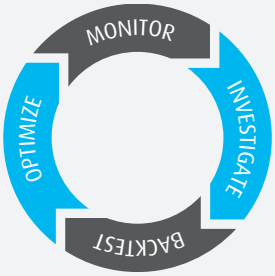
Altair Panopticon Streams™

Stream Processing with No Coding

Gain insight in real time. Make timely and informed decisions.

Altair | Knowledge Works



Continuous Process Optimization

Panopticon Streaming Analytics supports the continuous optimization of mission critical operations.

- **MONITOR:** Identify anomalies in streaming and static data.
- **INVESTIGATE:** Examine the historical time series of all events that led up to an anomaly.
- **BACKTEST:** Analyze how alternative scenarios will affect performance using historic data.
- **OPTIMIZE:** Update model thresholds based on the optimized back testing results.

Panopticon Streams is the stream processing engine that works with Panopticon Visual Analytics software to form the Panopticon Streaming Analytics platform. Streams connects directly to a wide range of streaming and historic sources, including Kafka, and supports these critical functions:

- **Real-Time Data Prep:** Combines streaming data with historic data
- **Calculation Engine:** Calculates performance metrics based on business needs
- **Aggregation Engine:** Aggregates data as needed
- **Alerting Engine:** Highlights anomalies against user-defined thresholds

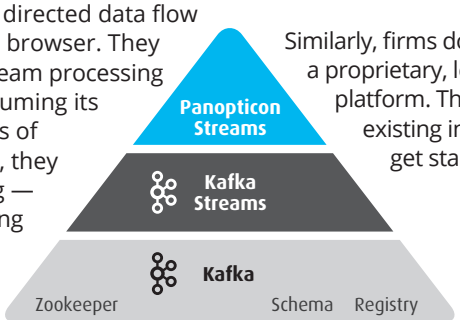
Built for Business Users — Not IT Engineers

Although Altair Panopticon Streams is built on Apache Kafka and Kafka Streams, it requires no coding. It is designed for use by business people.

Users can build a new directed data flow within a standard web browser. They can then start their stream processing model and begin consuming its output. Within minutes of receiving the software, they can be up and running — designing and deploying their own real-time streaming business processes.

Built on Kafka

The underlying platform for Altair Panopticon Streams is Kafka. It supports all the benefits of Kafka, but without its complexity. Users don't need to know how to write a single line of code in Java, Scala, or even KSQL.



Similarly, firms don't need to deploy a proprietary, legacy event processing platform. They can leverage their existing investment in Kafka and get started immediately.

BENEFITS

- No coding
  Designed for business users
- Leverage Kafka's Big Data capabilities
- Replace expensive custom development projects
- Install in minutes
- Create purpose-built analytics systems in minutes

RETRIEVE FROM

- Any SQL database
- Time series databases, including Kx kdb+, OneTick, MemSQL, InfluxDB, Timescale, and Vertica
- NoSQL databases, including Elastic, Hive, and Spark SQL
- XML, JSON, or text files
- Python or R

SUBSCRIBE TO

- Kafka topics
- RabbitMQ
- Kx kdb+tick
- OneTick CEP
- Thomson Reuters TREP RT
- ActiveMQ
- Tibco Streambase CEP Tibco
- Streambase LiveView SAP ESP
- 60East AMPS
- Solace
- Web sockets

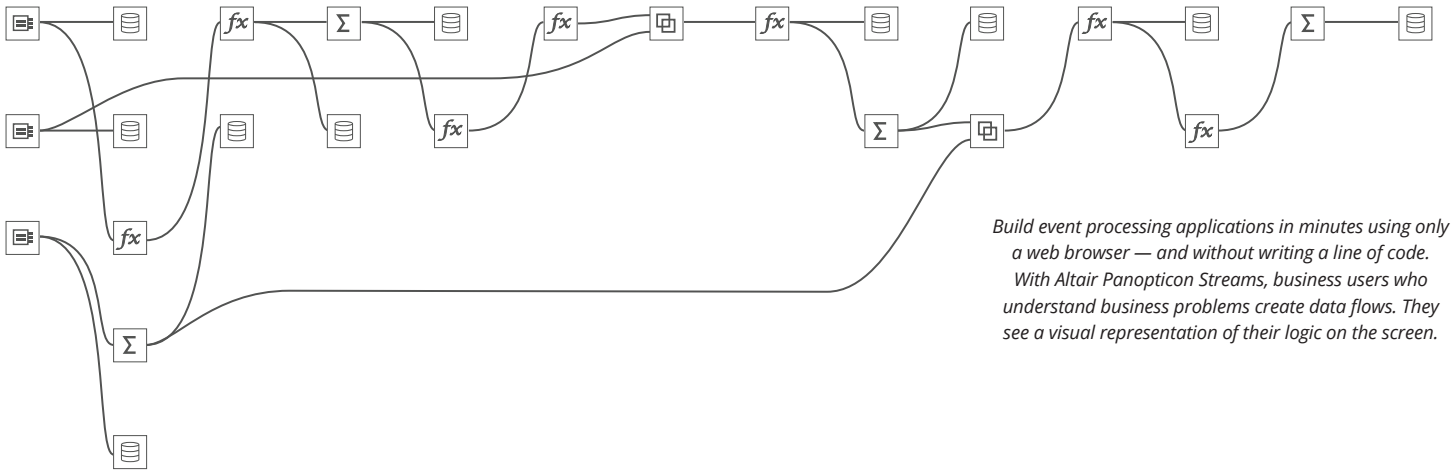
OUTPUT TO:

- Kafka topics
- SQL databases
- InfluxDB
- Kx kdb+

Build complex data flows in a web browser

Panopticon Streams allows you to build stream processing applications that:

- Subscribe to streaming data inputs, including Kafka streams and others
- Retrieve from historic and reference data sources
- Join data streams and tables
- Aggregate streams within defined time windows
- Conflate streams
- Create calculated performance metrics
- Filter streams
- Branch streams
- Union and merge streams
- Pulse output
- Create alerts based on performance metrics against defined thresholds
- Output to Kafka or email, or write to databases including kdb+, InfluxDb, or any SQL database
- Integrates with your infrastructure (LDAP, SSO, AD)



Build event processing applications in minutes using only a web browser — and without writing a line of code. With Altair Panopticon Streams, business users who understand business problems create data flows. They see a visual representation of their logic on the screen.

Learn more:
altair.com/panopticon