

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

This page is part of release 3.74 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <http://www.kernel.org/doc/man-pages/>.