Alert Redistribution System for Astronomy

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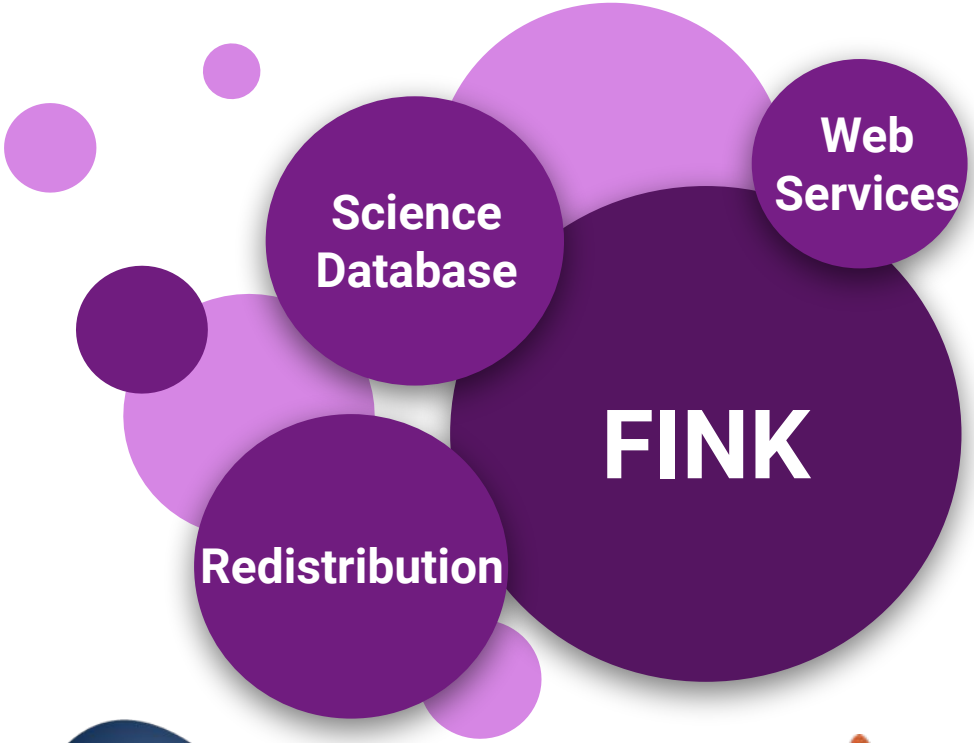
GSoC 2019 - CERN-HSF Org.

What is Fink?



The Large Synoptic Survey Telescope (LSST, 2022-2032) will send 20,000 alerts from the sky per minute.

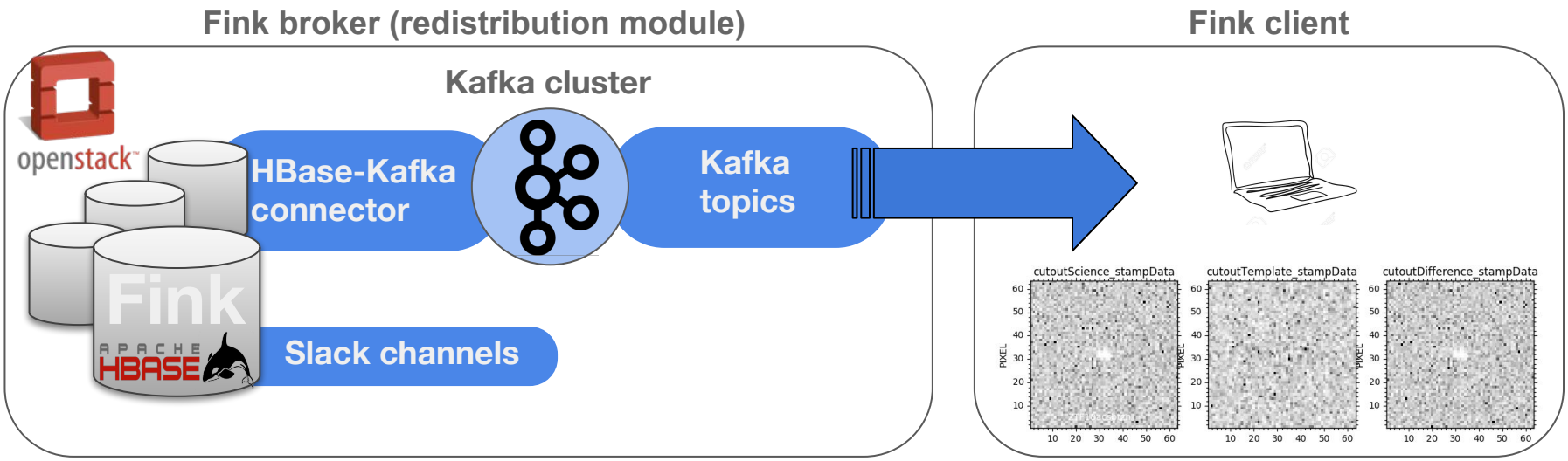
Fink is a broker (alert processor) based on Apache Spark and Apache Kafka. Main modules:

- Connect [to stream of alerts]
- Process [alerts]
- Redistribute [to the world]

GSoC 2019

GSoC 2019: Redistribution system

1) Design and implement the redistribution module in Fink
   a) Stream and filter from Fink HBase DB using Spark & stream out alerts using Apache Kafka.
   b) Redirect alerts of interest to Slack channels for quick inspection.
2) Implement a client for astrophysicists to manipulate output streams
   a) Connect to Fink streams and easily manipulate alerts using a simple Python client.



Project report

https://gist.github.com/cAbhi15/70619824a8a24dc70cf061a766788934