



# QUIC-Aware Proxying

*draft-ietf-masque-quic-proxy-03*

Tommy Pauly, Eric Rosenberg, David Schinazi

MASQUE

IETF 120, July 2024, Vancouver

# Status

Version -02 (design team output)

Packet transforms (scramble) for forwarded mode

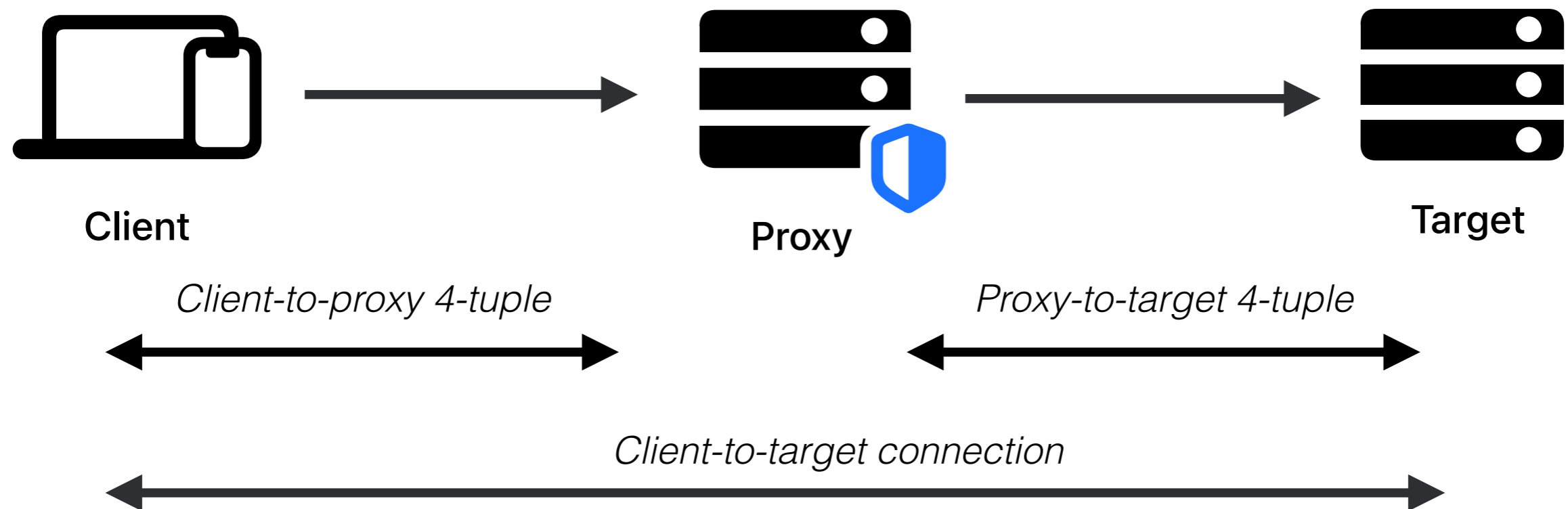
Security considerations

Version -03

Loop prevention via new ACK\_VCID capsule

Major editorial pass

# Protocol terminology



# Preferred address migration

Issue #113 and Issue #86

How should target preferred addresses be handled?

The client learns the preferred address, not the proxy; but the proxy has the connection to the target

Applies to tunneled and forwarded modes equally

Possible options

1. Client opens a new CONNECT-UDP request with the target address
2. Client sends a new capsule to the proxy to inform it of the preferred target address
3. Something else?

# Limiting CID registrations

Issue #109

A client can send many bogus REGISTER\_TARGET\_CID/  
REGISTER\_CLIENT\_CID capsules.

A proxy has to maintain the forwarding / port  
demultiplexing rules for each of the registered CIDs it  
acknowledges.

Should proxies signal some limit? Or should they merely  
send CLOSE\_CLIENT\_CID/CLOSE\_TARGET\_CID when  
the limit is exceeded?

# Client VCID length

Issue #112

For loop prevention, the proxy now selects the client virtual CID

*"To reduce the likelihood of connection ID conflicts, the proxy SHOULD choose a Virtual Client Connection ID that is at least as long as the Client Connection"*

Should this be a MUST?

Helps avoid CID conflicts, etc.

# Next steps

Please review latest updates and provide feedback in issues!