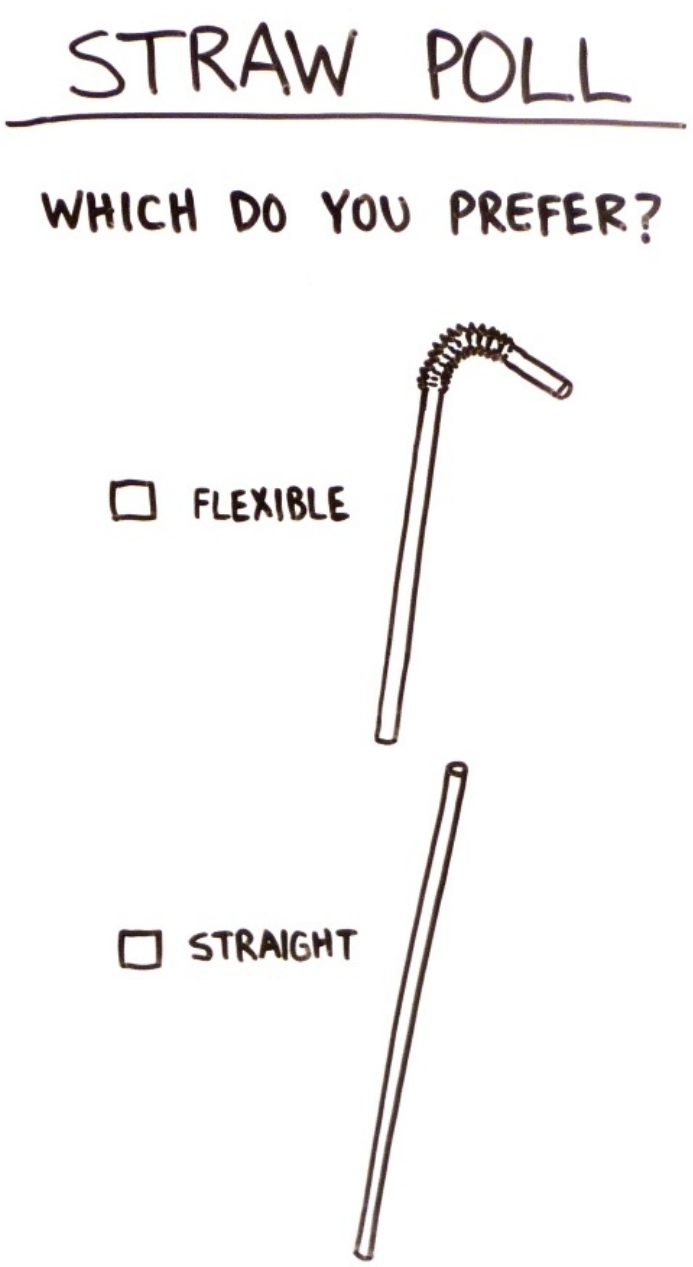
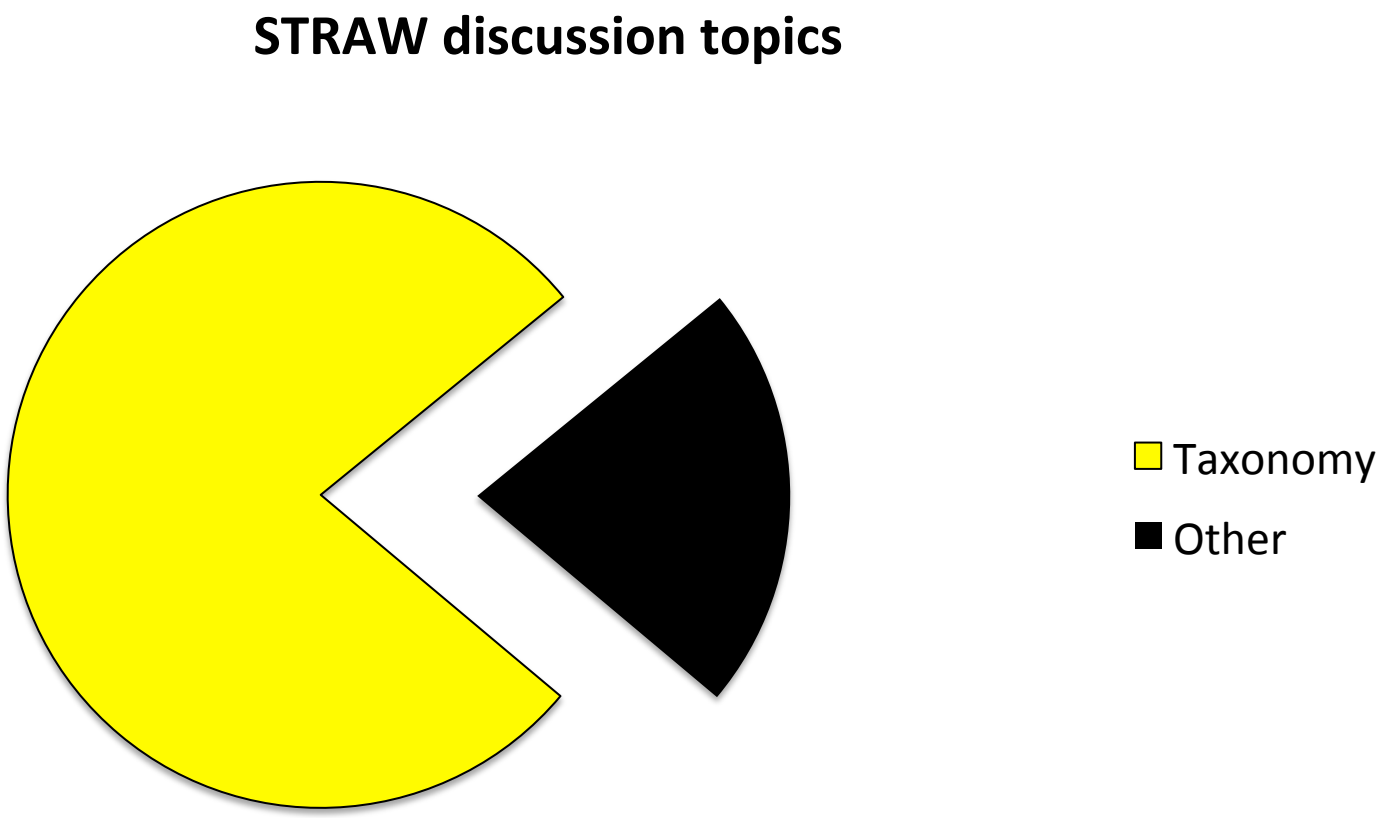


A Taxonomy of SIP B2BUAs

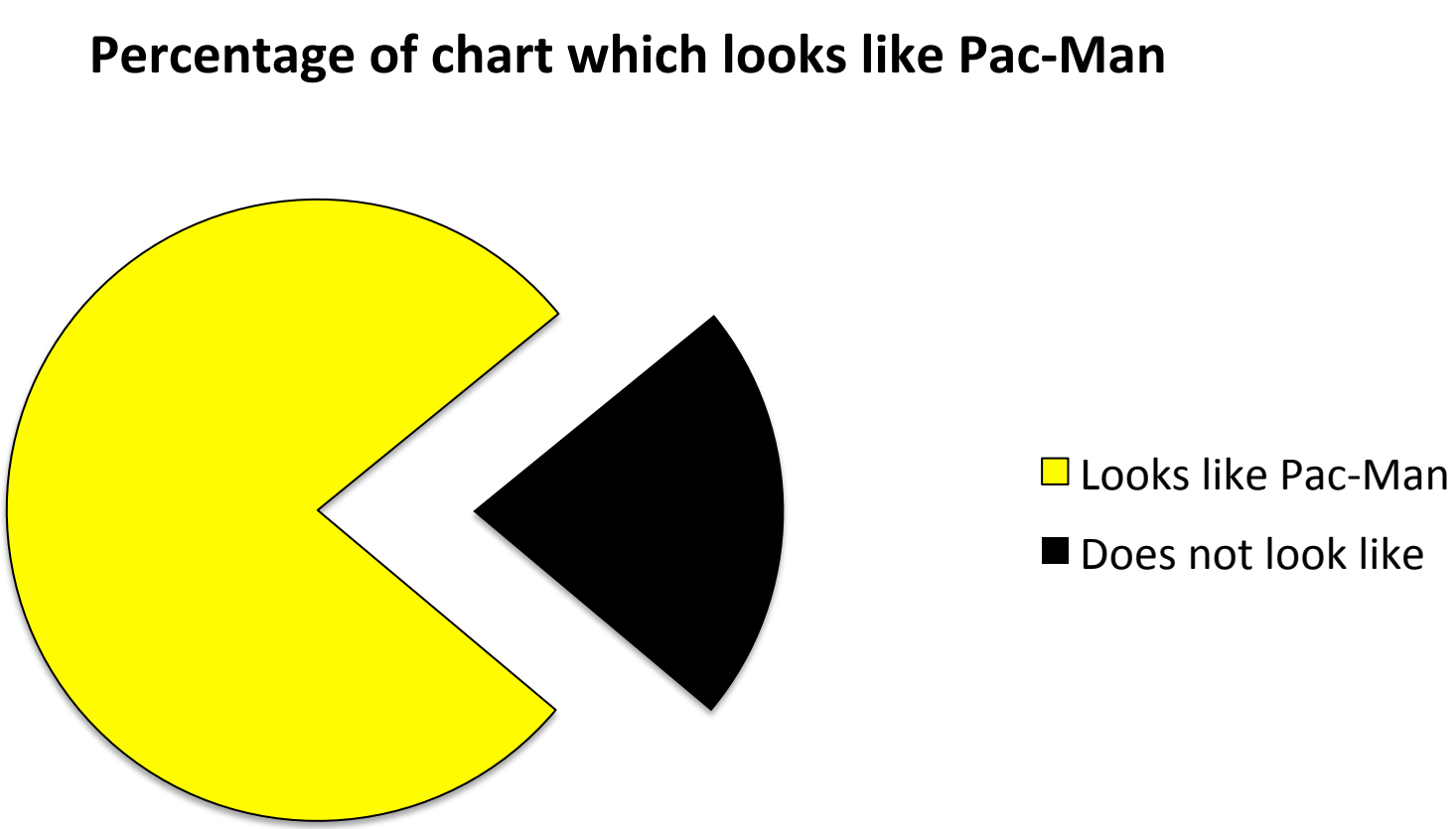
draft-kaplan-straw-b2bua-taxonomy (now a WG doc)

tax-man: Hadriel Kaplan

STRAW Working Group Topics



A similar chart...



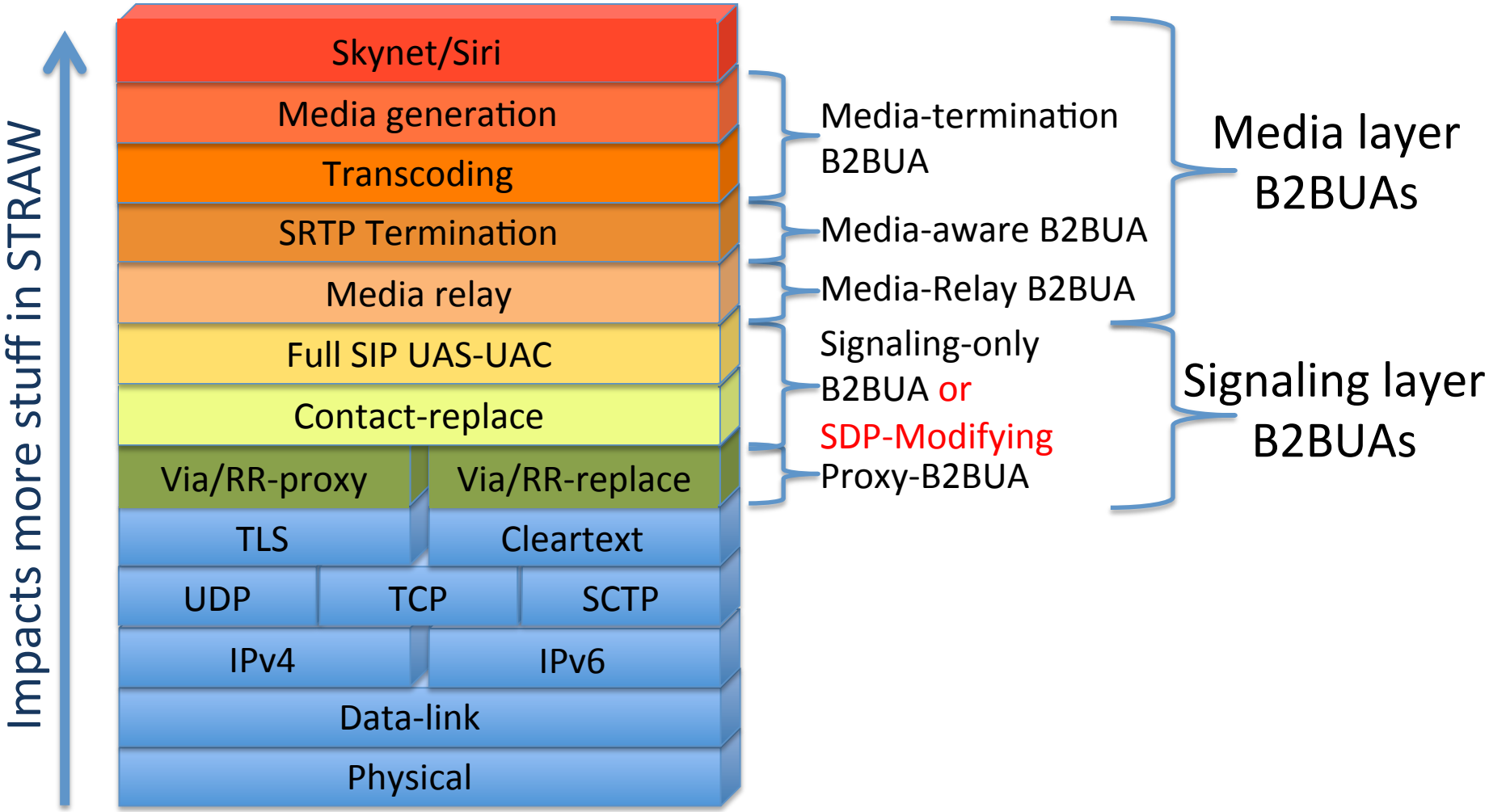
The Problem(s)

- To write a STRAW doc, we need to define what “types” of B2BUAs the doc applies to
- We could do this in every doc, or we could do it in one doc: a Taxonomy
- BUT, there may still be some STRAW docs that need to define special cases or sub-types
  - For example, a B2BUA that handles IPv6-IPv4 interworking may need to have different requirements than one that does only IPv4 or IPv6

So how many B2BUA types are there?

- Too many – this WG can't define them all
  (we don't even know them all!)
- But really we don't need to list them all – just the major/basic types that would make a difference for STRAW stuff
  - E.g: relays media or not, transcodes media or not, acts like Proxy vs. full UA for headers, etc.
- So I've chosen to differentiate based on what "layer" the B2BUA operates at/on

The not-so-OSI B2BUA layer model



Proxy-B2BUA

- This is a pure RFC-3261 Proxy, except...
  - It maintains enough state info to send in-dialog requests
  - Example: terminate a dialog by sending a BYE, or send UPDATE/re-INVITE to check liveness
- Does not modify headers/bodies
  - Except inserts Via/Record-Route, decrements Max-Forwards, etc., per 3261

Signaling-only B2BUA

- May replace any/all headers, terminates/ processes REFER, modifies specific bodies, etc.
  - I.e., an App Server or non-media PBX
- Does NOT touch media
  - Does not modify SDP

SDP-Modifying Signaling-only B2BUA

- May replace any/all headers, terminates/ processes REFER, modifies specific bodies, etc.
  - I.e., an App Server or non-media PBX
- Does NOT touch media, but DOES modify SDP
  - Understands SDP to some degree

Media-relay B2BUA

- A middlebox that relays UDP/TCP “media” packets, understands and modifies SDP
  - i.e., a plain-vanilla media-proxy
- Does NOT look into RTP/RTCP, does not transcode, terminate SRTP, munge RTP/RTCP, etc.
  - If it does that, it’s a media-aware or media-termination B2BUA

Media-Aware B2BUA

- A middlebox that knows it's relaying RTP/RTCP, looks into them for quality stats, or terminates SRTP
  - i.e., most common SBC role
- Does NOT transcode nor act as a B2BUA at the RTP/RTCP layer

Media-termination B2BUA

- A middlebox that is a B2BUA for media, such as transcoders
  - This is the full shebang
  - This would be a PSTN gateway, except the context of a B2BUA would be SIP on both sides so PSTN Gateway wouldn't apply

Open Issues

- Should we classify Conference Servers as B2BUAs for STRAW?
  - Right now they're not really, because they're typically multiple UAS', not a UAS-UAC pairing