Outbound Initiated Flows
IETF 65
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Changes since -01 (1/2)

- Changed scope of the draft.
- Special case of instance-id for REGISTER changed. Now use +sip.instance in every request at SHOULD strength.
- Removed pin-route. SUBSCRIBE now covered as a normal usage.
Changes (2/2)

• Instance ID definition moved from GRUU to outbound.
  (GRUU now depends on outbound instead of vice versa)

• Overall reorganization

• Changed confusing “flow-id” term to “reg-id”. UA increments for each simultaneous registration.
Open Issues (1/3)

• Concerns that current requirements on UA configuration of outbound-proxy-set is too much of a configuration burden.

• Approaches:
  – Provide a new (SRV-based?) discovery mechanism in another draft
  – Finish the configuration framework

• Proposal: Leave as is
Open Issues (2/3)

• Currently the draft describes two example algorithms for generating a flow token. Do we want to keep Algorithm 1?
  – It only works if every transport is SIPS protected
  – 100% of list comments (all one): Include it
Open Issues (3/3)

• NAT Keepalives for TCP-based transports
  – STUN muxed over connection would work
  – OS TCP KeepAlive
  – Double CRLF also proposed.
  – PING

• Proposal: Pick something
  – As usual, disagreements related to a requirements mismatch.
The not SIP PING method

• Several concrete examples given to a method that does not meet the SIP requirements for a method

• Infeasible to fully analyze every situation and check that no harm happens
OS TCP KeepAlive

– Using the OS-provided TCP keepalives results in unacceptably long delays to detect a connection failure on some platforms
  • (note text in draft is wrong)
Double CRLF

• Backwards “safe”
• Concerned about correlation of CRLF sent and live-ness of one received
• Still need STUN for UDP
STUN

- Do same thing in TCP as UDP
- Know this works
Proposal

• Everyone wants it to work for their environment

• Proposal:
  – 1) do STUN for TCP and UDP
  – 2) do CRLF for TCP and STUN for UDP
  – 3) KeepAlive if supported, 1 or 2 otherwise

• Real issue is choosing 1 or 2 because that is what servers MUST implement