NAME

netlink − Netlink macros

SYNOPSIS

```
#include <asm/types.h>
#include <linux/netlink.h>

int NLMSG_ALIGN(size_t len);
int NLMSG_LENGTH(size_t len);
int NLMSG_SPACE(size_t len);
void *NLMSG_DATA(struct nlmsghdr *nlh);
struct nlmsghdr *NLMSG_NEXT(struct nlmsghdr *nlh, int len);
int NLMSG_OK(struct nlmsghdr *nlh, int len);
int NLMSG_PAYLOAD(struct nlmsghdr *nlh, int len);
```

DESCRIPTION

<linux/netlink.h> defines several standard macros to access or create a netlink datagram. They are similar in spirit to the macros defined in **cmsg**(3) for auxiliary data. The buffer passed to and from a netlink socket should be accessed using only these macros.

NLMSG_ALIGN()
Round the length of a netlink message up to align it properly.

NLMSG_LENGTH()
Given the payload length, *len*, this macro returns the aligned length to store in the *nlmsg_len* field of the *nlmsghdr*.

NLMSG_SPACE()
Return the number of bytes that a netlink message with payload of *len* would occupy.

NLMSG_DATA()
Return a pointer to the payload associated with the passed *nlmsghdr*.

NLMSG_NEXT()
Get the next *nlmsghdr* in a multipart message. The caller must check if the current *nlmsghdr* didn't have the **NLMSG_DONE** set—this function doesn't return NULL on end. The *len* argument is an lvalue containing the remaining length of the message buffer. This macro decrements it by the length of the message header.

NLMSG_OK()
Return true if the netlink message is not truncated and is in a form suitable for parsing.

NLMSG_PAYLOAD()
Return the length of the payload associated with the *nlmsghdr*.

CONFORMING TO

These macros are nonstandard Linux extensions.

NOTES

It is often better to use netlink via *libnetlink* than via the low-level kernel interface.

SEE ALSO

libnetlink(3), **netlink**(7)

COLOPHON

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