

Implementation updates Network.Framework, PyTAPS, NEAT and NEATPy

TAPS @ IETF 111

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NEAT

<https://github.com/NEAT-project/neat>

- Output of a European project that started in parallel with TAPS
 - Written in C, feature-rich, supports TCP, MPTCP, UDP, SCTP; policy manager
 - Typical "research project": designed to show results, not satisfy users
 - E.g., SCTP support on Linux and FreeBSD, but multi-streaming only in FreeBSD
- NEAT project ended in 2018; this means...
 - NEAT is now not maintained by anyone
 - QUIC was never added: NEAT ended long before QUIC was finished
 - TAPS has moved on, NEAT is no longer in line with the TAPS API (but the core ideas and code "under the hood" are similar)

NEATPy

<https://github.com/theagilepadawan/NEATPy>

- Python shim layer to bring NEAT in line with TAPS
 - Finished master thesis; code will probably also not be maintained
 - Quite (not 100%) complete implementation of the interface draft up to version draft-ietf-taps-interface-05
- No changes to NEAT, only supports things that NEAT can support

PyTAPS

<https://github.com/fg-inet/python-asyncio-taps>

- Python asyncio TAPS implementation
- Mostly worked on during Hackathons
- Focused on experimenting and playing around with the TAPS API
- Supports multicast and has some more advanced framers implemented (<https://github.com/GrumpyOldTroll/ambi>)

Network.framework

<https://developer.apple.com/documentation/network>

- Swift and C system API on iOS and macOS
- Connection and Listener objects, with Groups to support multicast
- Supports TCP/UDP/TLS/DTLS/QUIC, and custom framers
- Not all properties supported yet, and dynamic protocol selection isn't mainstream (mainly selecting protocol stack up front)