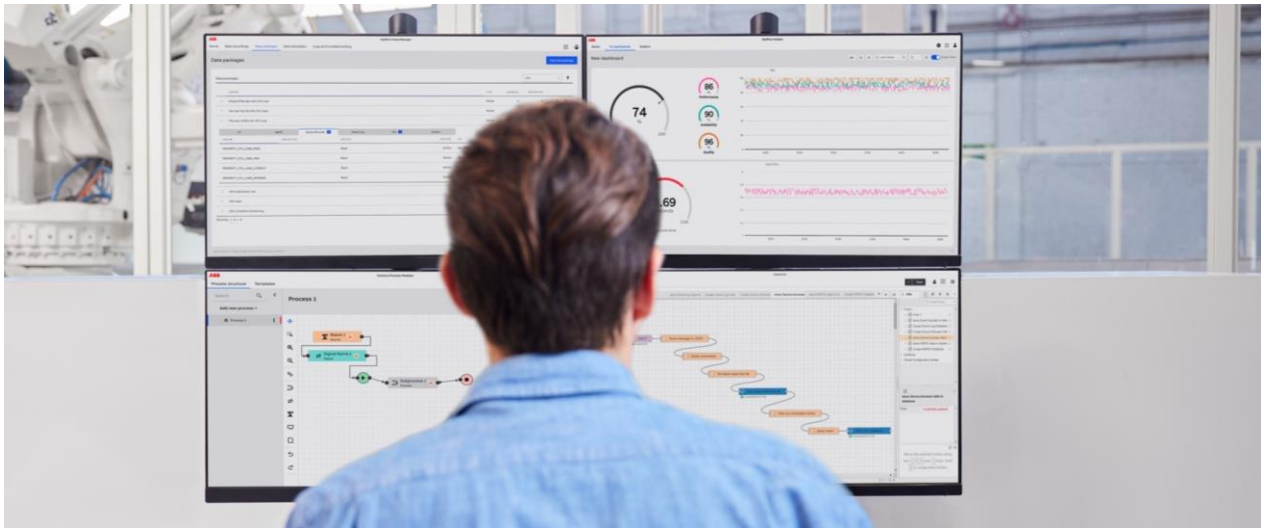
ROBOTICS

OPTIFACT™



Turning Factory Data into Business Value

ABB's OptiFact™ is a modular, edge-based software platform designed to seamlessly integrate into your production environment without disrupting operations. With on-premise ownership and full control, your data stays where it belongs: in your hands.

More than a robotics solution, OptiFact™ acts as a secure data broker for all devices across the factory floor. It collects, manages, and analyzes data from robots, PLCs, peripherals, and other connected systems to strengthen enterprise AI and IT ecosystems without requiring permanent connectivity or external transfers. This ensures maximum data privacy, flexibility, and independence.

With intuitive dashboards, OptiFact™ helps you deliver the right insights to the right people. Track overall equipment effectiveness, machine availability, cycle times, and more. Build and customize dashboards using labeling and modeling tools to organize data your way—tailored to your unique processes and production goals.

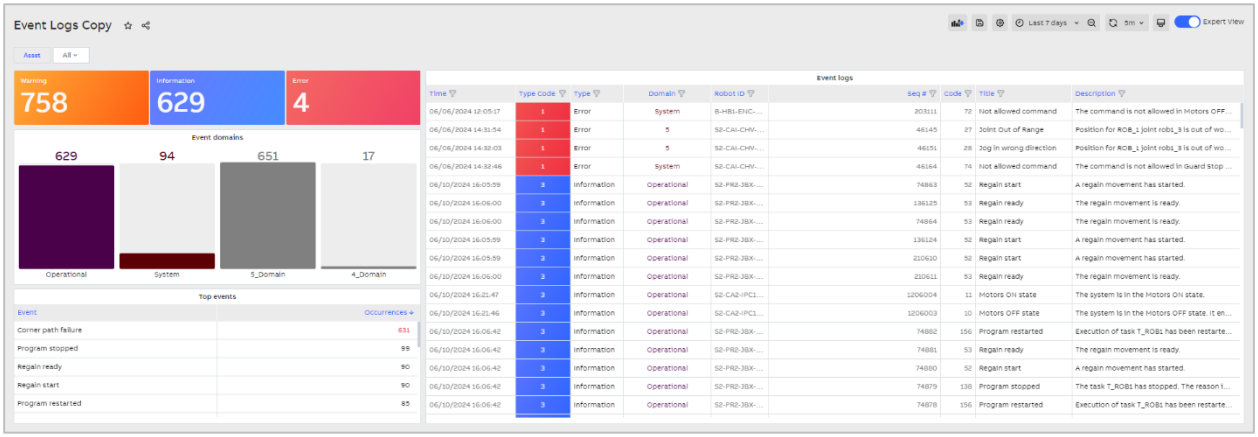
Key Benefits

- Collect data from all your factory devices to identify key performance indicators and accelerate productivity gains
- Increase production time by up to 20% by reducing errors and downtime
- Improve decision-making with real-time KPIs and predictive insights
- Analyze data in just a few clicks using ready-made or custom dashboards

COMMON USE CASES

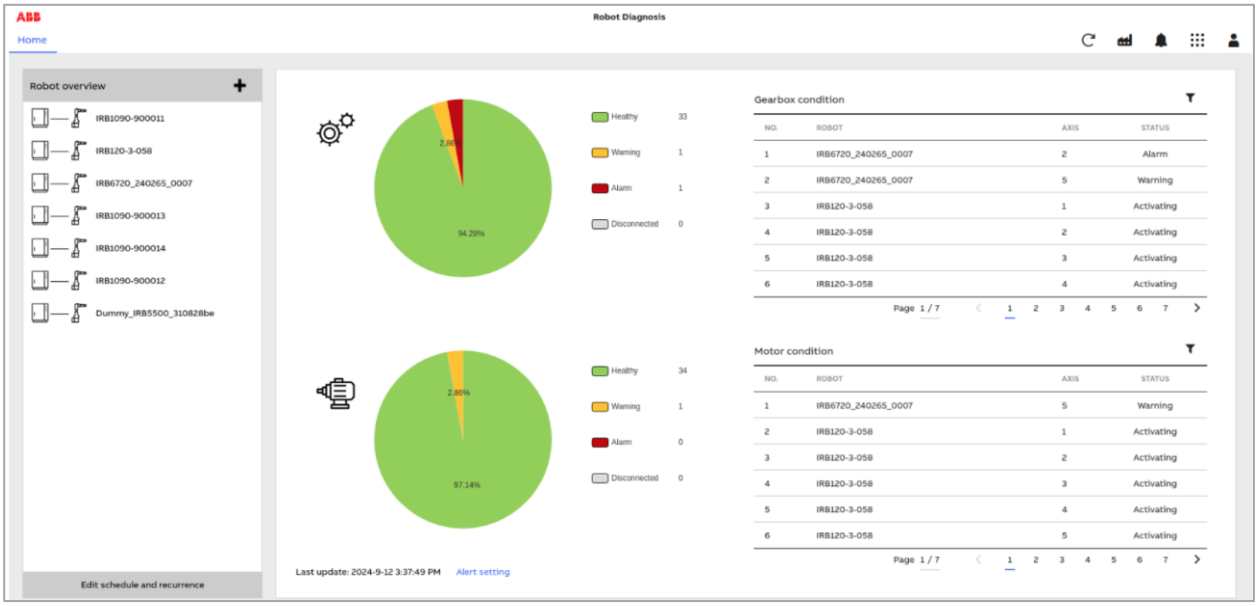
Tracking event logs

- **Challenge**: “We check errors of 150 robots manually via FlexPendant, but what are our most common errors?”
- **Solution**: Errors and event logs with one click – creating pareto with most common errors to find root cause



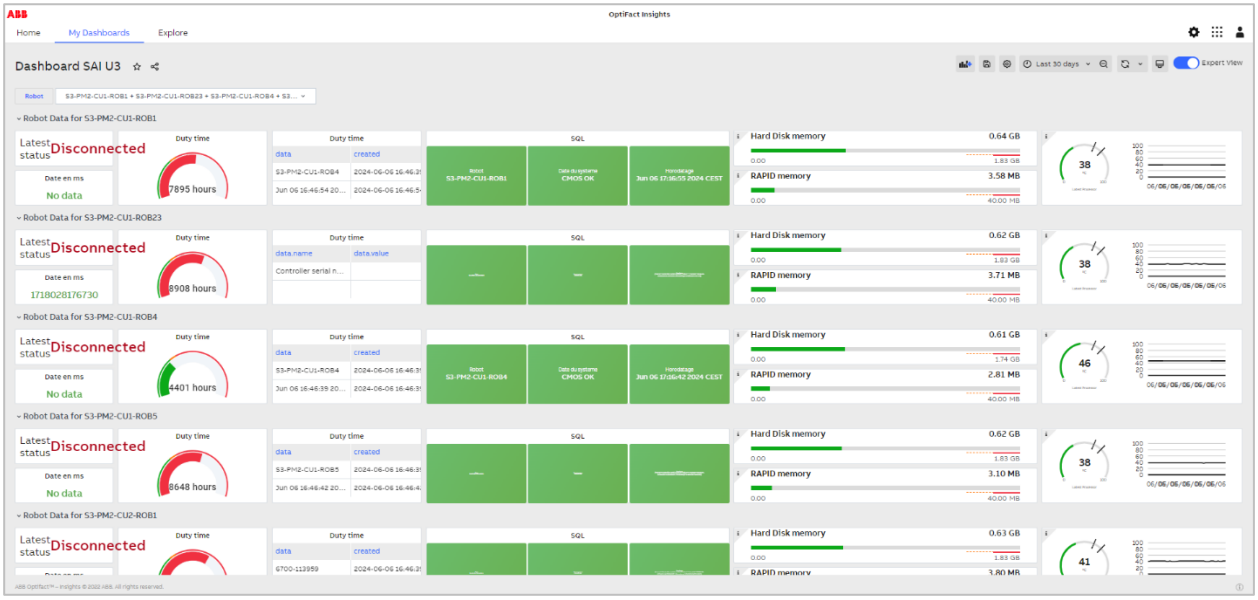
Robot Health Status

- **Challenge:** “We have unexpected downtimes, how can we identify robots that are under strain?”
- **Solution:** Fleet health on one click



Maintenance

- **Challenge**: “We change oil every year, but we do not know if the operational hours are above the threshold.”
- **Solution**: Robot fleet health monitoring dashboard, incl: operational hours, fan speed, memory capacity and more → sending data to ERP system for use-based maintenance schedules



Cycle Time

- **Challenge:** “How long does one cycle of a robot picking process take?”
- **Solution:** Display cycle time of individual robot picking processes in one dashboard

Installation and usage minimal requirements

Minimum Server Requirements (edge device or virtual machine)	**Connectivity requirements**
4 vCPU intel I3 or higher, 2.4 Ghz vCPU clock or higher	Compulsory outside connection for installation, updates and license renewals
16 GB+ RAM	OPC-UA (for factory devices) - up to 20 000 signals per minute
100 GB at root partition	MQTT (for factory devices) - up to 20 000 signals per minute
512 GB total data disk	RobAPI or RWS (for ABB robots), IRC5 & Omnicore Controllers, > RW 5.15
Ext4 File System	
TPM 2.0 enabled	
Operative System: Ubuntu Server 22.04	
Installed via executable installer on Ubuntu Linux distribution	

Network requirements