

Per Resource Events

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SYNTROPIZE

MOTIVATION

PROPOSAL

FEATURES

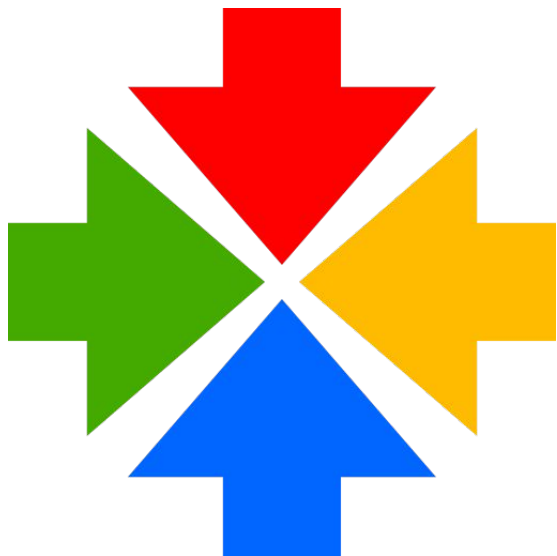
APPEAL

SYNTROPIZE

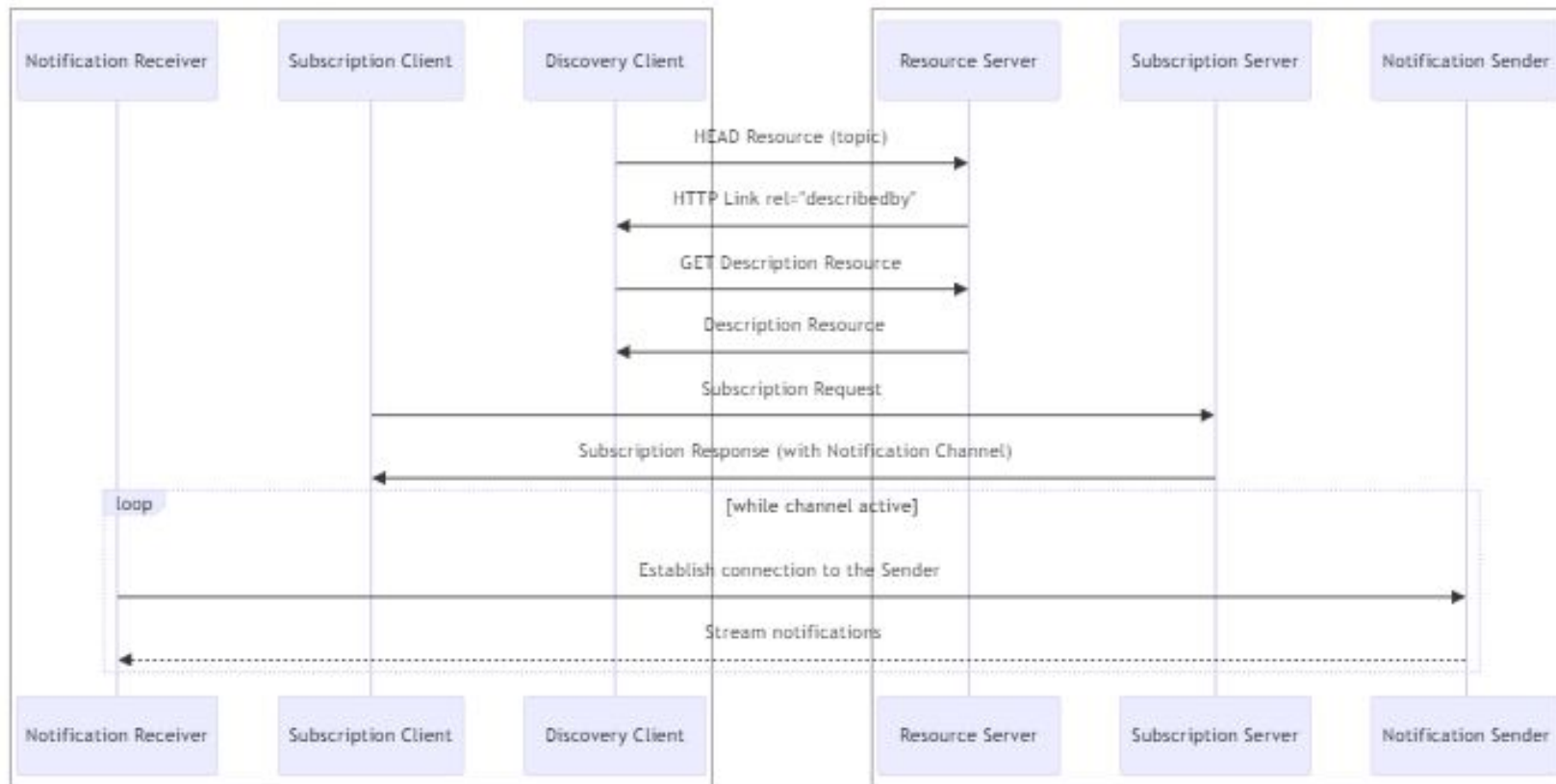
Re-imagine Computing!

TELL ME MORE

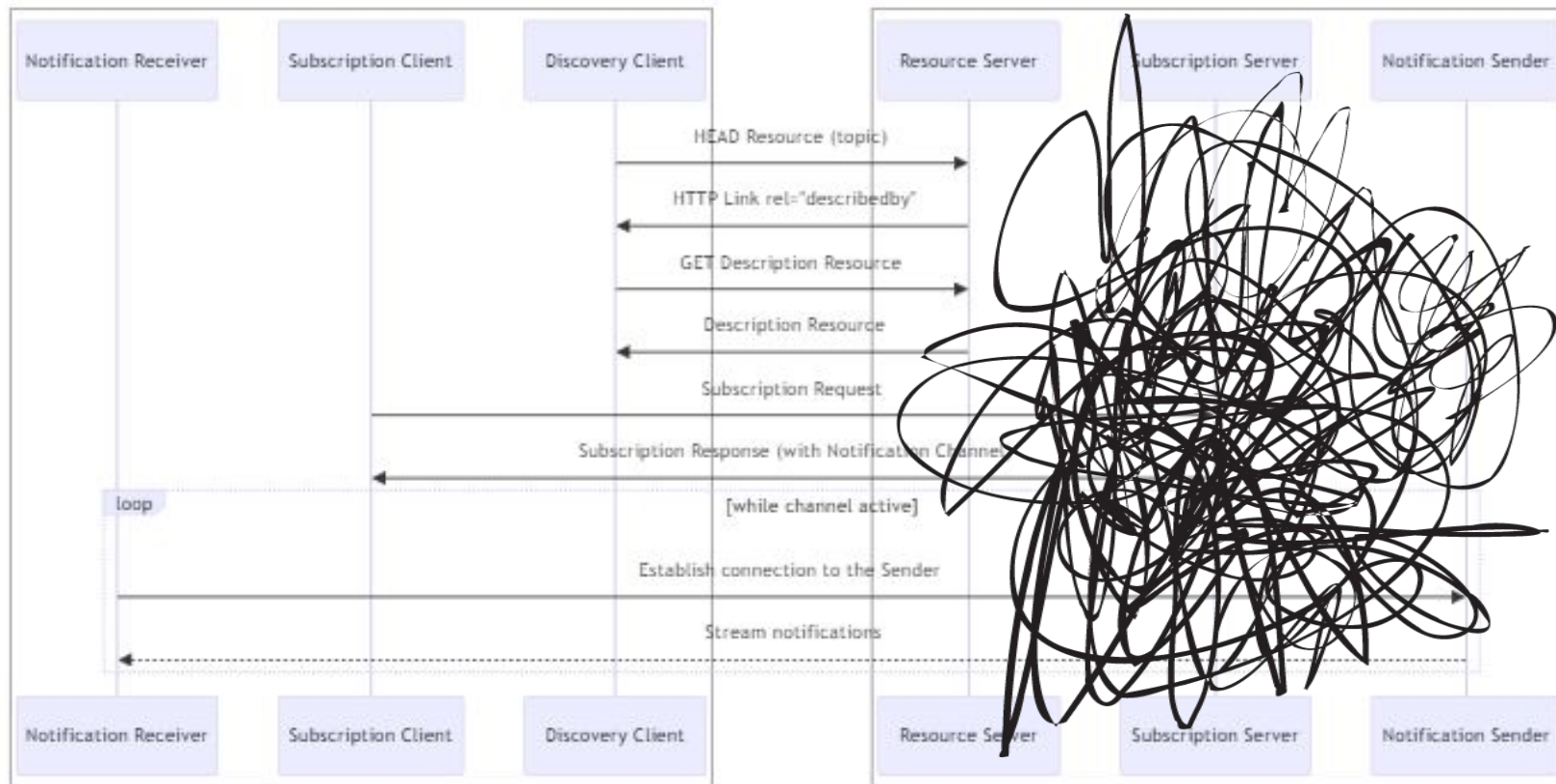
DOWNLOAD



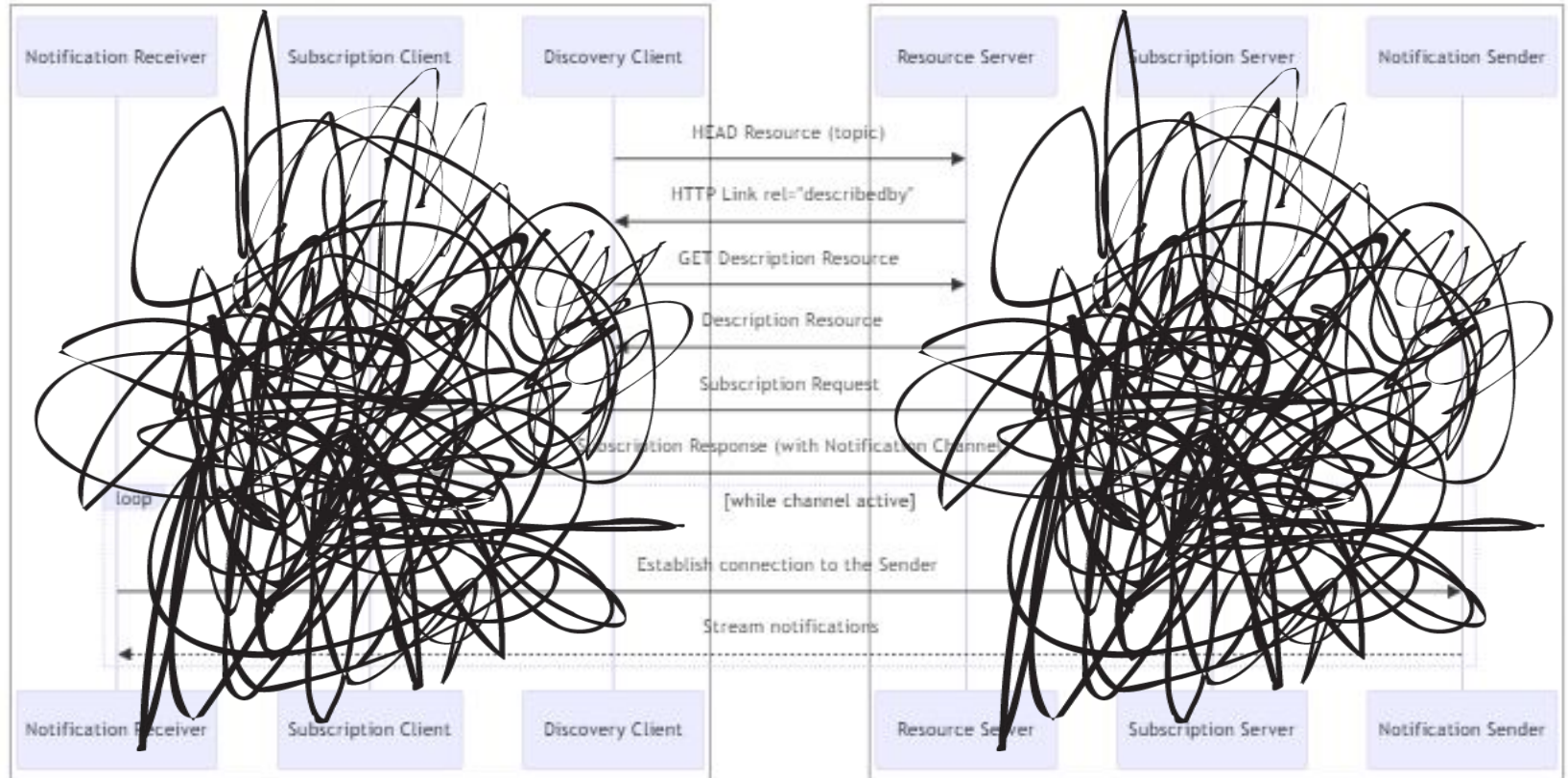
Solid Notifications Protocol



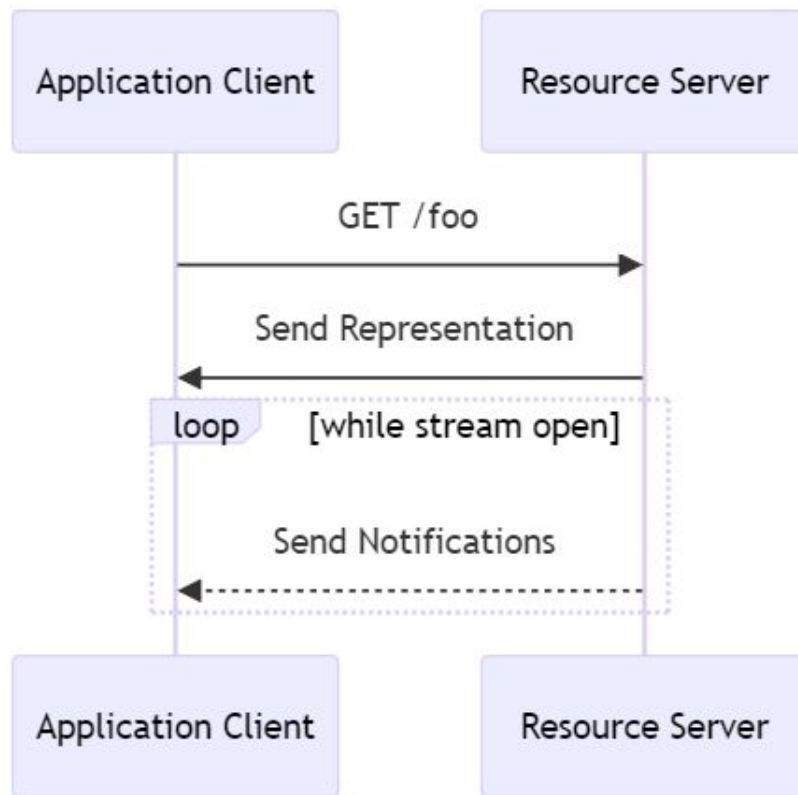
Solid Notifications Protocol



Solid Notifications Protocol



Per Resource Events



Ordinary Request

GET /foo HTTP/1.1

Host: example.org

Accept: text/plain

Notifications Request

GET /foo HTTP/1.1

Host: example.org

Accept: text/plain

Accept-Events: PREP

Ordinary Response

HTTP/1.1 200 OK

Last-Modified: Sat, 1 April 2023 10:11:12 GMT

Transfer-Encoding: chunked

ETag: 1234abcd

Content-Type: text/plain

Hello World!

Response/1

HTTP/1.1 200 OK

Last-Modified: Sat, 1 April 2023 10:11:12 GMT

Transfer-Encoding: chunked

ETag: 1234abcd

~~Content-Type: text/plain~~

Vary: Accept-Events

Accept-Events: PREP; accept=message/rfc822

Events: protocol=PREP, status=200, vary=accept-encoding

Content-Type: multipart/mixed; boundary=MAIN-SEPARATOR

Content-Type: text/plain

Hello World!

--MAIN SEPARATOR

Content-Type: multipart/digest; boundary=MESSAGE-SEPARATOR

Response/2

Method: PUT

Date: Sat, 1 April 2023 10:11:12 GMT

Event-ID: 1234

E-tag: abc123

Hello IETF!

--MESSAGE-SEPARATOR

Method: DELETE

Date: Sat, 1 April 2023 10:11:12 GMT

Event-ID: 1234

--MESSAGE-SEPARATOR--

--MAIN-SEPARATOR--

Request

Content Negotiation with PREP

GET /foo HTTP/1.1

Host: example.org

Accept: text/plain

Accept-Events: PREP; accept=application/ld+json

Request

PREP Notifications Only

GET /foo HTTP/1.1

Host: example.org

Accept: text/plain

Accept-Events: PREP

Last-Event-ID: *

Why Not: Eventsource/SSE

Why Not: Eventsource/SSE

You can have it in any colour
as long as it is black.

- Henry Ford



Why Not: Eventsource/SSE

You can have it in any colour
Content-type as long as it is
~~black~~ text/eventstream.

- WHATWG

```
: test stream
```

```
data: first event  
id: 1
```

```
data:second event  
id
```

```
data:  third event
```

Why not EventsourceSSE



Tieske commented on Oct 27, 2022

Author



It seems highly unlikely we'd further extend the EventSource feature.

what is the reason for this? care to elaborate @annevk ?



annevk commented on Oct 27, 2022

Member



It's not widely used and can easily be written in "userland" on top of fetch. We didn't have good response stream support back in the day, but we do now. There's also alternatives such as WebSockets that have somewhat broader adoption and allow for bidirectional communication, and there's even more alternatives on the horizon (WebTransport comes to mind).



Why not WebSockets/Webhooks etc.

- Need for Discovery
- Bespoke Semantics
- Funnelling/Filtering of Data

Implementation (Interest)

- Companion specification for Solid/Linked Data
- Green Light from the Community Solid Server
 - Implementation will take some time. Maybe before IETF 119.
- Public Interest from another Solid Server vendor
- Private Interest from multiple Solid application developers

How HTTPbis can help

- Identify a better framing for notifications
 - Upgrading from multipart to frames with h2/h3
- Identify better semantics for the default case
 - (even though it is only specified for minimum interoperability)
- Alternative ideas on headers?
- Other Suggestions for improvement?