

# Multicast Acquisition – RTCP XR

`draft-begen-avt-rapid-sync-rtcp-xr-03`

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**Ali C. Begen and Eric Friedrich**

`{abegen, efriedri}@cisco.com`

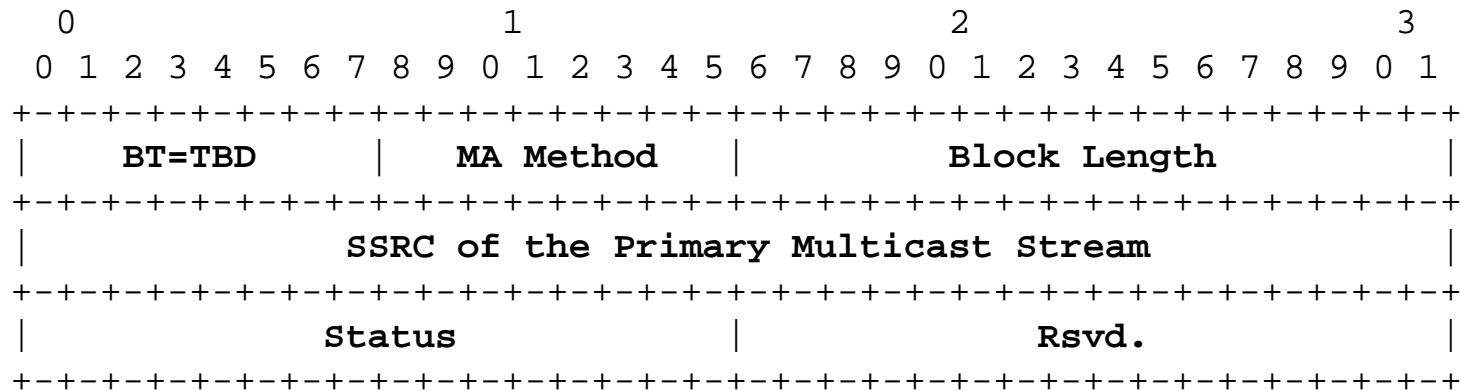
# Recap

- RTP receivers joining a multicast session experience
    - Varying join delays
    - Pretty random acquisition delays
  - For quality reporting, monitoring and diagnostics purposes, it is useful to gather their “acquisition” experiences
  - This document
    - Defines a new RTCP XR block type for multicast acquisition
    - Defines SDP signaling and registers the new block type with IANA
- This report block can be used by all RTP receivers, whether they are doing a simple multicast join, using RAMS or any other method

# Major Changes since Version -01

- Values for MA methods have been assigned
- Type values for TLV elements have been assigned
- Status codes have been defined for simple multicast join and RAMS
- RAMS-specific status code rules have been defined

# MA Report Block – Base Report (Mandatory)



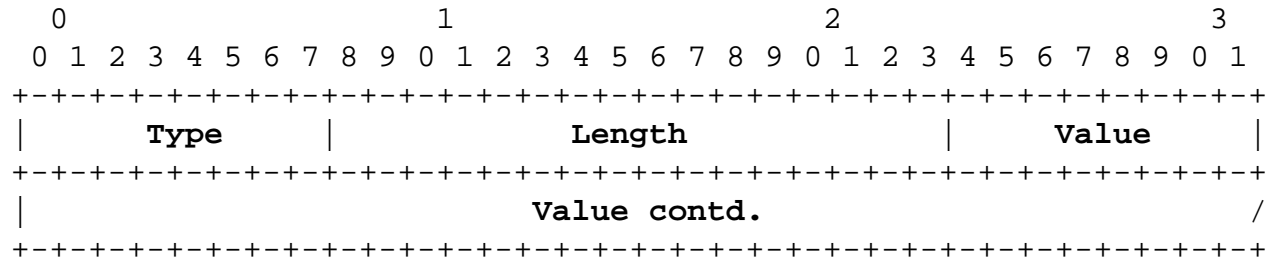
- BT: 8 bits (TBD) → Planning to use 11
- MA Method: 8 bits
  - 1 for Simple Join
  - 2 for RAMS
- Block Length: 16 bits
- SSRC of the Primary Multicast Stream: 32 bits
- Status: 16 bits
  - Vendor-neutral codes must be registered with IANA
  - Private codes are possible by putting a zero in this field

# MA Report Block – Extensions (Optional)

- Vendor-Neutral Extensions

These extend the report block in a vendor-neutral manner

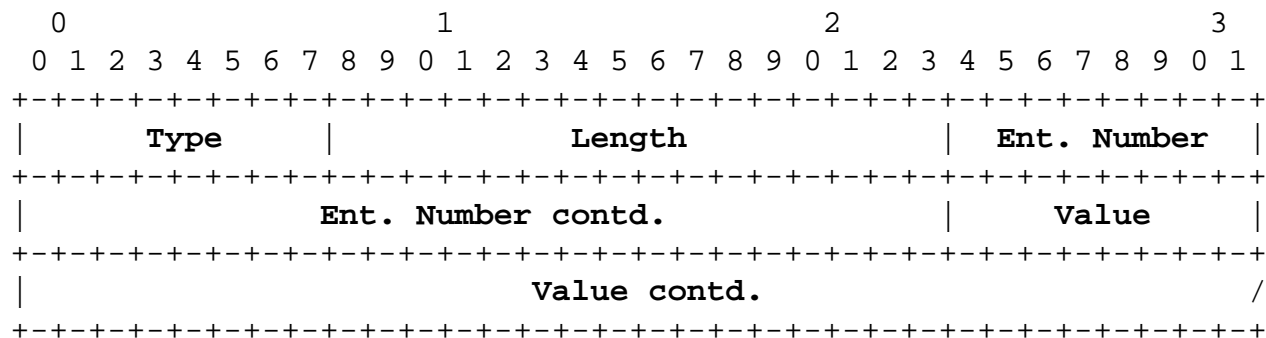
Registry will be maintained by IANA (Specification Required)



- Private Extensions

These MUST NOT collide with each other

A certain range of TLV Types ([128-254]) is reserved for private extensions



# Vendor-Neutral Extensions

- These apply to any RTP-based multicast application:
  - RTP Seqnum of the First Multicast Packet
  - Source Filtering Group Management Protocol (SFGMP) Join Time
  - Application Request-to-Multicast Delta Time
  - Application Request-to-Presentation Delta Time
- These apply to RAMS:
  - Application Request-to-RAMS Request Delta Time
  - RAMS Request-to-RAMS-I Delta Time
  - RAMS Request-to-Burst Delta Time
  - RAMS Request-to-Multicast Delta Time
  - RAMS Request-to-Burst-Completion Delta Time
  - Number of Duplicate Packets
  - Size of Burst-to-Multicast Gap

# SDP Signaling

- The "rtcp-xr" attribute is defined in RFC 3611

```
rtcp-xr-attrib = "a=rtcp-xr:"  
                [xr-format *(SP xr-format)] CRLF
```

```
xr-format =/ "multicast-acq"
```

# Next Steps

- The draft is complete
- WG adoption?

Or should we go for AD-sponsored individual contribution?