

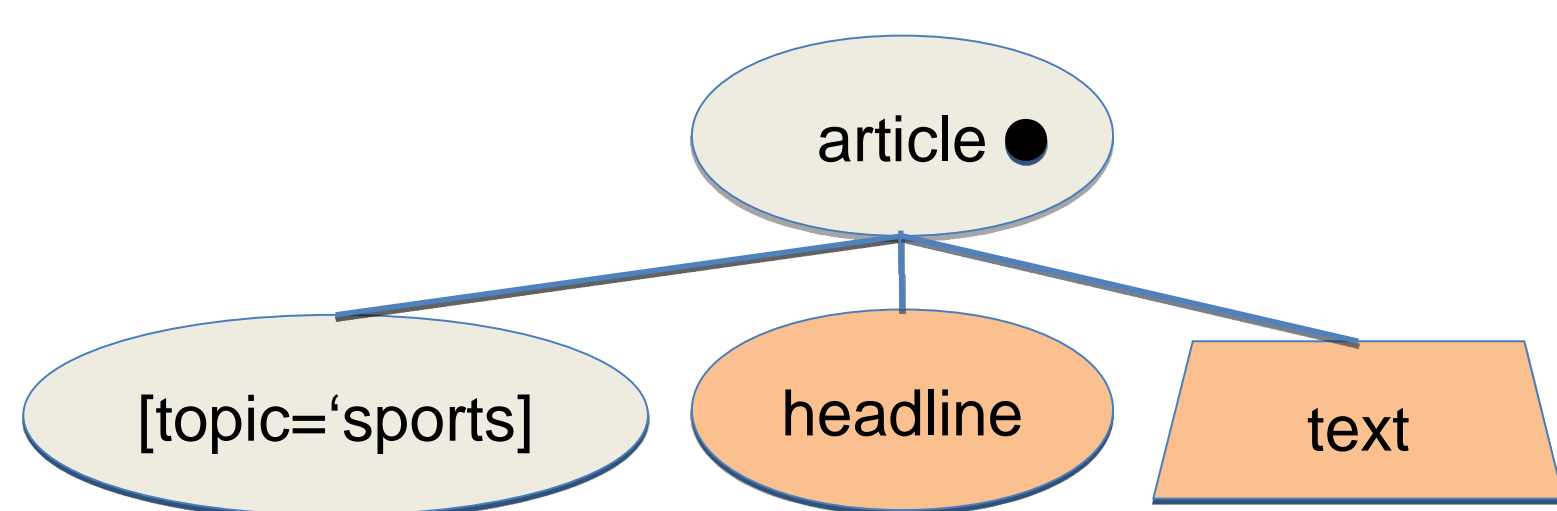
LiquidXML: Adaptive XML Content Redistribution

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The LiquidXML Platform

- P2P Platform for XML data management
- **Structured** network of peers (DHT)
- **Views & queries** are **Tree Patterns**



Peers can:

- **Publish** XML documents
- **Materialize** views
- **Pose** and **answer** Tree Pattern queries

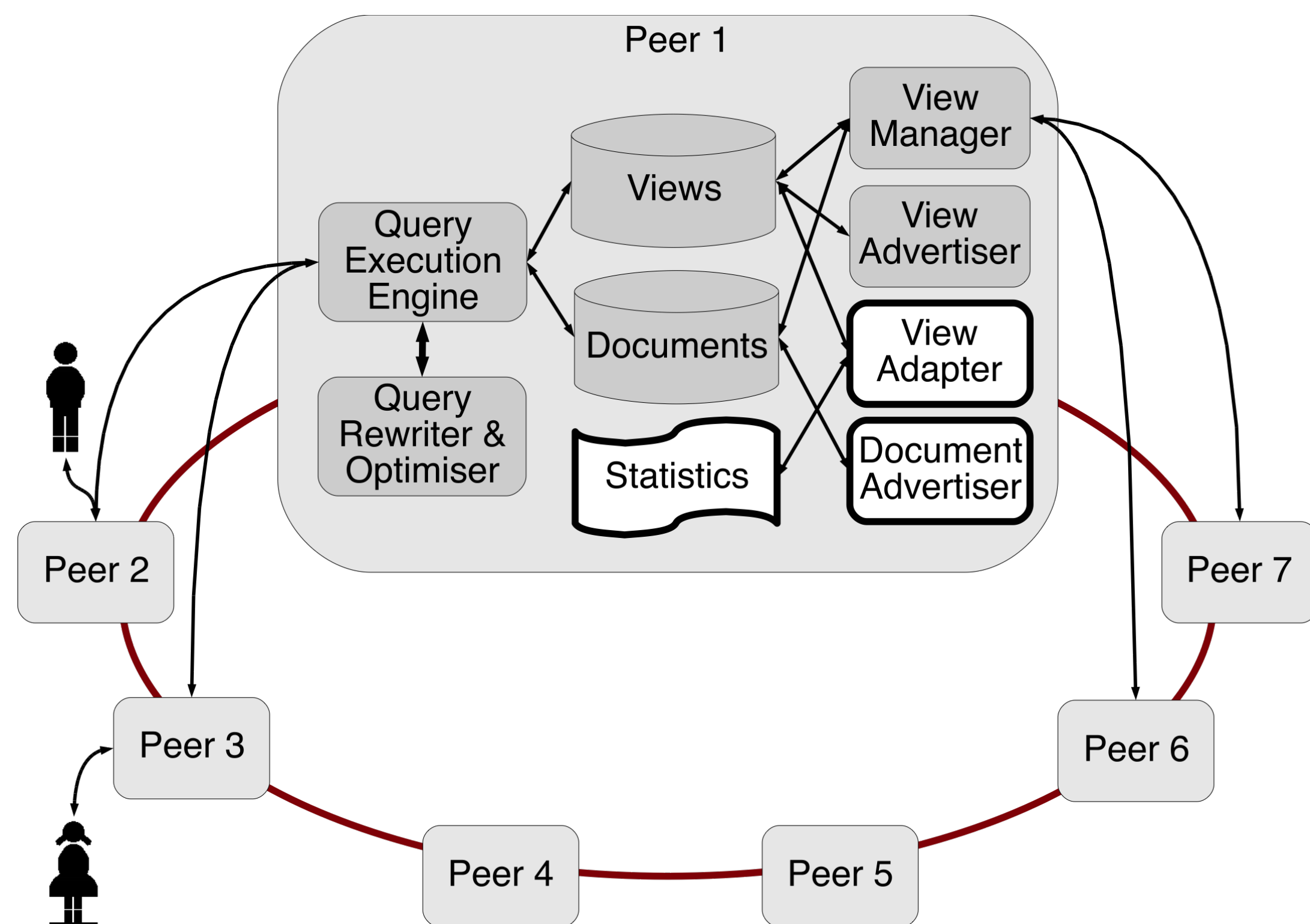


Figure 1: LiquidXML architecture

Adapting to the Query Workload

Peers

- Have limited view storage budget
- Keep query statistics

Adaptation algorithm

- **Analyze** query workload
- Find **candidate views**
- **Evaluate** candidates' **cost/benefit trade-off**
- **Materialize** the best set of views

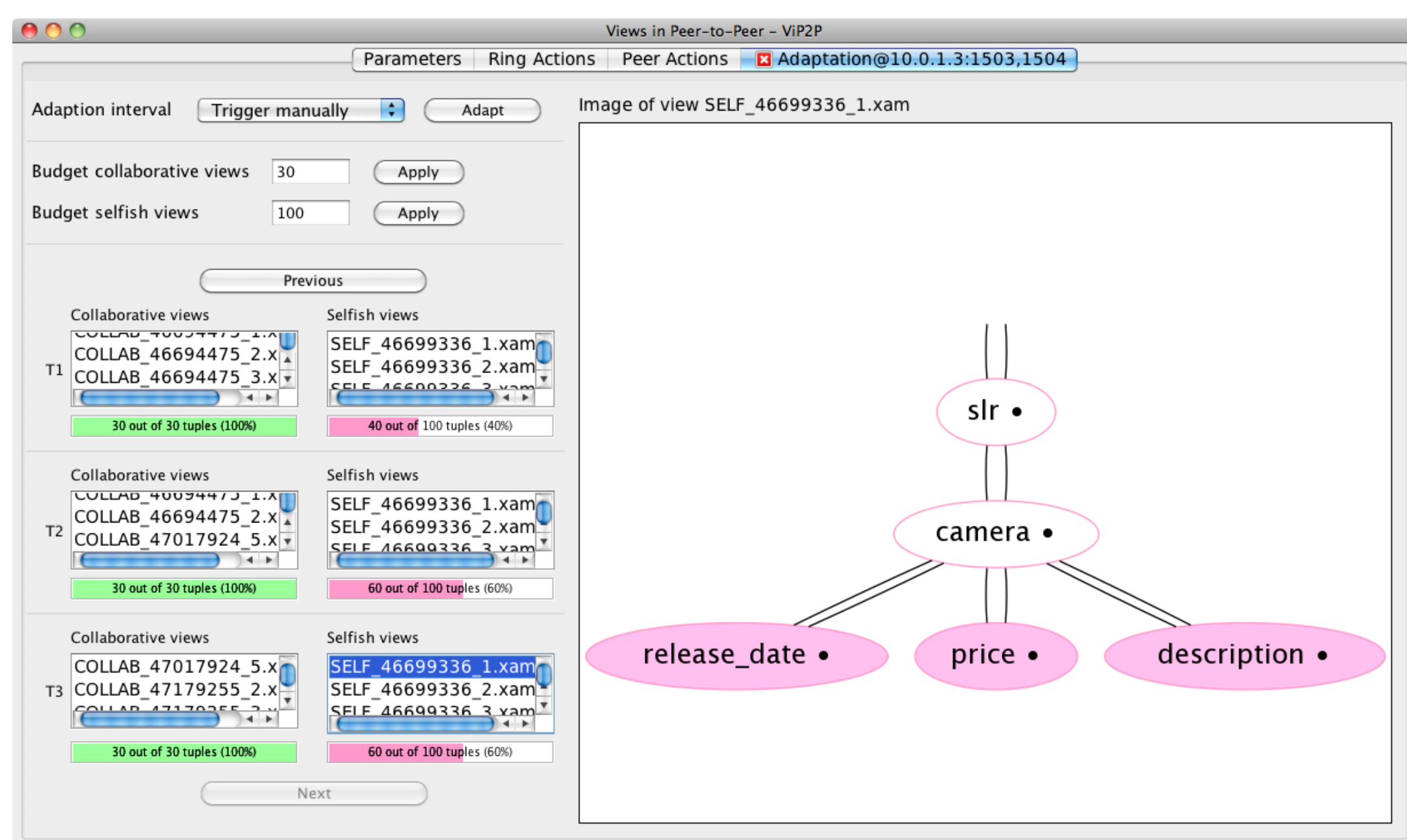


Figure 2: Adaptation monitoring window

*LiquidXML is based on the ViP2P platform (<http://vip2p.saclay.inria.fr>).
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