## **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)
```