MOQT Object Acks

draft-vvv-moqt-object-acks-00

Background

- MOQT provides no way for the sender to know if data was actually received
  - ACKs are not uniformly exposed by QUIC stacks
  - Using QUIC ACKs for application level feedback is a layering violation
- Scope: hop-by-hop
  - No provisions for aggregation
  - Publisher assumed to know what it published
- Premise: make it work similar to QUIC ACKs

`draft-vvv-moqt-object-acks-00` documents what we have implemented while working on single-subscriber rate adaptation

Wire Format

```
OBJECT_ACK Message {
  Type (vi64) = 0x3184,
  Length (16),
  Group ID (vi64),
  Object ID (vi64),
  Delta from Deadline (signed vi64)
}
```

How to use that signal?

Two signals:

- Delta from Deadline: decrease means worsening connection state
- Missing Objects: infer from reordering (similar to QUIC/TCP)
  - Alternatively, use timers

Discussion