

**NAME**

APRECV – APSR network testing tool designed to receive arbitrary packets

**SYNOPSIS**

**aprecv** [*options*]

**DESCRIPTION**

*APRECV* is designed to *receive* and *analyze* arbitrary network packets or complete protocols. A complete list of currently supported protocols can be found in the *PROTOCOLS* section.

*APRECV* supports a lot of command line options to control the *packet sniffing engine*, *BPF filters*, *the output format*, *statistics* and *various error checks*. Please have a look at the *OPTIONS* section.

Every non-printable character in the payload field of the different protocols will be replaced by a ".".

**OPTIONS****--calc-checksums**

Recalculate the checksums of the sniffed packets (if any) and print the correct one if it's wrong. Currently only IPv4 and ICMPv4 are implemented.

**-c | --count**

Count the size of the received packets.

**-d | --device <device>**

Listen on device. If no interface is given, *APRECV* tries to autoselect one (excluding loopback devices). On some systems you can use "any" to listen on all interfaces at the same time.

**-D | --daemon**

Run *APRECV* in daemon mode (fork in background and exit).

**--expand-<protocol>**

Expand the protocol header and display all protocol header fields verbosely. Following options are available: *--expand-all*, *--expand-ethernet*, *--expand-arp*, *--expand-token*, *--expand-llc* and *--expand-pppoe*.

**-f | --filter filter rule**

Set up a *BPF* filter rule.

**-F | --filter-nopt filter rule**

Set up a non-optimized *BPF* filter rule.

**--help | -h**

Display a help message and exit.

**-l | --logfile <file>**

Write all received packets which are normally printed to STDOUT to a file. If the file doesn't exist, *APRECV* will create a new one, otherwise it will append the information.

**--max-packets <num>**

Maximum number of packets to receive, default is an endless loop.

**--module <file>**

Load a shared module (only the *application layer* will be visible by the module!).

**--module-ignore**

Ignore the builtin *BPF* filter of the module.

**--module-raw**

Load a shared module and give the *full buffer* (with *datalink*, *network* and *transport layer*) to the module.

- print-<protocol>-hex**  
Print the payload of a packet in hex. The following options are available: *--print-ip-hex*, *--print-pppoe-hex*, *--print-tcp-hex* and *--print-udp-hex*.
- print-<protocol>-text**  
Print the payload of a packet in text. The following options are available: *--print-tcp-text* and *--print-udp-text*.
- p | --promisc <0|1>**  
Enable or disable promiscuous mode for the device (0=off, 1=on). The promiscuous mode is useful in ethernet networks to receive packets which are not sent to the *MAC address* of your network interface.
- P | --pcap-file <file>**  
Read a raw pcap dump from a file.
- quiet**  
Close the stdout filehandle, useful with raw logfile mode, but print out errors.
- r | --logfile-raw <file>**  
Log all packets in raw format to a file.
- really-quiet**  
Close the stdout and stderr filehandle, useful with raw logfile mode.
- R | --print-raw-hex**  
Print raw packets in hex.
- server-addr <ip>**  
IP Address of the APSR-Server, to connect to.
- server-port <port>**  
Port number of the APSR-Server.
- s | --snaplen <up to 65535>**  
Set the snaplen for pcap, default is 65535.
- statistic**  
Print a statistic of all counted packets and protocols before terminating. Format: NORMAL\_COUNT (TRUNCATED\_PACKETS|ERRORS\_IN\_PACKETS).
- use-apsrlib**  
Use the APSRLib instead of Libpcap. Some options may be disabled or not useable.
- v | --verbose**  
Print more information about the protocols, the interface, the localnet and the netmask address and activate resolving of IP and MAC addresses.
- V | --version**  
Display the *APRECV* version and the compiled libpcap version.

## PROTOCOLS

Currently the following protocols are supported: Ethernet II, LLC/SNAP(802.3), 802.2, VLAN(802.1p/1q), 802.11b, Prism monitor mode frames, TokenRing(802.5), CDP, PPPoE with Tags, PPP with LCP, IPCP, IPV6CP, IPXCP, ATCP, ECP, PAP and CHAP, LQR, ARP/RevARP/InvARP, IPv4/IPv6, IPX, ICMPv4/ICMPv6, IGMP, TCP, UDP, SPX/SPX2, IComp, IPAuth, IFMP, ESP, SCTP, EGP, GGP, IRTP, GRE, OSPFv2/OSPFv3, NARP, IGRP, EIGRP, VRRP, PIM, RIPv1/RIPv2, IPXRIP and RIPng.

## SEE ALSO

apsend (1), <http://www.tcpdump.org> or pcap (3) for *BPF* filter logic.

**AUTHOR**

APSR development team (<http://www.aa-security.de>).

**REPORTING BUGS**

Report bugs to <[bugs@aa-security.de](mailto:bugs@aa-security.de)>.