Industrial Operator (IO) - Secure Edge-to-Cloud Architecture

CLEVERDIST
Industrial AI Solutions

Cleverdist Azure Cloud

LLM/AI Inference
- Azure AI Foundry
- Other providers

Azure AI Foundry

Outbound HTTPS (request/response)

Dedicated IO Cloud Instance (per customer)
- Isolated environment (no public ingress)
- Agent orchestration & decision engine

IO Cloud

Azure IoT Hub (Device & Module Management)
- Fleet monitoring & health
- Module deployment & updates

IOT Hub

Telemetry, events, context

Device mgmt, deployments, health

Edge-initiated connections (no inbound ports)

Customer Enterprise/OT Network

Data Sources
- SCADA, DCS, PLC
- MES, MOM
- ERP, CMMS, EAM, APM
- Planning, simulation
- Data Lake

IO Edge (Azure IoT Edge Runtime)
- Data connectors
- Fast local analytics
- Local web UI

IO User Interface (https / internal)

Customer Premises
- Web UI (inside customer network)
- Authentication via customer IdP
- Policy editor (governance)

IO by Cleverdist S.A