Multimedia Content
Delivery Protocols

Member's work in more detail...

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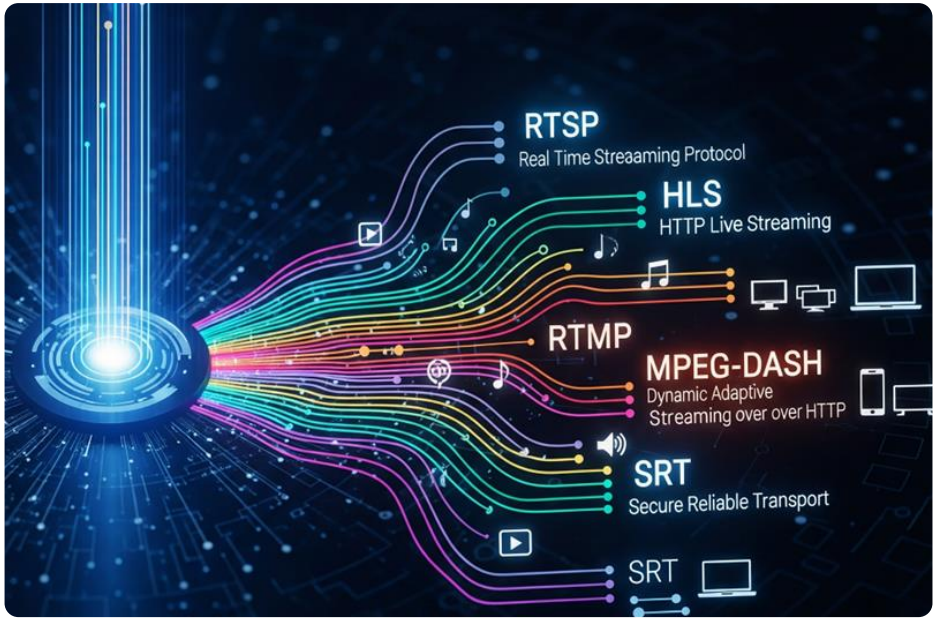
Multimedia Content Delivery Protocols

Overview of the work, outcomes, Execution Plan and Technical Resources

What is this project about?

Support the implementation of unidirectional media delivery with a special attention to:

- FLUTE (**File Delivery over Unidirectional Transport**)
- ROUTE (**Real-time Object delivery over Unidirectional Transport**)



WHERE TO LOOK AT?

Check the Execution Plan
All the Technical Resources
Information on Standards
Reference Tools available:

- Project: Multimedia Content Delivery Protocols

Multimedia Content Delivery Protocols

Overview of the work, outcomes, Execution Plan and Technical Resources

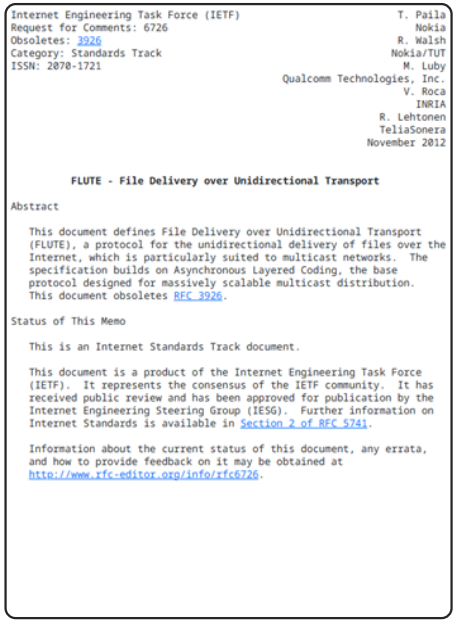
What are the members doing?

Standards

- Support to standards with feedback from implementation

Software

- Implementation of FLUTE (File Delivery over Unidirectional Transport) library according to IETF RFC 6726, with FEC Rapor10 support
- Implementation of ROUTE (Real-time Transport Object delivery over Unidirectional Transport) library to extract a DASH/HLS live filesystem from a ROUTE/IP session



Internet Engineering Task Force (IETF) — T. Paila, Nokia
Request for Comments: 6726 — R. Walsh, Nokia/TUT
Obsoletes: 3926 — M. Luby, Qualcomm Technologies, Inc.
Category: Standards Track — V. Roca, INRIA
ISSN: 2070-1721 — R. Lehtonen, TeliaSonera
November 2012

FLUTE - File Delivery over Unidirectional Transport

Abstract

This document defines File Delivery over Unidirectional Transport (FLUTE), a protocol for the unidirectional delivery of files over the Internet, which is particularly suited to multicast networks. The specification builds on Asynchronous Layered Coding, the base protocol designed for massively scalable multicast distribution. This document obsoletes RFC 3926.

Status of This Memo

This is an Internet Standards Track document.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on Internet Standards is available in Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at http://www.rfc-editor.org/info/rfc6726.

Independent Submission — W. Zia
Request for Comments: 9223 — T. Stockhammer, Qualcomm CDMA Technologies GmbH
Category: Informational — L. Chaponniere, G. Mandyam, Qualcomm Technologies Inc.
ISSN: 2070-1721 — M. Luby, BitRipple, Inc.
April 2022

Real-Time Transport Object Delivery over Unidirectional Transport (ROUTE)

Abstract

The Real-time Transport Object delivery over Unidirectional Transport (ROUTE) protocol is specified for robust delivery of Application Objects, including Application Objects with real-time delivery constraints, to receivers over a unidirectional transport. Application Objects consist of data that has meaning to applications that use the ROUTE protocol for delivery of data to receivers; for example, it can be a file, a Dynamic Adaptive Streaming over HTTP (DASH) or HTTP Live Streaming (HLS) segment, a WAV audio clip, etc. The ROUTE protocol also supports low-latency streaming applications.

The ROUTE protocol is suitable for unicast, broadcast, and multicast transport. Therefore, it can be run over UDP/IP, including multicast IP. The ROUTE protocol can leverage the features of the underlying protocol layer, e.g., to provide security, it can leverage IP security protocols such as IPsec.

This document specifies the ROUTE protocol such that it could be used by a variety of services for delivery of Application Objects by specifying their own profiles of this protocol (e.g., by adding or constraining some features).

This is not an IETF specification and does not have IETF consensus.

Status of This Memo

This document is not an Internet Standards Track specification; it is

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