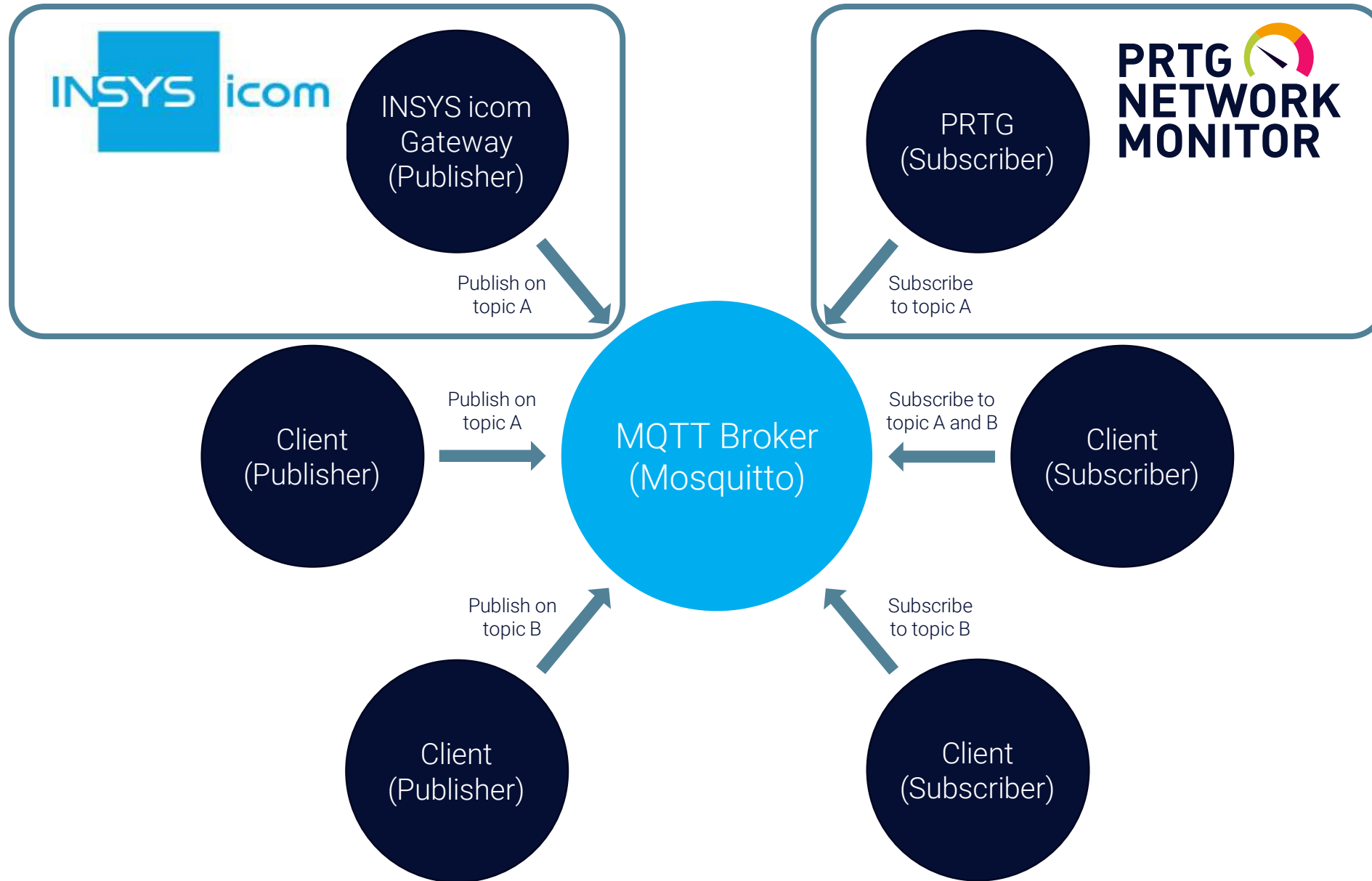
E-Mail

Cloud Services
OK 2

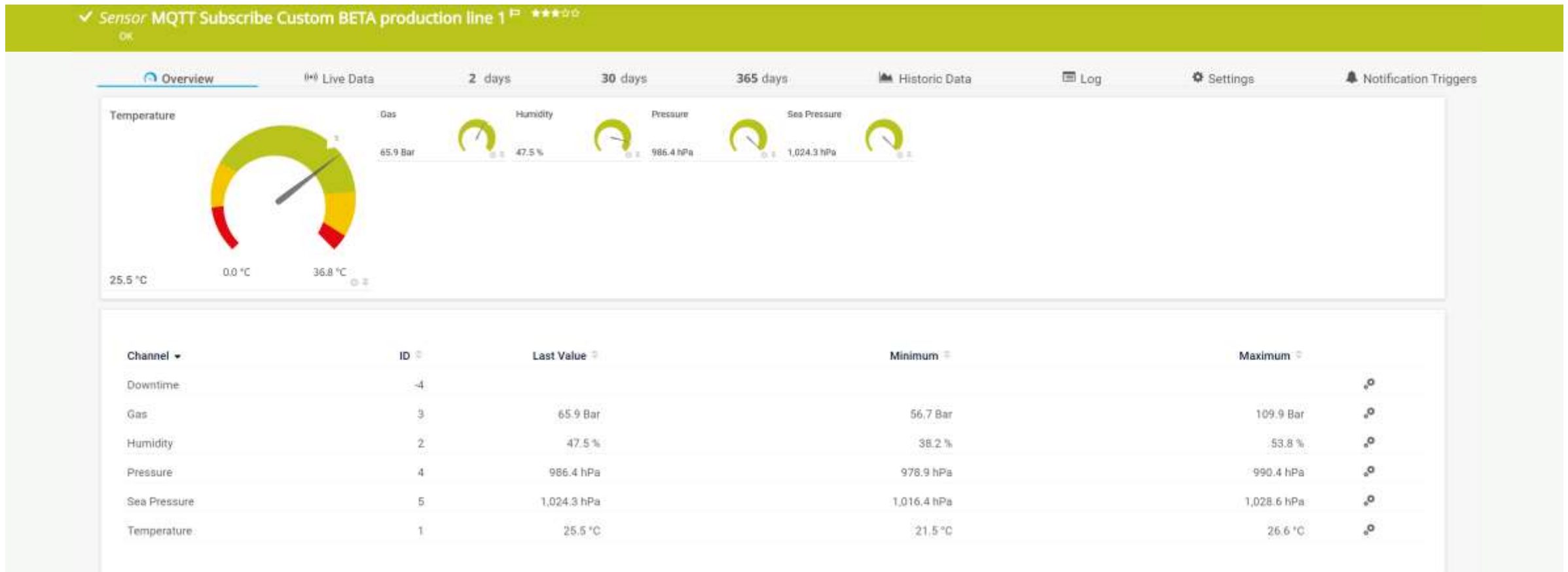


Архитектура MQTT

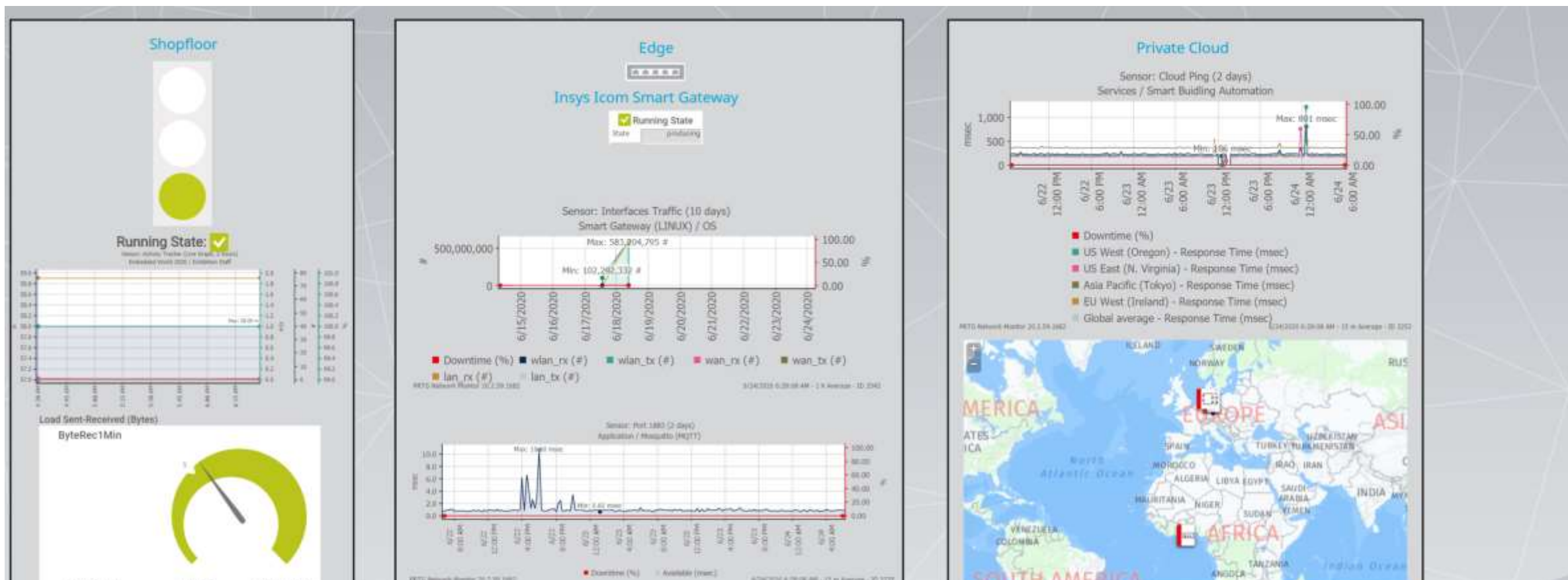


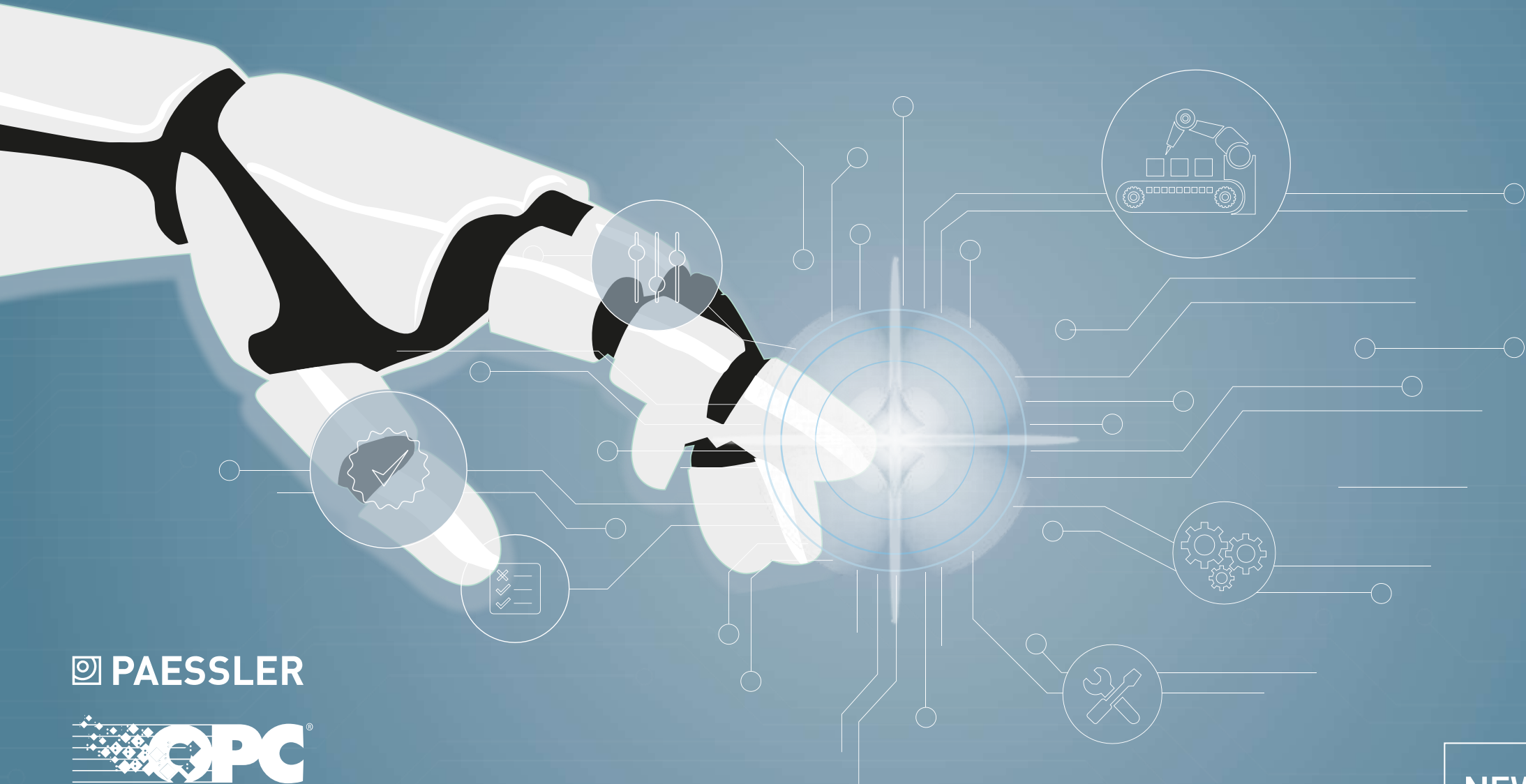


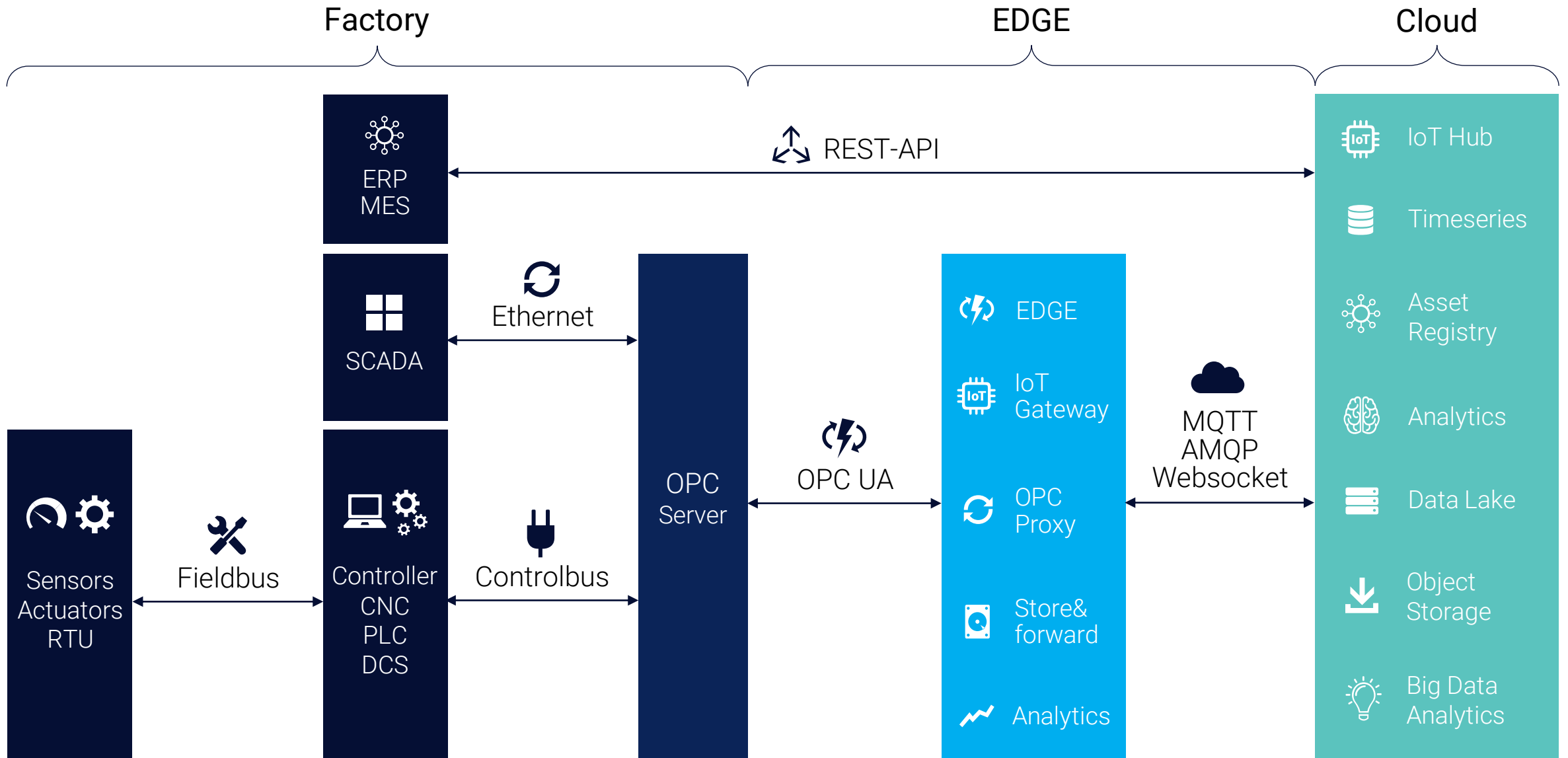
MQTT Subscribe Sensor (20.4.63)



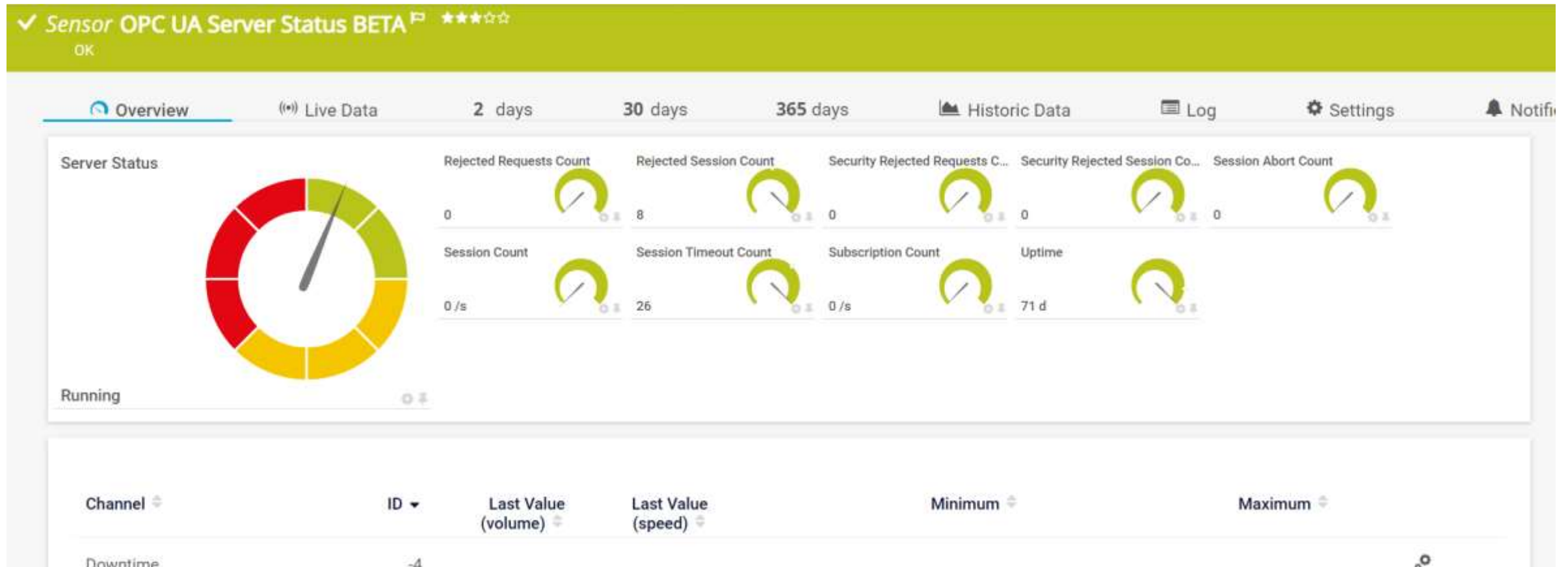
Dashboard: Производственная площадка



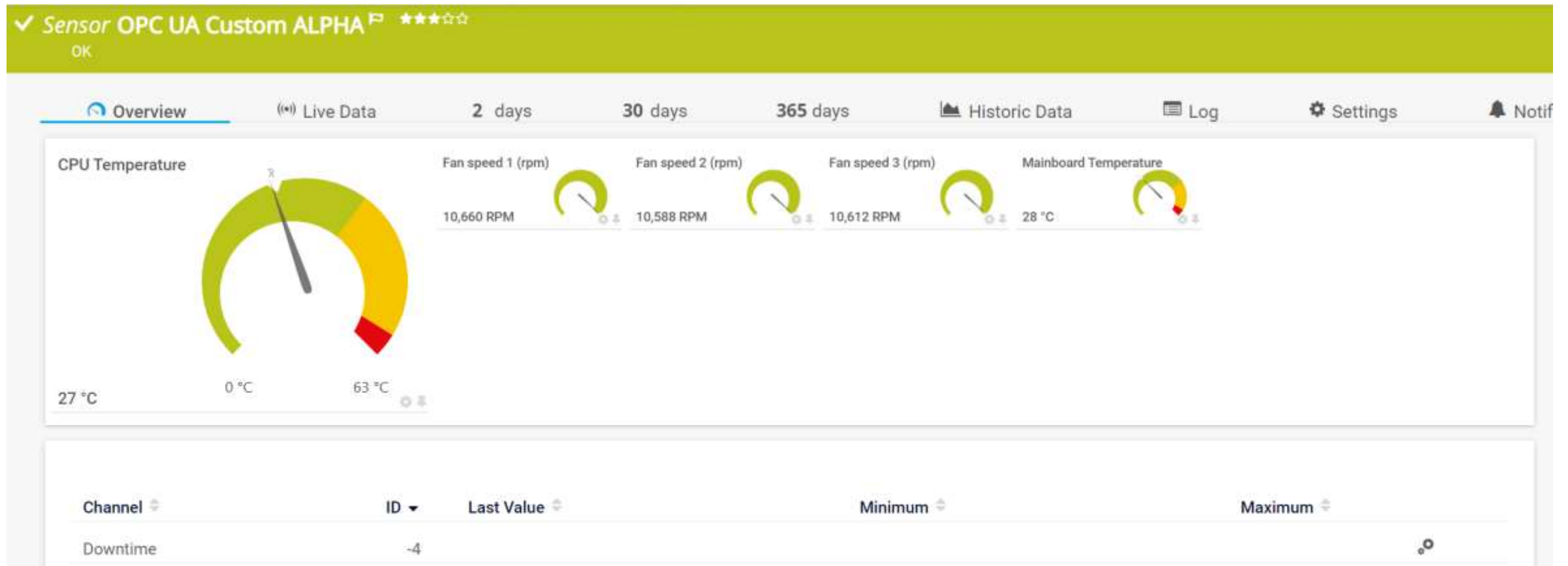




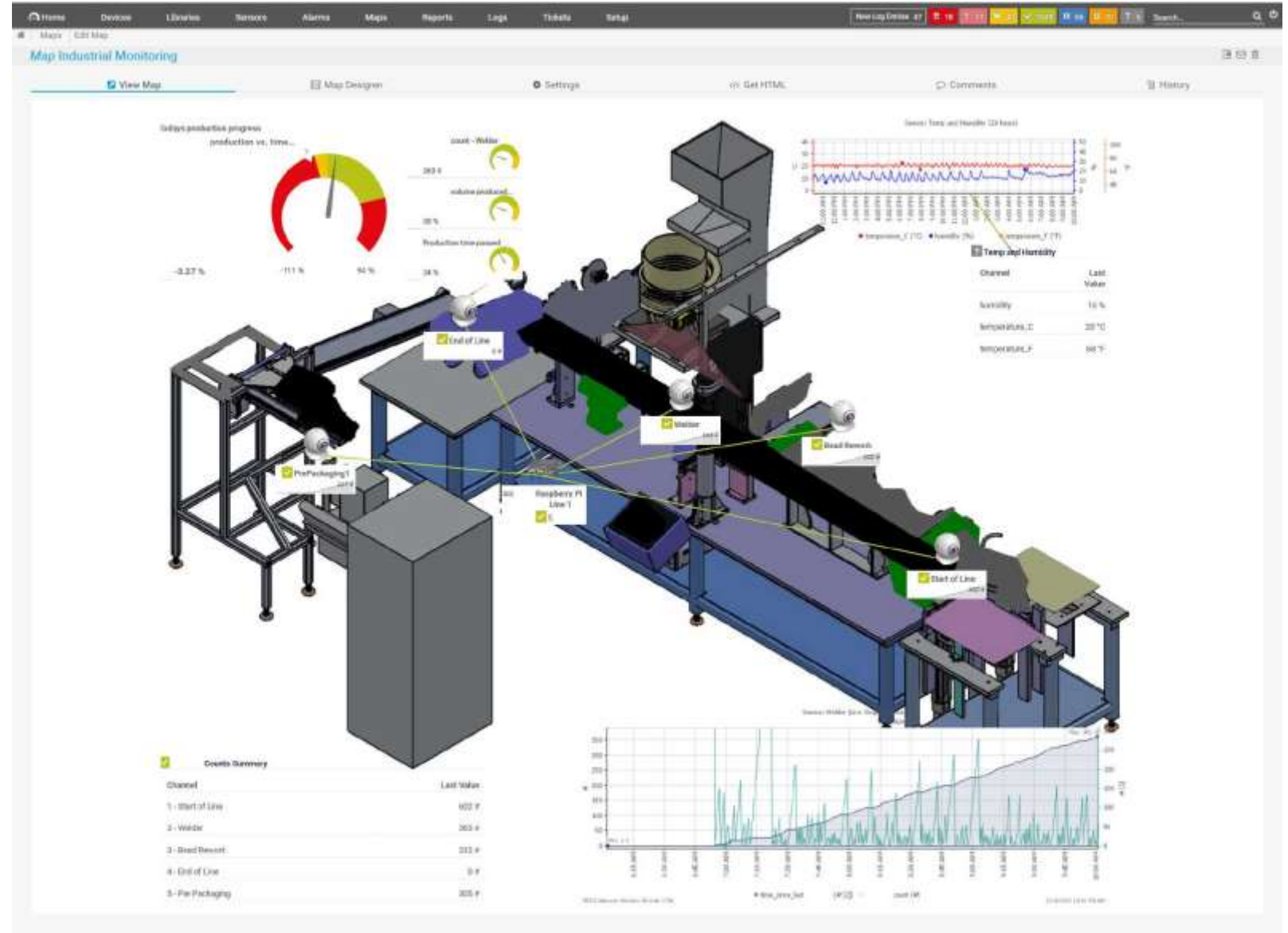
OPC UA Server Status Sensor (20.4.63)



OPC UA Custom Sensor (20.4.63 Alpha)



Dashboard: Линия



Демо

Спасибо!



Вячеслав Милованов
PreSales Systems Engineer

Свяжитесь с нами!

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