SIP over Websockets
draft-ibc-sipcore-sip-websocket-01

IETF 83

SIPCORE WG

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History

- draft-ibc-rtcweb-sip-websocket-00
  - defines the **WS transport for SIP**
  - rtcweb not meant to standardize a signaling protocol
- draft-ibc-sipcore-sip-websocket-00
  - WS transport **applicability not limited to web browsers**
- draft-ibc-sipcore-sip-websocket-01 (current draft)
  - three technical reviews
  - so far **all reviews and comments support this work**
  - main discussion around outbound applicability
- At least two known **implementations**
  - e.g. http://sip-on-the-web.aliax.net/
  - and some other in the roadmap

Scope

- Define behavior for a main use case
  - WS transport between a UA (one that cannot listen for inbound WS connections) and its first hop into the network

- Unforeseen circumstances should be allowed
  - that's where innovation is born
  - explicitly call out in the document that we don't currently define behavior for
    - inter-intermediary websockets connections
    - clients with the ability to listen for inbound connections
  - future documents may choose to do so

Problem Statement

- WS clients do not listen for incoming connections
  - it's the WS client that needs to open and maintain the WS connection
  - the WS server shall use an existing WS connection towards the client

- This is identical to the case where a SIP UA uses TCP behind a NAT, to communicate with its proxy
  - the SIP UA cannot receive incoming connections
  - communication with it must occur over the connection it opened to the SIP server

- This is not a new problem and we have solutions in place

Solution space

- Option 1: normative language
  - define the behavior for WS transport between a UA (one that cannot listen for connections) and its first hop into the network: both **MUST use outbound**
- Option 2: non-normative language
  - refer to Outbound as the preferred mechanism, but there might be other alternatives
- Option 3: do nothing
  - do not mention the issue at all

Next Steps

- Address comments from the technical reviews (along with editorial improvements) and submit a new version

- Call for WG adoption