draft-ietf-trill-channel-tunnel-02

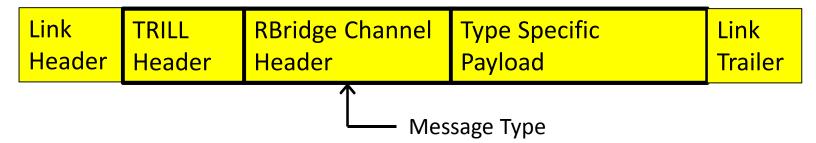
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The RBridge Channel Facility

- TRILL switches need to sent control messages to each other including multi-hop and multi-destination control messages. For example, BFD messages [RFC7175] since the BFD standard only specifies the payload, not an envelope.
- Since a TRILL switch it not guaranteed to have an IP address or even to have any MAC addresses (it could have all PPP ports), such control messages must be addressed by nickname (or distribution tree if multi-destination).
- The RBridge Channel feature [RFC7178] provides this facility.
- A message type ("channel protocol") field is included in the RBridge Channel header.

The RBridge Channel Facility (cont.)

"This is what it looks like at a high level:



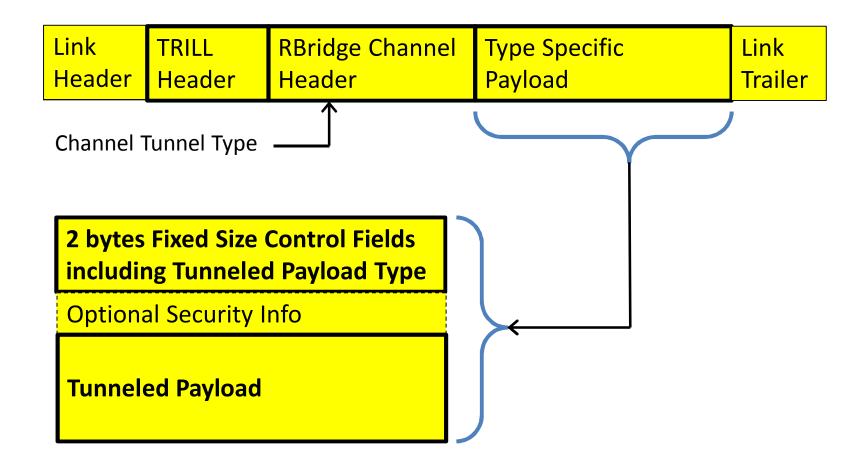
It is also useful to be able to send control messages between TRILL switches and end stations. In this case, the messages are addressed by MAC address since end stations connect by Ethernet:

| Ethernet | RBridge Channel | Type Specific | FCS |
|----------|-----------------|---------------|-----|
| Header | Header | Payload | |

So what does Channel Tunnel Add?

- 1. The [RFC7178] RBridge Channel facility provides no security. That may be OK if the control message being carried has its own security but is bad in general.
- 2. A way to tunnel standard payload types such as RBridge Channel messages, Ethernet frames, etc.
- By combining 1 and 2 above, Channel Tunnel lets you tunnel an RBridge Channel Message with security. This is currently used in draft-ietf-trill-directory-assist-mechanisms to security Pull Directory requests an responses.

Channel Tunnel



Questions / Action

" Questions?

"Action: Complete security portion of Channel Tunnel, polish the draft a bit, post a revision, and then do a WG Last Call.