Constraints

draft-burnett-rtcweb-constraints-registry-02

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IETF-85
First, some background on constraints
Constraints are

• A cross between preferences and settings
• Useful for selection/configuration when
  – Settings not appropriate, e.g.,
    • Privacy reasons
    • Authors "just want something good enough"
  – Preferences are insufficient because
    • Some criteria are crucial, or
    • Certain criteria are more important than others
Constraints are

• Used in WebRTC by
  – getUserMedia() for selection of MediaStreamTracks
  – RTCPeerConnection.addStream() for configuring streams about to be sent over a PeerConnection
  – Possibly a new runtime config API

• Defined in
  – Media Capture and Streams spec
  – WebRTC spec
Example

- `video:
  mandatory:
    minAspectRatio: 1.3333,
    maxAspectRatio: 1.3333,
  optional:
    [{minWidth: 1024},
     {maxHeight: 1440}],
  audio: true`
Constraints are

- Media type specific (possibly also non-media)
- Mandatory or prioritized optional

- (video) minWidth, maxWidth, minAspectRatio
- (PeerConnection) enumOfferToReceiveVideo
And now, the registry
Proposed registry:
"RTCWeb Media Constraints"

• Policy: Spec. req'd with expert review

• Each entry consists of
  – Name
    • Prefix of "min", "max", "enum"
    • Then camel case alphadigits
  – Media Type
    • One of "audio", "video", or "RTCPeerConnection"
  – Reference (or list of references)

• Draft defines min, max, enum
Known open issues

• May need to change/enlarge list of "media types"
• May decide to pull min/max/enum out of name
• May decide to remove "RTCWeb" from registry name
• May decide to remove "Media" from registry name
Now what?/Discussion

• How should this progress?
  – Individual draft
  – Working Group draft

• Any Other Comments?