

# SIP INFO Event Framework

(draft-kaplan-sip-info-events-00)

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# BACKGROUND

- The discussion on **when** to use INFO, **how** to use INFO, and **whether** to use INFO at all, has been around since the very early days of the protocol
- Different opinions on what RFC2976 really says
- INFO is out there
- We have identified the following options:
  - We don't care
  - We only allow for ISUP
    - We say it can only be used for transport of ISUP information
  - We fix                      ↓ Scope of this presentation

# ABSTRACT

- The document defines a proposed solution for defining, negotiating and exchanging info-event notifications in INFO messages, within SIP invite-created dialogs, for applications which need to exchange session-related information inside the invite-created dialog.

# Negotiation

- Two new SIP headers
  - Send-Event
    - The type of info-events one is able to send
  - Recv-Event
    - The type of info-events one is able to receive
- Listed info-event can have parameters
- Both users indicate what they are able/willing to send and receive
  - A user shall not send anything until he has knowledge about what the other user is willing to accept
  - Information can be sent only in one direction

# ”Event packages”

- **We should call it something else, e.g. ”Info Packages”**
- Event package defined for SUB/NOT can not be used as such for INFO
  - New package required for INFO
    - Package may of course share capabilities and also otherwise be very similar to a SUB/NOT package
  - Example can be found in draft-kaplan-sipping-dtmf-package-00

# Dialog impact

- No separate dialog/dialog usage needed
  - INFOs associated with an invite dialog can be sent and received as long as the invite dialog is alive
  - No separate state machines
- INFOs routed as any mid-dialog request

# Issue: Terminology

- We should use wording that does not cause confusion with regard to the SUB/NOT mechanism
  - "Info Package" instead of "Event Package"
  - "Send-Info" instead of "Send-Event"
  - "Recv-Info" instead of "Recv-Event"

# Issue: "Negotiation"

- Currently defined that calling UA inserts his headers in the INVITE request and the called UA in an INVITE response
  - Problems with PCC
- We should allow more flexibility
  - Allow sending of the headers in ACK
  - We could borrow things from RFC 3264
    - We shall NOT call it "INFO event offer/answer"
- Headers should also be allowed in OPTIONS

# Issue: "re-negotiation"

- Shall we allow to "re-negotiate" the info-event headers during the dialog (e.g. as part of a re-INVITE/UPDATE transaction)?
  - Useful for 3PCC?
  - Other use-cases?
- In case someone comes up with a use-case in future, would it harm?

# Issue: "id" concept

- Currently used to support multiple SUBSCRIBE usages
  - INFO part of a single invite usage
- Would it be useful to be able to differentiate info-event packages within the invite dialog?

# Issue: INFO rate

- Appropriate rate of INFO transmission
  - Is this INFO specific?

# Issue: Info Package specification

- Method for Info Package specifications
  - Write a draft, and this is the type of information it shall contain
  - Package registration

# Issue: Mandate support for Info Package

- Do we need to be able to indicate that a call shall be rejected unless the receiver support to send and/or receive specific Info Packages?
  - Option 1: Define a extension which requires certain Info Packages, and insert option-tag in Require header
    - Require: ZZZ
      - RFC defining ZZZ extensions/feature tag mandates the support of Info Event QQQ
  - Option 2: Define "required" header parameter for Send-Info/Recv info
    - Recv-Info: XXX;require, YYY
      - "I support receiving of XXX in INFO, and I require you to be able to send it to me"
    - Send-Info: XXX, YYY;require
      - "I support sending of YYY in INFO, and I require you to be able to receive it from me"

# Issue: "Will use"

- Indicating support of specific Info Package does not mean it automatically will be used
  - The meaning is only to indicate "capability" and "willingness"
  - Application decided what to use

# Issue: Replace RFC 2976?

- Should the draft contain the definition of the INFO method itself?
  - Aim to replace RFC 2976 rather than updating it?
- What about current standardized usage of INFO for transport of ISUP information?
  - Refers to RFC 2976
  - Do we need to say that the draft does not update the current usage of transporting ISUP information using INFO?
    - ISUP information carried in message bodies, not packages

# If we adopt this mechanism...

- People will hopefully adopt this mechanism for new implementations and usages of INFO
  - Existing proprietary solutions will still be out there
  - People will bring their INFO usages to IETF
- We leave it up to the implementation community to choose when to use INFO, SUB/NOT, in-band, or whatever other mechanism to transport information
  - We provide a **set of standardized tools**, each with pros and cons