Rocky Enterprise Linux 9.2 Manual Pages on command 'libnetlink.3'

$ man libnetlink.3

libnetlink(3) Library Functions Manual libnetlink(3)

NAME

libnetlink - A library for accessing the netlink service

SYNOPSIS

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

#include <libnetlink.h>

#include <linux/netlink.h>

#include <linux/rtnetlink.h>

int rtnl_open(struct rtnl_handle *rth, unsigned subscriptions)

int rtnl_wilddump_request(struct rtnl_handle *rth, int family, int type)

int rtnl_send(struct rtnl_handle *rth, char *buf, int len)

int rtnl_dump_request(struct rtnl_handle *rth, int type, void *req, int len)

int rtnl_dump_filter(struct rtnl_handle *rth,

        int (*filter)(struct sockaddr_nl *, struct nlmsghdr *n, void *),

        void *arg1,

        int (*junk)(struct sockaddr_nl *,struct nlmsghdr *n, void *),

        void *arg2)

int rtnl_talk(struct rtnl_handle *rtnl, struct nlmsghdr *n, pid_t peer,

      unsigned groups, struct nlmsghdr *answer,

      int (*junk)(struct sockaddr_nl *,struct nlmsghdr *n, void *),

      void *jarg)

int rtnl_listen(struct rtnl_handle *rtnl,

      int (*handler)(struct sockaddr_nl *, struct rtnl_ctrl_data *,
                    struct nlmsghdr *n, void *),
                void *jarg)
```

```
        int rtnl_from_file(FILE *rtnl,
                int (*handler)(struct sockaddr_nl *,struct nlmsghdr *n, void *),
                void *jarg)
        int addattr32(struct nlmsghdr *n, int maxlen, int type, __u32 data)
        int addattr_l(struct nlmsghdr *n, int maxlen, int type, void *data, int alen)
        int rta_addattr32(struct rtattr *rta, int maxlen, int type, __u32 data)
        int rta_addattr_l(struct rtattr *rta, int maxlen, int type, void *data, int alen)
```

DESCRIPTION

libnetlink provides a higher level interface to rtnetlink(7). The read functions return 0 on success and a negative errno on failure. The send functions return the amount of data sent, or -1 on error.

rtnl_open

Open a rtnetlink socket and save the state into the rth handle. This handle is passed to all subsequent calls. subscriptions is a bitmap of the rtnetlink multi?
cast groups the socket will be a member of.

rtnl_wilddump_request

Request a full dump of the type database for family addresses. type is a rtnetlink message type.

rtnl_dump_request

Request a full dump of the type data buffer into buf with maximum length of len. type is a rtnetlink message type.

rtnl_dump_filter

Receive netlink data after a request and filter it. The filter callback checks if the received message is wanted. It gets the source address of the message, the mes?
sage itself and arg1 as arguments. 0 as return means that the filter passed, a neg?
ative value is returned by rtnl_dump_filter in case of error. NULL for filter means to not use a filter. junk is used to filter messages not destined to the local socket. Only one message bundle is received. If there is a message pending, this function does not block.

rtnl_listen

Receive netlink data after a request and pass it to handler. handler is a callback that gets the message source address, anscillary data, the message itself, and the jarg cookie as arguments. It will get called for all received messages. Only one message bundle is received. If there is a message pending this function does not block.

rtnl_from_file

Works like rtnl_listen, but reads a netlink message bundle from the file file and passes the messages to handler for parsing. The file should contain raw data as re? ceived from a rtnetlink socket.

The following functions are useful to construct custom rtnetlink messages. For simple database dumping with filtering it is better to use the higher level functions above. See rtnetlink(3) and netlink(3) on how to generate a rtnetlink message. The following utility functions require a continuous buffer that already contains a netlink message header and a rtnetlink request.

rtnl_send

Send the rtnetlink message in buf of length len to handle rth.

addattr32

Add a __u32 attribute of type type and with value data to netlink message n, which is part of a buffer of length maxlen.

addattr_l

Add a variable length attribute of type type and with value data and alen length to netlink message n, which is part of a buffer of length maxlen. data is copied.

rta_addattr32

Initialize the rtnetlink attribute rta with a __u32 data value.

rta_addattr32

Initialize the rtnetlink attribute rta with a variable length data value.

BUGS

This library is meant for internal use, use libmnl for new programs.

The functions sometimes use fprintf and exit when a fatal error occurs. This library should be named librtnetlink.

AUTHORS

netlink/rtnetlink was designed and written by Alexey Kuznetsov. Andi Kleen wrote the man page.

SEE ALSO

netlink(7), rtnetlink(7)

/usr/include/linux/rtnetlink.h