

The Next Generation of Streaming

Tim Spann
Developer Advocate

- FLiP(N) Stack = Flink, Pulsar and NiFi Stack
- Streaming Systems/ Data Architect
- Experience:
 - 15+ years of experience with batch and streaming technologies including Pulsar, Kafka, Flink, Spark, NiFi, Spring, Java, Big Data, Cloud, MXNet, Hadoop, Datalakes, IoT and more.



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Developer Advocate

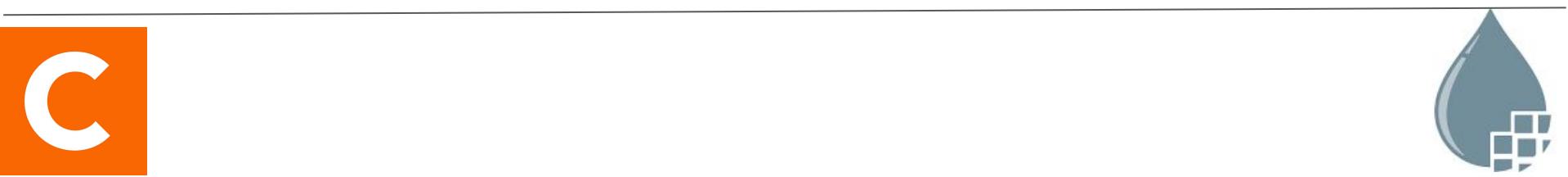
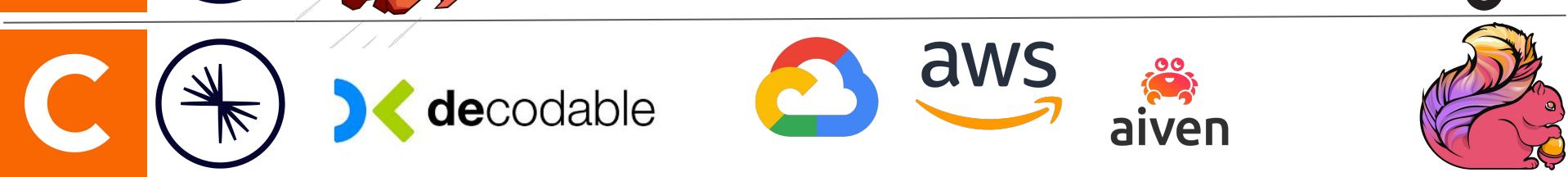


David Kjerrumgaard

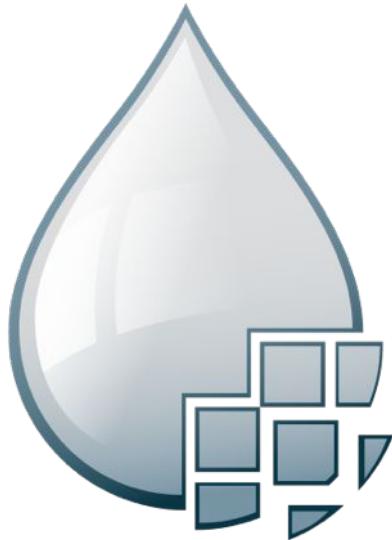


- Apache Pulsar Committer | Author of Pulsar In Action
- Former Principal Software Engineer on Splunk's messaging team that is responsible for Splunk's internal Pulsar-as-a-Service platform.
- Former Director of Solution Architecture at Streamlio.



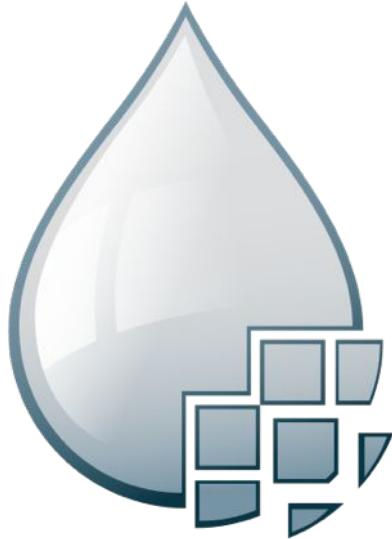


DataFlows for Data Ingest, Movement and Routing



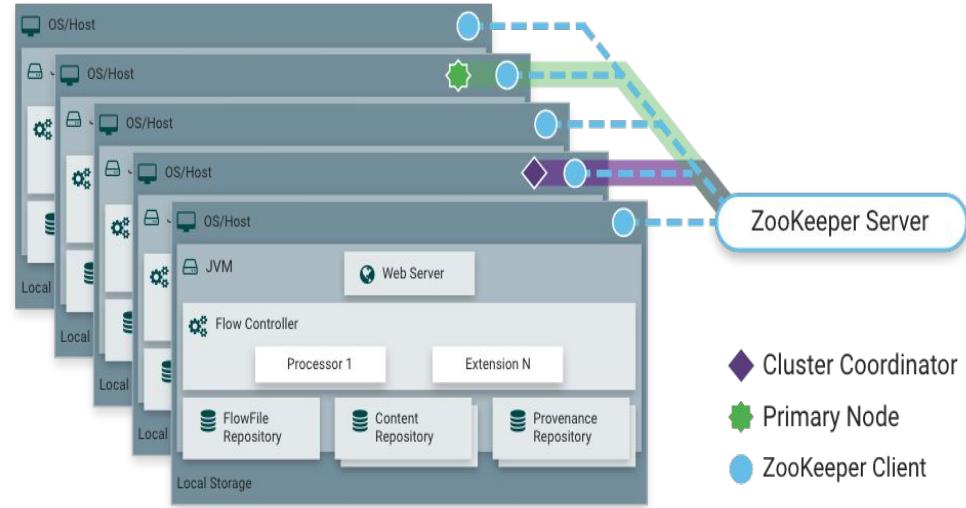
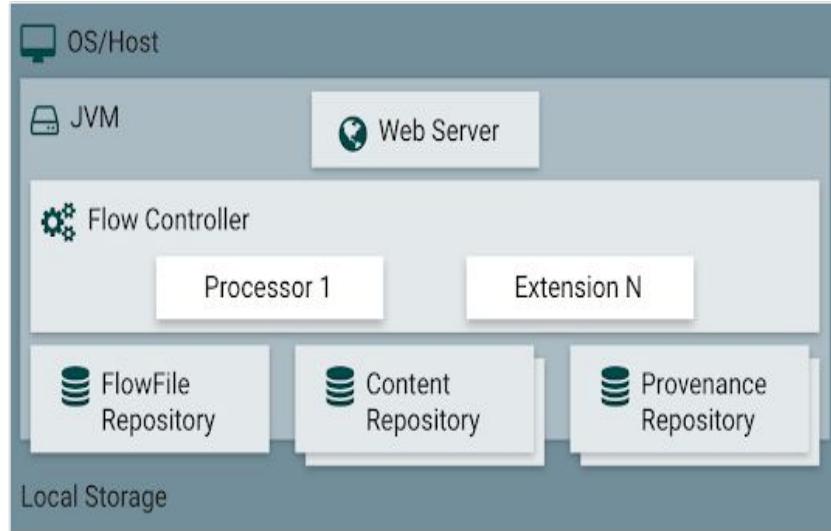
- Guaranteed delivery
- Data buffering
 - Backpressure
 - Pressure release
- Prioritized queuing
- Flow specific QoS
 - Latency vs. throughput
 - Loss tolerance
- Data provenance
- Supports push and pull models
- Hundreds of processors
- Visual command and control
- Over a sixty sources
- Flow templates
- Pluggable/multi-role security
- Designed for extension
- Clustering
- Version Control

The Power of Apache NiFi



- Moving Binary, Unstructured, Image and Tabular Data
- Enrichment
- Universal Visual Processor
- Simple Event Processor
- Routing
- Feeding data to Central Messaging
- Support for modern protocols
- Kafka Protocol Source/Sink
- Pulsar Protocol Source/Sink

Architecture



<https://nifi.apache.org/docs/nifi-docs/html/overview.html>

APACHE PULSAR

EVERYWHERE

A futuristic cityscape featuring several tall, sleek skyscrapers with curved glass facades. In the foreground, a man stands next to a white, pod-shaped monorail car. The sky is filled with numerous small, flying vehicles resembling futuristic cars or drones. A large, multi-tiered tower with a circular observation deck is visible in the background.

THE WORLD IF

EVERYONE USED APACHE PULSAR



**Unified
Messaging
Platform**



**Guaranteed
Message
Delivery**

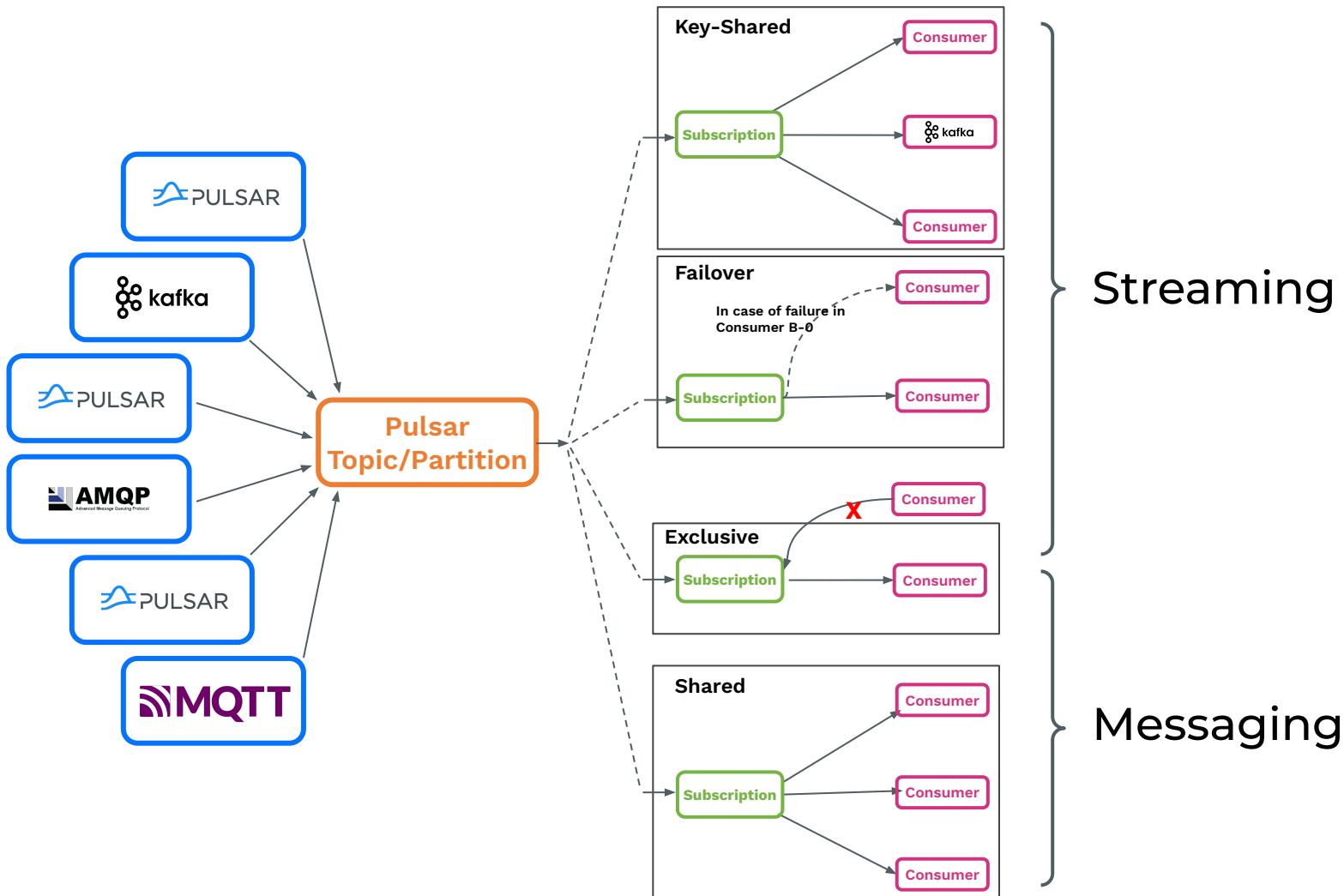


Resiliency



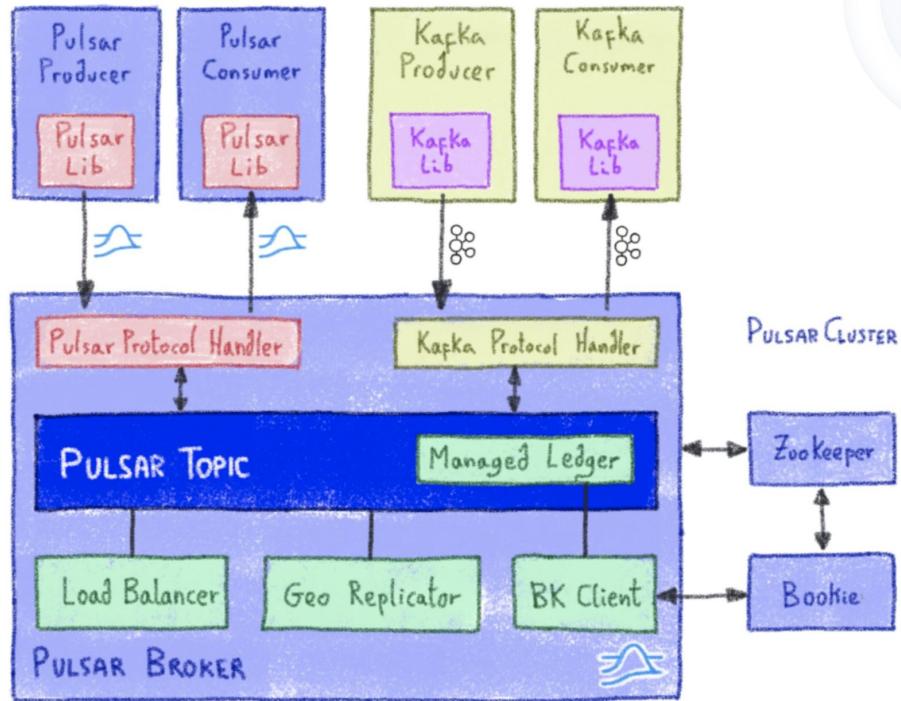
**Infinite
Scalability**

Central Messaging Hub

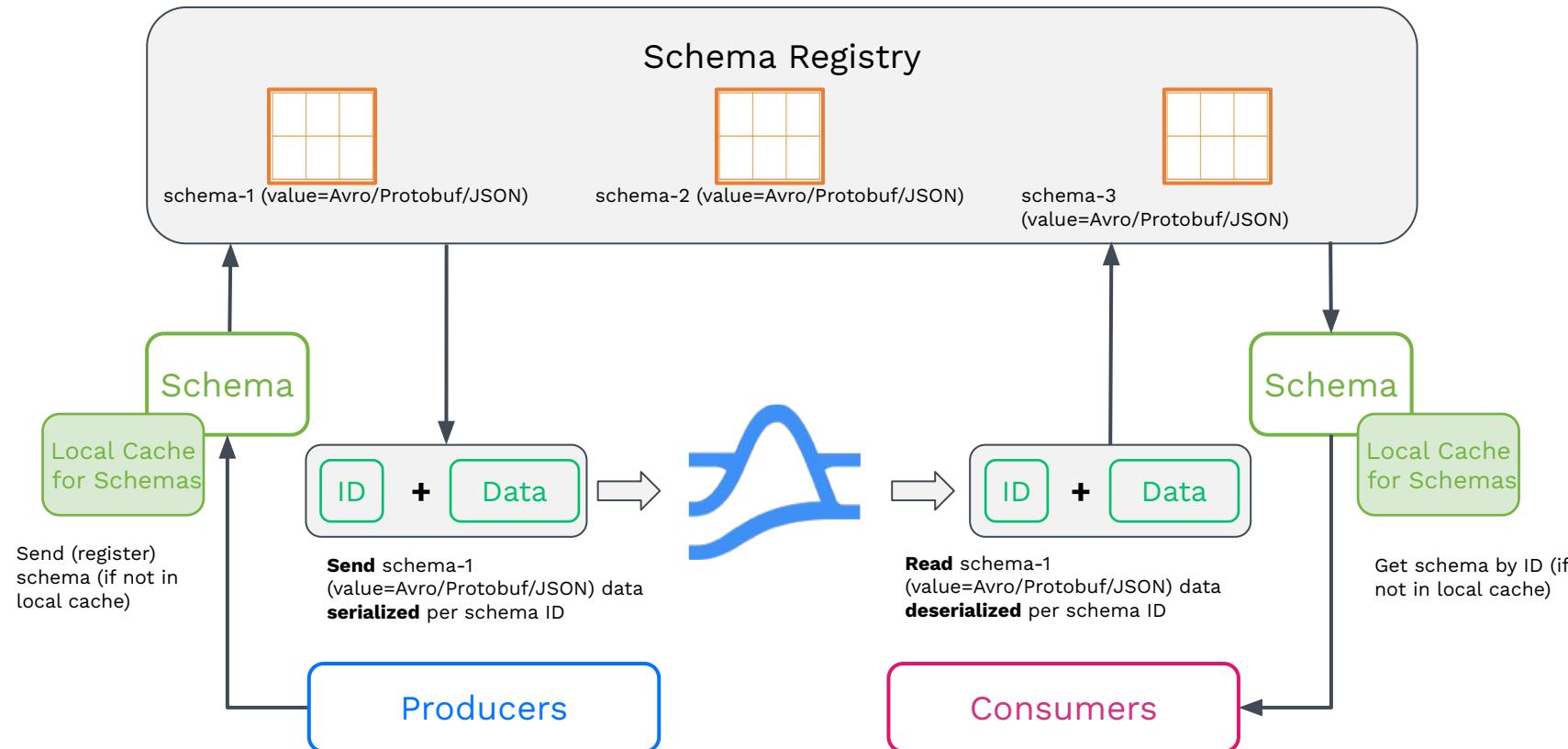


Kafka Protocol (Binary Data over TCP)

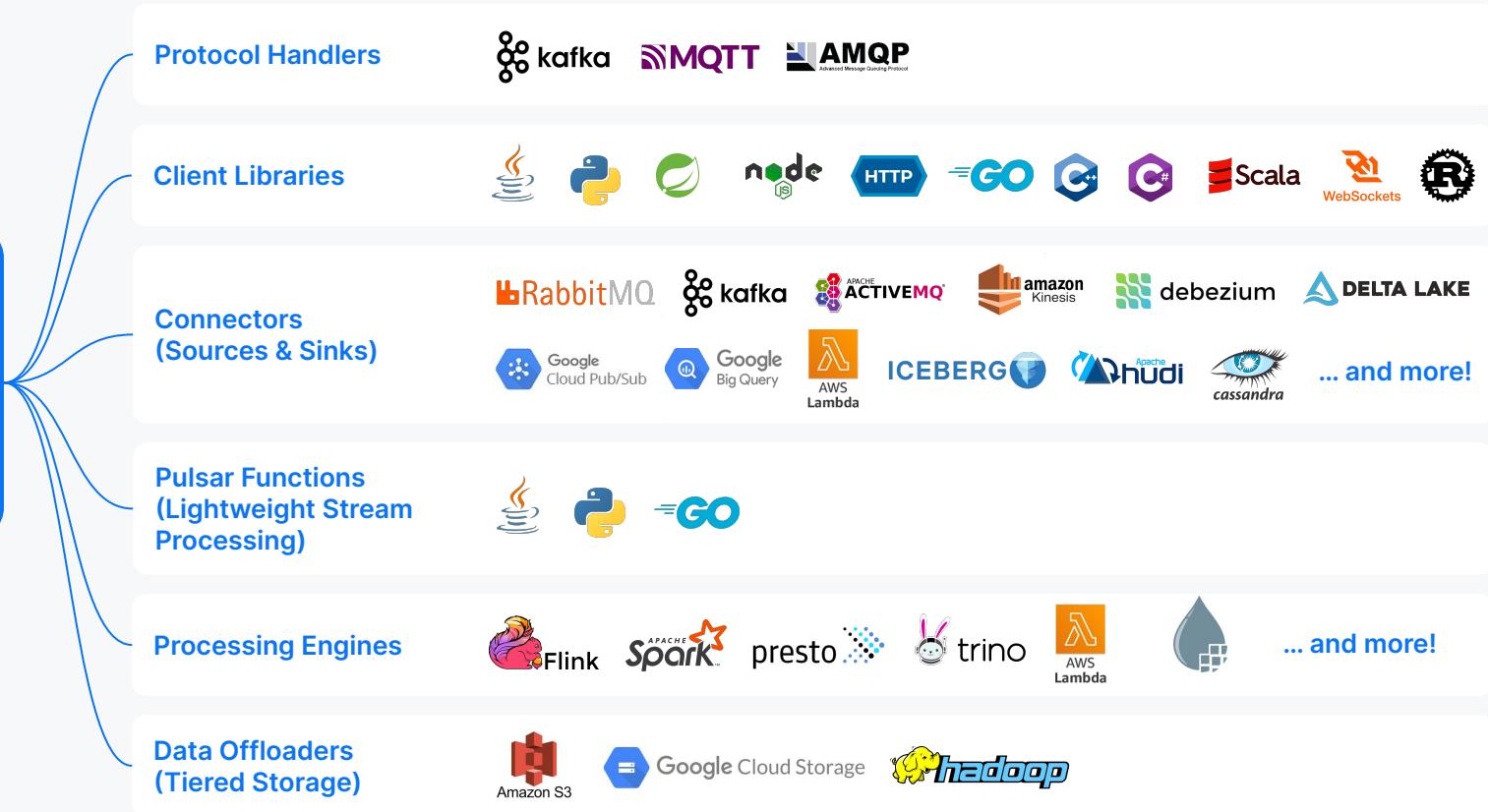
Kafka
On Pulsar
(KoP)



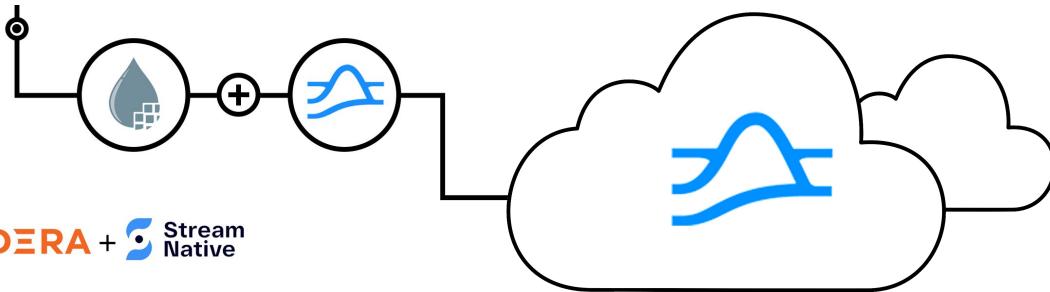
Schema Registry for Schema Support



Apache Pulsar ecosystem

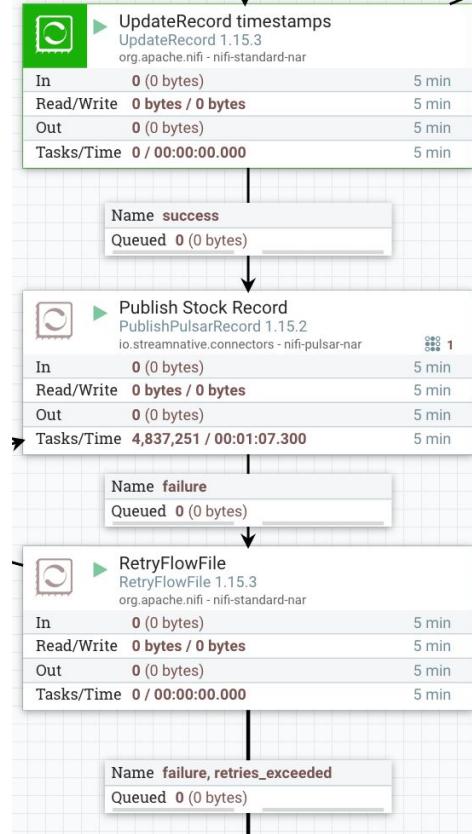


Apache NiFi - Apache Pulsar Connector

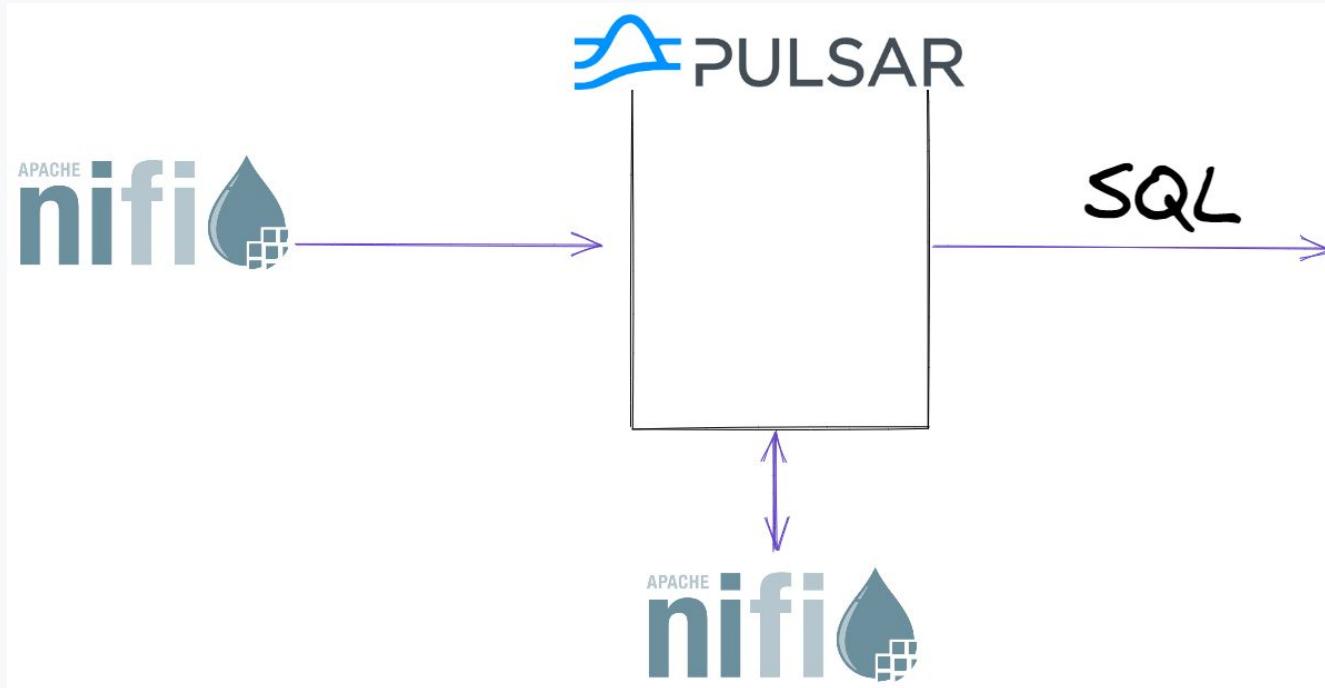


Announcing the Integration of
Apache NiFi and Apache Pulsar

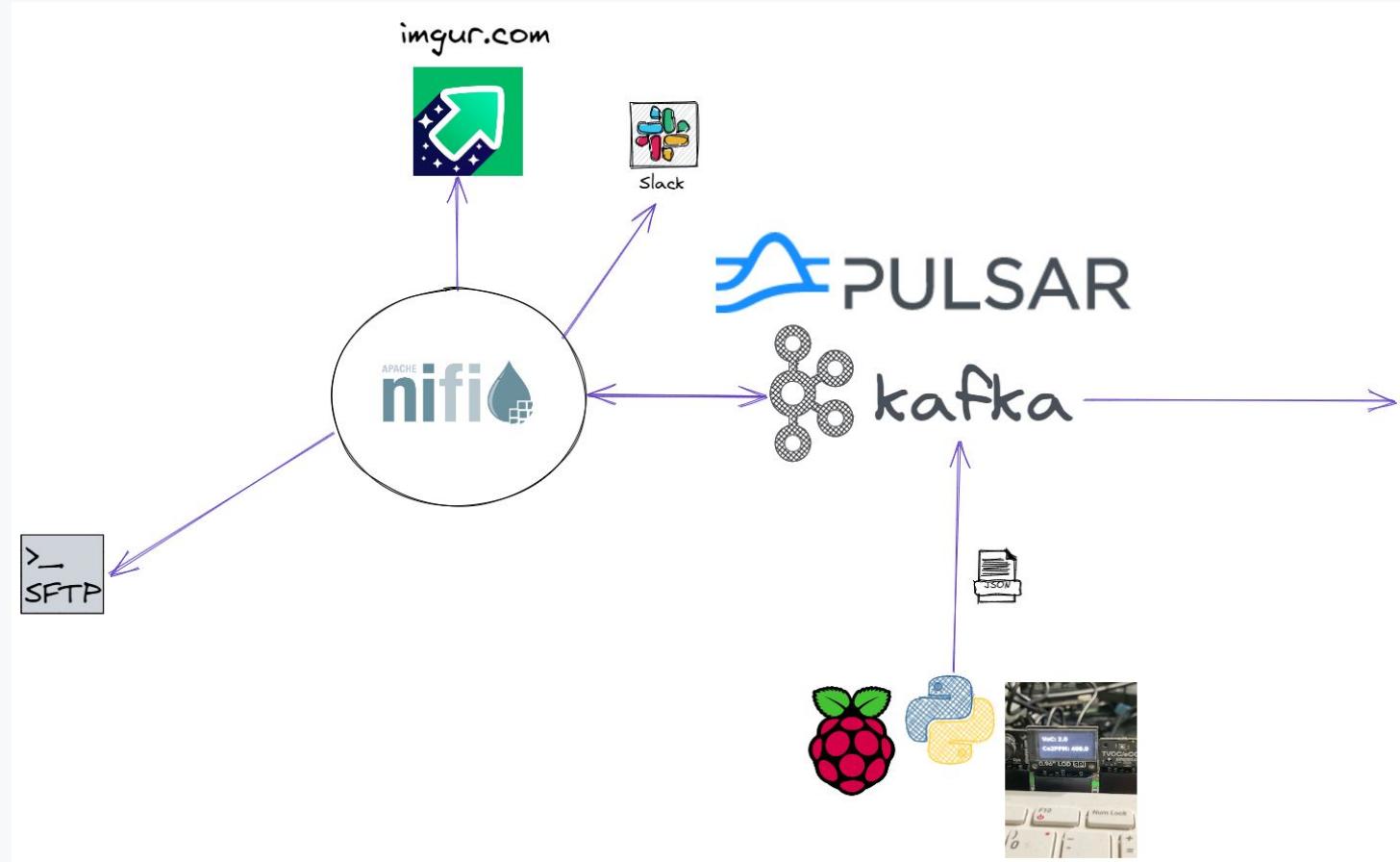
<https://github.com/streamnative/pulsar-nifi-bundle>



Example



Example



<https://github.com/tspannhw/Flow-SGP30-MLX90640>

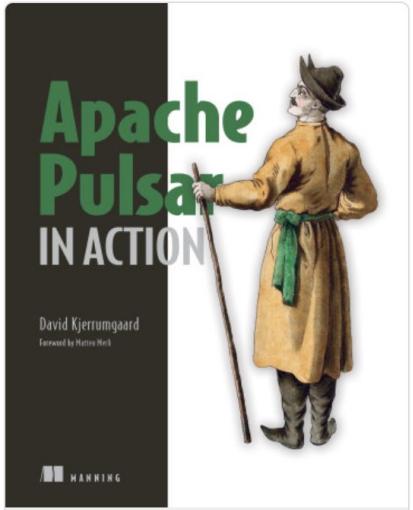
FLiP Stack Weekly



<https://bit.ly/32dAJft>



This week in Apache Kafka, Apache Flink, Apache Pulsar, Apache NiFi, Apache Spark, Java and Open Source friends.



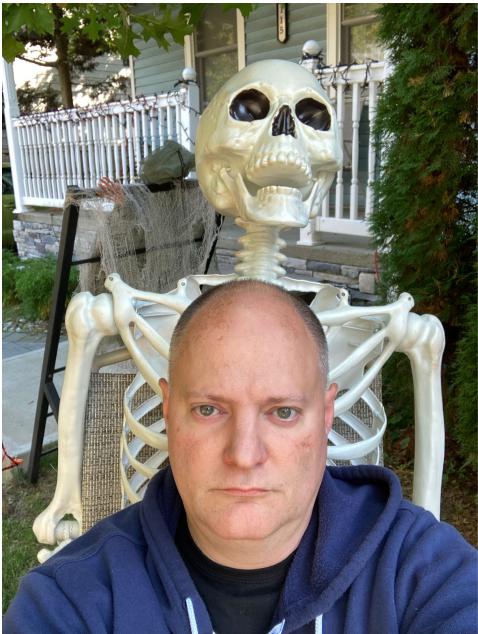
Apache Pulsar in Action

Please enjoy David's complete book which is the ultimate guide to Pulsar.



Tim Spann

Developer Advocate



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@PaaSDev



<https://github.com/tspannhw>

Notices

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