

# Mapping the MoQ Object Model to QUIC

We spent many hours at the last interim discussing the issue

Rough consensus that MoQ publishers should express preference for how relays forward objects

Lack consensus on how to publishers signal the intent to relays

Talking more at this point will probably not produce consensus

# Option 1: Implicit Signal

Publisher signals how to forward by how it places Objects onto streams

Relays serve objects how they were received

Caches remember how objects were received so they can be replayed later

Could allow for arbitrary object to stream mappings

Things might get strange if there are reconnects

No wire format overhead

# Option 1a: Implicit Signal - Group=Stream

Requires all objects on a stream to be in the same group

Simplifies some things (group end signal)

May be too restrictive (multiple priorities within a group?)

May have too much overhead for large numbers of groups (audio?)

## Option 2: Explicit Signal

MoQ Messages carry explicit information about how to forward

Eg: SUBSCRIBE\_OK or OBJECT header

Bug or Feature: forwarding differently

Fan-out from one stream to many might be neat, but fan-in sounds bad

Mappings must be defined in spec

New mappings are subject to relay upgrade cycle

# How to move forward

## **Observation:**

Implicit signal can be observed if the draft defines explicit signal

BUT

Explicit signal cannot be indicated if the draft defines implicit signal

## **Proposal:**

Adopt Explicit Signal to gather implementation experience and data, reconvene at IETF 119 or 120 to make a final decision

For relay implementers that are unwilling to implement cases where explicit != implicit, they can make this an error

# Next Steps

Join the Queue for Discussion

Please focus on how to proceed

Chairs may cutoff technical arguments for any of the individual options

Show of Hands: Should we proceed with adding an explicit object forwarding signal to moq-transport, experiment, gather data, and revisit this decision in 2024?

If we have rough consensus: chairs and editor will designate a small group to write PR adding the signal.