Feature Tags with SIP REFER
draft-ietf-sip-refer-feature-param-00

Orit Levin   oritl@microsoft.com

Alan Johnston   ajohnston@tello.com

Status from IETF-63

- Concerns were expressed about which feature tags should be included in REFERs
- Positions ranged from:
  - Only **isfocus** and a small set of other feature tags MAY be included
  - Every known feature tag SHOULD be included
  - The whole idea is useless
- The draft hasn't been updated since IETF-63

Background Information

- *RFC 3840 "Indicating User Agent Capabilities in SIP"* states that the feature tags are used in three distinct cases:
  - REGISTER requests and responses (means interactions with own server)
  - OPTIONS responses (means interactions with other UAs)
  - requests and responses that create dialogs (such as INVITE) (means interactions with other UAs)

Background Information – cont.

- *draft-ietf-sipping-callerprefs-usecases-05* provides guidance and examples for the feature tags usage:

  - In a REGISTER all feature tags (a long list including the SIP-related option tags and methods) are included

  - In a INVITE or 200 OK to OPTIONS **only selective feature tags** describing application capabilities are included

Examples from draft-ietf-sipping-callerprefs-usecases-05

From Section 3.7.2

REGISTER sip:example.com SIP/2.0
To: sip:X@example.com
Contact: <sip:X1@pc.example.com>
    'q=1.0
    ;methods="INVITE,BYE,OPTIONS
    ,ACK,CANCEL"
    ;uri-user="<X1>"
    ;uri-domain="example.com"
    ;audio
    ;schemes="sip,tel"
    ;mobility="fixed"
    ;class="business"

From Section 4.2

SIP/2.0 200 OK
Contact: <sip:server33.example.com>
    ;msgserver
    ;automata
    ;attendant

Proposal Part I

- Clarify the feature tags usage in the core documents:
  - RFC 3840 which has the relevant IANA Section
  - Potentially update the draft-ietf-sipping-callerprefs-usecases-05 to include examples in accordance to the clarified usage

Proposal Part I - cont.

- Considerations why it is NOT desirable to include all feature tags in the Contact
  - Message size for every creating dialog transaction
  - The non-application feature tags conveyed in the Contact header field are a duplication of the information conveyed in the following header fields: Supported, Allow, Allow-Events…

Proposal Part I - cont.

- The suggested guideline
  - In a REGISTER all feature tags (a long list including the SIP-related option tags and methods) are included
  - In a INVITE or 200 OK to OPTIONS **only selective feature tags** describing application capabilities are included
- More thinking and list discussions will be needed

Proposal Part II

- The suggested text to draft-ietf-sip-refer-feature-param:

   "It is RECOMMENDED that the REFER-Issuer includes in the Refer-To header field **all** feature tags that were listed in the most recent Contact header field of the REFER-Target"

Backup Slides

Executive Summary

- Motivation

  Make REFER requests more descriptive by explicitly allowing feature parameters to be included in the Refer-to

- No IANA actions

- Extension to RFC-3515

  Refer-To = ("Refer-To" / "r") HCOLON

  *(name-addr / addr-spec) * (SEMI refer-param)*

  *refer-param = generic-param / **feature-param***

  where feature-param is defined in Section 9 of

  RFC-3840 "Indicating UA Capabilities in SIP"

Example

REFER sip:carol@chicago.example.com SIP/2.0
   Via: SIP/2.0/UDP
  client.atlanta.example.com;branch=z9hG4bKg45
   Max-Forwards: 70
   To: Carol <sip:carol@chicago.example.com>
   From: Alice <sip:alice@atlanta.example.com>;tag=5534562
   Call-ID: 849392fklgl43
   CSeq: 476 REFER
   Contact: <sip:uf313a413@example.com>
   Allow: INVITE, ACK, CANCEL, OPTIONS, BYE, REFER,
   SUBSCRIBE, NOTIFY
   Accept: application/sdp, message/sipfrag
   Refer-To: <sip:3402934234@example.com>;**isfocus**
   Supported: gruu, …
   Content-Length: 0