Session Initiation Protocol (SIP) overload control draft-ietf-soc-overload-control-00

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Draft background

- Adopted as WG document on Oct-21-2010.
- -00 submitted on Nov-19-2010.
  - Incorporated comments from Shaun Bharrat, Salvatore Loreto, and Bruno Chatras (thanks!)
- At time of submission, two open comments:
  - Supporting other algorithms (from Janet Gunn).
  - Load balancer in front of a server farm (Bruno Chatras).

Open issue #1

- Need to allow for multiple overload control algorithms (loss-, rate-, and windows-based.)
- Default mandatory to implement algorithm is loss-based.
- A mechanism should be specified to choose an algorithm without introducing new parameters.

Open issue #1 (contd.)

- Proposal:

  Add a fourth, optional, parameter -- “oc-algo”.
- ABNF must use the quoted-string production rule (since unadorned commas are used as header separators in SIP.)
- This draft defines a value of “loss” for the “oc-algo” parameter.
- Question: Need to document the process whereby other drafts can define values. Will this involve IANA?

Open issue #1 (contd.)

- Example:

C -> S

```
INVITE sips:user at example.com SIP/2.0
Via: SIP/2.0/TLS p1.example.net;branch=z9hG4bK2d4790.1;
 received=192.0.2.111;oc;oc-algo="loss,rate,window"
```

S -> C

```
SIP/2.0 100 Trying
Via: SIP/2.0/TLS p1.example.net;branch=z9hG4bK2d4790.1;
 received=192.0.2.111;oc=20;oc-validity=500;
 oc-seq=1282321615.781;oc-algo="loss"
```

Open issue #1a

- Should we allow overload control information to be sent in a 100?
- List discussion:
  - 100 used to quench retransmissions at the transaction layer, so it should not be over-burdened with transporting additional information relevant to the TU.
  - However, allow for implementations that may want to do so.
  - Always carry overload in the first non-100 response.
- Thoughts? Flip a coin and choose one?

Open issue #1b

- Is the intent that the overload control algorithm is negotiated every transaction?
- No. Will draft text to spell out the semantics as unambiguously as possible.

Open issue #2

- How does overload control work when there is a load balancer in front of a server farm?
- Additional text to address this was inserted in draft-ietf-soc-overload-design-02.
- There is no discussion of load balancing in draft-ietf-sip-overload-control (which is okay since the mechanism does not change.)
  - At the very least, seems reasonable to maintain a reference to S6 of draft-ietf-soc-overload-design.

Next steps

- Will issue a -01 soon with the consensus that emerges on Issue #1 on the list.

The End

- Thanks!

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