PROGRESSING MOQ

Virtual Interim October 2022

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TOPICS - GROKKED FROM THE CHARTER

- Common publish protocol between ingest and distribution

- Naming or Addressing Things

- Packaging Media

- Client Media Request Protocol

- End to End Security

PUBLISHING MEDIA - 1

- Common push protocol for ingest and distribution

- Support way to specify media types (ads, subtitles, main media), qualities (bitrate, resolution, layers), codec

  - Need a way to identify the variations uniquely

- Media data/Application data granularity

  - Individual frames vs group of frames vs something different ?

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PUBLISHING MEDIA - 2

- Metadata available to relays/proxies to make caching decisions
  - Identifier, priority, dependencies, cacheability
- Allow configurable latency - live streaming , interactive, media conferencing
- Support media transport mapping over QUIC Streams/QUIC Datagram (needs further evaluation)
- Support Webtransport/H3/Raw QUIC as media transport
- Application data can be end-to-end encrypted (publisher to consumer)

NAMING OR IDENTIFICATION

- **Scoped to an Origin/Domain, Application specific.**

- **Allows CDN/Relay to known the billing relationship associated with the data being stored/distributed.**

- **Identifies elemental streams**

  - **Maps to an variants/renditions encoded**

- **Allows subscribing or requesting for the data matching the name by the consumers**

PACKAGING MEDIA

- Use existing container format like CMAF

- Support Raw container format

- Do we need other formats ?

MEDIA CONSUMPTION

- Consumers are authorized at the Origin.

- Allows consumers to ask for the media data by name.

- Allows consumers to ask the right quality/variant.

RELAYS/CACHES

- Allow caching and distribution of media data as applicable

- Store/distribute the data via trust relayed by Origin

- Supports media over QUIC Streams/QUIC Datagrams (needs

- Support pipelining to keep latencies at the minimum

- Support selective drop/cache decisions based on metadata

- Support push of media data to consumers

END TO END SECURITY

- Consider possible options as

  - DRM

  - MLS

  - Something different ???