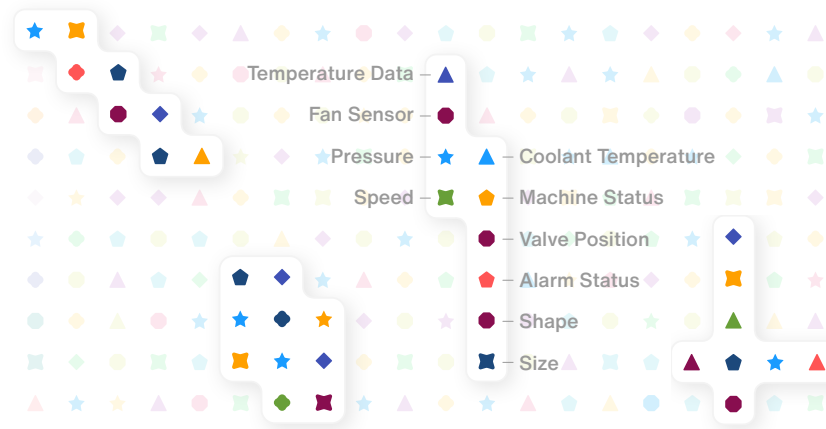# Factory **CONNECT**

SIGHT MACHINE

Create a Unified Namespace for Industrial Data

For data-driven manufacturers who need centralized access to operations information, Factory CONNECT provides secure, real-time industrial connectivity for seamless data unification.

FEATURE

Blueprint

Built in partnership with NVIDIA and Microsoft, Blueprint accelerates data labeling, helping to find clusters of unidentified, inconsistently, and confusingly named tags. This is the first step in contextualizing data and creating an AI/ML-ready data format.

NVIDIA.   **Microsoft**

Temperature Data
Fan Sensor
Pressure — Coolant Temperature
Speed — Machine Status
Valve Position
Alarm Status
Shape
Size

1. Increase Productivity and Efficiency

While manufacturing plants continuously generate thousands of data points, they are still running data analytics on a small, restricted subset of tags. Most tags are inconsistently or incorrectly labeled, and the process to sort through them is most often labor-intensive and time consuming.

With Factory CONNECT, you'll be able to:

› **Organize tags** by automating the standardization and contextualization of data. This is done through Blueprint, which solves the problem of hundreds of unidentified or confusing tags that end up misinterpreted and remain unused.

› **Connect directly** to assets and data sources to avoid the slow flow of data that is a result of a conventional, multi-hierarchy, ISA-95 data stack.

2. Reduce Total Cost of Ownership

With the progress of digital transformation through IoT, smart manufacturing, and advanced automation, manufacturers are seeing an increase in cloud consumption as a result.

Factory CONNECT helps reduce excess cloud costs through:

› **Automation of tag selection** based on heuristics and feature extraction (enabled by downsample intelligence) selects only relevant data to be transferred, thus reducing cloud costs.

› **Improved efficiency** through the transformation of variables from raw data, which also reduces the amount of transferred data — and thus eliminates unnecessary compute and storage costs.

3. Minimize Downtime and Build Credibility

Data reliability is fundamental to a successful and efficient plant; each minute of machine downtime can negatively impact OEE and product quality.

Count on Factory CONNECT to:

> **Always store and forward data** to prevent data loss, regardless of unexpected network outages. Rest assured that even PLC and SCADA data will be archived and stored.

> **Enable integrated alerts and notifications** for active monitoring of the entire process — assets and devices, connectors, and streaming to the cloud.

4. Future Proof and Mitigate Security Risks

Manufacturing software must uphold the highest standards of security. Whether it's protecting against operational risk and cyber attacks or ensuring supply chain security and regulatory compliance, secure operations build trust between partners and customers.

Factory CONNECT guarantees secure connection through:

> **Nested Edge technology** adds an extra layer of security between shop floor assets and the cloud, through a demilitarized zone.

> **TLS 1.2 compliant encryption protocols** guarantee that data being transferred will always be secure.

> **Fully integrated with Azure Key Vault**, a cloud service that provides a secure store for keys, passwords, certificates, and other confidential information.

> **Centralized container-based deployment management** with Microsoft IOT Edge or Siemens Industrial Edge provides for seamless Edge and Cloud deployment.

CONNECTORS

Sources:

> Historians, translators, proxies
> **REST APIs:** generic, Plweb, Proficy, ThingWorx, Predix, MindSphere
> OPC UA/UA-H
> **PLC:** Modbus, CC-link
> SQL databases (via SQLAlchemy)
> **File Systems:** Local, FTP, Windows Share, S3, ADL
> CSV, Excel (.xls, .xlsx), log files
> Any custom receiver for novel data sources

ZEISS · GE · ptc · SIEMENS

Destinations:

> Microsoft Fabric
> Microsoft IoT Hub
> Databricks
> Snowflake
> Sight Machine
> OPC UA/UA-H

Microsoft · databricks · snowflake

FEATURE

FactoryTX

Securely connect to any source of data in the manufacturing environment, standardize the data, and route it to the cloud.

FactoryTX securely connects to any source of data in the manufacturing environment, standardizes the data in a JSON payload, and routes it to the cloud.

Connect your data to Kafka topics and other stream processing platforms. Minimal transformations are made so you can quickly iterate on changes in the cloud.

DEVICE	STATUS	STATUS DURATION	FTX RELEASE	INTERNAL IP	PUBLIC IP
New Device Name	ONLINE	02:55:13	00.000000	192.168.13.21	89.13.80.1
Device Name	ONLINE	00:21:34	00.000000	192.168.13.21	89.13.80.1
Device Name	ONLINE	00:00:13	00.000000	192.168.13.34	89.13.80.2
Device Name	OFFLINE	00:00:13	00.000000	192.168.13.55	89.13.80.8