

# Weft.io - IoT



**Client:** Weft is a global logistics data company that combines sensors and supply chain analytics to help businesses gain real-time asset intelligence, reduce disruption and improve operational productivity. A true end-to-end supply chain and shipping visibility solution.

Weft's team quickly realizes that **collecting billions of events in real-time was not as easy as it looks and could take months to build.**

### Challenges:

- Lack of talent, Big Data expertise
- Collecting 20+ Billions sensor data points/day
- New data sources and schema updates
- Data pipeline operations
- Integration with Hive and Cassandra
- Data privacy & security

### Solution:

CaliStream's team worked closely with Weft's team to design a generic sensors gateway able to accept all existing data sources (AIS, weather, ocean current, port, etc.) but also sensors data being added to support specific customer's requests.

### Benefits:

The key benefits were:

- Big Data expertise and Time to market
- Ability to collect Billions of events in real-time and worldwide
- Self-Service data collection pipeline
- Native Spark/Hive and Cassandra integration
- Cloud ready solution

"Thanks to **CaliStream SaaS solution and expertise.** We've been able to gain a strategic **Big Data** advantage by focusing on our **domain expertise rather than infrastructure.**"

Marc Held  
CEO Weft.io

**Weft is a global logistics data company** that combines sensors and supply chain analytics to help businesses gain real-time asset intelligence, reduce disruption and improve operational productivity. A true end-to-end supply chain and shipping visibility solution, **Weft uses every piece of data available, whether through proprietary sensors or external sources, to weave a complete picture that enables smarter logistics decisions.**

Weft looked for a fully managed data collection pipeline able to ingest data in real-time from multiple sources, all with low maintenance and operational cost.

CaliStream's team worked closely with Weft's team to design a generic sensors gateway able to accept all existing data sources. **CaliStream's IoT sensors gateway was responsible for accepting, validating and auditing all external data, through simple adaptors, while CaliStream SDK was responsible for collecting and forwarding all this massive amount of data to a dedicated CaliStream cluster and final data-warehouse.**

**CaliStream SaaS**, was in charge of aggregating and storing this data in an Hadoop friendly format so the data can easily be analyzed using Hive, SparkQL and ML Lib, all in an automatic way without any human intervention.

Thanks to CaliStream's automatic schema management, Weft was able to continuously add new data sources using the pipeline as a strategic advantage.

