

Event Streaming Open Network

internet-draft

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Problem Statement

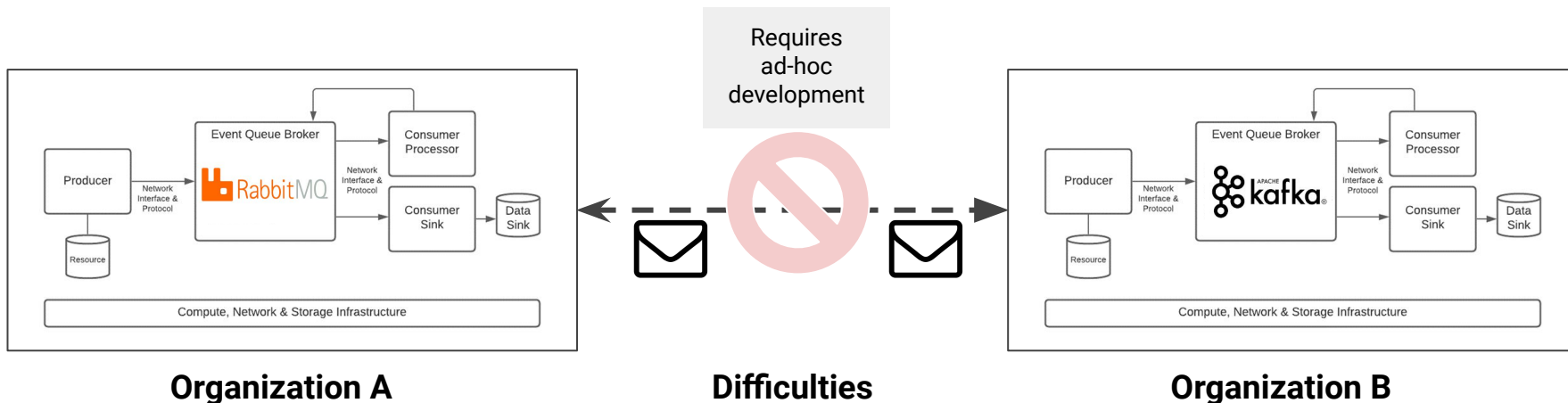
Asynchronous messaging over the Internet is difficult and costly

- The rise of microservices drive the need of asynchronous message communications, both inside organizations as well as between organizations (over the Internet).
- End users value immediate information since it provides an overall better experience. Companies strive to provide these kind of functionalities but it is not easy and most of the time too costly (require development)
- There is not an straightforward way to describe message flows. There is no URI scheme definition (i.e. similar to “mailto:”)
- DNS RR A & SRV are not enough to locate application level message flows, since IP and PORT are not enough either. There are many technologies which do not necessarily comply with IANA’s Port Number Registry.
- This results in private solutions/protocols, mostly for specific domains, such as:



Problem Statement

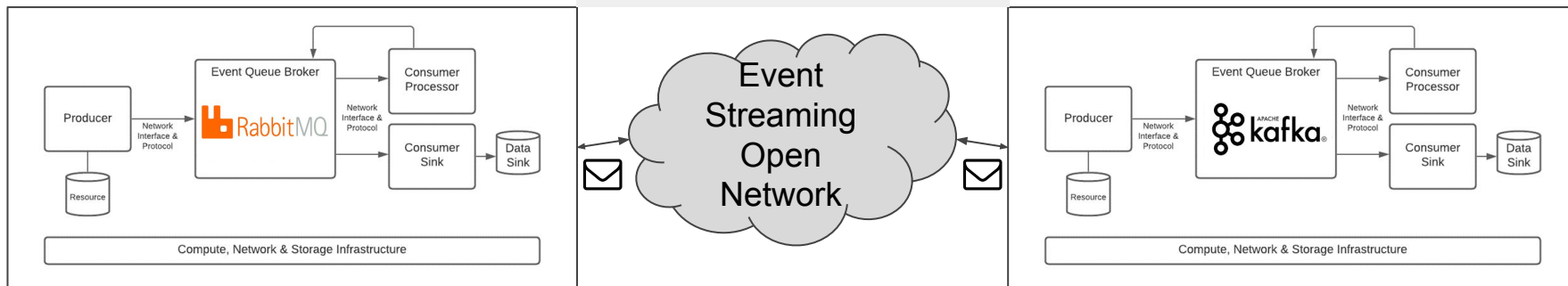
Message Streaming between organizations



- Agree on an interface for each message flow
- Develop software for each integration
- Maintain integrations
- Modifications need new developments

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URI scheme for message flows
flow://orders.mycompany.com



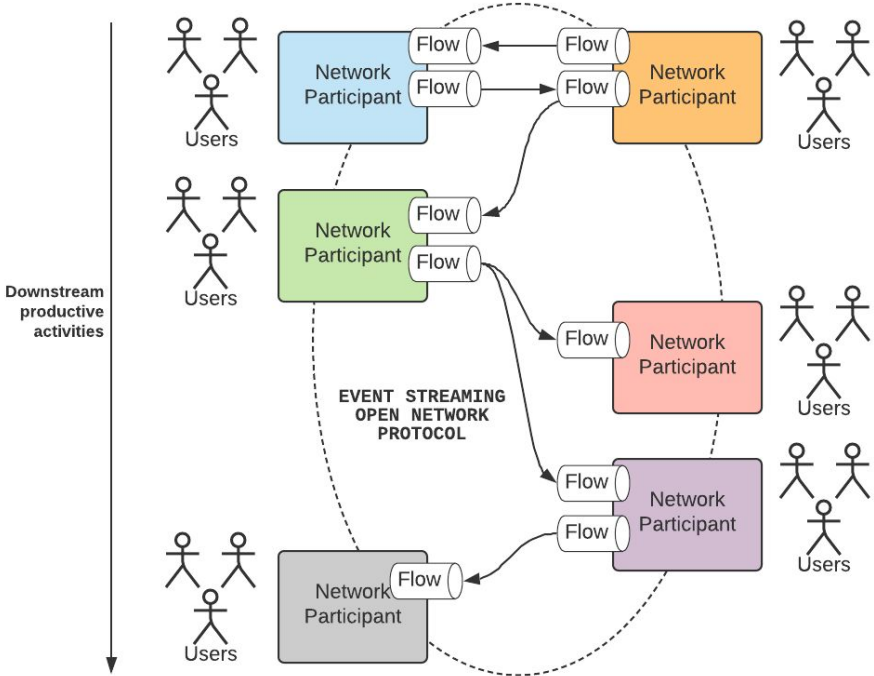
Organization A

Benefits

Organization B

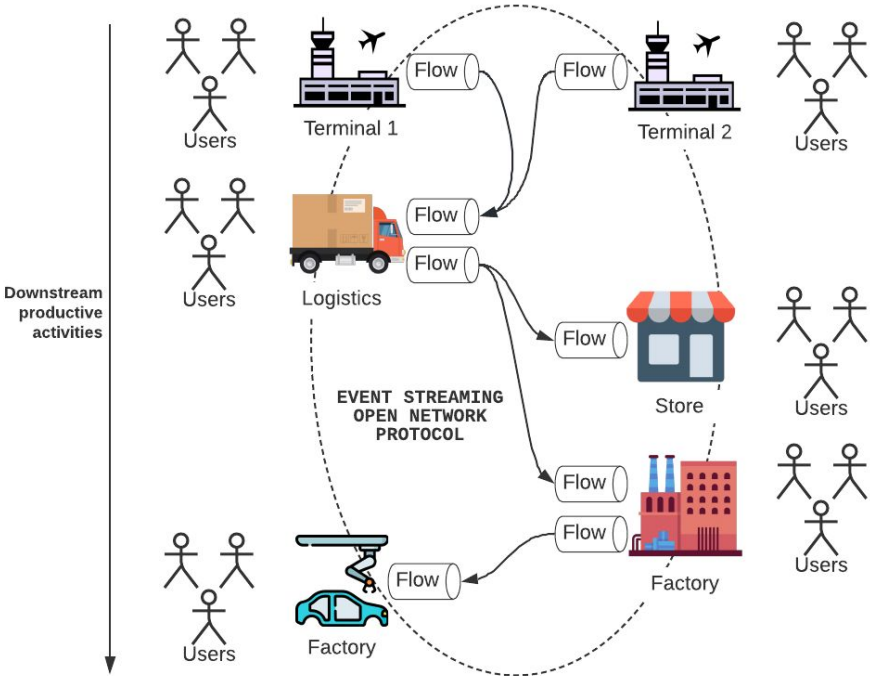
- Common framework for event flow integration.
- Minimizes offline developers communication
- Same strategy for multiple integrations
- Homogeneity facilitates maintainability
- Open access non-discrimination for all participants (just like the WWW and Email)

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High-level view of Event Streaming Open Network

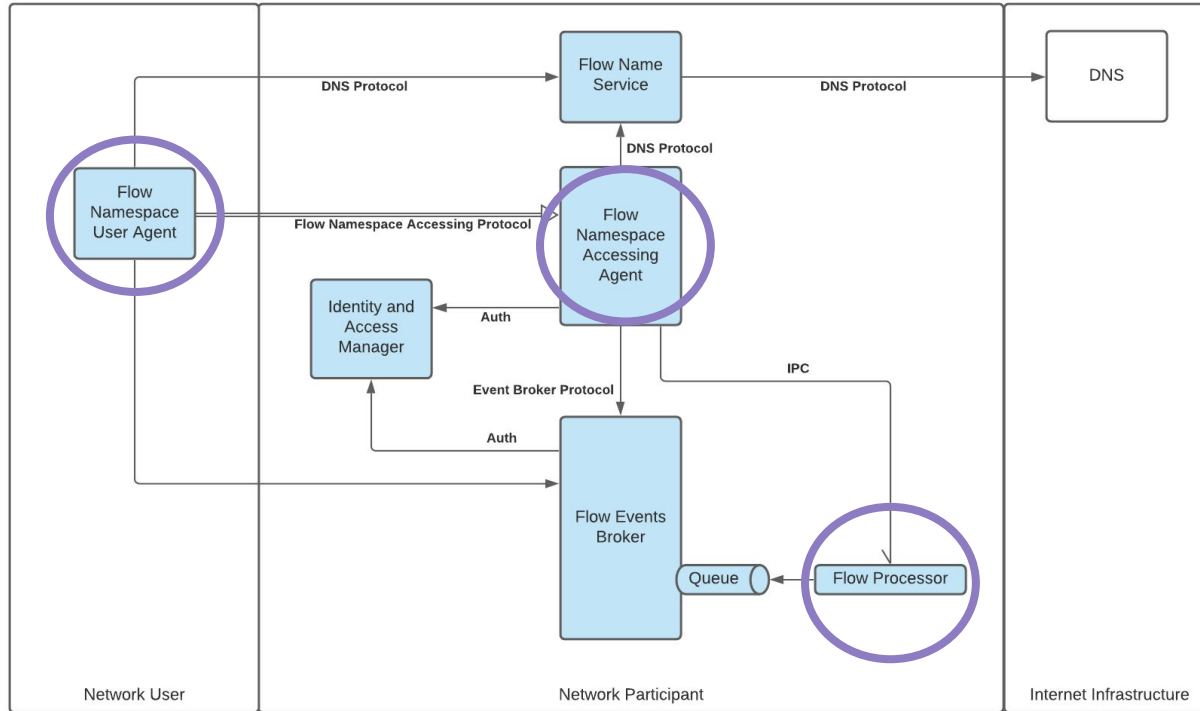
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High-level view of Event Streaming Open Network

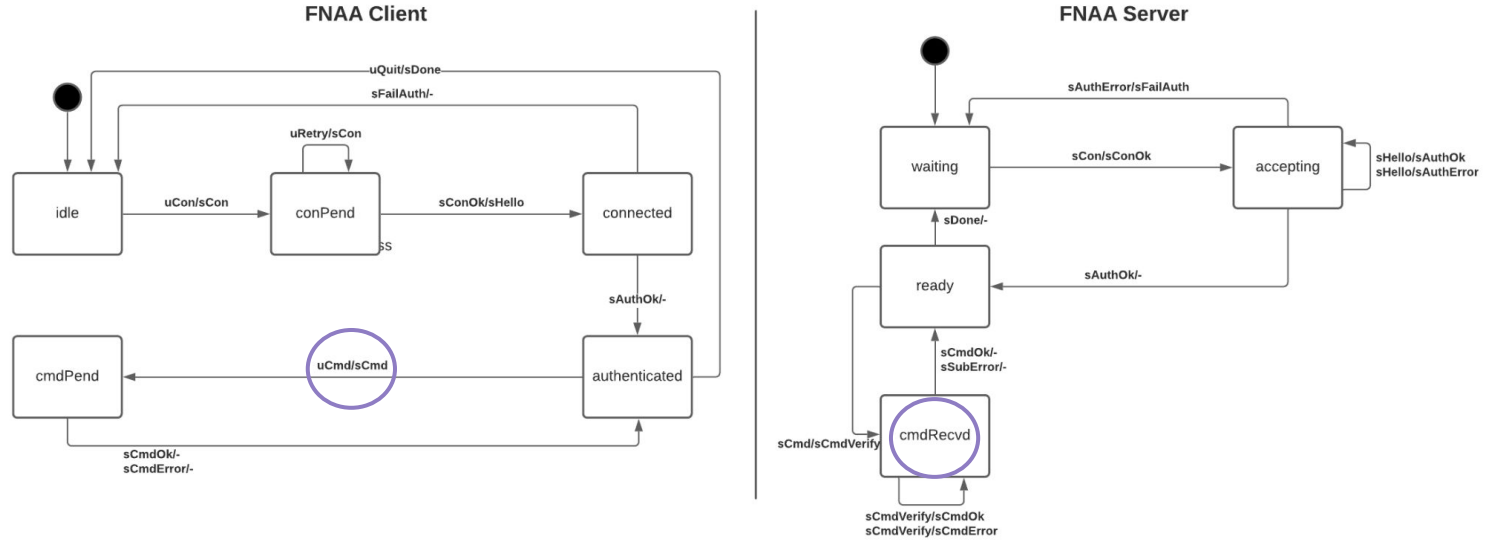
Network Participant Architecture

Central
Components



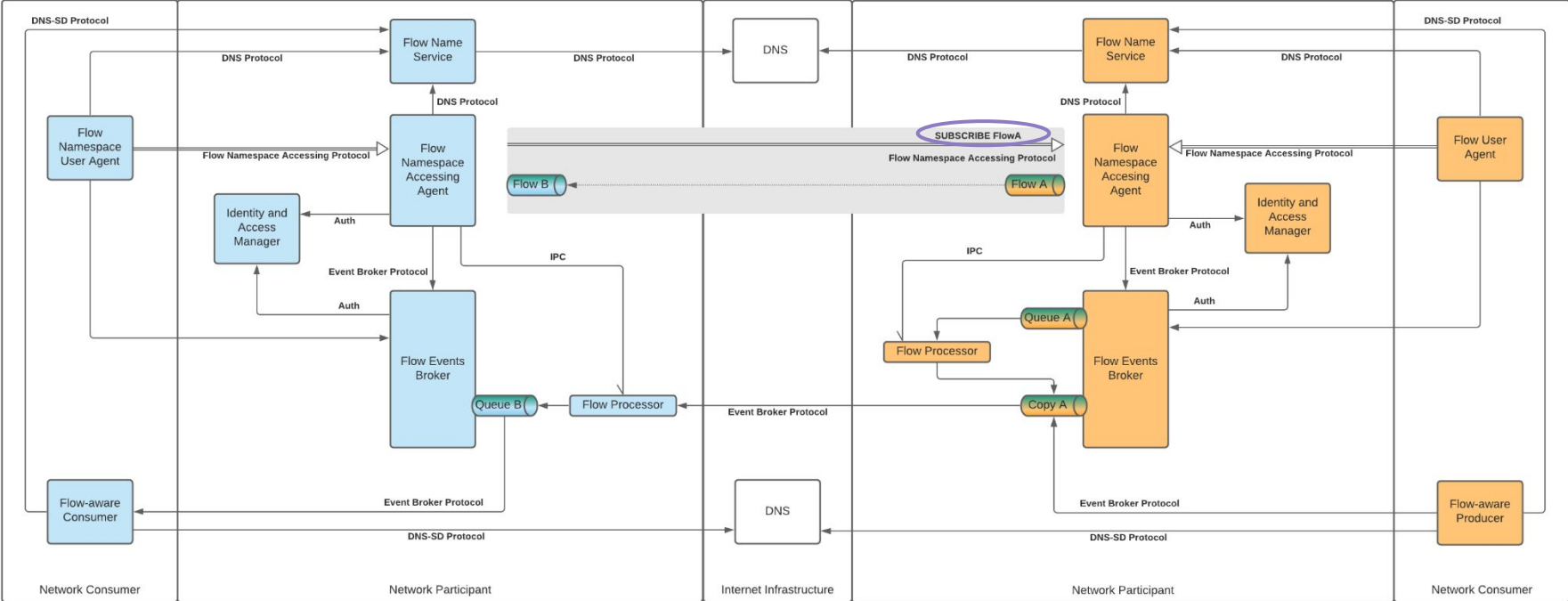
Network Participant Architecture

Flow Namespace Accessing Protocol



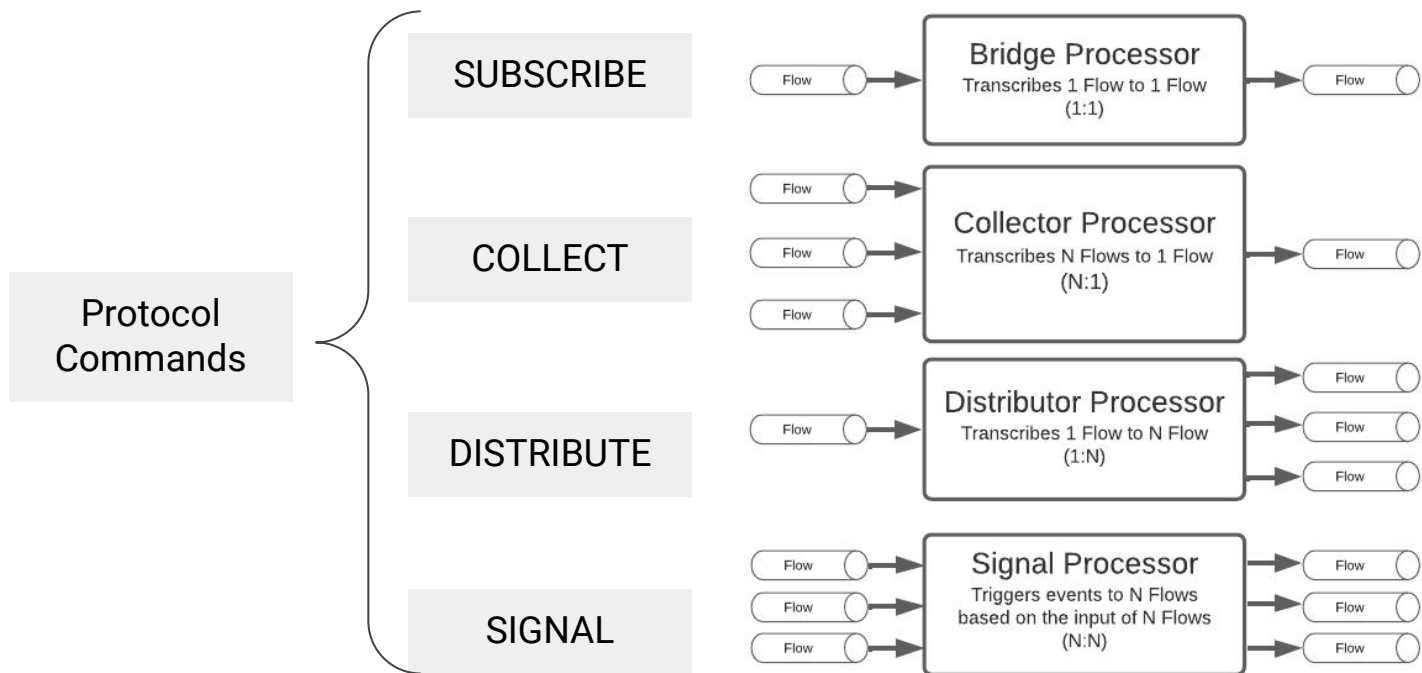
Wild diagram for the Flow Namespace Accessing Protocol

Flow Integration Example



Example of integrating a Flow using the defined architecture

Flow Processor Types



Different types of Flow Processors to cover a broad range of use cases

IETF113 Side Meeting

Find it interesting? Join us at the side meeting

Wednesday 23rd, 16:00

Grand Klimt Hall 3

Everyone is welcome!

Thank you