Live input streams

Strymon

Queries

Applications

replica

Storage

DBs

Compute

server

VM

Networking

switch

network service

montoring logs protocols configurations logs lnput ingestion

live traffic

Interfaces to internal state for user operators or other systems

State management & Fault tollerance

Stream state

Dataflow operator state

Internal often-used representations

sessions

topology

Catalogue

Streams entering the system
Queries sumitted
Running dataflow computations

Dataflow computatins:

- Sessions reconstruction
- Routing logic
- Advances analystics on application data streams

Design principles:

- publish- subscribe
- dataflow programming
- logical time management with epochs
- incremental processing

Dataflow computations

Interfaces to network controllers or cloud orchestrators

State queries

Utilization of core switches

Analytics

Top k
applications
with heaviest
communication

What-if tests

How migrating a budle of applications affects traffic?

Configurations

Route external traffic through firewall first.