

# Attestable HTTP (**HTTPPA**)

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<https://datatracker.ietf.org/doc/html/draft-sandowicz-httpbis-httpa2-01.txt>

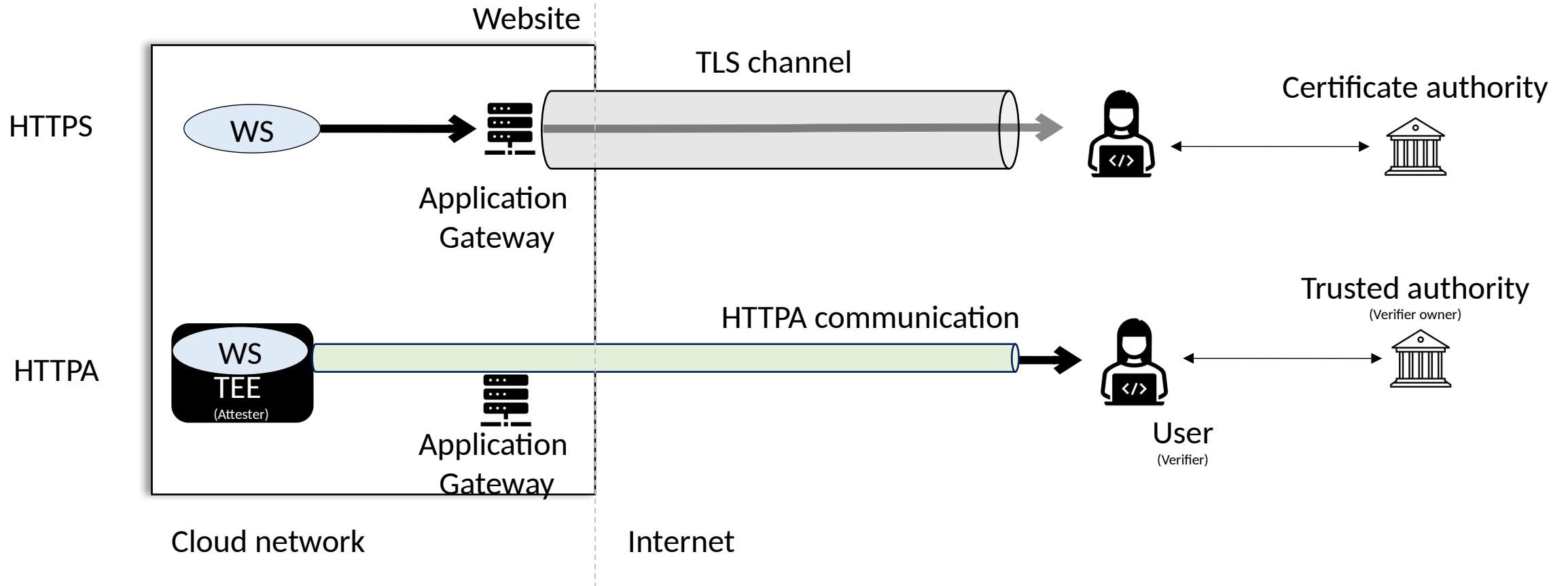
# What is Attestable HTTP?

- HTTP extensions for binding remote attestation messages to HTTP headers.
  - Secure communication enables end-to-end message protection to TEE endpoints.
  - L7 protection establishes trusted communication for web services running inside a TEE.
  - However, HTTPPA is not specific to TEE endpoints.
- We are proposing extending HTTP with an 'ATTEST' method and a set of 'Attest-\*' headers for standardization.
  - Mutual-HTTPPA to build L7 trusted end-to-end communication.
- Achieve trustworthy web services.

# Background

- There is customer demand for a wide range of secure web services.
- Web services are mostly not attested.
- TEE is an emerging technology that protects data in use and is a reasonable endpoint for HTTP message exchanges.
- There is a need for remote attestation at the HTTP layer.

# HTTPPA vs. HTTPS



# Where do we go?

- Dispatch?
  - HTTPBIS?
  - Other?
- SecDispatch?
  - RATS? TEEP?
  - Other?