

Position Talk:
In-network Data Aggregation
and Data Lineage Management

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First Stage: Data Aggregation

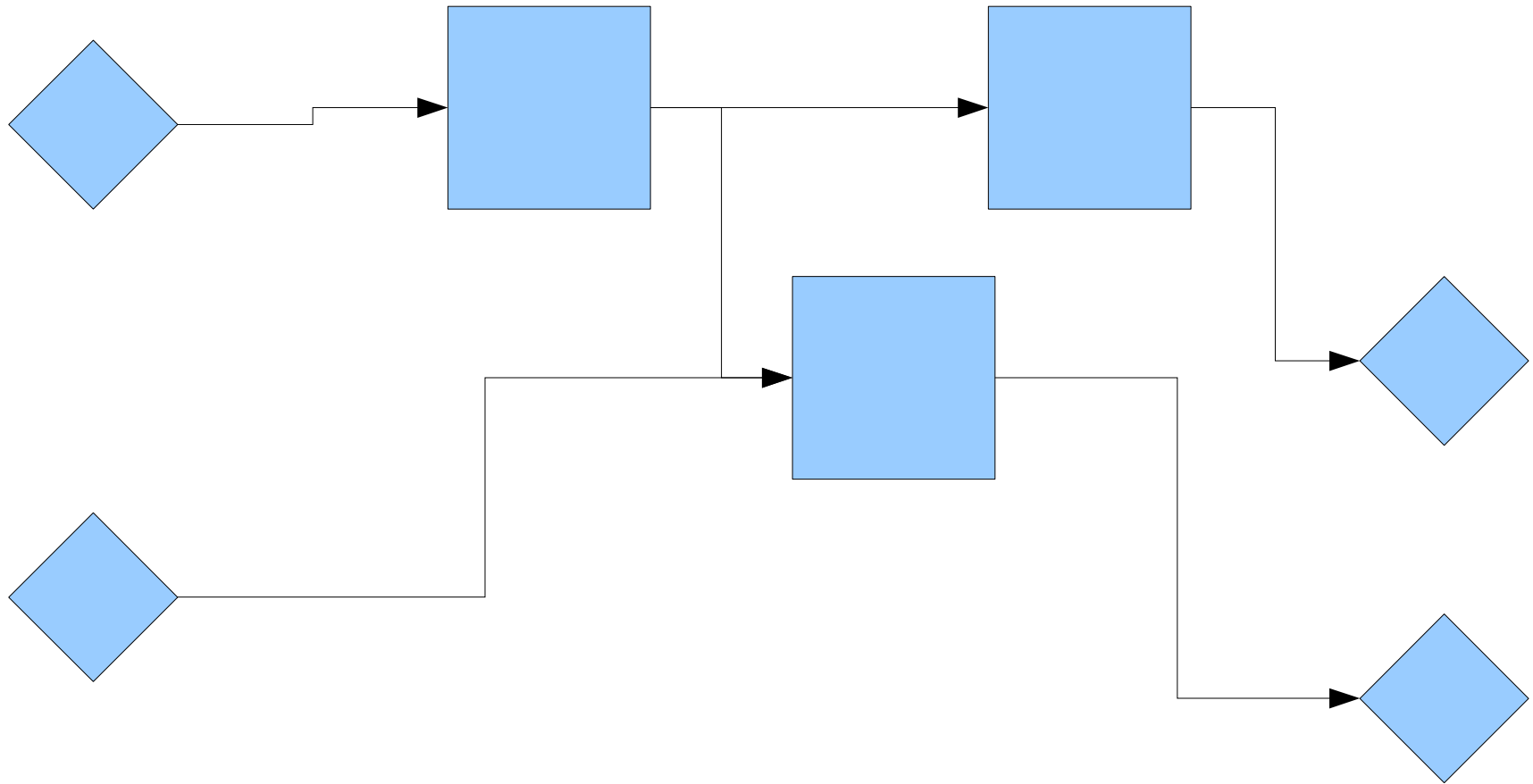
My Approach

- Box-and-Arrow
- Infrastructure,
not ad-hoc
- Application:
weather sensor
network data
aggregation
- Problem: originality

Related Works

- Ad-hoc
 - TinyDB
- Infrastructure
 - needs survey
- Continuous
 - STREAM, Borealis
- Abstraction
 - GHC?

Flow-oriented Abstraction (box-and-arrows approach)



Second Stage: Data Lineage Management

My Approach

- Every Data has ID
- Relation b/w ID
 - in DHT-like repos.
 - can be up to 10^{13}
- Trace-back
- Trace-forward

Related Works

- Needs Survey (SigMOD?)
 - In-DB Data Aggr.
 - Ad-hoc, Infrastructure, etc.

Past Work: Product Traceability

