

Streaming Data Integration for the Airline Industry

Optimize Operations, Improve Passenger Experience

The Striim[®] software platform offers streaming data integration capabilities to enable airlines to gain real-time visibility into their operations and make fast business decisions. By moving and processing critical operational data—such as flights, passengers, weather conditions, crew schedule, airplane parts inventory—in real time using in-memory computing, Striim enables time-sensitive decision making that streamlines airline operations and improves passenger experience. Using Striim, major airlines across the globe are able to:

- Optimize crew planning and flight schedules based on real-time events such as flight delays, weather changes, etc.
- Manage ground service equipment by tracking its use and location continuously to enable timely service to airplanes.
- Accurately track aircraft parts and rapidly submit work orders

CORE CAPABILITIES

- Ingest real-time data from databases, logs, sensors, Kafka, Hadoop
- Filter, aggregate, transform, mask, and enrich data in-motion
- Deliver to cloud or on-premises databases, messaging, files, storage
- Quick to deploy and easy to iterate via drag-and-drop UI
- Continuous data pipeline monitoring and built-in delivery validation
- Real-time dashboards



Striim ingests, processes, and delivers data from a wide range of data sources to cloud or on-prem data environments in real time.



Core Capabilities

Striim offers real-time data ingestion from a wide range of data sources including databases via low-impact change data capture, log files, messaging systems, sensors, Hadoop and NoSQL environments, deployed on premises or in the cloud. Using Striim's SQL-based, in-memory stream processing, airlines can filter, aggregate, transform, mask, and enrich data in-motion before delivering to cloud-based or on-premises solutions with sub-second latency. Striim supports all major targets including Kafka and other messaging systems, Hadoop, relational and NoSQL databases, cloud environments, and flat files. With real-time interactive dashboards, Striim also allows users to monitor the data flow and the content of the data in real time.

Optimize Crew Schedules

One of the largest global airlines uses Striim to move crew and flight data in real time from Oracle databases to Kafka, which then feeds Cassandra and HDFS environments for real-time analytics. Striim's low-impact log-based CDC from Oracle databases allows the source systems to maintain performance levels. With the availability of realtime, pre-processed data about flights and weather conditions, the airline can quickly detect events that may impact crew scheduling. Real-time visibility and intelligence enhances the efficiency of scheduling operations, reduces delays, and enhances service to passengers and crew.

Timely Work Order Management and Part Tracking

A leading U.S.-based cargo and passenger charter airline uses Striim to track aircraft maintenance operations. The airline partnered with Striim for its strong CDC capabilities. Striim moves real-time aircraft maintenance and part data from Oracle databases to IBM MQSeries to enable timely work order management and accurate real-time reporting. IBM MQ Series distributes the data to the work order management system and to the operational reporting solution. With this solution, the leading charter airline can rapidly schedule maintenance work orders and accurately track the aircraft parts with up-to-date information.

Real-Time Ground Service Equipment Location Tracking

Using Striim's streaming data integration and intelligence capabilities, this leading global airline tracks its ground service equipment (GSE) in real time to allow timely service to its aircrafts. With the ability to collect real-time data from databases, machine log files, sensors, and messaging solutions, Striim enables continuous location tracking, and predictive maintenance to maximize service uptime for critical equipment. Up-to-the-second information on GSE usage and location helps the airline reduce the time it takes to service their aircraft. By processing and analyzing log data streaming from GSE in real time, the airlines can receive an alert when there is a malfunction and send a service team to GSE as well.

To learn more, or to download or provision a fully functional trial of the Striim platform, please visit **www.striim.com**.