

# Appendix L

## Sample program using libnet

```
#include "libnet.h"

void print_mac_address(struct libnet_ether_addr *e)
{
    int c;

    printf("MAC address: ");

    for (c = 0; c < 6; c++) {

        printf("%2.2x", e->ether_addr_octet[c]);

        if (c != 5) {
            printf(":");
        }

        printf("\n");
    }
}
```

```
int main(int argc, char *argv[])
{
    libnet_t *l;
    u_long ip;
    char *device = "eth0";
    struct libnet_ether_addr *e;
    char errbuf[LIBNET_ERRBUF_SIZE];

    /*
     * Initialize the library.
     */
    l = libnet_init(
        LIBNET_LINK,                /* injection type */
        device,                    /* network interface */
        errbuf);                  /* errbuf */

    if (l == NULL) {
        fprintf(stderr, "libnet_init() failed: %s", errbuf);
        exit(EXIT_FAILURE);
    }

    printf("Interface: %s\n", libnet_getdevice(l));

    if ( (e = libnet_get_hwaddr(l)) == NULL ) {
        fprintf(stderr, "Can't get hardware address: %s\n", libnet_geterror(l));
    } else {
        print_mac_address(e);
    }

    if ( (ip = libnet_get_ipaddr4(l)) == -1 ) {
        fprintf(stderr, "Can't get ip address: %s\n", libnet_geterror(l));
    } else {
        printf("IP address: %s\n", libnet_addr2name4(ip, LIBNET_DONT_RESOLVE));
    }

    exit(EXIT_SUCCESS);
}
```