A Batch Notification Extension for the Session Initiation Protocol (SIP)

draft-johnston-sipping-batch-notify-00

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Problem Space

- Optimization for SIP Events
- Used for synchronization of bulk SIP event information between two peers both with the ability and authority to act as notifiers for this information
 - NOTIFYs exchanged for this purpose are batch NOTIFYs
- The way in which these batch notifications are generated and delivered needs to be managed carefully, otherwise:
 - 1. The rate of notifications could become excessive (solved by draft-neimi-sipping-event-throttle)
 - 2. The size of individual notification messages could become excessive (not currently solved)
 - 3. The processing of state information by both the subscriber and notifier could become excessive (not currently solved)

Use Cases

- Presence state events
 - Presence Servers sharing data
- Registration state events
 - Registrars sharing data
- Conference state events
 - Conference notification server

Requirements

- REQ-1: The mechanism will allow a subscriber to set the maximum number of bodies in a batch notification.
- REQ-2: The mechanism must work together with other throttling mechanisms and filtering mechanisms.
- REQ-3: The mechanism will not be event package specific.
- REQ-4: The mechanism will permit the notifier to indicate to the subscriber that the full event state has been transferred.
 - List discussion about this requirement (next slide)
- REQ-5: The mechanism will minimize the processing of the event state data by both the batch subscriber and batch notifier.

Open Issues

- List discussion on REQ-5
 - Intent is that the mechanism support this requirement, but is use is not required
 - This requirement useful if a snapshot is needed
 - Also useful if a different mechanism (such as publication) is to be used for normal state updates after initial sync is done with batch notifications.
 - More commonly would just transition to a normal subscription for updates
- Discussion about use cases
 - Presence
 - Conference

Straw Man Mechanisms

- New Event header field parameter "batch" used in SUBSCRIBE
 - Similar to draft-niemi-sipping-event-throttle
 - Indicates maximum number of bodies in each NOTIFY
- Use of Content-Type:multipart/mixed instead of RLMI if
 - 1. There is no back-end subscription as is the case with a RLS.
 - 2. Each individual body is self-contained and does not need any meta information for processing.
 - 3. Only full state event information is included

Next Steps

- Interest in this work?
- Requirements make sense?
- Relation to draft-niemi-sipping-eventthrottle?