

Packetization Layer Path MTU Discovery for Datagram Transports

draft-ietf-tsvwg-datagram-plpmtud-01

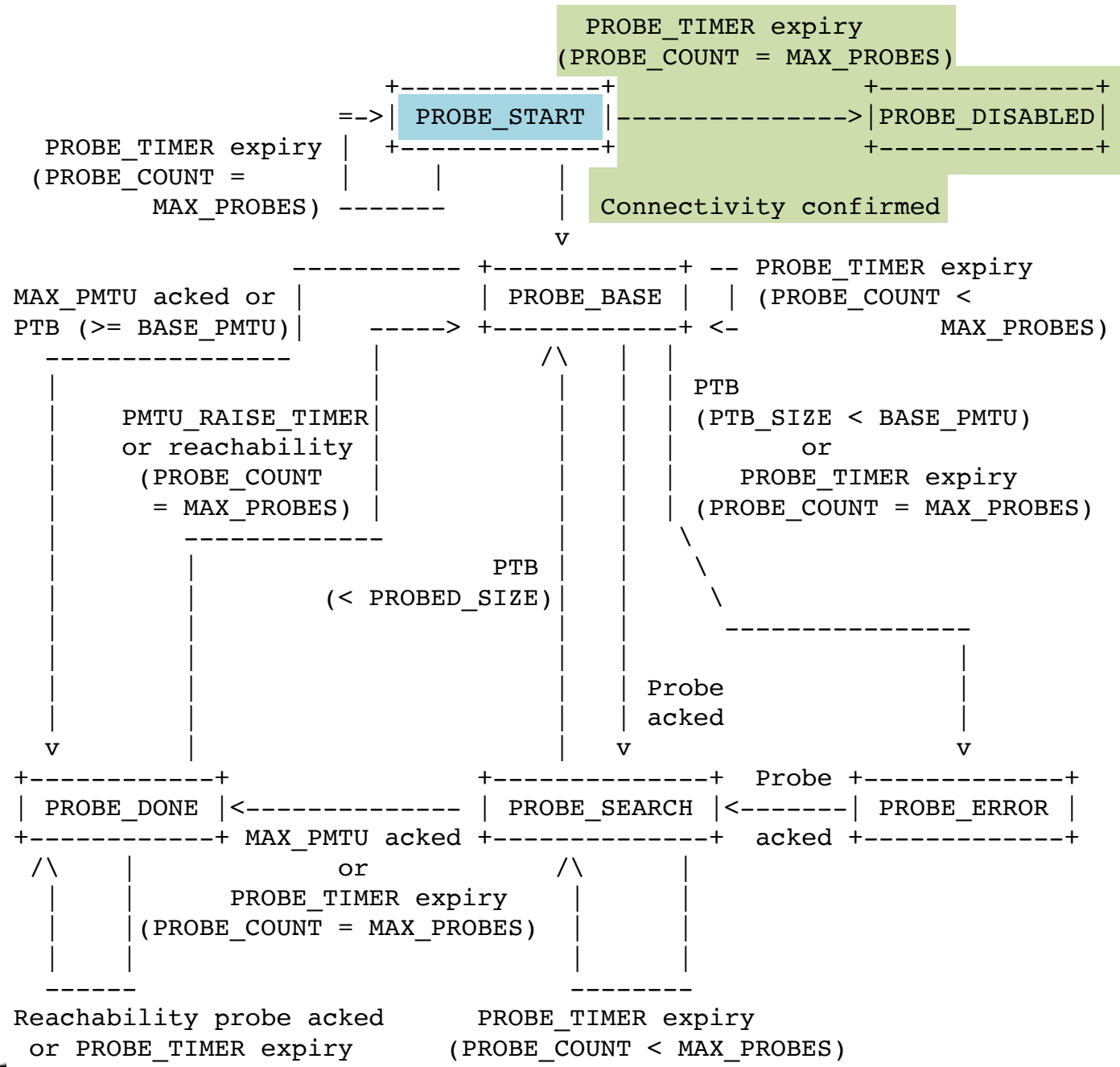
**Gorry Fairhurst, Tom Jones,
Michael Tüxen, Irene Rüngeler**



Changes since draft-fairhurst-tsvwg-datagram-plpmtud-01

- Updated state machine
 - New State (PROBE_DISABLED)
- Search algorithms
- QUIC
- PTB Handling





Implementation Status

- FreeBSD patch sets for 12-CURRENT
 - SCTP patch against individual -00
 - UDP Options patch
 - Available soon™



PTB Signals

- How should we validate ICMP PTB
 - Protection from off path attacks
 - At least rebuild 5-tuple
- How should we use PTB signals
 - Probe to validate size?
 - Use as search end?
 - Repeat if needed



Current Problems

- Some constants and times do not yet have recommended values
- When to set maximum packet size?
- How to handle inconsistent results
 - Discard PTB with a MTU larger than probe size
 - How to handle forwarding (path) inconsistency



Next Steps

- Revise draft
 - Update state machine for PTB processing
 - Check algorithm against code
 - SCTP
 - UDP Options
 - QUIC
 - Interested in PMTU experience



Acknowledgement

NEAT is funded by the European Union's Horizon 2020 research and innovation programme under grant agreement no. 644334.

Implementation Status

- Implementation for FreeBSD
 - <https://github.com/uoaserg/freebsd>
 - branch udpoptions-plpmtud—ietf101

