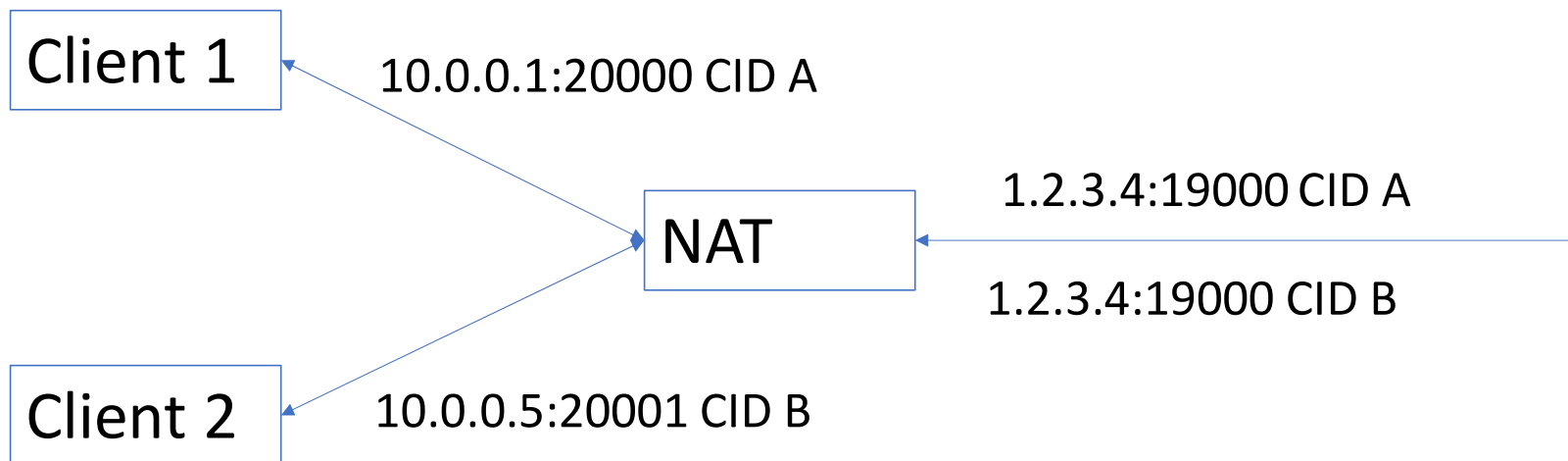# NAT Support for QUIC

draft-duke-quic-natsupp-03

# TL;DR

- NATs should treat QUIC like any other UDP packet; if they try to use the Connection ID they'll break something
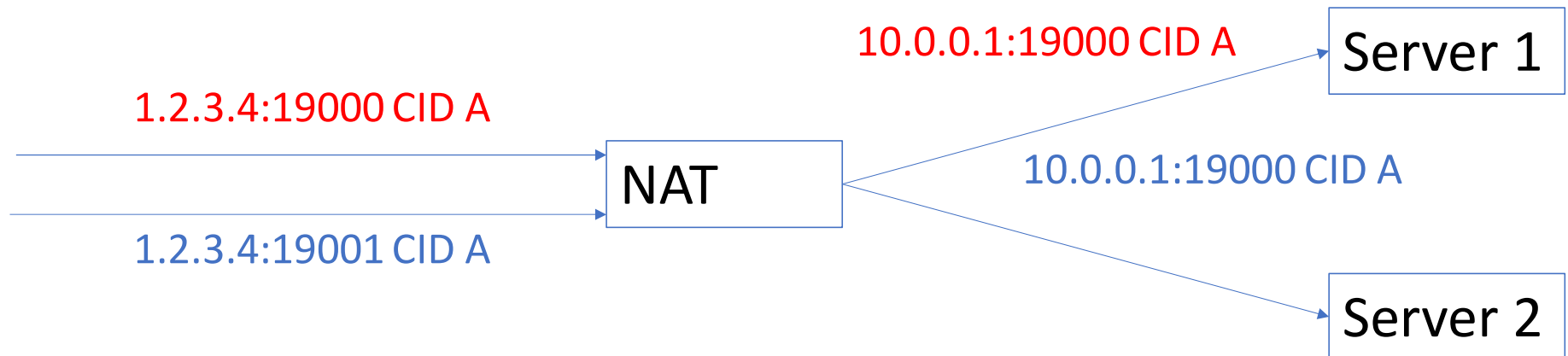
# Client NAT

Client 1

10.0.0.1:20000 CID A

1.2.3.4:19000 CID A

NAT

1.2.3.4:19000 CID B

Client 2    10.0.0.5:20001 CID B

Works great until the CIDs change – then it black holes

# Server NAT

Routing infrastructure here
is 5-tuple based

1.2.3.4:19000 CID A

10.0.0.1:19000 CID A

Server 1

NAT

10.0.0.1:19000 CID A

1.2.3.4:19001 CID A

Server 2

Bypasses validation procedures

Doesn't work when CID changes
(migration)

# PROXY Protocol?

- https://developers.cloudflare.com/spectrum/getting-started/proxy-protocol/#:~:text=When%20using%20UDP%20(currently%20an,Proxy%20Protocol%20to%20'on

# Document Status

- Currently an individual draft in QUICWG
- Any outcome is fine
    - Incorporate text into QUIC operations draft
    - Reference an expired individual draft in QUIC ops draft
    - Standalone Informational RFC, here or in tsvwg
    - Drop it altogether