NAME

pcap_setnonblock, pcap_getnonblock - set or get the state of non-blocking mode on a capture device

SYNOPSIS

#include <pcap/pcap.h>

char errbuf[PCAP_ERRBUF_SIZE];

int pcap_setnonblock(pcap_t *p, int nonblock, char *errbuf);
int pcap_getnonblock(pcap_t *p, char *errbuf);

DESCRIPTION

pcap_setnonblock() puts a capture handle into ‘‘non-blocking’’ mode, or takes it out of ‘‘non-blocking’’ mode, depending on whether the *nonblock* argument is non-zero or zero. It has no effect on ‘‘savefiles’’. If there is an error, **PCAP_ERROR** is returned and *errbuf* is filled in with an appropriate error message; otherwise, **0** is returned.

In ‘‘non-blocking’’ mode, an attempt to read from the capture descriptor with **pcap_dispatch**(3) and **pcap_next_ex**(3) will, if no packets are currently available to be read, return **0** immediately rather than blocking waiting for packets to arrive.

pcap_loop(3) will loop forever, consuming CPU time when no packets are currently available; **pcap_dispatch**() should be used instead. **pcap_next**(3) will return **NULL** if there are no packets currently available to read; this is indistinguishable from an error, so **pcap_next_ex**() should be used instead.

When first activated with **pcap_activate**(3) or opened with **pcap_open_live**(3)**,** a capture handle is not in ‘‘non-blocking mode’’; a call to **pcap_setnonblock**() is required in order to put it into ‘‘non-blocking’’ mode.

RETURN VALUE

pcap_getnonblock() returns the current ‘‘non-blocking’’ state of the capture descriptor; it always returns **0** on ‘‘savefiles’’. If called on a capture handle that has been created but not activated, **PCAP_ERROR_NOT_ACTIVATED** is returned. If there is another error, **PCAP_ERROR** is returned and *errbuf* is filled in with an appropriate error message.

errbuf is assumed to be able to hold at least **PCAP_ERRBUF_SIZE** chars.

SEE ALSO

pcap(3), **pcap_next_ex**(3), **pcap_geterr**(3)