

# Tidal APM Data Stream

Stream real-time operational data from Tidal to gain visibility into how business processes are performing.

## KEY BENEFITS

**Aggregates** and feeds Tidal operational data to your established data storage location

**Enables** a more holistic view of an organization's operational data for analysis and improvement

**Integrates** with third-party solutions for data streaming and analytics

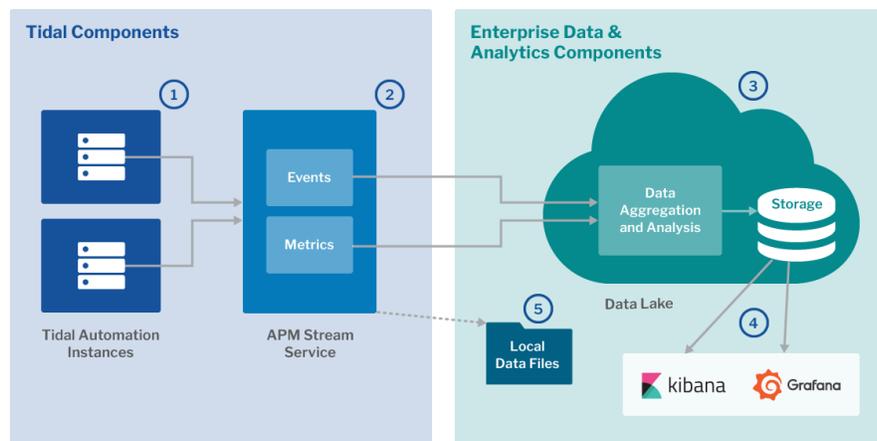
## PRODUCT OVERVIEW

The APM Stream aggregates real-time operational data from Tidal instances and streams it to a data storage or analytics platform.

Operational data includes: events, performance metrics, system messages, logs, tags, compliance management, server resources and SLAs/critical paths.

## BUSINESS CHALLENGES

Businesses today need strategies for combining all operational data so they can analyze how systems are performing and how business processes are running. Advanced analytics for operational data is an essential part of improving and increasing automation in the enterprise. Enterprise workload automation solutions contain a wealth of data about system operations and resource utilization that, when combined with other operational data, it provides a more holistic view of performance and processing.



- 1 Tidal Automation instances send event messages and data to the APM Stream service.
- 2 The service collects the Tidal messages and separates them into events and metrics, then sends them to a data lake or other storage location for further processing.
- 3 Data analytics and performance monitoring software – such as Kafka or Splunk – process the incoming data and can write it to data storage.
- 4 Administrators can use tools like Grafana and Kibana to create dashboards and graphs to monitor events and real-time metrics.
- 5 Optionally, the raw data can be saved to the local file system to be used with log collection and analysis software.

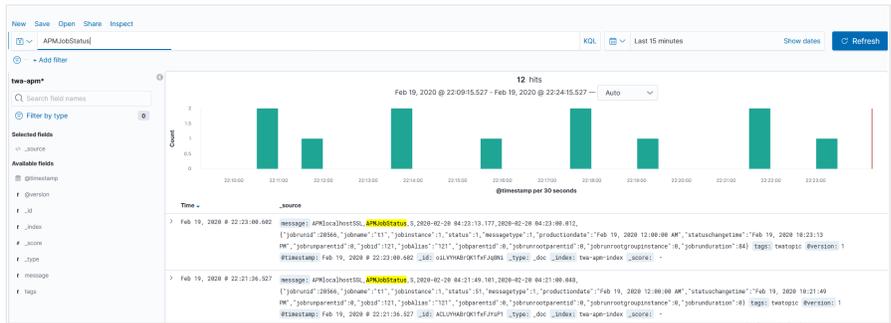


APM Stream was built with message-based protocols to integrate with a broad range of streaming platforms and data analytics tools.

## MONITORING AND ANALYZING DATA WITH KAFKA

Our APM Stream sends operational data from a Tidal Master to your Kafka cluster that stores the records in categories called topics. You can then access the data directly in Kafka or use third-party applications – like Elastic ELK – to visualize and analyze the data. APM Stream sends the following types of data to Kafka:

- APM Stream job status
- APM Stream queue status
- Jobs processed by agents
- Fault monitoring events
- Master status
- Job queue performance
- Job performance statistics
- Job activity system information



## ANALYZING DATA WITH PROMETHEUS

The Prometheus platform collects metrics from the APM Stream in its Pushgateway. APM Stream sends the following metrics:

- APM Stream job status
- APM Stream queue status
- Jobs processed by agents
- Fault monitoring events
- Master status

Use Grafana to query and display the metrics in graphical dashboards, including dashboards to analyze the performance of the Tidal Master.

