

Stats Definitions

Washington DC, May 2014

Assumptions

- Everyone knows what the stats API is
 - Otherwise, please read webrtc document
- Everyone knows stats principles
 - Otherwise, please read TPAC presentation
- This discussion is about what stats to define

Process, last 6 months

- Working in Wiki
- API definitions unchanged
 - Some WebIDL feedback, especially from Jan-Ivar
- Input from experience with goog* stats
 - These have been added when needed
 - Mostly issue resolution and performance tracking
- Object model is fairly complete
 - Reflects model of underlying protocols

News and Changes

<https://www.w3.org/2011/04/webRTC/wiki/Stats>

- **MediaStreamTrack objects**
 - Contain all media pertinent information
 - Codecs broken out as separate objects
- **ICE Candidate Pair / Candidate objects**
 - Contain all network related information
- **Data Channel objects**
 - Contain counters and configuration info

Thorny Stuff

- Audio Volume
 - Seems simple
 - Highly application dependent what you want
 - Even units are not well defined. dB(overload) seems most common.
- Inter-object “pointers”
 - Using the “Id” suffix on field names
 - Could do WebIDL typedef for DOMString
 - Could use “Stat” or “StatId” suffix instead

Thorny stuff (2)

- **Conditionally present stats**
 - Ex: Video variables on `MediaStreamTrack`
 - Suggestion: Have discriminator (“video”) present
 - Duplicates some info - but makes working simpler.
- **Network performance stats**
 - Congestion control is not standard
 - Measurements are time-varying - sampling bad?
 - Controls (`targetBitrate`) are OK to expose as value

More work

- Transform Wiki page into ReSpec
- Publish “stats” as W3C document
 - Intending to keep as “draft” longer than base spec
- Proposal: Abandon idea of registry (for now)
 - Stats need to be seen in relationship to each other. Evaluating a single variable is hard.