

TURN extension to convey flow characteristics

draft-wing-tsvwg-turn-flowdata-00

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Background

- TURN relays data
 - Sort of like SOCKS or an application proxy
- Applications like WebRTC may use TURN
 - Privacy
 - NAT/Firewall traversal
 - Mobility
 - IPv6/IPv4 interworking
 - Enterprise auditing / policy control

Background

TURN server could be deployed by a third party provider or application service provider

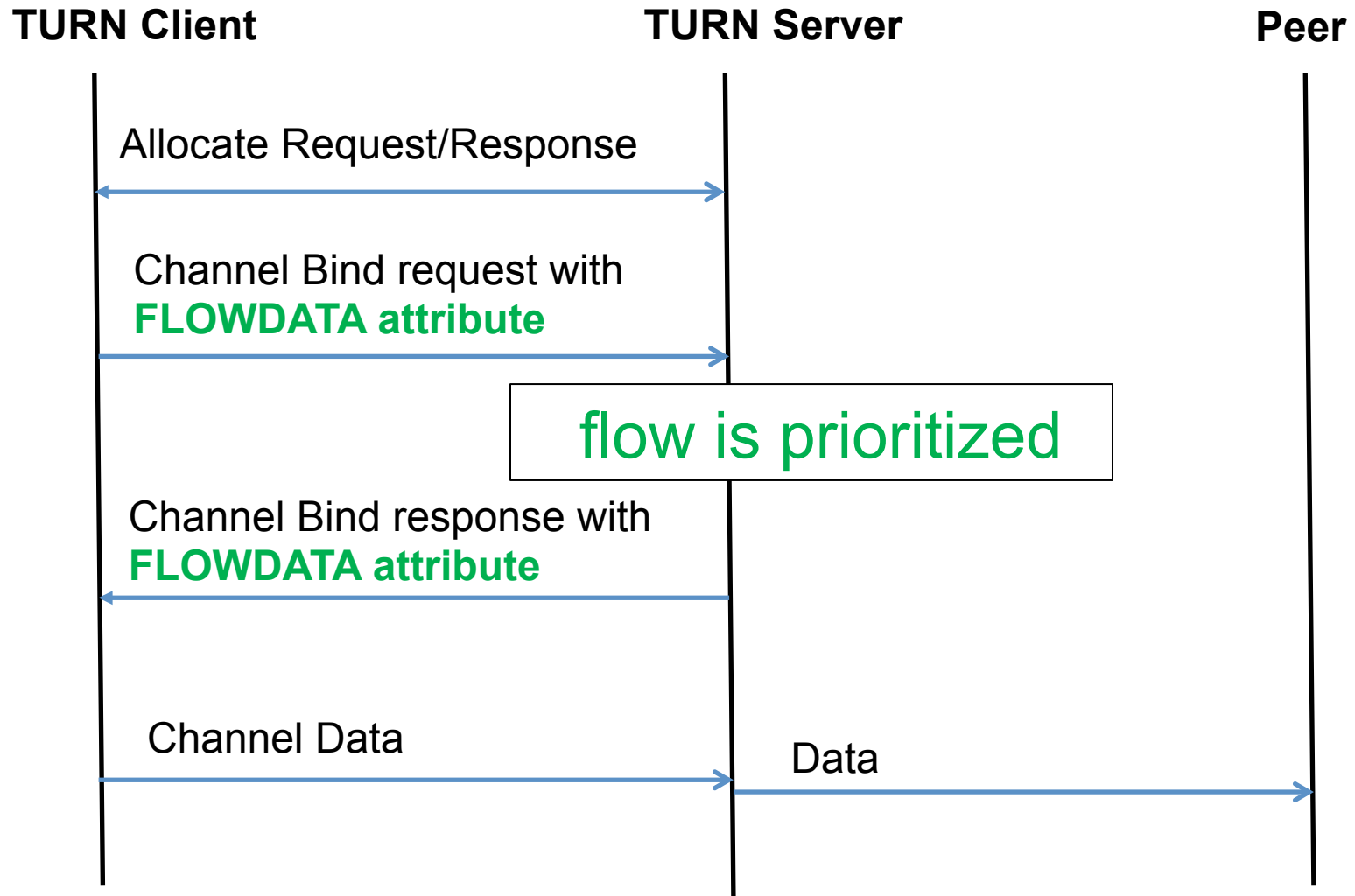
Problem Statement

- TURN server and its network are impacted by traffic using the TURN server
- During high traffic, it is desirable to shed less-important traffic

Existing Solutions

- DPI by TURN service provider
 - Encrypted traffic
 - Cost
- DSCP
 - DSCP values not preserved
 - OS might not allow setting DSCP

TURN Flowdata message flow



Flowdata format

- Flowdata does **not** communicate Diffserv code points
- Flowdata conveys:
 - Jitter/loss/delay tolerance (high/med/low)

Proposed Solution

- Define STUN FLOWDATA attribute
- Client sends requested flow characteristics
- Server responds with what can be provided

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Questions?

Backup Slides

FLOWDATA format: Request



Upstream Delay Tolerance

Downstream Delay Tolerance

- 0 = No information available.
- 1 = very low
- 2 = low
- 3 = medium
- 4 = high

FLOWDATA format: Response

Attribute Type (TBD)				Length (4)			
AuDT	AuLT	uAJT	RSVD1	AdDT	AdLT	AdJT	RSVD2

Accommodated
Upstream Delay
Tolerance

Accommodated
Downstream
Delay Tolerance

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