



# RoboPLC

by Bohemia Automation

a modern Industrial IoT real-time solution

High energy

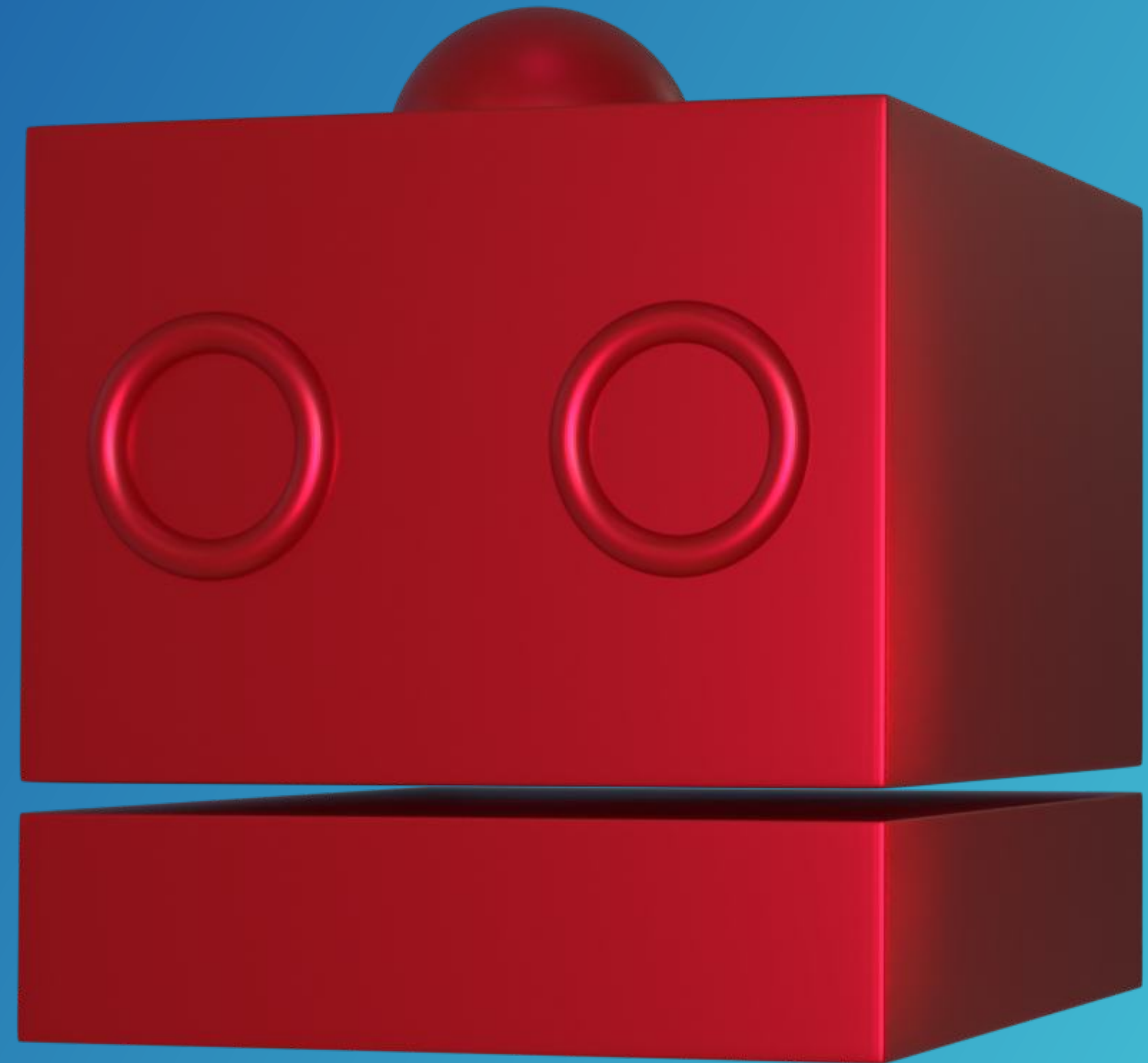
Heavy industry

Drones and robotics

UAVs and aerospace

Transportation Digital twins

Computer gaming industry





# What is RoboPLC?

- RoboPLC is a modern programming kit designed to create applications for robotics, real-time microservices, and classic PLC programs.
- The primary API is provided in Rust – a modern, memory-safe, and blazing-fast systems programming language – while ABI and bindings for C/C++ are also available.
- Supports the majority of industrial SCADA and Fieldbus standards.
- Pairs with EVA ICS v4 to form an extended automation platform for mission-critical tasks, ranging from embedded devices to EDGE cloud solutions.





# RoboPLC vs classic PLCs

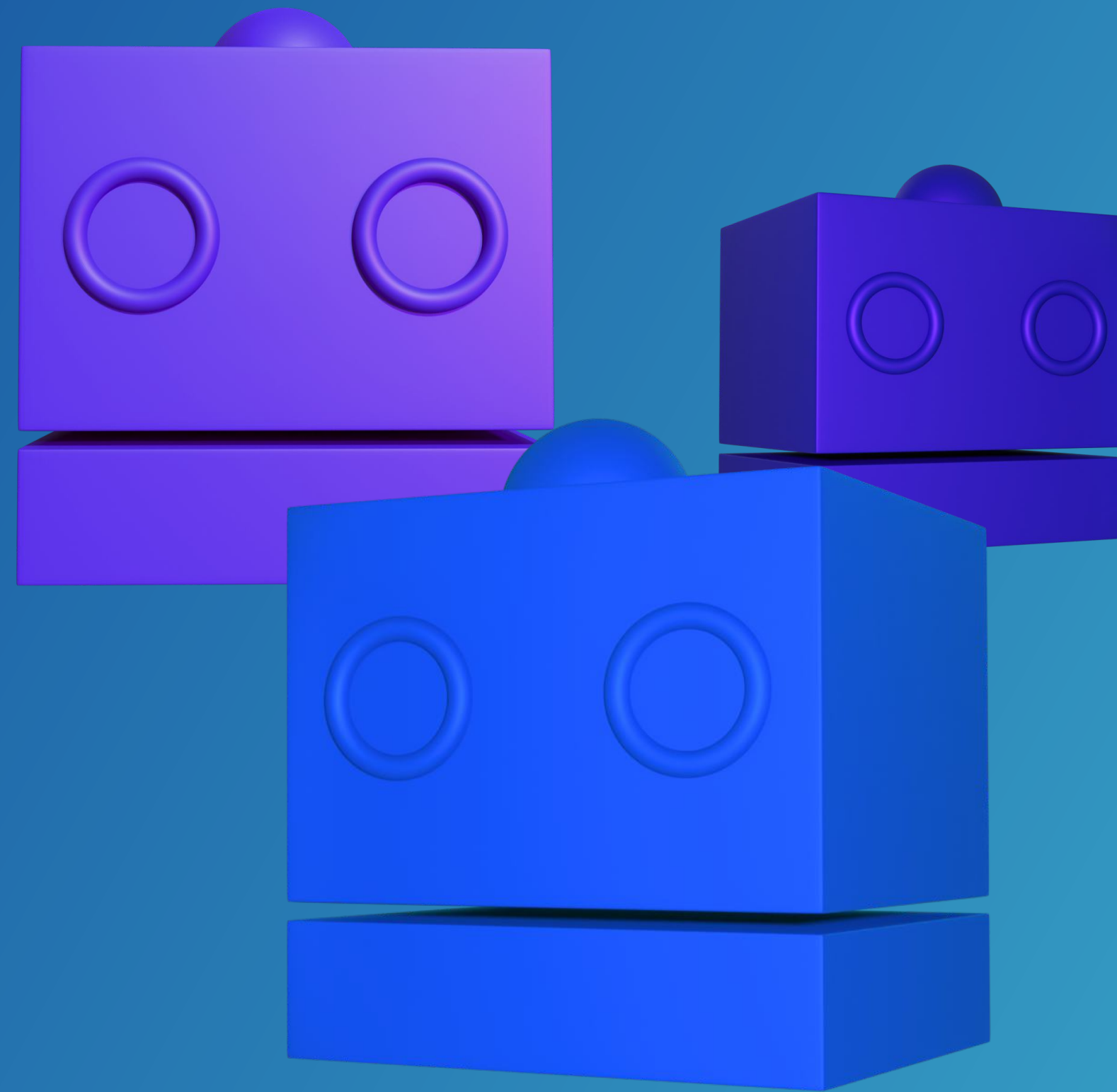
RoboPLC utilizes an architecture traditional in real-time robotics applications, where data frames are transferred instantaneously using high-speed memory channels, rather than relying on shared memory context for data exchange between programs, as seen in classic PLC systems.

This approach allows PLC programs to achieve data latency below 100 microseconds, even on general-purpose hardware and operating systems.

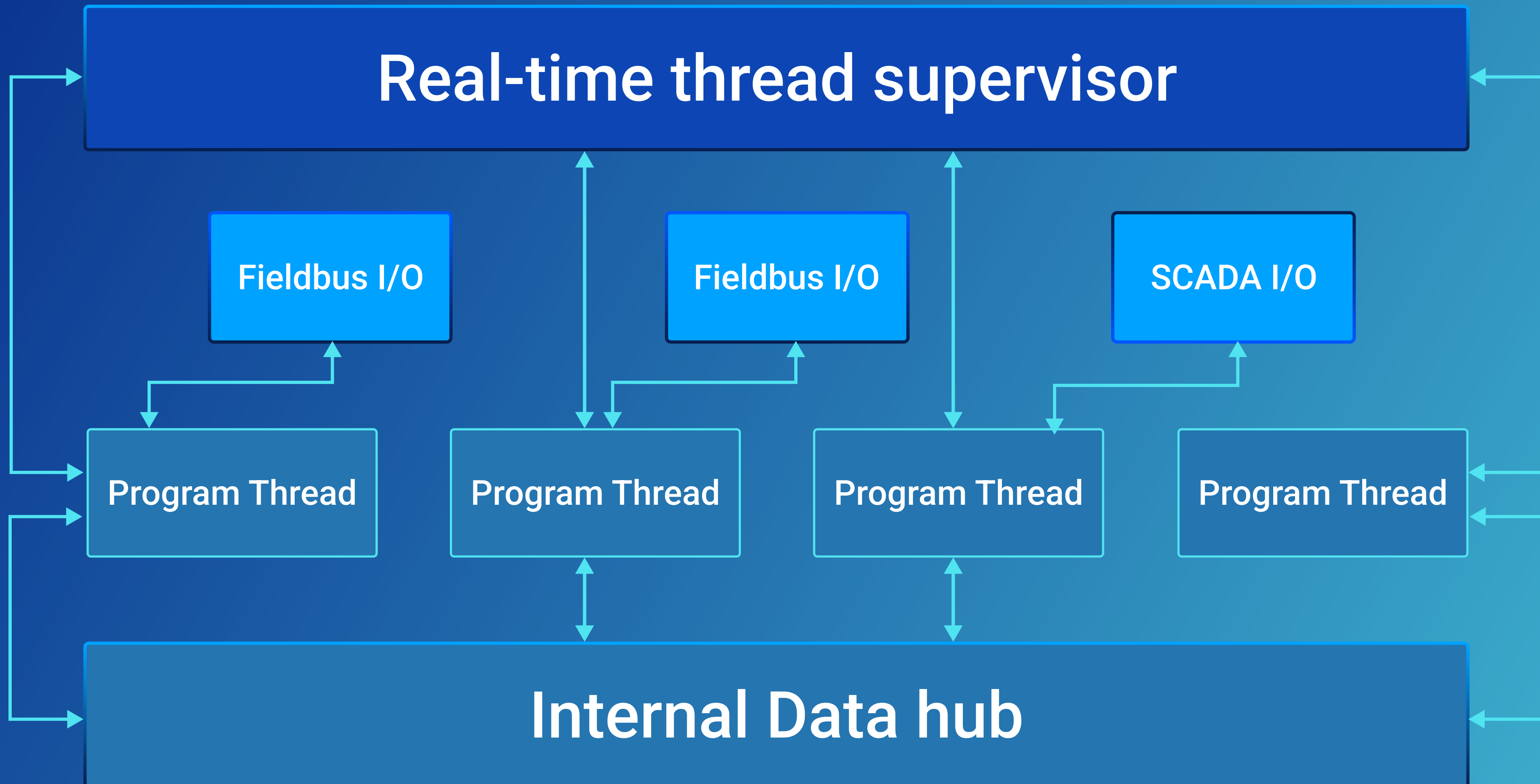
Features	RoboPLC	rPLC (firstgen)	Classic PLCs (CODESYS, Rockwell, Beckhoff etc)
dedicated hardware agnostic	Yes	Yes	No (ordinarily)
Programming languages	Rust, IEC 61131-3 (ST), C, C++	Rust	IEC 61131-3, C, C++
Push protocols supported	Yes	No	Usually no
Cost of development for complicated solutions	Low/Moderate	Moderate	High
Memory safety and security	High	High	No
IaC and DevOps tools	On request	No	No
In-house SCADA solution	Yes (EVA ICS v4)	Yes (EVA ICS v4)	Limited

# Supported data protocols

- Modbus (TCP/RTU)
- IEC 60870-5 101/104
- Matlab UDP Virtual I/O
- EVA ICS BUS/RT
- MQTT
- SNMP
- OPC-UA
- 1-Wire
- Ethernet/IP
- DNP3
- TwinCAT ADS



# RoboPLC internal architecture





# Contact Us:

## BOHEMIA AUTOMATION

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Since 2012, Bohemia Automation (formerly the automation department of Altertech group) has been a pioneering company in the development of new IIoT technologies and cloud-SCADA products.