Platform-Agnostic Execution Framework
Towards RDF Stream Processing

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Overview of CQELS Framework

RDF streams
SPARQL-Result streams

Decoder

Dynamic Executor

Dictionary

Window Buffer Manager
Cache Manager

Encoder

Input Manager
Cache Fetcher

RDF streams
RDF stores
SPARQL endpoints
CQELS Engines

CQELS Framework

- use Apache Jena
- high performance data structures
- incremental evaluation algorithms
- adapt RDF On The Go
- light-weight data structures
- use Storm, HBase
- distributed share-nothing architecture
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Add new features:

- Complex Event Processing
- Rule-based, temporal, spatial, RDFS reasoning
- Build smaller CQELS on tiny micro controllers, sensor boards
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