

RIPT Charter

IETF 107

March 26, 2020

After going through charter - there are slides for

1. Should we do P2P media?
2. E2E Crypto

Blue text in charter slides indicates proposed additions to charter since it went to list and red crossed out text is proposed removals.

Charter 1 of 4

This working group will standardize a protocol, capable of operating atop HTTP/3, which supports real-time voice and video communications, including signaling, media negotiation, and transmission of media packets.

The primary rationale for this new protocol is to enable deployment of real-time communications services on modern "cloud" systems. These systems are built around HTTP, and for HTTP-based applications, they enable load balancing, ~~HA~~ [High Availability](#), auto-scaling, and so on. However, real-time communications protocols are based on SIP and RTP, and they cannot take advantage of these HTTP-based capabilities

Charter 2 of 4

It is a non-goal of this working group to replicate all of SIP and its many extensions into HTTP. The group will limit itself to supporting the functionality in widespread actual usage today. The protocol uses HTTP techniques for authentication and authorization (notably OAuth), and requires hop by hop encryption (i.e., https).

The protocol will also allow for e2e media encryption, although keying is out of scope, and is expected to be handled by other protocols such as MLS. This extension will also utilize STIR for callerID.

Charter 3 of 4

This protocol should be implementable in browsers, thick desktop clients, mobile apps and servers.

The group will standardize an extension to the baseline protocol that automates the configuration necessary to achieve calling between an organization which is a customer of the other (for example, enterprise to service provider).

Charter 4 of 4

The group will do its work in conjunction with active software development efforts, so that implementation experience feeds directly into protocol development. The group will coordinate with WebTransport, QUIC, [AVTCORE](#), [MMUSIC](#), [ICE](#), HTTPbis and STIR WGs.

Deliverables (wordsmithing needed - dates TBD)

Date TBD: Submit draft for sending media over H3 & H2 to IESG

Date TBD: Submit draft for control of media to IESG

Date TBD: Submit draft for negotiation of what type of media to IESG

Date TBD: Submit draft for media sender identity management to IESG

E2E Crypto

Currently have:

The protocol will also allow for e2e media encryption, although keying is out of scope, and is expected to be handled by other protocols such as MLS.

Anything else needed ?

Open Issue #1 - P2P media

Is P2P media in or out?