draft-ietf-dots-requirements-01 IETF 95

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Changes in -01

- Revised introductory sections
- Updated terminology
- Requirements section updates

Revised introductory section

- Overview Context and Motivation
- Migrate requirements-related text to Requirements section

Added Terminology

- Reconcile with draft-ietf-dots-use-cases-01
 - DDoS attack target
 - DDoS attack telemetry
 - Countermeasure

Updated Terminology

- DOTS relay
 - Highlight bridging between TCP and UDP signaling, signal aggregation
- DDoS
 - Reconcile with draft-ietf-dots-use-cases-01

Requirements intro

- Emphasize DOTS client control over mitigation
 - No justification required from DOTS client to request or withdraw request for mitigation
- Note possible use of QoS, but emphasize need for DOTS to operate without it

General requirements

- Remove interoperability requirement
 - Redundant: DOTS is motivated by lack of interoperability
- GEN-003: Note need for unidirectional messaging within bidirectional signal channel – e.g. notifications from DOTS server
- GEN-005: Data channel MUST use reliable transport

Operational requirements

- OP-001: Emphasize use of UDP, allow fallback to TCP
- New OP-003: Session redirection
- New OP-005: Mitigation Lifetime
- OP-006: Extend possible addressing modes for mitigation scope
- OP-006: Emphasize attack details from client are OPTIONAL, MAY be ignored by server.

Operational requirements, cont'd

- New OP-007: Mitigation efficacy
- New OP-008: Conflict detection and notification
- New OP-009: Lookup caching
- New OP-010: NAT Traversal

Data channel requirements

- Move mutual authentication requirement to security requirements
- Clarify possible use of data channel for black-/ white-list management.
- Need feedback
 - WG understanding of data channel role?
 - Missing requirements?

Security requirements

- Extracted from general/operational sections
- Mutual authentication
- Message CIA
- Replay protection

Next steps

- Align with -02 use cases
- Data model requirements?
- Extend data channel requirements?
- Incorporate more WG feedback

THANK YOU