Platform-Agnostic Execution Framework Towards RDF Stream Processing

Danh Le-Phuoc Minh Dao-Tran Chan Le Van Anh Le Tuan
Manh Nguyen Duc Tuan Tran Nhat Manfred Hauswirth

RDF Stream Processing Workshop

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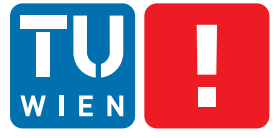

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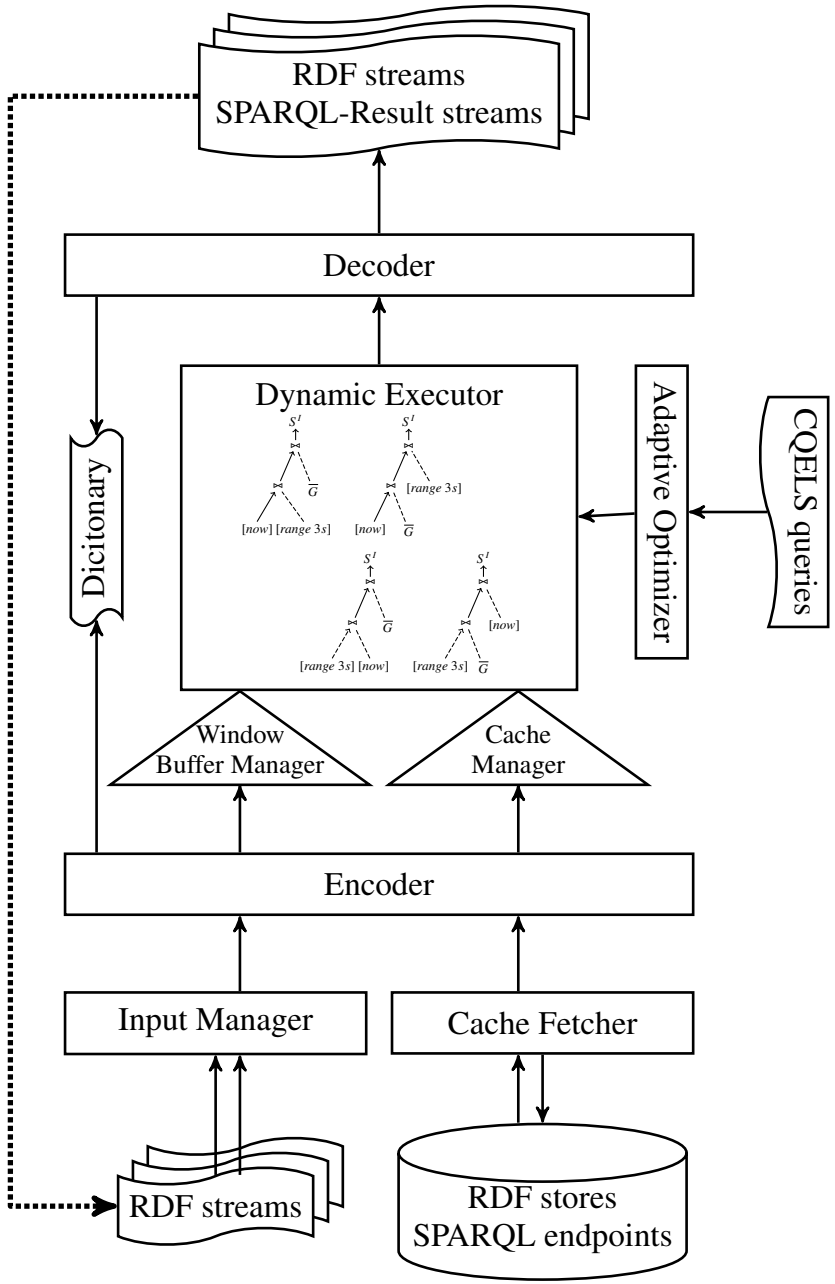
Overview of CQELS Framework



CQELS Engines

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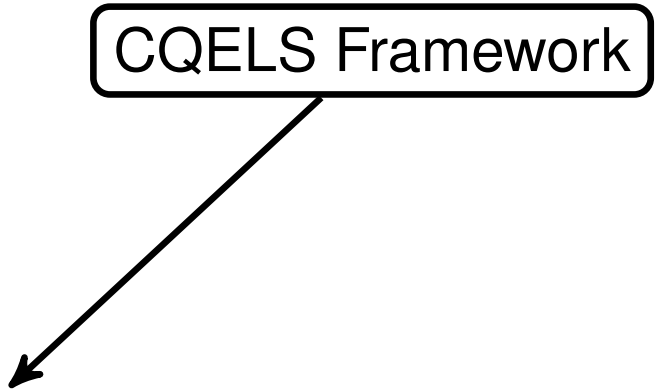
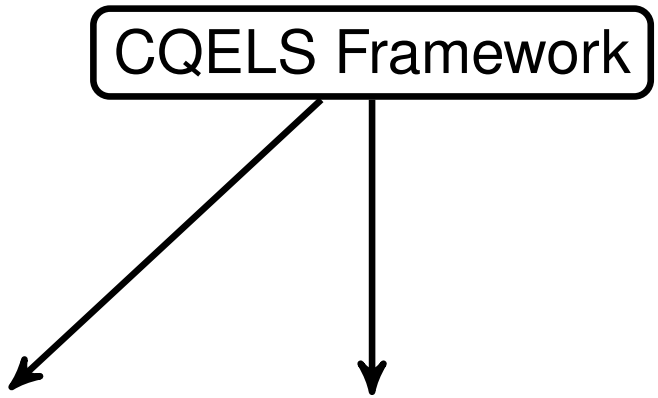


use Apache Jena
high performnace data structures

incremental evaluation

algorithms

CQELS Engines



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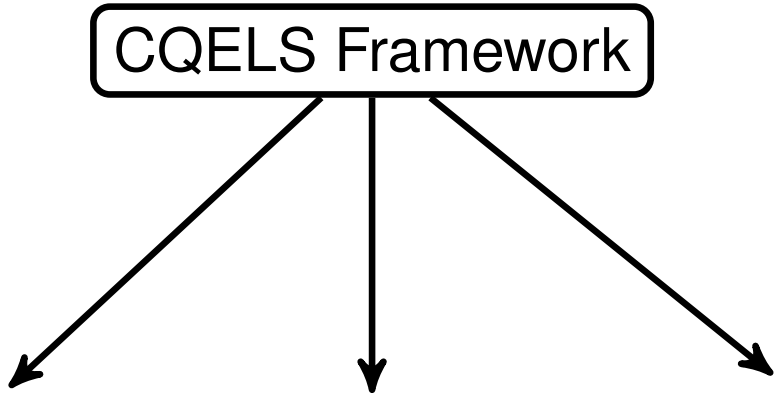
incremental evaluation algorithms

adapt RDF On The Go
light-weight data structures

CQELS Engines



use Apache Jena
high performnace 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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  - Rule-based, temporal, spatial, RDFS reasoning

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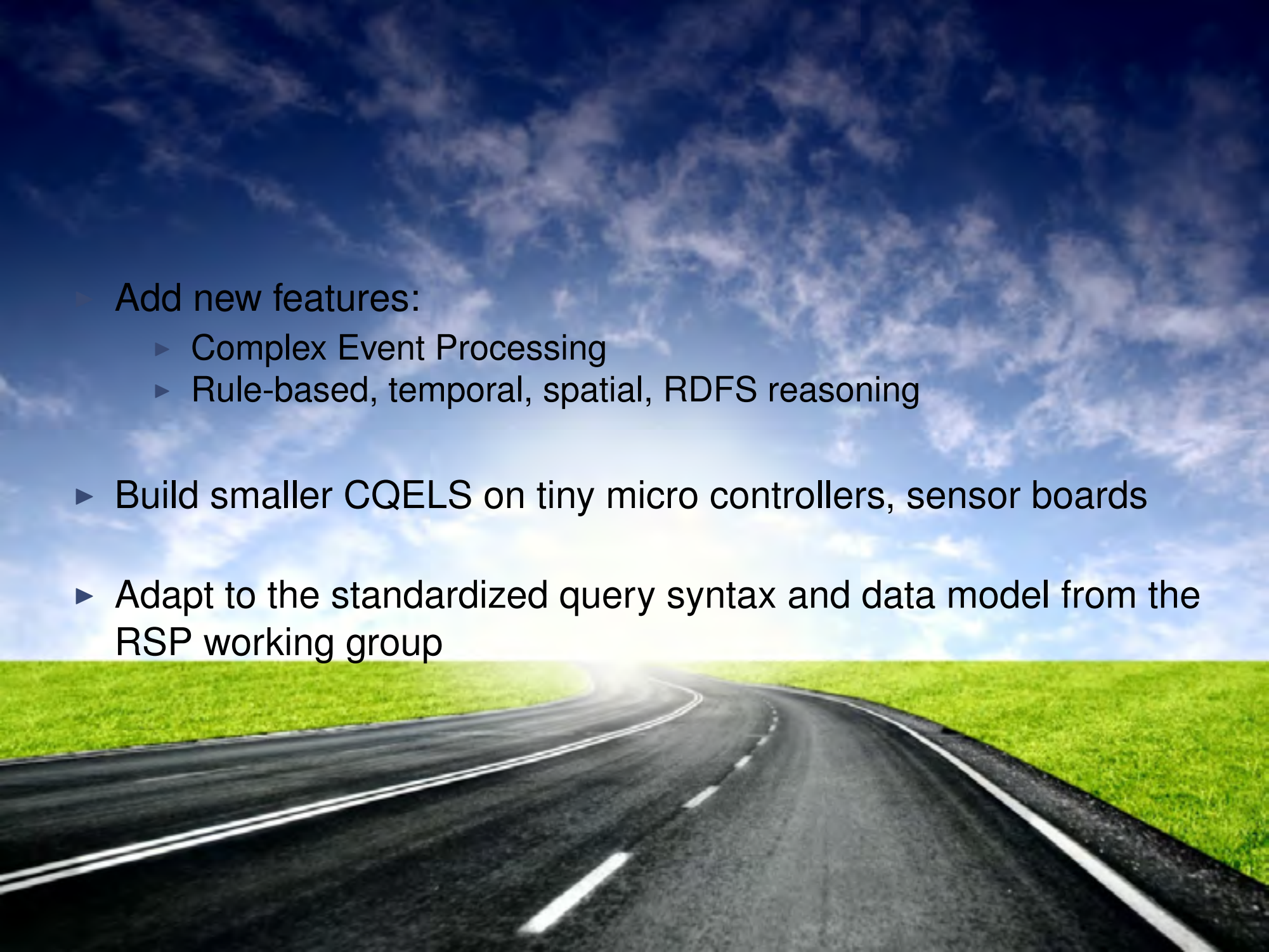

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  - Complex Event Processing
  - Rule-based, temporal, spatial, RDFS reasoning
- Build smaller CQELS on tiny micro controllers, sensor boards
- Adapt to the standardized query syntax and data model from the RSP working group