Explicit Subscriptions for REFER

draft-sparks-sipcore-refer-explicit-subscription-00

SIPCORE – IETF90

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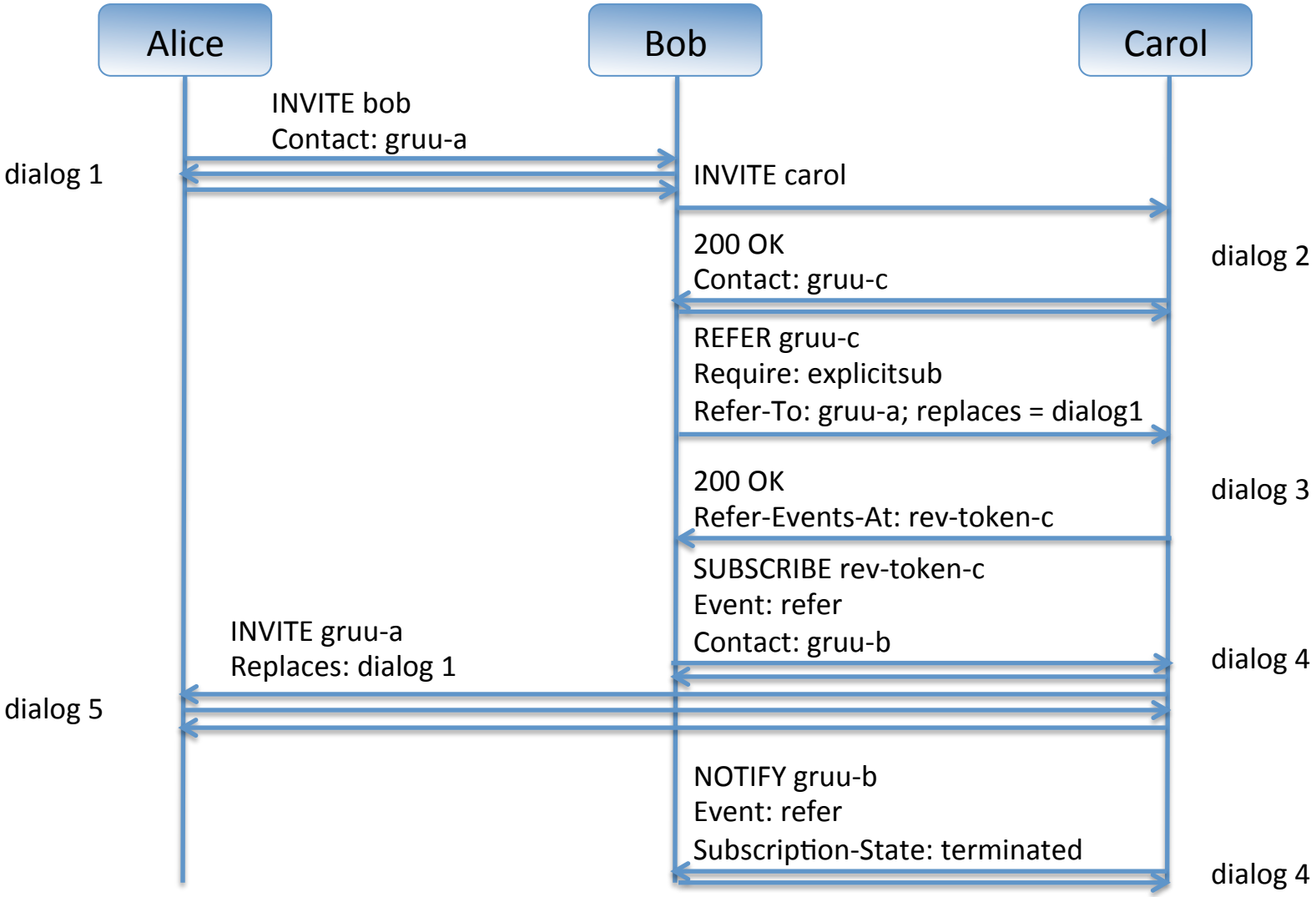
Proposed Plan

- Today: Discuss strawman's open questions and issues raised on list
- Shortly after IETF90: Flesh out strawman based on today's discussions
- Process result as a SIPCORE WG document with a PubReq target of late September

Summary of Strawman (so far)

- Send REFER in- or out-of-dialog
- Require: explicitsub
- Accepting server MUST NOT create implicit subscription
  - Instead, returns a URI for use with SUBSCRIBE in a new Refer-Events-At: header

Transfer Example



Easy Questions from Strawman

- Do we use a different method?
  - NO : An extension does the work and will likely be easier to deploy
- Do we use a different event package?
  - NO : The meaning of the state and the payload delivered in NOTIFY messages does not change.
- Do we further restrict what an appear in Refer-To?
  - NO : A UA can use the existing ability to reject REFER requests with Refer-To URIs that it doesn't care for.
- Do we deprecate RFC4488?
  - NO : These extensions can co-exist (but not be used together)

When no subscription is wanted

- REFER-er can simply ignore the Refer-Events-At header, and not subscribe if it doesn't care about the state.
  - But the server has had to prepare for a subscription that may never come.
- Proposal: Additional option tag 'nosub' telling server to not bother with those preparations

Acting on an Refer-Events-At URI

- Header field can contain an arbitrary URI
- Could be abused to cause peer to send a subscription to a malicious place
  - Attack advantage is small
    - Only one SUBSCRIBE is going to be sent – isn't a good amplifier for a DoS attack
  - All other security considerations are the same as for *any* mechanism through which a UA might get a URI to subscribe to
- Existing mechanisms (particularly Refer-To) are more attractive

Accepting an Event: refer subscription

- How should the SUBSCRIBE be authorized?
- Proposal: If someone knows the URI, they get to subscribe.
  - These URIs are necessarily short-lived and specific to the state being subscribed to.
  - They can be generated to be hard to guess
    - Getting another temp-gruu would be a good way to do this