Evolving VOEvent in response to community feedback

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Evolution based on interoperability

Minor version number 2.x

- Small changes to the existing schema.
- Adding things to the existing schema.
- Compatible with existing software
  Comet, 4piSky, etc.

VOEvent for Fast Radio Bursts
arXiv:1710.08155v1 [astro-ph.IM]

- Event type field, anyURI.
- Repository or registry for derived schema

VOEvent for planetary science
Observatoire de Paris

- Small changes to WhereWhen to support
  solar system and planetary reference frames.
- Working with time domain group to ensure
  that the changes will be backwards compatible
  with exsiting 2.x software.

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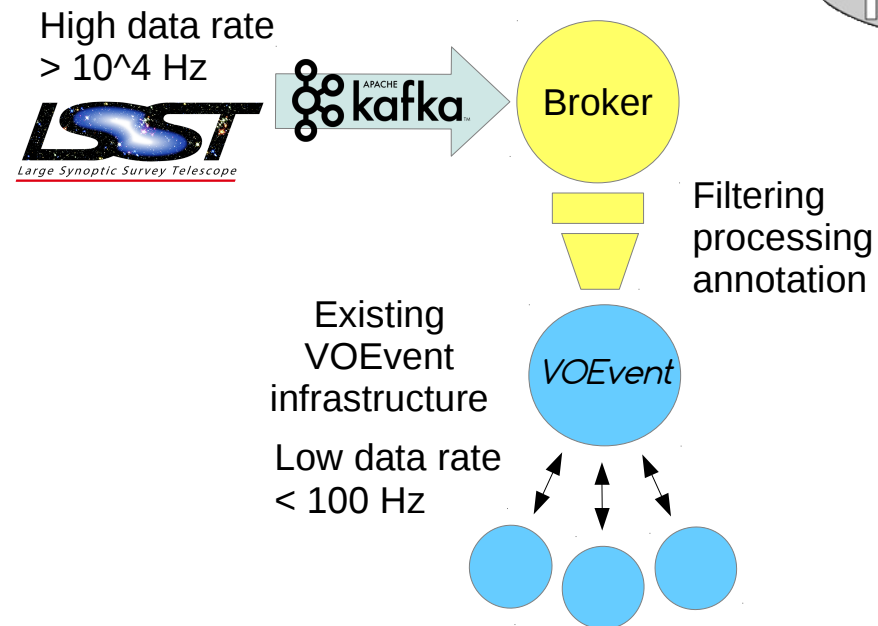April 2018

Next generation

Major version number 3.x

- Large changes to the schema.
- New data formats, JSON, Avro etc.
- Next generation software, Kafka etc.

Apache Kafka

- Designed for use inside a data centre
- Limited examples externally
- Are we trying to use JDBC in public ?

20180324-01-kafka-notes

High data rate
> 10^4 Hz

Broker

Filtering
processing
annotation

Existing
VOEvent
infrastructure

VOEvent

Low data rate
< 100 Hz

Images inline … or not ?

- Recent tech note from LSST re-visits the issues

DMTN-028: Benchmarking a distribution system for LSST alerts

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