Network-based Rapid Acquisition of Multicast RTP Sessions

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Motivation

• Network performs rapid acquisition on behalf of RR without its involvement.
  – It is difficult to update all legacy RRs which are largely deployed to support rapid acquisition.
  – Rapid acquisition introduces extra complexity on RR when RR frequently exchanges required parameters with network.
  – In radio network, rapid acquisition signaling messages will consume radio resources and the RR's power when RR is a mobile terminal.
Overview

Rapid Acquisition Proxy (RAP) performs rapid acquisition related signaling with a retransmission server on behalf of the RTP receiver.

No requirement to participate in any rapid acquisition related signaling.

- Unicast RTCP Messages
- SFGMP Messages
- Unicast RTP Flow
- Multicast RTP Flow
Basic Solution

• This network-based rapid acquisition of multicast RTP session is referred to as Proxy RAMS (PRAMS)
  – Rapid Acquisition Proxy (RAP) supports IGMP/MLD Proxy [RFC4605].
  – Rapid Acquisition Proxy (RAP) performs rapid acquisition related signaling.
  – Rapid Acquisition Proxy (RAP) translates unicast RTP burst into multicast format.
Request

• Request that PRAMS is taken on as a WG item.