Residence Time Measurement
draft-mirsky-mpls-residence-time-00

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Problem Statement

- Residence Time – time it takes a packet to traverse a node

- Clock synchronization protocols, i.e. IEEE-1588v2, may use residence time

- MPLS Packet Delay Measurement RFC 6374 includes propagation delay – not useful

Proposed Solution

- New G-ACh – Residence Time Measurement
- Scrath pad – 8 bytes (same size as Correction Field in IEEE 1588v2)
- Optional payload, e.g. PTP packet

0 0 0 1	Version	Reserved	Residence Time Measurement Channel ID
Scratch Pad (8 bytes)			
Payload			
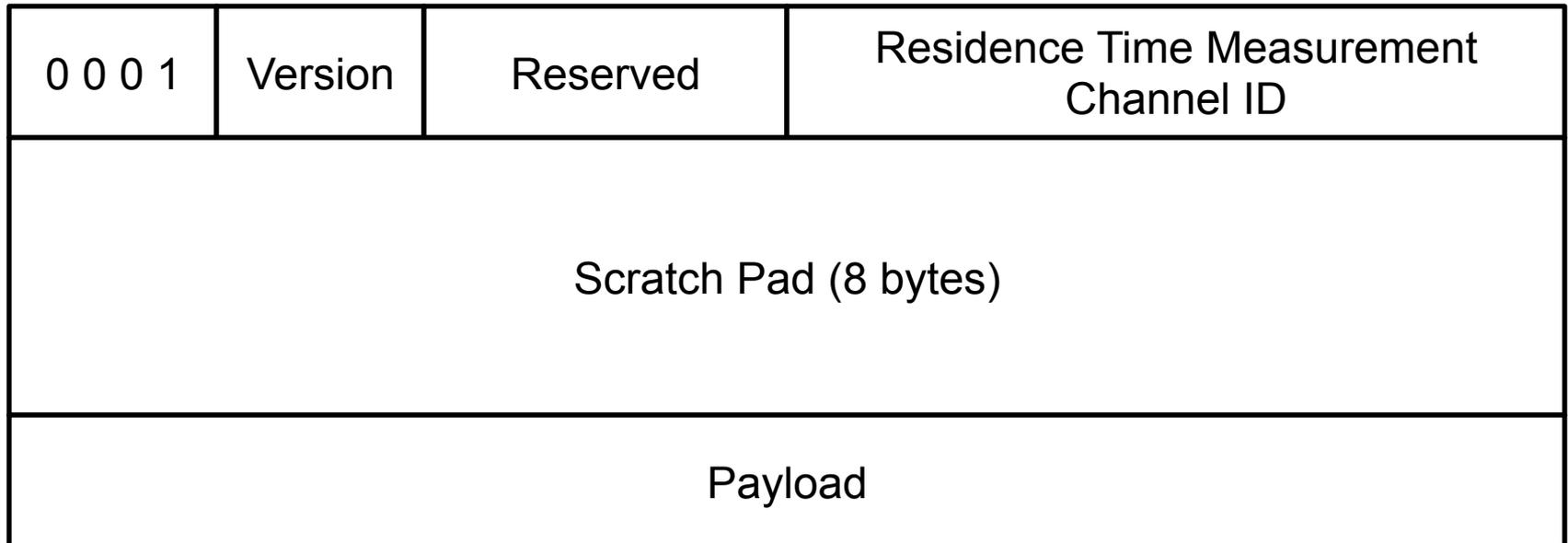
Alleged Benefits

- No special purpose LSP or PW context to transport clock synchronization packets

- Can be used by IEEE 1588 v2 end-to-end Transparent Clock, as well as NTPv4, if the latter is extended to use residence time correction

- Fully backward compatible with existing LSRs

Next steps

- Add examples of RTM used by IEEE 1588v2

- Solicit comments & feedback from the WG