Seamless & Secure
IT-OT Integration

Smart IoT Highway, SIOTH®, is a scalable and modular IoT platform for IT-OT integration, data exchange and transformation. It establishes secure end-to-end pipelines in order to collect and store data from edge and IoT devices. SIOTH® turns industrial data into actionable intelligence and increased productivity.

Command & Control Centers

Smart Factories & Industrial Automation

Geographically Distributed Sites

Smart Cities

Enterprise-Wide Integration

Smart Grid Infrastructures

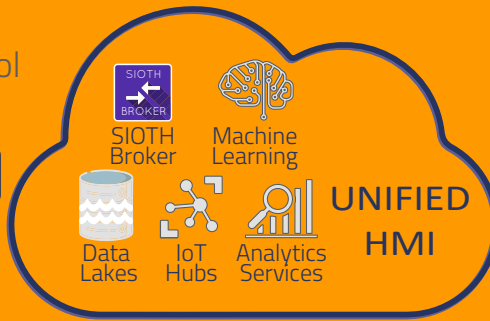**Enterprise Systems, Command & Control Centers and Operation Centers**

Data Warehouse | MIS | SCADA & Visualization Portals

SIOTH Broker | Machine Learning | Data Lakes | IoT Hubs | Analytics Services | **UNIFIED HMI**

End Users Unified HMI

ADO .NET | HTTPS | OPC UA | Modbus | REST | AMQP | CoAP | MQTT | Kafka | ... | CANbus

Jobs Scripts | Buffering | **Smart IoT Highway** | io Integration objects | Orchestration Synchronization | Data Model

Modbus | DNP | OPC | DLMS/COSEM | OPC UA | HartIP | REST | PROFINET | SNMP | MQ | ... | API

DMZ | **Communication & Cyber Security Backbone**

Devices/ Meters/ Automation Assets | DCS / SCADA | LIMS | Databases & Historians | CMMS / ERP | NoSQL/ Flat Files | IT Assets | External Systems & Sensors | SIOTH® Edge

Features

IT-OT Data Exchange
- Integration Bus based on publish/subscribe architecture
- Industrial protocols: Modbus, OPC, OPC UA, DNP, Hart, Profinet, Profibus
- IoT protocols: MQTT, REST, AMQP, CoAP
- Databases: MS SQL Sever, Oracle, MS SQL...
- Historians: OSIsoft PI, Aveva Historian...
- More connectivity options via plug-ins support
- Store & forward

Built-In Cyber Security
- Support of DMZ architectures
- Data encryption
- Data integrity
- User authentication
- Protocol break
- Configurable communication ports
- Traceability
- ISA/IEC 62443 compliant

Flexible Data Model & Real-time Historian
- Data model for a unified & hierarchical organization of data
- Real-time historian to store the exchanged process data, system & security data

High Availability & Scalable Architecture
- Scale up indefinitely, locally for a single site and globally interconnecting multiple sites
- Distribute data exchange tasks among multiple nodes
- Duplicate jobs and services for quick recovery post-failure

Orchestration & Synchronization
- Configure and execute scripts, jobs, rules & workflows for data aggregation or business logic purposes

Unified HMI for a Single Interface
- Manage all of your devices, sources & data flows
- Build user defined dashboards and generate web applications
- Deploy monitoring and SCADA applications
- Create customizable graphical components

Flexible User Management
- Configurable user accounts, profiles & access privileges
- Integration with Microsoft Active Directory
- Support of OAuth 2.0 protocol