Mnemosyne

An Immutable Distributed Logging Framework over NDN Siqi Liu, Philipp Moll, Lixia Zhang (UCLA)

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Requirements for Logging for Distributed System

Objective: to log all events from application for monitoring.

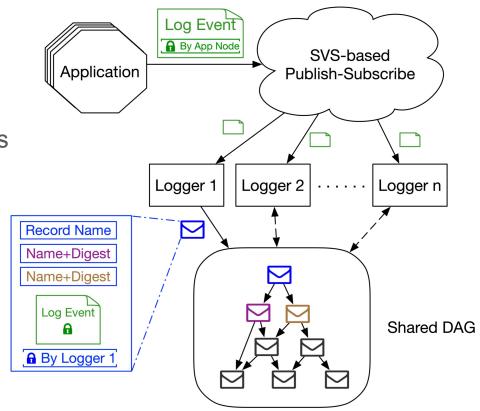
Requirements for distributed logging:

- **Partition Tolerance**: The logger should continue to function in best effort even if there is a network partition.
- **Authenticity**: Only authorized application entities can insert logs.
- **Immutability**: The logged events cannot be modified or removed by anyone.

Mnemosyne

Mnemosyne is designed for above requirements:

- Partition Tolerance: equal loggers and replicated logs
- Authenticity: by identities and signatures
- **Immutability**: similar DAG-based ledger



Thank you

Details and Q&A in Breakout room