

# Low-level control

Dan Burnett (presenting)

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# Original proposal

- [https://docs.google.com/document/pub?id=1MfrFHKx6O6yWtlv\\_jqwyH-RAbm8AgRtXQ7dJTZz5J2g](https://docs.google.com/document/pub?id=1MfrFHKx6O6yWtlv_jqwyH-RAbm8AgRtXQ7dJTZz5J2g)
- Limited discussion
- Recent IETF signaling call indicated very little support for this kind of API
- So . . .

# We should

- Add requirements from `draft-kaplan-rtcweb-api-reqs-00.txt`
- Flesh out APIs
  - Hints
  - Statistics
  - Capabilities

# Requirements from Hadriel's draft

- <http://tools.ietf.org/html/draft-kaplan-rtcweb-api-reqs-00>
  - Section 5
- Perhaps a new requirements document focused on low-level hints, statistics, and capabilities

# Hints API

- Last discussed:  
<http://lists.w3.org/Archives/Public/public-webrtc/2011Oct/0004.html>
- void addStream(MediaStream stream, MediaStreamHints hints)
- {audioType: "spoken | music"  
videoType: "movie | chat"  
onCongestion: "spatial | temporal"}

# Statistics API

- Last discussed: <http://lists.w3.org/Archives/Public/public-webrtc/2011Aug/0135.html>

- `MediaStream.getStats()->`

`{in:`

```
{codec: "SPEEX/16000",  
 bpsAve: "10000", (bps)  
 bpsMax: "20000", (bps)  
 processingDelay: "20", (ms)  
 framerate: "20", (fps)  
 resolution: "" (????)},
```

`out:`

```
{codec: "SPEEX/16000",  
 bpsAve: "10000", (bps)  
 bpsMax: "20000", (bps)  
 processingDelay: "20", (ms)  
 framerate: "20", (fps)  
 resolution: "" (????)}
```

# Statistics API (continued)

- Last discussed: <http://lists.w3.org/Archives/Public/public-webrtc/2011Aug/0135.html>

- `PeerConnection.getStats()->`

`{in:`

```
{bpsAve: "1000",  
 bpsMax: "2000",  
 byteCount: "122222",  
 packetCount: "1222",  
 rtt: "12", (ms)  
 packetLoss: "12"  
 jitter: "12"},
```

`out:`

```
{bpsAve: "1000",  
 bpsMax: "2000",  
 byteCount: "122222",  
 packetCount: "1222",  
 rtt: "12", (ms)  
 packetLoss: "12"  
 jitter: "12"}}
```

# Capabilities API

- ROAP spec proposed using <http://tools.ietf.org/html/rfc3264#section-9>
- This API should just return an SDP blob containing codec information and payload types
- getCapabilities() -> SDP blob

```
"m=audio 0 RTP/AVP 0 1 3  
a=rtpmap:0 PCMU/8000  
a=rtpmap:1 1016/8000  
a=rtpmap:3 GSM/8000  
m=video 0 RTP/AVP 31 34  
a=rtpmap:31 H261/90000  
a=rtpmap:34 H263/90000"
```