libdnet

Abstract

libdnet provides a simplified, portable interface to several low-level networking routines, including

- network address manipulation
- kernel arp(4) cache and route(4) table lookup and manipulation
- network firewalling (IP filter, ipfw, ipchains, pf, PktFilter, ...)
- network interface lookup and manipulation
- IP tunnelling (BSD/Linux tun, Universal TUN/TAP device)
- raw IP packet and Ethernet frame transmission

Supported languages:

- C, C++
- Python
- Perl, Ruby (see below)

Supported platforms:

- BSD (OpenBSD, FreeBSD, NetBSD, BSD/OS)
- Linux (Redhat, Debian, Slackware, etc.)
- MacOS X
- Windows (NT/2000/XP)
- Solaris
- IRIX
- HP-UX
- Tru64

Builds cleanly on, but needs work - see [TODO](#):
(please let me know if you have access to these systems!)

- AIX
- UnixWare

Download

- [libdnet-1.11.tar.gz](#) (01-19-2005)
- [libdnet-1.11 win32 developer's pack](#)
- [Windows Python-2.3 module installer](#)
- [Windows Python-2.4 module installer](#)
- [MacOS X Python-2.3 module installer](#)
- [MD5 checksums](#) for all the above
- cvs -d :pserver:anonymous@cvs.sf.net:/cvsroot/libdnet get libdnet

Documentation

- [dnet(3) manpage](#) - C/C++ programmer's reference
- [dnet pydoc](#) - Python documentation
- [dnet(8) manpage](#) - test program documentation
- [libdnet cvsweb](#) - browse the source code

Support

- [SourceForge libdnet project page](#)
- [libdnet mailing lists](#)

Links

Related work:

- [Net::Libdnet](#) - Perl interface to libdnet
- [dnet.rb](#) - Ruby interface to libdnet
- [libpcap](#) - portable packet capture library
- [winpcap](#) - libpcap for Windows
- [pypcap](#) - libpcap Python module
- [dpkt](#) - fast, simple packet creation and parsing in Python
- [libnet](#) - packet construction library
- [PktFilter](#) - win32 service to configure the IPv4 filtering driver in Windows 2000/XP/Server 2003
- [Universal TUN/TAP driver](#) - virtual point-to-point network tunnel device
- [TUN/TAP driver for MacOS X](#)
- [Tunnel driver for Solaris 8 (sparc64)](#)

Projects that use libdnet:

- [arpd](#) - ARP daemon
- [arpscan](#) - ARP scanner
- [dhcp-agent](#) - portable Unix DHCP client
- [firewalk](#) - determine firewall/router ACLs remotely
- [fragroute](#) - intercept, modify, and rewrite traffic to a target
- [ganglia](#) - real-time monitoring and execution environment for large-scale computer clusters
- [gdnet](#) - GTK+ interface demonstrating much of libdnet's functionality
- [honeyd](#) - virtual network honeypots
- [ip6sic](#) - IPv6 stack stress-testing tool
- [labrea](#) - simple worm tarpit
- [lsrscan](#) - loose source route scanner
- [lsrtunnel](#) - connection spoofing via loose source routing
- [mplscan](#) - send GRE-tunnelled MPLS packets
- [nmap](#) - the gold standard network scanner
- [nttlscan](#) - quick topology scanner / parallel traceroute
- [Open1x](#) - open-source implementation of IEEE 802.1x
- [ring](#) - OS fingerprinting through TCP rexmit timeouts
- [scapy](#) - interactive packet manipulation program
- [synscan](#) - scriptable TCP/IP test tool for network testing and active OS fingerprinting
- [stegtunnel](#) - IP ID / TCP ISN covert channels
- [ttlscan](#) - TCP SYN scanner with TTL printing
- [unicornscan](#) - distributed scanner
- [vomit](#) - sniff from, and inject into, Cisco IP phone conversations

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SOURCE**FORGE**