

Max-Forwards

Problems/Solutions

draft-lawrence-maxforwards-problems

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Simple Setup

- Small number of setup messages
- 1 INVITE produces 2^{70} forwarded INVITES
 - And probably a CANCEL storm in their wake
- Possible to trigger innocently

Attack in Practice: SIPIT 17

- Several proxies - several hours
- Estimated completion: 10 days
 - But only because folklore has capped max-forwards at 20.
- Proxies could fall in and out - the storm just keeps going.

Mitigation

- Sue the offender
- Put a smaller cap on Max-Forwards
- Control # of requests, not depth
- Return to loop-detection
- Disallow registration to arbitrary contacts
- Attempt to prevent loops during provisioning
- Deprecate forking

Improving diagnostics

- Whatever we do, we need to make it easier to tell what's going on when things go sour
 - Draft proposes returning the message as it is rejected (423) as a sipfrag in the response.