WebRTC NV

where do we stand?

Our Charter Agreement

As the name indicates, WebRTC 1.0: Real-time Communication Between Browsers is a first version of APIs for real-time communication, sometimes referred to as the PeerConnection API. The activities in the ORTC (Object Real-time Communications) Community Group indicate that there is interest in additional APIs to provide more direct control over WebRTC than what the PeerConnection API offers.

In recognition of this interest, the Working Group will, once WebRTC 1.0: Real-time Communication Between Browsers reaches Candidate Recommendation, start work on a new set of object-oriented APIs for real-time communication.

In developing these new APIs, the Working Group will adhere to the following principles:
- Direct control: The new APIs are intended to provide direct control over the details of real-time communication, where the application can directly specify how information should be transmitted, without any built-in negotiation semantics.
- Standalone operation: The new APIs will be complete enough to allow applications to write solely to the new APIs to complete common tasks.
- Backwards-compatibility: The new APIs will extend the WebRTC 1.0 APIs, rather than replace them. Applications that use the PeerConnection API will continue to function, unless there is a clear and compelling reason to deprecate specific 1.0 functionality.
- Feature independence: Features may be introduced in the new APIs that are not available when using the PeerConnection API.

The Working Group will take the work done by the ORTC Community Group as a source of input, and when contemplating similar APIs in the Working Group, make efforts to align with the ORTC CG on API methodologies and nomenclature. This may include scheduled design meetings with relevant WG and CG stakeholders to foster convergence of the APIs.

The Time is Not Now

- WebRTC 1.0 is not Candidate Recommendation
- We have to dot the i's and cross the t's
- That's what the rest of this meeting is about

So why talk now?

- Make a plan to make a plan

Exegesis of our basic principles

- ## On-the-wire 1.0/NV interoperability
  - Means SRTP, RTCP and SCTP/DTLS *must* be supported
- ## Direct control, Standalone Operation
  - SDP is not required
  - MUST expose everything that goes into SDP
- ## Backwards compatibility
  - If using 1.0 *and* NV, must know what will happen
  - Total footgun protection *not* required
- ## Feature independence
  - No requirement to have an SDP way for everything!

Possible Contentious Issues

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If we get 1.0 to CR.....

- Gather Requirements / Wishes / Traps
  - Simulcast? SVC? FEC control?
  - Are there security / privacy gotchas?
- Set an Ambition Level for NV
  - Nothing but (S)RTP/SCTP/DTLS as we know them?
  - Some added functionality?
  - Should we dream larger?
- Make a Plan