

Bug Bash for WebRTC-1.0

TPAC 2015

Bug status

- 52 bugs open (152 closed)
- Oldest bug is ~1 year old
- Some bug categories
 - Text clarifications - we need a PR to integrate, or editors can “just fix” when they get to it
 - Naming issues - bikeshed paint is widely available, so these can take time
 - Functionality wishes - wish is to delay as many as possible until after 1.0
 - Things that we want to work, but the spec doesn’t say how yet
 - Transceiver is an example - makes it clear how to do early media
 - Bugs - the spec is wrong, implementations have made it work
 - Bugs that are fixed, but we forgot to update the bug (!)
- We want to fix all of these - except the functionality wishes.

Purpose of this session

- Look at some bugs in the “want to work” and “spec is wrong” categories
 - Other categories aren’t useful use of face to face time
- Agree that it’s useful to address the issue
 - If not, close the bug as “won’t fix”
- Figure out whether or not it’s controversial
 - If it’s not, let’s get a fix applied
 - If it is, continue discussion until it’s not
- Get a volunteer to actually complete the fixing

Bugs to consider

#8 Need to add public to RTCIceTransports (alvestrand)
#21 Use of MUST and must is completely inconsistent throughout (burnburn)
#133 Streams that become isolated generate errors on PC ()
#140 DataChannel.onerror callback needs an error argument specific (burnburn)
#142 "Hold" unspecified (aboba)
#150 when closing, all outstanding actions are cancelled and then (adam-be)
#151 close is synchronous & idempotent (aboba)
#179 Potentially private IP addresses revealed (alvestrand)
#224 Not clear when responding PeerConnection reaches iceconnect (alvestrand)
#227 .mid attribute - random or Null when MID is not present in S (stefhak)
#230 Add support for WebRTC Data Channel in Workers ()
#244 set{Local|Remote}Description is underspecified (alvestrand)
#246 RTCIceCandidate's sdpMid and sdpMLineIndex members (alvestrand)
#251 Update RTCTrackEvent to use FrozenArray<> (martinthomson)
#253 Assurance that requests to IDP proxy originate from the user (martinthomson)
#257 ICE Candidate should have accessors for protocol-relevant it ()
#263 over-riding default ice servers ()
#265 Add Privacy/security review questions ()
#267 Need a bitrate definition ()
#275 RTCStatsReport seems broken ()
#277 Side-effects of mitigations for #179 in demo pages ()

#286 The "consumer of the session description" conflicts with ter ()
#287 nit: "audio stream" and "video stream" mentions (burnburn)
#295 Guidance for extending objects vs extending Stats needed (alvestrand)
#296 Debugging ICE problems needs more info (aboba)
#305 Describe what happens when media changes (alvestrand)
#308 RTCRtpSender.get/setParameters is underspecified (adam-be)
#312 We should not reference the public API in algorithms (adam-be)
#316 Don't use Interface.attribute to refer to properties of inst (adam-be)
#319 Work through error definitions (burnburn)
#328 RTCBundlePolicy Enum section should not be non-normative ()
#329 "none" as a RTCIceCredentialType ()
#330 Get rid of RTCAnswerOptions? ()
#331 Creating an ICE agent is not defined ()
#332 Timing of ICE gathering ()
#334 Consider using the streams API for DataChannel instead of ba ()
#335 DOMError is removed from the platform; use DOMException instead ()
#336 No definition of "applying an ICE candidate" ()
#337 Interfacing between WebRTC spec and JSEP ()
#338 specify what parts of the SDP can be changed between the core ()
#339 Parsing stun/turn URLs ()
#340 'RTCPriorityType' not aligned with names in rtcweb-transport ()
#341 [FIPS-180-3] has been replaced by [FIPS-180-4] ()
#343 RTCDegradationPreference vs RTCQualityPreference ()
#344 Should references to RFC5506 and RFC3550 be normative? ()
#345 Missing handling of createDataChannel() with a too long label ()
#346 Missing handling of createDataChannel with a too long protocol ()
#348 RTCRtpSender section doesn't include the definition for RTCR ()
#352 Sections 5.2 - 5.6 are a tossed salad (aboba)
#355 Ref to RFC3388 should be RFC5888 ()
#358 Remove mid from sender/receiver ()
#359 Set a priori codec preferences ()

... perhaps not today.

removing stuff that's editorial, or in another topic

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#358 Remove mid from sender/receiver ()

All stuff about "error cleanup" is removed, we'll do as we did with Media Capture & Streams

#150 and #151: Closing a PeerConnection

- Consensus from previous discussions (from memory)
 - Close is synchronous
 - All Promises on the “outstanding operations” list error out when PC is closed
- Still true?
 - If so, mark as editorial.
- Possible alternative: Promises on the “outstanding operations” list hang around forever unresolved
 - Anyone care to cite a Promises best practice on this?

#337 and #338: WEBRTC vs JSEP

- Suggested guideline:
 - If it is about what the SDP looks like, defer to JSEP
 - Having it in one place is good, and they have to finish anyway
 - If it is about what the API operations are, write in WEBRTC
 - The whole API has to be described in WEBRTC
- Specific issues
 - Form of references from WEBRTC to JSEP
 - “do the algorithm specified in JSEP <section>”
 - “do the <name> algorithm specified in JSEP”
 - Needs agreement between the two teams!
 - Permitted changes to SDP between CreateOffer and SetLocalDescription
 - Others?

#334 Consider using the Streams API

- Revisiting the decision to model DataChannel on WebSockets
 - Was a good decision at the time (Streams did not exist as stable spec)
- Suggested disposition: Leave for later (close, mark LATER)
 - If WebSockets gives us a Streams-based adaptaiton, we should adapt that to DataChannel too.
 - Does anyone know of such work?

#257 ICE Candidate should have accessors

Solved by RTCIceCandidateInformation, PR #349

#263 Overriding default ICE servers

- Use case for having defaults is apps in environments that the app writer did not predict, such as corporate firewalls with TURN servers embedded in them
- Suggestion is that app should be able to say “don’t use this”
- In environments where these are to be used by policy, overriding them seems actively harmful (subverting the firewall policy)
- Suggestion: Close as “wontfix”

#265 Add Privacy/security review questions

Discussion in editing team has been “copying in the security questionnaire is not useful - but answers to these questions should be obvious from the text”

Questions and answers reproduced in bug.

Need volunteer for review and text proposals

#305 Describe what happens when media changes

This is the remote variant of the “variable bitrate camera” discussion

Clarification: Is the problem a sender-side problem (MediaStreamTrack violating constraints in the PeerConnection) or a receiver-side problem (incoming data violating constraints set on the remote track)? Or both?

Discuss.

#308 RTCRtpSender.get/setParameters is underspecified

The model is that get/setParameters should not go outside the negotiated parameters; attempts to do so should cause a failure.

The parameters from SDP negotiation are all available to the PC at set time.

Is this OBE after the simulcast discussion?

Will the real docfaraday please stand up?

#340 `RTCPriorityType` not aligned with names in rtcweb-transport

```
enum RTCPriorityType {  
    "very-low",  
    "low",  
    "medium",  
    "high"  
};
```

rtcweb-transport: "normal", "below normal", "high" or "very high".

tsvwg-rtcweb-qos: "very low", "low", "medium", "high".

Editorial for rtcweb-transport; filing bug in that repo. Closing here.

#341 [FIPS-180-3] has been replaced by [FIPS-180-4]

Want to verify with experts that it's a straightforward replacement.

#343 RTCDegradationPreference vs RTCQualityPreference

Please choose a consistent color.

#345 and #346 - createDataChannel param errors

Suggestion: “return `InvalidValue` if the parameters don’t fit in the underlying protocol” (exact value to be assigned during error bash pass)

Any problems with this?

#358

Last slide!