



**Calhoun: The NPS Institutional Archive**  
**DSpace Repository**

---

Center for Measurement and Analysis of Network Data (CMAND) Center for Measurement and Analysis of Network Data (CMAND) Pr

---

2014

## Transport Traffic Analysis

Monterey, California: Naval Postgraduate School.

---

<https://hdl.handle.net/10945/41747>

---

*Downloaded from NPS Archive: Calhoun*



<http://www.nps.edu/library>

Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

**Dudley Knox Library / Naval Postgraduate School**  
**411 Dyer Road / 1 University Circle**  
**Monterey, California USA 93943**

**NAME**

*ttad* – Transport Traffic Analysis daemon

**SYNOPSIS**

**ttad** [options]

**DESCRIPTION**

*ttad* passively listens to network traffic on the specified interface and accumulates fine-grained per-flow traffic characteristics and features. These features include packet timing (jitter, three-way handshake RTT, etc), loss and retransmissions, flow control, and other detailed features that have been shown useful in identifying traffic flows to or from abusive hosts. *ttad* normally runs as a daemon and accepts XML-RPC queries for a flow identifier and returns that flow's traffic features. However, *ttad* can also read a pcap savefile for interactive use. *ttad* supports the SpamFlow and ttadclass plugins.

**OPTIONS**

- b* Include byte counts in addition to packet counts.
- c count*  
Number of packets to accept. Default is unlimited.
- D* Do not detach and daemonize. Useful for debugging.
- e host:port*  
Specify a host to export flows via XML-RPC.
- h* Help.
- i int* Traffic interface name (e.g., eth0). If not specified, *ttad* attempts to auto-detect. When run in promiscuous mode, *ttad* must be run as root.
- m ip:port*  
Specify the server IP:port on which to filter. Defaults to auto-detect.
- p w.x.y.z/mask*  
Specify an IP prefix (w.x.y.z/mask) on which to filter. Defaults to auto-detect.
- r file* Read from a pcap savefile rather than a live interface.
- s* Switch perspective so that we expect to initiate an active open (i.e. send SYN's rather than receive SYN's). Default is to expect incoming SYN's to MTA.
- t* Include timestamps.
- v* Increase verbosity by one level. Four verbosity levels exist (in increasing order): Off, Low, High, Debug.

**SPAMFLOW**

*ttad* is not generally useful alone. Rather, applications can issue XML-RPC queries to *ttad* in order to receive traffic statistics for a particular IP or IP:port tuple. One specific example is the *spamflow* plugin for spamassassin.

Likewise, *ttad* can export flow features to an XML-RPC collector for classification. One specific example is the *ttadclass* plugin.

Those wishing to experiment with *ttad* for other purposes are encouraged to look at the source code, run *ttad* in the foreground with high verbosity, etc. Many options are not documented in this manpage for clarity and usage reasons.

**SEE ALSO**

spamflow(1), ttadclass(1)

**VERSION**

This manual page documents *ttad* version 0.4

The current version is available from The Center for Measurement and Analysis of Network Data:

<http://www.cmand.org/ttad>

**AUTHOR**

Copyright (C) 2008-2013 by Robert Beverly. This is free software: you are free to change and redistribute it.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**BUGS**

Please send problems, bugs, questions, desirable enhancements, etc. to:  
[spamflow@lists.cmand.org](mailto:spamflow@lists.cmand.org)