Subscribe Issues
Are there restrictions on track names and namespaces?

# 284

Option 1: No restrictions
Subscribe: Namespace=cat_videos, Name=<image of my cats>

Option 2: UTF-8
Subscribe: Namespace=cat_videos, Name=😺😻

Option 3: URI Friendly: RFC 3986, sections 2 and 3
Subscribe: Namespace=cat_videos, Name=Rocket%20%26%20Gracie
Multiple subscriptions #269

Can an endpoint issue more than one subscribe to the same track?

Yes, there are plenty of use cases (eg: relay aggregation)
Disambiguating control messages for the same track #282

C->S: SUBSCRIBE /foo, group sequence=1
C->S: SUBSCRIBE /foo, group sequence=100
S->C: SUBSCRIBE_OK /foo
S->C: SUBSCRIBE_ERROR /foo

Proposal: Subscribe IDs (ie: PR #305)

    Adds a unique, sender chosen identifier for each subscribe which is referenced in any control message affecting that subscribe
Can subscriptions overlap with other subscriptions to the same track?

1. Publisher MUST / SHOULD / MAY deduplicate OBJECTs that match multiple subscriptions on the same session?
2. Provide information in the SUBSCRIBE_OK indicating what will be returned, allowing an opportunity to avoid duplicates.
3. ?
Multiple subscriptions and updating a subscription #269

Can an endpoint update open subscription?

For the same track name and subscribe ID, change the other params

A. Start Group/Object
B. End Group/Object – this is racy with SUBSCRIBE_FIN
C. Auth / other Track Request Parameters?

We have a single control stream so:

Is it meaningfully different than UNSUBSCRIBE + SUBSCRIBE?

Threat models?
Multiple subscriptions could cause resource exhaustion

#272

Proposal: Limit the number of subscribes in a manner similar to QUIC stream limit
Add a MAX_SUBSCRIBE_ID message to increase it

Other Questions:

1. Do we need a limit on Announce also?
   a. Probably, let’s get some experience with subscribes first.

2. What if an endpoint subscribes to more than they can handle?
   a. Please talk amongst yourselves
Who picks the “Track ID” - Off Ramp Edition #145

Latest Proposal:

1. Rename **Track ID** to **Track Name Alias**
   Reinforces it is a compression scheme
2. Subscriber picks the Track Name Alias in Subscribe
3. Publisher can Subscribe Error and suggest an alternate ID
4. Subscriber SHOULD resubscribe in that case

This compromise is better than where we are now (solves object buffering)

*We’re about to add subscribe ID, should we get some experience first?*