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

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Iñaki Baz Castillo
José Luis Millán
Victor Pascual
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/](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